NEW MEXICO ENVIRONMENT DEPARTMENT

SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov

RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 13, 2015

Ms. DeAnna Rothhaupt
Chief, Holloman AFB Environmental
49 CES/CEIE
550 Tabosa Avenue
Holloman AFB, NM 88330-8261

RE: EXTENSION OF SUBMITTAL DEADLINES, SITES RW-42 AND OT-32, HOLLOMAN AIR FORCE BASE, EPA ID # NM6572124422 HWB-HAFB-12-017

Dear Ms. Rothhaupt:

The New Mexico Environment Department (NMED) has reviewed the Holloman Air Force Base (the Permittee) September 22, 2015 request for an extension of the deadline to submit the work plan for investigation activities at site RW-42 (SWMU-111) and the investigation report for site OT-32 (AOC-PRI-A). The Permittee explained that this extension is necessary due to a delay in the start of field work.

NMED hereby grants the extension. The Permittee shall therefore submit the work plan and report not later than **November 25, 2015**. If you have any questions regarding this matter, please contact Mr. David Strasser of my staff at (505) 222-9526.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
W. Moats, NMED HWB
C. Amindyas, NMED HWB
D. Strasser, NMED HWB
C. Hendrickson, EPA-Region 6 (6PD-N)
L. King, EPA-Region 6 (6PD-N)

File: HAFB 2015 and Reading
HAFB-12-017

FINAL

REMEDIAL INVESTIGATION REPORT

ABLE 51 AREA MUNITIONS RESPONSE SITE (MRS) (XU854)
POORMAN RANGE MRS (SR864)
BALLISTICS RAIN FIELD MRS (ML865)
DEBRIS FIELD MRS (RR869a)

HOLLOMAN AIR FORCE BASE
NEW MEXICO

Performance Based Remediation
Contract Number: FA8903-13-C-0008

AIR FORCE CIVIL ENGINEER CENTER
2261 Hughes Ave., Suite 163
Joint Base San Antonio Lackland, Texas 78236-9853

October 2015

Prepared by:

FPM Remediations, Inc.

181 Kenwood Avenue
Oneida, NY 13421

XU854 Able 51 Area, SR864 Poorman Range, ML865 Ballistics Rain Field, and RR869a Debris Field MRSs

Remedial Investigation

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sites:

XU854 Able 51 Area,
SR864 Poorman Range
ML865 Ballistics Rain Field and
RR869a Debris Field
Holloman Air Force Base
New Mexico

Submitted to:

Mr. Chuck Hendrickson
USEPA, Region 6 (6PD-F)
1445 Ross Ave, Suite 1200
Dallas, TX 75202-2733

Prepared for:

Air Force Civil Engineer Center (AFCEC)
2261 Hughes Ave., Suite 163
Joint Base San Antonio Lackland AFB,
Texas 78236-9853

Prepared by:

FPM Remediations, Inc.
181 Kenwood Avenue, Oneida, NY 13421

October 2015

Author: _____
Ivana Raicevic

Title: MMRP Installation Manager
Date: _____

Reviewer: _____
Jeffrey B. Hackworth, PGp, PG

Title: MMRP Manager
Date: _____

This page is intentionally left blank.

EXECUTIVE SUMMARY

FPM Remediations, Inc. (FPM) was contracted by the Air Force Civil Engineer Center (AFCEC) to perform a Military Munitions Response Program (MMRP) Remedial Investigation (RI) at four Munitions Response Sites (MRSs): XU854 Able 51 Area, SR864 Poorman Range, ML865 Ballistics Rain Field, and RR869a Debris Field located at Holloman Air Force Base (AFB), New Mexico. The Department of Defense (DoD) has established the MMRP under the Defense Environmental Restoration Program (DERP) to address DoD sites with Unexploded Ordnance (UXO), Discarded Military Munitions (DMM), and Munitions Constituents (MC) at locations that are or were owned by, leased to, or otherwise possessed or used by the DoD. FPM performed this work under FPM's AFCEC Contract FA8903-13-C-0008. RI fieldwork was conducted between November 10, 2014 and February 24, 2015.

The purpose of the RI at XU854 and SR864 MRSs was to determine whether future military munitions response actions are necessary at either of the two MRSs by characterizing the nature and extent of hazards associated with Munitions and Explosives of Concern (MEC) and MC contamination that may be present at these MRSs. The purpose of the RI at ML865 and RR869a MRSs was to identify potential surface MEC and MC contamination and to provide site data of sufficient quantity and quality to close existing data gaps by identifying all subsurface anomalies that will be investigated during the follow-on Non-Time-Critical Removal Action (NTCRA).

Holloman AFB is located in south-central New Mexico, seven miles west of the city of Alamogordo in Otero County and occupies approximately 50,763 acres of land. The southern portion of Holloman AFB contains the flight line, composed of a series of runways running north-south, east-west, and northeast southwest. The Main Base is located at the southeast corner of the Base, where Route 70 borders the Installation. The West Area and the North Area refer to the improved areas around the original airfield (southeastern triangle formed by the runways). High Speed Test Track runs north-south and is located northwest of the airfield. Access to Holloman AFB requires admittance through the security gate and there is a fence around the Base.

RI Results

The RI field activities at these 4 MRSs included performing instrument-aided surface clearance, conducting Digital Geophysical Mapping (DGM) using an electromagnetic induction sensor EM61-MK2 (EM61) at XU854 and SR864 MRSs and Geometrics G-858 cesium vapor magnetometer (G-858) at ML865 and RR869a MRSs, performing MC sampling, and intrusively investigating all anomalies with responses above the site-specific thresholds established at XU854 and SR864 MRSs. Limited intrusive investigation was performed at ML865 and RR869a MRSs since the subsurface removal of all anomalies above the site-specific thresholds will be performed during the follow-on NTCRA at these two sites.

Detector-aided surface clearance was performed along DGM transects and within 100% coverage DGM grids in the XU854 MRS and across the entire footprints of the SR864, ML865, and RR869a MRSs. Surface clearance was also performed across 1.17 acres outside the ML865 MRS based on the nature of surface Material Potentially Presenting an Explosive Hazard (MPPEH) (retained the shapes of the projectiles) identified in the vicinity of the western boundary of the site. Based on the DGM results at the site boundary of RR869a, an additional 0.26 acres were cleared outside the RR869a MRS to provide the nature and extent of subsurface

anomalies located at the site boundary. Two MEC items (one UXO - M18 Smoke Grenade [impinged primer] and one DMM - M18 Smoke Grenade [safety pin still installed]) were discovered during the surface clearance at the SR864 MRS. No MEC was discovered during the surface clearance at the XU854, ML865, and RR869a MRSs. The following approximate amounts of Munitions Debris (MD) were removed and recycled from each site during the surface clearance:

- XU854 – 0.6 lbs,
- SR864 – 77.0 lbs,
- ML865 – 8,293.0, and
- RR869a – 221.0 lbs

Note FPM recognizes that during the surface clearance MD were recovered from the boundary of the ML865 and RR869a MRSs; however, since no MEC or MC were identified during the RI at either of the two sites, the need for further investigation outside the MRSs and potential change of the MRSs boundaries will be determined during the next clean-up (NTCRA) phase. The subsurface investigation during the NTCRA will provide additional data to rely upon regarding the MEC presence. If the clean-up activities do not indicate the presence of MEC/MC then there will be no change to the MRS boundary. If MEC/MC is identified during the cleanup activities in increasing concentrations toward the boundary, then the boundary will be extended.

Upon completing the EM61 and G-858 surveys, the target selection process identified the following anomalies exceeding the established site-specific thresholds:

- XU854 – 509
- SR864 – 994
- ML865 - 6,176, and
- RR869a - 399 (108 were located outside the MRS)

All identified anomalies were intrusively investigated at the XU854 and SR864 MRSs. In addition, intrusive investigation was performed within 8 test pits centered on several ML865 high anomaly density areas, and within a narrow corridor centered along the fence line between RR869a and Installation Restoration Program (IRP) site OT-04. No MEC was discovered during the intrusive investigations. The following approximate amounts of MD were removed and recycled from each site during the intrusive investigation:

- XU854 – 0.4 lbs,
- SR864 – 2.5 lbs,
- ML865 – 325 lbs, and
- RR869a – 0 lbs

Twelve incremental surface soil samples (0-6 inches) were collected at the XU854 MRS in the areas immediately surrounding known historical and suspected missile/rocket launch pad sites. The samples were analyzed using USEPA method 6850 for Perchlorate, USEPA Method 8330B for explosives, and USEPA method 9056A for Nitrate. Explosive compounds associated with

missile/rocket propellants were not detected or were well below their respective Human Health Screening levels (HHSLs). Both nitrate and perchlorate were detected at concentrations well below the HHSLs. As a result, it was concluded that explosives, nitrate, and perchlorate in soil at XU854 do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of explosives, nitrate, and perchlorate in soil at the XU854 MRS is not necessary.

Composite surface soil samples were collected at two locations in the SR864 MRS containing isolated occurrences of confirmed MEC, and at eight locations in the ML865 MRS containing high concentrations of confirmed surface MD. Composite surface soil samples were also collected at the Safe Disposal Areas within ML865 and SR864 MRSs. All composite surface soil samples were taken from a depth 0 to 6 inches below ground surface and analyzed using USEPA Method 8330A for explosives and USEPA Method 6010C for select metals (aluminum, antimony, chromium, copper, iron, lead, and zinc). Explosive compounds associated with SDAs, areas with high concentrations of MD, and MEC were either not detected or were below their respective HHSLs. Metals were detected at concentrations below their respective Base-wide background concentrations and well below their respective HHSLs and Ecological Screening Levels (ESLs). As a result, it was concluded that explosive compounds and metals in soil (both surface and subsurface) do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of explosives in soil at the SR864 MRS is not necessary. The same conclusion was made for the surface soil at both ML865 and RR869a MRSs.

Since no MEC was identified during the RI at XU854, ML865, and RR869a MRSs, and since 100% surface clearance and removal of all subsurface anomalies with responses above the site-specific threshold was performed at the SR864 MRS, a MEC-Hazard Assessment was not required for any of the four MRSs.

Based on the RI results, XU854 and SR864 MRSs obtained Munitions Response Site Prioritization Protocol (MRSPP) scores of 8. An MRSPP score of 6 was assigned to both the ML865 and RR869a MRSs.

From the information gathered during this RI, the following recommendations are made for the four MRSs discussed in this report:

XU854 – Recommended for No Further Action (NFA) for both MEC and MC – UXO Estimator, a software package developed by United States Army Corps of Engineers (USACE), was used as a statistical tool to determine the upper bound on the potential residual UXO remaining on the MRS with a 95% confidence level. Since XU854 was not used historically as a range (no target area), there is an equal likelihood of finding a potential UXO anywhere in the MRS. This is an underlying assumption for the use of UXO Estimator. According to calculations performed using this software, if a total of 6.34 acres was investigated (area covered by transects and grids at XU854) within the 47.7 acres (size of MRS), it can be claimed with the 95% confidence that there is no more than 0.44 UXO/acre at XU854. This means that the actual number of UXO potentially present at the XU854 MRS after the RI may be any number of UXO between zero and 21 (the upper bound). However, based on both historical usage of the MRS (launch facility for testing of Mace and Matador missiles) and previous investigations (no UXO identified), the number of potential UXO is most likely closer to zero.

SR864 – Recommended for NFA for both MEC and MC – Based on 100% surface clearance, removal of all subsurface anomalies with the responses above the site-specific threshold, and MC sampling results, it is concluded that unacceptable exposures to MEC and MC will not occur at SR864.

ML865 and RR869a MRSs – Further munitions response action for both subsurface MEC and MC – A systematic subsurface investigation was not performed at these two MRSs during the RI, and therefore, it is concluded that unacceptable exposures to subsurface MEC and MC might occur at both MRSs. These two sites are recommended for a follow-on Engineering Evaluation/Cost Analysis and NTCRA.

TABLE OF CONTENTS

SECTION **PAGE**

1.0 INTRODUCTION 1-1
1.1 General 1-1
1.2 Project Authorization 1-1
1.3 Project Purpose and Scope 1-2
1.4 RI Report Organization 1-3
1.5 Installation Location and Description 1-4
1.6 Installation Mission and Operational History 1-7
1.6.1 Site Description and Operational History of XU854 MRS 1-7
1.6.2 Site Description and Operational History of SR864 MRS 1-8
1.6.3 Site Description and Operational History of ML865 MRS 1-8
1.6.4 Site Description and Operational History of RR869a MRS 1-8
1.7 Physical Description 1-17
1.7.1 Climate 1-17
1.7.2 Topography 1-17
1.7.3 Soils 1-17
1.7.4 Geology 1-18
1.7.5 Hydrogeology 1-18
1.7.6 Hydrology 1-18
1.7.7 Vegetation 1-19
1.7.8 Ecological Profile 1-19
1.7.9 Buildings, Structures and Utilities Near/Within the MRSs 1-19
1.7.10 Archaeological and Cultural Resources 1-20
1.8 Previous Investigations 1-20
1.8.1 CSE Phase I 1-21
1.8.1.1 Modified CSE Phase I Results for the Able 51 Area MRA 1-21
1.8.1.2 Modified CSE Phase I Results for 864 MRA 1-21
1.8.1.3 Modified CSE Phase I Results for 865 MRA 1-21
1.8.1.4 Modified CSE Phase I Results for 869 MRA 1-22
1.8.2 CSE Phase II 1-22
1.8.2.1 CSE Phase II Results for 854 MRA 1-22
1.8.2.2 CSE Phase II Results for 864 MRA 1-23
1.8.2.3 CSE Phase II Results for 865 MRA 1-24
1.8.2.4 CSE Phase II Results for 869 MRA 1-24
1.9 Current and Future Land Uses 1-25
1.9.1 XU854 MRS 1-25
1.9.2 SR864 MRS 1-25
1.9.3 ML865 MRS 1-25
1.9.4 RR869a MRS 1-25

2.0 REMEDIAL INVESTIGATION OBJECTIVES 2-1
2.1 Conceptual Site Models 2-1
2.1.1 Munitions and Explosives of Concern 2-1
2.1.1.1 XU854 MRS 2-2
2.1.1.2 SR864 MRS 2-2
2.1.1.3 ML865 MRS 2-2
2.1.1.4 RR869a MRS 2-2
2.1.2 Munitions Constituents 2-2
2.1.2.1 XU854 MRS 2-3
2.1.2.2 SR864 MRS 2-3
2.1.2.3 ML865 MRS 2-3
2.1.2.4 RR869a MRS 2-4
2.2 Preliminary Remediation Goals 2-4
2.2.1 Project Data Quality Objectives 2-4
3.0 REMEDIAL INVESTIGATION FIELD ACTIVITIES 3-1
3.1 Objectives 3-1
3.2 Technical Approach to conducting RI Fieldwork 3-1
3.3 Surface Clearance 3-3
3.3.1 Surface Clearance Personnel and Equipment 3-3
3.3.2 Surface Clearance Procedures 3-3
3.4 MPPEH Handling 3-4
3.5 Brush Clearing 3-4
3.6 Geophysical Investigations 3-4
3.6.1 Geophysical Equipment 3-4
3.6.1.1 Geonics Electromagnetic Induction Sensor EM61-MK2 3-4
3.6.1.2 Geometrics G-858 Cesium Vapor Magnetometer 3-7
3.6.1.3 Integration of Geophysical and Real-Time Kinematic-Global Positioning System Data 3-7
3.6.2 Geophysical System Verification 3-7
3.6.2.1 Instrument Verification Strip 3-7
3.6.3 General Geophysical Investigation Procedures 3-15
3.6.4 Geophysical Data Processing and Analysis 3-16
3.6.4.1 G-858 Data Processing 3-16
3.6.4.2 EM61 Data Processing 3-17
3.6.4.3 Threshold Determination 3-18
3.6.4.4 Target Selection and Dig Sheet Development 3-19
3.7 Intrusive Investigation 3-19
3.8 Quality Control Program 3-20
3.8.1 Audit Procedures 3-20
3.8.2 QA Data Processing 3-21
3.8.3 Random Excavation Inspections 3-21

3.9 Soil Sampling 3-21
3.9.1 Incremental Soil Sampling 3-21
3.9.2 Composite Soil Sampling 3-21
3.9.3 MC Risk Screening Methodology 3-22
3.10 Progress Reporting 3-22
3.11 Health and Safety 3-22
3.12 Stakeholder Site Visit 3-23
4.0 REMEDIAL INVESTIGATION RESULTS 4-1
4.1 Surface Clearance Results 4-1
4.1.1 XU854 MRS 4-1
4.1.2 SR864 MRS 4-1
4.1.3 ML865 MRS 4-2
4.1.4 RR869a MRS 4-9
4.2 Geophysical Investigation Results 4-9
4.2.1 XU854 MRS 4-9
4.2.2 SR864 MRS 4-10
4.2.3 ML865 MRS 4-10
4.2.4 RR869a MRS 4-10
4.3 Intrusive Investigation Results 4-25
4.3.1 XU854 MRS 4-26
4.3.2 SR864 MRS 4-29
4.3.3 ML865 MRS 4-29
4.3.4 RR869a MRS 4-30
4.3.5 Depths of Recovered MEC/DMM and MD 4-30
4.4 Disposition of MEC and MDAS 4-30
4.5 Soil Sampling Results 4-38
4.5.1 Incremental Soil Sampling Results at XU854 4-38
4.5.2 Composite Soil Sampling Results at SR864 4-38
4.5.3 Composite Soil Sampling Results at ML865 4-39
5.0 REVISED CONCEPTUAL SITE MODELS 5-1
5.1 Revised MEC Exposure Pathways 5-1
5.1.1 XU854 MRS 5-1
5.1.2 SR864 MRS 5-1
5.1.3 ML865 MRS 5-1
5.1.4 RR869a MRS 5-2
5.2 Revised MC Exposure Pathways 5-2
5.2.1 XU854 MRS 5-2
5.2.2 SR864 MRS 5-2
5.2.3 ML865 MRS 5-2
5.2.4 RR869a MRS 5-2

6.0 MEC HAZARD ASSESSMENT, MC RISK ASSESSMENT, AND MRSPP SCORING 6-1
6.1 MEC Hazard Assessment 6-1
6.1.1 XU854, SR864, and ML865 MRSs 6-1
6.1.2 SR864 MRS 6-1
6.2 Human Health Risk Assessment MC 6-1
6.2.1 XU854 and SR864 6-1
6.2.2 ML865 and RR869a MRSs 6-1
6.3 Ecological Risk Assessment 6-1
6.3.1 XU854 and SR864 MRSs 6-1
6.3.2 ML865 and RR869a MRSs 6-2
6.4 Munitions Response Site Prioritization Protocol 6-2
6.4.1 Explosive Hazard Evaluation Module 6-2
6.4.2 Chemical Warfare Material Hazard Module 6-3
6.4.3 Health Hazard Evaluation Module 6-4
6.4.4 MRSPP Priority Scores 6-4
7.0 SUMMARY AND CONCLUSIONS 7-1
7.1 Summary of Activities and Conclusions 7-1
7.1.1 XU854 Able 51 Area MRS 7-1
7.1.2 SR864 Poorman Range MRS 7-2
7.1.3 ML865 Ballistics Rain Field MRS 7-3
7.1.4 RR869a Debris Field MRS 7-4
7.2 Recommendations 7-5
7.3 Proposed Remedial Action Objective 7-5
8.0 REFERENCES 8-1

LIST OF FIGURES

FIGURE		PAGE
Figure 1-1	Holloman Air Force Base Location	1-5
Figure 1-2	XU854 Able 51 Area MRS Location	1-9
Figure 1-3	SR864 Poorman Range MRS Location	1-11
Figure 1-4	ML865 Ballistics Rain Field MRS Location	1-13
Figure 1-5	RR869a Debris Field MRS Location	1-15
Figure 3-1	Safe Disposal Areas SR864 and ML865 MRSs	3-5
Figure 3-2	IVS Location for EM61 System XU854 and SR864 MRSs	3-9
Figure 3-3	IVS Location for G-8585 System ML865 MRS	3-11
Figure 3-4	IVS Location for G-858 System RR869a MRS	3-13
Figure 3-5	Incremental Sampling Locations XU854 MRS	3-27
Figure 3-6	Composite Sampling Locations SR864 MRS	3-29
Figure 3-7	Composite Sampling Locations ML865 MRS	3-31
Figure 4-1	Surface Clearance Areas DGM Transects and Grids XU854 MRS	4-3
Figure 4-2	Surface MEC Locations and Surface MD Distribution SR864 MRS	4-5
Figure 4-3	Surface MD Distribution ML865 MRS	4-7
Figure 4-4	Surface MD Distribution RR869a MRS	4-11
Figure 4-5	EM61 Channel 2 Data and Distribution of DGM Anomalies along Transects XU854 MRS	4-13
Figure 4-6	EM61 Channel 2 Data and Distribution of DGM Anomalies SR864 MRS	4-15
Figure 4-7	Total Magnetic Field Data ML865 MRS	4-17
Figure 4-8	G-858 Analytic Signal Data and Distribution of DGM Anomalies ML865 MRS	4-19
Figure 4-9	G-858 Total Magnetic Field RR869a MRS	4-21
Figure 4-10	G-858 Analytic Signal and Distribution of DGM Anomalies RR869a MRS	4-23
Figure 4-11	Locations of Subsurface MD and SD XU854 MRS	4-27
Figure 4-12	Locations of Subsurface MD and SD SR864 MRS	4-31
Figure 4-13	Intrusive Investigation Results Test Pits within High Density Areas ML865 MRS	4-33
Figure 4-14	Intrusive Investigation Results Fence-Line Area RR869a MRS	4-35
Figure 5-1	XU854 MRS MEC Pathway Analysis	5-3
Figure 5-2	SR864 MRS MEC Pathway Analysis	5-4

Figure 5-3 ML865 MRS MEC Pathway Analysis 5-5
Figure 5-4 RR869a MRS MEC Pathway Analysis 5-6
Figure 5-5 XU854 MRS MC Pathway Analysis 5-7
Figure 5-6 SR864 MRS MC Pathway Analysis 5-8
Figure 5-7 ML865 MRS MC Pathway Analysis 5-9
Figure 5-8 RR869a MRS MC Pathway Analysis 5-10

LIST OF TABLES

TABLE **PAGE**

Table 1-1 RI Performance Period XU854, SR864, ML865, and RR869a MRSs 1-1
Table 1-2 EESOH MIS IDs 1-2
Table 3-1 Soil Screening Standards 3-24
Table 4-1 Surface Clearance Results at 4 MRSs 4-2
Table 4-2 Subsurface Clearance Results at 4 MRSs 4-26
Table 4-3 Summary of Test Pit Intrusive Investigation Results ML865 MRS 4-30
Table 4-4 Summary of RI Demolition Operations 4-37
Table 4-5 Amount of MDAS Destructed during RI XU854, SR864, ML865, and RR869a . 4-37
Table 4-6 Incremental Soil Sampling Results XU854 MRS 4-40
Table 4-7 Composite Soil Sampling Results SR864 MRS 4-45
Table 4-8 Composite Soil Sampling Results ML865 MRS 4-47
Table 6-1 MRSPP Rankings 6-5

LIST OF APPENDICES

Appendix A Survey Coordinates of the Base Grid Cells of SR864, ML865 and RR869a MRSs
Appendix B Daily Site, Quality Control, and Health and Safety Reports
Appendix C IVS, Instrument QC Documentation, BSP Results, and Production and QC XYZ Files
Appendix D DGM Target Anomaly Lists and Dig Sheets
Appendix E Geonics Electromagnetic Induction Sensor EM61-MK2 Channel 2 Data Figures and Geometrics G-858 Cesium Vapor Magnetometer Analytic Signal Figures.
Appendix F MEC and MD Disposition Documentation
Appendix G Analytical Data and Data Review
Appendix H Munitions Response Site Prioritization Protocol Tables

LIST OF ABBREVIATIONS AND ACRONYMS

%	percent
°F	Degrees Fahrenheit
AAAF	Alamogordo Army Air Field
AF	Air Force
AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
ARAR	Applicable or Relevant and Appropriate Requirements
ATV	All-Terrain Vehicle
BEEF	Prime Base Engineer Emergency Force
bgs	below ground surface
BSP	Blind Seeding Program
CD	Cultural Debris
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CHE	Chemical Warfare Material Hazard Evaluation
CHF	Contamination Hazard Factor
cm	centimeter
COPC	Contaminant of Potential Concern
CSE	Comprehensive Site Evaluation
CSM	Conceptual Site Model
Cu	Copper
CWM	Chemical Warfare Material
DDESB	Department of Defense Explosives Safety Board
DERP	Defense Environmental Restoration Program
DID	Data Item Description
DGM	Digital Geophysical Mapping
DGPS	Differential Global Positioning System
DMM	Discarded Military Munitions
DoD	Department of Defense
DQO	Data Quality Objective
EESOH-MIS	Enterprise Environmental, Safety, and Occupational Health Management Information System
EHE	Explosive Hazard Evaluation
EM	Engineering Manual
EMI	Electromagnetic Induction
EM61	Electromagnetic Induction Sensor EM61-MK2
EOD	Explosive Ordnance Disposal
EPC	Exposure Point Concentration
ESL	Ecological Screening Level
ESS	Explosives Safety Submission
FPM	FPM Remediations, Inc.
ft	feet
GPS	Global Positioning System
GSV	Geophysical System Verification

LIST OF ABBREVIATIONS AND ACRONYMS (continued)

G-858	Geometrics G-858 Cesium Vapor Magnetometer
H	High
HASP	Health and Safety Plan
HDR	HDR Environmental, Operations and Construction, Inc.
HE	High Explosive
HFD	Hazardous Fragmentation Distance
HHE	Health Hazard Evaluation
HHSSL	Human Health Soil Screening Level
HSTT	High Speed Test Track
Hz	Hertz
IAW	in accordance with
ID	Identification
INRMP	Integrated Natural Resources Management Plan
IS	Incremental Sampling
IRP	Installation Restoration Program
ISO	Industry Standard Object
IVS	Instrument Verification Strip
L	Low
LANL	Los Alamos National Laboratory
lb	pound
LOD	Level of Detection
M	Medium
m	meter
m/s	meter per second
MC	Munitions Constituents
MD	Munitions Debris
MDAS	Material Documented as Safe
MDEH	Material Documented as an Explosive Hazard
MEC	Munitions and Explosives of Concern
MEC-HA	MEC-Hazard Assessment
mg/kg	milligrams/kilogram
MGFD	Munition with the Greatest Fragmentation Distance
mm	millimeter
MMRP	Military Munitions Response Program
MPF	Migration Pathway Factor
MPPEH	Material Potentially Presenting an Explosive Hazard
MRA	Munitions Response Area
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MSD	Minimum Separation Distance
NFA	No Further Action
NMED	Bew Mexico Environment Department
NRHP	National Register of Historic Places
nT	nanoTeslas

LIST OF ABBREVIATIONS AND ACRONYMS (continued)

NTCRA	Non-Time-Critical Removal Action
PAH	Polynuclear Aromatic Hydrocarbons
PC	Personal Computer
PM	Project Manager
PPE	Personal Protective Equipment
ppm	parts per million
QA	Quality Assurance
QC	Quality Control
RF	Receptor Factor
RI	Remedial Investigation
RMS	Root Mean Square
RTK-GPS	Real-Time Kinematic Global Positioning System
RSL	Regional Screening Levels
Schonstedt	Schonstedt GA-52Cx Magnetometers
SD	Small Arms Debris
SDA	Safe Disposal Area
Shaw	Shaw Environmental, Inc.
SOP	Standard Operating Procedure
SSL	Soil Screening Level
SSR	Static Standard Recovery
SUXOS	Senior UXO Supervisor
TDS	Total Dissolved Solids
UCL	Upper Confidence Level
UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
U.S.	United States
U.S.C.	United States Code
USACE	United States Army Corps of Engineers
USAF	U.S. Air Force
USEPA	United States Environmental Protection Agency
UXO	Unexploded Ordnance
UXO I	UXO Technician I
UXO II	UXO Technician II
UXO III	UXO Technician III
UXOQCS	UXO QC Specialist
UXOSO	UXO Safety Officer
WP	Work Plan
WSMR	White Sands Missile Range
WWII	World War II
XRF	X-Ray Fluorescence

This page is intentionally left blank.

1.0 INTRODUCTION

1.1 General

This report presents the activities, results, and conclusions of the Military Munitions Response Program (MMRP) Remedial Investigation (RI) performed at four Munitions Response Sites (MRSs): XU854 Able 51 Area, SR864 Poorman Range, ML865 Ballistics Rain Field, and RR869a Debris Field located at Holloman Air Force Base (AFB), New Mexico. As shown in **Table 1-1**, the RI field activities were conducted between November 10, 2014 and February 24, 2015.

Table 1-1 RI Performance Period XU854, SR864, ML865, and RR869a MRSs

MRS ID	MRS Acreage	Performance Period	
		Start	End
XU854	47.70	4 December 2014	21 February 2015
SR864	22.80	5 December 2014	24 February 2015
ML865	18.30	17 November 2014	16 January 2015
RR869a	3.50	12 November 2014	18 February 2015
TOTAL	**92.3**		

1.2 Project Authorization

The RI has been conducted under the regulatory framework of the United States Air Force (USAF) MMRP at Holloman AFB. The MMRP was created by Congress in 2001 under the Defense Environmental Restoration Program (DERP) as established by Section 211 of the Superfund Amendments and Reauthorization Act of 1986 and is codified in Sections 2701-2710 of Title 10 of the United States Code (U.S.C.). The Department of Defense (DoD) has established the MMRP under the DERP to address DoD sites with Unexploded Ordnance (UXO), Discarded Military Munitions (DMM), and Munitions Constituents (MC) at locations that are or were owned by, leased to, or otherwise possessed or used by the DoD.

The USAF is the lead agency for this RI. Participation of and cooperation with federal, state, and local authorities and the local public will be solicited for all environmental restoration activities at Holloman AFB. Participation of these entities is required for the environmental restoration process and aids in ensuring the protection of human health and the environment. Federal, state, and local authorities will have input into the actions implemented at Holloman AFB through planning meetings, plan review, and the public comment process. Concerns of the federal, state, and local authorities will be solicited and provisions of federal, state, and local regulations will be given full consideration for all actions taken at Holloman AFB.

This RI Report is being completed by the FPM Remediations, Inc. (FPM) Team, under FPM's Air Force Civil Engineer Center (AFCEC) Contract FA8903-13-C-0008, to support the USAF MMRP. The overall remediation objective for all four MRSs is Site Closeout.

The identifications (IDs) of the Munitions Response Areas (MRAs) and MRSs included in this Report are listed under the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). In previous investigations performed at these sites such as Comprehensive Site Evaluation (CSE) Phase I and II, different designations were used for site IDs. The EESOH-MIS IDs and previously used numbers for MRAs and MRSs are listed in **Table 1-2**.

Table 1-2 EESOH MIS IDs

Previously Used ID	EESOH-MIS ID
XU854 MRA	854 MRA
XU854 MRS	XU854 MRS
SR864 MRA	864 MRA
SR864 MRS	SR864 MRS
ML865 MRA	865 MRA
ML865 MRS	ML865 MRS
RR869 MRA	869 MRA
RR869a MRS	RR869a MRS

1.3 Project Purpose and Scope

XU854 and SR864 MRSs

The purpose of the RI at XU854 and SR864 MRSs was to provide site characterization data of sufficient quantity and quality to determine nature and extent of Munitions and Explosives of Concern (MEC) and MC within the MRSs in order to either focus follow-on restoration efforts on MEC and/or MC delineated areas or to recommend MRSs for No Further Action (NFA) for MEC and/or MC. As outlined in the approved RI Work Plans (WPs) for these two sites ([FPM, 2014a], [FPM, 2014b]), the RI was performed to:

(1) Characterize potential explosive safety hazards including MEC;

(2) Characterize the nature and extent of MC contamination (metals, explosives, and propellants) in site media (e.g., surface/subsurface soil);

(3) Perform a hazard assessment for MEC (if applicable) and perform a baseline risk assessment for MC; and

(4) Use the information collected during the RI to update the Conceptual Site Models (CSMs), evaluate human health and ecological risks, and determine Munitions Response Site Prioritization Protocol (MRSPP) scores.

ML865 and RR869a MRSs

The purpose of the RI at ML865 and RR869a MRSs was to identify the potential surface MEC and MC contamination and to provide site data of sufficient quantity and quality to close existing

data gaps at two MRSs. Geophysical investigation or intrusive investigations were not performed prior to the RI at these two sites, and therefore, there was no information regarding the distribution of subsurface geophysical anomaly density. Although some intrusive investigation was performed at both MRSs during the RI (see **Sections 4.3.3** and **4.3.4**), intrusive investigation in general was not planned for the RI field activities. Given the nature of the potential subsurface MEC/Munitions Debris (MD), FPM will complete an Engineering Evaluation/Cost Analysis (EE/CA) and Non-Time Critical Removal Action (NTCRA) Action Memorandum (AM) to evaluate and document the need to remove all anomalies with responses above the established thresholds based on site-specific data from both MRSs. During the follow-on NTCRA, FPM intends to remove subsurface anomalies identified during the RI. The subsurface anomalies that will be removed include all anomalies with responses above the established thresholds based on site-specific data from both MRSs.

RI Field Activities

The RI field activities at four MRSs included:

- Limited brush clearing,
- Analog-assisted MEC and Material Potentially Presenting an Explosive Hazard (MPPEH) detection, flagging, and identification; recording locations where MEC/MPPEH were found,
- Digital Geophysical Mapping (DGM) of transects (XU854) and grids (all four MRSs),
- Intrusive investigation of DGM targets,
- Use of approved MPPEH management procedures to determine any explosive hazard, collate the recovered material and store it accordingly. Material Documented as Safe (MDAS) was stored in secure containers.
- MEC demolition (SR864 only) and treatment/demilitarization of MPPEH/MD (ML865 only).
- Offsite recycling of MDAS.

FPM performed the fieldwork in close coordination with the Base offices of Natural and Cultural Resources, the Holloman AFB Environmental Restoration Manager and achieved concurrence on the path forward at all phases of the RI. Based on the Holloman AFB cultural resources map, only two cultural sites are located within the four MRSs discussed in this report: Building 1442 at XU854 and piping and nozzles for the artificial rain at ML865. Neither of the two cultural sites was affected by the RI field activities. In addition, since XU854 MRS is located on land that belongs to the Army/White Sands Missile Range (WSMR), FPM coordinated with WSMR Real Property and Environmental to obtain necessary permits for RI activities at that site.

1.4 RI Report Organization

This RI Report is organized as follows:

Section 1: Introduction - describes the project authorization, project purpose and scope, site location, setting, history, and current and future land uses.

Section 2: Remedial Investigation Objectives - identifies the project objectives.

Section 3: Remedial Investigation Field Activities - describes the methodology and procedures followed during the RI field activities.

Section 4: Remedial Investigation Results - presents the results of the field activities.

Section 5: Revised Conceptual Site Models - provides information on the revised CSMs for MEC and MC.

Section 6: MEC Hazard Assessment (MEC-HA), MC Risk Assessment and MRSPP Scoring - analyzes site specific information to support the hazard management decision-making process and to support hazard communication.

Section 7: Summary and Conclusions - summarizes the RI field activities, findings, and presents conclusions and recommendations for the XU854, SR864, ML865, and RR869a MRSs.

Section 8: References - provides a list of references used to develop this RI Report.

Appendix A: Survey Coordinates of the Base Grid Cells of SR864, ML865, and RR869a MRSs

Appendix B: Daily Site, Quality Control (QC), and Health and Safety Reports.

Appendix C: Instrument Verification Strip (IVS), Instrument QC Documentation, Blind Seeding Program (BSP) Results, and Production and QC XYZ Files.

Appendix D: DGM Target Anomaly Lists – Dig Sheets.

Appendix E: Geonics Electromagnetic Induction (EMI) Sensor EM61-MK2 (EM61) Channel 2 Data Figures and Geometrics G-858 Cesium Vapor Magnetometer (G-858) Analytic Signal Figures.

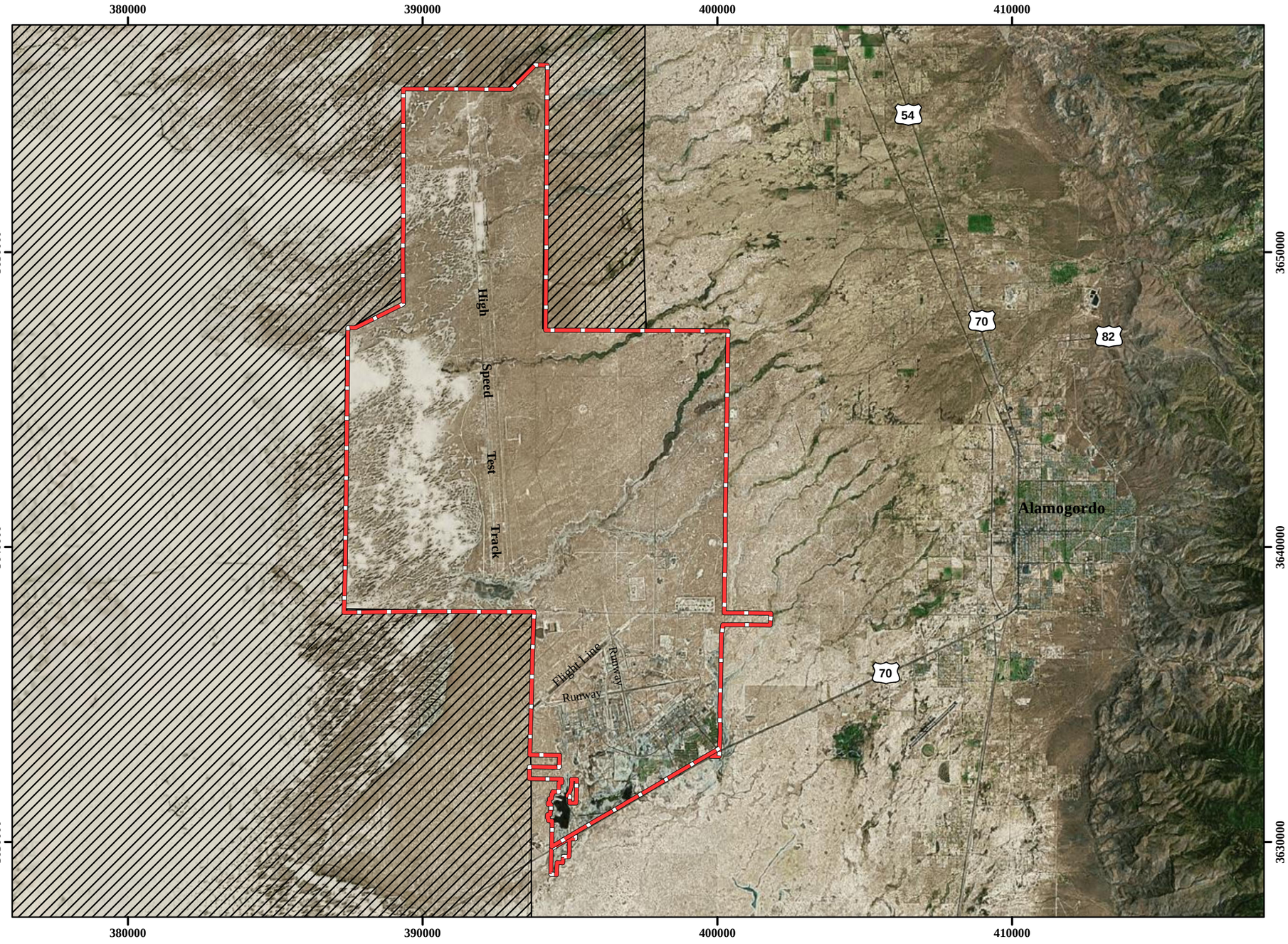
Appendix F: MEC and MDAS Disposition Documentation.

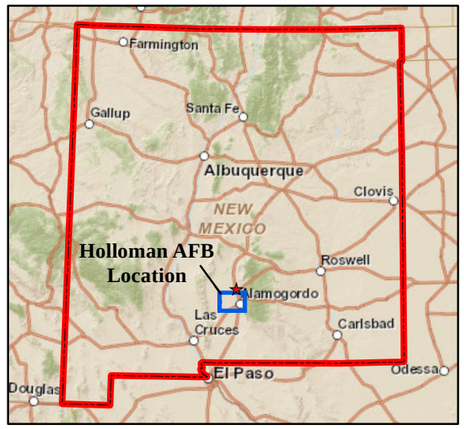
Appendix G: Analytical Data and Data Review.

Appendix H: MRSPP Tables.

1.5 Installation Location and Description

Holloman AFB is located in south-central New Mexico, seven miles west of the city of Alamogordo in Otero County (**Figure 1-1**). A portion of the Base to the south is bordered by Route 70, which also runs roughly north-south and parallel to the eastern boundary of the Base. Holloman AFB occupies approximately 50,763 acres of land. It is contiguous to the much larger (2.2 million acre) WSMR, and located adjacent to the eastern portion of the WSMR. The southern portion of Holloman AFB contains the flight line, composed of a series of runways running north-south, east-west, and northeast southwest. The Main Base is located at the southeast corner of the installation, where Route 70 borders the Base. The Main Base contains housing and administrative buildings. The West Area and the North Area refer to the improved areas around the original airfield (southeastern triangle formed by the runways). The High Speed Test Track (HSTT) runs north-south and is located northwest of the airfield. The track is the world's longest of its kind at 9.5 miles and has been used for an array of missile testing for decades and is still in use today. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation.





Legend

White Sands Missile Range

Installation Boundary

NOTES:

Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 12,000 feet

0 1,850 3,700 Meters

0 6,000 12,000 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 1-1

Holloman Air Force Base Location

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig1-1.mxd

This page is intentionally left blank.

1.6 Installation Mission and Operational History

Holloman AFB began nine months after the U.S. entered World War II (WWII), and was an integral facility in the early stages of the U.S. space program throughout the Cold War. On 6 February 1942, construction began on an extensive bombing and gunnery range later known as the Alamogordo Bombing and Gunnery Range. On 10 August 1942, the Alamogordo Army Air

Field (AAAF) was officially established. Because the facility was initially intended to be used by Great Britain as part of their WWII British Training Program for bomber crews, the Base was designed after Royal Air Force bases. The first atomic bomb was detonated at the Trinity Site in the northwest corner of the Alamogordo Bombing and Gunnery Range (now the WSMR) on 16 July 1945. In 1946, as more lands became available within the Tularosa Basin, the AAAF was reassigned to be a missile development facility. With the creation of the USAF as a separate service, the facility came under the direction of the Air Materiel Command, which decided that the facility would be used to conduct guided missile programs. On 13 January 1948, the Base was renamed Holloman AFB, after Col. George V. Holloman, an early pioneer in guided missile development.

To support the Holloman mission of developing guided missiles, the Army Ordnance Corps built White Sands Proving Grounds at about this time. The combination of the White Sands Proving Grounds and Alamogordo Bombing Range was 100 miles long and 40 miles wide. On 1 September 1952, the two ranges were combined to form the Integrated White Sands Range. From 1952 to 1970, missile development and testing at White Sands included the Snark Matador, Mace, Falcon, Aerobee, JB-2 Loon, and Firebee missiles. High speed sled tests, high altitude balloon projects, and Aeromedical Field Laboratory experiments were also conducted. Testing activities included the Central Inertial Guidance Test Facility and the Radar Target Scatter Test Facility. In 1972, the Base was taken over by Tactical Air Command and became primarily a fighter base with some continued developmental testing. On 15 November 1991, command responsibility passed from the 833rd Air Division to the 49th Wing. Today, the 49th Wing provides leadership to the installation. Two projects begun during the Cold War era continue on the Base: the HSTT and the Primate Research Lab (both considered tenant organizations).

1.6.1 Site Description and Operational History of XU854 MRS

XU854 MRS is located just west of the Holloman AFB main Base boundary fence, on the land that belongs to the WSMR (**Figure 1-2**). The MRS is 47.70 acres in size.

Able 51 Area MRA was used as a launch facility in the late 1950s and early 1960s for testing of Mace and Matador missiles. Also referred to as the Zero Length (ZEL) site or BQM-34A Drone Launch site, this area was also used for research on mobile launch capability of both manned and unmanned aircraft, using rocket boosters, without the need for prepared airfields. Building 1440, completed in 1962, was used as an observation blockhouse for Mace and Matador missiles and drone launches. Since missile testing ended at the Able 51 Area in the early 1970s, Building 1440 has been either used for storage or has been vacant. Building 1442 was constructed in 1959 as a missile launch facility and is currently vacant. Missiles and aircraft were launched from a fixed launcher as well as mobile launchers tethered to concrete pads within the Able 51 Area. Since the activities were designed for testing it is unlikely that the test items contained high explosives. In addition, evidence from CSE Phase II visual survey (HDR Environmental, Operations and Construction, Inc., [HDR], 2013) suggests recent but minor usage of small arms.

1.6.2 Site Description and Operational History of SR864 MRS

The SR864 Poorman Range MRS is 22.80-acre site located east of the Jeep Target Area (**Figure 1-3**). Initially it was identified as 5.40-acre MRA 864; however, based on the presence of MEC, MD, and small arms debris east and west of the original MRA boundary, the size of the area was increased to 22.80 acres and the entire MRA was identified as SR864 MRS at the conclusion of the CSE Phase II.

The MRA 864 is visible on aerial photography from as early as 1945. The Laboratory of Anthropology Site Record describes it as a feature located southeast of the Jeep Target Area consisting of 25 gun placement stations. Each firing station is composed of a constellation of seven concrete pads, including one gun mount pad. The area was used for training using .50 caliber guns and ammunition.

1.6.3 Site Description and Operational History of ML865 MRS

The ML865 Ballistic Rain Field MRS is 18.30-acre site located west of the HSTT, just north of Hay Draw (**Figure 1-4**). Initially it was identified as 5.20-acre MRA 865; however, due to continued presence of MD items observed during the CSE Phase II (HDR, 2013) beyond the boundary of the original MRA, the size of the area was increased to 18.3 acres and the entire MRA was identified as ML865 MRS at the conclusion of the CSE Phase II.

The MRA was used to create artificial rain for the purpose of testing the effects on artillery. The direction of fire was from the east to the west, although the firing point was not identified. The period of operation for the MRA 865 is unknown; however; aerial photography from 1972 shows the earth and timber target butt at the western end of a road perpendicular to the HSTT.

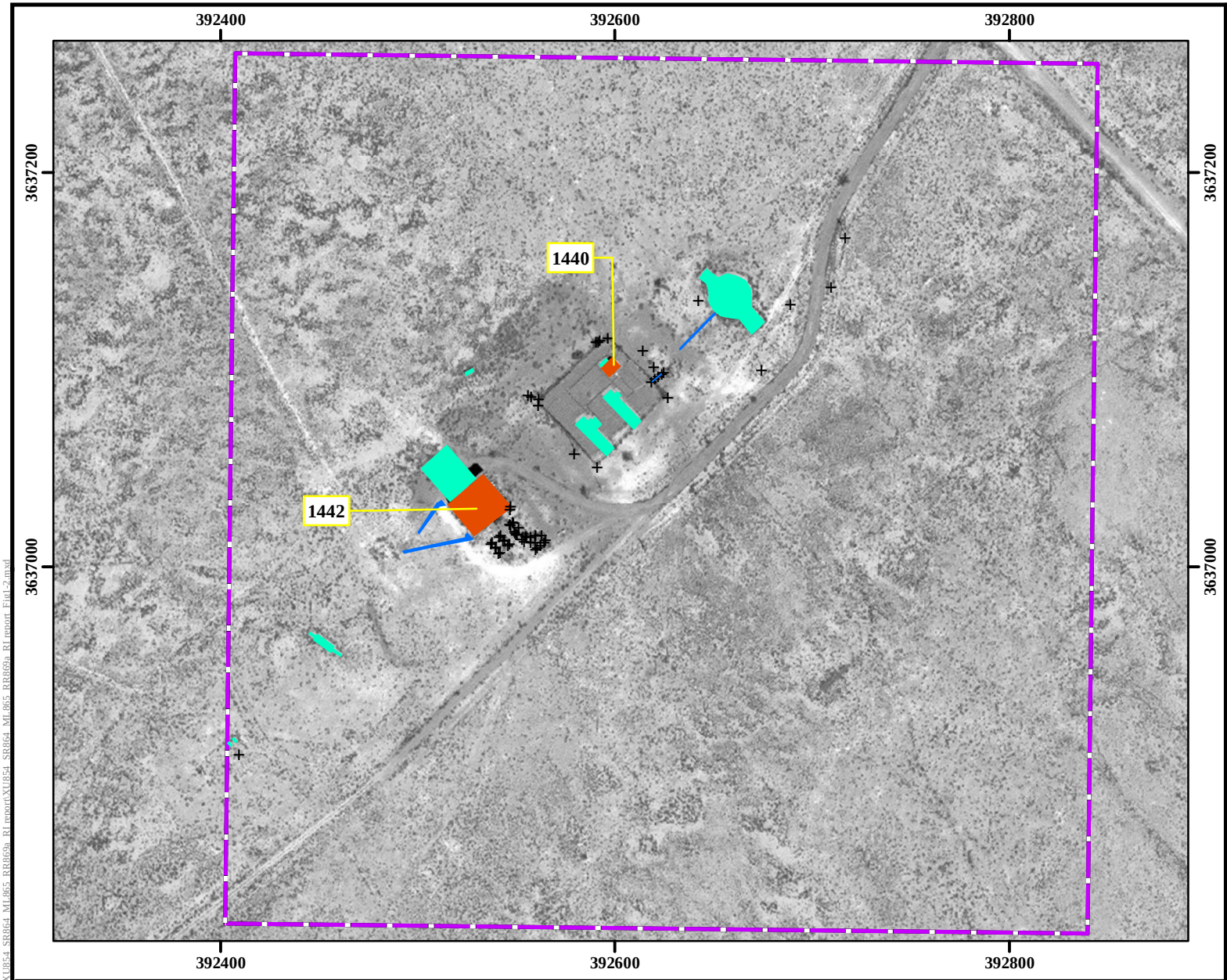
Based on CSE Phase II visual survey and RI surface clearance results the following projectiles may be found in the subsurface of the site:

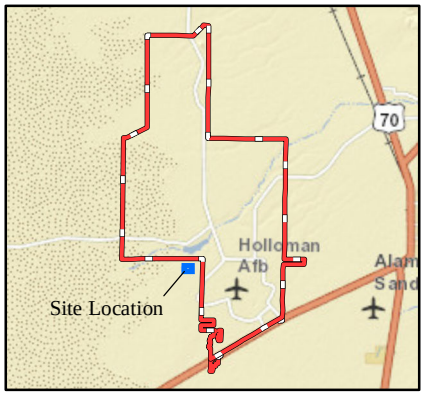
- 20 millimeter (mm),
- 37 mm,
- 75 mm,
- 105 mm, and
- 155 mm.

1.6.4 Site Description and Operational History of RR869a MRS

The RR869a Debris Field MRS is a 3.50-acre site located in the south-central portion of the Base north of Munitions Storage Buildings 1197 and 1198 (**Figure 1-5**). The site is located south of Ritas Draw. Initially the site was identified as 3.60-acre MRA 869; however, due to overlapping boundaries with Installation Restoration Program (IRP) Site OT-04 the CSE Phase II investigation (HDR, 2013) recommended splitting the MRA 869 into two MRSs. The Debris Field (RR869) MRS (0.1 acres) is comprised of the overlapping portion with IRP Site OT-04, which was investigated under the IRP and is therefore ineligible under the MMRP and the Debris Field (RR869a) MRS, consisting of the remaining 3.50 acres.

Exact historical munitions use at the MRA 869 are unknown, however during previous investigations, debris consistent with a possible missile/drone crash were observed along with 5-inch rocket motor fragments, small arms projectiles, small amounts of clay target debris, possible





Legend

- Buildings
- Concrete Pad
- Concrete Channel
- \+ Surface Obstacles (steel beam, metal pipe, anchor, electric pole, reinforced concrete block)
- XU854 Able 51 Area MRS (47.7 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 1-2

XU854 Able 51 Area
MRS Location

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 250 feet

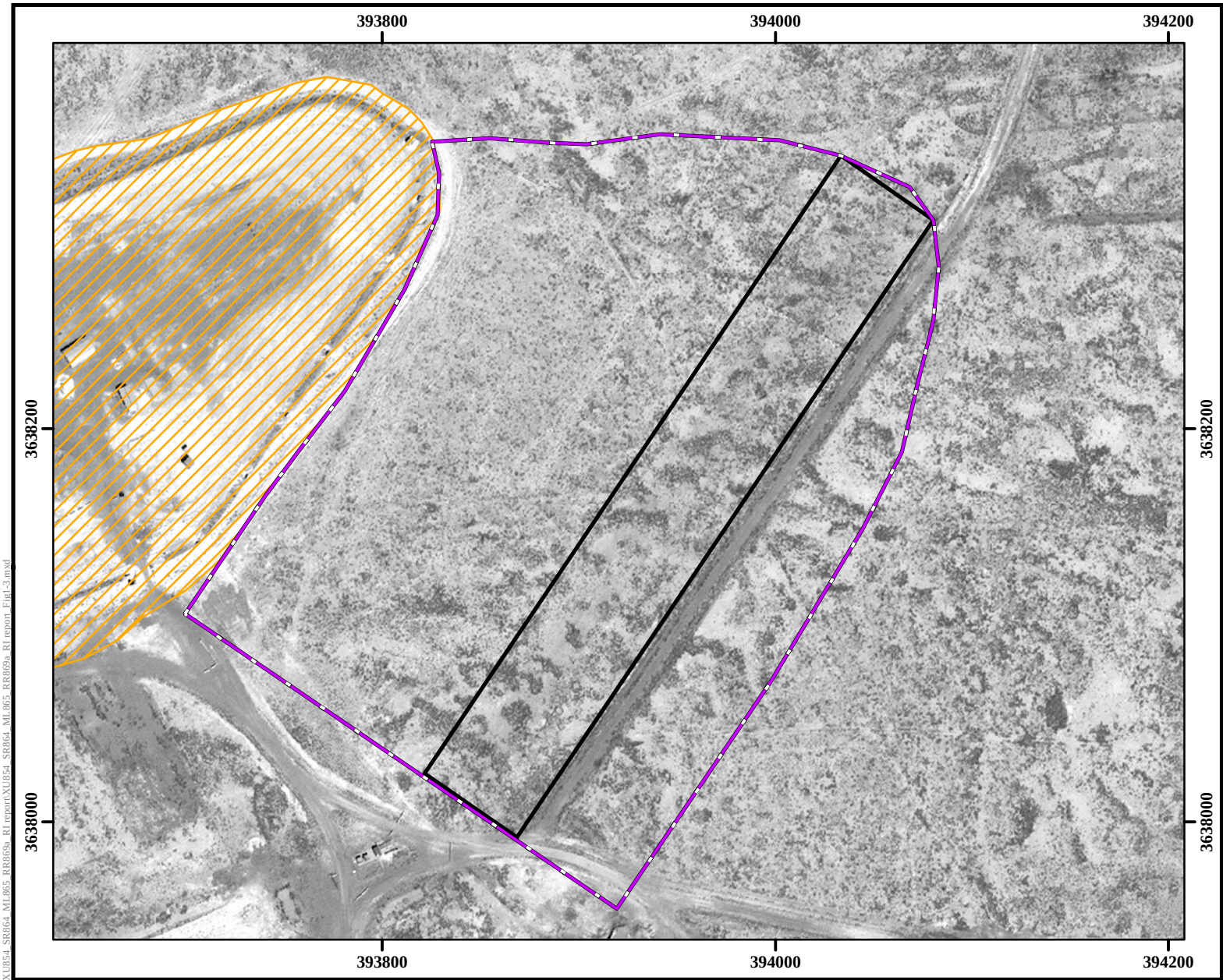
0 40 80
Meters

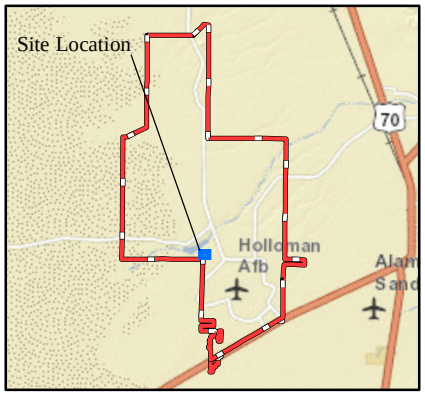
0 125 250
Feet

N
W E
S

Path: C:\Projects\New Mexico\GIS\XU854_SR864_MI_865_RR869s_R1report\XU854_SR864_MI_865_RR869s_R1report_Fig1-2.mxd

This page is intentionally left blank.





Legend

- MRA 864 Poorman Range Original Boundary (5.4 acres)
- SR864 MRS Poorman Range Revised Boundary Based on CSE Phase II (22.8 acres)
- Jeep Target Area
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 1-3

SR864 Poorman Range
MRS Location

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 250 feet

0 40 80 Meters

0 125 250 Feet

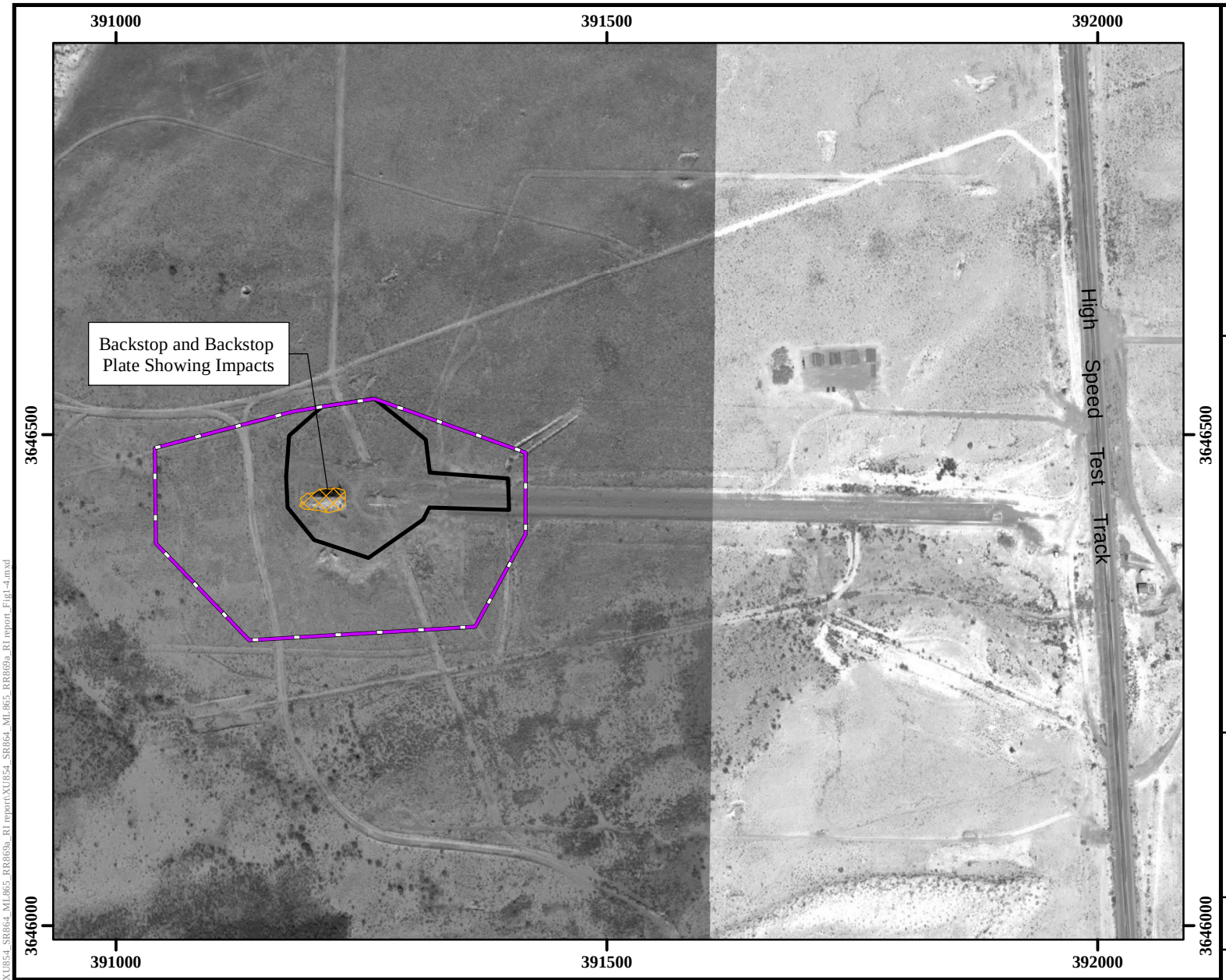
N W E S

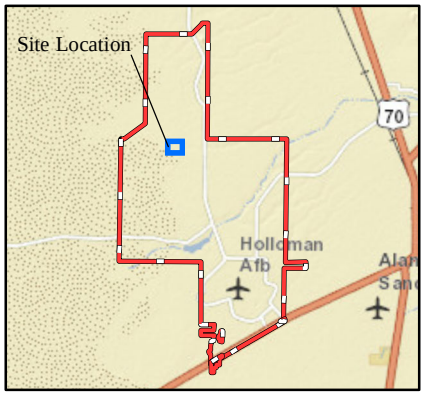
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\X1854_SR864_MI_865_RR869s_RI report\X1854_SR864_MI_865_RR869s_RI report_Fig1-3.mxd

This page is intentionally left blank.





Legend

- MRA 865, Ballistics Rain Field Original Boundary (5.2 acres)
- ML865 MRS Ballistics Rain Field Revised Boundary Based on CSE Phase II (18.3 acres)
- Installation Boundary

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 500 feet

0 75 150 Meters

0 250 500 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 1-4

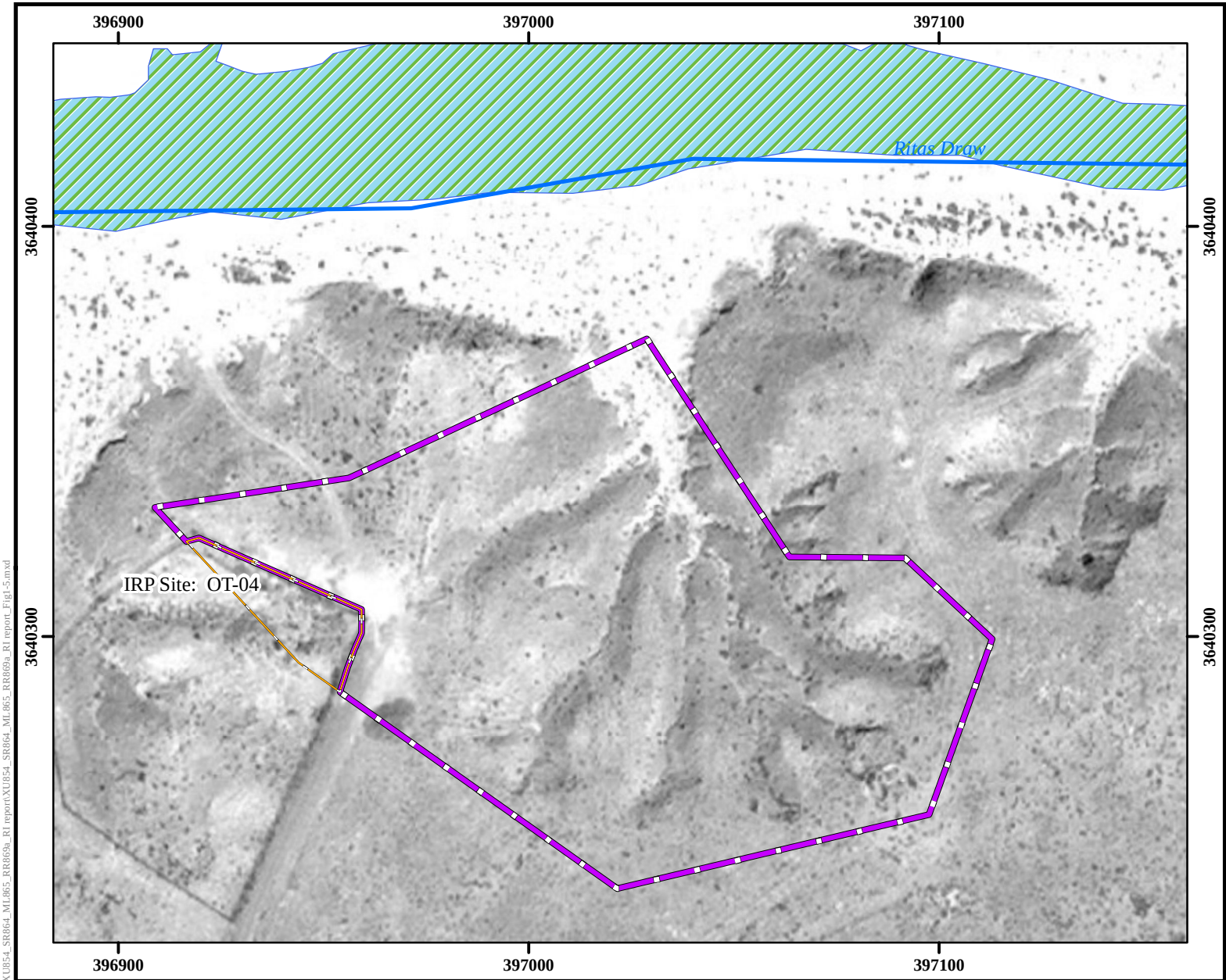
ML865 Ballistics Rain Field
MRS Location

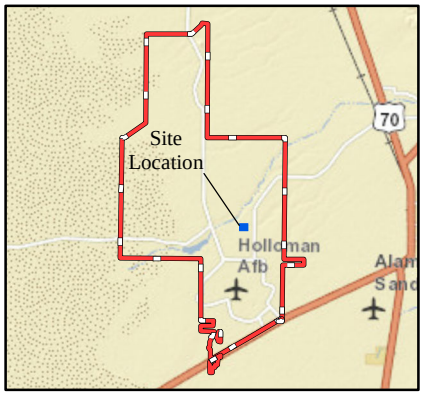
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869b_RI report\XU854_SR864_ML865_RR869b_RI report_Fig1-4.mxd

This page is intentionally left blank.





Legend

- Stream
- Wetlands
- RR869a MRS Debris Field Revised Boundary Based on CSE Phase II (3.5 acres)
- RR869 Debris Field MRS Addressed under the IRP (0.1 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 1-5

RR869a Debris Field MRS Location

NOTES:
1. SR859 MRS boundary based on CSE Phase II findings.
2. HHSL - Human Health Screening Level
3. Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter

1 inch = 120 feet

0 18 36 Meters

0 60 120 Feet

N W E S

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_MI865_RR869b_R1 report\XU854_SR864_MI865_RR869a_R1 report_Fig1-5.mxd

This page is intentionally left blank.

2.75-inch rocket launcher debris, one expended hand grenade fuze, and squibs, one of which was complete and treated as MEC.

Based on CSE Phase II visual survey and RI surface clearance results the following items may be found in the subsurface of the site:

- 2.75-inch rocket,
- 5-inch rocket,
- Hand grenades,
- Electric squibs, and
- Small arms ammunition: 5.56mm, 7.62mm, and .50 caliber.

1.7 Physical Description

1.7.1 Climate

Holloman AFB is located in a semi-arid region within the northern portion of the Chihuahuan Desert. Its climate resembles other semi-arid regions with warm to hot summer days, cool nights, and mild winters. Monthly mean high temperatures range from 55 degrees Fahrenheit (°F) in January to 93.6°F in August. Monthly mean low temperatures range from 29°F in January to 66°F in July. Evapotranspiration is usually high due to dry air, large daily solar radiation totals, seasonally high winds, and warm temperatures. Seasonal fluctuation in precipitation rates is a result of prevailing wind directions, which can bring in frontal storms from the north or the Pacific or Caribbean cyclonic systems. Holloman AFB averages 13.20 inches of annual rainfall. Nearly half of this amount falls within the months of July through September, known as the summer monsoons. Monsoon thunderstorms are generally short in duration and high in intensity. Occurrences are highly variable from year to year and one or two short-term events may contain a large percentage of the net annual precipitation.

1.7.2 Topography

Holloman AFB lies within the Tularosa basin of south-central New Mexico. This area is part of the Mexican Highland section of the Basin and Range physiographic province and is characterized by fault block mountains interspersed with low desert plains and basins. The Base lies on relatively flat alluvial plains below the Sacramento Mountains. These plains are bordered to the west by the White Sands dune field. Elevations range from 4,000 to 4,250 feet (ft) above mean sea level (Sky Research, Inc., 2011).

XU854, SR864 and ML865 MRSs exhibit relatively flat topography. The topography of the RR869a MRS consists of heavily sloping terrain with gorges and gullies.

1.7.3 Soils

The soils on Holloman AFB are basin fill deposits formed primarily from alluvial and eolian processes. All soils have a high gypsum and salt content, primarily due to the eastern migration of gypsum sands from WSMR and White Sands National Monument. Alluvial floodplains on the eastern and southern portions of the base are basin fill deposits from the western slope of the Sacramento Mountains. Subsoils, or undersoils, are formed from sediments of Lake Otero, a Pleistocene lake formed during a climatic cycle of increased moisture. During periods of low precipitation, this large lake, reaching a depth of several hundred feet, would contract and leave

salt and gypsum evaporates. Holloman AFB has three primary soil types: several associations and complexes of Holloman, Gypsum Land, and Yesum soils, located in the flats; Dune Land, found in the White Sands dunes; and Mead silty clay loam soil, found in the alluvial floodplains (including most jurisdictional wetlands). None of the soil types are very productive, due to high gypsum and salt content, and all are highly subject to both wind and water erosion when the vegetation is sparse or the soil is exposed.

Based on proximity with soil mapping units on Holloman AFB, soils at the XU854 MRS consist of the Yesum-Nasa complex. Soils at SR864 and ML865 MRSs consist of Yesum Sandy Loam while soils at RR869a MRS consist of the Gypsic Haplosalid.

1.7.4 Geology

Holloman AFB is located in the Tularosa Basin, a downfaulted, closed, intermountain basin located in the southern portion of the Rio Grande Rift. The Tularosa Basin is a bolson, which is a basin with no surface drainage outlet, in which sediments are carried by surface water into the closed basin and deposited (Bhate, 2007). The Tularosa Basin is thought to have formed approximately 35 million years ago as a result of faulting, with the most recent formational activity having occurred as recently as 10,000 years ago. Basin fill of the Tularosa Basin is derived from the erosion of the uplifted material and fluvial deposits from the Rio Grande River. The Basin fill consists of unconsolidated coarse- to fine-grained alluvial fan deposits along the rims of the basin that are gradational toward the basin into finer-grained alluvial, fluvial, and lacustrine deposits. Evaporite materials, such as selenite, are present. Prominent local physiographic features include the Sacramento Mountains to the east, San Andres Mountainsand White Sands National Monument to the west. The Tularosa Basin was formed as a structural trough during the Middle to Late Cenozoic era. Alluvial fill deposition includes sand, gravel, and clay in alluvial fans along the basin margins and extensive lake, alluvial, and evaporate deposits within the interior basin.

1.7.5 Hydrogeology

Streams sustained by groundwater discharge within the basin include Salt Creek and Malpais Spring. It is estimated that the groundwater resources of the Tularosa Basin contain over 100 million-acre feet of brackish groundwater. A wide range of water chemistries including sodium chloride, carbonate, and sulfate-based brine waters exist in the basin and water with salinity from 1,000 parts per million (ppm) Total Dissolved Solids (TDS), approximate to fresh water, to over 20,000 ppm TDS, approximate to sea water, can be found within the basin. The predominance of groundwater occurs as an unconfined aquifer in the unconsolidated deposits of the central basin. The primary source of groundwater recharge is percolation of rainwater and a minor contribution from stream run-off along the western edge of the Sacramento Mountains. Beneath Holloman AFB, groundwater ranges from 5 to 50 ft below ground surface (bgs). Groundwater flow is generally toward the southwest with localized influences from the variations in Base topography with shallower groundwater found on the southern end of the Base (Sky Research, Inc., 2011).

1.7.6 Hydrology

The only permanent water in the Tularosa Basin is found in small streams between Alamogordo and Three Rivers, New Mexico. There are no perennial streams within Holloman AFB or in the nearby surrounding landscape; however, a set of perennial pools exist within the Base. They are

the final one-third of the Lost River, a set of pools near the confluence of Ritas and Malone Draws, and the Salt Lakes just south of the Lost River and Camera Pad Road Pond. The Rio Grande, located west of the San Andres Mountains, and the Pecos River, east of the Sacramento Mountains, are the closest perennial rivers in the region. There are at least nine prominent east-west drainages that receive intermittent flows during seasonal thunderstorms. The largest of these drainages is the Lost River drainage system, including alone Draw, Carter Draw, and Ritas Draw. Prior to extensive management of the surface topography and construction of U. S. Highway 70/82, Dillard Draw emptied into the Main Base, creating a network of flats and playas including what are now Lake Holloman, Stinky Playa, and Pond G. Construction activities have disrupted the natural flow of this wetland ecosystem (Sky Research, Inc., 2011).

There are no wetlands or surface water associated with the XU854, SR864 and ML865 MRSs. A portion of the RR869a MRS boundary comingles with the wetland buffer zone associated with Ritas Draw.

1.7.7 Vegetation

The vegetation of Holloman AFB is consistent with that of the Tularosa Basin and includes mesquite, creosote bush, and grasses. Succulents such as cactus, agave, and yucca also occur. Sensitive species that currently receive no federal protection include lichen (A. *clauzadeana*), proposed for rare and endangered listing and the grama grass cactus, included due to its former candidate status (Sky Research, Inc., 2011).

Vegetation within the XU854, SR864, ML865, and RR869a MRSs is consistent with desert scrubland.

1.7.8 Ecological Profile

No federally listed species covered under the Endangered Species Act currently reside at Holloman AFB. Several federally listed species, however, have been observed at the base in the past. Mountain plover (proposed federally threatened) nested at Lake Holloman during the 1980s. Brown pelicans (recently delisted) are occasionally observed at Lake Holloman and the constructed wetlands. Peregrine falcons (recently delisted) regularly forage at Lake Holloman. Five other sensitive species currently receive no federal protection: a lichen (*A. clauzadeana*), proposed for rare and endangered listing; the grama grass cactus, included due to its former candidate status; the White Sands pupfish, a state-endangered species; the western burrowing owl, a species of concern; and the western snowy plover, also a species of concern.

No rare, threatened or endangered species are expected to inhabit XU854, SR864, and ML865 MRSs. According to the Integrated Natural Resources Management Plan (INRMP), potential White Sands Pupfish (*Cyprinodon tularosa*) habitat exists in a portion of the RR869a MRS since the MRS is slightly within the wetland buffer zone (Holloman AFB, 1999). However, since no intrusive investigation was performed within the wetland buffer zone, there were no negative impacts to the species and habitat at RR869a MRS during the RI.

1.7.9 Buildings, Structures and Utilities Near/Within the MRSs

XU854 Able 51 Area

Buildings 1440 and 1442 are within the MRS (**Figure 1-2**). Building 1440 either has been used for storage or has been vacant. Building 1442 is currently vacant. Both buildings are considered individually eligible for inclusion in the National Register of Historic Places (NRHP). There are

81 buildings within a 2-mile radius of the XU854 MRS. Operational mission support, recreational, and flight line support buildings are located to the southeast of the XU854 MRS within a 5-mile radius. Utilities associated with buildings/structures on-site are expected to be on/near the XU854 MRS.

SR864 Poorman Range

No buildings are located at the SR864 MRS. There are 101 buildings within a two-mile radius of the site. Operational mission support, recreational, and flight line support buildings are located to the southeast of the SR864 within a four-mile radius.

ML865 Ballistics Rain Field

No buildings are located at the ML865 MRS. There are 12 buildings located within a two-mile radius of the site. Operational mission support, recreational, and flight line support buildings are located to the south of the ML865 within a nine-mile radius.

Facilities still present at the location include piping and nozzles for the artificial rain, and the earth and timber target structure with a steel plate at the face of the structure.

RR869a Debris Field

The RR869a Debris Field MRS is unused and characterized by open space with vegetation consistent with desert scrubland. A portion of the MRS boundary is shared with IRP Site OT-04; however, this site is fenced off from the MRS. There are 100 buildings located within a 2-mile radius of the RR869a Debris Field MRS. Operational mission support, recreational, and buildings that support the flight line are located to the south of the RR869a Debris Field MRS within a 4-mile radius (HDR, 2013). No known utilities exist on/near the location of the Debris Field.

1.7.10 Archaeological and Cultural Resources

Since XU854 MRS was associated with early missile development on Holloman AFB, it is architecturally unique and has potential to yield additional important information. The site is considered eligible to inclusion on the NRHP. The Laboratory of Anthropology Site Record for this MRS identified two buildings and 30 features associated with various testing programs operated between 1959 and 1970 including variety of concrete pads and stands, construction and/or destruction debris, lumber piles, an iron platform, and sandbag piles. Additionally, modern military debris is scattered throughout the site area. The scatter contains colored bottle g1ass, nuts and bolts, various construction materials, electrical wire, rubber hose, discharged cartridge casings, and tin and metal scraps. Based on the Holloman AFB cultural resources map, only two cultural sites are located within the four MRSs discussed in this report: Building 1442 at XU854 and piping and nozzles for the artificial rain at ML865. Neither of the two cultural sites was affected by the RI field activities. The SR864 and RR869a MRSs do not contain archaeological or cultural resources.

1.8 Previous Investigations

Previous investigations performed at MRAs 854, 865, 864, and 869 included:

- Modified CSE Phase I (Shaw Environmental, Inc. [Shaw], 2010), and
- CSE Phase II (HDR, 2013).

1.8.1 CSE Phase I

A Modified CSE Phase I was completed in 2010. Prior to the start of the CSE Phase I, no MRAs had been discovered at Holloman AFB and it was believed that there was a low probability of a significant number of MRAs being found at the base. Therefore, the USAF has modified the CSE Phase I process by deferring some actions typically performed in a Phase I, to the CSE Phase II, if a Phase II is required. For this Modified CSE Phase I, it was determined that a CSM and MRSPP, and Hazard Ranking System scoring elements were not required. The activities performed during the CSE Phase I included identification and review of data repositories located both on and off the installation, interviews with base personnel, and visual surveys.

1.8.1.1 Modified CSE Phase I Results for the Able 51 Area MRA

A visual survey was performed at the Able 51 Area MRA during the Modified CSE Phase I. No MEC or MD other than small arms debris was observed. Several 5.56mm blank cartridges were observed on the ground in the vicinity of buildings 1440 and 1442 and appeared to be unfired or possibly misfires. No MC sampling was conducted at the MRA during the CSE Phase I. Since historical use of this site as a missile test/launch facility may have resulted in MC release, the site was recommended for further evaluation during the CSE Phase II.

1.8.1.2 Modified CSE Phase I Results for 864 MRA

The location of the 5.40-acre Poorman Range MRA 864 was initially based on the 1951 Runway 8 Taxiway Marking, Project Location Plan; however, review of the 1945 aerial photography revealed several discrepancies between the figure and the site layout. The location of the MRA 864 was ultimately georeferenced from the 1945 aerial photograph.

Due to the inaccurate location provided by the 1951 Project Location Plan, a visual survey of the MRA 864 location was not performed during the Modified CSE Phase I. Based on available information, it was concluded that historical small arms use at the Poorman Range MRA 864 may have resulted in the presence of MD and MC on the ground surface and possibly below the ground surface. Therefore, the MRA 864 was recommended for further evaluation during the CSE Phase II.

1.8.1.3 Modified CSE Phase I Results for 865 MRA

Based on the Holloman AFB personnel reports, the Ballistics Rain Field MRA 865 was identified as 5.20-acre artillery range, used to test the effects of artificially created rain on artillery. The direction of fire was from the east to the west, although the firing point was not identified. The period of operation for the MRA 865 is unknown; however, aerial photography from 1972 shows the earth and timber target butt at the western end of a road perpendicular to the HSTT.

A Visual Survey was performed at the MRA 865 during the Modified CSE Phase I. It was observed that the earth and timber target structure was still intact. A steel plate located at the center of the face of the target structure showed evidence of repeated impact; and the bottom, left corner of the plate was missing. Small pieces of artillery shell fragments were scattered across the site, with larger identifiable pieces of 75-mm, 105-mm, and 155-mm artillery shell fragments. Some of the artillery fragments appeared to be the result of low order detonations. Filler observed in the larger shell fragments appeared to resemble trinitrotoluene. Additionally, some inert fillers were dyed to resemble High Explosive (HE) filler, complicating the identification. Based on reports that Explosive Ordnance Disposal (EOD) was aware of, the

filler in the partial artillery projectiles observed was assumed to be inert, but this was not verified. In addition, two stand-off fuzes were observed at the site. MD observed was concentrated to the north of the earth and timber target structure.

Based on available information and visual survey results it was concluded that ballistics testing conducted at the Ballistics Rain Field MRA 865 resulted in the presence of MD, and may have resulted in the presence of MEC and MC on the ground surface and possibly below the ground surface. Therefore, the MRA 865 was recommended for further evaluation during the CSE Phase II.

1.8.1.4 Modified CSE Phase I Results for 869 MRA

During the Modified CSE Phase I field survey activities, debris was observed along the southern slope of Rita's Draw, north of Munitions Storage Buildings 1197 and 1198. Upon further examination, debris consistent with a possible missile/drone crash was observed. Additional MD observed at the site included fragments of 5-inch rocket motors (Shaw, 2010).

During the field investigation, no structural features were observed. The field team observed potential high explosive fragments and MD consistent with a missile or drone crash site.

Recommendations for the CSE Phase II included surface soil and subsurface soil sampling to assess if MC has been released to the environment at the Debris Field.

1.8.2 CSE Phase II

A CSE Phase II investigation was performed at MRAs 854, 865, 864, and 869. The field activities included:

- Visual surveying to identify MEC or MEC-related items and/or features and
- Sampling and analysis of surface and/or subsurface soil to determine if MC, hazardous substances, pollutants and contaminants, or other constituents have been released into the environment.

The sites were prioritized for further munitions response actions, based on relative risk, using the MRSPP scoring system. The MRS Priority is determined by selecting the highest rating from the Explosives Hazard Evaluation (EHE), Chemical Hazard Evaluation (CHE), and Human Health Hazard Evaluation (HHE) modules and ranges from 1 to 8. Priority 1 and 8 indicate the highest and the lowest potential hazards, respectively. Only a site with a chemical warfare hazard can receive an MRS Priority of 1.

1.8.2.1 CSE Phase II Results for 854 MRA

During the CSE Phase II visual survey, the launch site and support buildings which consisted of an observation building, the launch shelter, and concrete launch pads were present and generally intact, but fenced and locked.

Intact small arms ammunition (5.56mm and 7.62mm), small arms munitions debris (.22-caliber, 5.56mm, 7.62mm, .38-caliber, .45-caliber, and .50-caliber) and MD (40mm flares, M74 airburst simulator, projectiles, slap flares, and smoke grenades) were discovered at the site. It was concluded that the small arms debris and MD items documented during visual surveys were likely associated with recent small arms training activities.

No MEC or missile debris were observed during the visual survey; therefore, no MC sampling was conducted in the MRA Although intact small arms ammunitions was identified during the visual survey, there is no historical record of small arms training conducted at the MRA, and since the CSE Phase II visual survey did not discover any evidence of formal small arms training (e.g., targets, berms, and firing positions), the small arms debris discovered at the MRA during the CSE Phase II suggest recent but minor usage of small arms. Therefore, no MC sampling for lead was conducted in the MRA. As a result, no human health or ecological screening was conducted for this site. The CSE Phase II concluded that any human health or ecological risks at this site was expected to be similar to background conditions.

Based on the presence of surface MD within the MRA, the identified 47.7-acre XU854 MRS obtained an MRSPP score of 6 and was recommended for further munitions response action at the conclusion of the CSE Phase II.

1.8.2.2 CSE Phase II Results for 864 MRA

A Visual survey was completed at the 5.40-acre Poorman Range MRA 864. Observed firing pads were relatively intact and 25 firing stations were present on the area. Remnants of wooden tow carts were also present on the area. Since small arms debris and MD were observed across the entire MRA, the visual surveys were extended to the east and west of the MRA boundary.

The following items were observed during the visual survey:

- MEC – two intact M18 smoke grenades, two intact M116A1 hand grenade simulators, and one intact M115A2 ground burst simulator;
- MD - expended M18 smoke grenades, hand grenade simulators, and artillery simulators;
- Clay target debris;
- Small arms debris - .50 caliber casings and links near the firing stations, 5.56-mm and 7.62-mm blanks; and
- M16 magazine clip full of 5.56-mm blanks.

It was concluded that MEC and MD items as well as 5.56-mm and 7.62-mm blanks originate from Prime Base Engineer Emergency Force (BEEF) training activities associated with the active Jeep Target Area (**Figure 1-3**).

Eighteen surface soil samples were collected and analyzed for lead using X-Ray Fluorescence (XRF). Lead analysis results for surface soil ranged from below Level of Detection (LOD) (12 milligram [mg]/kilogram [kg]) to 25 mg/kg. Of the 18 surface soil samples collected, 15 were below LOD (12 mg/kg). No samples exceeded the human health screening level of 400 mg/kg. Maximum and mean lead concentrations exceeded the ecological Soil Screening Level (SSL) for only the most sensitive ecological receptor category. The maximum and mean lead concentrations at MRA 864 were within the typical New Mexico lead background range. Therefore it was concluded that lead does not pose human health and ecological risk at the MRA 864.

Eight surface and two subsurface samples were collected and analyzed for Polynuclear Aromatic Hydrocarbons (PAH) analysis. No results exceeded the human health screening level. Concentrations of High Molecular Weight PAHs and Low Molecular Wight PAHs were less

than their respective ecological screening benchmarks. Therefore, it was concluded that PAHs do not pose human health and ecological risk at the MRA 864.

Based on the surface MD present outside the original MRA boundary, the overall acreage of the Poorman Range MRA 864 increased from 5.40 acres to 22.80 acres at the conclusion of the CSE Phase II (**Figure 1-3**). The identified 22.80-acre SR864 MRS obtained an MRSPP score of 6 and was recommended for further munitions response action.

1.8.2.3 CSE Phase II Results for 865 MRA

The raised gravel, asphalt mound, and reinforced berm backstop were observed at the 5.20-acre MRA 865 during the CSE Phase II visual survey. The asphalt mound is running east-west, beginning near the HSTT and continuing west to a reinforced berm backstop. The western half of this raised gravel mound is lined on either side by the pipes and nozzles used to mimic rain conditions during ballistics tests.

Since the original MRA 865 (5.20 acres) is littered with debris from 75-mm, 105-mm, 155-mm projectiles, expended projectile fuzes, and 5-inch rockets, the visual survey was extended beyond this MRA boundary showing the continued presence of MD outside of the original MRA. In addition, one partial 20-mm projectile was observed, and one possible partial missile casing was observed southwest of the MRA. Two expended 5-inch rocket motors were documented to the southeast of the MRA.

Potential MEC items observed during the visual survey included 7 intact 105-mm rounds reported to Holloman EOD for disposal, where it was confirmed that the fillers were inert. Four surface soil samples were collected in the vicinity of damaged potential MEC items and analyzed for explosives. All sample results were non-detect.

Based on the surface MD present outside the original MRA boundary, the overall acreage of the Ballistics Rain Field MRA 865 increased from 5.20 acres to 18.30 acres at the conclusion of the CSE Phase II (**Figure 1-4**). The identified 18.30-acre ML865 MRS obtained an MRSPP score of 4 and was recommended for further munitions response action.

1.8.2.4 CSE Phase II Results for 869 MRA

During the field investigation, visual survey transects were completed at the Debris Field MRA. Metal scrap was observed throughout the area. Small arms-related debris consisted of one .50 cal projectile and sparse clay target debris. The field team observed various items that were identified as rocket launcher and possible rocket debris including 2.75-inch launcher debris and possible 5-inch rocket debris among other unidentifiable items. These items were documented as MD. One expended hand grenade fuze was also observed. Expended electric squibs were observed, along with one squib with a single intact charge. Holloman EOD was notified of the intact squib and collected the item for disposal. No other MEC items were discovered. No craters indicative of a target area were identified.

Sampling was not conducted during the CSE Phase II because no potential sources of MC were found during MRA surveys. Any risk at this MRA is expected to be similar to background conditions. The unfired squib round identified, are typically used to initiate an aircraft counter measure device and are considered a low explosive hazard. Squibs are not considered high explosive and the quantities of explosives in the items are not high enough in concentration to pose an explosives hazard; therefore sampling for explosives was not justified during this investigation.

The results from the CSE Phase II were also used to modify the investigated MRA boundary resulting in two MRSs. The RR869 Debris Field MRS (0.10 acres) was investigated as part of OT-04 under the IRP and is therefore ineligible under the MMRP. The RR869a Debris Field MRS consists of 3.50 acres and was recommended for further munitions response action.

The RR869a Debris Field MRS obtained an MRSPP score of 5 and was recommended for further munitions response action. Due to RR869 Debris Field MRS being ineligible for the MMRP it was not scored using the MRSPP.

1.9 Current and Future Land Uses

The goal of MMRP efforts at all four MRS is Site Closeout without any controls or restrictions.

1.9.1 XU854 MRS

The XU854 MRS is currently unused. No future land usage changes for this site are known at this time. The XU854 MRS lies just west of the Holloman AFB main boundary. There is a locked gate located at the end of the main access road. Access to the XU854 Able 51 Area is restricted to authorized Base personnel and contractors.

1.9.2 SR864 MRS

The SR864 Poorman Range MRS area is currently unused and no known changes to the future land use have been indicated. Access to Holloman AFB requires admittance through the security gate and there is a fence around the Base. The site is located north of gates IP-7 and IP-8, which are secured with combination locks. This is the most direct method of access; however, the barrier is incomplete as the site may be accessed using a rutted dirt road to the north. Therefore, access to the SR864 MRS is restricted for the general public, but is open to Base personnel, contractors, and Base residents.

1.9.3 ML865 MRS

The ML865 Ballistic Rain Field MRS is currently unused and no known changes to the future land use have been indicated. There is no fencing or other controls associated with the ML865 MRS; however, access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. Access coordination with HSTT personnel is required. Therefore, access to the ML865 MRS is restricted for the general public, but is open to Base personnel, contractors, and Base residents.

1.9.4 RR869a MRS

The RR869a Debris Field MRS is currently unused open space and no known changes to the future land use have been indicated. The site is located north of gate IP-11, which is secured with a combination lock. There is no fencing or other controls associated with the site; however, access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. Therefore, access to the MRS is restricted for the general public, but is open to Base personnel and contractors.

This page is intentionally left blank.

2.0 REMEDIAL INVESTIGATION OBJECTIVES

The primary objectives of the RI for the four MRSs addressed in this RI Report were to:

- Characterize the nature and extent of MEC and MC within the XU854 and SR864 MRSs in order to focus follow-on restoration efforts on MEC and/or MC delineated areas, or to recommend MRSs for NFA for MEC and/or MC.
- Identify surface MEC and MC and provide DGM data of sufficient quantity and quality to close existing data gaps at ML865 and RR869a MRSs. The subsurface anomalies with responses above the established site-specific thresholds at these two MRSs will be removed during the follow-on NTCRA.

The overall remediation objective for all four MRSs is Site Closeout without any controls or restrictions.

Project planning began with a project kickoff meeting in October 2013 that included representatives from Holloman AFB and AFCEC. Technical project plans began immediately following the project kickoff meeting and included developing the RI WPs and Explosives Safety Submission (ESS).

The RI WPs for the 4 MRSs were provided to the project team for review and all comments received from that review were resolved and incorporated into the Final RI WPs for the XU854 (FPM, 2014a), SR864 and ML865 (FPM, 2014b) and RR869a (FPM, 2014c). The Final RI WPs included a description of planned RI field activities based on the site's CSMs, project RI objectives, and the preliminary identification of Applicable or Relevant and Appropriate Requirements (ARARs). United States Environmental Protection Agency (USEPA) Region 6 approved the Final RI WPs for all four MRSs.

The Department of Defense Explosives Safety Board (DDESB)-approved ESS (FPM, 2014d) was developed to provide the explosive safety criteria and methodology during implementation of the RI and anticipated follow-on MEC response actions at the ML865 and RR869a MRSs and to protect workers from explosive hazards.

2.1 Conceptual Site Models

CSMs for XU854, SR864, ML865, and RR869a MRSs were developed for MEC and MC during the CSE Phase II (HDR, 2013). These CSMs served as a starting point for the RI WPs. Note: the CSM for XU854 was modified in the RI WP compared to the one provided in the Final CSE Phase II based on the USEPA comment regarding the incomplete exposure pathways for MEC at XU854 MRS. A general discussion of the primary sources of potential contamination for all 4 MRSs based on the results of investigations performed prior to the RI is provided below.

2.1.1 Munitions and Explosives of Concern

Munitions-related activities that have previously occurred at XU854, ML865, and RR869a MRSs were the primary source of MEC/MPPEH at these four sites. These activities may have resulted in the presence of MEC/MPPEH on and below the ground surface. According to available information from CSE Phase II (HDR, 2013), no MEC was anticipated to be present at SR864 MRS.

A variety of naturally occurring processes may alter the condition of the land at the site resulting in a potentially explosive subsurface item being exposed at the surface and becoming more

accessible to contact with people or the environment. These processes may include frost heave, flooding and erosion. A variety of intrusive activities by people also may alter the condition of the land at the site in a manner that a subsurface MEC item may become exposed at the surface. These may include construction activities that involve excavation. The primary exposure pathways for human and ecological receptors at XU854, ML865, and RR869a MRSs were surface MEC handled or tread underfoot and contact with MEC during intrusive activities.

Biota are generally not considered when evaluating MEC risk because, with the exception of threatened and endangered species, risk to biotic receptors is usually evaluated at the population level. Though an individual ecological receptor may experience a negative affect from encountering MEC, MEC does not pose risk to biotic populations unless a large area of habitat were to be destroyed, for example, by a large detonation. Therefore, the MEC exposure pathways to biota at all four MRSs were considered incomplete.

2.1.1.1 XU854 MRS

Since XU854 MRS was historically used for testing rockets and missiles, it is unlikely that the test items contained high explosives. However, MD items identified at this site during the CSE Phase II visual survey included expended smoke grenades and hand grenade simulators which presented a potential explosive hazard. As a result, MEC exposure pathways at XU854 were considered potentially complete for MEC at surface and in the subsurface for all human receptors (authorized Base personnel and contractors and trespassers).

2.1.1.2 SR864 MRS

Since no MEC was anticipated to be present at SR864 MRS based on CSE Phase II results, MEC exposure pathways were considered incomplete for this site for all human receptors (authorized Base personnel and contractors, Base residents, visitors, and trespassers).

2.1.1.3 ML865 MRS

The ML865 MRS was used to create artificial rain for the purpose of testing the effects on artillery. Based on CSE Phase II results, potential for MEC at ML865 was found in the form of MD associated with 155-mm, 105-mm, 75-mm, 37-mm, and 20-mm projectiles as well as unidentified MD. Therefore, MEC exposure pathways at ML865 were considered complete for MEC at surface and potentially complete for MEC in the subsurface for all human receptors (authorized Base personnel and contractors, Base residents, visitors, and trespassers).

2.1.1.4 RR869a MRS

Exact historical munitions use at the RR869a MRS are unknown, however potential for MEC at this site during the CSE Phase II visual survey was found in the form of MD associated with 2.75-inch rockets, 5-inch rockets, hand grenade fuzes, unidentified MD as well as squibs, one of which was complete and treated as MEC. Therefore, MEC exposure pathways at RR869a MRS were considered complete for MEC at surface and potentially complete for MEC in the subsurface for all human receptors (authorized Base personnel and contractors, and trespassers).

2.1.2 Munitions Constituents

In general, migration pathways involve movement via air, water, soil, and the interfaces between these media. Based on the types of releases and the characteristics of MC/Contaminants of Potential Concern (COPCs), the fate and transport of contaminants at Holloman AFB is expected

to occur mainly in the terrestrial environment, but there is potential for migration by aquatic and atmospheric pathways as well.

In the terrestrial environment, if the contaminant is released to soil, it may volatilize, adhere to the soil by sorption, leach into the groundwater with precipitation, or degrade due to chemical (abiotic) or biological (biotic) processes. If the contaminant is volatilized from soil, it may be released to the atmosphere or migrate to groundwater. Constituents that are dissolved in groundwater may eventually be transported to a surface aquatic environment. There are no known aquatic environments present within the XU854, SR864, ML865, and RR869a MRSs. Therefore, this pathway is considered incomplete at all four sites.

In the atmospheric environment, contaminants may exist as vapors or as suspended particulate matter. The transport of contaminants relies mostly on wind currents, and continues until the contaminants are returned to the earth by wet or dry deposition. Degradation of organic compounds in the atmosphere can occur due to direct photolysis, reaction with other chemicals, or reaction with photochemically generated hydroxyl radicals. Based upon the data collected during CSE Phase II activities, transport of MC/COPCs via the atmospheric environment is unlikely at Holloman AFB and therefore at all four MRSs discussed in this report as well.

The exposure pathways at 4 MRSs include direct (or incidental) ingestion of soil, dermal contact with soil, and inhalation of volatiles and fugitive dusts from contaminated soil.

2.1.2.1 XU854 MRS

Since CSE Phase II results suggested potential presence of MEC (potential sources of MC) at surface and in the subsurface, all soil pathways were considered potentially complete for XU854 for all human receptors (authorized Base personnel and contractors and trespassers). MC exposure pathways to biota were considered incomplete for surface/subsurface soil.

There is no present-day human exposure to groundwater at Holloman AFB. The aquifer below Holloman AFB is an unconfined sole source brackish aquifer, with an average depth to GW of 5 to 50 ft bgs. Groundwater flow beneath the installation generally occurs from the northeast to the southwest, and depths to groundwater tend to be shallowest toward the main installation. Depending on future land use, there is a possibility that groundwater supply wells could be put in place for domestic and/or industrial uses, though the high total dissolved solids in the aquifer indicates that the water would likely need pretreatment before it was considered potable. Therefore, exposure pathways were potentially complete for MC in ground water for future base residents (ingestion and dermal contact) and potentially complete for the groundwater route uptake pathway.

2.1.2.2 SR864 MRS

Exposure pathways at SR864 were considered potentially complete for MC at surface/subsurface for all human scenarios (authorized Base personnel and contractors, Base residents, visitors, and trespassers). MC exposure pathways to ecological receptors (terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles) were considered potentially complete for MC at surface/subsurface as well.

2.1.2.3 ML865 MRS

Since CSE Phase II results suggested potential presence of MEC (potential sources of MC) at surface and in the subsurface, exposure pathways were considered potentially complete for all

human receptors (authorized Base personnel and contractors, Base residents, visitors, and trespassers) for MC at surface and potentially complete for MC in the subsurface for all human scenarios except visitors/trespassers, which are unlikely to engage in soil disturbing activities. MC exposure pathways to ecological receptors (terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles) were considered potentially complete at surface/subsurface.

2.1.2.4 RR869a MRS

Since CSE Phase II results suggested potential presence of MEC (potential sources of MC) at surface and in the subsurface, exposure pathways at RR869a were considered potentially complete for all human receptor (authorized Base personnel, contractors, and trespassers) for MC at surface and potentially complete for MC in the subsurface for all human scenarios except trespassers which are unlikely to engage in soil disturbing activities. MC exposure pathways to ecological receptors (terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles) were considered potentially complete at surface/subsurface.

2.2 Preliminary Remediation Goals

The Final RI WPs for the XU854 MRS (FPM, 2014a), SR864 and ML865 MRSs (FPM, 2014b) and RR869a MRS(FPM, 2014c) identified field activities and data requirements to meet the project objectives as well as a description of the project team assembled to meet these objectives. Preliminary Remediation Goals identified in the RI WPs were based upon ARARs for human health and the environment by way of selecting applicable USEPA/New Mexico Environment Department (NMED)-required screening levels.

Site MEC characterization goals included:

- Accurately locating and recording geophysical anomalies,
- Properly analyzing and interpreting the geophysical data, and
- Properly documenting the intrusive findings.

Site MC characterization goals included sampling and analysis of MC in site media (soil), where required.

2.2.1 Project Data Quality Objectives

The Data Quality Objective (DQO) Process is a systematic planning tool that defines the performance criteria that was used to establish the final data collection design as well as to determine acceptable quantitative criteria on the quality and quantity of the data collected. The DQO Process was followed for all 4 MRSs to identify the type, number, location, and physical quantity of samples and data, as well as the QC and Quality Assurance (QA) activities that ensured that sampling design and measurement errors were managed sufficiently to meet the performance and acceptance criteria specified in the DQOs. An overview of the DQO process and the methodologies used in the field investigation and data collection is detailed in the RI WPs.

3.0 REMEDIAL INVESTIGATION FIELD ACTIVITIES

This section details the objectives and technical approach for the field activities conducted during the RI.

3.1 Objectives

The objectives for the Surface Clearance, DGM and Intrusive Investigations conducted are provided below.

- Surface Clearance for DGM Transects (XU854 MRS only) and Grids (all MRSs):
  - Remove surface hazards (MPPEH) from transect and grid footprints in the XU854 MRS,
  - Remove surface hazards (MPPEH) from the entire ML865, RR869a, and SR864 MRS footprints (100% surface clearance),
  - Remove surface debris that could pose a safety hazard to personnel and/or equipment during brush clearing and DGM activities, and
  - Eliminate sources of DGM signal interference on the surface that could obscure subsurface anomalies and thus reduce the effectiveness of the DGM surveys to detect and map subsurface targets.
- DGM along Transects (XU854 MRS only):
  - Identify subsurface anomalies for intrusive investigation.
- DGM across 100% Coverage Grids (all MRSs):
  - Identify subsurface anomalies for intrusive investigation.
- Intrusive Investigation:
  - Characterize subsurface anomalies selected for intrusive investigation (XU854 and SR864 only), and
  - Provide data regarding type, quantity, and depth of MPPEH (all MRSs).
- Soil Sampling:
  - Determine potential MCs in soils within areas that have a high concentration of MEC/MD and at isolated locations where MEC were encountered during surface clearance and intrusive work, and
  - Determine missile/rocket propellant constituents at historic launch pad sites in the XU854 MRS.

3.2 Technical Approach to conducting RI Fieldwork

All field activities described in this section were performed in accordance with (IAW) the RI WPs for the XU854 MRS (FPM, 2014a), SR864 and ML865 MRSs (FPM, 2014b) and RR869a MRS (FPM, 2014c) and were designed and conducted to meet the project objectives outlined in **Section 2.0** of this report. The RI fieldwork was performed at the MRSs between November 10, 2014 and February 24, 2015. Prior to beginning field activities, the FPM MMRP Project Manager (PM) coordinated Base support with Holloman AFB. This included providing access to

the XU854, SR864, ML865, and RR869a MRSs, obtaining all required permits/approvals (e.g., dig permits/brush clearing approvals), identifying a staging area for MDAS and non-MEC related debris, Safe Disposal Areas (SDAs) within each MRS and IVS locations at the installation, and providing utility locates where applicable in the MRSs.

A summary of activities performed at these 4 MRSs is provided below:

- Survey of site boundaries was performed for each MRS;
- Layout of DGM grids was conducted for the entire SR864, RR869a, and ML865 MRS footprints. Coordinates of the southwest corners of grid cells for these 3 MRSs are provided in **Appendix A**;
- Layout of DGM transects and grids was conducted at the XU854 MRS;
- Detector-aided surface clearance was performed within DGM transect and grid footprints prior to brush clearing and DGM activities;
- Brush clearing was conducted as necessary within DGM transect and grid footprints;
- The fence bordering the portion of RR869a MRS was temporarily removed to avoid fence interference during the G-858 data collection at this site. The fence was replaced immediately following intrusive investigation of DGM targets at and in close proximity to the fence location;
- DGM surveys:
  - XU854 - DGM surveys were performed along transects and within grids using the EM61 Electromagnetic Induction (EMI) sensors in a 5-sensor towed array system;
  - SR864 - 100% coverage DGM survey was performed using the 5-sensor EM61 towed array system;
  - ML865 - 100% coverage DGM survey was performed using the G-858 magnetic sensors in a 6-sensor towed array system;
  - RR869a - 100% coverage DGM survey was performed using the G-858 magnetic sensors in a 2-sensor man-portable system;
- Following geophysical data analysis, the site-specific thresholds were determined and DGM target anomaly lists were developed for all 4 MRSs;
- Intrusive investigation of all DGM anomalies with the responses above the determined site-specific thresholds was performed at the XU854 and SR864 MRSs;
- Limited intrusive investigation was performed at the ML865 and RR869a MRSs (the complete removal of DGM anomalies identified for intrusive investigation at these two sites will be performed during the follow-on NTCRA):
  - 8 exploratory test pits located within high anomaly density areas in the ML865 MRS were excavated and anomaly source materials documented;
  - Intrusive investigation of DGM anomalies was conducted along the fence line between RR869a and the IRP site OT-04 to avoid removing the fence a second time during the follow-on NTCRA;

- Use of approved MPPEH management procedures to determine any explosive hazard, segregate the recovered material and store it accordingly;
- Demolition of MEC and demilitarization of MPPEH/MD;
- Soil sampling:
  - Composite surface soil samples for explosives and metals analysis were collected at locations containing isolated occurrences of confirmed MEC (SR864) and at locations containing high concentrations of confirmed surface MD (ML865). Composite soil samples were also collected at the SDA locations within these two MRSs.
  - Incremental sampling (IS) for propellant analysis was performed at the XU854 MRS in the areas immediately surrounding known historical and suspected missile/rocket launch pad site locations.
- MDAS was processed and stored in a secured (locked) container for offsite recycling.

3.3 Surface Clearance

Detector-aided surface clearance was conducted prior to the brush clearing and DGM activities.

3.3.1 Surface Clearance Personnel and Equipment

The surface clearance was performed by a qualified UXO team consisting of two UXO Technician IIIs (UXO IIIs), three UXO technician IIs [UXO IIs], and two UXO Technician Is (UXO Is). The UXO IIIs were team leaders and both teams were supervised by the Senior UXO Supervisor (SUXOS) and dual-hat UXO Safety Officer (UXOSO)/ UXO QC Specialist (UXOQCS). The surface clearance was conducted with the aid of both hand-held analog Schonstedt GA-52Cx magnetic locators (Schonstedts) and hand-held White's Electromagnetic DFX 300 all metal detectors. Positional control for the surface clearance was provided using the sub-meter Differential Global Positioning System (DGPS) Trimble® GPS Pathfinder® ProXRS.

The UXO III (Team Leader) verified that all analog geophysical instrumentation was in proper working order at the start of each day. The analog instruments were tested each morning at an analog IVS established for that purpose. Any "failure to detect" occurrences resulted in that specific instrument being replaced by a properly functioning instrument of the same type. The Schonstedts, handheld electromagnetic metal detectors and the DGPS were also checked throughout the day for adequate battery charge.

3.3.2 Surface Clearance Procedures

The surface clearance was conducted across the entire ML865, RR869a, and SR864 MRS footprints and within selected DGM areas (transects and grids) in the XU854 MRS. Surface clearance work across grids was conducted by a minimum of three UXO technicians, side by side, with the analog geophysical sensors. Lanes were established by pulling fiberglass measuring tapes or ropes from grid node to grid node. Each member of the sweep crew performed detector-assisted visual inspection following a lane. At all times, when a survey line was halted for an item examination by a UXO technician, the rest of the line stopped as well until the item was marked, and a signal to proceed given.

3.4 MPPEH Handling

All discovered MPPEH was handled and stored in accordance with the requirements contained in the DDESB-approved ESS (FPM, 2014d) (see **Section 4.4)**. All discovered MEC items were determined to be safe and were transported to and secured at the SDA until the demolition date. **Figure 3-1** shows the location of SDAs at ML865 and SR864 MRSs since demolition operations were performed at these two sites only. MDAS (MD, Range Related Debris, trash and cultural debris (CD) [e.g., nails, wire, fence posts, etc.]) were collected, segregated (i.e., MD separated from other debris) and temporarily stored in a secure (locked) Conex container for final processing and recycling.

3.5 Brush Clearing

After completing surface clearance work, minimal brush clearing was conducted along the DGM transects and grids as necessary. The amount of vegetation removed was limited to what was necessary to ensure the safety of field personnel while performing DGM, anomaly investigation, sampling, and other RI activities. The vegetation removal was supervised by a UXO II or higher.

The UXO technicians marked any hazards by encircling the hazard with flagging tape. The brush clearing was conducted using manual methods consisting of personnel on the ground using hand or power tools such as machetes, brush hooks, or powered circular-saw-type weed cutters. All clearing activities were coordinated with the Holloman AFB office of Natural Resources. No vegetation restoration was conducted following RI activities due to the minimal amount of brush removed.

3.6 Geophysical Investigations

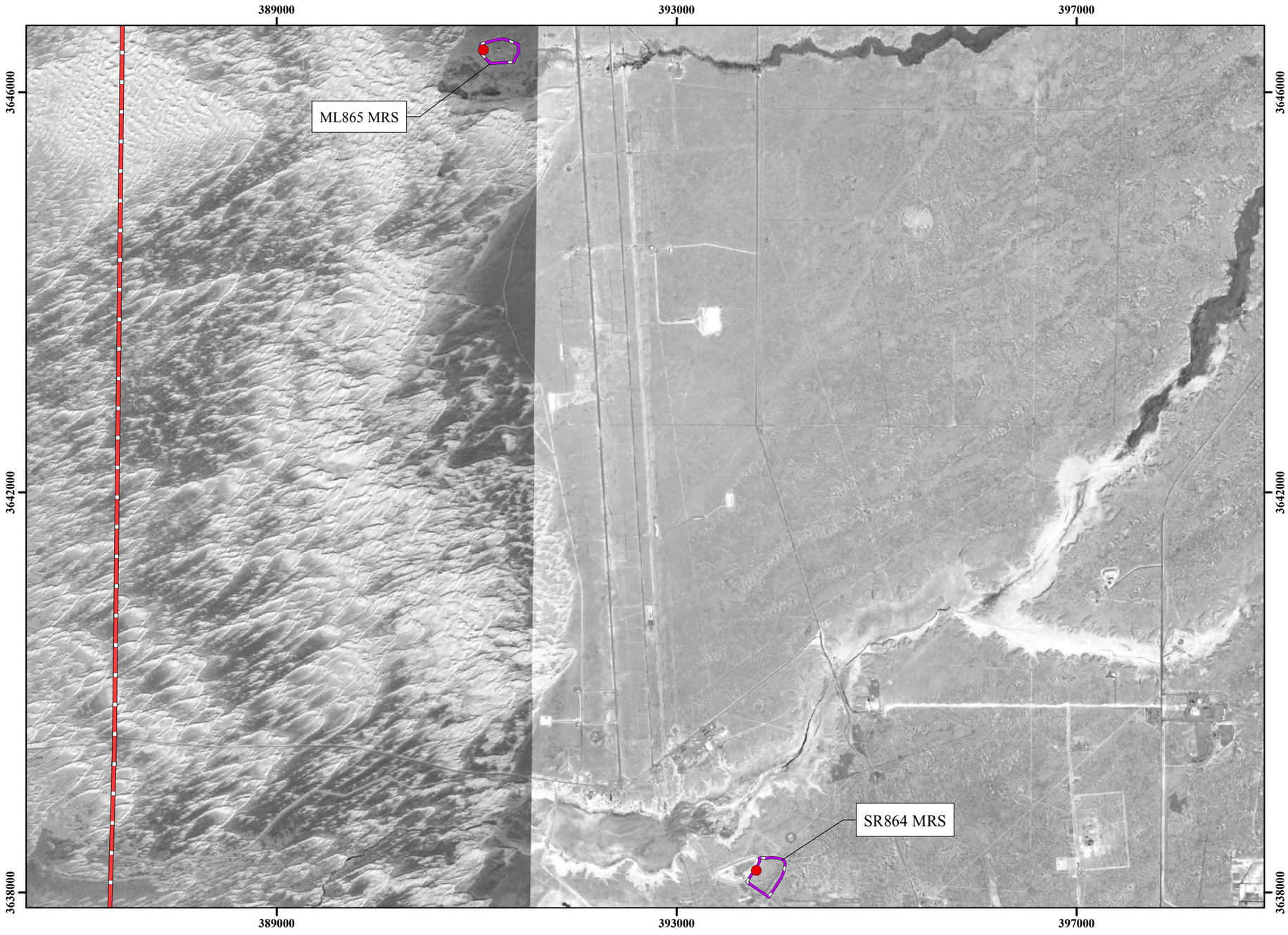
The geophysical investigation activities were performed IAW **Section 3.4** of the RI WPs for the XU854 MRS (FPM, 2014a), SR864 and ML865 MRSs (FPM, 2014b) and RR869a MRS (FPM, 2014c) MRSs. The U.S. Army Corps of Engineers (USACE) Data Item Description (DID) MMRP-09-004 (USACE, 2009) was used in association with Engineering Manuals (EMs) EM-1110-1-4009 (USACE, 2010) and EM 200-1-15 (USACE, 2013a) as guidance for all DGM operations. This section describes the geophysical instruments as well as Geophysical System Verification (GSV) and DGM procedures employed at each MRS.

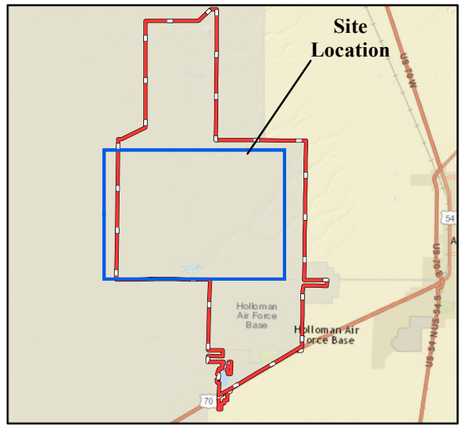
3.6.1 Geophysical Equipment

The DGM surveys at the XU854 and SR864 MRSs were conducted using EM61 EMI sensors, and at the ML865 and RR869a MRSs using G-858 magnetometers. The descriptions of the configurations in which these sensors were deployed at each MRS are provided below.

3.6.1.1 Geonics Electromagnetic Induction Sensor EM61-MK2

The EM61 was operated as a five-coil array towed by an All-Terrain Vehicle (ATV) at the SR864 and XU854 MRSs. The swath for this system was 3.4 meters (m) with a nominal line spacing of 0.6 m. The average velocity of the 5-coil system was 1 m/second (s). Using a collection rate of 10 Hertz (Hz), the sampling interval was one reading per 10 centimeters (cm). This data density provided adequate coverage to satisfy the project DQOs, and the performance standard of 98% of the collected data being less than 25 cm apart along the survey line. Data were recorded on a field Personal Computer (PC) using Maglog software.





Legend

- Safe Disposal Area
- ML865 MRS Ballistics Rain Field (18.3 acres)
- SR864 MRS Poorman Range (22.8 acres)
- Installation Boundary

NOTES:
Revision Date: 4/12/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 3,500 feet

0 500 1,000 Meters

0 1,750 3,500 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-1

Safe Disposal Areas
SR864 and ML865 MRSs

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig3-1.mxd

This page is intentionally left blank.

3.6.1.2 Geometrics G-858 Cesium Vapor Magnetometer

The G-858 was operated as a six-sensor array towed by an ATV at the ML865 MRS. The G-858 towed array consisted of six sensors mounted on a low magnetic signature cart. The sensors were mounted horizontally, with a sensor separation of 0.6 m and positioned approximately 0.25 m above the ground surface. The swath for this system was 3.6 m with nominal line spacing of 0.6 m. Data were collected with a down-line sample interval of 10 Hz.

The G-858 was operated in a shoulder-strap mode at the RR869a MRS. Two sensors were mounted on a low magnetic signature staff that was carried horizontally by the instrument operator at waist height. The sensors were mounted horizontally, with a nominal sensor separation of 0.6 m, and carried approximately 0.25 m above the ground surface. Data were collected with a down-line sample interval of 10 Hz.

A magnetic base station consisting of a single G-858 sensor and microprocessor console was established in an area away from vehicle or pedestrian traffic, and clear of surface and subsurface cultural interference (e.g., metallic debris, fencing, and utilities). The base station console was time-synchronized with the mobile field system console(s) daily. The base station data were later used to correct for diurnal variations in the Earth's magnetic field during the time of the G-858 surveys.

3.6.1.3 Integration of Geophysical and Real-Time Kinematic-Global Positioning System Data

The geophysical sensors (EM61 and G-858) were coupled with a Real-Time Kinematic (RTK)-Global Positioning Systems (GPS) for real-time sensor positioning. A Trimble R8 Rover was mounted on the towed array (surveys at XU854, SR864, and ML865) or on the backpack (survey at RR869a MRS) and data were recorded on a field PC using the Maglog software. The RTK-GPS base station was set up based on benchmarks established by U.S. National Geodetic Survey. Correction data was radio transmitted from the base station to the R8 rover. The GPS readings were recorded at a rate of 1 Hz. The RTK-GPS was configured to output a National Marine Electronics Association data string utilizing the GPS Fixed Data format to the geophysical data loggers.

3.6.2 Geophysical System Verification

A GSV (Nelson et al., 2009a) was used to confirm that the geophysical detection systems (EM61 and G-858) were functioning properly and provide ongoing monitoring of production work to verify the surveys were being performed correctly. The GSV is comprised of two main elements: an IVS and a BSP.

3.6.2.1 Instrument Verification Strip

The IVS for the EM61 system was established in close proximity to the SR864 MRS and was used to provide QC for the geophysical surveys at both the XU854 and SR864 MRSs (**Figure 3-2**). IVSs for the G-858 systems were established in close proximity to the ML865 (**Figure 3-3**) and RR869a (**Figures 3-4**) MRSs. For all IVSs, a background DGM survey and clearing surface/buried metal debris at the IVS locations was performed prior to the placement of Industry Standard Objects (ISOs). The ISO's depth and location was measured to the center and at the middle of the items, respectively, and recorded to a precision of ±0.02 m. In general, the IVSs were performed using the same protocols specified for field data collection. All IVS results and QC XYZ files are provided in **Appendix C**.

IVS for EM61

The IVS for the EM61 system was composed of 4 linear tracks with 6 ISOs (three small and three medium) buried along the central line in three different orientations (vertical, horizontal across track, and horizontal along track). The initial IVS (the first day) was performed by surveying all four lines with each sensor as specified in the RI WPs. Basically, these 4 lines were used to generate a small grid to confirm geolocation accuracy in both directions and check for latencies in the data. The subsequent IVSs (beginning and end of each fieldwork day) included a simplified survey consisting of two passes with each coil in opposite directions over the line of emplaced targets to confirm coil operation and one pass over the line for noise measurement. The line for noise measurement was more than 2 m away from the buried ISOs so that their signals would not contaminate the measured noise background.

IVS for G-858

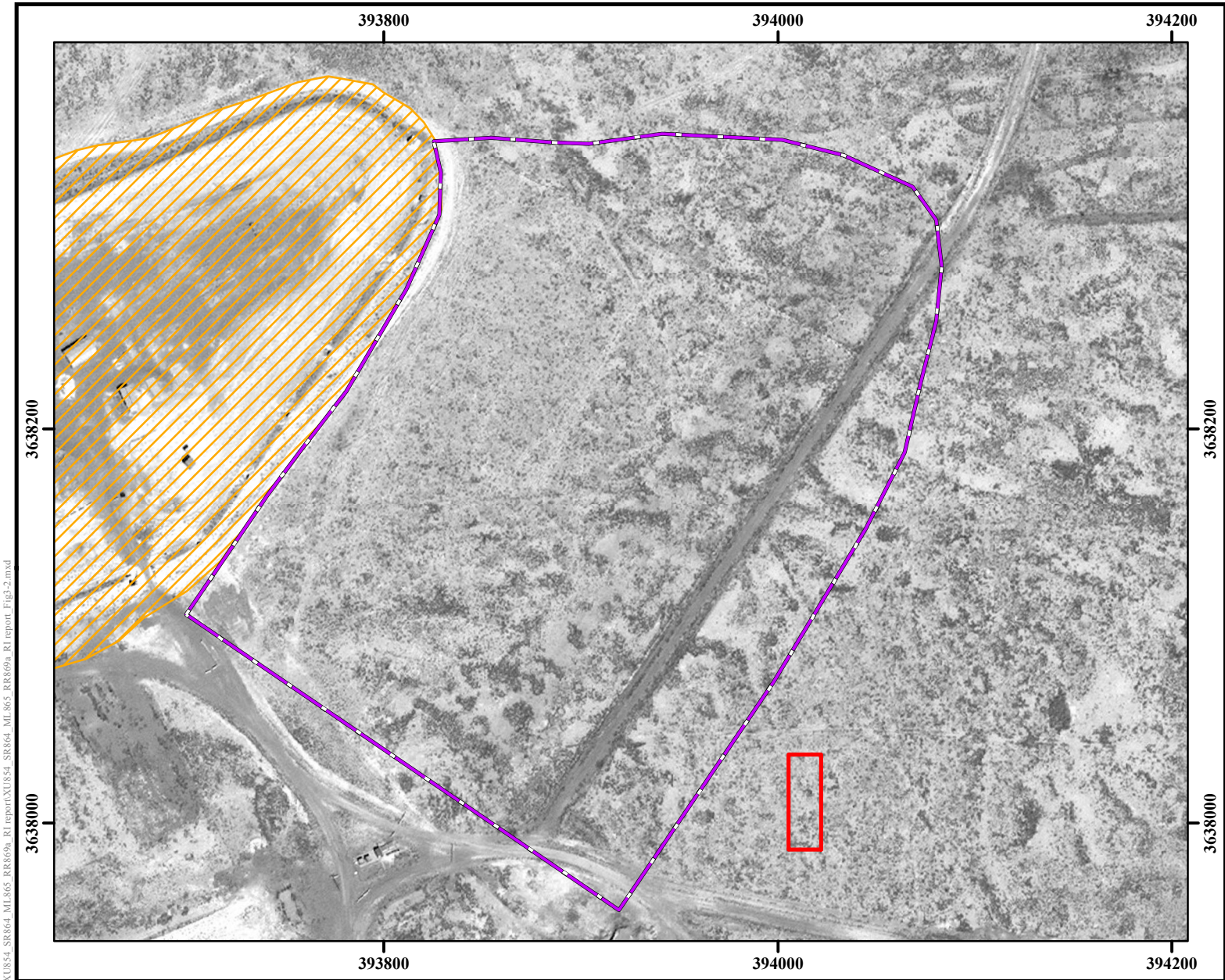
The IVSs for the G-858 at the ML865 and RR869a MRSs were composed of 4 linear tracks with 4 ISOs (2 medium and 2 large) buried along the central line in two different orientations, perpendicular and parallel to the Earth's magnetic field.

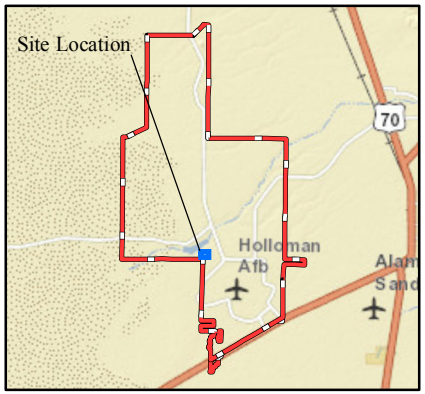
As described for the EM61 IVS, the G-858 IVS on the first day included the survey along all 4 lines while the subsequent IVSs were comprised of simplified surveys along the line with buried ISOs and along the noise measurement line. In this case, the line for noise measurement was more than 6 m away from the buried ISOs.

Since the ISO response as a function of depth and orientation has not been published for the magnetometer system, the IVS can only provide a qualitative confirmation that the magnetometer system is working properly. For surveys with the G-858, the IVS was first used to build a database which defined the boundaries for magnetic response of the ISOs (medium and large). The database included 10 passes of each sensor (for both 6-sensor and 2- sensor systems) over the central line with the buried ISOs. The surveys were performed in the same manner as that for collecting production data (i.e., towed by an ATV at ML865 MRS and in a shoulder-strap mode at RR869a MRS). An average of the readings resulting from the "runs or cycles" over the IVS was taken to determine the range of responses for each item and depth. The databases used for calculating the average G-858 response for each ISO in the IVS are provided in **Table C-10** (six-sensor system) and **Table C-11** (2-sensor system) in Appendix C.

Blind Seeding Program

The BSP was used to evaluate and validate the selected/implemented subsurface investigation process (equipment, data processing, and positional accuracy) and included placement of ISOs at surveyed locations that were blind to the DGM team, data processors, and anomaly resolution teams at sufficient frequency that they were useful for daily quality checks under the actual conditions of the site. Medium and small ISOs were placed at the XU854, SR864, and RR869a MRSs and large, medium, and small ISOs were placed at the ML865 MRS. The chosen seeds were representative of the munitions items of interest at the site and were buried at depths of 10 cm (small ISOs), 30 cm (medium ISOs), and 80 cm (large ISO) in the vertical orientation. The planned locations for seeds were flexible so that they could be emplaced safely. Anomaly avoidance was practiced in the burying of seeds, and all procedures were in compliance with relevant safety guidelines.





Legend

- IVS Location for EM61 System
- SR864 MRS Poorman Range (22.8 acres)
- Jeep Target Area
- Installation Boundary

NOTES:
Revision Date: 4/13/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 250 feet

0 40 80 Meters

0 125 250 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-2

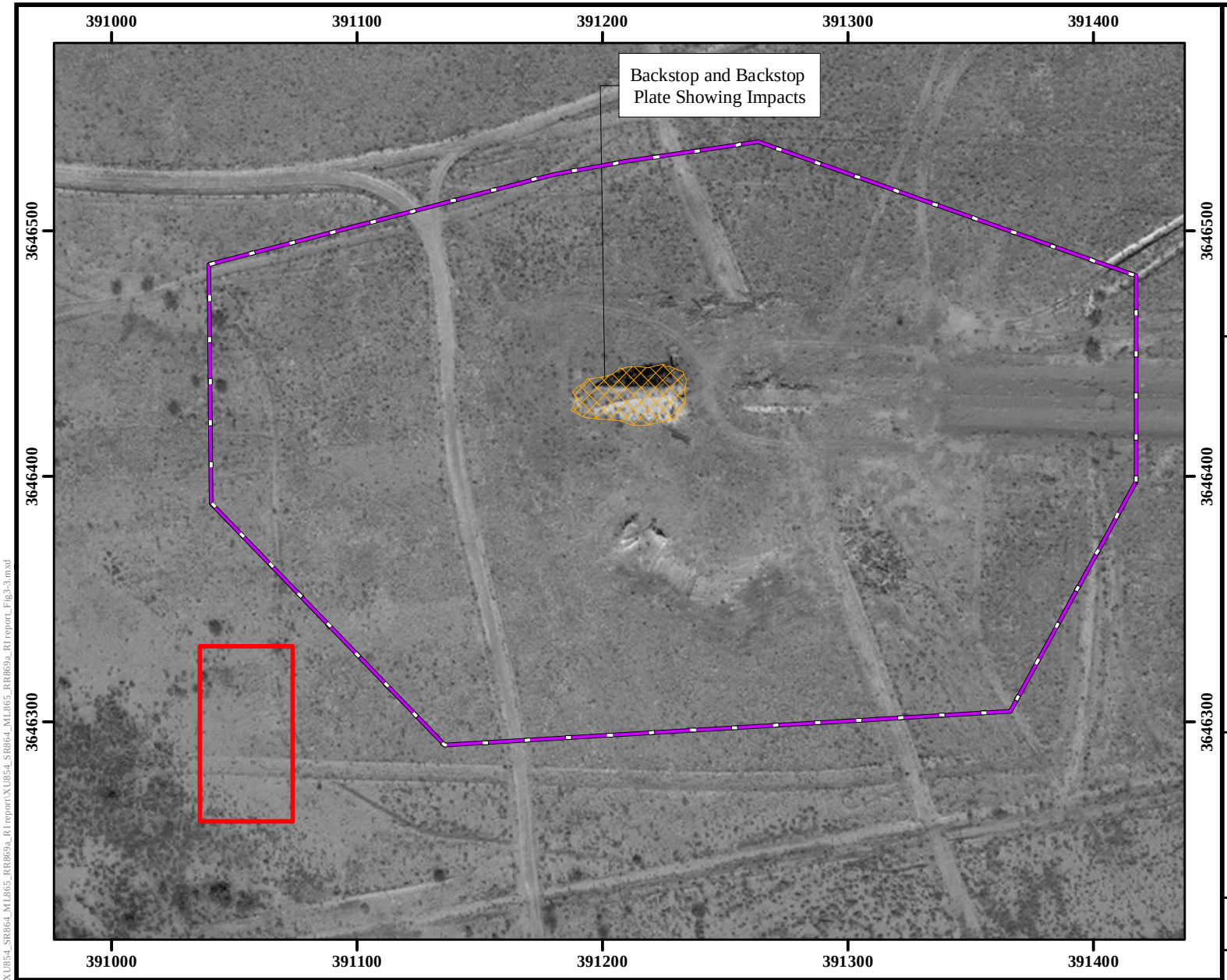
IVS Location for EM61 System
XU854 and SR864 MRSs

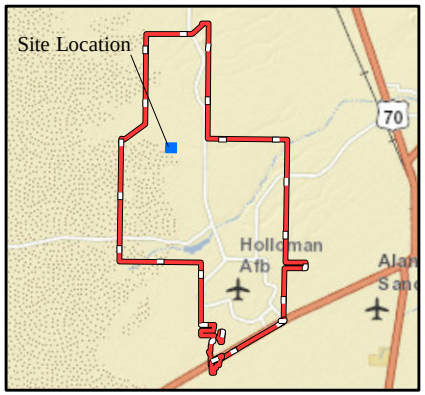
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_MI_865_RR869a_RI report\XU854_SR864_MI_865_RR869a_RI report_Fig3-2.mxd

This page is intentionally left blank.





Legend

- IVS Location for G-858 System
- ML865 MRS Ballistics Rain Field (18.3 acres)
- Installation Boundary

NOTES:
Revision Date: 5/11/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 200 feet

0 30 60 Meters

0 100 200 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-3

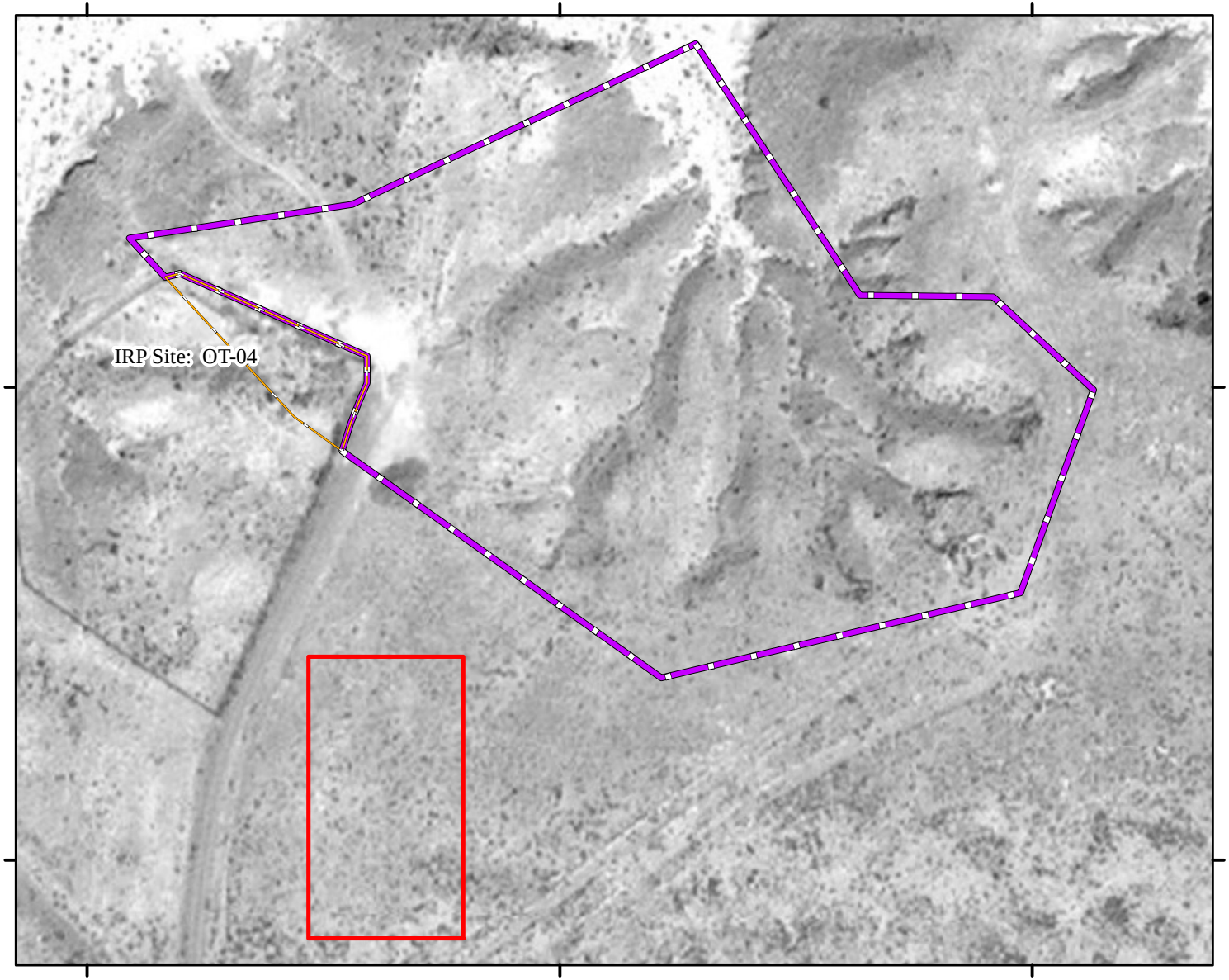
IVS Location for G-858 System
ML865 MRS

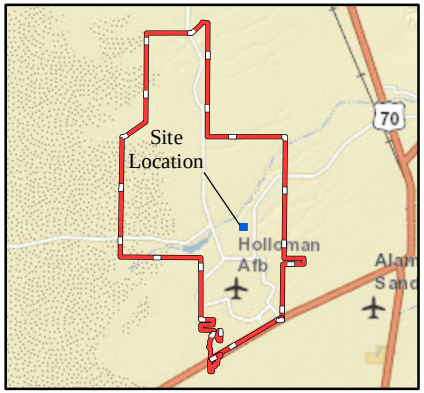
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\X1054_SR864_ML865_RR869a_RI report\X1054_SR864_ML865_RR869a_RI report_Fig3-3.mxd

This page is intentionally left blank.





Legend

- IVS Location for G-858 System
- RR869a MRS Debris Field (3.5 acres)
- RR869 MRS Debris Field Addressed under the IRP (0.1 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-4

IVS Location for G-858 System
RR869a MRS

NOTES:

1. SR859 MRS boundary based on CSE Phase II findings.
2. HHSL - Human Health Screening Level
3. Revision Date: 4/9/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter

1 inch = 110 feet

0 17 34 Meters

0 55 110 Feet

N W E S

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig3-4.mxd

This page is intentionally left blank.

To verify the anomaly resolution criteria and procedures during the BSP, the QC geophysicist ensured that the blind seeds made it to the anomaly list and that the positional accuracy was within contract specifications. In addition, the UXOQCS reviewed the results of each excavation and verified that all blind seeds were accounted for. The BSP results for all 4 MRSs are provided in **Appendix C**.

3.6.3 General Geophysical Investigation Procedures

Procedures were followed to help facilitate the collection of accurate and reliable geophysical data. The proper operation and function of the geophysical instruments and proper function of the positioning equipment was most important. Tests were conducted at the beginning of field operations as well as daily to assess those functions. Unless otherwise indicated, the daily instrument QC checks were performed at the opening and closing of fieldwork each day. The closing QC checks were sometimes skipped primarily due to inclement weather. The instrument QC checks were monitored and recorded in the field and acceptance criteria verified by the QC geophysicist. Failure to meet minimum QC criteria resulted in immediate corrective action including expedient field repairs or removing/replacing the failed system components.

Initial QC Tests for Geophysical Equipment

The QC checks that were completed at least once at the beginning of the DGM activities included: six line test, octant test (magnetometer only), azimuthal test (magnetometer only), and pull away test.

Daily QC Tests for Geophysical Equipment

Daily QC checks performed on the geophysical and positional equipment throughout the field effort included: positional accuracy, equipment/electronics warm-up, Static Standard Recovery (SSR) test, personnel test, vibration test (cable shake), IVS test, and latency test.

Daily QC Test for RTK-GPS Positional Accuracy

Static and dynamic RTK-GPS positional accuracy tests were performed each day prior to data collection. The static QC test included measuring the coordinates at an established control point to record any offset. The dynamic QC test determined offsets for the positions of the ISO obtained during the IVS tests after the latency correction was applied with respect to its position obtained during the static measurement.

The initial and daily instrument QC results including a summary of any failures are provided in **Appendix C**.

General Field Procedures

- The geophysical team was familiarized with the XU854, ML865/SR864, and RR869a MRSs, RI WPs;
- Shape files and points of interest were uploaded into the RTK-GPS controller so that the field operator was able to see his position and the corresponding background in real time;
- Instruments were visually checked for possible mechanical damage, and the team checked that the batteries were charged;
- Geophysical and navigational instruments were set up;

- The RTK-GPS was checked for proper functioning and tested for positional accuracy at a known control point(s);
- After warming up equipment, opening QC tests were conducted;
- The results of QC tests were written on daily QC forms;
- If QC tests were checked as "Pass," the operator proceeded to begin with the IVS;
- Following the completion of the IVS, the operator began data collection;
- Data collection with obstacles and deviations from the planned survey path was documented and recorded in the field log;
- The closing QC tests and IVS were performed;
- The closing QC test results were written on the daily QC form;
- All instruments and cables were visually checked for damage and damaged components repaired or replaced;
- All batteries were recharged;
- DGM production data were downloaded, backed up, and sent to the data processor; and
- The daily IVS and QC data were sent to the QC Geophysicist.

3.6.4 Geophysical Data Processing and Analysis

3.6.4.1 G-858 Data Processing

The G-858 and positional data were processed and interpreted using Geometrics MagMap 2000 and Geosoft Oasis Montaj®. Subsequent to data acquisition, all field data were downloaded to a PC and backed up daily to an external hard drive and electronically transmitted to FPM's San Antonio office for back up to a central server.

The overall-processing stream for G-858 data was accomplished using the following steps:

- Raw binary geophysical data were downloaded from the magnetic system to a PC.
- Raw G-858 binary geophysical data were converted to Geosoft *.xyz files in Geometrics MagMap.
- Positional offset correction for sensors was performed.
- The initial QC checks were conducted to verify that personal and shake tests passed.
- Geophysical sensor data were evaluated for spikes, gaps, and sensor failure.
- Heading corrections were applied (using results obtained from the QC octant test).
- The Hanning filter was utilized for smoothing.
- Positional and sensor data sets were merged.
- A demedian filter was applied to the geophysical data to remove sensor drift, regional trend, and level the data to a zero baseline (a 200-point average was used for the magnetic data).

- The total field analytic signal was gridded using a minimum curvature gridding function with a 0.06-m cell size.
- The data were displayed on the maps in a gridded 2-dimensional polynomial function format displayed using a color scheme where the response to the object shows up as an isolated feature or "anomaly" above the background level.

All processing steps were documented so that results could be checked and procedures verified. The processed G-858 Production XYZ files are included in **Appendix C**.

3.6.4.2 EM61 Data Processing

Geophysical sensor and positional data were processed and interpreted using Geonics DAT61MK2, and Geosoft Oasis Montaj®. Subsequent to data acquisition, all field data were downloaded to a PC and backed up daily to an external hard drive and electronically transmitted to FPM's San Antonio office for back up to a central server.

The overall-processing stream for EM61 data was accomplished using the following steps:

- Raw binary geophysical data were downloaded from the EM61 data logger to a PC.
- The geometry of geophysical system and RTK-GPS was included in the data.
- Data were converted to Geosoft *.xyz files and imported in Oasis Montaj.
- The following initial QC checks of the data were performed to verify the quality and/or identify substandard values:
  - The QC forms were checked for personal and shake tests.
  - The latency correction was calculated using latency test.
  - Data were checked for spikes.
  - Data were verified to be within the expected range.
- The static/standard test was evaluated for QC compliance.
- The data were latency and drift corrected. Only GPS data with quality factor 4 were used, and when possible the remaining data was interpolated. All data falling below the required positioning standards were recollected.
- The noise level was checked using the fourth differential.
- Different filters (e.g., low pass, non-linear, Euler or Werner deconvolution and Wiener optimal filter) was utilized, if necessary, to help alleviate the effect of the soil and known cultural EM sources.
- A dynamic background was calculated based on three (3) standard deviations and the production data were sub-set to include only those data that satisfy normal decay Channel 1 > Channel 2 > Channel 3 > Channel 4.
- Drift corrections were performed using demedian correction.
- The channel 2 was gridded using a minimum curvature gridding function with a 0.06-m cell size and 0.4-m blanking distance.

- Gridded data were plotted and non-systematic lag correction was performed if needed.
- Maps were made and data were displayed in gridded format as 2-dimensional polynomial function using a color scheme where the response to the object shows up as an isolated feature or "anomaly" above the background level.

All processing steps were documented so that results could be checked and procedures verified and all processed EM61 Production XYZ files are included in **Appendix C**.

3.6.4.3 Threshold Determination

XU854 and SR864 MRSs

The site-specific threshold for the EM61 system was determined by analyzing the level of noise in the measurements and using the fact that reliable detection requires a peak signal that is 5-6 times the Root Mean Square (RMS) noise level. Based on this analysis, the site-specific threshold for XU854 and SR864 was determined to be 5 mV and 7 mV, respectively.

ML865 MRS

The site-specific threshold for G-858 system was determined to be 43 nT/m based on the results obtained during the tests performed prior to DGM data collection. FPM tested the G-858 responses of munitions of interest for this site (155mm, 105mm, and 2.75 inch rocket) at several different depths and two orientations, parallel and perpendicular to the Earth's magnetic field. All tests were performed at the IVS area located in close proximity to the ML865 MRS. Based on soil characteristics and shallow firing angles specific to activities performed at the site, the depth of penetration for a 155mm projectile is not expected to be more than 1.5 m. The G-858 response of this projectile at 1.5m in the worst orientation (perpendicular to the Earth's magnetic field) was chosen for site-specific threshold (i.e., 43 nT/m). This threshold ensured the following detections:

- 155mm projectile at 1.5m,
- 105mm projectile at 1.15 m, and
- 2.75 inch rocket at 0.79 m.

The results of the tests are provided in **Table C-12** in **Appendix C**.

RR869a MRS

The site-specific threshold for G-858 system at RR869a MRS was determined to be 65 nT/m based on the results obtained during the tests performed at the IVS area located in close proximity to the RR869a MRS. The tests consisted of measuring the G-858 responses of munitions of interest for this MRS (5-inch rocket motor) buried at several different depths and two orientations, parallel and perpendicular to the Earth's magnetic field. In addition, since the RR869a MRS had not been used as a bombing range, FPM tested the responses of inert rocket motors buried at different depths in random orientation to obtain the responses of potential DMM pits located at the site. Based on the results of all tests it was concluded that the response of 5-inch rocket motor buried at a depth of 1.65m in the worst orientation (perpendicular to the Earth's magnetic field) should be chosen for the site-specific threshold. This is a rather conservative approach since it is unlikely that one item would be buried at such depth, and the

responses of a few inert rocket motors buried at the similar depth would be significantly higher. The results of the tests are provided in **Table C-13** in **Appendix C**.

3.6.4.4 Target Selection and Dig Sheet Development

Targets (EM61 and G-858) were selected using the following steps:

- An appropriate grid value cutoff level (see **Section 3.6.4.3**) was applied to the EM61 and G-858 data for target selection.
- EMI anomalies were selected from the gridded data filtered Channel 2 utilizing a peak-picking algorithm [Blakely test] based on the appropriate threshold value.
- Magnetic anomalies were selected from the gridded analytic signal data utilizing a peak-picking algorithm (Blakely test) based on the threshold value.
- Additional targets were manually selected from the portion of the data that had a signal strength within 5% of the required threshold.

Targets were excluded from intrusive investigation based on the following:

- The locations of all known cultural features (buildings, fences, utilities, etc.) were plotted on the same map as the data. All anomalies that were in close proximity to those features were masked and excluded from target selection.

DGM target anomaly tables were developed as a result of a target selection process. These anomaly tables represent the Dig Sheets as well since the overall remediation objective for all 4 MRSs is Site Closeout. All XU854 and SR864 anomalies above the site-specific thresholds were intrusively investigated during the RI, and targets at ML865 and RR869a will be investigated during the follow-on NTCRA. The Dig Sheets for all 4 sites are presented in **Appendix D**. In addition, the EM61 Channel 2 gridded data and the G-858 total analytic signal maps with target locations are shown in **Appendix E**.

3.7 Intrusive Investigation

The intrusive investigation of all DGM targets with responses above the site-specific threshold was performed in both the XU854 and SR864 MRSs. In addition, several DGM anomaly clusters in high anomaly density areas of the ML865 MRS were selected for 8 exploratory test pit investigations. Also, since the portion of the fence bordering the RR869a MRS was temporarily removed to avoid fence interference during the DGM data collection, identified subsurface anomalies at and in close proximity to the fence location were excavated to avoid having to remove the fence a second time during the follow-on NTCRA at RR869a MRS.

All intrusive activities at 4 MRSs discussed in this RI report were performed IAW the RI WPs for XU854 MRS (FPM, 2014a), SR864/ML865 MRSs (FPM, 2014b), and RR869a MRS (FPM, 2014c), USACE EM385-1-1 (USACE, 2011), the DDESB-approved ESS (FPM, 2014d), and the MMRP Sites Health and Safety Plan (HASP) (FPM, 2014e).

An exclusion zone for non-project personnel during intrusive operations was implemented for each MRS based on the Munitions with the Greatest Fragmentation Distance (MGFD) in accordance with the DDESB-approved ESS.

The Base Dig Permit process was utilized for avoiding underground utilities during intrusive work. Hand excavation using a shovel was the primary intrusive method used during the RI;

however, heavy equipment was used in some areas, including areas of very dense anomalies, or when large, heavy items were discovered. The UXO team utilized Schonstedt locators and/or White's all metal detectors to verify anomaly locations prior to excavation. Anomalies were excavated until the target item(s) were removed (negligible response with Schonstedt or White's).

Excavated anomalies underwent an MPPEH inspection by a minimum of two qualified UXO technicians (see **Section 4.4**). MPPEH was then further classified as MDAS since no Material Documented as an Explosive Hazard (MDEH) was identified during the MPPEH inspection process. MDAS was further characterized as MD or CD. Results of all investigations were recorded in the field on field dig sheets (**Appendix D**). MDAS items (MD and CD) were stored in a secure (locked) Conex container for final processing and disposition, and later offsite recycling

3.8 Quality Control Program

The primary purpose of the QC program was to evaluate tasks, procedures, and processes identified as definable features of work in the RI WPs for XU854 MRS (FPM, 2014a), SR864/ML865 MRSs (FPM, 2014b), and RR869a MRS (FPM, 2014c). The quality procedures contained in the WPs were followed during all aspects of RI fieldwork. The procedures were applicable to all site activities affecting quality including DGM surveys, MEC investigation and clearance operations, demolition operations, handling of demolition materials, and data management. Throughout the duration of the field activities, inspection and surveillance procedures such as daily equipment checks and maintenance, logbook inspection and proper use of personal protective equipment was performed. In addition, Daily Site Reports were prepared and submitted by the SUXOS daily summarizing surface and subsurface clearance operations as well as safety and environmental conditions (**Appendix B**).

The UXOQCS completed forms and reports documenting the product and process quality of the definable features of work. The UXOQCS also prepared daily QC reports describing operational work performed, inspections and surveillances conducted by QC personnel, safety and environmental conditions, and status of non-conforming conditions, if applicable. All Daily QC Reports are provided in **Appendix B**.

3.8.1 Audit Procedures

Field performance was evaluated to ensure that the quality standards and objectives of the WPs were met. The evaluation of field performance was accomplished through an audit process. The audit process involved identifying, documenting, and reporting non-conformances or deficiencies, initiating corrective actions through appropriate channels, and conducting a compliance review. Internal audit procedures performed during the RI were IAW the WPs and included the following:

- Audit inspections of geophysical equipment performance, operating and maintenance records, equipment testing records, equipment QC checks, geophysical data acquisition, dig location selection, anomaly reacquisition, and result corrections were performed by the UXOQCS.
- Audit inspections of dig sheets and the UXO database, in conjunction with the 10% QC checks were performed by the UXOQCS.

- Follow-up audits to verify that Quality Assurance procedures were maintained throughout the investigation were documented by the UXOQCS.

There were no technical non-conformances or deficiencies reported by field teams to the UXOQCS. All results of internal audits were reported to the FPM MMRP manager and are retained within the central project files.

3.8.2 QA Data Processing

A minimum of 10% of all DGM field data were reprocessed by a QC geophysicist as a standard QA procedure. No data processing errors were identified.

3.8.3 Random Excavation Inspections

The UXOQCS performed a QC inspection on approximately:

- 22% of areas where subsurface clearance was conducted in XU854;
- 21%. of areas where subsurface clearance was conducted in SR864; and
- 100% of areas where subsurface clearance was conducted in RR869a.

In addition, the UXOQCS inspected the recorded intrusive results from the 8 exploratory test pits at ML865.

For the inspections, the UXOQCS used the hand-held Schonstedt magnetic locator. Satisfactory verification of the random subsurface clearance was completed with no detected discrepancies. The results of random excavation inspections are provided in **Table D-10**, **Appendix D**.

3.9 Soil Sampling

This section describes the soil sampling performed during the RI fieldwork. All sampling activities were conducted IAW the Standard Operating Procedures (SOPs) described in the WPs and Uniform Federal Policy-QA Project Plan (UFP-QAPP) ([FPM, 2014a], [FPM, 2014b], and [FPM, 2014c]). All samples were sent to Accutest Laboratories, Inc. for analysis.

3.9.1 Incremental Soil Sampling

IS was performed at the XU854 MRS in the areas immediately surrounding known historical and suspected missile/rocket launch pad site locations (**Figure 3-5**). The surface soil samples (0 to 6 inches) were collected from 12 decision units ranging in size from 0.03 to 0.56 acres. The incremental samples included approximately 60-120 aliquots collected from random locations within the decision unit and combined into a sealable plastic bag. Approximately one kilogram of soil was collected for each of the 12 incremental samples and submitted to Accutest Labs for chemical analysis. The samples were analyzed using USEPA method 6850 for Perchlorate, USEPA Method 8330B for explosives, and USEPA method 9056A for Nitrate. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2 (MOD). Three replicate samples were also collected at two decision units (H and K) to verify that each incremental sample truly represented the decision unit.

3.9.2 Composite Soil Sampling

Composite surface soil samples were collected at two locations in the SR864 MRS containing isolated occurrences of confirmed MEC (**Figure 3-6**), and at 8 locations in the ML865 MRS containing high concentrations of confirmed surface MD (**Figure 3-7**). Composite soil samples

were also collected at the SDA locations (post-Blown-In-Place samples) within the SR864 and ML865 MRSs (**Figures 3-6** and **3-7**). All soil samples were taken from a depth 0 to 6 inches bgs. The composite soil samples were submitted to Accutest Labs for laboratory analysis using USEPA Method 8330A for explosives and USEPA Method 6010C for select metals (aluminum, antimony, chromium, copper, iron, lead, and zinc). The samples were analyzed to determine if MC have been released to the environment due to presence of MEC and significant amounts of MD.

3.9.3 MC Risk Screening Methodology

Table 3-1 shows the screening standards that were used for human health assessment at the XU854, SR864, and ML865 MRSs. No soil samples were collected from the RR869a MRS since neither MEC nor areas with significant amounts of MD were identified during the surface clearance and limited intrusive investigation along the fence line. The following human health screening standards have been included in this table:

- NMED residential Human Health Soil Screening Levels (HHSSLs) developed for risk assessment at site investigations and remediation by the NMED Hazardous Waste Bureau (NMED, 2015).
- USEPA Regional Screening Levels (RSLs) for residential soil (USEPA, 2015).

The more conservative of these two values was used as the risk-based screening level for human health.

Soil sampling results were also compared with Ecological Screening Levels (ESLs) provided in **Table 3-1**. These standards, if available, present the ESLs for soil developed by Los Alamos National Laboratory (LANL) for the ECORISK Database (LANL, 2014). The table shows the no effect ESL for the most sensitive receptor for each analyte.

The NMED approved Basewide background levels for constituents in soil, when available, are also included in **Table 3-2** (NMED, 2012).

3.10 Progress Reporting

Daily Site Reports (**Appendix B**) were prepared and submitted by the SUXOS daily summarizing field activities as well as safety and environmental conditions. The Daily Site Reports included a text description of project progress and summary figure(s) (when applicable) depicting the specific task progress.

3.11 Health and Safety

FPM's UXOSO/UXOQCS conducted daily safety meetings to review ongoing activities and discuss the potential hazards associated with those activities. The UXOSO/UXOQCS also monitored field activities to ensure all site work was conducted in accordance with the approved MMRP sites HASP (FPM, 2014e) and all precautions were taken to safely conduct RI field activities. In addition, subsurface investigation of targets along the fence line between RR869a and OT-04 was performed using Level C Protective Personal Equipment (PPE) due to potential discovery of new contaminants identified during the previous investigation at IRP site OT-04 such as picric acid, fuel, corrosives, and oxidizers. All operations in this area were performed in accordance with the AF-approved Health and Safety Addendum for RR869a MRS (FPM, 2014f).

In general, no safety concerns, issues, violations, or accidents occurred during the surface clearance, geophysical and intrusive investigations, and MC sampling. Daily Health and Safety Reports as well as Health and Safety Compliance Inspection Reports are provided in **Appendix B.**

3.12 Stakeholder Site Visit

Representatives from AFCEC visited the site on 11 December, 2014 and 11 February, 2015 to observe procedures being used to conduct various field tasks such as daily QC and IVS tests, DGM data collection in grids, DGM target reacquisition, and UXO intrusive operations. The SUXOS coordinated with the AFCEC representatives to provide them full access to the RI activities.

Table 3-1 Soil Screening Standards

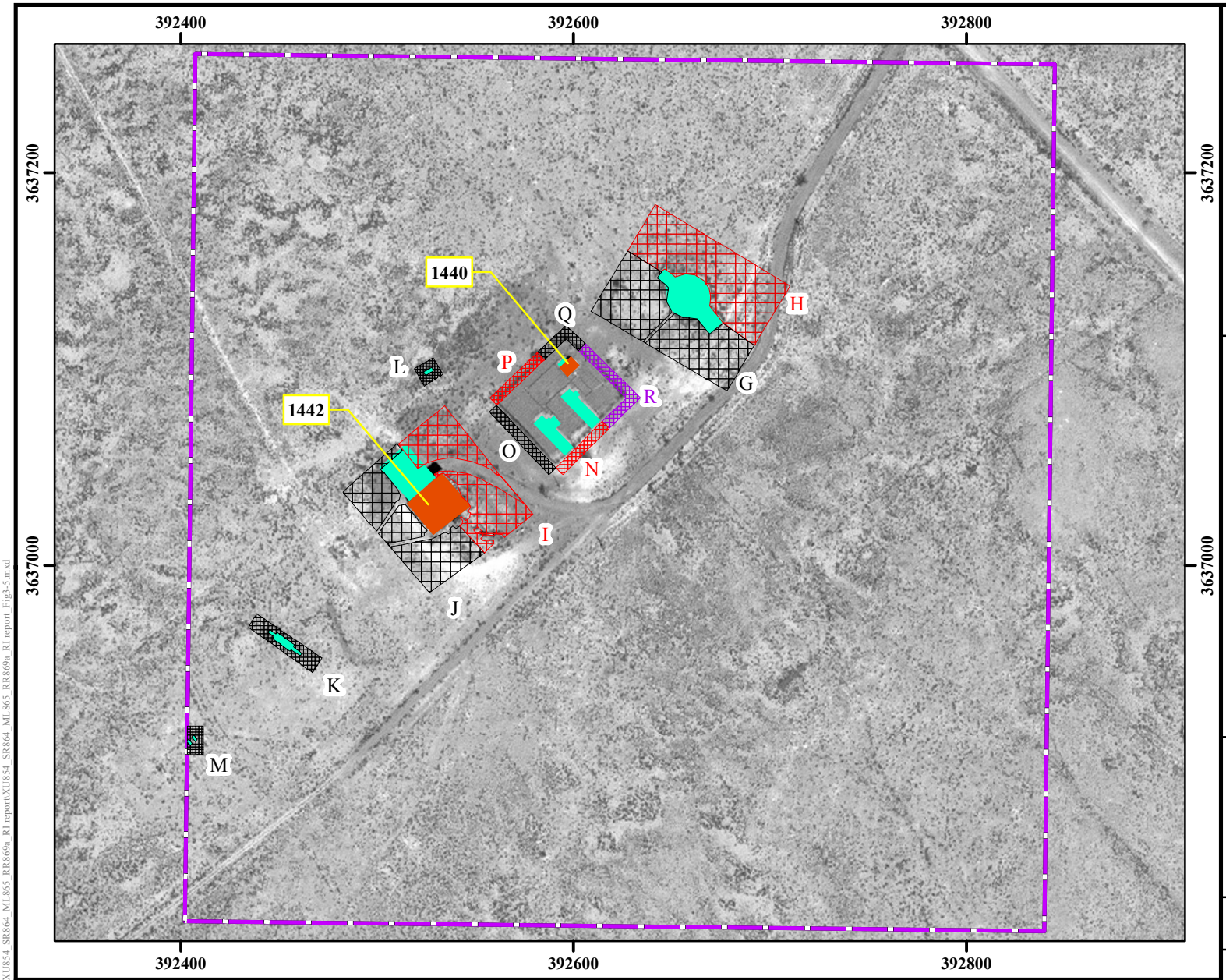
Analytes	Holloman AFB Soil Background Levels[a] (mg/kg)	Human Health Residential Soil Screening Value milligrams/kilogram (mg/kg)			Ecological soil Screening Values (mg/kg)	
		USEPA RSLs[b]	New Mexico SSLs[c]	Recommended HH Soil Screening Values	LANL Ecological Benchmarks[d]	Recommended Ecological Screening Values
Explosives						
1,3-Dinitrobenzene	NA	6.3	NA	6.3	0.073	0.073
2-Amino-4,6-dinitrotoluene (2-Am-DNT)	NA	150	NA	150	12	12
4-Amino-2,6-dinitrotoluene (4-Am-DNT)	NA	150	NA	150	14	14
2,4-Dinitrotoluene	NA	1.7	17.1	1.7	6	6
2,6-Dinitrotoluene	NA	0.36	3.56	0.36	4.1	4.1
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	NA	6.1	60.4	6.1	2.3	2.3
Nitrobenzene	NA	5.1	60.4	5.1	2.2	2.2
Nitroglycerin (NG)	NA	6.3	6.16	6.16	13	13
2-Nitrotoluene (o-Nitrotoluene)	NA	3.2	31.6	3.2	9.9	9.9
3-Nitrotoluene (m-Nitrotoluene)	NA	6.3	6.16	6.16	12	12
4-Nitrotoluene (p-Nitrotoluene)	NA	34	247	34	22	22
Octahydro- 1,3,5,7-tetranitro-1,3,5,7-tetra (HMX)	NA	3,900	3,850	3,850	16	16
Pentaerythritol tetranitrate (PETN)	NA	130	NA	130	100	100
1,3,5- Trinitrobenzene (sym-TNB)	NA	2,200	NA	2,200	10	10
2,4,6,-Trinitrotoluene (TNT)	NA	21	36	21	7.6	7.6

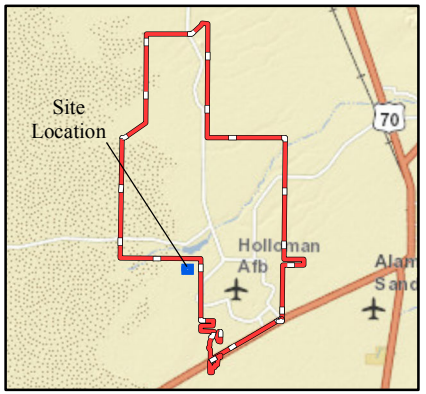
Analytes	Holloman AFB Soil Background Levels[a] (mg/kg)	Human Health Residential Soil Screening Value milligrams/kilogram (mg/kg)			Ecological soil Screening Values (mg/kg)	
		USEPA RSLs[b]	New Mexico SSLs[c]	Recommended HH Soil Screening Values	LANL Ecological Benchmarks[d]	Recommended Ecological Screening Values
Trinitrophenylmethylnitramine (Tetryl)	NA	160	156	156	1.5	1.5
3,5-Dinitroaniline	NA	NA	NA	NA	NA	NA
Nitrocellulose	NA	1.9E+08	NA	1.9E+08	NA	NA
Metals						
Aluminum	13,722	77,000	78,000	77,000	NA	NA
Antimony	1.6	31	31.3	31	2.4	2.4
Chromium	25	120,000	117,000	117,000	28	28
Copper	13	3,100	3,130	3,100	15	15
Iron	23,049	55,000	54,800	54,800	NA	NA
Lead	10.9	400	400	400	14	14
Zinc	54.6	23,000	23,500	23,000	48	48
Nutrients						
Nitrate	NA	130,000	125,000	125,000	NA	NA
Perchlorates						
Perchlorate	NA	55	54.8	54.8	NA	NA

Notes:

LANL = Los Alamos National Laboratory
NA = No value available
a – (NMED, 2012). Approved Basewide Background Levels Holloman AFB, NMED Approval Letter. 1 March.
b – (USEPA, June 2015). Regional Screening Levels Table. http://www.epa.gov/region6/6pd/rcra_c/pd-n/screen.htm
c – (NMED, July 2015). New Mexico Soil Screening Levels. https://www.env.nm.gov/HWB/documents/SSLs_RA_Guidance_for_SI_and_Remediation_July_2015.pdf
d – (LANL, 2014). The ESL for soil developed by LANL, LANL ECORISK Database Release 3.2, October.

This page is intentionally left blank.





Legend

- Buildings
- Concrete Pads
- XU854 MRS Able 51 Area (47.7 acres)
- Installation Boundary

Decision Units

G 0.55 acres	M 0.03 acres
H 0.56 acres	N 0.04 acres
I 0.39 acres	O 0.05 acres
J 0.41 acres	P 0.04 acres
K 0.07 acres	Q 0.04 acres
L 0.03 acres	R 0.07 acres

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-5

Incremental Sampling Locations
XU854 MRS

NOTES:
1. SR859 MRS boundary based on CSE Phase II findings.
2. HHSL - Human Health Screening Level
3. Revision Date: 4/13/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter

1 inch = 250 feet

0 40 80 Meters

0 125 250 Feet

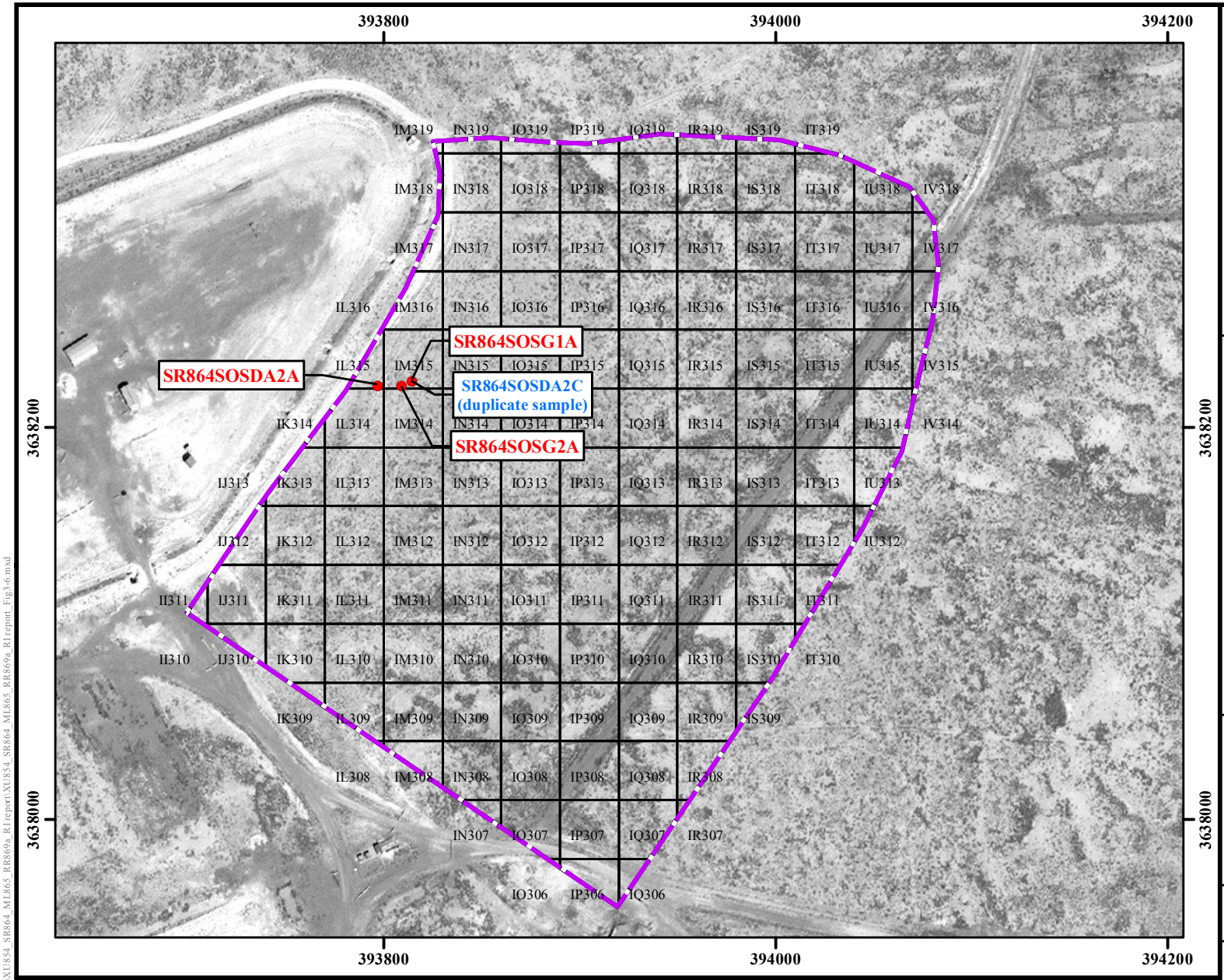
N W E S

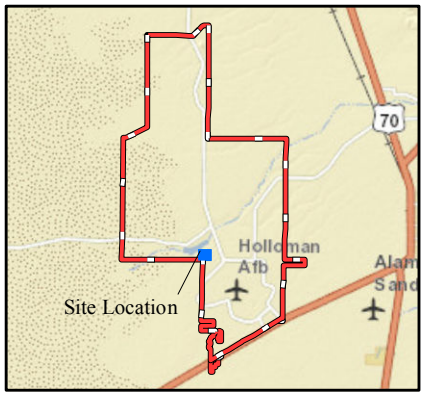
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_MI_865_RR869a_RI report\XU854_SR864_MI_865_RR869a_RI report_Fig3-5.mxd

This page is intentionally left blank.





Legend

- Composite Sampling Location
- SR864 MRS
  Poorman Range (22.8 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-6

Composite Sampling Locations
SR864 MRS

NOTES:
Revision Date: 7/20/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 250 feet

0 40 80
Meters

0 125 250
Feet

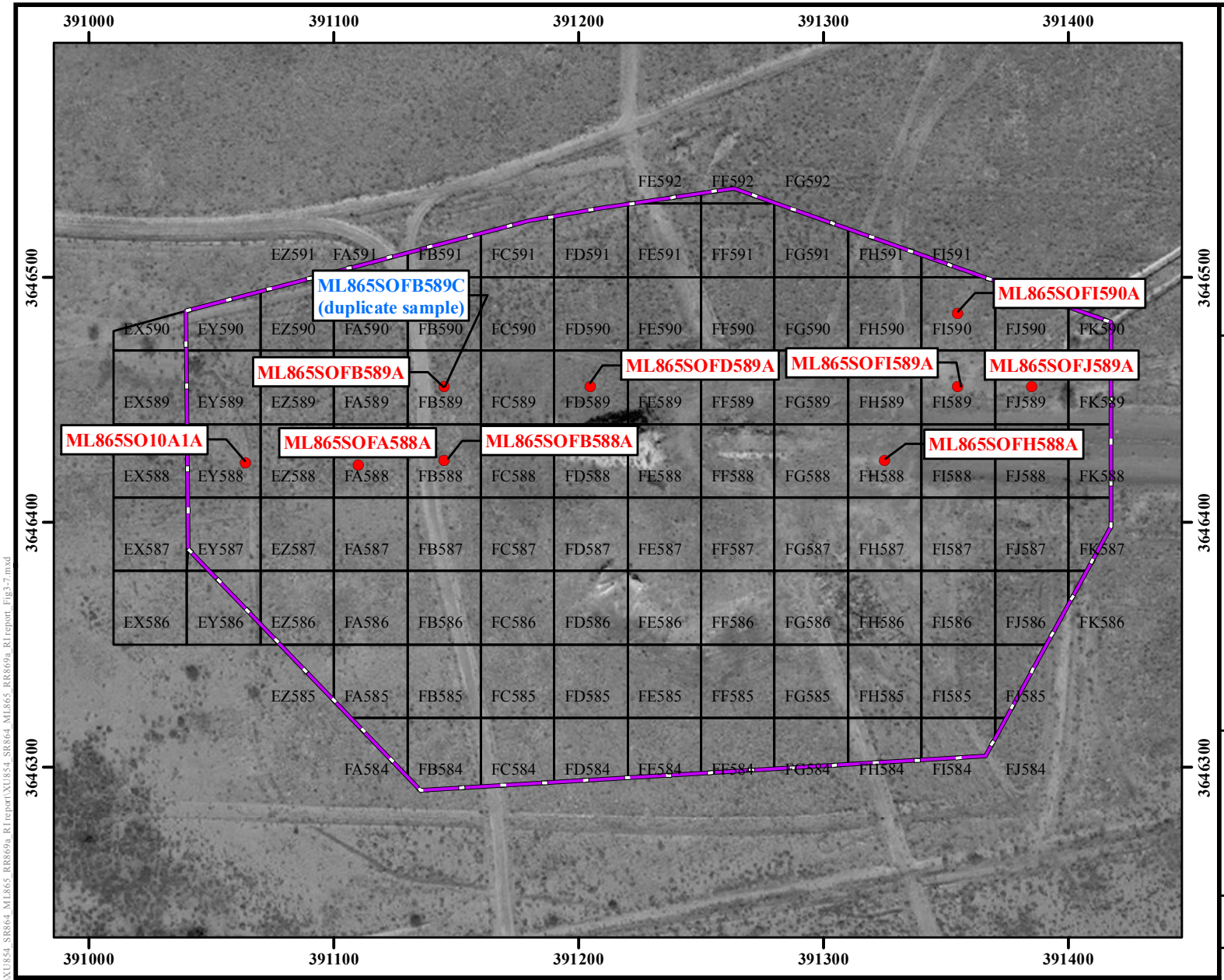
N
W E
S

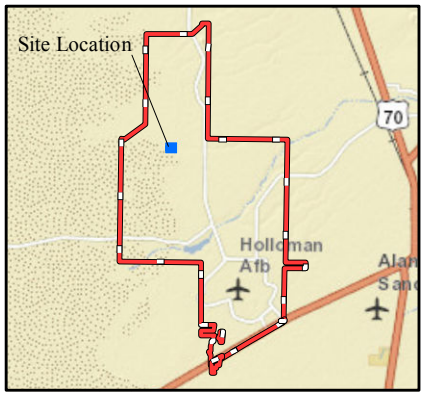
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU1854_SR864_M1865_RR869a_RI report\XU1854_SR864_M1865_RR869a_RI report_Fig3-6.mxd

This page is intentionally left blank.





Legend

- Composite Sampling Location
- ML865 MRS Ballistics Rain Field (18.3 acres)
- Installation Boundary

NOTES:
Revision Date: 7/20/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 200 feet

0 30 60 Meters

0 100 200 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 3-7

Composite Sampling Locations
ML865 MRS

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XT1854_SR864_ML865_RR869a_RI report\XT1854_SR864_ML865_RR869a_RI report_Fig3-7.mxd

This page is intentionally left blank.

4.0 REMEDIAL INVESTIGATION RESULTS

This section describes the RI results, including results obtained from the instrument-aided surface clearance, geophysical surveys, intrusive investigation activities, and MC soil sampling activities.

4.1 Surface Clearance Results

Detector-aided surface clearance was performed along DGM transects and within 100% coverage DGM grids in the XU854 MRS and across the entire footprints of the SR864, ML865, and RR869a MRSs. The surface clearance was conducted to remove potential surface hazards and to facilitate quality DGM data collection. Surface clearance was also performed across 1.17 acres outside the ML865 MRS based on the nature of surface MPPEH (retained the shape of the projectiles) identified in the vicinity of the western boundary of the site. Based on the DGM results, an additional 0.26 acres were cleared outside the RR869a MRS.

Two MEC items (one UXO and one DMM) were discovered during the surface clearance at the SR864 MRS. No MEC was discovered during the surface clearance at the XU854, ML865, and RR869a MRSs. A total of approximately 8,594 lbs of surface MD was removed during the RI at 4 MRSs. The summary of the surface clearance areas and results for each MRS is provided in **Table 4-1**.

4.1.1 XU854 MRS

A surface clearance was performed across 11 DGM transects (4.06 acres) and 12 DGM grids (2.28 acres) located around known historical and suspected missile/rocket launch pad sites (**Figure 4-1**). No MEC was identified during the surface clearance. The surface clearance identified the following MD items totaling approximately 0.6 lbs:

- (1) 40mm cartridge, and
- (1) M18 smoke grenade (expended).

The discovered MD items corresponded with items previously reported as associated with recent training activities. XU854 MRS is considered architecturally unique since it was associated with early missile development on Holloman AFB, therefore, based on FPM's coordination with the Office of Cultural Resources, all CD discovered on the surface of both transects and grids were set aside but not removed from the MRS.

4.1.2 SR864 MRS

A surface clearance was performed within 134 grid cells covering the entire footprint of the MRS (22.8 acres). Two MEC items (one UXO - M18 Smoke Grenade [impinged primer] and one DMM - M18 Smoke Grenade [safety pin still installed]) were discovered and destroyed, and approximately 77 lbs of MD and Small Arms Debris (SD) were removed from the MRS during the surface clearance. MD and SD weights were not tracked separately during the SR864 surface clearance. The locations of MEC/DMM items as well as distribution of MD/SD items are shown in **Figure 4-2**. Identified MD/SD items included:

- M18 smoke grenade pieces, and
- Undifferentiated spent small arms casings.

In addition, a total of approximately 1,106 lbs of CD was removed from the MRS during the surface clearance.

MEC discovery forms are provided in **Appendix F.**

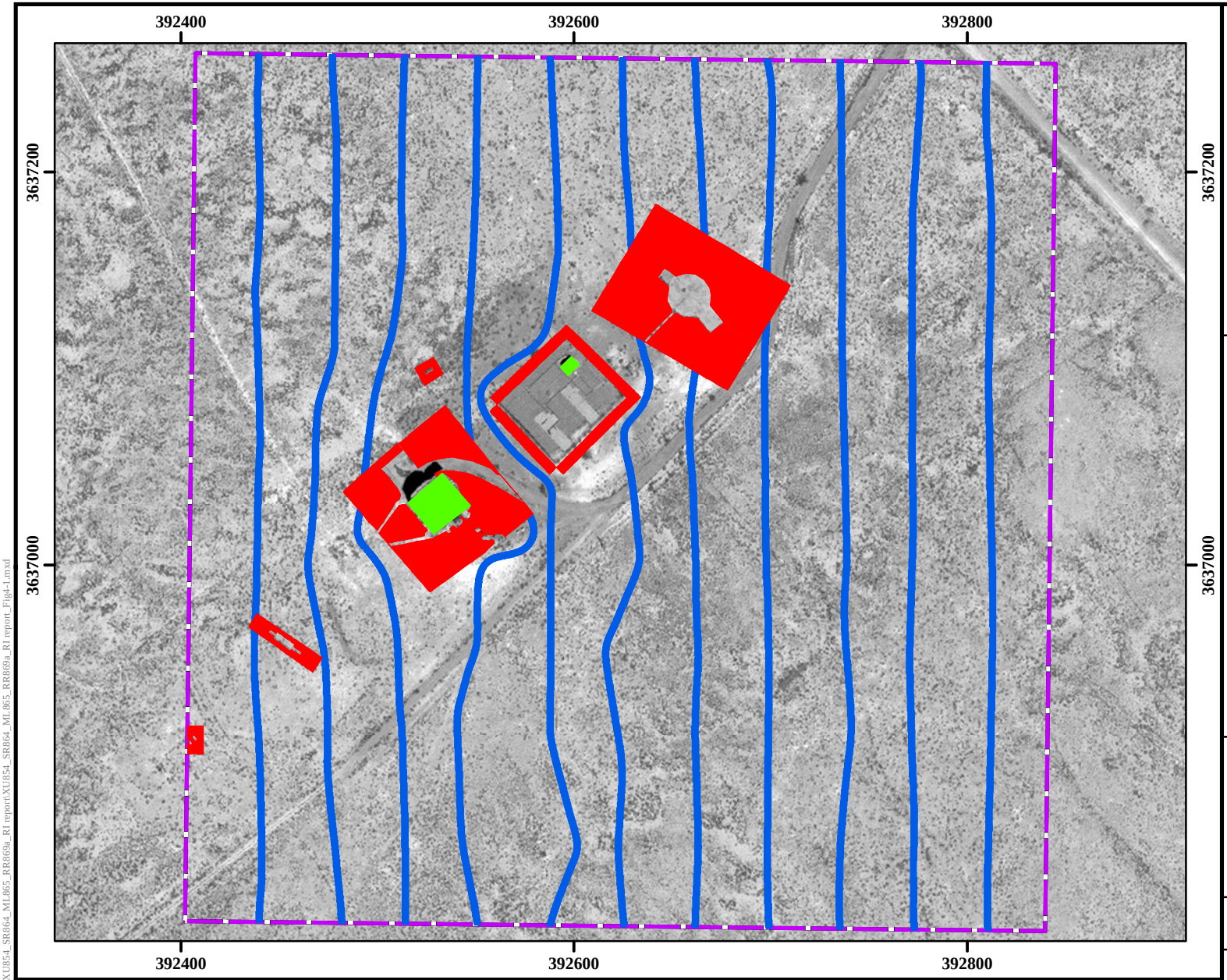
Table 4-1 Surface Clearance Results at 4 MRSs

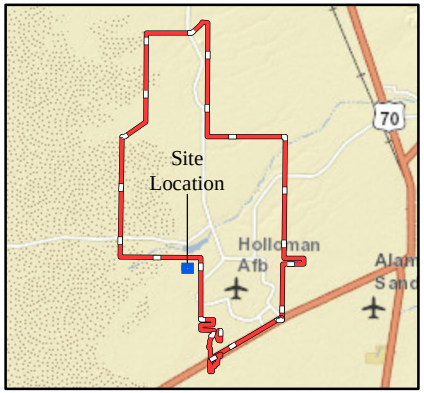
MRS (acreage)	Surface Clearance Area (acres)[1]		Total MEC/DMM Quantity	MEC/DMM Description	Approximate Total MD Weight Removed During Surface Clearance (lbs)[2]
XU854 (47.7)	4.06 (transects) 2.28 (grids)	6.34 (total)	0	None	0.6
SR864 (22.8)	22.8		2	(1) M18 Smoke Grenade (impinged primer – MEC) (1) M18 Smoke Grenade (safety pin still installed – DMM)	77.0
ML865 (18.3)	18.3		0	None	8,293.0
RR869a (3.5)	3.5		0	None	221.0
TOTAL	**50.94**		**2**		**8,591.6**

Notes:
1. 1.17 and 0.26 acres were cleared outside the ML865 and RR869a MRSs, respectively.
2. Approximate values derived from Daily Site Reports (**Appendix B)** (MD and Small Arms Debris [SD] weights were not differentiated during the surface clearance).

4.1.3 ML865 MRS

A surface clearance was performed within 99 grid cells covering the entire footprint of the MRS (18.3 acres). In addition, 1.17 acres was cleared outside the western boundary of the MRS because of the nature of the 21 MPPEH items identified in the vicinity of this boundary. Although these items were identified as MD during the initial inspection, FPM performed a demolition operation to ensure all identified items were in fact inert. Due to proximity of these finds to the boundary, the surface clearance was extended beyond the site boundary as mentioned above. No MEC was identified and approximately 8,293 lbs of MD was identified and removed from the MRS during the surface clearance (**Table 4-1**). The amount and distribution of MD removed during the surface clearance is shown in **Figure 4-3**.





Legend

- DGM Grids (2.28 acres total)
- DGM Transects (4.06 acres total)
- Buildings
- XU854 MRS Able 51 Area (47.7 acres)
- Installation Boundary

NOTES:

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter

1 inch = 250 feet

0 40 80 Meters

0 125 250 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-1

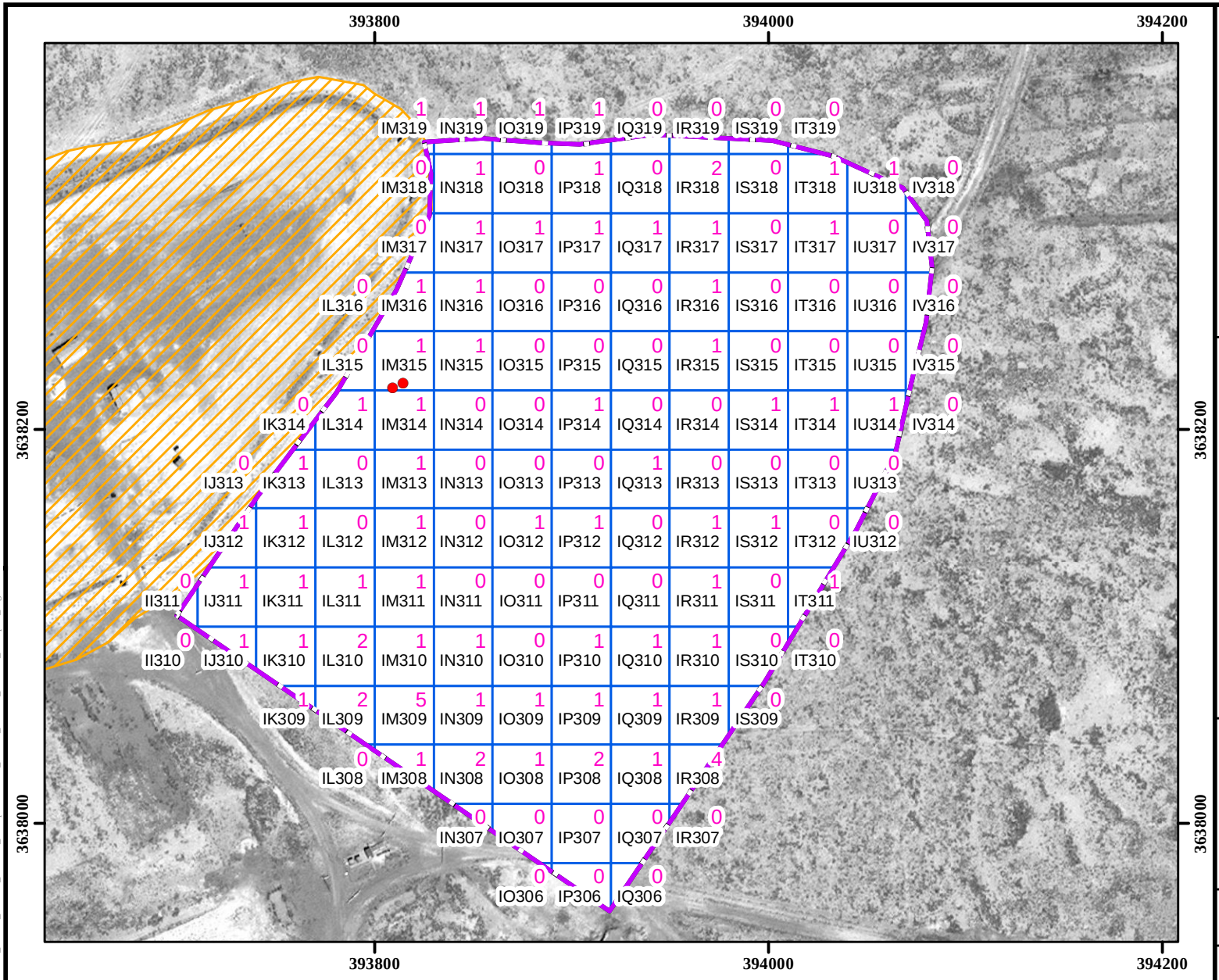
Surface Clearance Areas
DGM Transects and Grids
XU854 MRS

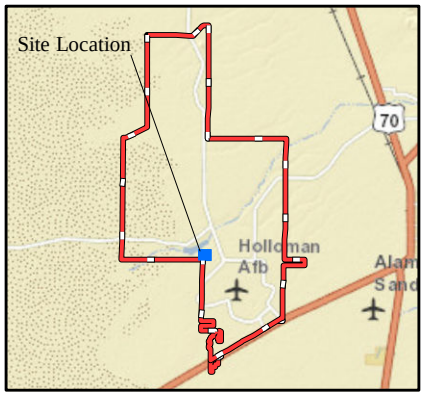
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869b_RI report\XU854_SR864_ML865_RR869b_RI report_Fig4-1.mxd

This page is intentionally left blank.





Legend

- MEC, M118 Smoke Grenade
- 5 — Approximate MD Weight (lbs) Removed from One Grid
- SR864 MRS Poorman Range (22.8 acres)
- Jeep Target Area
- IU316 — Grid for Surface Clearance
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-2

Surface MEC Locations
and Surface MD Distribution
SR864 MRS

NOTES:
Revision Date: 5/11/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 250 feet

0 40 80 Meters

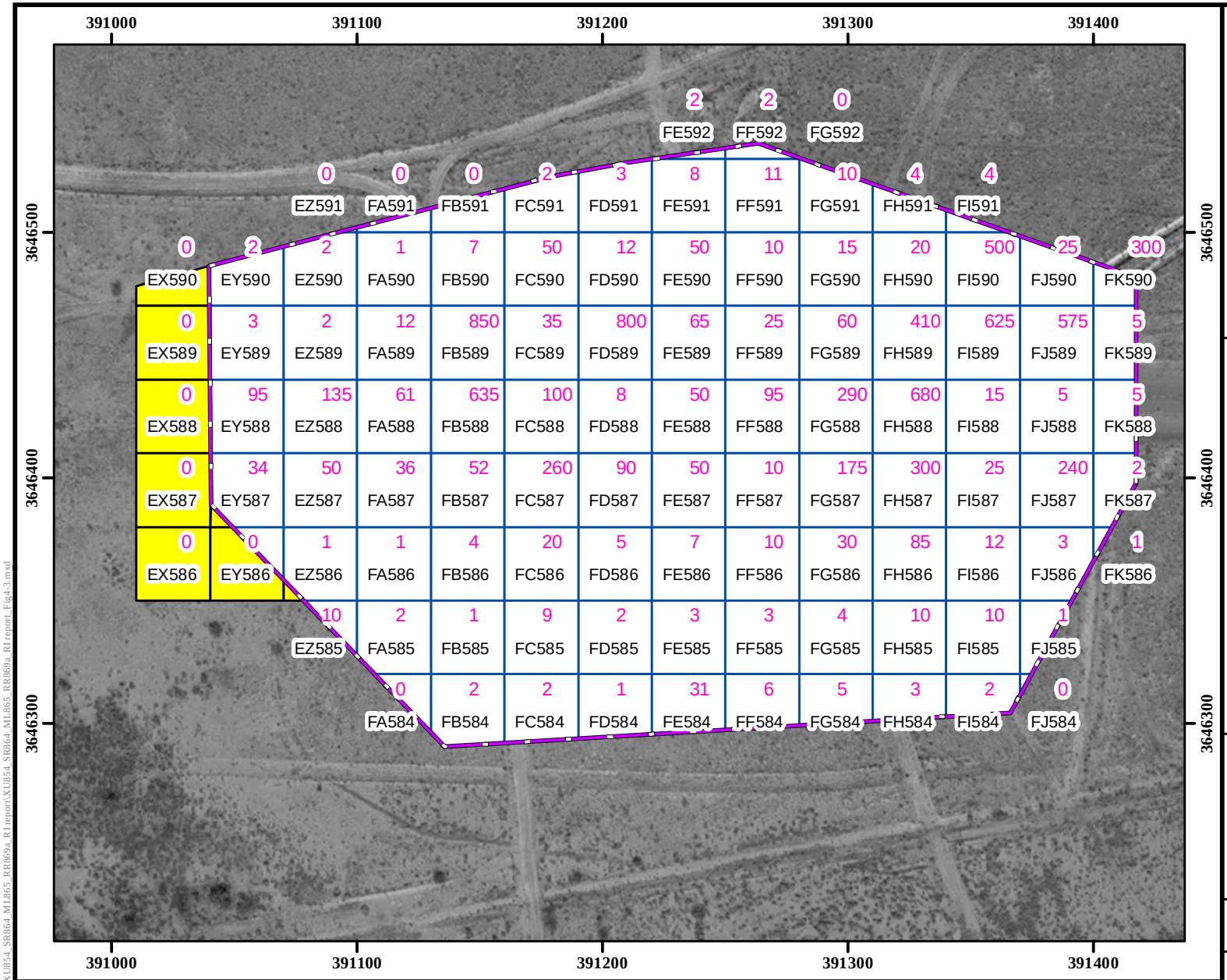
0 125 250 Feet

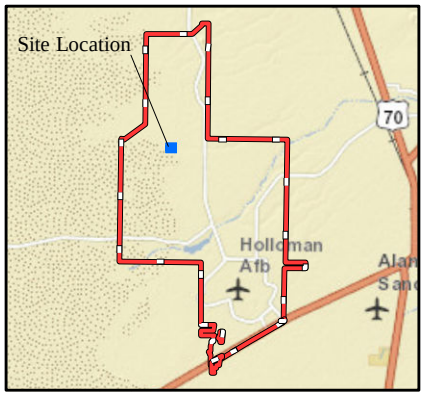
N W E S

FPM Remediations, Inc.

Path: C:\Projects\New Mexico\GIS\X1054_SR864_M1865_RR869a_RI report\X1054_SR864_M1865_RR869a_RI report_Fig4-2.mxd

This page is intentionally left blank.





Legend

- 35 — Approximate MD Weight (lbs) Removed from One Grid
- ML865 MRS Ballistics Rain Field (18.3 acres)
- EY588 — Grid for Surface Clearance Within the ML865 MRS Boundary (99 grids total)
- EX588 — Grid for Surface Clearance Outside the ML865 MRS Boundary (1.2 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-3

Surface MD Distribution
ML865 MRS

NOTES:
Revision Date: 5/11/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 200 feet

0 30 60 Meters

0 100 200 Feet

N W E S

FPM Remediations, Inc.

2015 Page 4-7

Path: C:\Projects\New Mexico\GIS\X1854_SR864_M1865_RR869a_RI report\X1854_SR864_M1865_RR869a_RI report_Fig4-3.mxd

This page is intentionally left blank.

Identified MD items included:

- M1, 105mm projectiles - inert,
- M48, 75mm projectiles – inert, and
- Expended 5-inch rocket motors.

In addition a total of approximately 487 lbs of CD was removed from the MRS during the surface clearance.

4.1.4 RR869a MRS

A surface clearance was performed within 26 grid cells covering the entire footprint of the MRS (3.50 acres). To better understand the extent of subsurface anomalies, surface clearance was also performed across three areas (0.26 acres) outside the MRS boundary where perimeter DGM anomalies occurred to facilitate DGM data collection in these areas.

No MEC was identified and approximately 221 lbs of MD was identified and removed from the MRS during the surface clearance (**Table 4-1**). No MD was identified in areas outside the MRS. The amount and distribution of MD removed during the surface clearance is shown in **Figure 4-4**.

Identified MD items included:

- M18, smoke grenade (expended fuze components), and
- MK10, 5-inch rocket motor venturi.

In addition, a total of approximately 511 lbs of CD was removed from the MRS during the surface clearance.

Note FPM recognizes that during the surface clearance MD were recovered from the boundary of the ML865 and RR869a MRSs (Figures 4-3 and 4-4); however, since no MEC or MC were identified during the RI at either of the two sites, the need for further investigation outside the MRSs and potential change of the MRSs boundaries will be determined during the next clean-up (NTCRA) phase. The subsurface investigation during the NTCRA will provide additional data to rely upon regarding the MEC presence. If the clean-up activities do not indicate the presence of MEC/MC then there will be no change to the MRS boundary. If MEC/MC is identified during the cleanup activities in increasing concentrations toward the boundary, then the boundary will be extended.

4.2 Geophysical Investigation Results

The results of the RI geophysical investigation performed at each MRS are provided in the sections below.

4.2.1 XU854 MRS

Transects

The RI geophysical investigation at the XU854 MRS included approximately 4,725 linear meters of transects within the 47.70-acre MRS. A total of 129 anomalies exceeding the 5 mV target threshold (see **Section 3.6.4.3**) and not caused by surface metal or other debris were identified during the geophysical investigation. The EM61 Channel 2 data and the distribution of DGM

target anomalies for transects are illustrated in **Figure 4-5.** The EM61 Target Dig List showing intrusive investigation results is provided in **Table D-1** in **Appendix D**.

Grids

The RI geophysical investigation conducted within XU854 included collecting 100% coverage DGM data in 12 grids (2.28 acres) around known historical and suspected missile/rocket launch pads. A total of 380 anomalies exceeding the 5 mV target threshold were identified in these grids. The EM61 Target Dig List showing intrusive investigation results for XU854 is provided in **Table D-2** in **Appendix D**. In addition, EM61 Channel 2 data and the distribution of DGM target anomalies for each grid are illustrated on **Figures 854-1** through **854-6** in **Appendix E**.

4.2.2 SR864 MRS

The RI geophysical investigation conducted within SR864 included collecting 100% coverage DGM data within 134 grid cells covering the entire footprint of the MRS (22.80 acres). Based on DGM data, 11 high anomaly density areas were identified within the southwest portion of the MRS; the discrete DGM anomalies exceeding the 7mV target threshold (see **Section 3.6.4.3**) were grouped into these areas and completely intrusively investigated. In addition, a total of 994 anomalies exceeding the 7 mV target threshold were identified in the remaining portion of the SR864 during the geophysical investigation. The EM61 Channel 2 data and the distribution of DGM target anomalies for SR864 are shown in **Figure 4-6.** The EM61 Target Dig List showing intrusive investigation results of anomalies located outside the high anomaly density areas is provided in **Table D-3** in **Appendix D**. In addition, EM61 Channel 2 data and distribution of DGM target anomalies for each grid are illustrated on **Figures 864-1** through **864-129** in **Appendix E**.

4.2.3 ML865 MRS

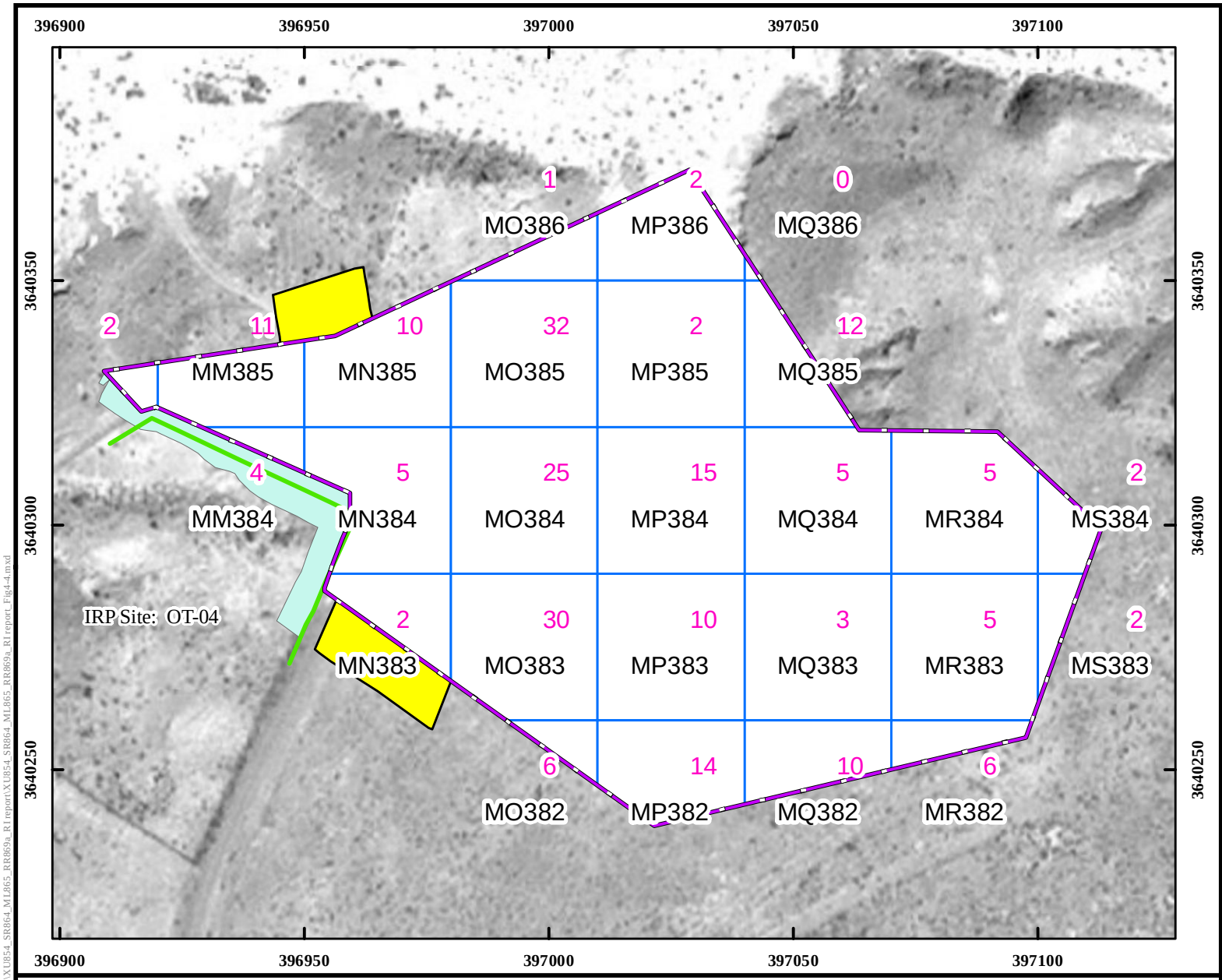
The RI geophysical investigation at ML865 included collecting 100% coverage DGM data within 99 grid cells.. DGM data were also collected in 1.17 acres outside the MRS due to MPPEH surface finds located in the vicinity of the western MRS boundary (see **Section 4.1.3**). Note DGM at backstop and fence locations within the MRS will be performed during the follow-on NTCRA. Both backstop and fence will be removed during the NTCRA activities.

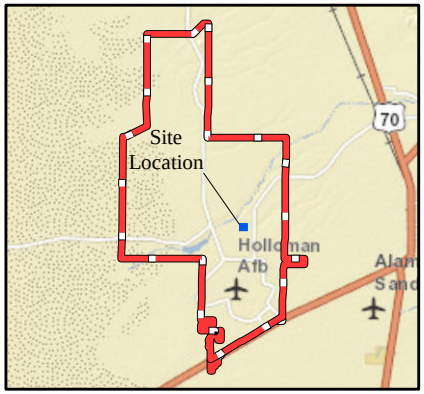
A total of 6,176 magnetic anomalies exceeding the site-specific threshold of 43 nT/m (see **Section 3.6.4.3**) were identified during the ML865 geophysical investigation. The G-858 total magnetic field and analytic signal (including the distribution of DGM target anomalies) are shown in **Figures 4-7 and 4-8**, respectively. The G-858 Target Dig List for ML865 is provided in **Table D-5** in **Appendix D**. In addition, the G-858 analytic signal and distribution of DGM anomalies for each grid are illustrated on **Figures 865-1** through **865-102** in **Appendix E**.

Note DGM data show high anomaly density in close proximity to the eastern MRS boundary. If intrusive investigation of these anomalies during the follow-on NTCRA identifies the MEC in the subsurface, additional DGM and anomaly interrogation will be extended beyond the MRS boundary to identify and remove all subsurface MEC.

4.2.4 RR869a MRS

The results of the RI geophysical investigation at RR869a are shown in **Figures 4-9** (total magnetic field data) and **4-10** (G-858 analytic signal). As shown in these figures, DGM was





Legend

- 20 — Approximate MD Weight (lbs) Removed from One Grid
- RR869a MRS Debris Field (3.5 acres)
- Fence
- Fence-Line Area Outside the MRS (0.12 acres)
- Areas Outside the MRS (0.14 acres)
- MR383 — Grid For Surface Clearance (26 grids total)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-4

Surface MD Distribution
RR869a MRS

NOTES:
Revision Date: 5/11/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

1 inch = 100 feet

0 15 30 Meters

0 50 100 Feet

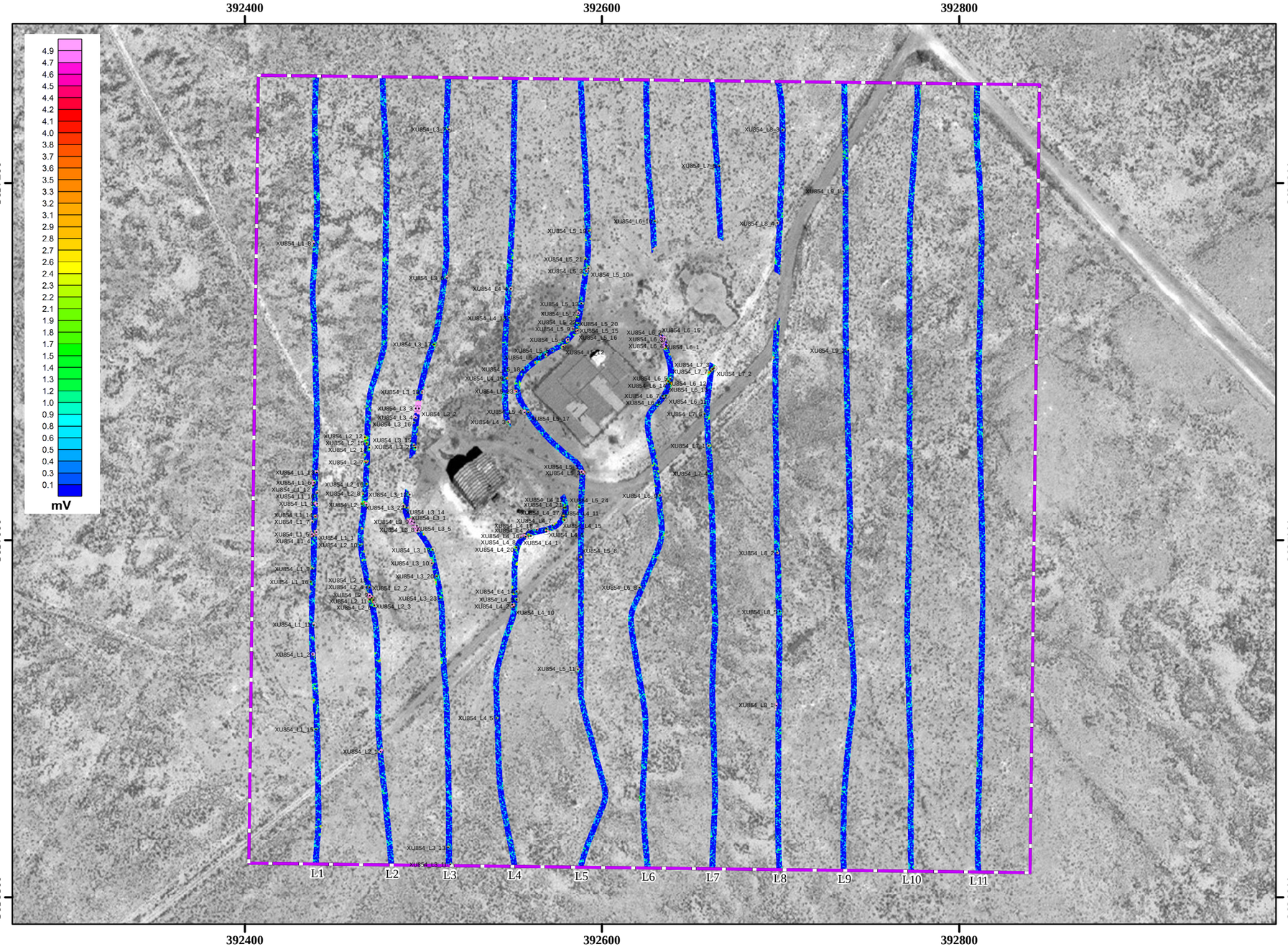
N W E S

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\X1854_SR864_M1865_RR869a_RI report\X1854_SR864_M1865_RR869a_RI report_Fig4-4.mxd

This page is intentionally left blank.



Legend

- DGM Target Anomalies Exceeding the 5mV Target Threshold
- EM61 Channel 2 Data
- XU854 MRS Able 51 Area (47.7 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-5

EM61 Ch2 Data and Distribution of DGM Target Anomalies Along Transects XU854 MRS

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 200 feet

0 30 60 Meters

0 100 200 Feet

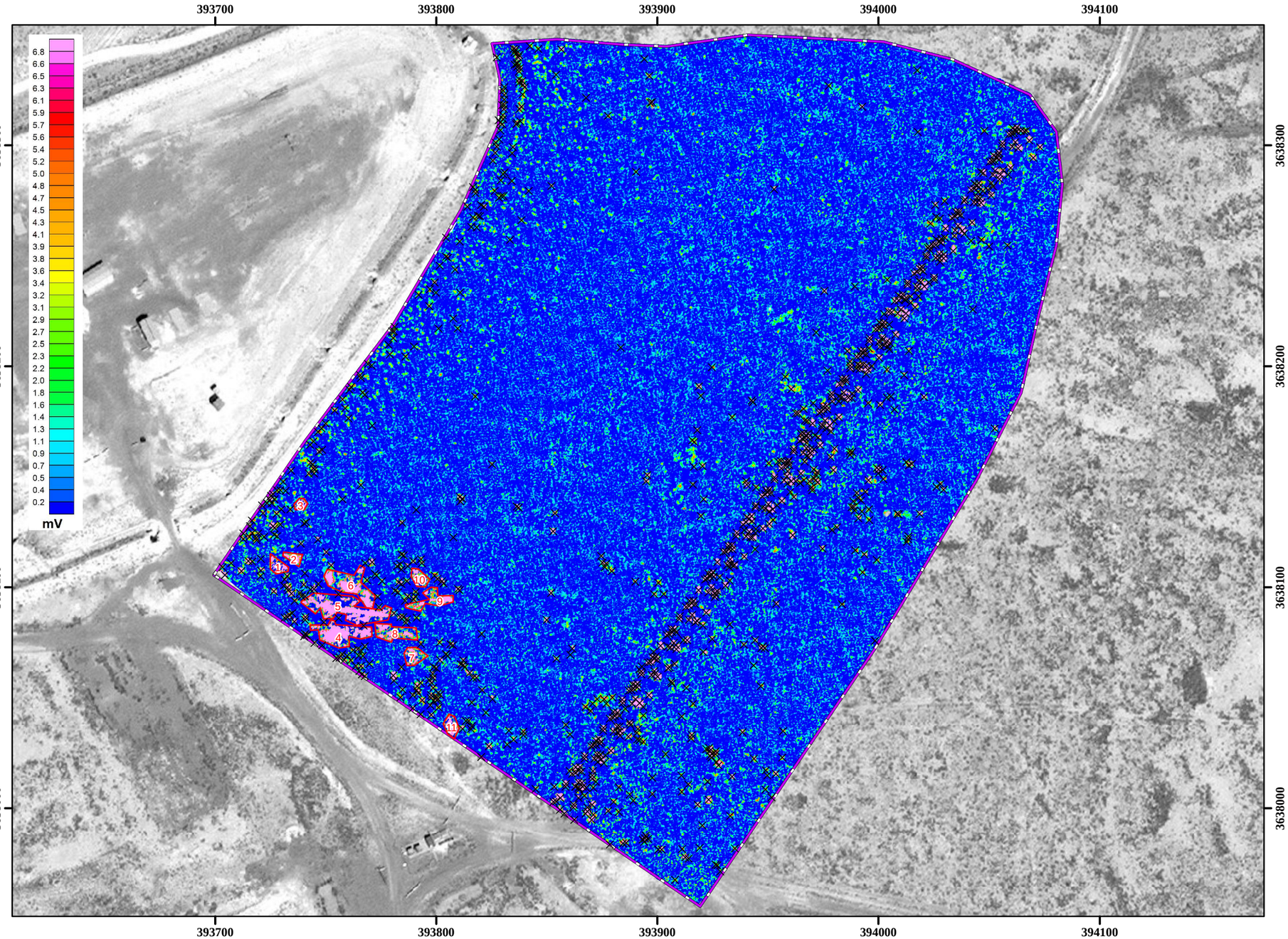
N W E S

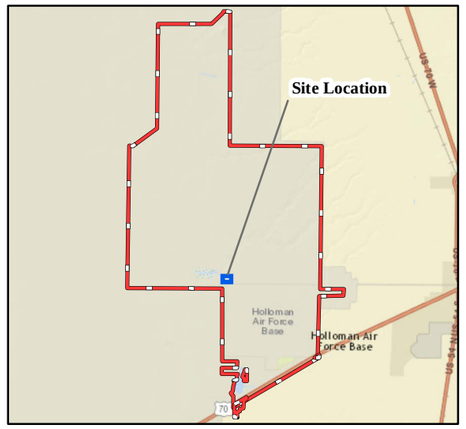
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-5.mxd

This page is intentionally left blank.





Legend

- DGM Target Anomalies Exceeding the 7mV Target Threshold
- High Density Area
- SR864 MRS Poorman Range (22.8 acres)
- EM61 Channel 2 Data
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-6

EM61 Channel 2 Data and Distribution of DGM Target Anomalies SR864 MRS

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 160 feet

0 25 50 Meters

0 80 160 Feet

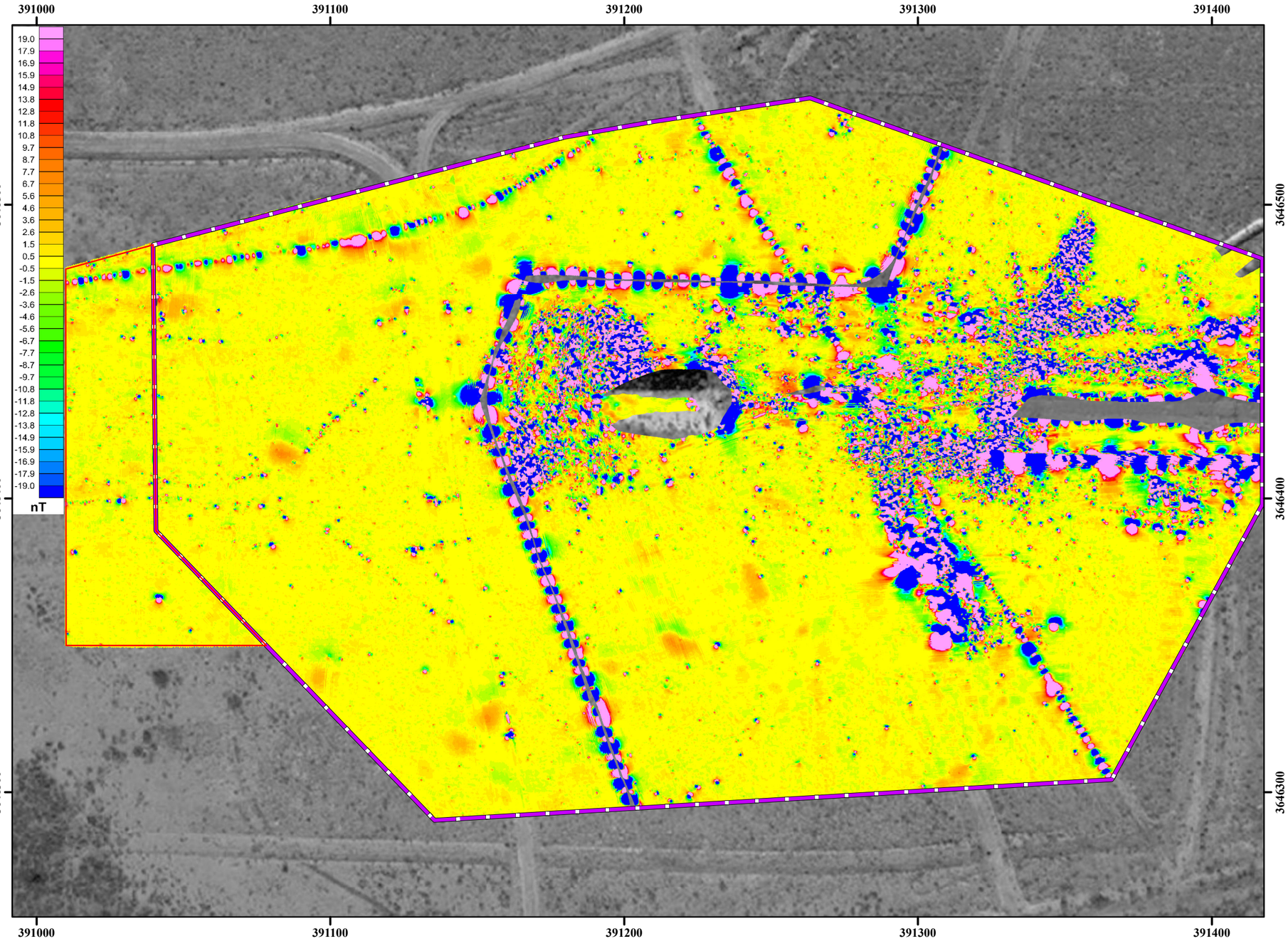
N W E S

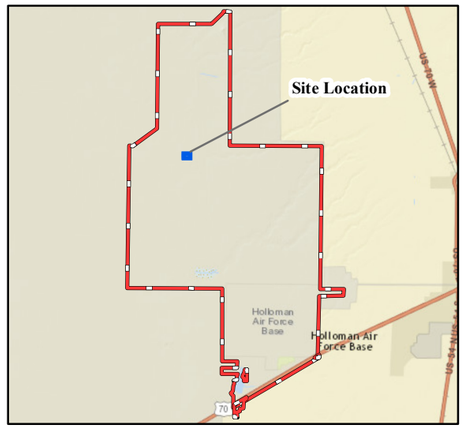
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-6.mxd

This page is intentionally left blank.





Legend

- G-858 Total Magnetic Field Data
- Area Outside the MRS (1.17 acres)
- ML865 MRS Ballistics Rain Field (18.3 acres)
- Installation Boundary

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 120 feet

0 18 36
Meters

0 60 120
Feet

N
W E
S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-7

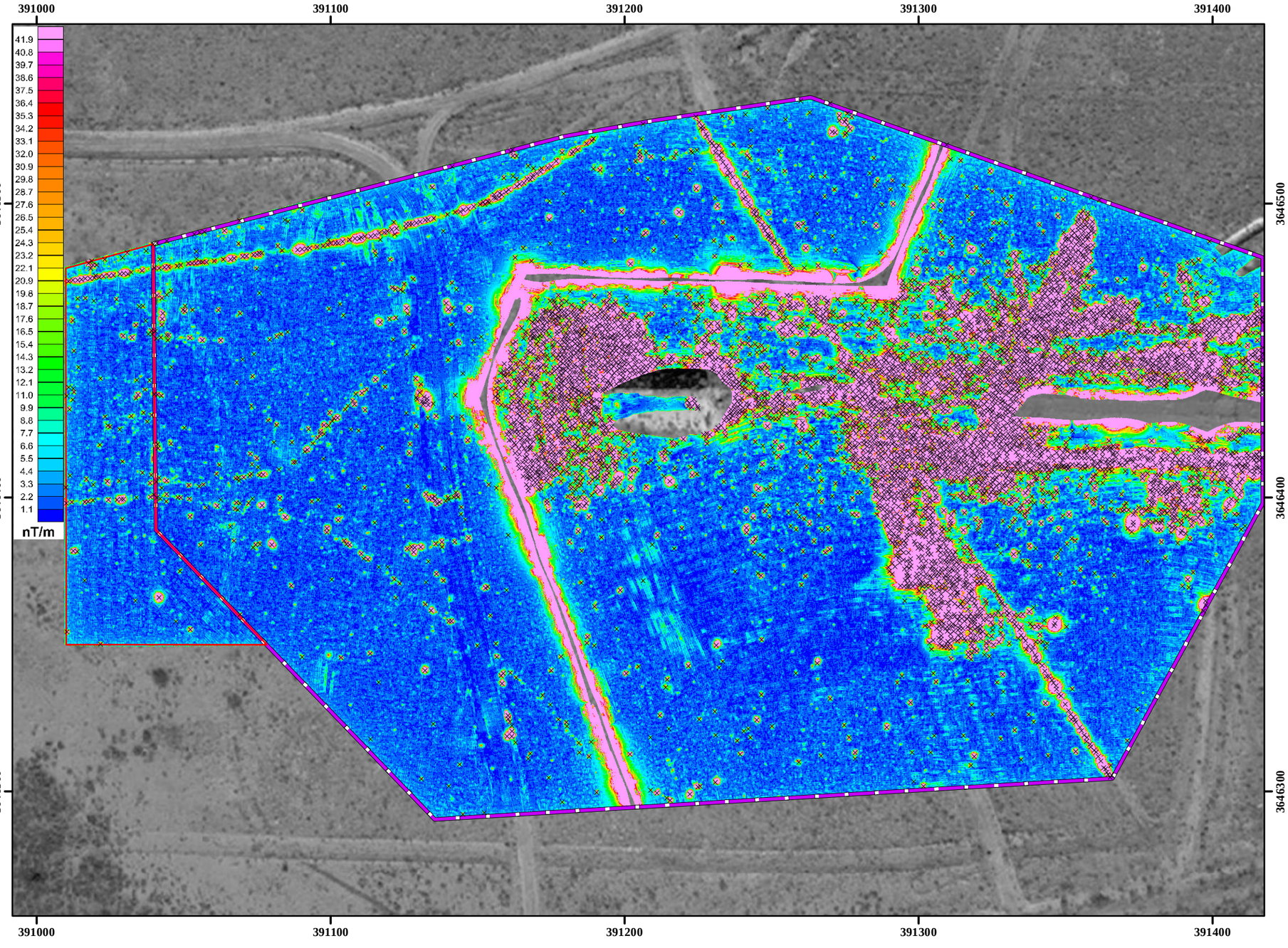
Total Magnetic Field Data
ML865 MRS

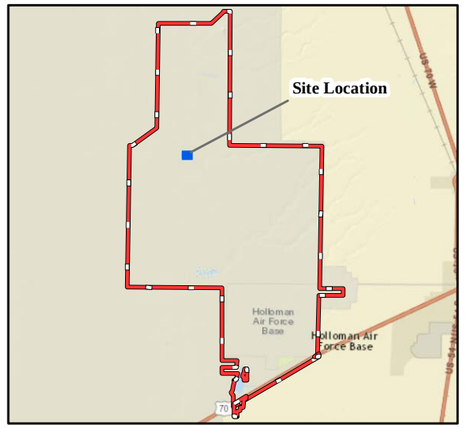
FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-7.mxd

This page is intentionally left blank.





Legend

- DGM Target Anomalies Exceeding 43 nT/m Threshold
- G-858 Analytic Signal Data
- Area Outside the MRS (1.17 acres)
- ML865 MRS Ballistics Rain Field (18.3 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-8

G-858 Analytic Signal Data and Distribution of DGM Target Anomalies ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 5/11/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 120 feet

0 18 36 Meters

0 60 120 Feet

N W E S

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-8.mxd

This page is intentionally left blank.

396950 397000 397050 397100

3640350

3640300

3640250

Area B
(ouside of MRS, 0.05 acres)

Data Gap Areas
(too steep for DGM data collection)

Area A
(ouside of MRS, 0.08 acres)

28.5
26.9
25.4
23.8
22.3
20.8
19.2
17.7
16.2
14.6
13.1
11.5
10.0
8.5
6.9
5.4
3.8
2.3
0.8
-0.8
-2.3
-3.8
-5.4
-6.9
-8.5
-10.0
-11.5
-13.1
-14.6
-16.2
-17.7
-19.2
-20.8
-22.3
-23.8
-25.4
-26.9
-28.5
nT

Legend

- G-858 Total Magnetic Field Data
- Areas Outside the MRS (0.13 acres)
- Fence
- Fence-Line Area (all DGM anomalies intrusively investigated)
- RR869a MRS Debris Field (3.5 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-9

Total Magnetic Field Data
RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 60 feet

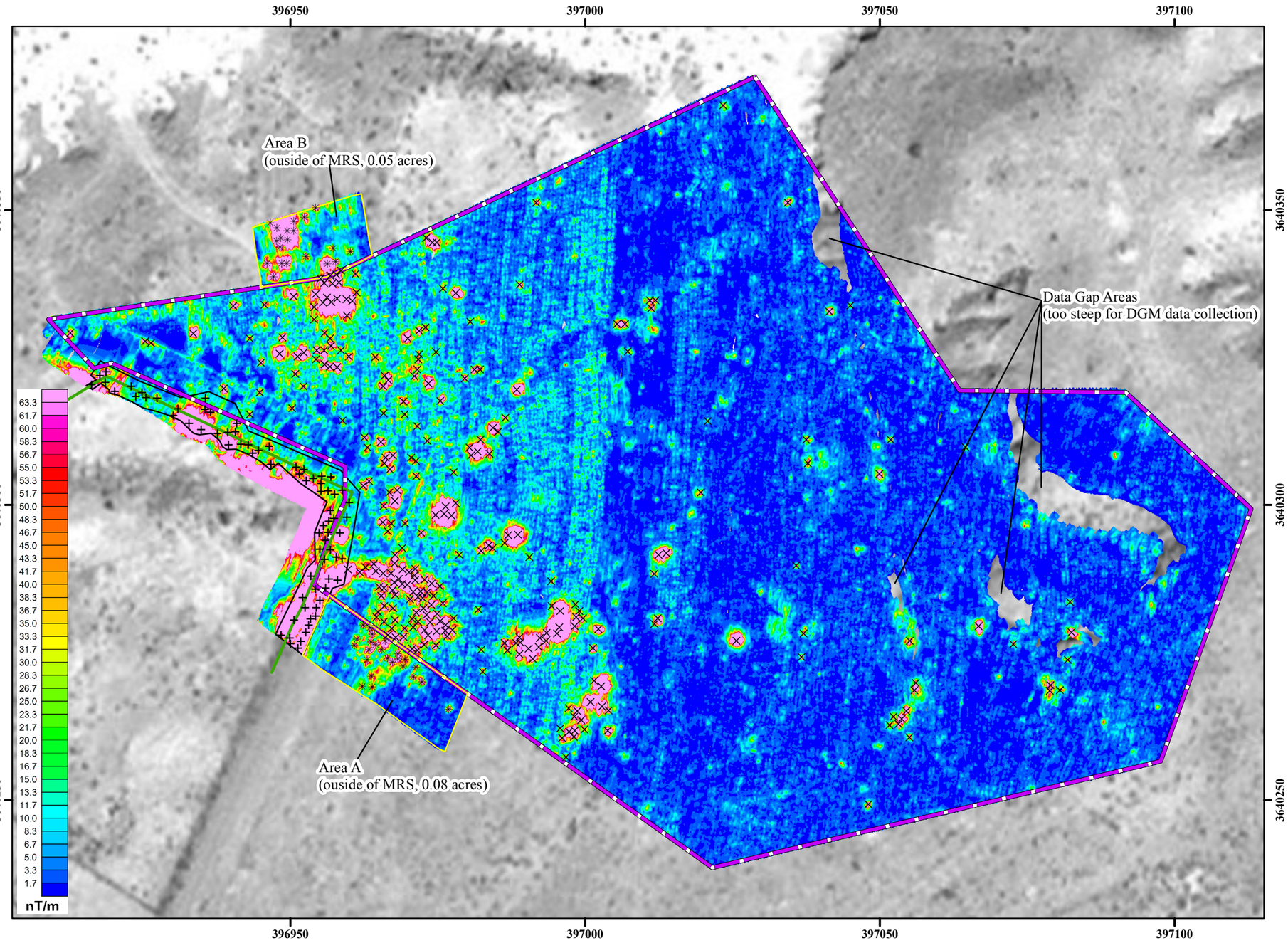
0 9 18
Meters

0 30 60
Feet

N W E S

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-9.mxd

This page is intentionally left blank.



Legend

- DGM Anomalies Exceeding 65 nT/m Threshold (inside the MRS)
- DGM Anomalies Exceeding 65 nT/m Threshold (outside the MRS)
- DGM Anomalies Exceeding 30 nT/m Fence-Line Area (11 anomalies inside and 64 outside the MRS)
- G-858 Analytic Signal Data
- Fence
- RR869a MRS Debris Field (3.5 acres)
- Fence-Line Area (all DGM anomalies intrusively investigated)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-10

G-858 Analytic Signal Data and Distribution of DGM Target Anomalies RR869a MRS

NOTES:
Revision Date: 4/12/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 60 feet

0 9 18 Meters

0 30 60 Feet

N W E S

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-10.mxd

This page is intentionally left blank.

performed within 26 grid cells covering the entire footprint of the MRS (3.50 acres). The fence bordering the portion of the RR869a MRS had to be removed temporarily to avoid its interference during the G-858 data collection. G-858 data were collected at the fence location as well as across 0.12 acres located at the other side of the fence (within IRP Site OT-04) to determine the nature and extent of subsurface anomalies identified at the boundary of RR869a MRS. DGM was extended beyond the MRS boundary in two additional areas (A [0.08 acres], and B [0.05 acres]) to better characterize the extent of perimeter anomalies seen in the original magnetic data (**Figure 4-10**). The extent of anomalies identified in Area B will be fully defined during the follow-on NTCRA if the intrusive investigation results indicate that these anomalies represent a potential MEC.

The following numbers of targets were identified in each of the above mentioned areas (**Figure 4-10**):

- 280 magnetic anomalies exceeding the site-specific threshold of 65 nT/m (see **Section 3.6.4.3**) within the MRS;
- 44 magnetic anomalies exceeding the 65 nT/m threshold outside the MRS (Areas A and B);
- 11 magnetic anomalies exceeding the 30 nT/m target threshold in the fence-line area inside the MRS; and
- 64 magnetic anomalies exceeding 30nT/m threshold in the fence-line area outside the MRS.

Note that the 75 targets in the fence line area were intrusively investigated immediately upon completion of the DGM to avoid removing the fence a second time during the follow-on NTCRA at RR869a. Since the 65 nT/m site-specific threshold had not yet been determined, FPM selected a very conservative threshold (30 nT/m) for selecting targets in this area to ensure the Air Force concurrence on this selection.

The G-858 Target Dig Lists for RR869a are provided in **Tables D-6 through D-9** in **Appendix D**. In addition, the analytic signal of G-858 data and distribution of DGM anomalies for each grid are illustrated on **Figures 869a-1** through **869a-29** in **Appendix E**.

4.3 Intrusive Investigation Results

The RI intrusive investigation of DGM target anomalies was performed along DGM transects and within 100% coverage DGM grids in XU854, across the entire footprint of SR864, within 8 exploratory test pits in ML865, and within the narrow corridor centered on the fence that removed at RR869a to facilitate DGM and intrusive work. No MEC was discovered during the intrusive investigations. A total of approximately 328 lbs of MD and 26 lbs of SD were discovered and removed from the 4 MRSs during the intrusive investigations.

Table 4-2 provides a summary of the RI intrusive investigation results. The Daily Site Reports including daily photo logs of items found during the intrusive investigations are provided in **Appendix B**. The descriptions of the RI intrusive investigation results for each MRS are provided in the following sections.

Table 4-2 Subsurface Clearance Results at 4 MRSs

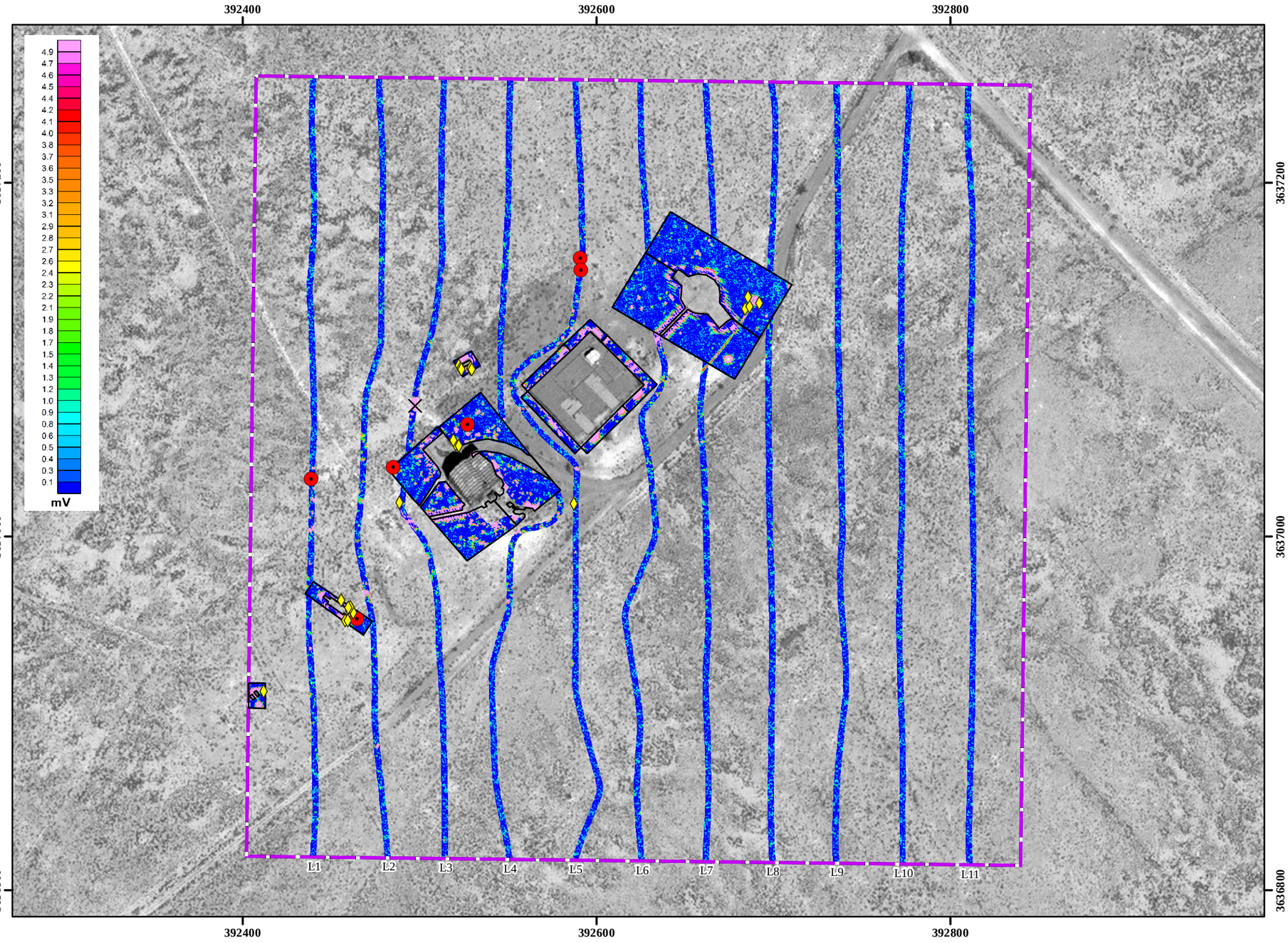
MRS	Total MEC/DMM Quantity	Approximate Total MD Weight Removed (lbs)[1]	Approximate Total SD Weight Removed (lbs)[1]	Approximate Total CD Weight Removed (lbs)[1]
XU854	0	0.4	2.0	160.6
SR864	0	High density area 1.0	High density area 10.0	High density area – 2,863.0
		Remainder of MRS 1.5	Remainder of MRS 13.5	Remainder of MRS – 412.4
ML865 Test Pits	0	325	0	1,050.0
RR869a Fence Line Area	0	0	0	33.0
TOTAL	**0**	**327.9**	**25.5**	**4,519.0**

Notes:1. Approximated values derived from Daily Site Reports (**Appendix B).**

4.3.1 XU854 MRS

All DGM target anomalies with the responses above the 7 mV site-specific threshold, including 129 anomalies from transects and 380 from grids, were reacquired and intrusively investigated during the RI. No MEC was discovered during this activity. The total MD and SD weights removed were approximately 0.4 lbs. and 2.0 lbs., respectively. MD items included two 40mm casings (empty), three 40mm flare pieces, and one grenade spoon. SD items included 5.56 and 7.62mm, and .45 caliber bullet casings and blanks and 1 undifferentiated ammunition link. In addition, a total of approximately 161 lbs of CD was removed from the MRS during the subsurface clearance. The locations of subsurface MD and SD finds at XU854 are illustrated in **Figure 4-11**. Detailed descriptions of the intrusive investigation results are provided in **Tables D-1** and **D-2** in **Appendix D**.

During intrusive investigation of DGM anomalies along transects at XU854 (5 February 2015), the UXO team uncovered and removed what initially appeared to be an isolated piece of deteriorated metal (**Figure 4-11**). Prior to removal, the team determined the exposed metal piece was not UXO/MEC/MPPEH. Upon removal, it was determined that the metal was part of a small drum containing a residual thick gray liquid, and Holloman AFB and AFCEC were notified. The drum and associated soils/liquid were containerized in two 55 – gallon drums and sampled for a waste characterization profile, and the excavation was backfilled due to safety concerns. The excavation was re-opened 11 February 2015 to collect confirmatory soil samples verifying all contaminated soils were removed. During the re-excavation, the apparent opening for a second drum was observed in the sidewall. The second drum was not removed. Plastic sheeting was laid in the excavation and the soils replaced. FPM completed 100% DGM in the area expanding outward from the original anomaly location to in an effort to determine the extent of the buried metallic material. In total, two geophysical anomaly areas were identified and the



Legend

- Small Arms Munitions Debris:
  .50 cal,
  .45 caliber slug,
  5.56 mm brass,
  7.62 mm brass,
  ammunition link
- Munitions Debris:
  40 mm cartridge,
  flare grenade spoon
- Drum/Barrel
- Grid Boundary
- EM61 Channel 2 Data
- XU854 MRS
  Able 51 Area (47.7 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-11

Locations of Subsurface
MD and SD XU854 MRS

NOTES:
Revision Date: 5/11/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 200 feet

0 30 60
Meters

0 100 200
Feet

N
W E
S

FPM Remediations, Inc.

2015

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-11.mxd

This page is intentionally left blank.

results of intrusive investigations indicated the presence of 4 additional drums. The sampling results and drum disposal documentation will be provided in a separate technical memorandum.

4.3.2 SR864 MRS

All DGM target anomalies above the 7 mV site-specific threshold were intrusively investigated at SR864 during the RI. The DGM effort identified 11 high anomaly density areas which were completely intrusively investigated (**Figure 4-12**). In addition, a total of 994 anomalies were reacquired and individually investigated. No MEC was discovered during the subsurface investigation at SR864.

The MD and SD discovered and removed from the SR864 MRS consisted of the following:

High Density Areas

- MD (1 lb total) - M18 smoke grenade pieces,
- SD (10 lbs. total) - 5.56mm, .50 caliber bullet casings and blanks.

The Remainder of the MRS

- MD (1.5 lbs. total) – (1) M18 smoke grenade empty, (2) grenade spoons, and (1) trip flare bracket, and
- SD (13.5 lbs. total) - 5.56 and 7.62mm, .50, .45, and .30 caliber bullet casings and blanks

In addition, a total of approximately 3,275 lbs of CD (2,863.0 lbs from the high density areas and 412 lbs from the remainder of the MRS) was removed from the MRS during the subsurface clearance.

The locations of MD and SD finds at SR864 are illustrated in **Figure 4-12**. Detailed descriptions of the intrusive investigation results are provided in **Tables D-3 and D-4** in **Appendix D.**

Note since mostly construction debris (2,863 lbs), no MEC and small amount of MD (1 lb) were recovered from high anomaly density areas located in the southwest portion of the MRS, it is unlikely that MEC is present outside the MRS; therefore, it was determined that additional DGM grids extending beyond the southern MRS boundary are not required for determining the nature and extent of MEC and MC at SR864.

4.3.3 ML865 MRS

Intrusive investigation of all DGM target anomalies with responses above the 43 nT/m site-specific threshold at ML865 MRS is planned for the follow-on NTCRA. The list of all 6,167 anomalies is provided in **Table D-4** in **Appendix D**. However, 8 exploratory test pits located in high anomaly density areas in ML865 were intrusively investigated during the RI to assess the nature of the anomaly sources in those areas. Since the purpose of intrusive investigation of test pits was to assess the contents only, they were not dug to depth and were not cleared of metal. The locations of the test pits and distribution of MD based on intrusive investigation results are shown in **Figure 4-13.** In addition, the intrusive investigation results are provided in **Table 4-3**. No MEC and approximately 325 lbs of MD were discovered and removed from the test pits. The MD consisted of 75mm and 105mm inert projectiles and projectile pieces. In addition, a total of approximately 1,050 lbs of CD was removed from the test pits.

Table 4-3 Summary of Test Pit Intrusive Investigation Results ML865 MRS

Test Pit ID	Depth of Clearance (inches)	Total MEC/DMM Quantity	Estimated Total MD Weight Removed (lbs)[1]	Estimated CD Weight Removed (lbs)[1]
FC588 - TP01	12 – 15	0	40	0
FC589 - TP01	12 – 15	0	15	0
FG586 - TP01	36	0	0	1,000
FG588 - TP01	12 – 15	0	20	0
FH586 - TP01	12 – 48	0	0	50
FI589 - TP01	12 – 15	0	100	0
FI590 - TP01	12 – 15	0	30	0
FK589 - TP01	18 – 24	0	120	0
TOTAL		**0**	**325**	**1,050**

Notes: 1. Approximated values derived from Daily Site Reports (**Appendix B).**

4.3.4 RR869a MRS

Intrusive investigation of all remaining DGM target anomalies above the 65 nT/m site-specific threshold (not including the anomalies located at and in close proximity to the bordering fence [RR869a/OT-04 boundary]) will be performed during the follow-on NTCRA at RR869a. Intrusive investigation of anomalies located at and in close proximity to the bordering fence (RR869a/OT-04 boundary) was performed during the RI to avoid removing the fence a second time during the follow-on NTCRA. A total of 75 DGM target anomalies (11 within the MRS and 64 outside the MRS) was investigated during this effort (**Figure 4-14**). No MEC, MD, or SD was discovered and approximately 33 lbs of CD was removed from the subsurface. Detailed descriptions of the intrusive investigation results are provided in **Tables D-8 and D-9** in **Appendix D**.

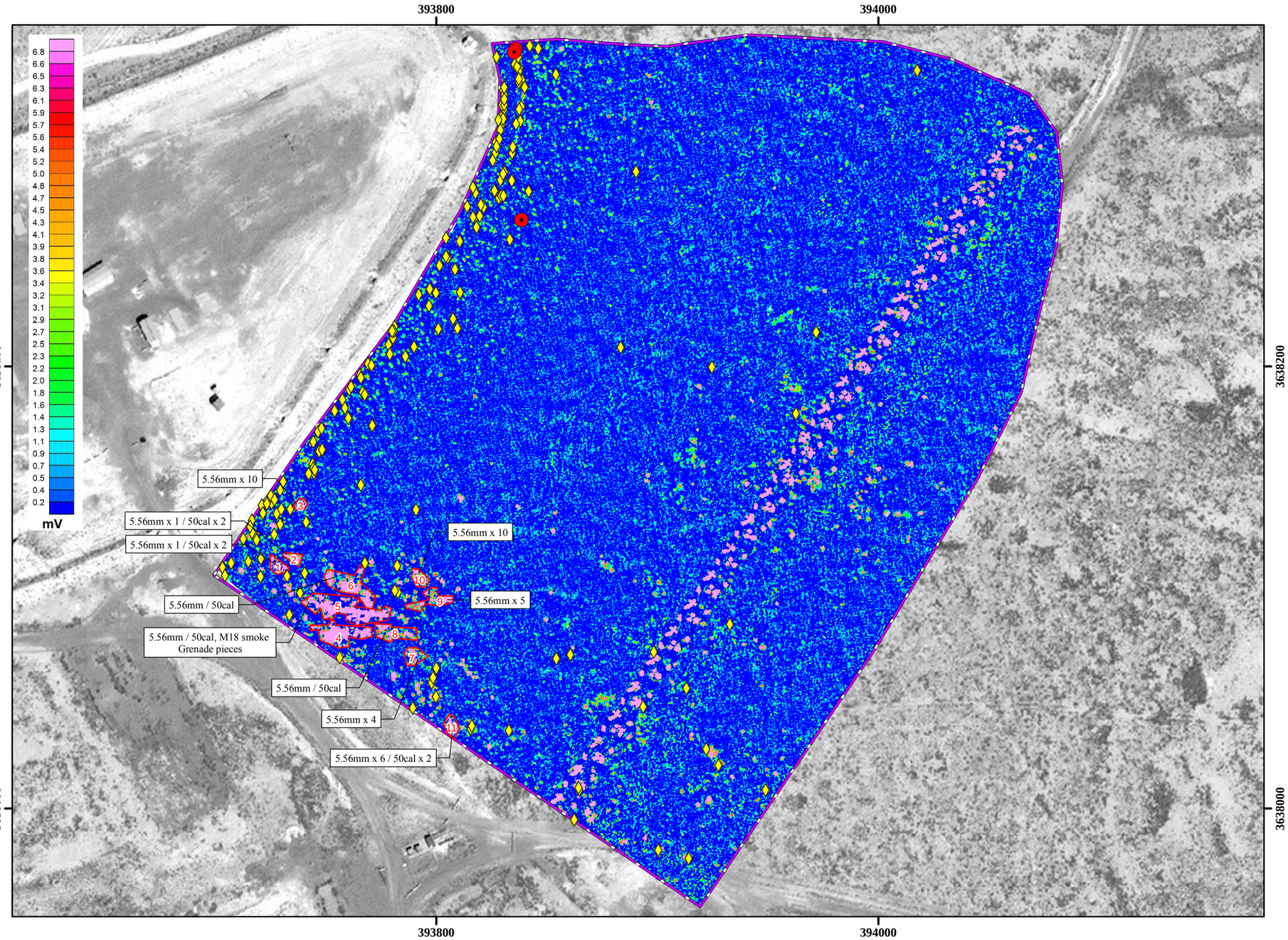
4.3.5 Depths of Recovered MEC/DMM and MD

The two MEC items identified during the RI were both identified on the surface of the SR864 MRS.

The deepest MD items at the different MRSs were identified at the following depths: 0.6 m at ML865, 0.15 m at SR864, and 0.05 m at XU854. No MD was identified in the subsurface of RR869a (fence line area) during the RI.

4.4 Disposition of MEC and MDAS

The 2 MEC items discovered at SR864 were moved to the SDA area in the MRS and destroyed by consolidated shot procedures described in the WP (FPM, 2014a) and ESS (FPM, 2014d). Two demolition operations occurred at ML865: 21 MPPEH items (75mm and 105mm wax-filled projectiles) discovered at ML865 were moved to the SDA area in the MRS and destroyed by consolidated shot procedures to confirm negative swipe tests from the Expray explosives detector kit and verify the items were free of energetics; and similarly demolition operation of 26 MD items (75mm and 105mm wax-filled projectiles) to confirm the items were free of



Legend

- Munitions Debris (M-18 empty smoke grenade, trip flare bracket, grenade spoon)
- Small Arms Munitions Debris (.30 carbine brass, .45 cal, .50 cal, 5.56 mm, 7.62 mm,)
- High Density Area
- SR864 MRS Poorman Range (22.8 acres)
- EM61 Channel 2 Data
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-12

Locations of Subsurface
MD and SD SR864 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/8/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 160 feet

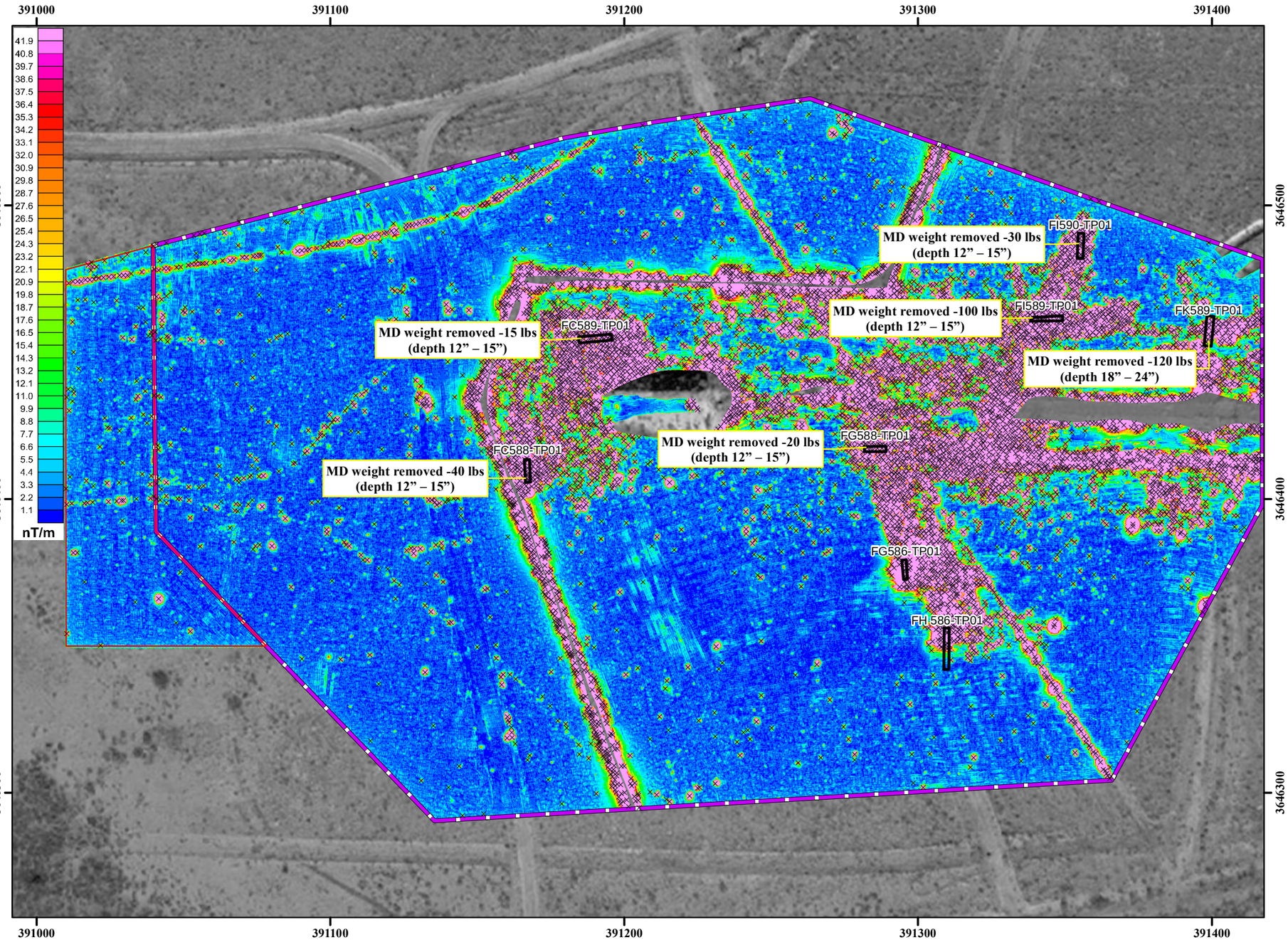
0 25 50 Meters

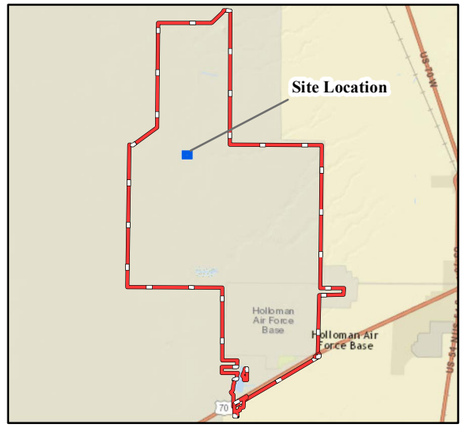
0 80 160 Feet

N W E S

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-12.mxd

This page is intentionally left blank.





Legend

- DGM Targets Anomalies Exceeding 43 nT/m Threshold
- Test Pit Area
- G-858 Analytic Signal Data
- Area Outside the MRS (1.17 acres)
- ML865 MRS Ballistic Rain Field (18.3 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-13

Intrusive Investigation Results
Test Pits within High Density Areas ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 120 feet

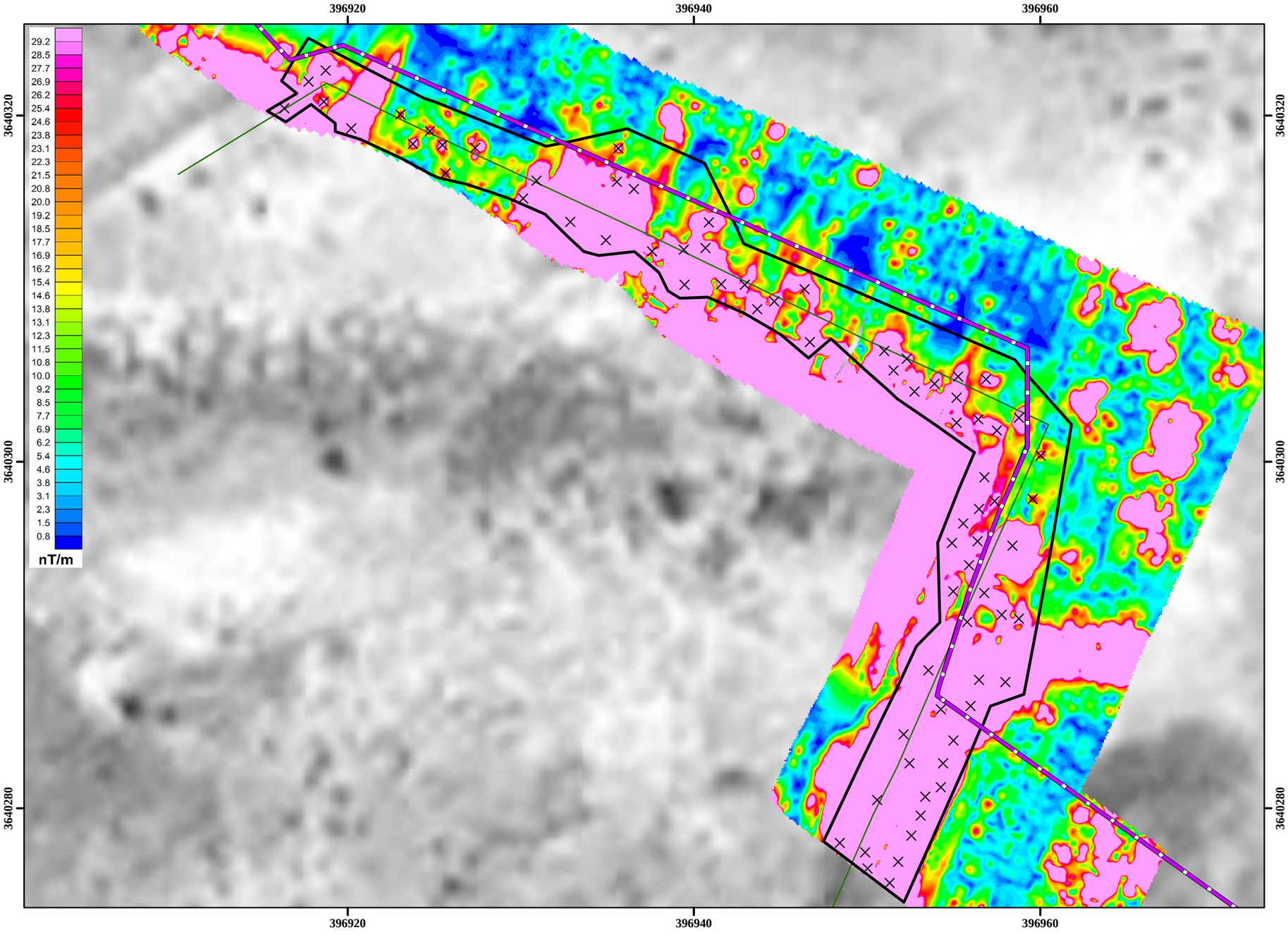
0 18 36 Meters

0 60 120 Feet

N W E S

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-13.mxd

This page is intentionally left blank.



Legend

- DGM Target Anomalies Exceeding 30nT/m Threshold (All CD)
- G-858 Analytic Signal Data Collected After Fence Removal
- Fence
- Fence-Line Area Within Which all DGM Anomalies Were Intrusively Investigated
- RR869a MRS Debris Field (3.5 acres)
- Installation Boundary

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM
AFCEC

FIGURE 4-14

Intrusive Investigation Results
Fence-Line Area
RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 20 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\New Mexico\GIS\XU854_SR864_ML865_RR869a_RI report\XU854_SR864_ML865_RR869a_RI report_Fig4-14.mxd

This page is intentionally left blank.

energetics. All by-products or fragments of the demolition operations were collected, inspected and verified as MDAS. **Table 4-4** presents a summary of the RI demolition operations.

All material collected during the RI was inspected in accordance with the Chapter I, Section 11 of EM 385-1-97 (USACE, 2013b) and DoD Instruction 4140.62 (DoD, 2014) requirements and certified as MDAS.

All MPPEH was inspected by the onsite UXO II and UXO Team Leader to determine if the item was free of energetic material. Once the UXO Technician and Team Leader determined the item was free of energetic material and safe to handle, the UXO III and UXOQC re-inspected the item and placed it in a locked container to ensure a certified chain of custody.

All non-MEC related debris (CD) totaling 7,182.7 lbs was delivered to the Recycling Services Center at Holloman AFB to be recycled.

All MDAS with a total weight of 7,626 lbs was transported to either El Paso Iron and Metal or Timberline Environmental Services for final recycling (**Table 4-5**). MDAS Certification DD Form 1348-1A, MDAS Chain of Custody, and Certificate of Destruction are provided in **Appendix F.**

Table 4-4 Summary of RI Demolition Operations

Demolition Date	MEC Quantity	MPPEH Quantity	MD Quantity	Disposition
ML865 MRS				
11-November-2014		21		Consolidated detonation in SDA
8-December-2014			26	Consolidated detonation in SDA
RR869a MRS				
None	0			N/A
XU854 MRS				
None	0			N/A
SR864 MRS				
17-December-2014	2			Consolidated detonation in SDA

Table 4-5 Amount of MDAS Destructed during RI XU854, SR864, ML865, and RR869a

Date	Off-Site Facility	MDAS Shipped Off-Site (lbs.)
2/6/2015	**El Paso Iron and Metal**	**5,705**
3/16/2015	**Timberline Environmental Services**	**1,921**
TOTAL		**7,626**

4.5 Soil Sampling Results

This section presents the results of the soil sampling performed during the RI. The results were compared to the project specific human health and ecological screening levels as well as the Base-specific background concentrations as discussed in **Section 3.9.3**. The analytical data QA/QC evaluation summary and data validation reports are presented in **Appendix G.** The raw laboratory data are also provided in **Appendix G**.

4.5.1 Incremental Soil Sampling Results at XU854

The locations of 12 incremental surface soil samples collected during the RI field activities at known historical and suspected missile/rocket launch pad sites in XU854 are shown in **Figure 3-5**. The analytical results for these samples are presented in **Table 4-6** and summarized below.

Explosive Compounds

As shown in **Table 4-6**, explosive compounds associated with missile/rocket propellants were not detected or were well below their respective HHSLs and ESLs. Therefore, explosive compounds in soil do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of explosives in soil at the XU854 MRS is not necessary.

Nitrate

As shown in **Table 4-6**, the potential missile/rocket propellant constituent, nitrate, was detected at concentrations ranging between 2.2 and 35.6 mg/kg which is well below the HHSL of 125,000 mg/kg. No ESL value is currently available for nitrate. Therefore, nitrate in soil at XU854 at the detected concentrations does not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of nitrate in soil at the XU854 MRS is not necessary.

Perchlorate

As shown in **Table 4-6**, the potential missile/rocket propellant constituent, perchlorate, was detected at concentrations ranging between 0.0029 and 0.345 mg/kg well below the HHSL of 54.8 mg/kg. No ESL value is currently available for perchlorate. Therefore, perchlorate in soil at XU854 at the detected concentrations does not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of perchlorate in soil at the XU854 MRS is not necessary.

4.5.2 Composite Soil Sampling Results at SR864

Composite soil samples for analysis of explosives and metals were collected at three locations at SR864 (2 locations where MEC items were encountered and one location at the SDA). The sampling locations (3 primary samples plus 1 duplicate) are shown in **Figure 3-6**. The analytical results for these samples are presented in **Table 4-7** and summarized below.

Explosive Compounds

As shown in **Table 4-7**, explosive compounds associated with MEC were not detected in in any of the samples. Therefore, explosive compounds in soil do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of explosives in soil at the SR864 MRS is not necessary.

Metals

As shown in **Table 4-7**, metals were detected at concentrations below their respective Basewide background concentrations and well below their respective HHSLs and ESLs. Therefore, metals in soil do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of metals in soil at the SR864 MRS is not necessary.

4.5.3 Composite Soil Sampling Results at ML865

Composite soil samples for analysis of explosives and metals were collected at 9 locations at ML865 (8 locations where significant amounts of surface MD (>500 lbs) were encountered and one location where the SDA was located). The sampling locations (9 primary samples plus one duplicate) are shown in **Figure 3-7**. The analytical results for these samples are presented in **Table 4-8** and summarized below.

Explosive Compounds

As shown in **Table 4-8**, explosive compounds associated with munitions-related items were either not detected or well below their respective HHSL. Therefore, explosive compounds in surface soil do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of explosives in soil at the ML865 MRS is not necessary.

Metals

As shown in **Table 4-8**, all metals except copper, were detected at concentrations below approved Basewide background concentrations and well below the HHSL and ESL. Copper was detected at concentrations ranging from 4.4 to 21.9 mg/kg, well below the HHSL, but slightly above the no-effect ESL for the most sensitive receptor category (15 mg/kg) for one sample (21.9 mg/kg). Based on the results of the screening assessment, copper in surface soil at ML865 was further evaluated.

To evaluate potential ecological exposures at ML865, the concentration of copper in the surface soil relevant to potentially exposed ecological receptors must be known or estimated. This concentration is referred to as an Exposure Point Concentration (EPC). The approach used to estimate EPC in the surface soil sampled at ML865 follows USEPA guidance (USEPA, 1989).

According to this guidance, the most appropriate measurement of central tendency for exposure to environmental chemical concentrations is the arithmetic mean. To account for uncertainty associated with this value, USEPA guidance recommends the use of the 95% Upper Confidence Level (UCL) of the arithmetic mean concentration. The 95% UCL of copper in the surface soil was calculated using the USEPA ProUCL (V4.0) statistical software. The calculation resulted in copper value of 12.89 mg/kg, which is assumed to represent the concentrations to which receptors could be exposed at ML865. Apparently, this value is below the no-effect ESL for the most sensitive receptor category (15 mg/kg) suggesting that further evaluation for copper in surface soil is not necessary.

As a result, metals in surface soil do not pose any hazard to human health and the environment, and further human health and ecological risk evaluation of metals in surface soil at the ML865 MRS is not recommended.

Table 4-6 Incremental Soil Sampling Results XU854 MRS

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL (mg/kg)	XU854ISH06A 12/09/2014 Result (Qual) XU854	XU854ISH06C 12/09/2014 Result (Qual) XU854	XU854ISH06Z1 12/11/2014 Result (Qual) XU854	XU854ISH06Z2 12/11/2014 Result (Qual) XU854	XU854ISH06Z3 12/11/2014 Result (Qual) XU854
Explosives								
2-Amino-4,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4-Dinitrotoluene	NA	1.7[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,6-Dinitrotoluene	NA	0.36[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
RDX	NA	6.1[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitroglycerin	NA	6.16[c]		0.5 (U)	0.5 (U)	0.5 (U)	0.5 (U)	0.5 (U)
HMX	NA	3,850[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4,6-Trinitrotoluene	NA	21[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitrocellulose	NA	1.9E+08[b]		1.55 (H1J)	1.38 (H1J)	1.20 (J)	1.03 (J)	2.95 (J)
Nutrients								
Nitrate	NA	125,000[c]		31.3	31.4	15.0 (J)	27.6	35.6
Perchlorates								
Perchlorate	NA	54.8[c]		0.0125	0.0112	0.0095	0.0059	0.0125 (J)

Table 4-6 Incremental Soil Sampling Results XU854 MRS (continued)

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL (mg/kg)	XU854ISG06A 12/15/2014 Result (Qual) XU854	XU854ISN06A 12/15/2014 Result (Qual) XU854	XU854ISO06A 12/15/2014 Result (Qual) XU854	XU854ISI06A 12/15/2014 Result (Qual) XU854	XU854ISP06A 12/15/2014 Result (Qual) XU854
Explosives								
2-Amino-4,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4-Dinitrotoluene	NA	1.7[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,6-Dinitrotoluene	NA	0.36[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
RDX	NA	6.1[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitroglycerin	NA	6.16[c]		0.5 (U)	0.5 (U)	0.5 (U)	0.5 (U)	0.5 (U)
HMX	NA	3,850[c]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4,6-Trinitrotoluene	NA	21[b]		0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitrocellulose	NA	1.9E+08[b]		2.59 (J)	2.53 (J)	1.29 (J)	1.34 (J)	1.81 (J)
Nutrients								
Nitrate	NA	125,000[c]		9.8	9.1	2.2	3.8	13.0
Perchlorates								
Perchlorate	NA	54.8[c]		0.0131	0.0104	0.0122	0.0610	0.0520

Table 4-6 Incremental Soil Sampling Results XU854 MRS (continued)

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL (mg/kg)	XU854ISQ06A 12/16/2014 Result (Qual) XU854	XU854ISR06A 12/16/2014 Result (Qual) XU854	XU854ISL06A 12/16/2014 Result (Qual) XU854	XU854ISJ06A 12/16/2014 Result (Qual) XU854	XU854ISK06A 12/17/2014 Result (Qual) XU854
Explosives								
2-Amino-4,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4-Dinitrotoluene	NA	1.7[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,6-Dinitrotoluene	NA	0.36[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
RDX	NA	6.1[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitroglycerin	NA	6.16[c]		0.5 (U)	0.49 (U)	0.5 (U)	0.5 (U)	0.5 (U)
HMX	NA	3,850[c]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4,6-Trinitrotoluene	NA	21[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitrocellulose	NA	1.9E+08[b]		1.25 (J)	1.17 (J)	4.97	1.81 (J)	1.46 (J)
Nutrients								
Nitrate	NA	125,000[c]		6.5	4.2	26.2	7.9	4.1
Perchlorates								
Perchlorate	NA	54.8[c]		0.0158	0.0117	0.345	0.0343	0.0164

Table 4-6 Incremental Soil Sampling Results XU854 MRS (continued)

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL (mg/kg)	XU854ISK06C 12/17/2014 Result (Qual) XU854	XU854ISK06Z1 12/17/2014 Result (Qual) XU854	XU854ISK06Z2 12/18/2014 Result (Qual) XU854	XU854ISK06Z3 12/18/2014 Result (Qual) XU854	XU854ISM06A 12/18/2014 Result (Qual) XU854
Explosives								
2-Amino-4,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4-Dinitrotoluene	NA	1.7[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,6-Dinitrotoluene	NA	0.36[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
RDX	NA	6.1[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitroglycerin	NA	6.16[c]		0.5 (U)	0.49 (U)	0.5 (U)	0.5 (U)	0.5 (U)
HMX	NA	3,850[c]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
2,4,6-Trinitrotoluene	NA	21[b]		0.05 (U)	0.049 (U)	0.05 (U)	0.05 (U)	0.05 (U)
Nitrocellulose	NA	1.9E+08[b]		1.30 (J)	6/48	1.75 (J)	1.0 (U)	1.07 (J)
Nutrients								
Nitrate	NA	125,000[c]		4.1	3.0	4.5	3.4	4.0
Perchlorates								
Perchlorate	NA	54.8[c]		0.0131	0.0130	0.0186	0.0157	0.0029

Notes:

a	Approved Basewide Background Levels Holloman AFB, NMED Approval Letter. 1 March 2012.
b	(USEPA, June 2015). Regional Screening Levels Table. http://www.epa.gov/region6/6pd/rcra_c/pd-n/screen.htm
c	(NMED, July 2015). New Mexico Soil Screening Levels. https://www.env.nm.gov/HWB/documents/SSLs_RA_Guidance_for_SI_and_Remediation_July_2015.pdf
d	Ecological Screening Level (ESL) for soil developed by Los Alamos National Laboratory (LANL), LANL ECORISK Database Release 3.2, October 2014. ESL values used are based on the "No Effect" ESL
BG	Background
ESL	Ecological Screening Level
HHSL	Human Health Screening Level
mg/kg	Milligrams per kilogram
NA	No value available
Qual	Qualifiers
H1	The result was analyzed outside of the EPA recommended holding time
U	Not detected at Limit of Detection
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific QC criteria or the analyte was positively identified; the qualifier is an estimation
	Value exceeds human health screening levels
	Value exceeds ecological screening levels
	Value exceeds both human health and ecological screening values
Bold	Bold value exceeds known installation specific background concentrations

Table 4-7 Composite Soil Sampling Results SR864 MRS

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL[d] (mg/kg)	SR864SOSDA2A 2/10/2015 Result (Qual) SR864	SR864SOSG1A 2/10/2015 Result (Qual) SR864	SR864SOSG2A 2/10/2015 Result (Qual) SR864	SR864SOSDA2C 12/15/2014 Result (Qual) SR864
Explosives							
1,3-Dinitrobenzene	NA	6.3[b]	0.073	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
2-Amino-4,6-dinitrotoluene	NA	150[b]	12	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]	14	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
2,4-Dinitrotoluene	NA	1.7[b]	6	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
2,6-Dinitrotoluene	NA	0.36[b]	4.1	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
RDX	NA	6.1[b]	2.3	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
Nitrobenzene	NA	5.1[b]	2.2	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
2-Nitrotoluene	NA	3.2[b]	9.9	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
3-Nitrotoluene	NA	6.16[c]	12	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
4-Nitrotoluene	NA	34[b]	22	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
HMX	NA	3,850[c]	16	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
1,3,5-Trinitrobenzene	NA	2,200[b]	10	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
2,4,6-Trinitrotoluene	NA	21[b]	7.6	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
Tetryl	NA	156[c]	1.5	0.083 (U)	0.098 (U)	0.093 (U)	0.094 (U)
Metals							
Aluminum	13,722	77,000[b]	NA	7,560	6,690	8,670	7,710
Antimony	1.6	31[b]	2.4	1.3 (U)	0.66 (J)	1.4 (U)	1.3 (U)
Chromium	25	117,000[c]	28	8.5	6.8	10.0	8.7
Copper	13	3,100[b]	15	8.3	7.0	7.9	9.6
Iron	23,049	54,800[c]	NA	6,580	5,570	7,540	6,670
Lead	10.9	400[b]	14	6.7	4.2 (J)	7.2	6.7
Zinc	54.6	23,000[b]	48	27.3	21.1	29.8	27.3

Notes:

a	Approved Basewide Background Levels Holloman AFB, NMED Approval Letter. 1 March 2012.
b	(USEPA, June 2015). Regional Screening Levels Table. http://www.epa.gov/region6/6pd/rcra_c/pd-n/screen.htm
c	(NMED, July 2015). New Mexico Soil Screening Levels. https://www.env.nm.gov/HWB/documents/SSLs_RA_Guidance_for_SI_and_Remediation_July_2015.pdf
d	Ecological Screening Level (ESL) for soil developed by Los Alamos National Laboratory (LANL), LANL ECORISK Database Release 3.2, October 2014. ESL values used are based on the "No Effect" ESL
BG	Background
ESL	Ecological Screening Level
HHSL	Human Health Screening Level
mg/kg	Milligrams per kilogram
NA	No value available
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Qual	Qualifiers
U	Not detected at Limit of Detection
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific QC criteria or the analyte was positively identified; the qualifier is an estimation
	Value exceeds human health screening levels
	Value exceeds ecological screening levels
	Value exceeds both human health and ecological screening values
Bold	Bold value exceeds known installation specific background concentrations

Table 4-8 Composite Soil Sampling Results ML865 MRS

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL[d] (mg/kg)	ML865SOFH588A 1/16/2015 Result (Qual) SR864	ML865SOFI589A 1/16/2015Result (Qual) SR864	ML865SOFJ589A 1/16/2015 Result (Qual) SR864	ML865SOFI590A 1/16/2015 Result (Qual) SR864	ML865SOFB589A 1/16/2015 Result (Qual) SR864
Explosives								
1,3-Dinitrobenzene	NA	6.3[b]	0.073	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
2-Amino-4,6-dinitrotoluene	NA	150[b]	12	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]	14	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
2,4-Dinitrotoluene	NA	1.7[b]	6	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
2,6-Dinitrotoluene	NA	0.36[b]	4.1	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
RDX	NA	6.1[b]	2.3	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
Nitrobenzene	NA	5.1[b]	2.2	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
2-Nitrotoluene	NA	3.2[b]	9.9	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
3-Nitrotoluene	NA	6.16[c]	12	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
4-Nitrotoluene	NA	34[b]	22	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
HMX	NA	3,850[c]	16	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
1,3,5-Trinitrobenzene	NA	2,200[b]	10	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
2,4,6-Trinitrotoluene	NA	21[b]	7.6	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
Tetryl	NA	156[c]	1.5	0.092 (U)	0.089 (U)	0.097 (U)	0.1 (U)	0.091 (U)
Metals								
Aluminum	13,722	77,000[b]	NA	3,590	4,030	4,180	3,830	4,910
Antimony	1.6	31[b]	2.4	2.9 (U)	2.9 (U)	3.0 (U)	2.8 (U)	2.8 (U)
Chromium	25	117,000[c]	28	6.3	4.3 (J)	4.9 (J)	4.4 (J)	5.6
Copper	13	3,100[b]	15	**15.0**	6.8	**21.9**	10.2	6.5
Iron	23,049	54,800[c]	NA	3,570	3,480	3,400	3,360	4,280
Lead	10.9	400[b]	14	4.8 (J)	5.1 (J)	5.6 (J)	6.0 (J)	8.5 (J)
Zinc	54.6	23,000[b]	48	42.2	20.9	18.7	18.7	20.3

Table 4-8 Composite Soil Sampling Results ML865 MRS (continued)

Field Sample ID Date Collected Comment	HAFB Soil BG Levels[a] (mg/kg)	HHSL (mg/kg)	ESL[d] (mg/kg)	ML865SOFB589C 1/16/2015 Result (Qual) SR864	ML865SOFB588A 1/16/2015Result (Qual) SR864	ML865SOFA588A 1/16/2015 Result (Qual) SR864	ML865SOFD589A 1/16/2015 Result (Qual) SR864	ML865SO10A1A 2/10/2015 Result (Qual) SR864
Explosives								
1,3-Dinitrobenzene	NA	6.3[b]	0.073	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
2-Amino-4,6-dinitrotoluene	NA	150[b]	12	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
4-Amino-2,6-dinitrotoluene	NA	150[b]	14	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
2,4-Dinitrotoluene	NA	1.7[b]	6	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
2,6-Dinitrotoluene	NA	0.36[b]	4.1	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
RDX	NA	6.1[b]	2.3	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.108 (J)
Nitrobenzene	NA	5.1[b]	2.2	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
2-Nitrotoluene	NA	3.2[b]	9.9	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
3-Nitrotoluene	NA	6.16[c]	12	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
4-Nitrotoluene	NA	34[b]	22	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
HMX	NA	3,850[c]	16	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.170 (U)
1,3,5-Trinitrobenzene	NA	2,200[b]	10	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
2,4,6-Trinitrotoluene	NA	21[b]	7.6	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
Tetryl	NA	156[c]	1.5	0.098 (U)	0.094 (U)	0.096 (U)	0.093 (U)	0.086 (U)
Metals								
Aluminum	13,722	77,000[b]	NA	4,070	3,460	3,110	4,570	4,640
Antimony	1.6	31[b]	2.4	3.0 (U)	2.7 (U)	2.8 (U)	2.7 (U)	2.7 (U)
Chromium	25	117,000[c]	28	4.6 (J)	3.4 (J)	3.1 (J)	4.8 (J)	4.4 (J)
Copper	13	3,100[b]	15	5.8	4.4	4.6	6.4	6.5
Iron	23,049	54,800[c]	NA	3,580	2,930	3,050	3,940	4,330
Lead	10.9	400[b]	14	6.0 (J)	3.1 (J)	3.5 (J)	5.0 (J)	3.3 (J)
Zinc	54.6	23,000[b]	48	15.4	12.2	11.7	18.7	15.1

Notes:

a	Approved Basewide Background Levels Holloman AFB, NMED Approval Letter. 1 March 2012.
b	(USEPA, June 2015). Regional Screening Levels Table. http://www.epa.gov/region6/6pd/rcra_c/pd-n/screen.htm
c	(NMED, July 2015). New Mexico Soil Screening Levels. https://www.env.nm.gov/HWB/documents/SSLs_RA_Guidance_for_SI_and_Remediation_July_2015.pdf
d	Ecological Screening Level (ESL) for soil developed by Los Alamos National Laboratory (LANL), LANL ECORISK Database Release 3.2, October 2014. ESL values used are based on the "No Effect" ESL
BG	Background
ESL	Ecological Screening Level
HHSL	Human Health Screening Level
mg/kg	Milligrams per kilogram
NA	No value available
Qual	Qualifiers
U	Not detected at Limit of Detection
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific QC criteria or the analyte was positively identified; the qualifier is an estimation
	Value exceeds human health screening levels
	Value exceeds ecological screening levels
	Value exceeds both human health and ecological screening values
Bold	Bold value exceeds known installation specific background concentrations

This page is intentionally left blank.

5.0 REVISED CONCEPTUAL SITE MODELS

Site-specific CSMs developed for XU854, SR864, ML865, and RR869a MRSs based on CSE Phase II results served as a starting point for the RI and were presented in the RI WPs for XU854 MRS (FPM, 2014a), SR864/ML865 MRSs (FPM, 2014b), and RR869a MRS FPM, 2014c) and summarized in **Section 2.1**. This section presents the revised CSMs for each MRS, consistent with findings from the RI. The CSMs summarize available site information and identify relationships between exposure pathways and associated receptors.

A CSM is used to determine the data types necessary to describe site conditions and quantify receptor exposure, and discusses the following information:

- Current site conditions and future land use;
- MEC and MC sources;
- Affected media;
- Governing fate and transport processes
- Exposure media (i.e., media through which receptors could contact site-related MEC and MC);
- Routes of exposure (e.g., inhalation, incidental ingestion, and dermal contact); and
- Potential human and/or representative ecological receptors at the exposure point (based on current and expected future land uses).

Current and future land uses and accessibility of all 4 MRSs are provided in **Section 1.9**. In addition, transport mechanism/migration routes, potential human and ecological receptors for MEC and MC at XU854, SR864, ML865, and RR869a MRSs are provided in **Section 2.1.**

5.1 Revised MEC Exposure Pathways

5.1.1 XU854 MRS

No MEC items were identified on the surface or within the subsurface during the RI at the XU854 MRS. A negligible amount of MD was identified on the surface (0.6 lbs.) and in the subsurface (0.4 lbs.) of this site. As a result, all MEC exposure pathways at XU854 are shown as incomplete for all human receptors: authorized Base personnel and contractors and trespassers (**Figure 5-1**).

5.1.2 SR864 MRS

Since 100% surface clearance and subsurface removal of all anomalies above the site-specific threshold was completed during the RI at SR864, all MEC exposure pathways are shown as incomplete for this site for all human receptors: authorized Base personnel and contractors, Base residents, visitors, and trespassers (**Figure 5-2**).

5.1.3 ML865 MRS

100% surface clearance was performed at the ML865 MRS during the RI. Based on the historical use of this site (i.e., it was used to create artificial rain for the purpose of testing the effects on artillery) and based on surface clearance results, the potential for subsurface MEC may be found in the form of MD associated with 155-mm, 105-mm, 75-mm, 37-mm, and 20-mm

projectiles as well as unidentified MD. Therefore, MEC exposure pathways at ML865 are shown as incomplete for surface MEC and potentially complete for MEC in the subsurface for all human receptors: authorized Base personnel and contractors, Base residents, visitors, and trespassers (**Figure 5-3**).

5.1.4 RR869a MRS

100% surface removal was performed at the RR869a MRS during the RI. However, potential for MEC in the subsurface may be found in the form of MD associated with M18 smoke grenades and MK10 5-inch rocket motors identified on the surface of the site during the RI. As a result, MEC exposure pathways at RR869a MRS are shown as incomplete for MEC at surface and potentially complete for MEC in the subsurface for all human receptors: authorized Base personnel and contractors, and trespassers (**Figure 5-4**).

5.2 Revised MC Exposure Pathways

5.2.1 XU854 MRS

No explosives exceeding screening levels were detected in soil samples collected during the RI at XU854. Nitrite and perchlorate (propellant constituents) were detected in concentrations well below their respective HHSLs. As a result, there are no complete exposure pathways for MC at the XU854 MRS (**Figure 5-5**).

5.2.2 SR864 MRS

No explosive compounds were detected in soil samples collected during the RI at SR864. Detected concentration of 7 metals in soils were below their respective HHSLs and ESLs. As a result, there are no complete exposure pathways for MC at the SR864 MRS (**Figure 5-6**).

5.2.3 ML865 MRS

No explosives exceeding screening levels were detected in soil samples collected during the RI at ML865. Detected concentrations of 7 metals in soils were below their respective HHSLs. Copper concentration in one soil sample was slightly above the ESL, while detected concentrations of all other metals were below their respective ESL values. The 95% UCL for copper calculated for this site (12.89 mg/kg) is below the ESL for copper indicating that potential ecological risks due to copper can be considered negligible at the ML865 Ballistics Rain Field MRS. Therefore, as shown in **Figure 5-7** all surface soil pathways are shown as incomplete for this MRS for all human receptors (authorized Base personnel and contractors, Base residents, visitors, and trespassers) and biota. Subsurface soil exposure pathways are considered potentially complete for all human receptors and biota, since only limited intrusive investigation was performed (test pits in several high anomaly density areas), and based on surface clearance results, there is a potential for subsurface source of MC at this site.

5.2.4 RR869a MRS

Since 100% surface removal performed during the RI at RR869a found no evidence of sources of MC (no MEC was identified), no MC sampling was performed at this site. Therefore, as shown in **Figure 5-8**, all surface soil pathways are shown as incomplete for this MRS for all human receptors (authorized Base personnel and contractors, and trespassers) and biota. Subsurface soil exposure pathways are considered potentially complete for all human receptors and biota, since only limited intrusive investigation was performed (fence line area), and based on surface clearance results, there is a potential for subsurface source of MC at this site.

Figure 5-1 XU854 MRS MEC Pathway Analysis

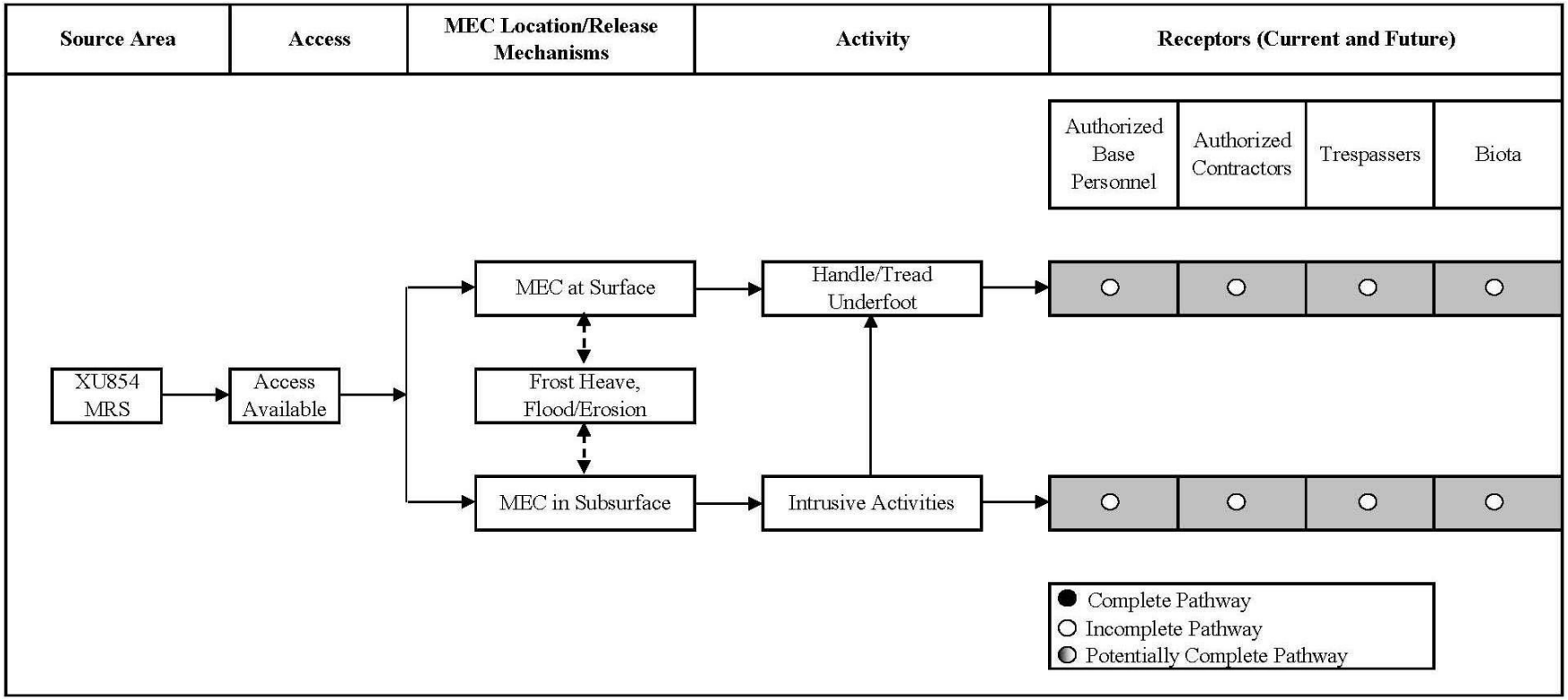


Figure 5-2 SR864 MRS MEC Pathway Analysis

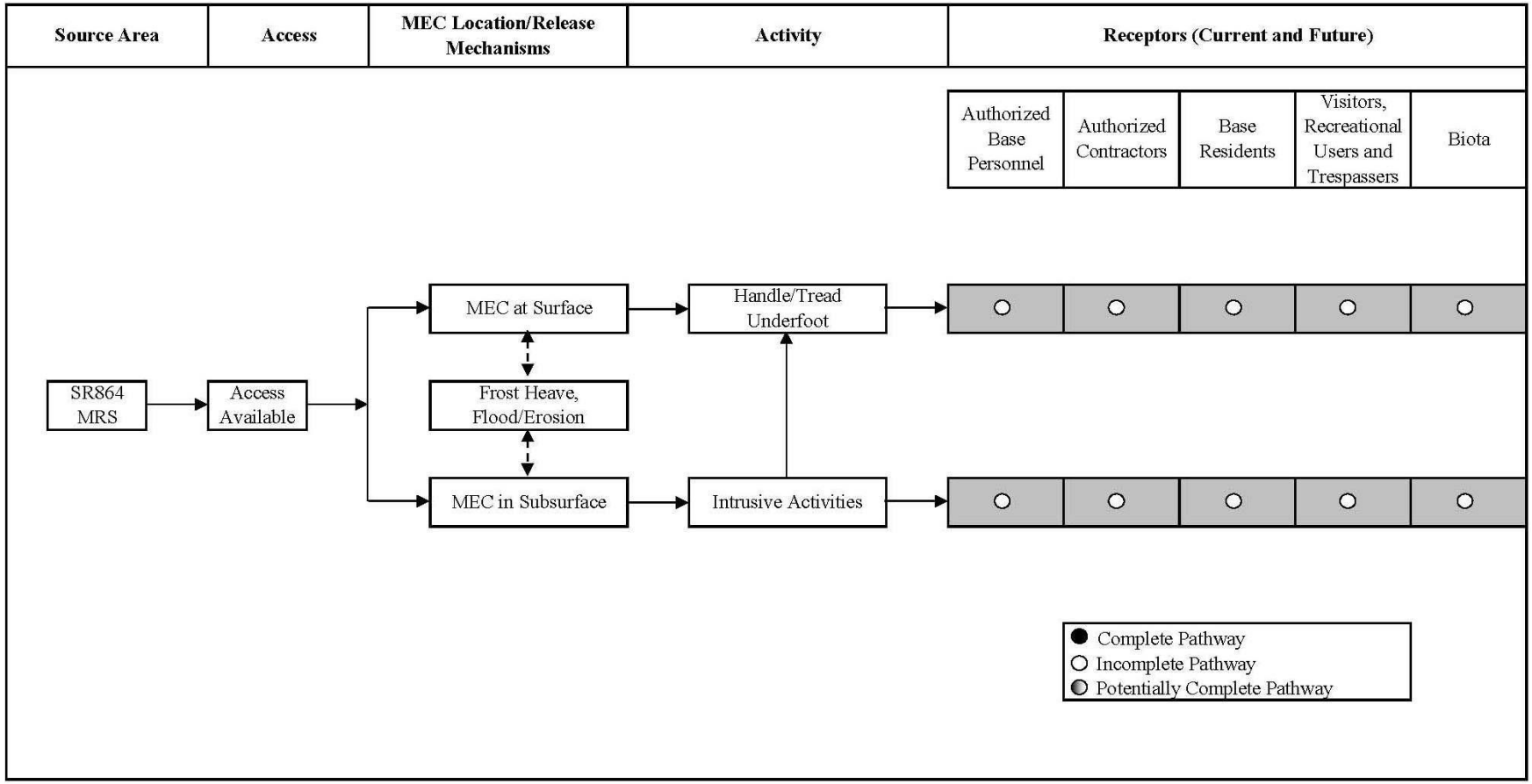


Figure 5-3 ML865 MRS MEC Pathway Analysis

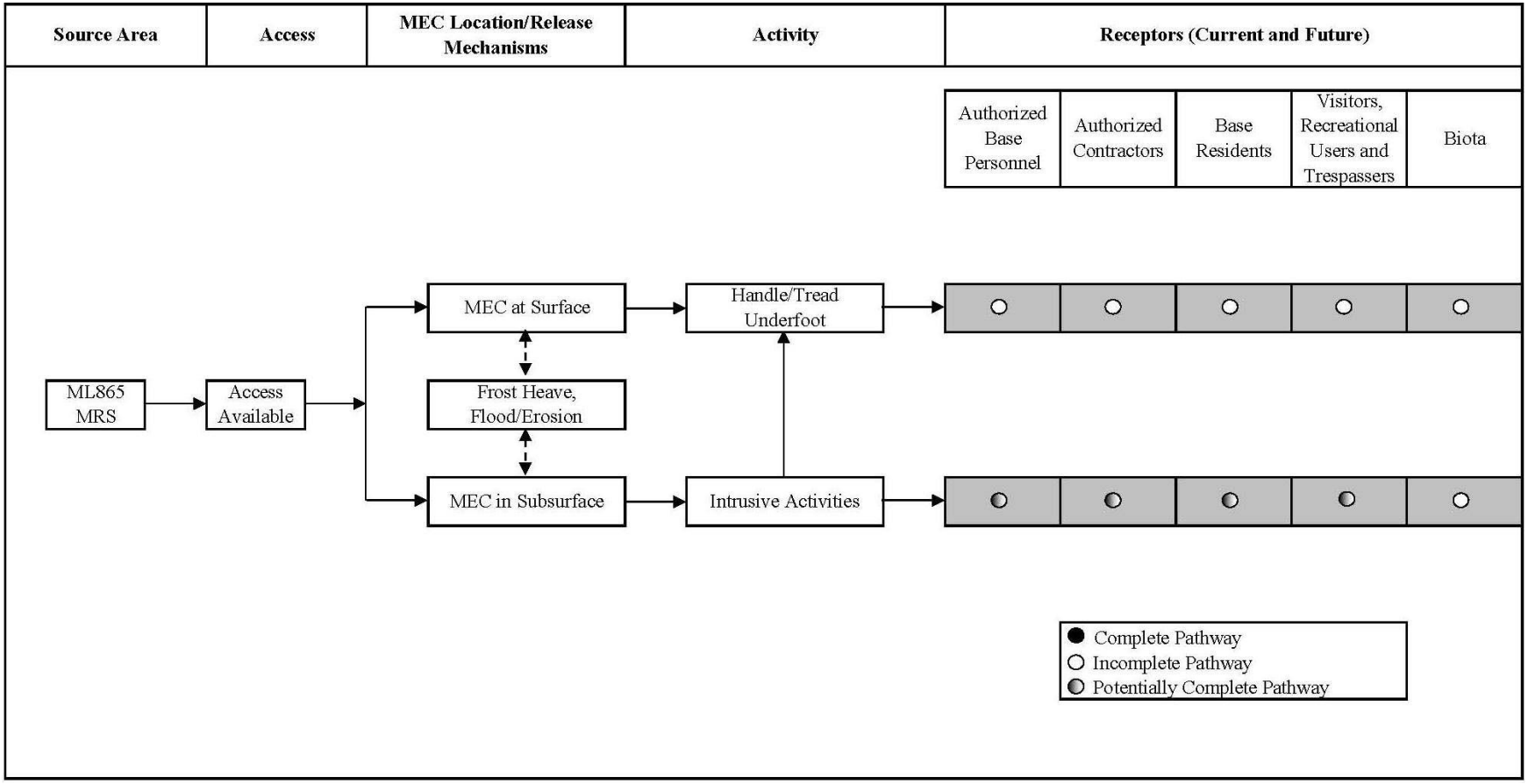


Figure 5-4 RR869a MRS MEC Pathway Analysis

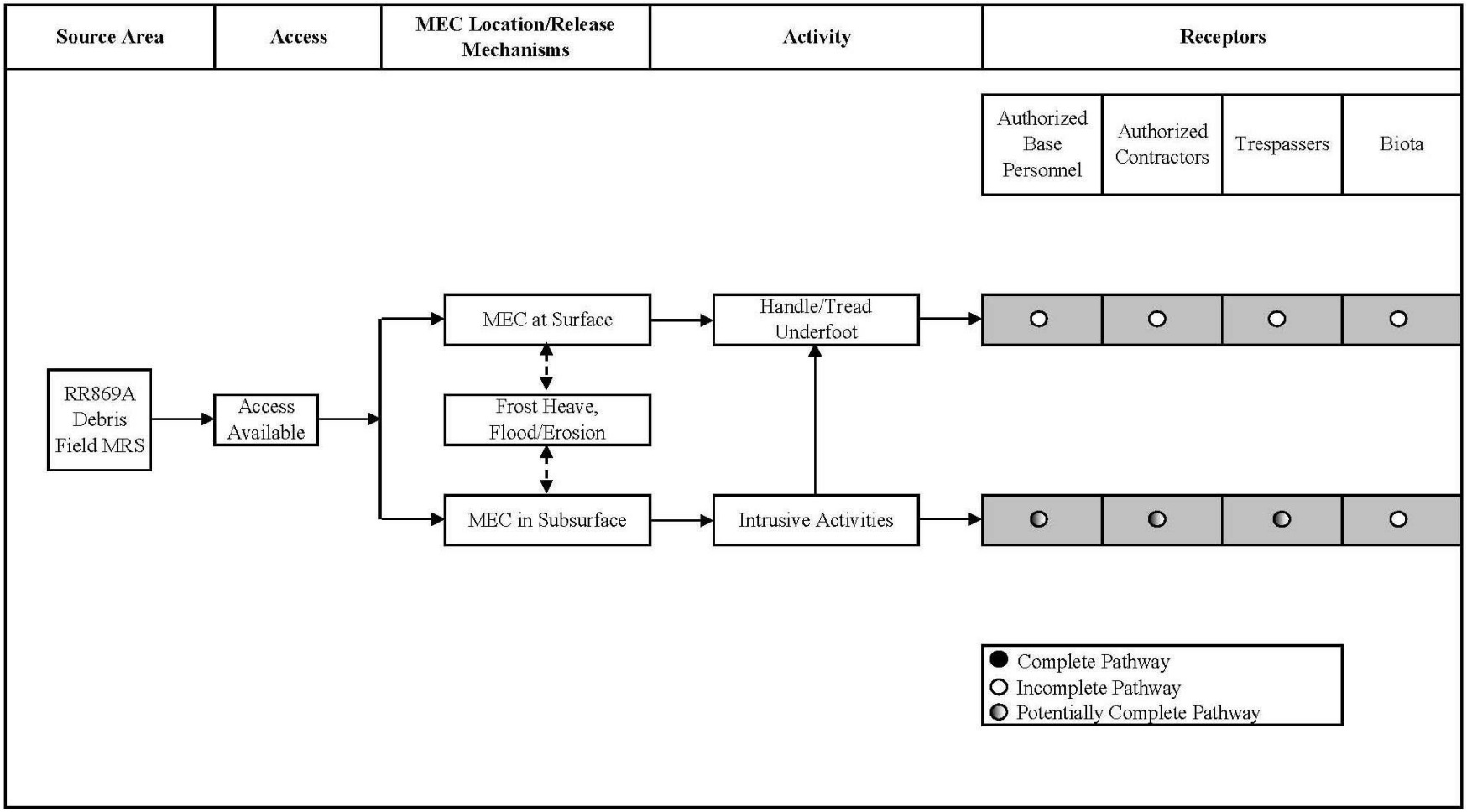


Figure 5-5 XU854 MRS MC Pathway Analysis

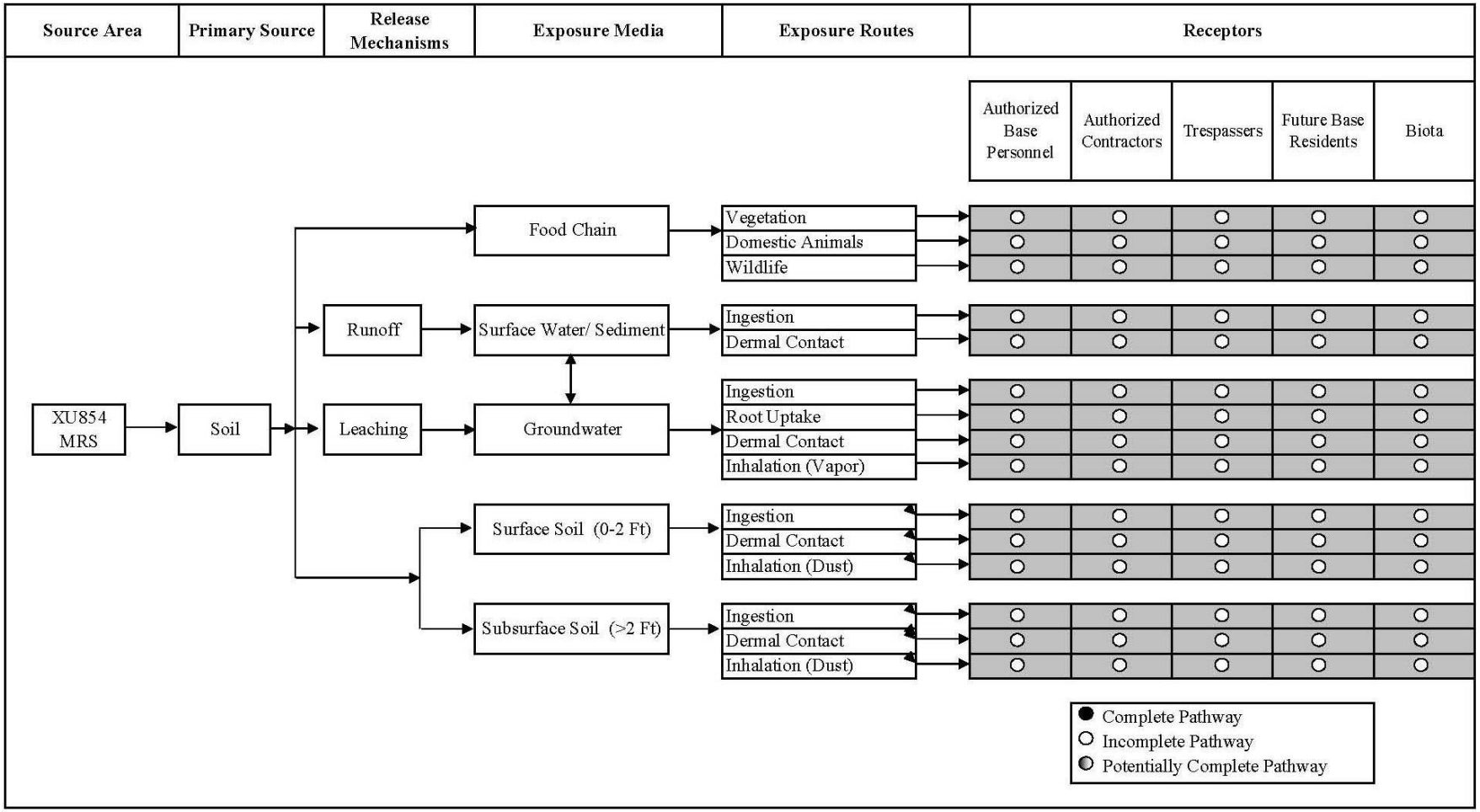


Figure 5-6 SR864 MRS MC Pathway Analysis

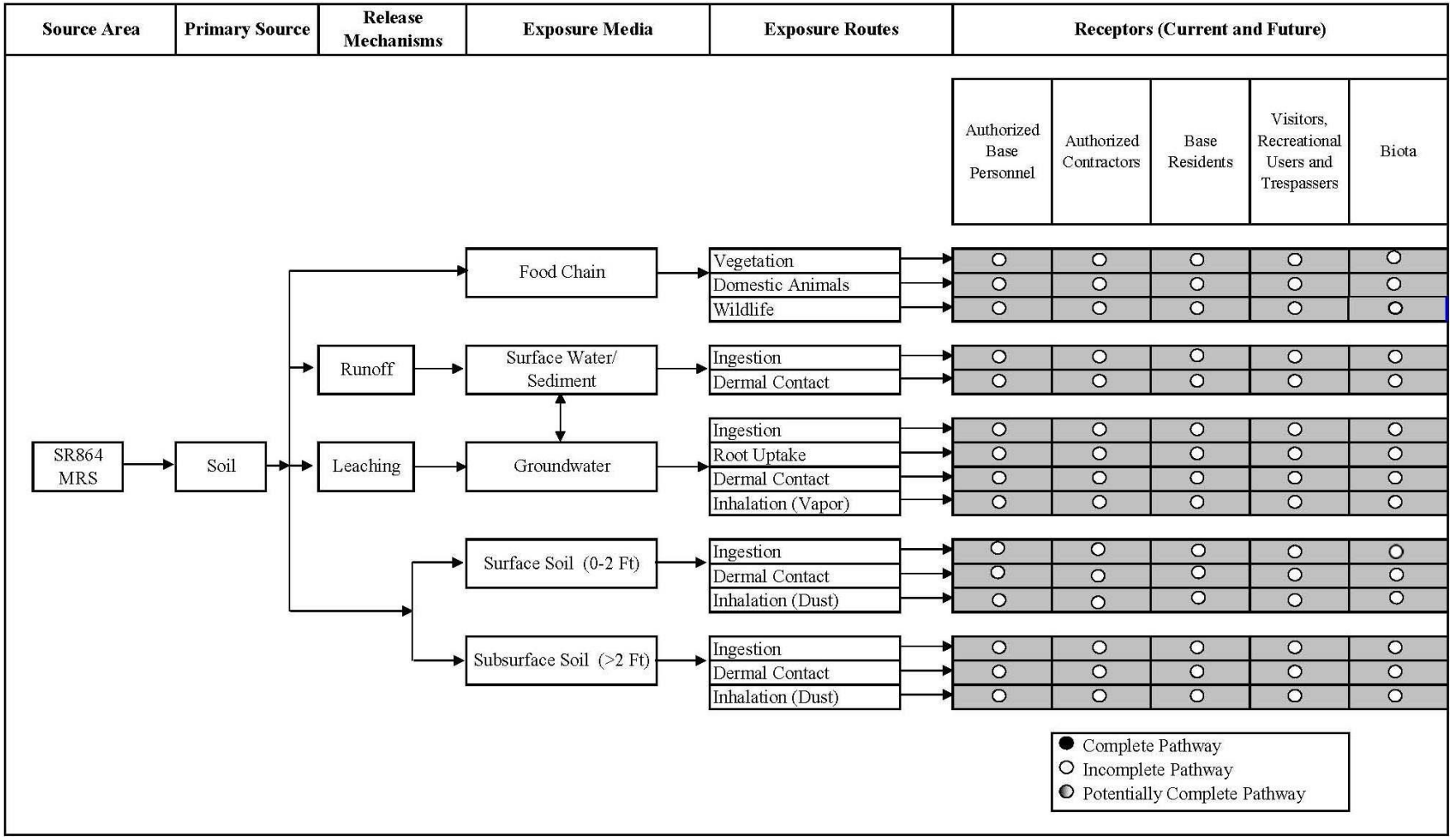


Figure 5-7 ML865 MRS MC Pathway Analysis

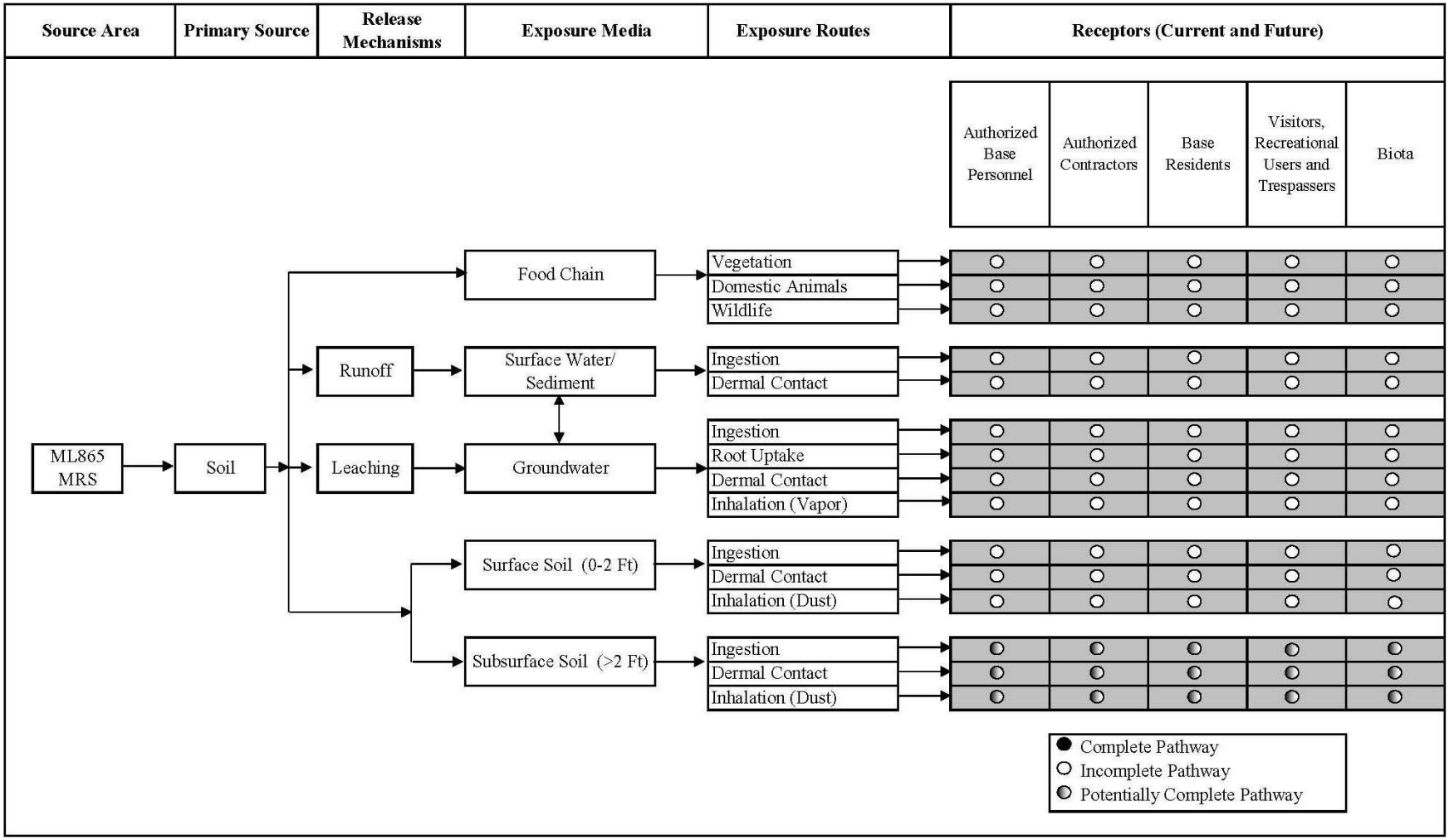
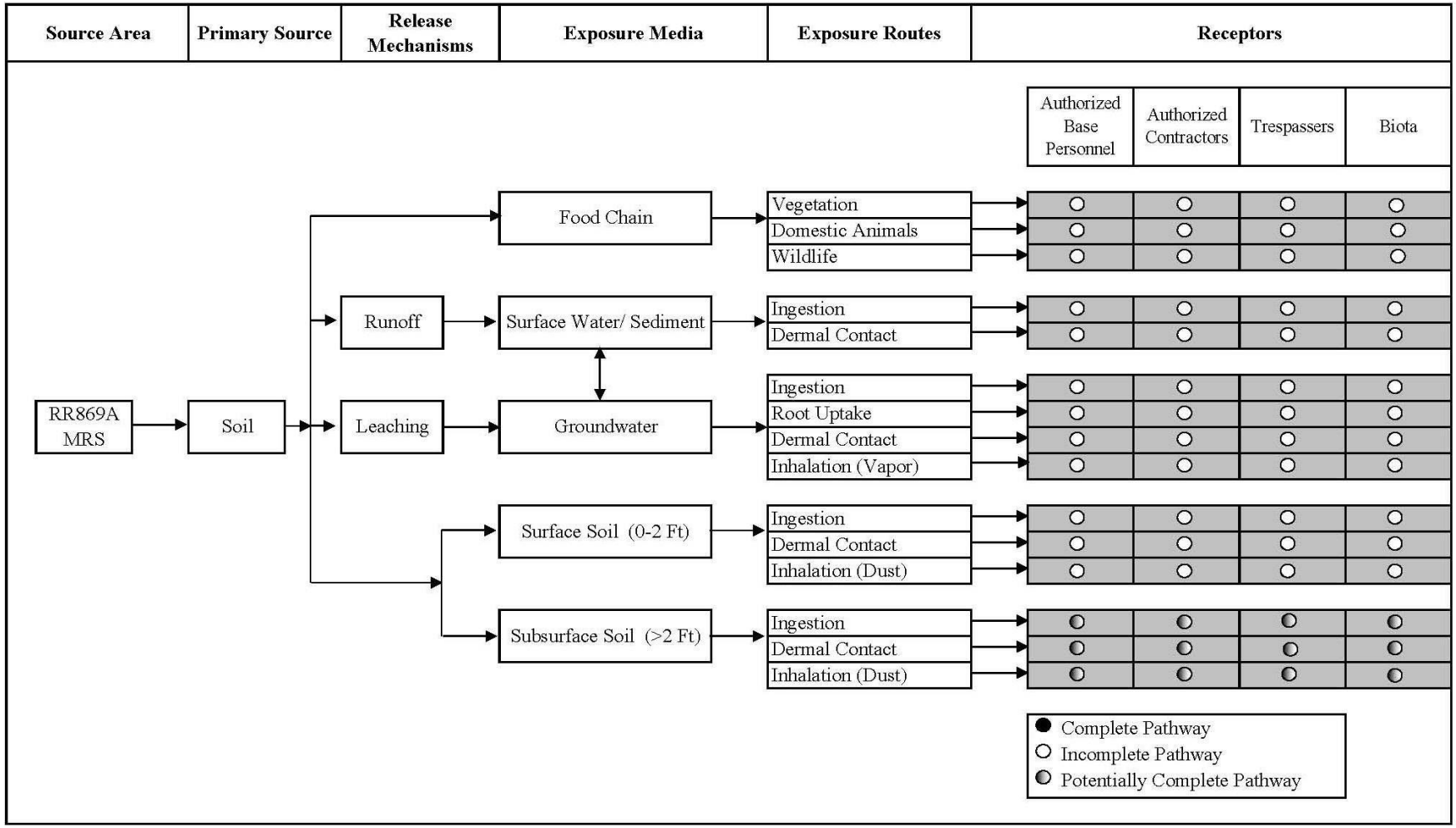


Figure 5-8 RR869a MRS MC Pathway Analysis



6.0 MEC HAZARD ASSESSMENT, MC RISK ASSESSMENT, AND MRSPP SCORING

This section presents the MEC-HA, ecological and human health risk assessments, and the methodology and results of MRSPP scoring.

6.1 MEC Hazard Assessment

6.1.1 XU854, SR864, and ML865 MRSs

Based on RI surface clearance and intrusive investigation results at XU854 (no MEC encountered), and based on surface clearance results at both ML865 and RR869a MRSs (no MEC discovered), MEC-HA is not required for these three MRSs.

6.1.2 SR864 MRS

During the RI surface clearance at SR864, one MEC and one DMM item were identified. However, since both 100% surface clearance and 100% subsurface removal of all anomalies with responses above the site-specific threshold were conducted, a MEC-HA is not required for the SR864 MRS.

6.2 Human Health Risk Assessment MC

6.2.1 XU854 and SR864

Based on the comparison of detected concentrations of MC to human health risk-based screening values and installation-specific background values (**Sections 4.5.1** and **4.5.2**), there are no MC COPCs and no complete exposure pathways for MC at the XU854 and SR864 MRSs. Therefore, there are no human health risks related to MC at either of the two MRSs.

6.2.2 ML865 and RR869a MRSs

Based on the comparison of detected concentrations of MC to human health risk-based screening values and installation-specific background values (**Section 4.5.3**), there are no MC COPCs in the surface soil at ML865. The same conclusion is valid for RR869a, since no potential sources of MC/COPCs were found during the surface clearance of this site, and as a result, no MC sampling of the surface soil was performed. However, since a systematic subsurface investigation was not conducted at either of the two MRSs during the RI (the subsurface anomalies will be investigated during the follow-on NTCRA), potential sources of MC may be found in the subsurface soil based on historical information and RI MD finds located at the surface of two sites. Therefore, potential risks to human health receptors associated with MC (explosives and metals) may exist in the subsurface of the ML865 and RR869a MRSs.

6.3 Ecological Risk Assessment

6.3.1 XU854 and SR864 MRSs

Based on the comparison of detected concentrations of MC to ecological risk-based screening values and installation-specific background values (**Section 4.5.1** and **4.5.2**), there are no MC COPC and no complete exposure pathways for MC at the XU854 and SR864 MRSs. Therefore, there are no ecological risks related to MC at either of the two MRSs.

6.3.2 ML865 and RR869a MRSs

Based on the comparison of detected concentrations of MC to ecological risk-based screening values and installation-specific background values (**Section 4.5.3**), there are no MC COPCs in the surface soil at ML865. The same is valid for RR869a since no potential sources of MC/COPCs were found during the surface clearance of this site and as a result, no MC sampling of the surface soil was performed. However, since a systematic subsurface investigation was not conducted at either of the two MRSs during the RI (the subsurface anomalies will be investigated during the follow-on NTCRA), potential sources of MC may be found in the subsurface soil based on historic information and RI MD finds located at the surface of two sites. Therefore, potential risks to ecological receptors associated with MC (explosives and metals) may exist in the subsurface of the ML865 and RR869a MRSs.

6.4 Munitions Response Site Prioritization Protocol

This section discusses application of the MRSPP for the XU854, SR864, ML865, and RR869a MRSs. The MRSPP was applied in accordance with 32 Code of Federal Regulations (CFR) Part 179 and the guidance provided in the DoD MRSPP Draft Primer (DoD, 2007). The MRSPP worksheet tables are provided in **Appendix H**.

In 2005, the DoD published the MRSPP as a Federal Rule (32 CFR Part 179) to assign a relative risk priority to each defense site in the MMRP Inventory for planning response activities. These response activities are based on the overall conditions at each MRS taking into consideration various factors related to explosive safety and environmental hazards. The application of the MRSPP applies to all locations:

- That are or were, owned, leased to, or otherwise possessed or used by DoD;
- That are known to or are suspected of containing MEC or MC; and/or
- That are included in the MMRP Inventory.

In assigning a relative priority for response activities, the DoD generally considers MRSs posing the greatest hazard as being the highest priority. The MRSPP priority is one factor in determining the sequence in which munitions response actions are funded. The following sections are a brief summary of the modules of the MRSPP and the results of the evaluations for the MRSs included in this RI.

6.4.1 Explosive Hazard Evaluation Module

The EHE module assesses the explosive hazards of a site based on the known or suspected presence of an explosive hazard. The EHE Module is composed of three factors, each of which has two to four data elements that are intended to assess the specific conditions at an MRS. The hazard factors and associated data elements are as follows:

- **Explosive Hazard Factor**. This factor includes the data elements of Munitions Type and Source of Hazard, and constitutes 40 percent of the EHE Module score (maximum EHE score of 40 points).
- **Accessibility Factor**. This factor includes the data elements of Location of Munitions, Ease of Access, and Status of Property, and constitutes 40 percent of the EHE Module score (maximum EHE score of 40 points).

- **Receptor Factor (RF)**. This factor includes the data elements of Population Density, Population near Hazard, Types of Activities/Structures, and Ecological and/or Cultural Resources, and constitutes 20 percent of the EHE Module score (maximum EHE score of 20 points).

Based on site-specific information, each data element is assigned a numeric score, and the sum of these values is the EHE Module score and is used to determine the corresponding EHE Module rating. The EHE module ratings range from 'A' through 'G' with 'A' representing the highest potential explosive hazard (92 to 100 points) and 'G' representing the lowest potential explosive hazard (<38 points).

The XU854 and SR864 scored 24 and 16 points, respectively, and both received the EHE Module rating of G (less than 38) because there was no evidence of MEC at these MRSs.

The ML865 and RR869a MRSs scored 59 and 53 points, respectively, and both received the EHE Module rating of E (48 to 59 points) based on potential MEC finds in the subsurface.

The EHE Module worksheet tables are presented in **Appendix H** and summarized in **Table 6-1**.

6.4.2 Chemical Warfare Material Hazard Module

The CHE module provides an evaluation of the chemical hazards associated with the physiological effecs of CWM. The CHE Module is used only when CWM in the form of MEC or MC are known or suspected of being present at an MRS. Like the EHE Module, the CHE Module has three factors, each of which has two to four data elements that are intended to assess the conditions of an MRS. These factors are as follows:

- **CWM Hazard Factor**. This factor includes the data elements of CWM Configuration and Sources of CWM, and constitutes 40 percent of the CHE score.
- **Accessibility Factor**. This factor focuses on the potential for receptors to encounter the CWM known or suspected to be present on an MRS and includes the data elements of Location of CWM, Ease of Access, and Status of Property, and constitutes 40 percent of the CHE score.
- **RF**. This factor focuses on the human and ecological populations that may be impacted by the presence of CWM and includes the data elements of Population Density, Population Near Hazard, Types of Activities/Structures, and Ecological and/or Cultural Resources, and constitutes 20 percent of the CHE score.

Similar to the EHE Module, each data element is assigned a numeric value, and the sum of these values is the CHE Module score which is used to determine the corresponding CHE Module rating. If CWM is not known or suspected then the CHE Module rating is No Known or Suspected CWM Hazard.

All 4 MRSs received the Alternative CHE Module rating of No Known or Suspected CWM Hazard.

The worksheet tables are presented in **Appendix H** and summarized in **Table 6-1**.

6.4.3 Health Hazard Evaluation Module

The HHE module provides a consistent DoD-wide approach for evaluating the relative risk to human health and the environment posed by contaminants (i.e., MC) present at an MRS. The module has three factors that are as follows:

- **Contamination Hazard Factor (CHF).** This factor evaluates potential risk posed by contaminants and contributes a level of High (H), Medium (M), or Low (L) based on Significant, Moderate, or Minimal contaminants present, respectively.
- **Migration Pathway Factor (MPF).** This factor assesses the potential for MC or incidental contaminants to migrate from an MRS and contributes a level of H, M, or L based on Evident, Potential, or Confined pathways, respectively.
- **RF.** This factor evaluates the presence of receptors that may be exposed and contributes a level of H, M, or L based on Identified, Potential, or Limited receptors, respectively.

The HHE builds on the DoD Relative Risk Site Evaluation framework. The CHF, RF, and MPF are based on quantitative evaluation of MCs and/or CERCLA hazardous substances and a qualitative evaluation of pathways and human and ecological receptors in surface soil, groundwater, surface water, and sediment. The HHE does not address subsurface soils. In addition, the HHE does not consider air as a pathway, because the risk through this medium from DoD munitions sites with soil contamination is generally minimal.

The H, M, and L levels for the CHF, RF, and MPF are combined in a matrix to obtain composite three-letter combination levels that integrate considerations of all three factors. The three-letter combination levels are organized by frequency and the combination of the frequencies results in the HHE Module rating.

The XU854, SR864, and ML865 received the HHE Module rating of G (LLL) because of very low levels of MC contamination at these MRSs. All detected MC at these 3 sites were below the screening criteria. The RR869a MRS received the Alternative HHE Module rating of No Known or Suspected Explosive Hazard due to the lack of MC contamination.

The HHE Module worksheet tables are presented in **Appendix H** and summarized in **Table 6-1**.

6.4.4 MRSPP Priority Scores

In accordance with the DoD MRSPP Primer (DoD, 2007), each MRS is assigned an MRSPP Priority ranging from 1 to 8 (**Table 6-1**). Priority 1 indicates the highest potential hazard and Priority 8 indicates the lowest potential hazard. Only a site with a potential CWM Hazard can receive a Priority of 1. The MRSPP priority is determined by selecting the highest rating from the EHE, CHE, and HHE Modules. For example, if the EHE rating is 2, the CHE rating is 5, and the HHE rating is 4, the priority assigned would be 2. The priority will be used to determine the future funding sequence of MRSs for further munitions response action. The overall MRSPP priorities for the MRSs were determined as follows:

For XU854 and SR864, the EHE Module ratings was G which corresponds to an MRSPP priority of 8. The CHE Module rating was No Known or Suspected CWM Hazard for both MRSs. The HHE Module rating was G for both sites which corresponds to MRSPP priority 8. Therefore, the overall MRSPP priorities for XU854 and SR864 is 8, based on both the EHE and HHE Module ratings.

For both ML865 and RR869a, the EHE Module rating was E, which corresponds to an MRSPP priority of 6. The CHE Module rating was No Known or Suspected CWM Hazard for both MRSs. The HHE Module rating for ML865 was G which corresponds to an MRSPP priority of 8. The HHE Module rating for RR869a was No Known or Suspected Explosive Hazard. Therefore, the overall MRSPP priority for both ML865 and RR869a is 6 based on the EHE Module rating.

Table 6-1 MRSPP Rankings

MRS	EHE (priority)	CHE	HHE (priority)	MRS Priority Rating
XU854	G (8)	No Known or Suspected CWM Hazard	G (8)	8
SR864	G (8)	No Known or Suspected CWM Hazard	G (8)	8
ML865	E (6)	No Known or Suspected CWM Hazard	G (8)	6
RR869	E (6)	No Known or Suspected CWM Hazard	No Known or Suspected MC Hazard	6

This page is intentionally left blank.

7.0 SUMMARY AND CONCLUSIONS

This section summarizes the RI field activities and findings, and presents conclusions and recommendations for the XU854, SR864, ML865, and RR869a MRSs located at Holloman AFB, NM.

7.1 Summary of Activities and Conclusions

RI field activities conducted at 4 MRSs included surface clearance, DGM surveys, intrusive investigations, and MC sampling, if required.

The following sections summarize the current status and RI results for the XU854, SR864, ML865, and RR869a MRSs.

7.1.1 XU854 Able 51 Area MRS

- **Size:** 47.7 acres
- **Site Features:** XU854 exhibits relatively flat topography; soil is assumed to consist of the Yesum-Nasa complex; there are no wetlands or surface water associated with the site; and vegetation is consistent with desert scrubland. The MRS is currently unused and no known changes to the future land use have been indicated.
- **Ecological and Cultural Resources:** No rare, threatened or endangered species are expected to inhabit the MRS. Since XU854 MRS was associated with early missile development on Holloman AFB, it is architecturally unique and considered eligible to inclusion on the NRHP. The Laboratory of Anthropology Site Record for this MRS identified 2 buildings and 30 features associated with various testing programs operated between 1959 and 1970 including variety of concrete pads and stands, construction and/or destruction debris, lumber piles, an iron platform, and sandbag piles.
- **Access:** Limited, there is a fence around the MRS.
- **Geophysical Investigation Results:** DGM identified 509 anomalies (129 and 380 anomalies in transects and grids, respectively).
- **Intrusive Investigation Results:** All 509 DGM anomalies were intrusively investigated.
- **MEC/MD:** No MEC items were recovered during the RI; 7 MD items (2 surface and 5 subsurface) identified at XU854 included: 40mm cartridge, M18 smoke grenade (expended), 40mm casing, 40mm, flare pieces, and a grenade spoon.
- **Investigated Area:** The total area (transects and grids) investigated at XU854 MRS included 6.34 acres. The UXO Estimator, a software package developed by USACE, was used as a statistical tool to determine the upper bound on the potential residual UXO remaining on the MRS with a 95% confidence level. Since XU854 was not used historically as a range (no target area), there is an equal likelihood of finding a potential UXO anywhere in the MRS. This is an underlying assumption for the use of the UXO Estimator. According to calculations performed using this software, if a total of 6.34 acres was investigated within the 47.7-acre site, it can be claimed with the 95% confidence that there is no more than 0.44 UXO/acre at XU854. This means that the actual number of UXO potentially present at the XU854 MRS after the RI may be any number of UXO between zero and 21 (the upper bound). However, based on both

historical usage of the MRS (launch facility for testing of Mace and Matador missiles) and previous investigations (no UXO identified), the number of potential UXO is most likely closer to zero.

- **MC**: Incremental soil samples were collected from 12 decision units immediately surrounding known historical and suspected missile/rocket launch pad sites. The samples were analyzed for propellants (explosive compounds, nitrate, and perchlorate). Detected concentrations of explosives, nitrate and perchlorate were well below the HHSLs.
- **MEC-HA:** A MEC HA was not required for XU854 since no MEC was identified at this site.
- **Ecological Risk Assessment:** Ecological risk screening determined that no further action is required for MC and propellants.
- **Human Health Risk Assessment:** Human health risk screening determined that no further action is required for MC and propellants.
- **MRSPP Priority:** 8

7.1.2 SR864 Poorman Range MRS

- **Size:** 22.8 acres
- **Site Features:** SR864 MRS exhibits relatively flat topography; soils at the site consist of Yesum Sandy Loam; there are no wetlands or surface water associated with the MRS; vegetation is consistent with desert scrubland; and no buildings are located at the site. The SR864 MRS is currently unused and no known changes to the future land use have been indicated.
- **Ecological and Cultural Resources:** No rare, threatened or endangered species are expected to inhabit the MRS. SR864 does not contain any significant cultural features.
- **Access:** Limited, located on Holloman AFB.
- **Geophysical Investigation Results:** DGM identified 994 discrete anomalies above the site-specific threshold and 11 high anomaly density areas (discrete targets were not identified within these areas).
- **Intrusive Investigation Results:** All 994 discrete DGM anomalies were intrusively investigated. Complete intrusive investigation was also performed at 11 high anomaly density areas.
- **MEC/MD:** One MEC item (M18 Smoke Grenade [impinged primer]) and one DMM item (M18 Smoke Grenade [safety pin still installed]) were discovered on the surface of the MRS. MD items (surface and subsurface) identified during the RI included: M18 smoke grenade pieces, M18 smoke grenade empty, grenade spoons, and trip flare bracket.
- **Investigated Area:** Surface clearance, DGM, and intrusive investigation were performed at the entire MRS (22.8 acres). All anomalies above the site-specific threshold were intrusively investigated.
- **MC**: Composite soil sampling for explosives and metals analysis was performed at three locations (2 locations where MEC/DMM were encountered and one location of SDA).

Explosive compounds were not detected in any of the samples, and metals were detected at concentrations below the approved Basewide background levels and well below their respective HHSLs and ESLs.

- **MEC-HA:** A MEC HA was not required for SR864 since both 100% surface clearance and subsurface removal of all anomalies above the site-specific threshold was performed during the RI.
- **Ecological Risk Assessment:** Ecological risk screening determined that no further action is required for MC.
- **Human Health Risk Assessment:** Human health risk screening determined that no further action is required for MC.
- **MRSPP Priority:** 8

7.1.3 ML865 Ballistics Rain Field MRS

- **Size:** MRS: 18.3 acres;
- **Site Features:** ML865 exhibit relatively flat topography; soils at the site consist of Yesum Sandy Loam; there are no wetlands or surface water associated with the MRS; vegetation is consistent with desert scrubland; and no buildings are located at the site. The ML865 MRS is currently unused and no known changes to the future land use have been indicated.
- **Ecological and Cultural Resources:** No rare, threatened or endangered species are expected to inhabit the MRS. ML865 does not contain any significant cultural features.
- **Access:** Limited, located on Holloman AFB.
- **Geophysical Investigation Results:** DGM identified 6,176 anomalies above the site-specific threshold.
- **Intrusive Investigation Results:** A complete intrusive investigation of all DGM anomalies will be performed during the follow-on NTCRA. Eight exploratory test pits located within several DGM high anomaly density areas were intrusively investigated during the RI.
- **MEC/MD:** No MEC items were recovered during the RI; approximately 8,293 lbs and 325 lbs of MD was removed from the surface and test pits located in high anomaly density areas, respectively. Identified MD items included M1, 105mm and M48, 75mm inert projectiles and projectile pieces, and expended 5-inch rocket motors.
- **Investigated Area:** Surface clearance and DGM were performed at the entire MRS (18.3 acres). In addition, 1.17 acres was cleared outside the western boundary of the MRS because of the nature of the 21 MPPEH items identified in the vicinity of this boundary. Intrusive investigation of all anomalies above the site-specific threshold is planned for the follow-on NTCRA.
- **MC:** Composite soil sampling for explosives and metals analysis was performed at 9 locations (8 locations with significant amount of MD and one location at the SDA). Explosives compounds were either not detected or were well below their respective HHSLs and ESLs. All metals except copper were detected at concentrations below the

approved Basewide background concentrations and below their respective HHSLs and ESLs. Copper in one sample was detected at concentration of 21.9 mg/kg which was slightly above the ESL value. However, the calculation of the 95% UCL, which is assumed to represent the concentrations to which receptors could be exposed at ML865, resulted in copper value of 12.89 mg/kg. This value is below the ESL value for copper (15 mg/kg).

- **MEC-HA:** A MEC HA was not required for ML865 since no MEC was identified during the RI.
- **Human Health Risk Assessment:** Since systematic subsurface investigation of DGM anomalies was not performed, potential risks to human receptors associated with MC (explosives and metals) may exist in the subsurface of the ML865 MRS.
- **Ecological Risk Assessment:** Since systematic subsurface investigation of DGM anomalies was not performed, potential risks to ecological receptors associated with MC (explosives and metals) may exist in the subsurface of the ML865 MRS.
- **MRSPP Priority:** 6

7.1.4 RR869a Debris Field MRS

- **Size:** 3.5 acres
- **Site Features:** RR869a exhibit relatively flat topography; soils at the site consist of the Gypsic Haplosalid; a portion of the RR869a MRS boundary comingles with the wetland buffer zone associated with Ritas Draw; vegetation is consistent with desert scrubland; and no buildings are located at the site. The RR869a MRS is currently unused and no known changes to the future land use have been indicated.
- **Access:** Limited, located on Holloman AFB.
- **Geophysical Investigation Results:** DGM identified 280 anomalies above the site-specific threshold within the MRS. Additional 44 anomalies were identified in two areas just outside the MRS boundary to determine the nature and extent of subsurface anomalies identified at the boundary of RR869a MRS. In addition, 75 DGM anomalies (11 within and 64 outside the MRS) were identified along the fence-line area.
- **Intrusive Investigation:** 75 anomalies located at and in close proximity to the fence line between the RR869a and IRP site OT-04 were intrusively investigated during the RI to avoid another removal of the fence during the follow-on NTCRA at RR869a.
- **MEC/MD:** No MEC items were recovered during the RI. Approximately 221 lbs of MD was removed from the MRS during the surface clearance. Identified MD items included M18, smoke grenade (expended fuze components), and MK10, 5-inch rocket motor (venture). No MD was identified during the intrusive investigation of 75 anomalies located along the fence-line area.
- **Investigated Area:** Surface clearance and DGM were performed at the entire MRS (3.5 acres). To better understand the extent of subsurface anomalies, surface clearance was also performed across three areas (0.26 acres) outside the MRS boundary where perimeter DGM anomalies occurred to facilitate DGM data collection in these areas.

Intrusive investigation of all anomalies above the site-specific threshold is planned for the follow-on NTCRA.

- **MC**: Since no MEC was identified during surface clearance and intrusive activities, MC sampling was not conducted.
- **Human Health Risk Assessment:** Since systematic subsurface investigation of DGM anomalies was not performed, potential risks to human receptors associated with MC (explosives and metals) may exist in the subsurface of the RR869a MRS.
- **Ecological Risk Assessment:** Since **s**ystematic subsurface investigation of DGM anomalies was not performed, potential risks to ecological receptors associated with MC (explosives and metals) may exist in the subsurface of the RR869a MRS.
- **MEC-HA:** A MEC-HA was not required for RR869a since no MEC was identified at this site.
- **MRSPP Priority:** 6

7.2 Recommendations

The results of the RI summarized in Sections **7.1.1** through **7.1.4** have been used to provide the following recommendations:

- XU854 Able 51 Area and SR864 Poorman Range MRSs are recommended for NFA for both MEC and MC.
- ML865 Ballistics Rain Field and RR869a Debris Field MRSs are recommended to move forward with requiring further munitions response actions.

7.3 Proposed Remedial Action Objective

In evaluating potential remedial action objectives, the following risk management principles were considered:

- Reducing the quantity of MEC lowers risk.
- Reducing the number of receptors lowers risk.
- Reducing the potential for interaction between receptors and MEC lowers risk.
- Modifying or controlling the behavior of receptors lowers risk.

The following preliminary remedial action objective is proposed for the ML865 and RR869a MRSs recommended for a further munitions response action:

Reduce risk to human health and the environment associated with potential MEC and MC by performing NTCRA at both sites.

This page is intentionally left blank.

8.0 REFERENCES

Air Force Manual (AFMAN). 2011. 91-201. Explosives Safety Standards. January.

Bhate Environmental Associates, Inc. 2007. Resource Conservation and Recovery Act Facility Investigation Work Plan, Chemical Agent Disposal Site (DP-64), Holloman Air Force Base, New Mexico - October.

Department of Defense (DoD). 2014. Department of Defense Instruction 4140.62, Material Potentially Presenting an Explosive Hazard. 25 November.

DoD. 2007. Munitions Response Site Prioritization Protocol (MRSPP) Primer. 13 July.

FPM Remediations, Inc. 2014a. Final Remedial Investigation Work Plan for XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman Air Force Base New Mexico. December.

FPM. 2014b. Final Remedial Investigation Work Plan for ML865 Ballistics Rain Field MRS and SR864 Poorman Range MRS, Holloman Air Force Base New Mexico. December

FPM. 2014c. Final Remedial Investigation Work Plan for RR869a Debris Field MRS, Holloman Air Force Base New Mexico. December

FPM. 2014d. XU853, XU854, FI857a, SR864, ML865, and RR869a MRSs Explosives Safety Submission, Holloman Air Force Base, New Mexico. June.

FPM. 2014e. Final MMRP Sites Health and Safety Plan XU853, XU854, FI857a, TS862a, SR864, ML865, RR869a, TS851a, ML866, SR867, TS859a, Holloman Air Force Base, New Mexico. October.

FPM. 2014f. MMRP Sites Health and Safety Plan – Addendum for RR869a MRS

HDR Environmental, Operations and Construction, Inc. (HDR). 2013. Holloman Air Force Base, New Mexico, Comprehensive Site Evaluation Phase II, Final. September. HDR for United States Corps of Engineers (USACE) - Omaha District.

Holloman Air Force Base. 1999. Integrated Natural Resource Management Plan Holloman Air Force Base, New Mexico.

Los Alamos National Laboratory. 2014. Ecological Risk Assessment Database. Release 3.2, October.

Nelson et al. 2009a. Nelson, H.H., K. Kaye, and A. Andrews. Geophysical System Verification (GSV): A Physics-Based Alternative to Geophysical Prove-Outs for Munitions Response. Environmental Security Testing and Certification Program. July.

Nelson et al. 2009b. Nelson, H.H., T. Bell, J. Kingdon, N. Khadr, and D. Steinhurst. EM61-MK2 Response of Three Munitions Surrogates. NRL/MR/6110-09-9183. 12 March.

New Mexico Environment Department (NMED). 2015. New Mexico Environment Department, Risk Assessment Guidance for Site Investigations and Remediation. July.

Shaw Environmental, Inc. (Shaw). 2010. Modified Comprehensive Site Evaluation Phase I, Holloman Air Force Base, New Mexico, Final. May. Shaw for USACE - Omaha District.

Sky Research, Inc. 2011. Holloman Air Force Base, New Mexico, Comprehensive Site Evaluation Phase II Final Work Plan, Military Munitions Response Program, October 2011. Centennial: SKY for USACE, Omaha District.

United States Corps of Engineers (USACE). 2013a. Military Munitions Response Actions. EM 200-1-15.

USACE. 2013b. Explosives Safety and Health Requirements Manual. EM 385-1-97.

USACE. 2011. Safety and Health Requirements Manual. EM 385-1-1. 15 September 2008 (Changes #1 through 3, dated April, October and June 2010; Changes #4 through 6, dated March, April and July 2011).

USACE. 2010. Military Munitions Response Actions. EM 1110-1-4009. June 15.

USACE. 2009. Data Item Description (DID) Number MMRP-09-004: Geophysics. August.

United States Environmental Protection Agency (USEPA). 2015. Regional Screening Levels (RSL) Resident Soil Table. June.

USEPA. 1989. Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance. Office of Solid Waste. Waste Management Division. USEPA/530/SW-89/026. July.

Appendix A

Survey Coordinates of the Base Grid Cells of SR864, ML865 and RR869a MRSs

This page is intentionally left blank

Survey Coordinates of SR864 Base Grids

ID	Easting (m)	Northing (m)
II310	393680	3638070
II311	393680	3638100
IJ310	393710	3638070
IJ311	393710	3638100
IJ312	393710	3638130
IJ313	393710	3638160
IK309	393740	3638040
IK310	393740	3638070
IK311	393740	3638100
IK312	393740	3638130
IK313	393740	3638160
IK314	393740	3638190
IL308	393770	3638010
IL309	393770	3638040
IL310	393770	3638070
IL311	393770	3638100
IL312	393770	3638130
IL313	393770	3638160
IL314	393770	3638190
IL315	393770	3638220
IL316	393770	3638250
IM308	393800	3638010
IM309	393800	3638040
IM310	393800	3638070
IM311	393800	3638100
IM312	393800	3638130
IM313	393800	3638160
IM314	393800	3638190
IM315	393800	3638220
IM316	393800	3638250
IM317	393800	3638280
IM318	393800	3638310
IM319	393800	3638340
IN307	393830	3637980
IN308	393830	3638010
IN309	393830	3638040
IN310	393830	3638070
IN311	393830	3638100
IN312	393830	3638130
IN313	393830	3638160
IN314	393830	3638190
IN315	393830	3638220
IN316	393830	3638250

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of SR864 Base Grids (Continued)

IN317	393830	3638280
IN318	393830	3638310
IN319	393830	3638340
IO306	393860	3637950
IO307	393860	3637980
IO308	393860	3638010
IO309	393860	3638040
IO310	393860	3638070
IO311	393860	3638100
IO312	393860	3638130
IO313	393860	3638160
IO314	393860	3638190
IO315	393860	3638220
IO316	393860	3638250
IO317	393860	3638280
IO318	393860	3638310
IO319	393860	3638340
IP306	393890	3637950
IP307	393890	3637980
IP308	393890	3638010
IP309	393890	3638040
IP310	393890	3638070
IP311	393890	3638100
IP312	393890	3638130
IP313	393890	3638160
IP314	393890	3638190
IP315	393890	3638220
IP316	393890	3638250
IP317	393890	3638280
IP318	393890	3638310
IP319	393890	3638340
IQ306	393920	3637950
IQ307	393920	3637980
IQ308	393920	3638010
IQ309	393920	3638040
IQ310	393920	3638070
IQ311	393920	3638100
IQ312	393920	3638130
IQ313	393920	3638160
IQ314	393920	3638190
IQ315	393920	3638220
IQ316	393920	3638250
IQ317	393920	3638280
IQ318	393920	3638310

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of SR864 Base Grids (Continued)

IQ319	393920	3638340
IR307	393950	3637980
IR308	393950	3638010
IR309	393950	3638040
IR310	393950	3638070
IR311	393950	3638100
IR312	393950	3638130
IR313	393950	3638160
IR314	393950	3638190
IR315	393950	3638220
IR316	393950	3638250
IR317	393950	3638280
IR318	393950	3638310
IR319	393950	3638340
IS309	393980	3638040
IS310	393980	3638070
IS311	393980	3638100
IS312	393980	3638130
IS313	393980	3638160
IS314	393980	3638190
IS315	393980	3638220
IS316	393980	3638250
IS317	393980	3638280
IS318	393980	3638310
IS319	393980	3638340
IT310	394010	3638070
IT311	394010	3638100
IT312	394010	3638130
IT313	394010	3638160
IT314	394010	3638190
IT315	394010	3638220
IT316	394010	3638250
IT317	394010	3638280
IT318	394010	3638310
IT319	394010	3638340
IU312	394040	3638130
IU313	394040	3638160
IU314	394040	3638190
IU315	394040	3638220
IU316	394040	3638250
IU317	394040	3638280
IU318	394040	3638310
IV314	394070	3638190
IV315	394070	3638220

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of SR864 Base Grids (Continued)

IV316	394070	3638250
IV317	394070	3638280
IV318	394070	3638310

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of ML865 Base Grids

ID	Easting (m)	Northing (m)
EY586	391040	3646350
EY587	391040	3646380
EY588	391040	3646410
EY589	391040	3646440
EY590	391040	3646470
EZ585	391070	3646320
EZ586	391070	3646350
EZ587	391070	3646380
EZ588	391070	3646410
EZ589	391070	3646440
EZ590	391070	3646470
EZ591	391070	3646500
FA584	391100	3646290
FA585	391100	3646320
FA586	391100	3646350
FA587	391100	3646380
FA588	391100	3646410
FA589	391100	3646440
FA590	391100	3646470
FA591	391100	3646500
FB584	391130	3646290
FB585	391130	3646320
FB586	391130	3646350
FB587	391130	3646380
FB588	391130	3646410
FB589	391130	3646440
FB590	391130	3646470
FB591	391130	3646500
FC584	391160	3646290
FC585	391160	3646320
FC586	391160	3646350
FC587	391160	3646380
FC588	391160	3646410
FC589	391160	3646440
FC590	391160	3646470
FC591	391160	3646500
FD584	391190	3646290
FD585	391190	3646320
FD586	391190	3646350
FD587	391190	3646380
FD588	391190	3646410
FD589	391190	3646440
FD590	391190	3646470

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of ML865 Base Grids (Continued)

FD591	391190	3646500
FE584	391220	3646290
FE585	391220	3646320
FE586	391220	3646350
FE587	391220	3646380
FE588	391220	3646410
FE589	391220	3646440
FE590	391220	3646470
FE591	391220	3646500
FE592	391220	3646530
FF584	391250	3646290
FF585	391250	3646320
FF586	391250	3646350
FF587	391250	3646380
FF588	391250	3646410
FF589	391250	3646440
FF590	391250	3646470
FF591	391250	3646500
FF592	391250	3646530
FG584	391280	3646290
FG585	391280	3646320
FG586	391280	3646350
FG587	391280	3646380
FG588	391280	3646410
FG589	391280	3646440
FG590	391280	3646470
FG591	391280	3646500
FG592	391280	3646530
FH584	391310	3646290
FH585	391310	3646320
FH586	391310	3646350
FH587	391310	3646380
FH588	391310	3646410
FH589	391310	3646440
FH590	391310	3646470
FH591	391310	3646500
FI584	391340	3646290
FI585	391340	3646320
FI586	391340	3646350
FI587	391340	3646380
FI588	391340	3646410
FI589	391340	3646440
FI590	391340	3646470
FI591	391340	3646500

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of ML865 Base Grids (Continued)

FJ584	391370	3646290
FJ585	391370	3646320
FJ586	391370	3646350
FJ587	391370	3646380
FJ588	391370	3646410
FJ589	391370	3646440
FJ590	391370	3646470
FK586	391400	3646350
FK587	391400	3646380
FK588	391400	3646410
FK589	391400	3646440
FK590	391400	3646470

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of ML865 Extension Base Grids

ID	Easting (m)	Northing (m)
EX586	391010	3646350
EX587	391010	3646380
EX588	391010	3646410
EX589	391010	3646440
EX590	391010	3646470

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of RR869a Base Grids

ID	Easting (m)	Northing (m)
ML385	396890	3640320
MM384	396920	3640290
MM385	396920	3640320
MN383	396950	3640260
MN384	396950	3640290
MN385	396950	3640320
MO382	396980	3640230
MO383	396980	3640260
MO384	396980	3640290
MO385	396980	3640320
MO386	396980	3640350
MP382	397010	3640230
MP383	397010	3640260
MP384	397010	3640290
MP385	397010	3640320
MP386	397010	3640350
MQ382	397040	3640230
MQ383	397040	3640260
MQ384	397040	3640290
MQ385	397040	3640320
MQ386	397040	3640350
MR382	397070	3640230
MR383	397070	3640260
MR384	397070	3640290
MS383	397100	3640260
MS384	397100	3640290

Projection WGS 1984 UTM Zone 13N, meters

Survey Coordinates of RR869a Extension Base Grids

ID	Easting (m)	Northing (m)
ML384	396890	3640290
MM383	396920	3640260
MN383	396950	3640230
MN386	396950	3640350

Projection WGS 1984 UTM Zone 13N, meters

Appendix B

Daily Site, Quality Control, and Health and Safety Reports

This page is intentionally left blank

Table of Contents

Daily Site Reports (electronic copy only)
Daily Quality Control Reports (electronic copy only)
Daily Health and Safety Reports (electronic copy only)

This page is intentionally left blank

Date: Monday, 10 November 2014

DAILY SITE REPORT

Report Number: 001
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location / Description of Work	Name	Hrs.	Affiliation	Location / Description of Work
George Vaughn	8	FPM SUXOS	FPM Site	Jack Connor	8	FPM UXO T2	Mob
Ron Vanderford	8	FPM UXOSO/UXOQCS MGR	FPM Site	Cecilia Flores	8	FPM UXO T2	Mob
Kyrian Onyeukwu	8	FPM Geophysicist	FPM Site	Paul Hackworth	8	FPM UXO T1	FPM Site
Loran Poindexter	8	FPM UXO T3	Mob	Nic Bolinger	8	FPM UXO T1	Mob
David Hugg	8	FPM UXO T3	Mob	Mike Sample	8	FPM Geophysicist	Mob
Ray Lunbeck	8	FPM UXO T2	Mob	Boban Stojanovic	8	FPM Geophysicist	Mob
Ivan Westrick	8	FPM UXO T2	Mob	Jeff Hackworth	8	FPM MMRP Manager	Mob
Total Hours	**112**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	USAF	49 CES/CEIE	Email
Renaghan, Brian	USAF	AFCEC/CZRX	Email
Oyelowo, Layi	USAF	AFCEC/CZRX	Email
Peters, Laura	USAF	AFCEC/CZO	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Dig permits for sites: RR869a, ML865, SR864, XU853 and XU854(SUXOS and UXOSO)
Accepted delivery of storage container for equipment (placed in parking lot of bldg. 1266)
Accepted delivery of rental vehicles
Mobilization of UXO and GEO team members
Daily reports, Emails/calls

Field
N/A

Today's Field Operations

UXO Team
N/A

GEO Team
N/A

Date: Monday, 10 November 2014

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (4):** 2015 Dodge Ram 4x4 Crew Cab (4 each) **UTVs (0):** N/A **MHE:** N/A **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Will be delivery 14 November 2014
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** **Daily Safety Briefing** (Vanderford) **Tailgate Safety Briefing** N/A
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** N/A
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. All team members arrived safely.
Next Day's Planned Activities:	1. Safety and orientation briefings.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

10 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 11 November 2014

DAILY SITE REPORT

Report Number: 002
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location / Description of Work	Name	Hrs.	Affiliation	Location / Description of Work
George Vaughn	8	FPM SUXOS	Orientation	Jack Connor	8	FPM UXO T2	Orientation
Ron Vanderford	8	FPM UXOSO/UXOQCS MGR	Orientation	Cecilia Flores	8	FPM UXO T2	Orientation
Kyrian Onyeukwu	8	FPM Geophysicist	Orientation	Paul Hackworth	8	FPM UXO T1	Orientation
Loran Poindexter	8	FPM UXO T3	Orientation	Nic Bolinger	8	FPM UXO T1	Orientation
David Hugg	8	FPM UXO T3	Orientation	Mike Sample	8	FPM Geophysicist	Orientation
Ray Lunbeck	8	FPM UXO T2	Orientation	Boban Stojanovic	8	FPM Geophysicist	Orientation
Ivan Westrick	8	FPM UXO T2	Orientation	Jeff Hackworth	8	FPM MMRP Manager	Orientation
Total Hours	**112**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	USAF	49 CES/CEIE	Email
Renaghan, Brian	USAF	AFCEC/CZRX	Email
Oyelowo, Layi	USAF	AFCEC/CZRX	Email
Peters, Laura	USAF	AFCEC/CZO	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Work plan briefings
Health and safety briefings
MD/MEC items previously located on Holloman AFB
Hazcom briefing
Contractor ID cards for Holloman AFB
Daily reports, Emails/calls

Field
N/A

Today's Field Operations

UXO Team
N/A

GEO Team
N/A

Date: Tuesday, 11 November 2014

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (4):** 2015 Dodge Ram 4x4 Crew Cab (4 each) **UTVs (0):** N/A **MHE:** N/A **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Will be delivery 14 November 2014
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** N/A **Daily Safety Briefing** (Vanderford) **Tailgate Safety Briefing** N/A
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** N/A
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Safety and orientation briefings / base contractor ID cards
Next Day's Planned Activities:	1. Orientation for all five sites / equipment inventory /begin field work

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

11 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Wednesday, 12 November 2014

DAILY SITE REPORT

Report Number: 003
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a	Jack Connor	10	FPM UXO T2	FPM Site/RR869a
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a	Cecilia Flores	10	FPM UXO T2	FPM Site/RR869a
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/RR869a
Loran Poindexter	10	FPM UXO T3	FPM Site/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/RR869a
David Hugg	10	FPM UXO T3	FPM Site/RR869a	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a
Ray Lunbeck	10	FPM UXO T2	FPM Site/RR869a	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/RR869a	Jeff Hackworth	10	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**140**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	USAF	49 CES/CEIE	Email
Renaghan, Brian	USAF	AFCEC/CZRX	Email
Oyelowo, Layi	USAF	AFCEC/CZRX	Email
Peters, Laura	USAF	AFCEC/CZO	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
Conducted site visits and familiarization

Today's Field Operations

UXO Team
Site visits to RR869a, SR864, XU853 and XU854
Equipment checkout/inventory and vehicle set up
Surface clearance of future IVS location

Date: Wednesday, 12 November 2014

	GEO Team Site visits to RR869a, SR864, XU853 and XU854 Locate area appropriate for IVS placement Set up control points for RR869a Staked 24 grids in RR869a
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (4):** 2015 Dodge Ram 4x4 Crew Cab (4 each) **UTVs (0):** N/A **MHE:** N/A **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Will be delivered 14 November 2014
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Review of Activity Hazard Analysis for tasks **Daily Safety Briefing** (Vanderford) **Tailgate Safety Briefing** (Poindexter)
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** N/A
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. RR869a is completely gridded and ready for surface sweeps.
Next Day's Planned Activities:	1. UXO - Begin surface clearance of RR869a 2. GEO – collect data for IVS

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

12 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 12 November 2014

Grid stakes locate and placement. Pictured from left to right Dave Hugg, Kyrian Onyeukwu and Nic Bolinger. Photo was taken in RR869a facing East.

Date: Thursday, 13 November 2014

DAILY SITE REPORT

Report Number: 004
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a/ML865	Jack Connor	10	FPM UXO T2	FPM Site/RR869a
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/RR869a
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/RR869a
Loran Poindexter	10	FPM UXO T3	FPM Site/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/ML865	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a
Ray Lunbeck	10	FPM UXO T2	FPM Site/RR869a	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/RR869a	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
Escort for dig permits (SUXOS)

Today's Field Operations

UXO Team
Surface clearance for grids in RR869a (11 grids complete)
Escort GEO ML865

Date: Thursday, 13 November 2014

	GEO Team Collected data for IVS Staked grids in ML865
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (4):** 2015 Dodge Ram 4x4 Crew Cab (4 each) **UTVs (0):** N/A **MHE:** N/A **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Will be delivered 14 November 2014
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Continued review of Activity Hazard Analysis for tasks
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** RR869a - MK10, 5 inch rocket motor (venturi) / M18, smoke grenade (expended fuze components) **Daily MEC/UXO Discussion:** M125A1, 10lb GB non-persistent gas bomb
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Began surface clearance for RR869a (11 grids complete) 2. Completed placement of grid stakes in ML865 (98 grids staked))
Next Day's Planned Activities:	1. UXO – Continue surface clearance in RR869a 2. GEO – Review IVS data and flag anomalies / Delineate 869a boundary / Mark proposed soil sample areas 3. UXOSO – accept delivery of donor explosives

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

13 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

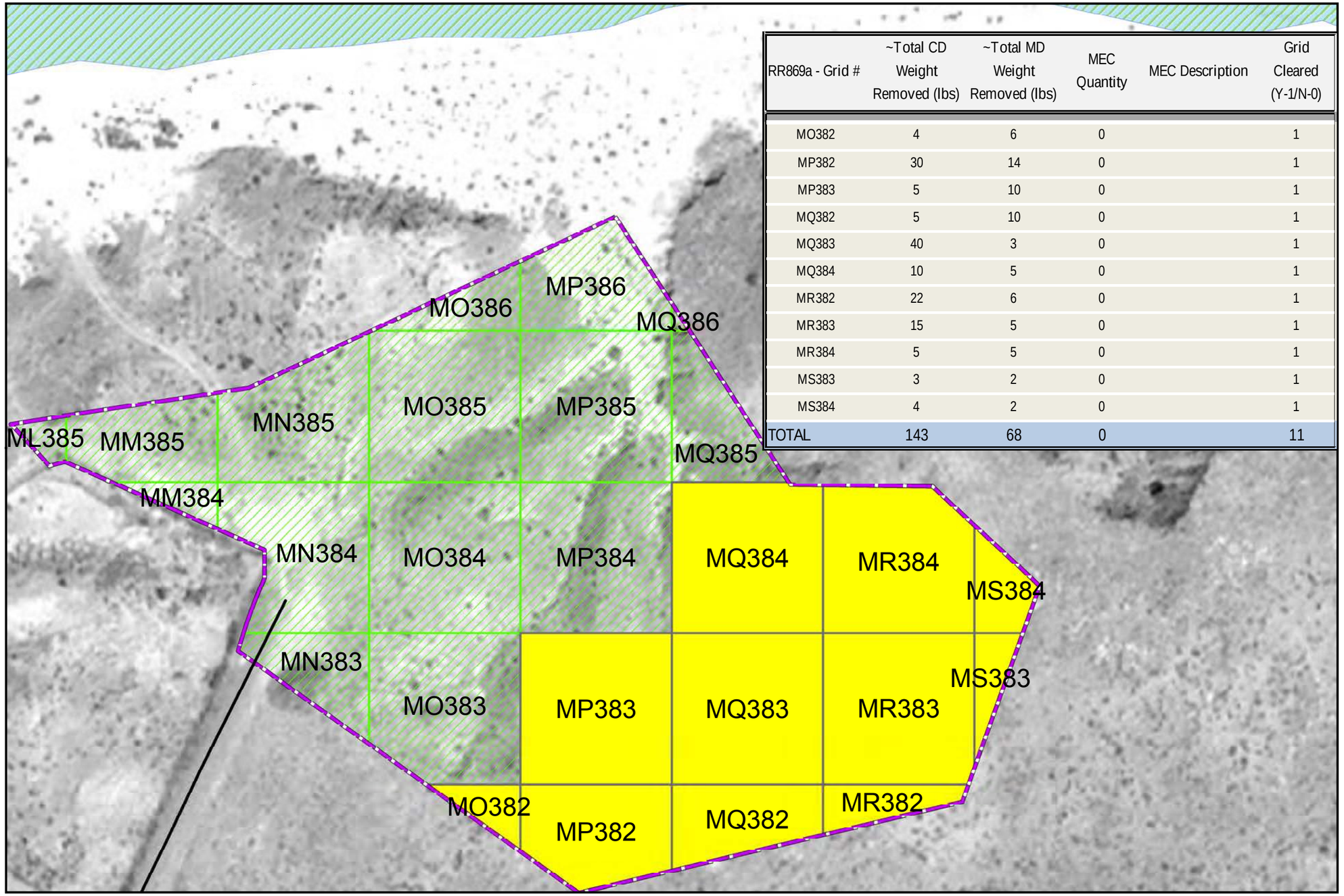
Holloman AFB PBR (FA8903-13-C-0008) 13 November 2014

UXO team conducting grid sweeps. Pictured from left to right; Ivan Westrick, Jack Connor, Cecilia Flores and Ray Lunbeck. Photo was taken in are RR869a facing South.

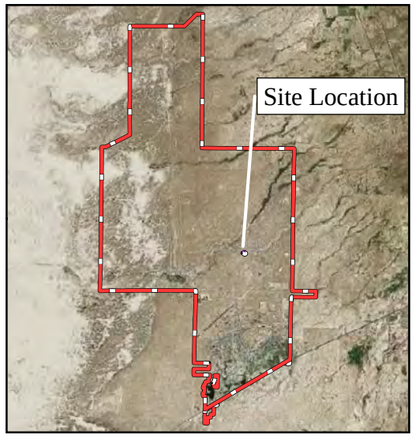
Placing grid stakes. Pictured from left to right; Nic Bolinger and Kyrian Onyeuwku. Photo was taken in ML865 facing East.

Holloman AFB PBR (FA8903-13-C-0008) 13 November 2014

IVS data collection. Pictured from left to right; Mike Sample and Boban Stojanovic. Photo was taken in RR869a facing Southwest.



RR869a - Grid #	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity	MEC Description	Grid Cleared (Y-1/N-0)
MO382	4	6	0		1
MP382	30	14	0		1
MP383	5	10	0		1
MQ382	5	10	0		1
MQ383	40	3	0		1
MQ384	10	5	0		1
MR382	22	6	0		1
MR383	15	5	0		1
MR384	5	5	0		1
MS383	3	2	0		1
MS384	4	2	0		1
TOTAL	143	68	0		11



Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 40 80 120 160 200

Meters
0 10 20 30 40 50

N W E S

Military Munitions Response Program
Remedial Investigation
RR869a Debris Field MRS

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

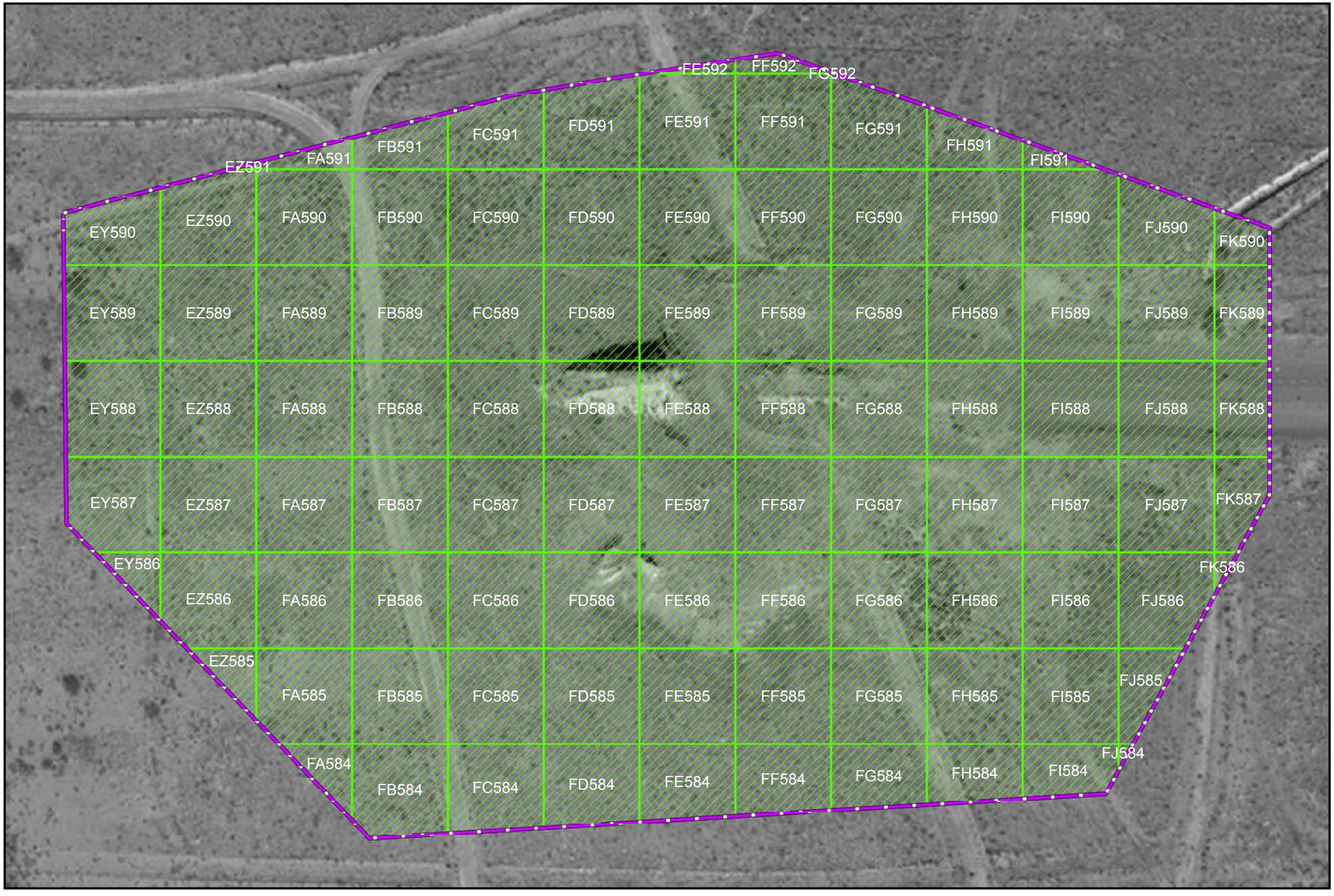
SURFACE SWEEPS UPDATE FIGURE

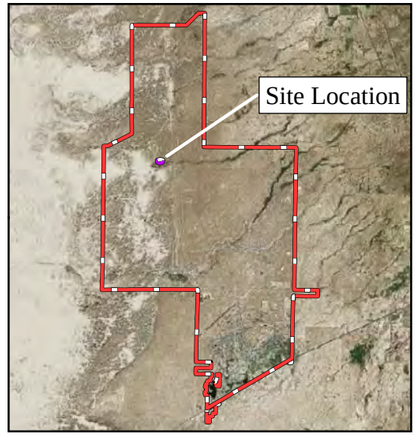
Daily Update
RR869a MRS
11/13/2014

FPM Remediations, Inc.

Date: November 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\HAFB_GPS\Daily_Update_Spreadsheet\111314_HAFB_Daily_Surface_Sweep_Update_A.mxd





Key to Features

- MEC Located
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS UPDATE FIGURE

Daily Update
ML865 MRS
11/13/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

FPM Remediations, Inc.

Date: November 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\HAFB_GPS\Daily_Update_Spreadsheet\111314_HAFB_Daily_Surface_Sweep_Update_B.mxd

Date: Friday, 14 November 2014

DAILY SITE REPORT

Report Number: 005
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a	Jack Connor	10	FPM UXO T2	FPM Site/RR869a
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a	Cecilia Flores	10	FPM UXO T2	FPM Site/RR869a
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/RR869a
Loran Poindexter	10	FPM UXO T3	FPM Site/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/RR869a
David Hugg	10	FPM UXO T3	FPM Site/XU853/4	Mike Sample	10	FPM Geophysicist	FPM Site/XU853/4
Ray Lunbeck	10	FPM UXO T2	FPM Site/RR869a	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/RR869a	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
Inventoried donor explosives and stored in Holloman AFB MSA(UXOSO)

Today's Field Operations

UXO Team
Surface clearance for grids in RR869a (13 grids complete)
Escort GEO XU854/XU853 and ML865

Date: Friday, 14 November 2014

	GEO Team Flagged anomalies in IVS Delineated RR869a Boundary Logged GPS coordinates for proposed soil sample areas in XU853/XU854 Established RTKGPS control points for XU853 and ML865
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (0):** N/A **MHE:** N/A **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 50 / Elec Blasting Caps – 50 / Det Cord(80g) – 500' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Safety in assigned tasks / weekend safety brief
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** RR869a - MK10, 5 inch rocket motor (venturi) / M18, smoke grenade (expended fuze components) **Daily MEC/UXO Discussion:** E61R4, 4lb Bomblets BW
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance for RR869a (13 grids complete)
Next Day's Planned Activities:	1. UXO – Complete surface clearance for RR869a (2 grids remaining) / Investigate sub surface anomalies in IVS 2. GEO – Begin IVS setup / Stake grids in SR864

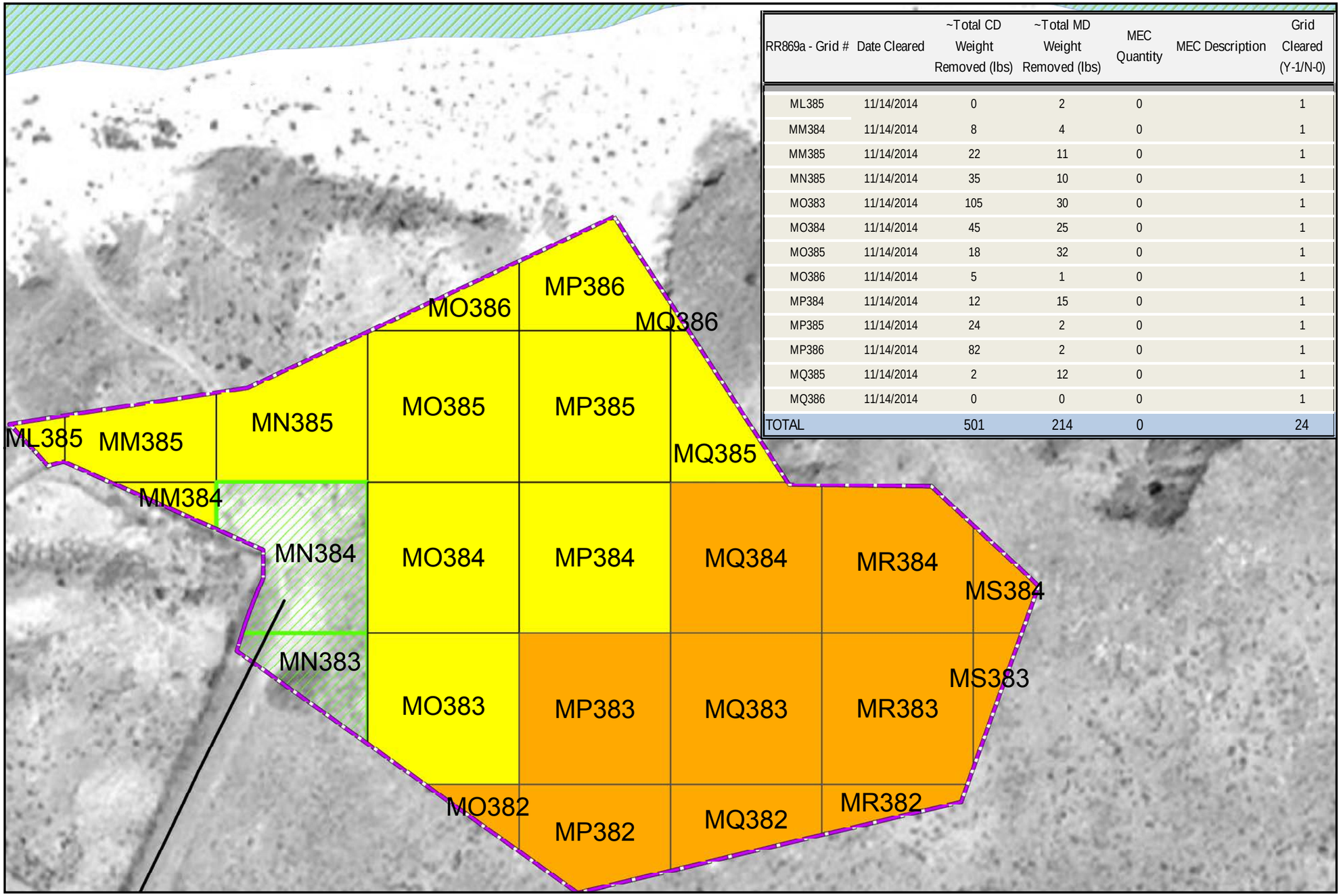
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — Date: 14 November 2014

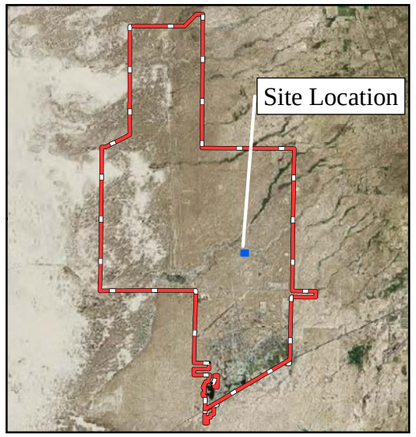
George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 14 November 2014

Surface clearance sweep line preparing for another sweep. Pictured from left to right; Ray Lunbeck, Paul Hackworth, Cecilia Flores, Nic Bolinger, Jack Connor and Ivan Westrick. In the distance Kyrian Onyeuwku and Boban Stojanovic. Photo was taken in RR869a facing North.



RR869a - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity	MEC Description	Grid Cleared (Y-1/N-0)
ML385	11/14/2014	0	2	0		1
MM384	11/14/2014	8	4	0		1
MM385	11/14/2014	22	11	0		1
MN385	11/14/2014	35	10	0		1
MO383	11/14/2014	105	30	0		1
MO384	11/14/2014	45	25	0		1
MO385	11/14/2014	18	32	0		1
MO386	11/14/2014	5	1	0		1
MP384	11/14/2014	12	15	0		1
MP385	11/14/2014	24	2	0		1
MP386	11/14/2014	82	2	0		1
MQ385	11/14/2014	2	12	0		1
MQ386	11/14/2014	0	0	0		1
TOTAL		501	214	0		24



Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
RR869a Debris Field MRS

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS UPDATE FIGURE

Daily Update
RR869a MRS
11/14/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 40 80 120 160 200

Meters
0 10 20 30 40 50

N
W E
S

FPM Remediations, Inc.

Date: November 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\111414_RR869A_Daily_Surface_Sweep_Update.mxd

Date: Monday, 17 November 2014

DAILY SITE REPORT

Report Number: 006
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a/ML865	Jack Connor	10	FPM UXO T2	FPM Site/RR869a/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/RR869a/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/RR869a/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/RR869a/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a
Ray Lunbeck	10	FPM UXO T2	FPM Site/RR869a/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/RR869a/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
Accepted delivery of (2) UTVs and (1) Backhoe from Blue Line Rental

Today's Field Operations

UXO Team
Completed surface clearance for grids in RR869a (2 grids complete)
Began surface clearance for grids in ML865 (8 grids complete)

	Escort GEO RR869a and SR864 **GEO Team** Instrument Verification Strip (IVS) #1 completed and 858 initial QC tests completed Staked grids in SR864 (completed)
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE:** Volvo Backhoe (1) **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 50 / Elec Blasting Caps – 50 / Det Cord(80g) – 500' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Safe vehicle operation and vehicle accident reporting
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** ML865 – 75mm, practice projectile **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO__XX__ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of RR869a / Began surface clearance in ML865
Next Day's Planned Activities:	1. UXO – Continue surface clearance ML865 2. GEO – Begin 858 data collection in RR869a

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 17 November 2014 (Date)

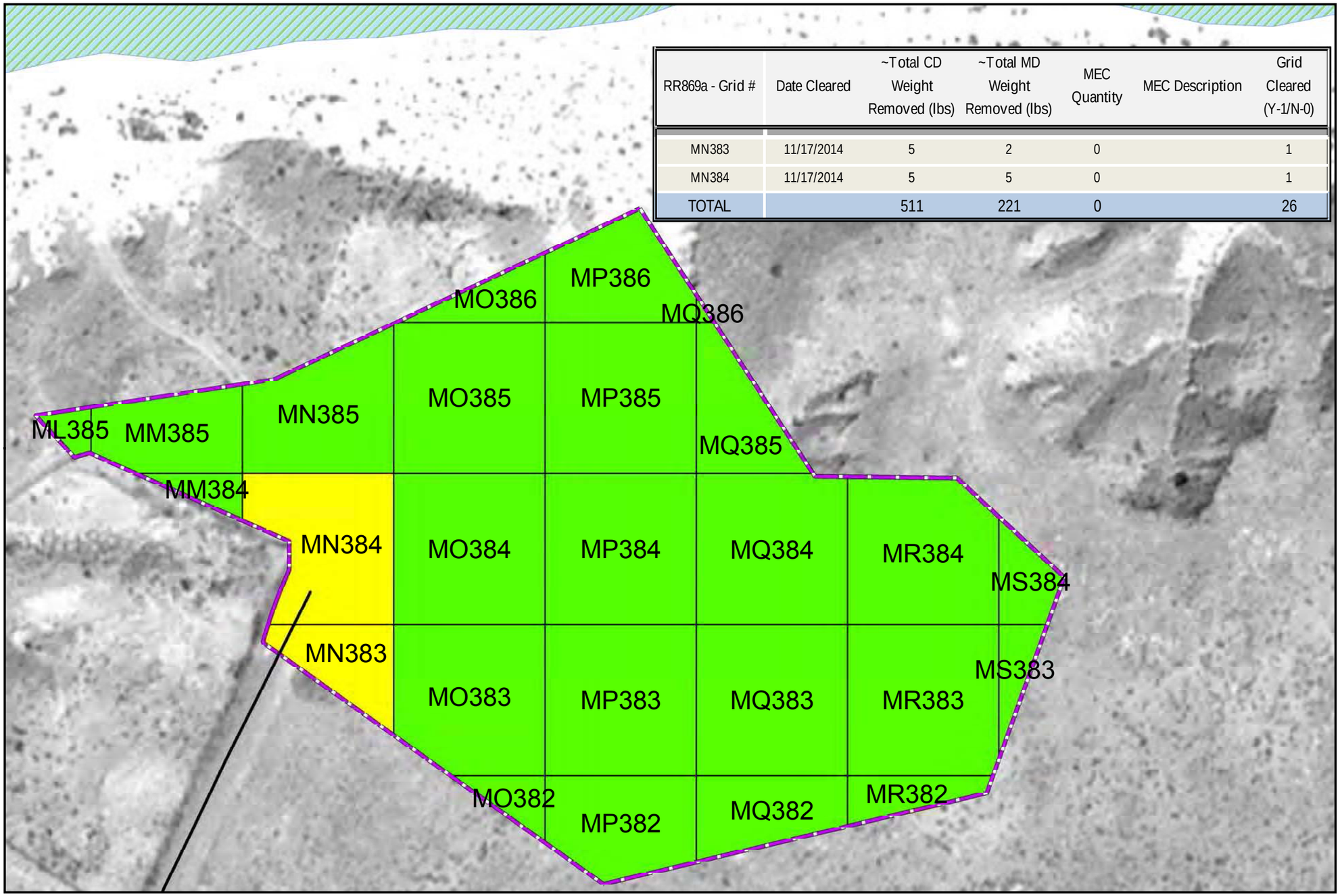
George H. Vaughn, Sr. UXO Supervisor
Name / Title

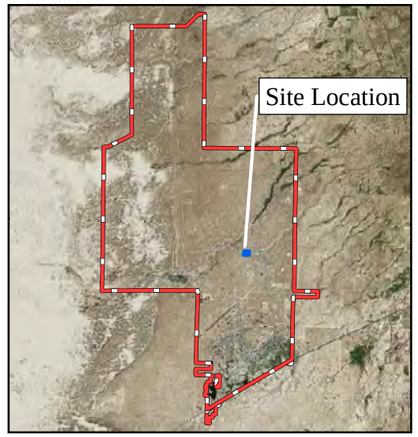
Holloman AFB PBR (FA8903-13-C-0008) 17 November 2014

Industry Standard Object (ISO), placed at a 45 degree angle in the Instrument Verification Strip (IVS). Photo was taken in RR869a facing Northeast.

Completed IVS. Photo was taken in RR869a facing North.

RR869a - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity	MEC Description	Grid Cleared (Y-1/N-0)
MN383	11/17/2014	5	2	0		1
MN384	11/17/2014	5	5	0		1
TOTAL		511	221	0		26





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
RR869a Debris Field MRS

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS UPDATE FIGURE

Daily Update
RR869a MRS
11/17/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 40 80 120 160 200

Meters
0 10 20 30 40 50

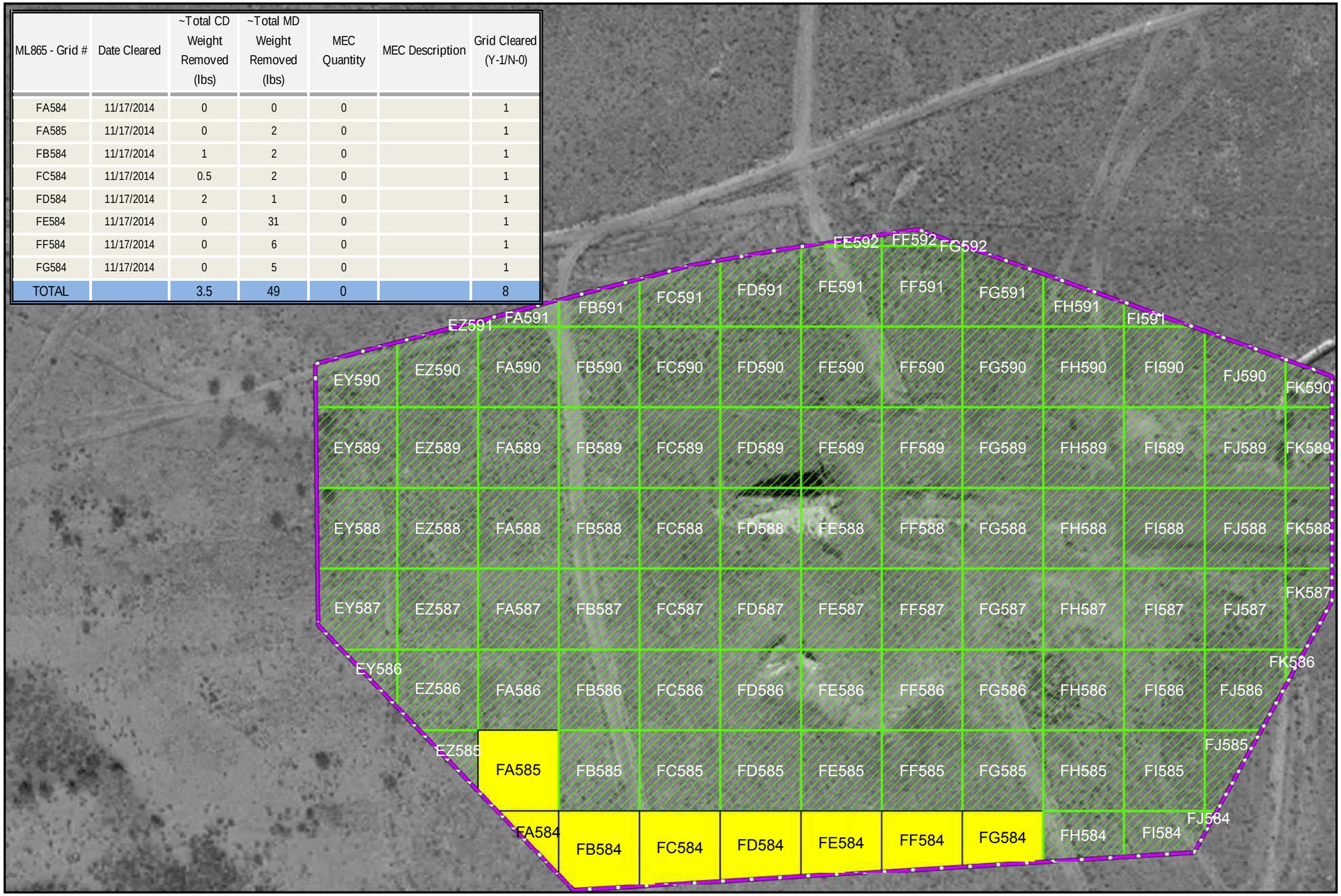
N W E S

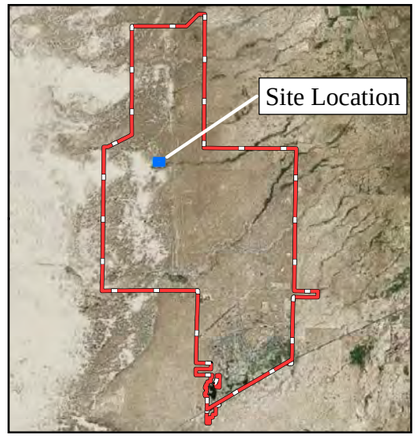
FPM Remediations, Inc.

Date: November 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\111714_RR869A_Daily_Surface_Sweep_Update.mxd

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity	MEC Description	Grid Cleared (Y-1/N-0)
FA584	11/17/2014	0	0	0		1
FA585	11/17/2014	0	2	0		1
FB584	11/17/2014	1	2	0		1
FC584	11/17/2014	0.5	2	0		1
FD584	11/17/2014	2	1	0		1
FE584	11/17/2014	0	31	0		1
FF584	11/17/2014	0	6	0		1
FG584	11/17/2014	0	5	0		1
TOTAL		3.5	49	0		8





Key to Features

- MEC Located
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS UPDATE FIGURE

Daily Update
ML865 MRS
11/17/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

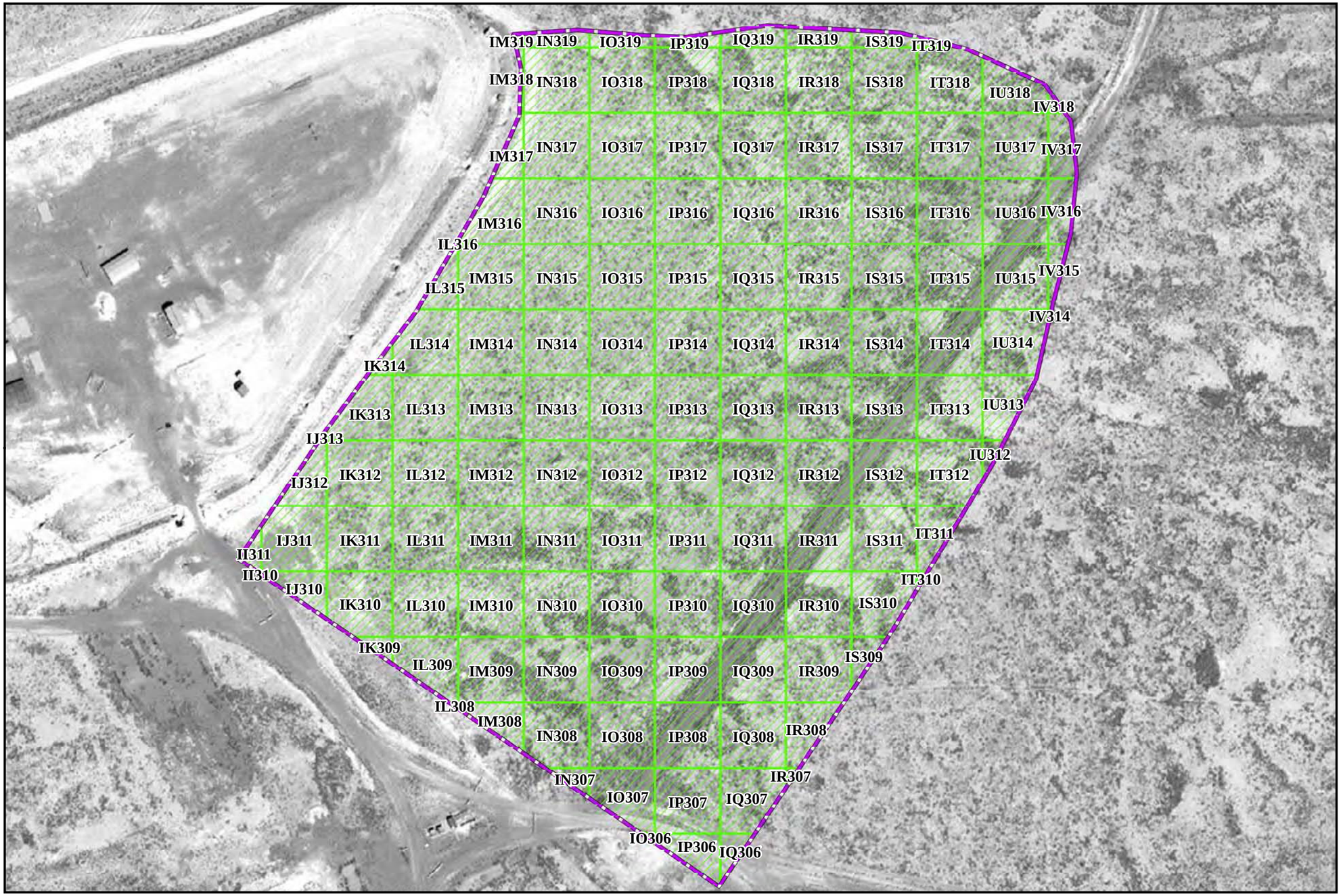
Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

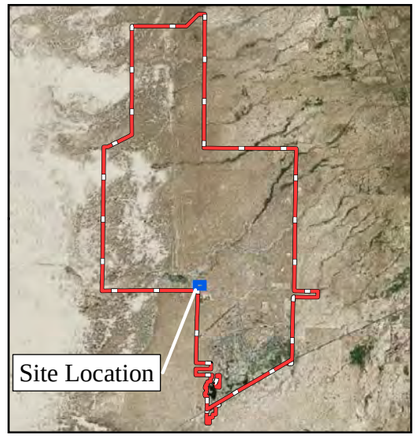
Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\111714_ML865_Daily_Surface_Sweep_Update.mxd





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS UPDATE FIGURE

Daily Update
SR864 MRS
11/17/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\111714_SR864_Daily_Surface_Sweep_Update.mxd

Date: Tuesday, 18 November 2014

DAILY SITE REPORT

Report Number:	007
Project Title:	Holloman AFB PBR, NM
Location:	RR869a,ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a/ML865	Cecilia Flores	12	FPM UXO T2 (MEC night watch	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/SR864/XU853	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a/ XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**140**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
John Tanis	Supervisor Track Control	USAF TGT/CDO

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	Email
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Program Manager	AFCEC/CZO	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
(1) Backhoe returned to Volvo

Today's Field Operations

UXO Team
Continued surface clearance in ML865 (7 grids complete) (8 MEC items located)
Surface clearance for excavation of trench through XU853 for burial of communications lines.
UXO recognition training at 49 CES/CED
Escort Geo XU853

Date: Tuesday, 18 November 2014

	GEO Team Began DGM data collection in RR869a Collected DGM data for excavation of trench through XU853 for burial of communications lines.
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE:** Volvo Backhoe (returned to volvo) **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 50 / Elec Blasting Caps – 50 / Det Cord(80g) – 500' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Safe operation of UTVs / Cold Stress
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** (7) M48, 75mm HE Projectile / (1) M1, 105mm HE Projectile **MD/Other:** ML865 – 75mm, practice projectile / 105mm practice projectile / M48, 75mm HE Projectile pieces / M1 HE Projectile pieces **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. (8) MEC items located. As required in the approved ESS, FPM will provide security for the MEC items until disposal is complete. Disposal operations are scheduled for Friday 21 November 2014 in area ML865.
Next Day's Planned Activities:	1. UXO – Continue surface clearance ML865 2. GEO – Continue 858 data collection in RR869a

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

18 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 18 November 2014

M1, 105mm HE Projectile located during surface clearance of grid FC588 in area ML865.

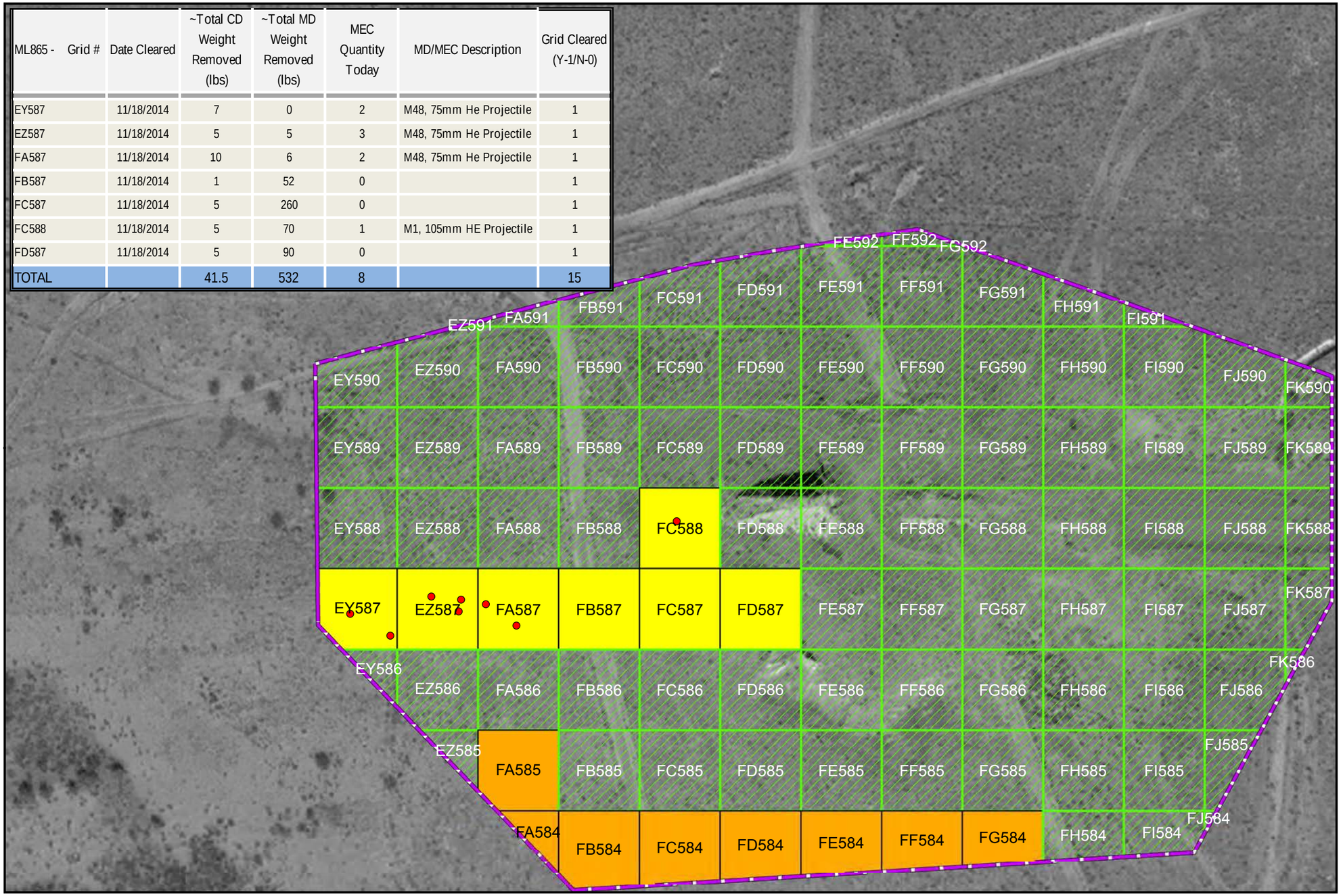
M48, 75mm HE Projectile located during surface clearance of grid FA587 in area ML865.

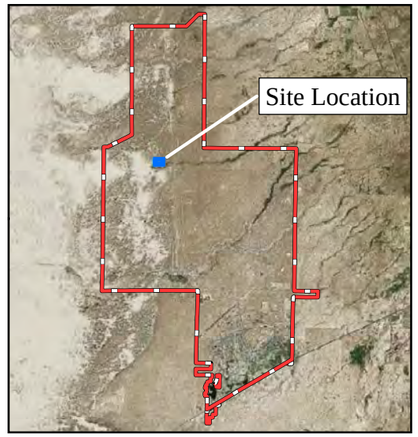
Holloman AFB PBR (FA8903-13-C-0008) 18 November 2014

Fragments of 105mm and 75mm projectiles found in piles in area ML865. Photo was taken in grid FC587 located in ML865.

DGM data collection in RR869a. Pictured from right to left; Boban Stojanovic and Kyrian Onyeukwu. Photo was taken in area RR869a facing Northwest.

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MEC Description	Grid Cleared (Y-1/N-0)
EY587	11/18/2014	7	0	2	M48, 75mm He Projectile	1
EZ587	11/18/2014	5	5	3	M48, 75mm He Projectile	1
FA587	11/18/2014	10	6	2	M48, 75mm He Projectile	1
FB587	11/18/2014	1	52	0		1
FC587	11/18/2014	5	260	0		1
FC588	11/18/2014	5	70	1	M1, 105mm HE Projectile	1
FD587	11/18/2014	5	90	0		1
TOTAL		41.5	532	8		15





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
11/18/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

FPM Remediations, Inc.

Date: November 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\111814_ML865_Daily_Surface_Sweep_Update.mxd

FPM Remediations, Inc.
MEC/MULTIPLE ANOMALY DISCOVERY FORM

UXO Supervisor: George Vaughn **Date:** 18 November 2014

Slope of Terrain (Check one box)	□	<10°	□	10° to 30°	□	>30°
Vegetation Cover (Check one box)	□	Cleared	□	Vegetated	□	Wetland
Inclination (Circle one)	0°	45°	90°	135°	180°	

Item Description/Justification/Comments

(2) M48, 75mm HE Projectile, Area ML865 – Grid FA587
(3) M48, 75mm HE Projectile, Area ML865 – Grid EZ587
(2) M48, 75mm HE Projectile, Area ML865 – Grid EY587
(1) M1, 105mm HE Projectile, Area ML865 – Grid FC588

Anomaly Type/Category (Check Appropriate Box)

□ UXO □ DMM □ Munitions Debris □ Practice Ordnance □ Inert Ordnance
□ Metal Waste □ Sub-surface Anomaly □ Other _____

Ordnance Positive Identification (If known, record below. Include fuze condition and disposition)

Quantity: 8	Ordnance Mark/Mod:	Nose Fuze Mark/Mod:	Tail Fuze Mark/Mod:
Ordnance Filler:	□ Explosive □ Propellant □ Pyrotechnic □ Other		N.E.W.M48 - 1.4lbs TNT M1 – 4.5lbs TNT

Ordnance Category:

□ Bombs □ Land Mines □ Rockets	□ Clusters/Dispensers □ Misc. Explosive Devices □ Pyrotechnics and Flares	□ Grenades □ Mortars □ Projectiles	□ Guided Missiles □ Underwater Ordnance □ Small Arms

Fuzing Types

☐ Piezo-Electric ☐ All-ways Acting (PD) ☐ Mech Long Delay ☐ Powder Train Time Fuze (PTTF)	☐ Proximity (VT) ☐ Electric ☐ Point-Initiating, Base-Detonating ☐ MT Superquick	☐ Impact ☐ Point Detonating ☐ Mechanical Time	☐ Base Detonating ☐ Influence ☐ Pressure

Status of MEC/UXO

□ Armed (fuzes sheared off) □ Unarmed

Physical Condition of MEC/UXO (Check all that apply)

□ Broken Open	□ Soil Staining	□ Filler Visible	□ Soil Sample Taken

FOR UXOSS USE

Disposition: (Clarify Under Remarks) ☐ Transport ☐ Leave In Place ☐ Other	Date:

Notifications To Installation By:	Initials: GHV	Date 18 Nov 2014

Storage Location: N/A

Remarks: As required in the approved ESS, FPM will provide security for the MEC items until disposal is complete. Disposal operation is scheduled for 21 November 2014.

UXO – Ordnance fuzed, armed or otherwise prepared for action and fired or placed in such a manner that it constitutes a hazard
DMM – Ordnance that was disposed of by abandonment; may have been fuzed or armed, but was not employed
Inert – Same physical features as an ordnance item but does not and never did contain energetic material
Munitions Debris – Ordnance material that contained or was in contact with energetic material, which has been expended (e.g., fragments from projectile)

Date: Wednesday, 19 November 2014

DAILY SITE REPORT

Report Number: 008
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a/ML865/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a/ML865/ XU853	Cecilia Flores	14	FPM UXO T2 (MEC night watch	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/XU853	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a/ XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**142**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
Shawn Quarles	Weapons Safety	49 WG/SEW

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	Email
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Program Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49 CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD flight	49 CES/CED	Email

Work Performed (include location)	**SUXOS/UXOSO/QC** Admin Daily Safety & Operations briefings (UXO, QC and Geo) Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS) Daily reports, Emails/Calls Field Observed field activities (SUXOS and UXOSO/UXOQCS)

Date: Wednesday, 19 November 2014

	Today's Field Operations **UXO Team** Continued surface clearance in ML865 (7 grids complete) (13 MEC items located) Intrusive investigation of anomalies for excavation of trench through XU853 for burial of communication lines Escort Geo XU853 **GEO Team** Continued DGM data collection in RR869a Anomaly locates for excavation of trench through XU853 for burial of communications lines.
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (0):** **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 50 / Elec Blasting Caps – 50 / Det Cord(80g) – 500' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Activity Hazard Analysis (AHA) for disposal/demolition operations
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** (11) M48, 75mm HE Projectile / (2) M1, 105mm HE Projectile **MD/Other:** ML865 – 75mm, practice projectile / 105mm practice projectile / M48, 75mm HE Projectile pieces / M1 HE Projectile pieces **Daily MEC/UXO Discussion:** Disposal operation safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. (13) MEC items located. As required in the approved ESS, FPM will provide security for the MEC items until disposal is complete. Disposal operations are scheduled for Friday 21 November 2014 in area ML865.
Next Day's Planned Activities:	1. UXO – Continue surface clearance ML865 2. GEO –Continue 858 data collection in RR869a / begin set up of towed array

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

19 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

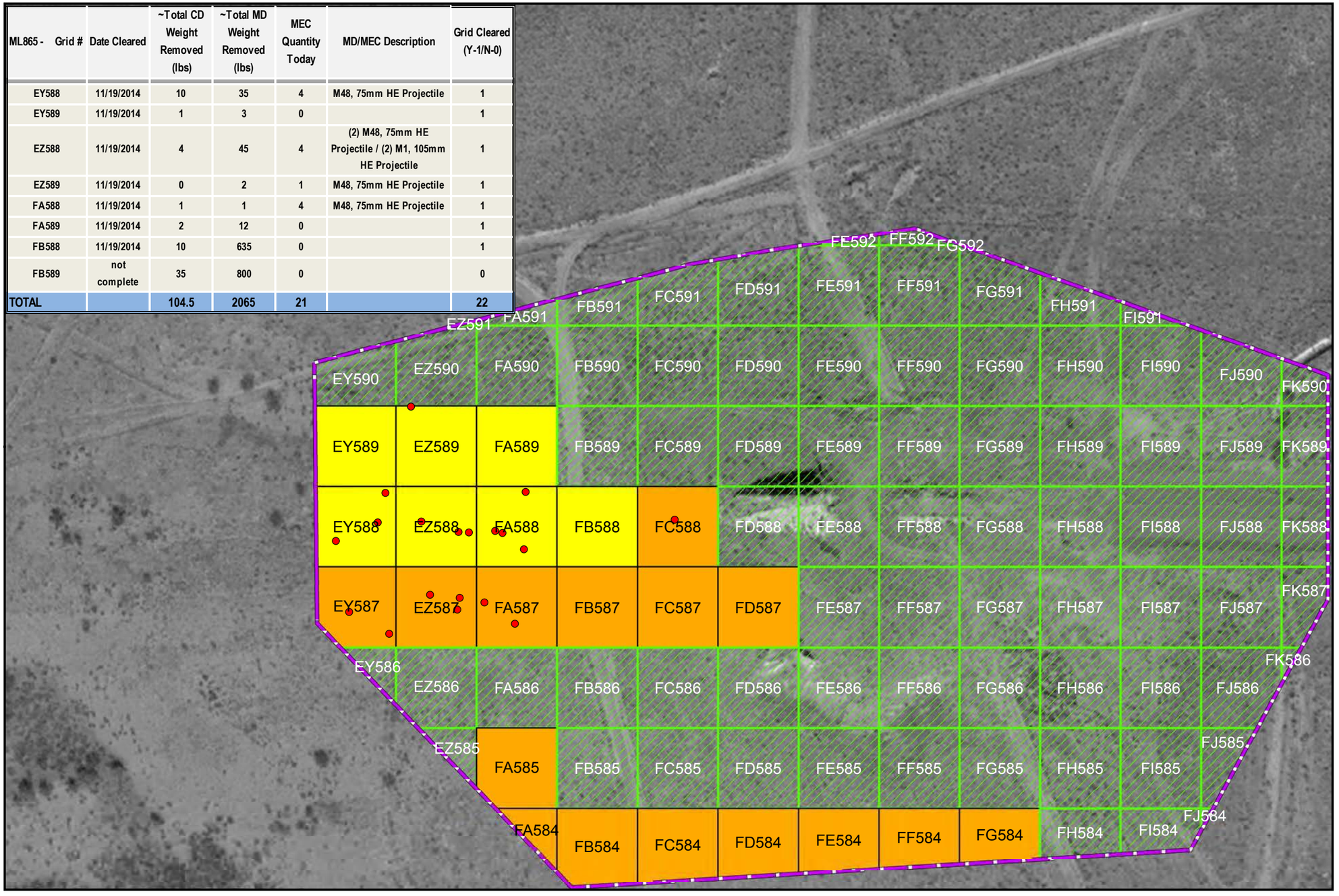
Daily Site Report

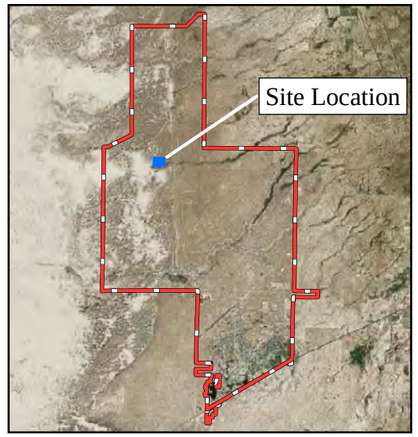
Holloman AFB PBR (FA8903-13-C-0008) 19 November 2014

(2) M1, 105mm HE Projectiles located during surface clearance of grid EZ588 in area ML865.

UXO team sorting through one of the piles of 105mm and 75mm scrap found in ML865. Pictured from left to right; Paul Hackworth, Loran Poindexter, Ivan Westrick and Nic Bolinger. Photo was taken facing Southeast.

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MEC Description	Grid Cleared (Y-1/N-0)
EY588	11/19/2014	10	35	4	M48, 75mm HE Projectile	1
EY589	11/19/2014	1	3	0		1
EZ588	11/19/2014	4	45	4	(2) M48, 75mm HE Projectile / (2) M1, 105mm HE Projectile	1
EZ589	11/19/2014	0	2	1	M48, 75mm HE Projectile	1
FA588	11/19/2014	1	1	4	M48, 75mm HE Projectile	1
FA589	11/19/2014	2	12	0		1
FB588	11/19/2014	10	635	0		1
FB589	not complete	35	800	0		0
TOTAL		104.5	2065	21		22





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
11/19/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\111914_ML865_Daily_Surface_Sweep_Update.mxd

FPM Remediations, Inc.
MEC/MULTIPLE ANOMALY DISCOVERY FORM

UXO Supervisor: George Vaughn **Date:** 19 November 2014

Slope of Terrain (Check one box)	□	**<10°**	□	**10° to 30°**	□	**>30°**
Vegetation Cover (Check one box)	□	**Cleared**	□	**Vegetated**	□	**Wetland**
Inclination (Circle one)	**0°**	**45°**	**90°**	**135°**	**180°**	

Item Description/Justification/Comments

(4) M48, 75mm HE Projectile, Area ML865 – Grid FA588
(2) M48, 75mm HE Projectile / (2) M1, 105 HE Projectile, Area ML865 – Grid EZ588
(4) M48, 75mm HE Projectile, Area ML865 – Grid EY588
(1) M48, 75mm HE Projectile, Area ML865 – Grid EZ589

Anomaly Type/Category (Check Appropriate Box)

□ **UXO** □ DMM □ Munitions Debris □ Practice Ordnance □ Inert Ordnance
□ Metal Waste □ Sub-surface Anomaly □ Other _____

Ordnance Positive Identification (If known, record below. Include fuze condition and disposition)

Quantity: 13	**Ordnance Mark/Mod:**	**Nose Fuze Mark/Mod:**	**Tail Fuze Mark/Mod:**
Ordnance Filler:	□ **Explosive** □ Propellant □ Pyrotechnic □ Other		**N.E.W.M48 - 1.4lbs TNT** **M1 – 4.5lbs TNT**

Ordnance Category:

□ Bombs	□ Clusters/Dispensers	□ Grenades	□ Guided Missiles
□ Land Mines	□ Misc. Explosive Devices	□ Mortars	□ Underwater Ordnance
□ Rockets	□ Pyrotechnics and Flares	□ **Projectiles**	□ Small Arms

Fuzing Types

☐ Piezo-Electric	☐ Proximity (VT)		
☐ All-ways Acting (PD)	☐ Electric	☐ **Impact**	☐ Base Detonating
☐ Mech Long Delay	☐ Point-Initiating, Base-Detonating	☐ Point Detonating	☐ Influence
☐ Powder Train Time Fuze (PTTF)	☐ MT Superquick	☐ Mechanical Time	☐ Pressure

Status of MEC/UXO

□ **Armed** (fuzes sheared off) □ Unarmed

Physical Condition of MEC/UXO (Check all that apply)

□ Broken Open	□ Soil Staining	□ Filler Visible	□ Soil Sample Taken

FOR UXOSS USE

Disposition: (Clarify Under Remarks) ☐ **Transport** ☐ Leave In Place ☐ Other	**Date:**

Notifications To Installation By:	**Initials: GHV**	**Date 19 Nov 2014**

Storage Location: N/A

Remarks: As required in the approved ESS, FPM will provide security for the MEC items until disposal is complete. Disposal operation is scheduled for 21 November 2014.

UXO – Ordnance fuzed, armed or otherwise prepared for action and fired or placed in such a manner that it constitutes a hazard
DMM – Ordnance that was disposed of by abandonment; may have been fuzed or armed, but was not employed
Inert – Same physical features as an ordnance item but does not and never did contain energetic material
Munitions Debris – Ordnance material that contained or was in contact with energetic material, which has been expended (e.g., fragments from projectile)

FPM Remediations, Inc.

Date: Thursday, 20 November 2014

DAILY SITE REPORT

Report Number:	009
Project Title:	Holloman AFB PBR, NM
Location:	RR869a,ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	14	FPM UXO T1 (MEC night watch)	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/RR869a	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**142**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

UXO Team
Continued surface clearance in ML865 (12 grids complete)
Assisted Geo with assembly of EM-61 and 858 towed array frames / Escort Geo

Date: Thursday, 20 November 2014

	GEO Team Continued DGM data collection in RR869a Assembled EM-61 and 858 towed array frames
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (0):** **Geophysical:** Geometrics G-858 Cesium Vapor mag (2-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 50 / Elec Blasting Caps – 50 / Det Cord(80g) – 500' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Sexual harassment briefing / slips, trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** ML865 – 75mm, practice projectile / 105mm practice projectile / M48, 75mm HE Projectile pieces / M1 HE Projectile pieces **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. N/A
Next Day's Planned Activities:	1. UXO – Disposal operation 2. GEO –Continue 858 data collection in RR869a / put in data control points for SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

20 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 20 November 2014

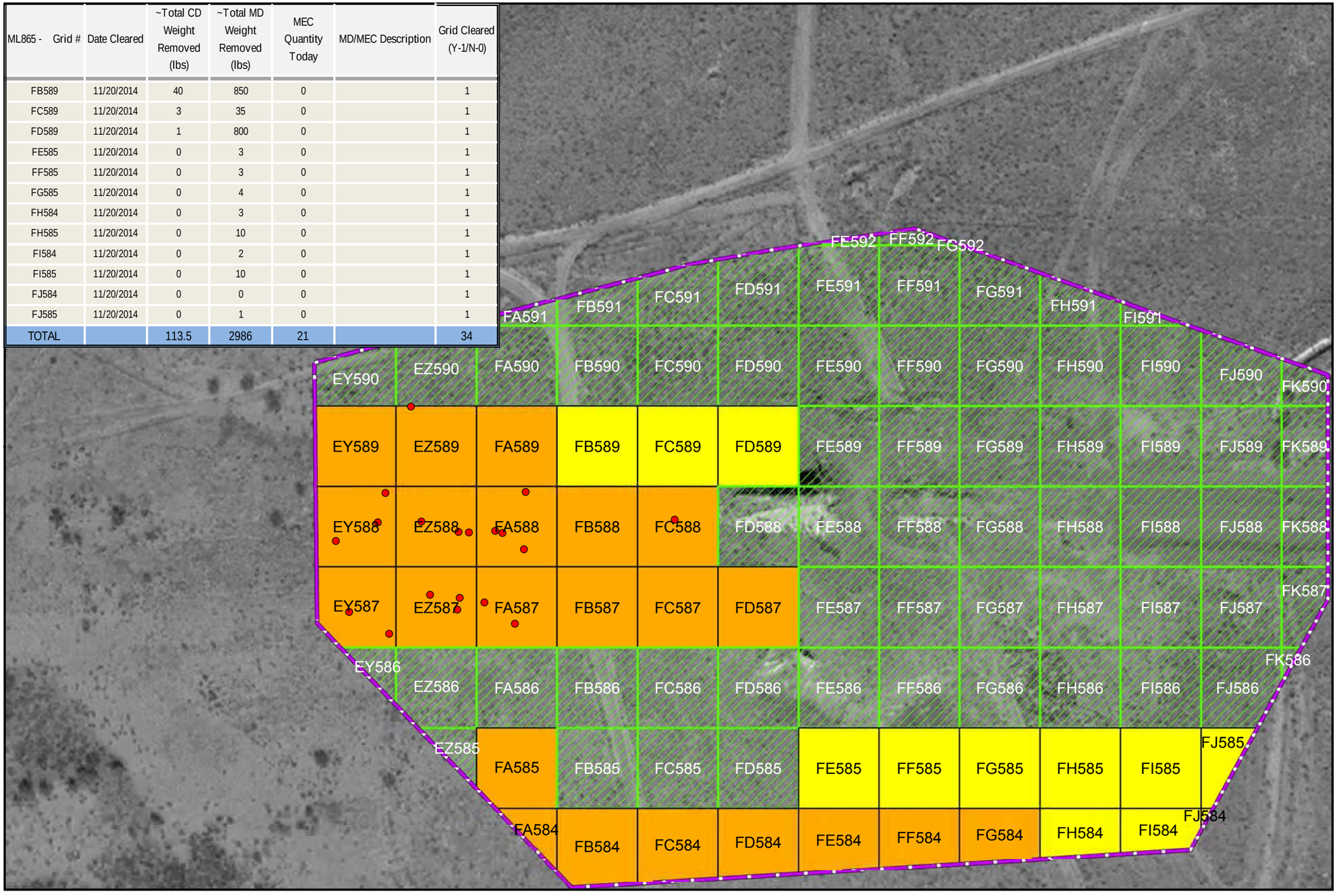
Grid surface clearance. Pictured from left to right; Ivan Westrick, Jack Connor, Cecilia Flores, Paul Hackworth and Ray Lunbeck. Photo was taken in ML865 facing Southeast.

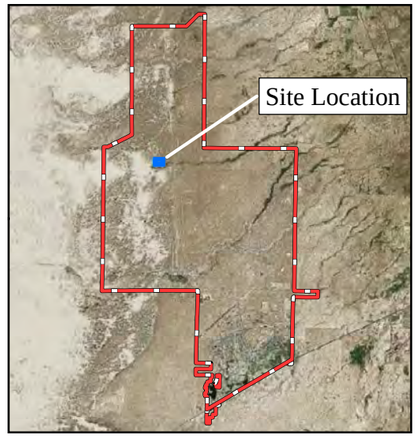
Holloman AFB PBR (FA8903-13-C-0008) 20 November 2014

Fully assembled 858 towed array frame. Photo was taken outside building 1266 facing Southeast.

Fully assembled EM-61 towed array frame. Photo was taken outside building 1266 facing Southeast.

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MEC Description	Grid Cleared (Y-1/N-0)
FB589	11/20/2014	40	850	0		1
FC589	11/20/2014	3	35	0		1
FD589	11/20/2014	1	800	0		1
FE585	11/20/2014	0	3	0		1
FF585	11/20/2014	0	3	0		1
FG585	11/20/2014	0	4	0		1
FH584	11/20/2014	0	3	0		1
FH585	11/20/2014	0	10	0		1
FI584	11/20/2014	0	2	0		1
FI585	11/20/2014	0	10	0		1
FJ584	11/20/2014	0	0	0		1
FJ585	11/20/2014	0	1	0		1
TOTAL		113.5	2986	21		34





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
11/20/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\112014_ML865_Daily_Surface_Sweep_Update.mxd

Date: Friday, 21 November 2014

DAILY SITE REPORT

Report Number: 010
Project Title: Holloman AFB PBR, NM
Location: RR869a,ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/RR869a/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/RR869a/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869a/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/RR869a/SR864	Mike Sample	10	FPM Geophysicist	FPM Site/RR869a /SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a /SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/RR869a
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	Email
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Program Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49 CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD flight	49 CES/CED	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
Range Safety Officer (RSO)(UXOSO)

Today's Field Operations

Date: Friday, 21 November 2014

	UXO Team Disposal of (21) MEC/MPPEH located in ML865. Escorted Geo in RR869a, SR864 **GEO Team** Completed DGM data collection in RR869a Established control points in SR864
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (0):** **Geophysical:** Geometrics G-858 Cesium Vapor mag (4-FPM), Schonstedt GA-52Cx mag (9), Whites All-metals detector (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rover w/TSC2 controller (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Disposal operation safety brief
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM:** N/A **MD/Other:** ML865 – 75mm, practice projectile / 105mm practice projectile / **Daily MEC/UXO Discussion:** Disposal operation
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MPPEH/MDAS:** MDAS secured in team connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Utilized 32 gram perforators to explosively treated all (21) MEC/MPPEH items. After explosive treatment determined the (21) items contained inert filler.
Next Day's Planned Activities:	1. UXO – Continue surface clearance of ML865 2. GEO – Soil samples for XU853 / begin IVS setup in ML865 and SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

21 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 21 November 2014

Jack Connor placing 32 gram perforators to explosively treat MEC/MPPEH items located in ML865. Photo was taken in ML865 facing Southeast.

Cecilia Flores conducting electric blasting cap check out. Photo was taken in ML865 facing Northwest.

FPM Remediations, Inc.

Date: Monday, 24 November 2014

DAILY SITE REPORT

Report Number:	011
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/XU853	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/XU853	Mike Sample	10	FPM Geophysicist	FPM Site/XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ML865
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **15** grids cleared today (**49** total grids completed to date)

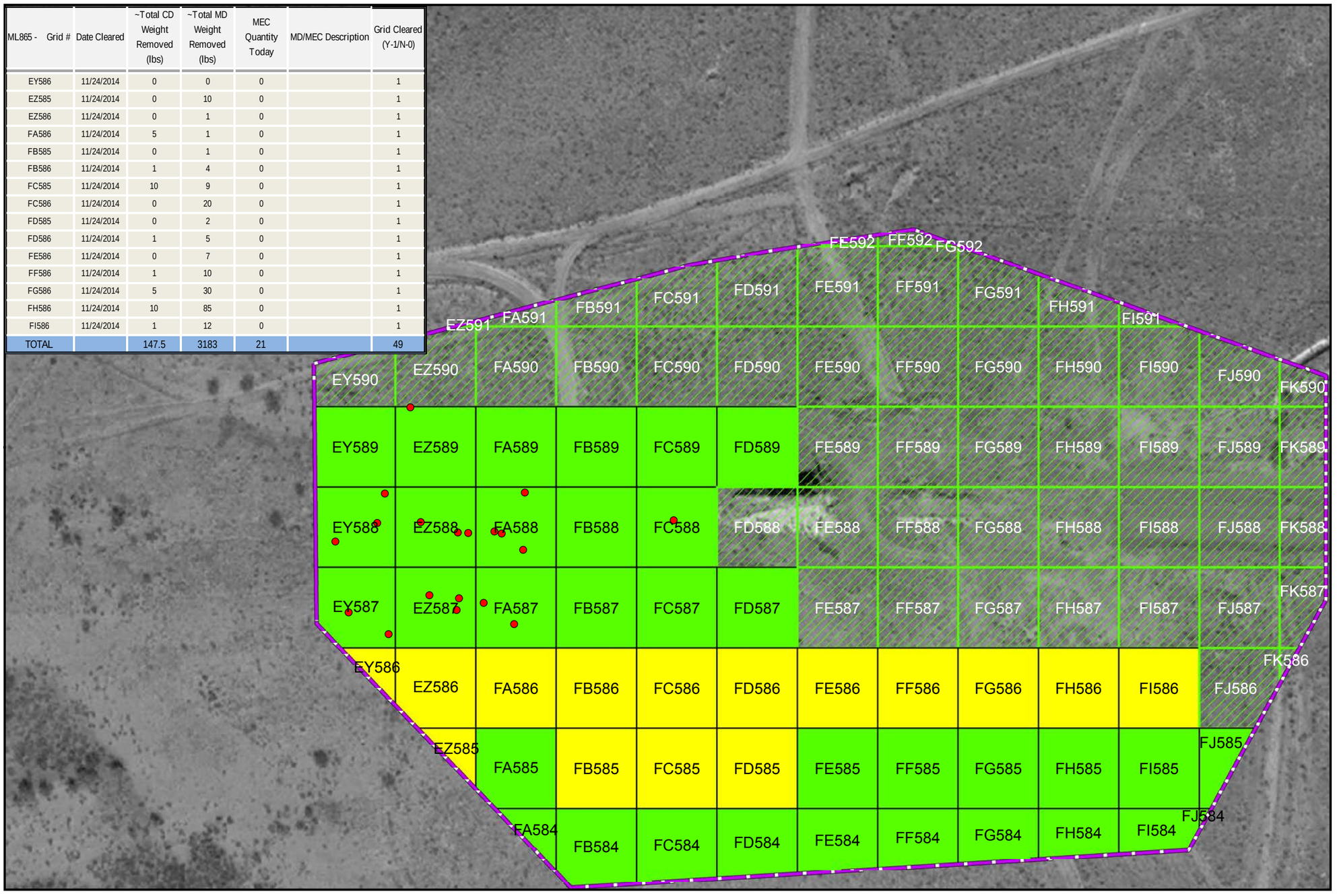
	· Began using mechanized heavy equipment to clear large timbers & cabling from northern part of ML865 in preparation for surface clearance · Transported G-858 6-sensor magnetic towed array to ML865 / completed assembly · Began G-858 background data collection for IVS location in ML865 · Marked (flagged) sub-grids using GPS in 5 multi-incremental sampling decision units in XU853
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Hanta virus precautions / slips trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (15) grids in ML865 / (0) MEC/MPPEH located
Next Day's Planned Activities:	1. Continue surface clearance in ML865 2. Complete IVS background data collection with G-858 6-sensor towed array in ML865 / Begin IVS setup 3. Complete marking of sub-grids in multi-incremental sampling decision units in XU853 / begin MC soil sampling

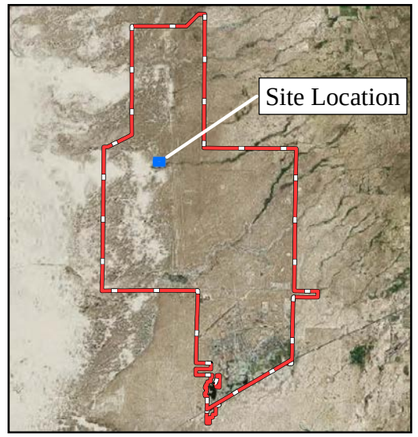
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — Date: 24 November 2014

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MEC Description	Grid Cleared (Y-1/N-0)
EY586	11/24/2014	0	0	0		1
EZ585	11/24/2014	0	10	0		1
EZ586	11/24/2014	0	1	0		1
FA586	11/24/2014	5	1	0		1
FB585	11/24/2014	0	1	0		1
FB586	11/24/2014	1	4	0		1
FC585	11/24/2014	10	9	0		1
FC586	11/24/2014	0	20	0		1
FD585	11/24/2014	0	2	0		1
FD586	11/24/2014	1	5	0		1
FE586	11/24/2014	0	7	0		1
FF586	11/24/2014	1	10	0		1
FG586	11/24/2014	5	30	0		1
FH586	11/24/2014	10	85	0		1
FI586	11/24/2014	1	12	0		1
TOTAL		147.5	3183	21		49





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
11/24/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\112414_ML865_Daily_Surface_Sweep_Update.mxd

FPM Remediations, Inc.

Date: Tuesday, 25 November 2014

DAILY SITE REPORT

Report Number:	012
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/XU853	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/XU853	Mike Sample	10	FPM Geophysicist	FPM Site/XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ML865
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **14** grids cleared today (**63** total grids completed to date)

	· Continued using mechanized heavy equipment to clear large timbers & cabling from northern part of ML865 in preparation for surface clearance · Completed G-858 background data collection for IVS location in ML865 · Cleared surface/subsurface anomalies in IVS location for ML865 · Began placing ISOs and inert seed items in ML865 IVS · Completed Marking (flagging) sub-grids using GPS in 6 multi-incremental sampling decision units in XU853 · Completed soil sampling in **1** multi-incremental decision unit in XU853
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Fire extinguisher training / slips trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (14) grids in ML865 / (0) MEC/MPPEH located
Next Day's Planned Activities:	1. Continue surface clearance in ML865 2. Complete ML865 IVS setup / test towed array on IVS / collect data for inert munitions seed items at different depths and orientations to build data base

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

25 November 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 25 November 2014

Mike Sample collecting soil samples in one of the six multi-incremental sampling decision units in area XU853. Photo was taken facing Southwest.

G-858 towed array IVS data collection. Pictured from left to right Boban Stojanovic (operating towed array) and Kyrian Onyeukwu. Photo was taken in ML865 facing Northwest.

Holloman AFB PBR (FA8903-13-C-0008) 25 November 2014

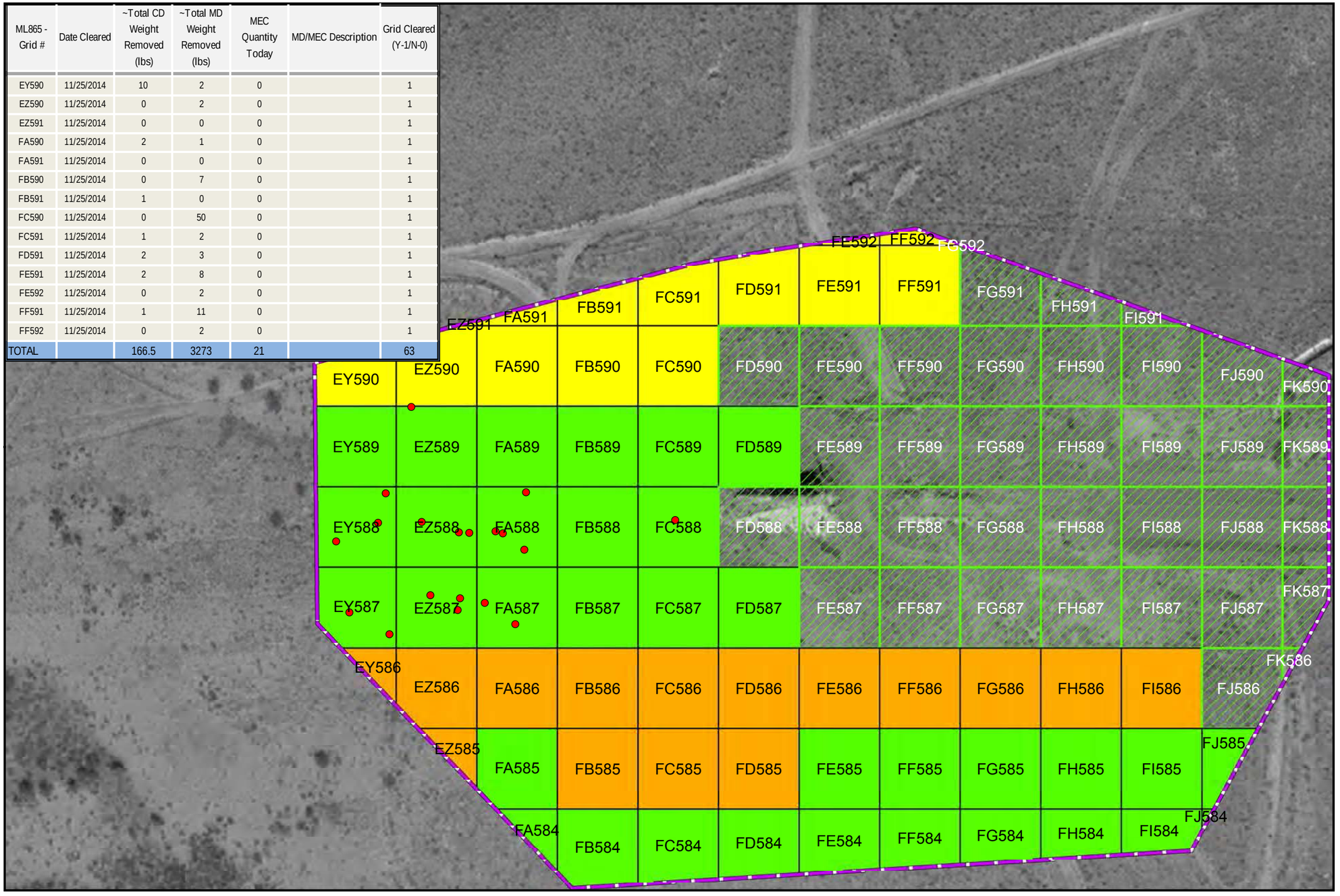
Removal of subsurface anomalies located in the IVS with the G-858 towed array. Pictured from left to right is Cecilia Flores and Ivan Westrick. Photo was taken in ML865 facing Northeast.

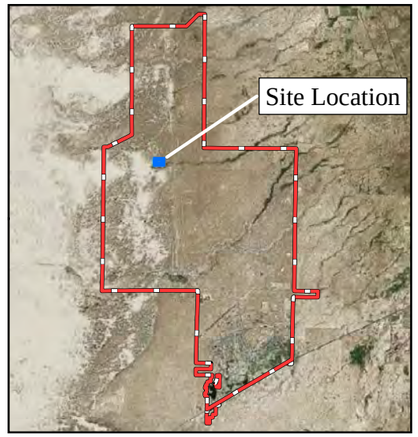
Team utilizing backhoe to remove debris for surface clearance. Pictured from left to right is Paul Hackworth and George Vaughn. Photo was taken in ML865 facing West.

Holloman AFB PBR (FA8903-13-C-0008) 25 November 2014

Grid surface clearance. Pictured from left to right; Nic Bolinger, Jack Connor, Cecilia Flores and Ivan Westrick. Photo was taken in ML865 facing West.

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MEC Description	Grid Cleared (Y-1/N-0)
EY590	11/25/2014	10	2	0		1
EZ590	11/25/2014	0	2	0		1
EZ591	11/25/2014	0	0	0		1
FA590	11/25/2014	2	1	0		1
FA591	11/25/2014	0	0	0		1
FB590	11/25/2014	0	7	0		1
FB591	11/25/2014	1	0	0		1
FC590	11/25/2014	0	50	0		1
FC591	11/25/2014	1	2	0		1
FD591	11/25/2014	2	3	0		1
FE591	11/25/2014	2	8	0		1
FE592	11/25/2014	0	2	0		1
FF591	11/25/2014	1	11	0		1
FF592	11/25/2014	0	2	0		1
TOTAL		166.5	3273	21		63





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
11/25/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\112514_ML865_Daily_Surface_Sweep_Update.mxd

Date: Wednesday, 26 November 2014

DAILY SITE REPORT

Report Number:	013
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/ML865	Mike Sample	10	FPM Geophysicist	FPM Site/ML865
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ML865
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **10** grids cleared today (**73** total grids completed to date)

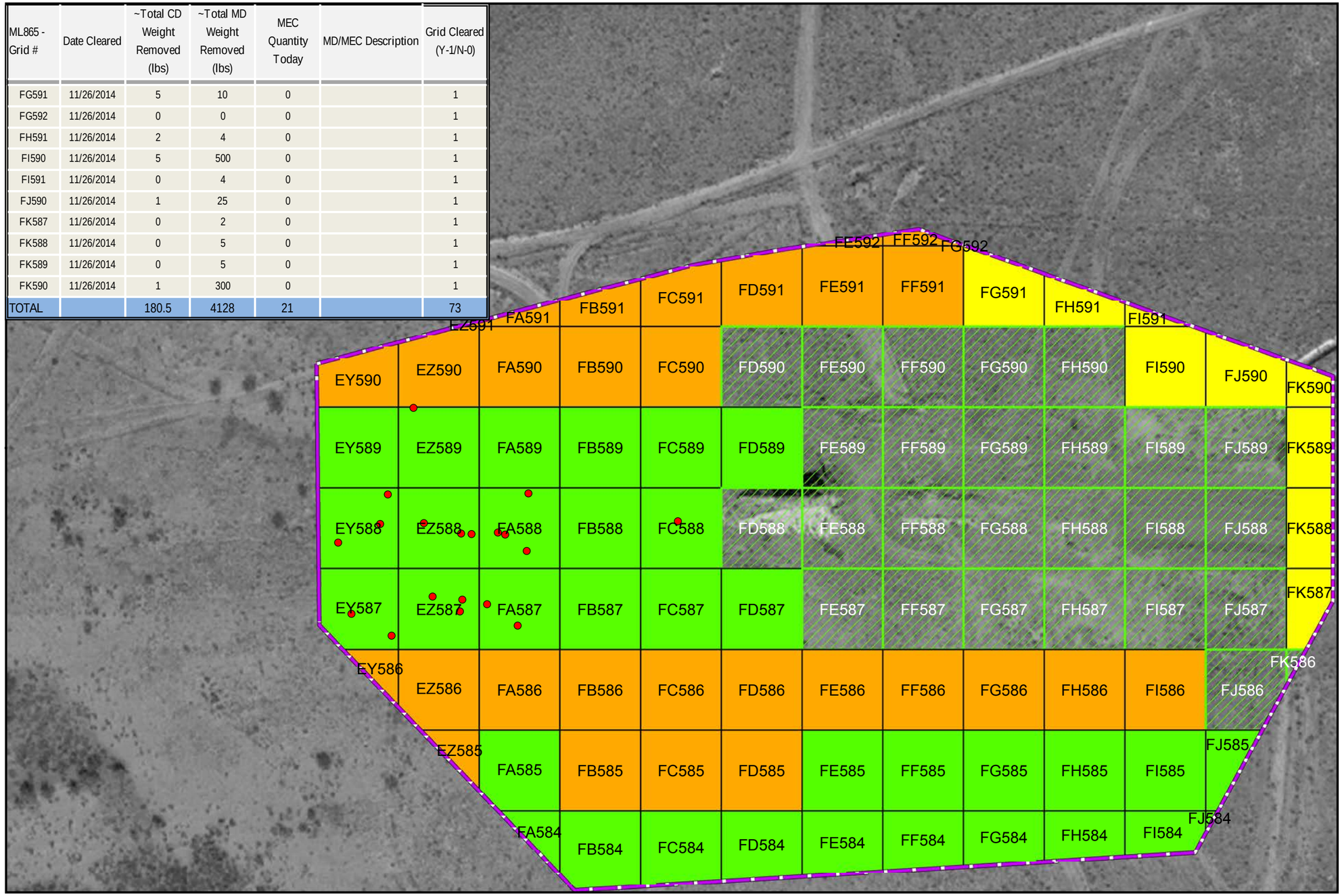
	· Continued using mechanized heavy equipment to clear large timbers & cabling from northern part of ML865 in preparation for surface clearance · Completed placing ISOs and inert seed items in ML865 IVS · Collected ISO and inert seed items data in ML865 IVS
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Holiday safety brief / slips trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (10) grids in ML865 / (0) MEC/MPPEH located
Next Day's Planned Activities:	1. Due to Thanksgiving Holiday, operations will resume on 1 December 2014 2. Continue surface clearance in ML865 3. Begin collecting 858-G data in ML865 utilizing towed array 4. Continue soil sampling in multi-incremental decision units in XU853

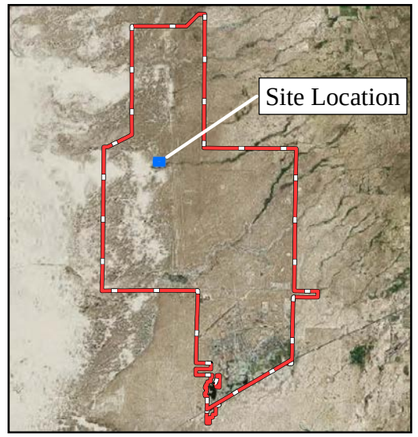
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 26 November 2014 (Date)

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MEC Description	Grid Cleared (Y-1/N-0)
FG591	11/26/2014	5	10	0		1
FG592	11/26/2014	0	0	0		1
FH591	11/26/2014	2	4	0		1
FI590	11/26/2014	5	500	0		1
FI591	11/26/2014	0	4	0		1
FJ590	11/26/2014	1	25	0		1
FK587	11/26/2014	0	2	0		1
FK588	11/26/2014	0	5	0		1
FK589	11/26/2014	0	5	0		1
FK590	11/26/2014	1	300	0		1
TOTAL		180.5	4128	21		73





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
11/26/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\112614_ML865_Daily_Surface_Sweep_Update.mxd

Date: Monday, 01 December 2014

DAILY SITE REPORT

Report Number: 014
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/ML865/ XU853	Mike Sample	10	FPM Geophysicist	FPM Site/ML865/ XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
Chris Fierro	Service Tech	Alamo tire repair / repair flat on backhoe

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **9** grids cleared today (**82** total grids completed to date)

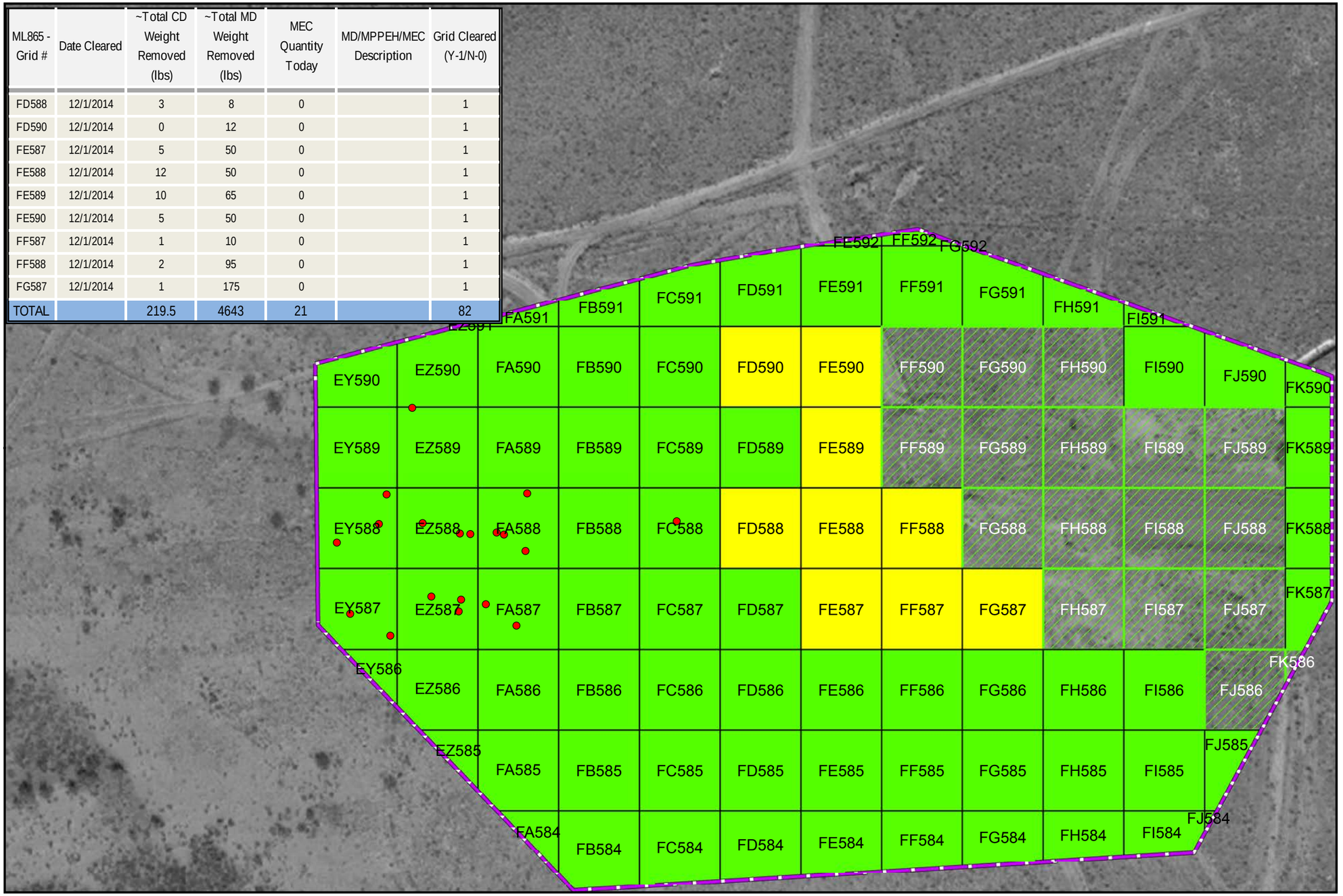
	· Began using mechanized heavy equipment to knock down brush for 858-G towed array data gathering in ML865 · Completed collection of ISO and inert seed items data in ML865 IVS · Continued soil sampling in multi-incremental decision units in XU853.
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Symptoms and treatment of allergic reactions / slips trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (9) grids in ML865 / (0) MEC/MPPEH located.
Next Day's Planned Activities:	1. Continue surface clearance in ML865 2. Begin collecting 858-G data in ML865 utilizing towed array 3. Continue soil sampling in multi-incremental decision units in XU853

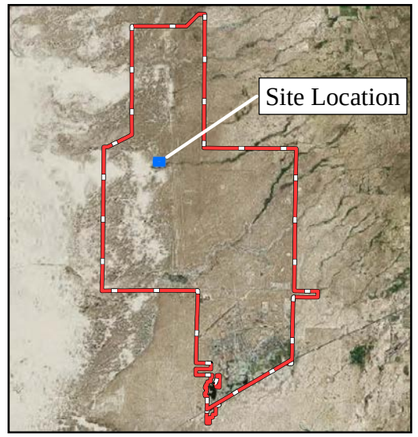
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — Date: 01 December 2014

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
FD588	12/1/2014	3	8	0		1
FD590	12/1/2014	0	12	0		1
FE587	12/1/2014	5	50	0		1
FE588	12/1/2014	12	50	0		1
FE589	12/1/2014	10	65	0		1
FE590	12/1/2014	5	50	0		1
FF587	12/1/2014	1	10	0		1
FF588	12/1/2014	2	95	0		1
FG587	12/1/2014	1	175	0		1
TOTAL		219.5	4643	21		82





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
12/01/2014

FPM Remediations, Inc.

Date: November 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\120114_ML865_Daily_Surface_Sweep_Update.mxd

Date: Tuesday, 02 December 2014

DAILY SITE REPORT

Report Number: 015
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/ML865/ XU853	Mike Sample	10	FPM Geophysicist	FPM Site/ML865/ XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **8** grids cleared today (**90** total grids completed to date)

Date: Tuesday, 02 December 2014

	· Continued utilizing mechanized heavy equipment to knock down brush for G-858 towed array data gathering in ML865 · Began G-858 towed array data collection in ML865 · Continued soil sampling in multi-incremental decision units in XU853 (4 of 6 completed to date).
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Importance of proper PPE / slips trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces / 5" rocket motor pieces **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (8) grids in ML865 / (0) MEC/MPPEH located.
Next Day's Planned Activities:	1. Continue surface clearance in ML865 2. Continue G-858 towed array data collection in ML865 3. Complete soil sampling in multi-incremental decision units in XU853

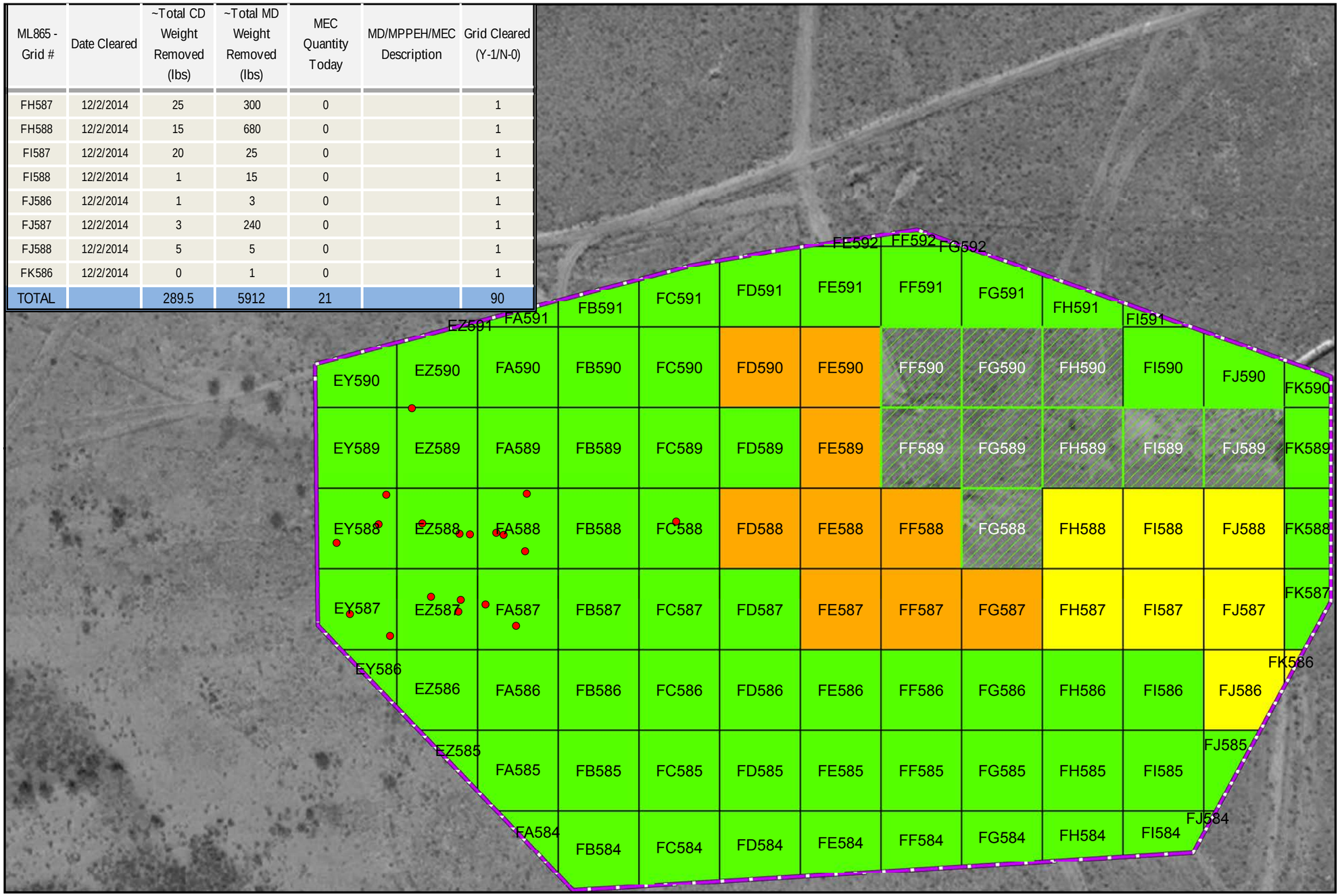
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

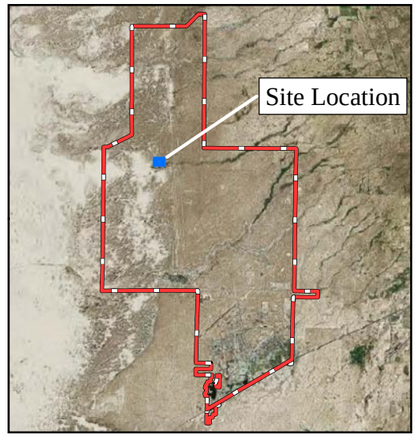
Signature

02 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
FH587	12/2/2014	25	300	0		1
FH588	12/2/2014	15	680	0		1
FI587	12/2/2014	20	25	0		1
FI588	12/2/2014	1	15	0		1
FJ586	12/2/2014	1	3	0		1
FJ587	12/2/2014	3	240	0		1
FJ588	12/2/2014	5	5	0		1
FK586	12/2/2014	0	1	0		1
TOTAL		289.5	5912	21		90





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
12/02/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

FPM Remediations, Inc.

Date: December 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\120214_ML865_Daily_Surface_Sweep_Update.mxd

Date: Wednesday, 03 December 2014

DAILY SITE REPORT

Report Number: 016
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/ML865/ XU853	Mike Sample	10	FPM Geophysicist	FPM Site/ML865/ XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **2** grids cleared today (**92** total grids completed to date)

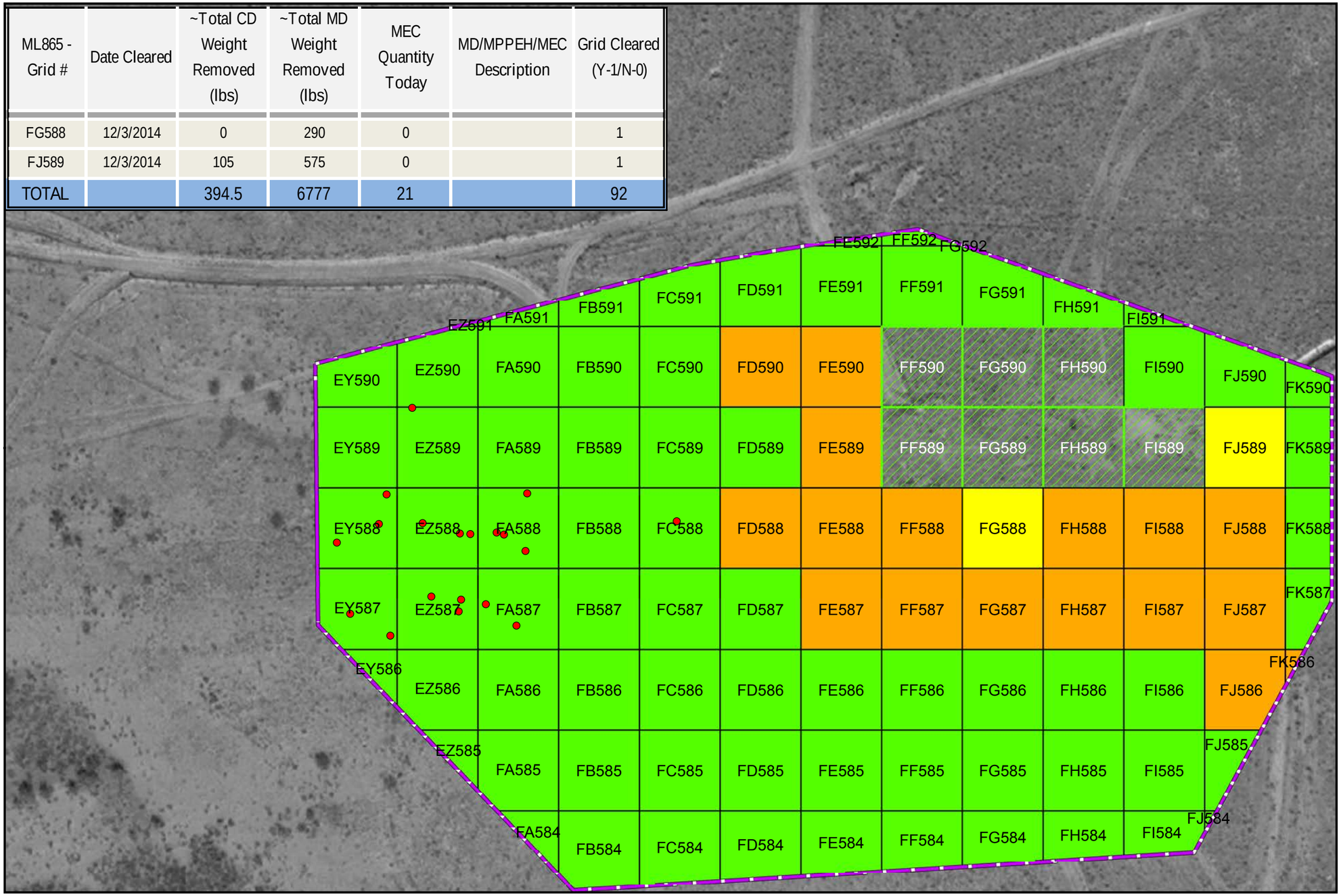
	· Completed surface clearance of a 50' area around the perimeter of ML865, to insure the safety of personnel and equipment during G-858 towed array operation. · Continued G-858 towed array data collection in ML865 · Completed soil sampling in multi-incremental decision units in XU853
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Avoiding back injuries/ how to avoid wind burn and sun burn.
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces / **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (2) grids in ML865 / (0) MEC/MPPEH located.
Next Day's Planned Activities:	1. Continue surface clearance in ML865 2. Continue G-858 towed array data collection in ML865 3. Begin marking (flagging) sub-grids using GPS in multi-incremental sampling decision units in XU854

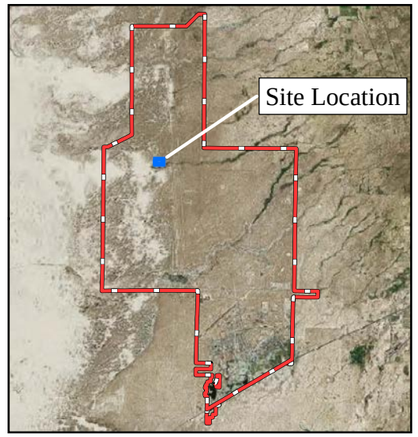
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 03 December 2014 (Date)

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
FG588	12/3/2014	0	290	0		1
FJ589	12/3/2014	105	575	0		1
TOTAL		394.5	6777	21		92





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
12/03/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N
W E
S

FPM Remediations, Inc.

Date: December 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\120214_ML865_Daily_Surface_Sweep_Update.mxd

Date: Thursday, 04 December 2014

DAILY SITE REPORT

Report Number: 017
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ML865
David Hugg	10	FPM UXO T3	FPM Site/ML865/ XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ML865/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Continued surface clearance of grids in area ML865; **7** grids cleared today (**99** total grids completed to date)

	· Continued G-858 towed array data collection in ML865 · Began marking (flagging) sub-grids using GPS in multi-incremental sampling decision units in XU854
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** How to safely move 55 gallon drums.
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces / 40mm, projectile pieces **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of (7) grids in ML865 / (0) MEC/MPPEH located.
Next Day's Planned Activities:	1. Continue surface clearance in ML865 grids added to determine extent of MEC/MPPEH 2. Begin surface clearance in SR864 3. Continue G-858 towed array data collection in ML865 4. Continue marking (flagging) sub-grids using GPS in multi-incremental sampling decision units in XU854

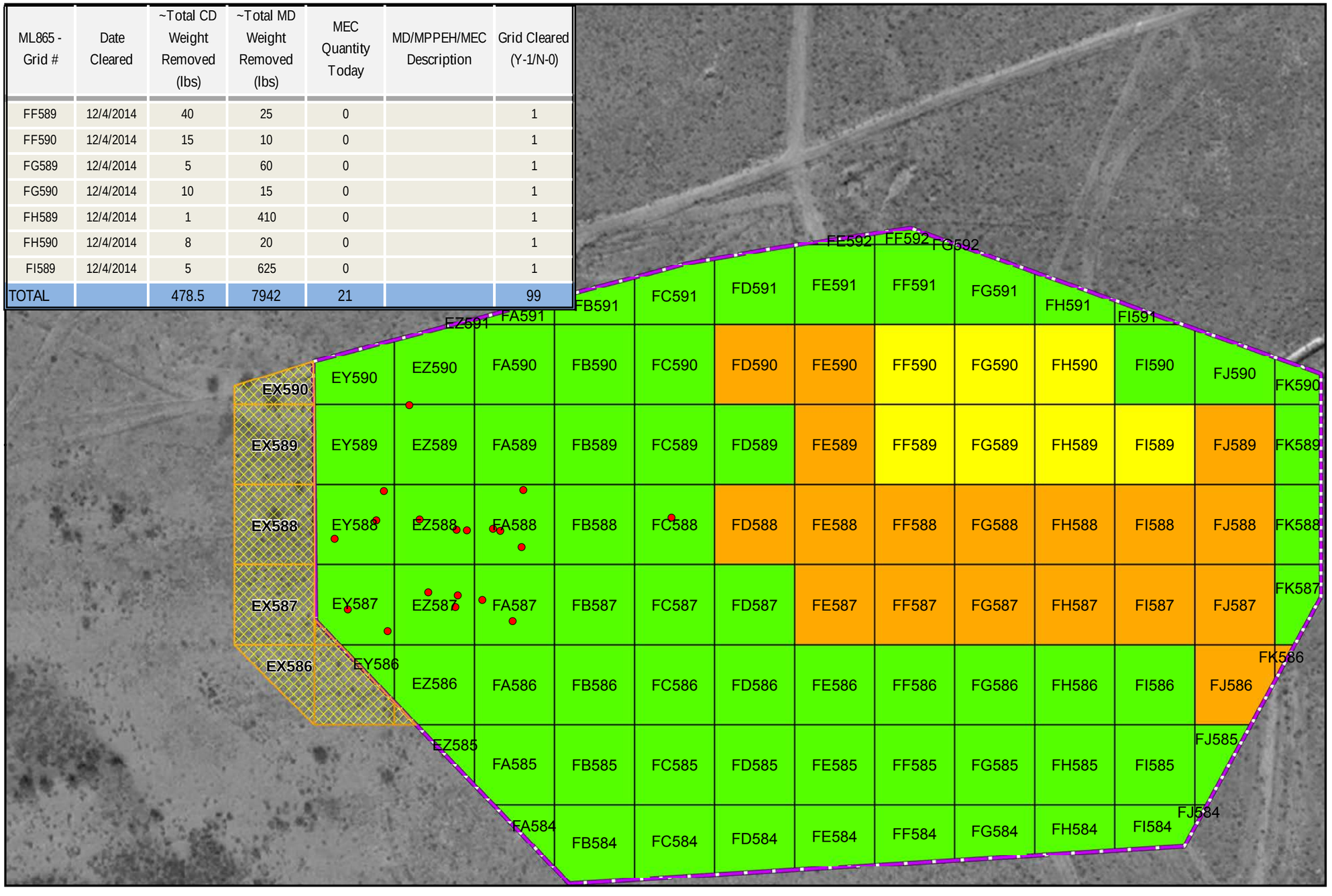
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

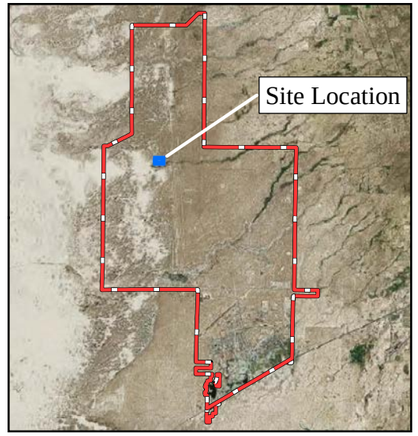
Signature

04 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
FF589	12/4/2014	40	25	0		1
FF590	12/4/2014	15	10	0		1
FG589	12/4/2014	5	60	0		1
FG590	12/4/2014	10	15	0		1
FH589	12/4/2014	1	410	0		1
FH590	12/4/2014	8	20	0		1
FI589	12/4/2014	5	625	0		1
TOTAL		478.5	7942	21		99





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- Newly added Grids/Area (1.05 acre)
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
12/04/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\120414_ML865_Daily_Surface_Sweep_Update4.mxd

Date: Friday, 05 December 2014

DAILY SITE REPORT

Report Number:	018
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ ML865/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ ML865/SR864
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU853/XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865/SR864				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)

Today's Field Operations

- Completed surface clearance in ML865 grids to include grids added to determine western extent of MEC/MPPEH (**104** total grids complete)(**0** MEC/MPPEH located today)

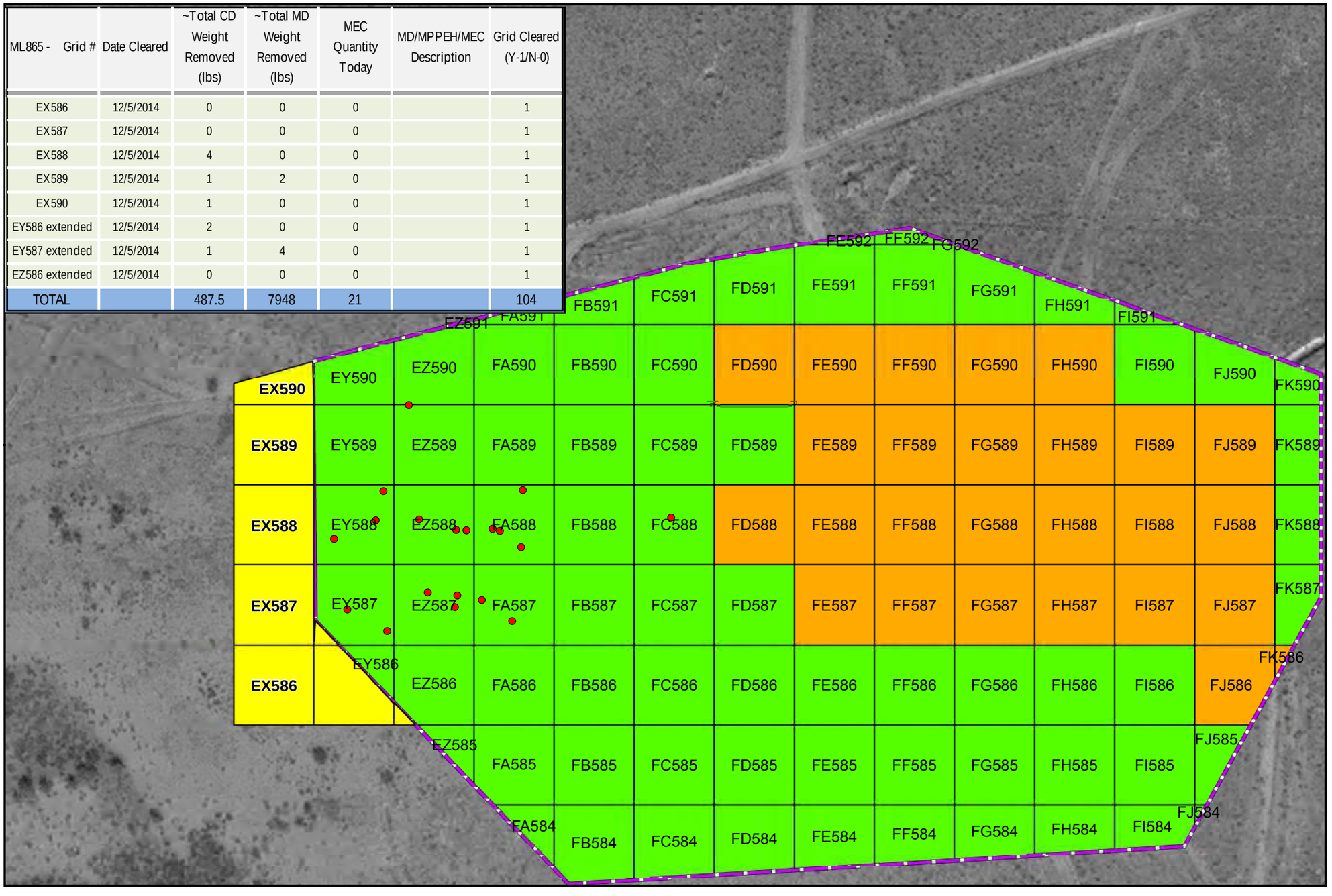
	· Continued G-858 towed array data collection in ML865 · Completed marking (flagging) sub-grids using GPS in current multi-incremental sampling decision units in XU854 · Began surface clearance in SR864; **13** grids completed today (**0** MEC/MPPEH located) · Began marking transects in XU853 using GPS
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 22 / Elec Blasting Caps – 44 / Det Cord(80g) – 450' / Boosters(1lb) - 18
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Venomous creatures in New Mexico / Importance of proper hours of sleep.
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces / 40mm, projectile pieces SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	Completed surface clearance in ML865.
Next Day's Planned Activities:	1. FPM team will conduct a demolition operation to verify there are no energetics in wax filled munitions found in ML865 2. Begin collecting EM61 data within IVS location in SR864 3. Continue marking transects in XU853 using GPS

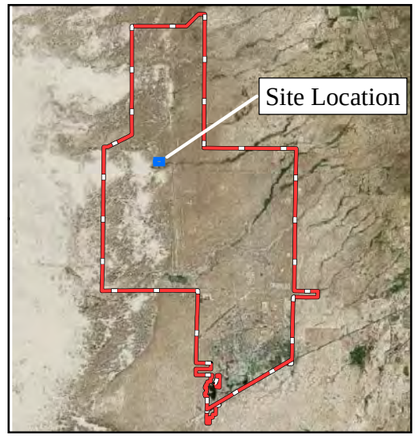
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — Date: 05 December 2014

George H. Vaughn, Sr. UXO Supervisor
Name / Title

ML865 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
EX586	12/5/2014	0	0	0		1
EX587	12/5/2014	0	0	0		1
EX588	12/5/2014	4	0	0		1
EX589	12/5/2014	1	2	0		1
EX590	12/5/2014	1	0	0		1
EY586 extended	12/5/2014	2	0	0		1
EY587 extended	12/5/2014	1	4	0		1
EZ586 extended	12/5/2014	0	0	0		1
TOTAL		487.5	7948	21		104





Key to Features

- MEC Location
- Roads
- Streams
- ML865 Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
ML865 MRS
12/05/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

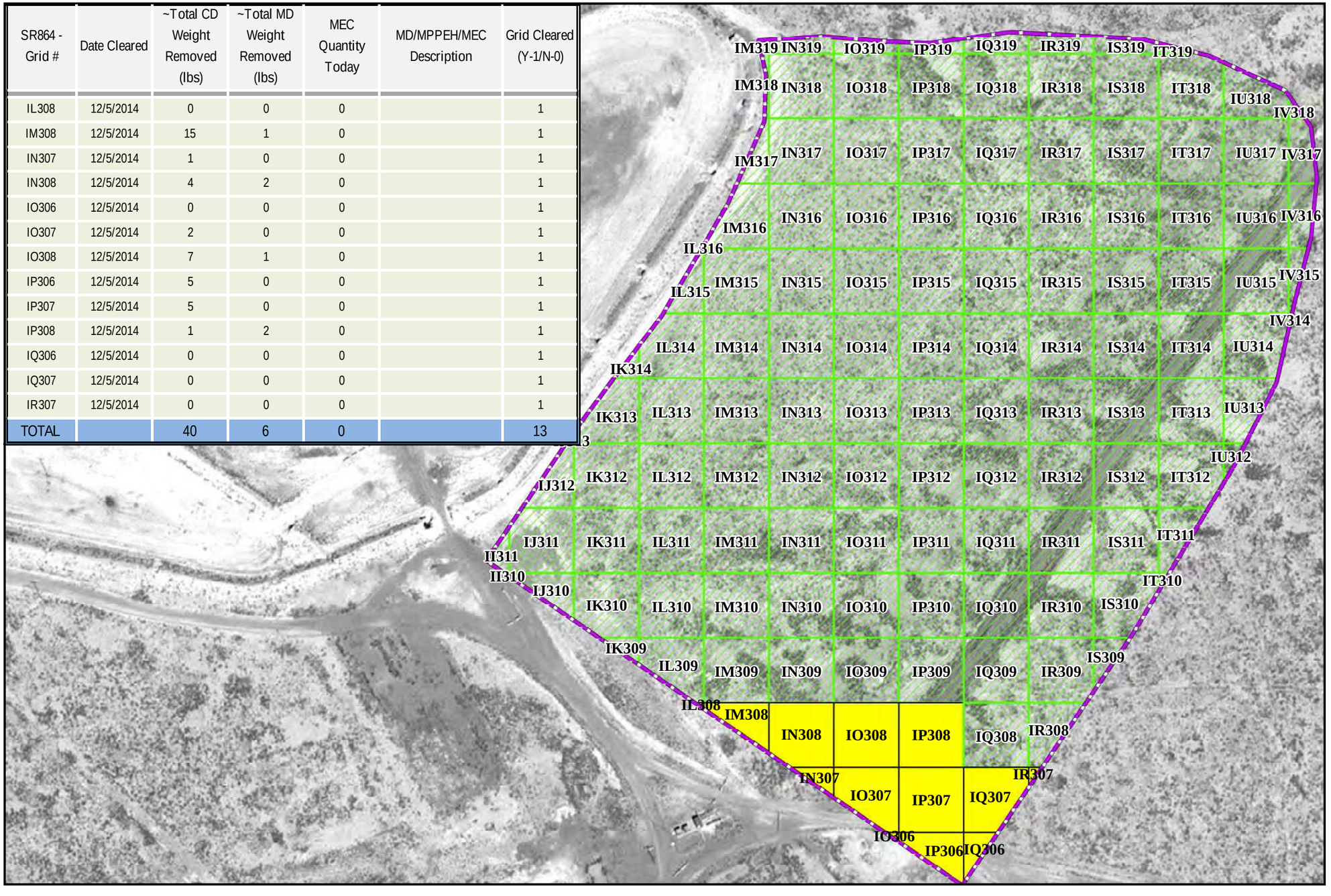
Feet
0 60 120 180 240 300

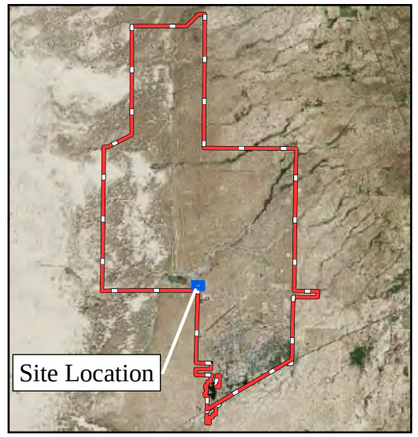
Meters
0 20 40 60 80 100

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\120514_ML865_Daily_Surface_Sweep_Update4.mxd

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
IL308	12/5/2014	0	0	0		1
IM308	12/5/2014	15	1	0		1
IN307	12/5/2014	1	0	0		1
IN308	12/5/2014	4	2	0		1
IO306	12/5/2014	0	0	0		1
IO307	12/5/2014	2	0	0		1
IO308	12/5/2014	7	1	0		1
IP306	12/5/2014	5	0	0		1
IP307	12/5/2014	5	0	0		1
IP308	12/5/2014	1	2	0		1
IQ306	12/5/2014	0	0	0		1
IQ307	12/5/2014	0	0	0		1
IR307	12/5/2014	0	0	0		1
TOTAL		40	6	0		13





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/05/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\120514_SR864_Daily_Surface_Sweep_Update.mxd

Date: Monday, 08 December 2014

DAILY SITE REPORT

Report Number: 019
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ ML865/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ ML865/SR864
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU853/XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865/SR864				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
Joe Silva	Mechanic	Blue Line Rental / repair loose oil filter on UTV 003

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	Email
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Program Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49 CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD flight	49 CES/CED	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS and UXOSO/UXOQCS)
Range Safety Officer (RSO) (UXOSO)

Today's Field Operations

- Completed demolition operation in ML865, all wax filled items verified to contain no energetics.

Date: Monday, 08 December 2014

	· Began EM61 towed array set up · Completed marking (flagging) **3** sub-grids using GPS in multi-incremental sampling decision units in XU854 · Continued surface clearance in SR864; **12** grids completed today (**0** MEC/MPPEH located) · Completed marking transects in XU853 using GPS
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Demolition procedures / 60A-1-1-31.
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, practice projectile pieces / 105mm practice projectile pieces SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance of grids in SR864, 12 grids completed (25 total to date)
Next Day's Planned Activities:	1. Continue surface clearance in SR864 2. Continue G-858 towed array data collection in ML865 3. Begin soil sampling in in multi-incremental decision unit in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

08 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 08 December 2014

Placement of 32g perforators to verify and attempt to breakup wax filler in 75mm and 105mm projectiles located in ML865. Pictured from left to right; Cecilia Flores and Nic Bolinger. Photo was taken in ML865 facing South.

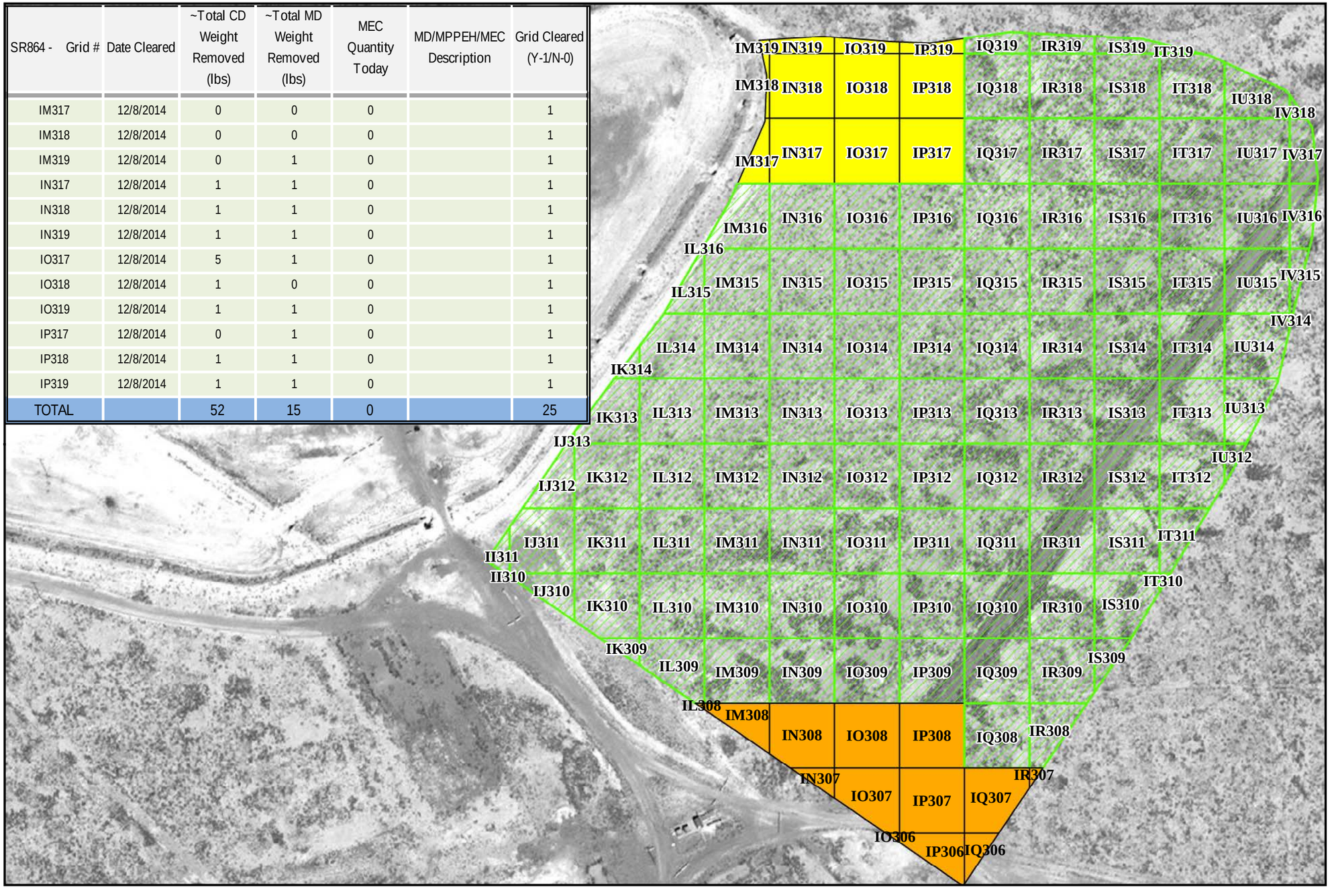
The wax filler inside a 75mm projectile. Photo was taken in ML865.

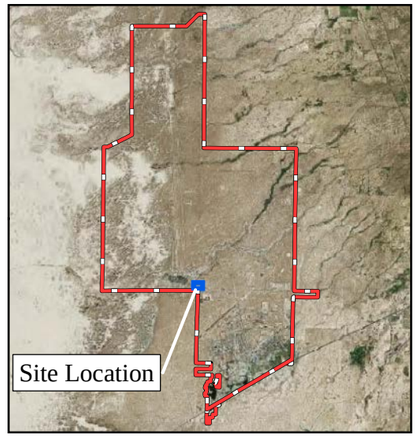
Holloman AFB PBR (FA8903-13-C-0008) 08 December 2014

Mike Sample locating and marking transect locations. Photo was taken in XU853 facing West.

Kyrian Onyeukwu setting up EM61 towed array. Photo was taken in the gravel area outside building 1266 facing South.

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
IM317	12/8/2014	0	0	0		1
IM318	12/8/2014	0	0	0		1
IM319	12/8/2014	0	1	0		1
IN317	12/8/2014	1	1	0		1
IN318	12/8/2014	1	1	0		1
IN319	12/8/2014	1	1	0		1
IO317	12/8/2014	5	1	0		1
IO318	12/8/2014	1	0	0		1
IO319	12/8/2014	1	1	0		1
IP317	12/8/2014	0	1	0		1
IP318	12/8/2014	1	1	0		1
IP319	12/8/2014	1	1	0		1
TOTAL		52	15	0		25





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/08/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\120814_SR864_Daily_Surface_Sweep_Update.mxd

Date: Tuesday, 09 December 2014

DAILY SITE REPORT

Report Number: 020
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU853/XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Began sorting MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Continued surface clearance in SR864, 13 grids completed today (38 grids completed total)

	· Began soil sampling in incremental sampling decision units in XU854 · Continued G-858 towed array data collection in ML865
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Eye injury prevention and treatment
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance of grids in SR864, 13 grids completed (38 total to date)
Next Day's Planned Activities:	1. Continue surface clearance in SR864 2. Continue G-858 towed array data collection in ML865 3. Begin using GPS to mark transects in XU854

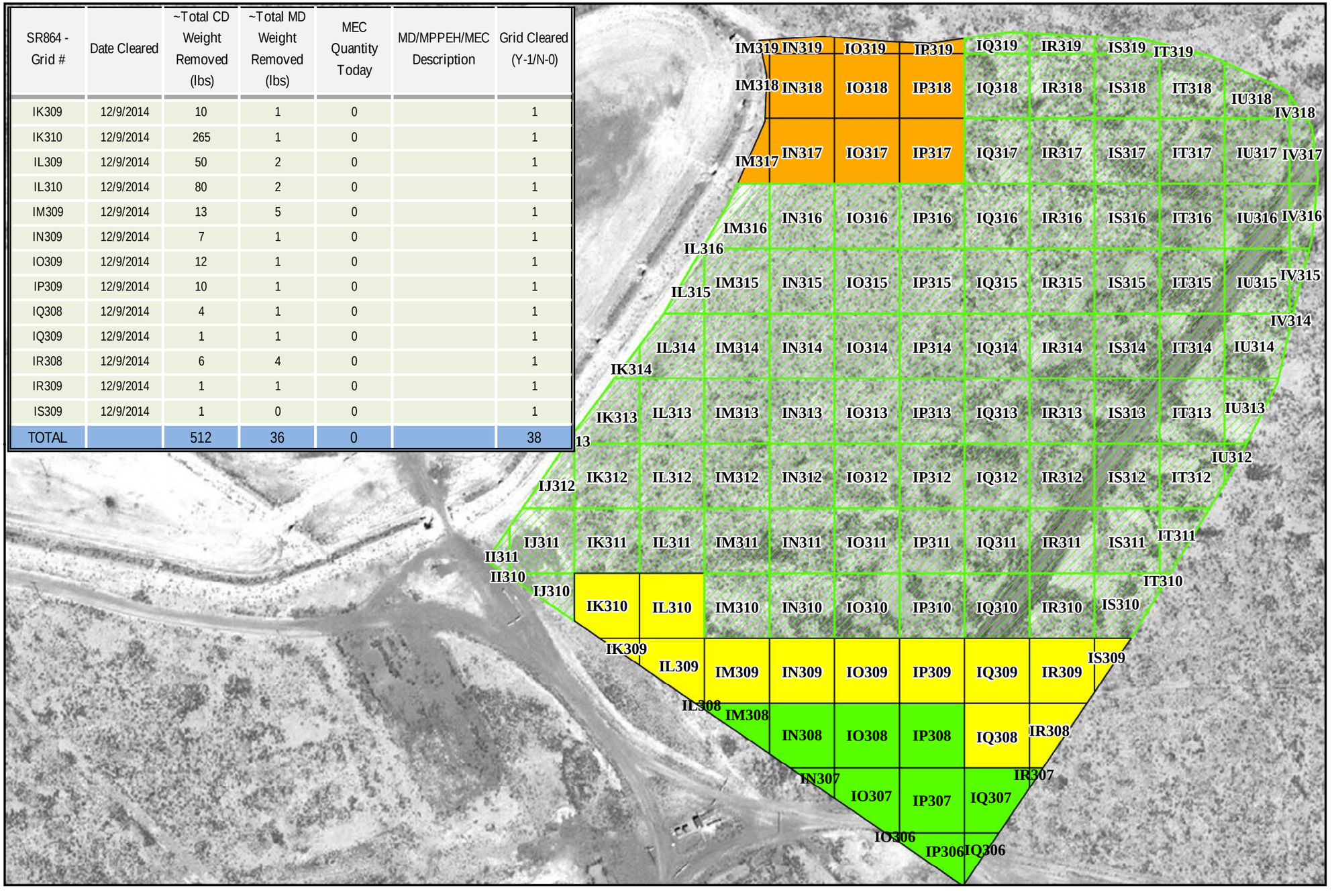
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

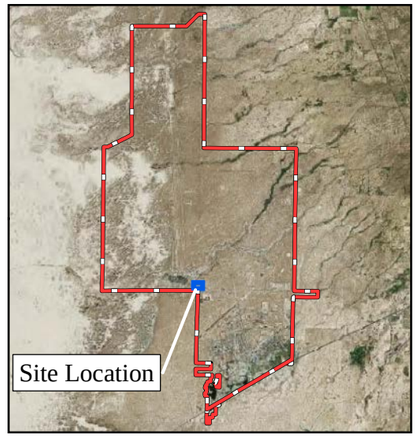
Signature

09 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
IK309	12/9/2014	10	1	0		1
IK310	12/9/2014	265	1	0		1
IL309	12/9/2014	50	2	0		1
IL310	12/9/2014	80	2	0		1
IM309	12/9/2014	13	5	0		1
IN309	12/9/2014	7	1	0		1
IO309	12/9/2014	12	1	0		1
IP309	12/9/2014	10	1	0		1
IQ308	12/9/2014	4	1	0		1
IQ309	12/9/2014	1	1	0		1
IR308	12/9/2014	6	4	0		1
IR309	12/9/2014	1	1	0		1
IS309	12/9/2014	1	0	0		1
TOTAL		512	36	0		38





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/09/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\120914_SR864_Daily_Surface_Sweep_Update.mxd

Date: Wednesday, 10 December 2014

DAILY SITE REPORT

Report Number:	021
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/ML865	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864				
Total Hours	**130**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Continued surface clearance in SR864, **18** grids completed today (**56** grids completed total)
- Completed G-858 towed array data collection in ML865

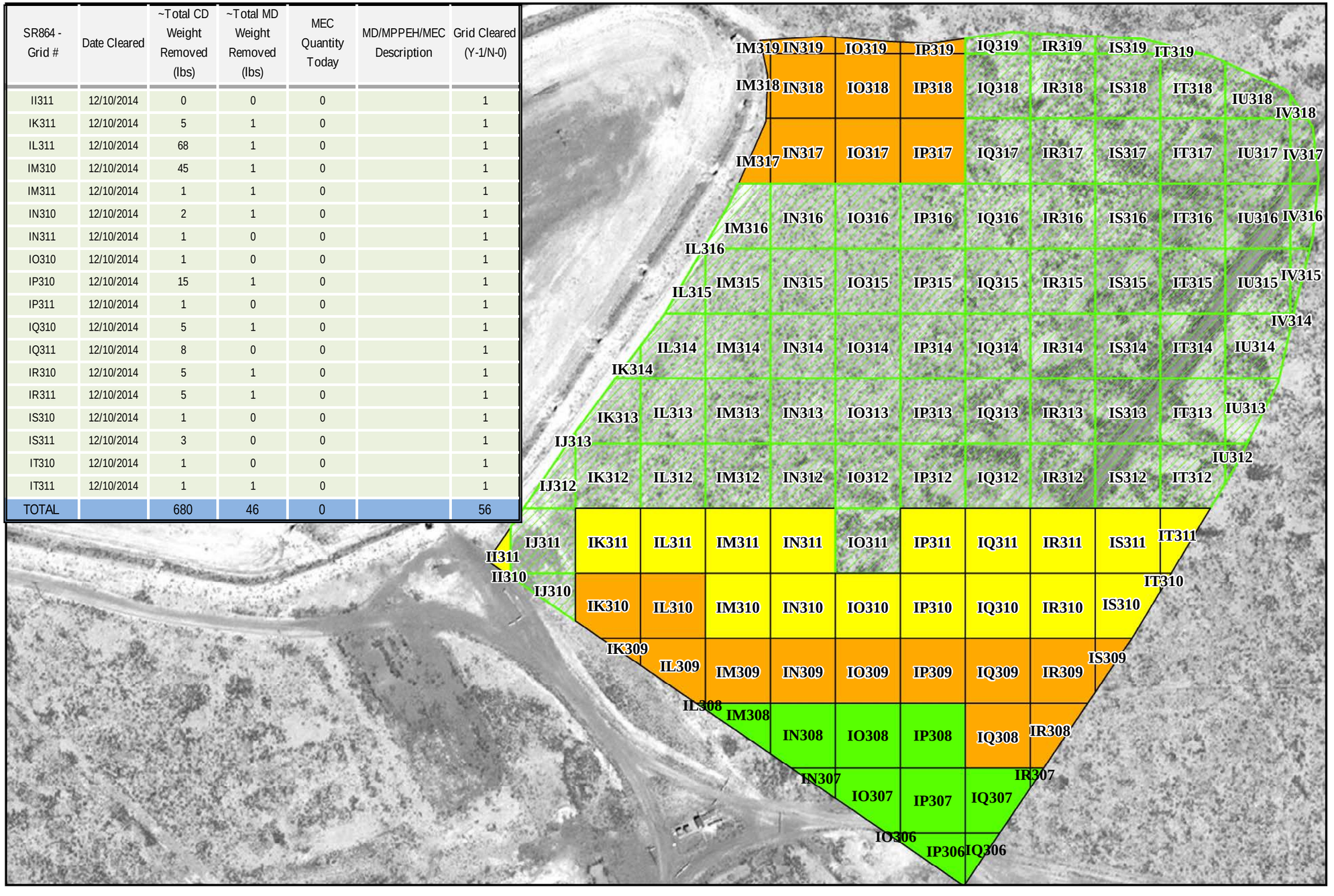
	· Began utilizing GPS to mark transects in XU854
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Importance of hydration
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance of grids in SR864, 18 grids completed (56 total to date)
Next Day's Planned Activities:	1. Continue surface clearance in SR864 2. Begin utilizing EM61 towed array to collect IVS data in SR864 3. Continue utilizing GPS to mark transects in XU854 4. Continue collecting soil samples in incremental decision units in XU854

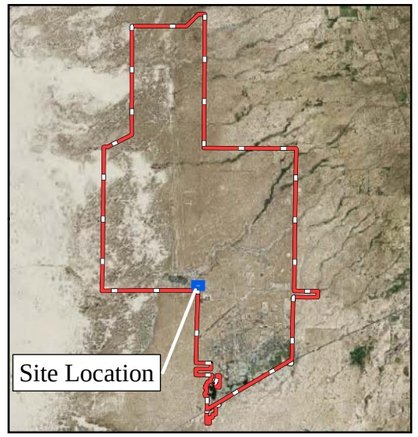
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 10 December 2014 (Date)

George H. Vaughn, Sr. UXO Supervisor
Name / Title

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
II311	12/10/2014	0	0	0		1
IK311	12/10/2014	5	1	0		1
IL311	12/10/2014	68	1	0		1
IM310	12/10/2014	45	1	0		1
IM311	12/10/2014	1	1	0		1
IN310	12/10/2014	2	1	0		1
IN311	12/10/2014	1	0	0		1
IO310	12/10/2014	1	0	0		1
IP310	12/10/2014	15	1	0		1
IP311	12/10/2014	1	0	0		1
IQ310	12/10/2014	5	1	0		1
IQ311	12/10/2014	8	0	0		1
IR310	12/10/2014	5	1	0		1
IR311	12/10/2014	5	1	0		1
IS310	12/10/2014	1	0	0		1
IS311	12/10/2014	3	0	0		1
IT310	12/10/2014	1	0	0		1
IT311	12/10/2014	1	1	0		1
TOTAL		680	46	0		56





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/10/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\121014_SR864_Daily_Surface_Sweep_Update.mxd

Date: Thursday, 11 December 2014

DAILY SITE REPORT

Report Number:	022
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/ML865/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/ML865/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ SR864
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Continued surface clearance in SR864, **20** grids completed today (**76** grids completed total)

	· Utilized EM61 towed array to collect IVS data in SR864 · Continued collecting soil samples in incremental decision units in XU854
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (4), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Identifying workplace hazards
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance of grids in SR864, 20 grids completed (76 total to date)
Next Day's Planned Activities:	1. Continue surface clearance in SR864 2. Begin IVS setup for EM61 towed array in SR864 3. Continue utilizing GPS to mark transects in XU854

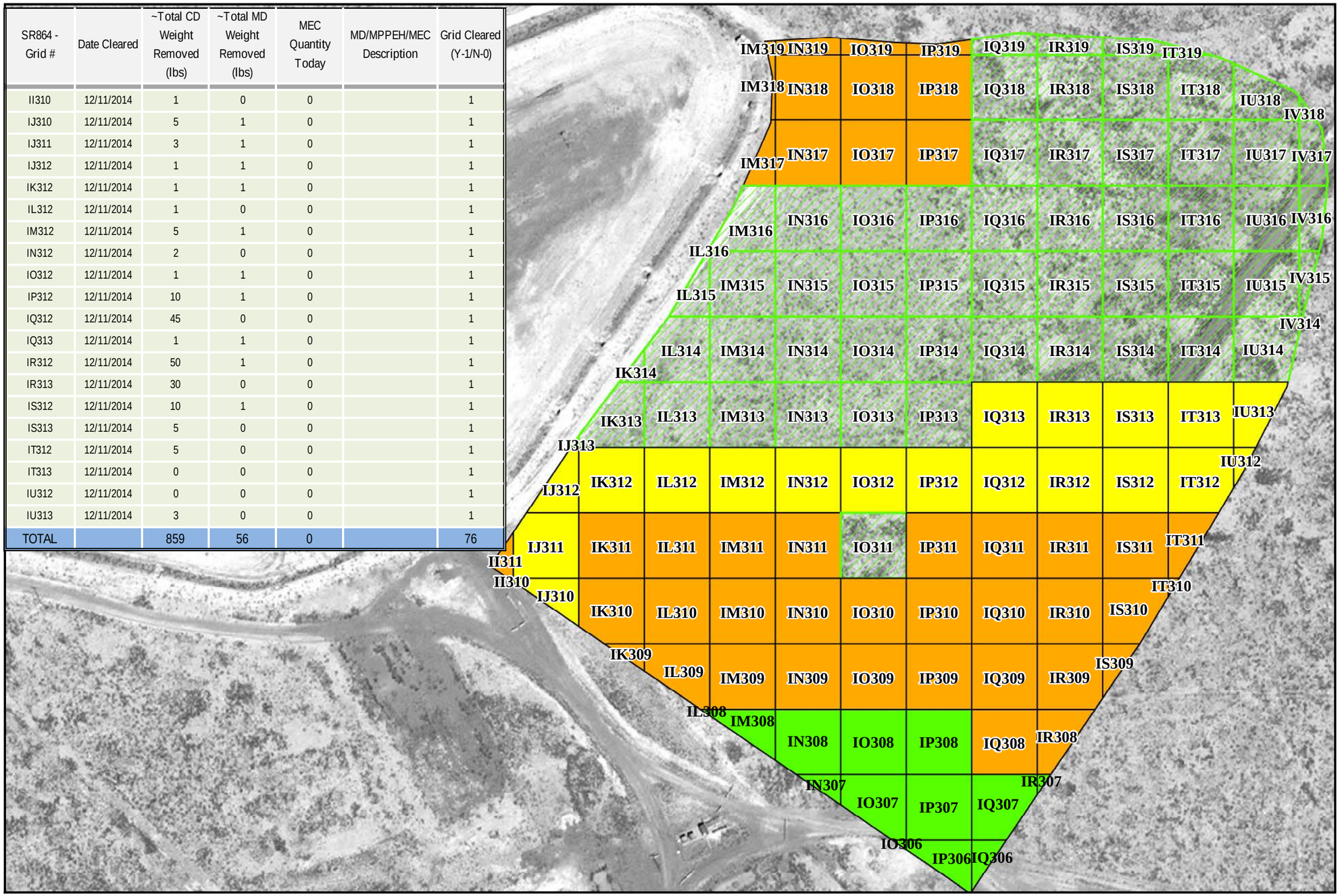
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

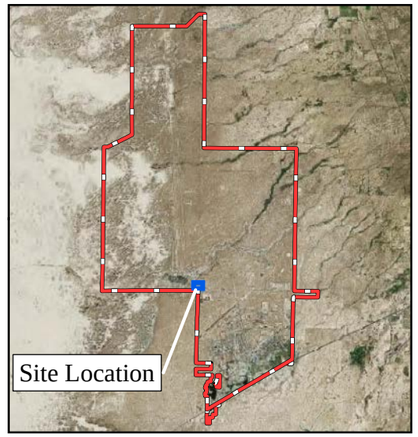
Signature

11 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
II310	12/11/2014	1	0	0		1
IJ310	12/11/2014	5	1	0		1
IJ311	12/11/2014	3	1	0		1
IJ312	12/11/2014	1	1	0		1
IK312	12/11/2014	1	1	0		1
IL312	12/11/2014	1	0	0		1
IM312	12/11/2014	5	1	0		1
IN312	12/11/2014	2	0	0		1
IO312	12/11/2014	1	1	0		1
IP312	12/11/2014	10	1	0		1
IQ312	12/11/2014	45	0	0		1
IQ313	12/11/2014	1	1	0		1
IR312	12/11/2014	50	1	0		1
IR313	12/11/2014	30	0	0		1
IS312	12/11/2014	10	1	0		1
IS313	12/11/2014	5	0	0		1
IT312	12/11/2014	5	0	0		1
IT313	12/11/2014	0	0	0		1
IU312	12/11/2014	0	0	0		1
IU313	12/11/2014	3	0	0		1
TOTAL		859	56	0		76





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/11/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

FPM Remediations, Inc.

Date: December 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\121114_SR864_Daily_Surface_Sweep_Update.mxd

Date: Friday, 12 December 2014

DAILY SITE REPORT

Report Number:	023
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ SR864
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Continued surface clearance in SR864, **20** grids completed today (**96** grids completed total)

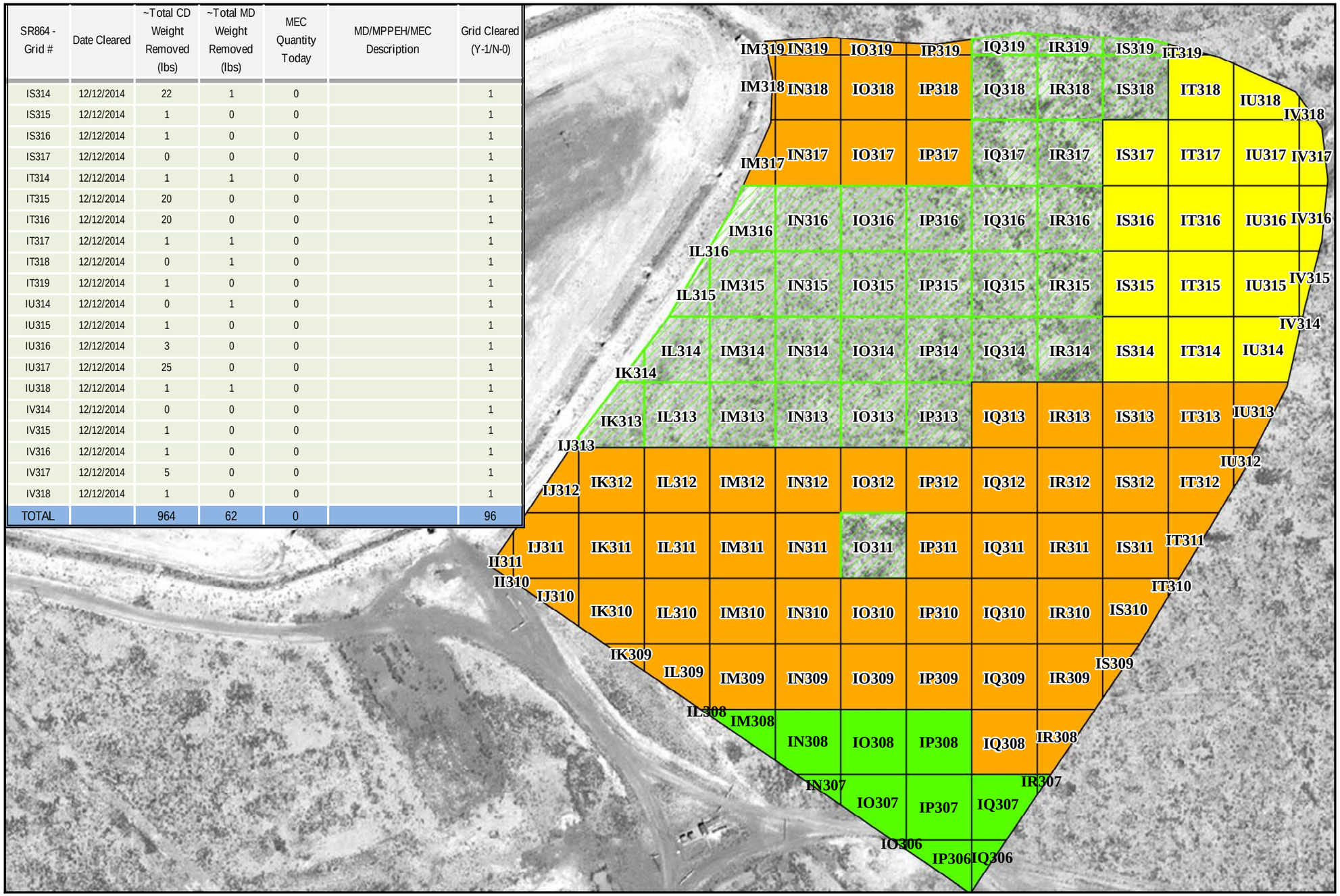
	· Completed IVS setup for EM61 towed array area in SR864 · Completed marking transects in XU854
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Heavy equipment operation safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance of grids in SR864, 20 grids completed (76 total to date)
Next Day's Planned Activities:	1. Continue surface clearance in SR864 2. Begin collecting data in SR864, utilizing EM61 towed array 3. Continue soil sampling in incremental sampling decision units in XU854

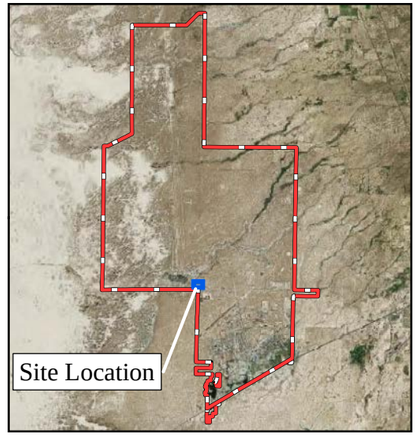
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 12 December 2014 (Date)

George H. Vaughn, Sr. UXO Supervisor
Name / Title

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
IS314	12/12/2014	22	1	0		1
IS315	12/12/2014	1	0	0		1
IS316	12/12/2014	1	0	0		1
IS317	12/12/2014	0	0	0		1
IT314	12/12/2014	1	1	0		1
IT315	12/12/2014	20	0	0		1
IT316	12/12/2014	20	0	0		1
IT317	12/12/2014	1	1	0		1
IT318	12/12/2014	0	1	0		1
IT319	12/12/2014	1	0	0		1
IU314	12/12/2014	0	1	0		1
IU315	12/12/2014	1	0	0		1
IU316	12/12/2014	3	0	0		1
IU317	12/12/2014	25	0	0		1
IU318	12/12/2014	1	1	0		1
IV314	12/12/2014	0	0	0		1
IV315	12/12/2014	1	0	0		1
IV316	12/12/2014	1	0	0		1
IV317	12/12/2014	5	0	0		1
IV318	12/12/2014	1	0	0		1
TOTAL		964	62	0		96





Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/12/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N
W E
S

FPM Remediations, Inc.

Date: December 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\121214_SR864_Daily_Surface_Sweep_Update.mxd

FPM Remediations, Inc.

Date: Monday, 15 December 2014

DAILY SITE REPORT

Report Number:	024
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ SR864
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Continued surface clearance in SR864, **21** grids completed today (**117** grids completed total)

	· Began data collection in SR864 utilizing EM61 towed array · Continued soil sampling in incremental decisions units in XU854
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Avoiding complacency
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Continued surface clearance of grids in SR864, 21 grids completed (117 total to date)
Next Day's Planned Activities:	1. Complete surface clearance in SR864 2. Continue collecting data in SR864, utilizing EM61 towed array 3. Continue soil sampling in incremental sampling decision units in XU854 4. Begin surface clearance of transects in XU853

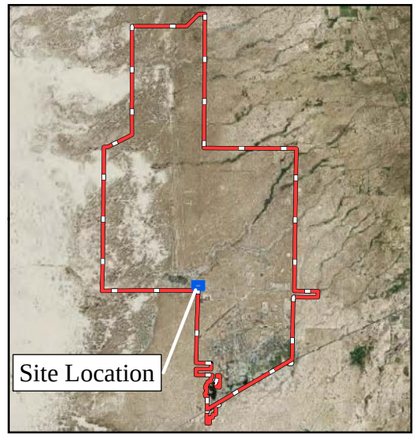
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

15 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
IO311	12/15/2014	110	0	0		1
IO313	12/15/2014	0	0	0		1
IO314	12/15/2014	0	0	0		1
IP313	12/15/2014	1	0	0		1
IP314	12/15/2014	1	1	0		1
IP315	12/15/2014	2	0	0		1
IP316	12/15/2014	0	0	0		1
IQ314	12/15/2014	0	0	0		1
IQ315	12/15/2014	1	0	0		1
IQ316	12/15/2014	5	0	0		1
IQ317	12/15/2014	1	1	0		1
IQ318	12/15/2014	0	0	0		1
IQ319	21/15/2014	0	0	0		1
IR314	12/15/2014	1	0	0		1
IR315	12/15/2014	8	1	0		1
IR316	12/15/2014	1	1	0		1
IR317	12/15/2014	1	1	0		1
IR318	12/15/2014	0	2	0		1
IR319	12/15/2014	0	0	0		1
IS318	12/15/2014	0	0	0		1
IS319	12/15/2014	1	0	0		1
TOTAL		1097	69	0		117



Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/15/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\121514_SR864_Daily_Surface_Sweep_Update.mxd

FPM Remediations, Inc.

Date: Tuesday, 16 December 2014

DAILY SITE REPORT

Report Number: 025
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ SR864
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	Email
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Program Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49 CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD flight	49 CES/CED	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Completed surface clearance in SR864, **17** grids completed today (**134** grids completed total)

	· Continued data collection in SR864 utilizing EM61 towed array · Continued soil sampling in incremental decisions units in XU854 · Began surface clearance of transects in XU853
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 38 / Det Cord(80g) – 300' / Boosters(1lb) - 13
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Near miss reporting
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** UXO – (1) M18, Smoke Grenade w/impinged primer / DMM – (1) M18, Smoke Grenade w/safety pin still installed **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings **Daily MEC/UXO Discussion:** General UXO Safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of grids in SR864, 17 grids completed (134 total to date) 2. (2) MEC items located in SR864. As required in the approved ESS, FPM will provide security for the MEC items until disposal is complete. Disposal operations are scheduled for Wednesday 17 December 2014 in area SR864.
Next Day's Planned Activities:	1. Disposal operation for MEC items located in SR864 2. Begin exploratory subsurface clearance in ML865 in order to further characterize site 3. Continue collecting data in SR864, utilizing EM61 towed array 4. Complete soil sampling in incremental sampling decision units in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — Date: 16 December 2014

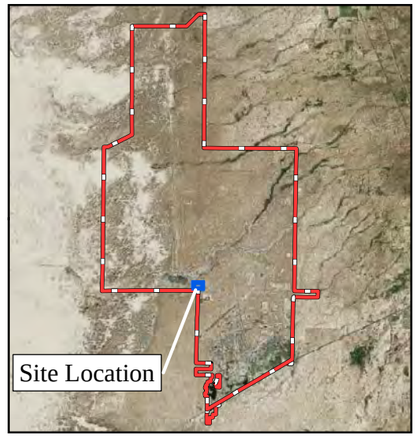
George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 16 December 2014

M18, smoke grenade with impinged primer located in area SR864, grid IM315. Photo was taken in area SR864.

M18, smoke grenade with safety pin still installed located in area SR864, grid IM315. Photo was taken in area SR864.

SR864 - Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
IJ313	12/16/2014	0	0	0		1
IK313	12/16/2014	1	1	0		1
IK314	12/16/2014	0	0	0		1
IL313	12/16/2014	1	0	0		1
IL314	12/16/2014	0	1	0		1
IL315	12/16/2014	0	0	0		1
IL316	12/16/2014	0	0	0		1
IM313	12/16/2014	1	1	0		1
IM314	12/16/2014	1	1	0		1
IM315	12/16/2014	1	1	2	M18, Smoke grenades	1
IM316	12/16/2014	1	1	0		1
IN313	12/16/2014	1	0	0		1
IN314	12/16/2014	0	0	0		1
IN315	12/16/2014	0	1	0		1
IN316	12/16/2014	1	1	0		1
IO315	12/16/2014	1	0	0		1
IO316	12/16/2014	0	0	0		1
TOTAL		1106	77	2		134



Key to Features

- MEC Located
- Roads
- Streams
- RR869A Boundary
- RI Grids Completed (Today)
- RI Grids Completed (This Week)
- RI Grids Completed (Project)
- RI Grids Brush-Cleared
- RI Grids Staked
- Wetlands
- Installation Boundary

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

SURFACE SWEEPS

Daily Update
SR864 MRS
12/16/2014

FPM Remediations, Inc.

Date: December 2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 90 180 270 360 450

Meters
0 30 60 90 120 150

N W E S

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\121614_SR864_Daily_Surface_Sweep_Update.mxd

FPM Remediations, Inc.

Date: Wednesday, 17 December 2014

DAILY SITE REPORT

Report Number: 026
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ML865	Jack Connor	10	FPM UXO T2 (night watch	FPM Site/ SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864/ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864/ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864/ML865
David Hugg	10	FPM UXO T3	FPM Site/XU854/SR864	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864/ML865
Ivan Westrick	10	FPM UXO T2	FPM Site/SR864/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ SR864/ML865
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	Email
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Program Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49 CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD flight	49 CES/CED	Email

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)
Range Safety Officer (UXOSO)

Today's Field Operations

- Completed disposal operation for (2) MEC items in SR864

	· Continued data collection in SR864 utilizing EM61 towed array · Continued soil sampling in incremental decisions units in XU854 · Began exploratory subsurface clearance in ML865 in order to further characterize site
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Disposal procedures and safety precautions
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 – M18, smoke grenade pieces / expended small arms casings ML865 – 75mm, projectile pieces / 105mm, projectile pieces / M48, projectile fuze pieces **Daily MEC/UXO Discussion:** M18, smoke grenade
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed disposal operation for (2) MEC items in SR864
Next Day's Planned Activities:	1. Continue exploratory subsurface clearance in ML865 in order to further characterize site 2. Continue collecting data in SR864, utilizing EM61 towed array 3. Complete soil sampling in incremental sampling decision units in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 17 December 2014 (Date)

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 17 December 2014

Electric blasting cap check out. Pictured from back to front; Ivan Westrick and Nic Bolinger. Photo was taken in SR864 facing Northwest.

(2) M18, smoke grenades ready for disposal utilizing a 1lb booster initiated by detonating cord. Photo was taken in SR864.

Date: Thursday, 18 December 2014

DAILY SITE REPORT

Report Number:	027
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ML865	Jack Connor	10	FPM UXO T2	FPM Site/ ML865
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ML865	Cecilia Flores	10	FPM UXO T2	FPM Site/ ML865
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/ ML865
Loran Poindexter	10	FPM UXO T3	FPM Site/ML865	Nic Bolinger	10	FPM UXO T1	FPM Site/ ML865
David Hugg	10	FPM UXO T3	FPM Site/XU854/SR864	Mike Sample	10	FPM Geophysicist	FPM Site/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ivan Westrick	10	FPM UXO T2	FPM Site/ML865	Jeff Hackworth	8	FPM MMRP Manager	FPM Site/ SR864/ML865
Total Hours	**138**						
Total Site Personnel	**14**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Sorted MDAS into 55 gal drums (SUXOS & UXOQCS)

Today's Field Operations

- Continued data collection in SR864 utilizing EM61 towed array

	· Completed soil sampling in incremental decisions units in XU854 · Completed exploratory subsurface clearance in ML865 in order to further characterize site
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Travel during the Holidays
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** ML865 – 75mm, projectile pieces / 105mm, projectile pieces / **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed exploratory subsurface clearance in ML865 in order to further characterize site
Next Day's Planned Activities:	1. Site/connex/equipment cleanup for Holiday Demob 2. Continue EM61 towed array data collection in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

18 December 2014
Date

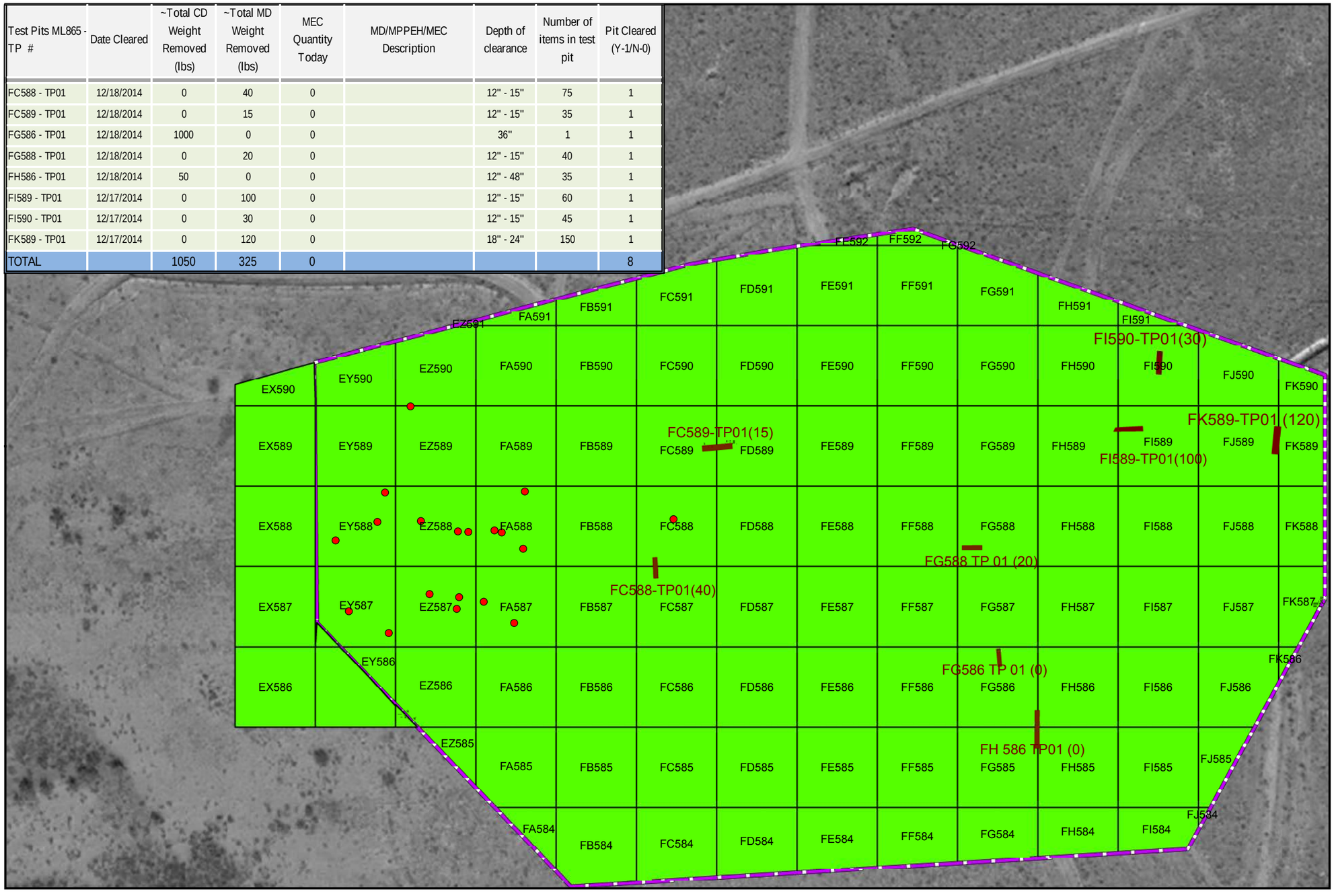
George H. Vaughn, Sr. UXO Supervisor
Name / Title

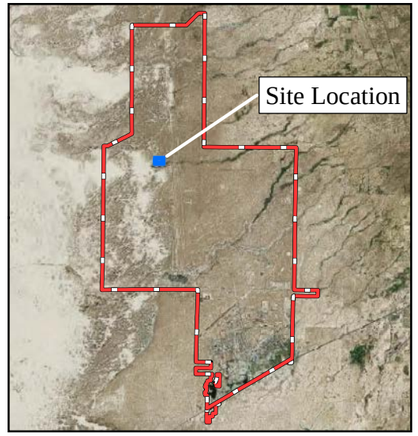
Holloman AFB PBR (FA8903-13-C-0008) 18 December 2014

EM61 towed array data collection. Pictured in photo is Boban Stojanovic. Photo was taken in SR864 facing Southeast.

Exploratory subsurface clearance in ML865. Pictured from left to right; Paul Hackworth, Jack Connor, Ray Lunbeck and Nic Bolinger. Photo was taken in ML865 facing Northeast.

Test Pits ML865 - TP #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Depth of clearance	Number of items in test pit	Pit Cleared (Y-1/N-0)
FC588 - TP01	12/18/2014	0	40	0		12" - 15"	75	1
FC589 - TP01	12/18/2014	0	15	0		12" - 15"	35	1
FG586 - TP01	12/18/2014	1000	0	0		36"	1	1
FG588 - TP01	12/18/2014	0	20	0		12" - 15"	40	1
FH586 - TP01	12/18/2014	50	0	0		12" - 48"	35	1
FI589 - TP01	12/17/2014	0	100	0		12" - 15"	60	1
FI590 - TP01	12/17/2014	0	30	0		12" - 15"	45	1
FK589 - TP01	12/17/2014	0	120	0		18" - 24"	150	1
TOTAL		1050	325	0				8





Key to Features

- MEC Location (Surface Clearance)
- Test Pit Location / Area
- RI Grids Completed (Surface Clearance)
- ML865 Boundary
- Installation Boundary

FK589-TP01 (20): Test Pit ID and MD Removed in lbs

Military Munitions Response Program
Remedial Investigation
ML865 Ballistics Rain Field

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

EXPLORATORY INTRUSIVE ACTIVITY

Daily Update
ML865 MRS
12/18/2014

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 60 120 180 240 300

Meters
0 20 40 60 80 100

N W E S

FPM Remediations, Inc.

Date: December 2014

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\ml865\121814_ML865_Daily_Surface_Sweep_Update.mxd

Date: Friday, 19 December 2014

DAILY SITE REPORT

Report Number:	028
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864	Jack Connor	5	FPM UXO T2	FPM Site bldg. 1266
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	5	FPM UXO T2	FPM Site bldg. 1266
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	5	FPM UXO T1	FPM Site bldg. 1266
Loran Poindexter	5	FPM UXO T3	FPM Site bldg. 1266	Nic Bolinger	5	FPM UXO T1	FPM Site bldg. 1266
David Hugg	10	FPM UXO T3	FPM Site bldg. 1266	Mike Sample	8	FPM Geophysicist	Demobilization
Ray Lunbeck	5	FPM UXO T2	FPM Site bldg. 1266	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ivan Westrick	5	FPM UXO T2	FPM Site bldg. 1266				
Total Hours	**93**						
Total Site Personnel	**13**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Continued data collection in SR864 utilizing EM61 towed array
- Site/connex/equipment cleanup for Holiday Demob

Date: Friday, 19 December 2014

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Travel during the Holidays
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed site/connex/equipment cleanup for Holiday Demob
Next Day's Planned Activities:	1. Demobilization for two weeks during holiday season

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

19 December 2014
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 6 January 2015

DAILY SITE REPORT

Report Number:	029
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/XU853	Jack Connor	10	FPM UXO T2	FPM Site/XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/XU853
David Hugg	0	FPM UXO T3	Delayed mobilization	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853				
Total Hours	**100**						
Total Site Personnel	**10**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
Jose Silva	Mechanic	Blue Line Rental / service backhoe

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

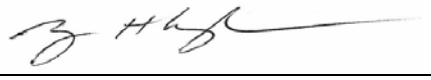
Today's Field Operations

- Setup EM61 towed array for data collection in SR864
- Completed surface clearance of transects 2 and 3 in XU853

Date: Tuesday, 6 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Cold stress and symptoms of cold stress
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** 5.56 blanks (expended)(1lb total) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of transects 2 and 3 in XU853 / 70lbs of CD collected / 1lb of MD collected
Next Day's Planned Activities:	1. Continue EM61 towed array data collection in SR864 2. Complete surface clearance of transects 1 and 4 in XU853 3. Begin surface clearance of transects in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above



Signature

6 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Wednesday, 7 January 2015

DAILY SITE REPORT

Report Number: 030
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/XU853	Jack Connor	10	FPM UXO T2	FPM Site/XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/XU853
David Hugg	10	FPM UXO T3	Delayed mobilization	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853				
Total Hours	**110**						
Total Site Personnel	**11**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

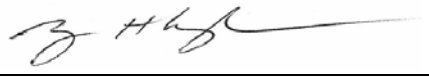
Today's Field Operations

- Repair technical problems with EM61 towed array completed setup for data collection in SR864
- Completed surface clearance of transects 1 and 4 in XU853

Date: Wednesday, 7 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Cold and Flu prevention / slips, trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** MDAS secured in team conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of transects 1 and 4 in XU853 / 20lbs of CD collected
Next Day's Planned Activities:	1. Continue EM61 towed array data collection in SR864 2. Begin surface clearance of transects in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above



Signature

7 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Thursday, 8 January 2015

DAILY SITE REPORT

Report Number:	031
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/XU854	Jack Connor	10	FPM UXO T2	FPM Site/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/XU854	Cecilia Flores	10	FPM UXO T2	FPM Site/XU854
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854	Nic Bolinger	10	FPM UXO T1	FPM Site/XU854
David Hugg	10	FPM UXO T3	FPM Site/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854				
Total Hours	**110**						
Total Site Personnel	**11**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

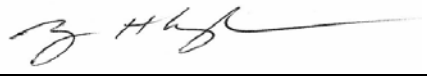
Today's Field Operations

- Continued EM61 towed array data collection in SR864
- Completed surface clearance of transects 11 and 10 in XU854

Date: Thursday, 8 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** How to prevent complacency
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of transects 11 and 10 in XU854 / 0 lbs of CD collected / 0 lbs of MD collected
Next Day's Planned Activities:	1. Complete EM61 towed array data collection in SR864 2. Continue surface clearance of transects in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above



Signature

8 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Friday, 9 January 2015

DAILY SITE REPORT

Report Number:	032
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/XU854	Jack Connor	10	FPM UXO T2	FPM Site/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/XU854	Cecilia Flores	10	FPM UXO T2	FPM Site/XU854
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854	Nic Bolinger	10	FPM UXO T1	FPM Site/XU854
David Hugg	10	FPM UXO T3	FPM Site/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854				
Total Hours	**110**						
Total Site Personnel	**11**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

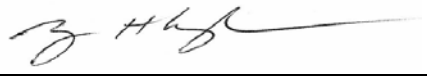
Today's Field Operations

- Completed EM61 towed array data collection in SR864
- Completed surface clearance of transects 8 and 9 in XU854

Date: Friday, 9 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** 4 seconds to safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** 40mm illumination (empty casing) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** stored in secured drums beside conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of transects 8 and 9 in XU854 / 0 lbs of CD collected /1 lb of MD collected
Next Day's Planned Activities:	1. Begin EM61 towed array data collection in XU853 transects 2. Continue surface clearance of transects in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above



Signature

9 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Monday, 12 January 2015

DAILY SITE REPORT

Report Number:	033
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/XU854/ XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/XU854/ XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/XU854/ XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/ XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/XU854/ XU853
David Hugg	10	FPM UXO T3	FPM Site/XU854/ XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/ XU853	Rob Martin	8	FPM Geophysicist	Mob
Total Hours	**118**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
Jose Silva	Mechanic	Blue Line Rental / repair backhoe

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)	**SUXOS/UXOSO/QC** Admin Daily Safety & Operations briefings (UXO, QC and Geo) Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS) Daily reports, Emails/Calls Field Observed field activities (SUXOS & UXOSO/UXOQCS)

Date: Monday, 12 January 2015

	Today's Field Operations • Completed EM61 towed array data collection in XU853 transects • Completed surface clearance of transects 6 and 7 in XU854 • Completed surface clearance of additional partial transects in XU853
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Signs and symptoms of stroke
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed surface clearance of transects 5,6 and 7 in XU854 / 0 lbs of CD collected /0 lb of MD collected 2. Completed EM61 towed array data collection in XU853 transects
Next Day's Planned Activities:	1. Begin EM61 towed array data collection in XU854 transects 2. Complete surface clearance of transects in XU854 3. Conduct soil samples for munitions constituents in ML865

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

12 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 13 January 2015

DAILY SITE REPORT

Report Number: 034
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/XU854/ XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/XU854/ XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853/ XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/XU854/ XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/ XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/XU854/ XU853
David Hugg	10	FPM UXO T3	FPM Site/XU854/ XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/XU853/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/ XU853	Rob Martin	10	FPM Geophysicist	FPM Site/ML865
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)	**SUXOS/UXOSO/QC** Admin Daily Safety & Operations briefings (UXO, QC and Geo) Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS) Daily reports, Emails/Calls Field Observed field activities (SUXOS & UXOSO/UXOQCS)

Date: Tuesday, 13 January 2015

	Today's Field Operations • Completed surface clearance of remaining transects in XU854 • Completed EM61 towed array data collection in XU854 transects • Completed surface clearance of DGM grid F in XU853
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Distractions caused by cell phones
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** XU854 – M18, smoke grenade (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** stored in secured drums beside conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO__XX__ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of the site all cultural debris was moved a short distance from transects but left on site..
Next Day's Planned Activities:	1. Begin reacquisition and flagging of anomalies in SR864 in preparation for subsurface operations 2. Continue DGM grid clearance in XU853 and XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

13 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

FPM Remediations, Inc.

Date: Wednesday, 14 January 2015

DAILY SITE REPORT

Report Number:	035
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/XU854/ XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/XU854/ XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/XU854/ XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/ XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/XU854/ XU853
David Hugg	10	FPM UXO T3	FPM Site/XU854/ XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/ XU853	Rob Martin	0	FPM Geophysicist	Off site
Total Hours	**110**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)	**SUXOS/UXOSO/QC** Admin Daily Safety & Operations briefings (UXO, QC and Geo) Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS) Daily reports, Emails/Calls Field Observed field activities (SUXOS & UXOSO/UXOQCS)

Date: Wednesday, 14 January 2015

	Today's Field Operations • Completed surface clearance of DGM grids in XU853 (Grids A thru E) • Began surface clearance of DGM grids in XU854 • Began reacquisition and flagging of anomalies in SR864 in preparation for subsurface operations
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** 5 steps to safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of the site all cultural debris was moved a short distance from transects and DGM grids but left on site.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in SR864 in preparation for subsurface operations 2. Complete DGM grid clearance in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — Date: 14 January 2015

George H. Vaughn, Sr. UXO Supervisor
Name / Title

FPM Remediations, Inc.

Date: Thursday, 15 January 2015

DAILY SITE REPORT

Report Number:	036
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/XU854/ XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/XU854/ XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/XU854/ XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/ XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/XU854/ XU853
David Hugg	10	FPM UXO T3	FPM Site/XU854/ XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/ XU853	Rob Martin	0	FPM Geophysicist	Off site
Total Hours	**110**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)	**SUXOS/UXOSO/QC** Admin Daily Safety & Operations briefings (UXO, QC and Geo) Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS) Daily reports, Emails/Calls Field Observed field activities (SUXOS & UXOSO/UXOQCS)

Date: Thursday, 15 January 2015

	Today's Field Operations • Completed surface clearance of DGM grids in XU854 • Continued reacquisition and flagging of anomalies in SR864 in preparation for subsurface operations
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** on-site first aid
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of the sites (XU853 and XU854) all cultural debris was moved a short distance from DGM grids but left on site.
Next Day's Planned Activities:	1. Begin data collection of DGM grids in XU853 and XU854 utilizing EM61 towed array 2. Begin subsurface anomaly investigations in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

15 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 15 January 2015

Subsurface anomaly reacquisition and flagging. Pictured from left to right; Kyrian Onyeukwu, Boban Stojanovic. Photo was taken in SR864 facing North.

Date: Friday, 16 January 2015

DAILY SITE REPORT

Report Number:	037
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/ML865	Boban Stojanovic	10	FPM Geophysicist	FPM Site/XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/ML865
Total Hours	**110**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Began data collection of DGM grids in XU853 and XU854 utilizing EM61 towed array
- Began subsurface anomaly investigations in SR864 (78 anomalies investigated)
- Conducted soil samples for munitions constituents in ML865

Date: Friday, 16 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Heavy equipment operation
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. 78 subsurface anomalies investigated in SR864.
Next Day's Planned Activities:	1. Continue data collection of DGM grids in XU853 and XU854 utilizing EM61 towed array 2. Continue subsurface anomaly investigations in SR864 3. Continued reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

16 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 16 January 2015

Soil sampling for munitions constituents in ML865. Pictured in photo is Rob Martin. Photo was taken in ML865.

Subsurface anomaly investigation in SR864. Pictured from left to right; Paul Hackworth and Jack Connor. Photo was taken in SR864 facing East.

Date: Monday, 19 January 2015

DAILY SITE REPORT

Report Number:	038
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/kSR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/SR864
Total Hours	**110**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Completed data collection of DGM grids in XU853 utilizing EM61 towed array
- Continued subsurface anomaly investigations in SR864 (87 anomalies investigated)
- Completed marking high density grid areas in SR864

Date: Monday, 19 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Carpal tunnel syndrome / hazards of repetitive motions
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) / M18, smoke grenade (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. 87 subsurface anomalies investigated in SR864.
Next Day's Planned Activities:	1. Begin/Complete data collection of DGM grids in XU854 utilizing EM61 towed array 2. Begin subsurface anomaly investigations for high density grids in SR864 3. Continued reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

19 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 20 January 2015

DAILY SITE REPORT

Report Number:	039
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ XU854	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ XU854	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/SR864
Total Hours	**110**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed data collection of DGM grids in XU854 utilizing EM61 towed array
- Continued subsurface anomaly investigations in SR864 (3 High Density grids investigated)
- Continued reacquisition and flagging of anomalies in SR864

Date: Tuesday, 20 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Carpal tunnel syndrome / hazards of repetitive motions
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed subsurface investigation of 3 high density grids in SR864
Next Day's Planned Activities:	1. Begin data collection of data gaps in XU854 and XU853 utilizing single coil EM61 2. Continue subsurface anomaly investigations for high density grids in SR864 3. Continue reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

20 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Wednesday, 21 January 2015

DAILY SITE REPORT

Report Number: 040
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ XU854	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ XU854	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853/ SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/XU864
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/XU853/ SR864
Total Hours	**110**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Continued subsurface anomaly investigations in SR864 (5 High Density grids investigated)
- Continued reacquisition and flagging of anomalies in SR864

Date: Wednesday, 21 January 2015

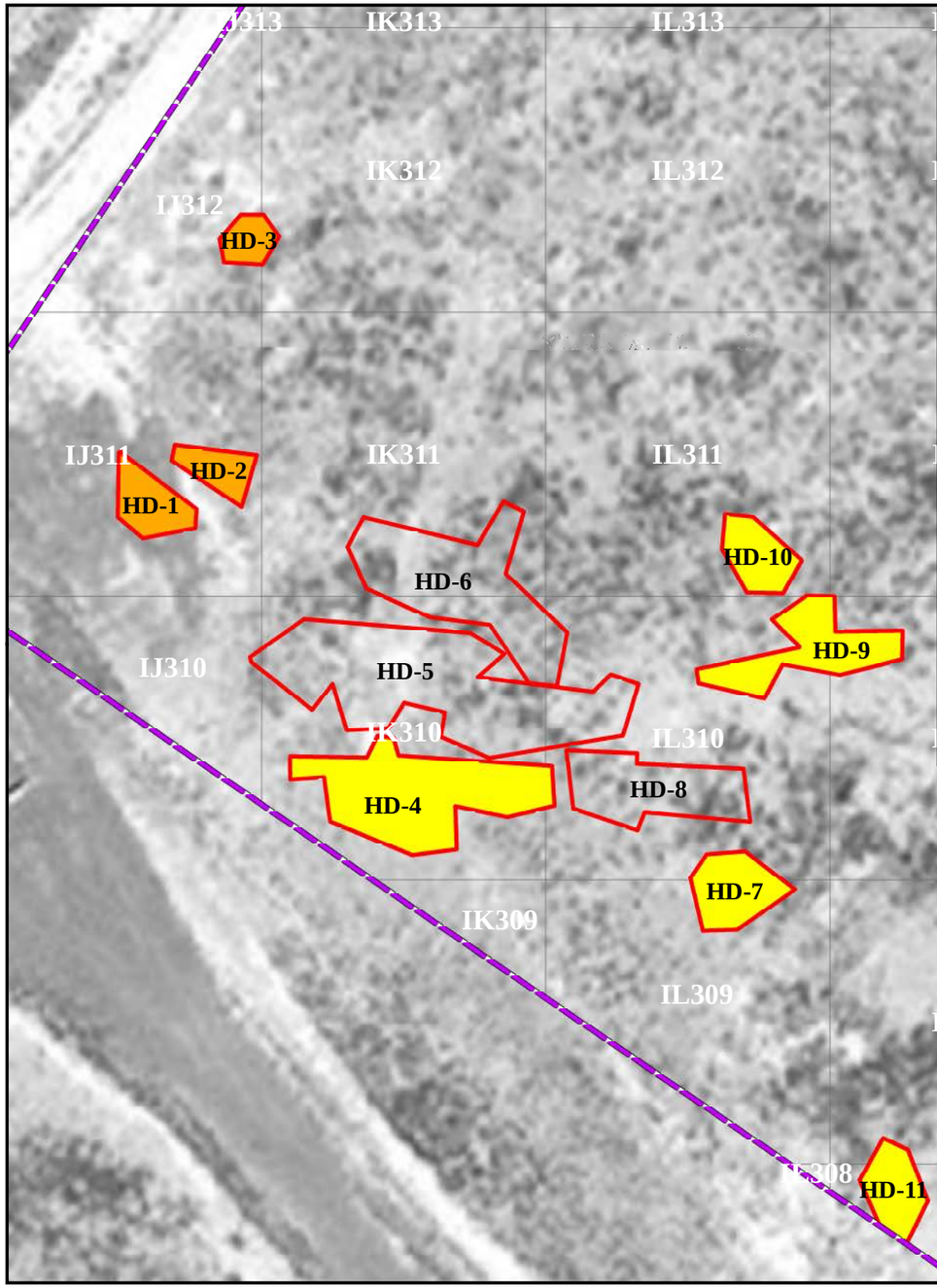
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Hazards to outdoor workers
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed subsurface investigation of 5 high density grids in SR864
Next Day's Planned Activities:	1. Begin data collection of data gaps in XU854 and XU853 utilizing single coil EM61 2. Continue subsurface anomaly investigations for high density grids in SR864 3. Continue reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

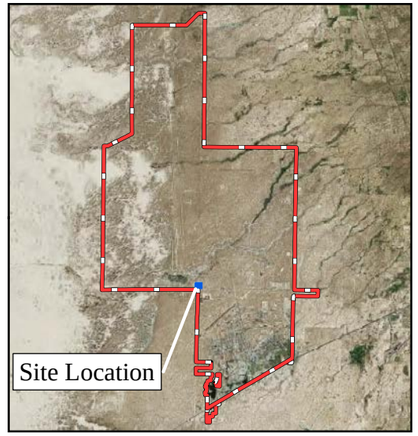
Signature

21 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title



SR864 - Subsurface High Density Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
HD-1	1/20/2015	75	1	0		1
HD-2	1/20/2015	25	1	0		1
HD-3	1/20/2015	10	1	0		1
HD-4	1/21/2015	923	0	0		1
HD-5						
HD-6						
HD-7	1/21/2015	12	1	0		1
HD-8						
HD-9	1/21/2015	10	1	0		1
HD-10	1/21/2015	11	1	0		1
HD-11	1/21/2015	47	1	0		1
TOTAL		1113	7	0		8



Key to Features

- High Density (HD) Area Boundary
- HD Area Completed (Today)
- HD Area Completed (This Week)
- HD Area Completed (Project)
- SR864 MRS Boundary
- Installation Boundary

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet: 0 30 60 90 120 150

Meters: 0 10 20 30 40 50

N W E S

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

Intrusive Investigation Results High Density Areas

Daily Update SR864 MRS 01/21/2015

FPM Remediations, Inc.

Date: January 2015

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\012115_SR864_Daily_Surface_Sweep_Update.mxd

Date: Friday, 23 January 2015

DAILY SITE REPORT

Report Number: 041
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ XU854/XU853	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ XU854/XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853/ XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/XU853/ XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/XU853/ XU854
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Continued subsurface anomaly investigations in SR864 (2 High Density grids investigated)
- Continued data collection in XU854 utilizing EM61 towed array

Date: Friday, 23 January 2015

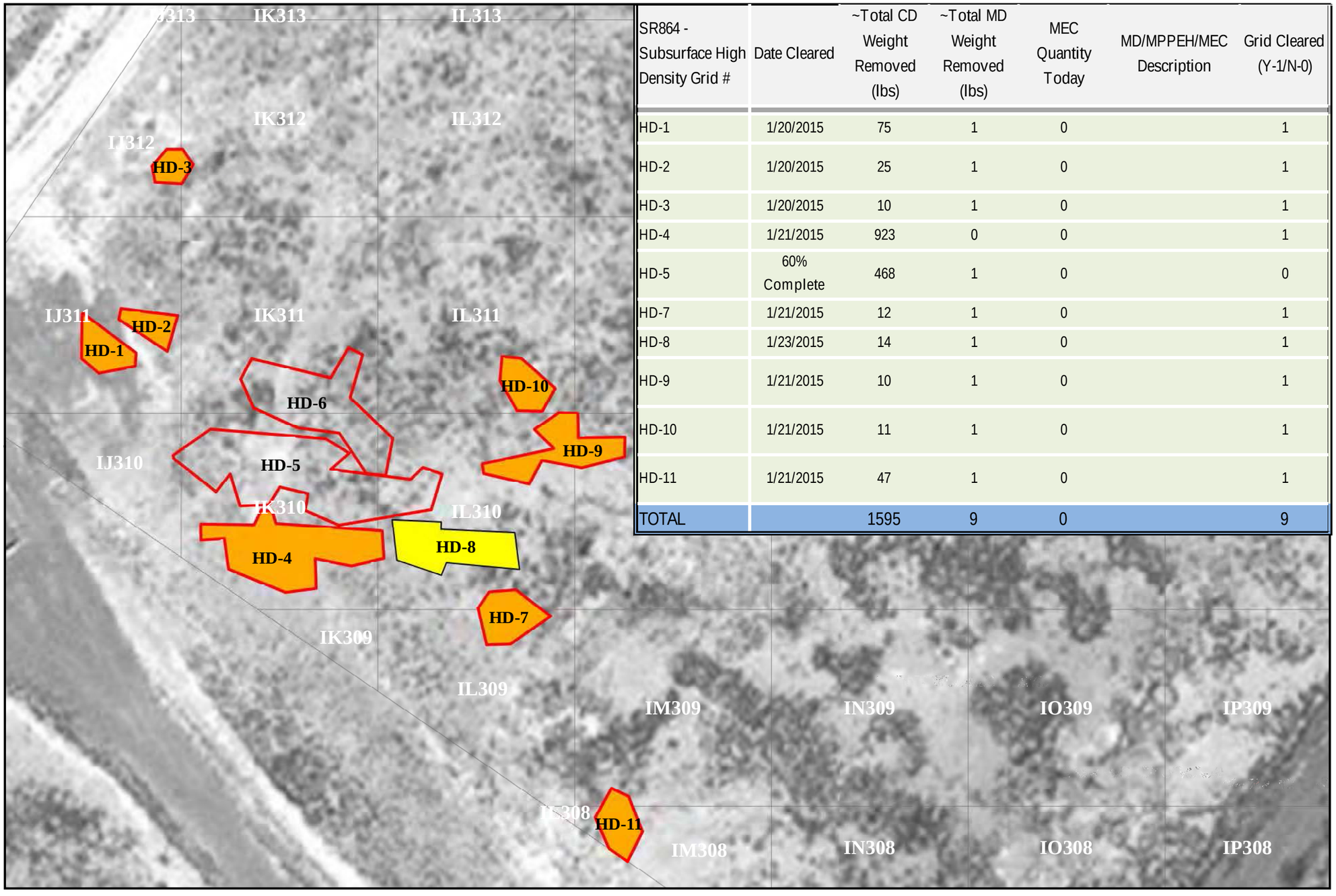
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Cold weather safety and health hazards
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to inclement weather there was no field work accomplished Thursday, 22 January 2015.
Next Day's Planned Activities:	1. Continue data collection of data gaps in XU854 and XU853 utilizing single coil EM61 2. Continue subsurface anomaly investigations for high density grids in SR864 3. Continue reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

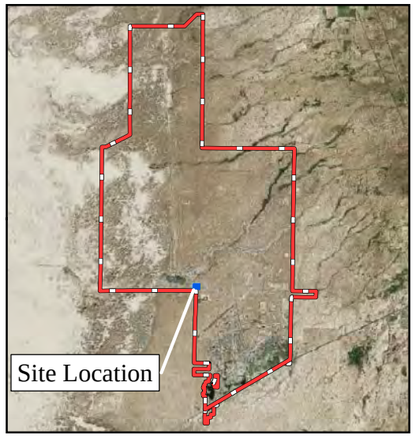
Signature

23 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title



SR864 - Subsurface High Density Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
HD-1	1/20/2015	75	1	0		1
HD-2	1/20/2015	25	1	0		1
HD-3	1/20/2015	10	1	0		1
HD-4	1/21/2015	923	0	0		1
HD-5	60% Complete	468	1	0		0
HD-7	1/21/2015	12	1	0		1
HD-8	1/23/2015	14	1	0		1
HD-9	1/21/2015	10	1	0		1
HD-10	1/21/2015	11	1	0		1
HD-11	1/21/2015	47	1	0		1
TOTAL		1595	9	0		9



Key to Features

- High Density (HD) Area Boundary
- HD Area Completed (Today)
- HD Area Completed (This Week)
- HD Area Completed (Project)
- SR864 MRS Boundary
- Installation Boundary

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet: 0 30 60 90 120 150

Meters: 0 10 20 30 40 50

N W E S

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

Intrusive Investigation Results High Density Areas

Daily Update SR864 MRS 01/23/2015

FPM Remediations, Inc.

Date: January 2015

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\012315_SR864_Daily_Surface_Sweep_Update.mxd

Date: Monday, 26 January 2015

DAILY SITE REPORT

Report Number:	042
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/ XU853	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/ XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853/	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/XU853/ SR864
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Continued subsurface anomaly investigations in SR864 (2 High Density grids investigated)
- Completed data gap collection in XU853 utilizing EM61
- Continued reacquisition and flagging of anomalies in SR864

Date: Monday, 26 January 2015

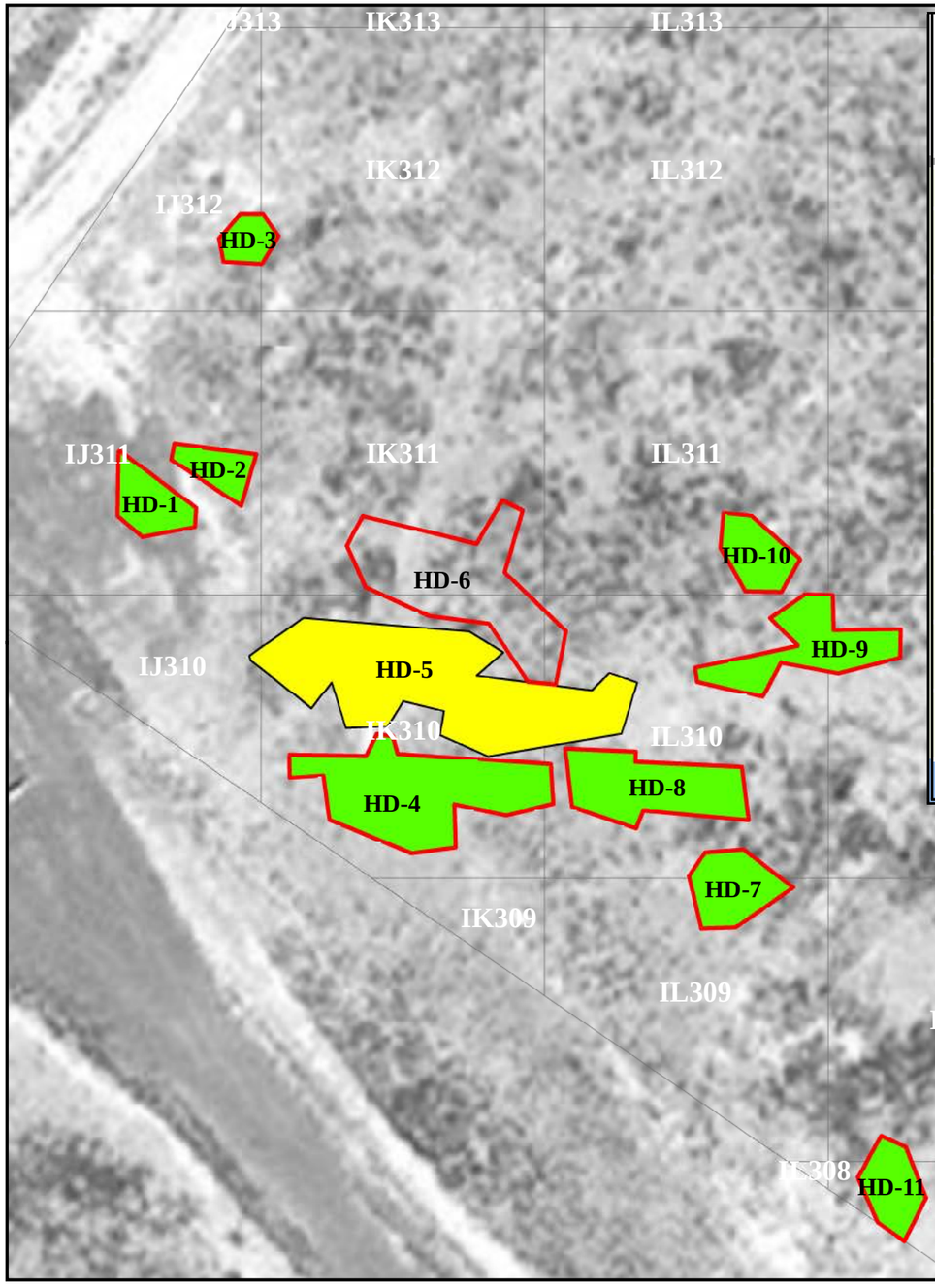
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** General safety rules / fire safety / and hand tool safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) / M18 smoke grenade pieces **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	N/A
Next Day's Planned Activities:	1. Complete subsurface anomaly investigations for high density grids in SR864 2. Continue subsurface investigation of anomalies in SR864 3. Accomplish IVS setup in RR869a utilizing inert seed items

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

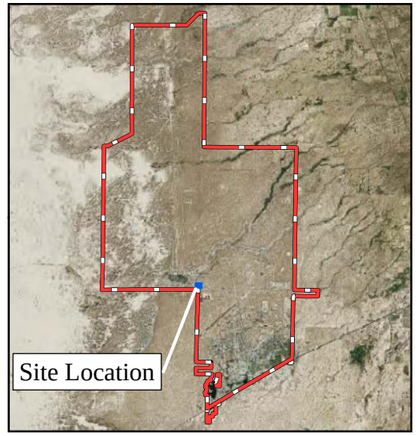
Signature

26 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title



SR864 - Subsurface High Density Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
HD-1	1/20/2015	75	1	0		1
HD-2	1/20/2015	25	1	0		1
HD-3	1/20/2015	10	1	0		1
HD-4	1/21/2015	923	0	0		1
HD-5	1/26/2015	915	1	0		1
HD-6	75% Complete	558	2	0		0
HD-7	1/21/2015	12	1	0		1
HD-8	1/23/2015	14	1	0		1
HD-9	1/21/2015	10	1	0		1
HD-10	1/21/2015	11	1	0		1
HD-11	1/21/2015	47	1	0		1
TOTAL		2600	11	0		10



Key to Features

- High Density (HD) Area Boundary
- HD Area Completed (Today)
- HD Area Completed (This Week)
- HD Area Completed (Project)
- SR864 MRS Boundary
- Installation Boundary

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet: 0 30 60 90 120 150

Meters: 0 10 20 30 40 50

N W E S

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

Intrusive Investigation Results High Density Areas

Daily Update SR864 MRS 01/26/2015

FPM Remediations, Inc.

Date: January 2015

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\012315_SR864_Daily_Surface_Sweep_Update.mxd

Date: Tuesday, 27 January 2015

DAILY SITE REPORT

Report Number: 043
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/SR864
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed subsurface anomaly investigations in SR864 (1 High Density grids investigated)
- Continued reacquisition and flagging of anomalies in SR864
- Continued subsurface investigation of individual anomalies in SR864

Date: Tuesday, 27 January 2015

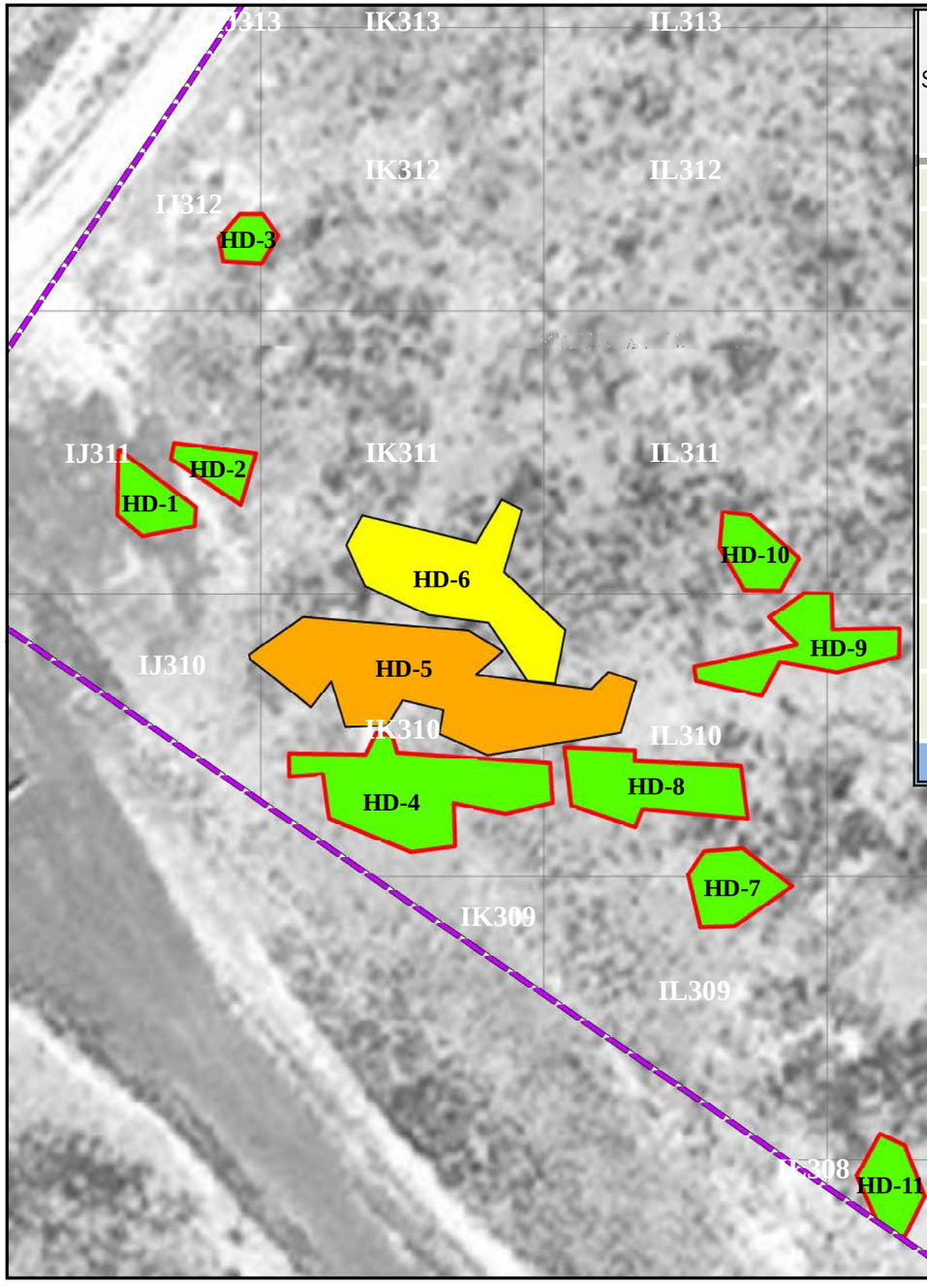
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Caught in / on / between hazards
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed 73 subsurface investigations of individual anomalies.
Next Day's Planned Activities:	1. Continue subsurface investigation of individual anomalies in SR864 2. Accomplish IVS setup in RR869a utilizing inert seed items

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

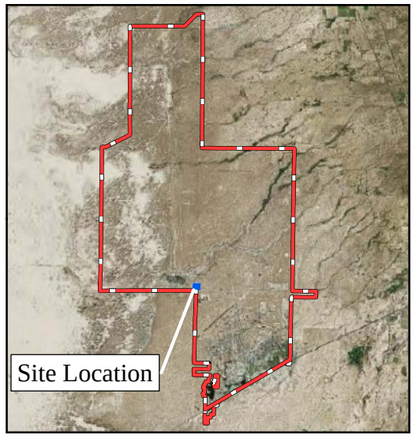
Signature

27 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title



SR864 - Subsurface High Density Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MD/MPPEH/MEC Description	Grid Cleared (Y-1/N-0)
HD-1	1/20/2015	75	1	0		1
HD-2	1/20/2015	25	1	0		1
HD-3	1/20/2015	10	1	0		1
HD-4	1/21/2015	923	0	0		1
HD-5	1/26/2015	915	1	0		1
HD-6	1/27/2015	821	2	0		1
HD-7	1/21/2015	12	1	0		1
HD-8	1/23/2015	14	1	0		1
HD-9	1/21/2015	10	1	0		1
HD-10	1/21/2015	11	1	0		1
HD-11	1/21/2015	47	1	0		1
TOTAL		2863	11	0		11



Key to Features

- High Density (HD) Area Boundary
- HD Area Completed (Today)
- HD Area Completed (This Week)
- HD Area Completed (Project)
- SR864 MRS Boundary
- Installation Boundary

NOTES:

Projection: UTM Zone 13N
Horizontal Datum: NAD83
Units: Meters

Feet
0 30 60 90 120 150

Meters
0 10 20 30 40 50

N
W E
S

Military Munitions Response Program
Remedial Investigation
SR864 Poorman Range

Holloman Air Force Base
New Mexico

CONTRACT No. FA8903-13-C-0008

Intrusive Investigation Results High Density Areas

Daily Update
SR864 MRS
01/27/2015

FPM Remediations, Inc.

Date: January 2015

Document Path: C:\Users\Kyrian\Documents\FPM\NM_PBR\Fieldwork\Daily_Update_Maps_and_Spreadsheet\sr864\012715_SR864_Intrusive_Investgn_Update.mxd

Date: Wednesday, 28 January 2015

DAILY SITE REPORT

Report Number: 044
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/XU853	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/XU853
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed IVS setup in RR869a utilizing inert seed items
- Continued subsurface investigation of individual anomalies in SR864 (186 anomalies investigated)
- Processed EM61 data for XU853 and XU854

Date: Wednesday, 28 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Dangers of working angry
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed 186 subsurface investigations of individual anomalies.
Next Day's Planned Activities:	1. Continue subsurface investigation of individual anomalies in SR864 2. Complete reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

28 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Thursday, 29 January 2015

DAILY SITE REPORT

Report Number: 045
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	0	FPM Geophysicist	FPM Site/SR864
Total Hours	**110**						
Total Site Personnel	**11**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Began procedures to utilize inert ordnance items to determine anomaly threshold for G-858 data in RR869a
- Continued subsurface investigation of individual anomalies in SR864 (161 anomalies investigated)
- Processed EM61 data for XU853 and XU854
- Continued reacquisition and flagging of anomalies in SR864

Date: Thursday, 29 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Hazards of excavation
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed 161 subsurface investigations of individual anomalies.
Next Day's Planned Activities:	1. Continue subsurface investigation of individual anomalies in SR864 2. Complete reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

29 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

FPM Remediations, Inc.

Date: Friday, 30 January 2015

DAILY SITE REPORT

Report Number:	046
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	3	FPM SUXOS	FPM Site/SR864	Jack Connor	3	FPM UXO T2	FPM Site/SR864
Ron Vanderford	3	FPM UXOSO/UXOQCS MGR	FPM Site/SR864	Cecilia Flores	3	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	3	FPM Geophysicist	FPM Site/SR864	Paul Hackworth	3	FPM UXO T1	FPM Site/SR864
Loran Poindexter	3	FPM UXO T3	FPM Site/SR864	Nic Bolinger	3	FPM UXO T1	FPM Site/SR864
David Hugg	3	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	3	FPM Geophysicist	FPM Site/SR864
Ray Lunbeck	3	FPM UXO T2	FPM Site/SR864	Rob Martin	3	FPM Geophysicist	FPM Site/SR864
Total Hours	**36**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Equipment cleanup and check out
- Work terminated due to inclement weather

Date: Friday, 30 January 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:**
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** Working in the rain
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Work terminated due to inclement weather.
Next Day's Planned Activities:	1. Continue subsurface investigation of individual anomalies in SR864 2. Complete reacquisition and flagging of anomalies in SR864

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

30 January 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Monday, 02 February 2015

DAILY SITE REPORT

Report Number:	047
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/RR869a	Jack Connor	10	FPM UXO T2	FPM Site/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/RR869a	Cecilia Flores	10	FPM UXO T2	FPM Site/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/SR864
David Hugg	10	FPM UXO T3	FPM Site/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/RR869a
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/RR869a
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed subsurface investigation of individual anomalies in SR864
- Completed reacquisition and flagging of anomalies in SR864
- Completed data collection of inert ordnance items to determine anomaly threshold utilizing G-858in RR869a

Date: Monday, 02 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Pallet safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** SR864 - .50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Completed 200 subsurface investigations of individual anomalies in SR864
Next Day's Planned Activities:	1. Complete subsurface investigation of individual anomalies in SR864 2. Begin reacquisition and flagging of anomalies on transects in XU854/XU853 3. Begin subsurface investigation of individual anomalies on transects in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

02 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 03 February 2015

DAILY SITE REPORT

Report Number: 048
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/SR864/XU854	Jack Connor	10	FPM UXO T2	FPM Site/ SR864/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/SR864/XU854	Cecilia Flores	10	FPM UXO T2	FPM Site/ SR864/XU854
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU854/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/ SR864/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/SR864/XU854	Nic Bolinger	10	FPM UXO T1	FPM Site/ SR864/XU854
David Hugg	10	FPM UXO T3	FPM Site/SR864/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU854/XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/SR864/XU854	Rob Martin	10	FPM Geophysicist	FPM Site/ XU854/XU853
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed subsurface investigation of individual anomalies in transects L1 and L2 for XU854
- Completed reacquisition and flagging of anomalies in XU854
- Began reacquisition and flagging of anomalies in XU853

Date: Tuesday, 03 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Gloves / Hand protection
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** XU854 - 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of XU854 all cultural debris was moved a short distance from transects but left on site.
Next Day's Planned Activities:	1. Continue subsurface investigation of individual anomalies in XU854 2. Complete reacquisition and flagging of anomalies in XU853

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

03 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Wednesday, 04 February 2015

DAILY SITE REPORT

Report Number:	049
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/XU853	Jack Connor	10	FPM UXO T2	FPM Site/ XU854/XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/XU853	Cecilia Flores	10	FPM UXO T2	FPM Site/ XU854/XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU854/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU854/XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU854/XU853
David Hugg	10	FPM UXO T3	FPM Site/XU854/XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU854/XU853
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/XU853	Rob Martin	10	FPM Geophysicist	FPM Site/ XU854/XU853
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed subsurface investigation of individual anomalies in transects L4 thru L9 for XU854 (3 backhoe digs remaining on L3)
- Completed reacquisition and flagging of anomalies in XU853
- Began subsurface investigation of individual anomalies in transect L4 for XU853

Date: Wednesday, 04 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Eye safety / Eye protection
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** XU854 - 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of XU854 all cultural debris was moved a short distance from transects but left on site. 2. After QC review of documentation for SR864 it was determined that 16 grids required anomaly reacquisition and subsurface investigation. This will be accomplished on 5 February 2015.
Next Day's Planned Activities:	1. Continue subsurface investigation of individual anomalies in SR864 2. Continue reacquisition and flagging of anomalies in SR864 3. Collect data gaps in RR869a utilizing G-858 4. Complete subsurface investigation of anomalies in XU854 transect L3

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

04 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Thursday, 05 February 2015

DAILY SITE REPORT

Report Number: 050
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ XU854/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/SR864	Cecilia Flores	8	FPM UXO T2	Demobilize
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864/RR869	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU854/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU854/SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854/SR864	Boban Stojanovic	10	FPM Geophysicist	Offsite processing data
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/ SR864/RR869a
Total Hours	**120**						
Total Site Personnel	**12**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC subsurface anomaly investigations in SR864 (UXOQCS)

Today's Field Operations

- Completed subsurface investigation of individual anomalies in transects L3 XU854(see other comments / additional information)

	• Continued subsurface investigation of individual anomalies in SR864
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Foot protection / proper foot wear
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** SR864 - 50 cal projectiles / 5.56 blanks (expended) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in drums
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of XU854 all cultural debris was moved a short distance from transects but left on site. 2. UXO team was investigating a subsurface anomaly in area XU854 transect L3. Soil covering the item was removed utilizing a combination of mechanized (backhoe) and manually (with a shovel). The team removed soil until they were within approximately one foot of the item and began using only manual digging to uncover the item. Once partially uncovered the item was determined not to be MEC/DMM/MPPEH and appeared to be discarded rusty crushed metal. Determination was made to remove the item utilizing the backhoe. Once the item was removed from the hole it was observed to be a barrel/drum and grey substance with a paint like consistency was leaking into the backhoe bucket. At this time a coffer dam was built and plastic sheeting was laid down in order to empty the backhoe bucket. The area immediately surrounding the item was cordoned off using red flagging ribbon until a determination could be made for a proper course of action. 3. FPM will move forward with the collection and analysis of samples for the waste disposal characterization profile. The disposal characterization profile will be provided to the AF for review and approval.
Next Day's Planned Activities:	1. Collect data gaps in RR869a utilizing G-858 4. Continue subsurface investigation of anomalies in XU853 transects.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

05 February 2015

Date

George H. Vaughn, Sr. UXO Supervisor

Date: Thursday, 05 February 2015

Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 05 February 2015

Barrel and soil removed from subsurface anomaly investigation on transect L3 utilizing a backhoe. A coffer dam was built and plastic was laid down to prevent soil contamination. Photo was taken in area XU854 facing west.

Substance leaking from barrel was grey in color and appeared to have a paint like consistency. Photo was taken in XU854

Holloman AFB PBR (FA8903-13-C-0008) 05 February 2015

Area containing the possible contaminants was marked off with red flagging ribbon and covered with plastic. The plastic was secured using buckets partially filled with soil. Photo was taken in XU854 facing north.

Date: Friday, 06 February 2015

DAILY SITE REPORT

Report Number:	051
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854/SR864	Jack Connor	10	FPM UXO T2	FPM Site/ XU854/SR864
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU854/SR864	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/SR864
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/SR864/RR869	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU854/SR864
Loran Poindexter	10	FPM UXO T3	FPM Site/XU854/SR864	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU853/SR864
David Hugg	10	FPM UXO T3	FPM Site/XU854/SR864	Rob Martin	10	FPM Geophysicist	FPM Site/ XU853/SR864
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854/SR864				
Total Hours	**110**						
Total Site Personnel	**11**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Continued subsurface investigation of individual anomalies in transects for XU854
- Collected remaining data gaps in RR869a utilizing G-858
- Drum/Barrel contents recovered on 5 Feb 2015 were placed in 55 gallon drums until sampling and disposal determination can be made.

Date: Friday, 06 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** UXO safety precautions
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1.
Next Day's Planned Activities:	1. Begin reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854 2. Continue subsurface investigation of anomalies in XU853 transects.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

06 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Monday, 09 February 2015

DAILY SITE REPORT

Report Number:	052
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Rob Martin	10	FPM Geophysicist	FPM Site/ XU853
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU853
David Hugg	10	FPM UXO T3	FPM Site/XU853				
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853				
Total Hours	**100**						
Total Site Personnel	**10**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC targets in SR864 (UXOQCS)

Today's Field Operations

- Continued subsurface investigation of individual anomalies in transects for XU853
- Began reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854

Date: Monday, 09 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Driving and backing precautions and proper use of a spotter
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854 2. Complete subsurface investigation of anomalies in XU853 transects. 3. Collect samples of drum/barrel contents in XU854 for analysis

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

09 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 10 February 2015

DAILY SITE REPORT

Report Number:	053
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853/XU854	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853/XU854
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Rob Martin	10	FPM Geophysicist	FPM Site/ XU853/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU853
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854				
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853/XU854				
Total Hours	**100**						
Total Site Personnel	**10**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC targets in SR864 (UXOQCS)

Today's Field Operations

- Completed FIT tests for respirators to be used during subsurface anomaly investigation along fence line in RR869a.
- Completed subsurface investigation of individual anomalies in transects for XU853
- Continued reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854

	• In XU854 - Collected samples of drum contents and surrounding soil for analysis. Soil samples were accomplished by excavating the area where the drum was recovered. (see additional comments)
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Hydration and sun protection
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. While excavating the area in XU854 where the drum was removed, a possible burial pit located approximately 3 meters north was discovered. On 11 February 2015 DGM data will be collected utilizing both EM-61 and G-858 instruments to determine the extent of the possible burial pit.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854 2. Continue subsurface investigations of anomalies in DGM grids located in XU853 3. Collect DGM data utilizing both EM-61 and G-858 instruments to determine extent of possible burial pit located in XU854.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature — 10 February 2015 (Date)

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Wednesday, 11 February 2015

DAILY SITE REPORT

Report Number:	054
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853/XU854	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853/XU854
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Rob Martin	10	FPM Geophysicist	FPM Site/ XU853/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU853/XU854
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854				
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853/XU854				
Total Hours	**100**						
Total Site Personnel	**10**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Continued subsurface investigation of individual anomalies in DGM grids located in XU853 (115 targets investigated)
- Collected DGM data utilizing both EM-61 and G-858 instruments to determine extent of possible burial pit located in XU854

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Slips, trips and falls
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** XU853 – BLU-26(T-1) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. (2) BLU26 (T-1) were located approximately 1 meter apart in DGM grid A in XU853. Both items were found in two pieces. Exspray kit was utilized to test for explosives and results were negative.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854 2. Continue subsurface investigations of anomalies in DGM grids located in XU853

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

11 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Thursday, 12 February 2015

DAILY SITE REPORT

Report Number: 055
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/ XU854/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853/RR869a
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853	Rob Martin	10	FPM Geophysicist	FPM Site/ XU853/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ XU853/XU854
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854				
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853/XU854				
Total Hours	**100**						
Total Site Personnel	**10**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Continued subsurface investigation of individual anomalies in DGM grids located in XU853 (138 targets investigated)
- Continued reacquisition and flagging of anomalies in DGM grids located in XU853 and XU854

	· Began removal of fence located next to RR869a, in order to collected DGM data that was masked by the fencing.
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Lunchtime food safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** XU853 – M18, Smoke grenade fuze (expended) and spoon **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** secured in connex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of the area surrounding DGM grids in XU853 all cultural debris was moved a short distance from the area of subsurface investigation but left on site.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU854 2. Continue subsurface investigations of anomalies in DGM grids located in XU853 and Xu854 3. Complete fence removal and collect DGM data utilizing G-858 in RR869a..

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

12 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 12 February 2015

George Vaughn (left) and Paul Hackworth loosening fence brackets prior to fence removal. Photo was taken in RR869a facing south.

Date: Friday, 13 February 2015

DAILY SITE REPORT

Report Number: 056
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853/RR869a
Kyrian Onyeukwu	10	FPM Geophysicist	FPM Site/XU853/RR869a	Rob Martin	10	FPM Geophysicist	FPM Site/ XU853/RR869a
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853/XU854	Boban Stojanovic	10	FPM Geophysicist	FPM Site/ RR869a
David Hugg	10	FPM UXO T3	FPM Site/XU853/XU854				
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU853/XU854				
Total Hours	**100**						
Total Site Personnel	**10**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Continued subsurface investigation of individual anomalies in DGM grids located in XU853 (78 targets investigated)

	• Completed removal of fence located next to RR869a, in order to collected DGM data that was masked by the fencing. • Completed data collection along fence in RR869a utilizing G-858
Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Safety precautions for fence removal
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historical nature of the area surrounding DGM grids in XU853 all cultural debris was moved a short distance from the area of subsurface investigation but left on site.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU854 2. Continue subsurface investigations of anomalies in DGM grids located in XU853 and Xu854 3. Reacquisition and flagging of anomalies along fence in RR869a.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

13 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 17 February 2015

DAILY SITE REPORT

Report Number: 057
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853/XU854	Ray Lunbeck	10	FPM UXO T2	FPM Site/ XU853/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853/XU854
David Hugg	10	FPM UXO T3	FPM Site/XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/XU854
Loran Poindexter	10	FPM UXO T3	FPM Site/XU853/XU854	Rob Martin	10	FPM Geophysicist	FPM Site/ XU854/RR869a
Total Hours	**80**						
Total Site Personnel	**8**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Continued subsurface investigation of individual anomalies in DGM grids located in XU853 and XU854 (135 targets investigated)
- Completed reacquisition and flagging of anomalies along fence in RR869a.
- Continued reacquisition and flagging of anomalies in DGM grids located in XU854

Date: Tuesday, 17 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Modified Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Level C safety precautions
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historic nature of the area surrounding DGM grids in XU853/XU854 all cultural debris was moved a short distance from the area of subsurface investigation but left on site.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU854 2. Complete subsurface investigation of anomalies along fence line in RR869a. Level of PPE utilized to accomplish this will be level C.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

17 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Wednesday, 18 February 2015

DAILY SITE REPORT

Report Number:	058
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU853/XU854	Ray Lunbeck	10	FPM UXO T2	FPM Site/ XU853/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/RR869a	Paul Hackworth	10	FPM UXO T1	FPM Site/ XU853/XU854
David Hugg	10	FPM UXO T3	FPM Site/XU853	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU853/XU854
Loran Poindexter	8	FPM UXO T3	Demobilize	Rob Martin	10	FPM Geophysicist	FPM Site/ XU854/RR869a
Total Hours	**78**						
Total Site Personnel	**8**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)

Today's Field Operations

- Conducted 75 subsurface anomaly investigations in RR869a, utilizing Level C protective clothing (see additional comments section). Removed approximately 15 kg of cultural debris.
- Continued reacquisition and flagging of anomalies in DGM grids located in XU854

Date: Wednesday, 18 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Level C **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Level C Donning and Doffing procedures
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the possibility of encountering hazardous substances in OT-04 (fenced in area which runs adjacent to RR869a along the western side), the determination was made to conduct the operation in level C PPE.
Next Day's Planned Activities:	1. Continue reacquisition and flagging of anomalies in DGM grids located in XU854 2. Continue subsurface anomaly investigations in XU854.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

18 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 18 February 2015

Dig team dressed in level C PPE, ready to begin subsurface anomaly investigation along the fence line in RR869a. Pictured from left to right Ray Lunbeck, Nic Bolinger, George Vaughn and Paul Hackworth. Photo was taken in RR869a facing Northwest.

Ray Lunbeck and Nic Bolinger performing subsurface anomaly investigation along the fence line in RR869a. Photo was taken in RR869a facing Southwest.

Holloman AFB PBR (FA8903-13-C-0008) 18 February 2015

Paul Hackworth utilizing backhoe to remove a fence post located inside current fence line. Photo was taken in RR869a facing Northwest.

Date: Thursday, 19 February 2015

DAILY SITE REPORT

Report Number:	059
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/ RR869a/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU854
David Hugg	10	FPM UXO T3	FPM Site/XU854	Rob Martin	10	FPM Geophysicist	FPM Site/ RR869a/XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854				
Total Hours	**70**						
Total Site Personnel	**7**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC transects and grids in XU853

Today's Field Operations

- Conducted 169 subsurface anomaly investigations in XU854
- Continued reacquisition and flagging of anomalies in DGM grids located in XU854

Date: Thursday, 19 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Level C **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Lessons learned during fence line operation in RR869a
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** XU854 – M18, smoke grenade (spoon) **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** Secured in conex
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. . Due to the historic nature of the area surrounding DGM grids in XU854 all cultural debris was moved a short distance from the area of subsurface investigation but left on site.
Next Day's Planned Activities:	1. Complete reacquisition and flagging of anomalies in DGM grids located in XU854 2. Continue subsurface anomaly investigations in XU854 3. Reacquire approximately 10 anomalies in XU853 utilizing EM-61

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

19 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Friday, 20 February 2015

DAILY SITE REPORT

Report Number:	060
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	10	FPM SUXOS	FPM Site/XU854	Paul Hackworth	10	FPM UXO T1	FPM Site/ RR869a/XU854
Ron Vanderford	10	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/RR869a	Nic Bolinger	10	FPM UXO T1	FPM Site/ XU854
David Hugg	10	FPM UXO T3	FPM Site/XU854	Rob Martin	10	FPM Geophysicist	FPM Site/ RR869a/XU854
Ray Lunbeck	10	FPM UXO T2	FPM Site/XU854				
Total Hours	**70**						
Total Site Personnel	**7**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
QC transects and grids in XU853

Today's Field Operations

- Conducted 138 subsurface anomaly investigations in XU854
- Reacquired targeted anomalies in DGM grids located in XU853/XU854 utilizing EM-61

Date: Friday, 20 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Level C **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** 7 common accident causes
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. . Due to the historic nature of the area surrounding DGM grids in XU854 all cultural debris was moved a short distance from the area of subsurface investigation but left on site.
Next Day's Planned Activities:	1. Complete subsurface anomaly investigations in XU854 2. Subsurface investigation of burial pit (drums) areas located in XU854 3. Soil samples to define extent of possible contamination for buried drum areas in XU854

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

20 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Saturday, 21 February 2015

DAILY SITE REPORT

Report Number: 061
Project Title: Holloman AFB PBR, NM
Location: RR869a, ML865, SR864, XU853 and XU854
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	7	FPM SUXOS	FPM Site/XU854	Paul Hackworth	7	FPM UXO T1	FPM Site/ RR869a/XU854
Ron Vanderford	7	FPM UXOSO/UXOQCS MGR	FPM Site/XU853/RR869a	Nic Bolinger	8	FPM UXO T1	Demob
David Hugg	7	FPM UXO T3	FPM Site/XU854	Rob Martin	7	FPM Geophysicist	FPM Site/ RR869a/XU854
Ray Lunbeck	7	FPM UXO T2	FPM Site/XU854				
Total Hours	**50**						
Total Site Personnel	**7**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit
Paul Swinford	Fence Contractor	Swintec LLC / Reinstall fence in RR869a

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Escort fence contractor in RR869a (UXOSO)

Today's Field Operations

- Completed subsurface anomaly investigations relating to possible MEC in XU854
- Additional excavation of burial pit (drum) areas located in XU854
- Conducted soil samples to define extent of possible contamination for burial pit areas in XU854

Date: Saturday, 21 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Level C **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** Heavy Equipment operation safety
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Due to the historic nature of the area surrounding DGM grids in XU854 all cultural debris was moved a short distance from the area of subsurface investigation but left on site. 2. During the additional excavation into XU854 Burial Pit #1, the team uncovered a barrel with an unknown clear liquid inside. Excavation was terminated until the contents of the barrel can be determined and an FPM environmental team mobilized to complete the excavation/removal (early to mid-March). 3. During the excavation into XU854 Burial Pit #2, the team located an empty barrel and while removing it uncovered another barrel. Excavation was terminated until an FPM environmental team is mobilized to complete the excavation/removal (early to mid-March). 4. The excavated portions of the pits were covered with 4' x 8' sheets of plywood and cordoned off utilizing snow fence.
Next Day's Planned Activities:	1. Begin site cleanup / equipment preparation for demob

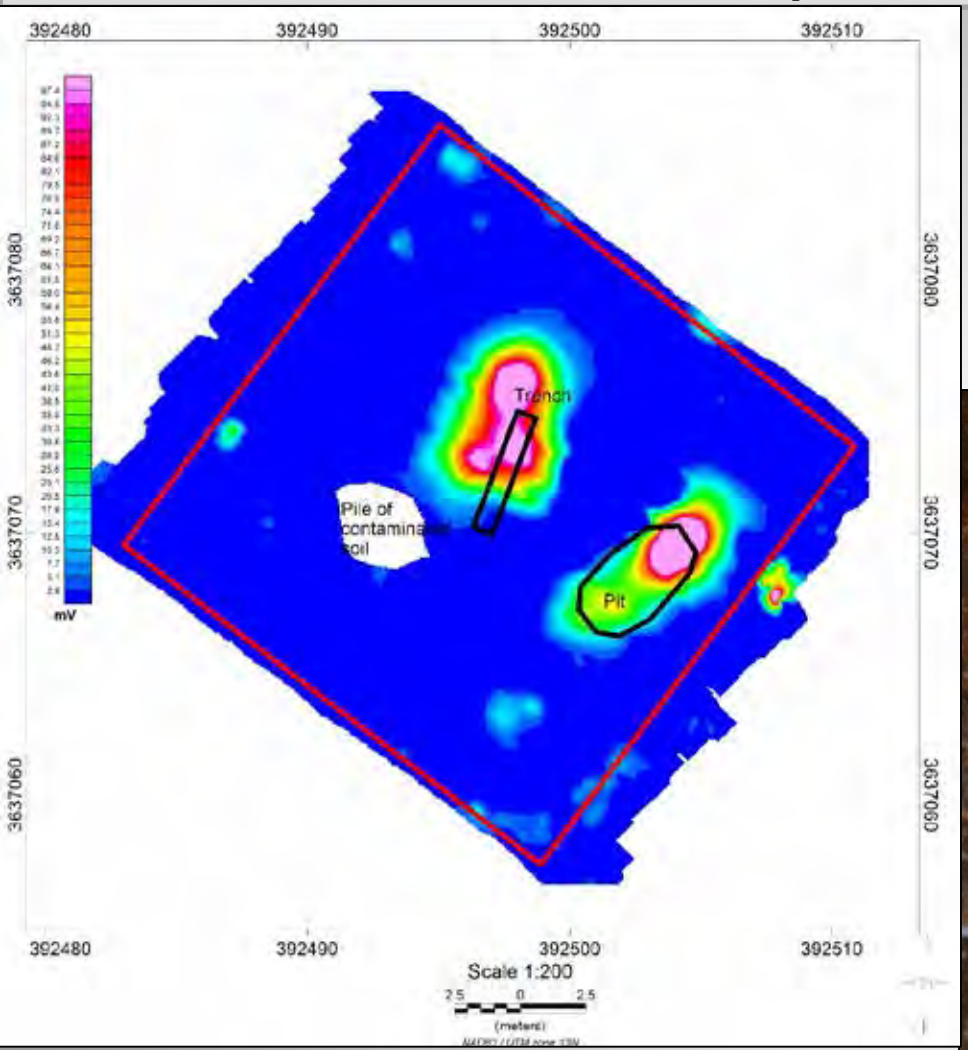
Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

21 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Holloman AFB PBR (FA8903-13-C-0008) 21 February 2015



EM61 data showing extent of burial pits #1 (west) and #2 (east) in XU854.

Photo of drum encountered on 21 February 2015, contents are a clear viscous material. Samples were taken of the material and sent to the lab for testing. Photo was taken in XU854

Holloman AFB PBR (FA8903-13-C-0008) 21 February 2015

This is burial pit #2 (located under the north edge of a surface depression, to the east of burial pit #1). While removing an empty drum, this damaged drum was located in the side of the pit. It appears to be empty.

Rob Martin collecting soil samples in burial pit #2. Photo was taken in XU854 facing southwest.

Holloman AFB PBR (FA8903-13-C-0008) 21 February 2015

Pictured from left to right; David Hugg, Ray Lunbeck and Paul Hackworth shown covering both burial pits with 4' x 8' sheets of plywood and placing snow fence around the pits and the spoils to prevent wild life from entering the area. Photo was taken in XU854 facing East.

Date: Monday, 23 February 2015

DAILY SITE REPORT

Report Number:	062
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	8.5	FPM SUXOS	FPM Site/All sites	Ray Lunbeck	8.5	FPM UXO T2	FPM Site/ All Sites
Ron Vanderford	8.5	FPM UXOSO/UXOQCS MGR	FPM Site/All sites	Paul Hackworth	8.5	FPM UXO T1	FPM Site/ All sites
David Hugg	8.5	FPM UXO T3	FPM Site/All sites	Rob Martin	8.5	FPM Geophysicist	FPM Site/ All Sites
Total Hours	**51**						
Total Site Personnel	**6**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Complete QC in XU853/XU854 (UXOQCS)

Today's Field Operations

- Began site preparation for demob (pulled flags from sites; RR869a, XU853 and started in XU854)
- Oil changes for four rental vehicles

Date: Monday, 23 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 6 / Elec Blasting Caps – 34 / Det Cord(80g) – 280' / Boosters(1lb) - 12
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** 12 Rules for winter driving (rules 1 – 6)
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1.
Next Day's Planned Activities:	1. Disposal operation, to zero out courtesy storage accounts with MSA 2. Complete site prep / cleanup for demob,

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

23 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

Date: Tuesday, 24 February 2015

DAILY SITE REPORT

Report Number:	063
Project Title:	Holloman AFB PBR, NM
Location:	RR869a, ML865, SR864, XU853 and XU854
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 – 20 mph	20 – 30 mph	30 – 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

FPM and Subcontractor Personnel on Site

Name	Hrs.	Affiliation	Location	Name	Hrs.	Affiliation	Location
George Vaughn	9	FPM SUXOS	FPM Site/All sites	Ray Lunbeck	9	FPM UXO T2	FPM Site/ All Sites
Ron Vanderford	9	FPM UXOSO/UXOQCS MGR	FPM Site/All sites	Paul Hackworth	9	FPM UXO T1	FPM Site/ All sites
David Hugg	9	FPM UXO T3	FPM Site/All sites	Rob Martin	9	FPM Geophysicist	FPM Site/ All Sites
Total Hours	**54**						
Total Site Personnel	**6**						

Visitors

Visitor Name	Position	Company/Agency and Reason for Visit

MEC Find / MEC Disposal Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	Chief, Holloman AFB Environmental	49 CES/CEIE	N/A
Renaghan, Brian	COR – Contract Officers Rep.	AFCEC/CZRX	N/A
Oyelowo, Layi	Program Manager	AFCEC/CZRX	N/A
Peters, Laura	Environmental Program Manager	AFCEC/CZO	N/A
Kusmak, Adam	49 CES	49 CES/CEI	N/A
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	N/A
Bergren, James	Captain, EOD flight	49 CES/CED	N/A

Work Performed (include location)

SUXOS/UXOSO/QC

Admin
Daily Safety & Operations briefings (UXO, QC and Geo)
Reviewed team logbooks and production sheets (SUXOS & UXOSO/UXOQCS)
Daily reports, Emails/Calls

Field
Observed field activities (SUXOS & UXOSO/UXOQCS)
Range Safety Officer (RSO)(UXOSO)

Today's Field Operations

- Disposal operation to dispose of remaining donor explosives in courtesy storage at MSA
- Completed site cleanup and prep for demob
- Swept 1.5 meters around utility poles at SR864which were causing gaps in EM61 data (0 lbs CD / 0 lbs MD located)

Date: Tuesday, 24 February 2015

Equipment Used/On Site:	**Admin/Office:** Laptop computers (1), **Vehicles (5):** 2015 Dodge Ram 4x4 Crew Cab (5 each) **UTVs (2):** Polaris two seat rangers (2) **MHE (1):** Backhoe (1) **Geophysical:** Geometrics G-858 dual-sensor cesium vapor magnetometers (2), Schonstedt GA-52Cx magnetic locators (9), Whites All-metals detectors (2) **GPS/Geospatial:** Trimble Pro-XRS DGPS w/Allegro controllers (2), Trimble R8 RTK-GPS base station (1) and rovers w/TSC2 controllers (2) **Demo:** Rothlisbuehler Remote Firing Device (RFD); 50-cap blasting machine; Type II day boxes (3); Galvanometer, Various demo tools and equipment **Communications:** Motorola PR-400 2-way radios (8) **Other:** Cameras (2), JVC Video Camera (1), Various hand tools and Safety gear, Stihl commercial weed-eater, 15-min Eyewash, Large first aid kit **Explosives on Hand:** Perforators(32g) – 0 / Elec Blasting Caps – 0 / Det Cord(80g) – 0 / Boosters(1lb) - 0
Health & Safety (Briefing held, PPE, injuries, near misses, etc.)	**PPE:** Level D **Daily Safety Briefing** (Vanderford) **Injuries:** N/A **Near Misses:** None **Daily Briefing Safety Topics:** 12 Rules for winter driving (rules 7 – 12)
Ordnance or Ordnance-Related Material Encountered, Condition and Location:	**MEC/UXO/DMM/MPPEH:** N/A **MD/SD/Other:** N/A **Daily MEC/UXO Discussion:** General UXO safety
Disposition of Ordnance Items, MD Encountered, Include Dates:	**MDAS:** N/A
Verbal Instructions Received or Given:	N/A
Changed Conditions/Delays/Conflicts Encountered:	*Field Changes:* YES_____ NO_____XX_____ If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____ **Delays/Conflicts :**
Other Comments or Additional Information:	1. Today (February 24, 2015) was the last day of field work for this mobilization.
Next Day's Planned Activities:	1. Vehicle prep for rental company pickup 2. Administrative actions for demob

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above

Signature

24 February 2015
Date

George H. Vaughn, Sr. UXO Supervisor
Name / Title

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/10/14

Report Number: 001
Project Title: Holloman AFB, NM Remedial Inv.
Location: Conference rm. Fairfield Inn
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/10/14

Work Performed (including sampling)	Dig permits for sites: RR869a, ML865, SR864, XU853 and XU854 (SUXOS and UXOSO). Accepted delivery of storage container for equipment (placed in parking lot of bldg. 1266). Accepted delivery of rental vehicles. Mobilization of UXO and GEO team members. Daily reports, Emails/calls.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Courtesy Storage Agreement (CSA) progressing through signature phase.
Visitors On Site	
Notes	
Tomorrow's Expectations	Site Orientation – Hazard Communications, Bloodborne pathogens, review of Work Plans. Pick up base passes for contract employees.

Additional: All team members arrived and checked into lodging at Alamogordo, NM.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/10/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/11/14

Report Number: 002
Project Title: Holloman AFB, NM Remedial Inv.
Location: Conference rm. Fairfield Inn
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/11/14

Work Performed (including sampling)	Site Orientation – Hazard Communications, Bloodborne pathogens, review of Work Plans. Pick up base passes for contract employees.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Courtesy Storage Agreement (CSA) progressing through signature phase.
Visitors On Site	Jeff Hackworth (FPM)
Notes	
Tomorrow's Expectations	Site orientation. Begin fieldwork (grid stakes at RR869).

Additional: _____

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/11/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/12/14

Report Number: 003
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/12/14

Work Performed (including sampling)	Site visits to RR869A, SR864, XU853, and XU854. Logistical tasks associated with preparation of project field activities after mobilization of field personnel. Locate IVS area for testing Geophysical equipment. GPS and grid stake placement in RR869 (completed - 26 grids). Equipment inspections and inventory. Site tour of MRSs.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization phases complete. Preparatory for surface clearance.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Courtesy Storage Agreement (CSA) progressing through signature phase. Explosives delivery pushed to Friday to allow time for CSA processing. Contractors laying a pipe through MRS XU853 – reported to Environmental Dept.
Visitors On Site	Jeff Hackworth (FPM)
Notes	
Tomorrow's Expectations	Receive base radios from Communications. Continue placing stakes on grid corners in RR869. Coordinate High Speed Test Track (HSTT) activities with Test Group Safety (John Tanis). Begin surface clearance of RR869A.

Additional: _____

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/12/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/13/14

Report Number: 004
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/13/14

Work Performed (including sampling)	Logistical tasks associated with preparation of project field activities after mobilization of field personnel. GPS and grid stake placement in ML865 (completed). Surface clearance in RR869A - 11 today, 11 of 26 completed. Surface clearance of IVS area near RR869A (30m x 60m area completed). Equipment inspections and inventory. Site tour of MRSs.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization phases complete. Preparatory and Initial for Surface Clearance complete.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Signed Courtesy Storage Agreement (CSA) received. Received base radios from Communications. Coordinated with John Tanis (Test Group Safety). Explosives delivery pushed to Friday.
Visitors On Site	Jeff Hackworth (FPM)
Notes	
Tomorrow's Expectations	Delivery and inventory of donor explosives.

Additional: _____

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/13/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/14/14

Report Number: 005
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/14/14

Work Performed (including sampling)	GPS and grid stake placement in ML865 (completed). Surface clearance in RR869 (13 today, 24 of 26 completed). Vehicle inspections. Explosives received and inventoried.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization phases complete. Preparatory, Initial, and Follow On for Surface Clearance complete.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Working to assist contractors who had buried a pipeline through the east side of XU853.
Visitors On Site	Jeff Hackworth (FPM)
Notes	
Tomorrow's Expectations	Weekend.

Additional: _____

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/14/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/17/14

Report Number: 006
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/17/14

Work Performed (including sampling)	GPS and grid stake placement in SR864 completed. Surface clearance in RR869 (26 of 26 grids completed) and ML865 (8 of 98 grids completed. Instrument Verification Strip #1 completed and 858 initial QC tests completed. Escort GEO in RR869a and SR864.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Working to assist contractors who had buried a pipeline through the east side of XU853. FPM will provide a cleared corridor for the pipeline footprint as far as Tula Peak Road. Informed that part of XU854 is a historical site and that site is on White Sands property. This will require additional documentation for approval.
Visitors On Site	Jeff Hackworth (FPM)
Notes	
Tomorrow's Expectations	Surface clearance of pipeline footprint at XU853. Continue surface clearance of ML865.

Additional: Two UTV's and a backhoe received from Blue Line Rentals.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/17/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/18/14

Report Number: 007
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/18/14

Work Performed (including sampling)	DGM data collection in RR869, blind seed emplaced. Surface clearance in ML865 (15 of 98 grids completed). Completed surface clearance and DGM data collection over pipeline corridor in XU853 extending to Tula Peak road. Scout area in XU853 for soil sampling.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Working to assist contractors who had buried a pipeline through the east side of XU853. FPM will provide a cleared corridor for the pipeline footprint as far as Tula Peak Road. Informed that part of XU854 is a historical site and that site is on White Sands property. This will require additional documentation for approval.
Visitors On Site	Jeff Hackworth (FPM)
Notes	Eight MEC items were located: 2 ea. 75mm HE projectiles in grid FA587, 3 ea. 75mm HE projectiles in grid EZ587, 2 ea. 75mm HE projectiles in grid EY587, 1 ea. 105mm HE projectile in grid FC588.
Tomorrow's Expectations	Surface clearance of pipeline footprint at XU853. Continue surface clearance of ML865.

Additional: One FPM person is providing overnight security at ML865 until demolition of MEC items.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/18/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/19/14

Report Number: 008
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/19/14

Work Performed (including sampling)	DGM data collection in RR869, blind seed #2 emplaced. Surface clearance in ML865 – 7 grids (22 of 98 grids completed).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Waiting for a backhoe to excavate anomalies below 3 feet at the pipeline corridor through the east side of XU853. Informed that part of XU854 is a historical site and that site is on White Sands property. This will require additional documentation for approval.
Visitors On Site	Jeff Hackworth (FPM)
Notes	Thirteen MEC items were located: 4 ea. 75mm HE projectiles in grid EY588, 2 ea. 75mm HE projectiles and 2 ea. 105mm in grid EZ588, 1 ea. 75mm HE projectiles in grid EZ589, 4 ea. 75mm HE projectile in grid FA588.
Tomorrow's Expectations	Continue surface clearance of ML865.

Additional: One FPM person is providing overnight security at ML865 until demolition of MEC items (scheduled for Friday 11/21/14).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/19/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/20/14

Report Number: 009
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO____X_____

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/20/14

Work Performed (including sampling)	DGM data collection in RR869, blind seed #3 emplaced. Surface clearance in ML865 – 12 grids today (34 of 98 grids completed).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Waiting for a backhoe to excavate anomalies below 3 feet at the pipeline corridor through the east side of XU853. Informed that part of XU854 is a historical site and that site is on White Sands property. This will require additional documentation for approval.
Visitors On Site	Jeff Hackworth (FPM)
Notes	Zero MEC/UXO located today.
Tomorrow's Expectations	Demolition operations.

Additional: One FPM person is providing overnight security at ML865 until demolition of MEC items (scheduled for Friday 11/21/14).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/20/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/21/14

Report Number: 010
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/21/14

Work Performed (including sampling)	Demolition operations: explosive treatment of 21 projectiles (18 ea. 75mm projectiles and 3 ea. 105mm projectiles). All 21 items determined to be inert. Admin (payroll/per diem). Scout location for IVS #2 near SR864 (for EM 61) and GPS concrete pads (GEO data avoidance). Completed GEO data collection in RR869. Vehicle/equipment checks.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Scout areas designated for soil sampling in XU853.
Problems Encountered/Resolved	Waiting for a backhoe to excavate anomalies below 3 feet at the pipeline corridor through the east side of XU853. Informed that part of XU854 is a historical site and that site is on White Sands property. This will require additional documentation for approval.
Visitors On Site	
Notes	Explosives draw: no issues. Zero MEC/UXO located today. MDAS secured in team conex container.
Tomorrow's Expectations	Monday: Continue surface clearance of ML865, transport and assemble the 858 towed array, fully investigate deep anomalies at the pipeline corridor in XU853.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/21/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/24/14

Report Number: 011
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/24/14

Work Performed (including sampling)	Surface clearance in ML865 – 15 grids today (49 grids of 98 completed). Towed array transported to ML865 and assembled. Scout for IVS #3 location near ML865. Completed investigation at communication pipeline corridor (clear - no MEC/UXO). Vehicle/equipment checks.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Flagged corners of multi-incremental sampling grids in XU853 decision units (6 each).
Problems Encountered/Resolved	Informed that part of XU854 is a historical site and that site is on White Sands property. Terri Bood (49 CES – Real Estate) provided a map of HAFB boundaries and JR Gomolak provided the archeological report.
Visitors On Site	
Notes	Backhoe delivered.
Tomorrow's Expectations	Tuesday: Continue surface clearance of ML865 and flagging multi-incremental sampling grids in XU853.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/24/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/25/14

Report Number: 012
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/25/14

Work Performed (including sampling)	Surface clearance in ML865 – 14 grids today (63 grids of 98 completed). Large timbers scattered near the backstop in ML865 were moved to allow for the surface clearance and subsequent DGM data collection. The towed array was assembled in ML865 and tested. The IVS near ML865 is being established (surface sweep and blind seed burial) . Vehicle/equipment checks.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Multi-incremental sampling in XU853 - all six of the decision unit sub-grids are flagged and soil sampling in one decision unit was completed today.
Problems Encountered/Resolved	Informed that part of XU854 is a historical site and that XU854 is on White Sands property. Discussions are progressing on disposition of the historical area and the Project Action Description (work/entry authorization) is currently being processed by WSMR.
Visitors On Site	None
Notes	
Tomorrow's Expectations	Wednesday: Continue surface clearance of ML865 and continue establishing the IVS for the towed array near ML865.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/25/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/26/14

Report Number: 013
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 11/26/14

Work Performed (including sampling)	Surface clearance in ML865 – 10 grids today (73 grids of 99 completed). Large timbers and cables scattered near the backstop in ML865 were moved to allow for the surface clearance and subsequent DGM data collection. The IVS near ML865 was completed today (ISOs emplaced). The towed array was tested at the IVS (data collected). Vehicle/equipment checks.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	Informed that part of XU854 is a historical site and that XU854 is on White Sands property. Discussions are progressing on disposition of the historical area and the Project Action Description (work/entry authorization) is currently being processed by WSMR.
Visitors On Site	None
Notes	Note that ML865 has a total of 99 grids (98 grids were tallied in earlier QC reports).
Tomorrow's Expectations	Thanksgiving holidays.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/26/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/01/14

Report Number: 014
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/01/14

Work Performed (including sampling)	Surface clearance in ML865 – 9 grids today (82 grids of 99 completed). Incremental soil sampling in XU853. Towed array collected data at the IVS to build a database. Heavy equipment reducing vegetation height for the towed array. Vehicle/equipment checks.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Incremental soil sampling in XU853.
Problems Encountered/Resolved	Informed that part of XU854 is a historical site and that XU854 is on White Sands property. Discussions are progressing on disposition of the historical area and the Project Action Description (work/entry authorization) is currently being processed by WSMR.
Visitors On Site	Chris Fierro (tire serviceman).
Notes	The 75mm and 105mm projectiles thus far appear to have different types of inert fillers. The inert condition is proven by negative responses from the Expray explosives detector kit and by results of perforator demolition which produced only a hole through the projectile and their filler; no low or high detonations occurred. The most prevalent filler is a yellow/dry substance; however, this material is also found mixed with the more commonly used red wax filler (see photos). A white, wax-type inert filler has also been noted in some projectiles as well as plaster of paris filler. The yellow/dry material does not share characteristics of the local soil to indicate soil-impacted projectiles. If related, it is possible that the red wax filler decomposes into the yellow/dry material.
Tomorrow's Expectations	Surface clearance of ML865, incremental soil sampling in XU854, towed array completion of the IVS database & data collection in ML865.

Additional: No MEC/UXO located today – no overnight security. Short production delay (30 minutes) due to tire repair on backhoe.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/01/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/01/14

Inert fillers: Left - dry/yellow material, Middle – red wax, Right – white waxy material.

A 75mm projectile base with the yellow/dry inert filler interspersed with the red wax inert filler.

DAILY QUALITY CONTROL REPORT

Date 12/01/14

The same 75mm projectile base with inert fillers (open).

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/02/14

Report Number: 015
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/02/14

Work Performed (including sampling)	Surface clearance in ML865 – 8 grids today (90 grids of 99 completed). Incremental soil sampling in XU853. Towed array collected data at the IVS (completed) to build a database and begin collected data in ML865. Heavy equipment reducing vegetation height for the towed array. Vehicle/equipment checks. Blind seed ML865 #1 emplaced (small).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Incremental soil sampling in XU853 (4 of 6 Decision Units completed).
Problems Encountered/Resolved	Informed that part of XU854 is a historical site and that XU854 is on White Sands property. Discussions are progressing on disposition of the historical area and the Project Action Description (PAD - work/entry authorization) is currently being processed by WSMR and is expected to be completed 12/04/14.
Visitors On Site	None.
Notes	
Tomorrow's Expectations	Surface clearance of ML865, incremental soil sampling in XU854, towed array data collection in ML865.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/02/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/02/14

Inert fillers: Left - dry/yellow material, Middle – red wax, Right – white waxy material.

A 75mm projectile base with the yellow/dry inert filler interspersed with the red wax inert filler.

DAILY QUALITY CONTROL REPORT

Date 12/02/14

The same 75mm projectile base with inert fillers (open).

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/03/14

Report Number: 016
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/03/14

Work Performed (including sampling)	Surface clearance in ML865 – 2 grids today (92 grids of 99 completed) and surface clearance (MEC/UXO and tire hazards only) of a 50 foot area outside the perimeter of ML865 to allow safe turning room for the towed array outside of established grids. Incremental soil sampling in XU853 (all 6 Decision Units completed). Towed array collected data in ML865. Vehicle/equipment checks. Blind seed ML865 #2 emplaced (medium size).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Incremental soil sampling in XU853.
Problems Encountered/Resolved	Informed that part of XU854 is a historical site and that XU854 is on White Sands property. Discussions are progressing on disposition of the historical area and the Project Action Description (PAD - work/entry authorization) is currently being processed by WSMR and is expected to be completed 12/04/14.
Visitors On Site	None.
Notes	JR Gomolak (Base Environmental) approved work to flag sampling mini-grid locations in XU854.
Tomorrow's Expectations	Surface clearance of ML865, begin incremental soil sampling in XU854, towed array data collection in ML865. Approval of PAD to work in XU854.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/03/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/03/14

Inert fillers: Left - dry/yellow material, Middle – red wax, Right – white waxy material.

A 75mm projectile base with the yellow/dry inert filler interspersed with the red wax inert filler.

DAILY QUALITY CONTROL REPORT

Date 12/03/14

The same 75mm projectile base with inert fillers (open).

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/04/14

Report Number: 017
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/04/14

Work Performed (including sampling)	Surface clearance in ML865 – 7 grids today (99 grids of 99 completed*). Towed array collected data in ML865. Vehicle/equipment checks. Blind seed ML865 #3 emplaced (large size).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Flagged locations of mini-grids for multi-incremental soil sampling in XU854.
Problems Encountered/Resolved	XU854 is a historical site on White Sands property. The Project Action Description (PAD - work/entry authorization) is being processed by WSMR. Guidance was provided by JR Gomolak (Base Environmental).
Visitors On Site	None.
Notes	Mr. JR Gomolak clarified some aspects of the restrictions that apply to XU854 as a historical site. The main concern will be retaining the integrity of missile components and any other cultural debris that relate to a nearby historical homestead. Mr. Gomolak approved removal of UXO/MEC as well as MD that is unrelated to missile components. Multi-incremental soil sampling is also approved. Should any historical cultural debris be located, he will provide guidance to its disposition. Note that the DGM transects are somewhat flexible and may be routed to avoid obstructions and historically significant finds.
Tomorrow's Expectations	Surface clearance of additional grids that were added to the west side of ML865 and surface clearance of grids in SR864 if time allows. Towed array data collection in ML865 and scouting a location for an IVS near SR864.

Additional: No MEC/UXO located today – no overnight security. *Note that seven grids were added to the west side of ML865 (total number of grids will change to 106). Small pieces of a 40mm grenade projectile was discovered (fragmentation sleeve only – no energetics).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/04/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/04/14

Inert fillers: Left - dry/yellow material, Middle – red wax, Right – white waxy material.

A 75mm projectile base with the yellow/dry inert filler interspersed with the red wax inert filler.

DAILY QUALITY CONTROL REPORT

Date 12/04/14

The same 75mm projectile base with inert fillers (open).

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/05/14

Report Number: 018
Project Title: Holloman AFB, NM Remedial Inv.
Location: RR869 (Debris Field), Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/05/14

Work Performed (including sampling)	Surface clearance in ML865 – 5 grids that were added to ML865 as well as partials of previously completed grids (EY586, EY587, and EZ586) were completed today (104 grids of 104 grids). SR864 – 13 grids were surface swept today (13 of 135 grids). Towed array collected data in ML865. Flagging of multi incremental soil sampling grids in XU854 completed. Vehicle/equipment checks. Blind seed ML865 #4 emplaced (small size).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory and Initial for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	
Problems Encountered/Resolved	XU854 is a historical site on White Sands property; guidance was provided by Mr. JR Gomolak that should allow work to proceed. The Project Action Description (PAD - work/entry authorization) is being processed by WSMR.
Visitors On Site	None.
Notes	No MEC/UXO were discovered in the grids & partial areas added to the west side of ML865 or in surface swept grids in SR864
Tomorrow's Expectations	Weekend

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/05/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/05/14

Inert fillers: Left - dry/yellow material, Middle – red wax, Right – white waxy material.

A 75mm projectile base with the yellow/dry inert filler interspersed with the red wax inert filler.

DAILY QUALITY CONTROL REPORT

Date 12/05/14

The same 75mm projectile base with inert fillers (open).

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/08/14

Report Number: 019
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, ML865, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/08/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Demolition/demilitarization of inert filled projectiles in ML865. Surface clearance in SR864 – 12 grids today (25 of 135 grids). EM-61 towed array was assembled and staged near SR864. Flagging of multi incremental soil sampling grids in XU854 completed (currently 7 decision units).
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory, Initial, and Follow On for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	XU854 is a historical site on White Sands property; guidance was provided by Mr. JR Gomolak that should allow work to proceed. The Project Action Description (PAD - work/entry authorization) is being processed by WSMR.
Visitors On Site	Joe Silva (Blue Line Rental mechanic)
Notes	Repair for UTV#003 (loss of oil – loose oil filter)
Tomorrow's Expectations	Continue surface sweep at SR864, construction and data collection at IVS near SR864.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/08/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/08/14

Inert fillers: Left - dry/yellow material, Middle – red wax, Right – white waxy material.

A 75mm projectile base with the yellow/dry inert filler interspersed with the red wax inert filler.

DAILY QUALITY CONTROL REPORT

Date 12/08/14

The same 75mm projectile base with inert fillers (open).

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/09/14

Report Number: 020
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, ML865, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/09/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance in SR864 – 13 grids today (38 of 135 grids). DGM data collection in ML865. Begin soil sampling in multi incremental sampling grids in XU854.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory, Initial, and Follow On for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	XU854 is a historical site on White Sands property. The Project Action Description (PAD - work/entry authorization) was received and UXO clearance/DGM data collection is approved in XU854.
Visitors On Site	None.
Notes	
Tomorrow's Expectations	Continue surface sweep at SR864, DGM data gap collection at ML865. Arrival of Mr. Jeff Hackworth.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/09/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/10/14

Report Number: 021
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, ML865, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/10/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance in SR864 – 18 grids today (56 of 135 grids). DGM data collection (data gaps) in ML865 completed. Blind seeds emplaced for towed array and for manned portable G-858.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory, Initial, and Follow On for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Soil sampling in multi incremental sampling grids in XU854.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	None.
Tomorrow's Expectations	Continue surface sweep at SR864. Collect background DGM data for the IVS near SR864.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/10/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/11/14

Report Number: 022
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, RR869, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/11/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance in SR864 – 20 grids today (76 of 135 grids). Assembly of the EM-61 towed array and collection of DGM background data over the IVS located near SR864. QC of collected CD & MD.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory, Initial, and Follow On for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	Soil sampling in multi incremental sampling grids in XU854.
Problems Encountered/Resolved	None.
Visitors On Site	Laura Peters at RR869.
Notes	Morning safety brief: Identifying workplace hazards. Jeff Hackworth (FPM MMRP Manager) onsite.
Tomorrow's Expectations	Continue surface sweep at SR864. Surface clear and begin assembly of the IVS near SR864.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/11/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/12/14

Report Number: 023
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, RR869, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/12/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance in SR864 – 20 grids today (96 of 135 grids). Assembly of IVS near SR864. Surface clearance at IVS near SR864. EM-61 towed array collected DGM data over the IVS. Transects laid in for XU854. QC of collected CD & MD.
DFW (Preparatory, Initial, Follow On)	Completed: Pre-mobilization, Mobilization, Surface Clearance phases complete. Preparatory, Initial, and Follow On for Demolition Operations completed.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	A line of concrete pads on the eastern side of SR864 will prevent towed array data collection because of protruding metal rods that can puncture the towed array tires (see attached photos). These data gaps will be filled in with EM61.
Visitors On Site	None.
Notes	Morning safety brief: Heavy Equipment Safety. Jeff Hackworth onsite at RR869A for discussion about OT-04 (old IRP site adjacent to RR869A).
Tomorrow's Expectations	Weekend.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/12/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/12/14

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/15/14

Report Number: 024
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/15/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance in SR864 – 21 grids today (117 of 134 grids*). EM-61 towed array collected DGM data in SR864. QC of collected CD (cultural debris) & MD (munitions debris). QC seed (SR864-ISO#1) emplaced in SR864 for the towed array.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	Soil sampling in Decision Units (multi incremental grids) in XU854.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Avoiding complacency. Note that grid total for SR864 is 134 grids, not 135 as previously reported.
Tomorrow's Expectations	Continue surface clearance in SR864, DGM data collection in SR864 (EM-61 towed array), soil sampling in multi incremental grids in XU854, begin surface clearance of transects at XU853.

Additional: No MEC/UXO located today – no overnight security.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/15/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/16/14

Report Number: 025
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 12/16/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance in SR864 completed – 17 grids today (134 of 134 grids). EM-61 towed array collected DGM data in SR864. QC of collected CD & MD. QC seed (SR864-ISO#2) emplaced in SR864 for the towed array. Begin surface clearance of transects in XU853. Blind seed (SR864-ISO#2) emplaced in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	Soil sampling in Decision Units (multi incremental grids) in XU854.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Near Miss Reporting. Two M18 Smoke grenades located. One is Discarded Military Munition (DMM) with safety pin installed while the other has an impinged primer – did not function. Night watch posted.
Tomorrow's Expectations	Demolition operation in SR864 for two smoke grenades, DGM data collection in SR864 (EM-61 towed array), soil sampling in multi incremental grids at XU854, begin surface clearance of transects at XU853.

Additional: _____

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/16/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/17/14

Report Number: 026
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, ML865, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 12/17/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Demolition operation in SR864 for two smoke grenades. QC of collected CD & MD. QC seed (SR864-ISO#3) emplaced in SR864 for the towed array. Begin excavations in exploratory trenches in ML865.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	Soil sampling in Decision Units (multi incremental grids) in XU854.
Problems Encountered/Resolved	The EM-61 towed array developed technical problems – no DGM data collected.
Visitors On Site	None.
Notes	Morning safety brief: Activity Hazard Analysis for Demolition Operations.
Tomorrow's Expectations	DGM data collection in SR864 (EM-61 towed array), soil sampling in multi incremental grids at XU854, complete excavations in exploratory trenches in ML865.

Additional: No MEC/UXO located – no night watch posted.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/17/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/18/14

Report Number: 027
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, ML865, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 12/18/14

Work Performed (including sampling)	Vehicle, equipment & radio checks. Completed excavations in exploratory trenches (8 each) in ML865. DGM data collection in SR864
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	Soil sampling in Decision Units (multi-incremental grids) in XU854 completed.
Problems Encountered/Resolved	The EM-61 towed array passed testing after troubleshooting and successfully collected DGM data.
Visitors On Site	None.
Notes	Morning safety brief: Christmas travel safety.
Tomorrow's Expectations	Vehicle clean up and shipping equipment. Preparation for Christmas demobilization. Continue EM61 towed array data collection in SR864.

Additional: No MEC/UXO located – no night watch posted. A large metal bin/scoop was excavated from one of the exploratory trenches in ML865 (see attached photos).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/18/14

Date

DAILY QUALITY CONTROL REPORT

Date 12/18/14

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/19/14

Report Number: 028
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Boban Stojanovic	FPM Remediations	FPM Geophysicist
13.	Mike Sample	FPM Remediations	FPM Geophysicist (demobilizing)

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 12/19/14

Work Performed (including sampling)	Vehicle clean up and shipping equipment. Preparation for Christmas demobilization. One blind seed (SR864-ISO#4) implanted. Continue EM61 towed array data collection in SR86.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Merry Christmas and safe travels. Scheduled to return 5 January 2015 with work starting 6 January 2015.
Tomorrow's Expectations	Demobilization.

Additional: Only fieldwork today is DGM data collection in SR864 – escorted by UXO Tech III.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/19/14

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/06/15

Report Number: 029
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Jack Connor	FPM Remediations	UXO Tech 2
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Cecilia Flores	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/06/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Assembly of EM-61 towed array. Surface clearance of transects 2 and 3 in XU853 completed.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	Jose Silva (Blue Line Rental – backhoe maintenance).
Notes	Morning safety brief: Cold stress, hazard analysis for tasks.
Tomorrow's Expectations	Surface clearance of transects 1and 4 in XU853. Begin surface clearance of transects in XU854. Complete assemble of EM-61 towed array and DGM data collection at SR864. Dave Hugg will be present onsite.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/06/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/07/15

Report Number: 030
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/07/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Assembly and testing of the EM-61 towed array at SR864. Surface clearance of transects 1 and 4 at XU853. All four transects for SR864 are complete.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	GEO experienced technical difficulties with the EM-61 towed array – no DGM data collected. Dave Rizzuto related that at some point in the near future, the gate to SR864 will be permanently shut to keep out oryx – an alternate route will be used.
Visitors On Site	Dave Rizzuto
Notes	Morning safety brief: avoiding colds & flu, slips/trips/falls.
Tomorrow's Expectations	Begin surface clearance of transects in XU854. Complete assembly of EM-61 and testing of EM-61 towed array and DGM data collection at SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/07/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/08/15

Report Number: 031
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/08/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Assembly and testing of the EM-61 towed array at SR864. Surface clearance of transects 10 and 11 at XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Blue Line Rental was not allowed on base due to no FPM personnel having escort privileges.
Visitors On Site	None.
Notes	Morning safety brief: avoiding complacency.
Tomorrow's Expectations	Continue surface clearance of transects in XU854. DGM data collection at SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/08/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/09/15

Report Number: 032
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/09/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. EM-61 towed array collecting DGM data at SR864. Surface clearance of transects 8 & 9 at XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: pause to evaluate tasks.
Tomorrow's Expectations	Continue surface clearance of transects in XU854. DGM data collection at XU853.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/09/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/12/15

Report Number: 033
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/12/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance & marking of alternate transect paths at XU853. EM-61 towed array collecting DGM data at XU853 (completed). Surface clearance of transects 5, 6 & 7 at XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Transects 1 & 2 at XU853 were altered to avoid buildings and increase coverage.
Visitors On Site	Jose Silva (Blue Line rentals).
Notes	Morning safety brief: signs of a stroke. Robert Martin arrives.
Tomorrow's Expectations	Continue surface clearance of transects in XU854. DGM data collection at XU854 and/or placement of 100% DGM grids in XU853 and XU854. Conduct soil sampling in ML865.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/12/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/13/15

Report Number: 034
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/13/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance of transects at XU854 (completed). EM-61 towed array collecting DGM data at XU854 transects (completed). Surface clearance of DGM grid F in XU853.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Soil sampling kit did not arrive today for R. Martin to take samples in ML865.
Visitors On Site	None.
Notes	Morning safety brief: Cell phone distraction.
Tomorrow's Expectations	Begin reacquisition and flagging of subsurface anomalies in SR864. Continue surface clearance of DGM grids in XU853 & XU854.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/13/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/14/15

Report Number: 035
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/14/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance of DGM grids at XU854. Surface clearance of DGM grids at XU853 (A-E completed). Begin reacquisition and flagging of subsurface anomalies in DGM grids at SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Soil sampling kit arrived today.
Visitors On Site	None.
Notes	Morning safety brief: Five steps to safety.
Tomorrow's Expectations	Continue reacquisition and flagging of subsurface anomalies in DGM grids at SR864. Complete DGM grid surface clearance at XU854.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/14/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/15/15

Report Number: 036
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/15/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Surface clearance of DGM grids at XU854 (completed). Continue reacquisition and flagging of subsurface anomalies in DGM grids at SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: First Aid Awareness.
Tomorrow's Expectations	Begin intrusive investigations in SR864. Begin data collection of DGM grids with the towed array in SR864. Soil sampling in ML865.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/15/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/16/15

Report Number: 037
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239368	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/16/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Begin investigation of subsurface anomalies in DGM grids at SR864. Begin data collection at XU853 & XU854 with the EM61 towed array.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	Soil samples collected at ML865.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: General UXO precautions & excavation procedures.
Tomorrow's Expectations	Continue intrusive investigations in SR864. Continue data collection of DGM grids in XU854 & XU854 with the towed array in SR864. Continue reacquisition & flagging of targets in SR864..

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/16/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/19/15

Report Number: 038
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/19/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigations in SR864. Data collection of DGM grids in XU853 with the towed array (completed). Completed marking high density grids in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of nine grids in SR864 – IK311, IK312, IK313, IK314, IL311, IL314, IL315, IM311, IM315. All pass.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Carpal Tunnel Syndrome.
Tomorrow's Expectations	Begin data collection of DGM grids in XU854 with the EM61 towed array. Begin intrusive investigation of high density grids in SR864. Continue reacquisition and flagging of subsurface targets in SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/19/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/20/15

Report Number: 039
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/20/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigations in SR864 (three high density grids completed). Data collection of DGM grids in XU854 with the EM-61towed array (completed). Continued reacquisition and flagging of subsurface targets in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of fourteen grids in SR864 – IL312, IL313, IM312, IM313, IM314, IM316, IM318, IN310, IN311, IN312, IN316, IN317, IN318, IN319. All pass.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Hazards to outdoor workers.
Tomorrow's Expectations	Begin data collection of data gaps in XU854 & XU853 with the single coil EM61. Continue intrusive investigation of high density grids in SR864. Continue reacquisition and flagging of subsurface targets in SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/20/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/21/15

Report Number: 040
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/21/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigations in SR864 (five high density grids completed). Continued reacquisition and flagging of subsurface targets in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None
Problems Encountered/Resolved	The EM-61 single coil had technical difficulties and did not collect any DGM data today.
Visitors On Site	None.
Notes	Morning safety brief: Employee safety rights and responsibilities.
Tomorrow's Expectations	Begin data collection of data gaps in XU854 & XU853 with the single coil EM61. Continue intrusive investigation of high density grids in SR864. Continue reacquisition and flagging of subsurface targets in SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/21/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/23/15

Report Number: 041
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/23/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigations in SR864 (2 high density grids investigated). Surface clearance & brush clearance of additional sampling grids in XU854. Data collection of additional sampling grids and data gaps in XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Cold weather safety and health hazards. Emplaced one blind seed in XU853.
Tomorrow's Expectations	Weekend.

Additional: No fieldwork conducted on 01/22/15 due to bad weather (rain, snow, ice). No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/23/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/26/15

Report Number: 042
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /requires repair
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/26/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigations in SR864 (2 high density grids investigated). DGM data collection with the EM-61 single coil over data gaps in XU853 (completed). Continue reacquisition and flagging of anomalies in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: General safety, fire safety, hand tool safety.
Tomorrow's Expectations	Complete subsurface intrusive investigation of high density grids in SR864. Continue subsurface intrusive investigation in SR864. Prepare the IVS near RR869A.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/26/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/27/15

Report Number: 043
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/27/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Intrusive investigations in SR864 high density grids (last grid completed). Continue intrusive investigation of single anomalies in SR864. Continue reacquisition and flagging of anomalies in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Caught in/on/between hazards (pinch points).
Tomorrow's Expectations	Continue subsurface intrusive investigation in SR864. Prepare the IVS near RR869A.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/27/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/28/15

Report Number: 044
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, RR869A, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/28/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigation of single anomalies in SR864. Continue reacquisition and flagging of anomalies in SR864. Completed IVS setup near RR869A.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Anger – one letter short of Danger.
Tomorrow's Expectations	Continue subsurface intrusive investigation in SR864. Continue flagging and reacquisition of targets in SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/28/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/29/15

Report Number: 045
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, RR869A, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 01/29/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Continue intrusive investigation of single anomalies in SR864. Continue reacquisition and flagging of anomalies in SR864. Processed EM61 data collected from XU854 & XU854. Preparing test pit to set threshold for G-858 at RR869A.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Excavation hazards & precautions.
Tomorrow's Expectations	Continue subsurface intrusive investigation in SR864. Continue flagging and reacquisition of targets in SR864.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/29/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/30/15

Report Number: 046
Project Title: Holloman AFB, NM Remedial Inv.
Location: Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 01/30/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Equipment cleanup. Preparation of ISO's to be used at the threshold pit near RR869A.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Inclement weather (constant rain) prevented field work today.
Visitors On Site	None.
Notes	Morning safety brief: Working in the rain.
Tomorrow's Expectations	Weekend.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/30/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/02/15

Report Number: 047
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/02/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Reacquisition and flagging of targets in SR864 (completed). Subsurface investigation of targets in SR864. Data collection to determine threshold for RR869A (completed).
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Pallet safety.
Tomorrow's Expectations	Complete subsurface investigation of targets in SR864. Begin reacquisition and flagging of targets in XU853 & XU854. Begin subsurface investigation of targets in XU854.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/02/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/03/15

Report Number: 048
Project Title: Holloman AFB, NM Remedial Inv.
Location: SR864, XU854, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/03/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Reacquisition and flagging of transect targets in XU854 (completed). Begin reacquisition and flagging of transect targets in XU853. Subsurface investigation of targets in XU854 (transects L1 & L2 complete).
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of thirty four grids in SR864: II311, IJ310, IJ311, IJ312, IK309, IK310, IL309, IL310, IM308, IM310, IN307, IN308, IN309, IO307 – IO311, IP306 – IP312, IQ306 – IQ312, IR 307, IR308. All pass. Note that all "no finds" are included in QC.
Problems Encountered/Resolved	None.
Visitors On Site	Paul Swinford (Swinford Fencing)
Notes	Morning safety brief: Hand protection.
Tomorrow's Expectations	Continue subsurface investigation of targets in XU854. Complete reacquisition and flagging of targets in XU853.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/03/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/04/15

Report Number: 049
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/04/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Reacquisition and flagging of transect targets in XU853 (completed). Subsurface investigation of targets in XU854 (transects L4- L9). Began subsurface investigation of transects in XU853.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	After QC review of site documentation for SR864, it was determined that 16 grids require anomaly reacquisition and subsurface investigation. This will be accomplished on 5 February 2015.
Visitors On Site	None.
Notes	Morning safety brief: Eye safety precautions.
Tomorrow's Expectations	Complete reacquisition, flagging, and subsurface investigation of 16 grids in SR864. Continue subsurface investigation of targets in XU854. Collect DGM data gaps in RR869a.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/04/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/05/15

Report Number: 050
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2 - demobilized
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Rob Martin	FPM Remediations	FPM Geophysicist
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/05/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU854 (transect L3). Subsurface investigation of remaining targets in SR864.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	The UXO team was investigating target anomalies in XU853. One anomaly was deep, so a backhoe was used to remove the overburden soil. When the team got within a foot of the anomaly, they hand dug to the anomaly and verified it was not UXO/MEC/MPPEH. All that was visible was a piece of crumpled up metal, so the team used the backhoe to remove it in one scoop. When the bucket was lifted from the hole, a thick, grey liquid oozed from the dirt & metal inside the bucket. Plastic sheeting was laid down on the ground; a dirt coffer dam built around it to contain the material; and then the bucket load was laid on the sheeting. Only then could the anomaly be identified as a barrel. It is estimated that 10 gallons of liquid material remained with the barrel. This area was then cordoned off until disposition is decided. FPM will collect a sample and send it to a lab for analysis. The resulting disposal characterization profile will be provided to the AF for review & approval.
Visitors On Site	None.
Notes	Morning safety brief: Foot protection.
Tomorrow's Expectations	Continue subsurface investigation of targets in XU853. Collect DGM data gaps in RR869a with the G-858.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/05/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/06/15

Report Number: 051
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, RR869a, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2 – last day
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Rob Martin	FPM Remediations	FPM Geophysicist
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/06/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU854. Collected DGM data gaps in RR869a with the G-858.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	Recovered barrel and material found on 02/05/15 in an XU853 transect were drummed up and is awaiting sampling and disposition.
Visitors On Site	None.
Notes	Morning safety brief: General UXO precautions.
Tomorrow's Expectations	Continue subsurface investigation of targets in XU853. Collect DGM data gaps in RR869a with the G-858.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/06/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/09/15

Report Number: 052
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, SR864, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
9.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
10.	Rob Martin	FPM Remediations	FPM Geophysicist
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/09/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU853 transects. Began reacquisition and flagging of anomalies in DGM grids at XU853 & XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of twenty five grids: IM309, IO314, IP313, IP314, IQ313, IQ314, IR310 - IR315, IS310 – IS315, IT311 – IT316, & IU313. All grids passed QC.
Problems Encountered/Resolved	The MDAS shipment to Timberline was delayed until tomorrow afternoon.
Visitors On Site	None.
Notes	Morning safety brief: General UXO precautions.
Tomorrow's Expectations	Continue subsurface investigation of targets in XU853. Pickup of MDAS material to be shipped to Timberline Environmental. Fit testing of respirators for work at the fence line between RR869a & OT-4. Verification of "no finds" with geophysical equipment. Soil sampling in ML865 and sampling of barrel and paint-like material at excavation site at XU854 transect site.

Additional: No MEC/UXO located.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/09/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/10/15

Report Number: 053
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, SR864, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
9.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
10.	Rob Martin	FPM Remediations	FPM Geophysicist
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/10/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU853 transects (completed). Reacquisition and flagging of anomalies in DGM grids at XU853 & XU854. Fit testing of respirators for work at the fence line between RR869a & OT-4. Soil sampling in ML865 and sampling of barrel and paint-like material at excavation site at XU854 transect site.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of thirteen grids in SR864: IM317, IO318, IP317, IP318, IR317, IR318, IS318, IT317, IT318, IU315, IU316, IU317, and IV317. All grids passed QC.
Problems Encountered/Resolved	A possible burial pit was discovered adjacent to the location of the barrel with paint-like properties (transect at XU854). The EM-61 & G-858 will be used to discover the extent. The freight company (YRC) again failed to show to pick up the MDAS shipment for Timberline Environmental.
Visitors On Site	None.
Notes	Morning safety brief: Importance of hydration, sun/windburn protection.
Tomorrow's Expectations	Continue acquisition & flagging of targets in DGM grids at XU853 & XU854. Continue subsurface investigation of DGM grid targets in XU853. The EM-61 & G-858 will be used to discover the extent of a possible burial pit in XU853.

Additional: No MEC/UXO located. Note that 39 grids in SR864 had no subsurface anomalies detected by geophysical instruments: II310, IF313, IL308, IL316, IM319, IN313, IN314, IN315, IO306, IO312, IO313, IO315, IO316, IO317, IO319, IP315, IP316, IP319, IQ315, IQ316, IQ317, IQ318, IQ319, IR309, IR316, IR319, IS309, IS316, IS317, IS319, IT310, IT319, IU312, IU314, IU318, IV314, IV315 IV316, and IV318.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/10/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/11/15

Report Number: 054
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
9.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
10.	Rob Martin	FPM Remediations	FPM Geophysicist
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/11/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853. DGM data was collected with the G-858 & EM-61 to determine the extent of the possible burial pit in XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Slips, trips, and falls.
Tomorrow's Expectations	Continue acquisition & flagging of targets in DGM grids at XU853 & XU854. Continue subsurface investigation of DGM grid targets in XU853.

Additional: No MEC/UXO located, but two BLU-26 (T-1) training submunitions that were each separated into two halves were located at DGM grid "A" in XU853. The Expray explosive detector kit tests were negative for energetics for these items.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/11/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/12/15

Report Number: 055
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
9.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
10.	Rob Martin	FPM Remediations	FPM Geophysicist
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/12/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853. Reacquisition and flagging of anomalies in DGM grids at XU853 & 854. Began fence removal between RR869a and OT-4 (for DGM data collection in areas masked by fence interference.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Food safety & lunchtime (field hygiene).
Tomorrow's Expectations	Continue acquisition & flagging of targets in DGM grids at XU854. Continue subsurface investigation of DGM grid targets in XU853 & XU854. Complete fence removal, surface clearance, and DGM data collection at fence line.

Additional: No MEC/UXO located. A conference call between FPM, Laura Peters, Brian Renaghan, and John Haliscak was held today where it was decided to proceed with the fence removal operation at RR869a.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/12/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/13/15

Report Number: 056
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
9.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
10.	Rob Martin	FPM Remediations	FPM Geophysicist
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/13/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853. Completed fence removal between RR869a and OT-4 (for DGM data collection in areas masked by fence interference). DGM data collection at the fence line corridor.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Safety precautions for fence removal.
Tomorrow's Expectations	Weekend – On Saturday 02/14/15, the fence posts between RR869a and OT-4 will be emplaced by the fencing contractor – FPM will provide over watch and review the subcontractor's work.

Additional: No MEC/UXO located. The remainder of the stored MDAS was picked up on Thursday 02/12/15 for recycling.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/13/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/17/15

Report Number: 057
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU853, XU854, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Rob Martin	FPM Remediations	FPM Geophysicist
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/17/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853 and XU854. Reacquisition and flagging of anomalies at fence line between RR869a & OT-4. Reacquisition & flagging of targets in XU854 DGM grids.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of XU853 DGM grid A and transects L1, L2. All areas passed QC.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Review of PPE and decontamination procedures for fence line work (Level C safety precautions). The fencing contractor (SwinTec) emplaced the fence posts on Saturday 02/14/15. Monday was a holiday (Presidents Day).
Tomorrow's Expectations	Begin investigation of fence line anomalies (Level C PPE when intrusive). Continue reacquisition & flagging of targets in XU854 DGM grids.

Additional: No MEC/UXO located. Two geophysicists de-mobilized over the weekend.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/17/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/18/15

Report Number: 058
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3 – Demobilized
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Rob Martin	FPM Remediations	FPM Geophysicist
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/18/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of targets at the fence line between RR869a and OT-4 (PPE – Level C). Reacquisition and flagging of anomalies at DGM grids in XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Review of PPE and decontamination procedures for fence line work (doffing and donning procedures).
Tomorrow's Expectations	Continue reacquisition & flagging of targets in XU854 DGM grids. Continue subsurface intrusive investigations of anomalies at DGM grids in XU854.

Additional: No MEC/UXO located. Loran Poindexter demobilizing today.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/18/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/19/15

Report Number: 059
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Nic Bolinger	FPM Remediations	UXO Tech 1
7.	Rob Martin	FPM Remediations	FPM Geophysicist
8.			
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/19/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface investigation of targets at the fence line between RR869a and OT-4 (PPE – Level C). Reacquisition and flagging of anomalies at DGM grids in XU854. Intrusive investigation of targets in XU854 DGM grids.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	QC of XU853 transects L3 & L4, XU853 DGM grids B – F, and Tier 1 & 2 targets at fence line between RR869a & OT04. All areas pass QC. Note that XU854 transects L10 & L11 had no subsurface anomalies detected with geophysics.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Lessons learned & review of yesterday's fence line operation in Level C PPE.
Tomorrow's Expectations	Continue reacquisition & flagging of targets in XU854 DGM grids. Continue subsurface intrusive investigations of anomalies at DGM grids in XU854. Relocate 10 anomalies in UX853 with EM-61.

Additional: No MEC/UXO located.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/19/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/20/15

Report Number: 060
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, XU853, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Nic Bolinger	FPM Remediations	UXO Tech 1
7.	Rob Martin	FPM Remediations	FPM Geophysicist
8.			
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/20/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Relocation of anomalies at DGM grids in XU853 & XU854 with EM-61. Intrusive investigation of targets in XU 853 & XU854.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	Paul Swinford of SwinTec (fencing contractor).
Notes	Morning safety brief: seven common accident causes.
Tomorrow's Expectations	Saturday (02/21/15) - Subsurface intrusive investigations of anomalies at burial pit area (paint barrel area). Soil sampling to define extent and properties of possible contamination at burial area in XU854. Safety watch for fence contractor to reset the fence between RR869a & OT-4.

Additional: No MEC/UXO located.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/20/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/21/15

Report Number: 061
Project Title: Holloman AFB, NM Remedial Inv.
Location: XU854, RR869a, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Nic Bolinger	FPM Remediations	UXO Tech 1
7.	Rob Martin	FPM Remediations	FPM Geophysicist
8.			
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

DAILY QUALITY CONTROL REPORT

Date 02/21/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Subsurface intrusive investigations of anomalies at burial pit area (paint barrel area) in XU854. Soil sampling to define extent and properties of possible contamination at burial area in paint barrel area. Safety watch for fence contractor resetting the fence between RR869a & OT-4.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	During the additional excavation into XU854 Burial Pit #1, the team uncovered a barrel with an unknown clear liquid inside. Excavation was terminated until the contents of the barrel is determined by lab analysis and an FPM environmental team mobilized to complete the excavation/removal. The excavated portions of the pits were covered with 4' x 8' sheets of plywood and cordoned off utilizing snow fence.
Visitors On Site	Paul Swinford of SwinTec (fencing contractor).
Notes	Morning safety brief: working safely with heavy equipment.
Tomorrow's Expectations	Weekend.

Additional: No MEC/UXO located.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/21/15

Date

DAILY QUALITY CONTROL REPORT

Date 02/21/15

Close up of open drum and clear, viscous liquid in XU854

Fencing subcontractor re-installing fence between RR869a & OT-4

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/23/15

Report Number:	062
Project Title:	Holloman AFB, NM Remedial Inv.
Location:	XU854, XU853, SR864, RR869a, ML865, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Rob Martin	FPM Remediations	FPM Geophysicist
7.			
8.			
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/23/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Site preparation for demobilization. Oil changes for four rental trucks.
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Twelve tips for winter driving (Part 1).
Tomorrow's Expectations	Demolition operation (clean-up shot) to zero out donor explosives inventory held at MSA courtesy storage. Complete site demobilization prep.

Additional: No MEC/UXO located.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/23/15

Date

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/24/15

Report Number:	063
Project Title:	Holloman AFB, NM Remedial Inv.
Location:	XU854, XU853, SR864, RR869a, ML865, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10 mph	10 - 20 mph	20 - 30 mph	30 - 40 mph	> 40 mph	
HUMIDITY	DRY	MODERATE	HUMID			

Personnel On-Site

No.	Name	Affiliation	Location/Description of Work
1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Rob Martin	FPM Remediations	FPM Geophysicist
7.			
8.			
9.			
10.			
11.			
12.			
13.			

MEC Find / Explosive Operations Notifications

Name	Position	Agency	Notification by Email / Call
Rothhaupt, DeAnna	HAFB Environmental Chief	49 CES/CEIE	Email
Reneghan, Brian	COR	AFCEC/CZRX	Email
Oyelowo, Layi	Program Manager	AFCEC/CZRX	Email
Peters, Laura	Environmental Project Manager	AFCEC/CZO	Email
Kusmak, Adam	49 CES	49CES/CEI	Email
Mello, Wayne	Holloman AFB, Fire Chief	49 CES/CEF	Email
Bergren, James	Captain, EOD Flight	49 CES, CED	Email

Detection equipment on site:

Type	Serial Number	Status	Location	Manufacturer/Notes
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow
DML2000, Magnetometer	914059	Good	HAFB	Dunham & Morrow
ML-1M, Magnetometer	11010018	Good	HAFB	
GA-52CX, Magnetometer	239360	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	214178	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	214179	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	222774	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	239360	Bad	HAFB	Schonstedt /out of service
GA-52CX, Magnetometer	240785	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	293221	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294349	Good	HAFB	Schonstedt
GA-52CX, Magnetometer	294350	Good	HAFB	Schonstedt
DFX 300mm	1792841094	Good	HAFB	White
DFX 300mm	2642847011	Good	HAFB	White
DML2000, Magnetometer	120233	Good	HAFB	Dunham & Morrow

Field Changes: YES_____ NO__X__

If yes, filed Nonconformance and Corrective Action Report number (NCR No.):_____

FPM Remediations, Inc.

DAILY QUALITY CONTROL REPORT

Date 02/24/15

Work Performed (including sampling)	Vehicle, equipment & radio checks. Demolition operation (clean-up shot) to zero out donor explosives inventory held at MSA courtesy storage. Site preparation for demobilization. Schonstedt sweep around utility poles to cover gaps in DGM data (no additional material recovered).
DFW (Preparatory, Initial, Follow On)	Completed Preparatory, Initial, and Follow On phases for: Pre-mobilization, Mobilization, Surface Clearance, Vegetation Removal (heavy equipment), IVS establishment, Geophysical Investigation, Blind Seeding Program, MEC Disposal, and MPPEH Certification.
QA/QC Samples Collected/Analyses Requested	None.
Problems Encountered/Resolved	None.
Visitors On Site	None.
Notes	Morning safety brief: Twelve tips for winter driving (Part 2).
Tomorrow's Expectations	Complete administrative duties for demobilization on Thursday (02/26/15).

Additional: No MEC/UXO located.

.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/24/15

Date

This page is intentionally left blank

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/10/14

Report Number:	001
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:30am, Sunset: 5:04pm. Wind: S at 10 – 15. Chance of precipitation: 10%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: None. Mobilization

Team PPE: None for mobilization

Team assignments: TBD

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): No discrepancies noted.

Other: N/A

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/10/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/11/14

Report Number:	002
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:30am, Sunset: 5:04pm. Wind: S at 10 – 15. Chance of precipitation: 10%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Conduct Initial Orientation for contract employees working at HAFB. Hazard communication, blood borne pathogens, administrative duties (per diem & travel expenses).

Team PPE: Modified Level "D" for majority of project activities. Safety glasses and leather gloves.

Team assignments: Employees all present for orientation.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): No discrepancies noted.

Other: Base passes picked up.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/11/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/12/14

Report Number:	003
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:30am, Sunset: 5:04pm. Wind: S at 10 – 15. Chance of precipitation: 10%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Conduct site familiarization, equipment inventory, review of Activity Hazard Analysis for tasks, radio checks, rally points, emergency procedures, and safe vehicle operation.

Team PPE: Modified Level "D" for majority of project activities. Safety glasses and leather gloves.

Team assignments: Logistical tasks associated with setting up project field activities after mobilization. Equipment inspection and inventory were performed.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Site familiarization and safety training. Surveillance: crew located and cleared an area for the southern IVS (near RR869 & Bldg. 1266. All personnel wore proper personal protection equipment (PPE). No discrepancies were noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/12/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/13/14

Report Number:	004
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:31am, Sunset: 5:04pm. Wind: WNW at 10 – 15. Chance of precipitation: 10%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: MEC/UXO training, radio checks, rally points, emergency procedures, and safe vehicle operation.

Team PPE: Modified Level "D" for majority of project activities. Safety glasses and leather gloves.

Team assignments: Surface clearance at RR869 and IVS area, layout of grid stakes at ML865.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Site familiarization and safety training. Surveillance: All personnel wore proper personal protection equipment (PPE). No discrepancies noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/13/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/14/14

Report Number:	005
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:31am, Sunset: 5:04pm. Wind: WNW at 10 – 15. Chance of precipitation: 10%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: MEC/UXO training, radio checks, rally points, emergency procedures, and safe vehicle operation.

Team PPE: Modified Level "D" for majority of project activities. Safety glasses and leather gloves.

Team assignments: Surface clearance at RR869.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Site familiarization and safety training. Surveillance: crew located and cleared an area for the southern IVS (near RR869 & Bldg. 1266). All personnel wore proper personal protection equipment (PPE). No discrepancies noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/14/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/17/14

Report Number:	006
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:36am, Sunset: 5:01pm. Temp: 26 – 47. Wind: WNW at 7 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Proper lifting techniques, slips/trips/falls/, safe vehicle operation, accident/incident reporting.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Surface clearance at RR869 and ML865. GEO team completed the Instrument Verification Strip (IVS) and initial QC checks of the 858.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). No discrepancies noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/17/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/18/14

Report Number:	007
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:36am, Sunset 5:00pm. Temps 27 – 49 F. Wind: NW at 7 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: General UXO precautions, safe operation of UTV vehicles, Cold Stress, Recognition and notification training at EOD shop.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Surface clearance at ML865, surface clearance/DGM at pipeline corridor.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/18/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/19/14

Report Number:	008
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:37am, Sunset 5:00pm. Temps 31 – 56 F. Wind: W at 6 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Activity Hazard Analysis for Disposal/Demolition operations.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Surface clearance at ML865, surface clearance/DGM at pipeline corridor, DGM data collection at RR869A.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/19/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/20/14

Report Number:	009
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:38am, Sunset 4:59pm. Temps 35 – 59 F. Wind: WSW at 6 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Sexual Harassment Training, General UXO safety (handling, excavation).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Surface clearance in ML865, Radio checks, DGM data collection at RR869A, assemble towed arrays.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other:

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/20/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/21/14

Report Number:	010
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:39am, Sunset 4:59pm. Temps 37 – 62 F. Wind: SW at 8 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: UXO handling and demolition procedures, emergency procedures.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio checks, Demolition operations/road guard, DGM data collection at RR869A.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Demolition: safety briefing conducted and all associated demolition safety rules were adhered to. Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: Twenty one MEC/UXO items were explosively treated and found to be inert filled.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/21/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/24/14

Report Number:	011
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:39am, Sunset 4:59pm. Temps 37 – 62 F. Wind: SW at 8 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Hanta virus (symptoms, avoidance, treatments), slips/trips/falls, UXO handling.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio checks, Surface Clearance at ML865, Investigate deep anomalies at communication pipeline corridor, Scout for location for IVS #3 near ML865. Flag corners of multi-incremental sampling grids in XU853 decision units (6 ea.). Transport towed array to ML865 for assembly.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today, backhoe delivered.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/24/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/25/14

Report Number:	012
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:43am, Sunset 4:58pm. Temps 28 - 49 F. Wind: W at 8 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Fire extinguisher training, UXO handling.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio checks, Surface Clearance at ML865, collection of background DGM data and bury Industry Standard Objects (ISOs) at IVS #3 near ML865. Collect soil samples at multi-incremental sampling grids in XU853 decision units (6 ea. – completed today).

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. Note that the sides of the backstop in ML865 are too steep for surface clearance or DGM data collection (safety hazard) and will show as a data gap. These areas were visually inspected and no MEC/UXO, munitions debris (MD), or cultural debris (CD) was found. The top of the backstop may be surface swept as long as personnel do not stray too close to the sides.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/25/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 11/26/14

Report Number:	013
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:44am, Sunset 4:57pm. Temps 35 - 61 F. Wind: NNW at 10 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Facts and prevention for colds and flu, travel safety tips for Thanksgiving travelers.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio checks, Surface Clearance at ML865, establish the IVS #3 near ML865. Complete timber and cable removal from ML865 for surface clearance and DGM data collection

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

11/26/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/01/14

Report Number:	014
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:48am, Sunset 4:57pm. Temps 37 - 64 F. Wind: SSW at 7 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Jeff Hackworth	FPM Remediations	FPM Manager

Safety Meeting Topics: Causes, symptoms and treatment of allergic reactions (mild to severe).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio checks, surface clearance at ML865, incremental soil sampling in XU853, towed array data collection at IVS to build a database. Use of heavy equipment to reduce vegetation height and ease passage of the towed array.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: Honey bees frequent ML865. No FPM employees are allergic to bee/wasp stings. No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/01/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/02/14

Report Number:	015
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:49am, Sunset 4:57pm. Temps 37 - 62 F. Wind: SW at 7 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Importance of proper PPE.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio/equipment checks, surface clearance at ML865, incremental soil sampling in XU853, towed array data collection at IVS to build a database and data collection in ML865.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/02/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/03/14

Report Number:	016
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:50am, Sunset 4:57pm. Temps 43 - 66 F. Wind: W at 5 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Avoiding back injuries, symptoms and treatment for windburn & sunburn.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio/equipment checks, surface clearance at ML865, surface clearance (MEC/UXO and tire hazards only) of a 50 foot area outside the perimeter of ML865 to allow safe turning room for the towed array outside of established grids, incremental soil sampling in XU853 (completed), towed array data collection in ML865.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/03/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/04/14

Report Number:	017
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:50am, Sunset 4:57pm. Temps 43 - 66 F. Wind: W at 5 mph. Clear with 10% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Safe handling of 55 gallon barrels.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio/equipment checks, surface clearance at ML865, flagging mini-grid locations for incremental soil sampling in XU854 (completed), towed array data collection in ML865.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. Small pieces of a 40mm grenade projectile was discovered (fragmentation sleeve only – no energetics).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/04/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/05/14

Report Number:	018
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:51am, Sunset 4:57pm. Temps 42 - 64 F. Wind: NW at 7 mph. Clear with 2% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Getting plenty of sleep, venomous creatures of New Mexico.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio/equipment checks, surface clearance of additional grids at ML865 (to delineate extent of MEC/MPPEH/inert filled projectiles), begin surface clearance at SR864, towed array data collection in ML865, using heavy equipment to reduce brush height for the towed array, completed flagging multi incremental soil sampling grids in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/05/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/08/14

Report Number:	019
Project Title:	Holloman AFB PBR, NM
Location:	ML865
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:54am, Sunset 4:57pm. Temps 38 - 62F. Wind: W at 5 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Review of Demolition/Disposal AHA & appropriate sections of 60A1-1-31 (EOD Procedures).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Radio/equipment checks, demolition/demilitarization of inert filled projectiles, surface clearance at SR864, assembly of EM-61 towed array, completed flagging multi incremental soil sampling grids in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/08/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/09/14

Report Number: 020
Project Title: Holloman AFB PBR, NM
Location: ML865
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:54am, Sunset 4:57pm. Temps 38 - 62F. Wind: NNE at 5 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Eye injury prevention and treatment.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance in SR864. DGM data collection in ML865. Begin soil sampling in multi incremental sampling grids in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/09/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/10/14

Report Number:	021
Project Title:	Holloman AFB PBR, NM
Location:	ML865, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:55am, Sunset 4:57pm. Temps 41 - 64F. Wind: NNW at 5 mph. Partly cloudy with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: The importance of hydration.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance in SR864. DGM data collection (data gaps) in ML865 completed. Soil sampling in multi incremental sampling grids in XU854. .

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/10/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/11/14

Report Number:	022
Project Title:	Holloman AFB PBR, NM
Location:	ML865, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:56am, Sunset 4:57pm. Temps 39 - 65F. Wind: WSW at 5 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Identifying workplace hazards & reporting.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance in SR864. DGM data collection for background at IVS near SR864. Soil sampling in multi incremental sampling grids in XU854. .

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/11/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/12/14

Report Number: 023
Project Title: Holloman AFB PBR, NM
Location: ML865, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:56am, Sunset 4:58pm. Temps 40 - 66F. Wind: SW at 7 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Heavy Equipment safety.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance in SR864. Surface clearance at IVS near SR864 & DGM data collection for background. Emplacement of additional multi incremental sampling grids in XU854 and marking transects in XU853, QC of Cultural Debris (CD) and Munitions Debris (MD).

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/12/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/15/14

Report Number:	024
Project Title:	Holloman AFB PBR, NM
Location:	ML865, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:59am, Sunset 4:58pm. Temps 31 - 56F. Wind: NW at 7 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Avoiding complacency.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance in SR864. DGM data collection in SR864. Soil sampling in Decision Units (multi incremental sampling grids) in XU854. QC of Cultural Debris (CD) and Munitions Debris (MD).

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/15/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/16/14

Report Number:	025
Project Title:	Holloman AFB PBR, NM
Location:	SR864, XU854, XU853, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:59am, Sunset 4:59pm. Temps 31 - 61F. Wind: S with gusts to 12 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Near Miss Reporting.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue surface clearance in SR864. DGM data collection in SR864 with EM-61 towed array. Soil sampling in Decision Units (multi incremental sampling grids) in XU854. QC of CD and MD. Begin surface clearance in XU853.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: Two M18 Smoke grenades located. One is Discarded Military Munition (DMM) with safety pin installed while the other has an impinged primer – did not function. Night watch posted.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/16/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/17/14

Report Number:	026
Project Title:	Holloman AFB PBR, NM
Location:	SR864, ML865, XU854, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:00am, Sunset 4:59pm. Temps 37 - 55F. Wind: SW with gusts to 16+ mph. Partly cloudy with 16% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Activity Hazard Analysis for Demolition Operations.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Demolition operations in SR864 (two smoke grenades). DGM data collection in SR864 with EM-61 towed array. Soil sampling in Decision Units (multi incremental sampling grids) in XU854. QC of CD and MD. Begin excavations in exploratory trenches at ML865.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/17/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/18/14

Report Number:	027
Project Title:	Holloman AFB PBR, NM
Location:	SR864, ML865, XU854, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:00am, Sunset 5:00 pm. Temps 32 - 52F. Wind: W at 5 with gusts to 20 mph. Partly cloudy with 10% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Christmas travel safety.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. DGM data collection in SR864 with EM-61 towed array. Soil sampling in Decision Units (multi incremental sampling grids) in XU854. Continue excavations in exploratory trenches at ML865.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. A large metal bin/scoop was safely excavated today in ML865 (see photos in QC report).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/18/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 12/19/14

Report Number:	028
Project Title:	Holloman AFB PBR, NM
Location:	SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:01am, Sunset 5:00 pm. Temps 31 - 52F. Wind: NNW with gusts to 18 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	David Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Ivan Westrick	FPM Remediations	UXO Tech 2
8.	Cecilia Flores	FPM Remediations	UXO Tech 2
9.	Paul Hackworth	FPM Remediations	UXO Tech 1
10.	Nic Bolinger	FPM Remediations	UXO Tech 1
11.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
12.	Mike Sample	FPM Remediations	FPM Geophysicist (demobilizing)
13.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead

Safety Meeting Topics: Merry Christmas and safe travels.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle/ equipment preparation for storage, equipment packing and shipping. DGM data collection in SR864 with EM-61 towed array (with UXO Tech III escort).

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. Scheduled for return on 5 January 2015 with work starting 6 January 2015.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

12/19/14

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/06/15

Report Number: 029
Project Title: Holloman AFB PBR, NM
Location: XU853, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:08am, Sunset 5:12 pm. Temps 22 - 58F. Wind: NW at 5 - 8 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Jack Connor	FPM Remediations	UXO Tech 2
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Cecilia Flores	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.			
12.			
13.			

Safety Meeting Topics: Cold stress, hazard analysis for tasks.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Assembly of EM-61 towed array. Surface clearance of transects in XU853.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. Dave Hugg (UXO Tech 3 delayed until tomorrow).

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/06/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/07/15

Report Number: 030
Project Title: Holloman AFB PBR, NM
Location: XU853, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:07am, Sunset 5:12 pm. Temps 30 - 50F. Wind: NE at 7 - 10 mph. Clear with 0% chance of precipitation.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: Avoiding cold & flu, slips/trips/falls.
Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Assembly & testing of EM-61 towed array. Surface clearance of transects in XU853.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/07/15
Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/08/15

Report Number:	031
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:07am, Sunset 5:14 pm. Temps 26 - 46F. Wind: NW at 3 - 6 mph. Overcast with 10% chance of precipitation: possible freezing drizzle and fog.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: Avoiding complacency.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. DGM data collection at SR864. Surface clearance of transects in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/08/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/09/15

Report Number:	032
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:07am, Sunset 5:15 pm. Temps 28 - 42F. Wind: SE at 5 mph. Chance of precip: 20% rain.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: pause to evaluate tasks (4 seconds to safety).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. DGM data collection at SR864. Surface clearance of transects in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/09/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/12/15

Report Number: 033
Project Title: Holloman AFB PBR, NM
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:07am, Sunset 5:16 pm. Temps 33 - 56F. Wind: S at 5 – 10 mph. Chance of precip: 20% rain.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: signs of a stroke.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. DGM data collection at SR864. Surface clearance of transects in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/12/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/13/15

Report Number:	034
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:07am, Sunset 5:16 pm. Temps 33 - 56F. Wind: S at 5 – 10 mph. Chance of precip: 20% rain.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: Cell phone distraction.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance of transects at XU854. EM-61 towed array collecting DGM data at XU854 transects. Surface clearance of DGM grids in XU853.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/13/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/14/15

Report Number:	035
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:06am, Sunset 5:18 pm. Temps 33 - 56F. Wind: W at 6 mph. Chance of precip: 30% rain, sleet and/or fog.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: Five steps to improve safety.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Surface clearance of DGM grids at XU854; surface clearance of DGM grids in XU853 and begin reacquisition and flagging of subsurface anomalies in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/14/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/15/15

Report Number:	036
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:06am, Sunset 5:21 pm. Temps 28 - 53F. Wind: N at 6 mph. Chance of precip: 10%. Morning fog and sunny afterwards.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.			
13.			

Safety Meeting Topics: First Aid Awareness.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue surface clearance of DGM grids at XU854. Continue reacquisition and flagging of subsurface anomalies in DGM grids at SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/15/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/16/15

Report Number:	037
Project Title:	Holloman AFB PBR, NM
Location:	XU853, XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:06am, Sunset 5:22 pm. Temps 24 - 55F. Wind: NW at 5 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: General UXO safety & excavation procedures.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Begin investigation of subsurface anomalies in DGM grids at SR864. Begin data collection at XU853 & XU854 with the EM61 towed array.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/16/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/19/15

Report Number:	038
Project Title:	Holloman AFB PBR, NM
Location:	XU853, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:05am, Sunset 5:24 pm. Temps 29 - 66F. Wind: N at 5- 7 mph. Chance of precip: 0%. Mostly sunny.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Carpal Tunnel Syndrome.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigations in SR864. Data collection of DGM grids in XU853 with the towed array (completed). Completed marking high density grids in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/19/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/20/15

Report Number:	039
Project Title:	Holloman AFB PBR, NM
Location:	XU853, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:05am, Sunset 5:25 pm. Temps 34 – 67 F. Wind: N at 6 mph. Chance of precip: 0%. Mostly sunny.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Hazards to outdoor workers.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigations in SR864, data collection of DGM grids in XU854 with the EM-61towed array, continued reacquisition and flagging of subsurface targets in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/20/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/21/15

Report Number:	040
Project Title:	Holloman AFB PBR, NM
Location:	XU853, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:04am, Sunset 5:26 pm. Temps 35 – 54 F. Wind: ENE at 7 - 14 mph with gust to 18 mph. Chance of precip: 10%. Partly sunny.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Employee safety rights and responsibilities.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigations in SR864, data collection of data gaps in DGM grids at XU853 & XU854 with the EM-61 single coil, continued reacquisition and flagging of subsurface targets in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/21/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/23/15

Report Number:	041
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:03am, Sunset 5:28 pm. Temp 19 – 41 F. Wind: NW at 5 - 8 mph. Sunny after morning fog. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Cold weather safety & health hazards.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigations in SR864, data collection of additional sampling grids & DGM data gaps at XU854 with the EM-61.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No field work on 01/22/15 due to bad weather (rain, snow, ice). No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/23/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/26/15

Report Number: 042
Project Title: Holloman AFB PBR, NM
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:02am, Sunset 5:31 pm. Temp 27 – 62 F. Wind: W at 6 mph. Partly sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: General safety, fire safety, hand tool safety.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigations in SR864. DGM data collection with the EM-61 single coil over data gaps in XU853. Continue reacquisition and flagging of anomalies in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/26/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/27/15

Report Number:	043
Project Title:	Holloman AFB PBR, NM
Location:	SR864, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:02am, Sunset 5:31 pm. Temp 27 – 62 F. Wind: W at 6 mph. Partly sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Caught in/on/between (pinch points).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue reacquisition and flagging of anomalies in SR864. Intrusive investigations in SR864 high density grids. Continue intrusive investigation of single anomalies in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/27/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/28/15

Report Number:	044
Project Title:	Holloman AFB PBR, NM
Location:	SR864, RR869A, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:01am, Sunset 5:33 pm. Temp 33 – 66 F. Wind: NW at 7 mph. Mostly sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Anger – one letter short of Danger.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigation of single anomalies in SR864. Continue reacquisition and flagging of anomalies in SR864. IVS setup near RR869A.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/28/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/29/15

Report Number:	045
Project Title:	Holloman AFB PBR, NM
Location:	SR864, RR869A, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 7:00am, Sunset 5:34 pm. Temp 38 – 59 F. Wind: ENE at 9 - 15 mph. Partly sunny. Chance of precip: 20% after 11am.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Excavation hazards & precautions.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Continue intrusive investigation of single anomalies in SR864. Continue reacquisition and flagging of anomalies in SR864. Processed EM61 data collected from XU854 & XU854. Preparing test pit to set threshold for G-858 at RR869A.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/29/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 01/30/15

Report Number: 046
Project Title: Holloman AFB PBR, NM
Location: Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:59am, Sunset 5:35 pm. Temp 37 – 45 F. Wind: SSE at 5 - 8 mph. Partly sunny. Chance of precip: 70%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Working in the rain.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Equipment cleanup. Preparation of ISO's to be used at the threshold pit near RR869A.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

01/30/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/02/15

Report Number:	047
Project Title:	Holloman AFB PBR, NM
Location:	SR864, XU854, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:57am, Sunset 5:36 pm. Temp 31 – 58 F. Wind: NNE at 5 mph. Mostly sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Pallet safety.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Reacquisition and flagging of targets in SR864 (completed). Subsurface investigation of targets in SR864. Data collection to determine threshold for RR869A (completed).

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/02/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/03/15

Report Number:	048
Project Title:	Holloman AFB PBR, NM
Location:	SR864, XU854, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:57am, Sunset 5:37 pm. Temp 31 – 61 F. Wind: NW at 6 - 10 mph. Sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Hand protection.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Reacquisition and flagging of transect targets in XU854 (completed). Begin reacquisition and flagging of transect targets in XU853. Subsurface investigation of targets in XU854 (transects L1 & L2 complete). QC of grids in SR864.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. Paul Swinford (fencing contractor) visited to offer a quote on re-installation of the chain link fence between RR869a and OT-4.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/03/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/04/15

Report Number:	049
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:56am, Sunset 5:40 pm. Temp 36 – 65 F. Wind: N at 8 - 13 mph. Sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Eye safety precautions.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Reacquisition and flagging of transect targets in XU853 (completed). Subsurface investigation of targets in XU854 (transects L4- L9). Began subsurface investigation of transects in XU853.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/04/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/05/15

Report Number: 050
Project Title: Holloman AFB PBR, NM
Location: XU854, SR864, Bldg. 1266
Contract Number: FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:55am, Sunset 5:41 pm. Temp 32 – 62 F. Wind: SW @ 6 mph. Sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Cecilia Flores	FPM Remediations	UXO Tech 2 - demobilized
8.	Paul Hackworth	FPM Remediations	UXO Tech 1
9.	Nic Bolinger	FPM Remediations	UXO Tech 1
10.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
11.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
12.	Robert Martin	FPM Remediations	FPM Geophysicist
13.			

Safety Meeting Topics: Foot protection.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU854 (transect L3). Subsurface investigation of remaining targets in SR864

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today. However, when the UXO team was investigating target anomalies in XU853, a deep anomaly was discovered. A backhoe was used to remove the overburden soil from the anomaly. When the team got within a foot of the anomaly, they hand dug to the anomaly and verified it was not UXO/MEC/MPPEH. All that was visible was a piece of crumpled up metal, so the team used the backhoe to remove it in one scoop. When the bucket was lifted from the hole, a thick, grey liquid oozed from the dirt & metal inside the bucket. Plastic sheeting was laid down on the ground; a dirt coffer dam built around it to contain the material; and then the bucket load was laid on the sheeting. Only then could the anomaly be identified as a barrel. Sheeting was added to the top to cover the anomaly (see Site Report #50). It is estimated that 10 gallons of liquid material remained with the barrel. This area was then cordoned off until disposition is decided.
FPM will collect a sample and send it to a lab for analysis. The resulting disposal characterization profile will be provided to the AF for review & approval.

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT **02/05/15**

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/05/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/06/15

Report Number:	051
Project Title:	Holloman AFB PBR, NM
Location:	XU854, RR869a, XU853, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:54am, Sunset 5:41 pm. Temp 36 – 69 F. Wind: calm. Sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Robert Martin	FPM Remediations	FPM Geophysicist
12.			
13.			

Safety Meeting Topics: General UXO precautions.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU854. Collected DGM data gaps in RR869a with the G-858. Recovered barrel and material found on 02/05/15 in an XU853 transect were drummed up and is awaiting sampling and disposition.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/06/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/09/15

Report Number:	052
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, XU853, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:52am, Sunset 5:44 pm. Temp 38 – 71 F. Wind: S @ 6 mph. Sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Robert Martin	FPM Remediations	FPM Geophysicist
12.			
13.			

Safety Meeting Topics: General UXO precautions.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU853 transects. Began reacquisition and flagging of anomalies in DGM grids at XU853 & XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/09/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/10/15

Report Number:	053
Project Title:	Holloman AFB PBR, NM
Location:	XU854, SR864, XU853, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:51am, Sunset 5:45 pm. Temp 39 – 72 F. Wind: light & variable. Sunny. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Robert Martin	FPM Remediations	FPM Geophysicist
12.			

Safety Meeting Topics: Importance of hydration, sun/windburn protection.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of transect targets in XU853 transects. Reacquisition and flagging of anomalies in DGM grids at XU853 & XU854. Fit testing of respirators for work at the fence line between RR869a & OT-4. Soil sampling in ML865 and sampling of barrel and paint-like material at excavation site at XU854 transect site.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/10/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/11/15

Report Number:	054
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:50am, Sunset 5:46 pm. Temp 39 – 61 F. Sunny. Winds: E @ 5 – 14 mph with gusts up to 23 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Robert Martin	FPM Remediations	FPM Geophysicist
12.			

Safety Meeting Topics: Slips, trips, and falls.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853. DGM data was collected with the G-858 & EM-61 to determine the extent of the possible burial pit in XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were safely operated. No discrepancies noted.

Other: No MEC/UXO located today, but two BLU-26 (T-1) training submunitions that were each separated into two halves were located in DGM grid "A" in XU853. The Expray explosive detector kit tests for energetics were negative for these items.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/11/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/12/15

Report Number:	055
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:49am, Sunset 5:47 pm. Temp 33 – 53 F. Sunny. Winds: NE @ 7 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Robert Martin	FPM Remediations	FPM Geophysicist
12.			

Safety Meeting Topics: Food safety & lunchtime.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate for the fence removal operation.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853. Reacquisition and flagging of anomalies in DGM grids at XU853 & 854. Began fence removal between RR869a and OT-4 (for DGM data collection in areas masked by fence interference.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/12/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/13/15

Report Number:	056
Project Title:	Holloman AFB PBR, NM
Location:	XU853, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:48am, Sunset 5:48 pm. Temp 30 – 62 F. Sunny. Winds: ENE @ 6 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Jack Connor	FPM Remediations	UXO Tech 2
6.	Ray Lunbeck	FPM Remediations	UXO Tech 2
7.	Paul Hackworth	FPM Remediations	UXO Tech 1
8.	Nic Bolinger	FPM Remediations	UXO Tech 1
9.	Kyrian Onyeukwu	FPM Remediations	FPM Geophysicist
10.	Boban Stojanovic	FPM Remediations	FPM Geophysicist Field Lead
11.	Robert Martin	FPM Remediations	FPM Geophysicist
12.			

Safety Meeting Topics: Safety precautions for fence removal.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate for the fence removal operation.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853. Completed fence removal between RR869a and OT-4 (for DGM data collection in areas masked by fence interference). DGM data collection at the fence line corridor.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/13/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/17/15

Report Number:	057
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:44am, Sunset 5:51 pm. Temp 32 – 56 F. Sunny. Winds: N @ 8 mph becoming east in the afternoon. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Robert Martin	FPM Remediations	FPM Geophysicist
9.			
10.			
11.			
12.			

Safety Meeting Topics: Review of PPE and decontamination procedures for fence line work tomorrow (Level C safety precautions).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of targets in DGM grids at XU853 and XU854. Reacquisition and flagging of anomalies at fence line between RR869a & OT-4. Reacquisition & flagging of targes in XU854 DGM grids.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/17/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/18/15

Report Number:	058
Project Title:	Holloman AFB PBR, NM
Location:	XU854, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:44am, Sunset 5:51 pm. Temp 32 – 56 F. Sunny. Winds: N @ 8 mph becoming east in the afternoon. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Loran Poindexter	FPM Remediations	UXO Tech 3 - Demobilized
4.	Dave Hugg	FPM Remediations	UXO Tech 3
5.	Ray Lunbeck	FPM Remediations	UXO Tech 2
6.	Paul Hackworth	FPM Remediations	UXO Tech 1
7.	Nic Bolinger	FPM Remediations	UXO Tech 1
8.	Robert Martin	FPM Remediations	FPM Geophysicist
9.			
10.			
11.			
12.			

Safety Meeting Topics: Review of PPE and decontamination procedures for fence line work (doffing and donning procedures).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of targets at the fence line between RR869a and OT-4 (PPE – Level C). Reacquisition and flagging of anomalies at DGM grids in XU854. Reacquisition & flagging of targets in XU854 DGM grids.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE – Level C) and followed established doffing and donning procedures. All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today. Loran Poindexter (T3) is demobilizing today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/18/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/19/15

Report Number:	059
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:42am, Sunset 5:53 pm. Temp 32 – 72 F. Sunny. Winds: SW @ 6 - 11 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Nic Bolinger	FPM Remediations	UXO Tech 1
7.	Robert Martin	FPM Remediations	FPM Geophysicist
8.			
9.			
10.			
11.			
12.			

Safety Meeting Topics: Lessons learned & review of yesterday's fence line operation in Level C PPE.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate.

Team assignments: Vehicle, equipment & radio checks. Subsurface investigation of targets at the fence line between RR869a and OT-4 (PPE – Level C). Reacquisition and flagging of anomalies at DGM grids in XU854. Intrusive investigation of targets in XU854 DGM grids.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/19/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/20/15

Report Number:	060
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:41am, Sunset 5:54 pm. Temp 39 – 73 F. Sunny. Winds: S @ 6 with gusts to 23 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Nic Bolinger	FPM Remediations	UXO Tech 1
7.	Robert Martin	FPM Remediations	FPM Geophysicist
8.			
9.			
10.			
11.			
12.			

Safety Meeting Topics: Seven common accident causes.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate.

Team assignments: Vehicle, equipment & radio checks. Relocation of anomalies at DGM grids in XU853 & XU854 with EM-61. Intrusive investigation of targets in XU853 & XU854.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today. SwinTec was on site to begin resetting the fence between RR869a and OT-4.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/20/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/21/15

Report Number:	061
Project Title:	Holloman AFB PBR, NM
Location:	XU854, RR869a, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:40am, Sunset 5:55 pm. Temp 41 – 72 F. Sunny. Winds: S @ 5 - 16 with gusts to 23 mph. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Nic Bolinger	FPM Remediations	UXO Tech 1
7.	Robert Martin	FPM Remediations	FPM Geophysicist
8.			
9.			
10.			
11.			
12.			

Safety Meeting Topics: Working safely with heavy equipment.

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate.

Team assignments: Vehicle, equipment & radio checks. Subsurface intrusive investigations of anomalies at burial pit area (paint barrel area) in XU854. Soil sampling to define extent and properties of possible contamination at burial area in paint barrel area. Safety watch for fence contractor resetting the fence between RR869a & OT-4.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No MEC/UXO located today. SwinTec was on site to begin resetting the fence between RR869a and OT-4.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/21/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/23/15

Report Number:	062
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, SR864, RR869a, ML865, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:37am, Sunset 5:56 pm. Temp 39 – 53 F. Sunny. Winds: WNW @ 6 - 11 mph becoming South in the afternoon. Chance of precip: 0%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Robert Martin	FPM Remediations	FPM Geophysicist
7.			
8.			
9.			
10.			
11.			
12.			

Safety Meeting Topics: Twelve tips for winter driving (Part 1).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate.

Team assignments: Vehicle, equipment & radio checks. Site preparation for demobilization. Oil changes for four rental trucks.

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: No production field work.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/23/15

Date

FPM Remediations, Inc.

DAILY HEALTH & SAFETY REPORT 02/24/15

Report Number:	063
Project Title:	Holloman AFB PBR, NM
Location:	XU854, XU853, SR864, RR869a, ML865, Bldg. 1266
Contract Number:	FA8903-13-C-0008

WEATHER	CLEAR	PT CLOUDY	OVERCAST	RAIN	SNOW	FOG
TEMP	< 32 F	32 – 50 F	50 – 70 F	70 – 85 F	85 – 100 F	> 100 F
WIND	< 10mph	10 - 20mph	20 - 30mph	30 - 40mph	> 40mph	
HUMIDITY	DRY	MODERATE	HUMID			

Additional: Sunrise: 6:36am, Sunset 5:57pm. Temp 34 – 58 F. Sunny. Winds: S @ 8 - 13 mph becoming SW in the afternoon. Chance of precip: 20%.

Personnel On-Site

1.	George Vaughn	FPM Remediations	SUXOS
2.	Ron Vanderford	FPM Remediations	UXOSO/QCS
3.	Dave Hugg	FPM Remediations	UXO Tech 3
4.	Ray Lunbeck	FPM Remediations	UXO Tech 2
5.	Paul Hackworth	FPM Remediations	UXO Tech 1
6.	Robert Martin	FPM Remediations	FPM Geophysicist
7.			
8.			
9.			
10.			
11.			
12.			

Safety Meeting Topics: Twelve tips for winter driving (Part 2).

Team PPE: Level "D" PPE. Safety glasses, leather work boots and leather gloves. Hard hats were worn when appropriate.

Team assignments: Vehicle, equipment & radio checks. Demolition operation (clean-up shot) to zero out donor explosives inventory held at MSA courtesy storage. Site preparation for demobilization. Schonstedt sweep around utility poles to cover gaps in DGM data (no additional material recovered).

Injuries/Accidents/Illnesses: No injuries or accidents to report.

Safety (Documentation/Training/Inspections): Surveillance: All personnel wore proper personal protection equipment (PPE). All vehicles were operated in a safe manner. No discrepancies noted.

Other: Today is the last day for field work.

Contractor Verification: On behalf of the contractor, FPM Remediations, Inc., I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as may be noted above.

William R. Vanderford

Signature

02/24/15

Date

Appendix C

IVS, Instrument QC, and BSP Results and XYZ Files

This page is intentionally left blank

Table of Contents

Table C-1 Summary of SSR and IVS Results

Table C-2 Summary of G-858 Responses to Standard Objects

Table C-3 Summary of EM61 Responses to Standard Objects

Table C-4 Summary of G-858 Responses to ISOs During the IVS 2-Sensor System

Table C-5 Summary of G-858 Responses to ISOs During the IVS 6-Sensor System

Table C-6 Summary EM61 Responses to ISOs During IVS

Table C-7 IVS Positional Accuracy G-858

Table C-8 IVS Positional Accuracy EM61

Table C-9 RTK-GPS Positional Accuracy

Table C-10 G-858 IVS Database for 2-Sensor System

Table C-11 G-858 IVS Database for 6-Sensor System

Table C-12 G-858 Total Field Test for Threshold ML865

Table C-13 G-858 Total Field Test for Threshold RR869a

Table C-14 Summary Table of Blind Seeding Program

Figure C-1 11/13/14 Data, RR869a IVS Area, G-858 Analytic Signal Background before Clearance

Figure C-2 11/13/14 and 11/18/14 Data, RR869a IVS Area, G-858 Analytic Signal Background after Clearance

Figure C-3 11/24/14 Data, ML865 IVS Area, G-858 Analytic Signal Background before Clearance

Figure C-4 11/24/14 and 11/25/14 Data, ML865 IVS Area, G-858 Analytic Signal Background after Clearance

Figure C-5 12/11/14 Data, SR864 IVS Area, EM61-MK2 Background

Figures C-6 and C-7 G-858 Handheld System Azimuth Test Results

Figures C-8 through C-13 G-858 6 Sensor System Azimuth Test Results

Figures C-14 and C-15 G-858 Handheld System Octant Test Results

Figures C-16 through C-21 G-858 6 Sensor System Octant Test Results

Figures C-22 and C-23 G-858 Handheld System 6 Line Test Results

Figures C-24 through C-29 G-858 6 Sensor System 6 Line Test Results

Figures C-30 through C-34 EM61-MK2 5 Coil System 6 Line Test Results

Figures C-35 through C-40 G-858 6 Sensor System Pull Away Test Results

Figures C-41 through C-45 EM61-MK2 5 Coil System Pull Away Test Results

Figure C46 through C-49 G-858 Total Field Strength Response to Standard Object

Figure C50 EM61 Response to Standard Object

Figure C51 858 Total Field Strength Response to Large ISO in Best Orientation RR869a and ML865 MRSs

Figure C52 858 Total Field Strength Response to Large ISO in Worst Orientation RR869a and ML865 MRSs

Figure C53 858 Total Field Strength Response to Medium ISO in Best Orientation RR869a and ML865 MRSs

Figure C54 858 Total Field Strength Response to Medium ISO in Worst Orientation RR869a and ML865 MRSs

Figure C55 858 Total Field Strength Response to Large ISO in Best Orientation ML865 MRSs

Figure C56 858 Total Field Strength Response to Large ISO in Worst Orientation ML865 MRSs

Figure C57 858 Total Field Strength Response to Medium ISO in Best Orientation ML865 MRSs

Figure C58 858 Total Field Strength Response to Medium ISO in Worst Orientation ML865 MRSs

Figure C59 EM61-MK2 Ch2 Signal Strength for Medium Vertical ISO ZU854 and SR864 MRSs

Figure C60 EM61-MK2 Ch2 Signal Strength for Medium Horizontal Along ISO ZU854 and SR864 MRSs

Figure C61 EM61-MK2 Ch2 Signal Strength for Medium Horizontal Across ISO ZU854 and SR864 MRSs

Figure C62 EM61-MK2 Ch2 Signal Strength for Small Vertical ISO ZU854 and SR864 MRSs

Figure C63 EM61-MK2 Ch2 Signal Strength for Small Horizontal Along ISO ZU854 and SR864 MRSs

Figure C64 EM61-MK2 Ch2 Signal Strength for Small Horizontal Across ISO ZU854 and SR864 MRSs

Figures C-65 through C-274 Daily Static Standard and Recovery Test Results

Figures C275 through C-322 G-858 Daily Instrument Verification Strip Test Results

Figures C-323 through C-498 EM61 Daily Instrument Verification Strip Test Results

Production and QC data (electronic copy only)

Table C-1
Summary of SSR and IVS Results

Item #	Date	Geophysical Instrument	SSR AM Pass (Y/N)	IVS AM Pass (Y/N)	SSR PM Pass (Y/N)	IVS PM Pass (Y/N)	Comments
1	11/17/2014	G-858 2-Sensor	Y	Not Performed	Not Performed	Not Performed	No production data. Testing instruments.
2	11/18/2014	G-858 2-Sensor	Y	Not Performed	Y	Not Performed	No production data. Testing instruments.
3	11/19/2014	G-858 2-Sensor	Y	Y	Y	Y	
4	11/20/2014	G-858 2-Sensor	Y	Y	Y	Y	
5	11/21/2014	G-858 2-Sensor	Y	Y	Y	Y	
6	12/1/2014	G-858 6-Sensor	Y	Not Performed	Y	Not Performed	No production data. Building IVS database for 6-sensor system
7	12/2/2014	G-858 6-Sensor	Y	Y	Y	Y	
8	12/3/2014	G-858 6-Sensor	Y	Y	Y	Y	
9	12/4/2014	G-858 6-Sensor	Y	Y	Y	Y	
10	12/5/2014	G-858 6-Sensor	Y	Y	Y	Y	
11	12/9/2014	G-858 6-Sensor	Y	Y	Y	Y	
12	12/10/2014	G-858 6-Sensor	Y	Y	Y	Y	
13	12/10/2014	G-858 2-Sensor	Y	Y	Not Performed	Y	Baterry failed, IVS not completed at PM.
14	12/11/2014	EM61 5-Coil	Y	Not Performed	Not Performed	Not Performed	Equipment failed. No production data.
15	12/12/2014	EM61 5-Coil	Y	Y	Y	Not Performed	Equipment failed. No production data.
16	12/15/2014	EM61 5-Coil	Y	Y	Not Performed	Not Performed	Equipment failed no production data.
17	12/16/2014	EM61 5-Coil	Y	Y	Y	Y	
18	12/18/2014	EM61 5-Coil	Y	Y	Y	Y	
19	12/19/2014	EM61 5-Coil	Y	Y	Y	Y	
20	1/8/2015	EM61 3-Coil	Y	Y	Y	Y	
21	1/9/2015	EM61 5-Coil	Y	Y	Y	Y	
22	1/13/2015	EM61 5-Coil	Y	Y	Y	Y	
23	1/20/2015	EM61 5-Coil	Y	Y	Y	Y	
24	1/23/2015	EM61 5-Coil	Y	Y	Y	Y	
25	1/26/2015	EM61 1-Coil	Y	Y	Y	Y	
26	2/6/2015	G-858 2-Sensor	Y	Y	Y	Y	
27	2/13/2015	G-858 2-Sensor	Y	Y	Y	Y	

Table C-1 (Continued)
Summary of SSR and IVS Results

Notes:
1. The G-858 responses for the medium ISO in the best orientation were above the upper boundary (mean + 20%) for several IVSs. This occured for the same sensor (sensor C2) in the 6-sensor system and the reason was the terrain configuration. The path along which the sensor C2 was puled was slightly closer to the ISO than the required distance of 30cm. However, if the response of one ISO failed, the responses to the remaining three were in the proper range and overall IVS obtained the mark "Pass". At the same time, the responses of sensor C2 to standard object in the SSR test were also in the proper range indicating that the sensor C2 was tuned well.

Table C-2
Summary of G-858 Responses to Standard Objects

Date/Test	Standard Object	Static AM (nT)	Standard AM (nT)	Recovery AM (nT)	Standard - Static AM (nT)	Static PM (nT)	Standard PM (nT)	Recovery PM (nT)	Standard - Static PM (nT)
111714 L	ISO3	48536.49	48616.31	48537.21	**79.82**	No Data	No Data	No Data	**No Data**
111714 R	ISO3	48536.91	48615.50	48537.91	**78.59**	No Data	No Data	No Data	**No Data**
111814 L	ISO3	48532.85	48612.99	48531.59	**80.14**	48540.57	48619.96	48540.56	**79.39**
111814 R	ISO3	48533.75	48608.20	48534.12	**74.45**	48541.24	48618.32	48541.41	**77.08**
111914 L	ISO3	48537.52	48616.82	48536.01	**79.30**	48548.55	48633.10	48549.31	**84.55**
111914 R	ISO3	48537.78	48611.67	48536.28	**73.89**	48549.37	48625.29	48550.06	**75.92**
112014 L	ISO3	48539.28	48619.59	48538.66	**80.31**	48536.85	48623.44	48537.49	**86.59**
112014 R	ISO3	48539.74	48615.91	48539.09	**76.17**	48536.34	48620.96	48536.95	**84.62**
112114 L	ISO3	48540.93	48626.67	48539.51	**85.74**	48517.08	48596.98	48512.33	**79.90**
112114 R	ISO3	48540.98	48626.86	48539.62	**85.88**	48517.57	48589.51	48512.78	**71.94**
120114 C1	ISO1	48255.68	48431.14	48252.38	**175.46**	48240.89	48428.66	48242.09	**187.77**
120114 C2	ISO1	48254.76	48439.22	48251.50	**184.46**	48240.44	48433.62	48241.64	**193.18**
120114 L1	ISO1	48252.21	48429.41	48248.91	**177.20**	48237.01	48429.08	48238.24	**192.07**
120114 L2	ISO1	48256.14	48439.19	48252.90	**183.05**	48240.96	48440.21	48242.18	**199.25**
120114 R1	ISO1	48255.90	48428.33	48252.74	**172.43**	48241.70	48427.12	48242.95	**185.42**
120114 R2	ISO1	48255.80	48431.13	48252.63	**175.33**	48241.14	48425.94	48242.33	**184.80**
120214 C1	ISO1	48263.21	48446.60	48252.96	**183.39**	48254.28	48436.47	48255.42	**182.19**
120214 C2	ISO1	48266.35	48456.37	48256.03	**190.02**	48254.05	48432.94	48255.23	**178.89**
120214 L1	ISO1	48253.91	48442.04	48246.44	**188.13**	48250.92	48434.60	48251.79	**183.68**
120214 L2	ISO1	48258.07	48453.03	48247.83	**194.96**	48254.63	48443.94	48255.55	**189.31**
120214 R1	ISO1	48265.65	48447.85	48255.42	**182.20**	48256.87	48432.41	48258.03	**175.54**
120214 R2	ISO1	48263.21	48441.81	48253.05	**178.60**	48255.16	48434.89	48256.32	**179.73**
120314 C1	ISO1	48258.97	48429.82	48258.07	**170.85**	48250.13	48427.39	48251.09	**177.26**
120314 C2	ISO1	48258.96	48438.64	48258.07	**179.68**	48250.46	48429.55	48251.43	**179.09**
120314 L1	ISO1	48255.16	48430.70	48254.32	**175.54**	48246.30	48422.93	48247.21	**176.63**
120314 L2	ISO1	48258.86	48433.76	48258.09	**174.90**	48250.13	48434.14	48251.09	**184.01**
120314 R1	ISO1	48261.88	48425.51	48261.17	**163.63**	48254.22	48433.40	48255.19	**179.18**
120314 R2	ISO1	48259.94	48432.22	48259.24	**172.28**	48252.21	48431.16	48253.17	**178.95**
120414 C1	ISO1	48247.26	48425.29	48244.29	**178.03**	48248.20	48424.31	48249.34	**176.11**
120414 C2	ISO1	48246.61	48425.91	48243.62	**179.30**	48248.53	48434.39	48249.67	**185.86**
120414 L1	ISO1	48242.40	48422.14	48239.47	**179.74**	48242.59	48420.71	48243.71	**178.12**
120414 L2	ISO1	48246.80	48430.34	48243.88	**183.54**	48247.27	48432.30	48248.41	**185.03**

Table C-2 (Continued)
Summary of G-858 Responses to Standard Objects

Date/Test	Standard Object	Static AM (nT)	Standard AM (nT)	Recovery AM (nT)	Standard - Static AM (nT)	Static PM (nT)	Standard PM (nT)	Recovery PM (nT)	Standard - Static PM (nT)
120414 R1	ISO1	48249.19	48428.26	48246.36	**179.07**	48251.29	48432.74	48252.43	**181.45**
120414 R2	ISO1	48246.34	48424.69	48243.45	**178.35**	48248.26	48434.44	48249.39	**186.18**
120514 C1	ISO1	48250.03	48425.85	48248.65	**175.82**	48247.32	48423.28	48249.04	**175.96**
120514 C2	ISO1	48250.77	48431.59	48249.33	**180.82**	48247.40	48426.18	48249.13	**178.78**
120514 L1	ISO1	48247.58	48429.47	48246.20	**181.89**	48244.73	48431.74	48246.44	**187.01**
120514 L2	ISO1	48250.74	48432.30	48249.39	**181.56**	48244.73	48423.22	48246.44	**178.49**
120514 R1	ISO1	48254.05	48430.84	48252.65	**176.79**	48251.09	48431.49	48252.79	**180.40**
120514 R2	ISO1	48252.72	48428.32	48251.32	**175.60**	48249.34	48432.61	48251.05	**183.27**
120914 C1	ISO1	48243.49	48422.87	48236.37	**179.38**	48245.88	48424.08	48245.86	**178.20**
120914 C2	ISO1	48243.46	48422.76	48236.32	**179.30**	48245.88	48424.41	48245.86	**178.53**
120914 L1	ISO1	48242.52	48420.65	48235.41	**178.13**	48245.20	48419.59	48245.18	**174.39**
120914 L2	ISO1	48245.61	48422.96	48238.50	**177.35**	48248.59	48420.88	48248.06	**172.29**
120914 R1	ISO1	48247.47	48420.20	48240.40	**172.73**	48250.87	48427.97	48250.77	**177.10**
120914 R2	ISO1	48246.51	48427.88	48239.48	**181.37**	48250.87	48427.97	48250.77	**177.10**
121014 C1	ISO2	48246.99	48482.44	48241.21	**235.45**	48242.41	48484.80	48244.59	**242.39**
121014 C2	ISO2	48246.15	48488.16	48240.36	**242.01**	48241.74	48481.82	48243.95	**240.08**
121014 L1	ISO2	48245.46	48483.40	48239.67	**237.94**	48241.30	48479.94	48243.53	**238.64**
121014 L2	ISO2	48248.92	48489.68	48243.13	**240.76**	48244.61	48484.35	48246.80	**239.74**
121014 R1	ISO2	48248.97	48486.58	48243.23	**237.61**	48247.84	48485.66	48250.79	**237.82**
121014 R2	ISO2	48249.29	48483.08	48243.60	**233.79**	48245.62	48481.61	48247.77	**235.99**
121014 L	ISO3	48253.71	48350.43	48254.23	**96.72**	No Data	No Data	No Data	**No Data**
121014 R	ISO3	48253.25	48354.49	48253.69	**101.24**	No Data	No Data	No Data	**No Data**
020614 L	Hitch Ball	48532.7	48549.93	48532.51	**17.23**	48520.4	48536.59	48519.98	**16.19**
020614 R	Hitch Ball	48532.54	48548.73	48531.7	**16.19**	48520.41	48537.08	48520.32	**16.67**
021315 L	Hitch Ball	48499	48517.09	48498.06	**18.09**	48488.98	48508.57	48488.46	**19.59**
021315 R	Hitch Ball	48500.13	48518.34	48499.16	**18.21**	48490.55	48509.93	48489.56	**19.38**

Notes:

L =	Left Sensor (2-Sensor System)	L2 =	Left 2 Sensor (6-Sensor System
R =	Right Sensor (2-Sensor System)	R1 =	Right 1 Sensor (6-Sensor System
C1 =	Central 1 Sensor (6-Sensor System	R2 =	Right 2 Sensor (6-Sensor System
C2 =	Central 2 Sensor (6-Sensor System		
L1 =	Left 1 Sensor (6-Sensor System		

Table C-3
Summary of EM61 Responses to Standard Objects

Date/Test	Static AM (mV)	Standard AM (mV)	Recovery AM (mV)	Standard - Static AM (mV)	Static PM (mV)	Standard PM (mV)	Recovery PM (mV)	Standard - Static PM (mV)
121114 C	-66.33	290.55	-65.78	**356.88**	No Data	No Data	No Data	No Data
121114 L1	-52.21	333.97	-52.07	**386.18**	No Data	No Data	No Data	No Data
121114 L2	-51.55	344.43	-51.47	**395.98**	No Data	No Data	No Data	No Data
121114 R1	-26.17	313.06	-25.82	**339.23**	No Data	No Data	No Data	No Data
121114 R2	-33.97	309.68	-33.76	**343.65**	No Data	No Data	No Data	No Data
121214 C	-70.47	281.79	-69.77	**352.26**	-58.22	307.30	-57.66	**365.52**
121214 L1	-32.88	340.35	-32.21	**373.23**	-23.16	359.20	-22.78	**382.36**
121214 L2	-58.24	322.99	-57.99	**381.23**	-48.70	344.61	-48.09	**393.31**
121214 R1	-39.71	302.62	-39.48	**342.33**	-31.99	323.95	-31.61	**355.94**
121214 R2	-39.59	306.65	-39.77	**346.24**	-35.58	315.11	-35.83	**350.69**
121514 C	-36.88	333.29	-36.97	**370.17**	No Data	No Data	No Data	No Data
121514 L1	-65.69	318.43	-64.25	**384.12**	No Data	No Data	No Data	No Data
121514 L2	-53.80	335.15	-52.50	**388.95**	No Data	No Data	No Data	No Data
121514 R1	-38.02	314.03	-37.61	**352.05**	No Data	No Data	No Data	No Data
121514 R2	-16.32	326.15	-16.41	**342.47**	No Data	No Data	No Data	No Data
121614 C	-48.73	323.59	-49.54	**372.32**	-51.04	315.20	-50.44	**366.24**
121614 L1	-15.74	375.59	-16.43	**391.33**	-50.44	365.21	-18.25	**415.65**
121614 L2	-41.19	364.53	-42.31	**405.72**	-43.46	354.63	-42.45	**398.09**
121614 R1	-26.20	339.04	-26.59	**365.24**	-28.14	330.17	-27.58	**358.31**
121614 R2	-33.46	326.09	-32.56	**359.55**	-27.58	310.73	-37.54	**338.31**
121814 C	-46.41	333.49	-46.17	**379.90**	-38.20	323.17	-37.82	**361.37**
121814 L1	-19.05	386.25	-17.49	**405.30**	-5.05	364.49	-2.91	**369.54**
121814 L2	-18.01	351.98	-56.62	**369.99**	-25.76	345.24	-25.65	**371.00**
121814 R1	-27.66	346.87	-26.05	**374.53**	-25.65	364.06	-18.77	**389.71**
121814 R2	-17.56	346.78	-18.13	**364.34**	-26.48	353.00	-25.89	**379.48**
121914 C	-50.08	322.58	-50.41	**372.66**	-48.23	325.47	-47.55	**373.70**
121914 L1	-30.19	366.20	-33.10	**396.39**	-16.68	378.19	-16.52	**394.87**
121914 L2	-63.58	337.29	-64.74	**400.87**	-51.52	349.89	-51.69	**401.41**
121914 R1	-29.30	337.07	-28.32	**366.37**	-25.16	341.49	-24.34	**366.65**
121914 R2	-26.12	338.57	-25.91	**364.69**	-24.82	341.48	-23.88	**366.30**
010815 3Coil C	-3.26	411.71	-3.52	**414.97**	-10.08	389.15	-9.69	**399.23**
010815 3Coil L2	-19.93	398.77	-19.85	**418.70**	-23.48	379.23	-23.09	**402.71**
010815 3Coil R1	-2.80	406.39	-2.69	**409.19**	-5.60	389.90	-5.35	**395.50**
010915 C	-40.03	335.70	-40.27	**375.73**	-38.42	325.83	-38.23	**364.25**
010915 L1	-1.68	369.58	-1.89	**371.26**	-1.50	357.64	-1.33	**359.14**
010915 L2	-29.20	345.04	-29.04	**374.24**	-28.03	333.67	-27.96	**361.70**
010915 R1	-18.66	367.20	-19.00	**385.86**	-18.63	360.52	-18.22	**379.15**
010915 R2	-26.34	354.31	-26.34	**380.65**	-25.86	347.60	-25.97	**373.46**
011315 C	-39.12	331.43	-39.09	**370.55**	-38.70	328.75	-38.59	**367.45**
011315 L1	-5.55	364.33	-5.49	**369.88**	-5.10	359.03	-4.84	**364.13**
011315 L2	-30.93	339.53	-30.64	**370.46**	-29.94	337.17	-30.09	**367.11**
011315 R1	-20.95	367.96	-20.87	**388.91**	-19.20	365.00	-19.06	**384.20**
011315 R2	-27.71	352.00	-27.25	**379.71**	-26.43	352.30	-26.00	**378.73**
012015 C	-45.67	312.61	-47.11	**358.28**	-74.15	271.61	-73.32	**345.76**
012015 L1	-11.07	347.59	-12.53	**358.66**	-30.41	314.14	-29.72	**344.55**
012015 L2	-31.14	328.70	-31.03	**359.84**	-35.64	309.37	-35.38	**345.01**
012015 R1	-24.26	344.46	-26.21	**368.72**	-44.94	311.80	-44.62	**356.74**
012015 R2	-32.77	330.22	-33.82	**362.99**	-49.47	304.70	-48.80	**354.17**
012315 C	-39.18	335.20	-37.37	**374.38**	-38.20	333.15	-37.82	**371.35**
012315 L1	-5.05	364.49	-2.91	**369.54**	-5.22	363.55	-4.79	**368.77**
012315 L2	-32.00	341.03	-29.51	**373.03**	-25.76	345.24	-25.67	**371.00**
012315 R1	-21.34	366.88	-18.19	**388.22**	-19.04	364.06	-18.75	**383.10**
012315 R2	-27.72	351.89	-26.13	**379.61**	-26.48	353.00	-25.89	**379.48**
012615 Single Coil	-0.05	393.93	0.14	**393.98**	-0.02	377.09	0.09	**377.11**

Notes:

1) If not specified data are provided for 5-coil system (Left1 –L1, Left2 –L2, Central-C, Right1-R1, Right2-R2)

Table C-4
Summary of G-858 Responses to ISOs During the IVS 2-Sensor System

Date	Large ISO Parallel to Earth's Magnetic Field (BEST) AM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Medium ISO Parallel to Earth's Magnetic Field (BEST) AM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Large ISO Parallel to Earth's Magnetic Field (BEST) PM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) PM	Medium ISO Parallel to Earth's Magnetic Field (BEST) PM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) PM
112014 L S-N	80.3	31.9	220.1	125.7	73.9	28.2	261.6	127.3
112014 L N-S	77.4	27	216.7	128.9	74.4	27.8	209.9	115.7
112014 L Average	**78.85**	**29.45**	**218.4**	**127.3**	**74.15**	**28**	**235.75**	**121.5**
112014 R S-N	81.4	29.8	264.1	140.3	74.4	29	242.1	127.3
112014 R N-S	73.6	28.5	242.9	144.2	75.1	32.1	219.9	112.2
112014 R Average	**77.5**	**29.15**	**253.5**	**142.25**	**74.75**	**30.55**	**231**	**119.75**
112114 L S-N	77.6	30.7	248.7	119.2	73.7	28.8	227.6	104.7
112114 L N-S	72.9	27.9	231.4	142.5	71.3	27.5	188.5	113.1
112114 L Average	**75.25**	**29.3**	**240.05**	**130.85**	**72.5**	**28.15**	**208.05**	**108.9**
112114 R S-N	78.6	28.6	250.1	105.7	80.7	27.7	247	114.2
112114 R N-S	74.2	26.1	233.4	120.9	71.1	29.8	233.7	119.4
112114 R Average	**76.4**	**27.35**	**241.75**	**113.3**	**75.9**	**28.75**	**240.35**	**116.8**
121014 L S-N	64.4	25.3	187	110.9	72.8	26.6	252.4	122
121014 L N-S	80.8	28.3	229.7	101.7	79	28.1	217.3	103.5
121014 L Average	**72.6**	**26.8**	**208.35**	**106.3**	**75.9**	**27.35**	**234.85**	**112.75**
121014 R S-N	70.3	25	225.4	119	74.8	25.7	241.2	108.7
121014 R N-S	74.6	27.3	219.9	122.1	74.5	25.8	212.3	109.9
121014 R Average	**72.45**	**26.15**	**222.65**	**120.55**	**74.65**	**25.75**	**226.75**	**109.3**
020615 L S-N	81.5	33.7	224.2	129.6	85.7	34.5	228.3	132.3
020615 L N-S	78.8	29.2	219.4	133.6	79.1	28.3	216.7	131.2
020615 L Average	**80.15**	**31.45**	**221.8**	**131.6**	**82.4**	**31.4**	**222.5**	**131.75**
020615 R S-N	83.9	30.4	269.1	141.5	82.5	32.9	227.3	126.7
020615 R N-S	74.8	28.7	237.2	143.6	78.6	29.4	217.3	129.7
020615 R Average	**79.35**	**29.55**	**253.15**	**142.55**	**80.55**	**31.15**	**222.3**	**128.2**
021315 L S-N	78.6	30.9	249.7	120.4	70.9	30.2	236.4	109.5
021315 L N-S	71.3	27.8	229.4	141.8	73.4	29.8	190.3	118.4
021315 L Average	**74.95**	**29.35**	**239.55**	**131.1**	**72.15**	**30**	**213.35**	**113.95**
021315 R S-N	80.5	31.2	257.4	109.4	82.3	28.9	252.7	116.9
021315 R N-S	81.2	27.5	242.1	126.9	75.1	31.3	245.3	127.5
021315 R Average	**80.85**	**29.35**	**249.75**	**118.15**	**78.7**	**30.1**	**249**	**122.2**

Green - Value outside of the (mean ± 20%) range.

Large ISO BEST	Large ISO Worst	Medium ISO Best	Medium ISO Worst
Mean + 20% = 94 nT/m	Mean + 20% = 37.4 nT/m	Mean + 20% = 300.9 nT/m	Mean + 20% = 161.1nT/m
Mean = 78.3 nT/m	Mean = 31.2 nT/m	Mean = 250.7 nT/m	Mean = 134.3 nT/m
Mean - 20% = 62.7 nT/m	Mean - 20% = 25.0 nT/m	Mean - 20% = 200.6 nT/m	Mean - 20% = 107.4 nT/m

Notes:
R = Right sensor
S = South
N = North
L = Left sensor
nT/m = nano-Teslas per meter

Table C-5
Summary of G-858 Responses to ISOs During the IVS 6-Sensor System

Date	Large ISO Parallel to Earth's Magnetic Field (BEST) AM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Medium ISO Parallel to Earth's Magnetic Field (BEST) AM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Large ISO Parallel to Earth's Magnetic Field (BEST) PM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) PM	Medium ISO Parallel to Earth's Magnetic Field (BEST) PM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) PM
120214 C1 S-N	81.5	33.6	334.9	192.3	87.6	32.4	304.4	174.9
120214 C1 N-S	88.95	31.8	328.6	157.7	90.3	31.2	352.8	140.5
120214 C1 Average	85.225	32.7	331.75	175	88.95	31.8	328.6	157.7
120214 C2 S-N	95.6	30.5	417.2	169	95.2	31.9	414	166.1
120214 C2 N-S	94.15	32.6	388.2	175.9	93.1	33.3	362.3	185.6
120214 C2 Average	94.875	31.55	402.7	172.45	94.15	32.6	388.15	175.85
120214 L1 S-N					82.9	30.7	257	143.2
120214 L1 N-S	82.95	31.05	264.5	145.1	83	31.4	272	146.9
120214 L1 Average	82.95	31.05	264.5	145.1	82.95	31.05	264.5	145.05
120214 L2 S-N					87.7	32	274.9	151.4
120214 L2 N-S	87.5	31.45	254	131.4	87.3	30.9	233	111.3
120214 L2 Average	87.5	31.45	254	131.4	87.5	31.45	253.95	131.35
120214 R1 S-N	88.1	31.3	306.5	164	86.3	30.6	311	159.1
120214 R1 N-S	85.3	31.45	302	156.2	84.3	32.3	292.9	153.3
120214 R1 Average	86.7	31.375	304.25	160.1	85.3	31.45	301.95	156.2
120214 R2 S-N	85	31.3	280.6	131.9	81.2	30.7	278.2	134.7
120214 R2 N-S	78.75	31.15	274	144.4	76.3	31.6	269.8	154
120214 R2 Average	81.875	31.225	277.3	138.15	78.75	31.15	274	144.35
120314 C1 S-N	78.4	30.6	302.4	158.4	86.4	30.1	309.4	164.7
120314 C1 N-S	80.5	31	327.5	123.8	91.1	32	382.4	145.9
120314 C1 Average	79.45	30.8	314.95	141.1	88.75	31.05	345.9	155.3
120314 C2 S-N	94.4	32.3	382.4	164.4	95.3	32.3	383.6	170
120314 C2 N-S	88.9	32	345.5	171.8	94.5	33.4	374.6	191.2
120314 C2 Average	91.65	32.15	363.95	168.1	94.9	32.85	379.1	180.6
120314 L1 S-N	82.3	30.4	260.8	137.6	82.3	30.8	267	137.7
120314 L1 N-S	81.6	31.4	263.1	136.1	82.7	30.8	270.8	144.8
120314 L1 Average	81.95	30.9	261.95	136.85	82.5	30.8	268.9	141.25
120314 L2 S-N	76.6	29.3	242.2	128.5	84.3	30.1	264.5	141.1
120314 L2 N-S	84.7	30.8	243.7	114.5	86.9	30.9	303.5	156.7
120314 L2 Average	80.65	30.05	242.95	121.5	85.6	30.5	284	148.9
120314 R1 S-N	80.5	29.3	298.4	144.9	85.9	30.7	299.1	154.2
120314 R1 N-S	82.7	32.3	281.7	156.9	83.7	32.2	274.2	157.6
120314 R1 Average	81.6	30.8	290.05	150.9	84.8	31.45	286.65	155.9
120314 R2 S-N	79.3	30.5	257.3	124.5	84	30	264.9	131
120314 R2 N-S	76.9	31.8	270.4	138.3	82.9	31.7	266.8	148.7
120314 R2 Average	78.1	31.15	263.85	131.4	83.45	30.85	265.85	139.85
120414 C1 S-N	77	30.5	293.5	169.9	90.7	31.2	305	171.7
120414 C1 N-S	85.9	31.6	372.7	129.3	87.2	31.5	372	112.1
120414 C1 Average	81.45	31.05	333.1	149.6	88.95	31.35	338.5	141.9
120414 C2 S-N	92.7	31.3	363.7	161.9	93.7	32	389.2	164.9
120414 C2 N-S	90.7	32.9	295.5	181.2	91.5	33.3	372.6	182
120414 C2 Average	91.7	32.1	329.6	171.55	92.6	32.65	380.9	173.45
120414 L1 S-N	82.2	30.2	264	142.9	81.9	30.7	266.3	140.5
120414 L1 N-S	82.8	30.2	272.7	141.3	82.5	31	271	134.9

Table C-5 (Continued)
Summary of G-858 Responses to ISOs During the IVS 6-Sensor System

Date	Large ISO Parallel to Earth's Magnetic Field (BEST) AM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Medium ISO Parallel to Earth's Magnetic Field (BEST) AM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Large ISO Parallel to Earth's Magnetic Field (BEST) PM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) PM	Medium ISO Parallel to Earth's Magnetic Field (BEST) PM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) PM
120414 L1 Average	82.5	30.2	268.35	142.1	82.2	30.85	268.65	137.7
120414 L2 S-N	81.6	30.1	257.5	137.1	83.5	30.2	261.6	141.6
120414 L2 N-S	83.9	30.5	267.9	109.4	84.6	30.6	264.1	115.7
120414 L2 Average	82.75	30.3	262.7	123.25	84.05	30.4	262.85	128.65
120414 R1 S-N	83.8	30.1	289.7	143	85	30.5	302.1	153.3
120414 R1 N-S	82.3	31.5	282.1	151	82.7	31	288.9	146.6
120414 R1 Average	83.05	30.8	285.9	147	83.85	30.75	295.5	149.95
120414 R2 S-N	79.9	30.4	262.5	121.1	82.4	30.2	267.1	124.3
120414 R2 N-S	80.6	31.8	267.1	149.5	81.4	32	268.1	150.7
120414 R2 Average	80.25	31.1	264.8	135.3	81.9	31.1	267.6	137.5
120514 C1 S-N	84.4	30.3	304.9	149.3	82.5	30.7	307.6	146.2
120514 C1 N-S	87.7	32.5	359.3	126.1	87.9	32.4	369.4	134.6
120514 C1 Average	86.05	31.4	332.1	137.7	85.2	31.55	338.5	140.4
120514 C2 S-N	93.1	31.8	376.1	158.4	94.9	31.9	383.5	153.3
120514 C2 N-S	93.9	33	369.8	188.4	94.8	33.5	372.2	120.9
120514 C2 Average	93.5	32.4	372.95	173.4	94.85	32.7	377.85	137.1
120514 L1 S-N	82.3	30.9	255.3	133.5	83.2	30.6	263	138.5
120514 L1 N-S	83.5	30.9	272.7	145.8	83.8	30.9	278.4	145.4
120514 L1 Average	82.9	30.9	264	139.65	83.5	30.75	270.7	141.95
120514 L2 S-N	83.2	30.1	263.2	140.3	84.5	30.6	263.3	139.7
120514 L2 N-S	85.2	30.8	295.4	159.8	86.3	31.4	308.7	156
120514 L2 Average	84.2	30.45	279.3	150.05	85.4	31	286	147.85
120514 R1 S-N	83.9	30.2	298.8	144.5	84.3	30.3	301.2	148.7
120514 R1 N-S	83.1	32.3	291.8	153.4	84.4	32.5	288.5	155
120514 R1 Average	83.5	31.25	295.3	148.95	84.35	31.4	294.85	151.85
120514 R2 S-N	81.1	30	256.9	122.5	83.2	30.2	264.7	118.4
120514 R2 N-S	81.2	32.1	268.2	145.8	81.9	32.2	273.8	147.5
120514 R2 Average	81.15	31.05	262.55	134.15	82.55	31.2	269.25	132.95
120914 C1 S-N	85.8	30.3	312.9	150.1	82	30.5	301.3	141.8
120914 C1 N-S	90.9	32.9	390.1	141.3	92.7	32.4	385.4	121.4
120914 C1 Average	88.35	31.6	351.5	145.7	87.35	31.45	343.35	131.6
120914 C2 S-N	94.8	32.3	384.5	163.2	95.6	32.2	396.4	168.3
120914 C2 N-S	95.1	32.9	381.6	193.3	94.2	33.3	377.9	192
120914 C2 Average	94.95	32.6	383.05	178.25	94.9	32.75	387.15	180.15
120914 L1 S-N	81.9	30.8	255.9	130.4	82.5	30.5	258.7	134
120914 L1 N-S	82.9	30.7	274.4	144.6	82.7	30.2	273.7	142.5
120914 L1 Average	82.4	30.75	265.15	137.5	82.6	30.35	266.2	138.25
120914 L2 S-N	83.7	30.6	262	138.7	84.8	30.3	262.3	141.9
120914 L2 N-S	86.8	30.9	303.9	155.5	86.9	31.2	305.6	114.3
120914 L2 Average	85.25	30.75	282.95	147.1	85.85	30.75	283.95	128.1
120914 R1 S-N	82.9	30.4	298.5	147.4	83	30.1	297.8	146.5
120914 R1 N-S	84.1	32.1	286.2	157.5	84.1	31.6	286.8	153.5
120914 R1 Average	83.5	31.25	292.35	152.45	83.55	30.85	292.3	150
120914 R1 S-N	82	30.2	260.2	118.8	81.4	30.2	260.5	123.1

Table C-5 (Continued)
Summary of G-858 Responses to ISOs During the IVS 6-Sensor System

Date	Large ISO Parallel to Earth's Magnetic Field (BEST) AM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Medium ISO Parallel to Earth's Magnetic Field (BEST) AM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) AM	Large ISO Parallel to Earth's Magnetic Field (BEST) PM	Large ISO Perpendicular to Earth's Magnetic Field (WORST) PM	Medium ISO Parallel to Earth's Magnetic Field (BEST) PM	Medium ISO Perpendicular to Earth's Magnetic Field (WORST) PM
120914 R1 N-S	81	31.9	267.7	148.7	80.8	31.5	268.6	148
120914 R1 Average	**81.5**	**31.05**	**263.95**	**133.75**	**81.1**	**30.85**	**264.55**	**135.55**
121014 C1 S-N	82.3	30.4	298.2	149.2	93.8	30.5	316.8	136.2
121014 C1 N-S	85.7	32.8	392.3	134.9	93.6	33.5	403.1	155.8
121014 C1 Average	**84**	**31.6**	**345.25**	**142.05**	**93.7**	**32**	**359.95**	**146**
121014 C2 S-N	95.8	32.5	399.3	165.3	96	32.8	390	159.9
121014 C2 N-S	95	33.4	372.1	191.7	96.1	33.3	377.1	171
121014 C2 Average	**95.4**	**32.95**	**385.7**	**178.5**	**96.05**	**33.05**	**383.55**	**165.45**
121014 L1 S-N	81.9	30.8	265.6	138.8	82.5	30.7	264	138.2
121014 L1 N-S	83.7	31.1	272.6	145.4	83.6	31	278.7	141.3
121014 L1 Average	**82.8**	**30.95**	**269.1**	**142.1**	**83.05**	**30.85**	**271.35**	**139.75**
121014 L2 S-N	76.7	30.4	265.8	138.9	84.4	30.5	267.3	138.6
121014 L2 N-S	86	30.9	306.5	155.3	86.9	30.8	309.2	160.3
121014 L2 Average	**81.35**	**30.65**	**286.15**	**147.1**	**85.65**	**30.65**	**288.25**	**149.45**
121014 R1 S-N	82.5	30.3	290.7	146.5	83.2	30.6	290.5	143.4
121014 R1 N-S	84.3	32.2	292.4	156.5	84.7	32.1	286.3	152.4
121014 R1 Average	**83.4**	**31.25**	**291.55**	**151.5**	**83.95**	**31.35**	**288.4**	**147.9**
121014 R2 S-N	81	30.5	257.3	126.5	81.7	30.5	269.2	121.5
121014 R2 N-S	81.6	31.9	271.8	148.6	81.9	32.1	272.1	145.3
121014 R2 Average	**81.3**	**31.2**	**264.55**	**137.55**	**81.8**	**31.3**	**270.65**	**133.4**

Green - Value outside of the (mean ± 20%) range.

Large ISO BEST	Large ISO Worst	Medium ISO Best	Medium ISO Worst
Mean + 20% = 104 nT/m	Mean + 20% = 38.4 nT/m	Mean + 20% = 374.4 nT/m	Mean + 20% = 188.4nT/m
Mean = 86.7 nT/m	Mean = 32.0 nT/m	Mean = 312.0 nT/m	Mean = 157.0 nT/m
Mean - 20% = 69.4 nT/m	Mean - 20% = 25.6 nT/m	Mean - 20% = 249.6 nT/m	Mean - 20% = 125.6 nT/m

The G-858 responses for the medium ISO in the best orientation were above the upper boundary (mean + 20%) for several IVSs. This occured for the same sensor (sensor C2) in the 6-sensor system and the reason was the terrain configuration. The path along which the sensor C2 was puled was slightly closer to the ISO than the required distance of 30cm. However, if the response of one ISO failed, the responses to the remaining three were in the proper range and overall IVS obtained the mark "Pass". At the same time, the responses of sensor C2 to standard object in the SSR test were also in the proper range indicating that the sensor C2 was tuned well.

Table C-6
Summary EM61 Responses to ISOs During IVS

DAY_Coil	Medium ISO Vertical_EM61-MK2	Horisontal_Along_EM61-MK2	Medium ISO Horisontal_Across_EM61-MK2	Small ISO Vertical_EM61-MK2	Horisontal_Along_EM61-MK2	Horisontal_Across_EM61-MK2	Comments
121214_1_C	137.66	51.80	29.24	66.34	25.68	17.46	
121214_1_L1	132.16	48.93	29.15	70.66	21.99	11.55	
121214_1_L2	129.04	52.68	31.18	66.83	23.31	11.35	
121214_1_R1	124.68	46.61	30.60	57.71	24.91	13.25	
121214_1_R2	141.83	45.27	38.69	57.07	24.37	11.47	
121514_1_C	150.31	54.70	29.98	73.03	28.87	14.62	
121514_1_L1	131.56	51.81	30.70	75.69	21.78	12.85	
121514_1_L2	132.94	55.87	35.23	70.55	24.77	13.22	
121514_1_R1	133.14	53.96	32.06	63.18	21.98	16.70	
121514_1_R2	139.98	48.81	36.08	65.06	24.16	12.86	
121614_1_C	154.61	55.15	30.65	73.29	29.76	13.96	
121614_1_L1	133.06	52.97	31.68	77.10	21.55	13.74	
121614_1_L2	128.81	54.36	31.17	65.75	23.62	11.73	
121614_1_R1	123.89	50.47	31.97	60.44	22.17	15.47	
121614_1_R2	142.36	50.34	36.45	67.92	21.92	16.10	
121614_2_C	149.34	56.63	30.10	73.81	29.78	13.14	
121614_2_L1	129.22	53.49	30.62	73.99	22.02	13.58	
121614_2_L2	129.48	52.27	30.17	64.00	22.84	11.20	
121614_2_R1	134.99	55.59	33.56	67.13	25.58	12.03	
121614_2_R2	146.93	53.59	38.09	72.16	24.95	11.97	
121814_1_C	144.74	55.26	28.75	71.56	29.09	13.13	
121814_1_L1	133.98	54.40	32.91	77.40	22.12	14.41	
121814_1_L2	127.32	52.33	30.95	66.12	23.60	12.81	
121814_1_R1	125.19	51.40	30.99	61.03	20.71	12.83	
121814_1_R2	140.76	50.58	36.22	65.23	22.25	11.01	
121814_2_C	143.61	55.53	29.24	69.24	28.80	12.90	
121814_2_L1	123.46	52.75	31.55	70.54	21.44	12.32	
121814_2_L2	122.70	51.94	29.76	64.46	21.77	10.99	
121814_2_R1	115.35	52.01	30.98	54.76	20.86	17.35	
121814_2_R2	129.15	51.15	31.95	60.31	25.73	12.64	
121914_1_C	143.18	54.56	29.21	70.61	29.00	12.89	
121914_1_L1	125.62	51.11	31.68	69.96	21.02	13.88	
121914_1_L2	124.19	51.39	29.25	60.69	22.33	11.69	
121914_1_R1	124.82	51.48	31.26	59.53	20.80	14.44	
121914_1_R2	137.28	51.25	34.55	63.02	24.08	12.84	
121914_2_C	139.11	53.71	30.16	65.61	28.52	14.73	
121914_2_L1	125.73	50.21	32.45	74.66	21.57	12.73	
121914_2_L2	123.58	54.26	30.64	63.07	22.07	13.17	
121914_2_R1	121.05	50.64	29.87	58.69	20.63	16.55	
121914_2_R2	140.59	51.93	34.96	63.32	24.55	11.72	
010815_3Coil_1_C	150.31	52.74	30.30	72.30	29.12	17.87	
010815_3Coil_1_L2	132.33	52.24	32.24	62.15	22.02	11.05	
010815_3Coil_1_R1	143.29	50.26	35.47	68.73	26.50	12.49	
010815_3Coil_2_C	160.38	52.47	33.66	77.40	29.90	15.22	
010815_3Coil_2_L2	125.60	54.23	30.48	60.97	22.64	11.48	
010815_3Coil_2_R1	131.57	50.98	33.43	66.65	26.31	11.97	
010915_1_C	140.82	54.97	28.46	69.96	28.69	12.30	
010915_1_L1	127.14	57.97	32.16	74.98	23.02	15.25	
010915_1_L2	121.35	48.37	27.10	59.54	21.51	9.07	
010915_1_R1	132.22	53.45	34.10	69.19	20.09	11.42	
010915_1_R2	147.91	52.86	36.83	69.15	25.65	11.94	

Table C-6 (Continued)
Summary EM61 Responses to ISOs During IVS

DAY_Coil	Medium ISO Vertical_EM61-MK2	Horisontal_Along_EM61-MK2	Medium ISO Horisontal_Across_EM61-MK2	Small ISO Vertical_EM61-MK2	Horisontal_Along_EM61-MK2	Horisontal_Across_EM61-MK2	Comments
010915_2_C	137.85	59.51	26.59	62.07	26.72	11.66	
010915_2_L1	123.98	50.30	27.40	62.23	17.81	12.45	
010915_2_L2	116.94	46.32	28.69	59.36	21.19	11.06	
010915_2_R1	123.74	53.07	27.65	65.27	21.71	16.44	
010915_2_R2	139.65	52.75	36.96	65.68	23.62	13.06	
011315_1_C	145.70	53.13	28.88	67.41	27.64	14.09	
011315_1_L1	125.34	50.59	30.10	72.99	20.68	13.35	
011315_1_L2	121.27	48.02	28.79	61.26	19.32	11.57	
011315_1_R1	132.94	55.17	33.53	66.96	20.24	13.38	
011315_1_R2	147.51	52.59	37.30	71.59	26.55	12.97	
011315_2_C	154.14	56.89	30.56	77.44	28.63	14.54	
011315_2_L1	135.40	51.47	30.97	77.53	21.91	13.71	
011315_2_L2	130.58	51.56	30.73	63.88	19.11	10.78	
011315_2_R1	137.85	56.63	32.29	68.28	24.06	13.82	
011315_2_R2	153.85	54.50	36.64	73.66	26.23	12.80	
012015_1_C	124.60	50.79	30.63	59.72	26.52	14.92	
012015_1_L1	110.45	45.07	28.35	66.23	20.16	12.88	
012015_1_L2	122.28	48.57	28.99	57.84	21.59	11.07	
012015_1_R1	124.54	52.39	33.62	57.56	21.64	16.47	
012015_1_R2	121.91	49.14	38.43	60.73	23.91	17.52	
012015_2_C	134.63	51.70	No data	No data	No data	No data	No GPS data after second ISO, posible GPS feilure.
012015_2_L1	109.84	42.36	29.94	67.46	19.90	14.29	
012015_2_L2	124.67	48.96	29.43	62.06	22.82	11.88	
012015_2_R1	108.31	45.74	33.88	56.81	22.20	15.95	
012015_2_R2	119.54	47.29	38.87	56.96	22.77	17.65	
012315_1_C	120.50	45.13	26.77	56.46	23.59	14.62	
012315_1_L1	101.30	43.58	27.06	59.41	18.80	11.76	
012315_1_L2	107.94	42.64	28.11	52.31	19.04	10.94	
012315_1_R1	109.61	48.57	30.37	59.07	21.42	12.62	
012315_1_R2	132.95	48.19	33.58	61.78	21.98	13.77	
012315_2_C	114.33	50.27	29.07	60.71	25.76	16.06	
012315_2_L1	116.07	45.54	28.18	61.93	21.25	12.07	
012315_2_L2	114.47	45.25	26.56	57.37	19.65	11.14	
012315_2_R1	113.33	51.35	31.29	60.36	20.98	13.88	
012315_2_R2	124.39	49.20	37.90	57.96	21.50	15.95	

Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified data are provided
for 5-coil system (Left1 –L1, Left2 –L2,
Central-C, Right1-R1, Right2-R2)

Table C-7
IVS Positional Accuracy G-858

Date/ Test/ Sensor	Geophysical System	Surveyed Location for Large ISO Parallel Y (m)	Detected Location for Large ISO Parallel Y (m)	Offset (m)	Surveyed Location for Large ISO Perpendicular Y (m)	Detected Location for Large ISO Perpendicular Y (m)	Offset (m)	Surveyed Location for Medium ISO Parallel Y (m)	Detected Location for Medium ISO Parallel Y (m)	Offset (m)	Surveyed Location for Medium ISO Perpendicular Y (m)	Detected Location for Medium ISO Perpendicular Y (m)	Offset (m)
111914 IVS1 L	2 Sensor	3640190.82	3640190.88	-0.06	3640202.69	3640202.67	0.02	3640212.40	3640212.42	-0.02	3640220.43	3640220.35	0.08
111914 IVS1 R	2 Sensor	3640190.82	3640190.88	-0.06	3640202.69	3640202.74	-0.05	3640212.40	3640212.43	-0.03	3640220.43	3640220.33	0.10
112014 IVS1 L	2 Sensor	3640190.82	3640190.83	-0.01	3640202.69	3640202.74	-0.05	3640212.40	3640212.46	-0.06	3640220.43	3640220.36	0.07
112014 IVS1 R	2 Sensor	3640190.82	3640190.79	0.03	3640202.69	3640202.71	-0.02	3640212.40	3640212.52	-0.12	3640220.43	3640220.43	0.00
112014 IVS2 L	2 Sensor	3640190.82	3640190.82	0.00	3640202.69	3640202.73	-0.04	3640212.40	3640212.44	-0.04	3640220.43	3640220.44	-0.01
112014 IVS2 R	2 Sensor	3640190.82	3640190.87	-0.05	3640202.69	3640202.67	0.02	3640212.40	3640212.36	0.04	3640220.43	3640220.41	0.02
112114 IVS1 L	2 Sensor	3640190.82	3640190.81	0.01	3640202.69	3640202.68	0.01	3640212.40	3640212.45	-0.05	3640220.43	3640220.39	0.04
112114 IVS1 R	2 Sensor	3640190.82	3640190.85	-0.03	3640202.69	3640202.73	-0.04	3640212.40	3640212.38	0.02	3640220.43	3640220.39	0.04
112114 IVS2 L	2 Sensor	3640190.82	3640190.76	0.06	3640202.69	3640202.66	0.03	3640212.40	3640212.31	0.09	3640220.43	3640220.35	0.08
112114 IVS2 R	2 Sensor	3640190.82	3640190.80	0.02	3640202.69	3640202.67	0.02	3640212.40	3640212.42	-0.02	3640220.43	3640220.45	-0.02
120214 IVS2 C1	6 Sensor	3646281.99	3646281.84	0.15	3646294.32	3646294.21	0.11	3646304.14	3646304.16	-0.03	3646311.86	3646311.81	0.05
120214 IVS2 C2	6 Sensor	3646281.99	3646281.83	0.16	3646294.32	3646294.26	0.06	3646304.14	3646304.19	-0.06	3646311.86	3646311.84	0.02
120214 IVS2 L1	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.40	-0.08	3646304.14	3646304.32	-0.19	3646311.86	3646311.98	-0.12
120214 IVS2 L2	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.39	-0.07	3646304.14	3646304.25	-0.12	3646311.86	3646311.86	0.00
120214 IVS2 R1	6 Sensor	3646281.99	3646282.03	-0.04	3646294.32	3646294.38	-0.06	3646304.14	3646304.20	-0.07	3646311.86	3646311.87	-0.01
120214 IVS2 R2	6 Sensor	3646281.99	3646281.96	0.03	3646294.32	3646294.42	-0.10	3646304.14	3646304.11	0.02	3646311.86	3646311.89	-0.03
120314 IVS1 C1	6 Sensor	3646281.99	3646282.00	-0.01	3646294.32	3646294.27	0.05	3646304.14	3646304.14	-0.01	3646311.86	3646311.83	0.03
120314 IVS1 C2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.23	0.09	3646304.14	3646304.21	-0.08	3646311.86	3646311.88	-0.02
120314 ISV1 L1	6 Sensor	3646281.99	3646281.90	0.09	3646294.32	3646294.37	-0.05	3646304.14	3646304.14	-0.01	3646311.86	3646311.88	-0.02
120314 ISV1 L2	6 Sensor	3646281.99	3646281.83	0.16	3646294.32	3646294.31	0.01	3646304.14	3646304.14	-0.01	3646311.86	3646311.91	-0.05
120314 ISV1 R1	6 Sensor	3646281.99	3646282.10	-0.11	3646294.32	3646294.41	-0.09	3646304.14	3646304.26	-0.13	3646311.86	3646311.76	0.10
120314 ISV1 R2	6 Sensor	3646281.99	3646281.93	0.06	3646294.32	3646294.30	0.02	3646304.14	3646304.18	-0.05	3646311.86	3646311.81	0.05
120314 IVS2 C1	6 Sensor	3646281.99	3646282.00	-0.01	3646294.32	3646294.34	-0.02	3646304.14	3646304.08	0.05	3646311.86	3646311.88	-0.02
120314 IVS2 C2	6 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.30	0.02	3646304.14	3646304.22	-0.09	3646311.86	3646311.91	-0.05
120314 IVS2 L1	6 Sensor	3646281.99	3646282.04	-0.05	3646294.32	3646294.28	0.04	3646304.14	3646304.15	-0.02	3646311.86	3646311.85	0.01
120314 IVS2 L2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.25	0.07	3646304.14	3646304.11	0.02	3646311.86	3646311.81	0.05
120314 IVS2 R1	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.34	-0.02	3646304.14	3646304.16	-0.03	3646311.86	3646311.81	0.05
120314 IVS2 R2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.37	-0.05	3646304.14	3646304.14	-0.01	3646311.86	3646311.93	-0.07
120414 IVS1 C1	6 Sensor	3646281.99	3646281.91	0.08	3646294.32	3646294.34	-0.02	3646304.14	3646304.16	-0.03	3646311.86	3646311.81	0.05
120414 IVS1 C2	6 Sensor	3646281.99	3646281.94	0.05	3646294.32	3646294.40	-0.08	3646304.14	3646304.06	0.07	3646311.86	3646311.85	0.01
120414 IVS1 L1	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.33	-0.01	3646304.14	3646304.08	0.05	3646311.86	3646311.92	-0.06
120414 IVS1 L2	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.27	0.05	3646304.14	3646304.17	-0.04	3646311.86	3646311.90	-0.04
120414 IVS1 R1	6 Sensor	3646281.99	3646282.03	-0.04	3646294.32	3646294.28	0.04	3646304.14	3646304.17	-0.04	3646311.86	3646311.90	-0.04
120414 IVS1 R2	6 Sensor	3646281.99	3646281.91	0.08	3646294.32	3646294.37	-0.05	3646304.14	3646304.17	-0.04	3646311.86	3646311.83	0.03
120414 IVS2 C1	6 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.34	-0.02	3646304.14	3646304.18	-0.05	3646311.86	3646311.81	0.05
120414 IVS2 C2	6 Sensor	3646281.99	3646282.14	-0.15	3646294.32	3646294.40	-0.08	3646304.14	3646304.28	-0.15	3646311.86	3646311.97	-0.11
120414 IVS2 L1	6 Sensor	3646281.99	3646281.92	0.07	3646294.32	3646294.28	0.04	3646304.14	3646304.19	-0.06	3646311.86	3646311.85	0.01
120414 IVS2 L2	6 Sensor	3646281.99	3646281.92	0.07	3646294.32	3646294.32	0.00	3646304.14	3646304.11	0.02	3646311.86	3646311.82	0.04
120414 IVS2 R1	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.31	0.01	3646304.14	3646304.13	0.00	3646311.86	3646311.90	-0.04
120414 IVS2 R2	6 Sensor	3646281.99	3646281.93	0.06	3646294.32	3646294.28	0.04	3646304.14	3646304.15	-0.02	3646311.86	3646311.88	-0.02

Table C-7 (Continued)
IVS Positional Accuracy G-858

Date/ Test/ Sensor	Geophysical System	Surveyed Location for Large ISO Parallel Y (m)	Detected Location for Large ISO Parallel Y (m)	Offset (m)	Surveyed Location for Large ISO Perpendicular Y (m)	Detected Location for Large ISO Perpendicular Y (m)	Offset (m)	Surveyed Location for Medium ISO Parallel Y (m)	Detected Location for Medium ISO Parallel Y (m)	Offset (m)	Surveyed Location for Medium ISO Perpendicular Y (m)	Detected Location for Medium ISO Perpendicular Y (m)	Offset (m)
120514 IVS1 C1	6 Sensor	3646281.99	3646282.04	-0.05	3646294.32	3646294.30	0.02	3646304.14	3646304.04	0.09	3646311.86	3646311.84	0.02
120514 IVS1 C2	6 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.29	0.03	3646304.14	3646304.15	-0.02	3646311.86	3646311.89	-0.03
120514 IVS1 L1	6 Sensor	3646281.99	3646282.03	-0.04	3646294.32	3646294.32	0.00	3646304.14	3646304.20	-0.07	3646311.86	3646311.89	-0.03
120514 IVS1 L2	6 Sensor	3646281.99	3646281.94	0.05	3646294.32	3646294.30	0.02	3646304.14	3646304.13	0.00	3646311.86	3646311.84	0.02
120514 IVS1 R1	6 Sensor	3646281.99	3646282.00	-0.01	3646294.32	3646294.32	0.00	3646304.14	3646304.11	0.02	3646311.86	3646311.88	-0.02
120514 IVS1 R2	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.37	-0.05	3646304.14	3646304.14	-0.01	3646311.86	3646311.85	0.01
120514 IVS2 C1	6 Sensor	3646281.99	3646281.94	0.05	3646294.32	3646294.36	-0.04	3646304.14	3646304.10	0.03	3646311.86	3646311.80	0.06
120514 IVS2 C2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.27	0.05	3646304.14	3646304.04	0.09	3646311.86	3646311.86	0.00
120514 IVS2 L1	6 Sensor	3646281.99	3646281.95	0.04	3646294.32	3646294.37	-0.05	3646304.14	3646304.16	-0.03	3646311.86	3646311.81	0.05
120514 IVS2 L2	6 Sensor	3646281.99	3646281.92	0.07	3646294.32	3646294.32	0.00	3646304.14	3646304.11	0.02	3646311.86	3646311.82	0.04
120514 IVS2 R1	6 Sensor	3646281.99	3646282.00	-0.01	3646294.32	3646294.29	0.03	3646304.14	3646304.11	0.02	3646311.86	3646311.94	-0.08
120514 IVS2 R2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.30	0.02	3646304.14	3646304.15	-0.02	3646311.86	3646311.88	-0.02
120914 IVS1 C1	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.34	-0.02	3646304.14	3646304.15	-0.02	3646311.86	3646311.89	-0.03
120914 IVS1 C2	6 Sensor	3646281.99	3646281.95	0.04	3646294.32	3646294.32	0.00	3646304.14	3646304.09	0.04	3646311.86	3646311.82	0.04
120914 IVS1 L1	6 Sensor	3646281.99	3646281.94	0.05	3646294.32	3646294.27	0.05	3646304.14	3646304.11	0.02	3646311.86	3646311.78	0.08
120914 IVS1 L2	6 Sensor	3646281.99	3646281.95	0.04	3646294.32	3646294.27	0.05	3646304.14	3646304.25	-0.12	3646311.86	3646311.90	-0.04
120914 IVS1 R1	6 Sensor	3646281.99	3646282.14	-0.15	3646294.32	3646294.28	0.04	3646304.14	3646304.28	-0.15	3646311.86	3646311.86	0.00
120914 IVS1 R2	6 Sensor	3646281.99	3646282.04	-0.05	3646294.32	3646294.31	0.01	3646304.14	3646304.33	-0.20	3646311.86	3646311.87	-0.01
120914 IVS2 C1	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.36	-0.04	3646304.14	3646304.08	0.05	3646311.86	3646311.83	0.03
120914 IVS2 C2	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.34	-0.02	3646304.14	3646304.20	-0.07	3646311.86	3646311.88	-0.02
120914 IVS2 L1	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.29	0.03	3646304.14	3646304.14	-0.01	3646311.86	3646311.87	-0.01
120914 IVS2 L2	6 Sensor	3646281.99	3646282.00	-0.01	3646294.32	3646294.36	-0.04	3646304.14	3646304.10	0.03	3646311.86	3646311.85	0.01
120914 IVS2 R1	6 Sensor	3646281.99	3646281.95	0.04	3646294.32	3646294.28	0.04	3646304.14	3646304.10	0.03	3646311.86	3646311.85	0.01
120914 IVS2 R2	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.31	0.01	3646304.14	3646304.27	-0.14	3646311.86	3646311.82	0.04
121014 IVS1 C1	6 Sensor	3646281.99	3646282.00	-0.01	3646294.32	3646294.31	0.01	3646304.14	3646304.09	0.04	3646311.86	3646311.87	-0.01
121014 IVS1 C2	6 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.34	-0.02	3646304.14	3646304.10	0.03	3646311.86	3646311.91	-0.05
121014 IVS1 L1	6 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.27	0.05	3646304.14	3646304.14	-0.01	3646311.86	3646311.89	-0.03
121014 IVS1 L2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.37	-0.05	3646304.14	3646304.09	0.04	3646311.86	3646311.87	-0.01
121014 IVS1 R1	6 Sensor	3646281.99	3646282.02	-0.03	3646294.32	3646294.31	0.01	3646304.14	3646304.20	-0.07	3646311.86	3646311.83	0.03
121014 IVS1 R2	6 Sensor	3646281.99	3646281.97	0.02	3646294.32	3646294.33	-0.01	3646304.14	3646304.25	-0.12	3646311.86	3646311.88	-0.02
121014 IVS2 C1	6 Sensor	3646281.99	3646281.93	0.06	3646294.32	3646294.34	-0.02	3646304.14	3646304.09	0.04	3646311.86	3646311.85	0.01
121014 IVS2 C2	6 Sensor	3646281.99	3646281.95	0.04	3646294.32	3646294.32	0.00	3646304.14	3646304.16	-0.03	3646311.86	3646311.82	0.04
121014 IVS2 L1	6 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.36	-0.04	3646304.14	3646304.13	0.00	3646311.86	3646311.90	-0.04
121014 IVS2 L2	6 Sensor	3646281.99	3646281.96	0.03	3646294.32	3646294.28	0.04	3646304.14	3646304.19	-0.06	3646311.86	3646311.87	-0.01
121014 IVS2 R1	6 Sensor	3646281.99	3646281.96	0.03	3646294.32	3646294.30	0.02	3646304.14	3646304.19	-0.06	3646311.86	3646311.86	0.00
121014 IVS2 R2	6 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.30	0.02	3646304.14	3646304.16	-0.03	3646311.86	3646311.85	0.01
121014 IVS1 L	2 Sensor	3646281.99	3646281.87	0.12	3646294.32	3646294.37	-0.05	3646304.14	3646304.19	-0.06	3646311.86	3646311.82	0.04
121014 IVS1 R	2 Sensor	3646281.99	3646281.98	0.01	3646294.32	3646294.36	-0.04	3646304.14	3646304.15	-0.02	3646311.86	3646311.77	0.09
121014 IVS2 L	2 Sensor	3646281.99	3646282.11	-0.12	3646294.32	3646294.31	0.01	3646304.14	3646304.15	-0.02	3646311.86	3646311.84	0.02
121014 IVS2 R	2 Sensor	3646281.99	3646281.99	0.00	3646294.32	3646294.32	0.00	3646304.14	3646304.18	-0.05	3646311.86	3646311.92	-0.06

Table C-7 (Continued)
IVS Positional Accuracy G-858

Date/ Test/ Sensor	Geophysical System	Surveyed Location for Large ISO Parallel Y (m)	Detected Location for Large ISO Parallel Y (m)	Offset (m)	Surveyed Location for Large ISO Perpendicular Y (m)	Detected Location for Large ISO Perpendicular Y (m)	Offset (m)	Surveyed Location for Medium ISO Parallel Y (m)	Detected Location for Medium ISO Parallel Y (m)	Offset (m)	Surveyed Location for Medium ISO Perpendicular Y (m)	Detected Location for Medium ISO Perpendicular Y (m)	Offset (m)
020615 IVS1 L	2 Sensor	3640190.82	3640190.79	0.03	3640202.69	3640202.69	0.00	3640212.40	3640212.46	-0.06	3640220.43	3640220.55	-0.12
020615 IVS1 R	2 Sensor	3640190.82	3640190.82	0.00	3640202.69	3640202.55	0.14	3640212.40	3640212.37	0.03	3640220.43	3640220.51	-0.08
020615 IVS2 L	2 Sensor	3640190.82	3640190.92	-0.10	3640202.69	3640202.56	0.13	3640212.40	3640212.30	0.10	3640220.43	3640220.54	-0.11
020615 IVS2 R	2 Sensor	3640190.82	3640190.89	-0.07	3640202.69	3640202.63	0.06	3640212.40	3640212.45	-0.05	3640220.43	3640220.43	0.00
021315 IVS1 L	2 Sensor	3640190.82	3640190.84	-0.02	3640202.69	3640202.62	0.07	3640212.40	3640212.49	-0.09	3640220.43	3640220.49	-0.06
021315 IVS1 R	2 Sensor	3640190.82	3640190.87	-0.05	3640202.69	3640202.71	-0.02	3640212.40	3640212.36	0.04	3640220.43	3640220.45	-0.02
021315 IVS2 L	2 Sensor	3640190.82	3640190.82	0.00	3640202.69	3640202.67	0.02	3640212.40	3640212.44	-0.04	3640220.43	3640220.58	-0.15
021315 IVS2 R	2 Sensor	3640190.82	3640190.92	-0.10	3640202.69	3640202.71	-0.02	3640212.40	3640212.38	0.02	3640220.43	3640220.50	-0.07

Notes: L-Left, R-Right (left and right sensors for 2-sensor system) L1-
Left1, L2-Left2, C1-Central1, C2-Central2, R1-Right1, R2-Right2 (6-sensor system) IVS1 -
Opening; IVS2 - Clsoing Criterion for
Passing: Offset < 0.25m

Table C-8
IVS Positional Accuracy EM61

Date/ Test/ Sensor	Geophysical System	Surveyed Location for Medium ISO Vertical Y (m)	Detected Location for Medium ISO Vertical Y (m)	Offset (m)	Surveyed Location for Medium ISO Horizontal Along Y (m)	Detected Location for Medium ISO Horizontal Along Y (m)	Offset (m)	Surveyed Location for Medium ISO Horizontal Across Y (m)	Detected Location for Medium ISO Horizontal Across Y (m)	Offset (m)	Surveyed Location for Small ISO Vertical Y (m)	Detected Location for Small ISO Vertical Y (m)	Offset (m)	Surveyed Location for Small ISO Horizontal Along Y (m)	Detected Location for Small ISO Horizontal Along Y (m)	Offset (m)	Surveyed Location for Small ISO Horizontal Across Y (m)	Detected Location for Small ISO Horizontal Across Y (m)	Offset (m)
121214 IVS1 C	5 Coil	3637997.06	3637997.11	-0.05	3638002.08	3638002.12	-0.04	3638007.16	3638007.20	-0.04	3638011.89	3638011.93	-0.04	3638016.88	3638016.83	0.05	3638021.87	3638021.91	-0.04
121214 IVS L1	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.00	0.08	3638007.16	3638007.13	0.03	3638011.89	3638011.90	-0.01	3638016.88	3638016.93	-0.05	3638021.87	3638021.87	0.00
121214 IVS1 L2	5 Coil	3637997.06	3637996.97	0.09	3638002.08	3638002.01	0.07	3638007.16	3638007.11	0.05	3638011.89	3638011.86	0.03	3638016.88	3638016.89	-0.01	3638021.87	3638021.83	0.04
121214 IVS1 R1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.13	-0.05	3638007.16	3638007.22	-0.06	3638011.89	3638011.82	0.07	3638016.88	3638016.94	-0.06	3638021.87	3638021.89	-0.02
121214 IVS1 R2	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.18	-0.10	3638007.16	3638007.19	-0.03	3638011.89	3638011.91	-0.02	3638016.88	3638016.83	0.05	3638021.87	3638021.95	-0.08
121514 IVS1 C	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.10	-0.02	3638007.16	3638007.21	-0.05	3638011.89	3638011.83	0.06	3638016.88	3638016.88	0.00	3638021.87	3638021.90	-0.03
121514 IVS1 L1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.08	0.00	3638007.16	3638007.24	-0.08	3638011.89	3638011.83	0.06	3638016.88	3638016.86	0.02	3638021.87	3638021.83	0.04
121514 IVS1 L2	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.11	-0.03	3638007.16	3638007.11	0.05	3638011.89	3638011.88	0.01	3638016.88	3638016.90	-0.02	3638021.87	3638021.80	0.07
121514 IVS1 R1	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.09	-0.01	3638007.16	3638007.19	-0.03	3638011.89	3638011.80	0.09	3638016.88	3638016.83	0.05	3638021.87	3638021.82	0.05
121514 IVS1 R2	5 Coil	3637997.06	3637997.14	-0.08	3638002.08	3638002.14	-0.06	3638007.16	3638007.19	-0.03	3638011.89	3638011.86	0.03	3638016.88	3638016.90	-0.02	3638021.87	3638021.84	0.03
121614 IVS1 C	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.11	-0.03	3638007.16	3638007.20	-0.04	3638011.89	3638011.89	0.00	3638016.88	3638016.86	0.02	3638021.87	3638021.88	-0.01
121614 IVS1 L1	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.09	-0.01	3638007.16	3638007.17	-0.01	3638011.89	3638011.82	0.07	3638016.88	3638016.92	-0.04	3638021.87	3638021.76	0.11
121614 IVS1 L2	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.14	-0.06	3638007.16	3638007.13	0.03	3638011.89	3638011.80	0.09	3638016.88	3638016.86	0.02	3638021.87	3638021.82	0.05
121614 IVS1 R1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.10	-0.02	3638007.16	3638007.14	0.02	3638011.89	3638011.80	0.09	3638016.88	3638016.86	0.02	3638021.87	3638021.90	-0.03
121614 IVS1 R2	5 Coil	3637997.06	3637997.11	-0.05	3638002.08	3638002.09	-0.01	3638007.16	3638007.18	-0.02	3638011.89	3638011.85	0.04	3638016.88	3638016.82	0.06	3638021.87	3638021.88	-0.01
121614 IVS2 C	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.12	-0.04	3638007.16	3638007.20	-0.04	3638011.89	3638011.90	-0.01	3638016.88	3638016.87	0.01	3638021.87	3638021.86	0.01
121614 IVS2 L1	5 Coil	3637997.06	3637997.10	-0.04	3638002.08	3638002.14	-0.06	3638007.16	3638007.19	-0.03	3638011.89	3638011.87	0.02	3638016.88	3638016.93	-0.05	3638021.87	3638021.96	-0.09
121614 IVS2 L2	5 Coil	3637997.06	3637997.03	0.03	3638002.08	3638002.13	-0.05	3638007.16	3638007.15	0.01	3638011.89	3638011.83	0.06	3638016.88	3638016.90	-0.02	3638021.87	3638021.79	0.08
121614 IVS2 R1	5 Coil	3637997.06	3637996.98	0.08	3638002.08	3638002.07	0.01	3638007.16	3638007.20	-0.04	3638011.89	3638011.89	0.00	3638016.88	3638016.95	-0.07	3638021.87	3638021.82	0.05
121614 IVS2 R2	5 Coil	3637997.06	3637997.10	-0.04	3638002.08	3638002.09	-0.01	3638007.16	3638007.13	0.03	3638011.89	3638011.82	0.07	3638016.88	3638016.88	0.00	3638021.87	3638021.89	-0.02
121814 IVS1 C	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.13	-0.05	3638007.16	3638007.15	0.01	3638011.89	3638011.86	0.03	3638016.88	3638016.88	0.00	3638021.87	3638021.92	-0.05
121814 IVS1 L1	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.00	0.08	3638007.16	3638007.13	0.03	3638011.89	3638011.79	0.10	3638016.88	3638016.87	0.01	3638021.87	3638021.79	0.08
121814 IVS1 L2	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.10	-0.02	3638007.16	3638007.13	0.03	3638011.89	3638011.86	0.03	3638016.88	3638016.86	0.02	3638021.87	3638021.81	0.06
121814 IVS1 R1	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.05	0.03	3638007.16	3638007.17	-0.01	3638011.89	3638011.87	0.02	3638016.88	3638016.89	-0.01	3638021.87	3638021.83	0.04
121814 IVS1 R2	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.16	-0.08	3638007.16	3638007.31	-0.15	3638011.89	3638011.96	-0.07	3638016.88	3638016.88	0.00	3638021.87	3638021.91	-0.04
121814 IVS2 C	5 Coil	3637997.06	3637997.01	0.05	3638002.08	3638002.07	0.01	3638007.16	3638007.21	-0.05	3638011.89	3638011.92	-0.03	3638016.88	3638016.90	-0.02	3638021.87	3638021.89	-0.02
121814 IVS2 L1	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.04	0.04	3638007.16	3638007.15	0.01	3638011.89	3638011.88	0.01	3638016.88	3638016.91	-0.03	3638021.87	3638021.79	0.08
121814 IVS2 L2	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.08	0.00	3638007.16	3638007.10	0.06	3638011.89	3638011.82	0.07	3638016.88	3638016.89	-0.01	3638021.87	3638021.85	0.02
121814 IVS2 R1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.09	-0.01	3638007.16	3638007.10	0.06	3638011.89	3638011.90	-0.01	3638016.88	3638016.69	0.19	3638021.87	3638021.91	-0.04
121814 IVS2 R2	5 Coil	3637997.06	3637997.01	0.05	3638002.08	3638002.09	-0.01	3638007.16	3638007.26	-0.10	3638011.89	3638011.92	-0.03	3638016.88	3638016.93	-0.05	3638021.87	3638021.85	0.02
121914 IVS1 C	5 Coil	3637997.06	3637997.12	-0.06	3638002.08	3638002.02	0.06	3638007.16	3638007.21	-0.05	3638011.89	3638011.89	0.00	3638016.88	3638016.86	0.02	3638021.87	3638021.91	-0.04
121914 IVS1 L1	5 Coil	3637997.06	3637997.13	-0.07	3638002.08	3638002.09	-0.01	3638007.16	3638007.15	0.01	3638011.89	3638011.84	0.05	3638016.88	3638016.87	0.01	3638021.87	3638021.80	0.07
121914 IVS1 L2	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.10	-0.02	3638007.16	3638007.16	0.00	3638011.89	3638011.85	0.04	3638016.88	3638016.84	0.04	3638021.87	3638021.78	0.09
121914 IVS1 R1	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.07	0.01	3638007.16	3638007.18	-0.02	3638011.89	3638011.79	0.10	3638016.88	3638016.85	0.03	3638021.87	3638021.81	0.06
121914 IVS1 R2	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638002.20	-0.12	3638007.16	3638007.16	0.00	3638011.89	3638011.84	0.05	3638016.88	3638016.92	-0.04	3638021.87	3638021.91	-0.04
121914 IVS2 C	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.11	-0.03	3638007.16	3638007.25	-0.09	3638011.89	3638011.92	-0.03	3638016.88	3638016.86	0.02	3638021.87	3638021.95	-0.08
121914 IVS2 L1	5 Coil	3637997.06	3637997.10	-0.04	3638002.08	3638002.09	-0.01	3638007.16	3638007.17	-0.01	3638011.89	3638011.83	0.06	3638016.88	3638016.91	-0.03	3638021.87	3638021.84	0.03
121914 IVS2 L2	5 Coil	3637997.06	3637997.00	0.06	3638002.08	3638002.13	-0.05	3638007.16	3638007.17	-0.01	3638011.89	3638011.85	0.04	3638016.88	3638016.88	0.00	3638021.87	3638021.82	0.05
121914 IVS2 R1	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638002.08	0.00	3638007.16	3638007.15	0.01	3638011.89	3638011.81	0.08	3638016.88	3638016.82	0.06	3638021.87	3638021.86	0.01
121914 IVS2 R2	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638002.09	-0.01	3638007.16	3638007.20	-0.04	3638011.89	3638011.92	-0.03	3638016.88	3638016.90	-0.02	3638021.87	3638021.97	-0.10
010815 IVS1 C	3 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.12	-0.04	3638007.16	3638007.23	-0.07	3638011.89	3638011.91	-0.02	3638016.88	3638016.82	0.06	3638021.87	3638021.92	-0.05
010815 IVS1 L2	3 Coil	3637997.06	3637997.04	0.02	3638002.08	3638001.95	0.13	3638007.16	3638007.13	0.03	3638011.89	3638011.80	0.09	3638016.88	3638016.90	-0.02	3638021.87	3638021.87	0.00
010815 IVS1 R1	3 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.09	-0.01	3638007.16	3638007.17	-0.01	3638011.89	3638011.85	0.04	3638016.88	3638016.89	-0.01	3638021.87	3638021.84	0.03
010815 IVS2 C	3 Coil	3637997.06	3637997.02	0.04	3638002.08	3638002.12	-0.04	3638007.16	3638007.22	-0.06	3638011.89	3638011.93	-0.04	3638016.88	3638016.82	0.06	3638021.87	3638021.84	0.03
010815 IVS2 L2	3 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.03	0.05	3638007.16	3638007.14	0.02	3638011.89	3638011.79	0.10	3638016.88	3638017.03	-0.15	3638021.87	3638021.86	0.01
010815 IVS2 R1	3 Coil	3637997.06	3637996.97	0.09	3638002.08	3638002.07	0.01	3638007.16	3638007.12	0.04	3638011.89	3638011.76	0.13	3638016.88	3638016.84	0.04	3638021.87	3638021.78	0.09
010915 IVS1 C	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.20	-0.12	3638007.16	3638007.27	-0.11	3638011.89	3638011.89	0.00	3638016.88	3638016.96	-0.08	3638021.87	3638021.89	-0.02
010915 IVS1 L1	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.10	-0.02	3638007.16	3638007.19	-0.03	3638011.89	3638011.79	0.10	3638016.88	3638016.92	-0.04	3638021.87	3638021.82	0.05
010915 IVS1 L2	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.02	0.06	3638007.16	3638007.19	-0.03	3638011.89	3638011.82	0.07	3638016.88	3638016.85	0.03	3638021.87	3638021.68	0.19
010915 IVS1 R1	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638001.78	0.30	3638007.16	3638007.08	0.08	3638011.89	3638011.83	0.06	3638016.88	3638016.81	0.07	3638021.87	3638021.83	0.04
010915 IVS1 R2	5 Coil	3637997.06	3637997.12	-0.06	3638002.08	3638002.24	-0.16	3638007.16	3638007.20	-0.04	3638011.89	3638011.91	-0.02	3638016.88	3638016.88	0.00	3638021.87	3638021.93	-0.06
010915 IVS2 C	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.10	-0.02	3638007.16	3638007.25	-0.09	3638011.89	3638011.82	0.07	3638016.88	3638016.91	-0.03	3638021.87	3638021.90	-0.03
010915 IVS2 L1	5 Coil	3637997.06	3637997.01	0.05	3638002.08	3638002.15	-0.07	3638007.16	3638007.20	-0.04	3638011.89	3638011.85	0.04	3638016.88	3638017.00	-0.12	3638021.87	3638021.90	-0.03

Table C-8 (Continued)
IVS Positional Accuracy EM61

Date/ Test/ Sensor	Geophysical System	Surveyed Location for Medium ISO Vertical Y (m)	Detected Location for Medium ISO Vertical Y (m)	Offset (m)	Surveyed Location for Medium ISO Horizontal Along Y (m)	Detected Location for Medium ISO Horizontal Along Y (m)	Offset (m)	Surveyed Location for Medium ISO Horizontal Across Y (m)	Detected Location for Medium ISO Horizontal Across Y (m)	Offset (m)	Surveyed Location for Small ISO Vertical Y (m)	Detected Location for Small ISO Vertical Y (m)	Offset (m)	Surveyed Location for Small ISO Horizontal Along Y (m)	Detected Location for Small ISO Horizontal Along Y (m)	Offset (m)	Surveyed Location for Small ISO Horizontal Across Y (m)	Detected Location for Small ISO Horizontal Across Y (m)	Offset (m)
010915 IVS2 L2	5 Coil	3637997.06	3637997.13	-0.07	3638002.08	3638002.20	-0.12	3638007.16	3638007.19	-0.03	3638011.89	3638011.79	0.10	3638016.88	3638016.81	0.07	3638021.87	3638021.87	0.00
010915 IVS2 R1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.05	0.03	3638007.16	3638007.27	-0.11	3638011.89	3638011.75	0.14	3638016.88	3638016.84	0.04	3638021.87	3638021.86	0.01
010915 IVS2 R2	5 Coil	3637997.06	3637997.10	-0.04	3638002.08	3638002.14	-0.06	3638007.16	3638007.19	-0.03	3638011.89	3638011.94	-0.05	3638016.88	3638016.86	0.02	3638021.87	3638021.88	-0.01
011215 IVS1 C	5 Coil	3637997.06	3637997.10	-0.04	3638002.08	3638002.09	-0.01	3638007.16	3638007.13	0.03	3638011.89	3638011.88	0.01	3638016.88	3638017.02	-0.14	3638021.87	3638021.88	-0.01
011215 IVS1 L1	5 Coil	3637997.06	3637997.11	-0.05	3638002.08	3638002.08	0.00	3638007.16	3638007.12	0.04	3638011.89	3638011.83	0.06	3638016.88	3638016.83	0.05	3638021.87	3638021.85	0.02
011215 IVS1 L2	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.09	-0.01	3638007.16	3638007.17	-0.01	3638011.89	3638011.86	0.03	3638016.88	3638016.86	0.02	3638021.87	3638021.91	-0.04
011215 IVS1 R1	5 Coil	3637997.06	3637997.00	0.06	3638002.08	3638002.05	0.03	3638007.16	3638007.20	-0.04	3638011.89	3638011.88	0.01	3638016.88	3638016.95	-0.07	3638021.87	3638021.87	0.00
011215 IVS1 R2	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.07	0.01	3638007.16	3638007.18	-0.02	3638011.89	3638011.89	0.00	3638016.88	3638016.86	0.02	3638021.87	3638021.89	-0.02
011215 IVS2 C	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.04	0.04	3638007.16	3638007.28	-0.12	3638011.89	3638011.83	0.06	3638016.88	3638016.85	0.03	3638021.87	3638021.84	0.03
011215 IVS2 L1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.02	0.06	3638007.16	3638007.19	-0.03	3638011.89	3638011.80	0.09	3638016.88	3638016.87	0.01	3638021.87	3638021.81	0.06
011215 IVS2 L2	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.11	-0.03	3638007.16	3638007.10	0.06	3638011.89	3638011.82	0.07	3638016.88	3638016.87	0.01	3638021.87	3638021.72	0.15
011215 IVS2 R1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.09	-0.01	3638007.16	3638007.12	0.04	3638011.89	3638011.88	0.01	3638016.88	3638016.85	0.03	3638021.87	3638021.84	0.03
011215 IVS2 R2	5 Coil	3637997.06	3637997.03	0.03	3638002.08	3638002.14	-0.06	3638007.16	3638007.14	0.02	3638011.89	3638011.87	0.02	3638016.88	3638016.96	-0.08	3638021.87	3638021.94	-0.07
011315 IVS1 C	5 Coil	3637997.06	3637997.03	0.03	3638002.08	3638002.03	0.05	3638007.16	3638007.16	0.00	3638011.89	3638011.83	0.06	3638016.88	3638016.79	0.09	3638021.87	3638021.87	0.00
011315 IVS1 L1	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.10	-0.02	3638007.16	3638007.16	0.00	3638011.89	3638011.81	0.08	3638016.88	3638016.89	-0.01	3638021.87	3638021.78	0.09
011315 IVS1 L2	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.01	0.07	3638007.16	3638007.12	0.04	3638011.89	3638011.82	0.07	3638016.88	3638016.91	-0.03	3638021.87	3638021.90	-0.03
011315 IVS1 R1	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.09	-0.01	3638007.16	3638007.12	0.04	3638011.89	3638011.86	0.03	3638016.88	3638016.89	-0.01	3638021.87	3638021.84	0.03
011315 IVS1 R2	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.14	-0.06	3638007.16	3638007.17	-0.01	3638011.89	3638011.89	0.00	3638016.88	3638016.98	-0.10	3638021.87	3638021.87	0.00
011315 IVS2 C	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.03	0.05	3638007.16	3638007.27	-0.11	3638011.89	3638011.89	0.00	3638016.88	3638016.96	-0.08	3638021.87	3638021.92	-0.05
011315 IVS2 L1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.10	-0.02	3638007.16	3638007.19	-0.03	3638011.89	3638011.82	0.07	3638016.88	3638016.84	0.04	3638021.87	3638021.88	-0.01
011315 IVS2 L2	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.10	-0.02	3638007.16	3638007.14	0.02	3638011.89	3638011.81	0.08	3638016.88	3638016.86	0.02	3638021.87	3638021.78	0.09
011315 IVS2 R1	5 Coil	3637997.06	3637997.03	0.03	3638002.08	3638002.10	-0.02	3638007.16	3638007.15	0.01	3638011.89	3638011.81	0.08	3638016.88	3638016.85	0.03	3638021.87	3638021.81	0.06
011315 IVS2 R2	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.13	-0.05	3638007.16	3638007.16	0.00	3638011.89	3638011.89	0.00	3638016.88	3638016.87	0.01	3638021.87	3638021.94	-0.07
011615 IVS1 C	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.10	-0.02	3638007.16	3638007.16	0.00	3638011.89	3638011.86	0.03	3638016.88	3638016.83	0.05	3638021.87	3638021.87	0.00
011615 IVS1 L1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.09	-0.01	3638007.16	3638007.13	0.03	3638011.89	3638011.83	0.06	3638016.88	3638016.87	0.01	3638021.87	3638021.89	-0.02
011615 IVS1 L2	5 Coil	3637997.06	3637996.97	0.09	3638002.08	3638002.04	0.04	3638007.16	3638007.16	0.00	3638011.89	3638011.77	0.12	3638016.88	3638016.92	-0.04	3638021.87	3638021.83	0.04
011615 IVS1 R1	5 Coil	3637997.06	3637996.97	0.09	3638002.08	3638002.07	0.01	3638007.16	3638007.17	-0.01	3638011.89	3638011.86	0.03	3638016.88	3638016.86	0.02	3638021.87	3638021.83	0.04
011615 IVS1 R2	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638002.12	-0.04	3638007.16	3638007.16	0.00	3638011.89	3638011.86	0.03	3638016.88	3638016.92	-0.04	3638021.87	3638021.85	0.02
011615 IVS2 C	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.08	0.00	3638007.16	3638007.21	-0.05	3638011.89	3638011.90	-0.01	3638016.88	3638016.92	-0.04	3638021.87	3638021.88	-0.01
011615 IVS2 L1	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.06	0.02	3638007.16	3638007.11	0.05	3638011.89	3638011.78	0.11	3638016.88	3638016.83	0.05	3638021.87	3638021.81	0.06
011615 IVS2 L2	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638002.05	0.03	3638007.16	3638007.14	0.02	3638011.89	3638011.82	0.07	3638016.88	3638016.88	0.00	3638021.87	3638021.89	-0.02
011615 IVS2 R1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.05	0.03	3638007.16	3638007.14	0.02	3638011.89	3638011.82	0.07	3638016.88	3638016.89	-0.01	3638021.87	3638021.82	0.05
011615 IVS2 R2	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.11	-0.03	3638007.16	3638007.19	-0.03	3638011.89	3638011.91	-0.02	3638016.88	3638016.88	0.00	3638021.87	3638021.82	0.05
011915 IVS1 C	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.08	0.00	3638007.16	3638007.17	-0.01	3638011.89	3638011.86	0.03	3638016.88	3638016.84	0.04	3638021.87	3638021.93	-0.06
011915 IVS1 L1	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.09	-0.01	3638007.16	3638007.20	-0.04	3638011.89	3638011.87	0.02	3638016.88	3638016.85	0.03	3638021.87	3638021.86	0.01
011915 IVS1 L2	5 Coil	3637997.06	3637997.03	0.03	3638002.08	3638002.02	0.06	3638007.16	3638007.18	-0.02	3638011.89	3638011.85	0.04	3638016.88	3638016.88	0.00	3638021.87	3638021.80	0.07
011915 IVS1 R1	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.09	-0.01	3638007.16	3638007.12	0.04	3638011.89	3638011.86	0.03	3638016.88	3638016.85	0.03	3638021.87	3638021.86	0.01
011915 IVS1 R2	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.17	-0.09	3638007.16	3638007.20	-0.04	3638011.89	3638011.83	0.06	3638016.88	3638016.85	0.03	3638021.87	3638021.88	-0.01
011915 IVS2 C	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.16	-0.08	3638007.16	3638007.18	-0.02	3638011.89	3638011.91	-0.02	3638016.88	3638016.78	0.10	3638021.87	3638021.89	-0.02
011915 IVS2 L1	5 Coil	3637997.06	3637997.02	0.04	3638002.08	3638001.98	0.10	3638007.16	3638007.21	-0.05	3638011.89	3638011.86	0.03	3638016.88	3638016.88	0.00	3638021.87	3638021.81	0.06
011915 IVS2 L2	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.03	0.05	3638007.16	3638007.09	0.07	3638011.89	3638011.78	0.11	3638016.88	3638016.86	0.02	3638021.87	3638021.78	0.09
011915 IVS2 R1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.14	-0.06	3638007.16	3638007.15	0.01	3638011.89	3638011.81	0.08	3638016.88	3638016.86	0.02	3638021.87	3638021.85	0.02
011915 IVS2 R2	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.14	-0.06	3638007.16	3638007.16	0.00	3638011.89	3638011.87	0.02	3638016.88	3638016.92	-0.04	3638021.87	3638021.93	-0.06
012015 IVS1 C	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.11	-0.03	3638007.16	3638007.19	-0.03	3638011.89	3638011.85	0.04	3638016.88	3638016.89	-0.01	3638021.87	3638021.88	-0.01
012015 IVS1 L1	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.09	-0.01	3638007.16	3638007.12	0.04	3638011.89	3638011.87	0.02	3638016.88	3638016.86	0.02	3638021.87	3638021.81	0.06
012015 IVS1 L2	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.05	0.03	3638007.16	3638007.13	0.03	3638011.89	3638011.87	0.02	3638016.88	3638016.80	0.08	3638021.87	3638021.85	0.02
012015 IVS1 R1	5 Coil	3637997.06	3637997.11	-0.05	3638002.08	3638002.08	0.00	3638007.16	3638007.14	0.02	3638011.89	3638011.86	0.03	3638016.88	3638016.82	0.06	3638021.87	3638021.82	0.05
012015 IVS1 R2	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.10	-0.02	3638007.16	3638007.23	-0.07	3638011.89	3638011.90	-0.01	3638016.88	3638016.83	0.05	3638021.87	3638021.94	-0.07
012015 IVS2 C	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.09	-0.01	3638007.16	3638007.21	-0.05	3638011.89	3638011.88	0.01	3638016.88	3638016.80	0.08	3638021.87	3638021.91	-0.04
012015 IVS2 L1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.01	0.07	3638007.16	3638007.24	-0.08	3638011.89	3638011.82	0.07	3638016.88	3638016.90	-0.02	3638021.87	3638021.80	0.07
012015 IVS2 L2	5 Coil	3637997.06	3637997.01	0.05	3638002.08	3638002.06	0.02	3638007.16	3638007.13	0.03	3638011.89	3638011.82	0.07	3638016.88	3638016.82	0.06	3638021.87	3638021.84	0.03
012015 IVS2 R1	5 Coil	3637997.06	3637997.09	-0.03	3638002.08	3638002.10	-0.02	3638007.16	3638007.21	-0.05	3638011.89	3638011.84	0.05	3638016.88	3638016.85	0.03	3638021.87	3638021.83	0.04
012015 IVS2 R2	5 Coil	3637997.06	3637997.07	-0.01	3638002.08	3638002.13	-0.05	3638007.16	3638007.23	-0.07	3638011.89	3638011.86	0.03	3638016.88	3638016.92	-0.04	3638021.87	3638021.85	0.02

Table C-8 (Continued)
IVS Positional Accuracy EM61

Date/ Test/ Sensor	Geophysical System	Surveyed Location for Medium ISO Vertical Y (m)	Detected Location for Medium ISO Vertical Y (m)	Offset (m)	Surveyed Location for Medium ISO Horizontal Along Y (m)	Detected Location for Medium ISO Horizontal Along Y (m)	Offset (m)	Surveyed Location for Medium ISO Horizontal Across Y (m)	Detected Location for Medium ISO Horizontal Across Y (m)	Offset (m)	Surveyed Location for Small ISO Vertical Y (m)	Detected Location for Small ISO Vertical Y (m)	Offset (m)	Surveyed Location for Small ISO Horizontal Along Y (m)	Detected Location for Small ISO Horizontal Along Y (m)	Offset (m)	Surveyed Location for Small ISO Horizontal Across Y (m)	Detected Location for Small ISO Horizontal Across Y (m)	Offset (m)
012315 IVS1 C	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.07	0.01	3638007.16	3638007.19	-0.03	3638011.89	3638011.81	0.08	3638016.88	3638016.87	0.01	3638021.87	3638021.92	-0.05
012315 IVS1 L1	5 Coil	3637997.06	3637997.03	0.03	3638002.08	3638002.04	0.04	3638007.16	3638007.18	-0.02	3638011.89	3638011.81	0.08	3638016.88	3638016.90	-0.02	3638021.87	3638021.83	0.04
012315 IVS1 L2	5 Coil	3637997.06	3637996.96	0.10	3638002.08	3638002.14	-0.06	3638007.16	3638007.18	-0.02	3638011.89	3638011.82	0.07	3638016.88	3638016.84	0.04	3638021.87	3638021.80	0.07
012315 IVS1 R1	5 Coil	3637997.06	3637997.08	-0.02	3638002.08	3638002.08	0.00	3638007.16	3638007.12	0.04	3638011.89	3638011.78	0.11	3638016.88	3638016.89	-0.01	3638021.87	3638021.85	0.02
012315 IVS1 R2	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.12	-0.04	3638007.16	3638007.15	0.01	3638011.89	3638011.89	0.00	3638016.88	3638016.87	0.01	3638021.87	3638021.92	-0.05
012315 IVS2 C	5 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.10	-0.02	3638007.16	3638007.22	-0.06	3638011.89	3638011.85	0.04	3638016.88	3638016.85	0.03	3638021.87	3638021.90	-0.03
012315 IVS2 L1	5 Coil	3637997.06	3637997.04	0.02	3638002.08	3638002.09	-0.01	3638007.16	3638007.16	0.00	3638011.89	3638011.81	0.08	3638016.88	3638016.88	0.00	3638021.87	3638021.81	0.06
012315 IVS2 L2	5 Coil	3637997.06	3637997.01	0.05	3638002.08	3638002.06	0.02	3638007.16	3638007.16	0.00	3638011.89	3638011.84	0.05	3638016.88	3638016.88	0.00	3638021.87	3638021.83	0.04
012315 IVS2 R1	5 Coil	3637997.06	3637997.06	0.00	3638002.08	3638002.08	0.00	3638007.16	3638007.20	-0.04	3638011.89	3638011.82	0.07	3638016.88	3638016.89	-0.01	3638021.87	3638021.82	0.05
012315 IVS2 R2	5 Coil	3637997.06	3637997.12	-0.06	3638002.08	3638002.10	-0.02	3638007.16	3638007.16	0.00	3638011.89	3638011.95	-0.06	3638016.88	3638016.84	0.04	3638021.87	3638021.92	-0.05
012615_IVS1	1 Coil	3637997.06	3637997.10	-0.04	3638002.08	3638002.10	-0.02	3638007.16	3638007.21	-0.05	3638011.89	3638011.92	-0.03	3638016.88	3638016.91	-0.03	3638021.87	3638021.99	-0.12
012615_IVS2	1 Coil	3637997.06	3637997.05	0.01	3638002.08	3638002.11	-0.03	3638007.16	3638007.24	-0.08	3638011.89	3638011.89	0.00	3638016.88	3638016.91	-0.03	3638021.87	3638021.93	-0.06

Notes: C - Central, L1 - Left 1, L2 - Left 2, R1 - Right 1, R2 - Right 2
IVS1 - Opening; IVS2 - Closing
Criterion for Passing: Offset < 0.25m

Table C-9
RTK-GPS Positional Accuracy

ID	y (m)	x (m)	Δy (m)	Δx (m)	Total Offset (m)	Comment
MAID	3639955.434	398324.765				Starting point benchmark for RR869a
LOW 1968	3644528.859	393858.575				Starting point benchmark for ML865
CP3	3640359.154	396982.031				Point used as base station for RR869a. Starting point based on MAID benchmark for SR864 and XU854
CP4	3640361.159	396973.657				Control point at RR869a
CP7	3646268.460	391174.393				Point used as base station for ML865
CP8	3646262.792	391176.857				Control point at ML865
CP9	3638043.517	393725.798				Point used as base station for SR864 and XU854
CP10	3638037.660	393729.008				Control point at SR864 and XU854
Measured Point Coordinates						
111414_S2_CP4	3640361.150	396973.657	0.009	0.000	0.009	Pass
111714_S2_CP4	3640361.146	396973.647	0.013	0.010	0.023	Pass
111814_S2_CP4	3640361.166	396973.635	0.007	0.022	0.029	Pass
111914_S2_CP4	3640361.164	396973.659	0.005	0.002	0.007	Pass
111914_S1_CP4	3640361.159	396973.652	0.000	0.005	0.005	Pass
112014_S2_CP4	3640361.154	396973.642	0.005	0.015	0.020	Pass
112014_S1_CP4	3640361.185	396973.649	0.026	0.008	0.034	Pass
112414_S2_CP8	3646262.786	391176.852	0.006	0.005	0.011	Pass
112512_s2_CP7	3646268.457	391174.387	0.003	0.006	0.009	Pass
112714_S2_CP8	3646262.788	391176.855	0.004	0.002	0.006	Pass
120114_S2_CP8	3646262.781	391176.857	0.011	0.000	0.011	Pass
120214_S2_CP8	3646262.786	391176.860	0.006	0.003	0.009	Pass
120314_S2_CP8	3646262.778	391176.854	0.014	0.003	0.017	Pass
120414_S2_CP8	3646262.762	391176.864	0.030	0.007	0.037	Pass
120514_S1_CP8	3646262.780	391176.853	0.012	0.004	0.016	Pass
120514_S2_CP8	3646262.785	391176.847	0.007	0.010	0.017	Pass
120914_S1_CP8	3646262.799	391176.856	0.007	0.001	0.008	Pass
120914_S2_CP8	3646262.782	391176.862	0.010	0.005	0.015	Pass
121014_S2_CP8	3646262.781	391176.849	0.011	0.008	0.019	Pass
121114_S2_CP10	3638037.658	393729.018	0.002	0.010	0.012	Pass
121214_S2_CP10	3638037.655	393729.016	0.005	0.008	0.013	Pass
121514_S2_CP10	3638037.655	393729.025	0.005	0.017	0.022	Pass
121614_S2_CP10	3638037.660	393729.020	0.000	0.012	0.012	Pass
121814_S2_CP10	3638037.654	393729.027	0.006	0.019	0.025	Pass
121914_S1_CP10	3638037.664	393729.029	0.004	0.021	0.025	Pass
121914_S2_CP10	3638037.654	393729.028	0.006	0.020	0.026	Pass
010715_S1_CP10	3638037.642	393729.013	0.018	0.005	0.023	Pass
010715_S2_CP10	3638037.656	393729.021	0.004	0.013	0.017	Pass
010815_S2_CP10	3638037.657	393729.022	0.003	0.014	0.017	Pass
010915_S2_CP10	3638037.657	393729.023	0.003	0.015	0.018	Pass
011215_S2_CP10	3638037.649	393729.019	0.011	0.011	0.022	Pass
011315_S2_CP10	3638037.657	393729.020	0.003	0.012	0.015	Pass
011415_S2_CP10	3638037.652	393729.013	0.008	0.005	0.013	Pass
011515_S2_CP10	3638037.652	393729.021	0.008	0.013	0.021	Pass
011615_S2_CP10	3638037.653	393729.016	0.007	0.008	0.015	Pass
011916_S2_CP10	3638037.652	393729.020	0.008	0.012	0.020	Pass
012015_S2_CP10	3638037.669	393729.013	0.009	0.005	0.014	Pass
012015_S1_CP10	3638037.655	393729.008	0.005	0.000	0.005	Pass
012115_S2_CP10	3638037.656	393729.030	0.004	0.022	0.026	Pass
012115_S1_CP10	3638037.642	393729.025	0.018	0.017	0.035	Pass
012315_S1_CP10	3638037.662	393729.022	0.002	0.014	0.016	Pass
012315_S2_CP10	3638037.642	393729.002	0.018	0.006	0.024	Pass
012615_S2_CP10	3638037.647	393729.016	0.013	0.008	0.021	Pass
012715_S2_CP10	3638037.645	393729.023	0.015	0.015	0.030	Pass
020215_S1_CP4	3640361.168	396973.647	0.009	0.010	0.019	Pass
020215_S2_CP4	3640361.167	396973.645	0.008	0.012	0.020	Pass
020315_S2_CP10	3638037.641	393729.022	0.019	0.014	0.033	Pass
020415_S2_CP4	3640361.149	396973.649	0.010	0.008	0.018	Pass
020515_S1_CP4	3640361.153	396973.645	0.006	0.012	0.018	Pass
020615_S2_CP4	3640361.160	396973.652	0.001	0.005	0.006	Pass

Table C-9 (Continued)
RTK-GPS Positional Accuracy

ID	y (m)	x (m)	Δy (m)	Δx (m)	Total Offset (m)	Comment
020915_S2_CP10	3638037.662	393729.035	0.002	0.027	0.029	Pass
021115_S2_CP10	3638037.655	393729.030	0.005	0.022	0.027	Pass
021315_S2_CP4	3640361.165	396973.649	0.006	0.008	0.014	Pass

Notes:

S1 = RTK-GPS System 1

S2 = RTK-GPS System 2

Datum/projection/units: NAD83/UTM ZONE 13N/meters

Table C-10
G-858 IVS Database for 2-Sensor System

Sensor	Pass	Large ISO Best Orientation (0.8m depth) (nT/m)	Large ISO Worst Orientation (0.8m depth) (nT/m)	Medium ISO Best Orientation (0.3m depth) (nT/m)	Medium ISO Worst Orientation (0.3m depth) (nT/m)
Left	1.0	75.8	29.6	267.3	112.8
Left	2.0	77.0	31.0	228.5	144.7
Left	3.0	79.5	31.4	284.8	145.6
Left	4.0	76.5	32.3	199.1	141.8
Left	5.0	81.1	31.4	277.8	139.3
Left	6.0	76.3	30.3	239.4	130.4
Left	7.0	83.0	31.6	273.5	120.8
Left	8.0	79.8	33.9	207.1	155.8
Left	9.0	85.5	33.4	307.4	133.7
Left	10.0	76.3	32.0	203.1	154.7
Right	1.0	80.4	31.8	248.6	117.4
Right	2.0	77.4	32.0	233.3	130.0
Right	3.0	82.0	29.3	253.7	132.6
Right	4.0	74.6	31.2	233.5	143.4
Right	5.0	76.0	28.8	290.8	122.9
Right	6.0	75.6	32.0	234.3	131.3
Right	7.0	75.5	30.7	276.8	124.5
Right	8.0	75.2	30.6	222.8	122.9
Right	9.0	79.3	30.1	264.9	141.8
Right	10.0	79.4	30.8	268.3	139.2

Statistics				
average	78.3	31.2	250.7	134.3
stand dev	3.0	1.3	30.6	11.9
20% of value	15.7	6.2	50.1	26.9
max	94.0	37.4	300.9	161.1
min	62.7	25.0	200.6	107.4

Table C-11
G-858 IVS Database for 6-Sensor System

Date	Sensor	Pass	Large ISO Best Orientation (0.8m depth) (nT/m)	Large ISO Worst Orientation (0.8m depth) (nT/m)	Medium ISO Best Orientation (0.3m depth) (nT/m)	Medium ISO Worst Orientation (0.3m depth) (nT/m)
120114	L1	1	78.4	31.7	274.2	146.3
120114	L1	2	81.0	30.4	256.6	134.0
120114	L1	3	75.5	31.5	269.3	145.1
120114	L1	4	80.5	31.1	267.5	141.8
120114	L1	5	81.2	31.5	263.0	150.2
120114	L1	6	80.9	31.2	263.3	149.3
120114	L1	7	82.4	32.0	261.2	152.9
120114	L1	8	78.5	31.2	266.3	145.5
120114	L1	9	81.3	30.5	272.5	148.5
120114	L1	10	80.9	30.6	266.4	133.0
120114	L2	1	85.2	32.2	260.1	149.8
120114	L2	2	82.2	32.1	313.1	180.3
120114	L2	3	85.3	31.6	282.5	147.7
120114	L2	4	88.5	31.1	309.9	162.6
120114	L2	5	85.6	31.5	297.6	150.7
120114	L2	6	88.9	31.1	312.8	166.2
120114	L2	7	86.0	31.5	300.8	152.8
120114	L2	8	86.8	31.3	307.0	177.7
120114	L2	9	85.1	31.8	289.0	151.3
120114	L2	10	85.4	31.5	297.5	176.7
120214	C1	1	81.5	33.6	334.9	192.3
120214	C1	2	93.9	33.0	394.8	123.8
120214	C1	3	82.8	33.3	341.8	179.1
120214	C1	4	93.4	32.1	395.5	156.0
120214	C1	5	92.0	33.1	342.9	190.7
120214	C1	6	94.5	33.1	407.3	165.4
120214	C1	7	91.5	33.7	338.6	189.9
120214	C1	8	94.9	32.5	391.3	164.6
120214	C1	9	90.6	32.9	350.5	191.2
120214	C1	10	93.9	32.4	412.3	166.6
120214	C2	1	95.6	30.5	417.2	169.0
120214	C2	2	94.9	33.9	362.6	196.0
120214	C2	3	93.4	33.1	409.7	157.3
120214	C2	4	94.9	33.6	341.6	161.1
120214	C2	5	93.7	33.0	414.8	162.7
120214	C2	6	94.7	33.6	354.5	199.3
120214	C2	7	89.3	30.5	396.2	161.3
120214	C2	8	94.2	34.1	348.2	193.8
120214	R1	1	88.1	31.3	306.5	164.0
120214	R1	2	83.9	30.4	252.0	127.3
120214	R1	3	86.5	30.4	286.5	136.1
120214	R1	4	87.3	32.8	292.1	145.6
120214	R1	5	87.6	31.3	309.9	145.2
120214	R1	6	86.1	32.6	295.0	151.1
120214	R1	7	87.2	30.6	310.8	148.2
120214	R1	8	86.7	33.1	295.0	153.4

Table C-11 (Continued)
G-858 IVS Database for 6-Sensor System

Date	Sensor	Pass	Large ISO Best Orientation (0.8m depth) (nT/m)	Large ISO Worst Orientation (0.8m depth) (nT/m)	Medium ISO Best Orientation (0.3m depth) (nT/m)	Medium ISO Worst Orientation (0.3m depth) (nT/m)
120214	R1	9	87.2	31.0	310.5	147.8
120214	R1	10	85.9	32.8	287.6	152.2
120214	R2	1	85.0	31.3	280.6	131.9
120214	R2	2	84.8	32.2	277.7	153.0
120214	R2	3	85.0	31.5	276.6	136.9
120214	R2	4	83.3	32.4	276.2	152.6
120214	R2	5	83.6	31.1	278.7	134.4
120214	R2	6	83.1	32.4	271.8	154.6
120214	R2	7	85.0	31.2	281.0	141.3
120214	R2	8	82.2	32.5	273.8	154.0
120214	R2	9	84.5	31.0	273.7	143.1
120214	R2	10	85.8	32.4	276.3	152.8

Statistics				
average	86.7	32.0	312.0	157.0
stand dev	5.0	1.0	48.3	18.2
20% of value	17.3	6.4	62.4	31.4
max	104.0	38.4	374.4	188.4
min	69.4	25.6	249.6	125.6

Notes:

1) Data are provided for 6-sensor system
(Left1 –L1, Left2 –L2, Central1-C1,, Central2-C2, Right1-R1, Right2-R2)

Table C-12
G-858 Total Field Test for Threshold ML865

Test Item	**155mm projectile**		**105 mm projectile**		**2.75 inch rocket**	
orientation	best	worst	best	worst	best	worst
depth (m)	1.21m	1.22	0.88	0.92	0.56	0.6
Average value (nT/m)	**276**	**75**	**118**	**77**	**517**	**85**
Standard deviation (nT/m)	8	2	9	8	66	12
orientation	best	worst	best	worst	best	worst
depth (m)	1.38	1.39	1.02	1.02	0.7	0.7
Average value (nT/m)	**199**	**53**	**81**	**62**	**305**	**57**
Standard deviation (nT/m)	15	0	4	3	45	7
orientation	best	worst	best	worst	best	worst
depth (m)	1.55	1.55	1.13	1.13	0.8	0.8
Average value (nT/m)	**140**	**39**	**62**	**46**	**231**	**42**
Standard deviation (nT/m)	6	2	6	1	17	6
orientation	best	worst	best	worst	best	worst
depth (m)	1.72	1.72	1.22	1.22	0.9	0.9
Average value (nT/m)	**94**	**28**	**46**	**35**	**160**	**30**
Standard deviation (nT/m)	2	2	3	1	19	3
orientation	best	worst	best	worst	best	worst
depth (m)	1.88	1.88	1.31	1.31	1	1
Average value (nT/m)	**67**	**21**	**36**	**30**	**119**	**23**
Standard deviation (nT/m)	1	1	1	0	11	4

Table C-13
G-858 Total Field Test for Threshold RR869a

Number of 5-inch rocket motors	Orientation	Depth (m)	Total Field Analytic Signal (nT/m)
1	Worst	1.96	26.8
1	Worst	1.63	67.9
1	Worst	1.27	162.5
1	Worst	0.99	397.5
1	Best	1.88	69.9
1	Best	1.56	130
1	Best	1.27	257.7
1	Best	0.99	460.9
1	Random ~horizontal	1.94	58.5
2	Random ~horizontal	1.94	117.5
3	Random ~horizontal	1.94	191.7

Table C-14 Summary of Blind Seeding Program

Project: Holloman AFB, NM
QC Blind Seed Tracking Log - DGM

TA = towed array
MP = manned portable

Seed ID / Size	Seed Item Grid ID	Area or Transect ID	Date Seed Placed	GPS Coordinates		Depth and Orientation	Date DGM Collected	DGM System	Detected/Offset (m)
				East Coord.	North Coord.				
RR869-ISO#1/med.	MM385	RR869A	11/18/14	396933.504	3640329.2	30cm/vertical	11/18/14	G-858 (MP)	yes/0.15
RR869-ISO#2/med.	MP383	RR869A	11/19/14	397025.531	3640277.172	30cm/vertical	11/19/14	G-858 (MP)	yes/0.18
RR869-ISO#3/sm.	MR384	RR869A	11/20/14	397089.944	3640308.616	10cm/vertical	11/20/14	G-858 (MP)	yes/0.10
ML865-ISO#1/sm.	EZ587	ML865	12/02/14	391093.632	3646406.21	10cm/vertical	12/02/14	G-858 (TA)	yes/0.17
ML865-ISO#2/med.	FB585	ML865	12/03/14	391132.098	3646341.183	30cm/vertical	12/03/14	G-858 (TA)	yes/0.13
ML865-ISO#3/lrg.	FI586	ML865	12/04/14	391346.423	3646356.713	80cm/vertical	12/04/14	G-858 (TA)	yes/0.12
ML865-ISO#4/sm.	FG589	ML865	12/05/14	391308.708	3646460.665	10cm/vertical	12/05/14	G-858 (TA)	yes/0.10
ML865-ISO#5/med.	FJ590	ML865	12/09/14	391376.482	3646478.248	30cm/vertical	12/09/14	G-858 (TA)	yes/0.20
ML865-ISO#6/sm.	FA587	ML865	12/10/14	391114.805	3646391.58	10cm/vertical	12/10/14	G-858 (TA)	yes/0.17
ML865-ISO#7/sm.	FD588	ML865	12/10/14	391195.198	3646426.493	10cm/vertical	12/10/14	G-858 (MP)	yes/0.09
SR864-ISO#1/med.	IR308	SR864	12/15/14	393953.48	3638015.707	30cm/vertical	12/15/14	EM-61 (TA)	yes/0.19
SR864-ISO#2/med.	IP307	SR864	12/16/14	393918.205	3638001.601	30cm/vertical	12/16/14	EM-61 (TA)	yes/0.12
SR864-ISO#3/sm.	IO310	SR864	12/17/14	393861.692	3638072.765	10cm/vertical	12/18/14	EM-61 (TA)	yes/0.13
SR864-ISO#4/sm.	IM311	SR864	12/19/14	393800.466	3638103.881	10cm/vertical	12/19/14	EM-61 (TA)	yes/0.12
SR864-ISO#5/med.	IN319	SR864	01/08/15	393856.553	3638343.542	30cm/vertical	01/08/15	EM-61 (TA)	yes/0.12
SR864-ISO#6/med.	IJ312	SR864	01/09/15	393726.094	3638142.416	10cm/vertical	01/09/15	EM-61 (TA)	yes/0.15
XU854-ISO#1/med.	GS272	XU854	01/13/15	392438.18	3636936.153	30cm/vertical	01/13/15	EM-61 (TA)	yes/0.16
XU853-ISO#1/sm.	JX376	XU853	01/16/15	394917.478	3640052.609	10cm/vertical	01/16/15	EM-61 (TA)	yes/0.10
XU853-ISO#2/med.	JN350	XU853	01/19/15	394628.57	3639280.689	30cm/vertical	01/19/15	EM-61 (TA)	yes/0.07
XU854-ISO#2/med.	GZ279 (H)	XU854	01/20/15	392639.337	3637154.461	30cm/vertical	01/20/15	EM-61 (TA)	yes/0.10

Project: Holloman AFB, NM
QC Blind Seed Tracking Log - DGM

TA = towed array
MP = manned portable

XU854-ISO#3/sm.	HA277 (G)	XU854	01/23/15	392667.989	3637102.79	10cm/vertical	01/23/15	EM-61 (TA)	yes/0.18
XU853-ISO#3/sm.	JM350 (A)	XU853	01/26/15	394594.12	3639292.171	10cm/vertical	01/26/15	EM-61 (MP)	yes/0.13
RR869-ISO#4/sm.	gaps	RR869A	02/05/15	396976.962	3640265.619	10cm/vertical	02/05/15	G-858 (MP)	yes/0.11
RR869-ISO#5/sm.	fence line area	RR869A	02/13/15	396942.884	3640315.527	10cm/vertical	02/13/15	G-858 (MP)	yes/0.10

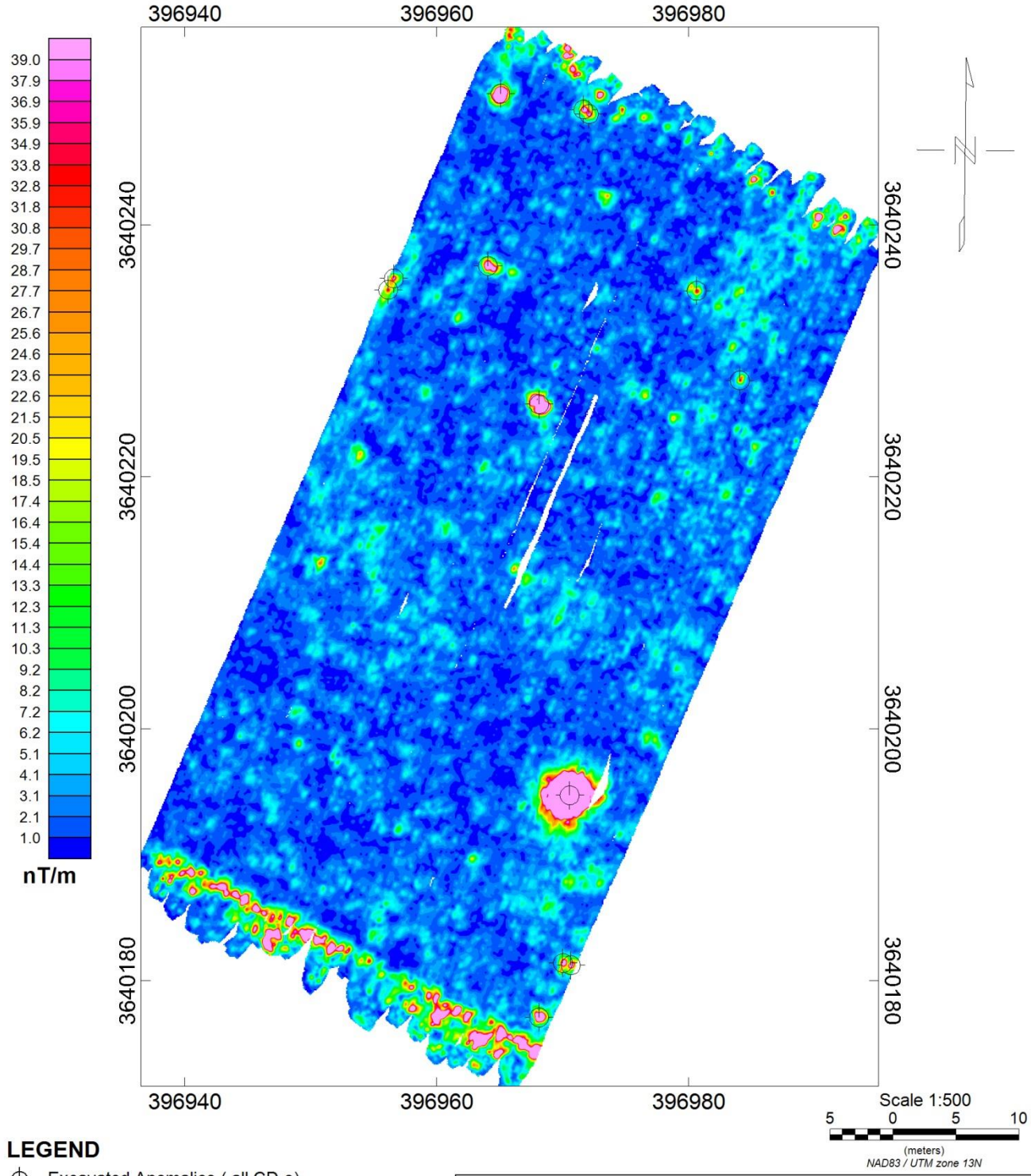


Figure C-1

11/13/12 Data, RR869a IVS Area,
G-858 Analytic Signal Background Before Clearance

New Mexico-Arizona PBR
Holloman Air Force Base

FPM Remediations, Inc.

This page is intentionally left blank

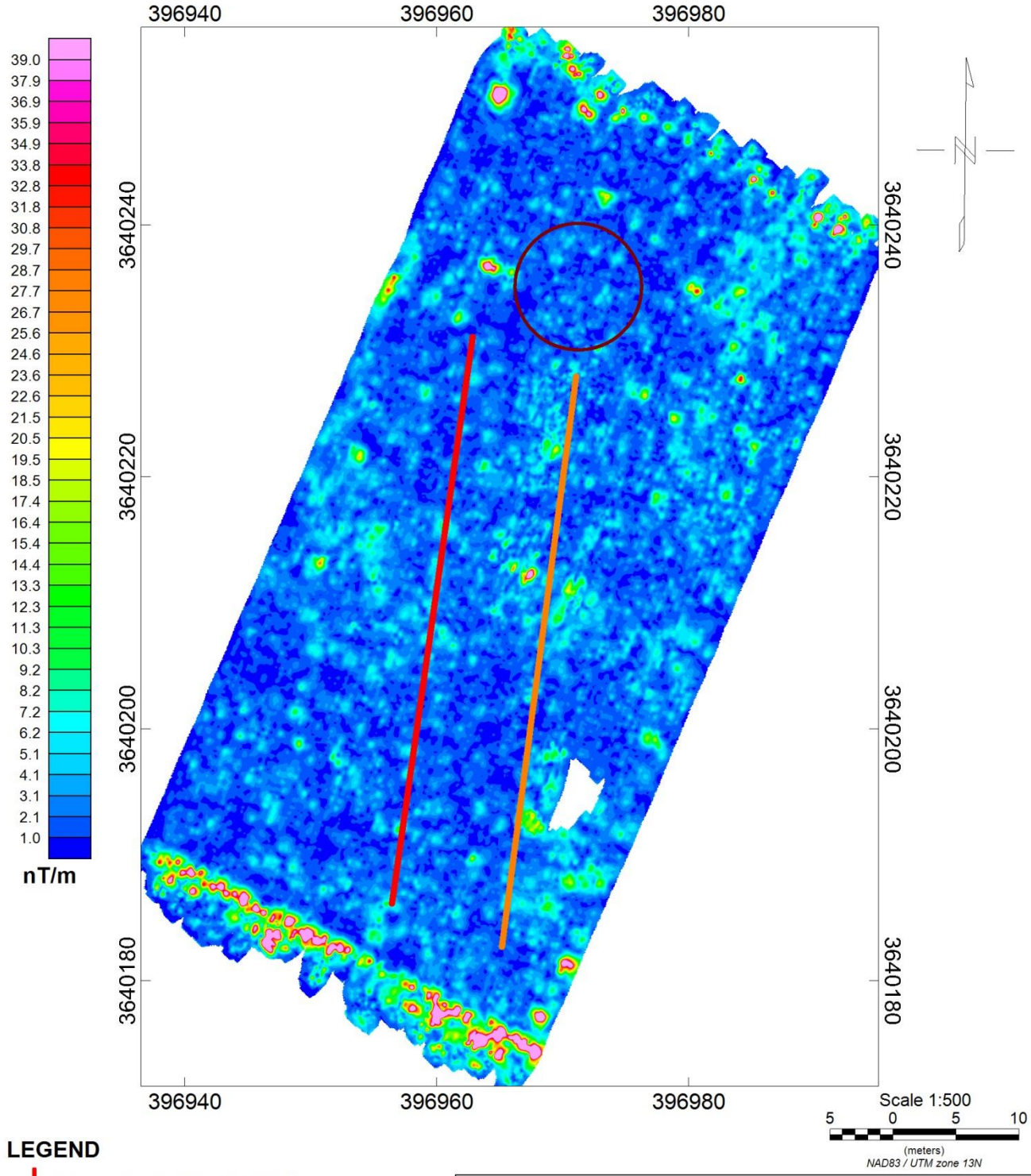
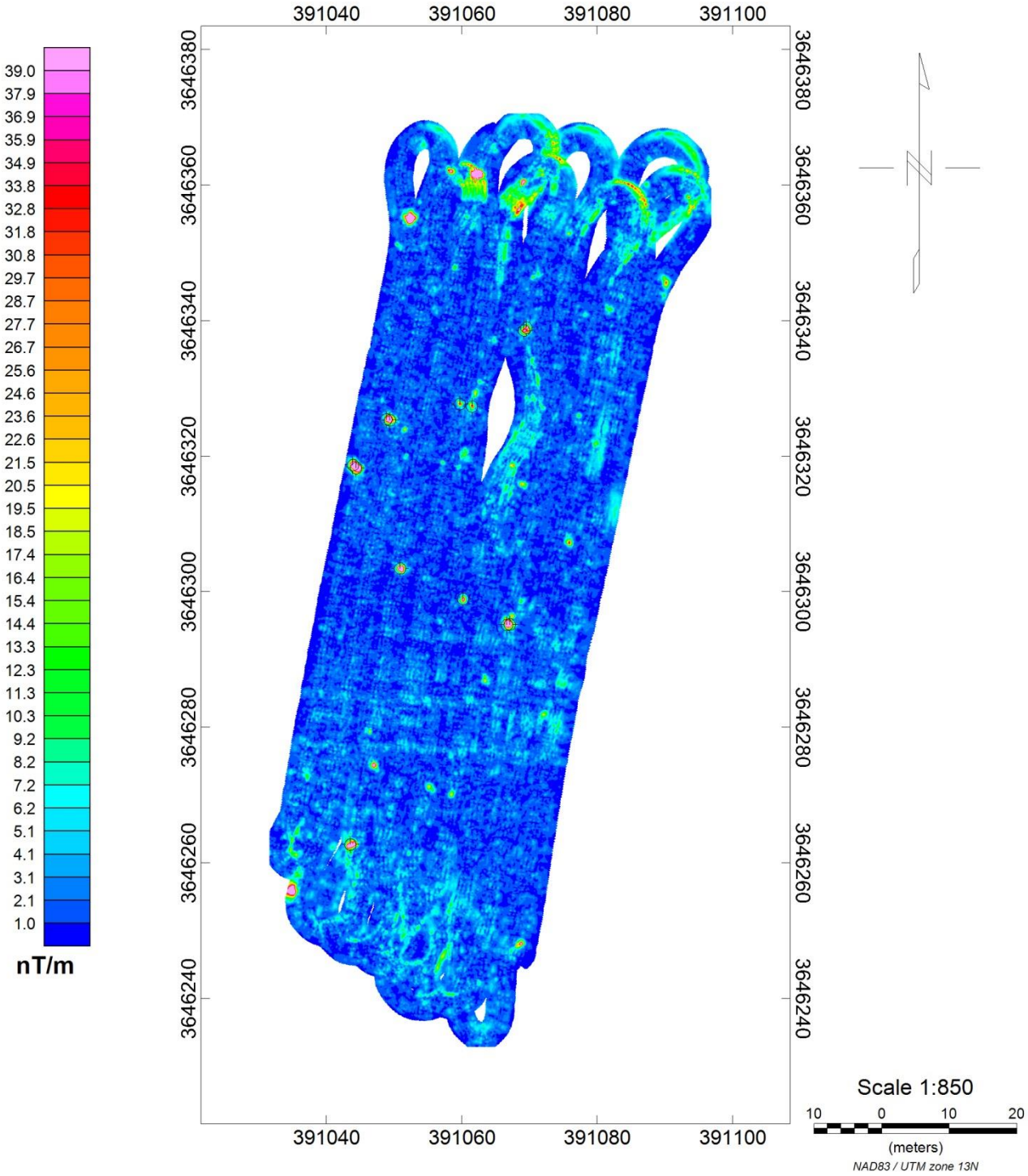


Figure C-2

11/13/12 and 11/18/14 Data, RR869a IVS Area, G-858 Analytic Signal Background After Clearance

New Mexico-Arizona PBR
Holloman Air Force Base

FPM Remediations, Inc.



LEGEND

⊕ Excavated Anomalies (all CD-s)

Figure C-3

11/24/12 Data, ML865 IVS Area,
G-858 Analytic Signal Background Before Clearance

New Mexico-Arizona PBR
Holloman Air Force Base

FPM Remediations, Inc.

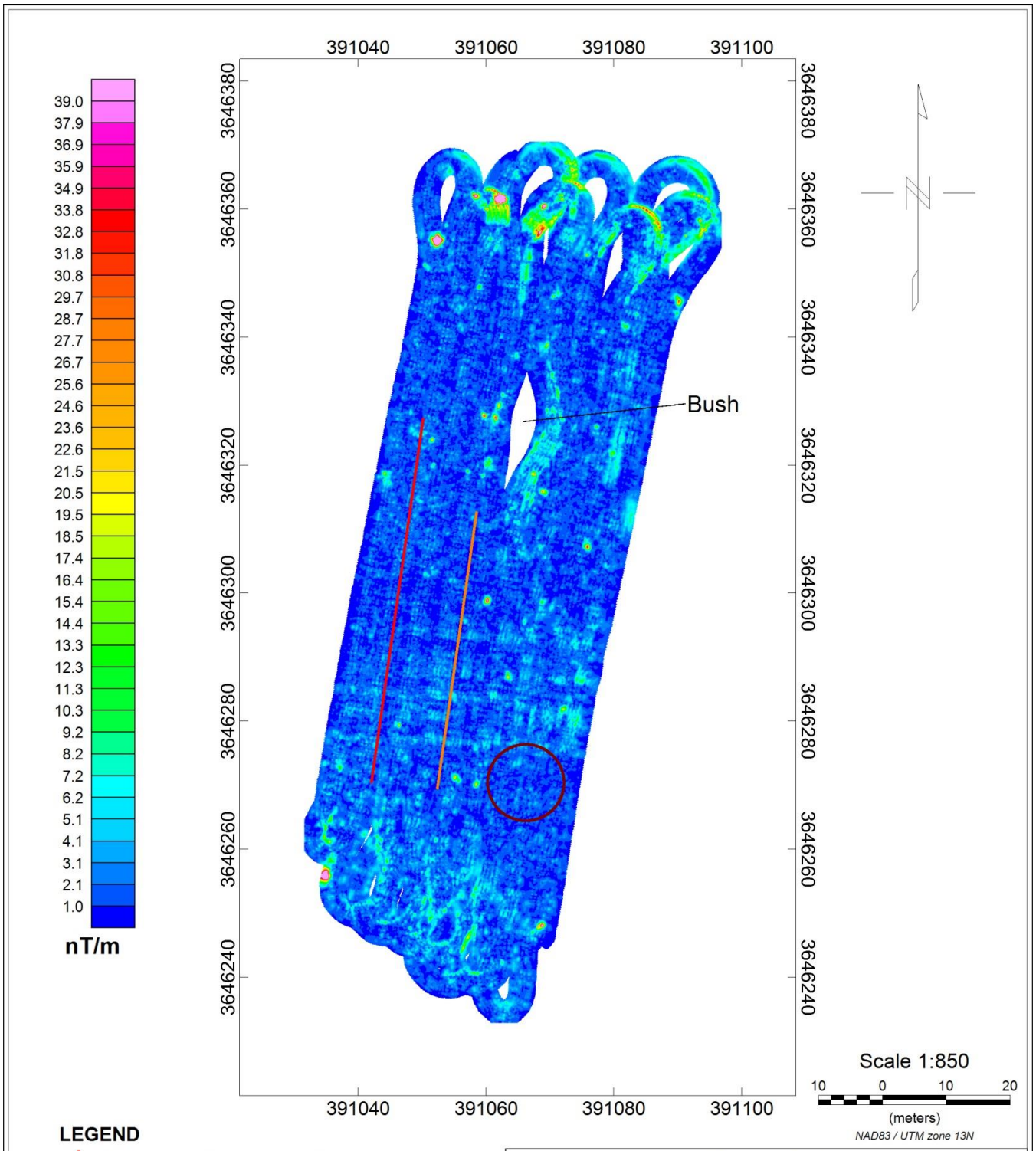
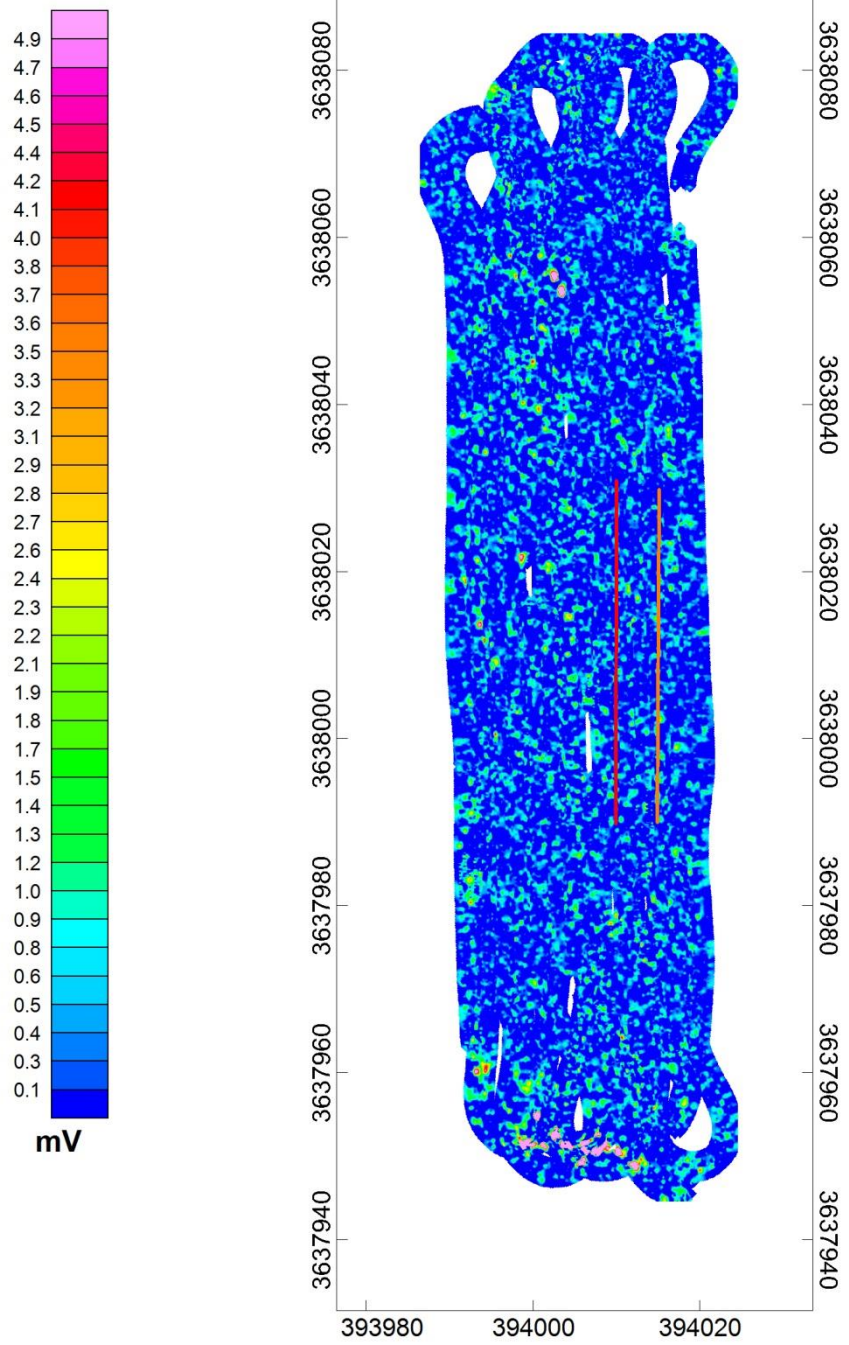


Figure C-4

11/24/12 and 11/25/12 Data, ML865 IVS Area, G-858 Analytic Signal Background After Clearance

New Mexico-Arizona PBR
Holloman Air Force Base

FPM Remediations, Inc.



Scale 1:850

10 0 10 20

(meters)

NAD83 / UTM zone 13N

LEGEND

- Recommended Area for IVS Test
- Recommended Area for Background Dynamic Noise and 6 line test

Figure C-5
12/11/14 Data, SR864 IVS Area, EM61-MK2 Ch2 Background
New Mexico-Arizona PBR Holloman Air Force Base
FPM Remediations, Inc.

Figure C-6
G-858 Handheld System Left Sensor Azimuth Test Results

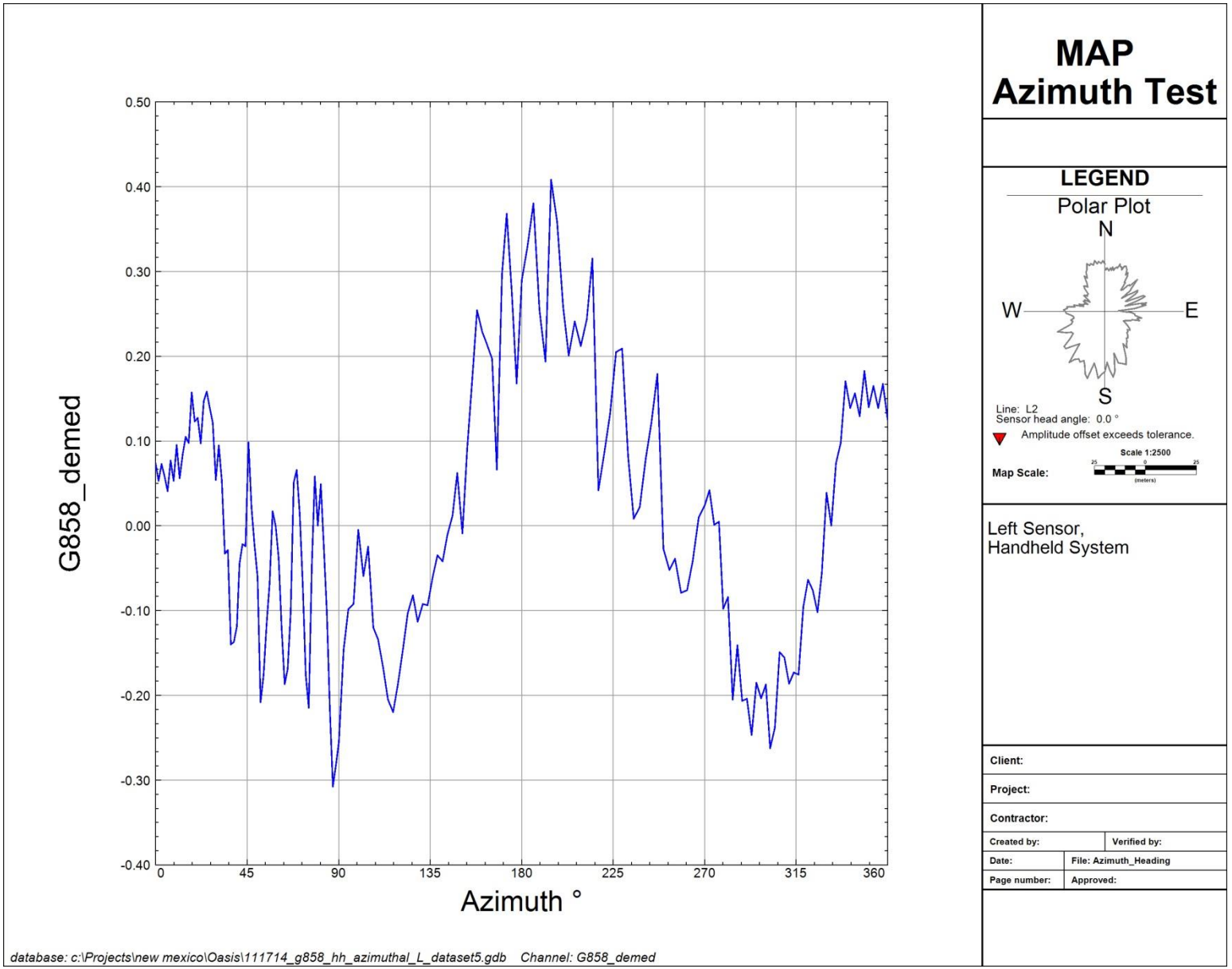


Figure C-7
G-858 Handheld System Right Sensor Azimuth Test Results

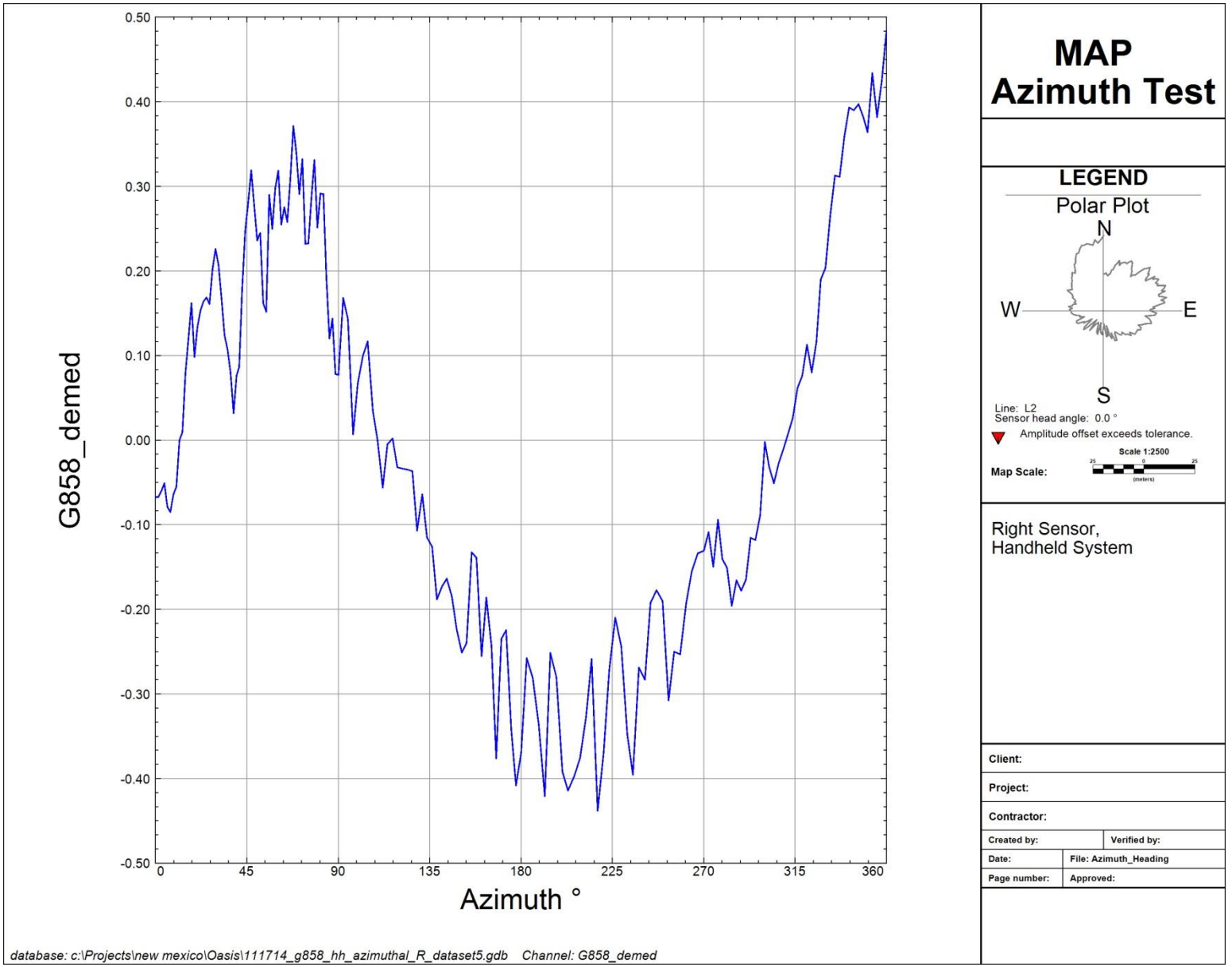


Figure C-8
G-858 6 Sensor System Right 1 Sensor Azimuth Test Results

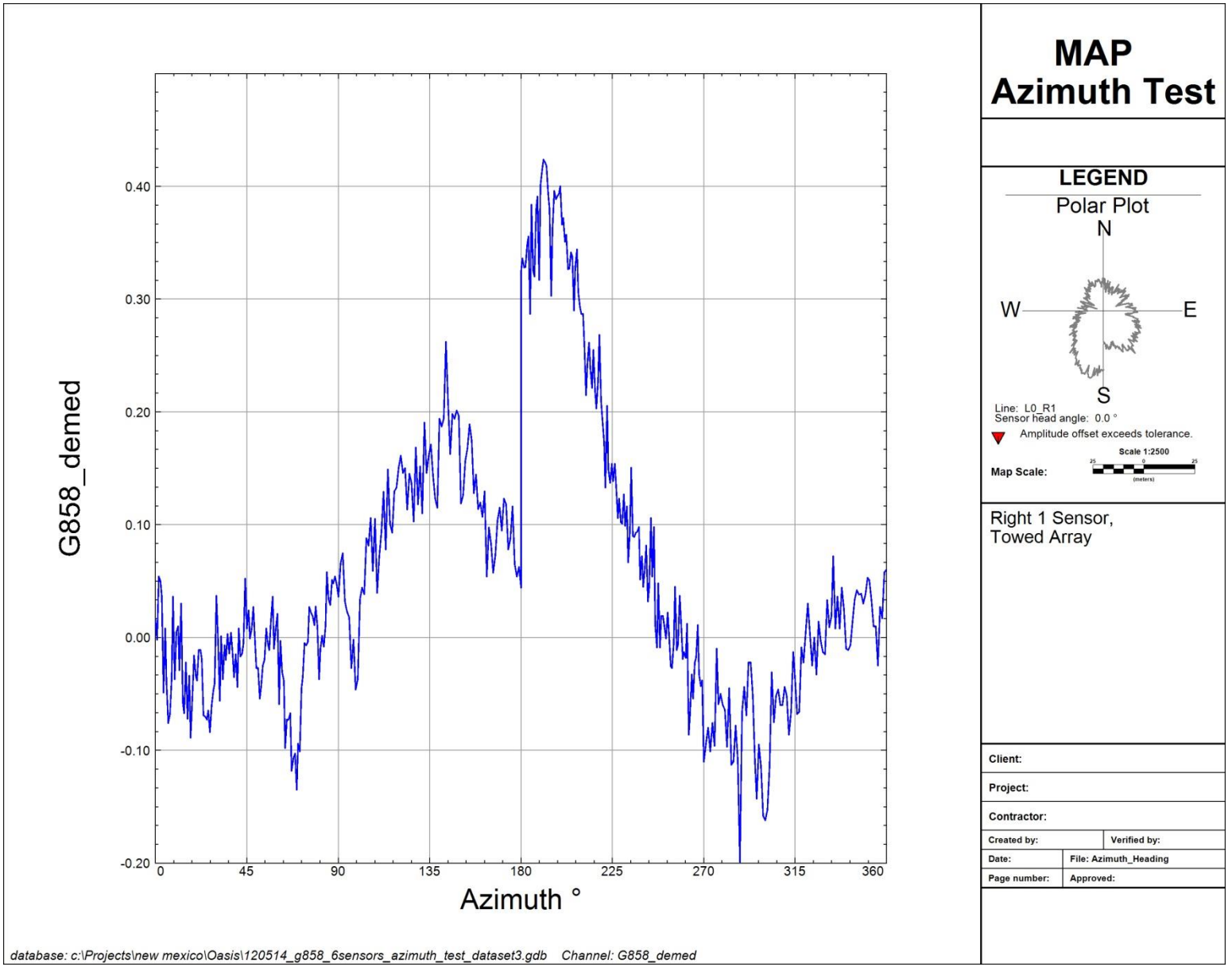


Figure C-9
G-858 6 Sensor System Right 2 Sensor Azimuth Test Results

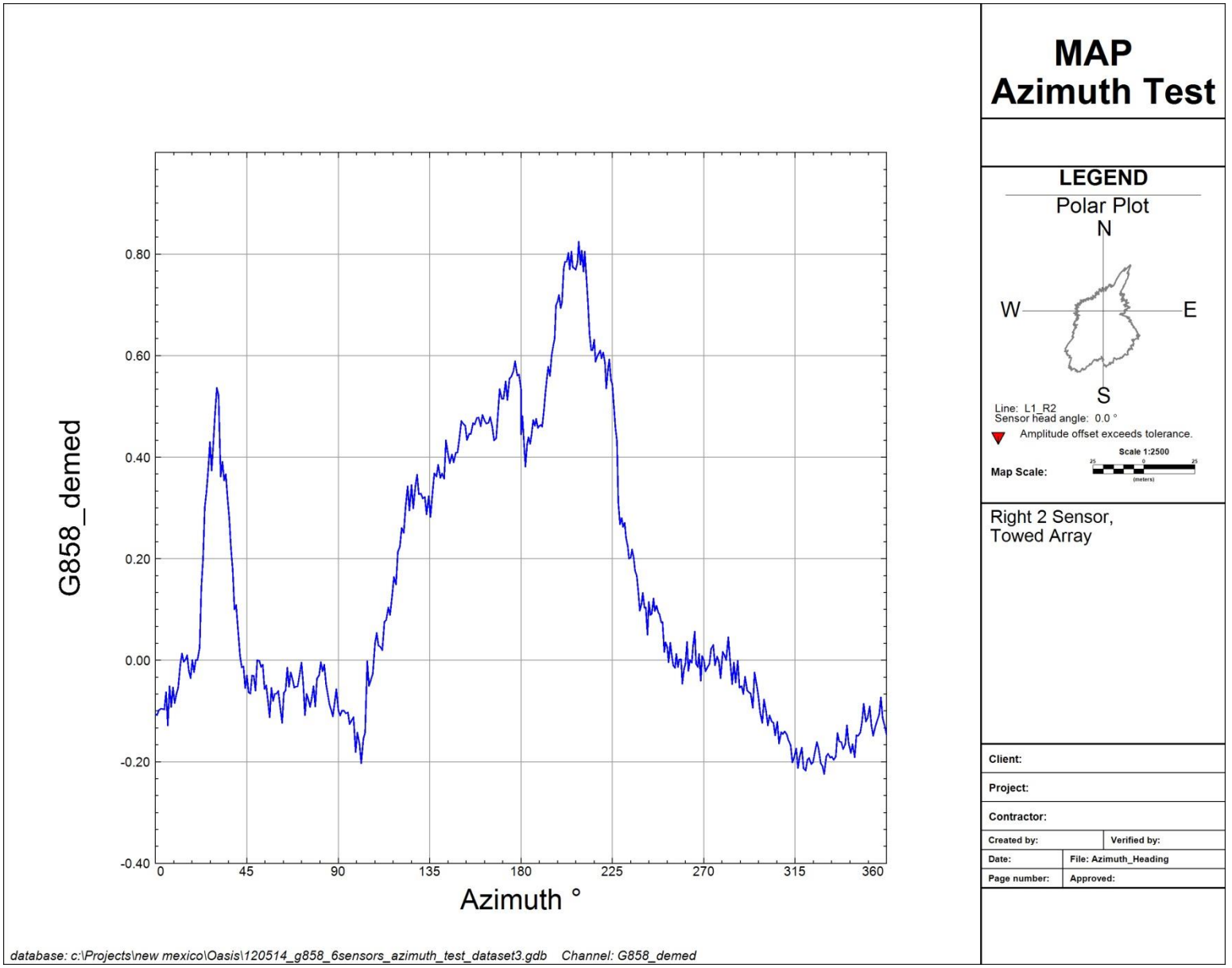


Figure C-10
G-858 6 Sensor System Central 1 Sensor Azimuth Test Results

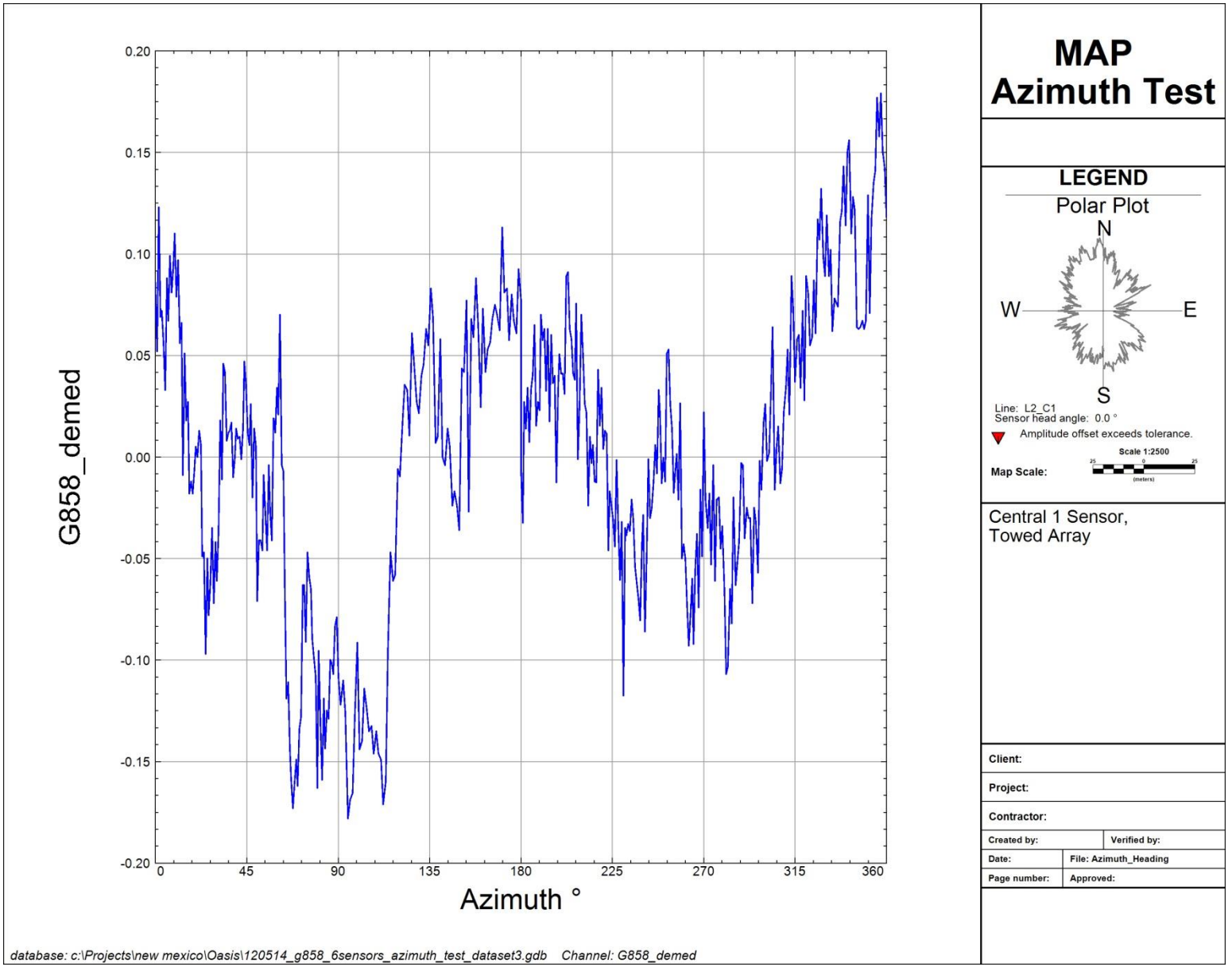


Figure C-11
G-858 6 Sensor System Central 2 Sensor Azimuth Test Results

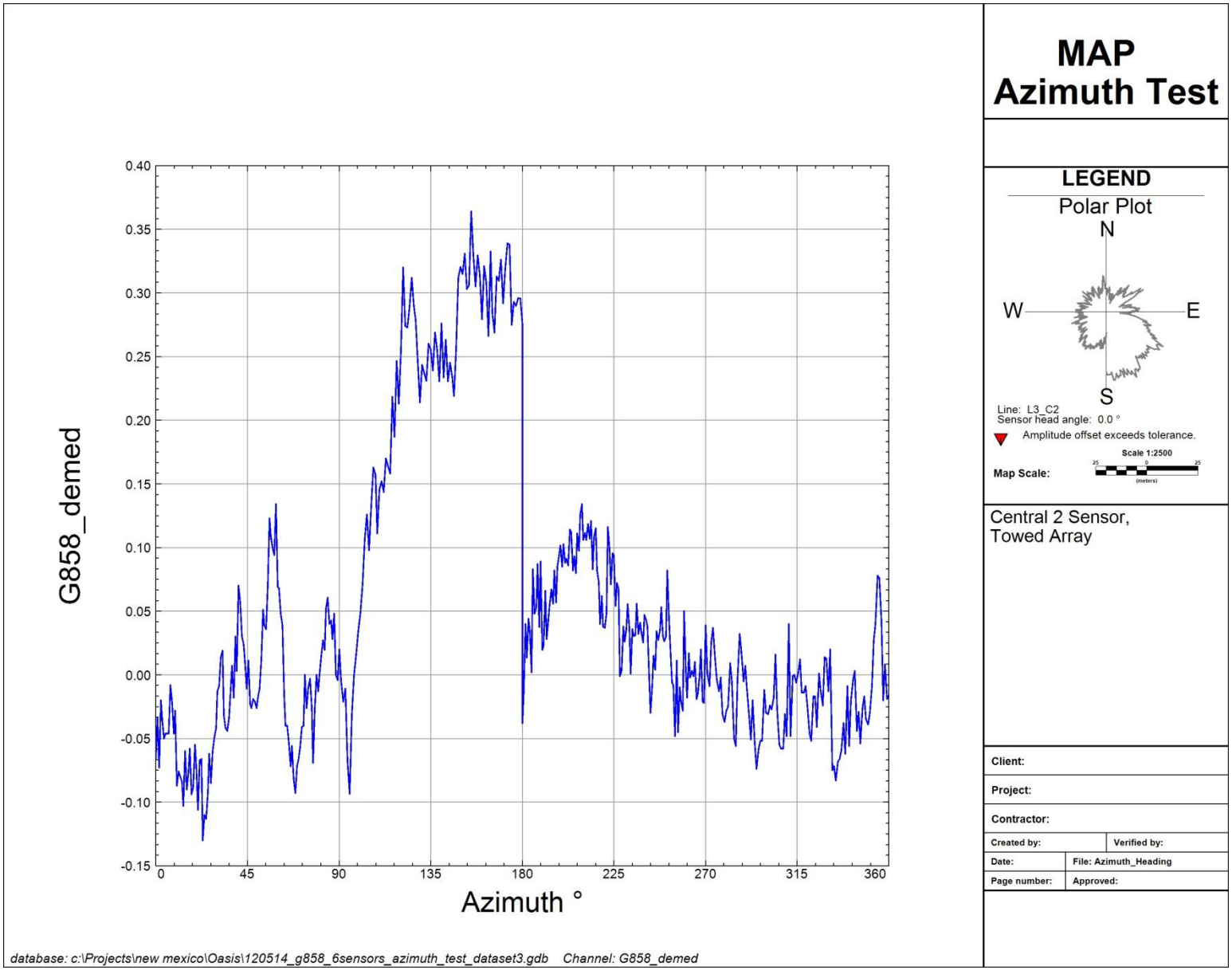


Figure C-12
G-858 6 Sensor System Left 1 Sensor Azimuth Test Results

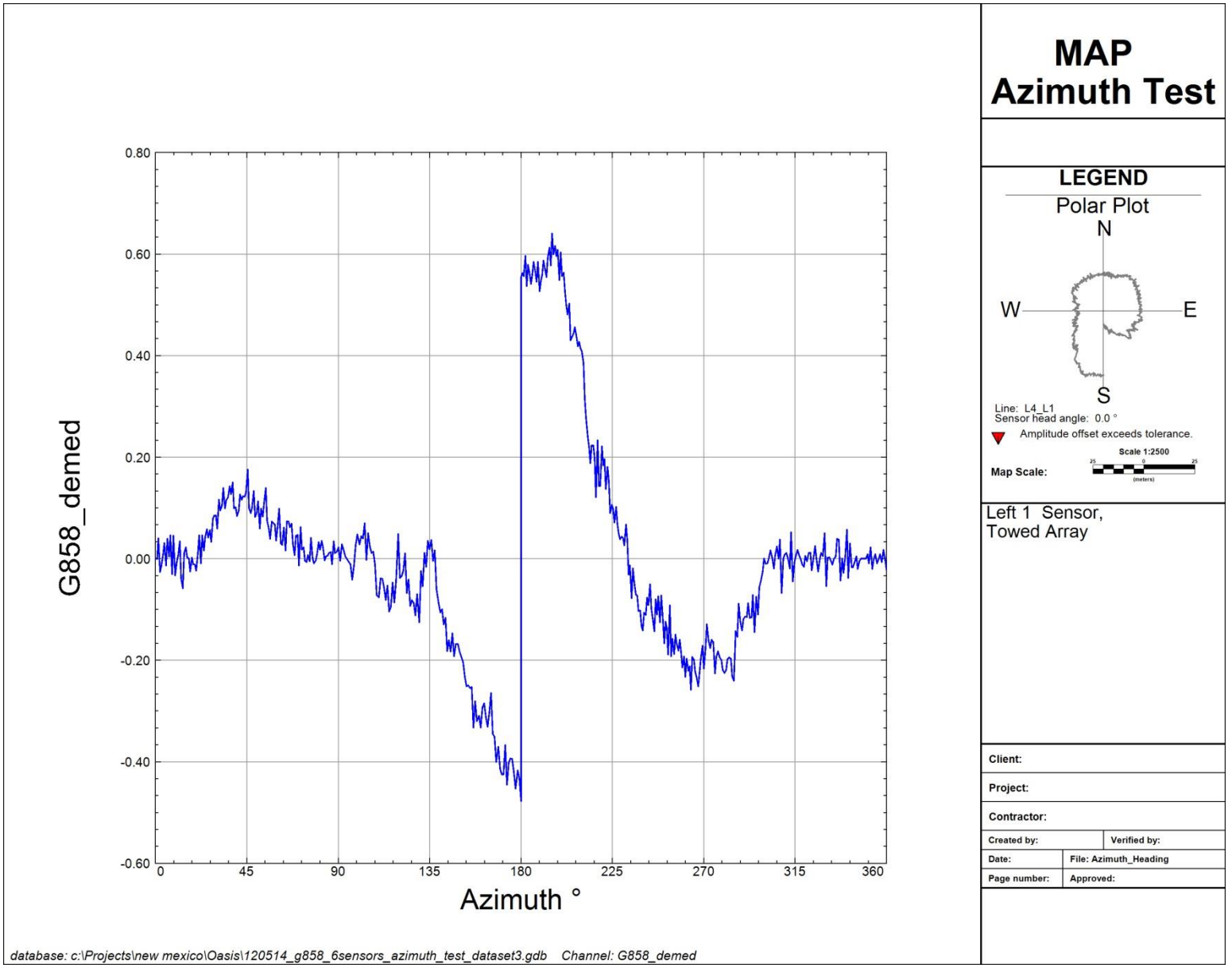


Figure C-13
G-858 6 Sensor System Left 2 Sensor Azimuth Test Results

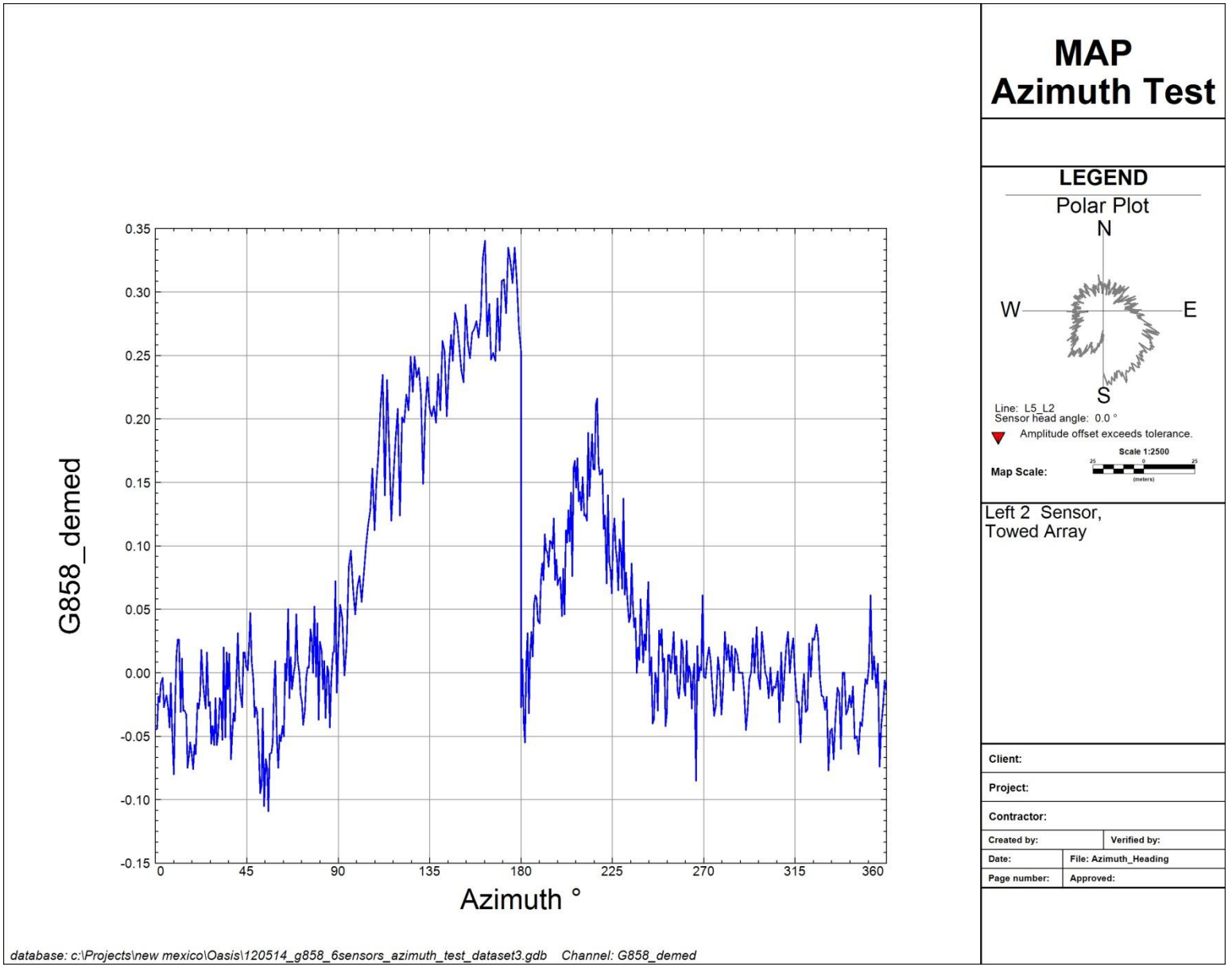


Figure C-14
G-858 Handheld System Left Sensor Octant Test Results

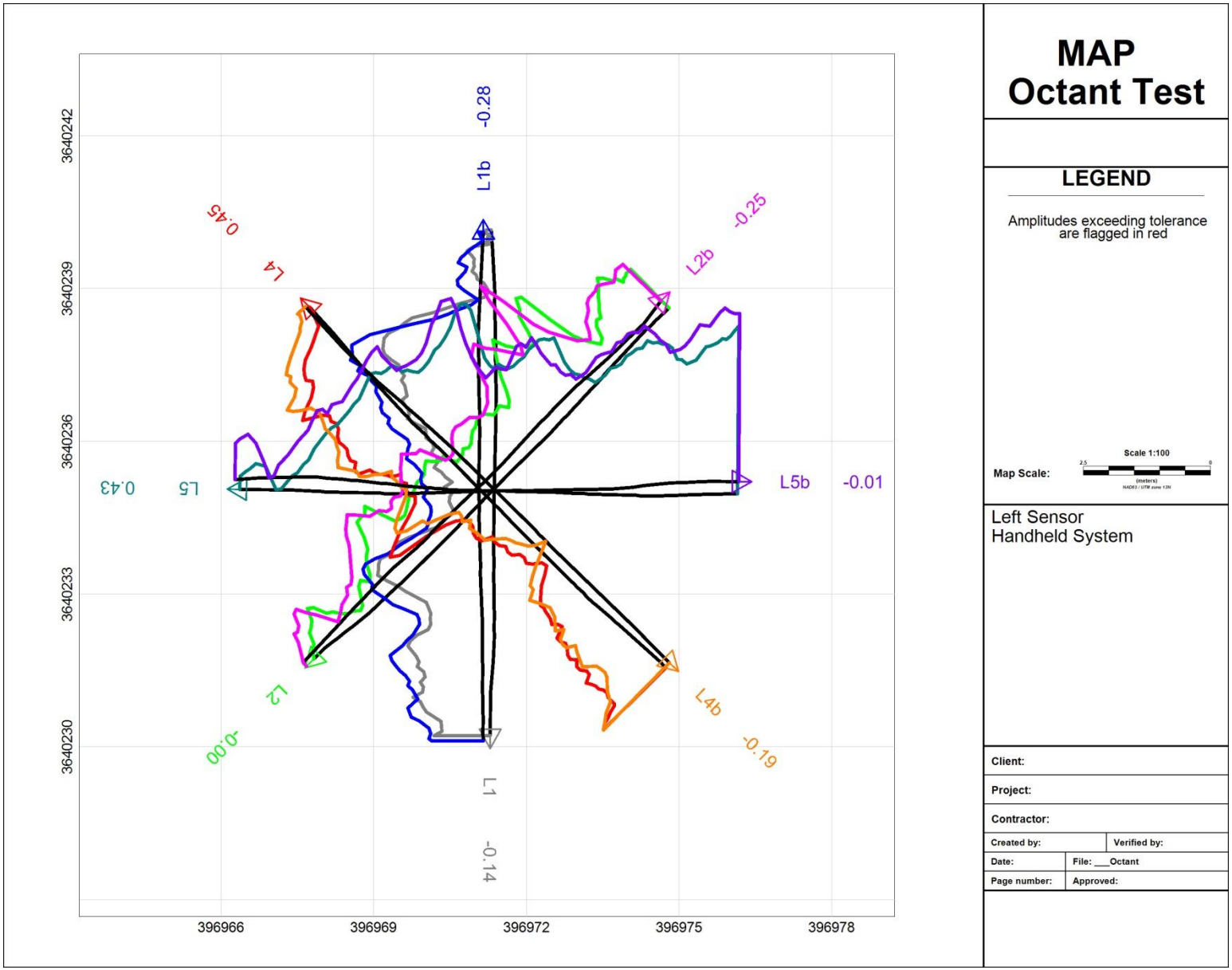


Figure C-15
G-858 Handheld System Right Sensor Octant Test Results

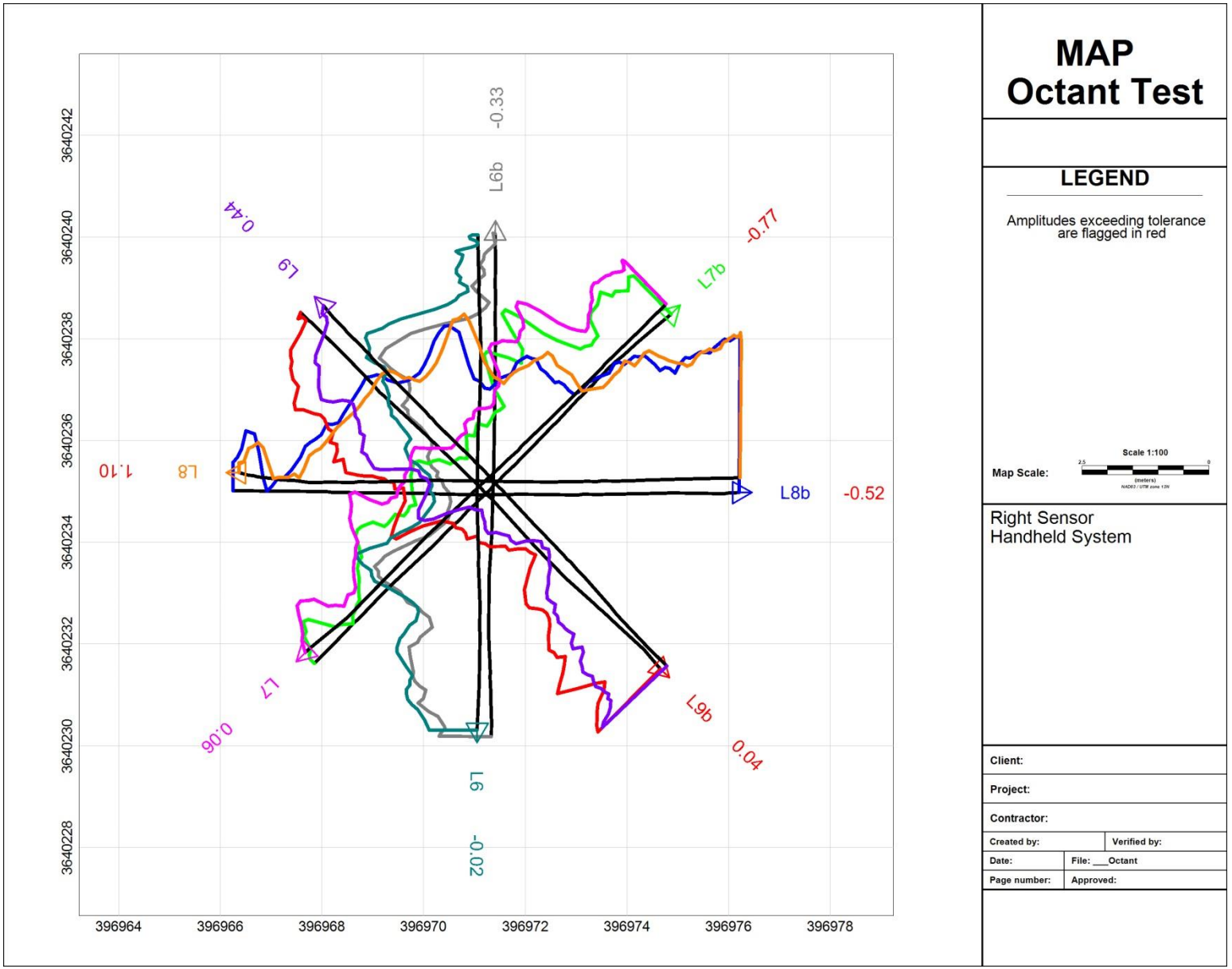


Figure C-16
G-858 6 Sensor System Central 1 Sensor Octant Test Results

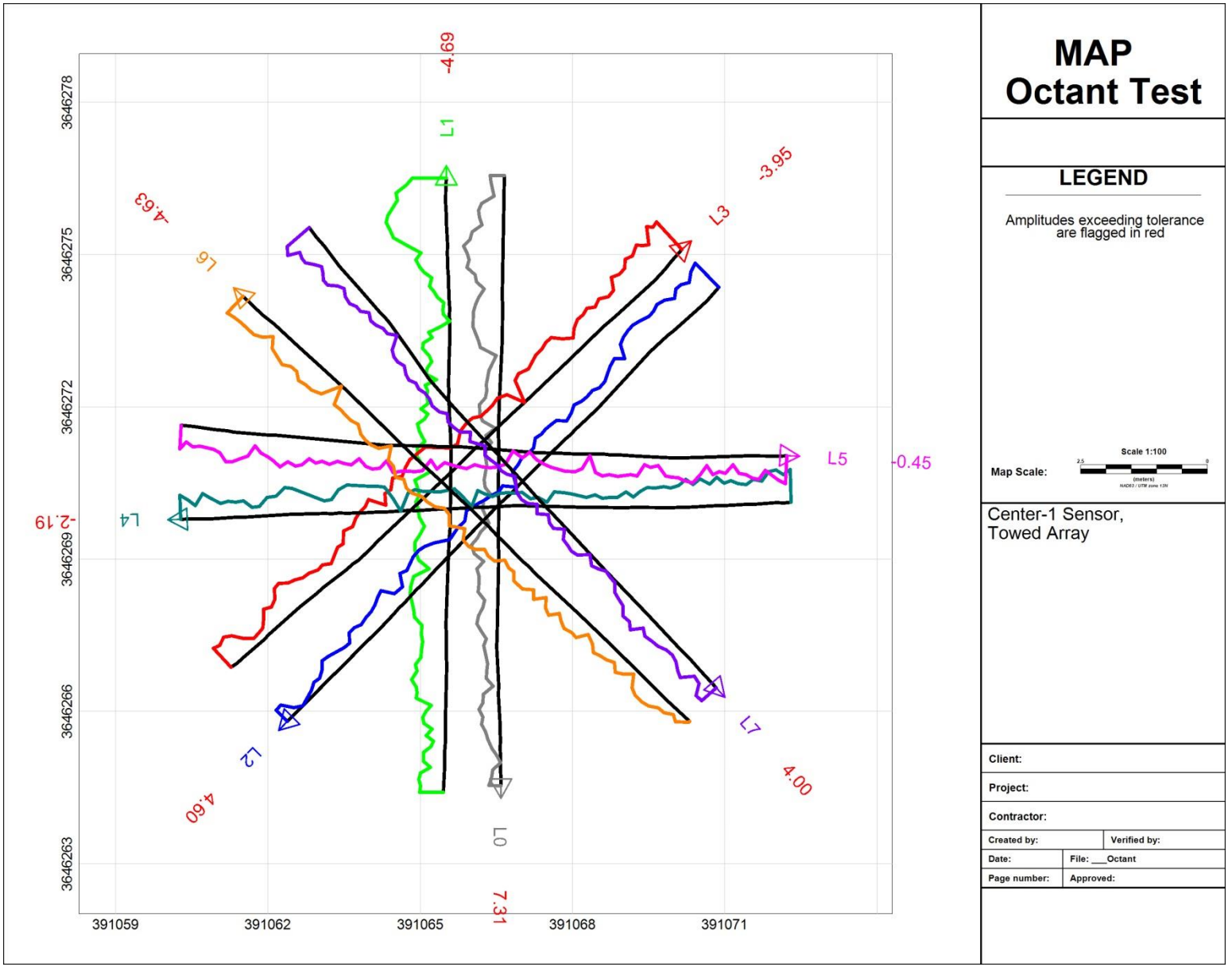
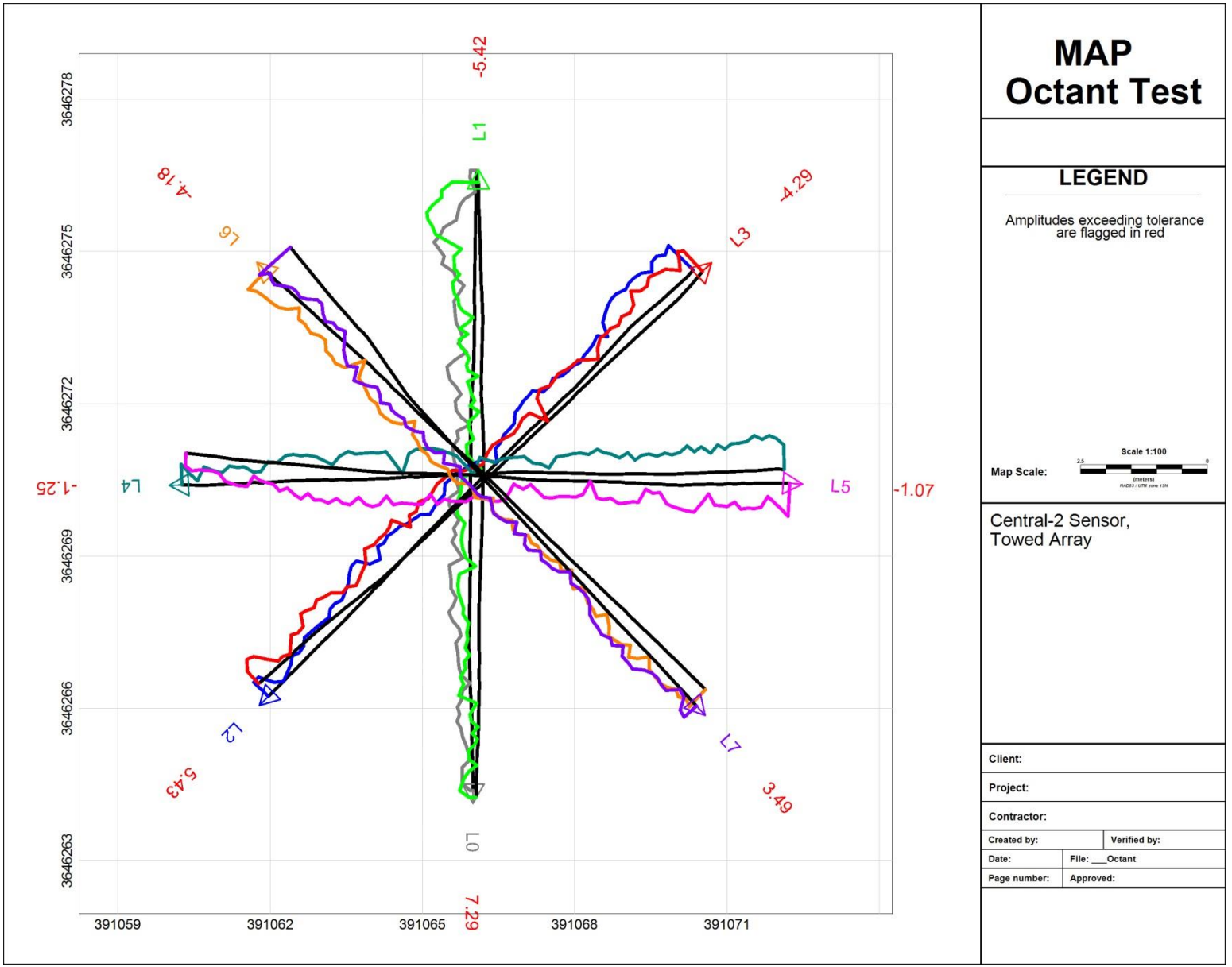


Figure C-17
G-858 6 Sensor System Central 2 Sensor Octant Test Results



MAP
Octant Test

LEGEND

Amplitudes exceeding tolerance are flagged in red

Map Scale: Scale 1:100

Central-2 Sensor,
Towed Array

Client:	
Project:	
Contractor:	
Created by:	Verified by:
Date:	File: ___Octant
Page number:	Approved:

Figure C-18
G-858 6 Sensor System Left 1 Sensor Octant Test Results

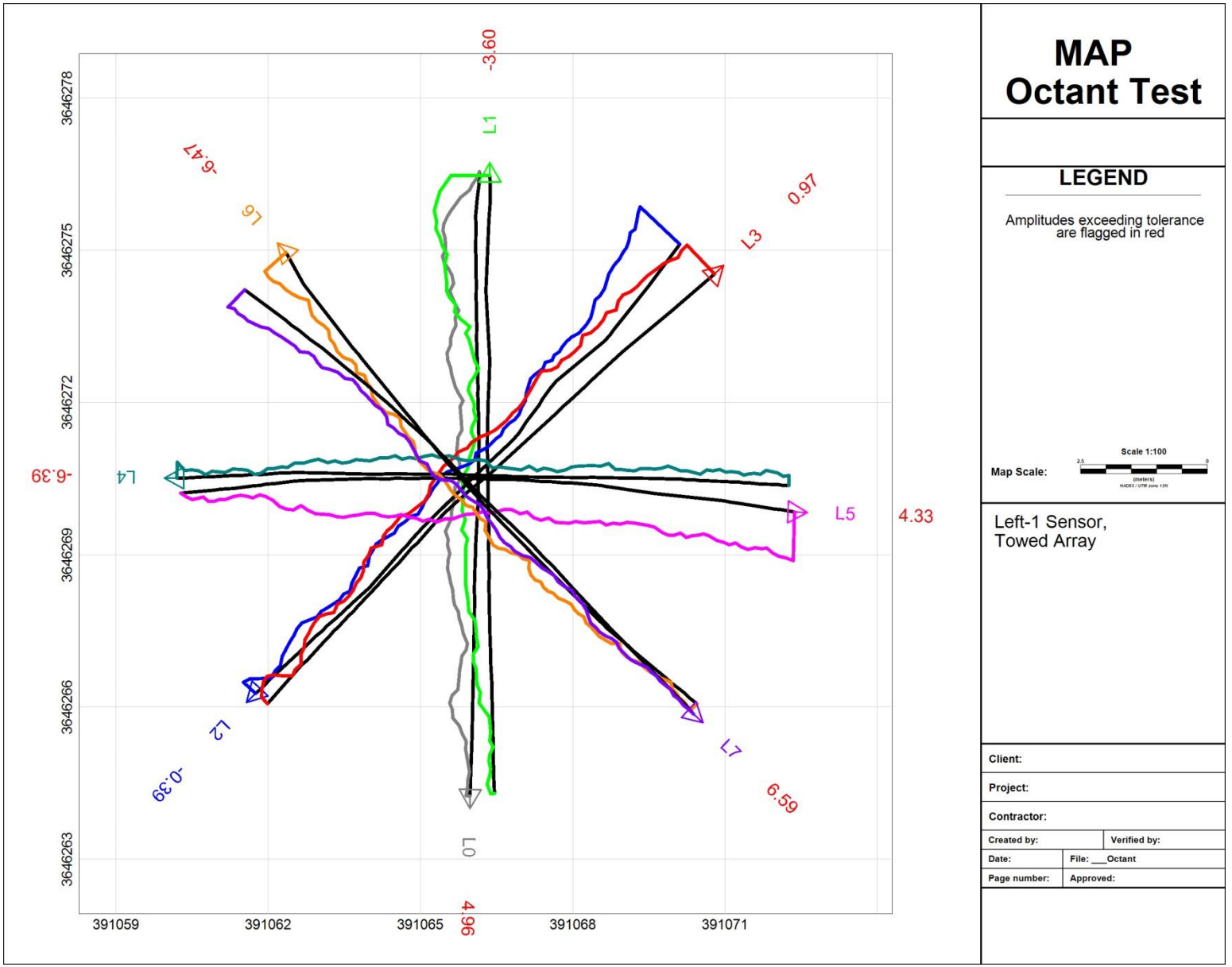


Figure C-19
G-858 6 Sensor System Left 2 Sensor Octant Test Results

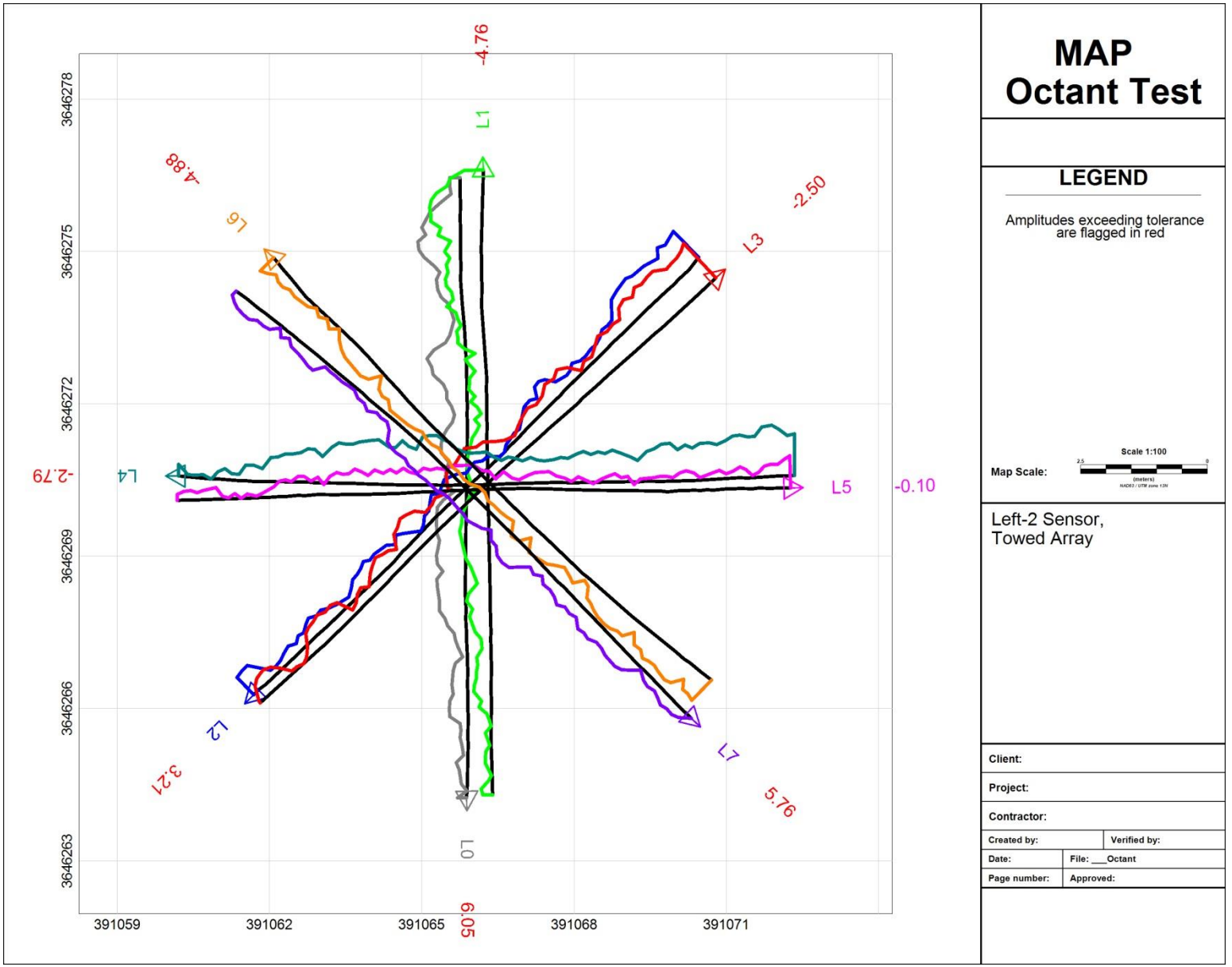


Figure C-20
G-858 6 Sensor System Right 1 Sensor Octant Test Results

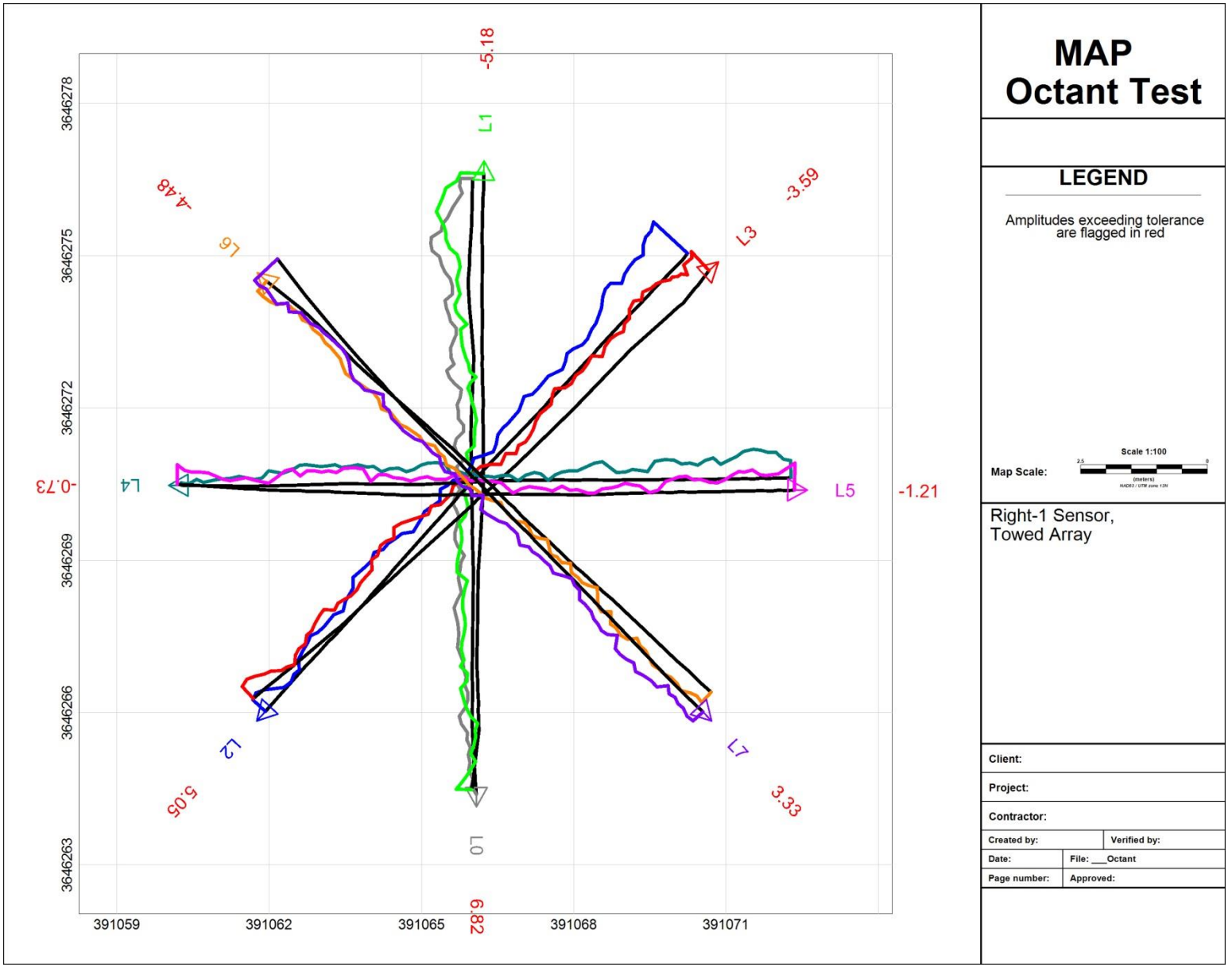


Figure C-21
G-858 6 Sensor System Right 2 Sensor Octant Test Results

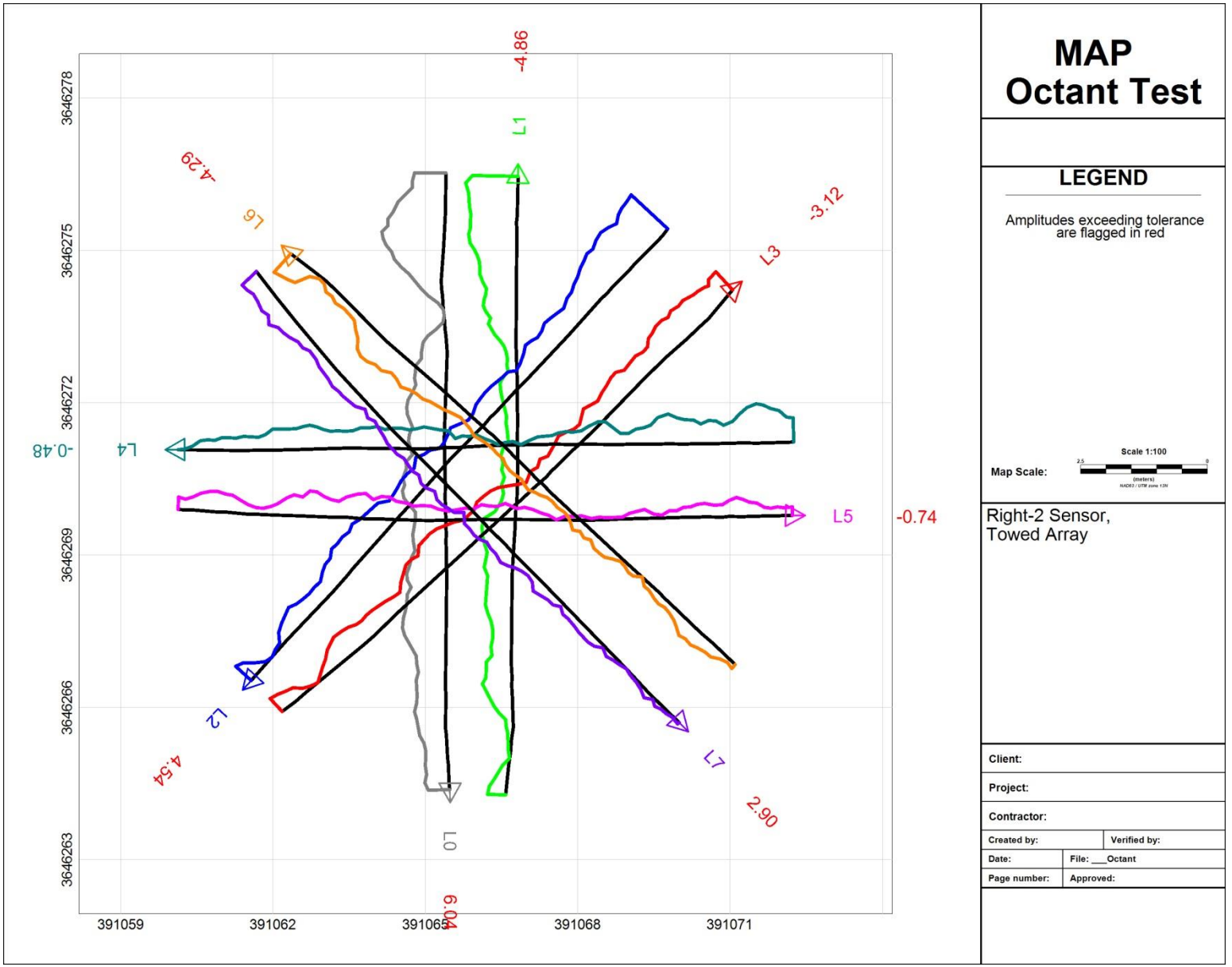


Figure C-22
G-858 Handheld System Left Sensor 6 Line Test Results

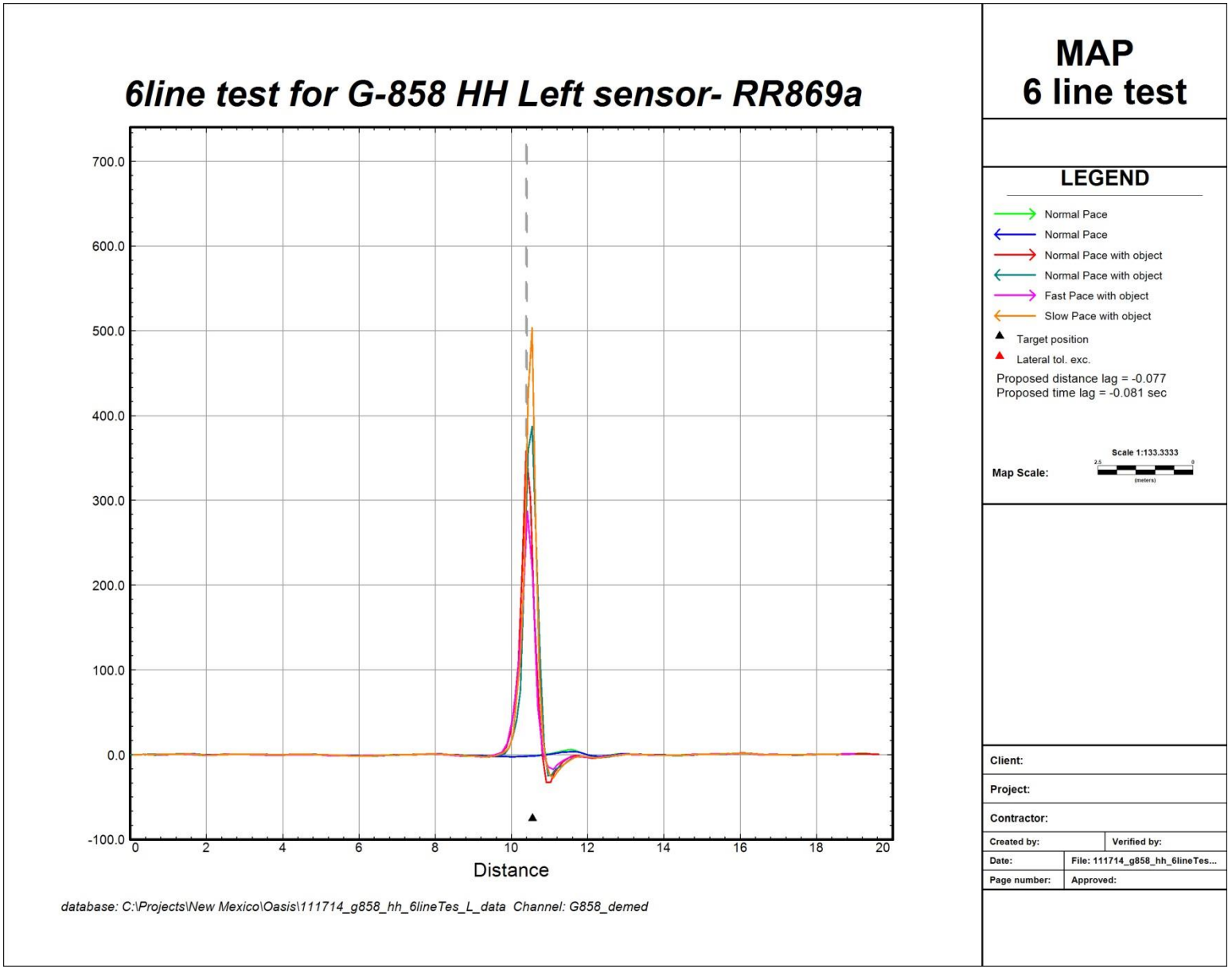


Figure C-23
G-858 Handheld System Right Sensor 6 Line Test Results

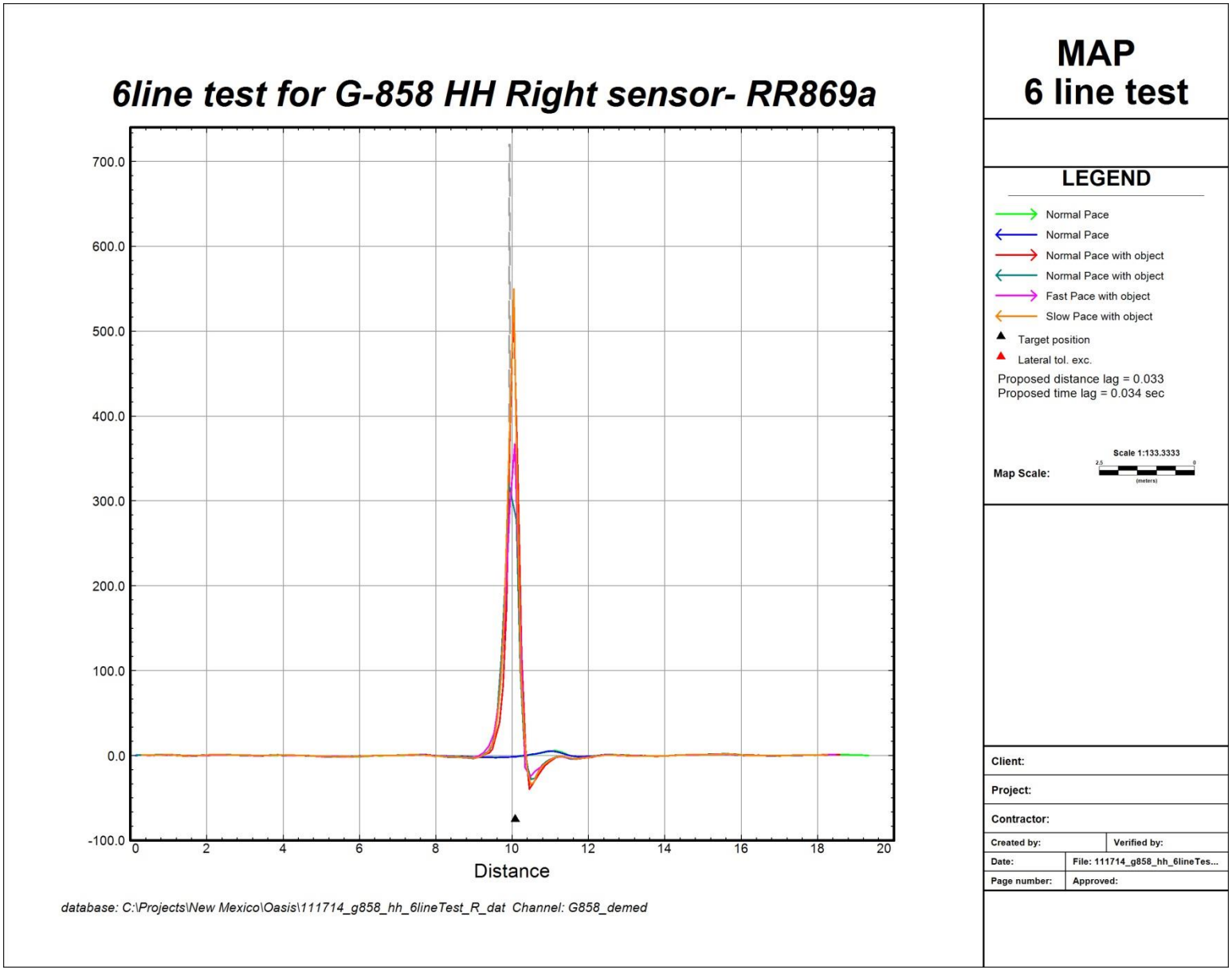


Figure C-24
G-858 6 Sensor System Central 1 Sensor 6 Line Test Results

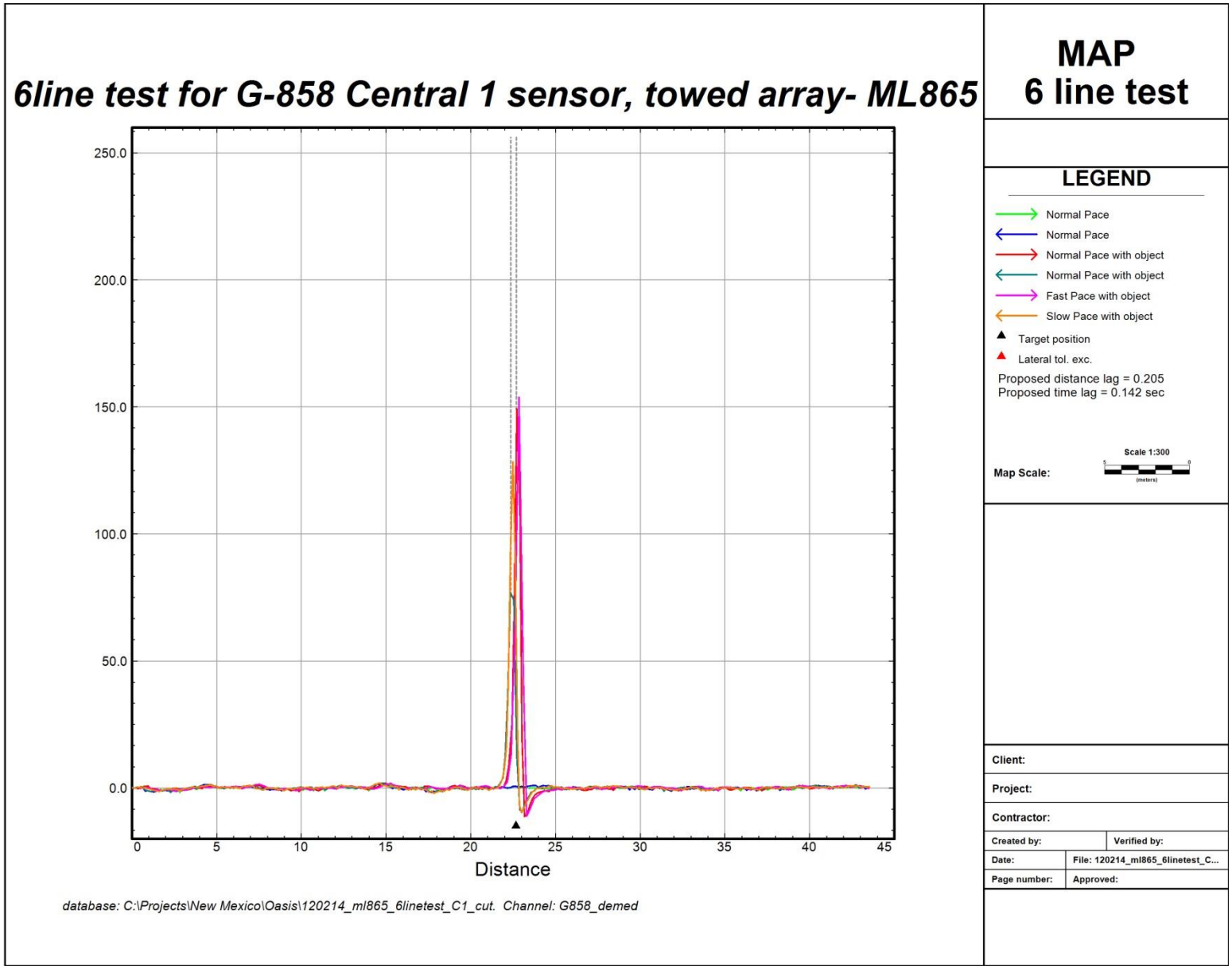


Figure C-25
G-858 6 Sensor System Central 2 Sensor 6 Line Test Results

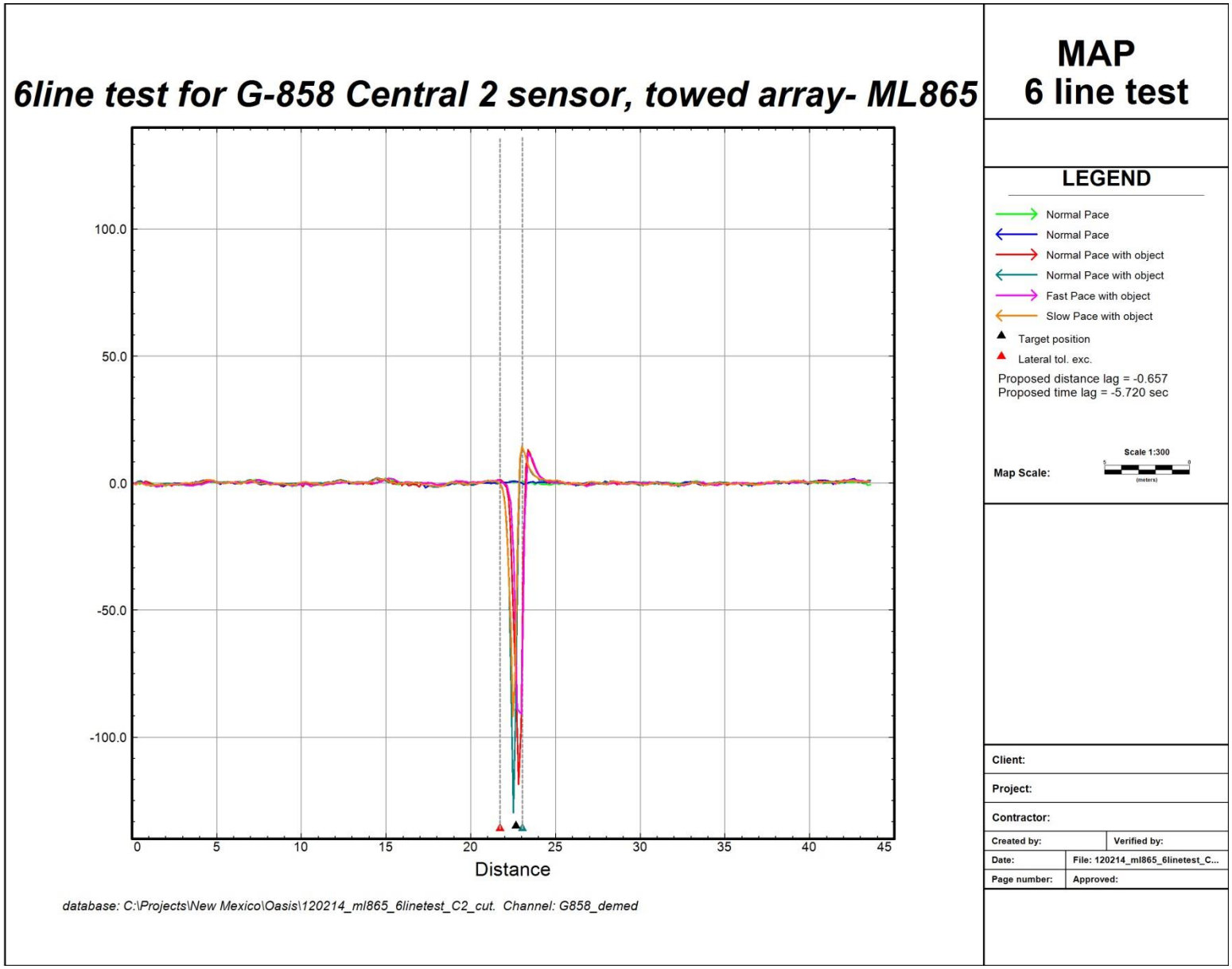


Figure C-26
G-858 6 Sensor System Left 1 Sensor 6 Line Test Results

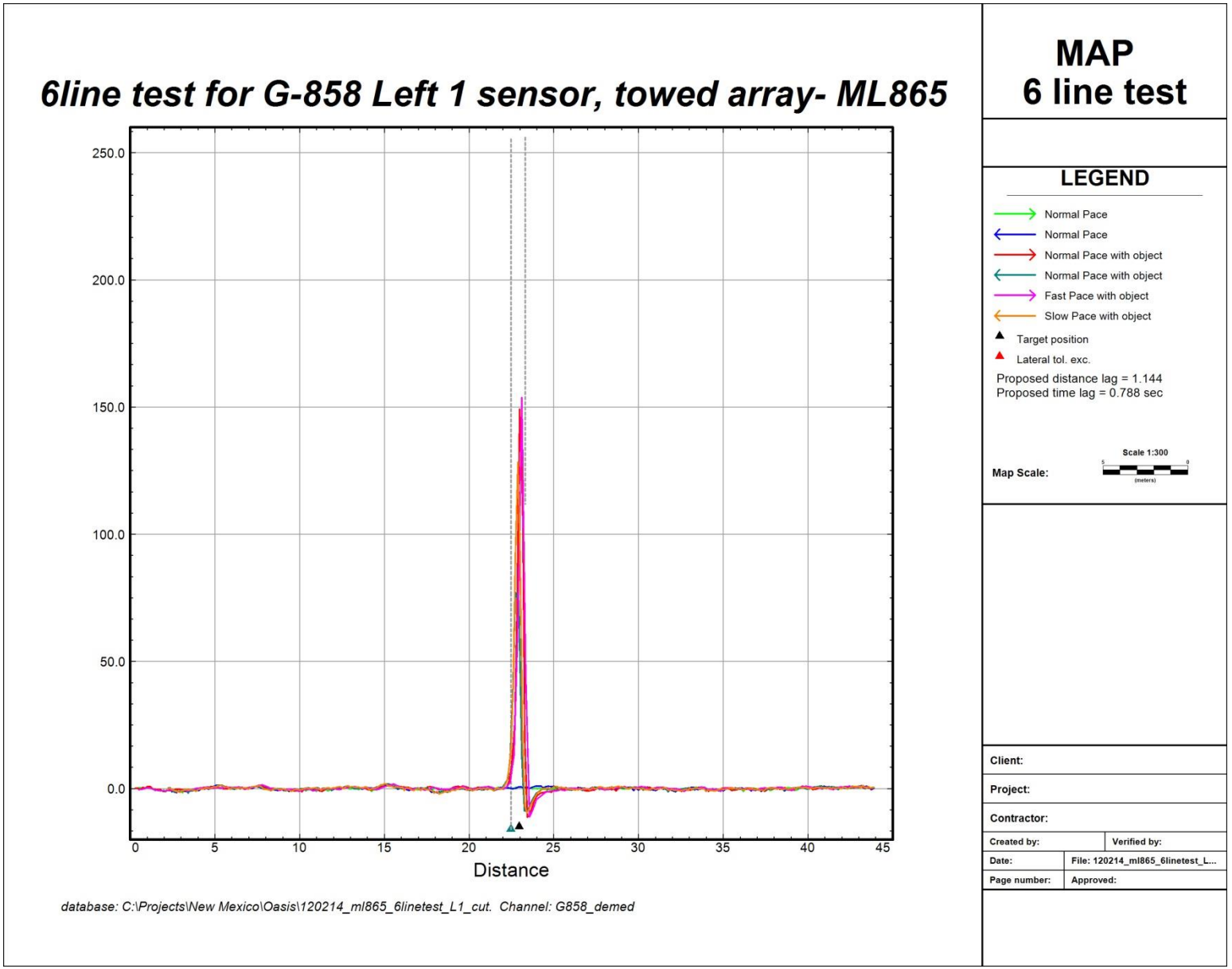


Figure C-27
G-858 6 Sensor System Left 2 Sensor 6 Line Test Results

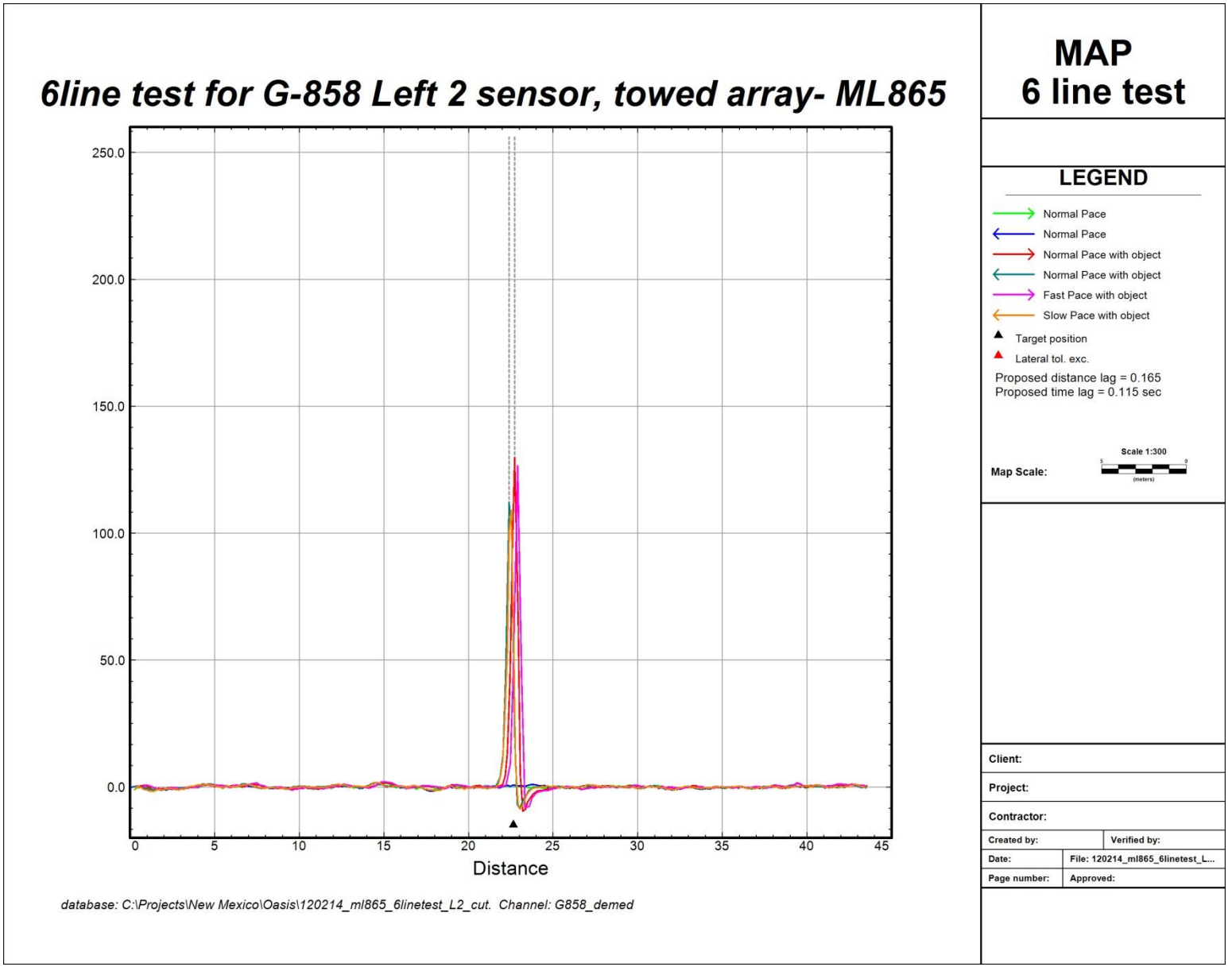


Figure C-28
G-858 6 Sensor System Right 1 Sensor 6 Line Test Results

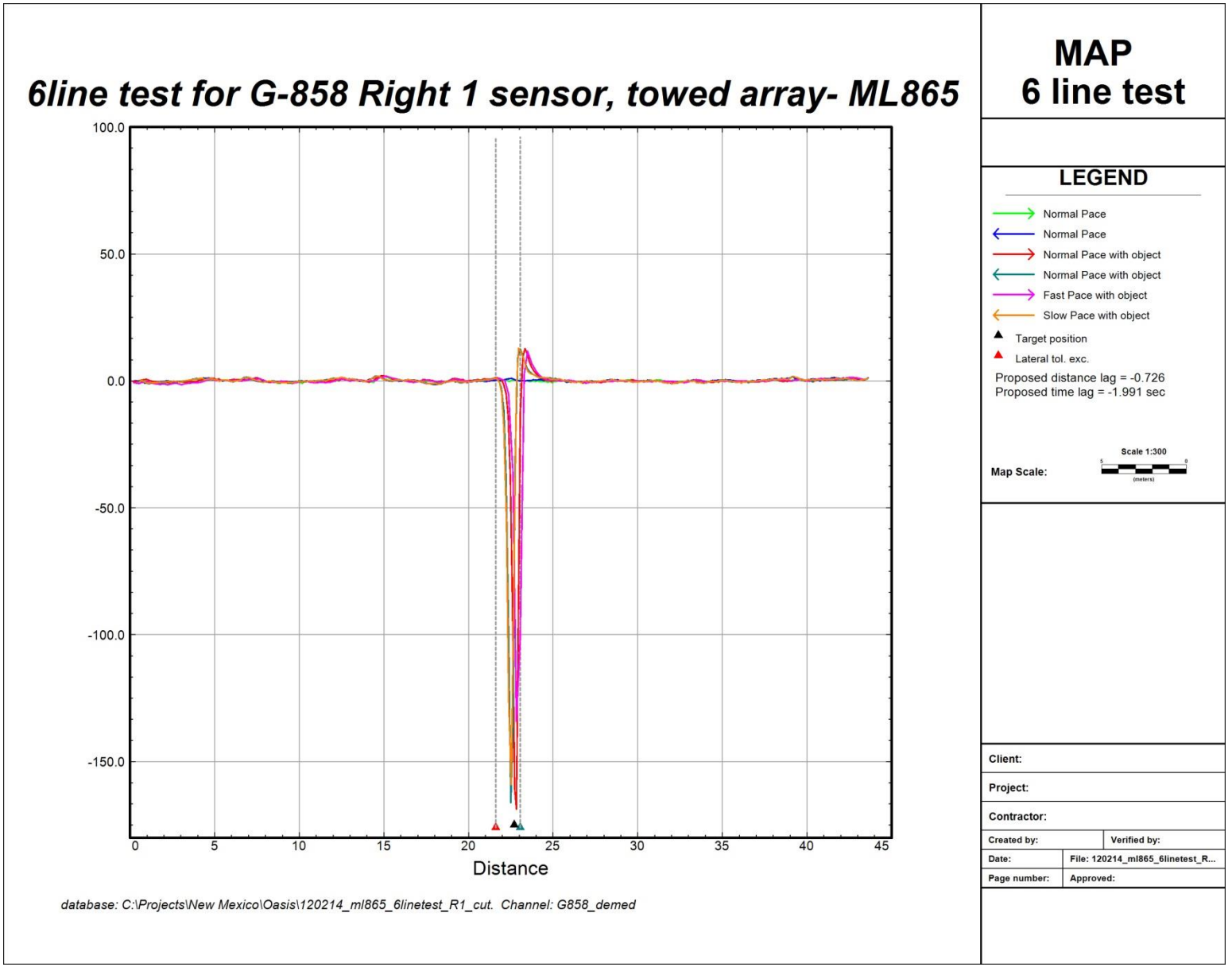


Figure C-29
G-858 6 Sensor System Right 2 Sensor 6 Line Test Results

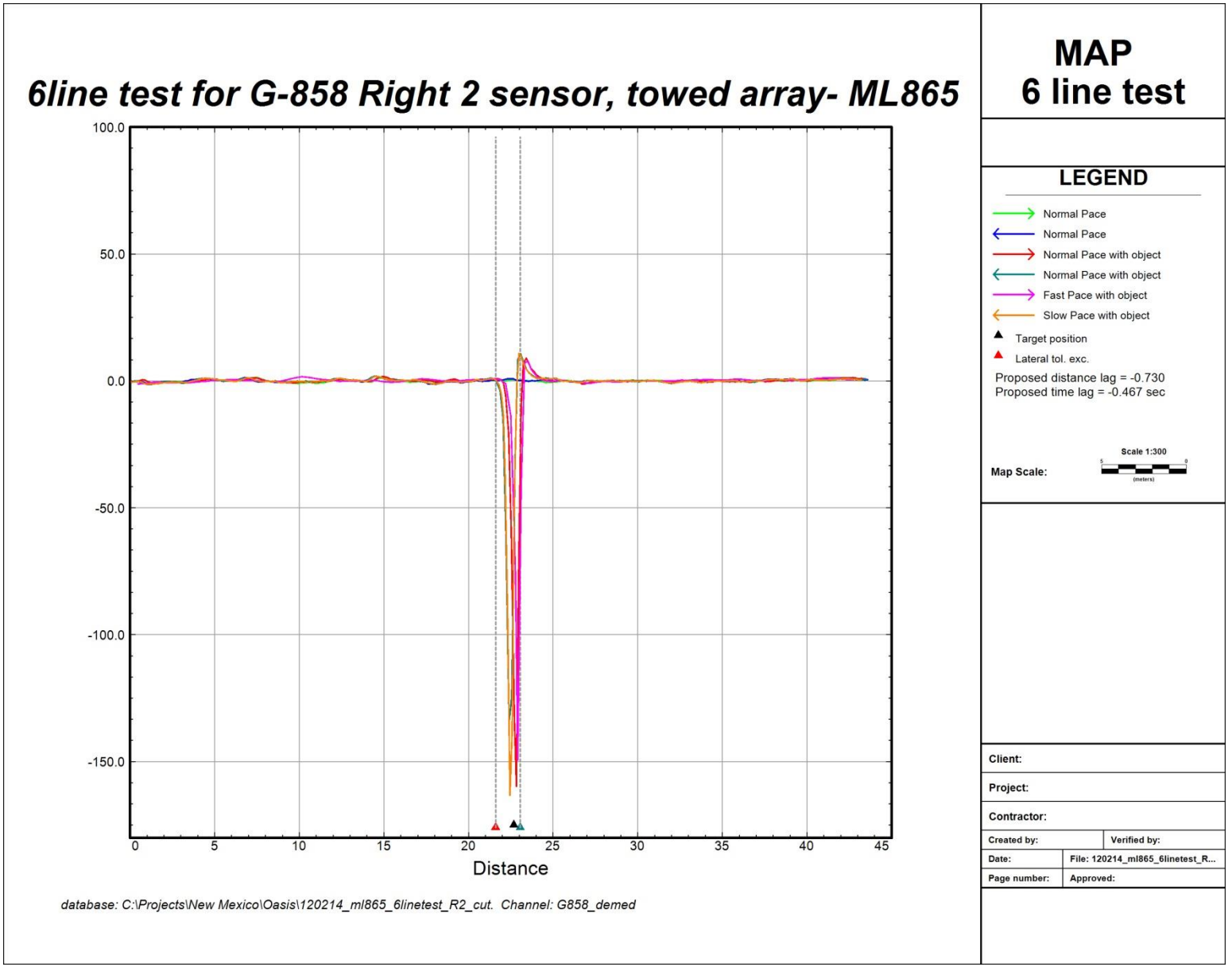


Figure C-30
EM61-MK2 5 Coil System Central Coil 6 Line Test Results

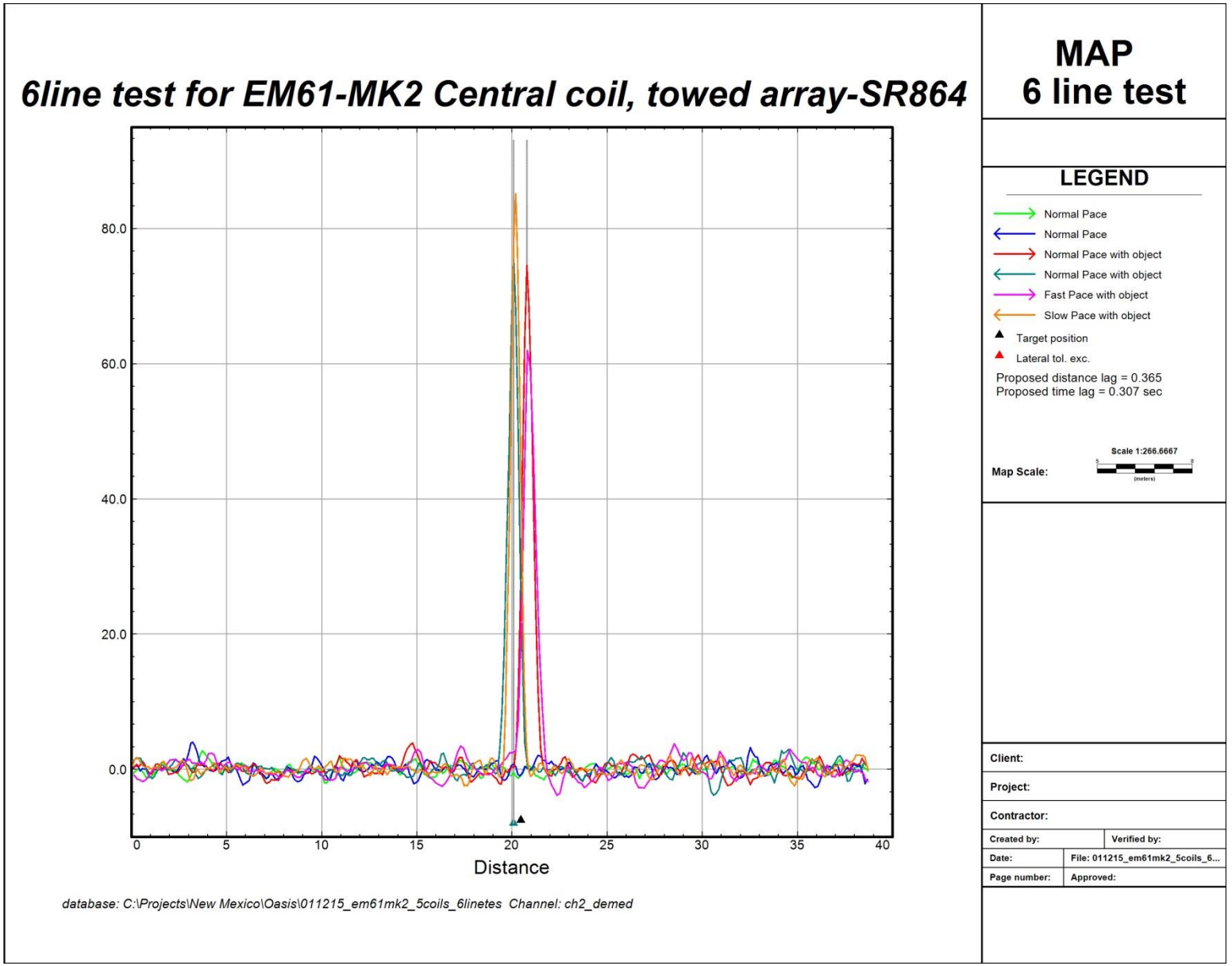


Figure C-31
EM61-MK2 5 Coil System Right 1 Coil 6 Line Test Results

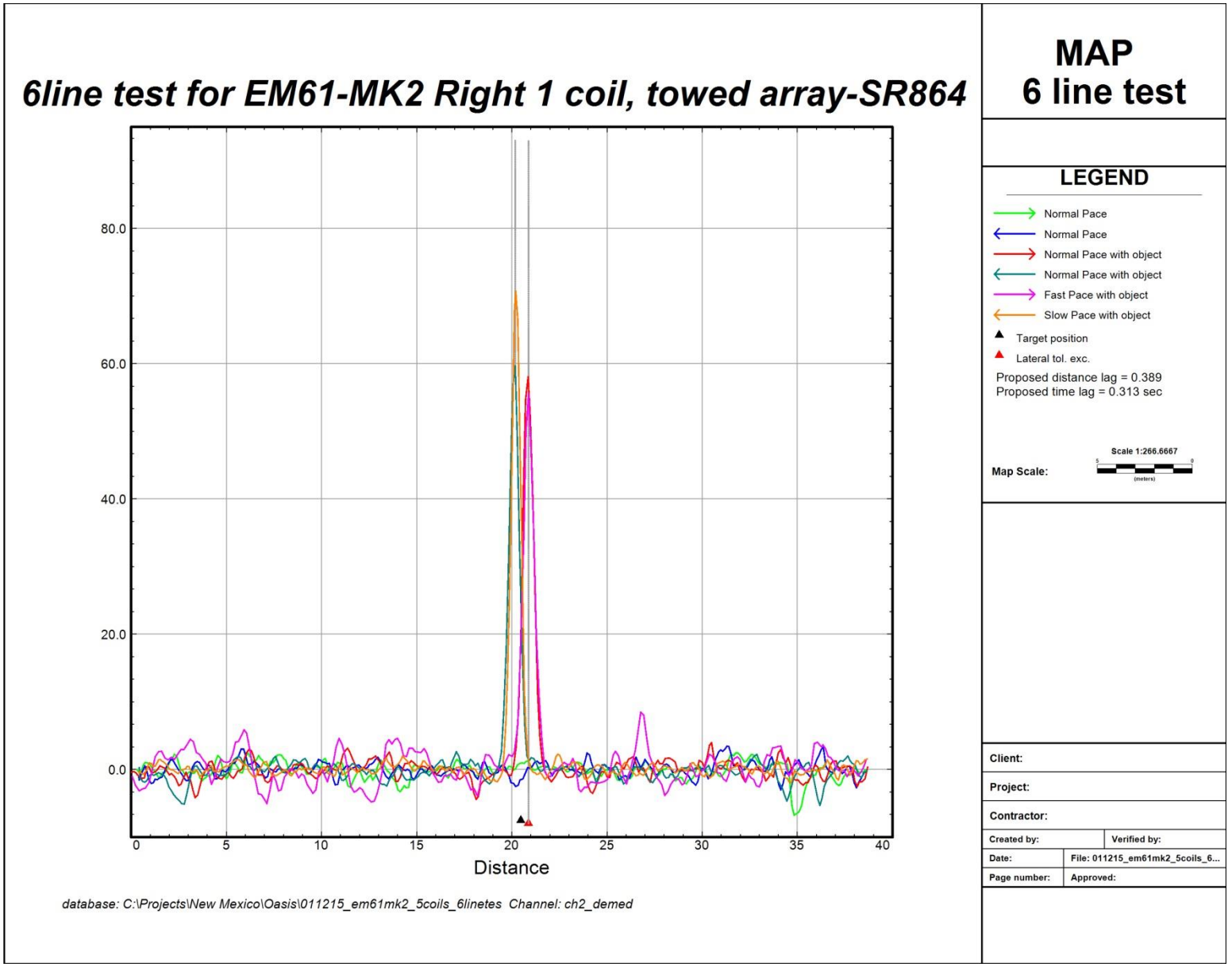


Figure C-32
EM61-MK2 5 Coil System Right 2 Coil 6 Line Test Results

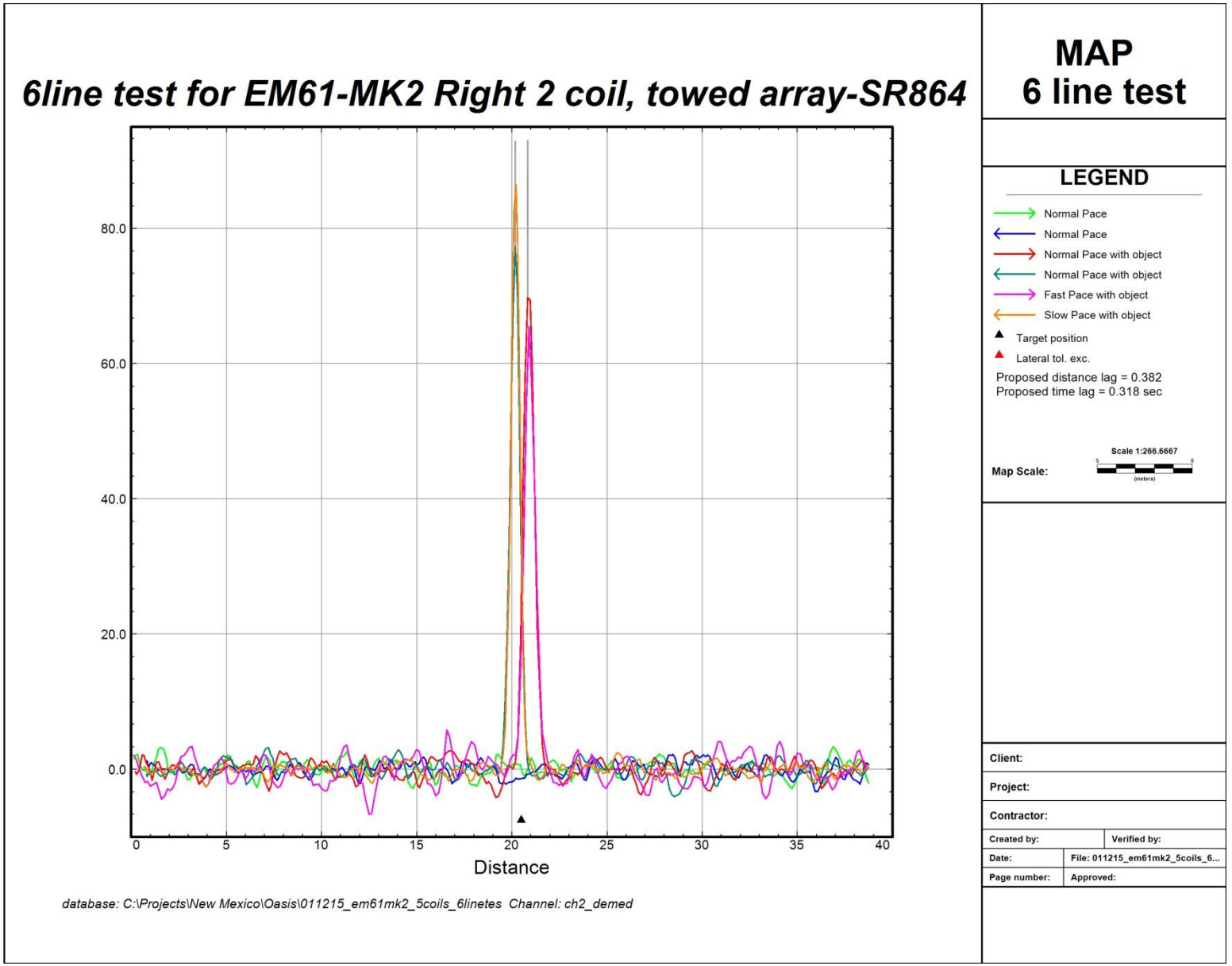


Figure C-33
EM61-MK2 5 Coil System Left 1 Coil 6 Line Test Results

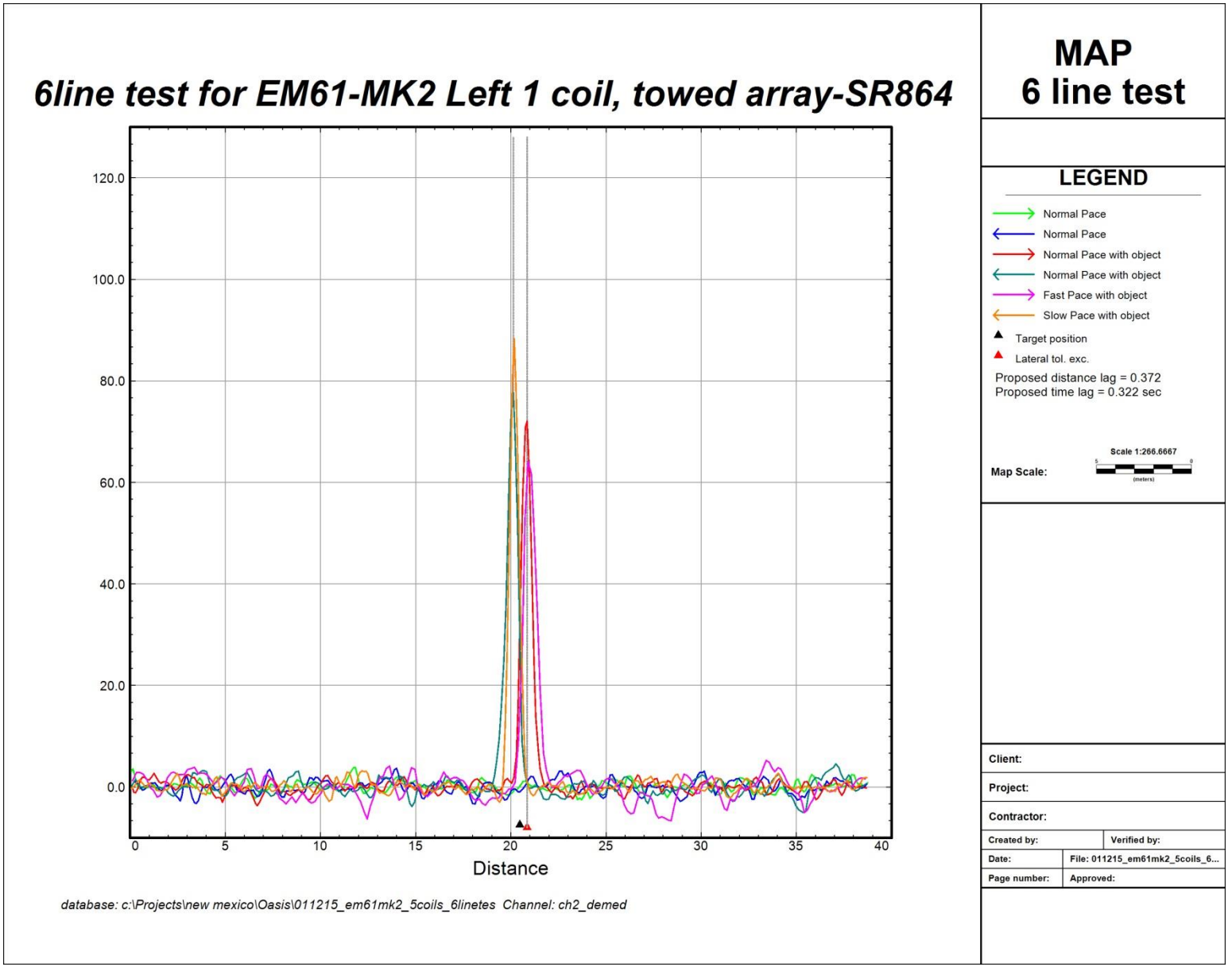


Figure C-34
EM61-MK2 5 Coil System Left 2 Coil 6 Line Test Results

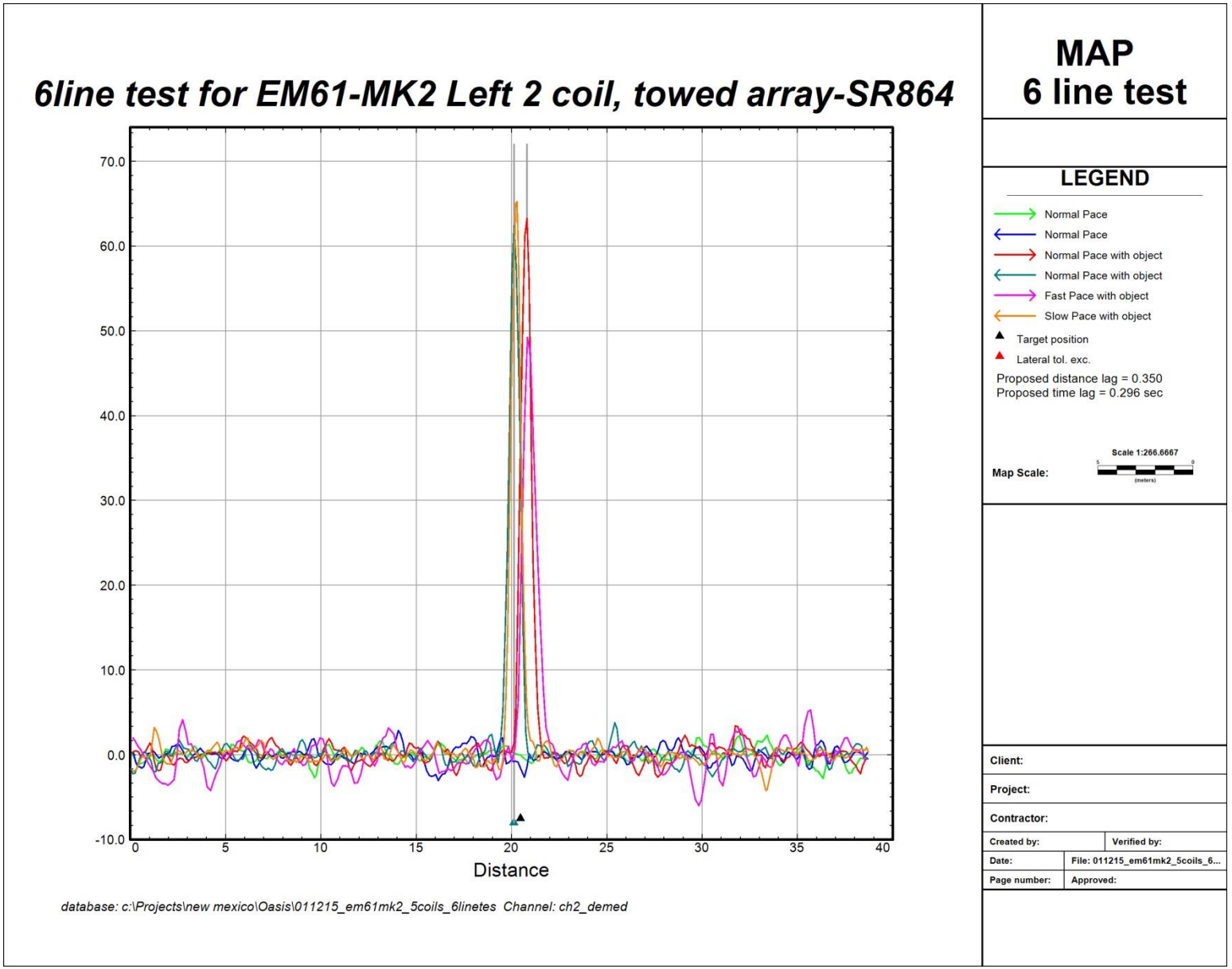


Figure C-35
G-858 6 Sensor System Central 1 Sensor-Pull Away Test Results

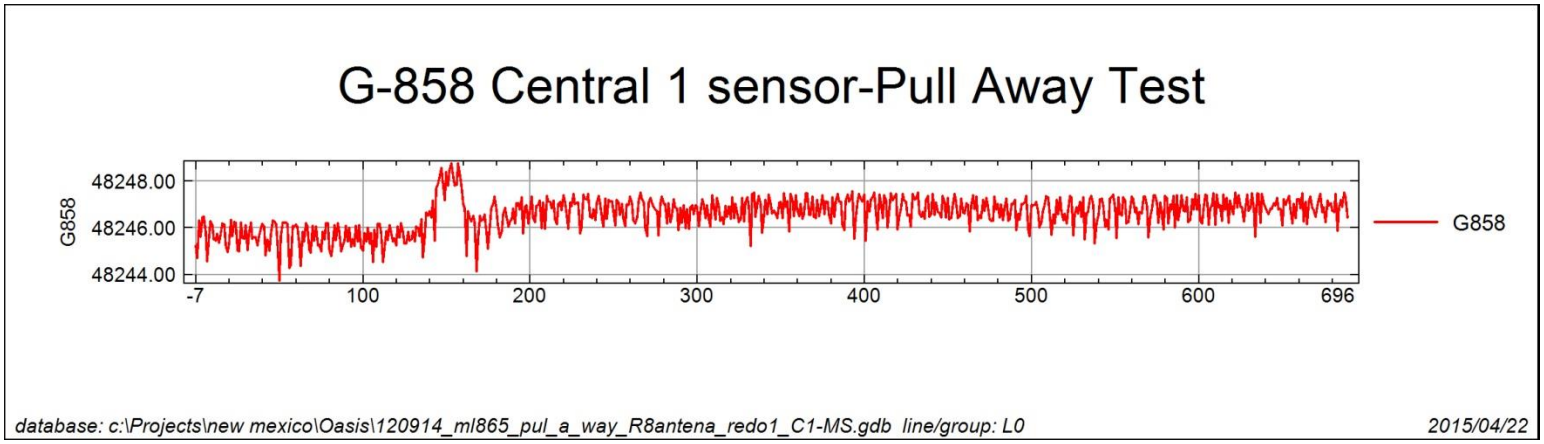


Figure C-36
G-858 6 Sensor System Central 2 Sensor-Pull Away Test Results

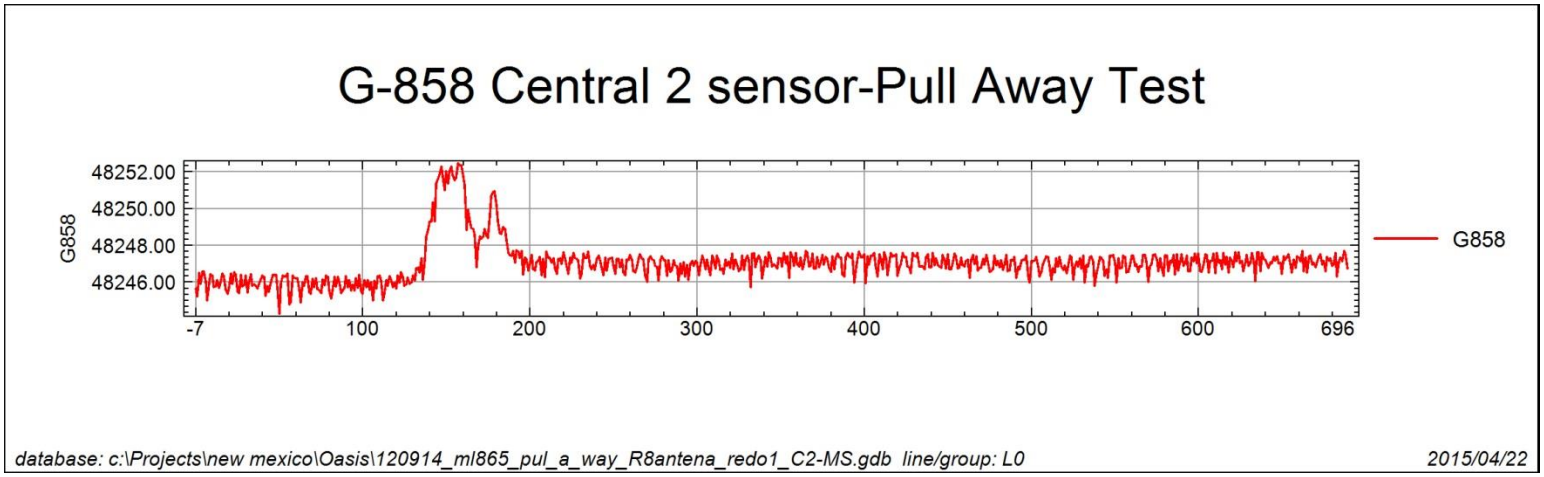


Figure C-37
G-858 6 Sensor System Left 1 Sensor-Pull Away Test Results

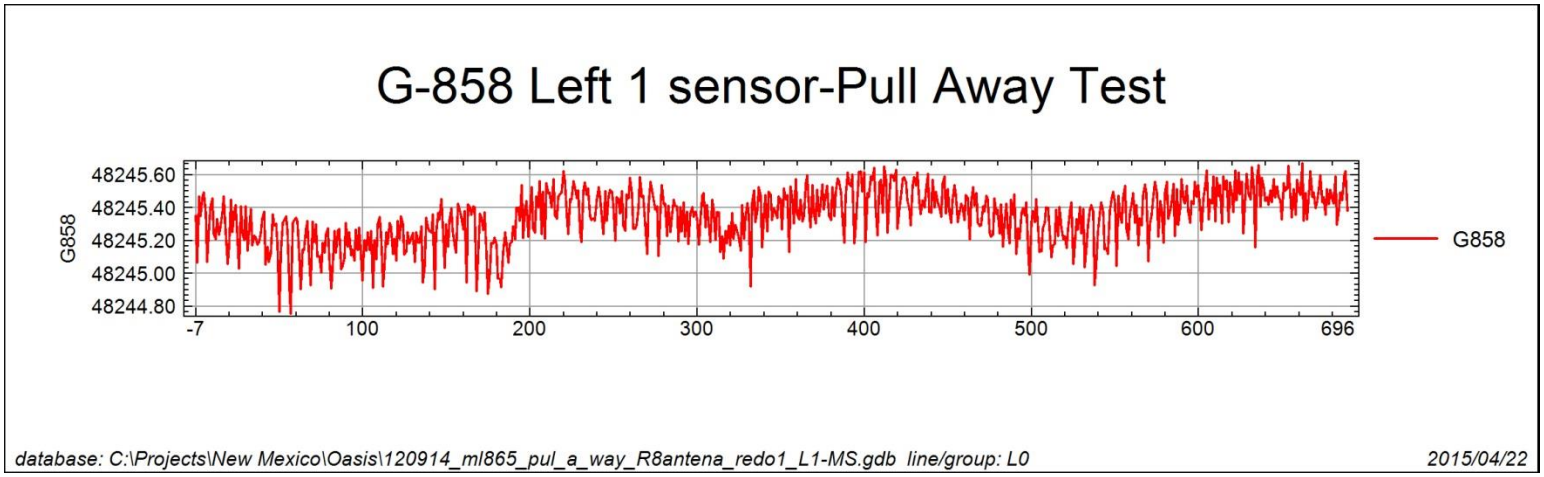


Figure C-38
G-858 6 Sensor System Left 2 Sensor-Pull Away Test Results

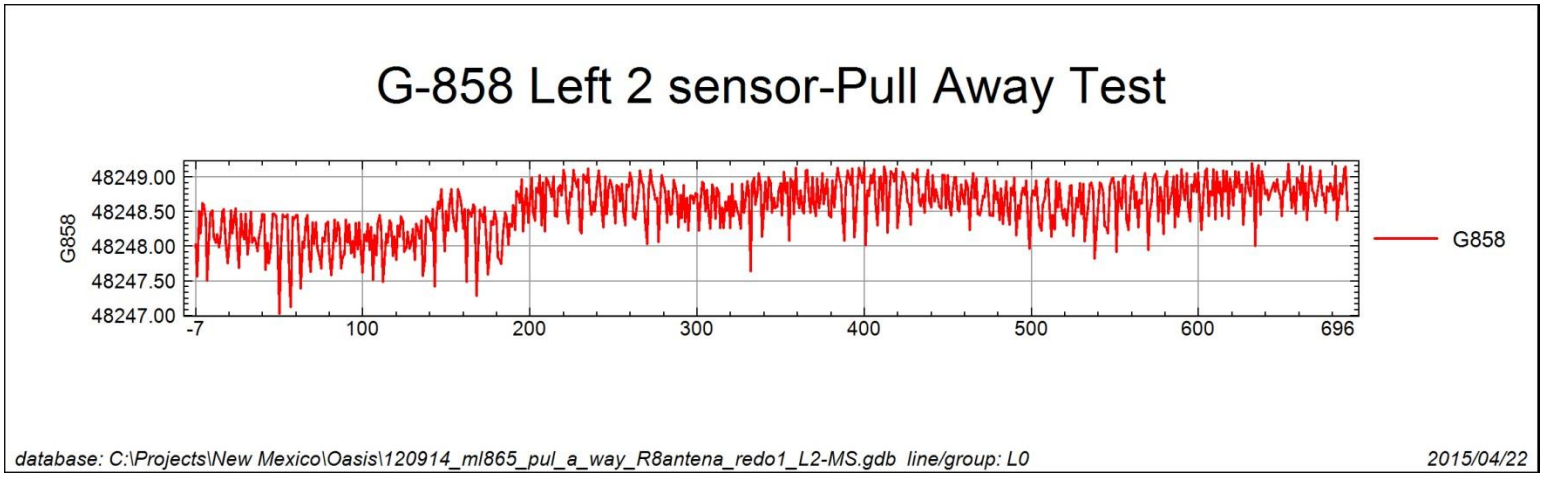


Figure C-39
G-858 6 Sensor System Right 1 Sensor-Pull Away Test Results

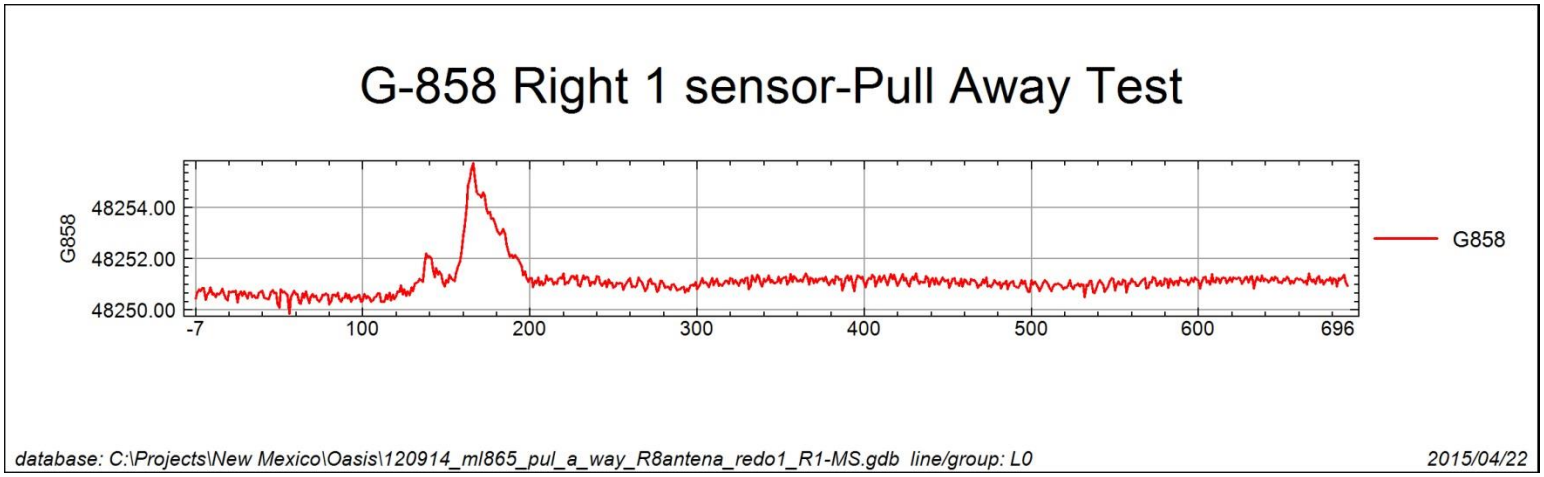


Figure C-40
G-858 6 Sensor System Right 2 Sensor-Pull Away Test Results

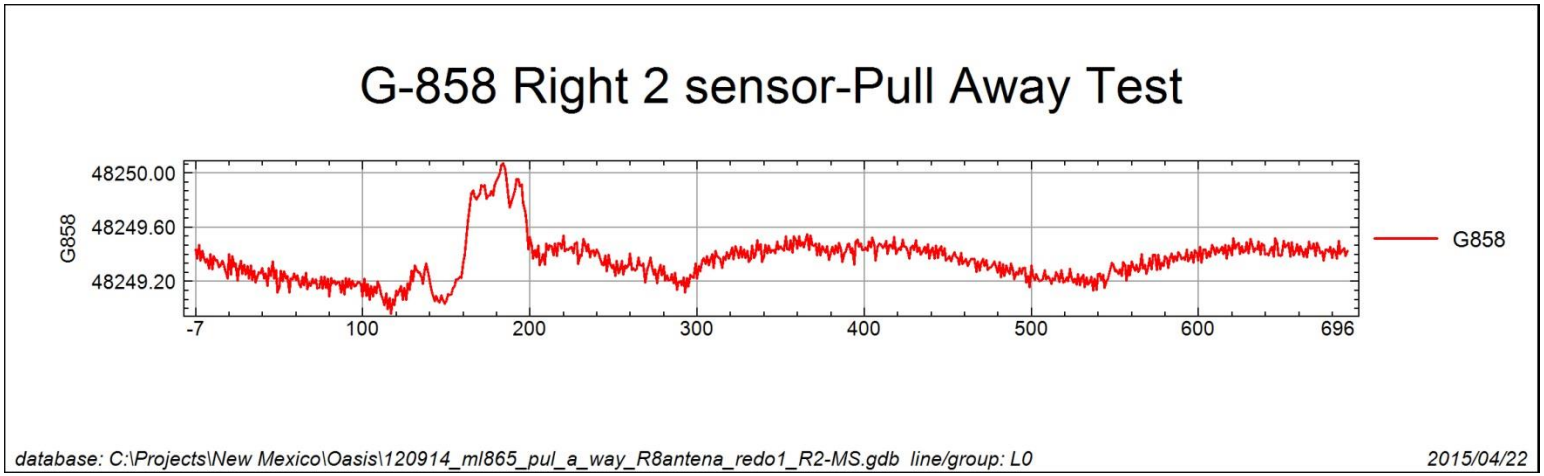


Figure C-41
EM61-MK2 5 Coil System Central Coil-Pull Away Test Results

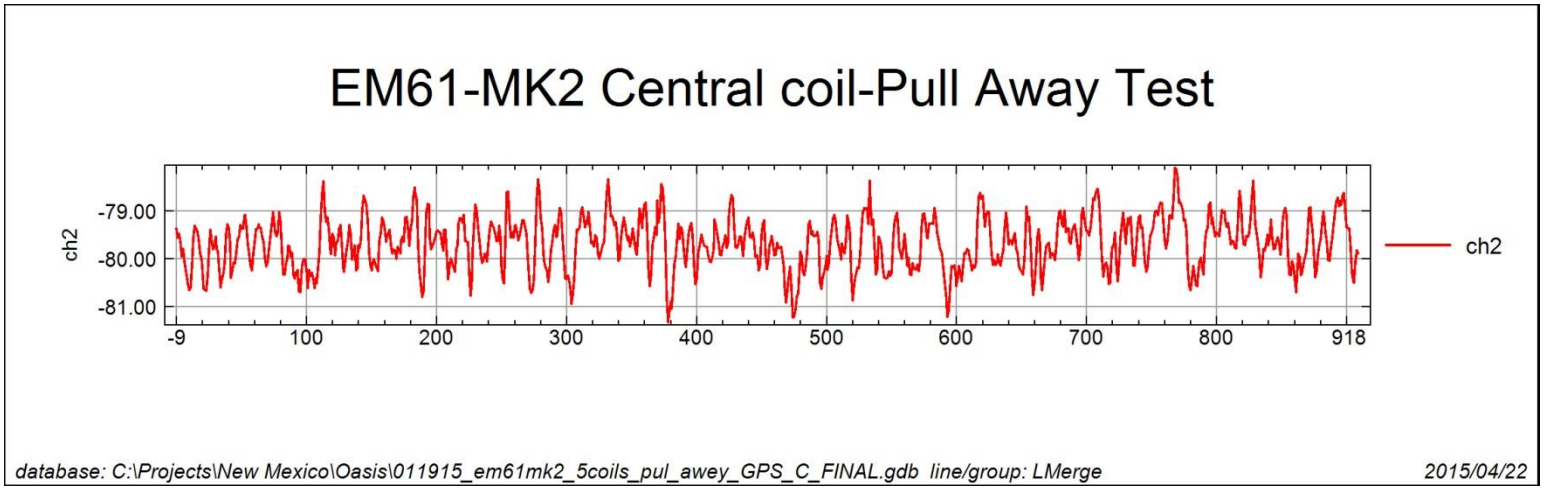


Figure C-42
EM61-MK2 5 Coil System Left 1 Coil-Pull Away Test Results

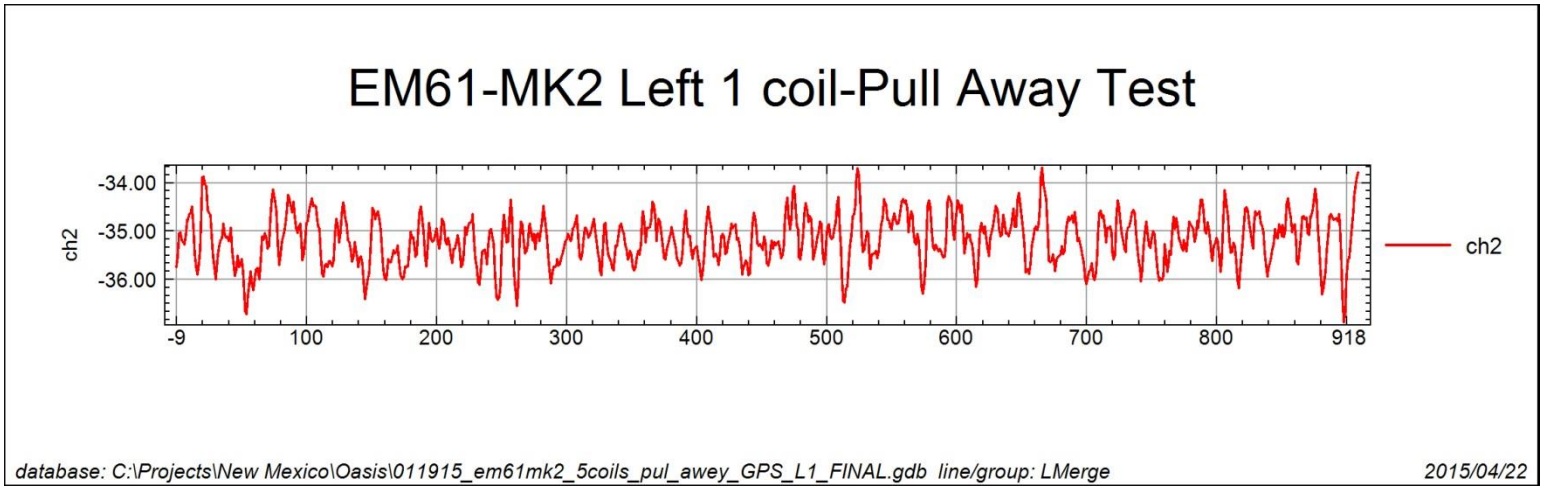


Figure C-43
EM61-MK2 5 Coil System Left 2 Coil-Pull Away Test Results

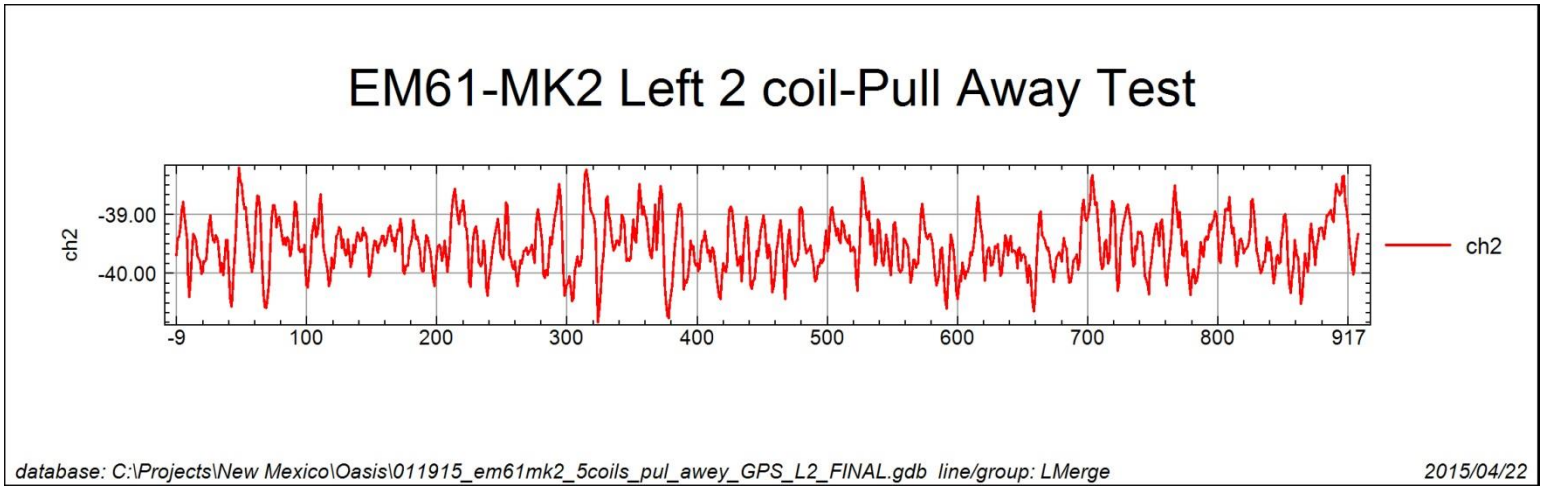


Figure C-44
EM61-MK2 5 Coil System Right 1 Coil-Pull Away Test Results

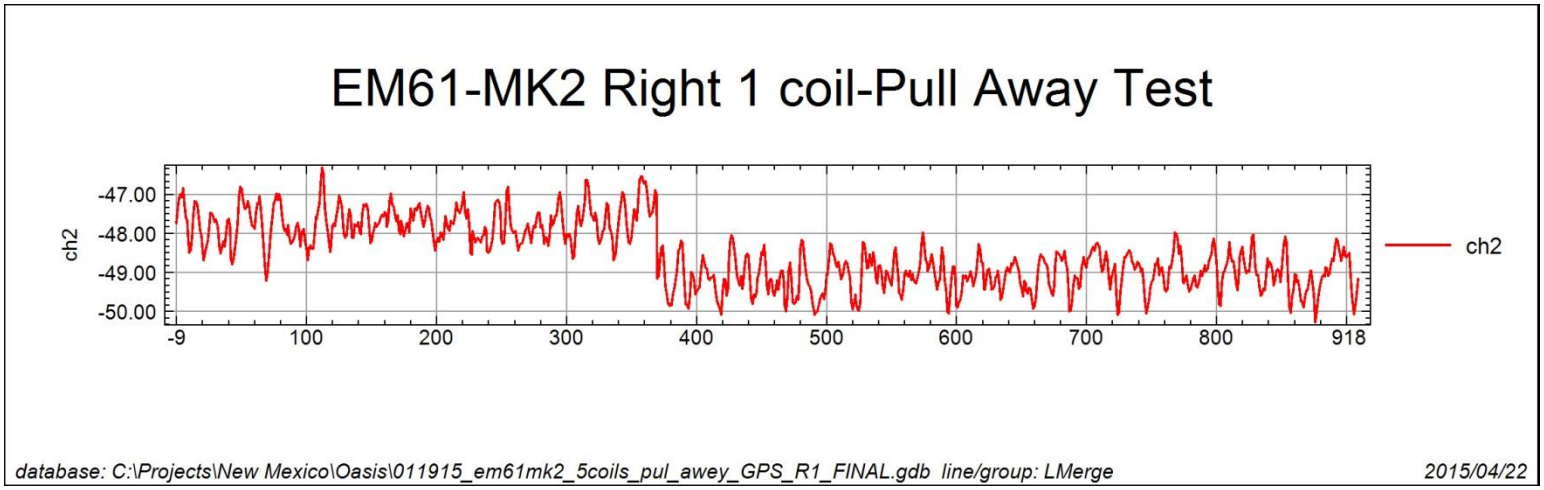


Figure C-45
EM61-MK2 5 Coil System Right 2 Coil-Pull Away Test Results

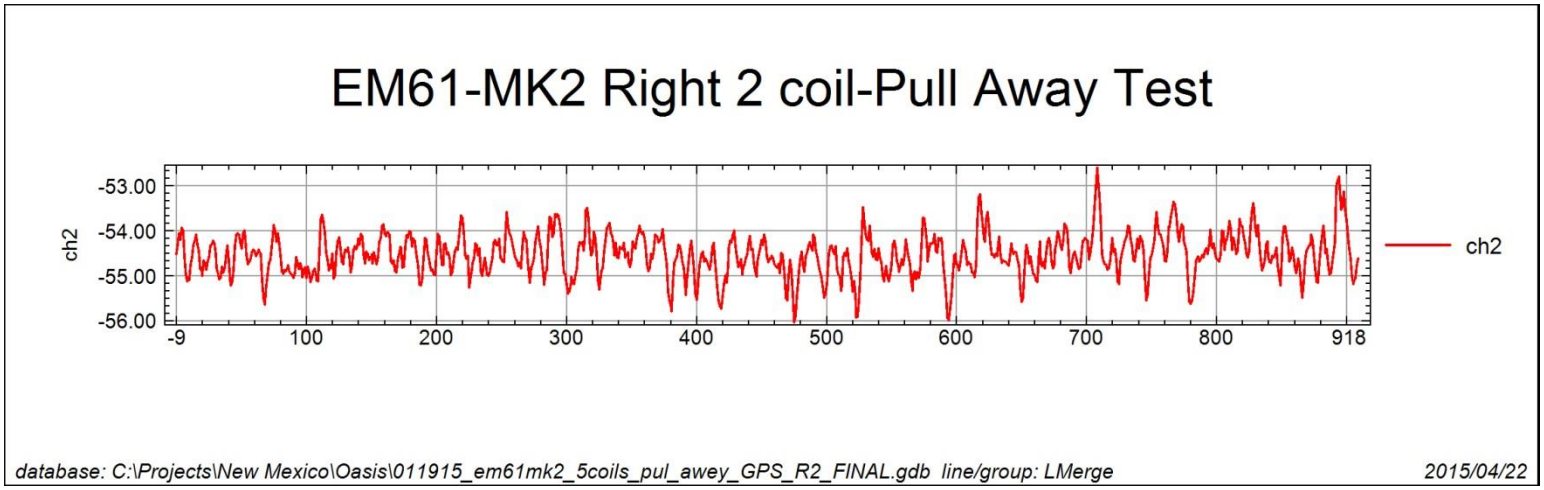


Figure C-46

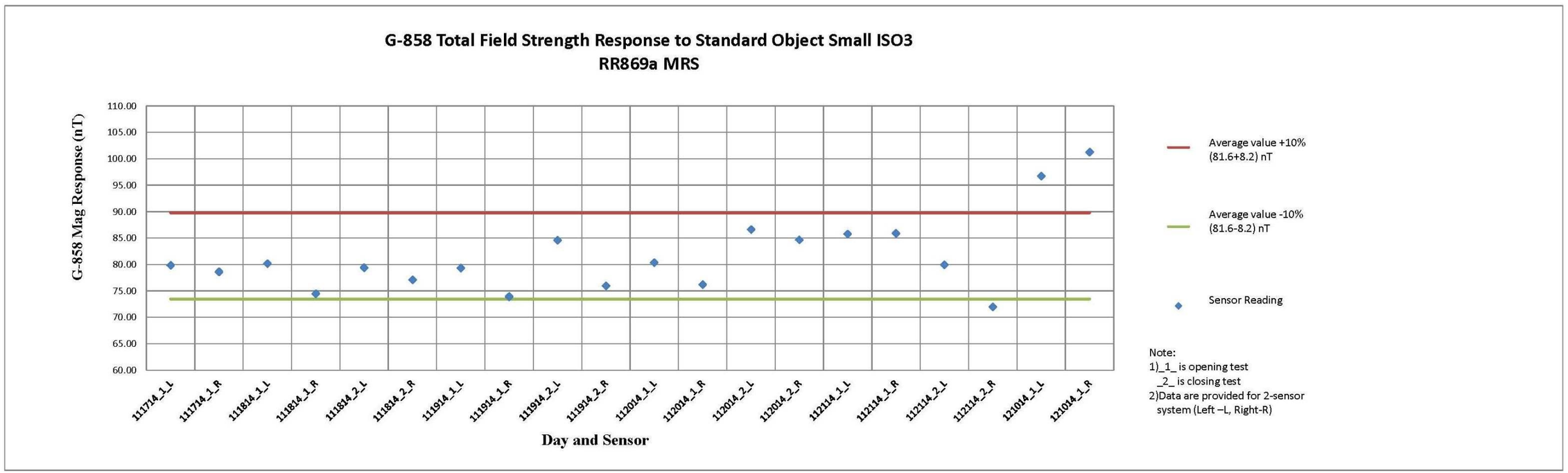

G-858 Total Field Strength Response to Standard Object Small ISO3
RR869a MRS
G-858 Mag Response (nT)
110.00
105.00
100.00
95.00
90.00
85.00
80.00
75.00
70.00
65.00
60.00
111714_1_L
111714_1_R
111814_1_L
111814_1_R
111814_2_L
111814_2_R
111914_1_L
111914_1_R
111914_2_L
111914_2_R
112014_1_L
112014_1_R
112014_2_L
112014_2_R
112114_1_L
112114_1_R
112114_2_L
112114_2_R
121014_1_L
121014_1_R
Day and Sensor
Average value +10%
(81.6+8.2) nT
Average value -10%
(81.6-8.2) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 2-sensor
system (Left –L, Right-R)

Figure C-47

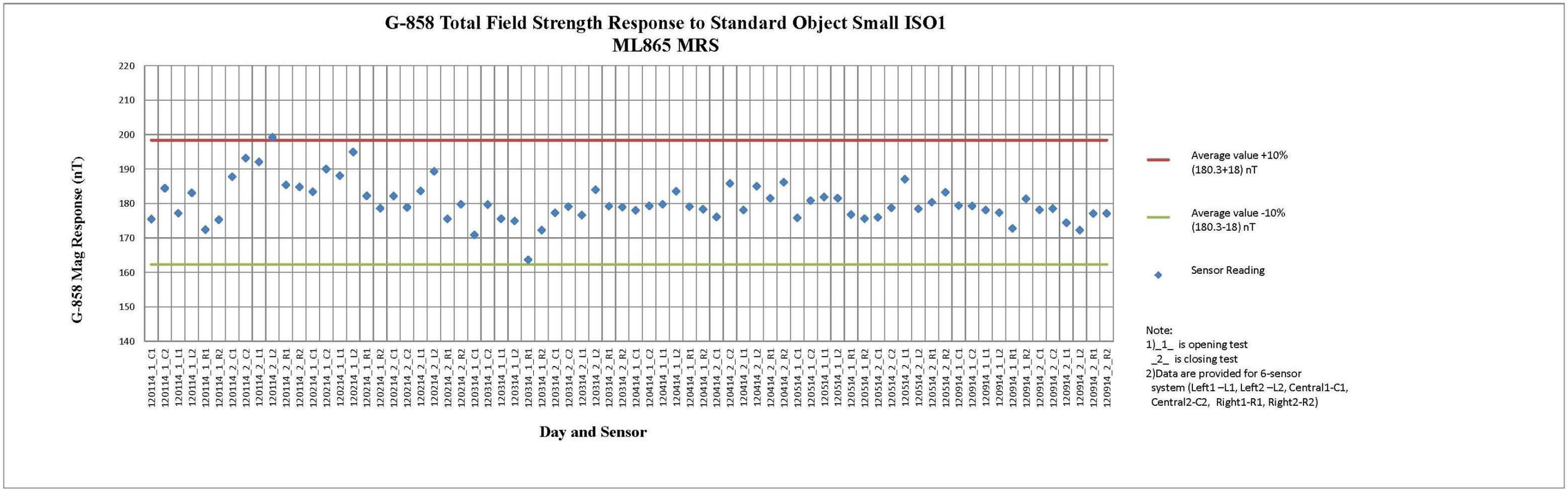

G-858 Total Field Strength Response to Standard Object Small ISO1
ML865 MRS
G-858 Mag Response (nT)
220
210
200
190
180
170
160
150
140
120114_1_C1
120114_1_C2
120114_1_L1
120114_1_L2
120114_1_R1
120114_1_R2
120114_2_C1
120114_2_C2
120114_2_L1
120114_2_L2
120114_2_R1
120114_2_R2
120214_1_C1
120214_1_C2
120214_1_L1
120214_1_L2
120214_1_R1
120214_1_R2
120214_2_C1
120214_2_C2
120214_2_L1
120214_2_L2
120214_2_R1
120214_2_R2
120314_1_C1
120314_1_C2
120314_1_L1
120314_1_L2
120314_1_R1
120314_1_R2
120314_2_C1
120314_2_C2
120314_2_L1
120314_2_L2
120314_2_R1
120314_2_R2
120414_1_C1
120414_1_C2
120414_1_L1
120414_1_L2
120414_1_R1
120414_1_R2
120414_2_C1
120414_2_C2
120414_2_L1
120414_2_L2
120414_2_R1
120414_2_R2
120514_1_C1
120514_1_C2
120514_1_L1
120514_1_L2
120514_1_R1
120514_1_R2
120514_2_C1
120514_2_C2
120514_2_L1
120514_2_L2
120514_2_R1
120514_2_R2
120914_1_C1
120914_1_C2
120914_1_L1
120914_1_L2
120914_1_R1
120914_1_R2
120914_2_C1
120914_2_C2
120914_2_L1
120914_2_L2
120914_2_R1
120914_2_R2
Day and Sensor
Average value +10%
(180.3+18) nT
Average value -10%
(180.3-18) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 6-sensor
system (Left1 –L1, Left2 –L2, Central1-C1,
Central2-C2, Right1-R1, Right2-R2)

Figure C-48

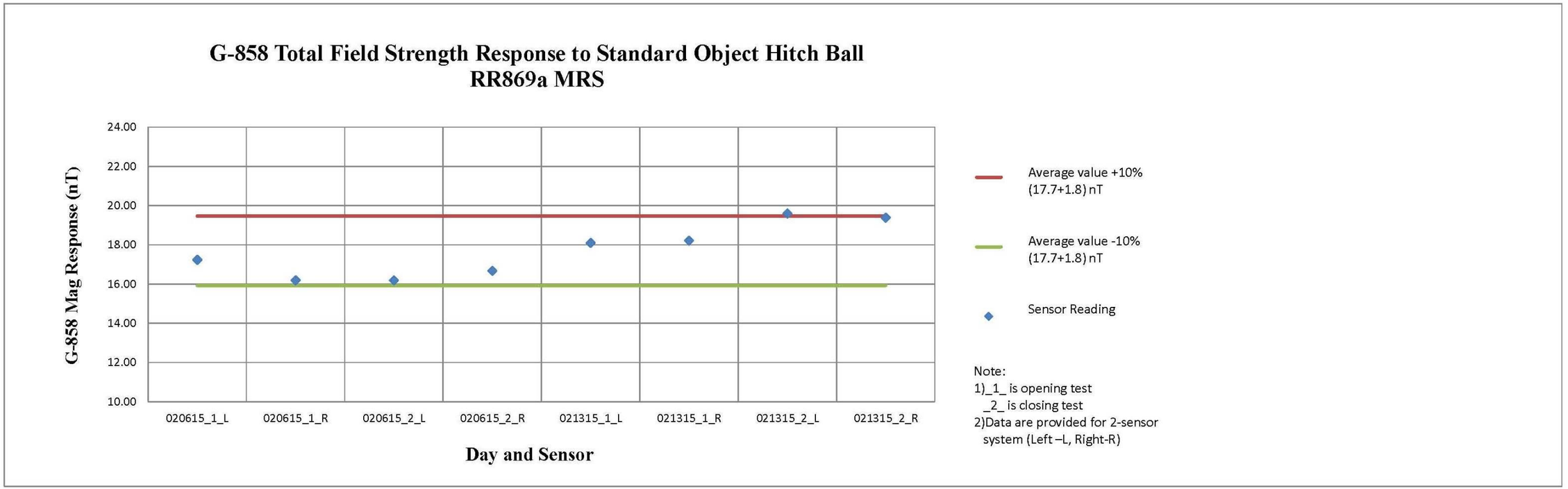

G-858 Total Field Strength Response to Standard Object Hitch Ball
RR869a MRS
G-858 Mag Response (nT)
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
020615_1_L
020615_1_R
020615_2_L
020615_2_R
021315_1_L
021315_1_R
021315_2_L
021315_2_R
Day and Sensor
Average value +10%
(17.7+1.8) nT
Average value -10%
(17.7+1.8) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 2-sensor
system (Left –L, Right-R)

Figure C-49

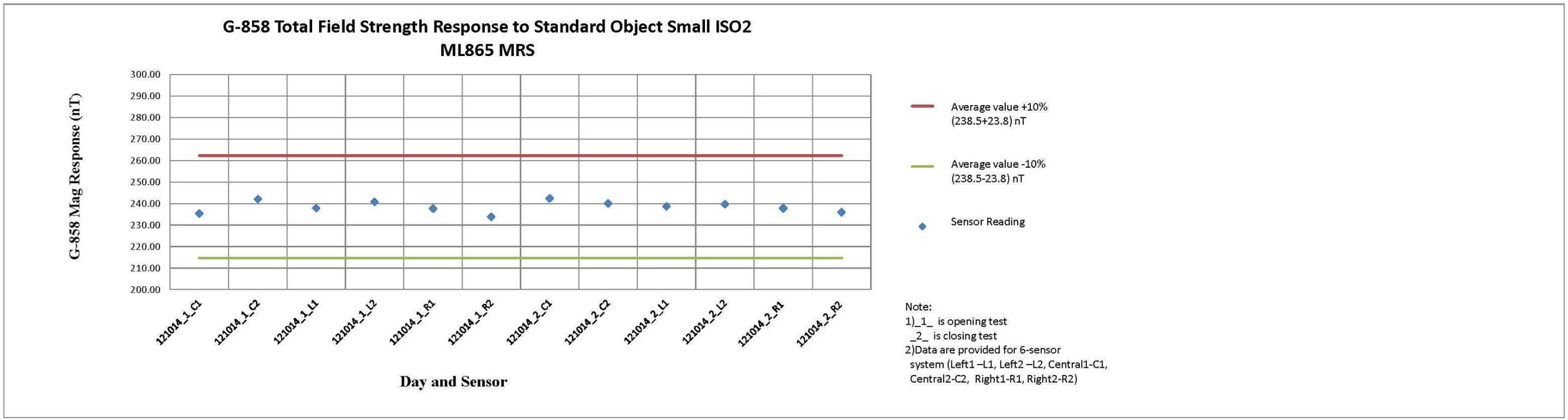

G-858 Total Field Strength Response to Standard Object Small ISO2
ML865 MRS
G-858 Mag Response (nT)
300.00
290.00
280.00
270.00
260.00
250.00
240.00
230.00
220.00
210.00
200.00
121014_1_C1
121014_1_C2
121014_1_L1
121014_1_L2
121014_1_R1
121014_1_R2
121014_2_C1
121014_2_C2
121014_2_L1
121014_2_L2
121014_2_R1
121014_2_R2
Day and Sensor
Average value +10%
(238.5+23.8) nT
Average value -10%
(238.5-23.8) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 6-sensor
system (Left1 –L1, Left2 –L2, Central1-C1,
Central2-C2, Right1-R1, Right2-R2)

Figure C-50

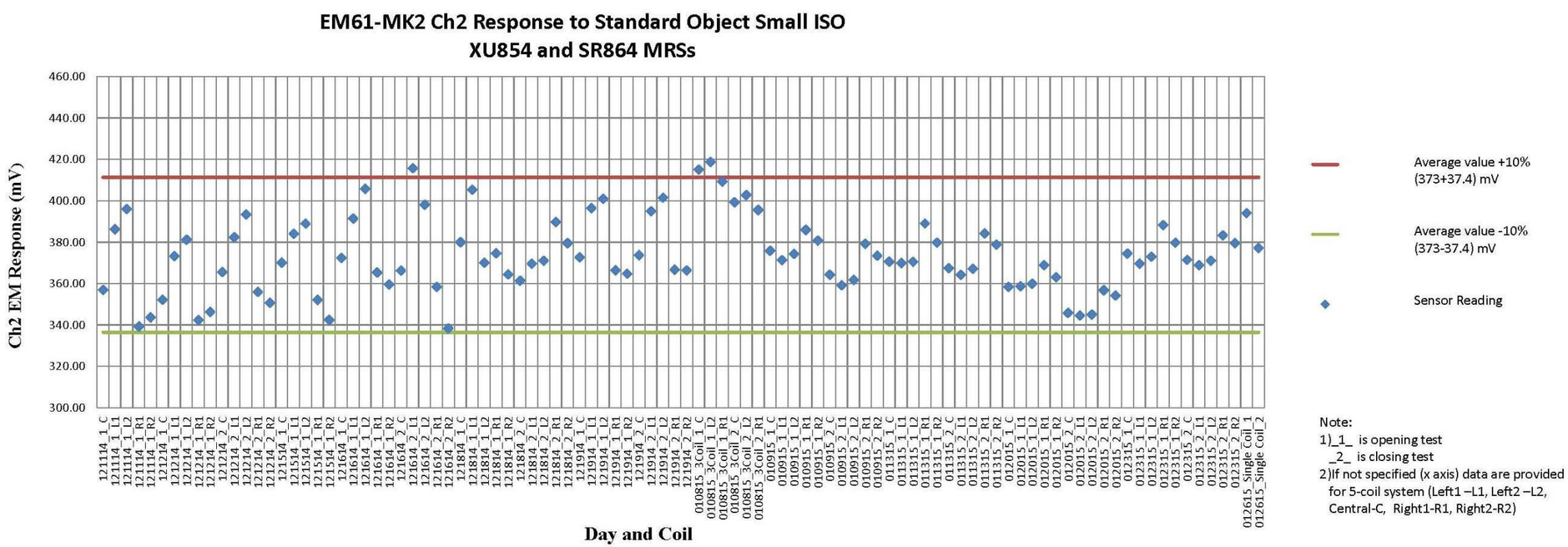

EM61-MK2 Ch2 Response to Standard Object Small ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
460.00
440.00
420.00
400.00
380.00
360.00
340.00
320.00
300.00
Day and Coil
Average value +10%
(373+37.4) mV
Average value -10%
(373-37.4) mV
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided
for 5-coil system (Left1 –L1, Left2 –L2,
Central-C, Right1-R1, Right2-R2)

Figure C-51

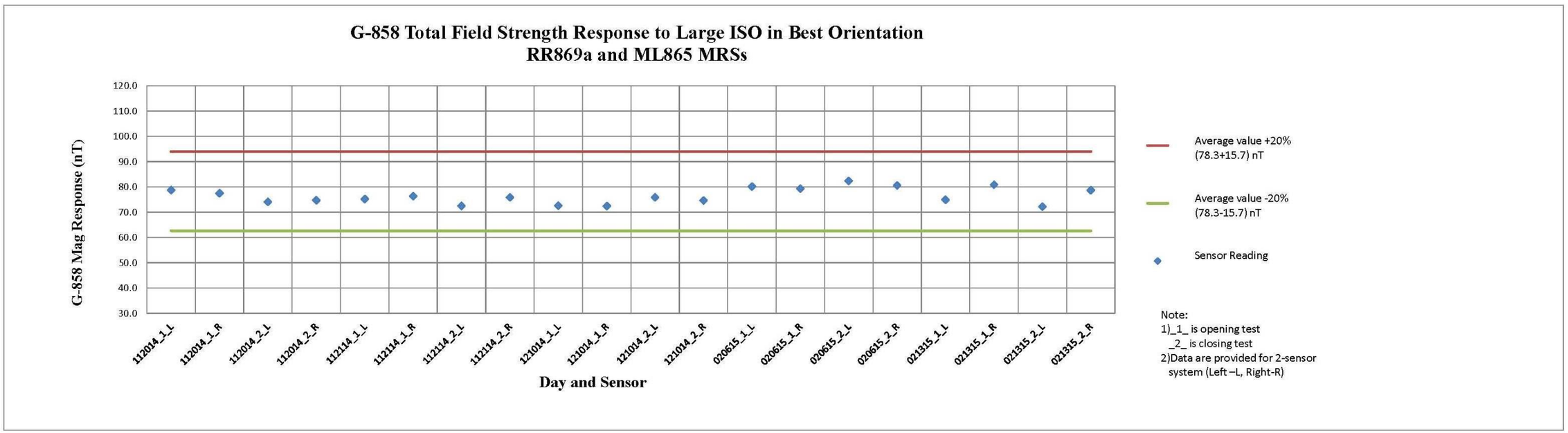

G-858 Total Field Strength Response to Large ISO in Best Orientation
RR869a and ML865 MRSs
G-858 Mag Response (nT)
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
112014_1_L
112014_1_R
112014_2_L
112014_2_R
112114_1_L
112114_1_R
112114_2_L
112114_2_R
121014_1_L
121014_1_R
121014_2_L
121014_2_R
020615_1_L
020615_1_R
020615_2_L
020615_2_R
021315_1_L
021315_1_R
021315_2_L
021315_2_R
Day and Sensor
Average value +20%
(78.3+15.7) nT
Average value -20%
(78.3-15.7) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 2-sensor system (Left –L, Right-R)

Figure C-52

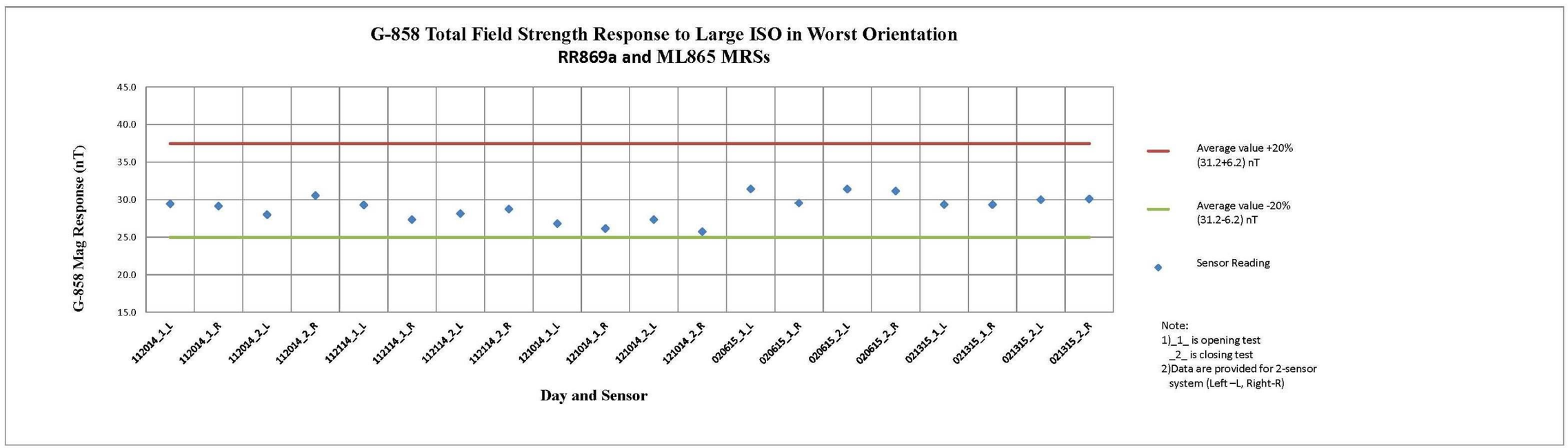

G-858 Total Field Strength Response to Large ISO in Worst Orientation
RR869a and ML865 MRSs
G-858 Mag Response (nT)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
112014_1_L
112014_1_R
112014_2_L
112014_2_R
112114_1_L
112114_1_R
112114_2_L
112114_2_R
121014_1_L
121014_1_R
121014_2_L
121014_2_R
020615_1_L
020615_1_R
020615_2_L
020615_2_R
021315_1_L
021315_1_R
021315_2_L
021315_2_R
Day and Sensor
Average value +20%
(31.2+6.2) nT
Average value -20%
(31.2-6.2) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 2-sensor
system (Left –L, Right-R)

Figure C-53

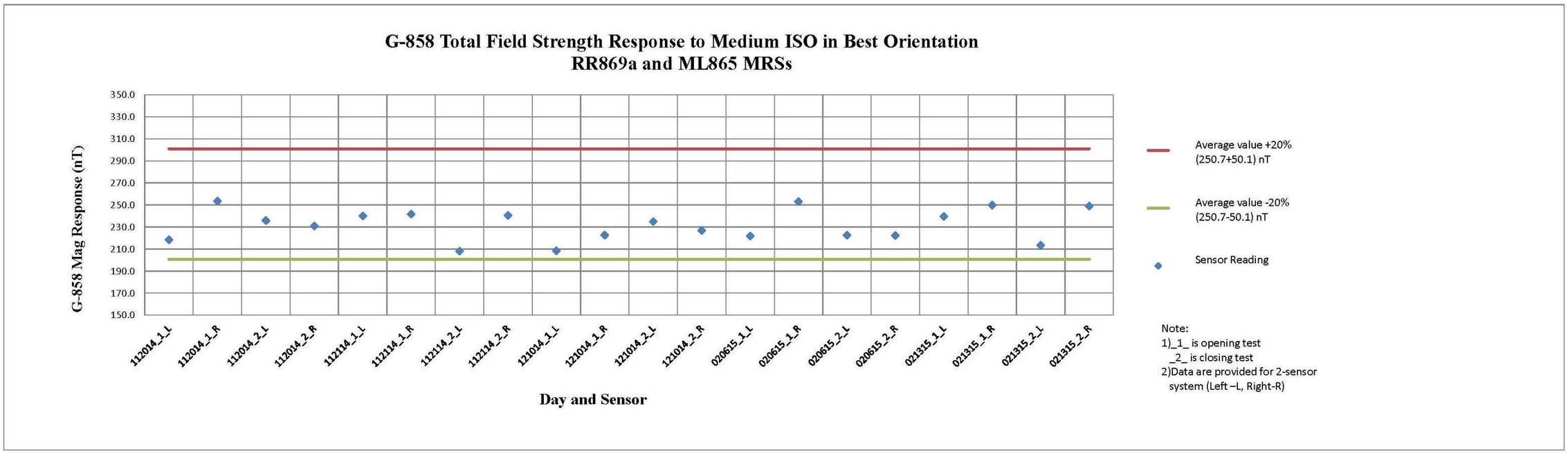

G-858 Total Field Strength Response to Medium ISO in Best Orientation
RR869a and ML865 MRSs
G-858 Mag Response (nT)
350.0
330.0
310.0
290.0
270.0
250.0
230.0
210.0
190.0
170.0
150.0
112014_1_L
112014_1_R
112014_2_L
112014_2_R
112114_1_L
112114_1_R
112114_2_L
112114_2_R
121014_1_L
121014_1_R
121014_2_L
121014_2_R
020615_1_L
020615_1_R
020615_2_L
020615_2_R
021315_1_L
021315_1_R
021315_2_L
021315_2_R
Day and Sensor
Average value +20%
(250.7+50.1) nT
Average value -20%
(250.7-50.1) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 2-sensor
system (Left –L, Right-R)

Figure C-54

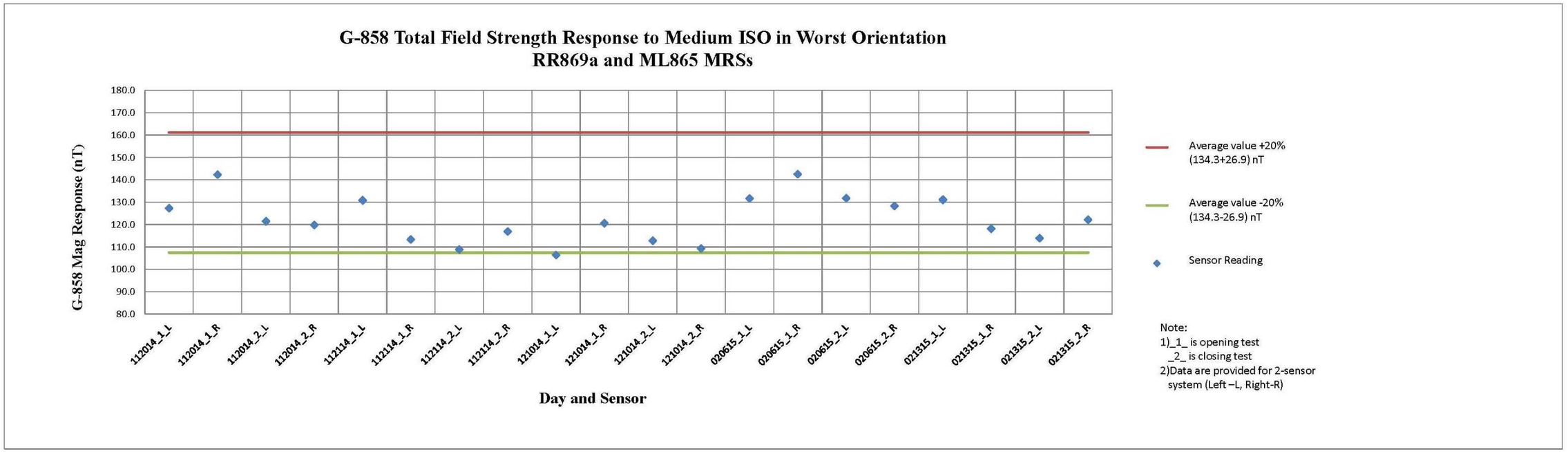

G-858 Total Field Strength Response to Medium ISO in Worst Orientation
RR869a and ML865 MRSs
G-858 Mag Response (nT)
180.0
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
112014_1_L
112014_1_R
112014_2_L
112014_2_R
112114_1_L
112114_1_R
112114_2_L
112114_2_R
121014_1_L
121014_1_R
121014_2_L
121014_2_R
020615_1_L
020615_1_R
020615_2_L
020615_2_R
021315_1_L
021315_1_R
021315_2_L
021315_2_R
Day and Sensor
Average value +20%
(134.3+26.9) nT
Average value -20%
(134.3-26.9) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 2-sensor
system (Left –L, Right-R)

Figure C-55

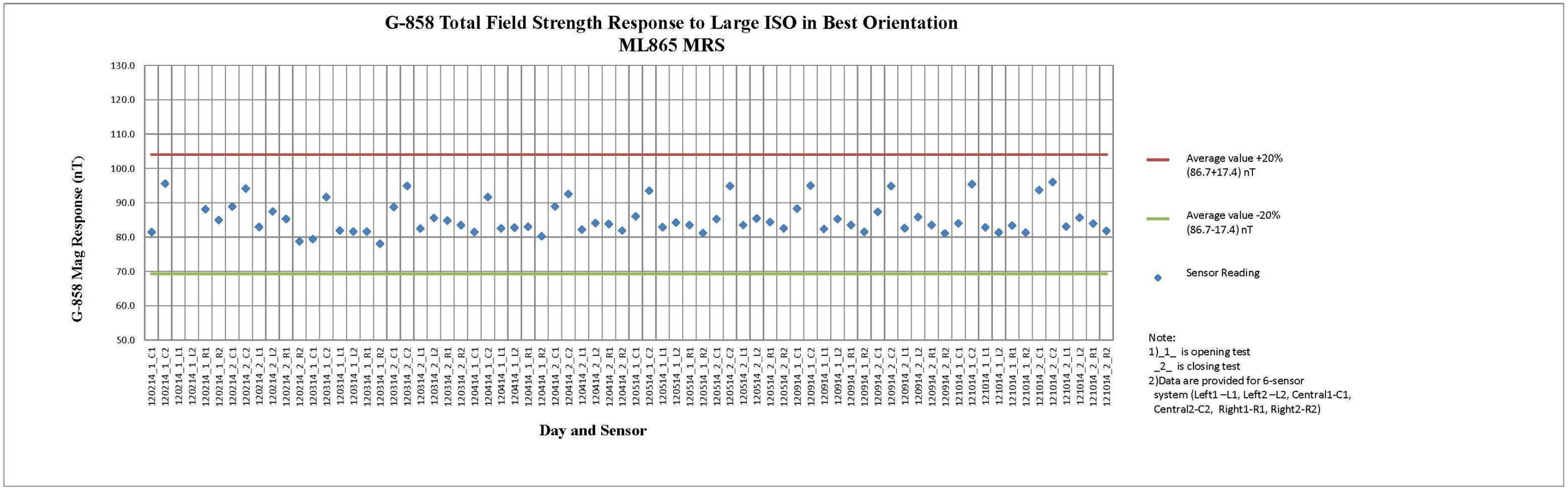

G-858 Total Field Strength Response to Large ISO in Best Orientation
ML865 MRS
G-858 Mag Response (nT)
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
120214_1_C1
120214_1_C2
120214_1_L1
120214_1_L2
120214_1_R1
120214_1_R2
120214_2_C1
120214_2_C2
120214_2_L1
120214_2_L2
120214_2_R1
120214_2_R2
120314_1_C1
120314_1_C2
120314_1_L1
120314_1_L2
120314_1_R1
120314_1_R2
120314_2_C1
120314_2_C2
120314_2_L1
120314_2_L2
120314_2_R1
120314_2_R2
120414_1_C1
120414_1_C2
120414_1_L1
120414_1_L2
120414_1_R1
120414_1_R2
120414_2_C1
120414_2_C2
120414_2_L1
120414_2_L2
120414_2_R1
120414_2_R2
120514_1_C1
120514_1_C2
120514_1_L1
120514_1_L2
120514_1_R1
120514_1_R2
120514_2_C1
120514_2_C2
120514_2_L1
120514_2_L2
120514_2_R1
120514_2_R2
120914_1_C1
120914_1_C2
120914_1_L1
120914_1_L2
120914_1_R1
120914_1_R2
120914_2_C1
120914_2_C2
120914_2_L1
120914_2_L2
120914_2_R1
120914_2_R2
121014_1_C1
121014_1_C2
121014_1_L1
121014_1_L2
121014_1_R1
121014_1_R2
121014_2_C1
121014_2_C2
121014_2_L1
121014_2_L2
121014_2_R1
121014_2_R2
Day and Sensor
Average value +20%
(86.7+17.4) nT
Average value -20%
(86.7-17.4) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 6-sensor
system (Left1 –L1, Left2 –L2, Central1-C1,
Central2-C2, Right1-R1, Right2-R2)

Figure C-56

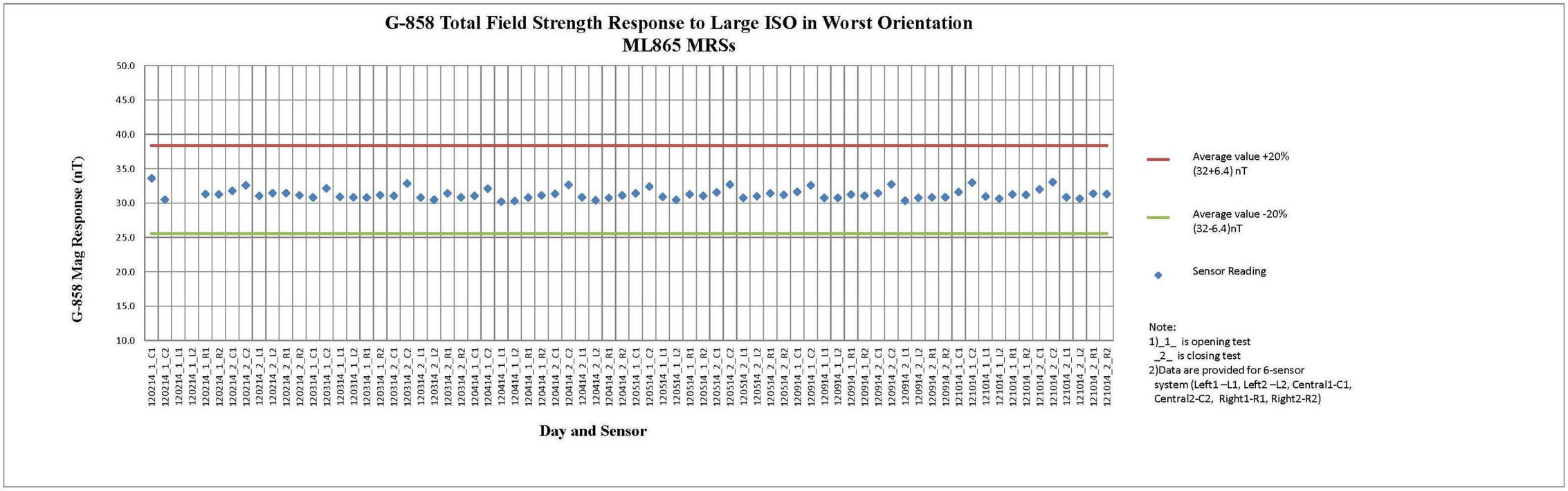

G-858 Total Field Strength Response to Large ISO in Worst Orientation
ML865 MRSs
G-858 Mag Response (nT)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
120214_1_C1
120214_1_C2
120214_1_L1
120214_1_L2
120214_1_R1
120214_1_R2
120214_2_C1
120214_2_C2
120214_2_L1
120214_2_L2
120214_2_R1
120214_2_R2
120314_1_C1
120314_1_C2
120314_1_L1
120314_1_L2
120314_1_R1
120314_1_R2
120314_2_C1
120314_2_C2
120314_2_L1
120314_2_L2
120314_2_R1
120314_2_R2
120414_1_C1
120414_1_C2
120414_1_L1
120414_1_L2
120414_1_R1
120414_1_R2
120414_2_C1
120414_2_C2
120414_2_L1
120414_2_L2
120414_2_R1
120414_2_R2
120514_1_C1
120514_1_C2
120514_1_L1
120514_1_L2
120514_1_R1
120514_1_R2
120514_2_C1
120514_2_C2
120514_2_L1
120514_2_L2
120514_2_R1
120514_2_R2
120914_1_C1
120914_1_C2
120914_1_L1
120914_1_L2
120914_1_R1
120914_1_R2
120914_2_C1
120914_2_C2
120914_2_L1
120914_2_L2
120914_2_R1
120914_2_R2
121014_1_C1
121014_1_C2
121014_1_L1
121014_1_L2
121014_1_R1
121014_1_R2
121014_2_C1
121014_2_C2
121014_2_L1
121014_2_L2
121014_2_R1
121014_2_R2
Day and Sensor
Average value +20%
(32+6.4) nT
Average value -20%
(32-6.4)nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 6-sensor
system (Left1 –L1, Left2 –L2, Central1-C1,
Central2-C2, Right1-R1, Right2-R2)

Figure C-57

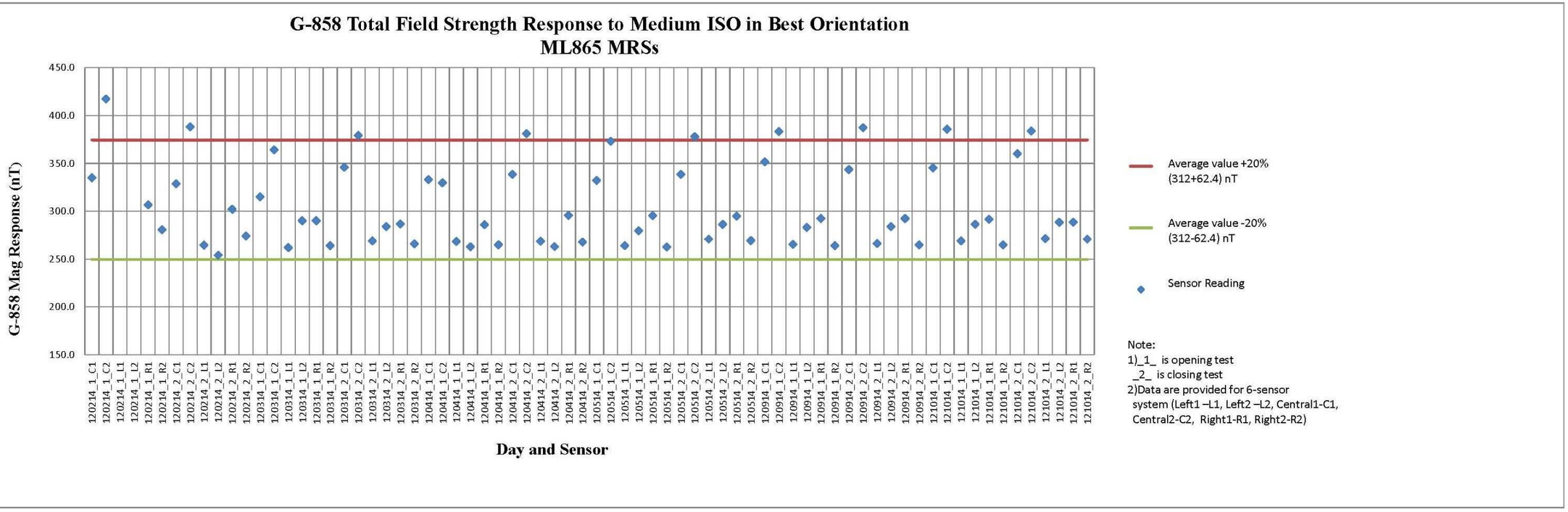

G-858 Total Field Strength Response to Medium ISO in Best Orientation
ML865 MRSs
G-858 Mag Response (nT)
450.0
400.0
350.0
300.0
250.0
200.0
150.0
120214_1_C1
120214_1_C2
120214_1_L1
120214_1_L2
120214_1_R1
120214_1_R2
120214_2_C1
120214_2_C2
120214_2_L1
120214_2_L2
120214_2_R1
120214_2_R2
120314_1_C1
120314_1_C2
120314_1_L1
120314_1_L2
120314_1_R1
120314_1_R2
120314_2_C1
120314_2_C2
120314_2_L1
120314_2_L2
120314_2_R1
120314_2_R2
120414_1_C1
120414_1_C2
120414_1_L1
120414_1_L2
120414_1_R1
120414_1_R2
120414_2_C1
120414_2_C2
120414_2_L1
120414_2_L2
120414_2_R1
120414_2_R2
120514_1_C1
120514_1_C2
120514_1_L1
120514_1_L2
120514_1_R1
120514_1_R2
120514_2_C1
120514_2_C2
120514_2_L1
120514_2_L2
120514_2_R1
120514_2_R2
120914_1_C1
120914_1_C2
120914_1_L1
120914_1_L2
120914_1_R1
120914_1_R2
120914_2_C1
120914_2_C2
120914_2_L1
120914_2_L2
120914_2_R1
120914_2_R2
121014_1_C1
121014_1_C2
121014_1_L1
121014_1_L2
121014_1_R1
121014_1_R2
121014_2_C1
121014_2_C2
121014_2_L1
121014_2_L2
121014_2_R1
121014_2_R2
Day and Sensor
Average value +20%
(312+62.4) nT
Average value -20%
(312-62.4) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 6-sensor
system (Left1 –L1, Left2 –L2, Central1-C1,
Central2-C2, Right1-R1, Right2-R2)

Figure C-58

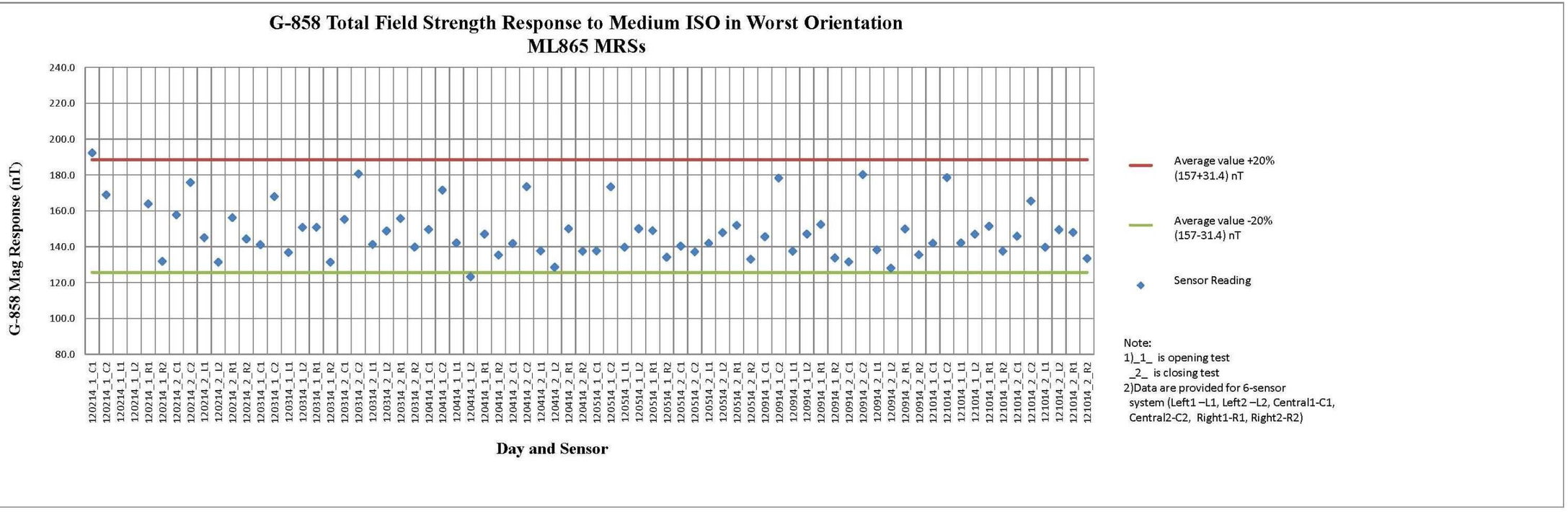

G-858 Total Field Strength Response to Medium ISO in Worst Orientation
ML865 MRSs
G-858 Mag Response (nT)
240.0
220.0
200.0
180.0
160.0
140.0
120.0
100.0
80.0
Day and Sensor
Average value +20%
(157+31.4) nT
Average value -20%
(157-31.4) nT
Sensor Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)Data are provided for 6-sensor
system (Left1 –L1, Left2 –L2, Central1-C1,
Central2-C2, Right1-R1, Right2-R2)

Figure C-59

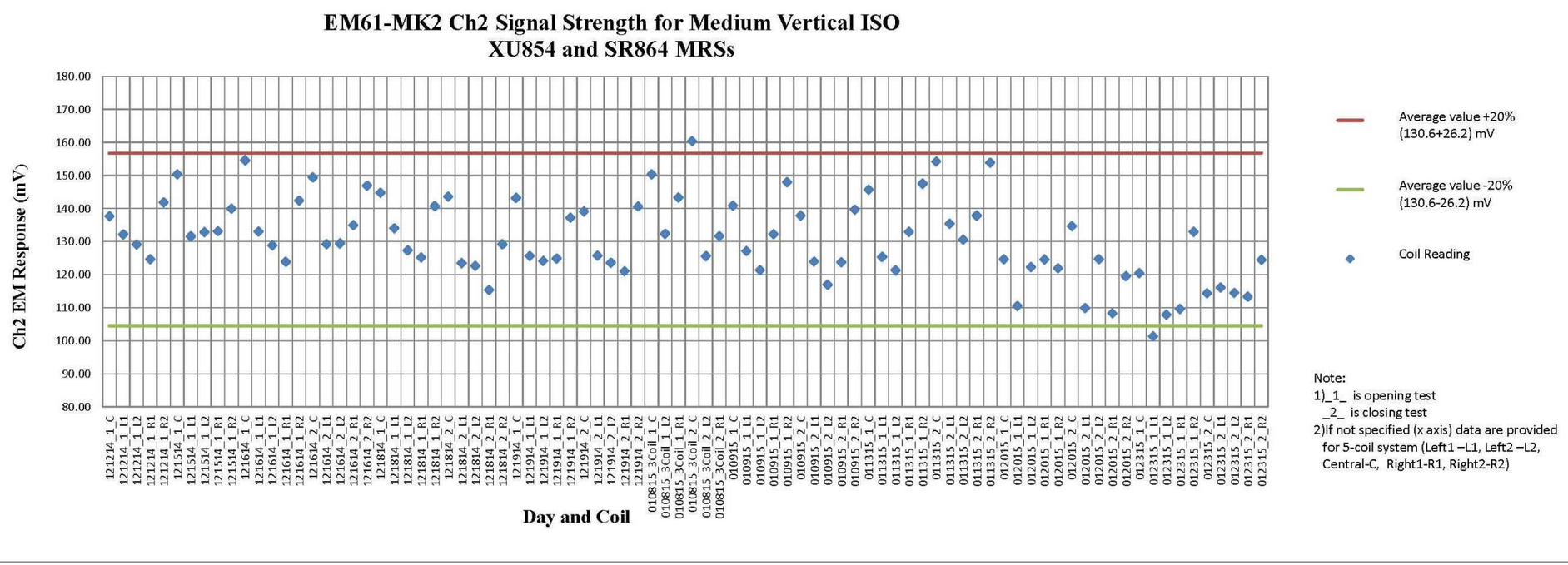

EM61-MK2 Ch2 Signal Strength for Medium Vertical ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
180.00
170.00
160.00
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
Day and Coil
Average value +20%
(130.6+26.2) mV
Average value -20%
(130.6-26.2) mV
Coil Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided
for 5-coil system (Left1 –L1, Left2 –L2,
Central-C, Right1-R1, Right2-R2)

Figure C-60

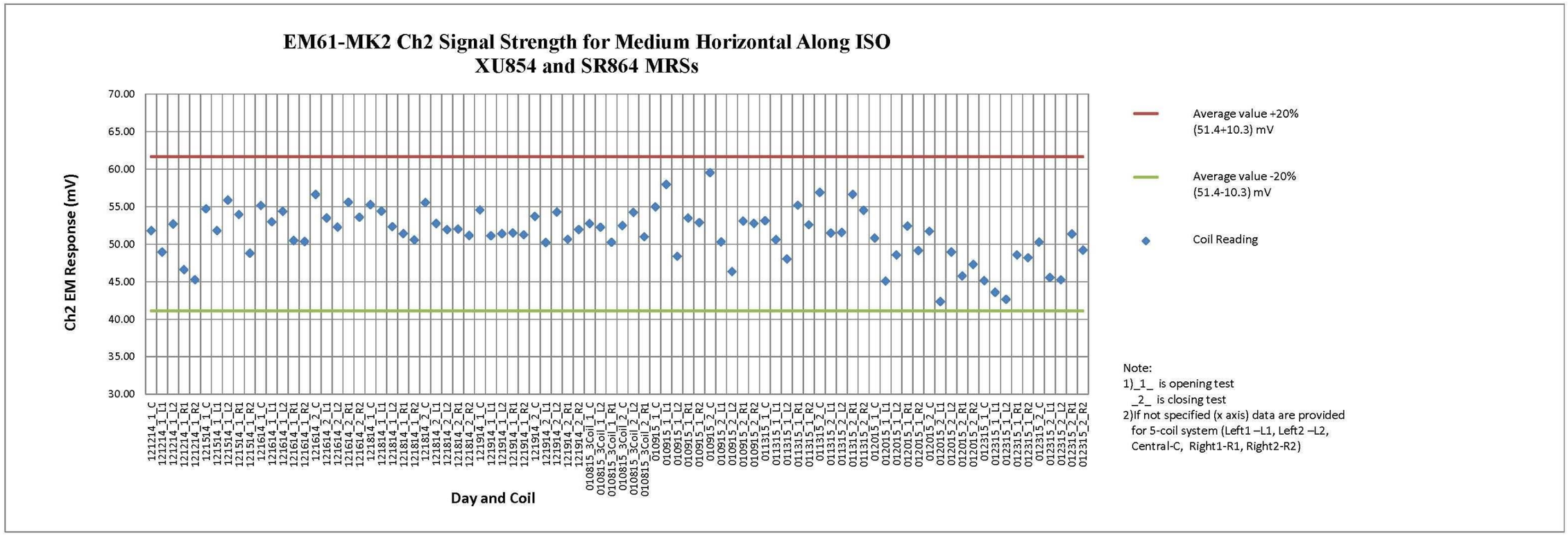

EM61-MK2 Ch2 Signal Strength for Medium Horizontal Along ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
70.00
65.00
60.00
55.00
50.00
45.00
40.00
35.00
30.00
Day and Coil
Average value +20%
(51.4+10.3) mV
Average value -20%
(51.4-10.3) mV
Coil Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided
for 5-coil system (Left1 –L1, Left2 –L2,
Central-C, Right1-R1, Right2-R2)

Figure C-61

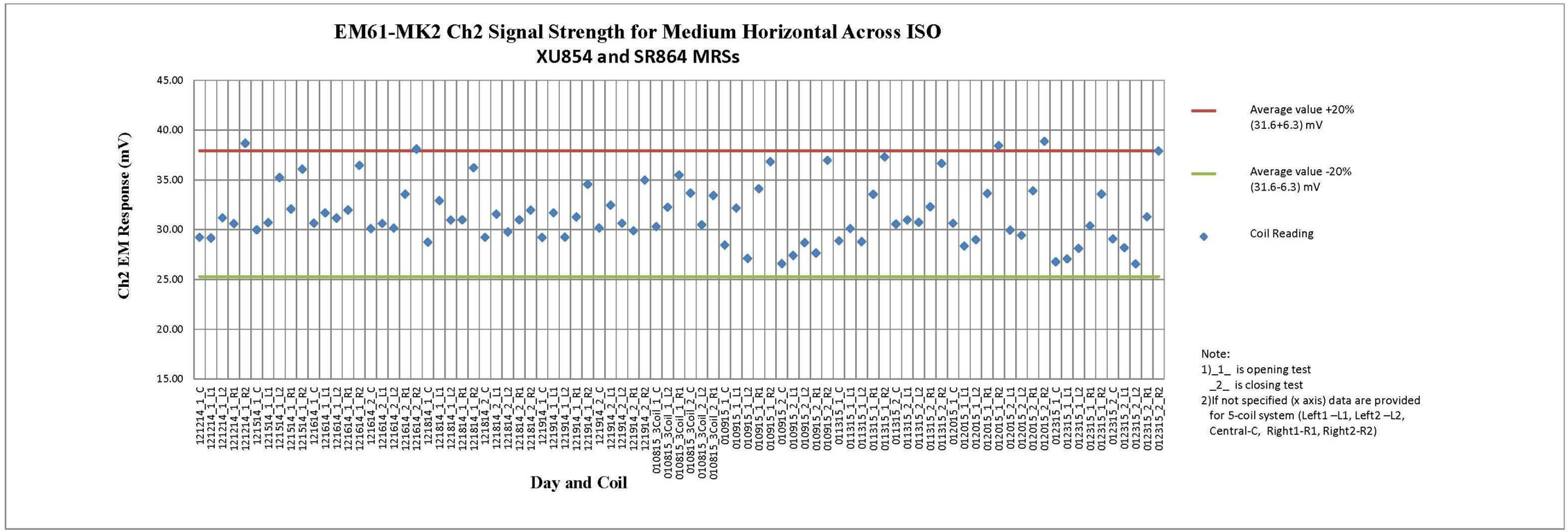

EM61-MK2 Ch2 Signal Strength for Medium Horizontal Across ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
45.00
40.00
35.00
30.00
25.00
20.00
15.00
Day and Coil
Average value +20%
(31.6+6.3) mV
Average value -20%
(31.6-6.3) mV
Coil Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided
for 5-coil system (Left1 –L1, Left2 –L2,
Central-C, Right1-R1, Right2-R2)

Figure C-62

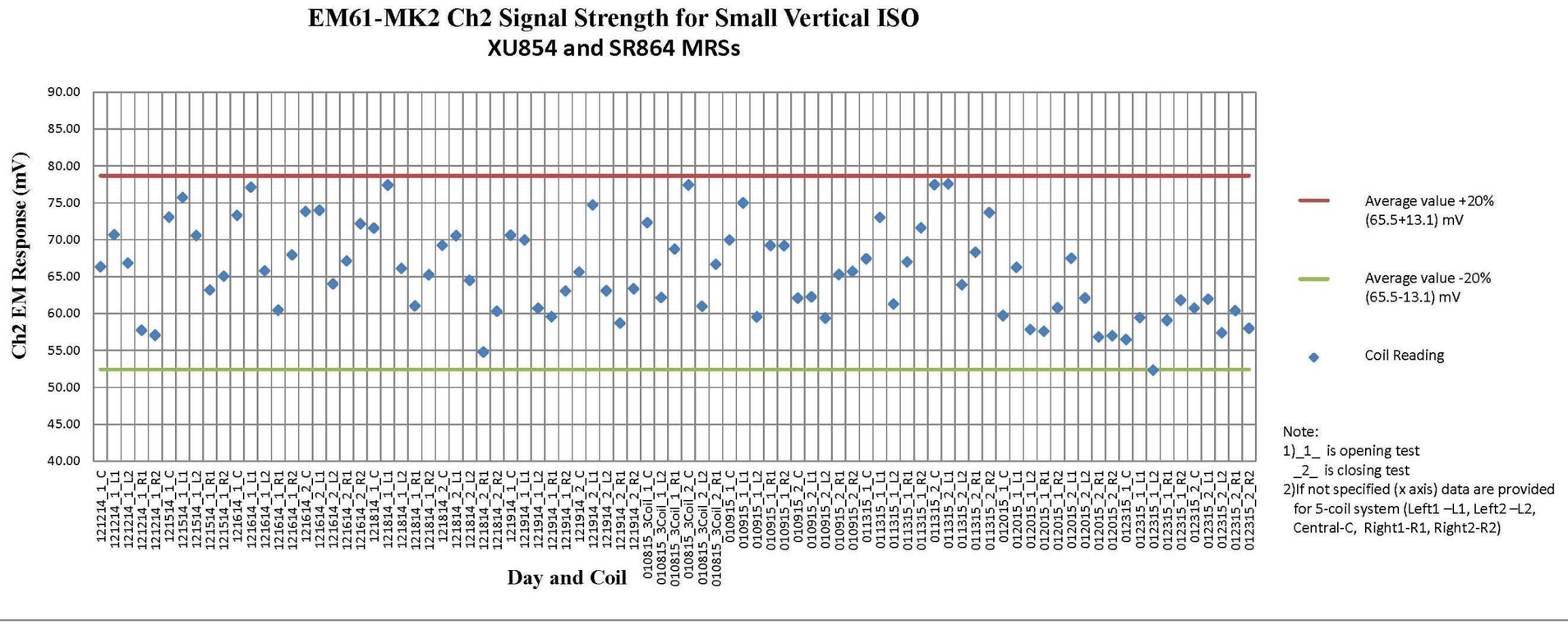

EM61-MK2 Ch2 Signal Strength for Small Vertical ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
90.00
85.00
80.00
75.00
70.00
65.00
60.00
55.00
50.00
45.00
40.00
121214_1_C
121214_1_L1
121214_1_L2
121214_1_R1
121214_1_R2
121514_1_C
121514_1_L1
121514_1_L2
121514_1_R1
121514_1_R2
121614_1_C
121614_1_L1
121614_1_L2
121614_1_R1
121614_1_R2
121614_2_C
121614_2_L1
121614_2_L2
121614_2_R1
121614_2_R2
121814_1_C
121814_1_L1
121814_1_L2
121814_1_R1
121814_1_R2
121814_2_C
121814_2_L1
121814_2_L2
121814_2_R1
121814_2_R2
121914_1_C
121914_1_L1
121914_1_L2
121914_1_R1
121914_1_R2
121914_2_C
121914_2_L1
121914_2_L2
121914_2_R1
121914_2_R2
010815_3Coil_1_C
010815_3Coil_1_L2
010815_3Coil_1_R1
010815_3Coil_2_C
010815_3Coil_2_L2
010815_3Coil_2_R1
010915_1_C
010915_1_L1
010915_1_L2
010915_1_R1
010915_1_R2
010915_2_C
010915_2_L1
010915_2_L2
010915_2_R1
010915_2_R2
011315_1_C
011315_1_L1
011315_1_L2
011315_1_R1
011315_1_R2
011315_2_C
011315_2_L1
011315_2_L2
011315_2_R1
011315_2_R2
012015_1_C
012015_1_L1
012015_1_L2
012015_1_R1
012015_1_R2
012015_2_L1
012015_2_L2
012015_2_R1
012015_2_R2
012315_1_C
012315_1_L1
012315_1_L2
012315_1_R1
012315_1_R2
012315_2_C
012315_2_L1
012315_2_L2
012315_2_R1
012315_2_R2
Day and Coil
Average value +20%
(65.5+13.1) mV
Average value -20%
(65.5-13.1) mV
Coil Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided
for 5-coil system (Left1 –L1, Left2 –L2,
Central-C, Right1-R1, Right2-R2)

Figure C-63

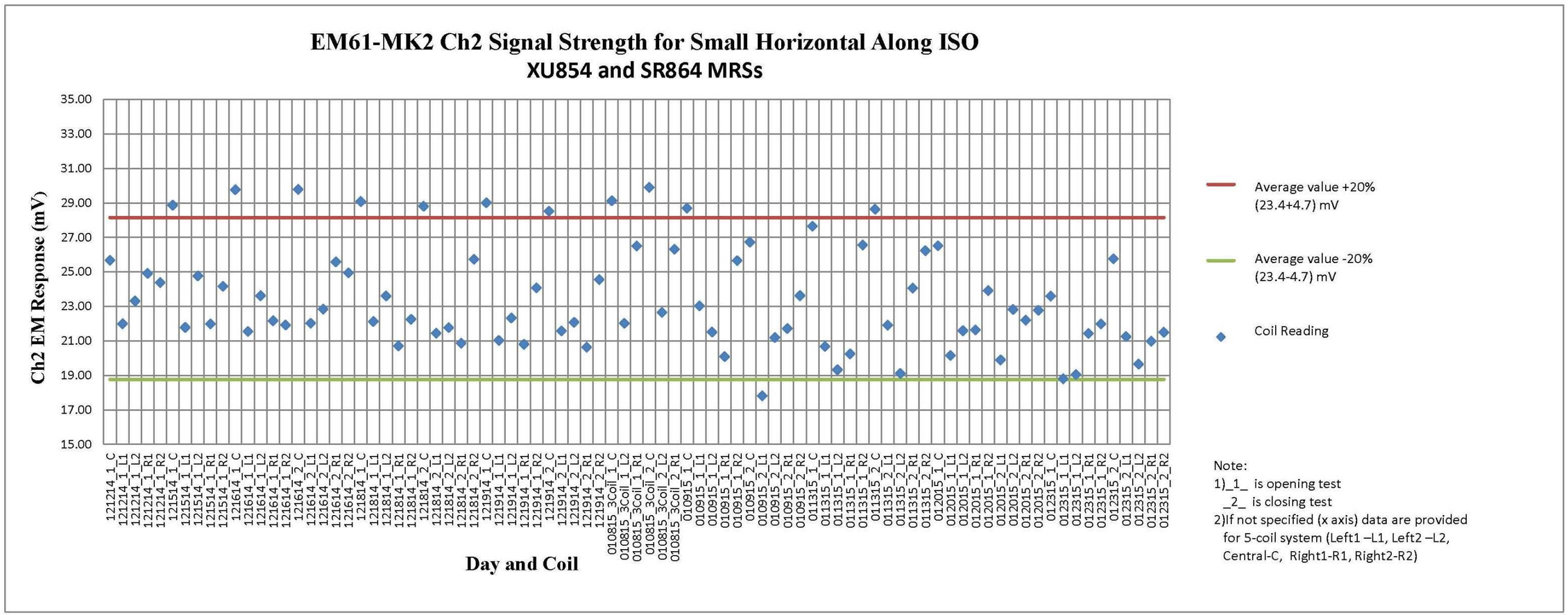
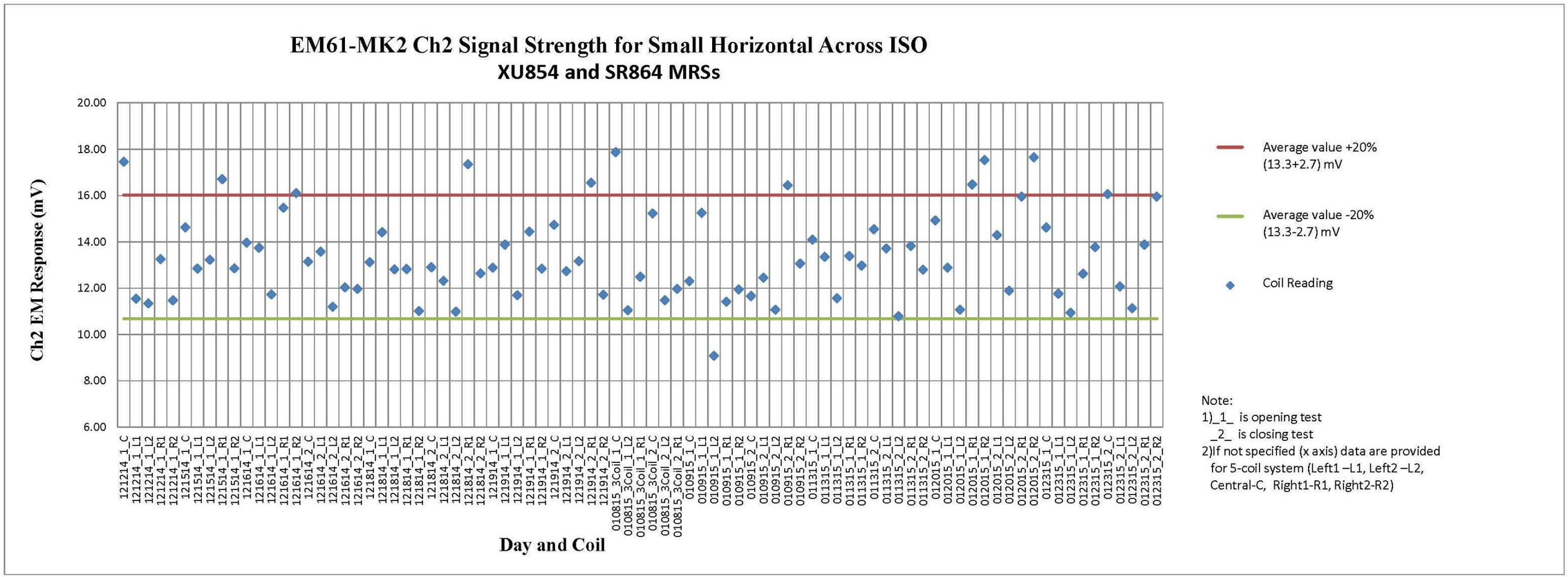

EM61-MK2 Ch2 Signal Strength for Small Horizontal Along ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
35.00
33.00
31.00
29.00
27.00
25.00
23.00
21.00
19.00
17.00
15.00
121214_1_C
121214_1_L1
121214_1_L2
121214_1_R1
121214_1_R2
121514_1_C
121514_1_L1
121514_1_L2
121514_1_R1
121514_1_R2
121614_1_C
121614_1_L1
121614_1_L2
121614_1_R1
121614_1_R2
121614_2_C
121614_2_L1
121614_2_L2
121614_2_R1
121614_2_R2
121814_1_C
121814_1_L1
121814_1_L2
121814_1_R1
121814_1_R2
121814_2_C
121814_2_L1
121814_2_L2
121814_2_R1
121814_2_R2
121914_1_C
121914_1_L1
121914_1_L2
121914_1_R1
121914_1_R2
121914_2_C
121914_2_L1
121914_2_L2
121914_2_R1
121914_2_R2
010815_3Coil_1_C
010815_3Coil_1_L2
010815_3Coil_1_R1
010815_3Coil_2_C
010815_3Coil_2_L2
010815_3Coil_2_R1
010915_1_C
010915_1_L1
010915_1_L2
010915_1_R1
010915_1_R2
010915_2_C
010915_2_L1
010915_2_L2
010915_2_R1
010915_2_R2
011315_1_C
011315_1_L1
011315_1_L2
011315_1_R1
011315_1_R2
011315_2_C
011315_2_L1
011315_2_L2
011315_2_R1
011315_2_R2
012015_1_C
012015_1_L1
012015_1_L2
012015_1_R1
012015_1_R2
012015_2_L1
012015_2_L2
012015_2_R1
012015_2_R2
012315_1_C
012315_1_L1
012315_1_L2
012315_1_R1
012315_1_R2
012315_2_C
012315_2_L1
012315_2_L2
012315_2_R1
012315_2_R2
Day and Coil
Average value +20%
(23.4+4.7) mV
Average value -20%
(23.4-4.7) mV
Coil Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided for 5-coil system (Left1 –L1, Left2 –L2, Central-C, Right1-R1, Right2-R2)

Figure C-64


EM61-MK2 Ch2 Signal Strength for Small Horizontal Across ISO
XU854 and SR864 MRSs
Ch2 EM Response (mV)
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
Day and Coil
Average value +20%
(13.3+2.7) mV
Average value -20%
(13.3-2.7) mV
Coil Reading
Note:
1)_1_ is opening test
_2_ is closing test
2)If not specified (x axis) data are provided for 5-coil system (Left1 –L1, Left2 –L2, Central-C, Right1-R1, Right2-R2)

This page is intentionally left blank.

Figure C-65
11/17/2014 G-858 SSR AM Sensor L RR869a MRS

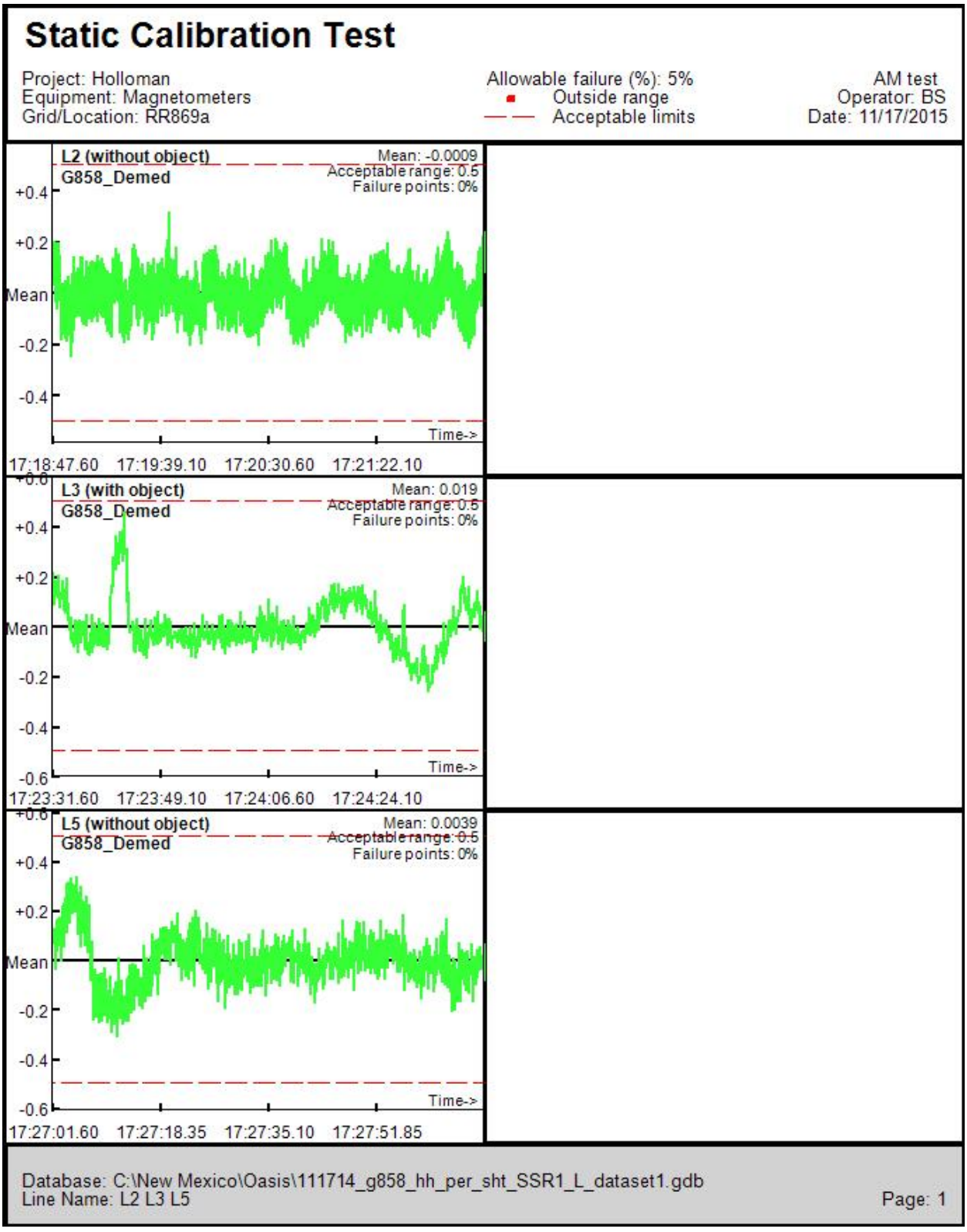


Figure C-66
11/17/2014 G-858 SSR AM Sensor R RR869a MRS

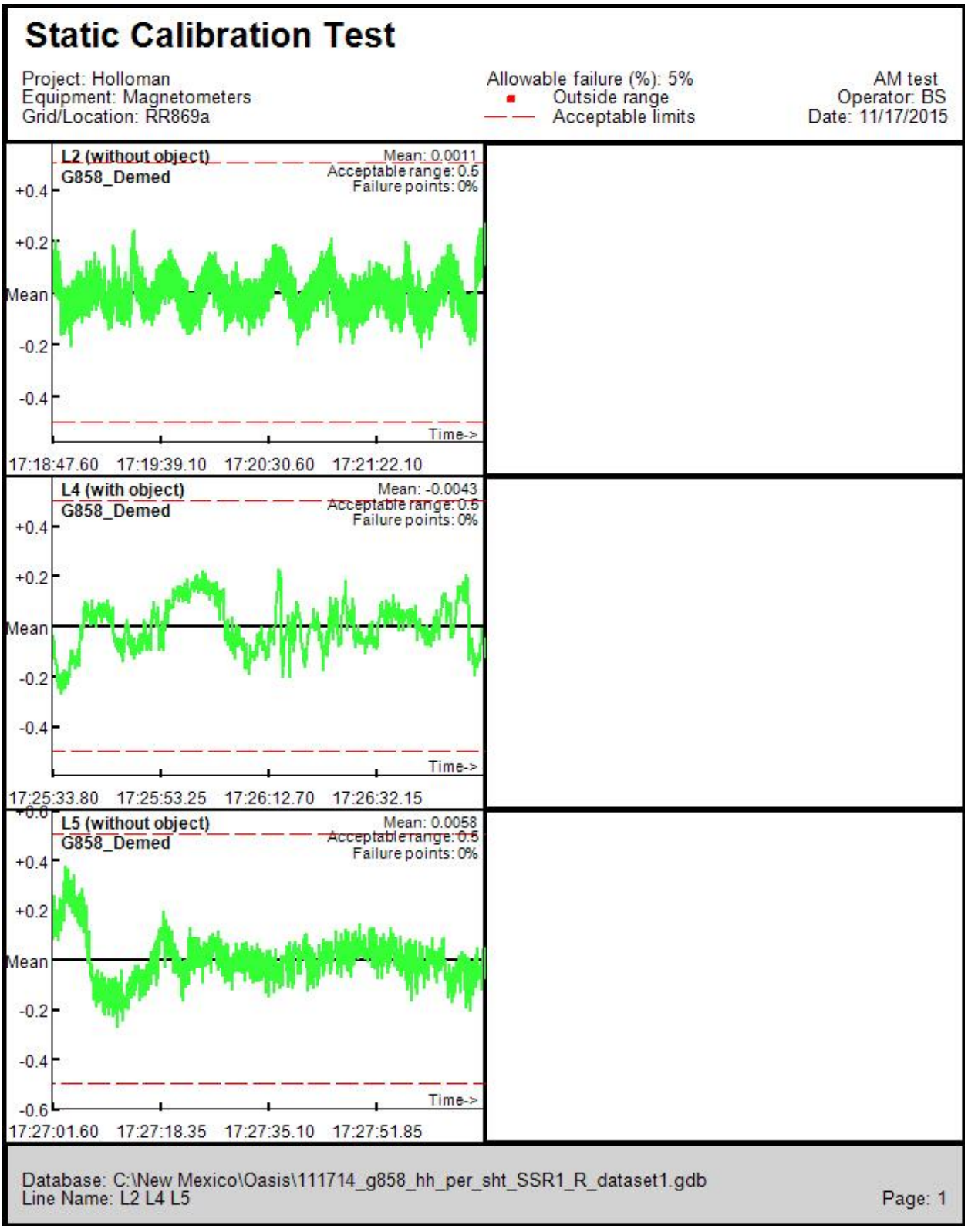


Figure C-67
11/18/2014 G-858 SSR AM Sensor L RR869a MRS

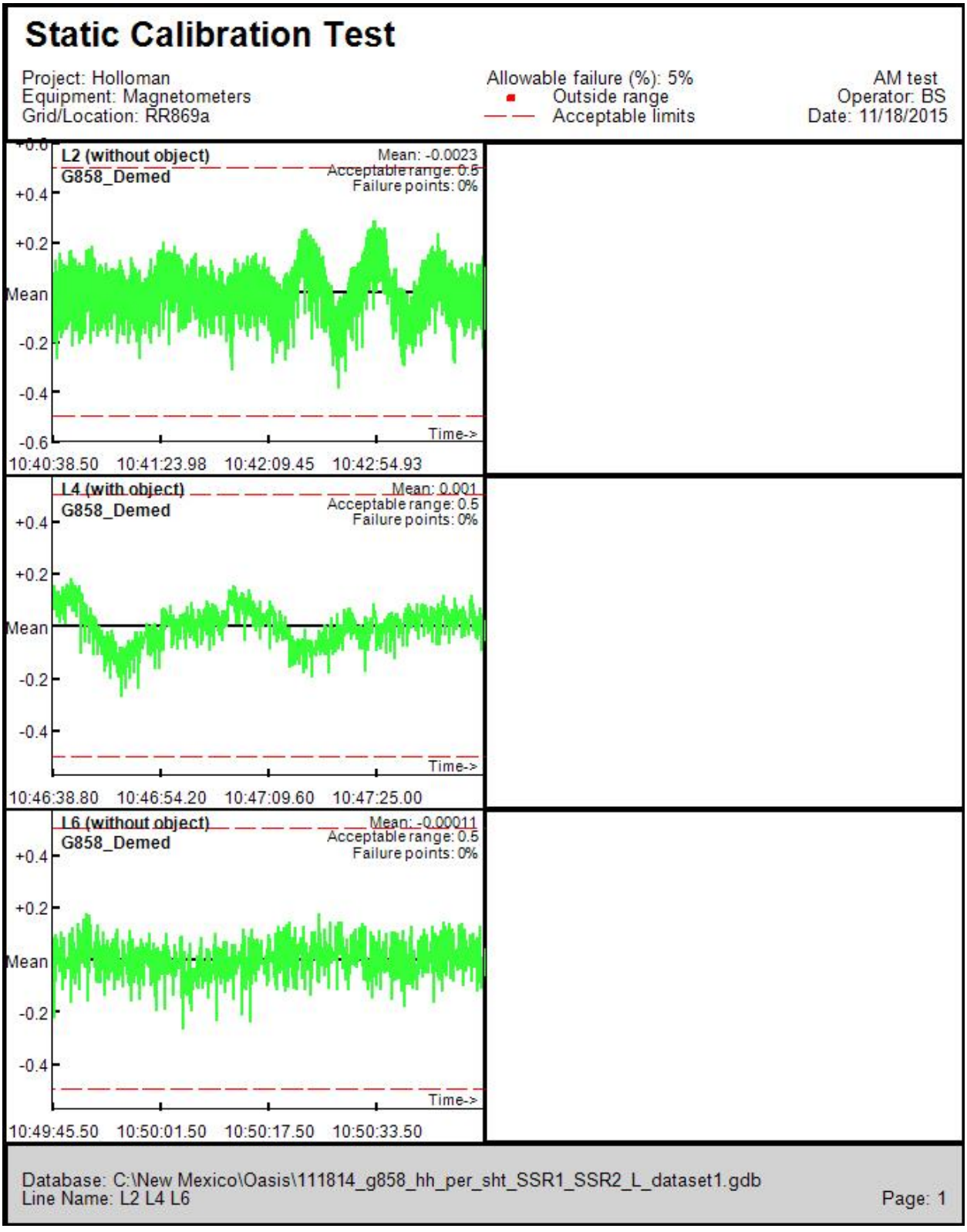


Figure C-68
11/18/2014 G-858 SSR AM Sensor R RR869a MRS

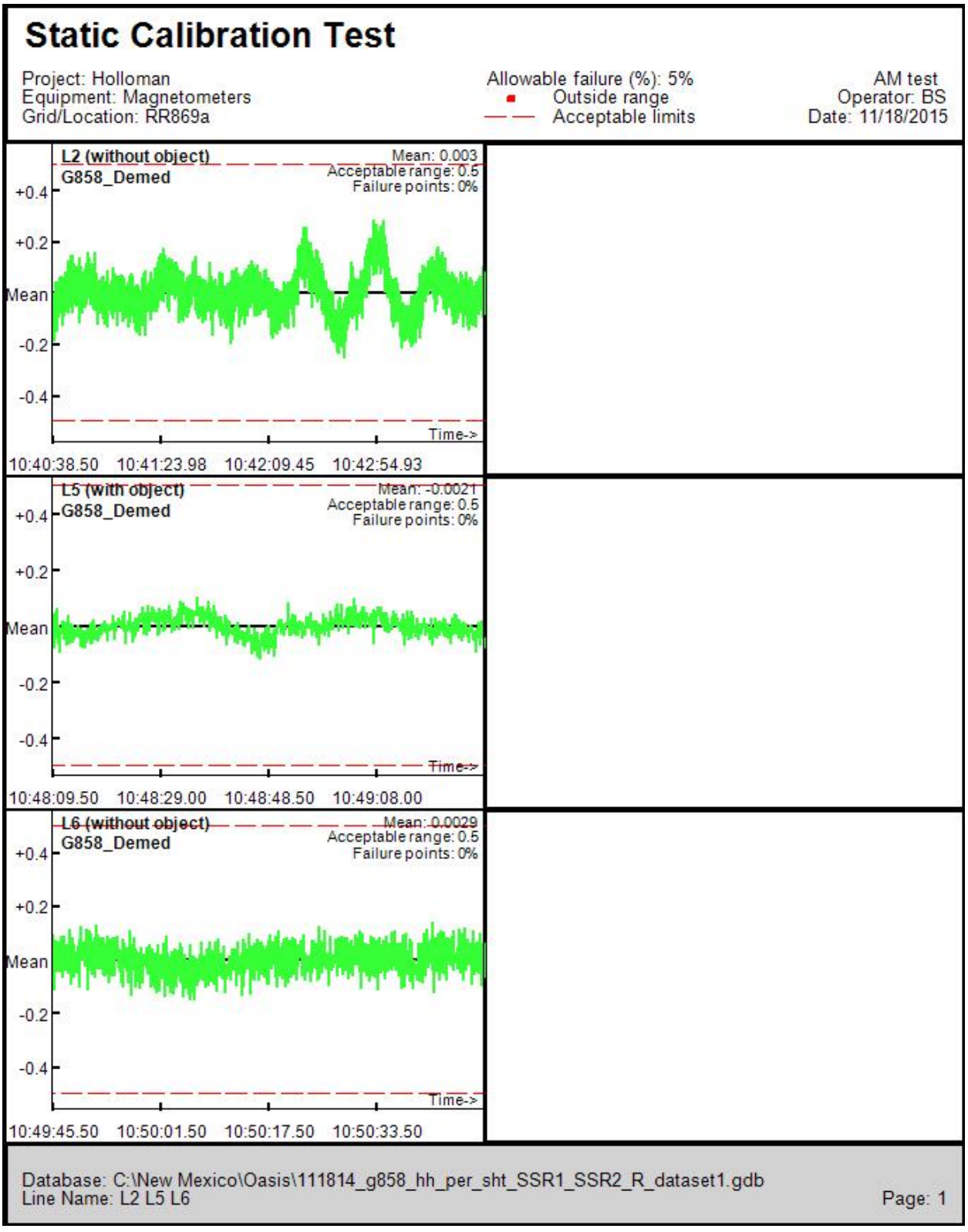


Figure C-69
11/18/2014 G-858 SSR PM Sensor L RR869a MRS

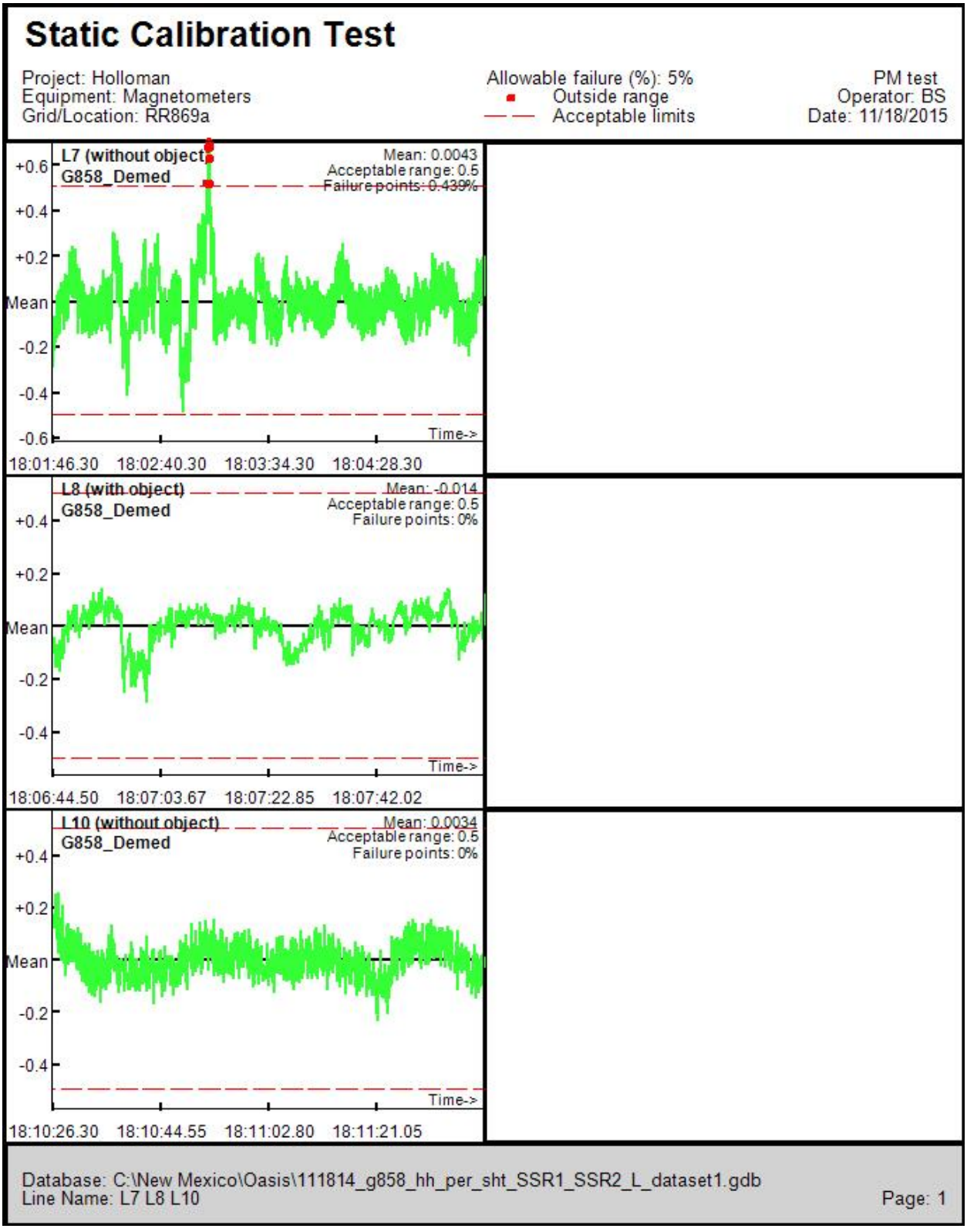


Figure C-70
11/18/2014 G-858 SSR PM Sensor R RR869a MRS

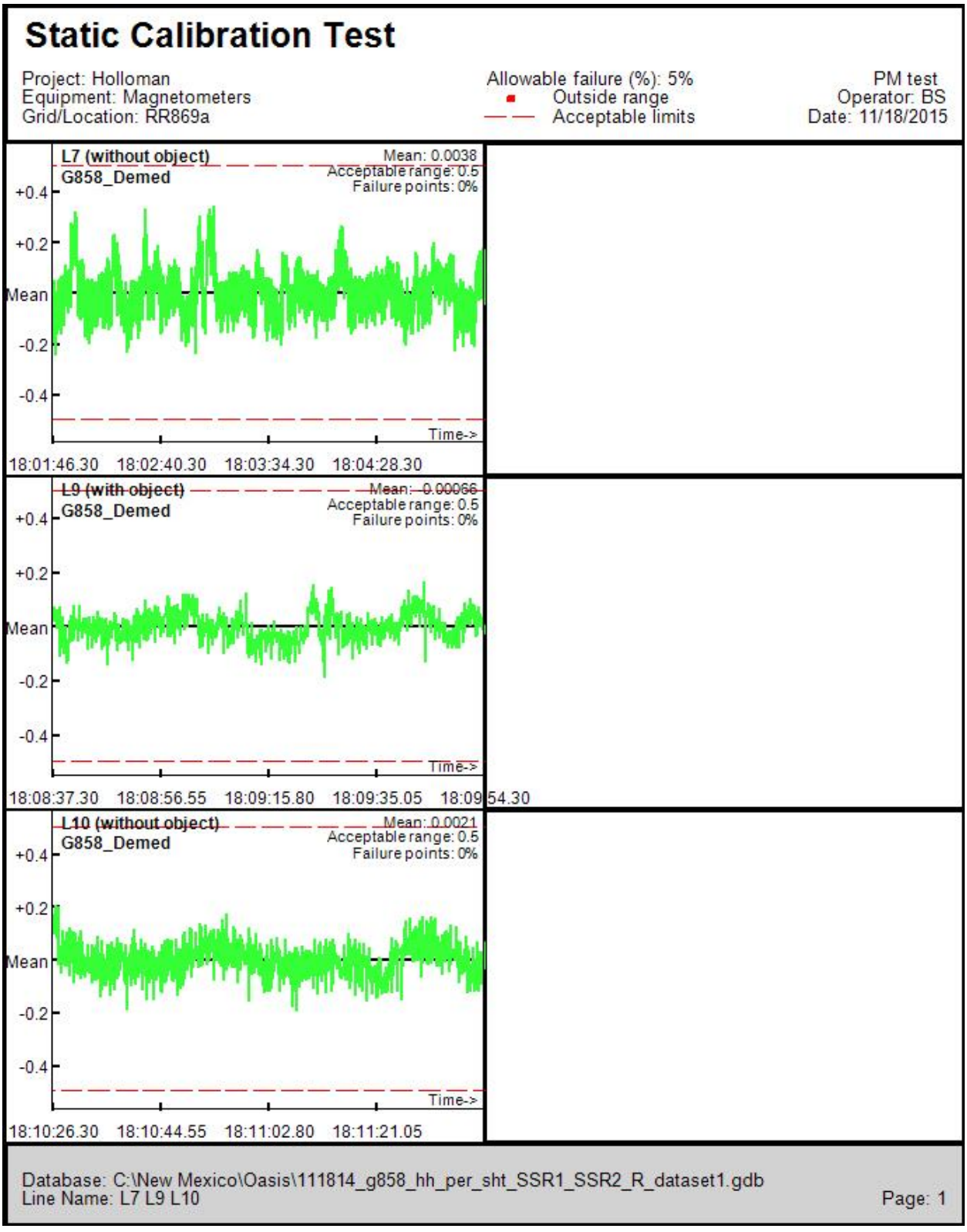


Figure C-71
11/19/2014 G-858 SSR AM Sensor L RR869a MRS

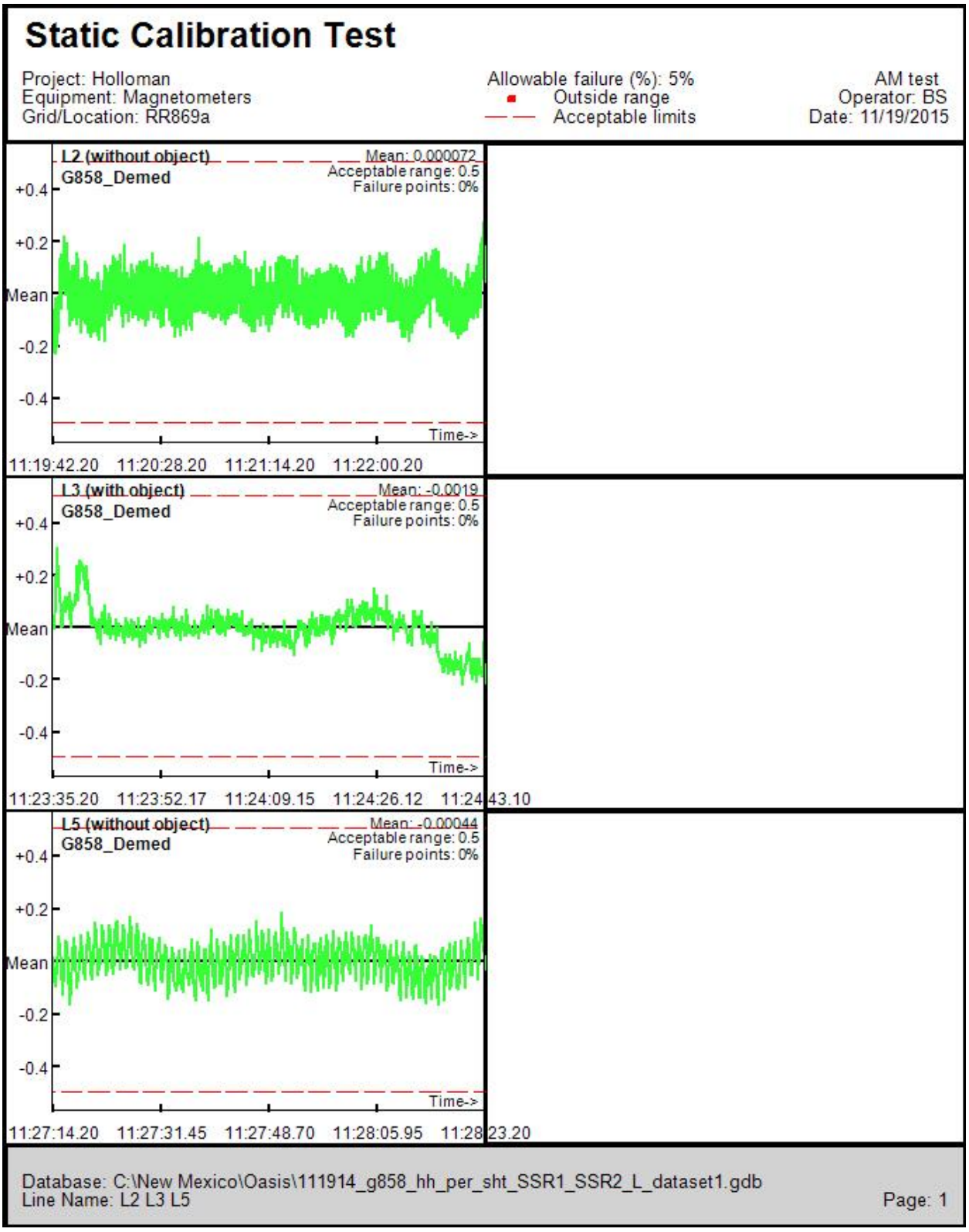


Figure C-72
11/19/2014 G-858 SSR AM Sensor R RR869a MRS

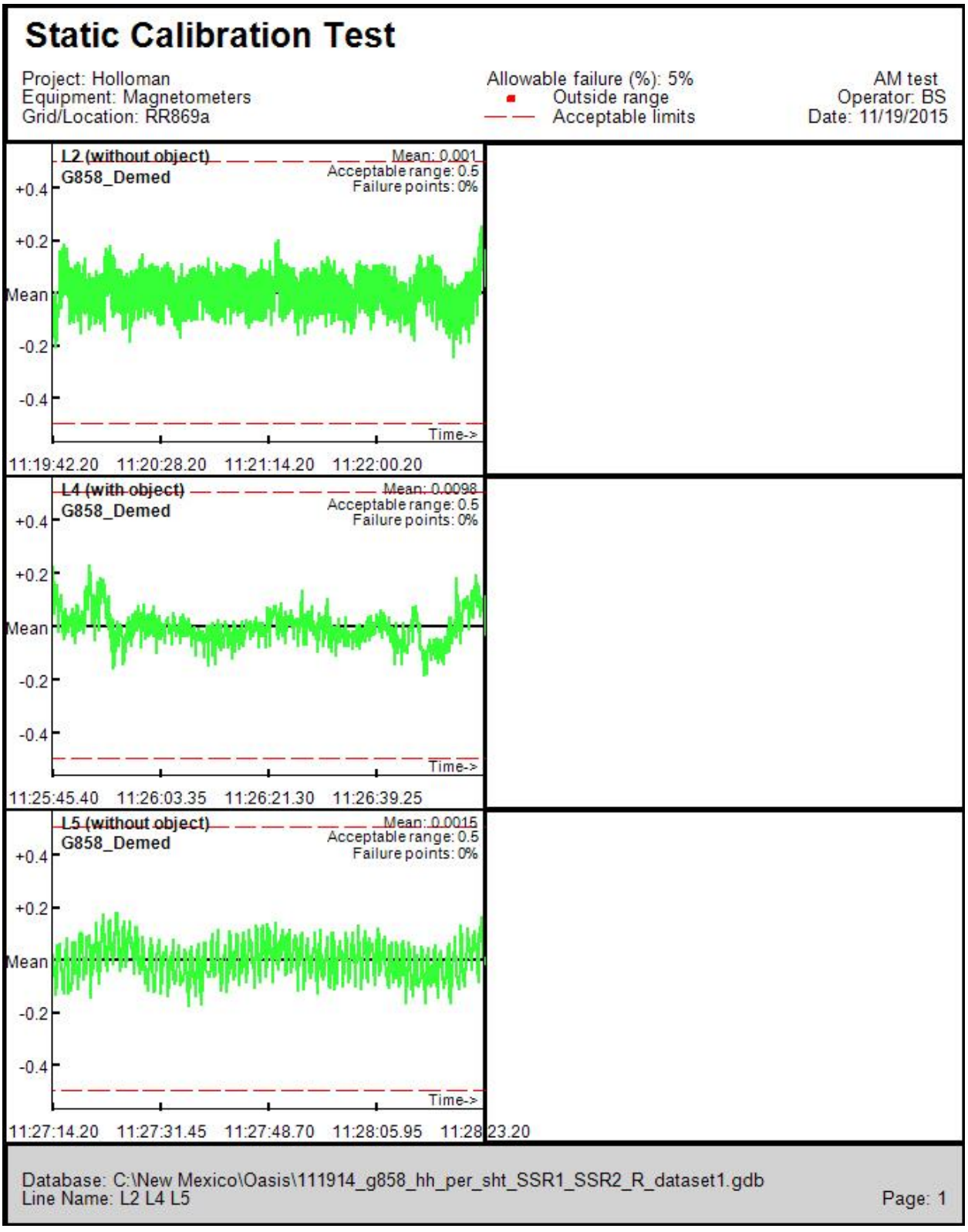


Figure C-73
11/19/2014 G-858 SSR PM Sensor L RR869a MRS

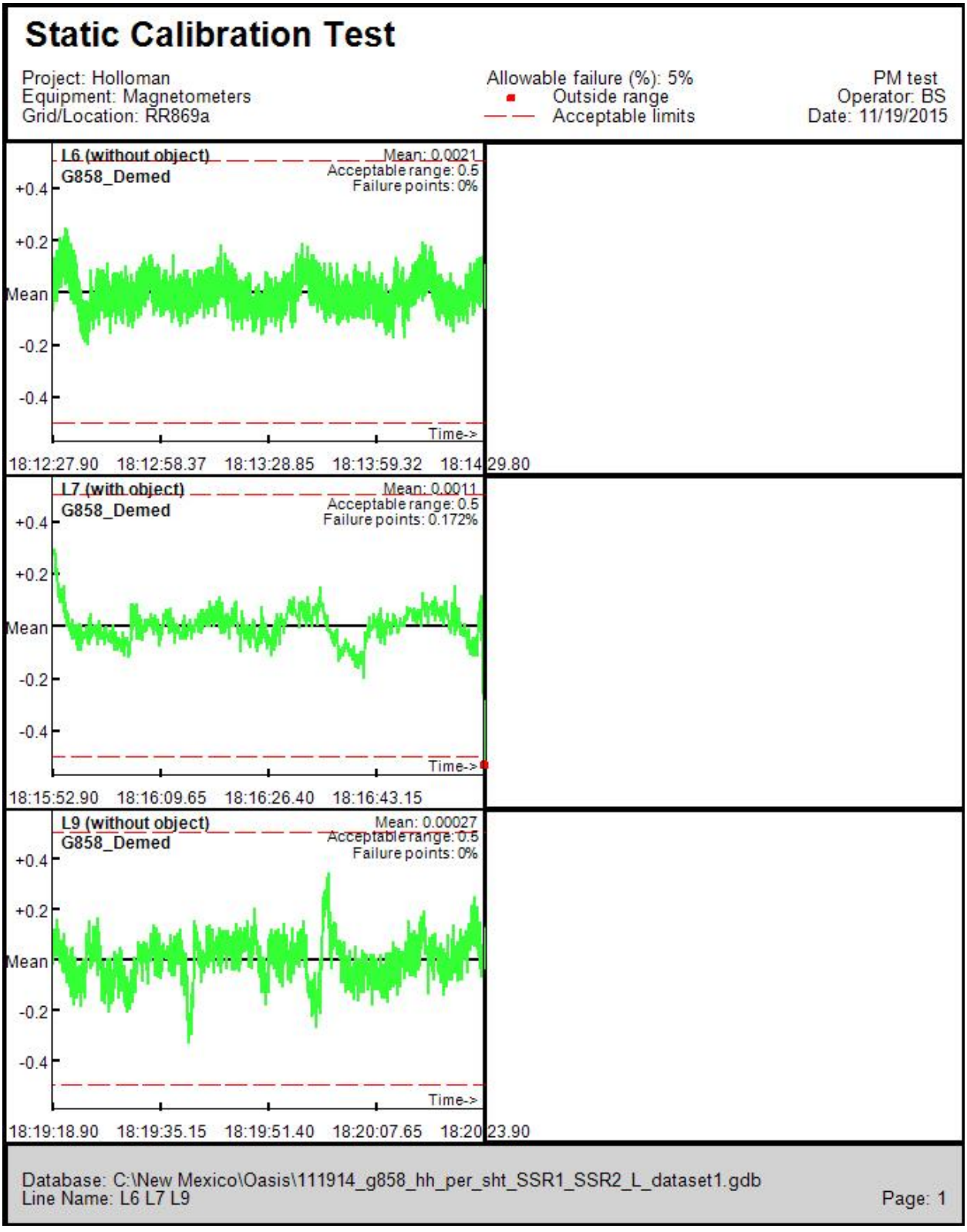


Figure C-74
11/19/2014 G-858 SSR PM Sensor R RR869a MRS

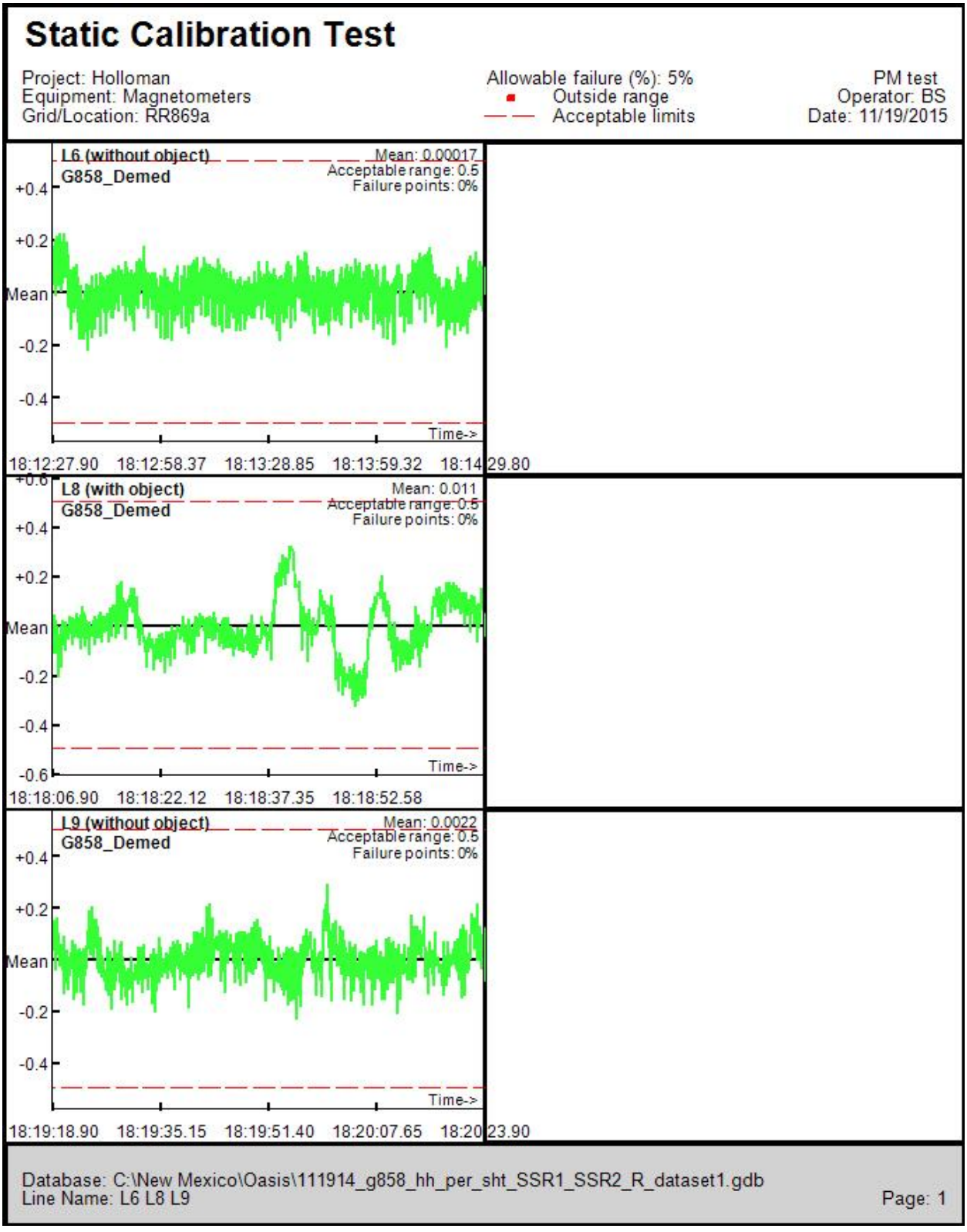


Figure C-75
11/20/2014 G-858 SSR AM Sensor L RR869a MRS

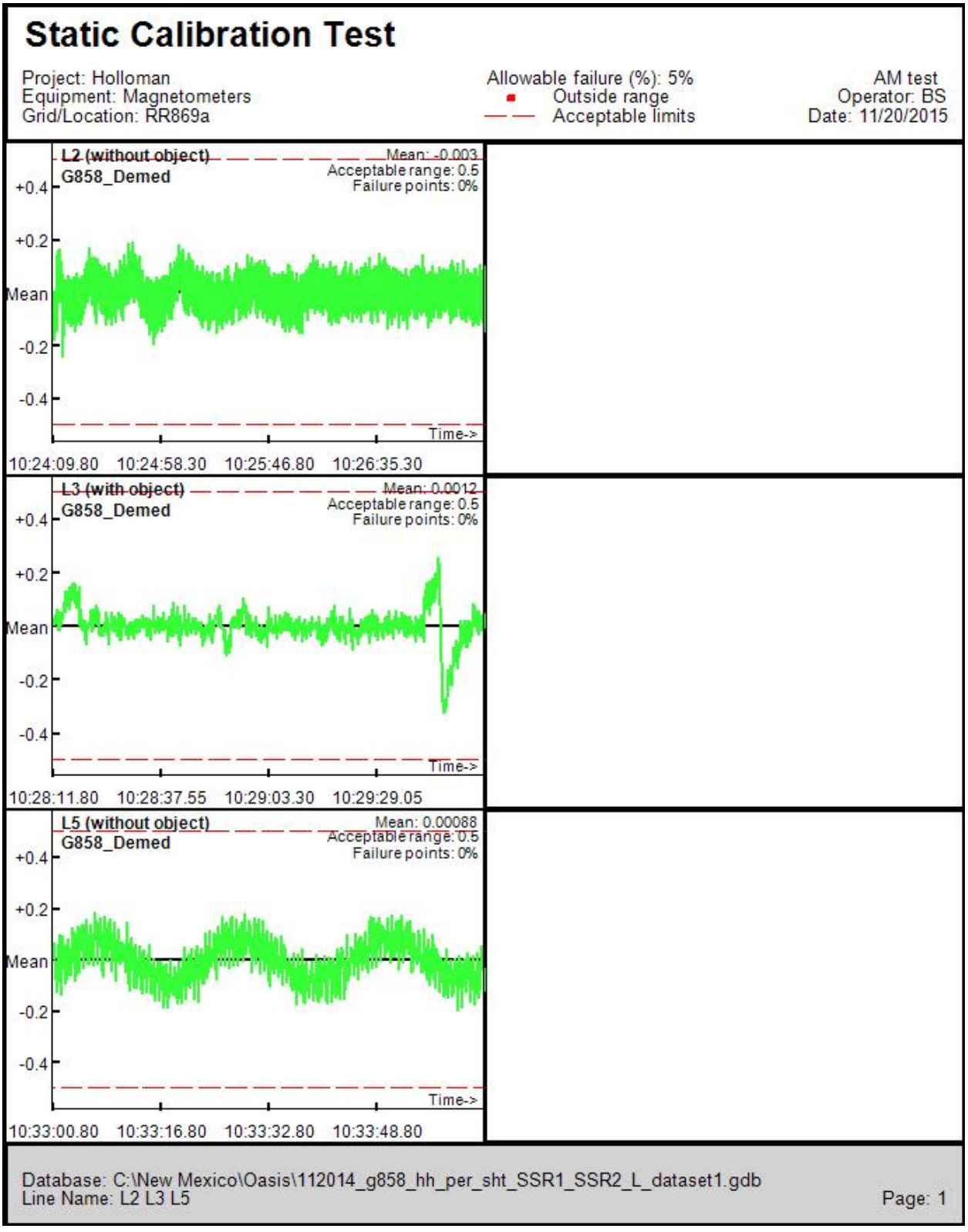


Figure C-76
11/20/2014 G-858 SSR AM Sensor R RR869a MRS

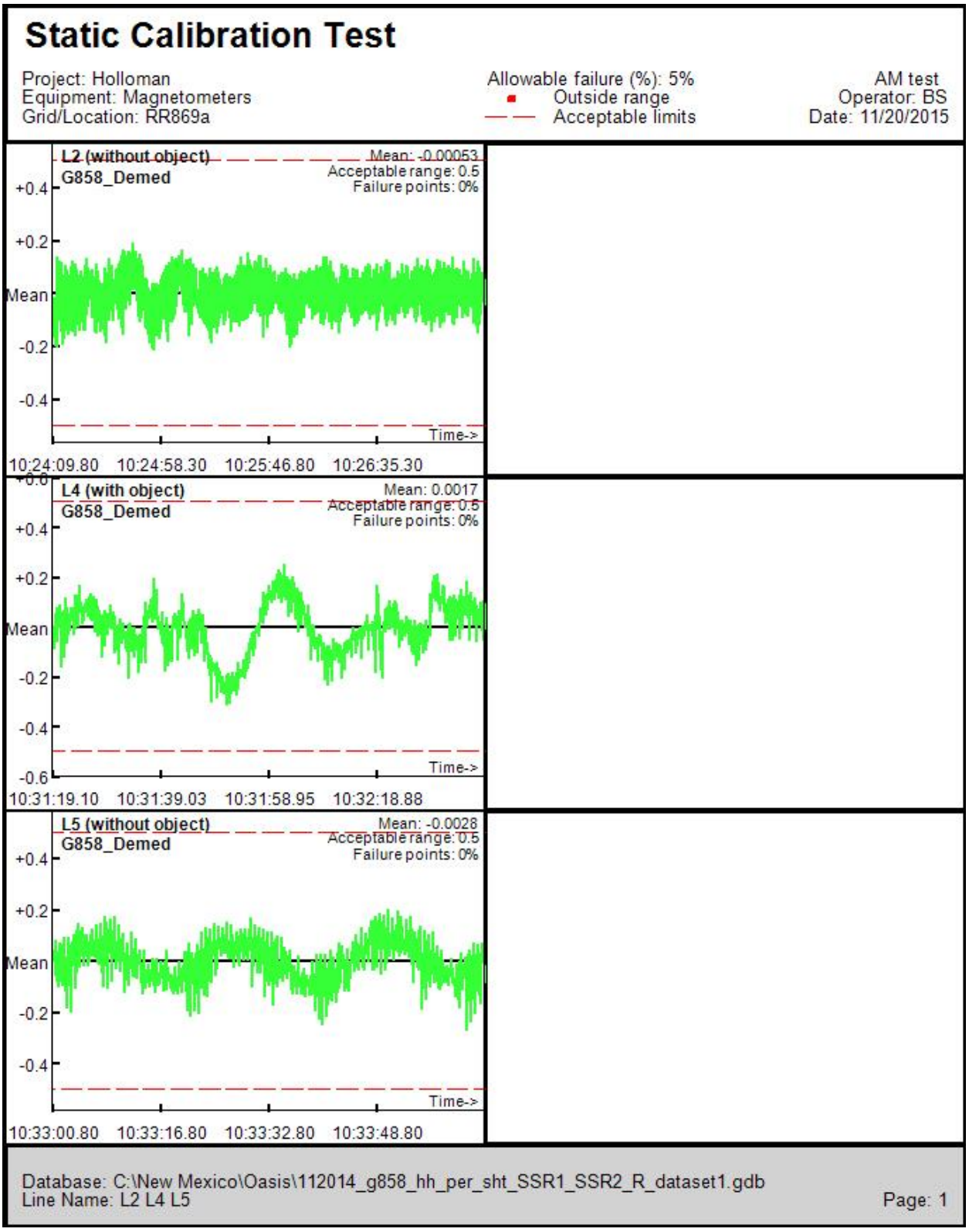


Figure C-77
11/20/2014 G-858 SSR PM Sensor L RR869a MRS

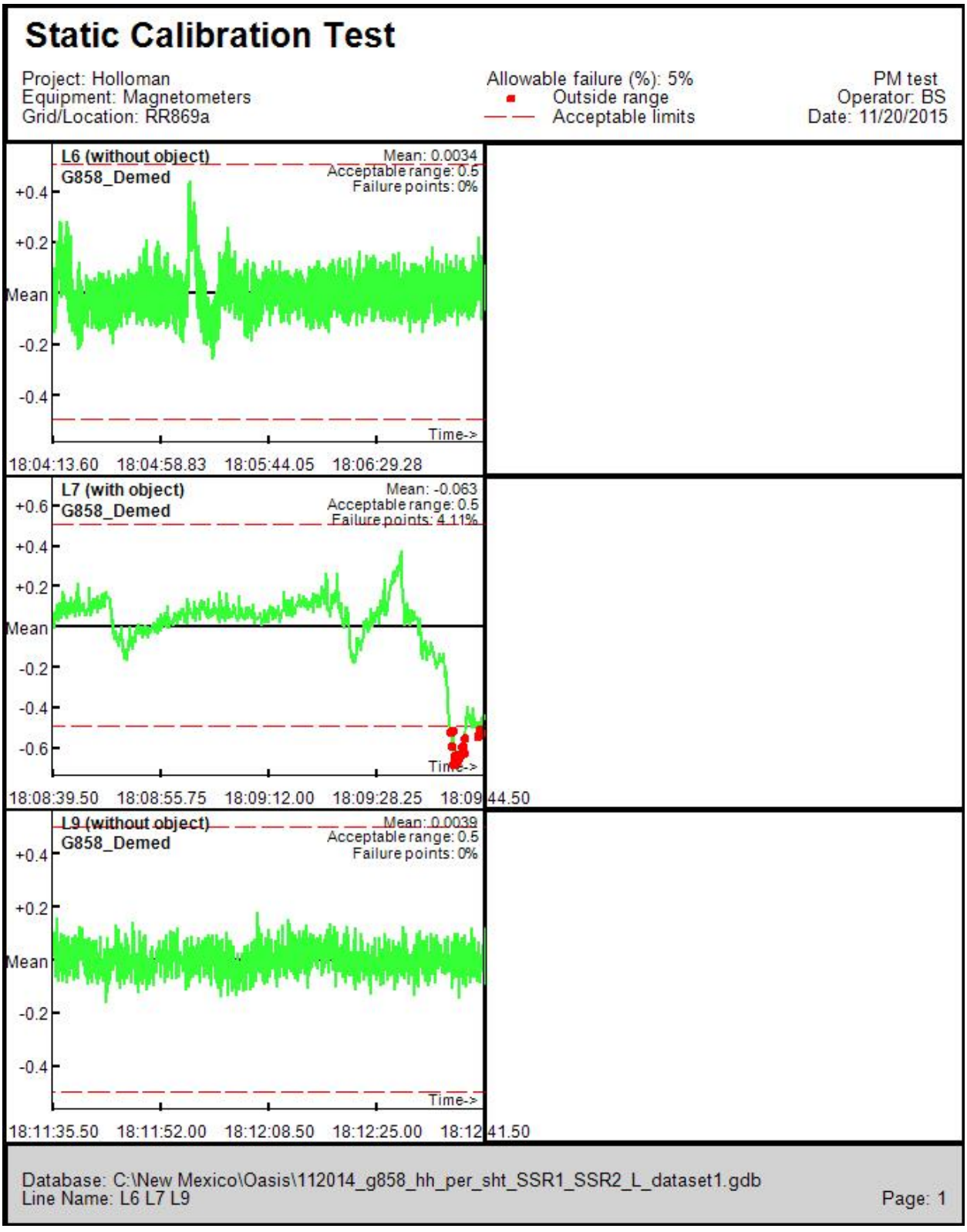


Figure C-78
11/20/2014 G-858 SSR PM Sensor R RR869a MRS

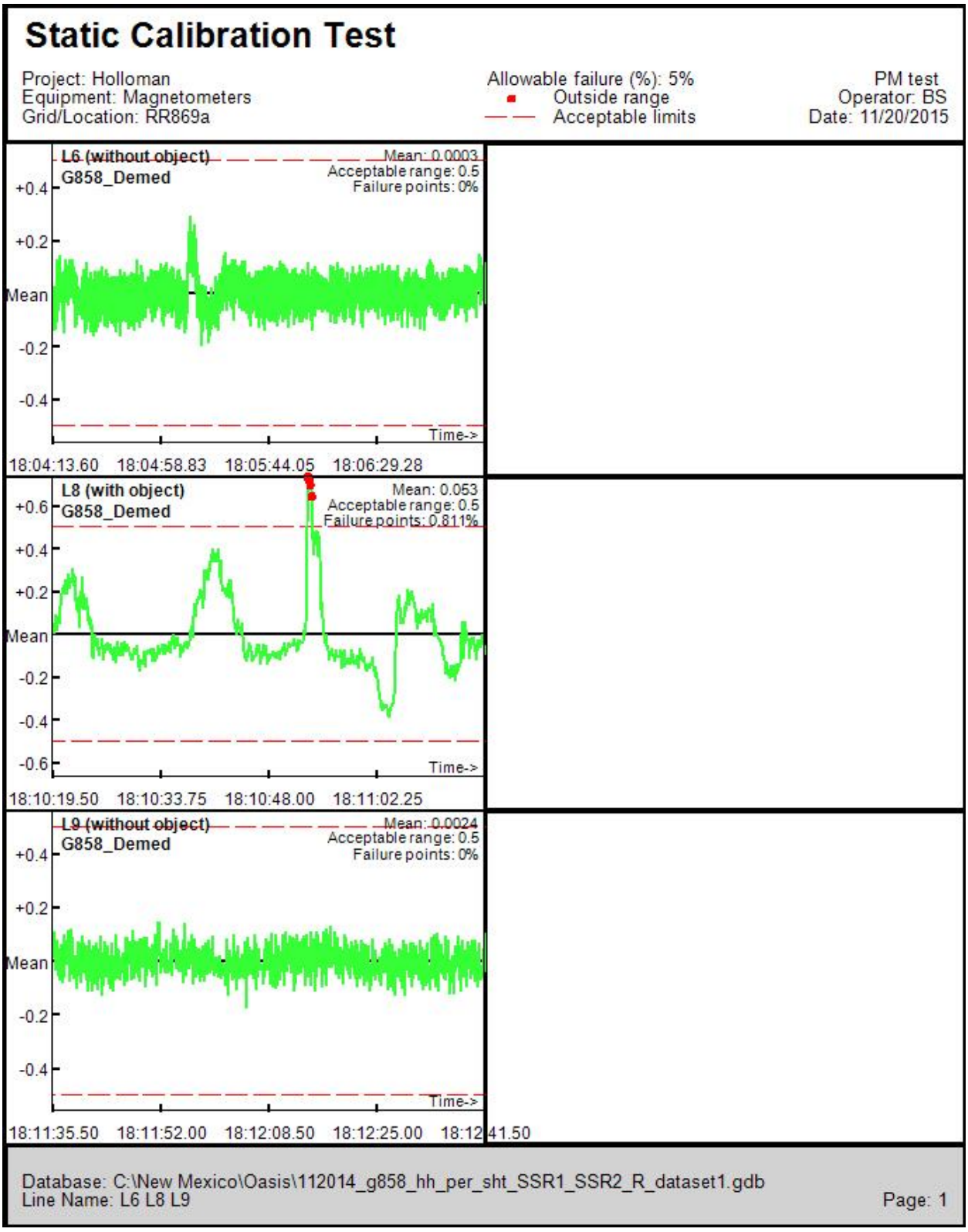


Figure C-79
11/21/2014 G-858 SSR AM Sensor L RR869a MRS

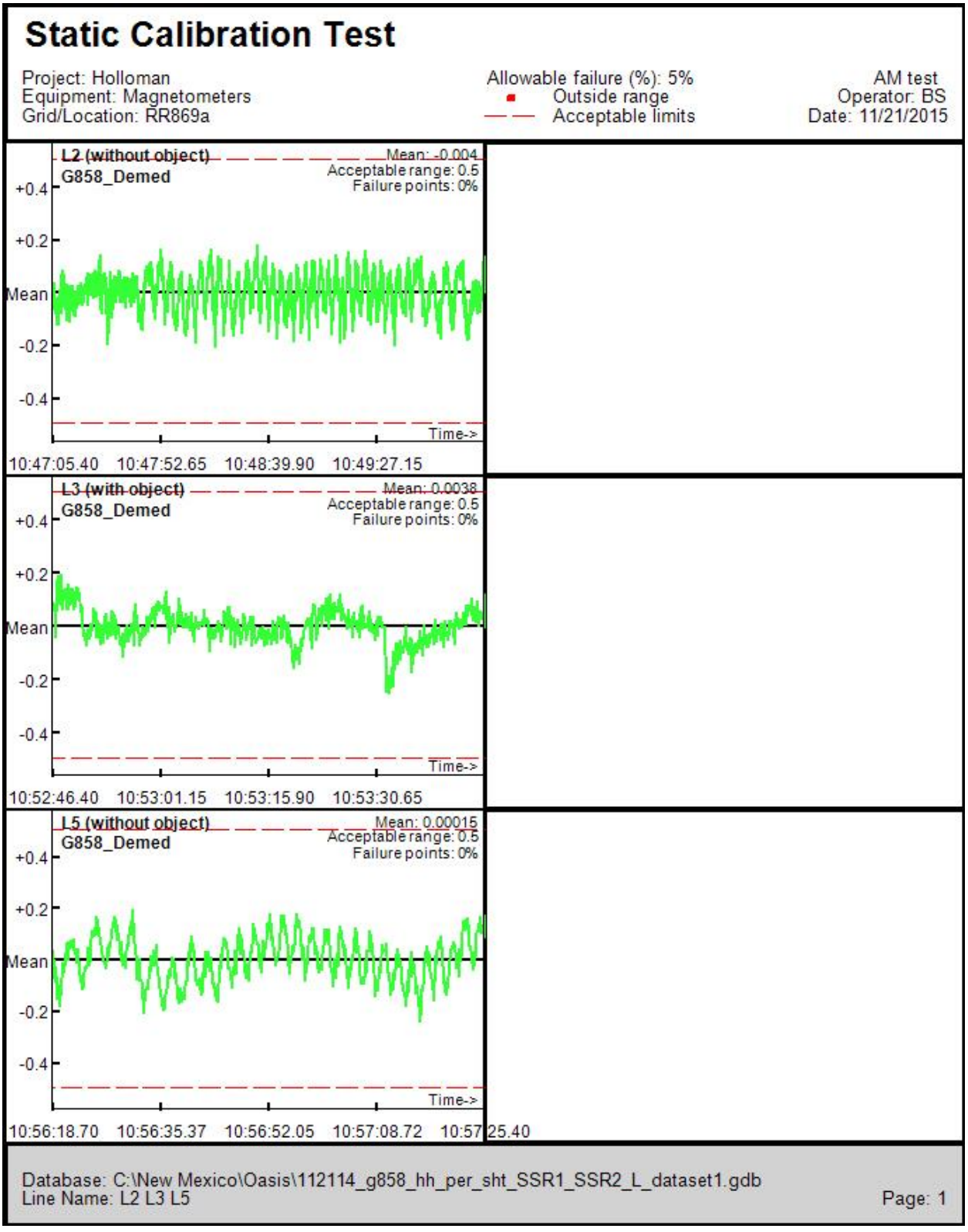


Figure C-80
11/21/2014 G-858 SSR AM Sensor R RR869a MRS

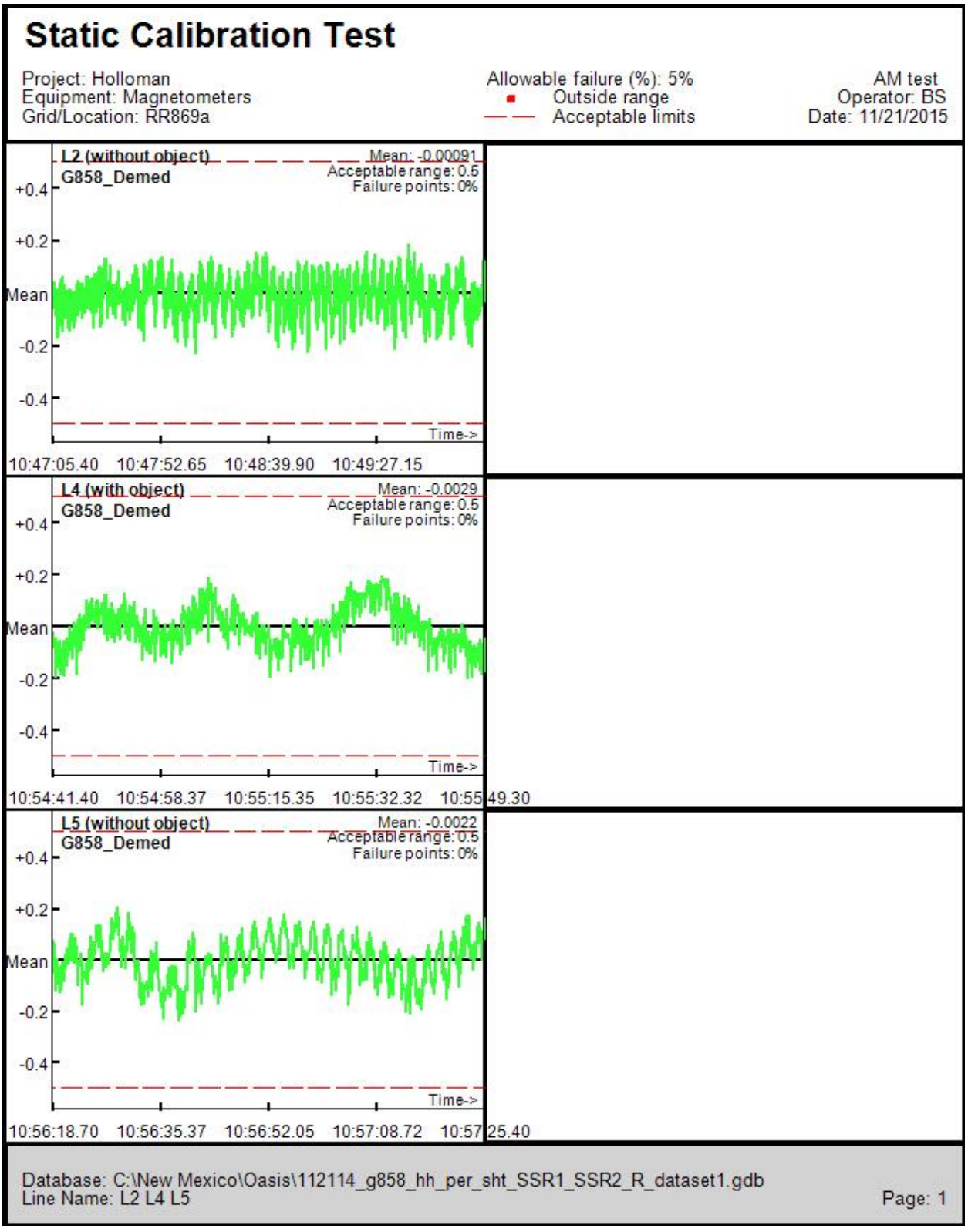


Figure C-81
11/21/2014 G-858 SSR PM Sensor L RR869a MRS

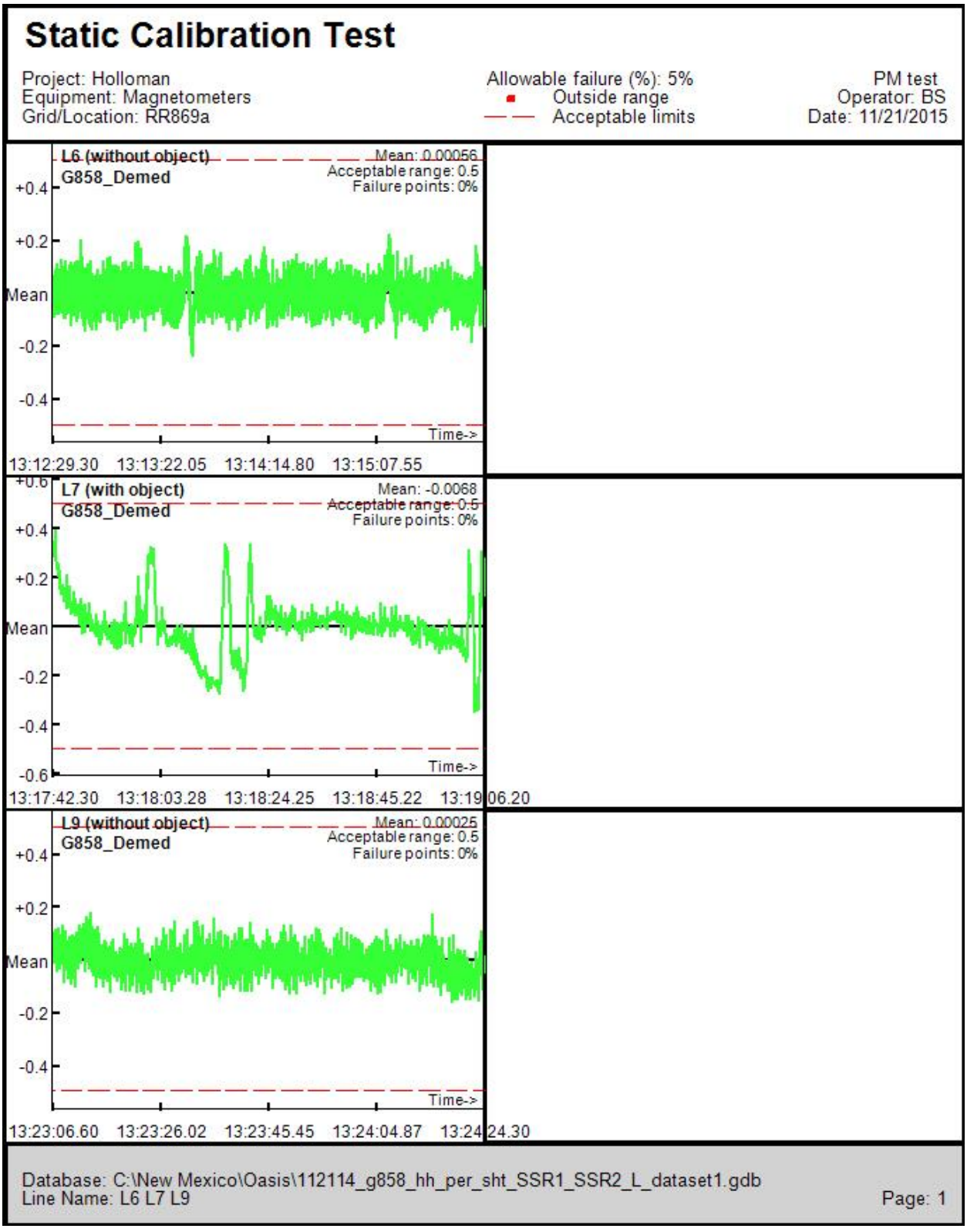


Figure C-82
11/21/2014 G-858 SSR PM Sensor R RR869a MRS

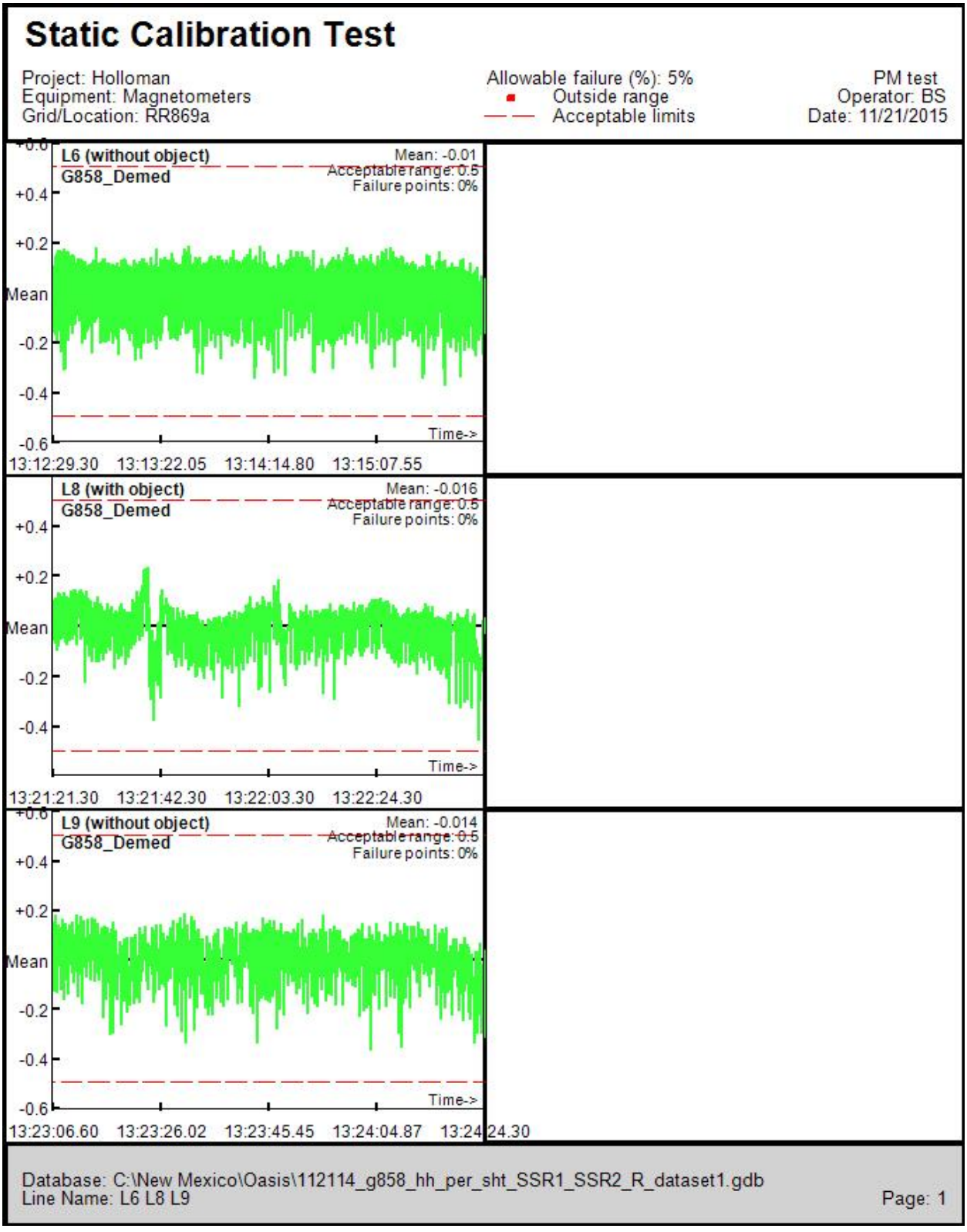


Figure C-83
12/1/2014 G-858 SSR AM Sensor C1 ML865 MRS

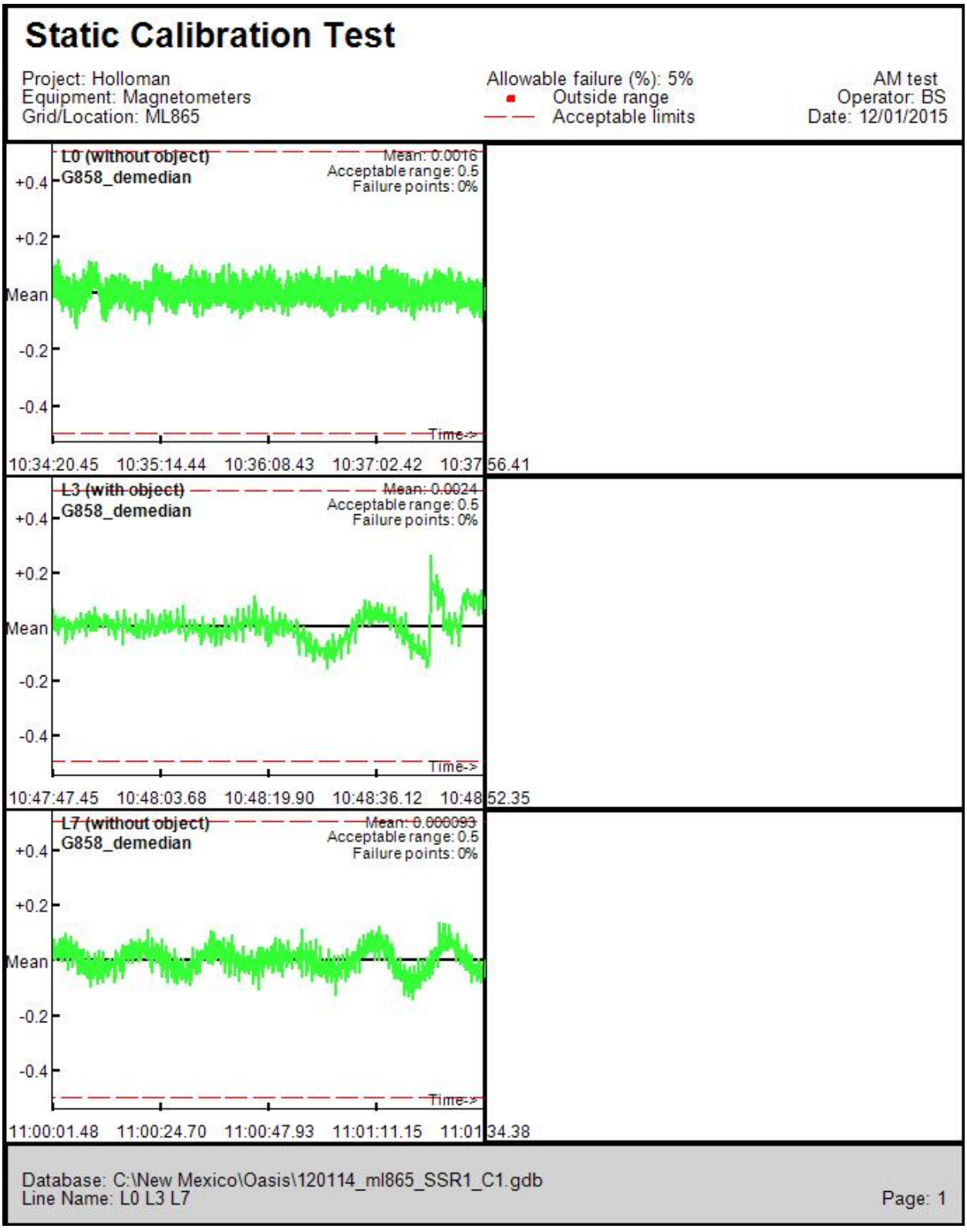


Figure C-84
12/1/2014 G-858 SSR AM Sensor C2 ML865 MRS

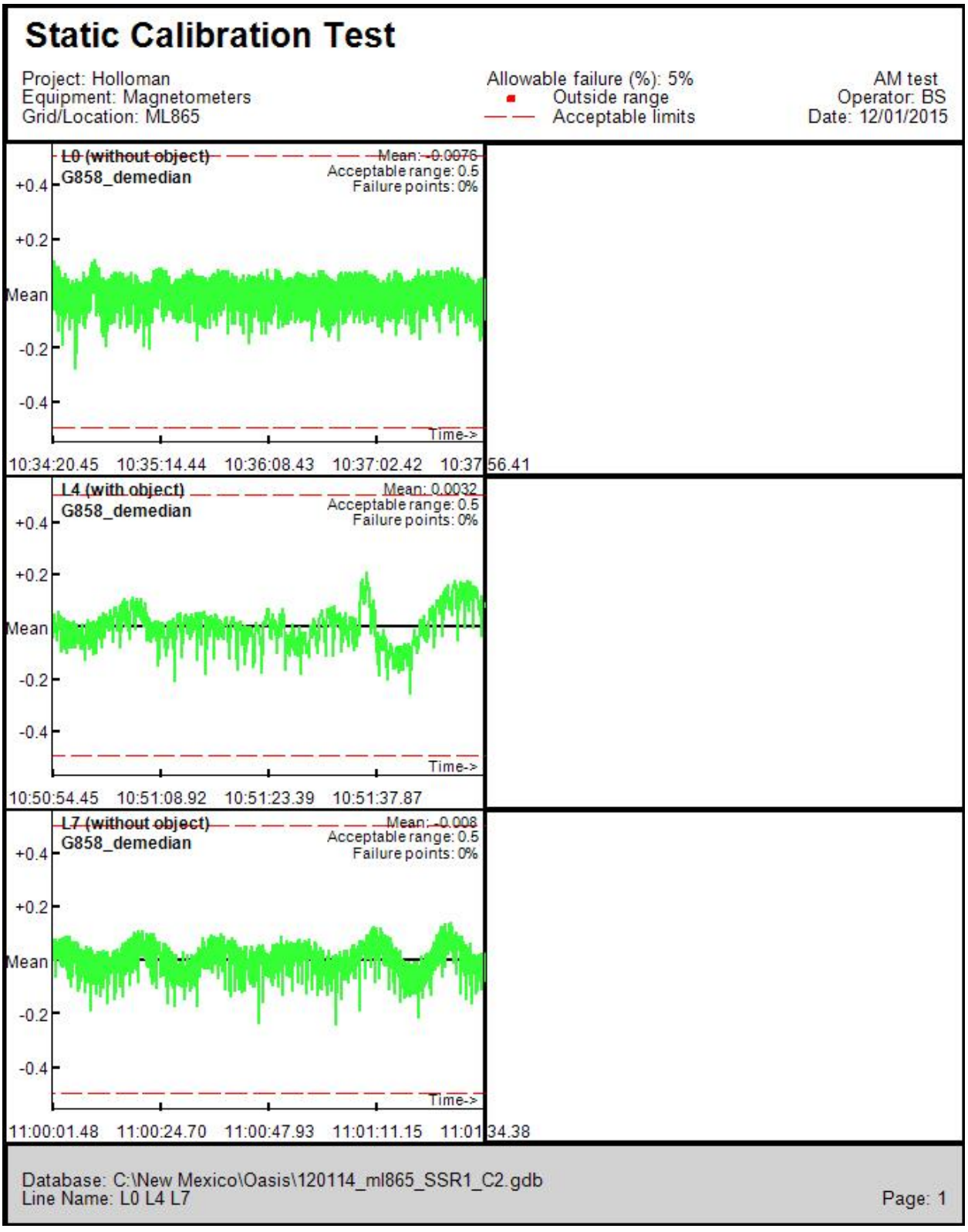


Figure C-85
12/1/2014 G-858 SSR AM Sensor L1 ML865 MRS

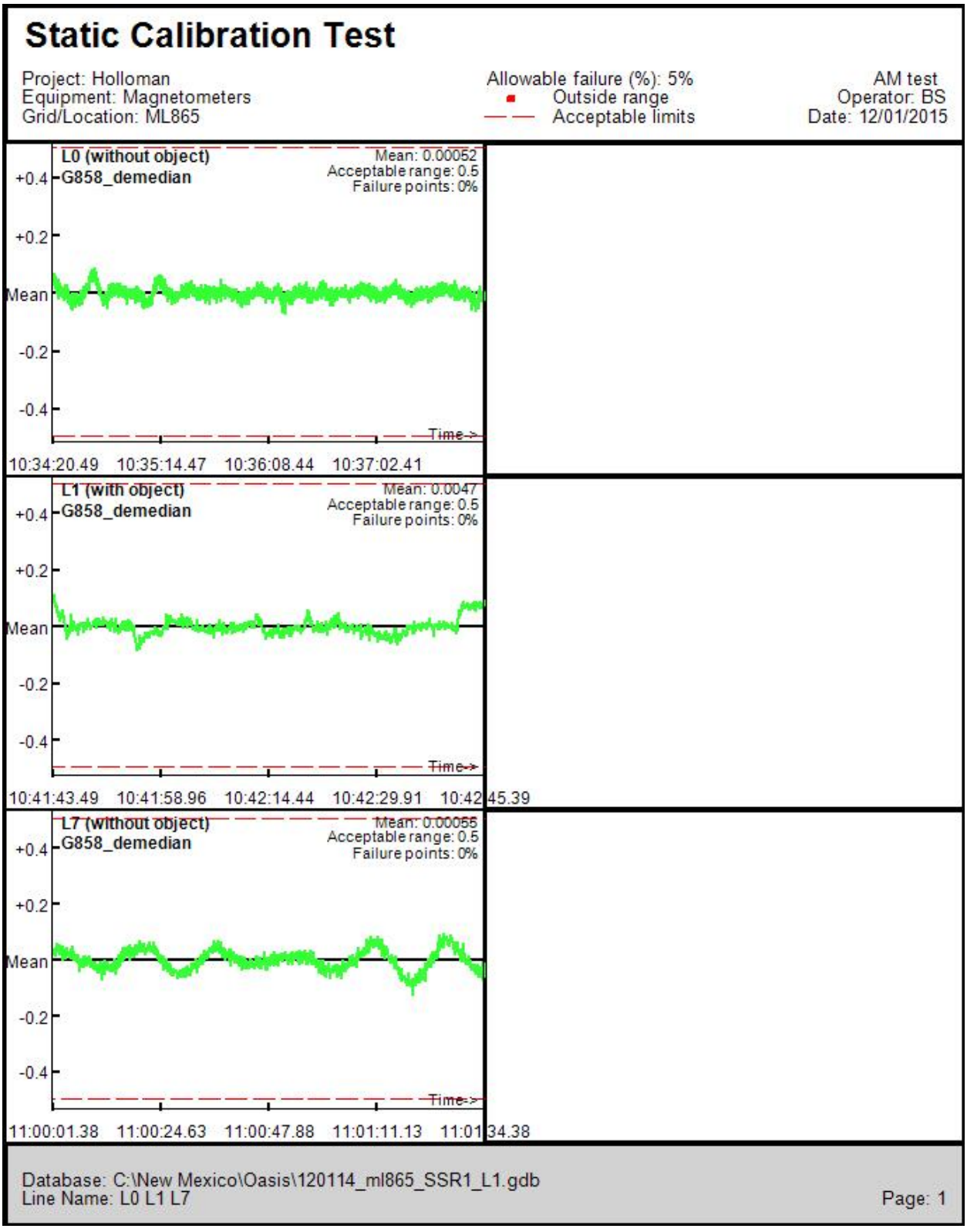


Figure C-86
12/1/2014 G-858 SSR AM Sensor L2 ML865 MRS

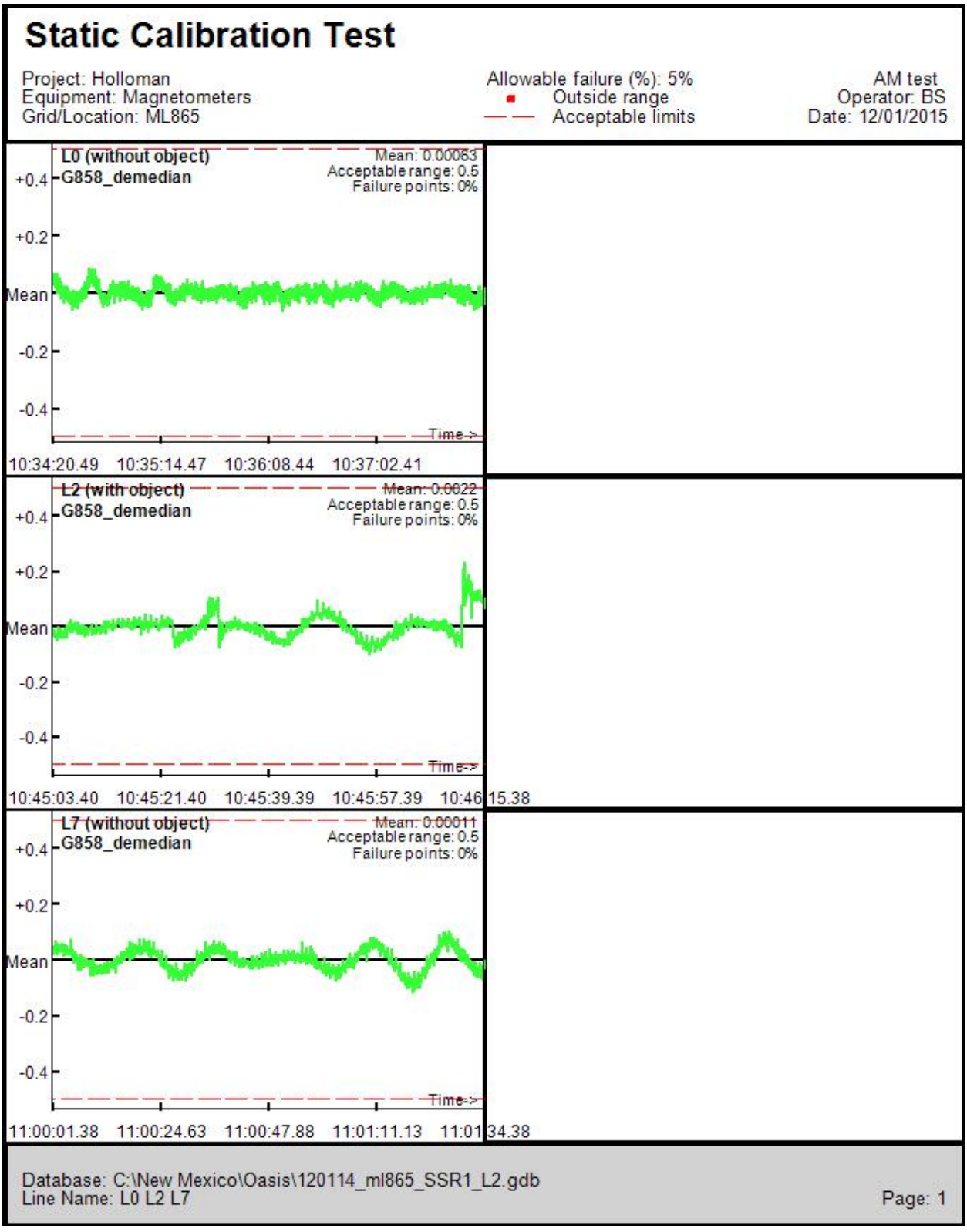


Figure C-87
12/1/2014 G-858 SSR AM Sensor R1 ML865 MRS

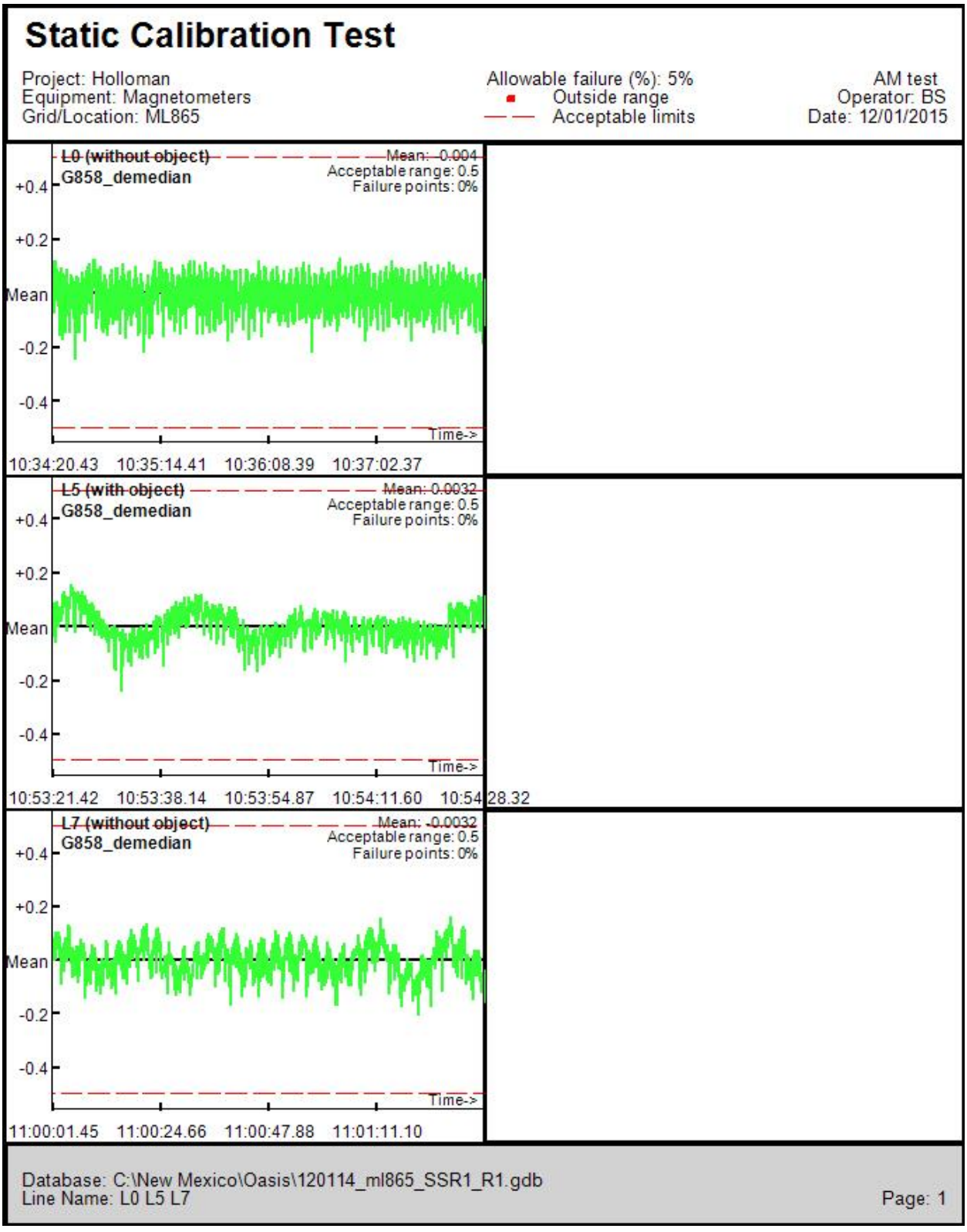


Figure C-88
12/1/2014 G-858 SSR AM Sensor R2 ML865 MRS

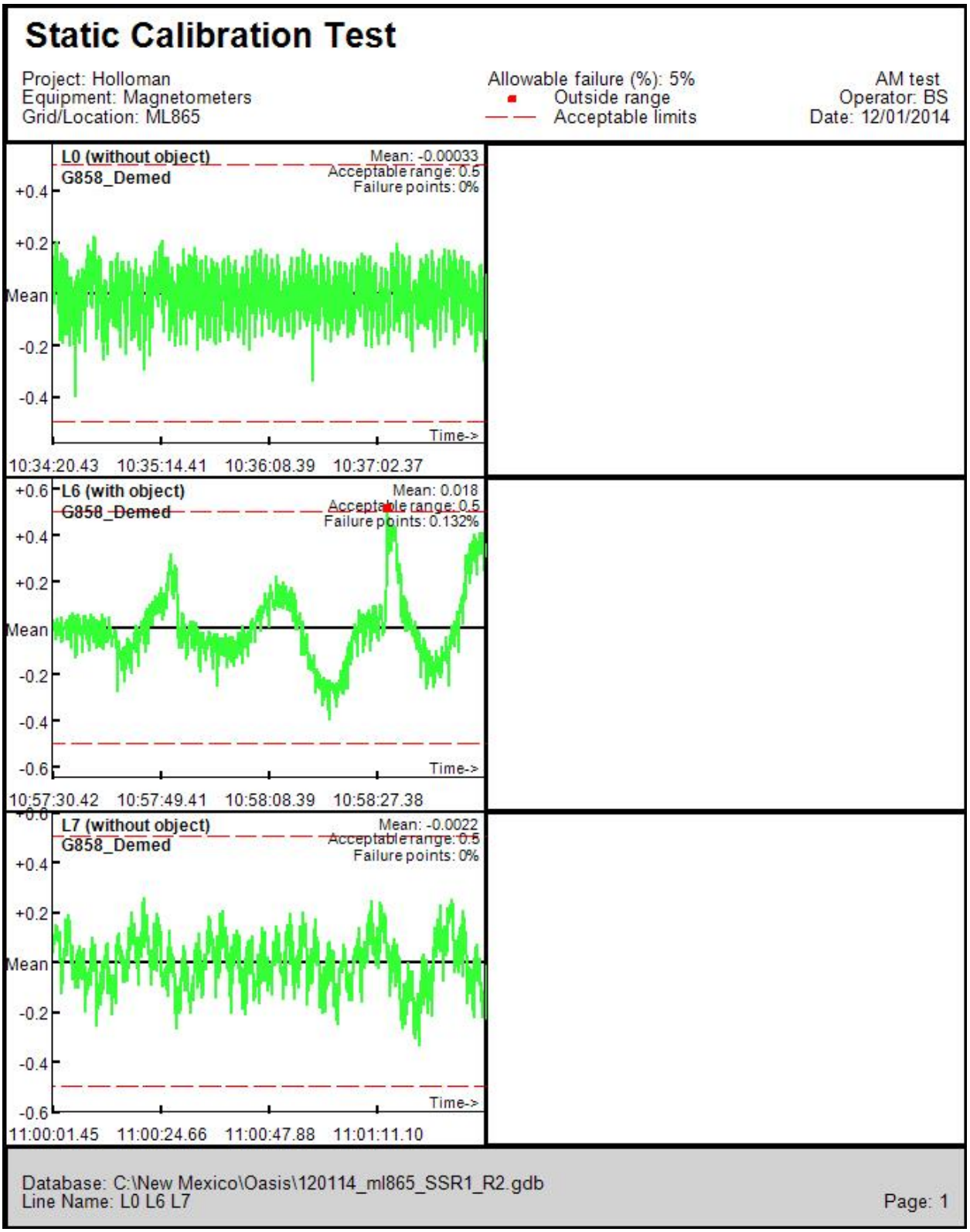


Figure C-89
12/1/2014 G-858 SSR PM Sensor C1 ML865 MRS

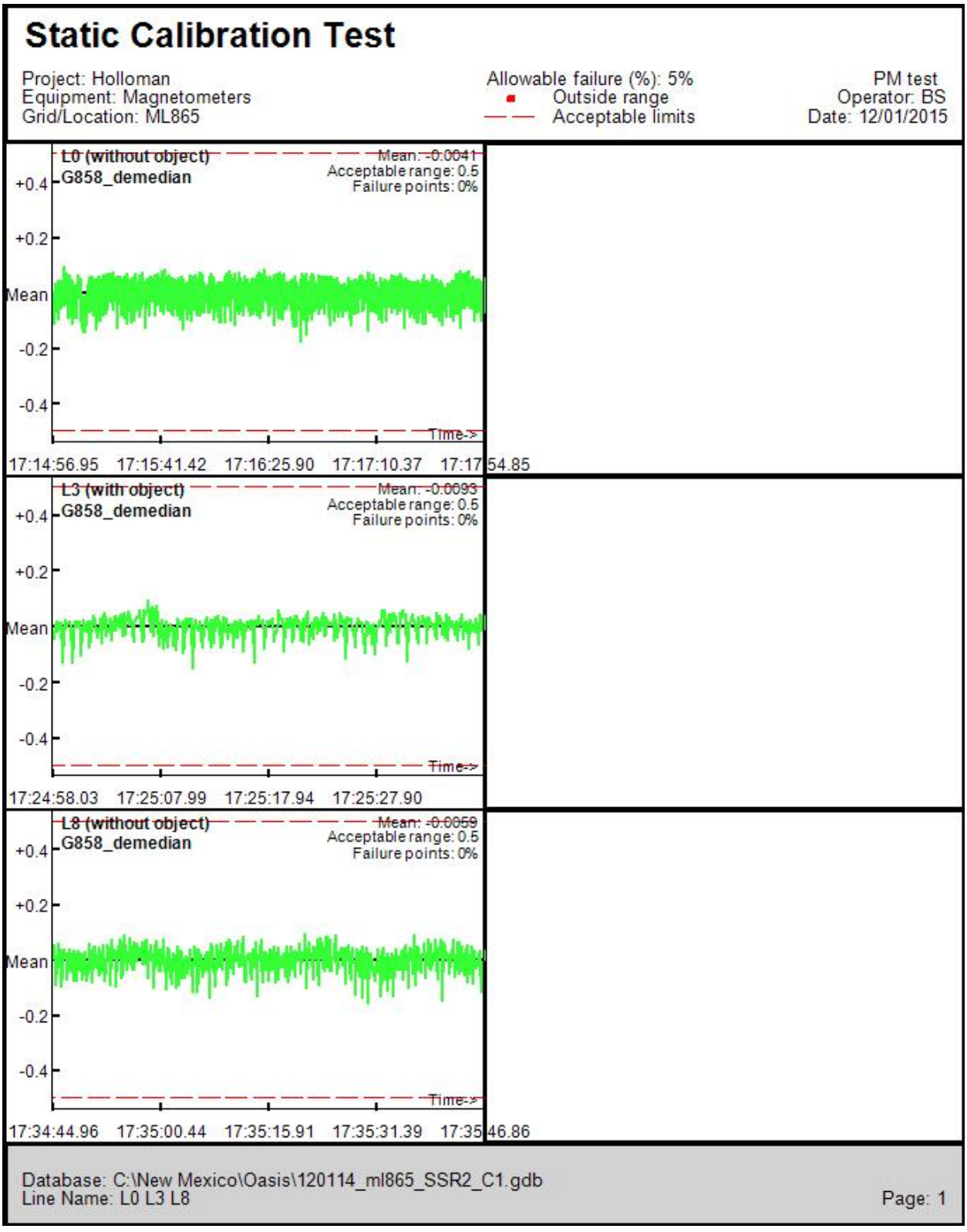


Figure C-90
12/1/2014 G-858 SSR PM Sensor C2 ML865 MRS

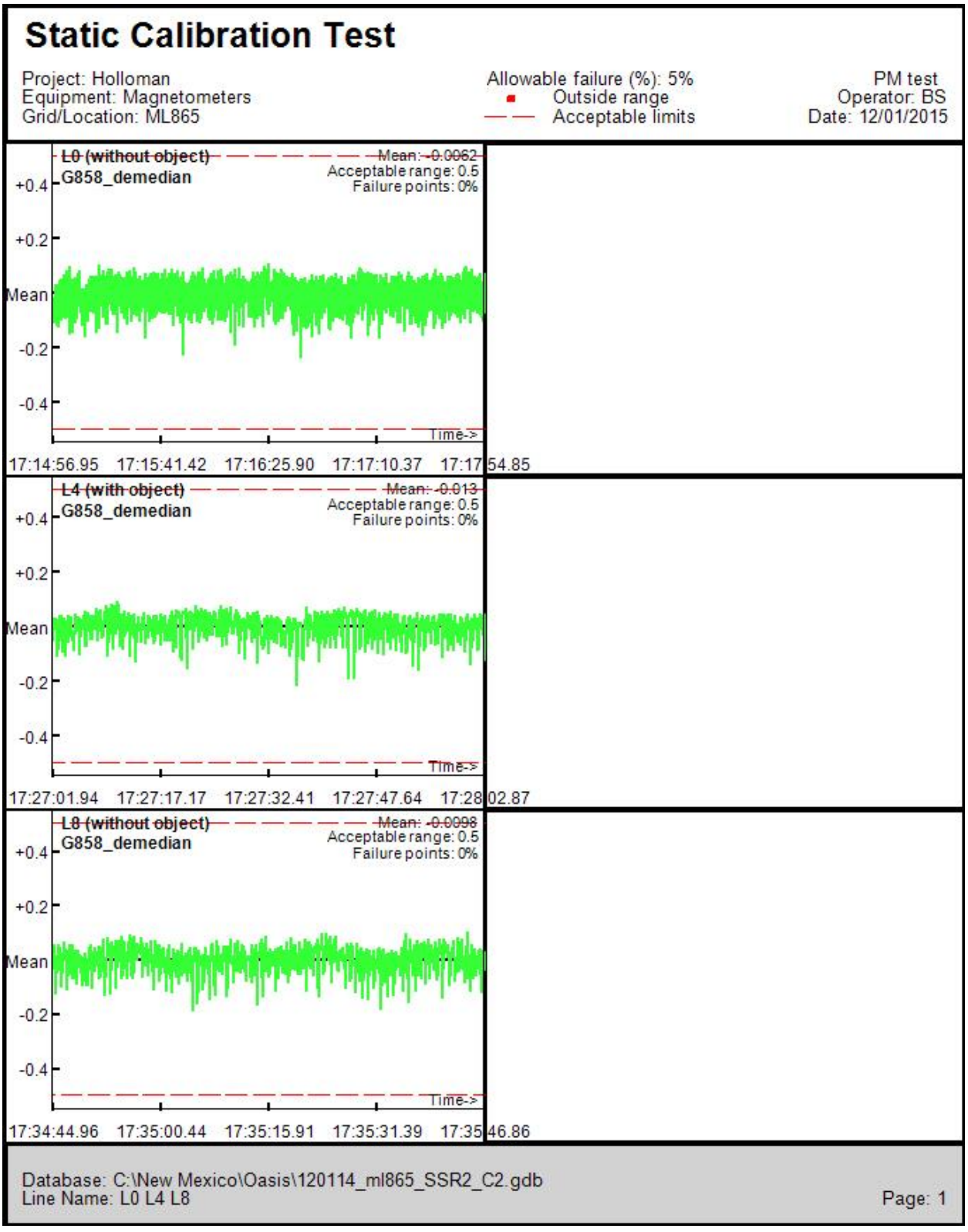


Figure C-91
12/1/2014 G-858 SSR PM Sensor L1 ML865 MRS

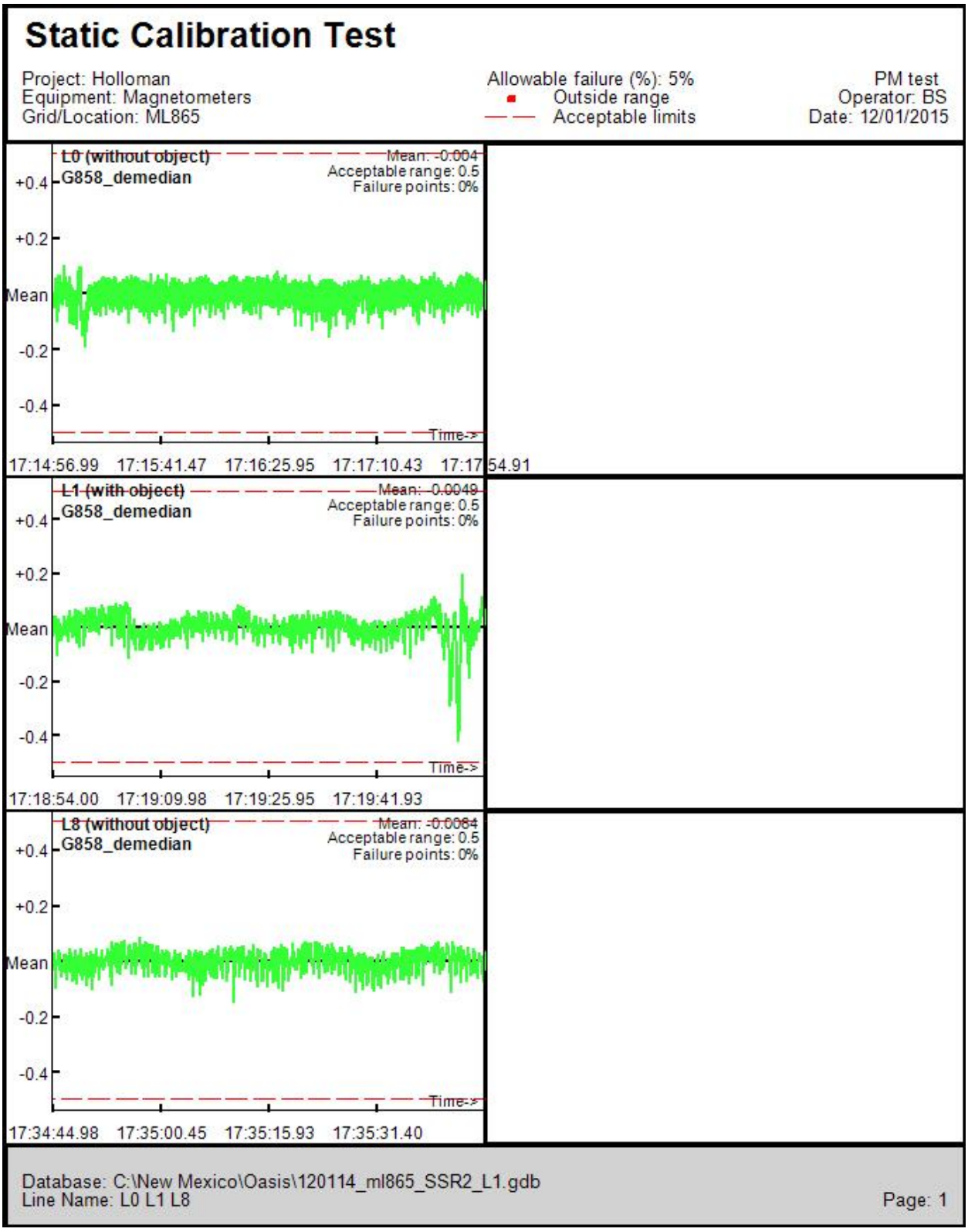


Figure C-92
12/1/2014 G-858 SSR PM Sensor L2 ML865 MRS

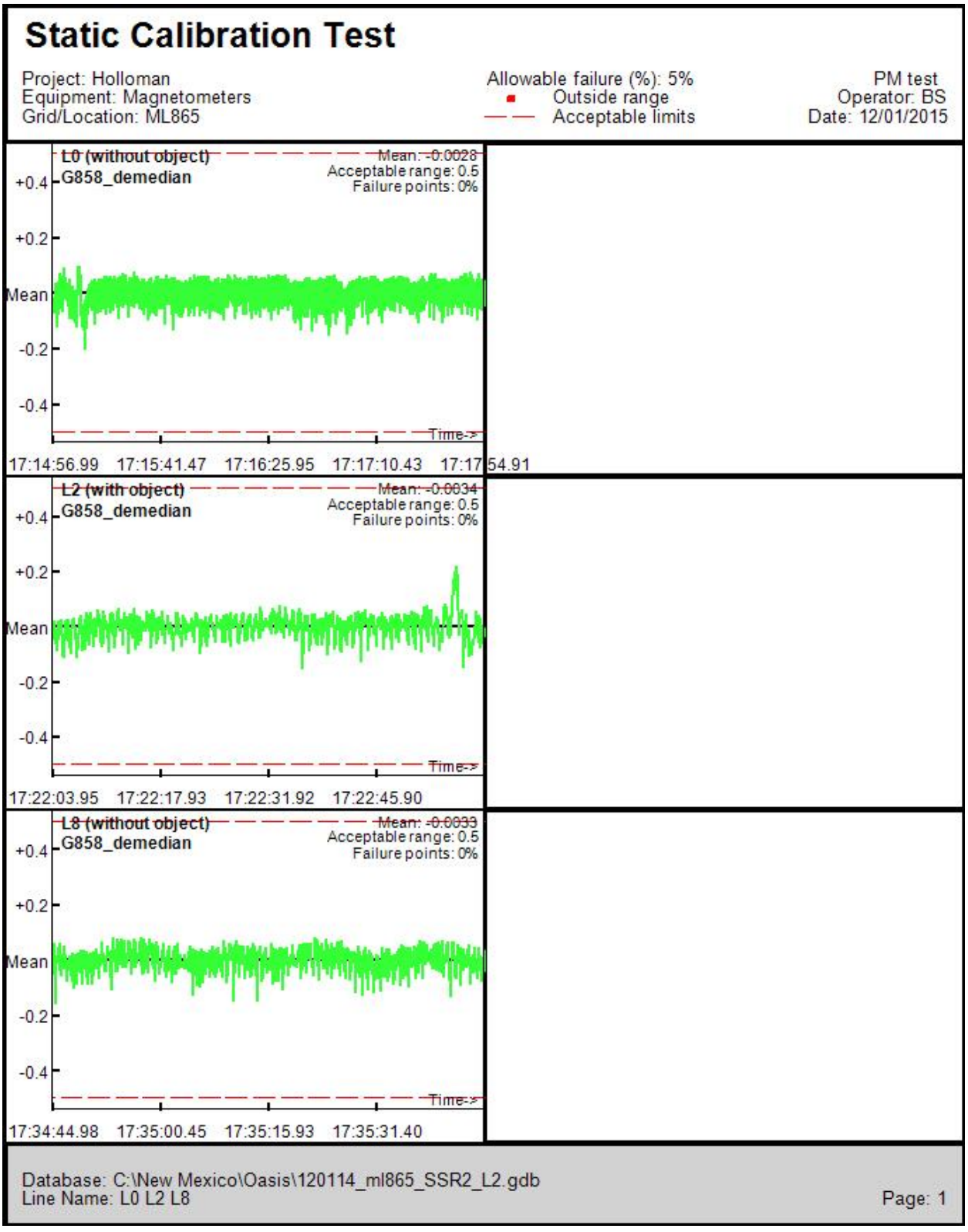


Figure C-93
12/1/2014 G-858 SSR PM Sensor R1 ML865 MRS

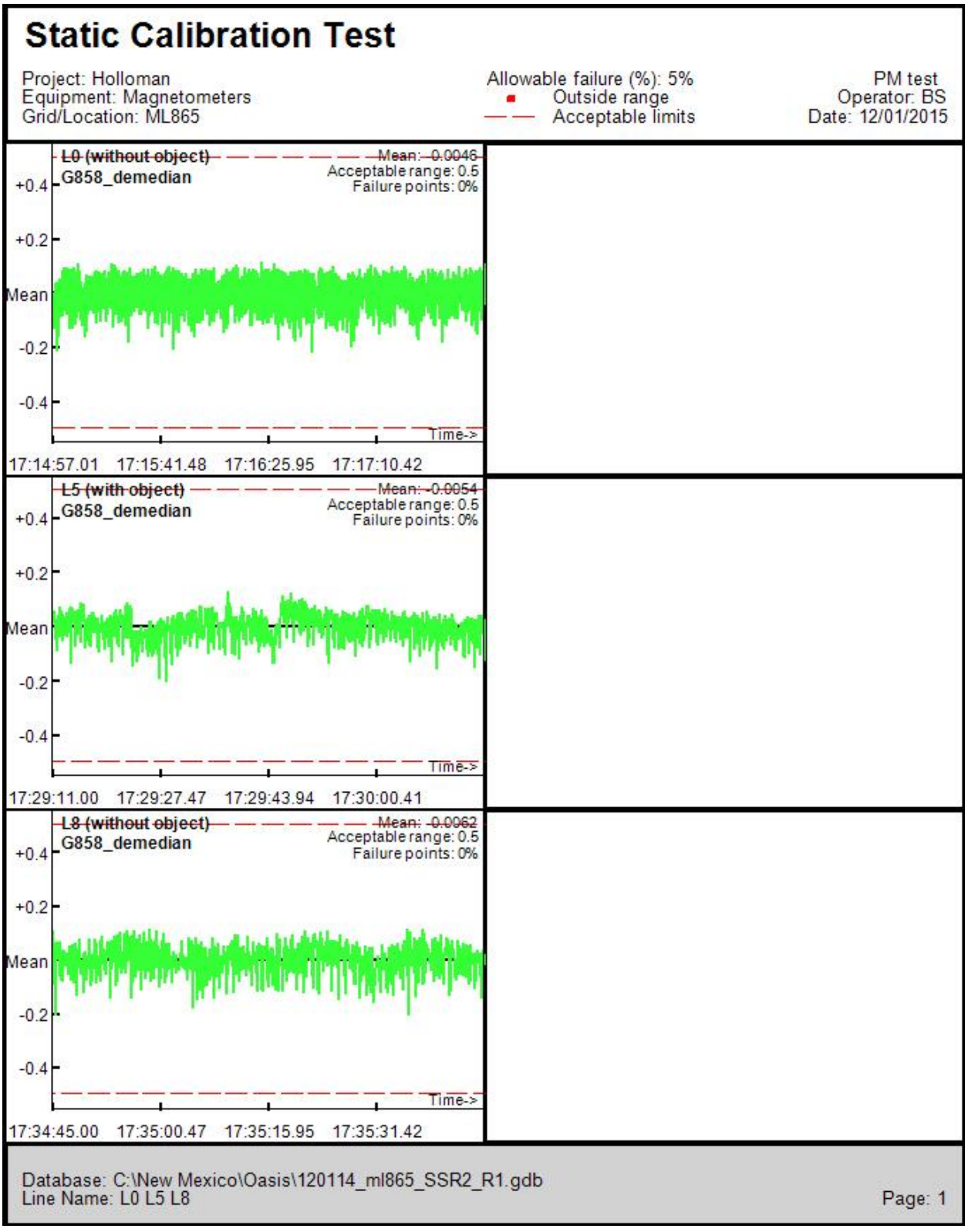


Figure C-94
12/1/2014 G-858 SSR PM Sensor R2 ML865 MRS

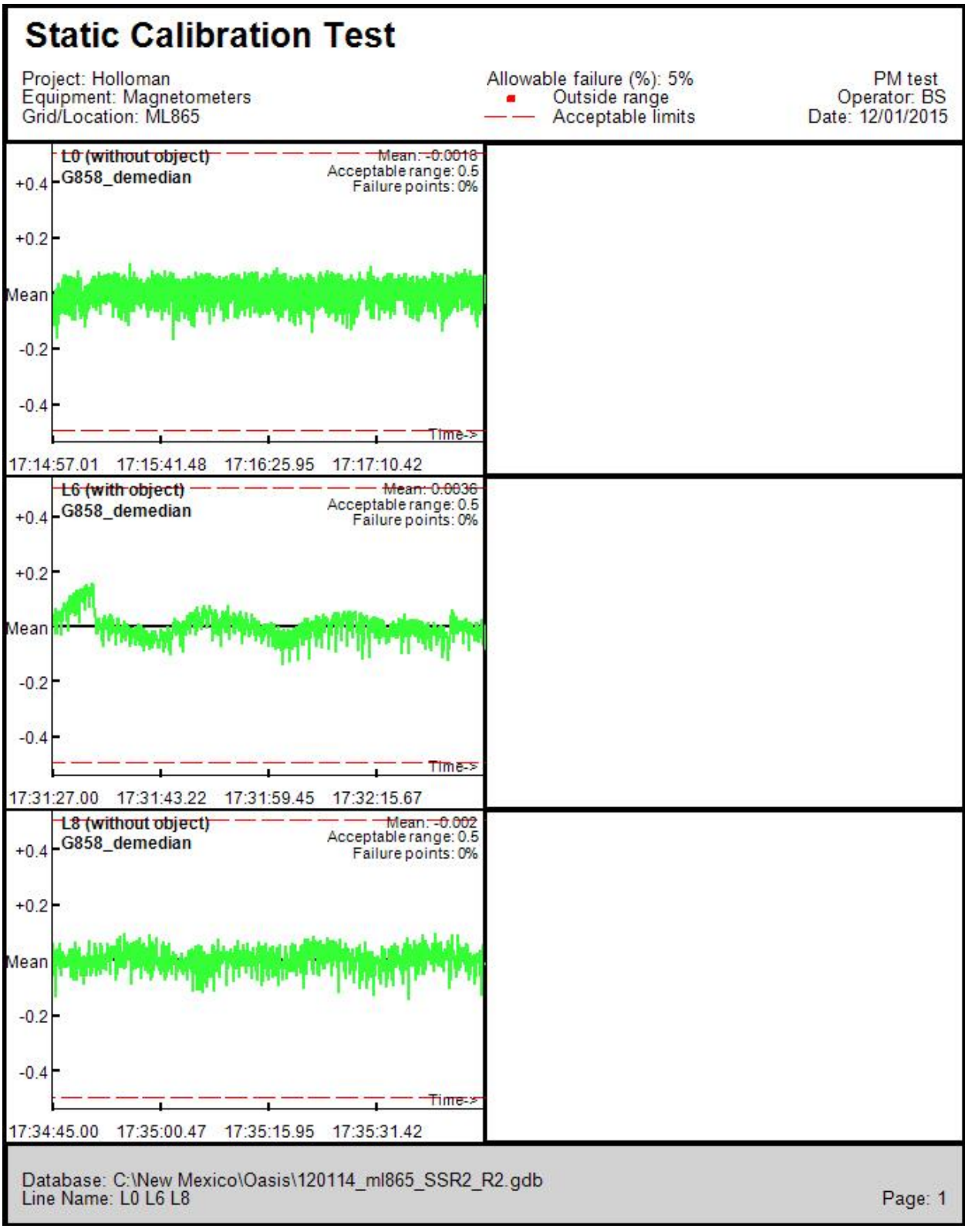


Figure C-95
12/2/2014 G-858 SSR AM Sensor C1 ML865 MRS

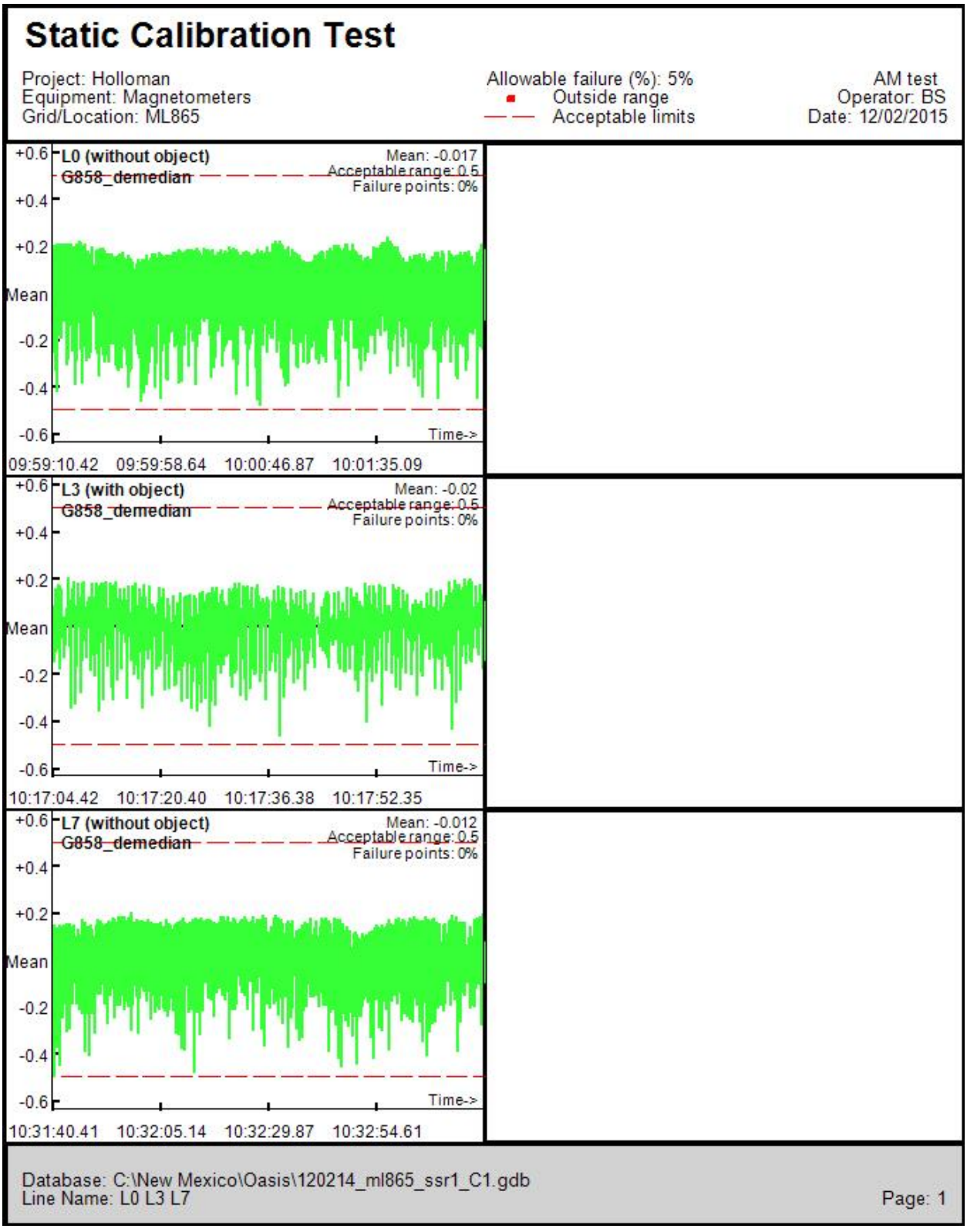


Figure C-96
12/2/2014 G-858 SSR AM Sensor C2 ML865 MRS

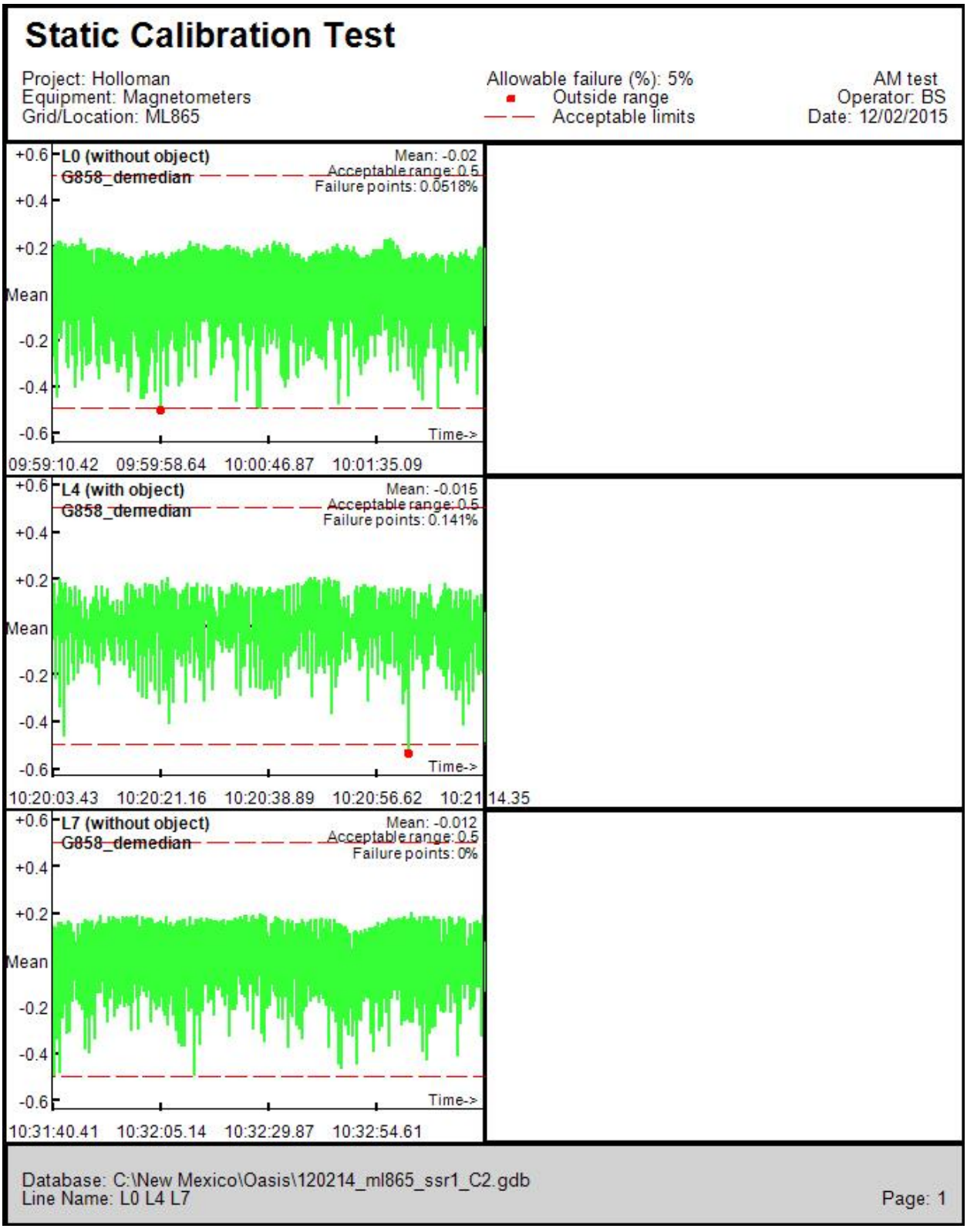


Figure C-97
12/2/2014 G-858 SSR AM Sensor L1 ML865 MRS

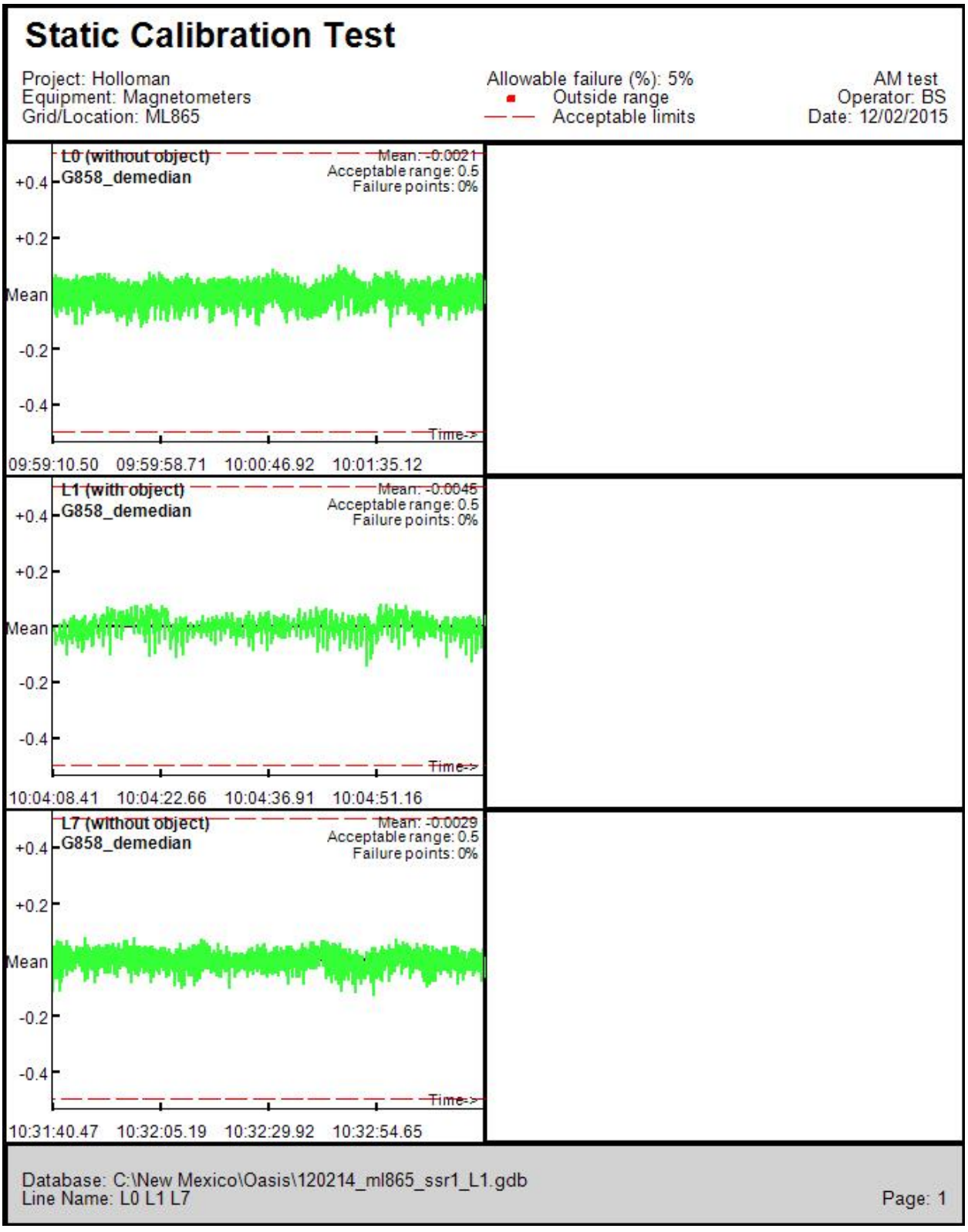


Figure C-98
12/2/2014 G-858 SSR AM Sensor L2 ML865 MRS

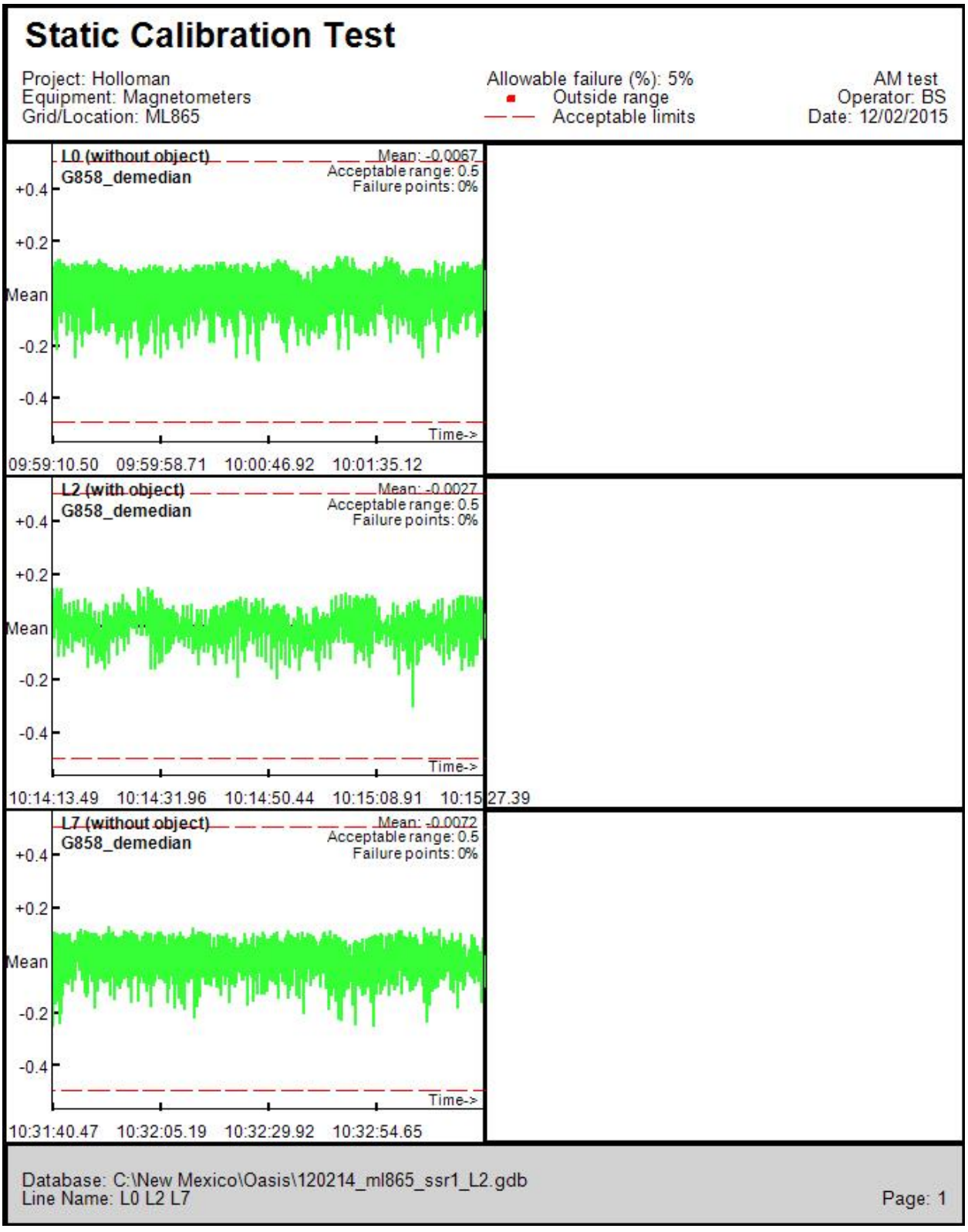


Figure C-99
12/2/2014 G-858 SSR AM Sensor R1 ML865 MRS

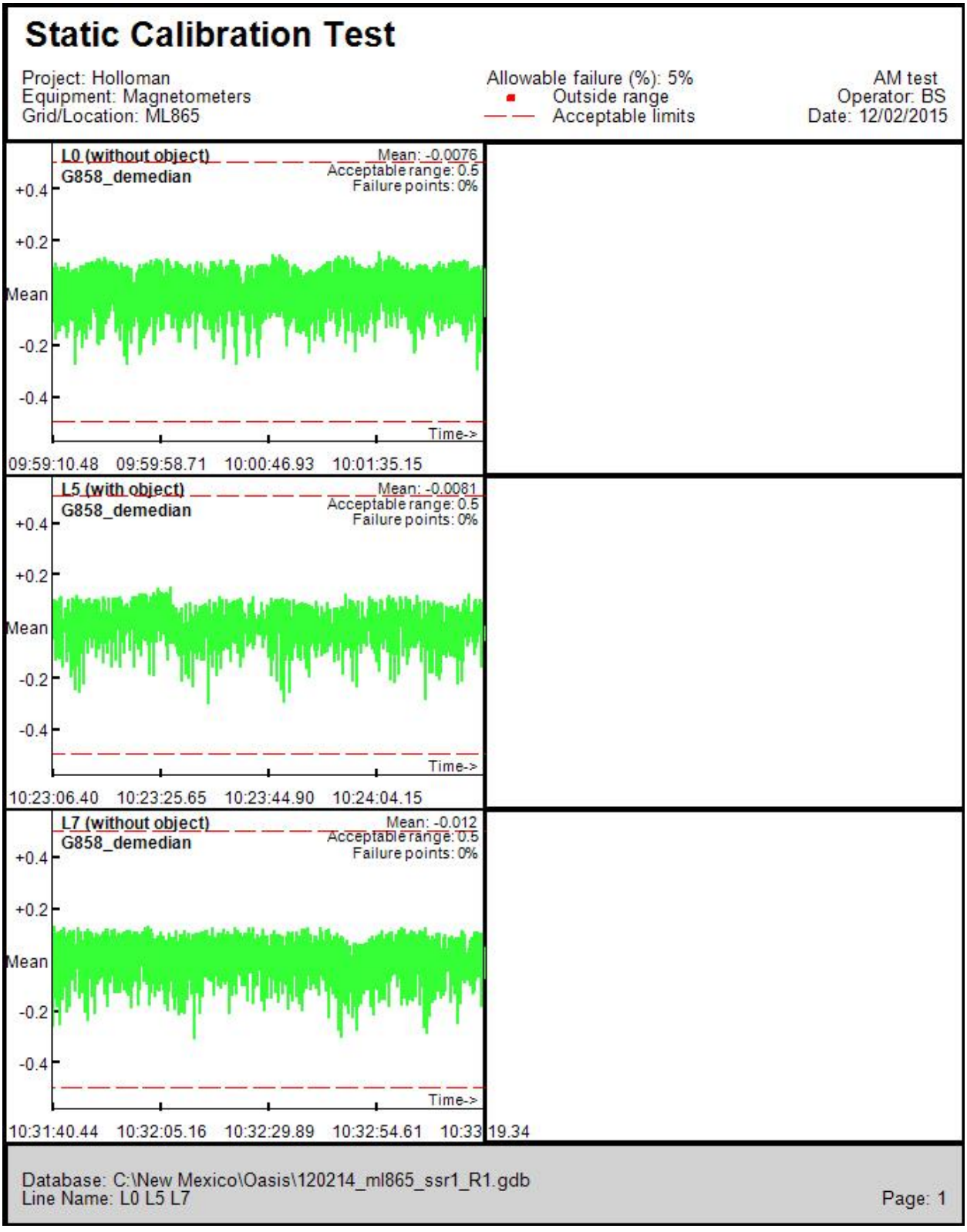


Figure C-100
12/2/2014 G-858 SSR AM Sensor R2 ML865 MRS

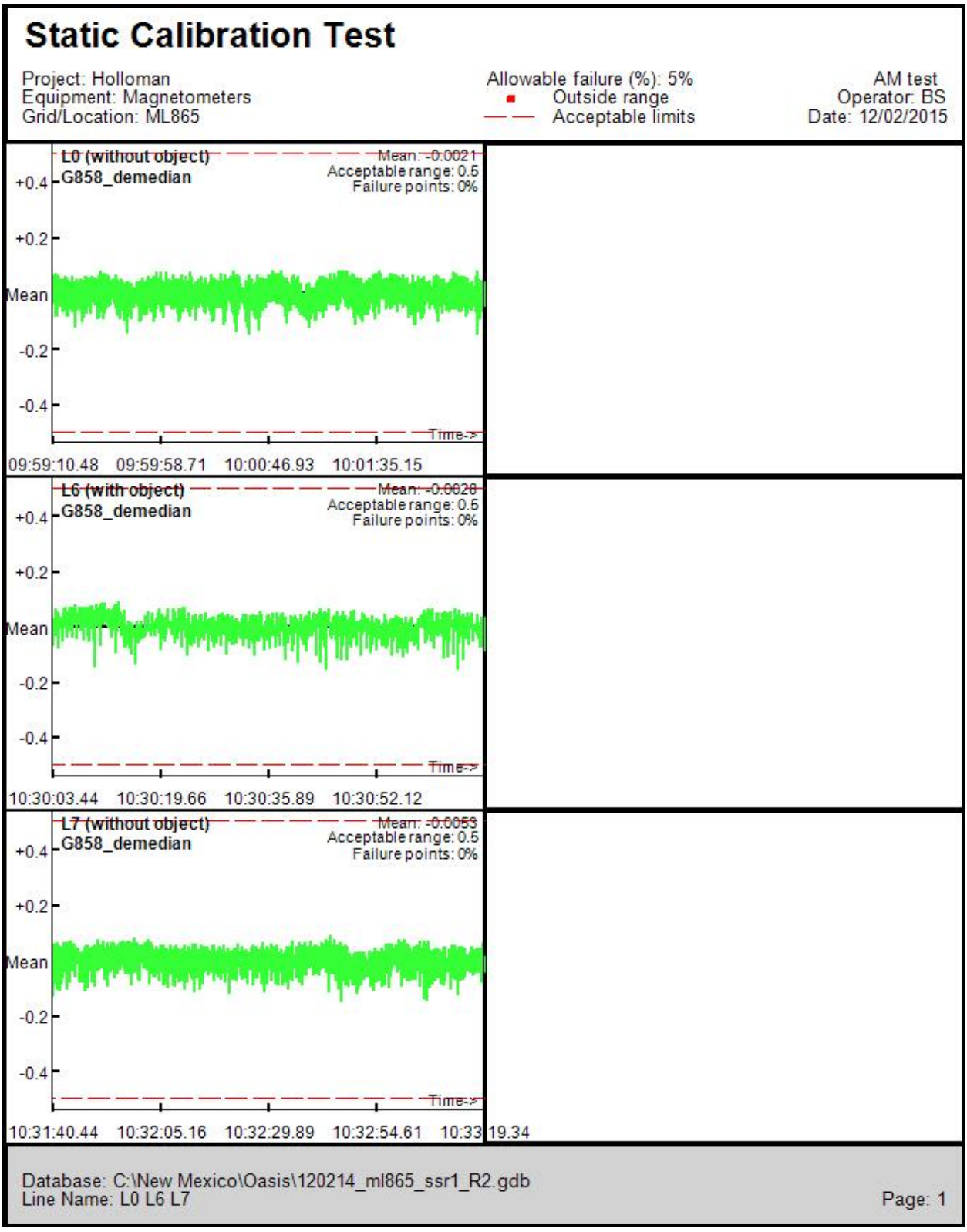


Figure C-101
12/2/2014 G-858 SSR PM Sensor C1 ML865 MRS

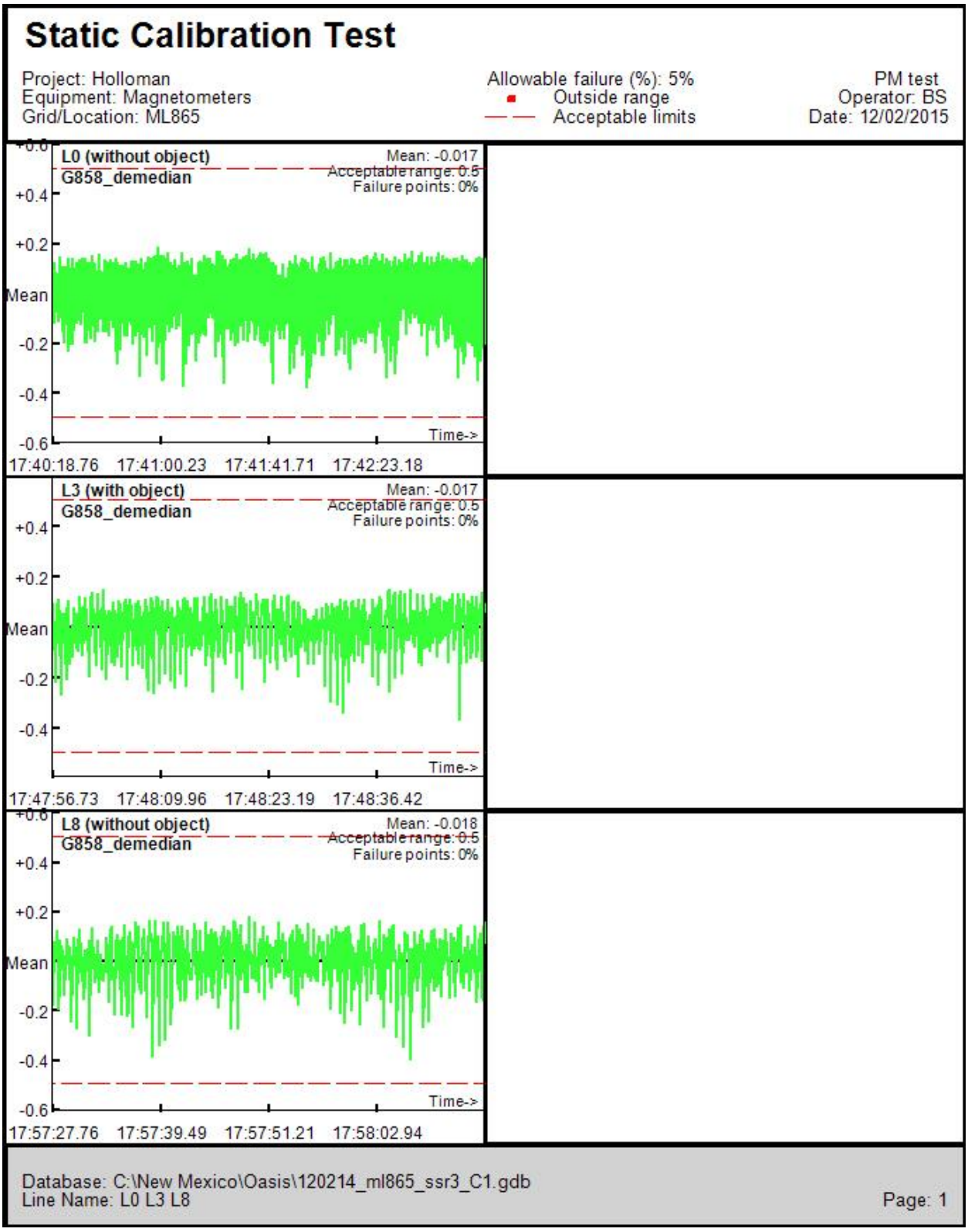


Figure C-102
12/2/2014 G-858 SSR PM Sensor C2 ML865 MRS

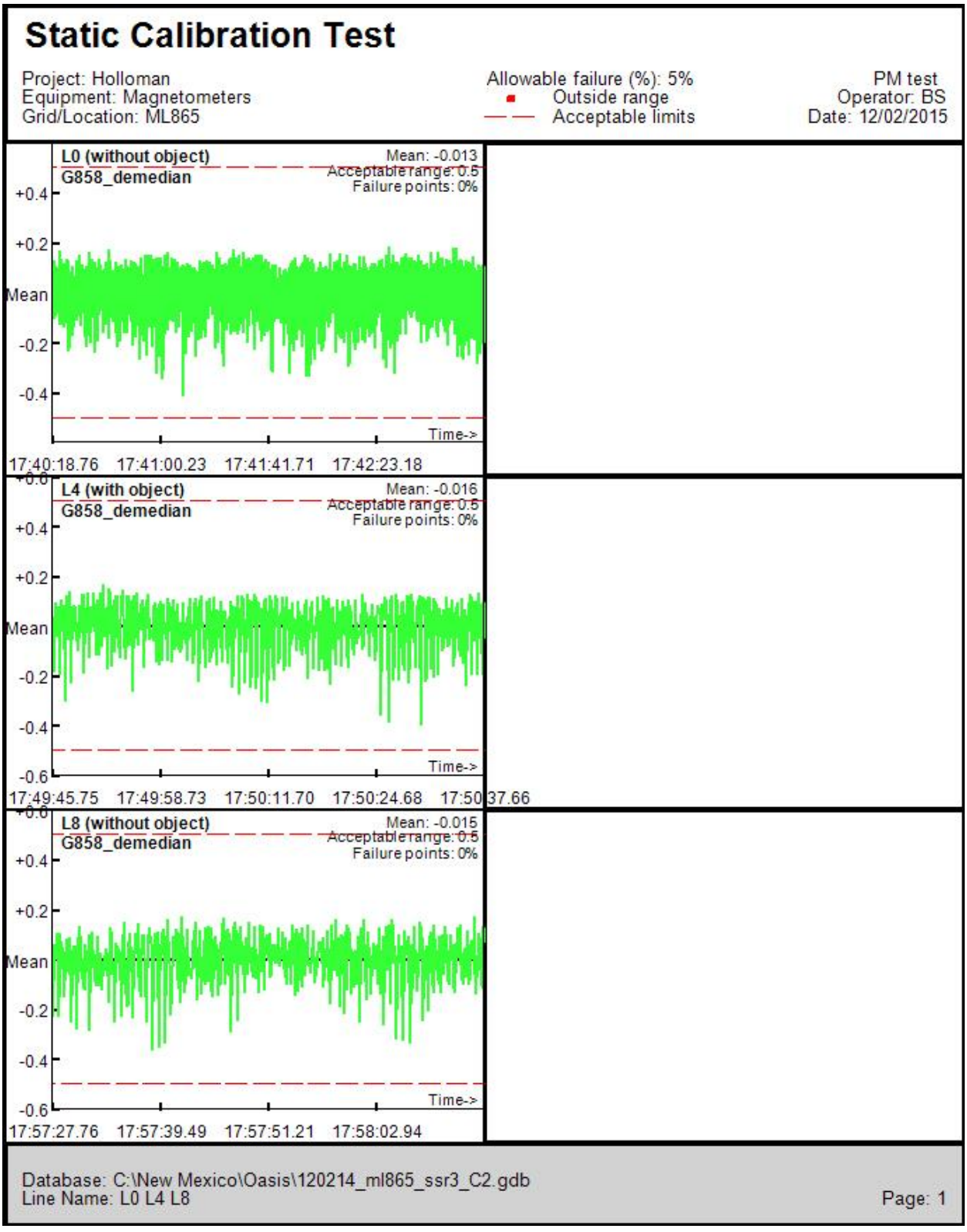


Figure C-103
12/2/2014 G-858 SSR PM Sensor L1 ML865 MRS

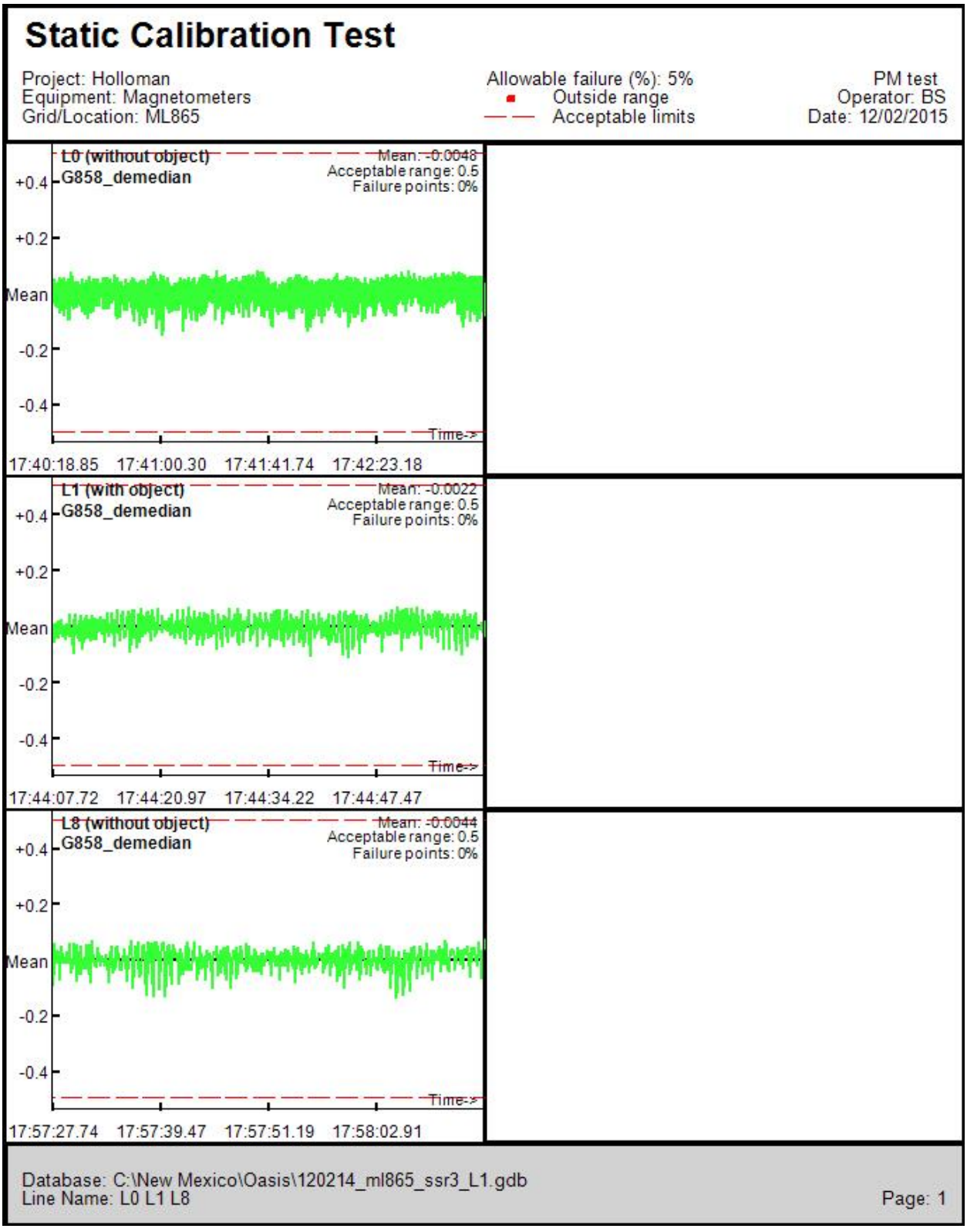


Figure C-104
12/2/2014 G-858 SSR PM Sensor L2 ML865 MRS

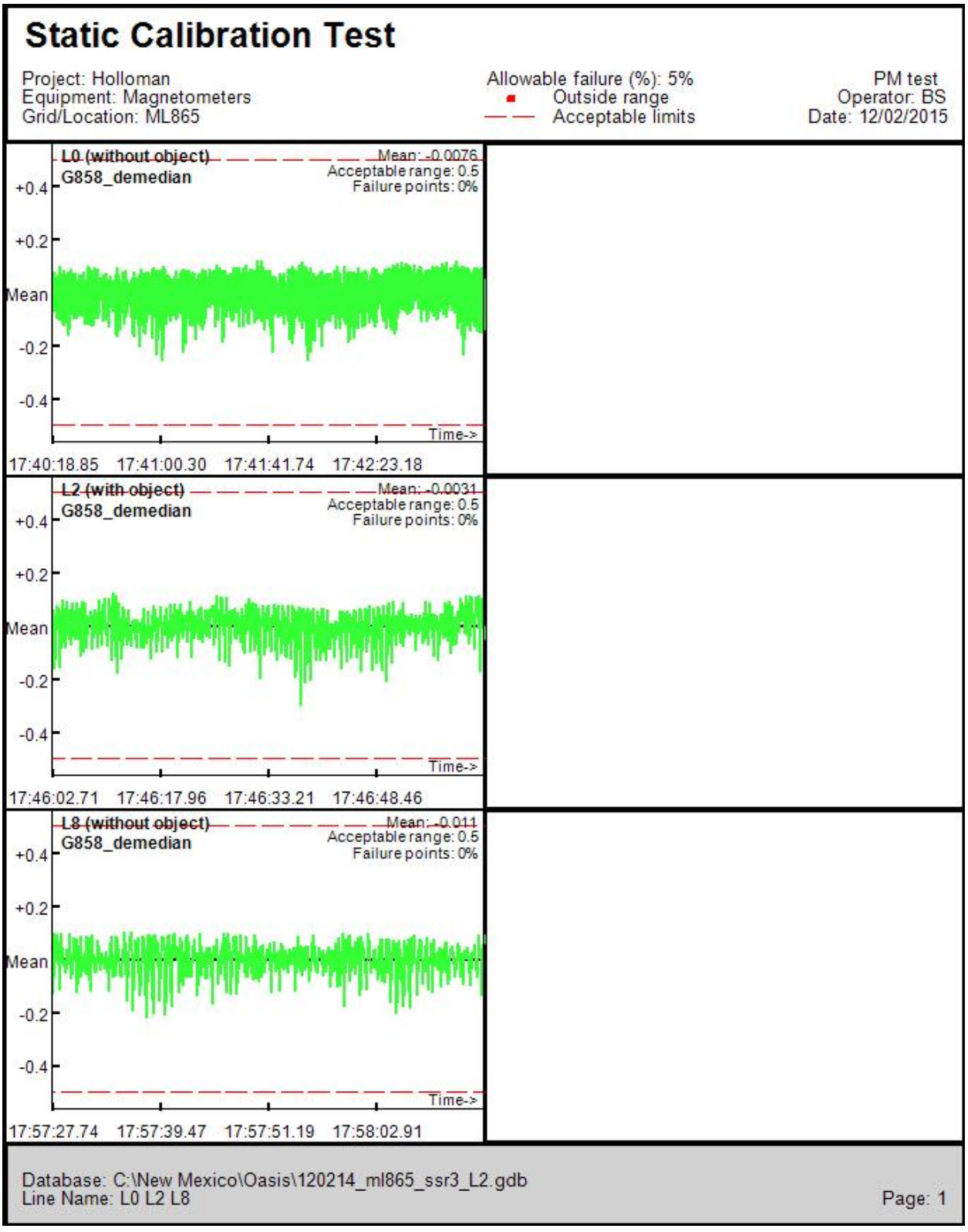


Figure C-105
12/2/2014 G-858 SSR PM Sensor R1 ML865 MRS

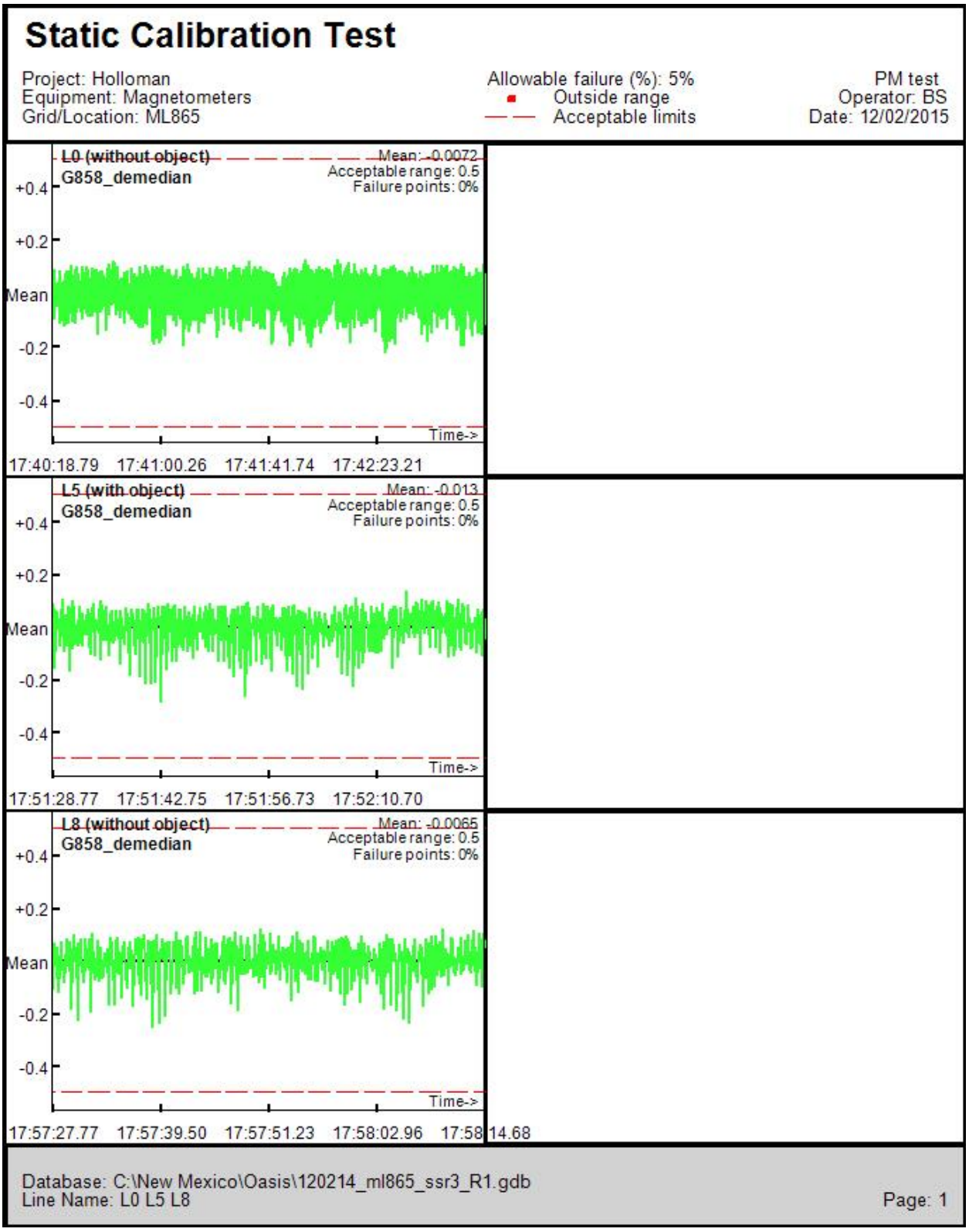


Figure C-106
12/2/2014 G-858 SSR PM Sensor R2 ML865 MRS

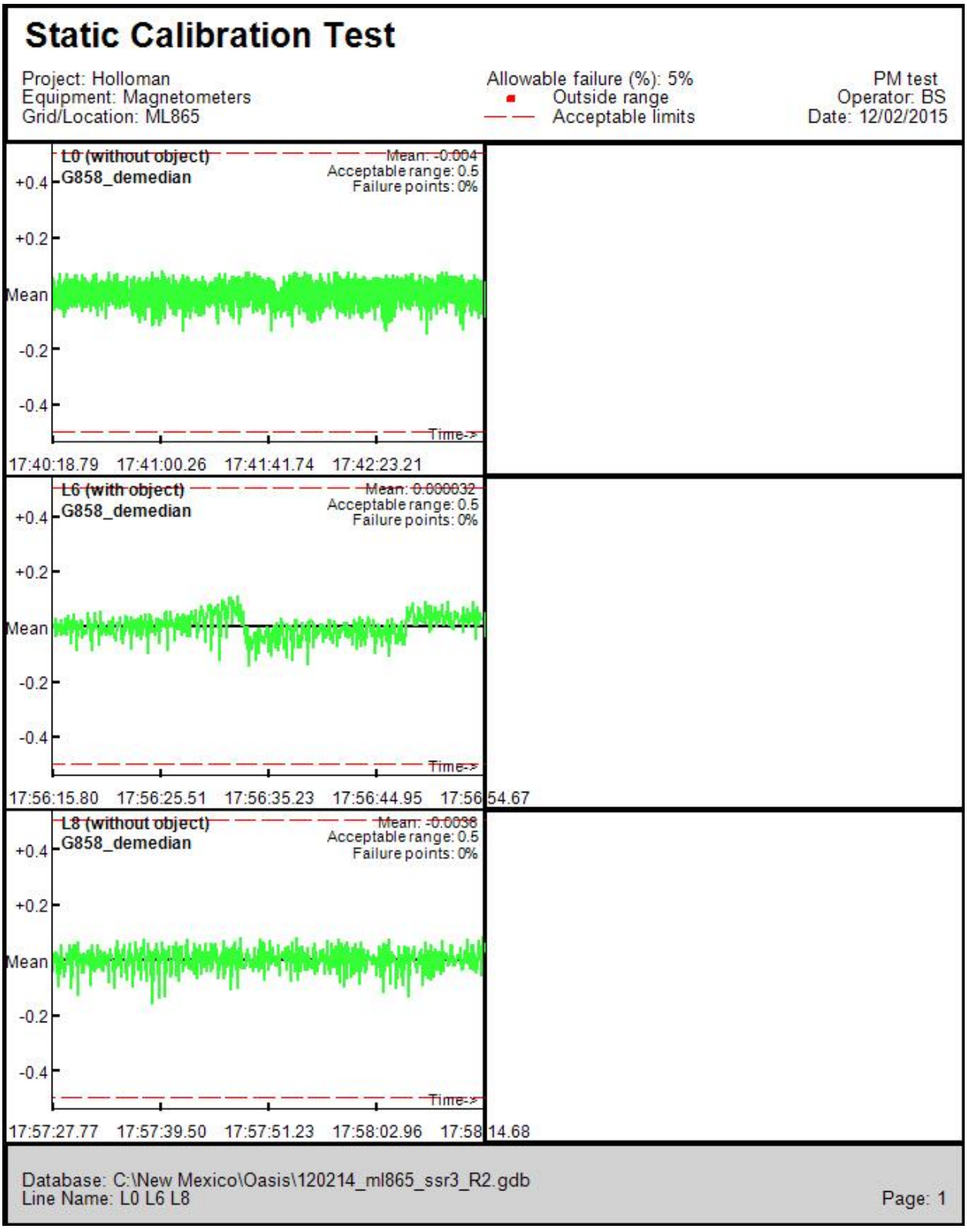


Figure C-107
12/3/2014 G-858 SSR AM Sensor C1 ML865 MRS

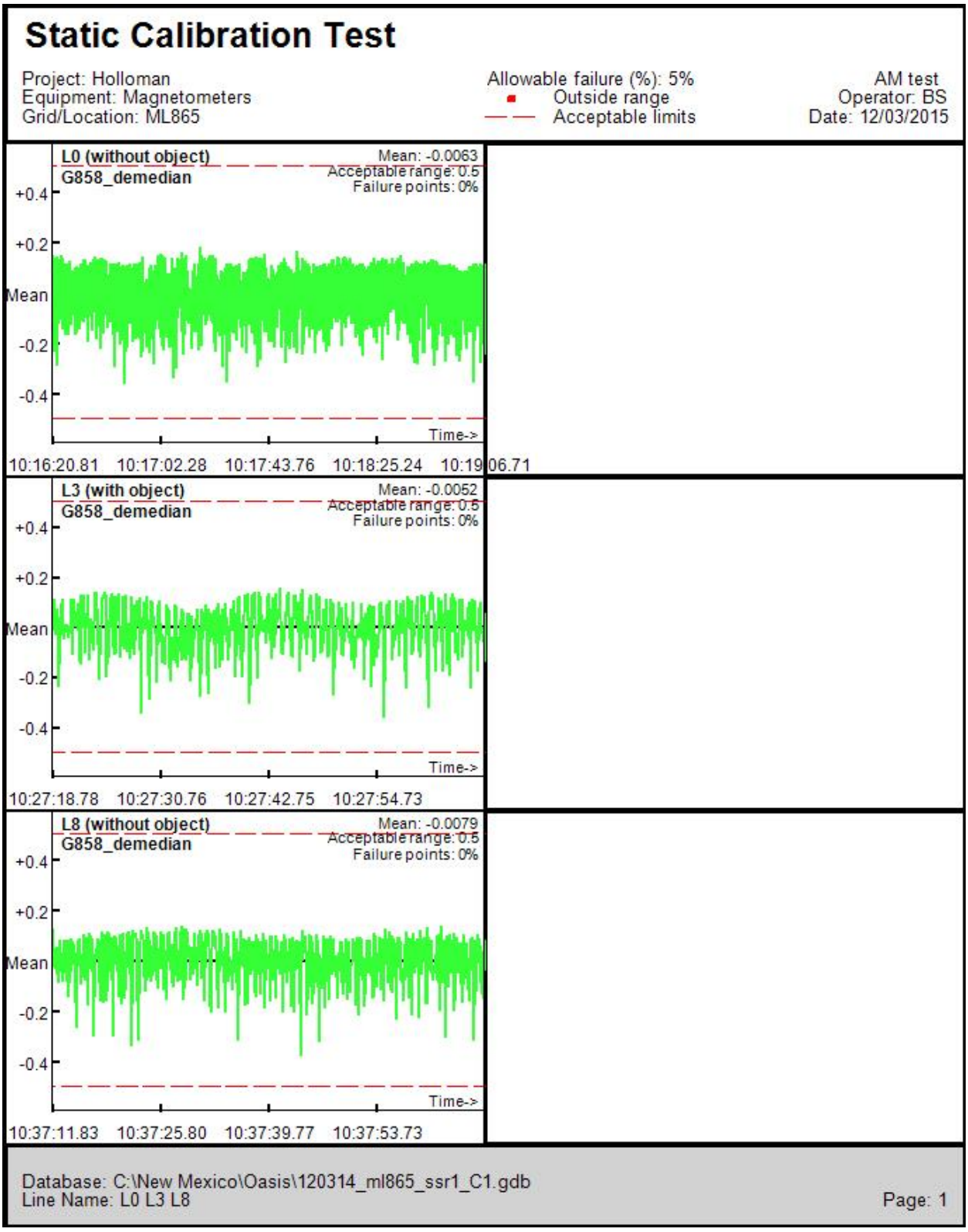


Figure C-108
12/3/2014 G-858 SSR AM Sensor C2 ML865 MRS

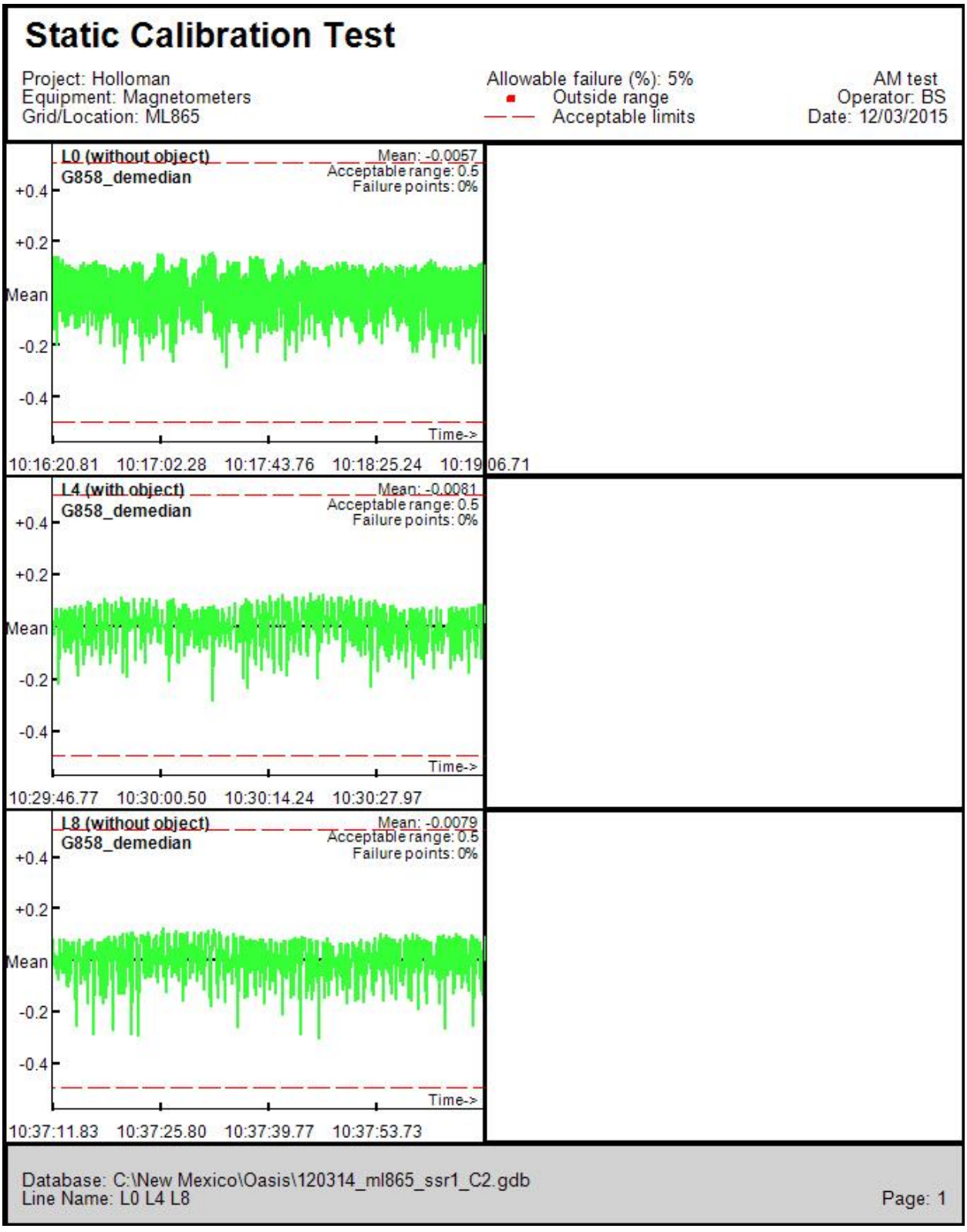


Figure C-109
12/3/2014 G-858 SSR AM Sensor L1 ML865 MRS

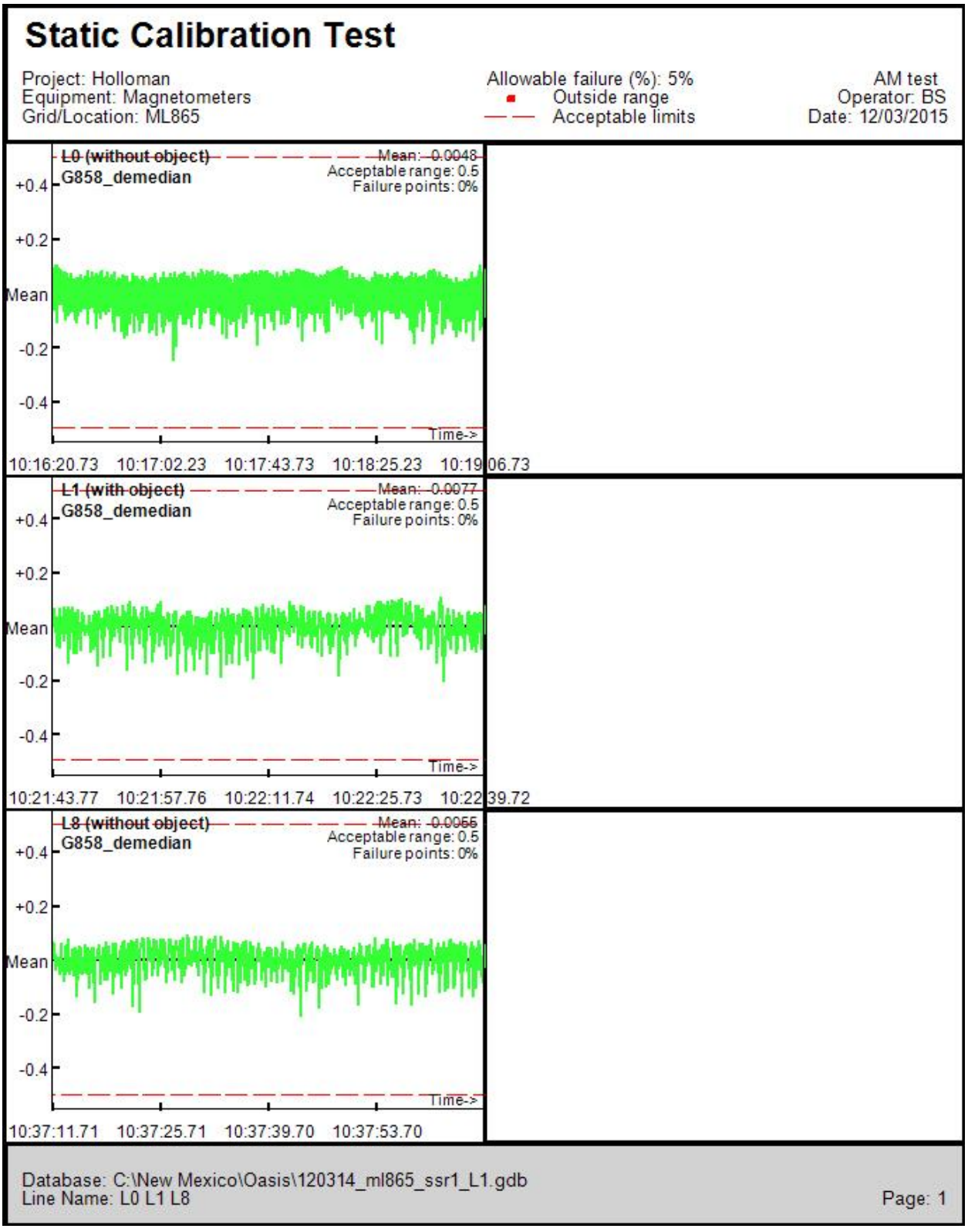


Figure C-110
12/3/2014 G-858 SSR AM Sensor L2 ML865 MRS

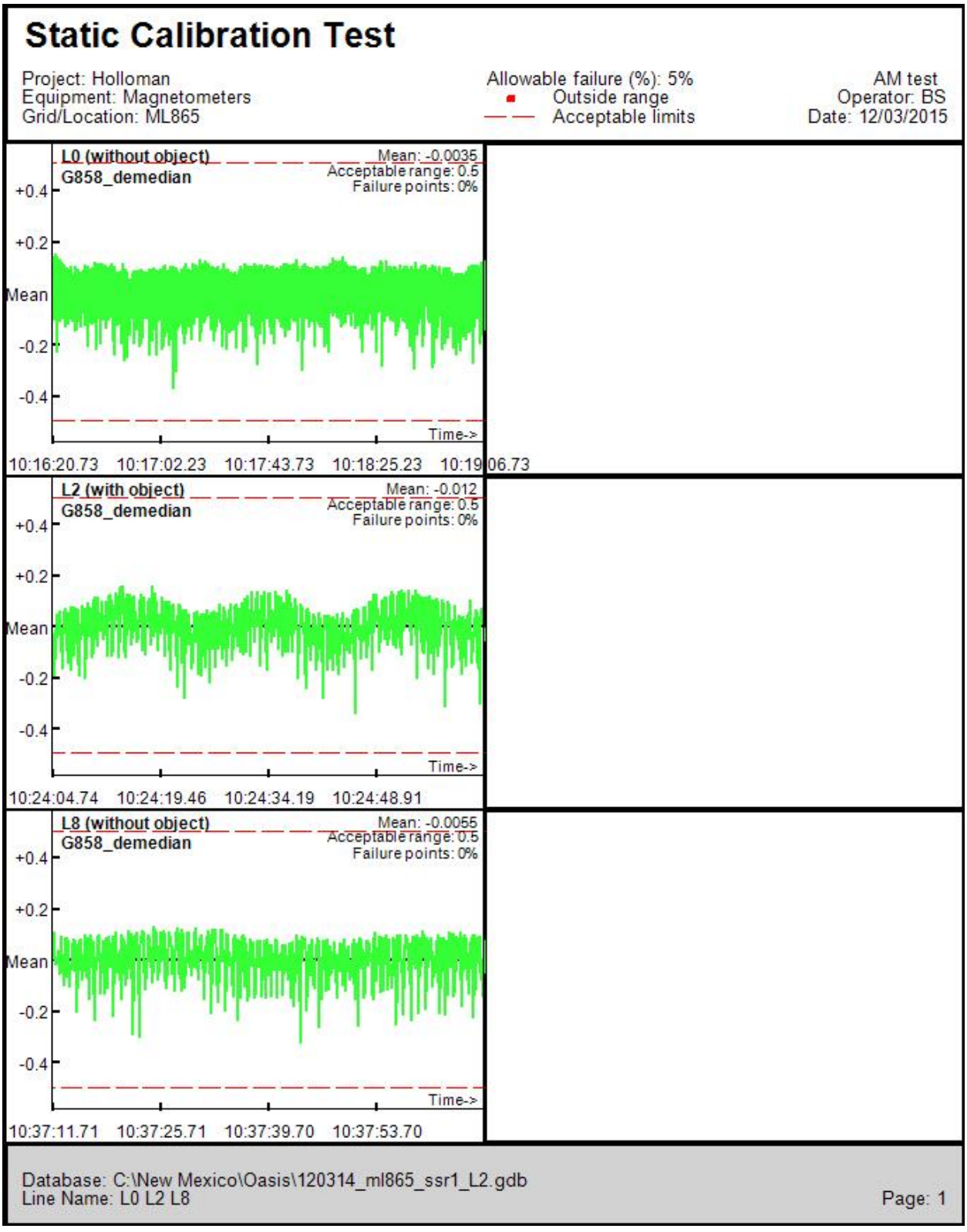


Figure C-111
12/3/2014 G-858 SSR AM Sensor R1 ML865 MRS

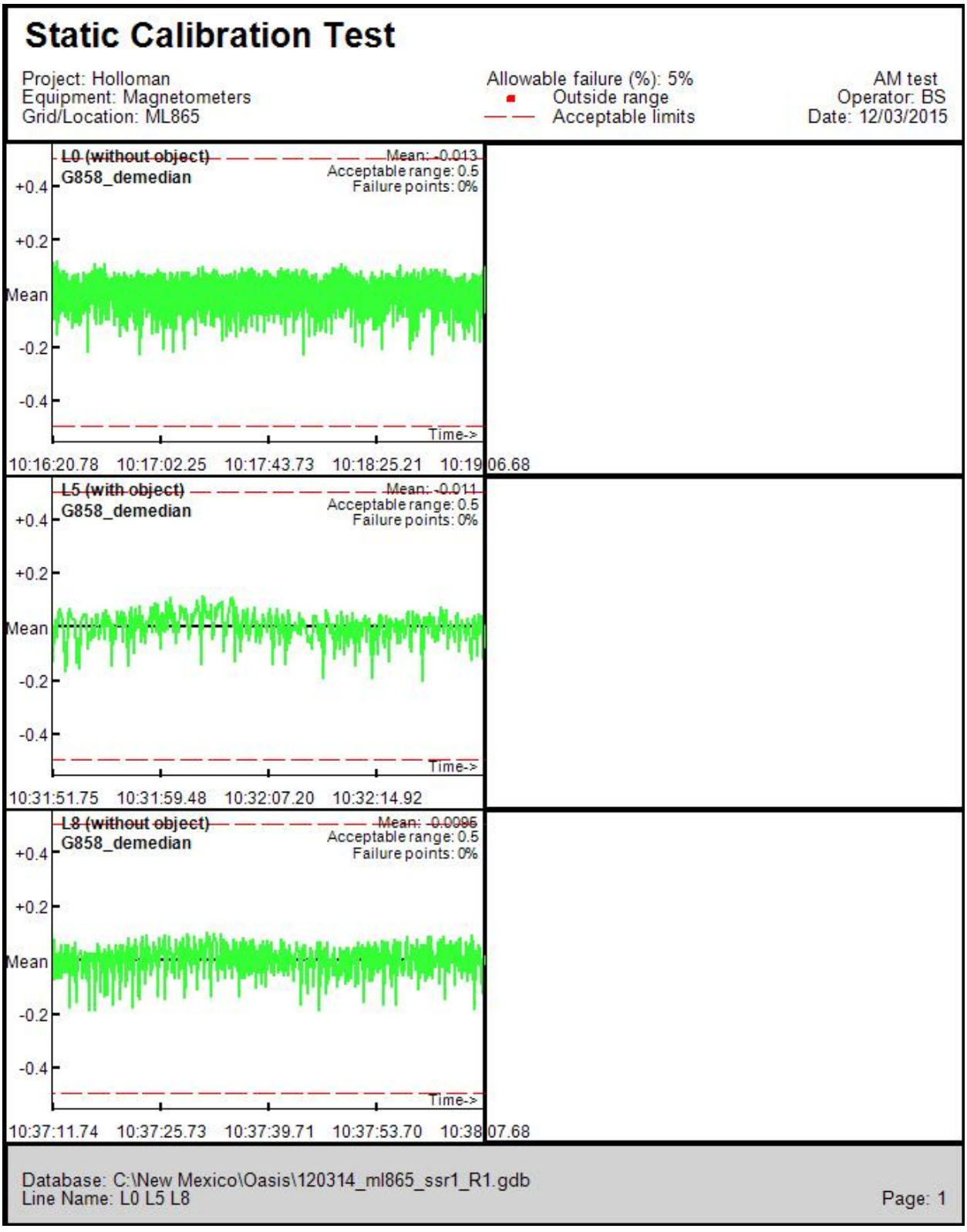


Figure C-112
12/3/2014 G-858 SSR AM Sensor R2 ML865 MRS

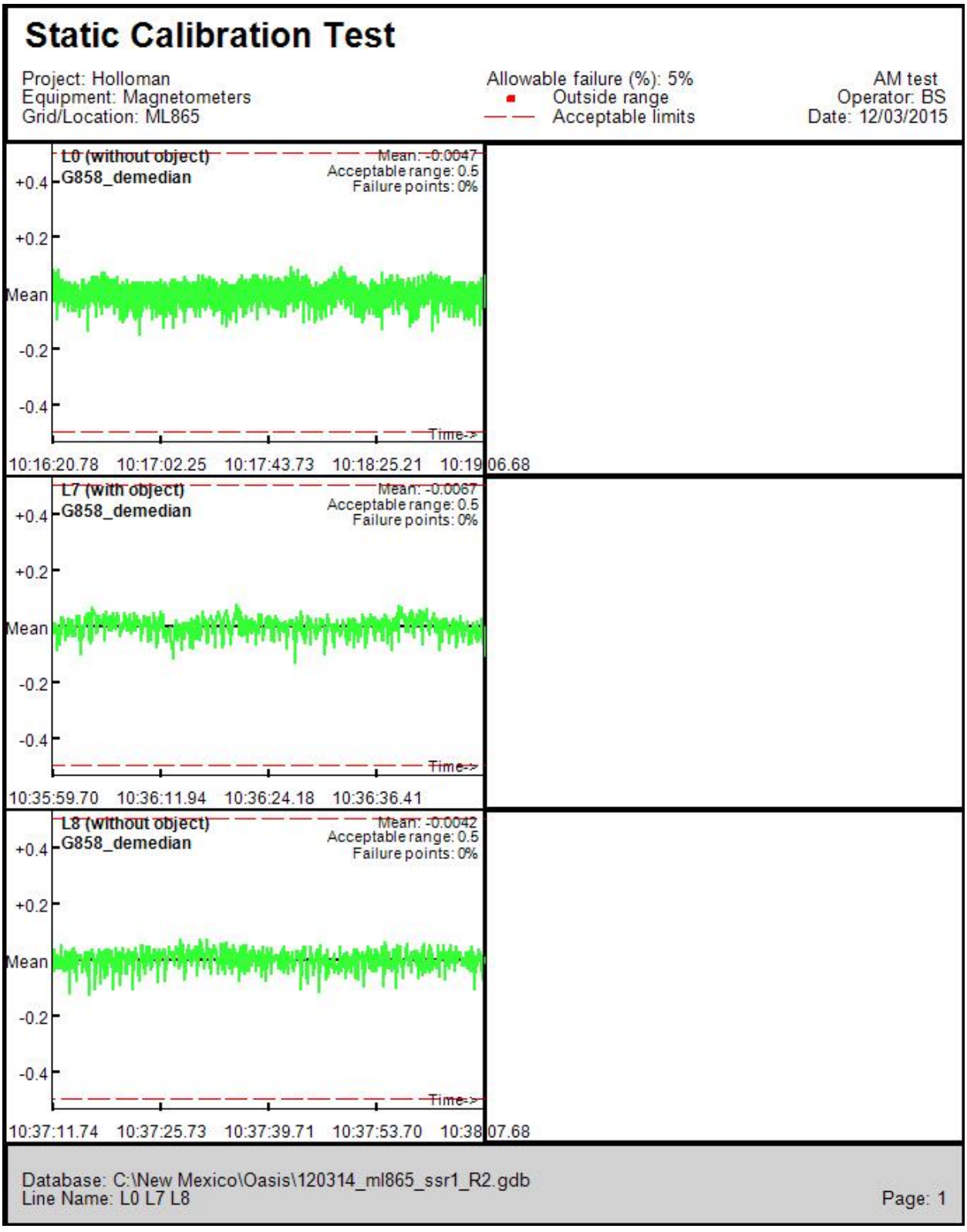


Figure C-113
12/3/2014 G-858 SSR PM Sensor C1 ML865 MRS

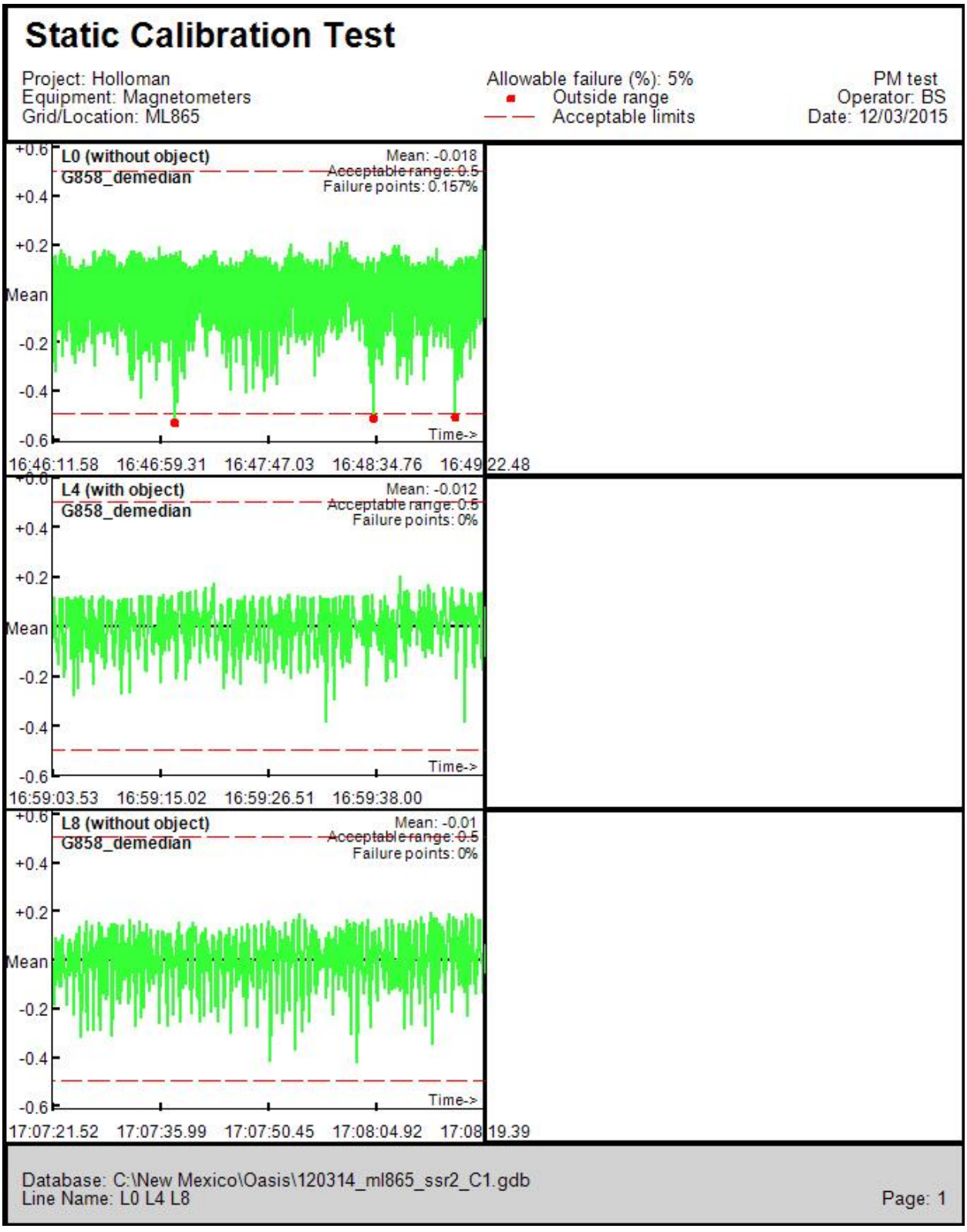


Figure C-114
12/3/2014 G-858 SSR PM Sensor C2 ML865 MRS

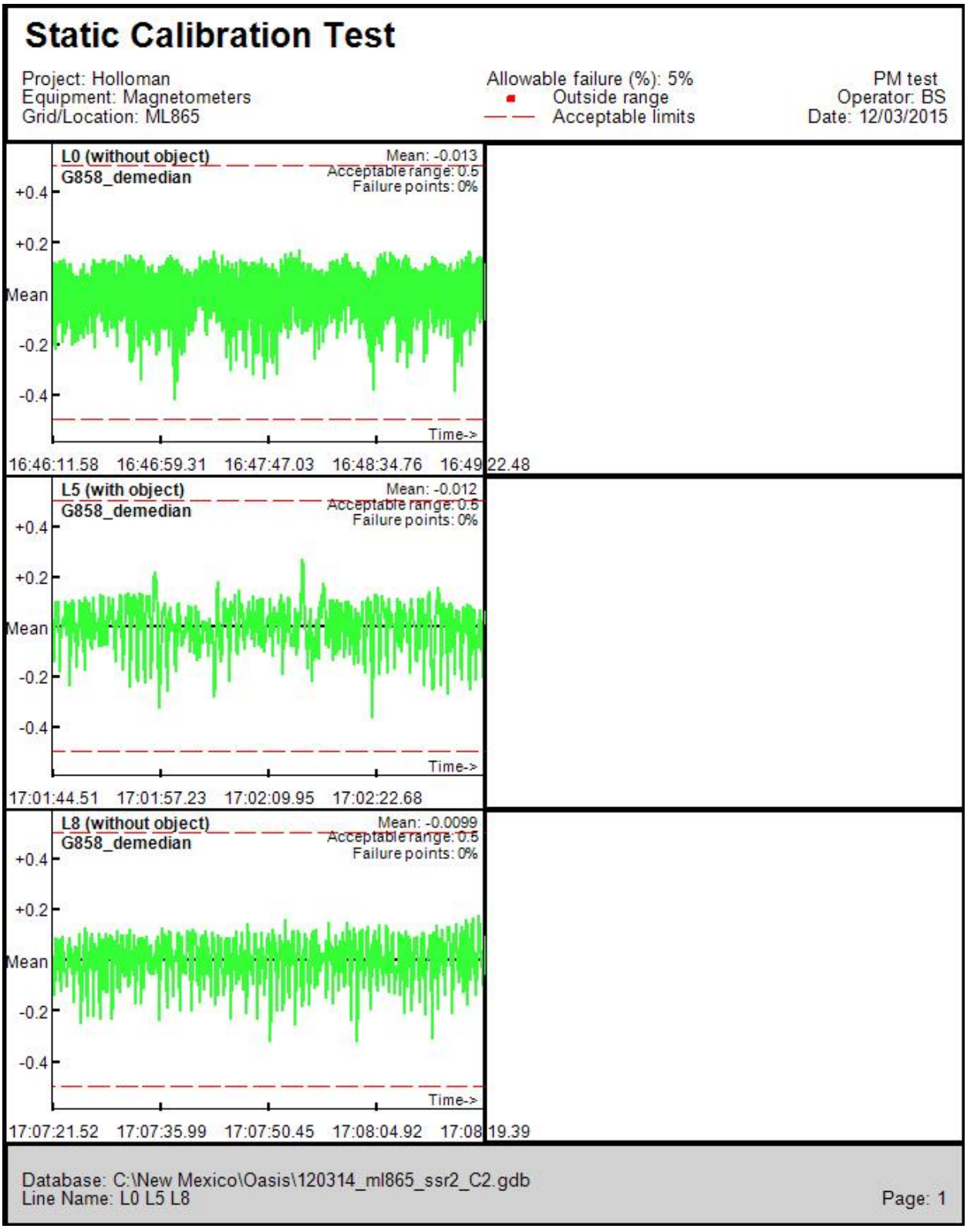


Figure C-115
12/3/2014 G-858 SSR PM Sensor L1 ML865 MRS

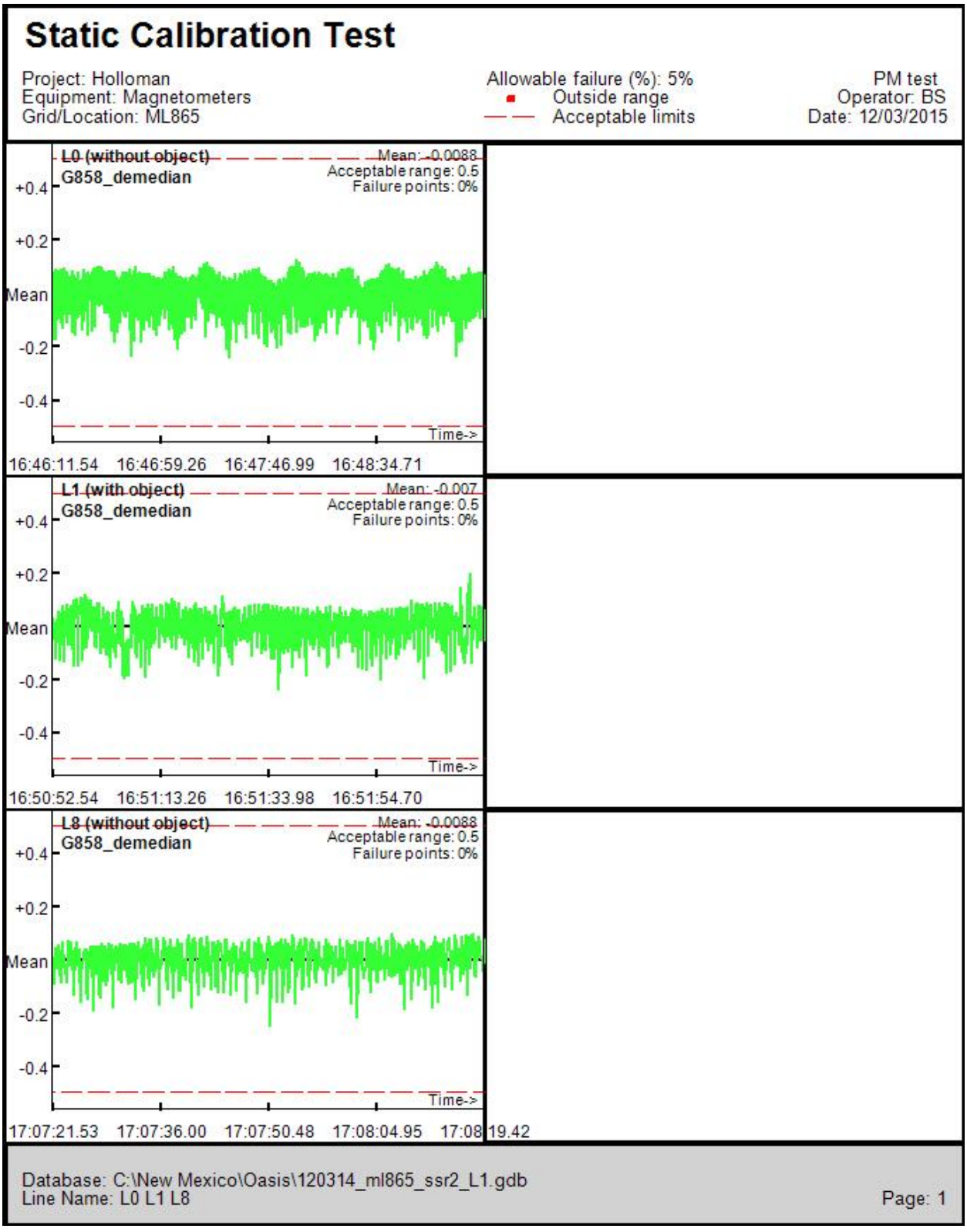


Figure C-116
12/3/2014 G-858 SSR PM Sensor L2 ML865 MRS

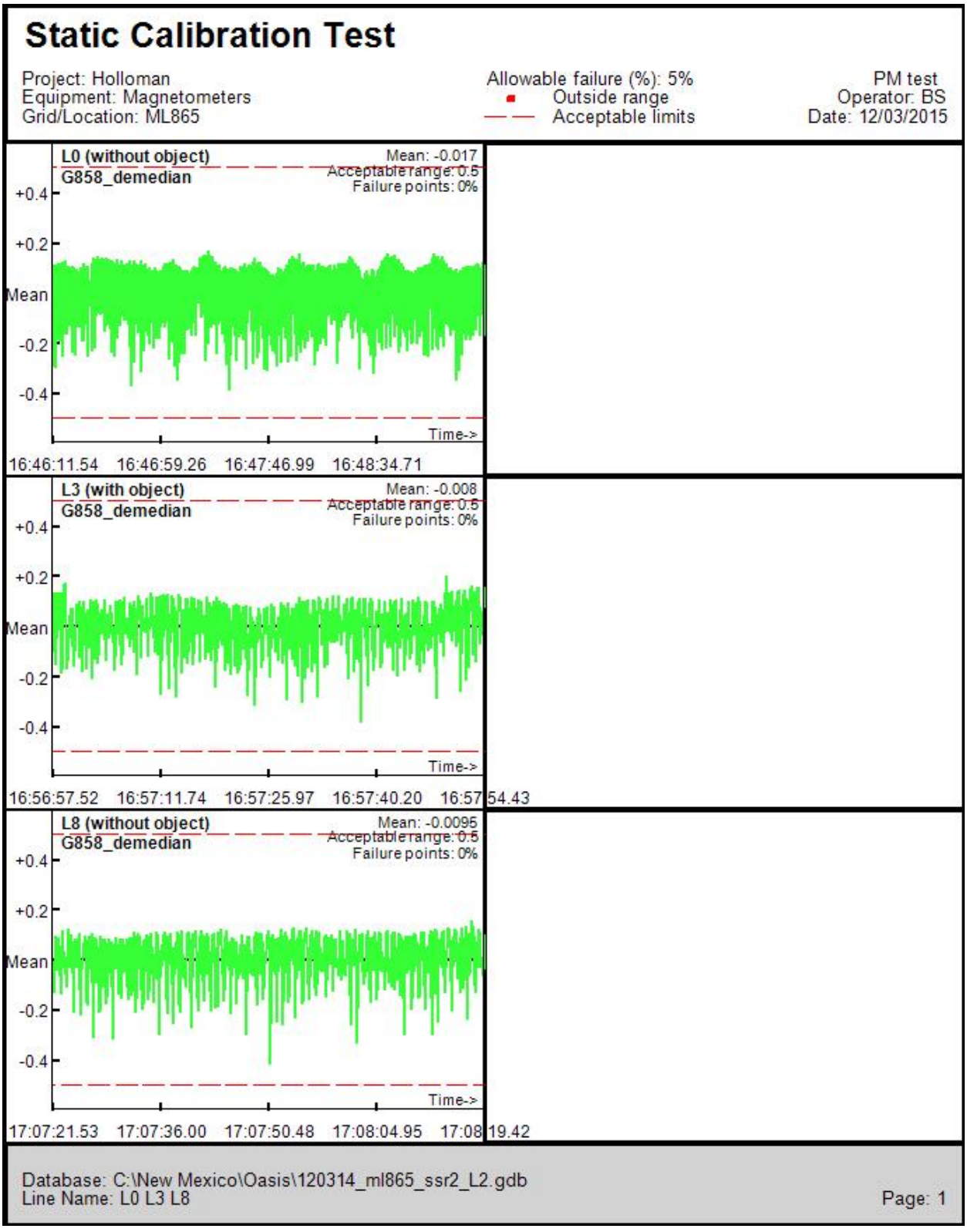


Figure C-117
12/3/2014 G-858 SSR PM Sensor R1 ML865 MRS

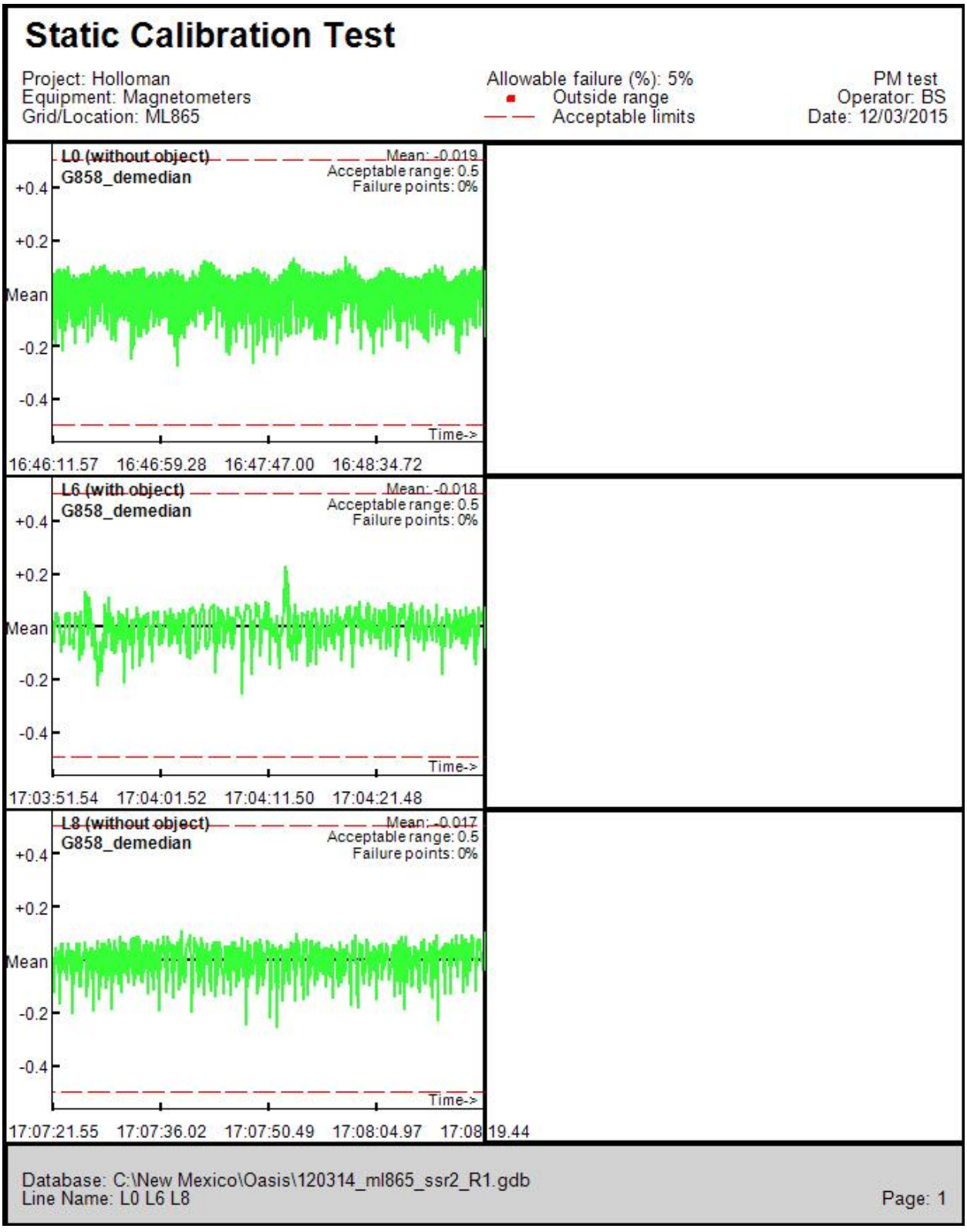


Figure C-118
12/3/2014 G-858 SSR PM Sensor R2 ML865 MRS

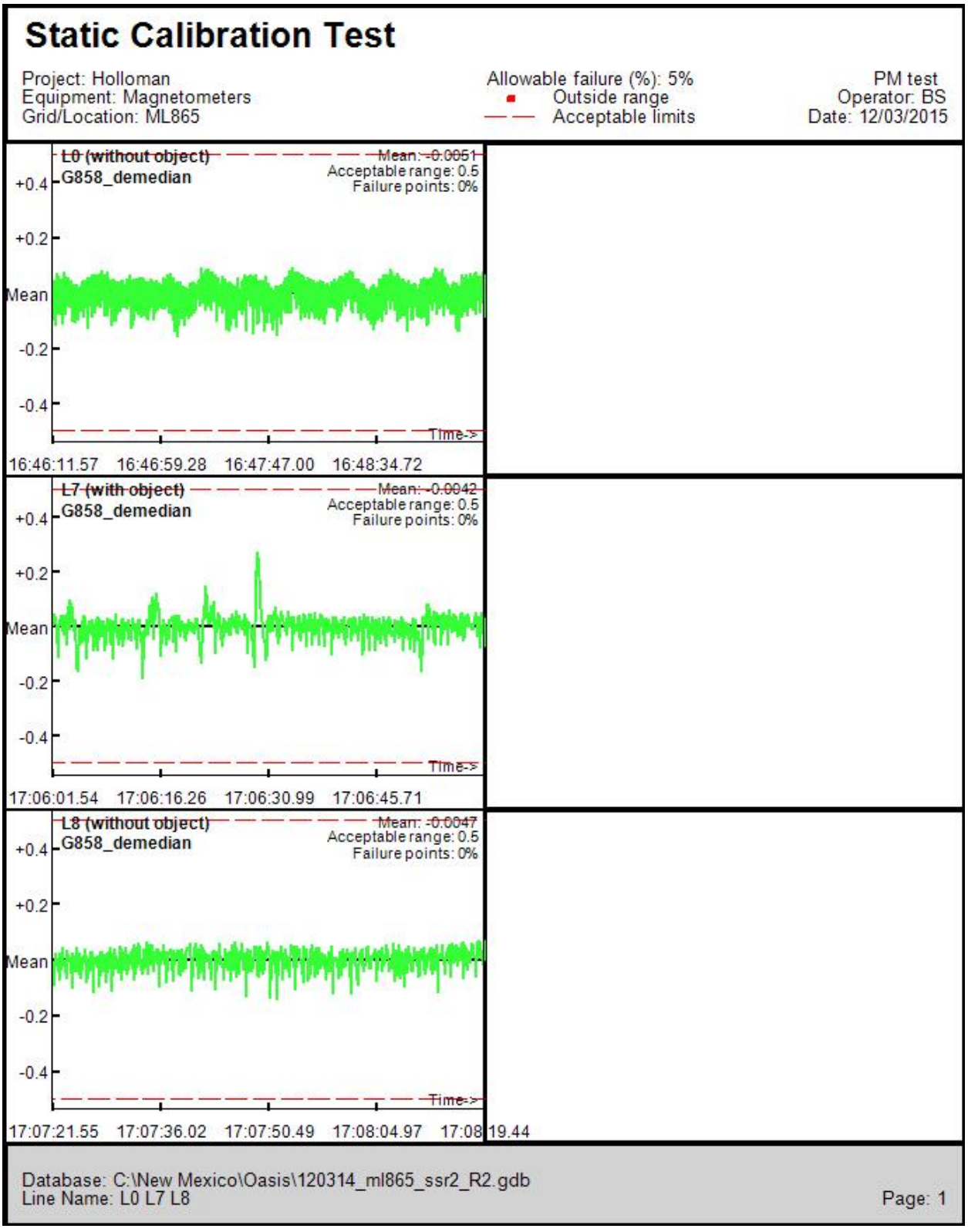


Figure C-119
12/4/2014 G-858 SSR AM Sensor C1 ML865 MRS

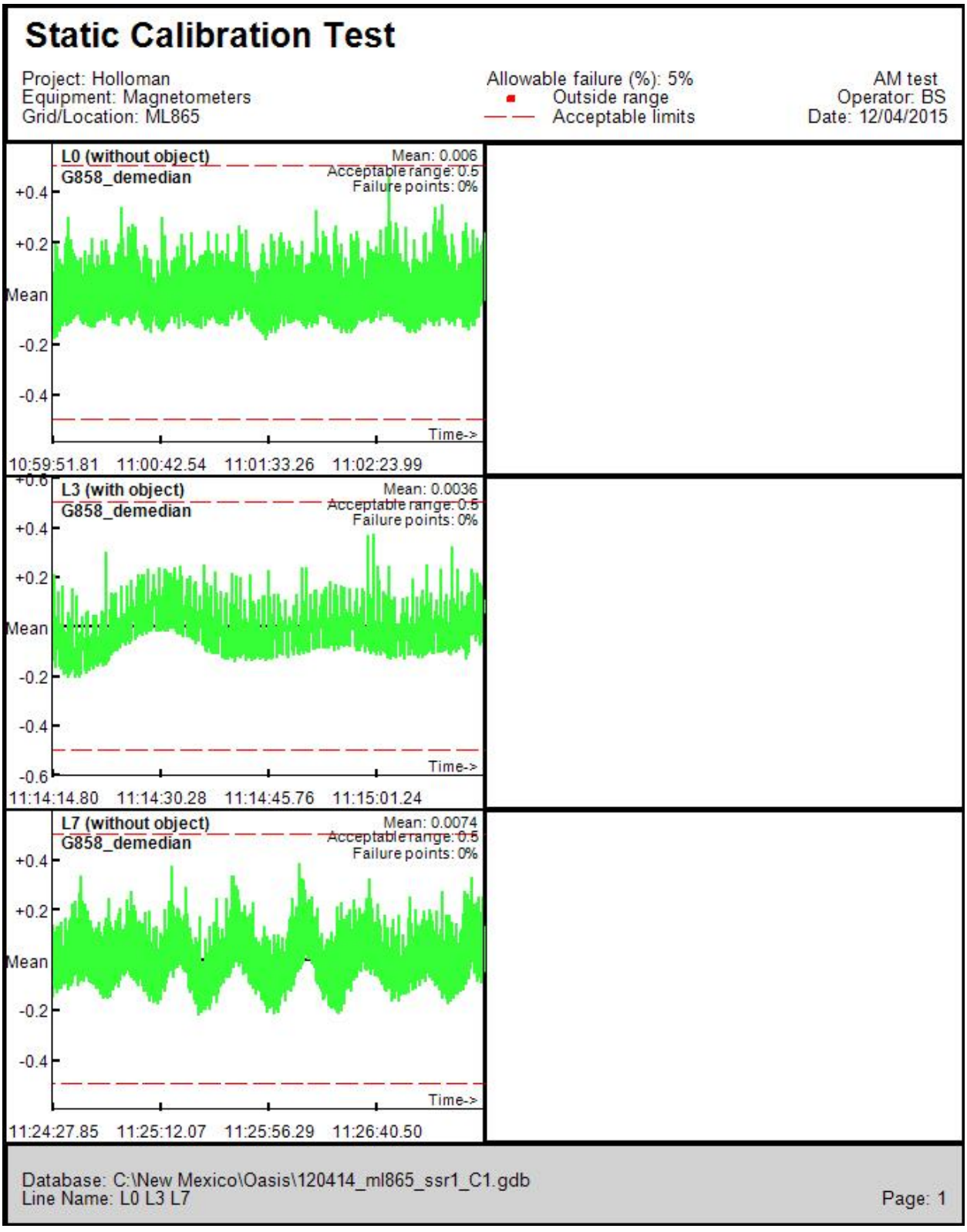


Figure C-120
12/4/2014 G-858 SSR AM Sensor C2 ML865 MRS

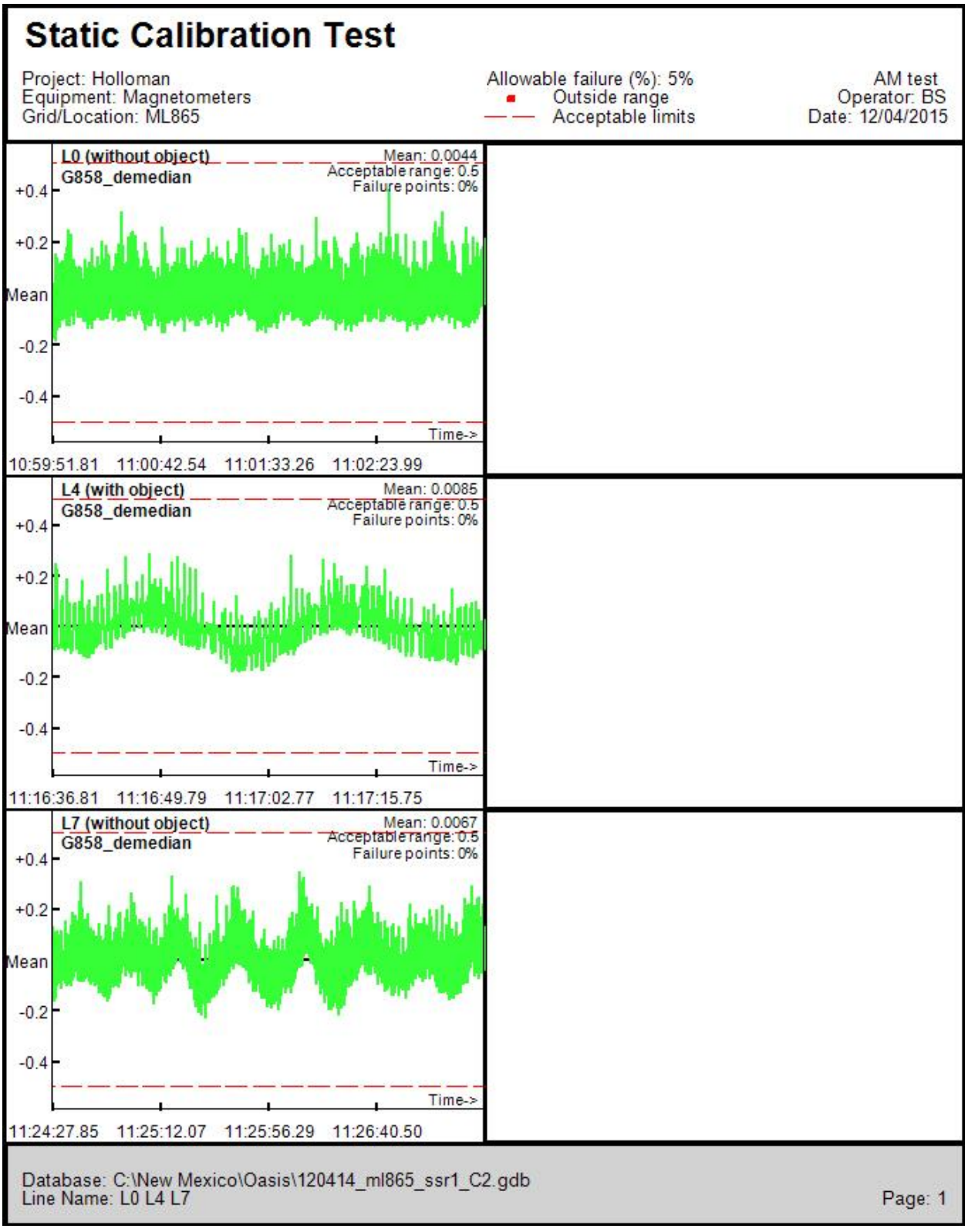


Figure C-121
12/4/2014 G-858 SSR AM Sensor L1 ML865 MRS

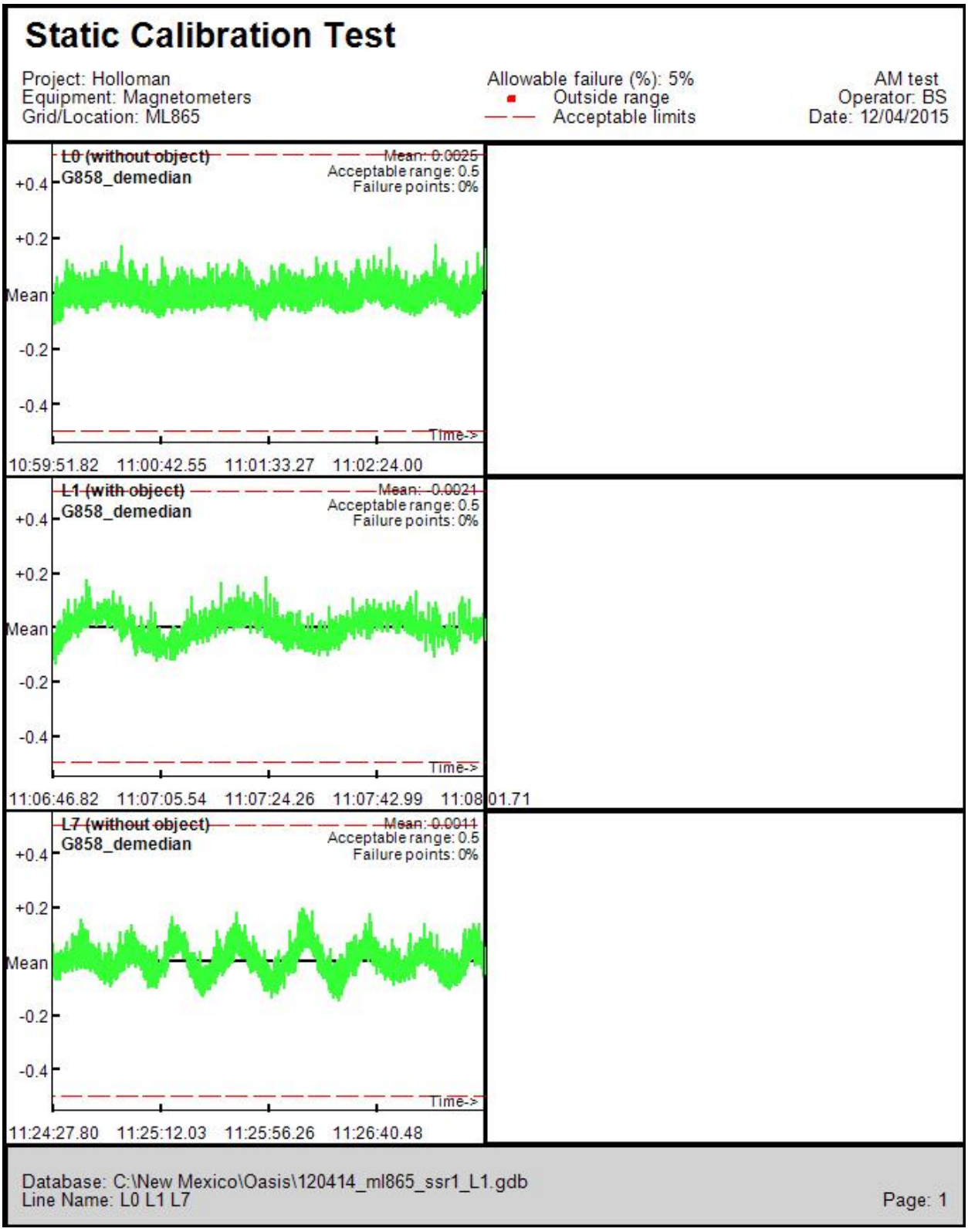


Figure C-122
12/4/2014 G-858 SSR AM Sensor L2 ML865 MRS

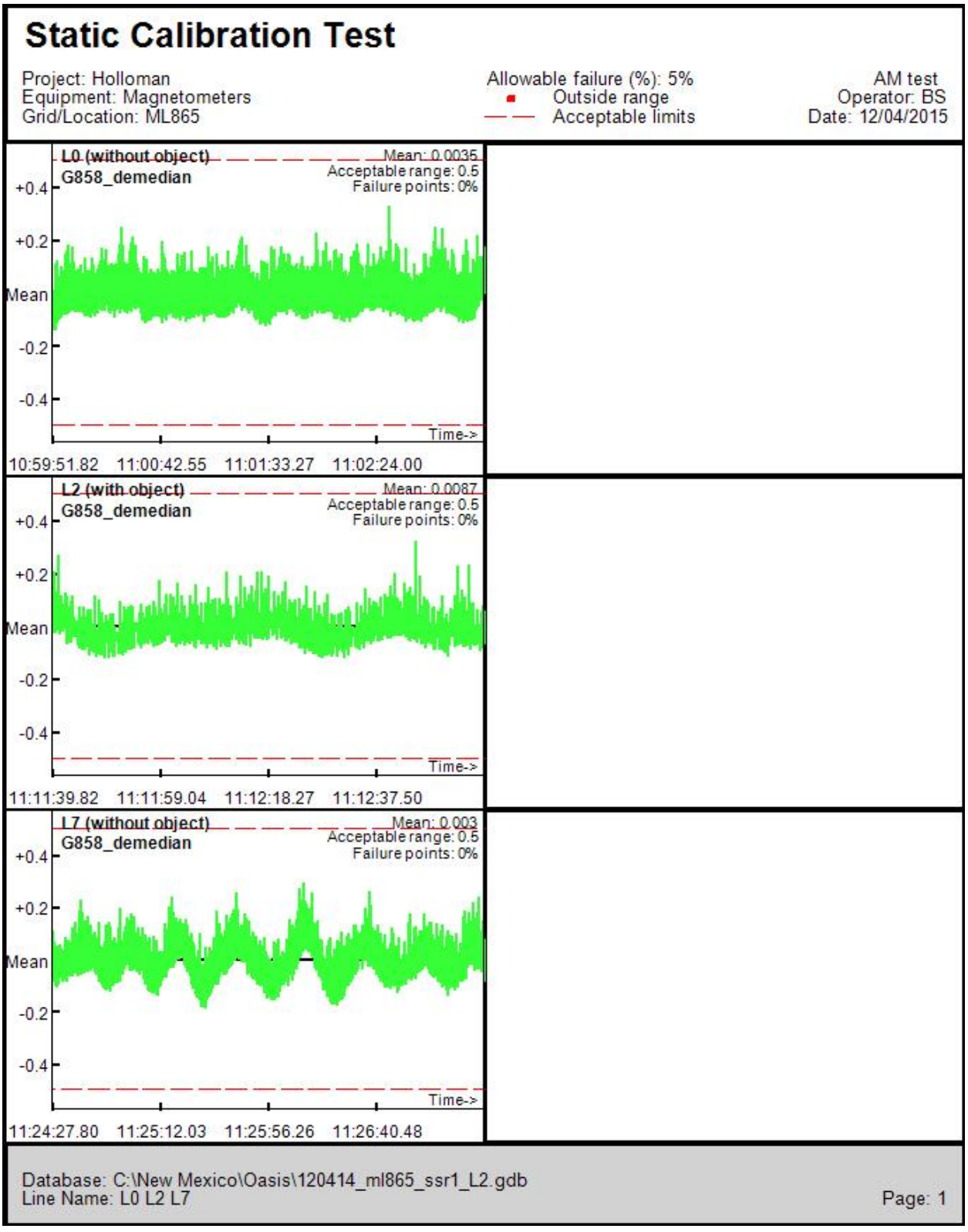


Figure C-123
12/4/2014 G-858 SSR AM Sensor R1 ML865 MRS

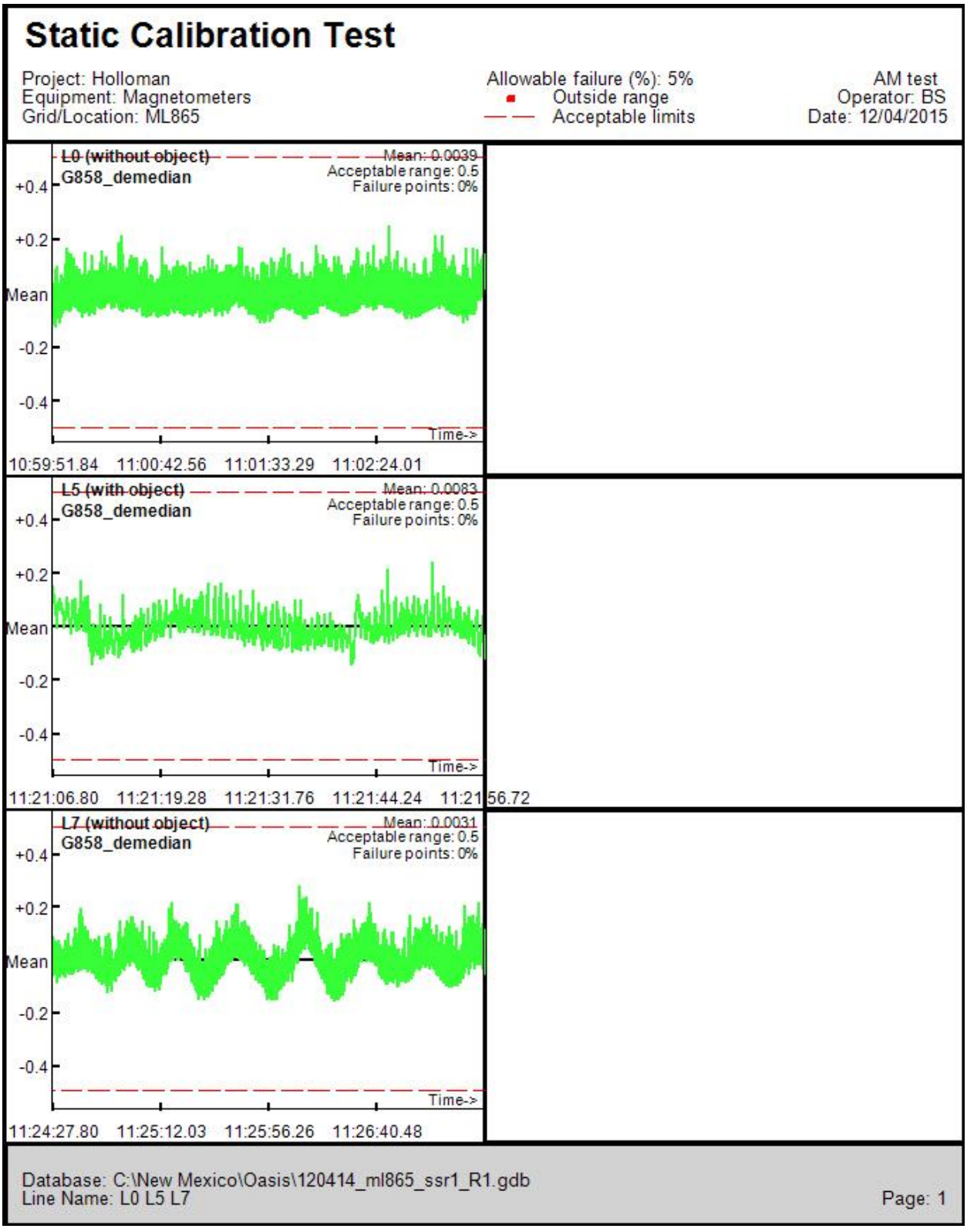


Figure C-124
12/4/2014 G-858 SSR AM Sensor R2 ML865 MRS

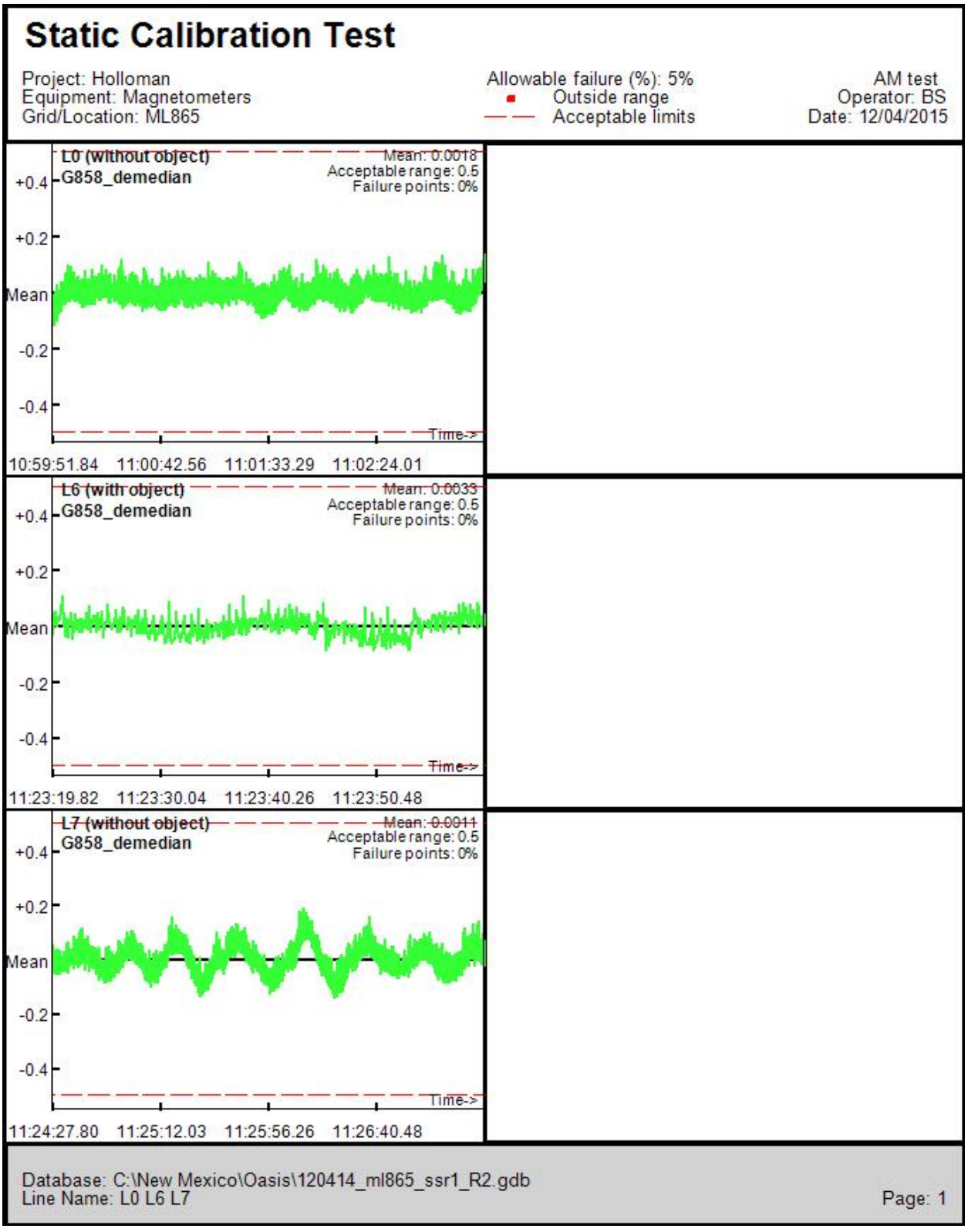


Figure C-125
12/4/2014 G-858 SSR PM Sensor C1 ML865 MRS

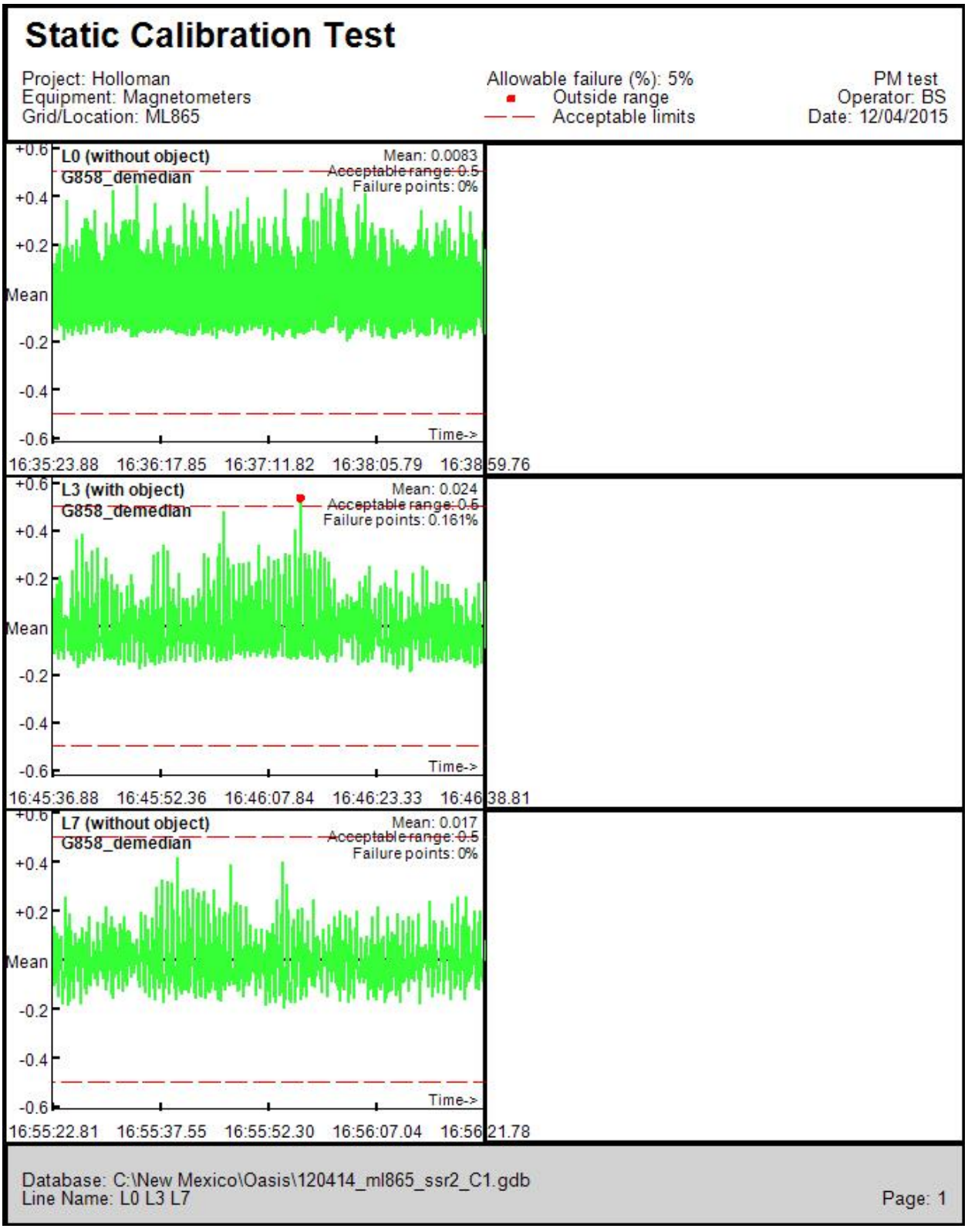


Figure C-126
12/4/2014 G-858 SSR PM Sensor C2 ML865 MRS

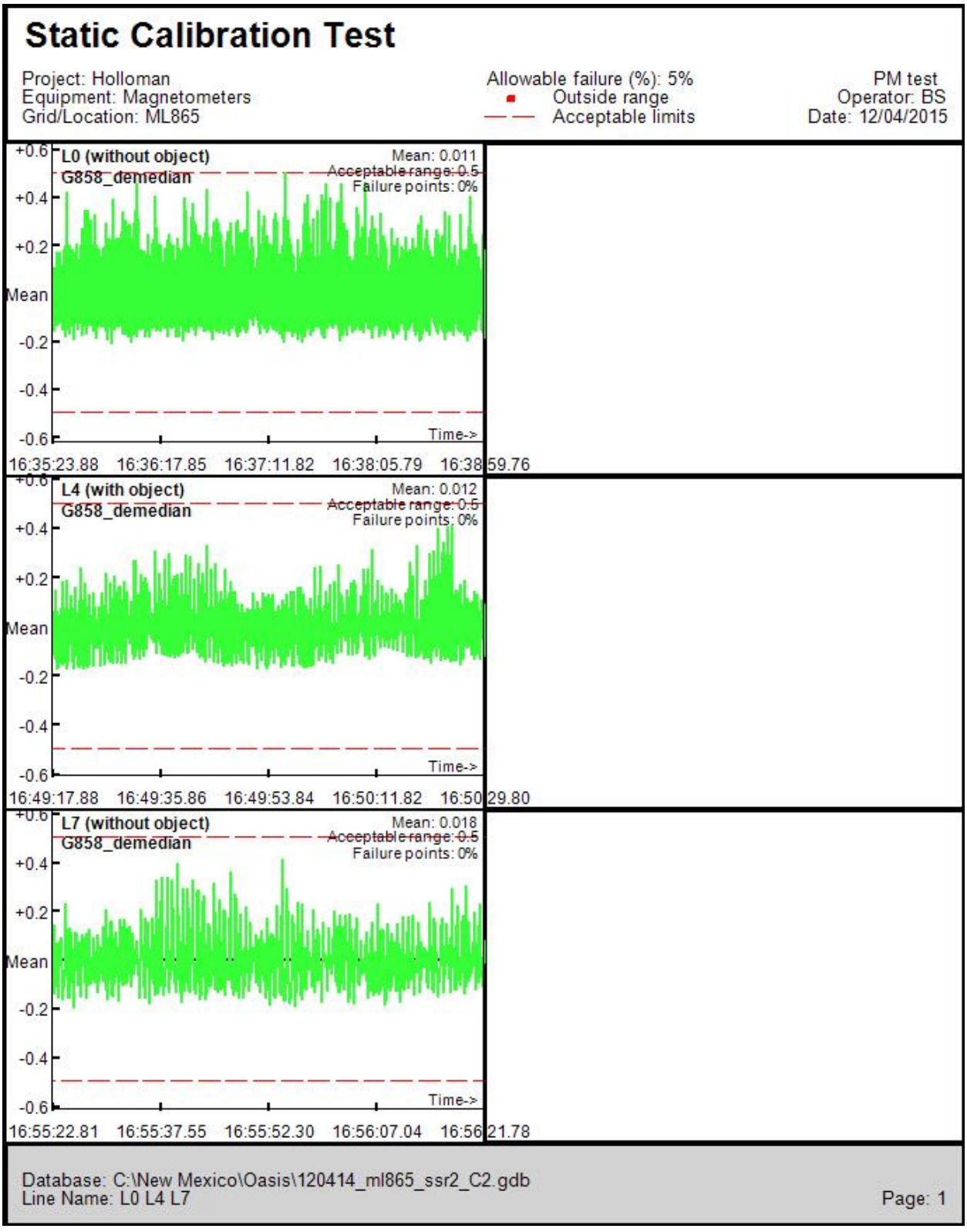


Figure C-127
12/4/2014 G-858 SSR PM Sensor L1 ML865 MRS

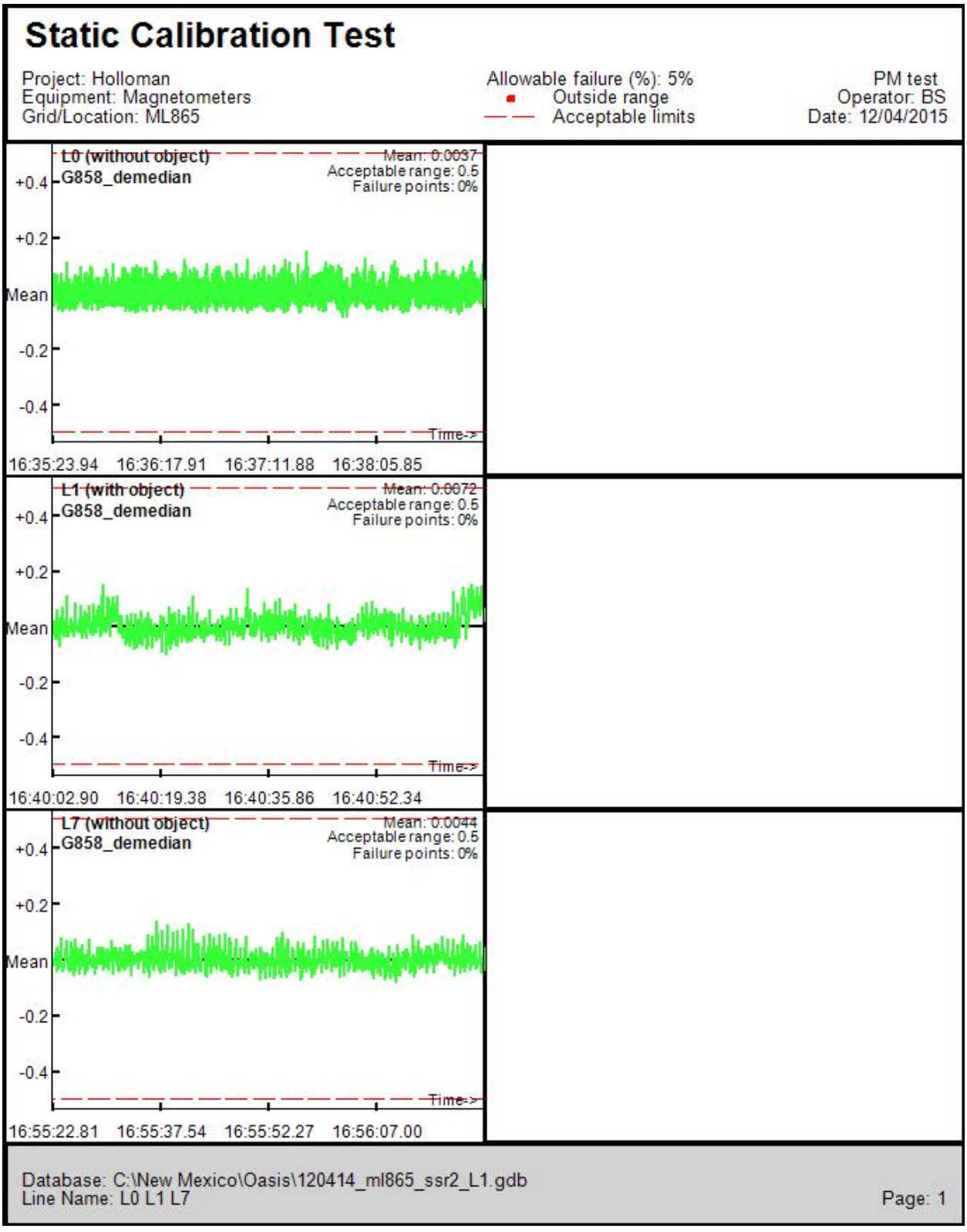


Figure C-128
12/4/2014 G-858 SSR PM Sensor L2 ML865 MRS

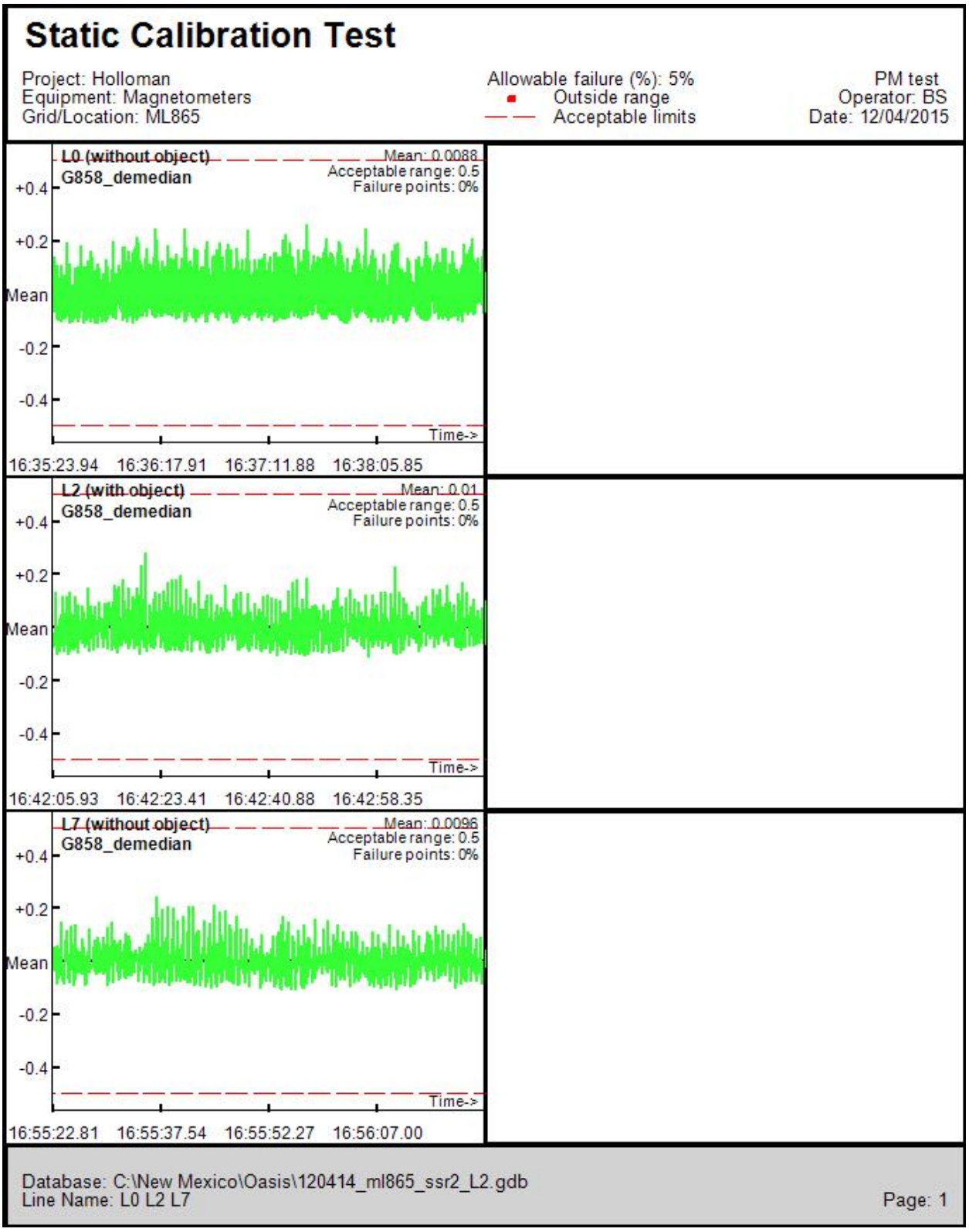


Figure C-129
12/4/2014 G-858 SSR PM Sensor R1 ML865 MRS

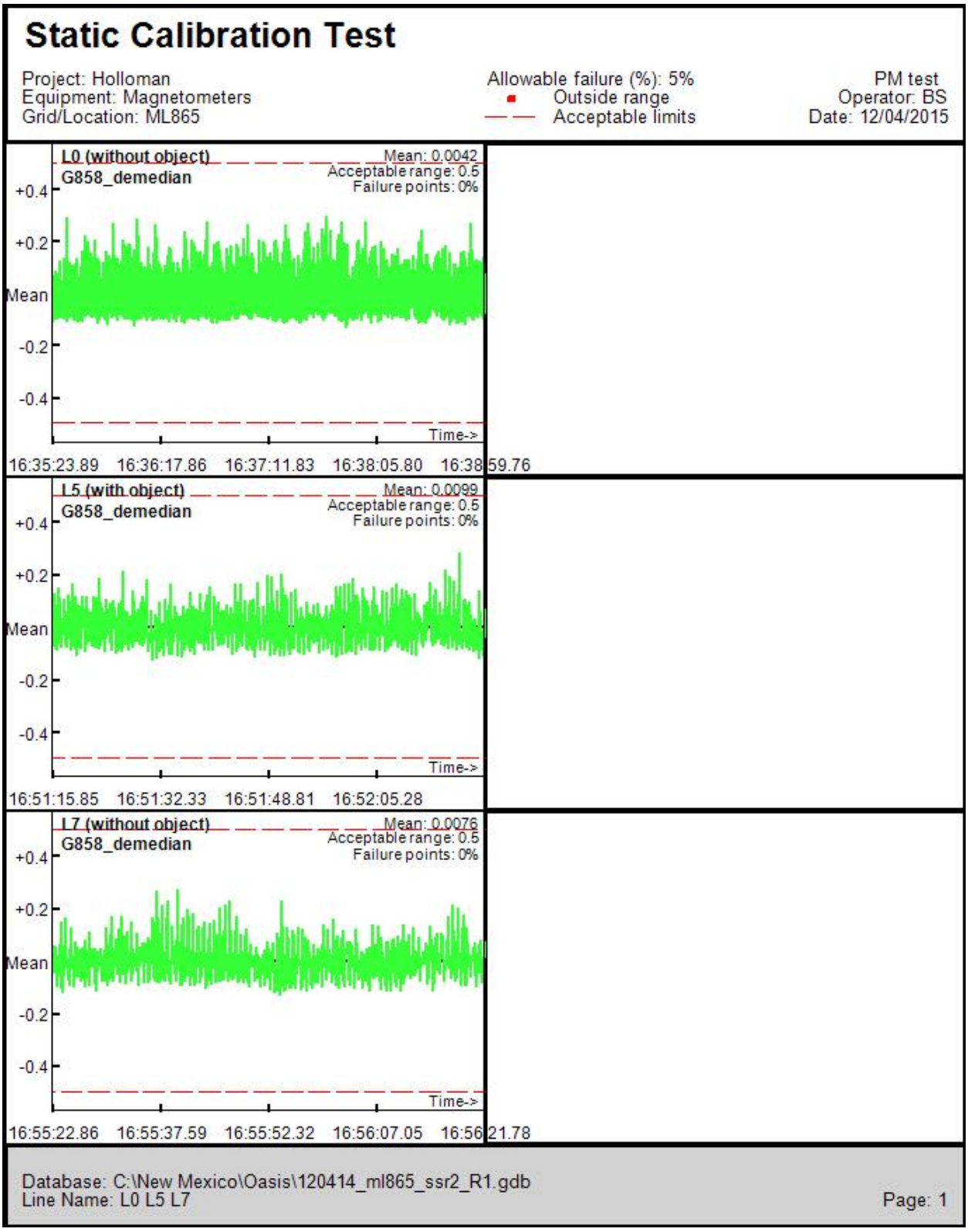


Figure C-130
12/4/2014 G-858 SSR PM Sensor R2 ML865 MRS

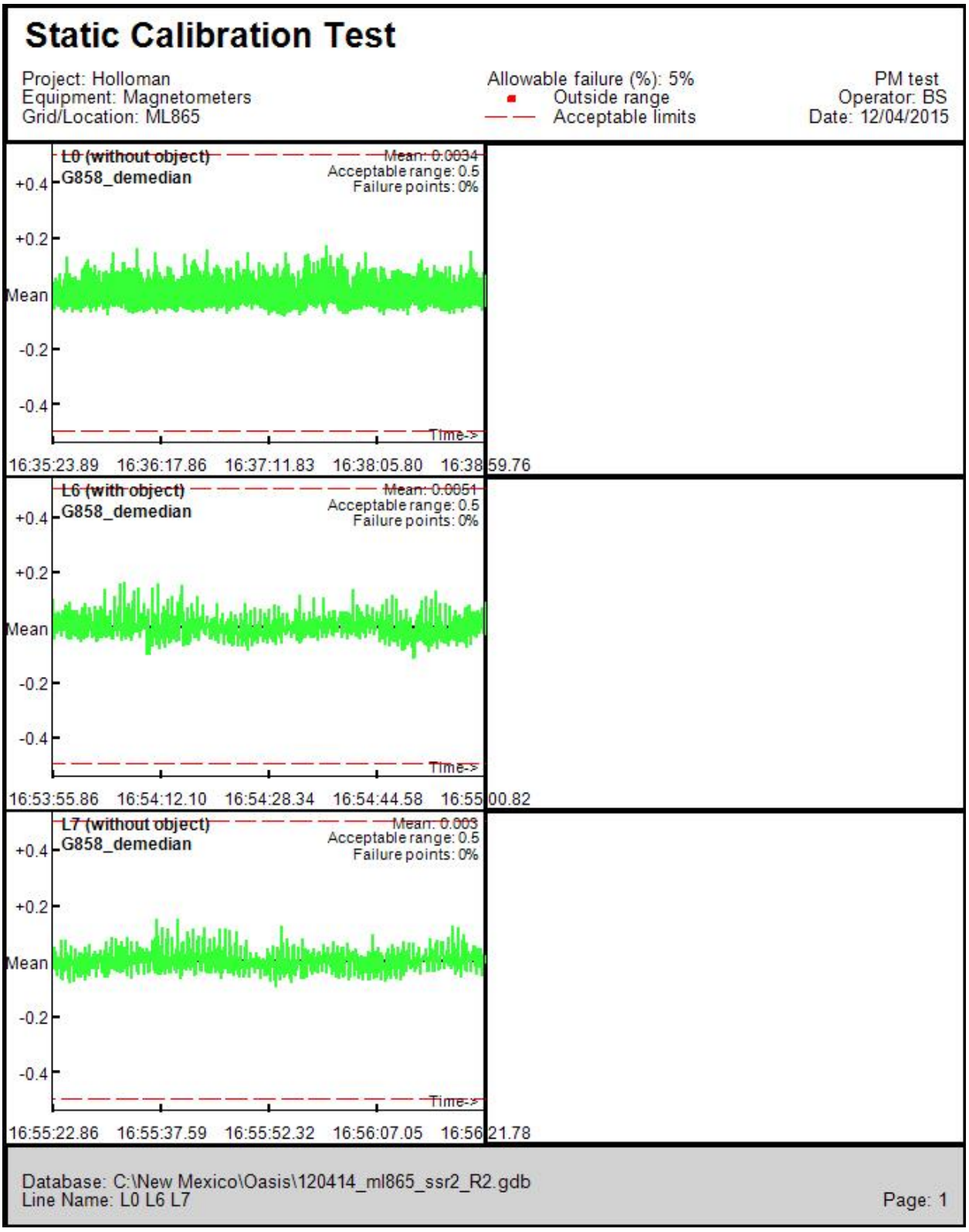


Figure C-131
12/5/2014 G-858 SSR AM Sensor C1 ML865 MRS

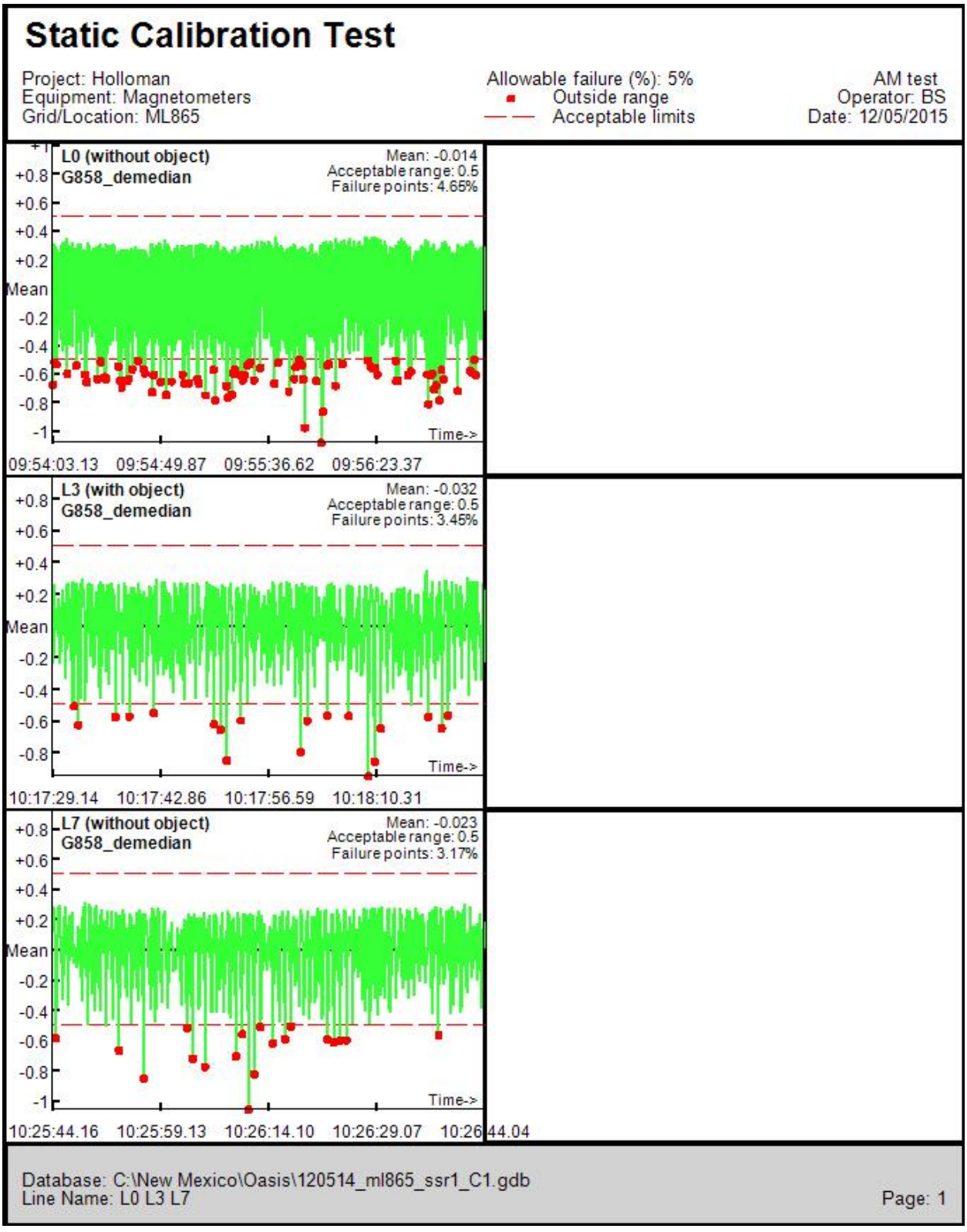


Figure C-132
12/5/2014 G-858 SSR AM Sensor C2 ML865 MRS

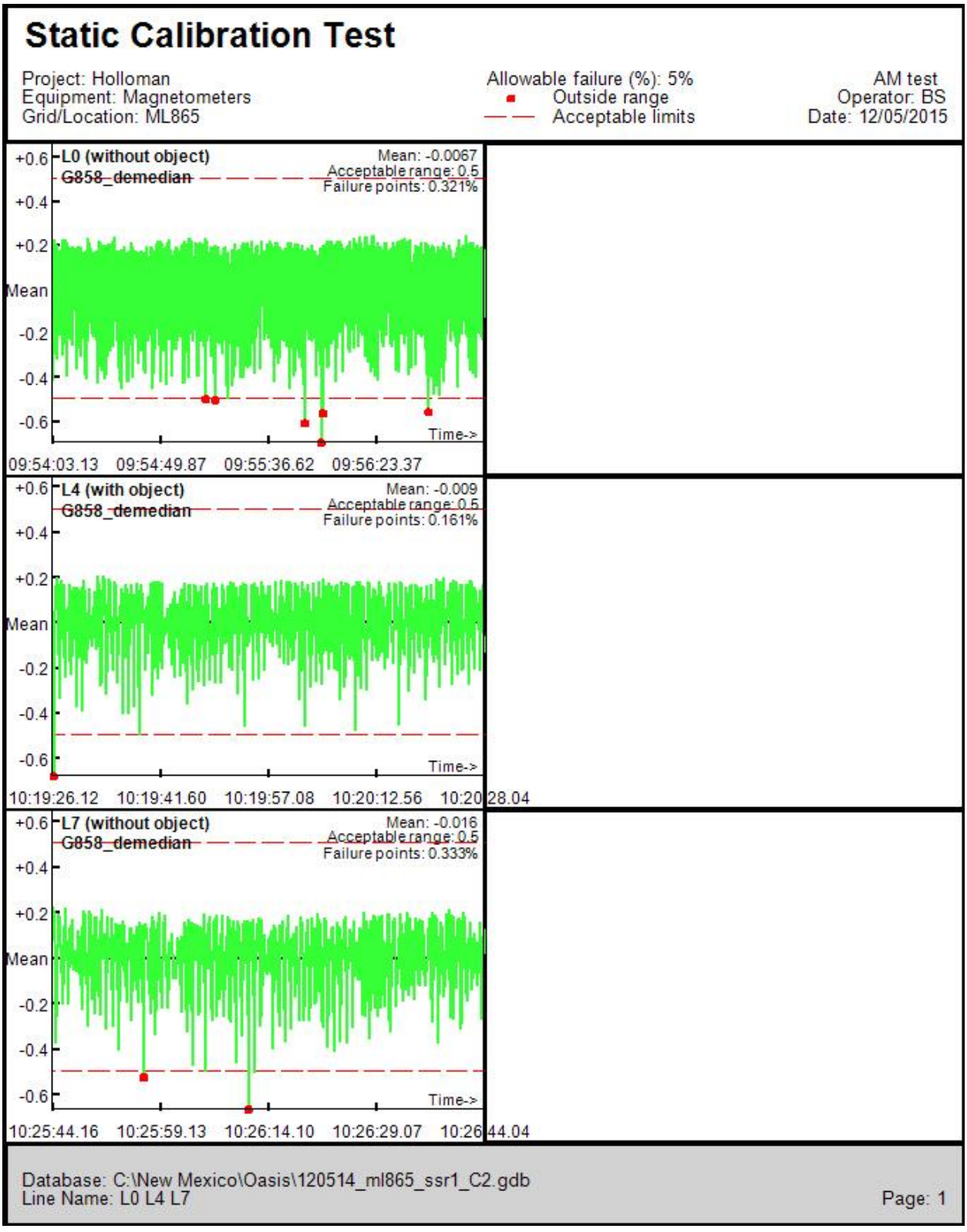


Figure C-133
12/5/2014 G-858 SSR AM Sensor L1 ML865 MRS

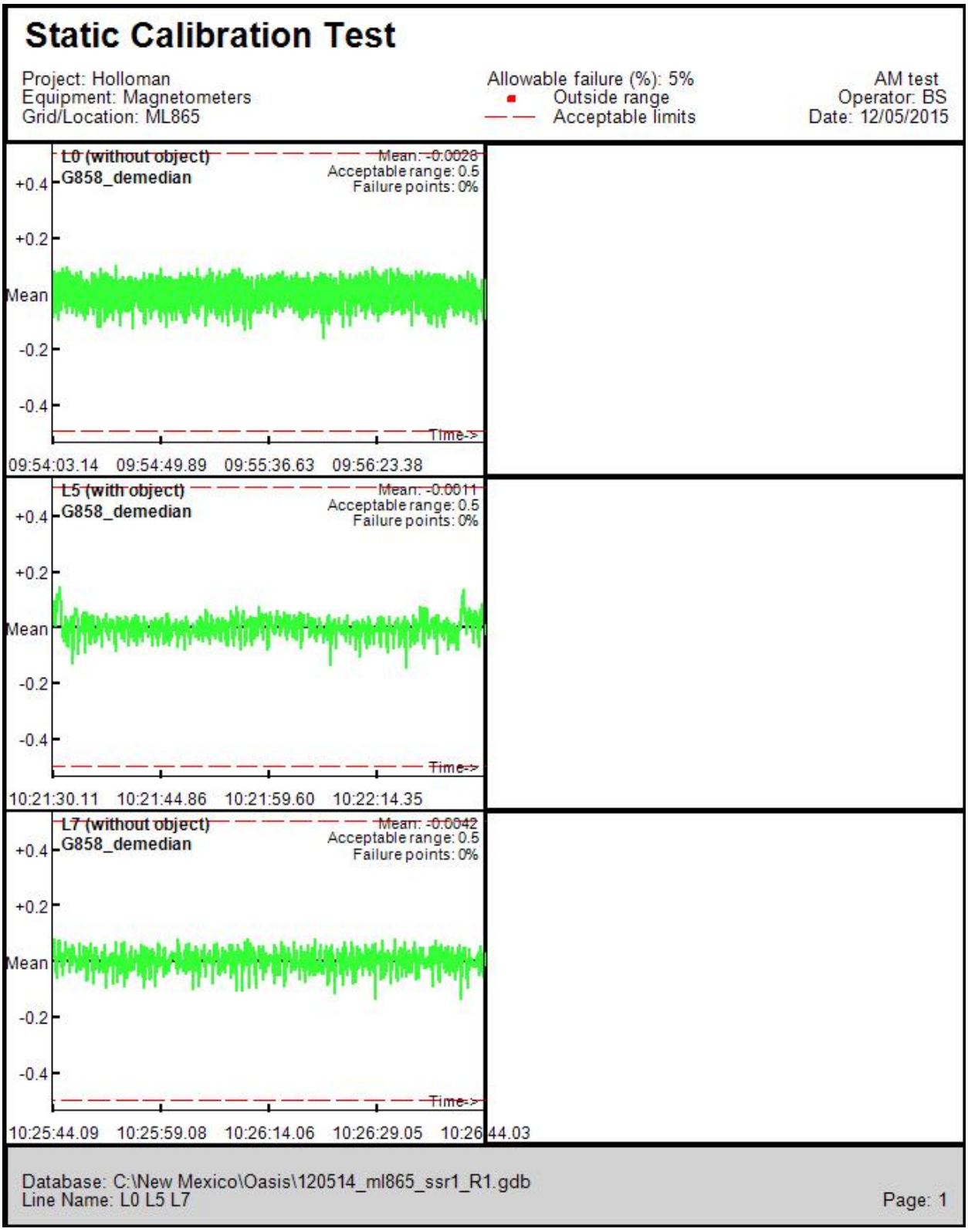


Figure C-134
12/5/2014 G-858 SSR AM Sensor L2 ML865 MRS

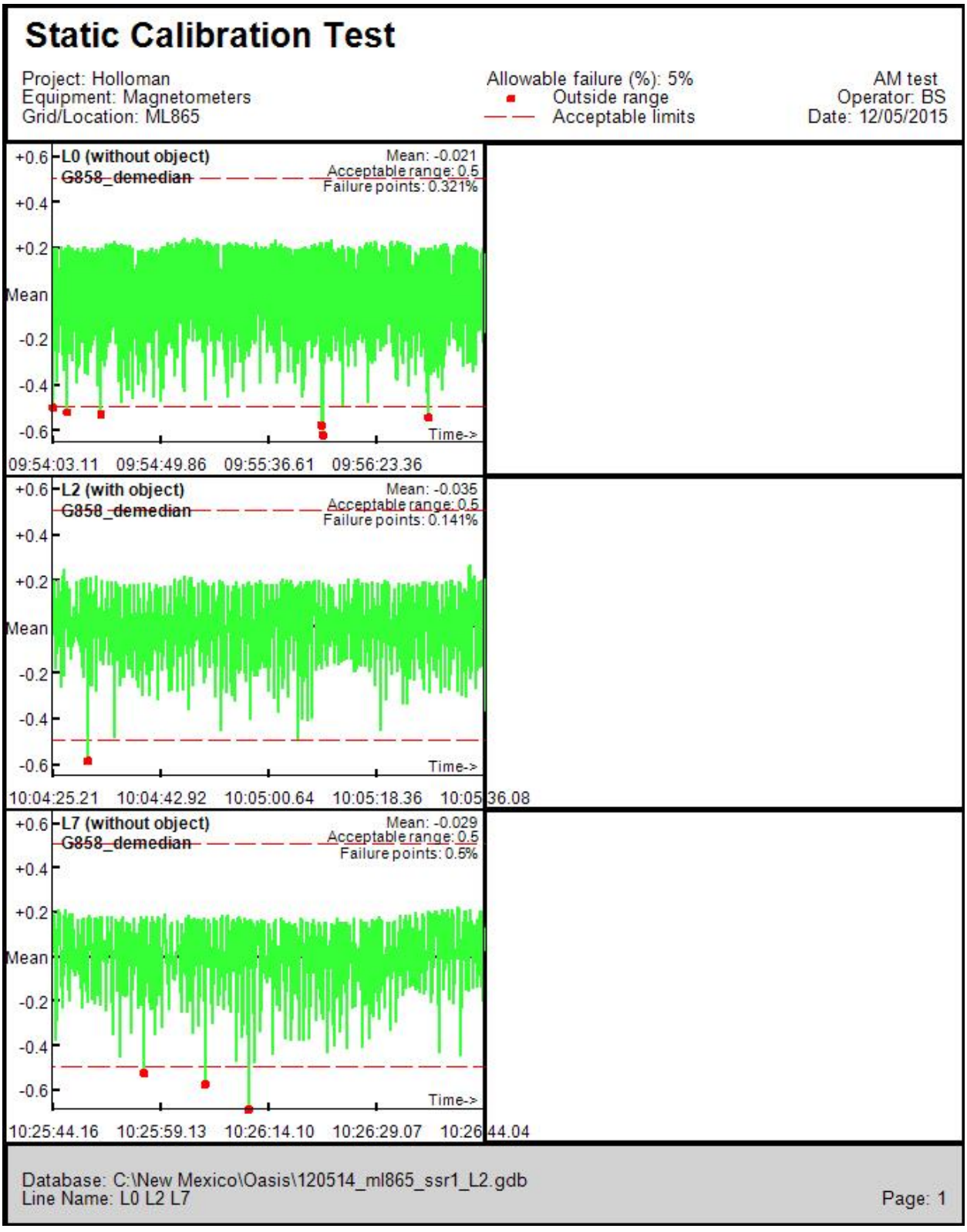


Figure C-135
12/5/2014 G-858 SSR AM Sensor R1 ML865 MRS

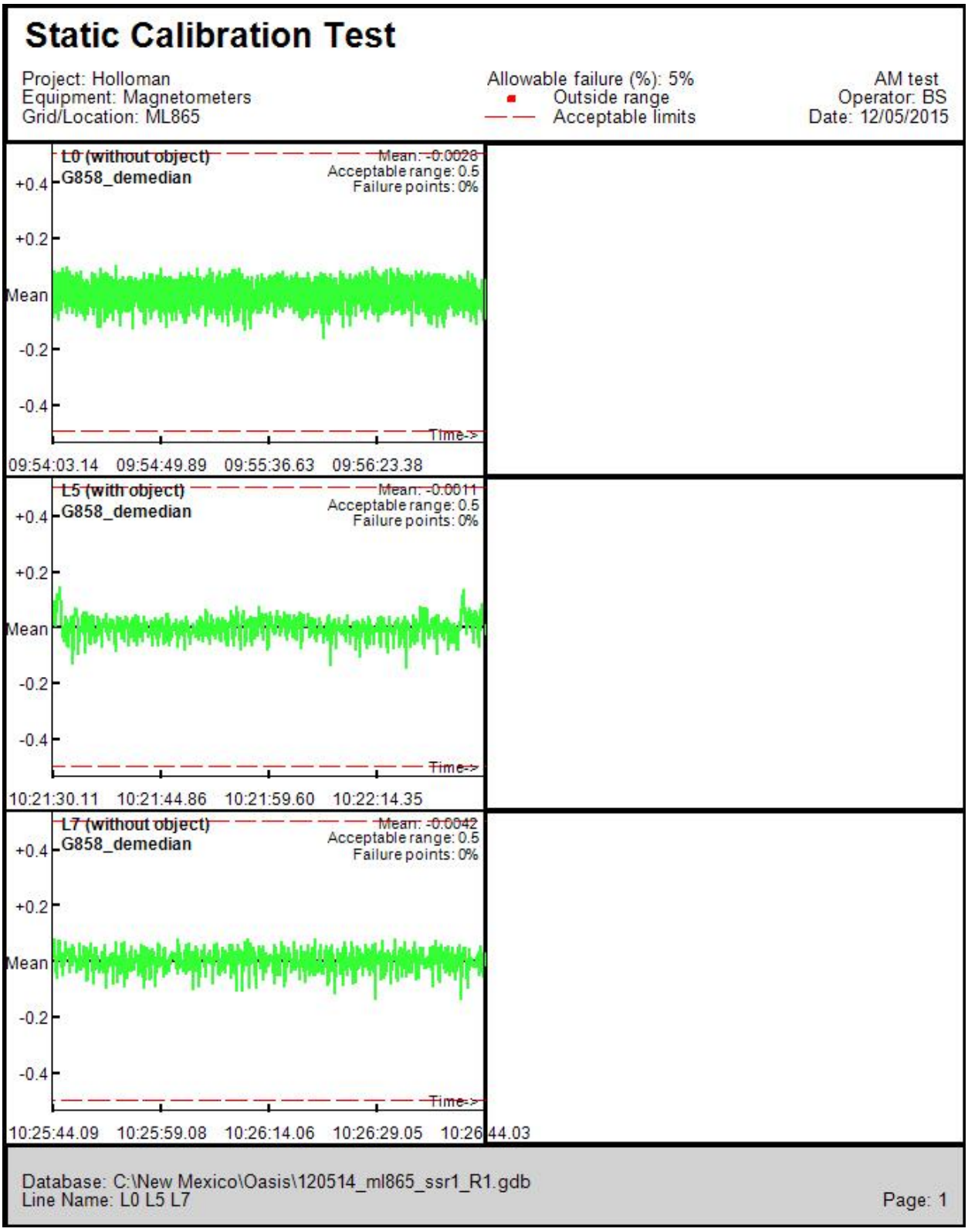


Figure C-136
12/5/2014 G-858 SSR AM Sensor R2 ML865 MRS

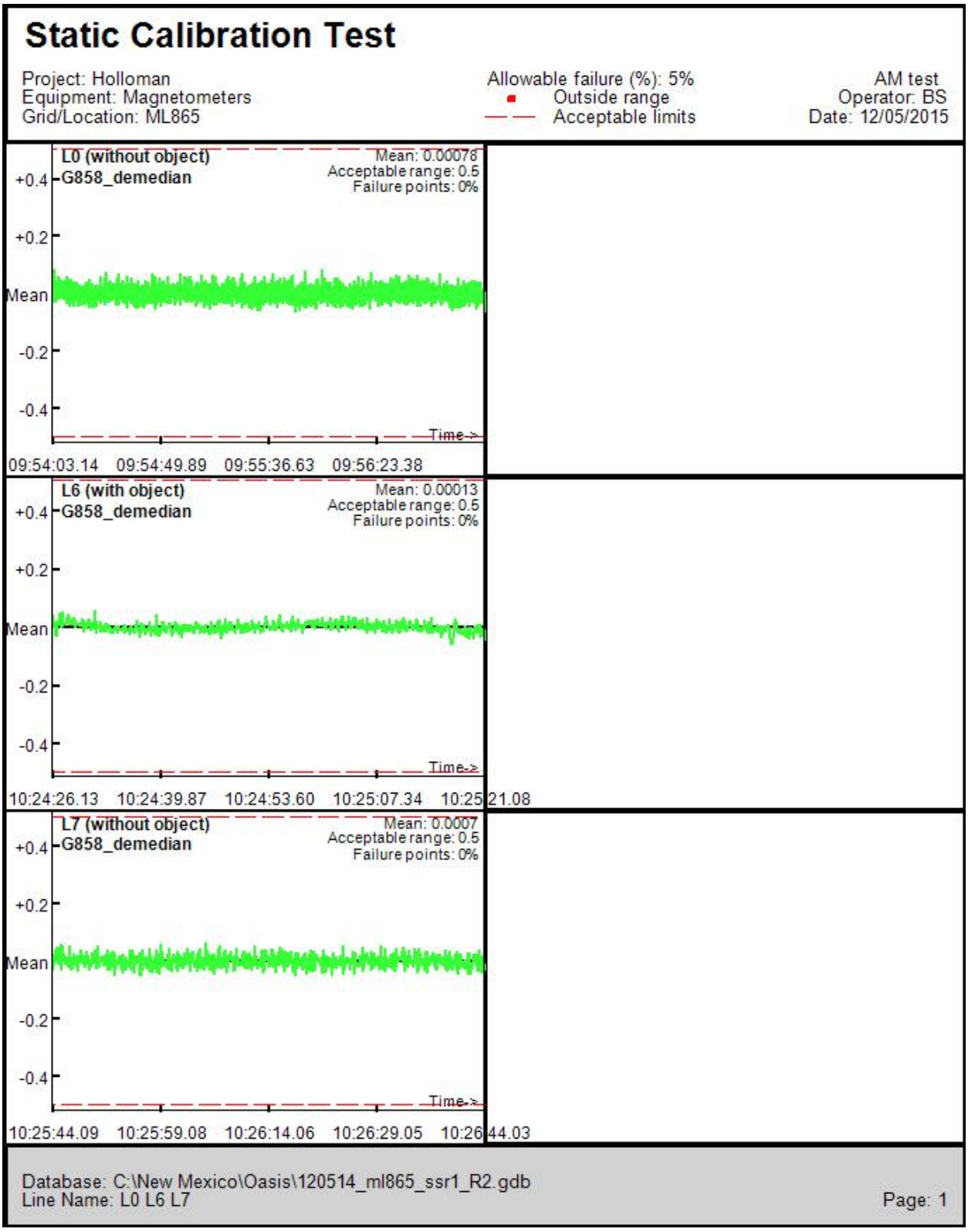


Figure C-137
12/5/2014 G-858 SSR PM Sensor C1 ML865 MRS

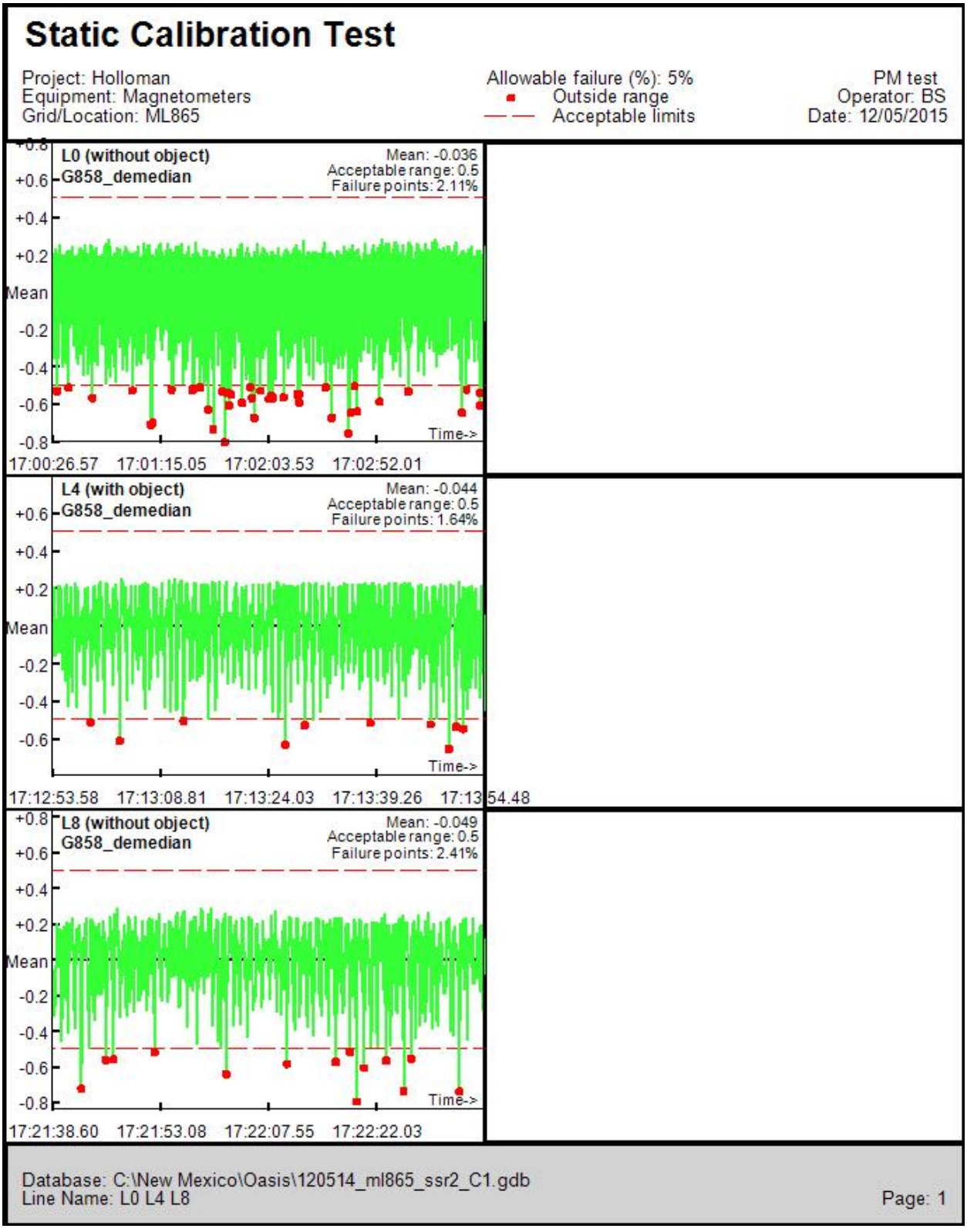


Figure C-138
12/5/2014 G-858 SSR PM Sensor C2 ML865 MRS

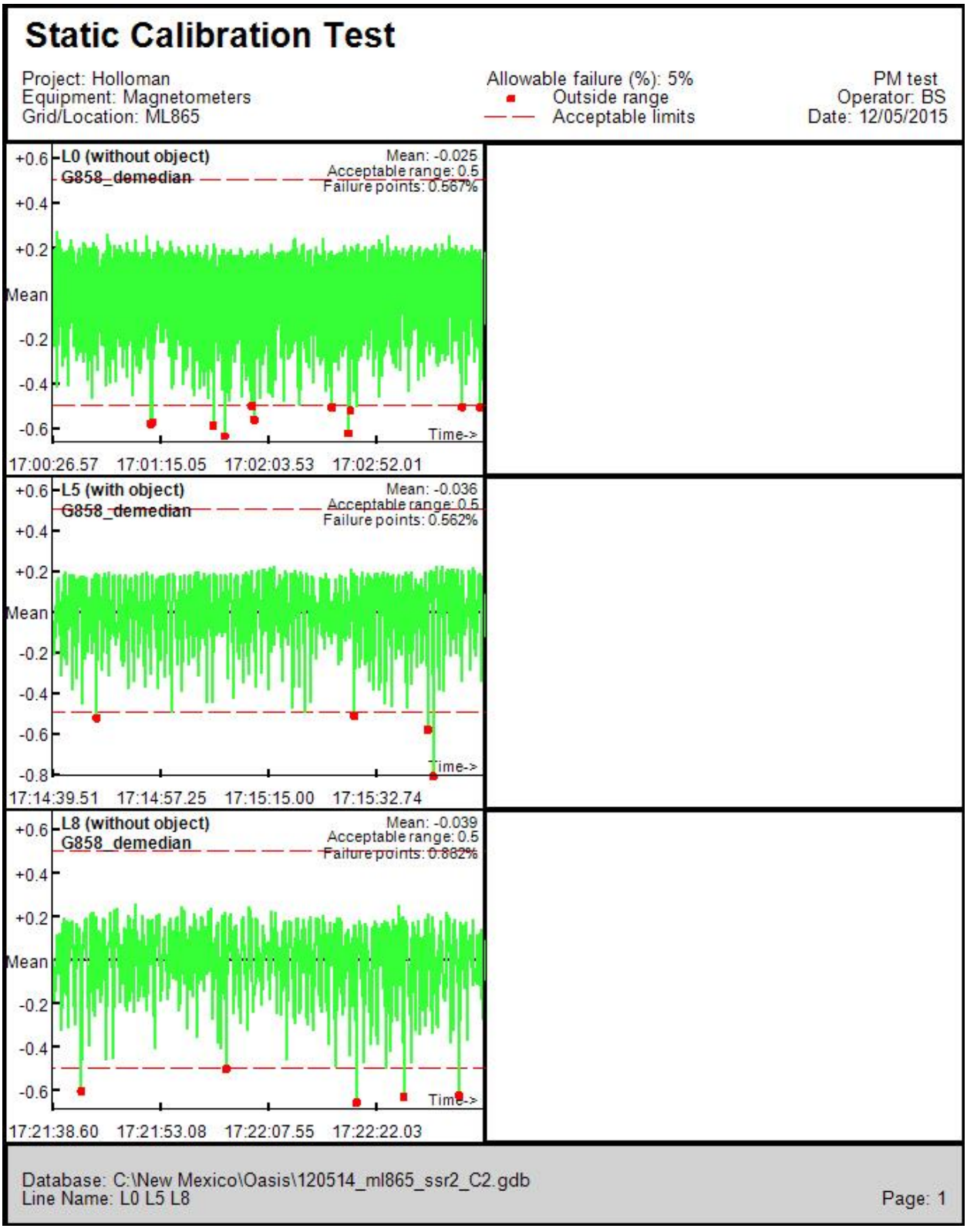


Figure C-139
12/5/2014 G-858 SSR PM Sensor L1 ML865 MRS

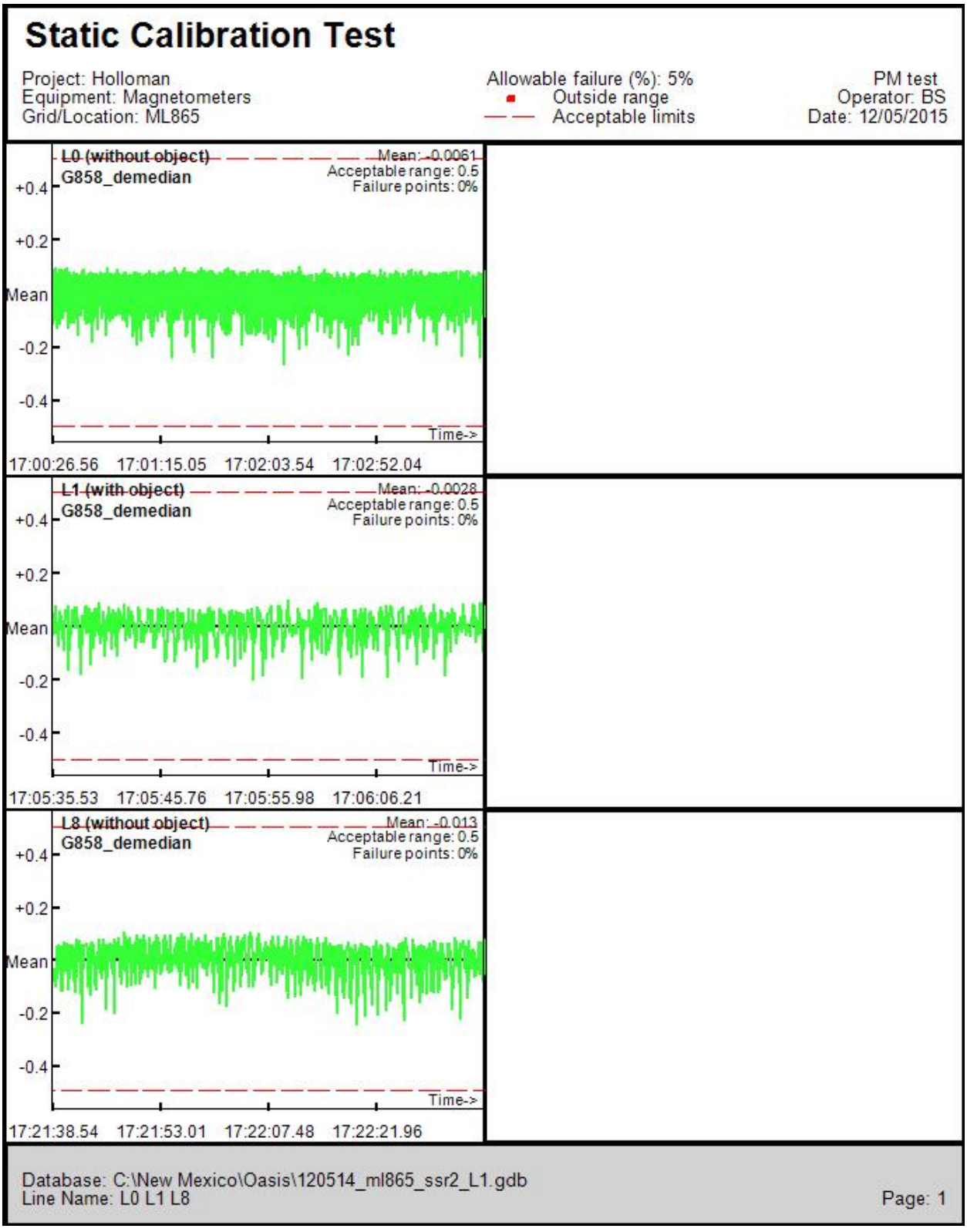


Figure C-140
12/5/2014 G-858 SSR PM Sensor L2 ML865 MRS

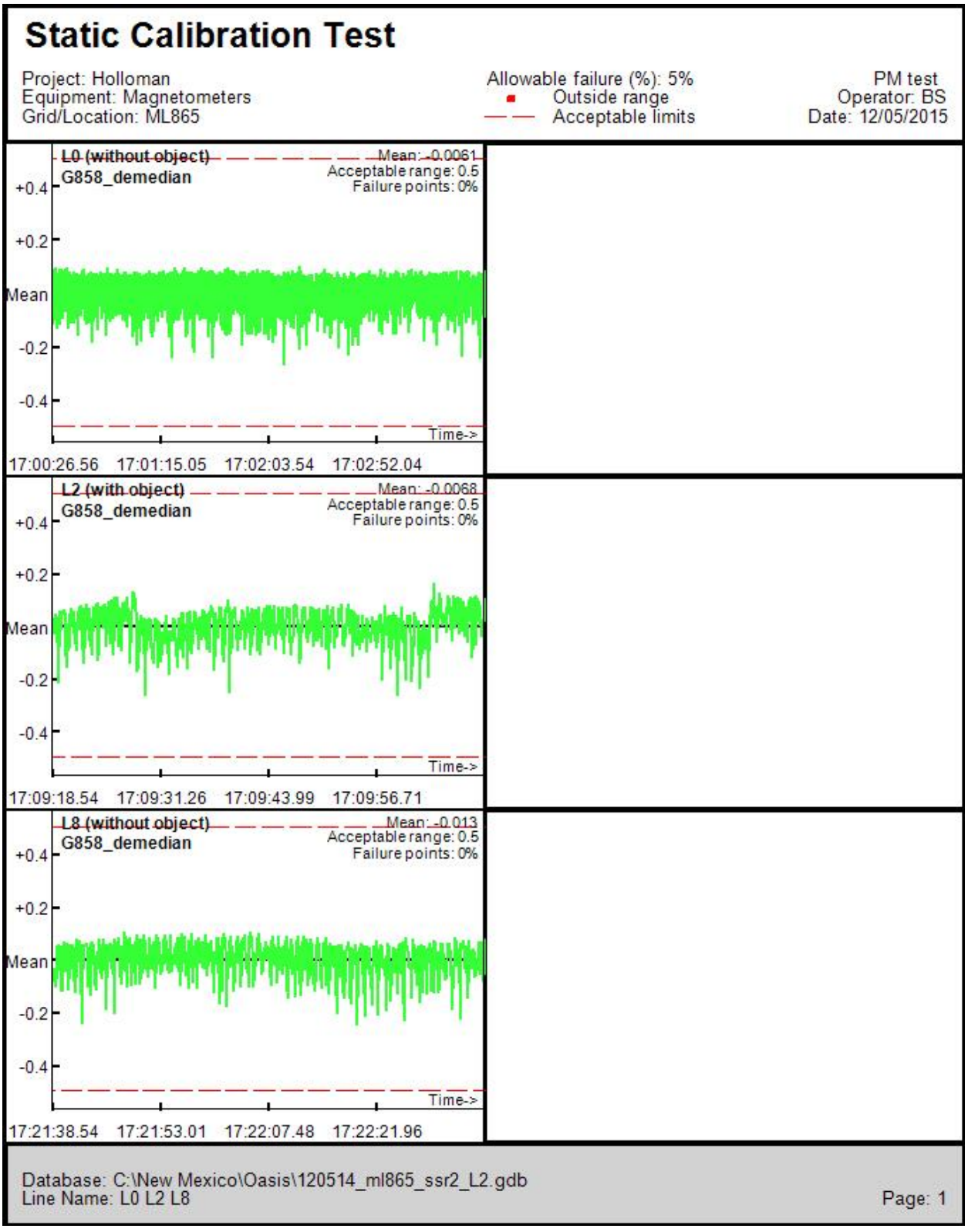


Figure C-141
12/5/2014 G-858 SSR PM Sensor R1 ML865 MRS

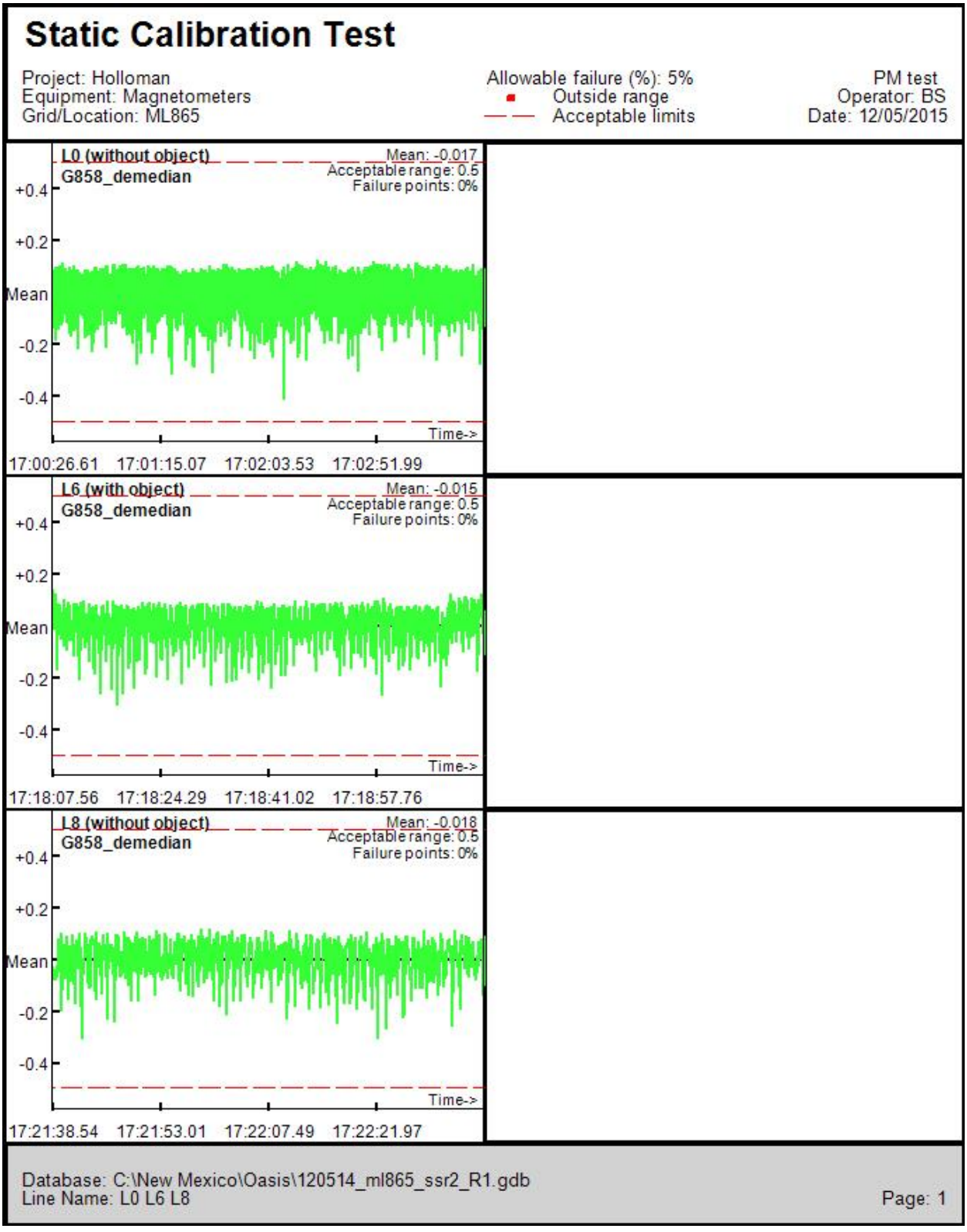


Figure C-142
12/5/2014 G-858 SSR PM Sensor R2 ML865 MRS

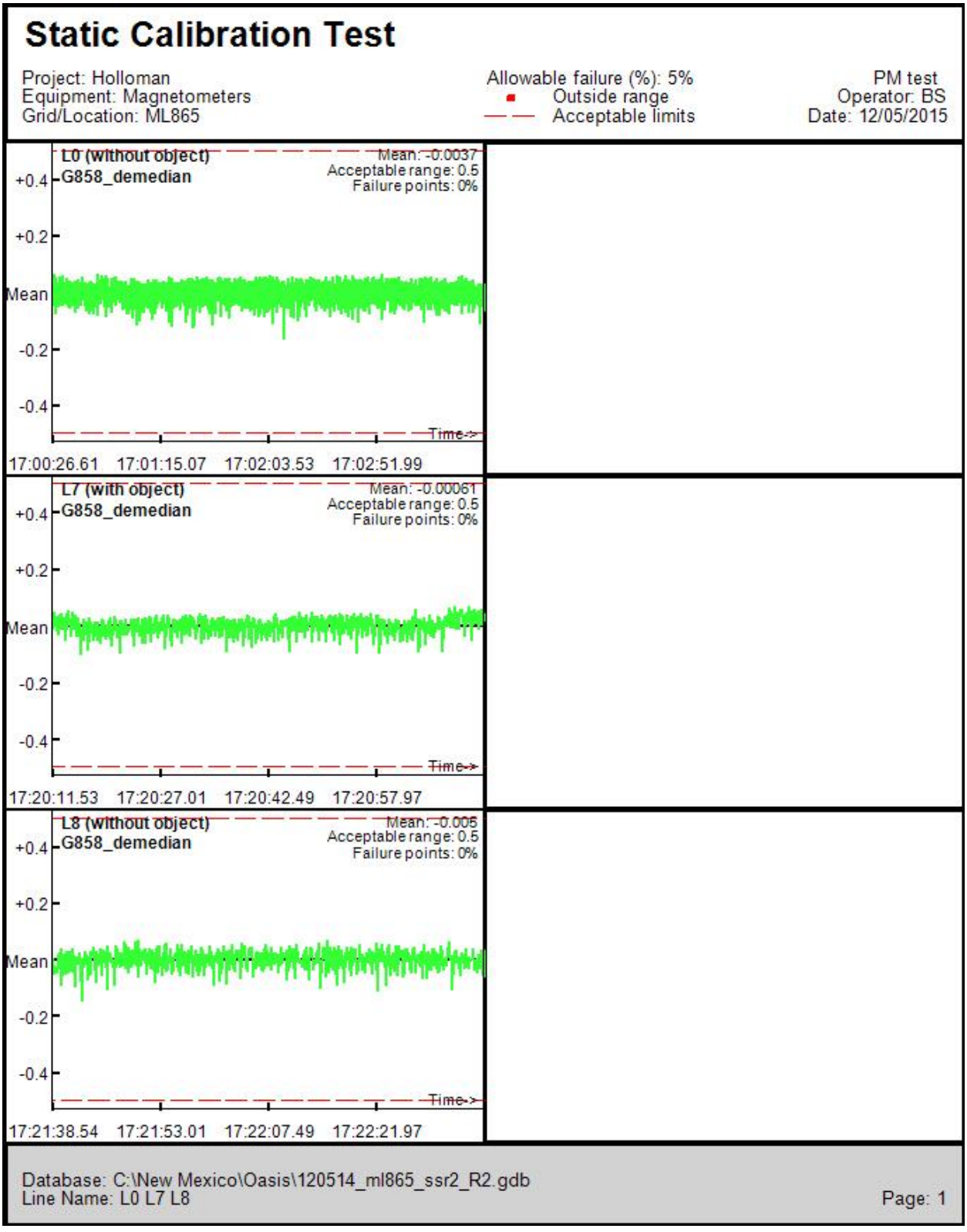


Figure C-143
12/9/2014 G-858 SSR AM Sensor C1 ML865 MRS

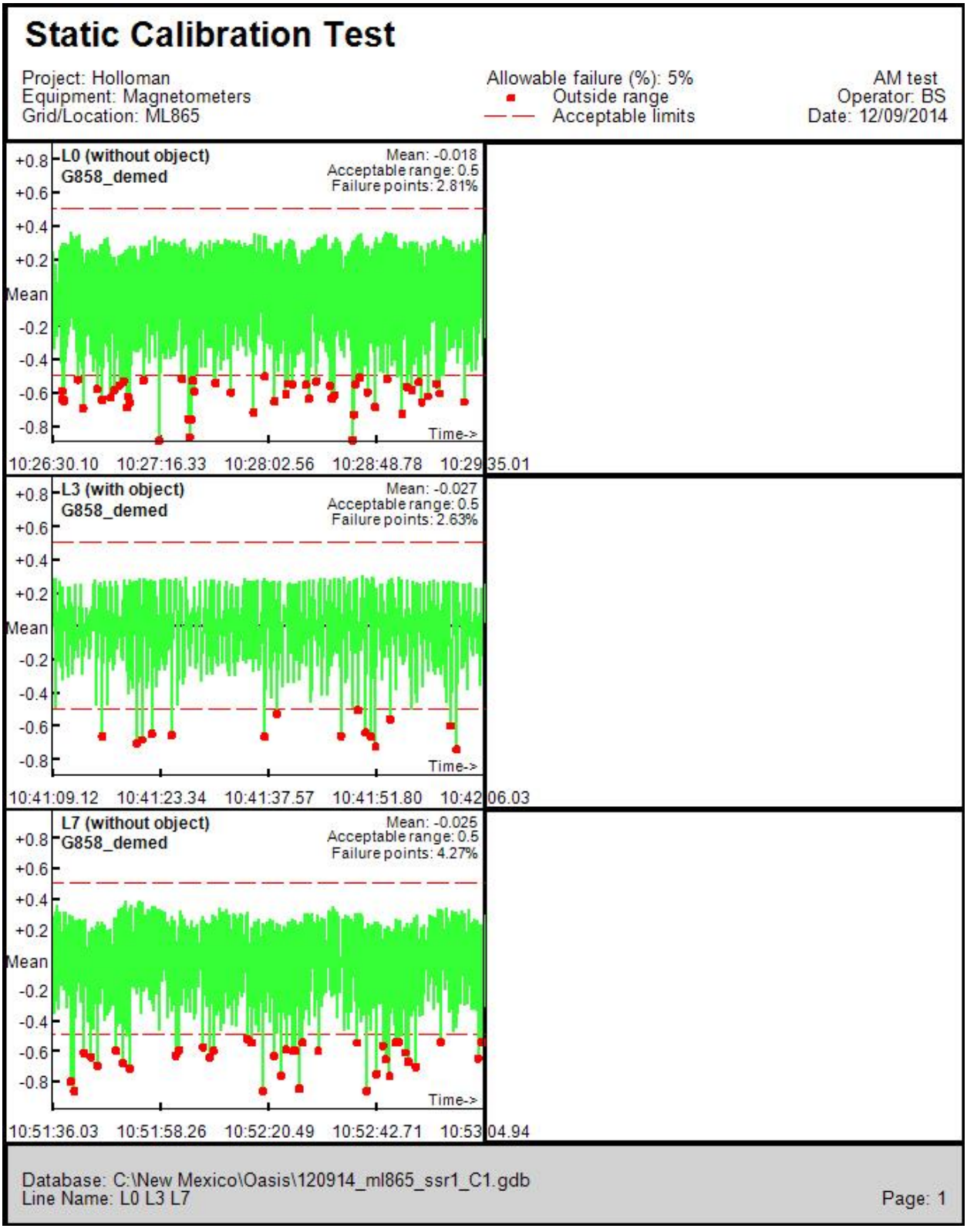


Figure C-144
12/9/2014 G-858 SSR AM Sensor C2 ML865 MRS

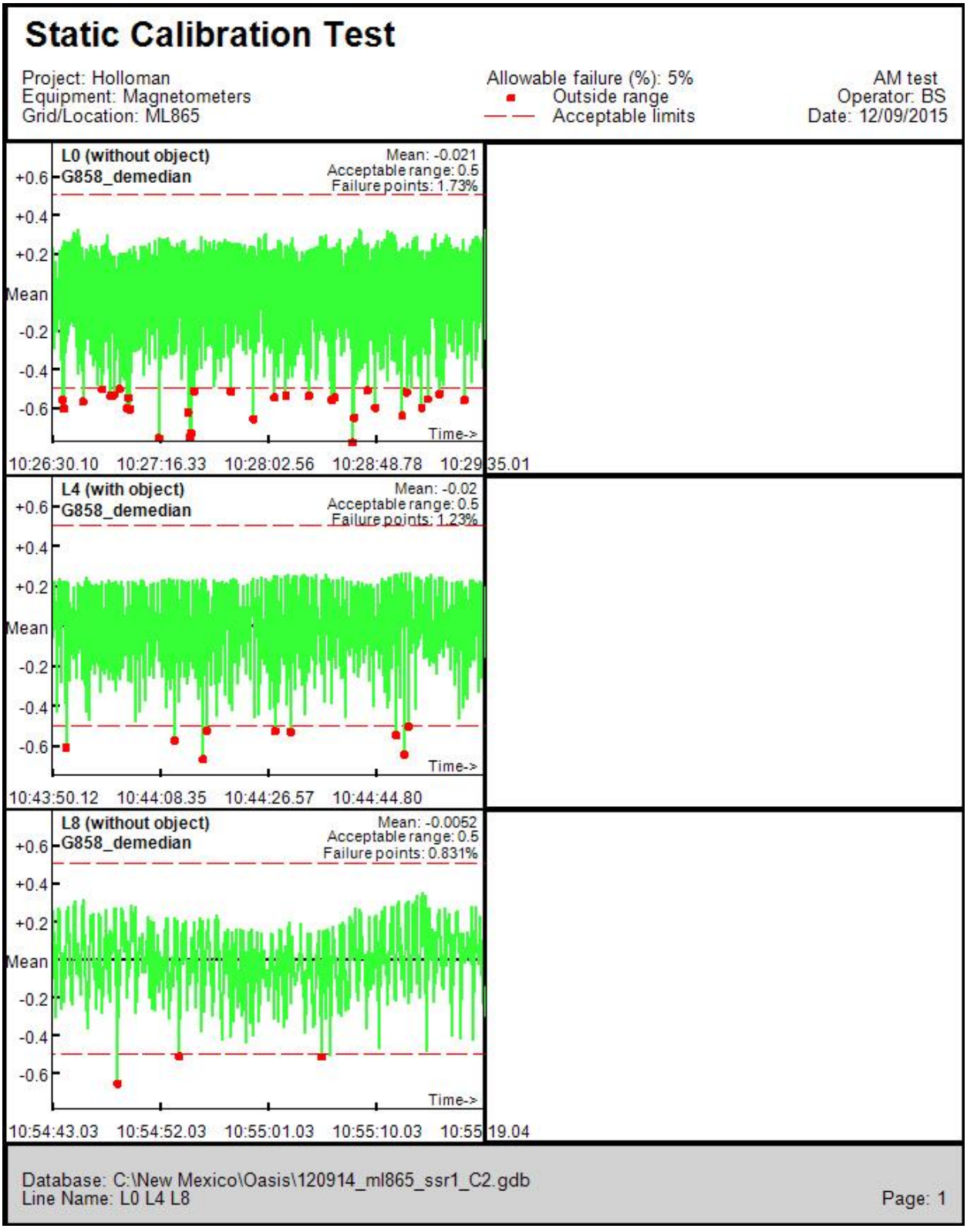


Figure C-145
12/9/2014 G-858 SSR AM Sensor L1 ML865 MRS

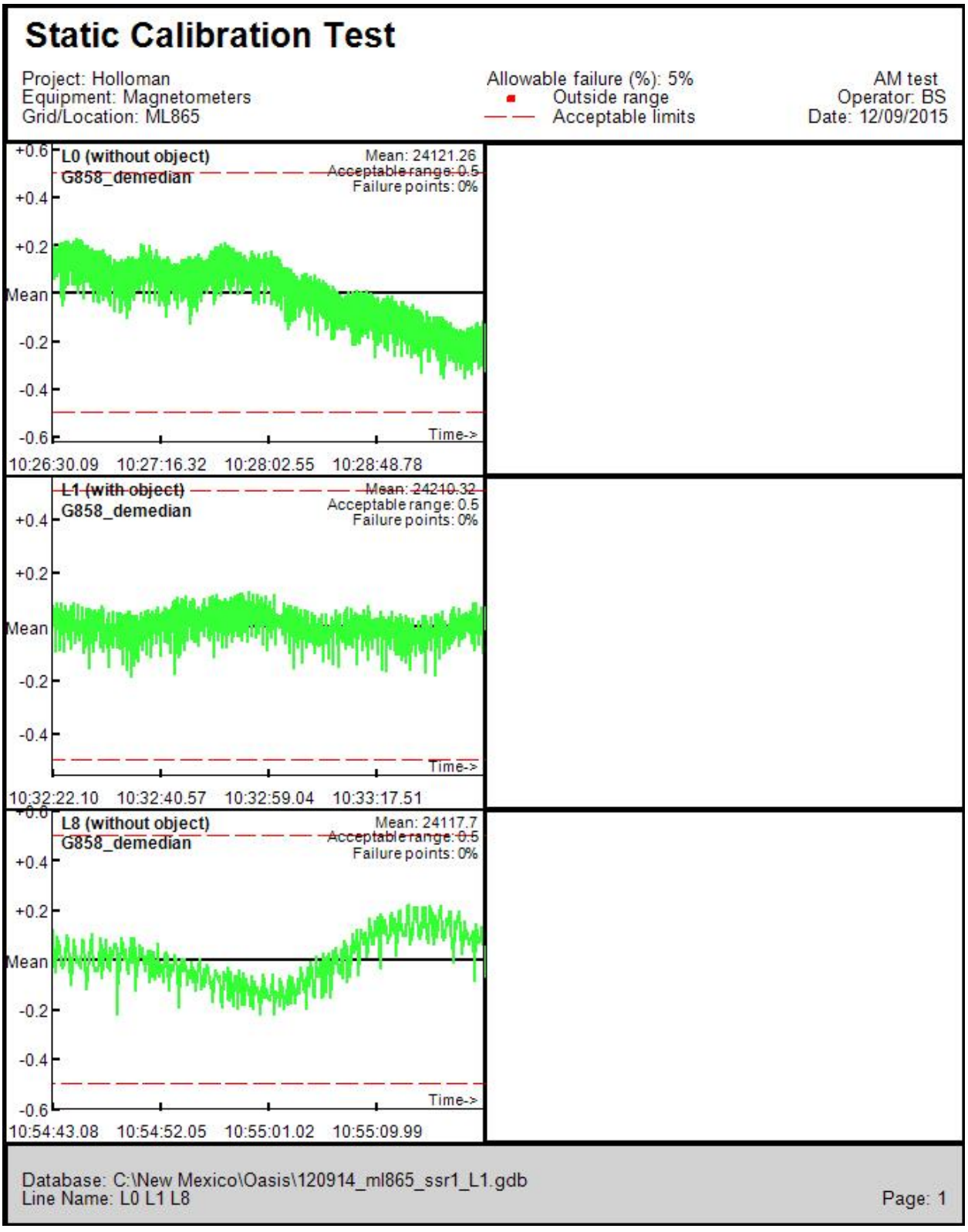


Figure C-146
12/9/2014 G-858 SSR AM Sensor L2 ML865 MRS

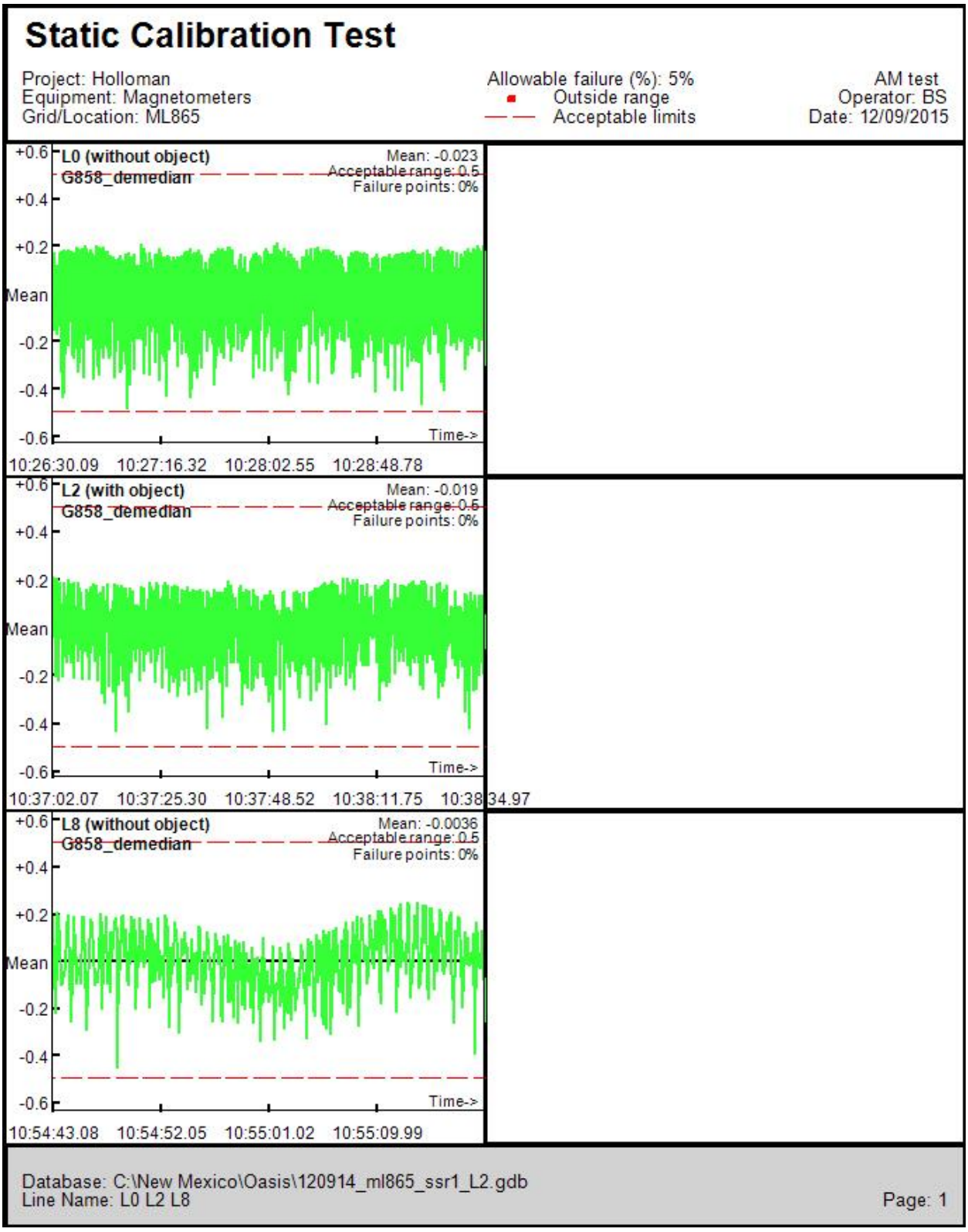


Figure C-147
12/9/2014 G-858 SSR AM Sensor R1 ML865 MRS

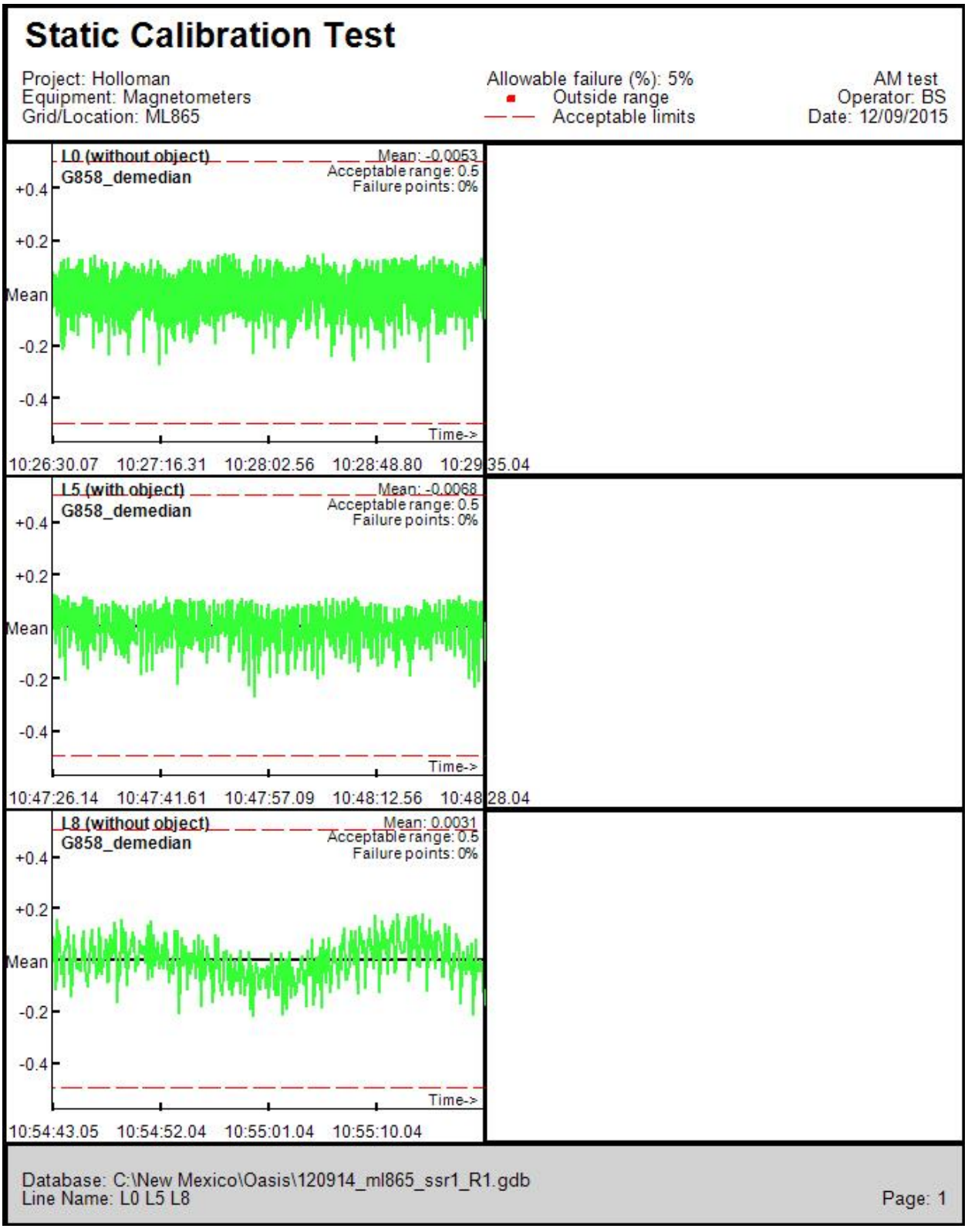


Figure C-148
12/9/2014 G-858 SSR AM Sensor R2 ML865 MRS

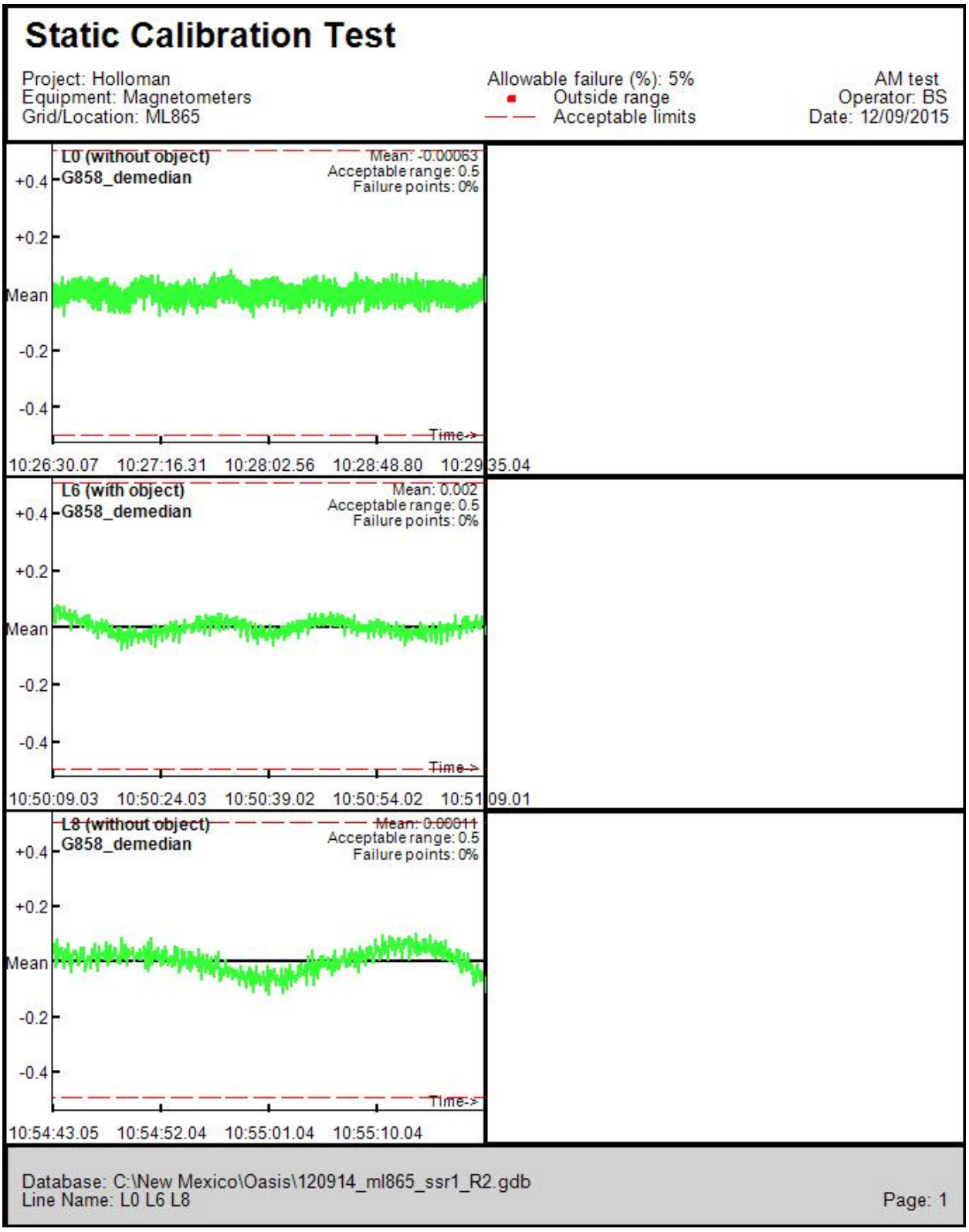


Figure C-149
12/9/2014 G-858 SSR PM Sensor C1 ML865 MRS

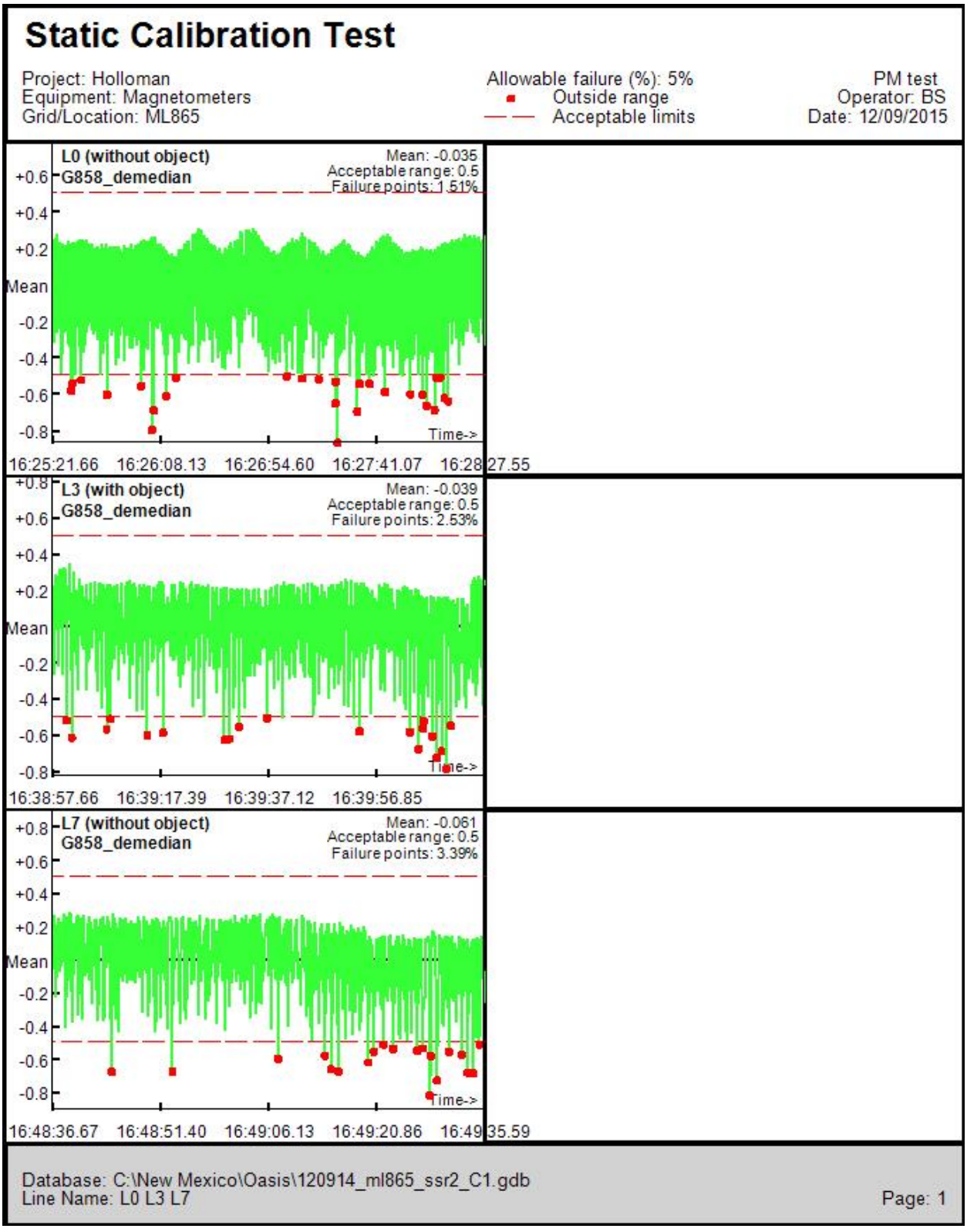


Figure C-150
12/9/2014 G-858 SSR PM Sensor C2 ML865 MRS

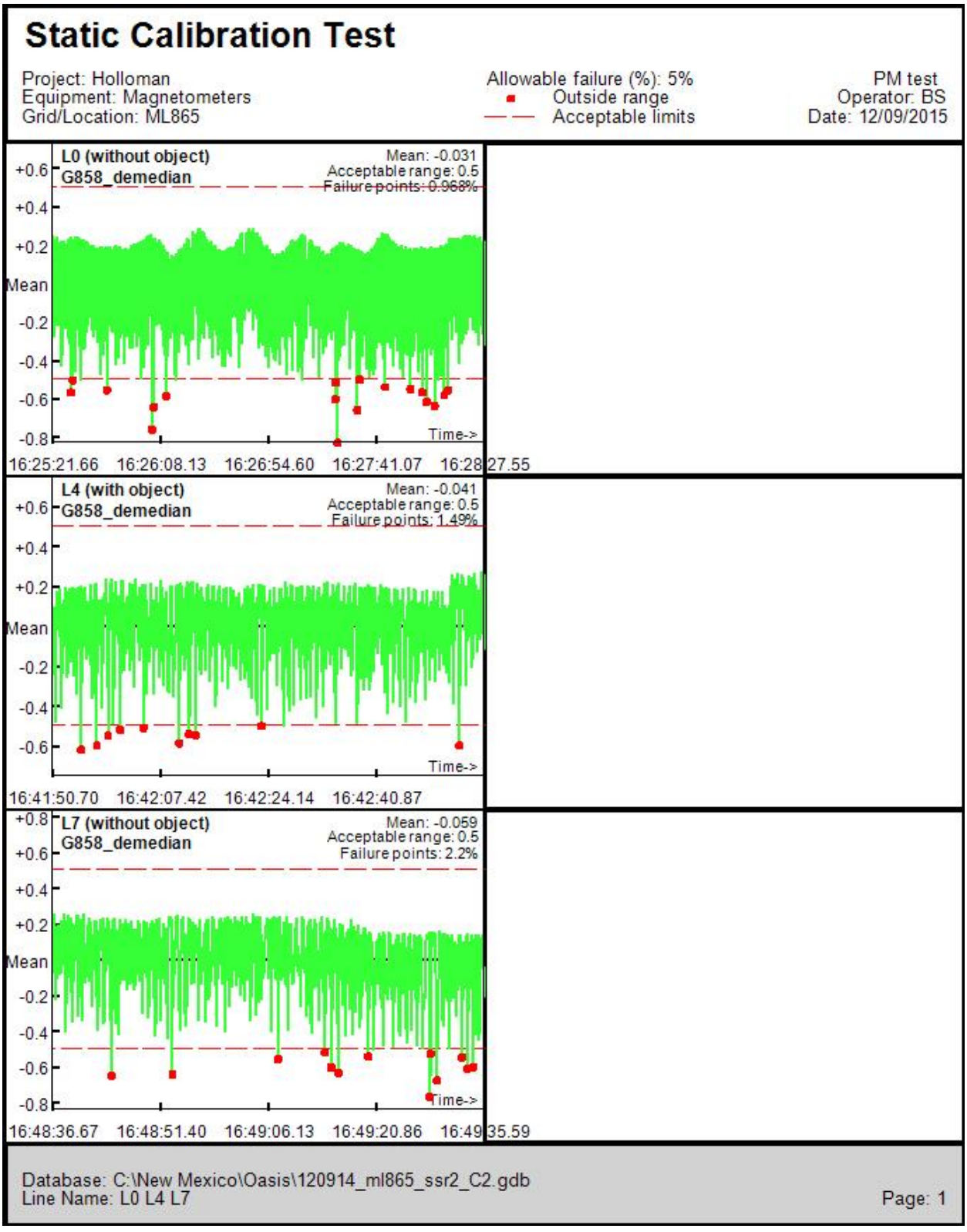


Figure C-151
12/9/2014 G-858 SSR PM Sensor L1 ML865 MRS

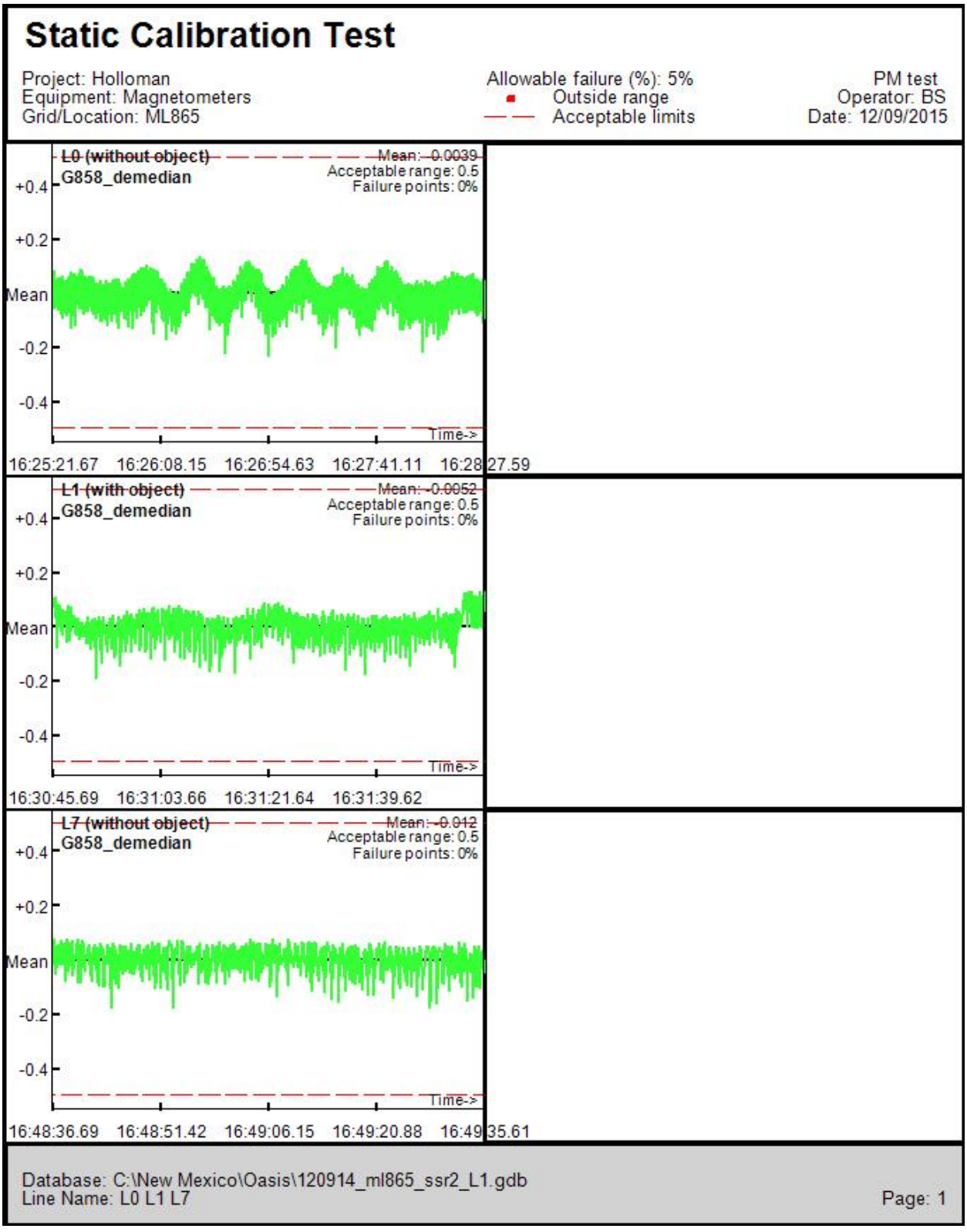


Figure C-152
12/9/2014 G-858 SSR PM Sensor L2 ML865 MRS

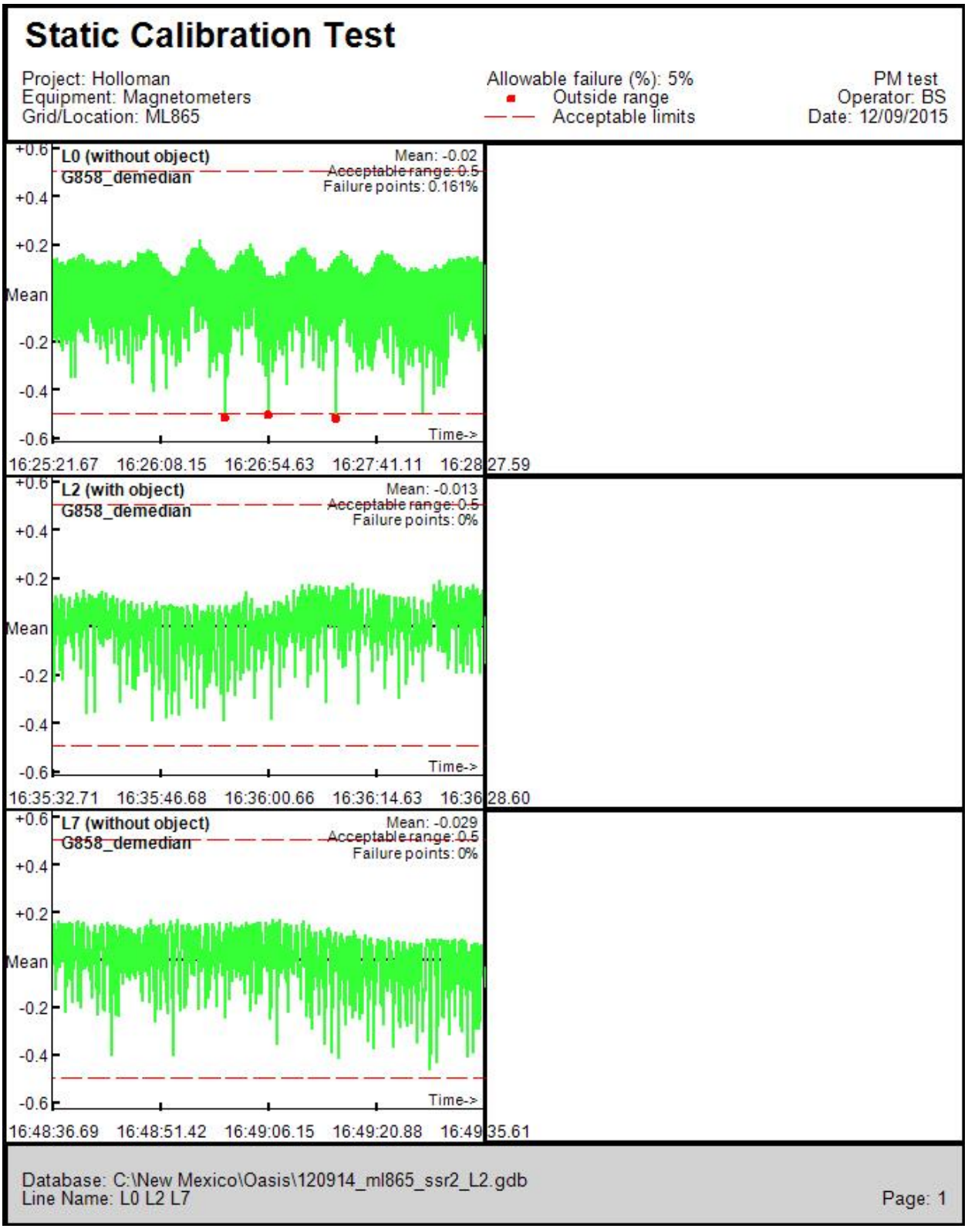


Figure C-153
12/9/2014 G-858 SSR PM Sensor R1 ML865 MRS

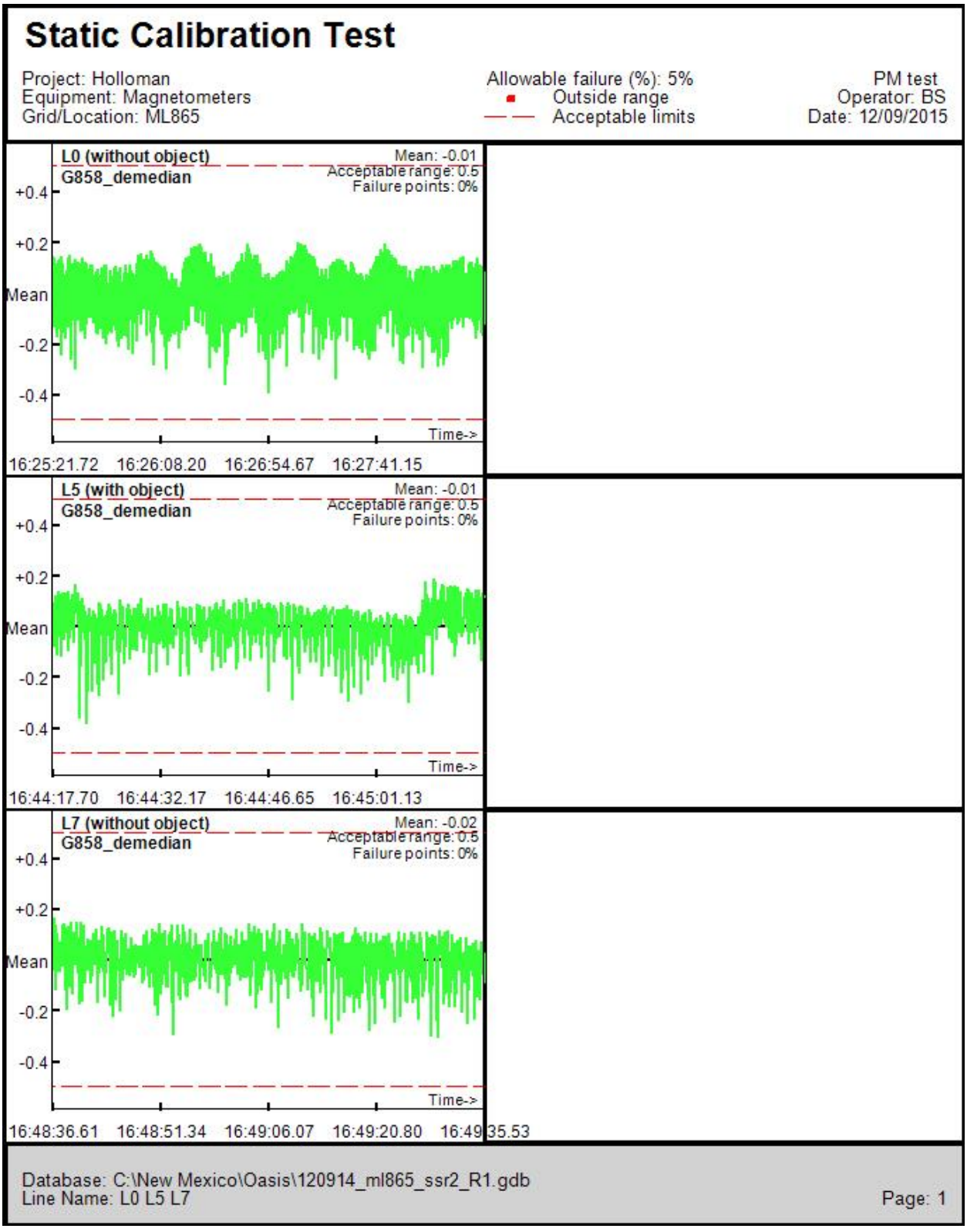


Figure C-154
12/9/2014 G-858 SSR PM Sensor R2 ML865 MRS

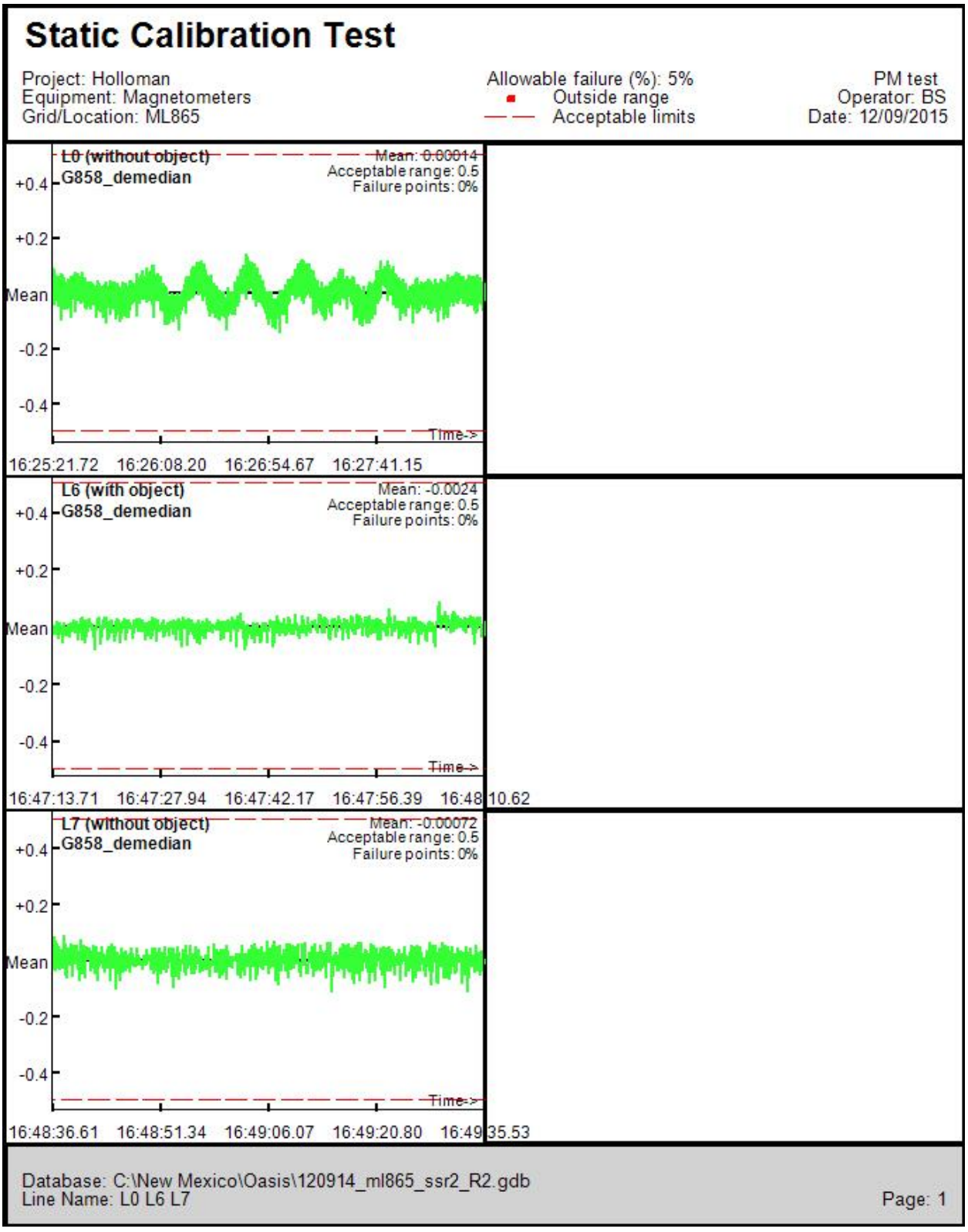


Figure C-155
12/10/2014 G-858 SSR AM Sensor C1 ML865 MRS

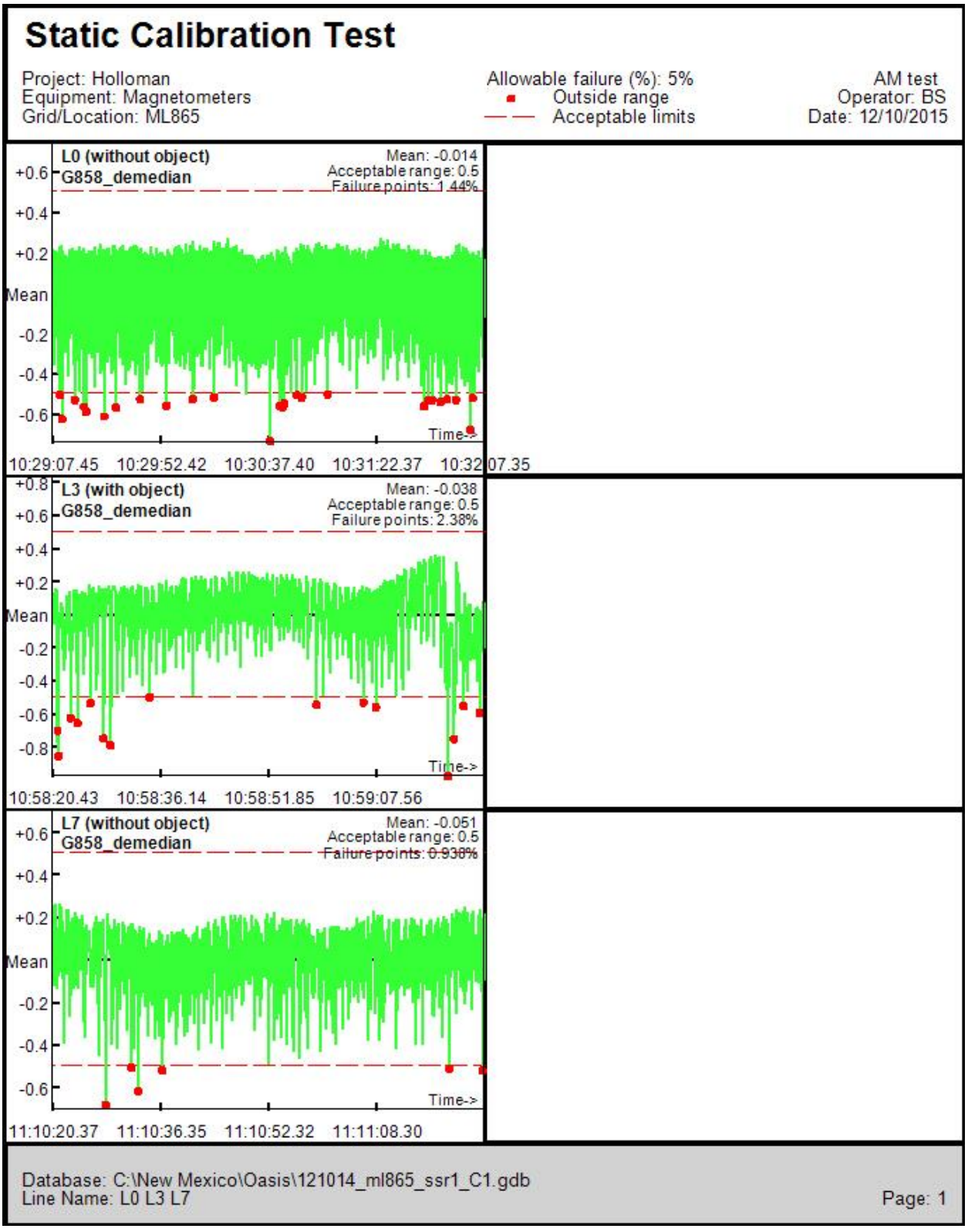


Figure C-156
12/10/2014 G-858 SSR AM Sensor C2 ML865 MRS

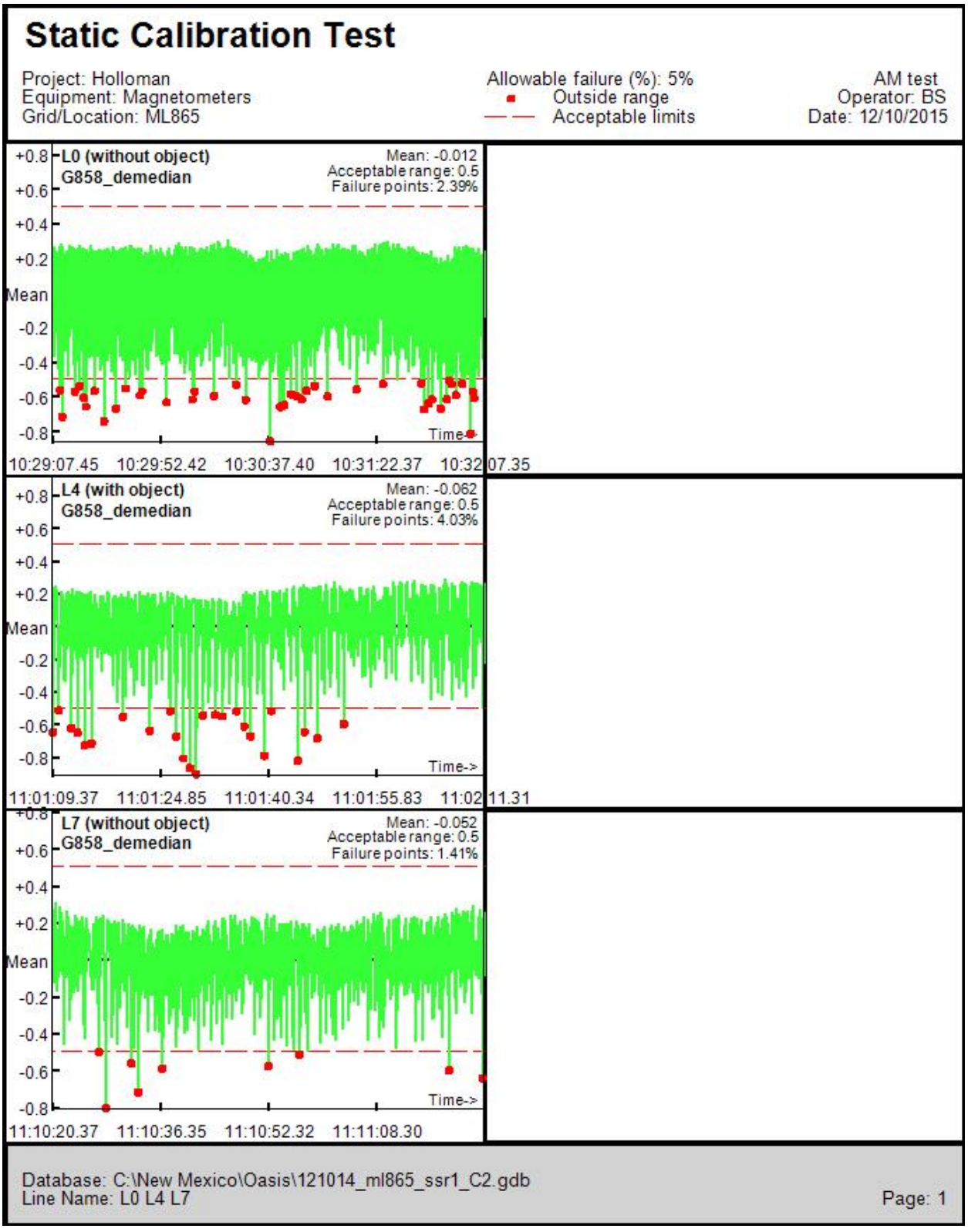


Figure C-157
12/10/2014 G-858 SSR AM Sensor L1 ML865 MRS

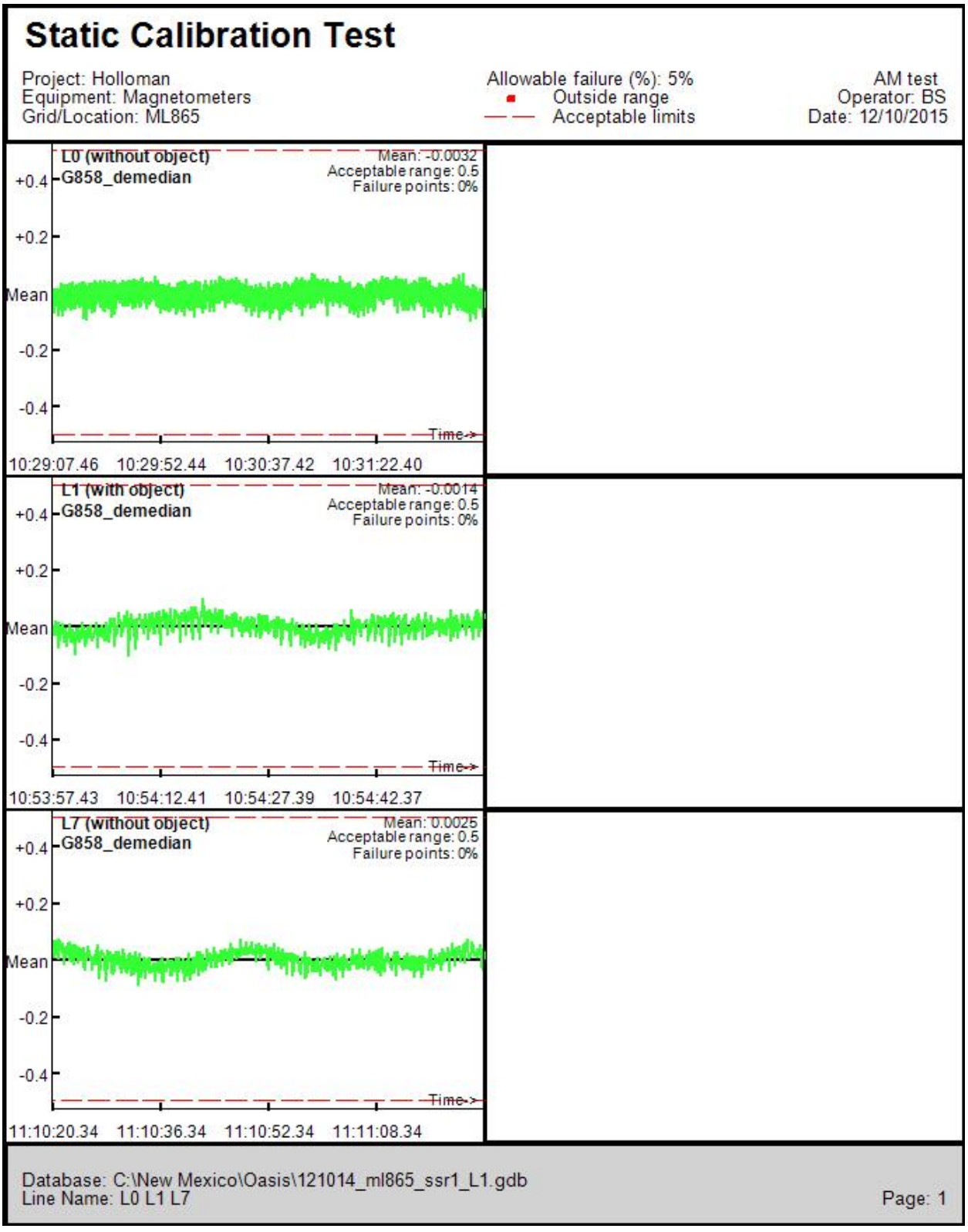


Figure C-158
12/10/2014 G-858 SSR AM Sensor L2 ML865 MRS

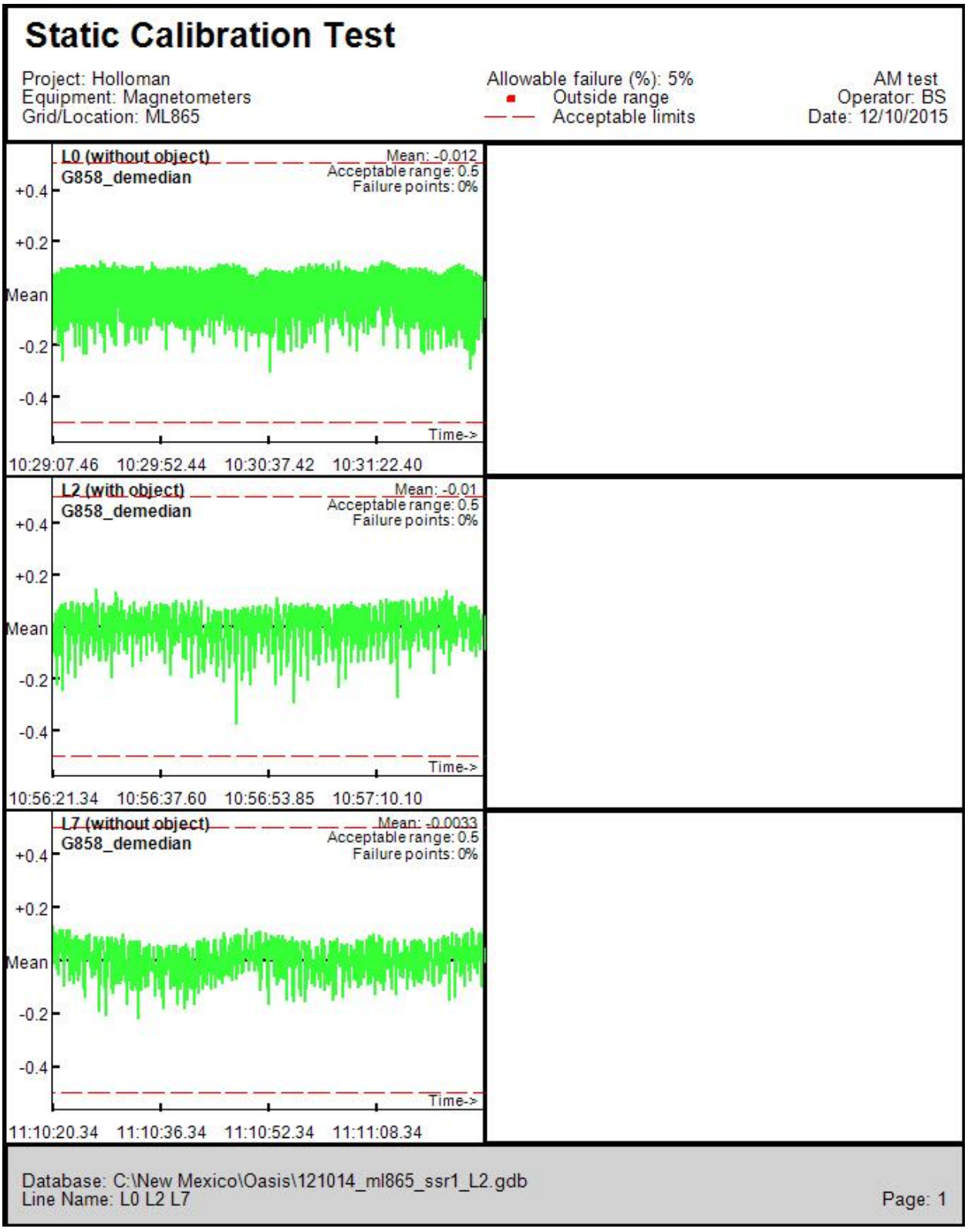


Figure C-159
12/10/2014 G-858 SSR AM Sensor R1 ML865 MRS

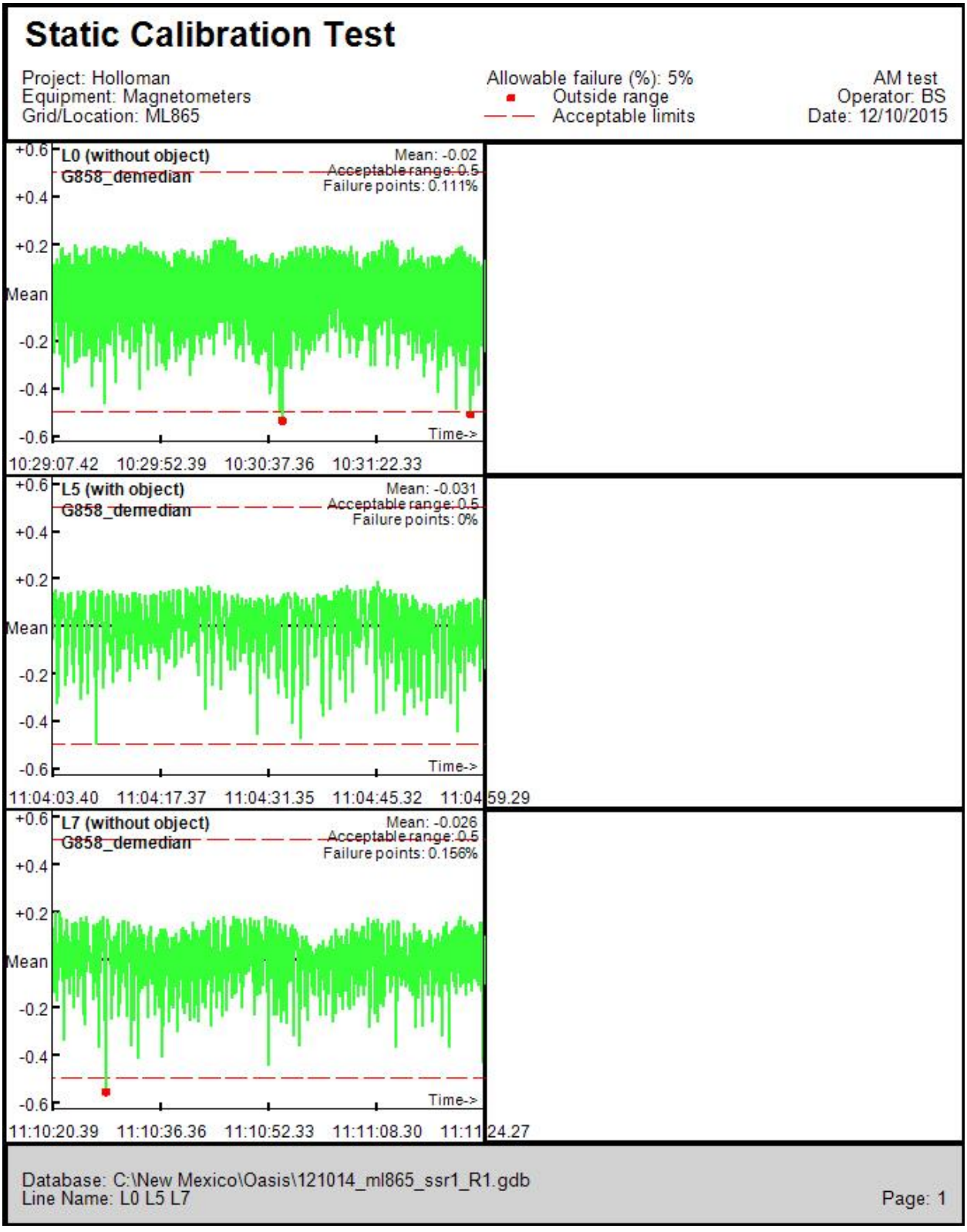


Figure C-160
12/10/2014 G-858 SSR AM Sensor R2 ML865 MRS

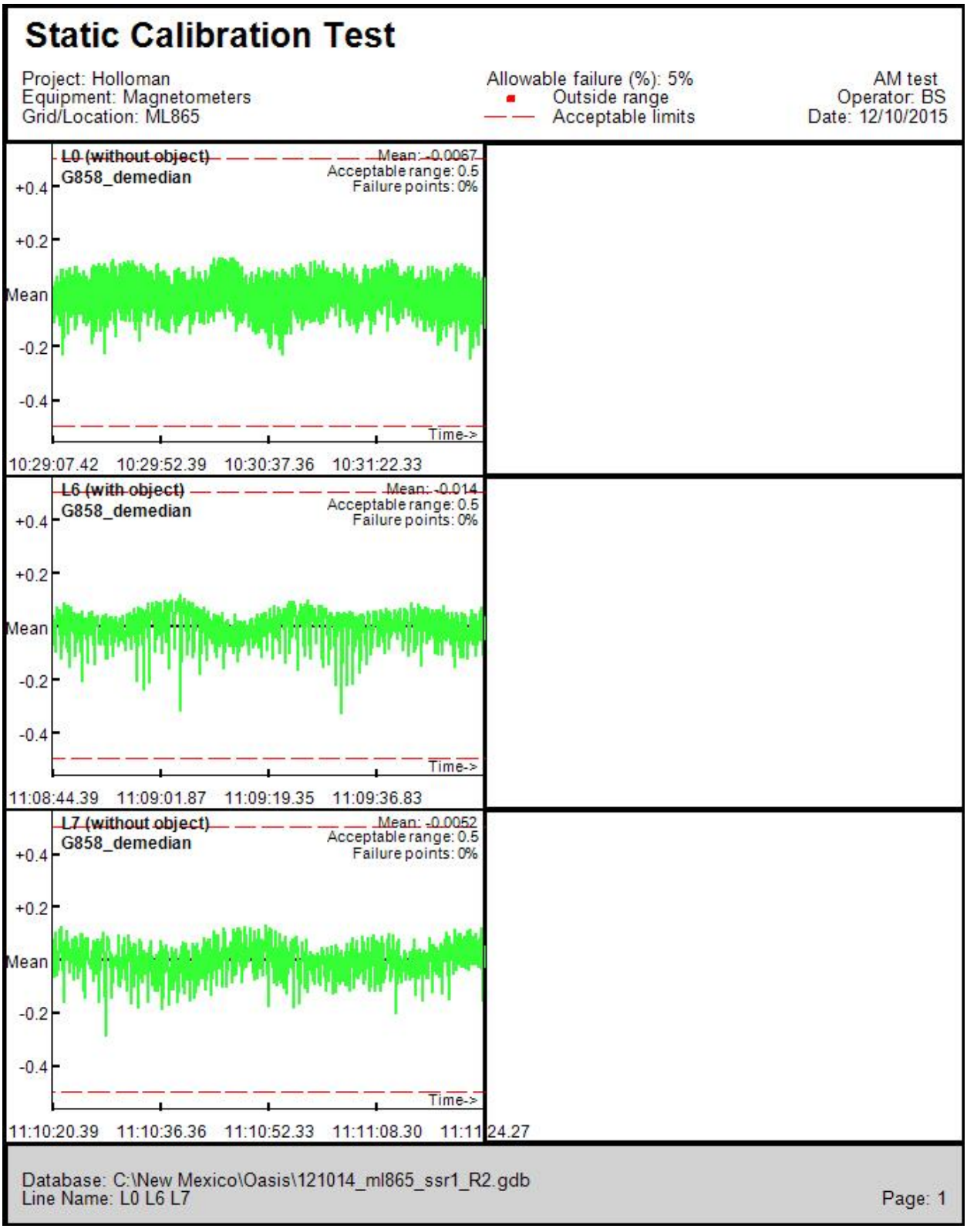


Figure C-161
12/10/2014 G-858 SSR PM Sensor C1 ML865 MRS

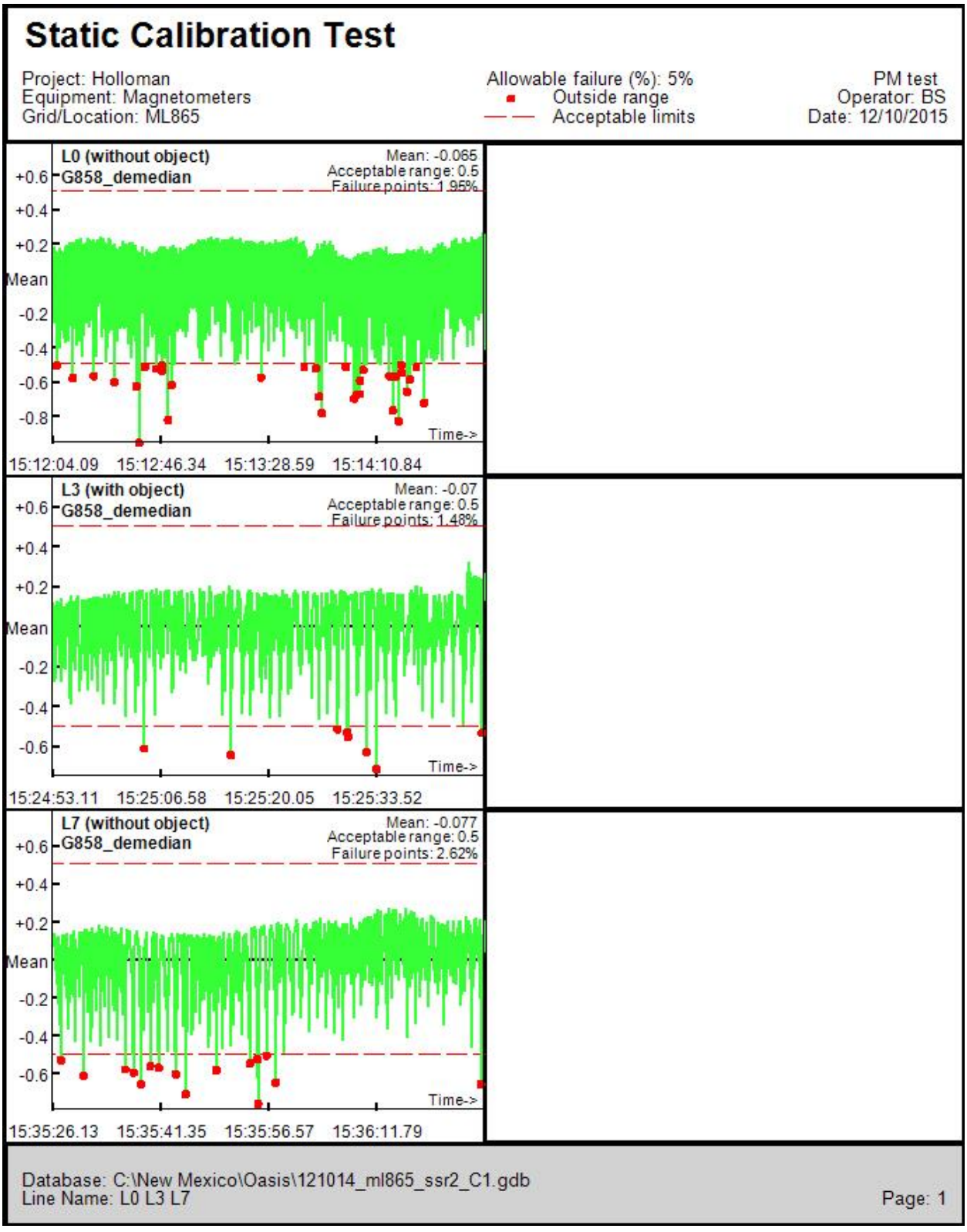


Figure C-162
12/10/2014 G-858 SSR PM Sensor C2 ML865 MRS

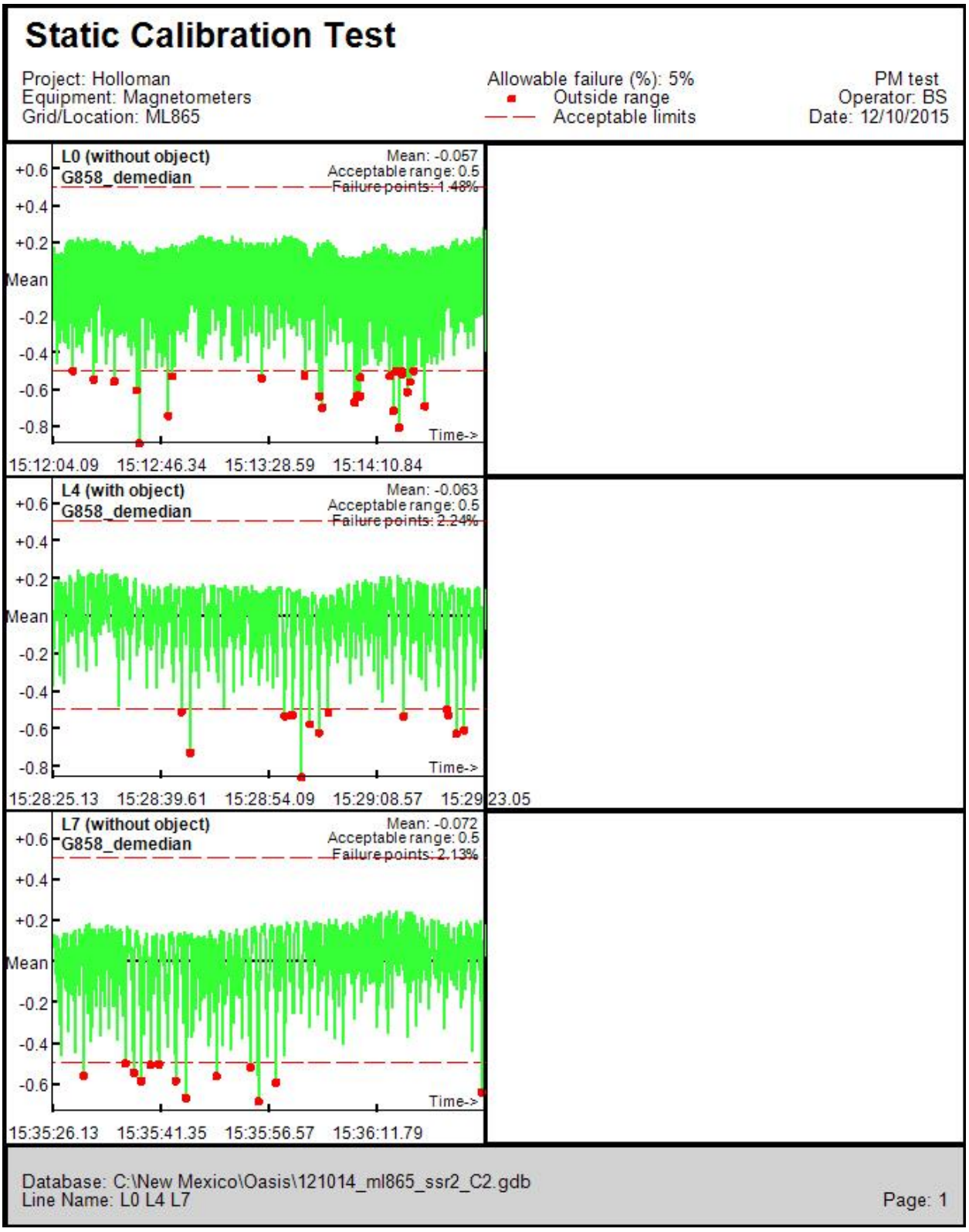


Figure C-163
12/10/2014 G-858 SSR PM Sensor L1 ML865 MRS

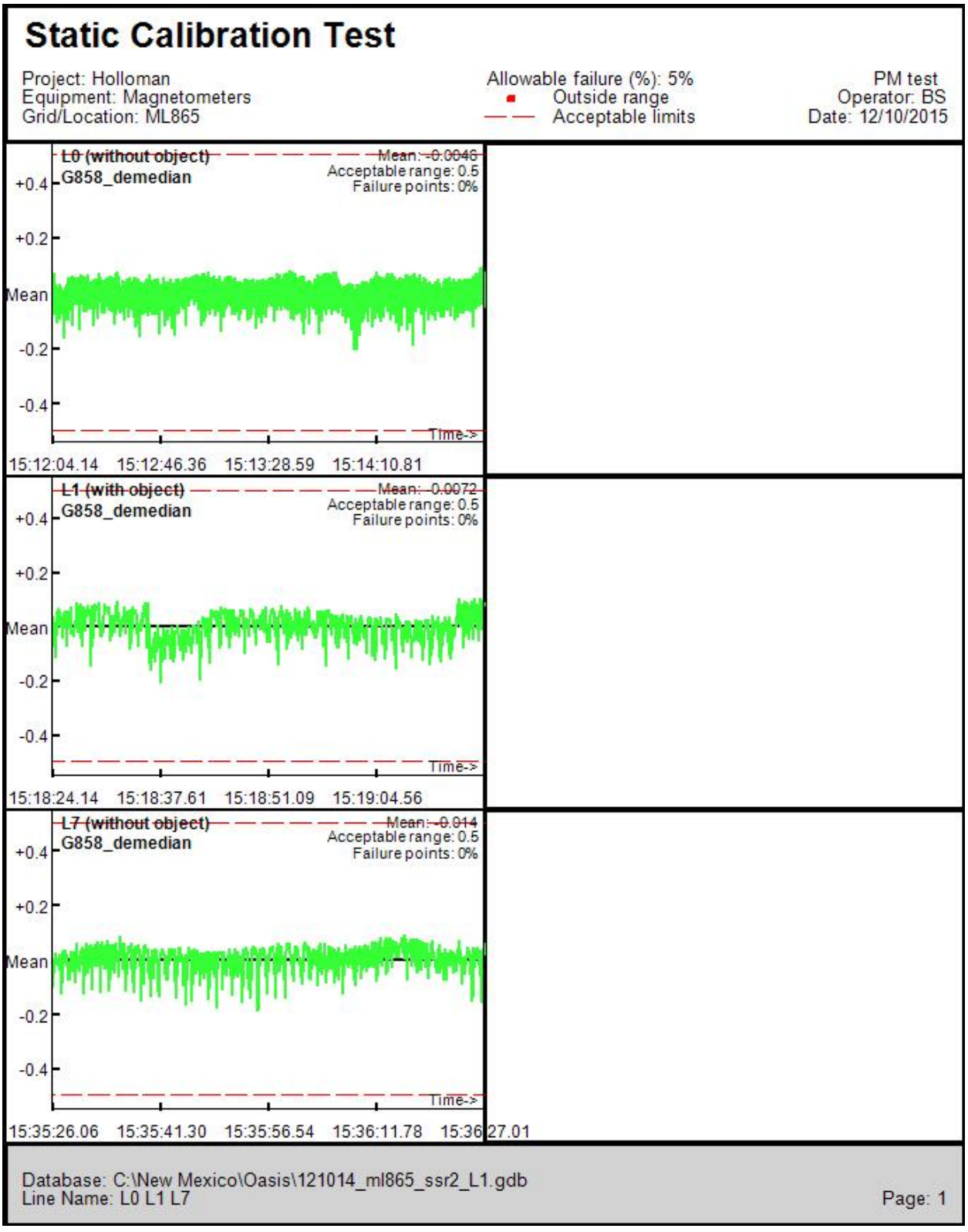


Figure C-164
12/10/2014 G-858 SSR PM Sensor L2 ML865 MRS

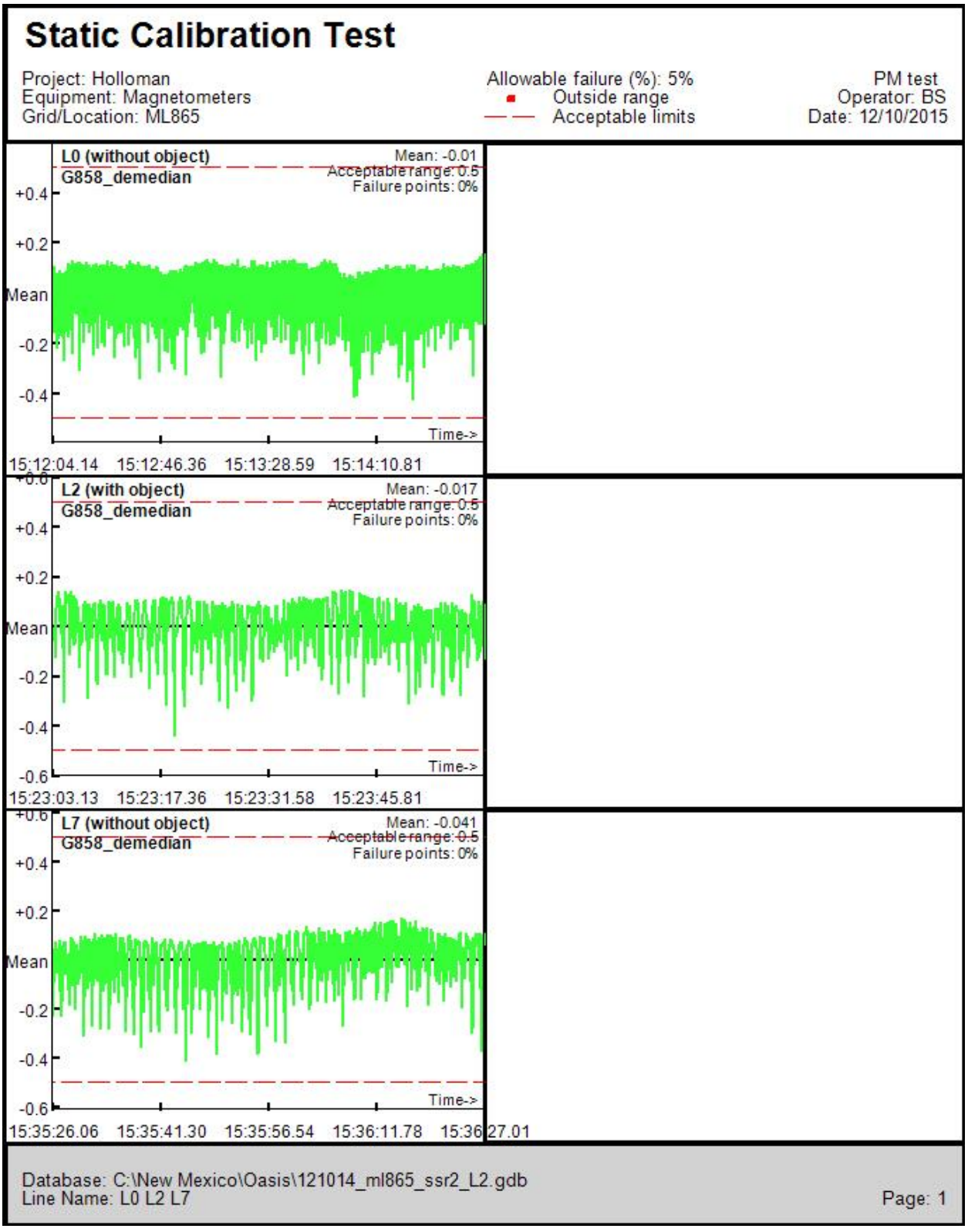


Figure C-165
12/10/2014 G-858 SSR PM Sensor R1 ML865 MRS

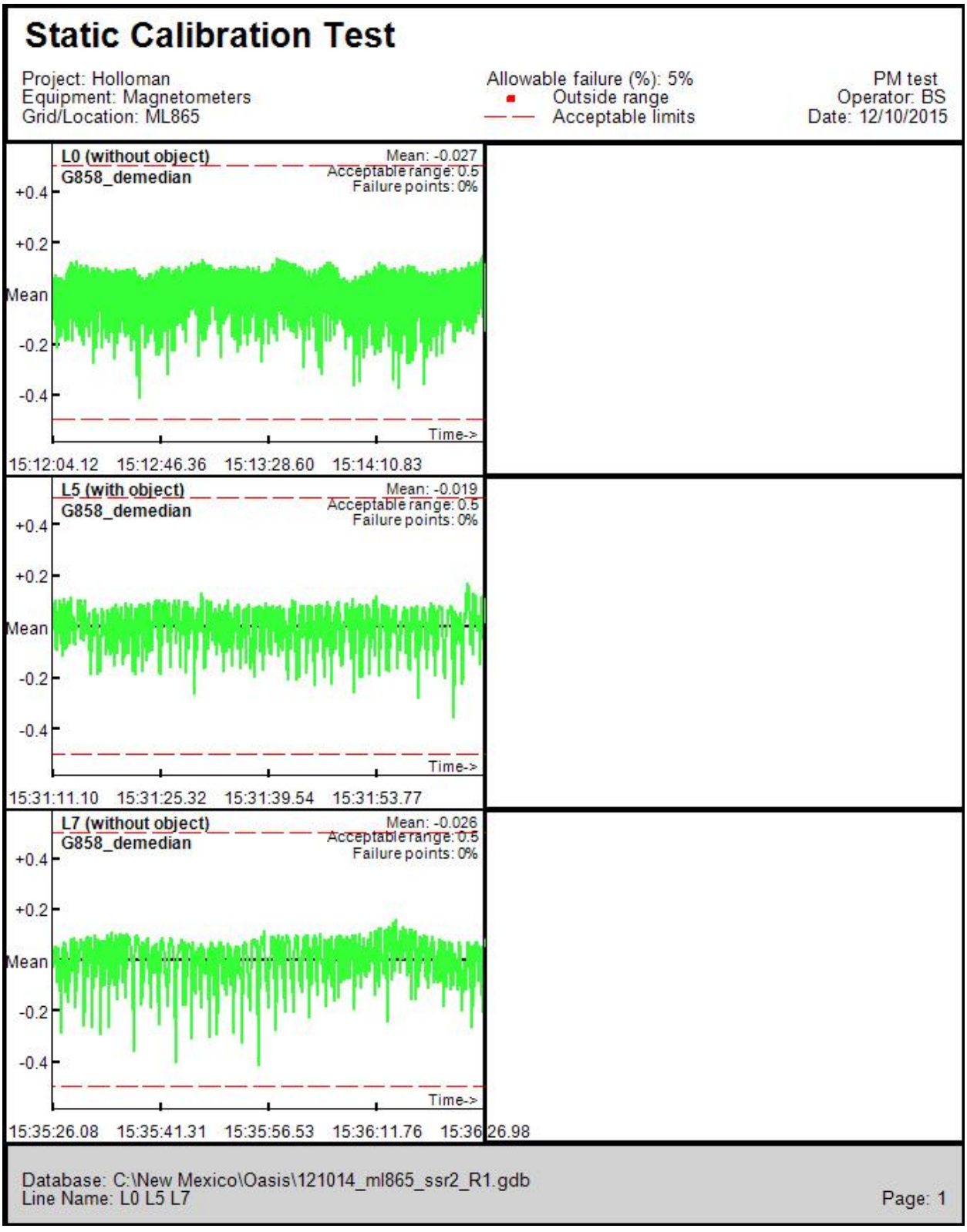


Figure C-166
12/10/2014 G-858 SSR PM Sensor R2 ML865 MRS

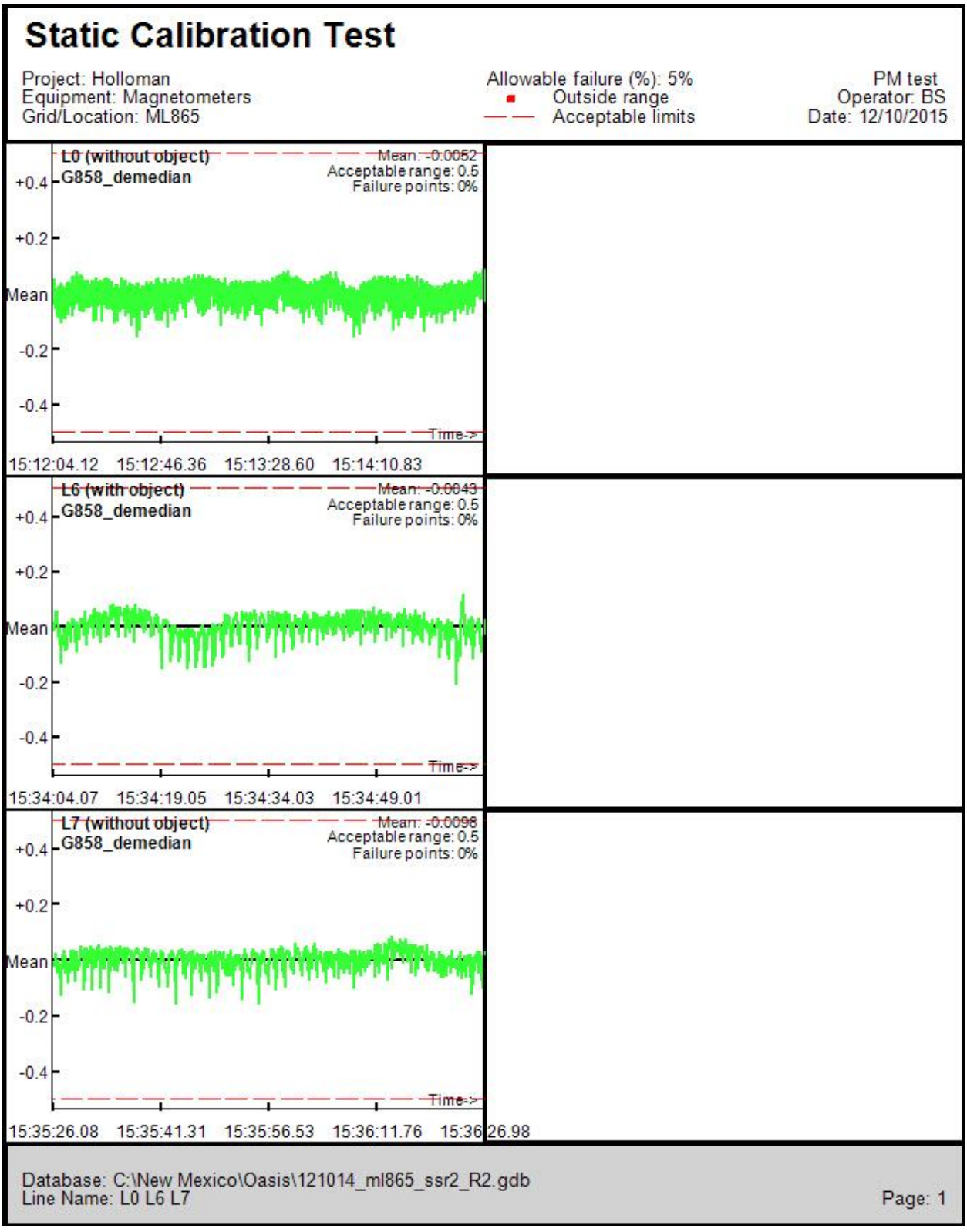


Figure C-167
12/10/2014 G-858 SSR AM Sensor L RR869a MRS

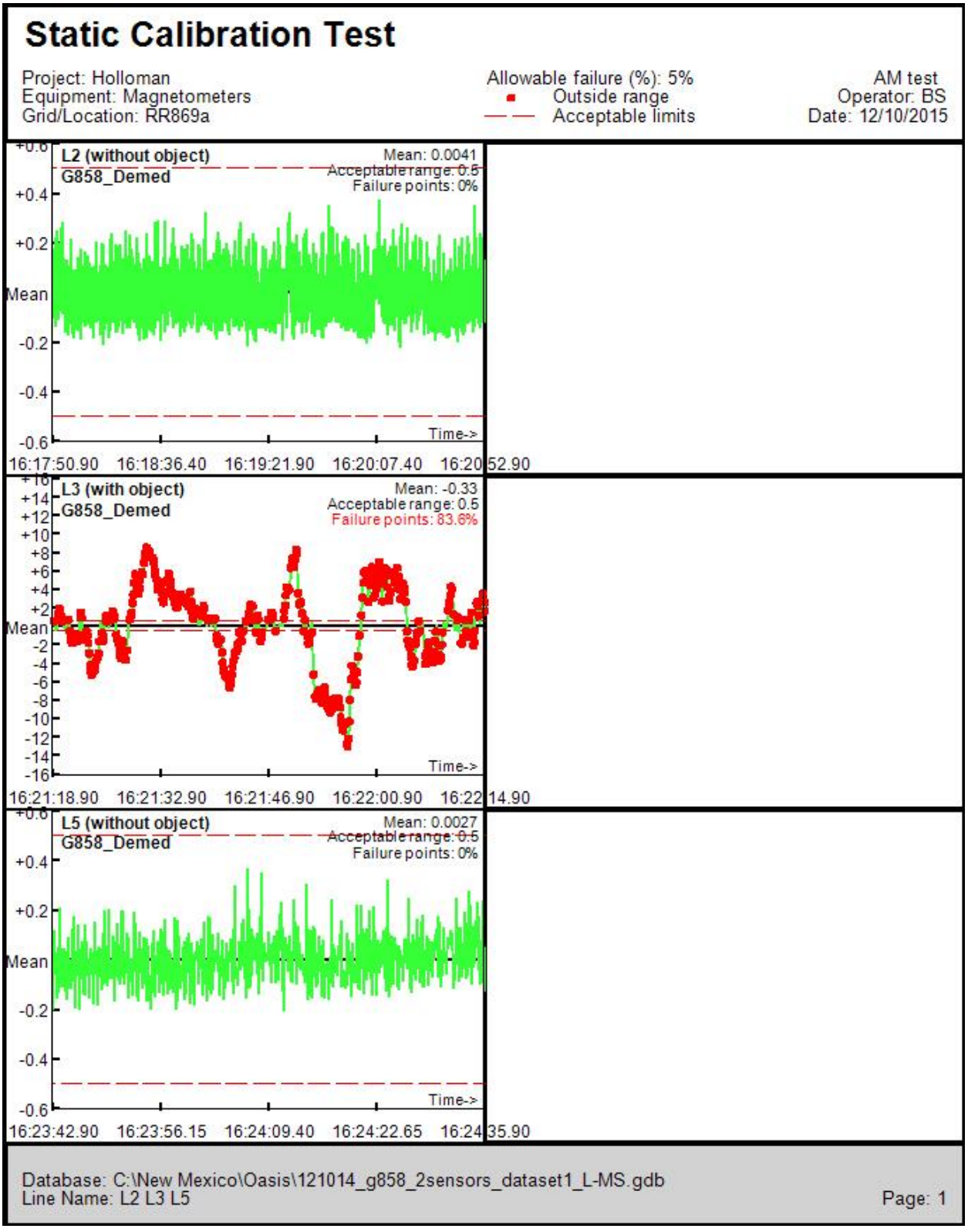


Figure C-168
12/10/2014 G-858 SSR AM Sensor R RR869a MRS

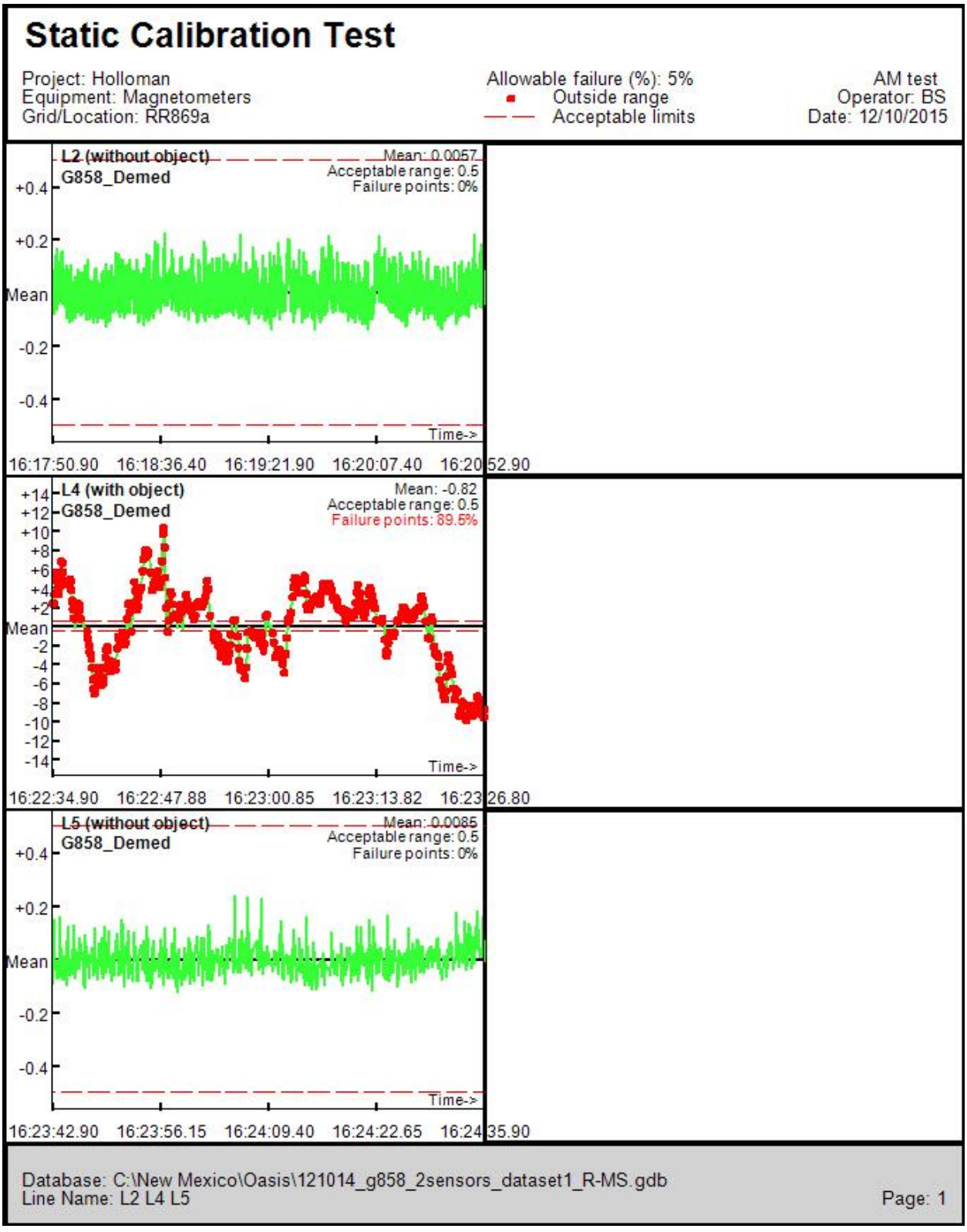


Figure C-169
2/06/2015 G-858 SSR AM Sensor L RR869a MRS

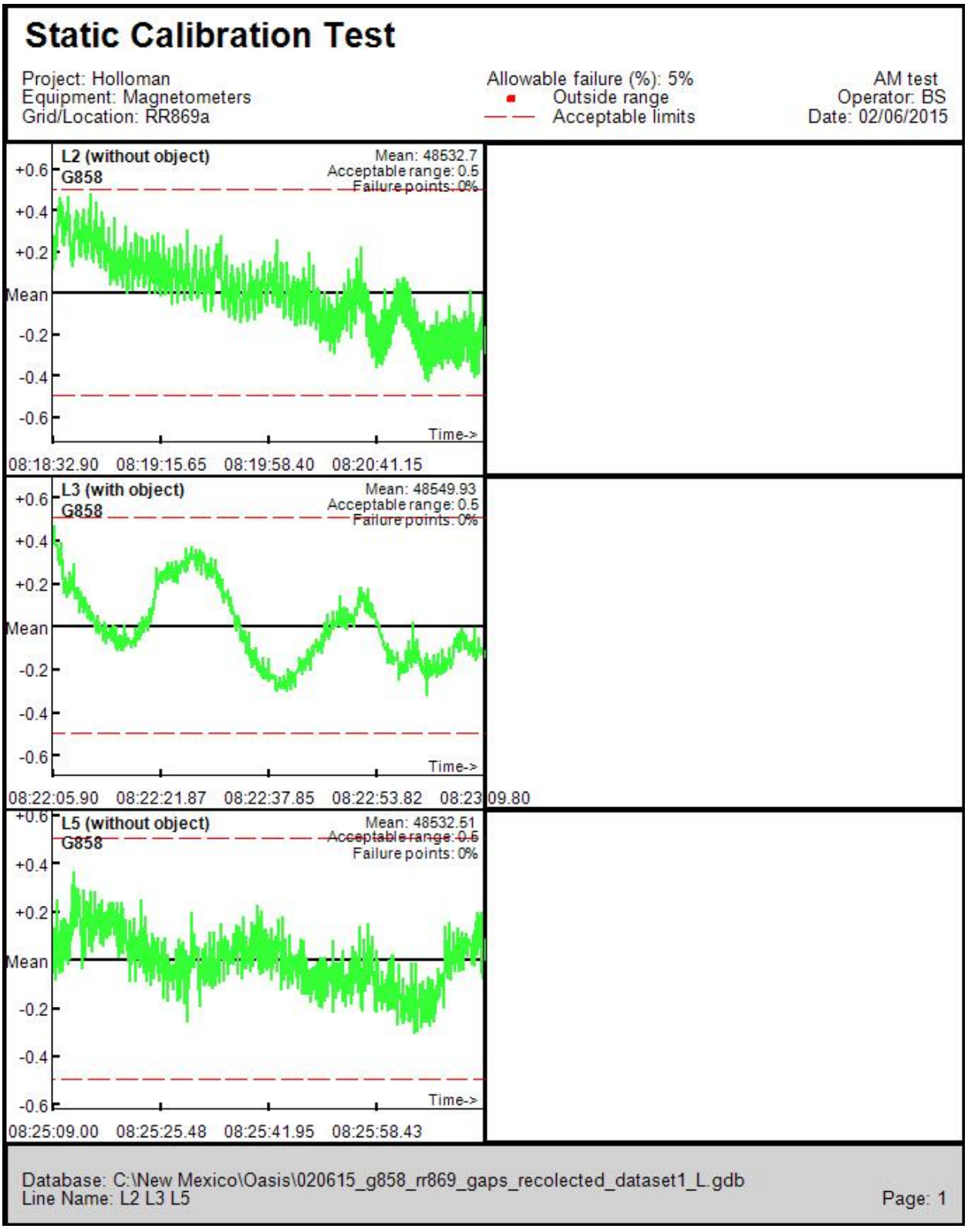


Figure C-170
2/06/2015 G-858 SSR AM Sensor R RR869a MRS

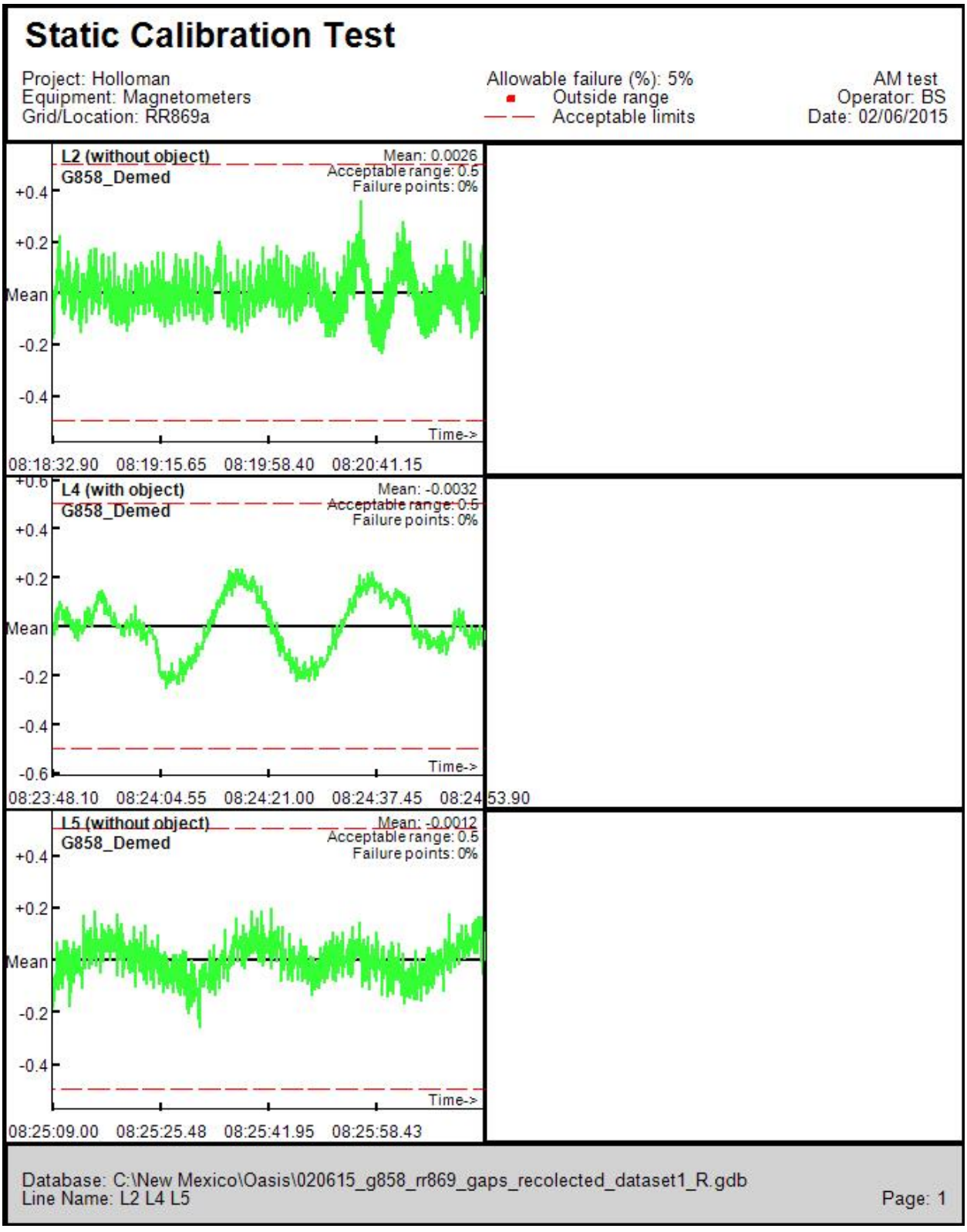


Figure C-171
2/06/2015 G-858 SSR PM Sensor L RR869a MRS

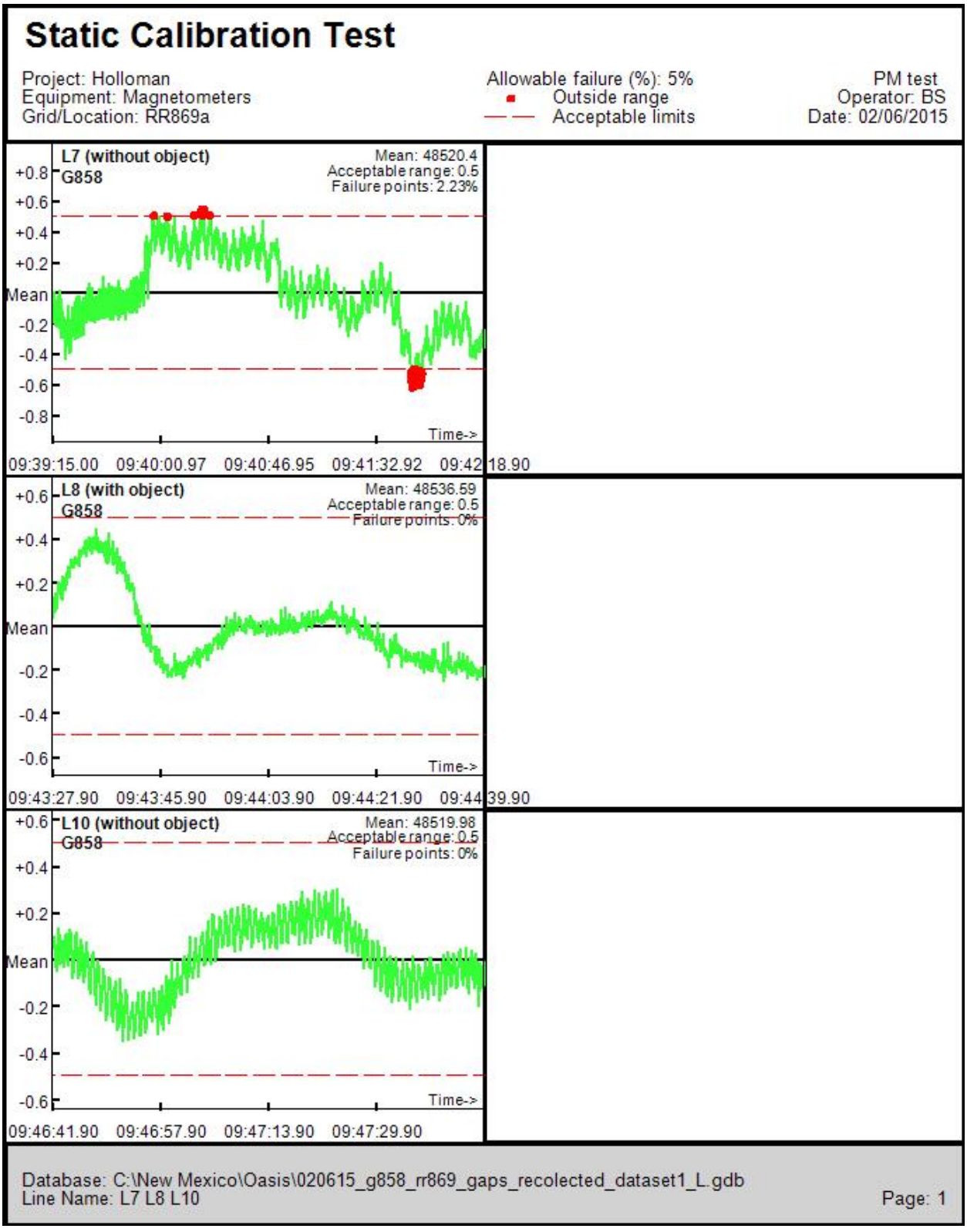


Figure C-172
2/06/2015 G-858 SSR PM Sensor R RR869a MRS

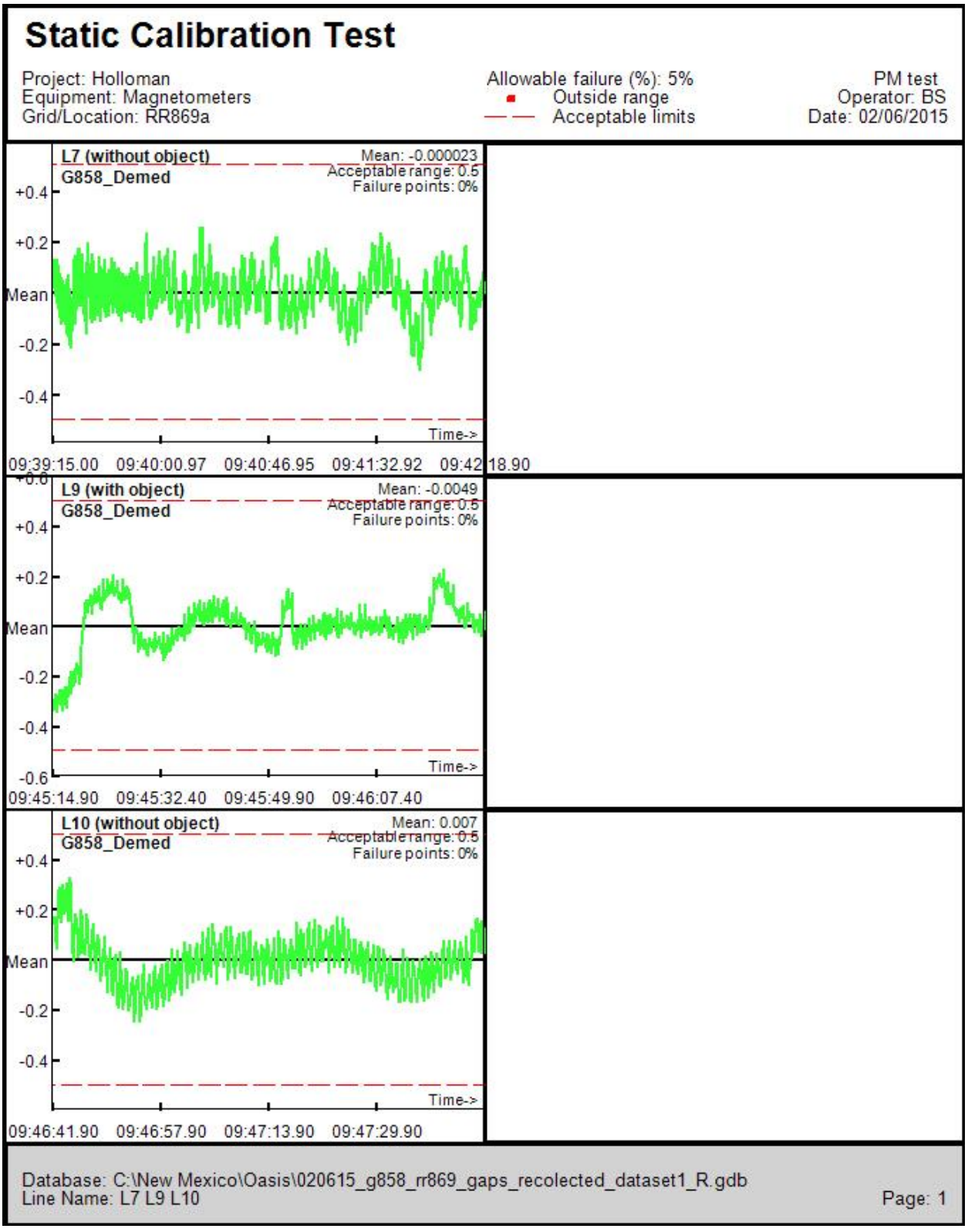


Figure C-173
2/13/2015 G-858 SSR AM Sensor L RR869a MRS

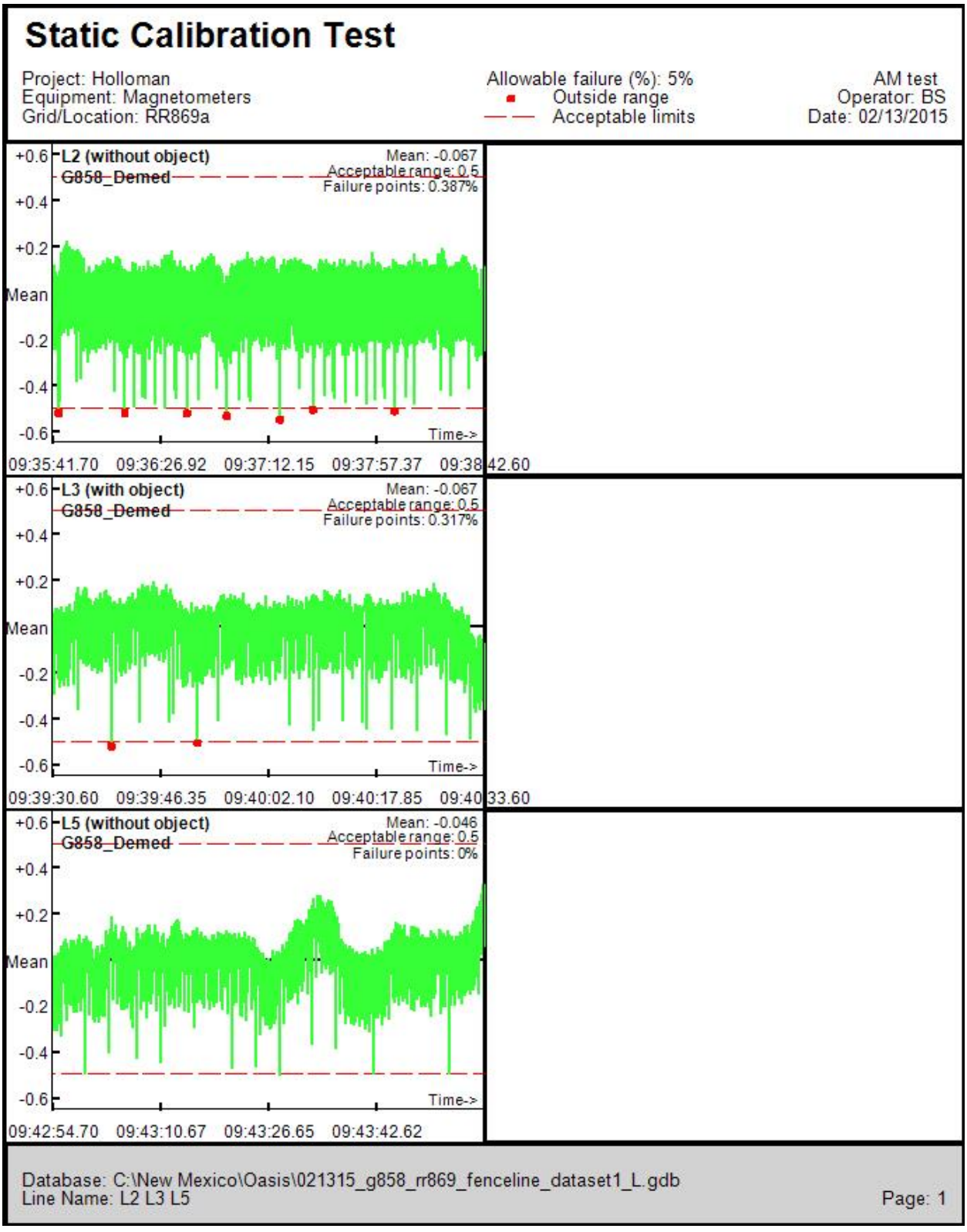


Figure C-174
2/13/2015 G-858 SSR AM Sensor R RR869a MRS

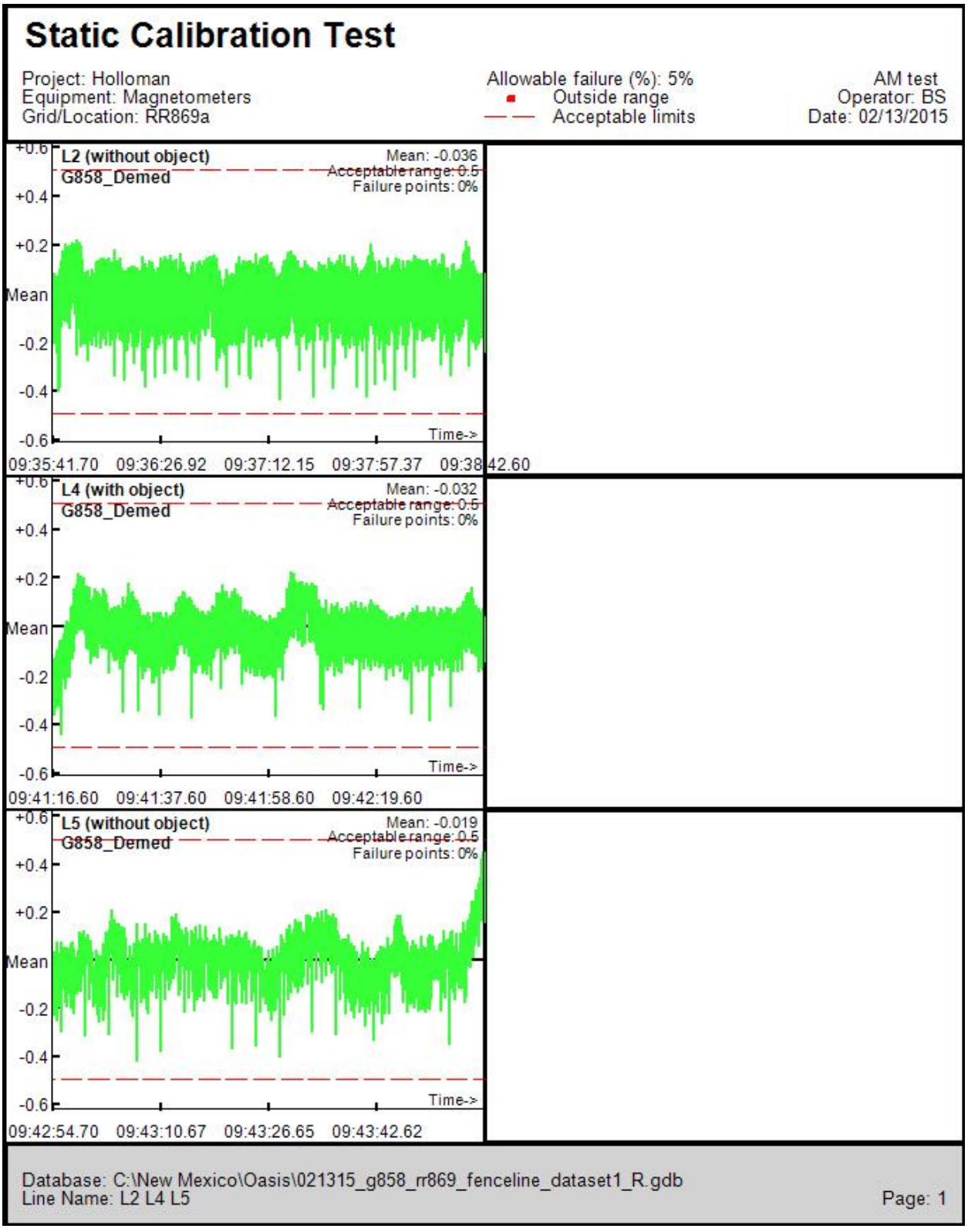


Figure C-175
2/13/2015 G-858 SSR PM Sensor L RR869a MRS

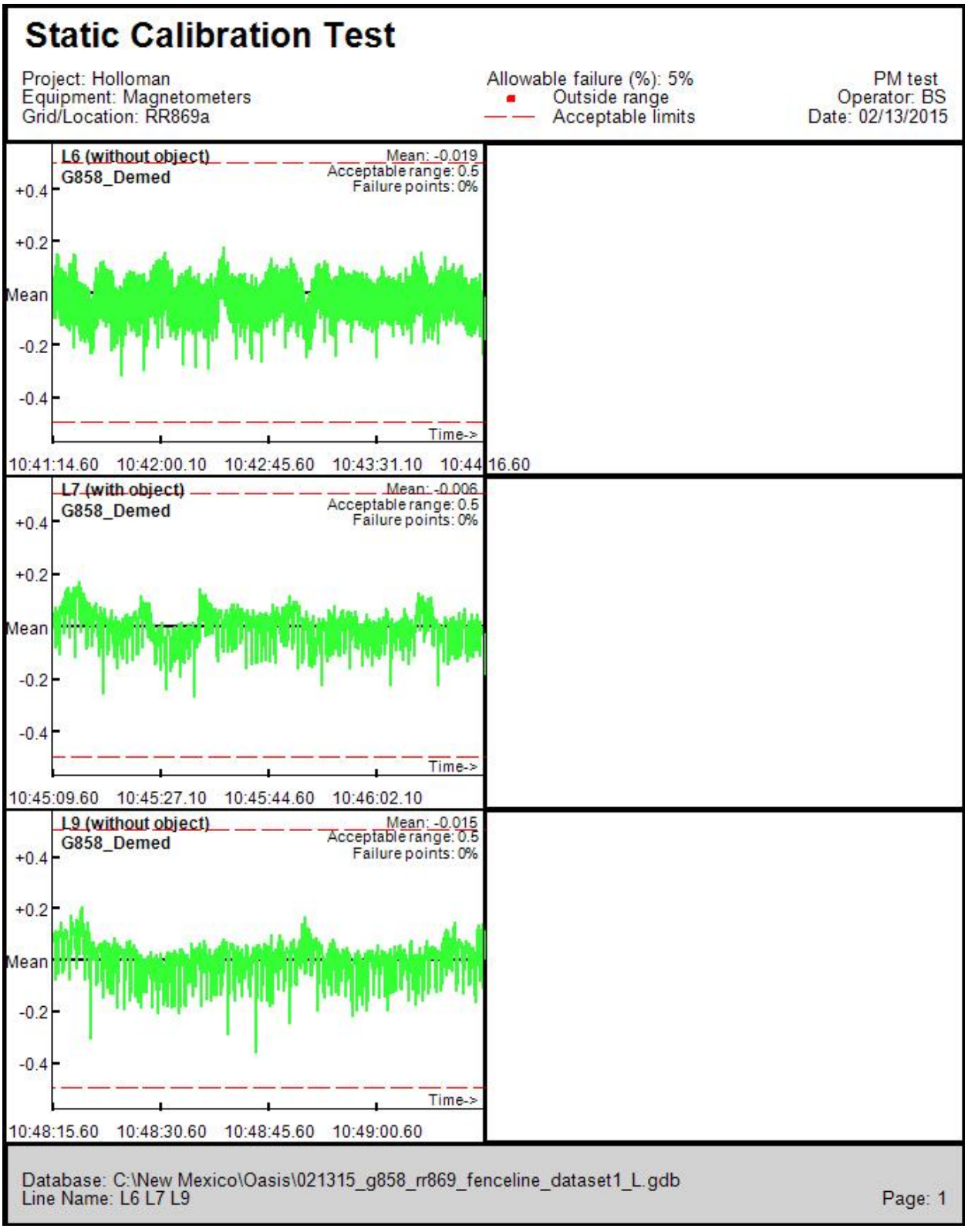


Figure C-176
2/13/2015 G-858 SSR PM Sensor R RR869a MRS

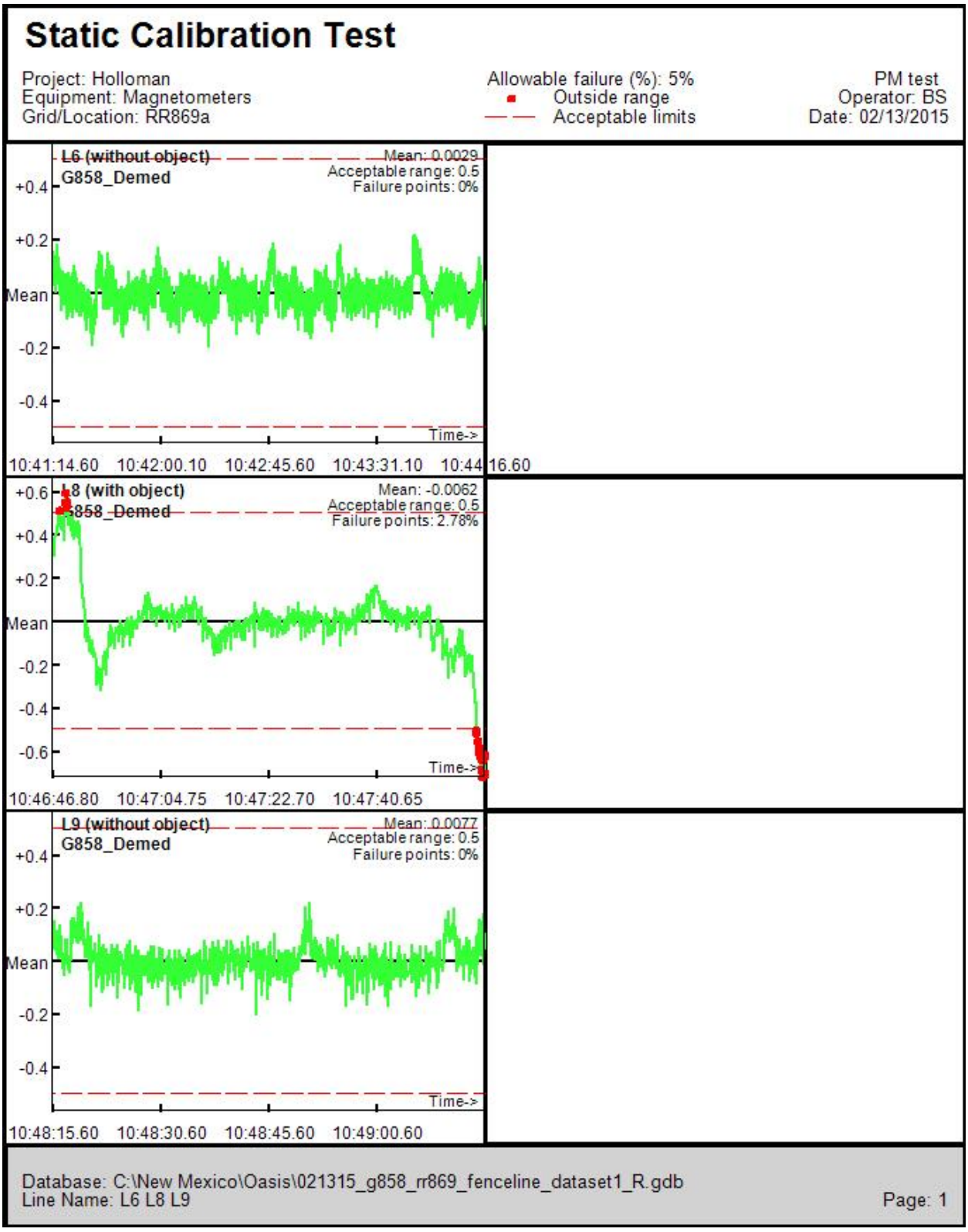


Figure C-177
12/11/2014 EM61 SSR AM Sensor C SR864 MRS

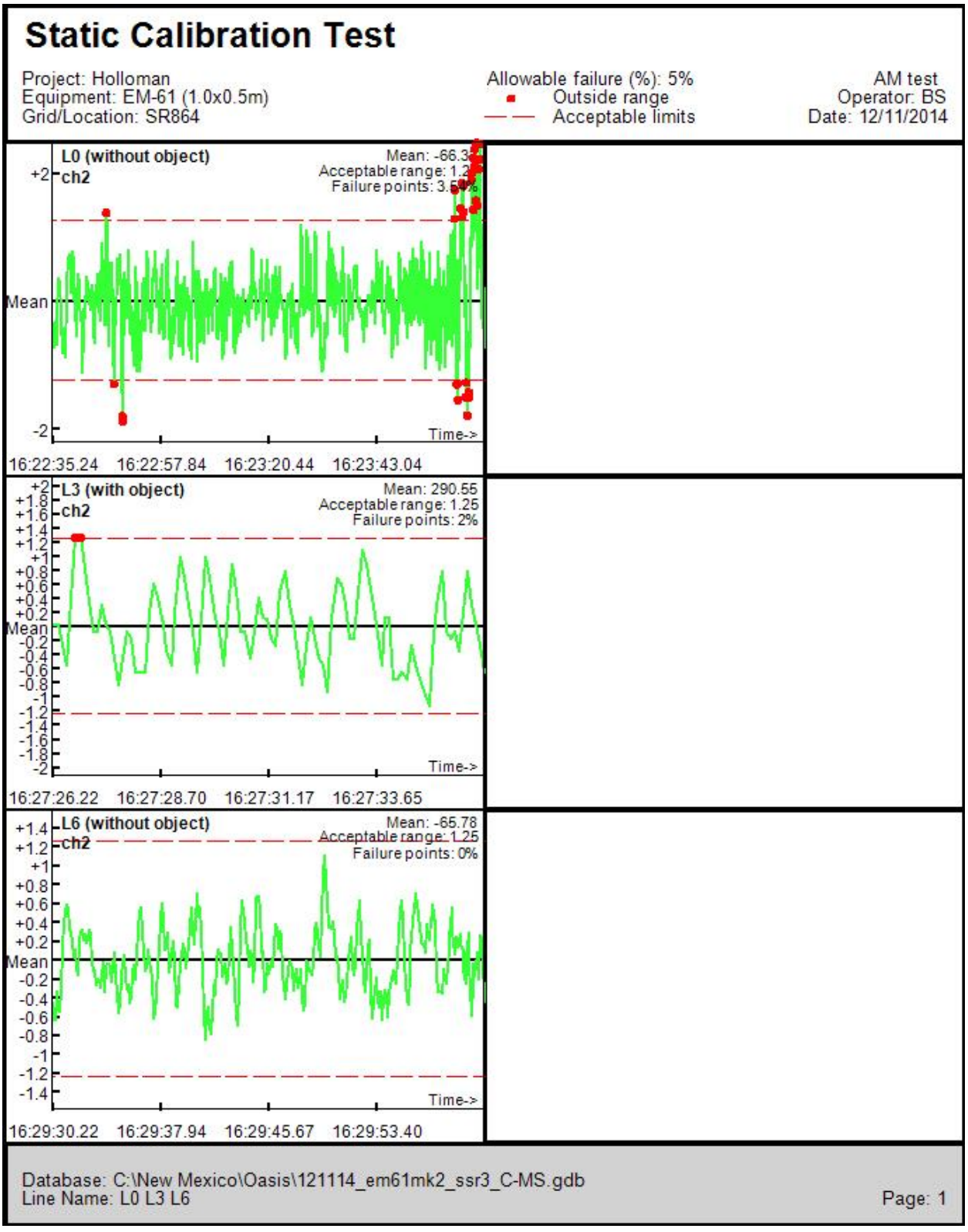


Figure C-178
12/11/2014 EM61 SSR AM Sensor L1 SR864 MRS

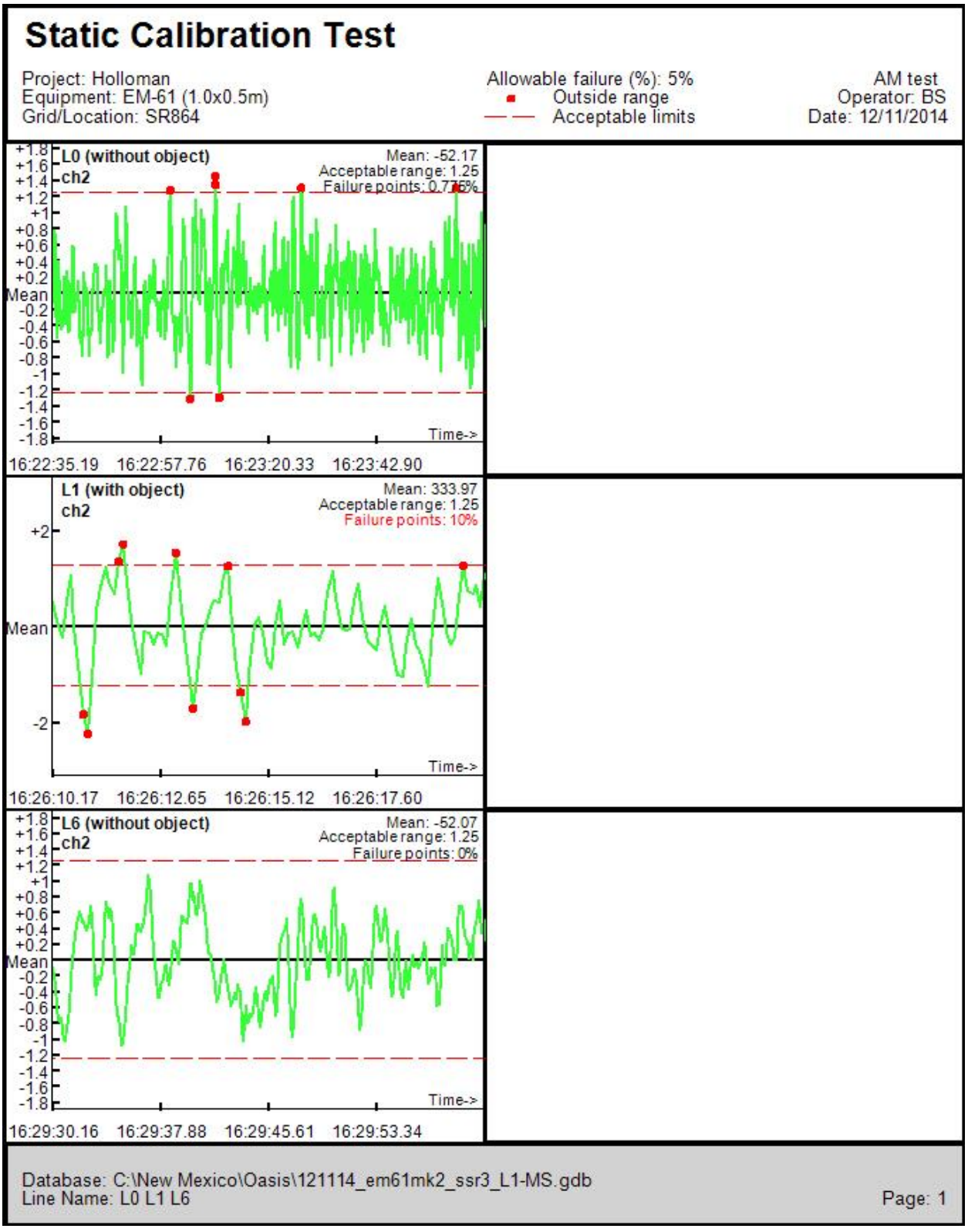


Figure C-179
12/11/2014 EM61 SSR AM Sensor L2 SR864 MRS

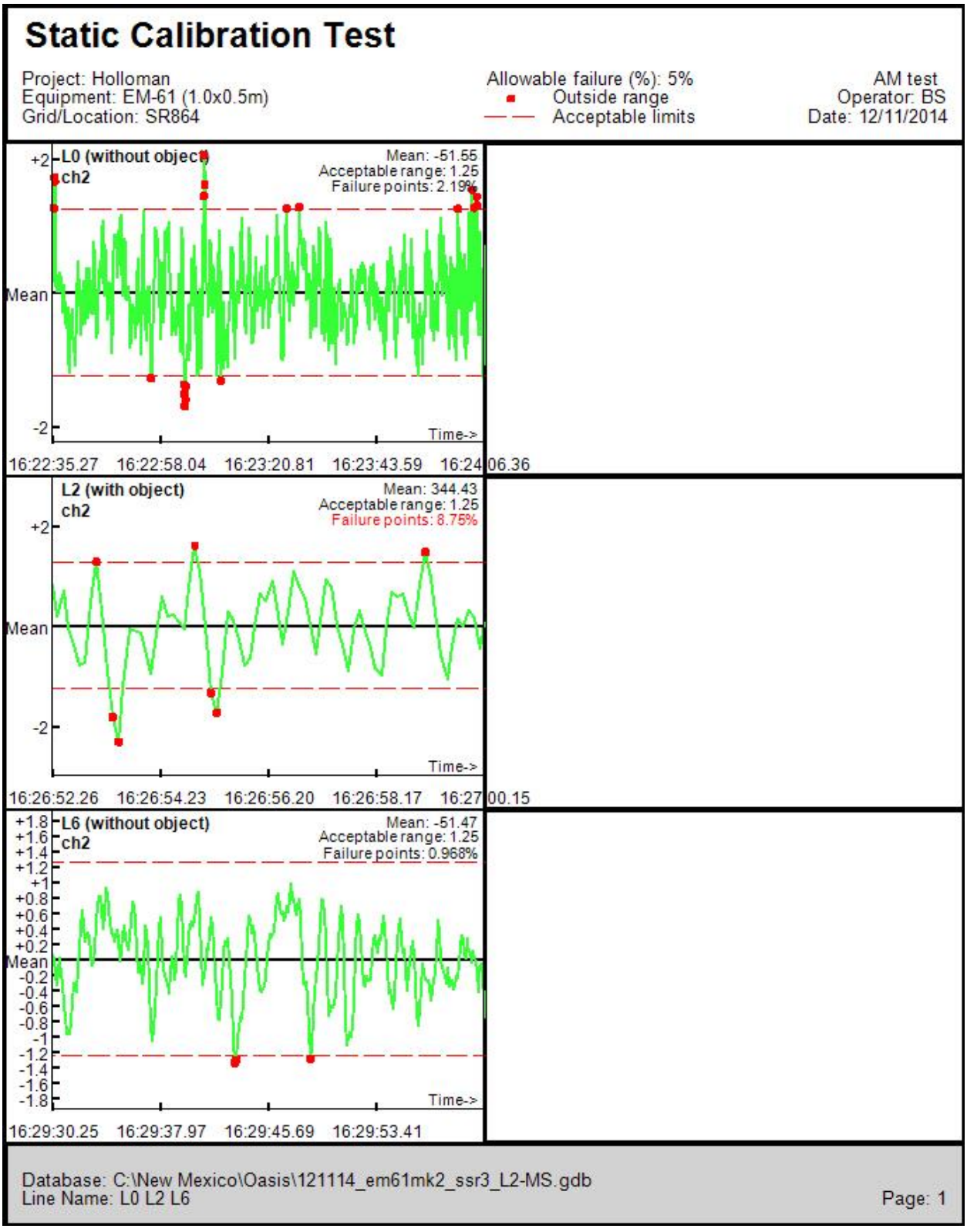


Figure C-180
12/11/2014 EM61 SSR AM Sensor R1 SR864 MRS

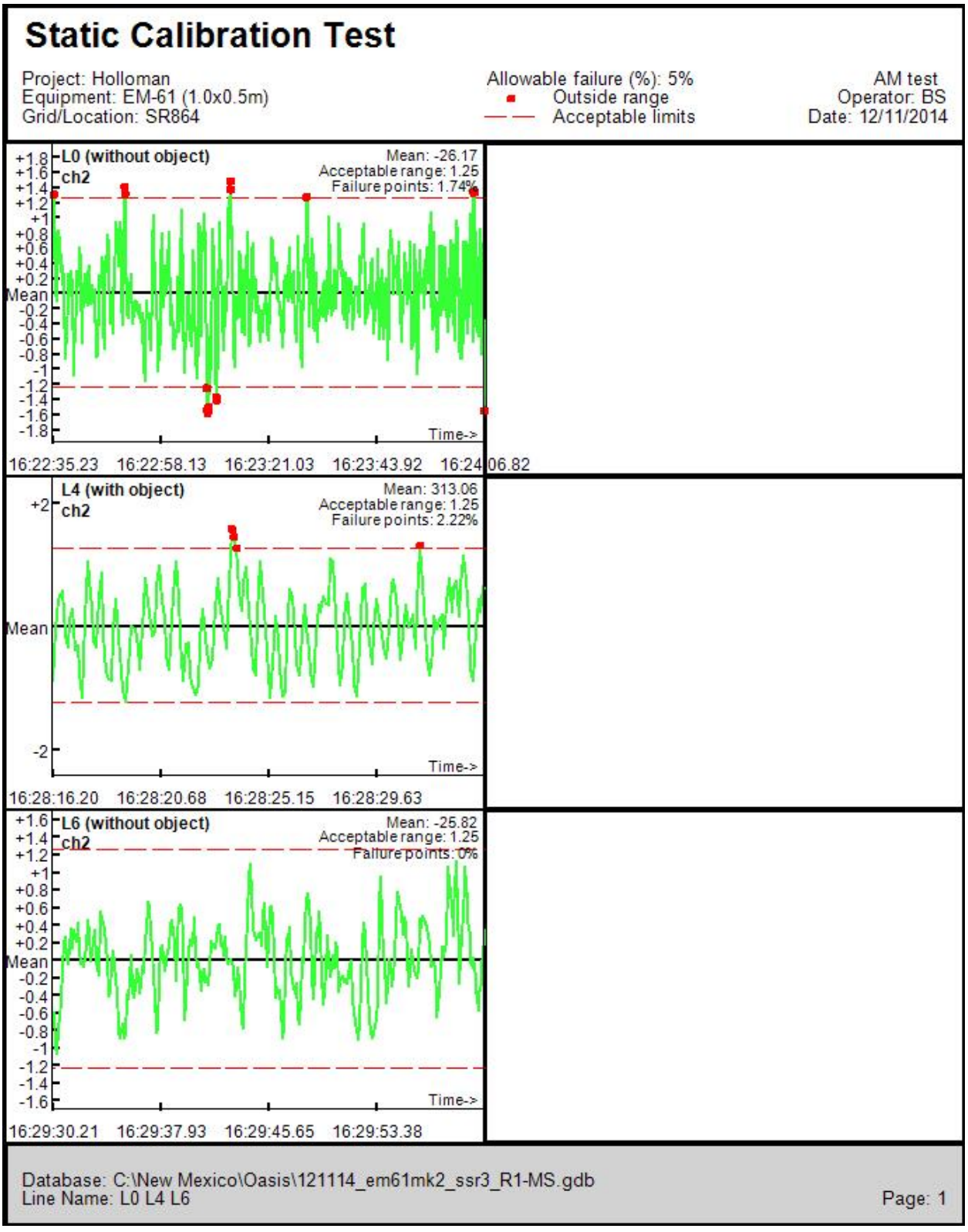


Figure C-181
12/11/2014 EM61 SSR AM Sensor R2 SR864 MRS

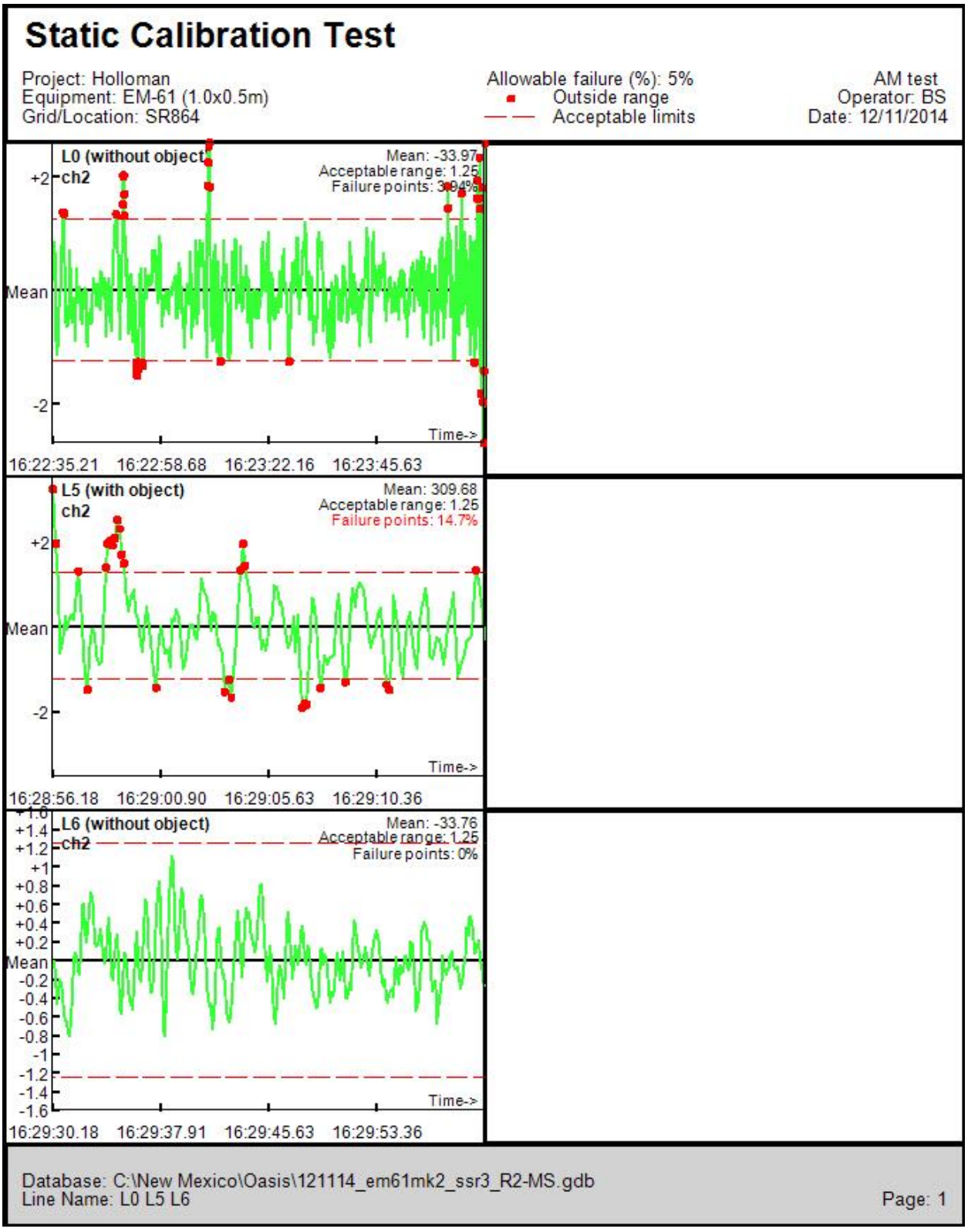


Figure C-182
12/12/2014 EM61 SSR AM Sensor C SR864 MRS

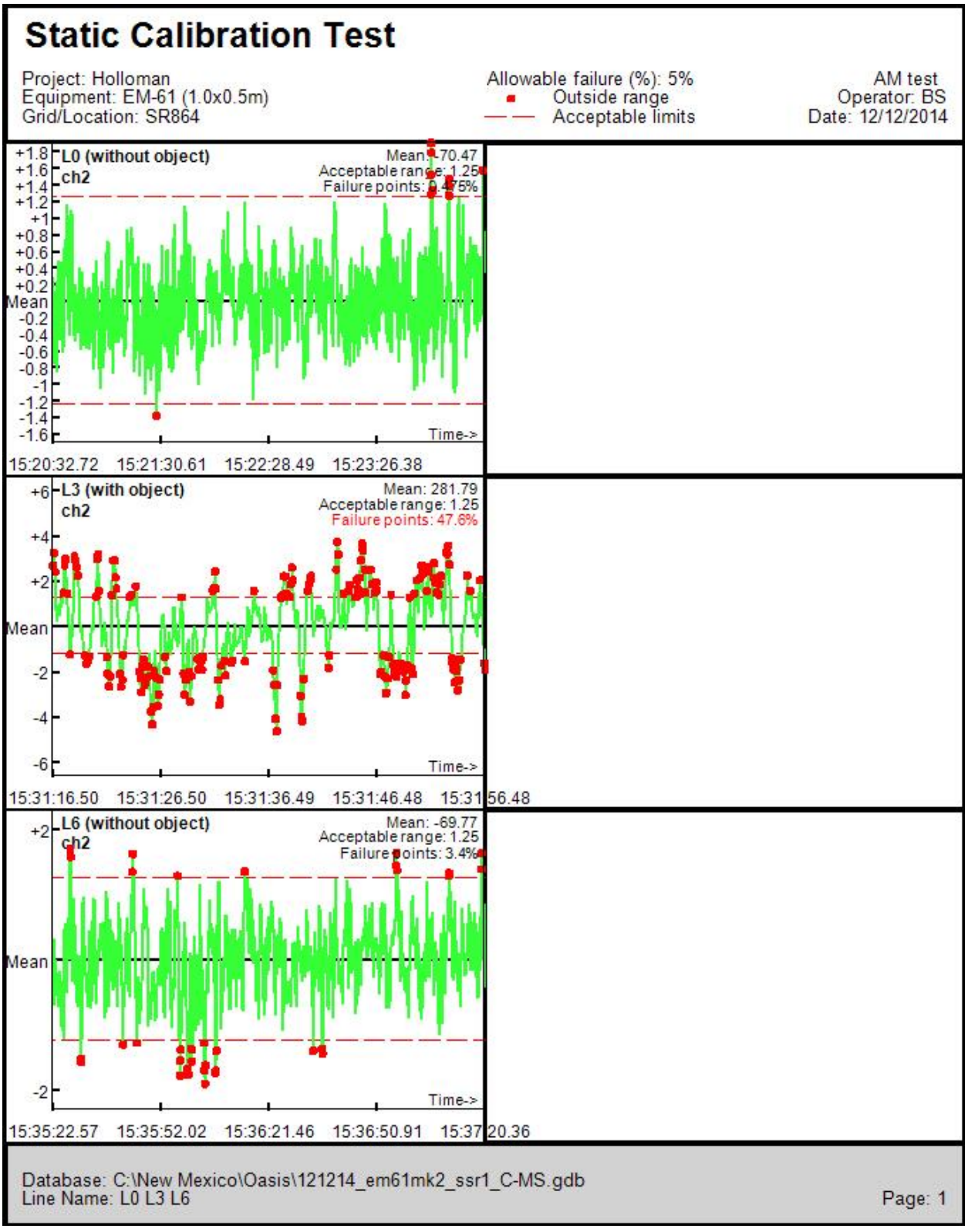


Figure C-183
12/12/2014 EM61 SSR AM Sensor L1 SR864 MRS

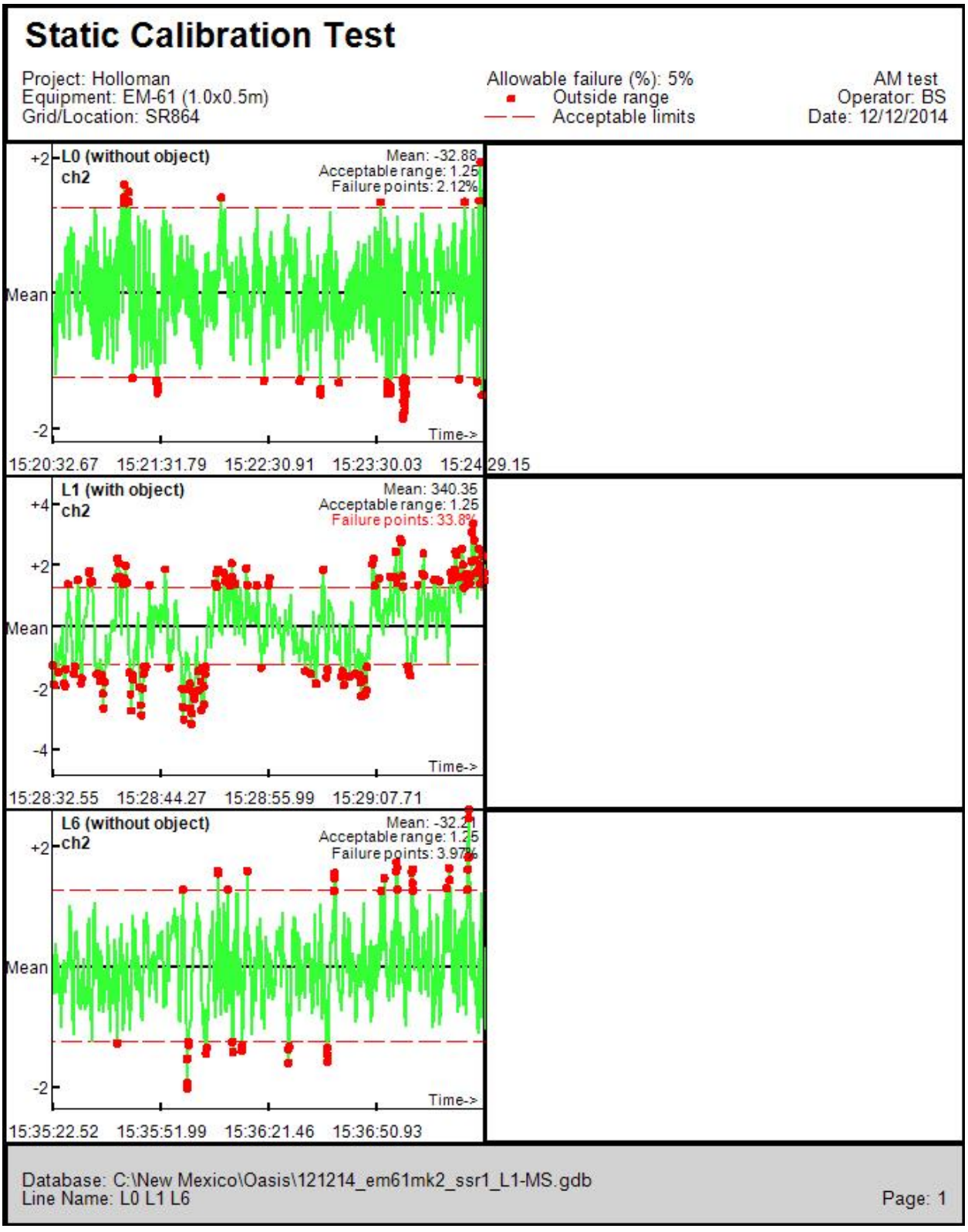


Figure C-184
12/12/2014 EM61 SSR AM Sensor L2 SR864 MRS

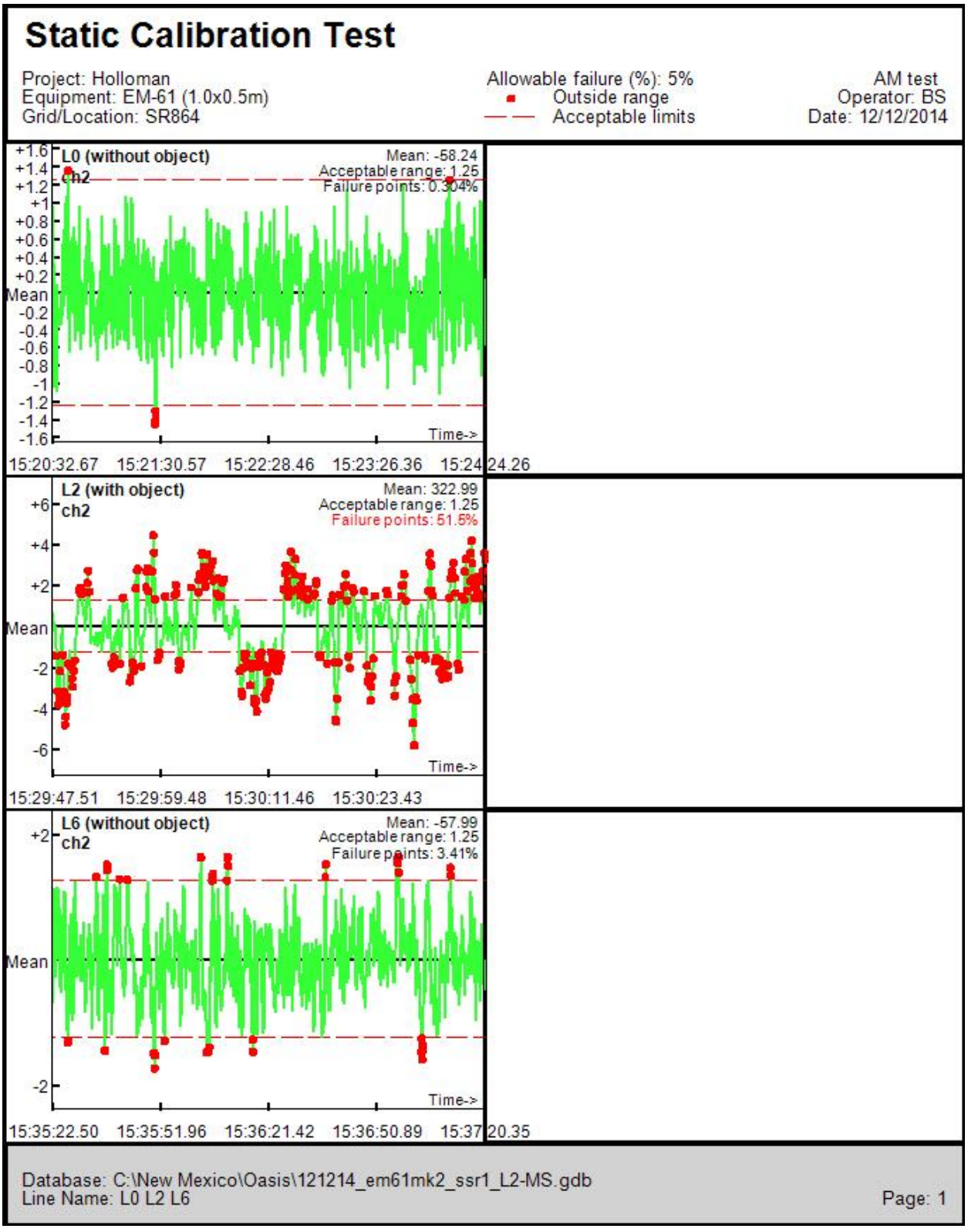


Figure C-185
12/12/2014 EM61 SSR AM Sensor R1 SR864 MRS

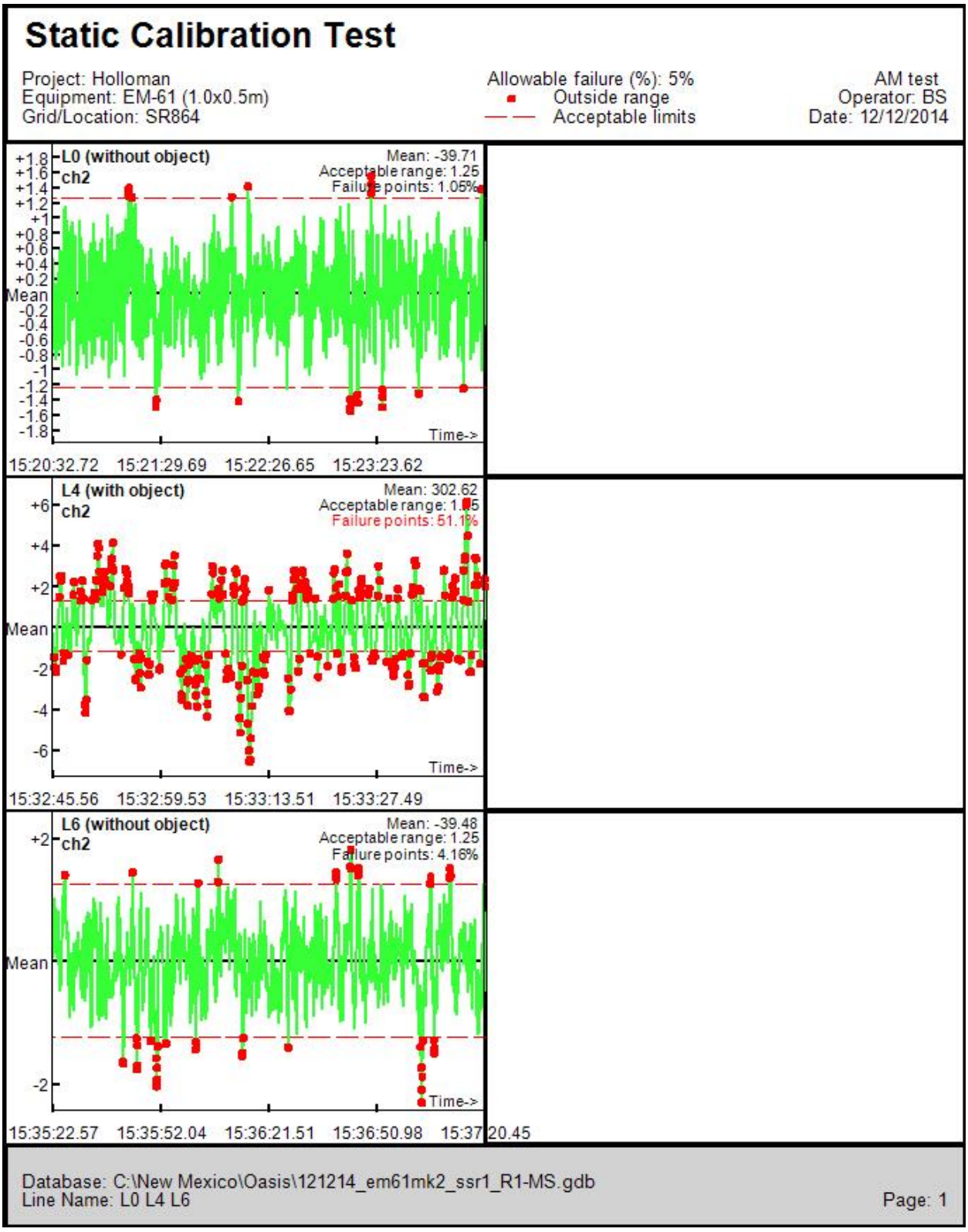


Figure C-186
12/12/2014 EM61 SSR AM Sensor R2 SR864 MRS

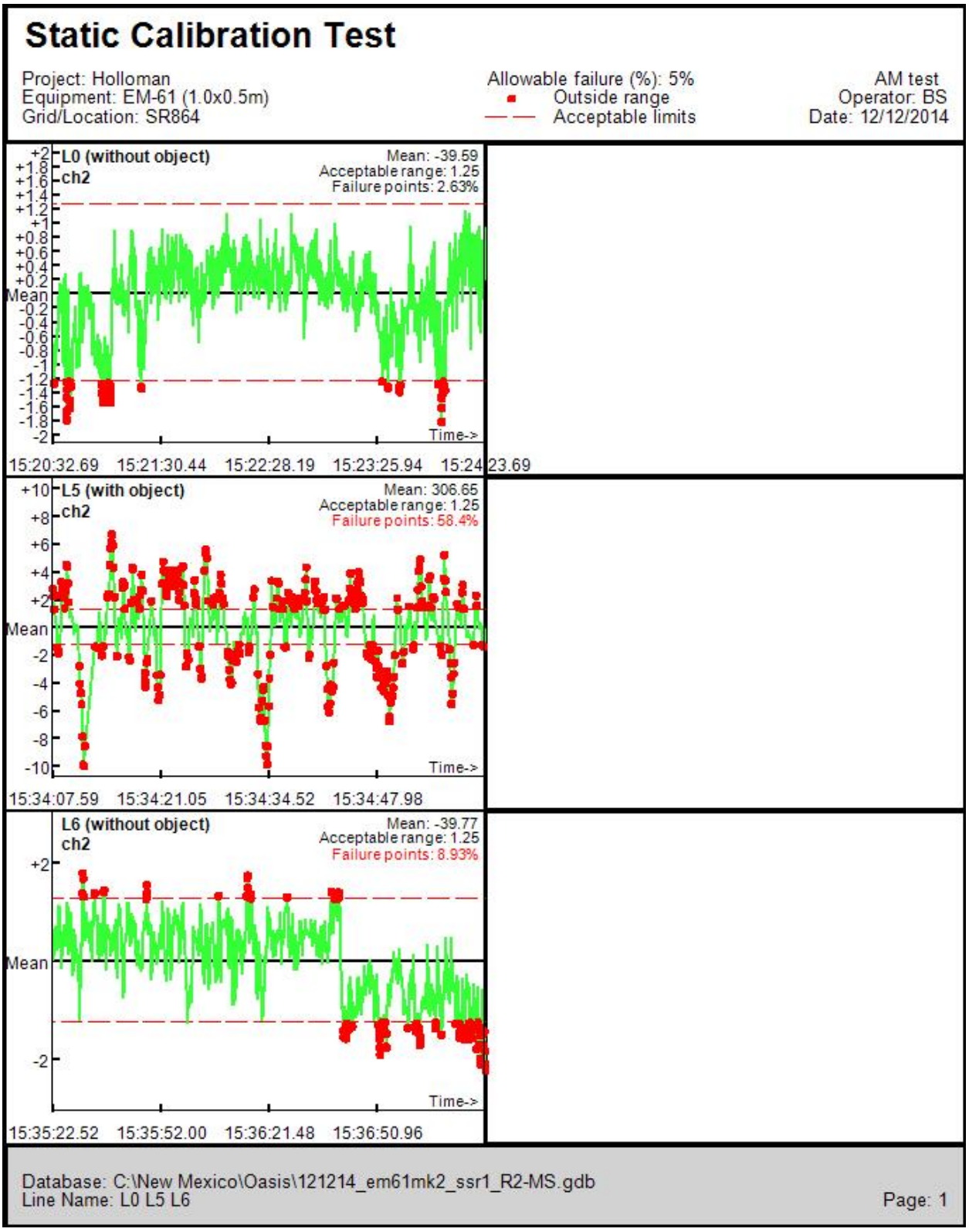


Figure C-187
12/12/2014 EM61 SSR PM Sensor C SR864 MRS

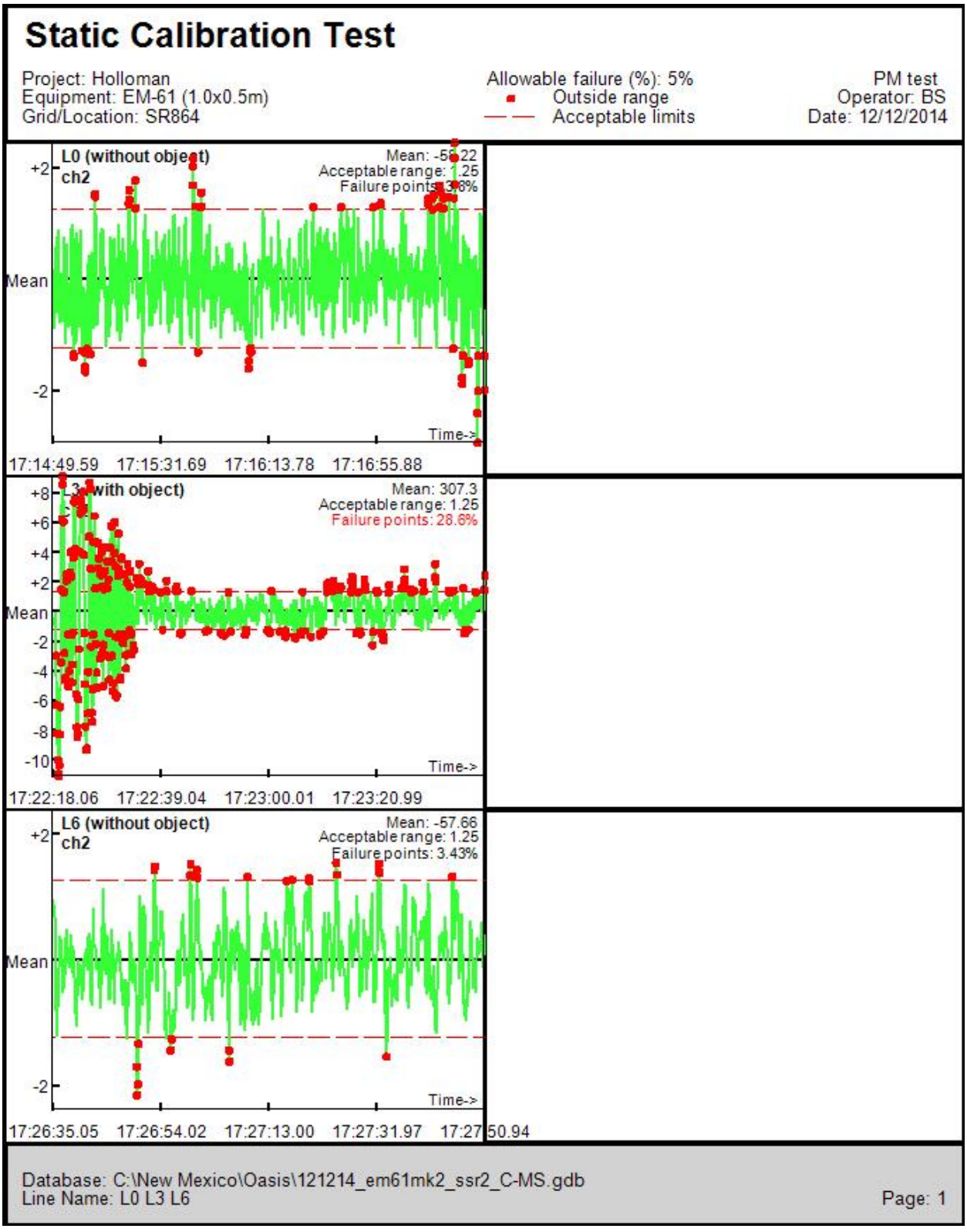


Figure C-188
12/12/2014 EM61 SSR PM Sensor L1 SR864 MRS

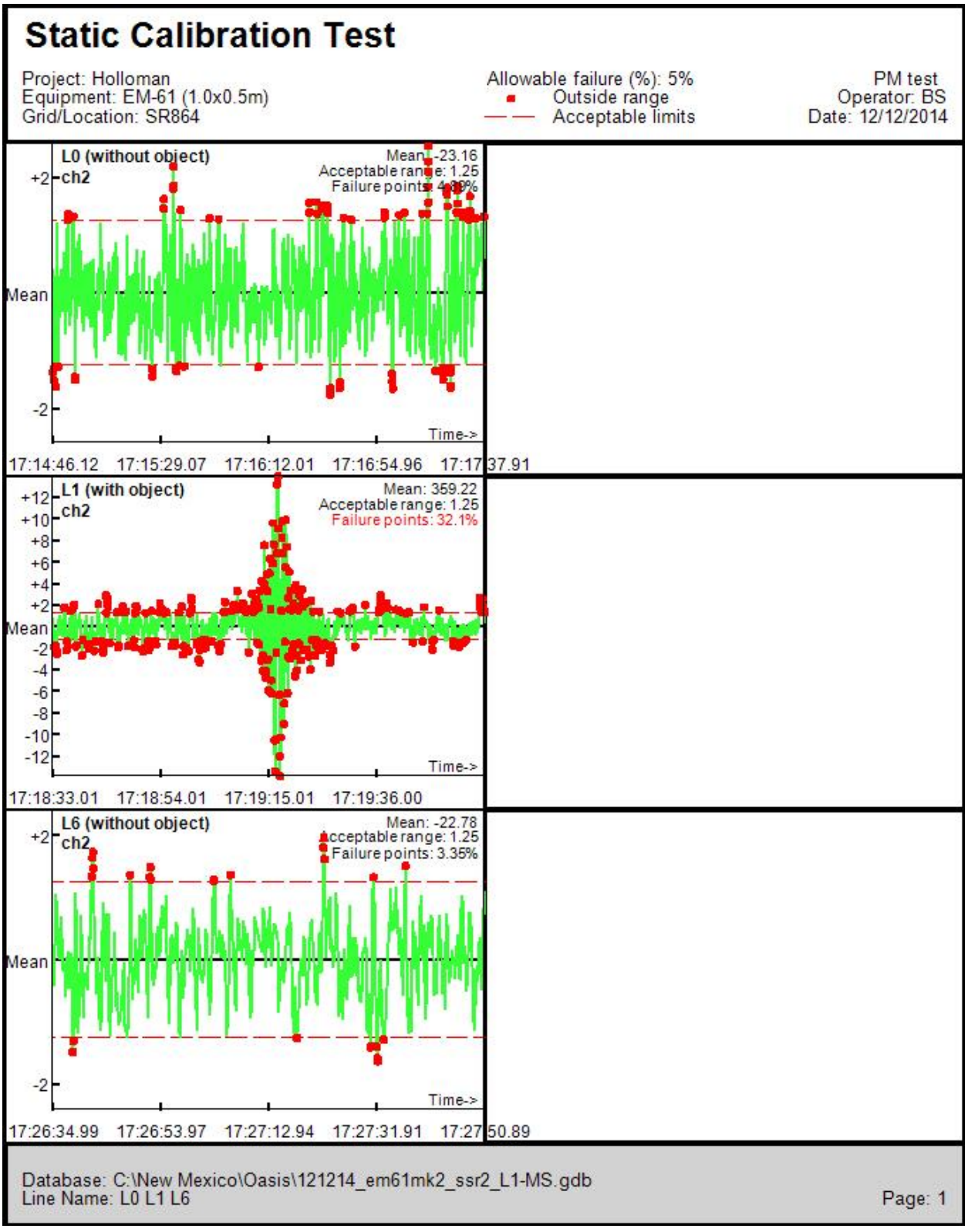


Figure C-189
12/12/2014 EM61 SSR PM Sensor L2 SR864 MRS

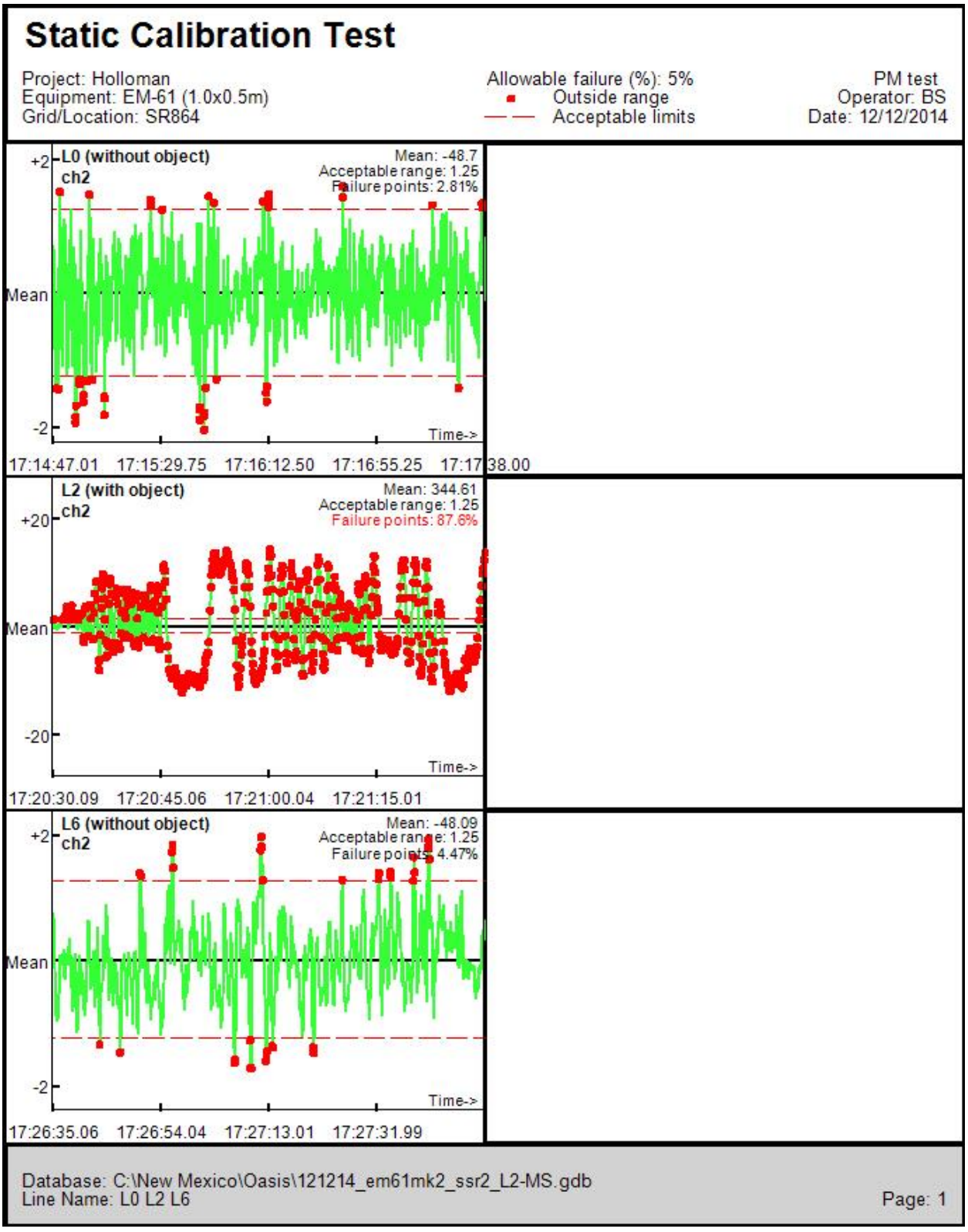


Figure C-190
12/12/2014 EM61 SSR PM Sensor R1 SR864 MRS

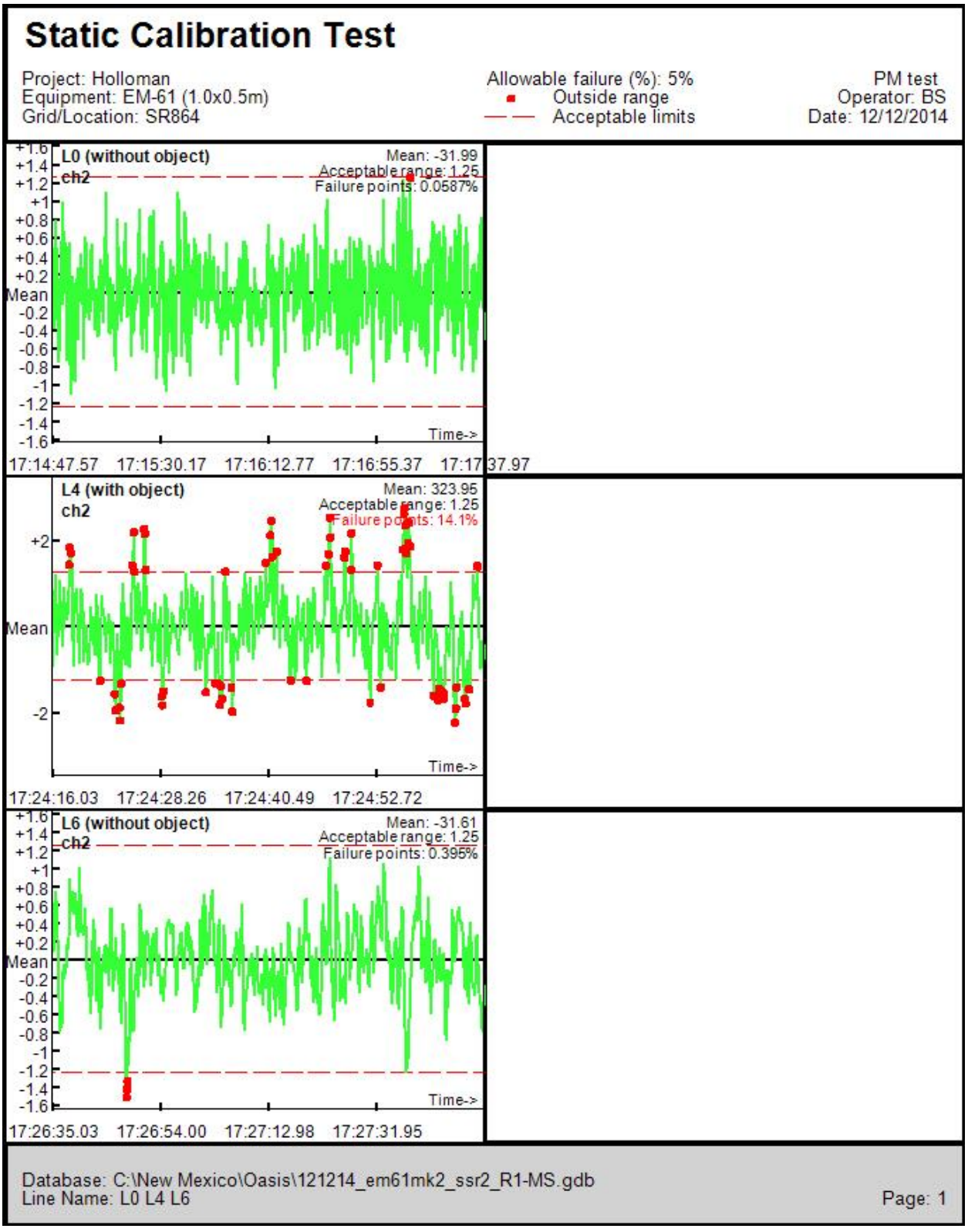


Figure C-191
12/12/2014 EM61 SSR PM Sensor R2 SR864 MRS

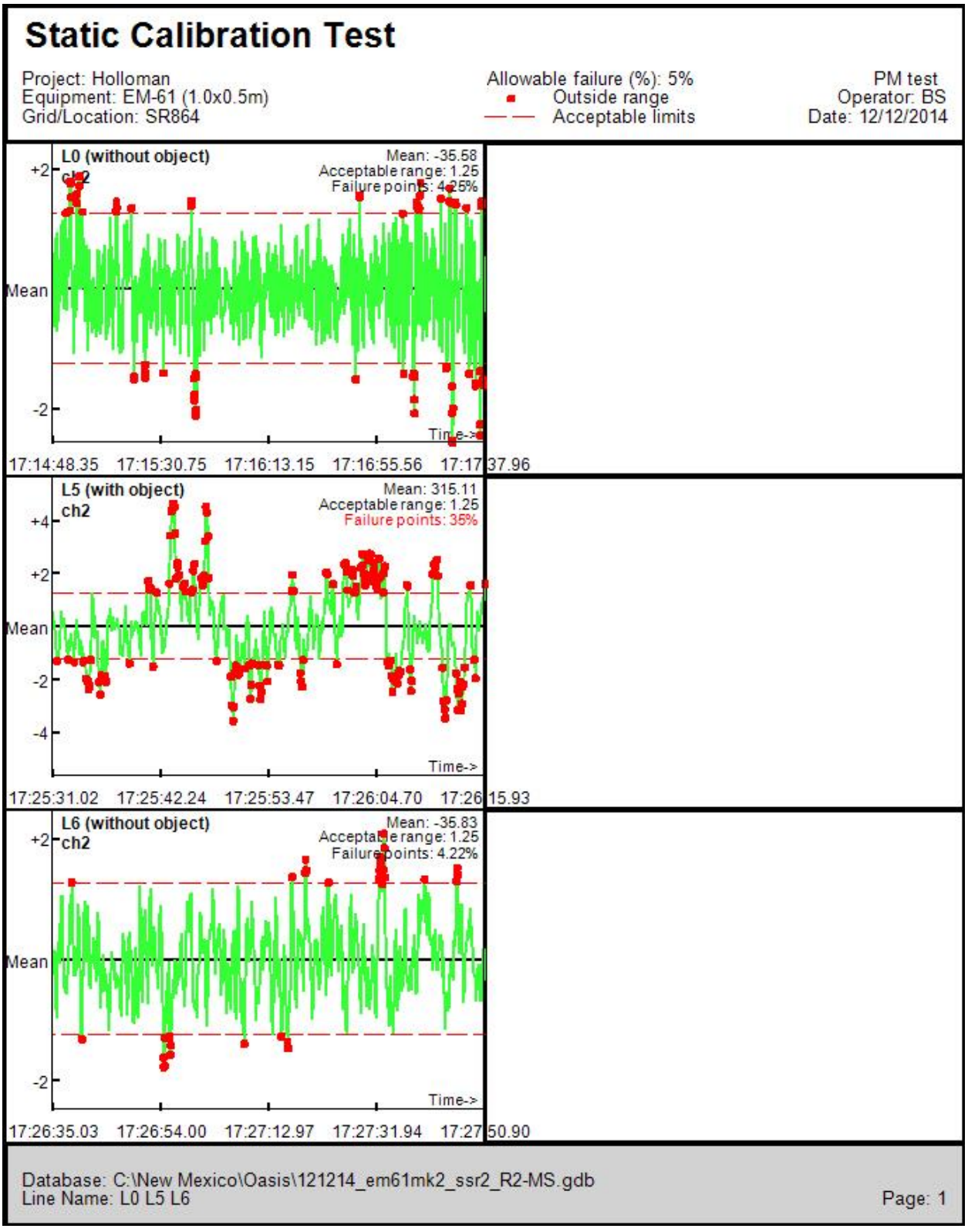


Figure C-192
12/15/2014 EM61 SSR AM Sensor C SR864 MRS

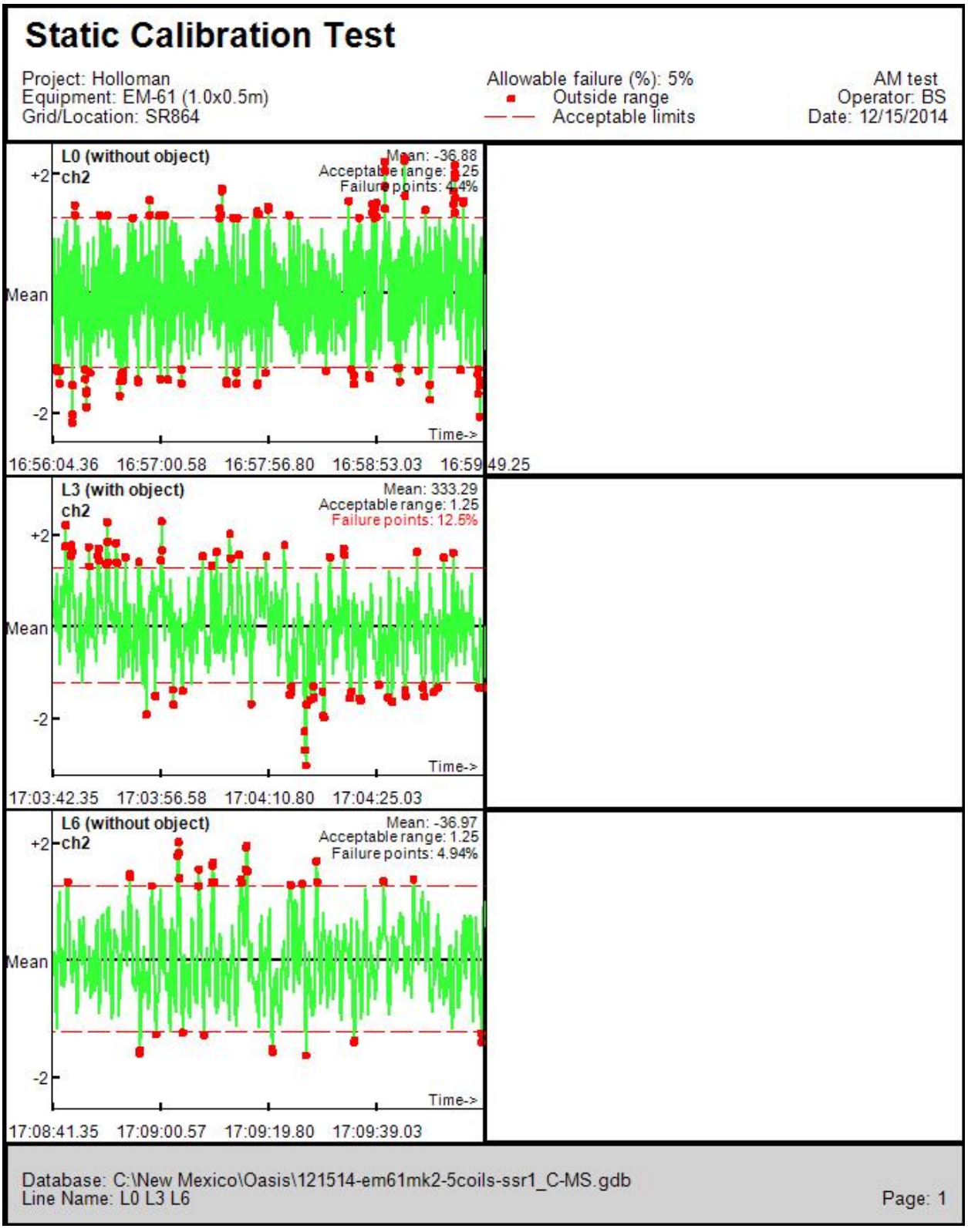


Figure C-193
12/15/2014 EM61 SSR AM Sensor L1 SR864 MRS

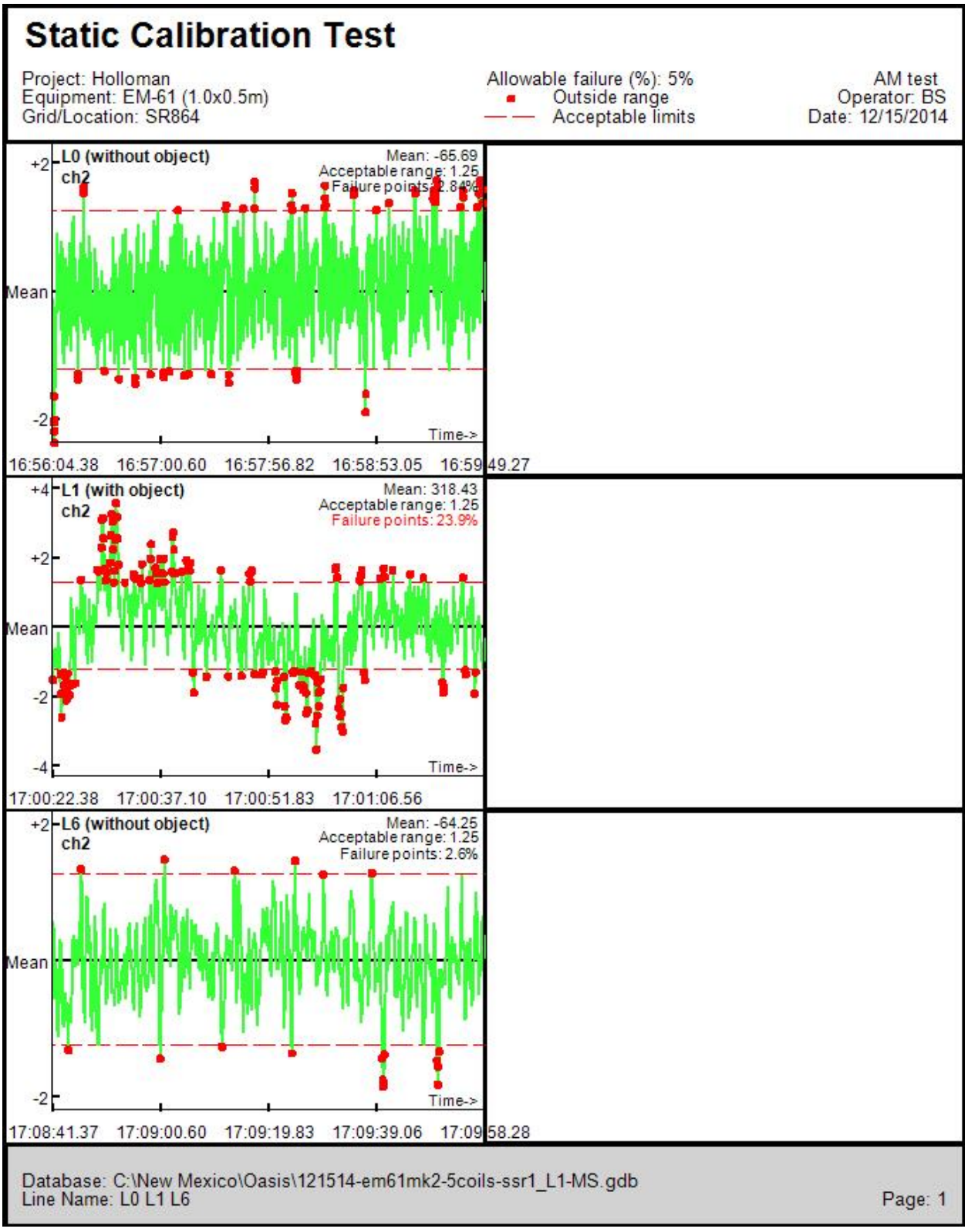


Figure C-194
12/15/2014 EM61 SSR AM Sensor L2 SR864 MRS

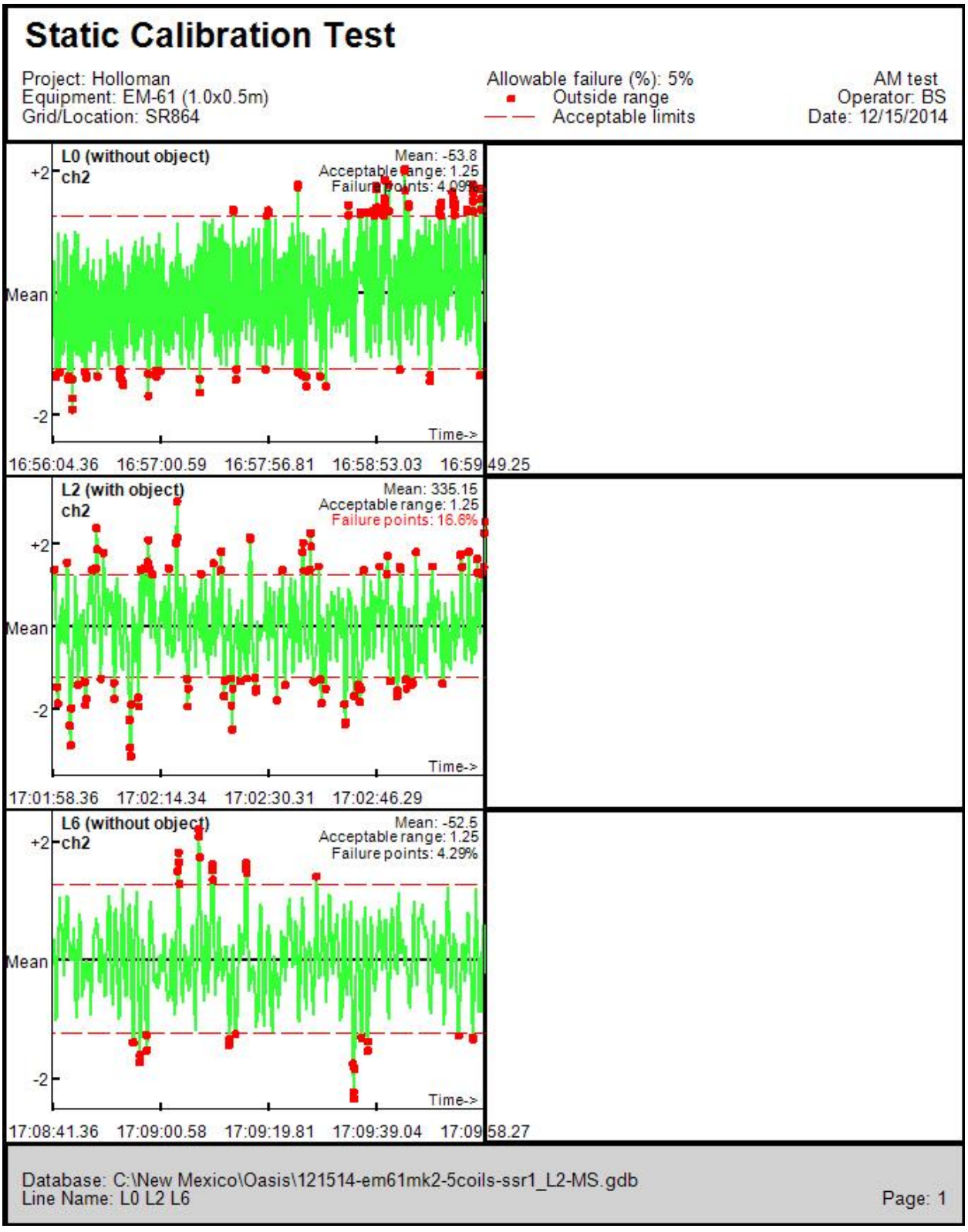


Figure C-195
12/15/2014 EM61 SSR AM Sensor R1 SR864 MRS

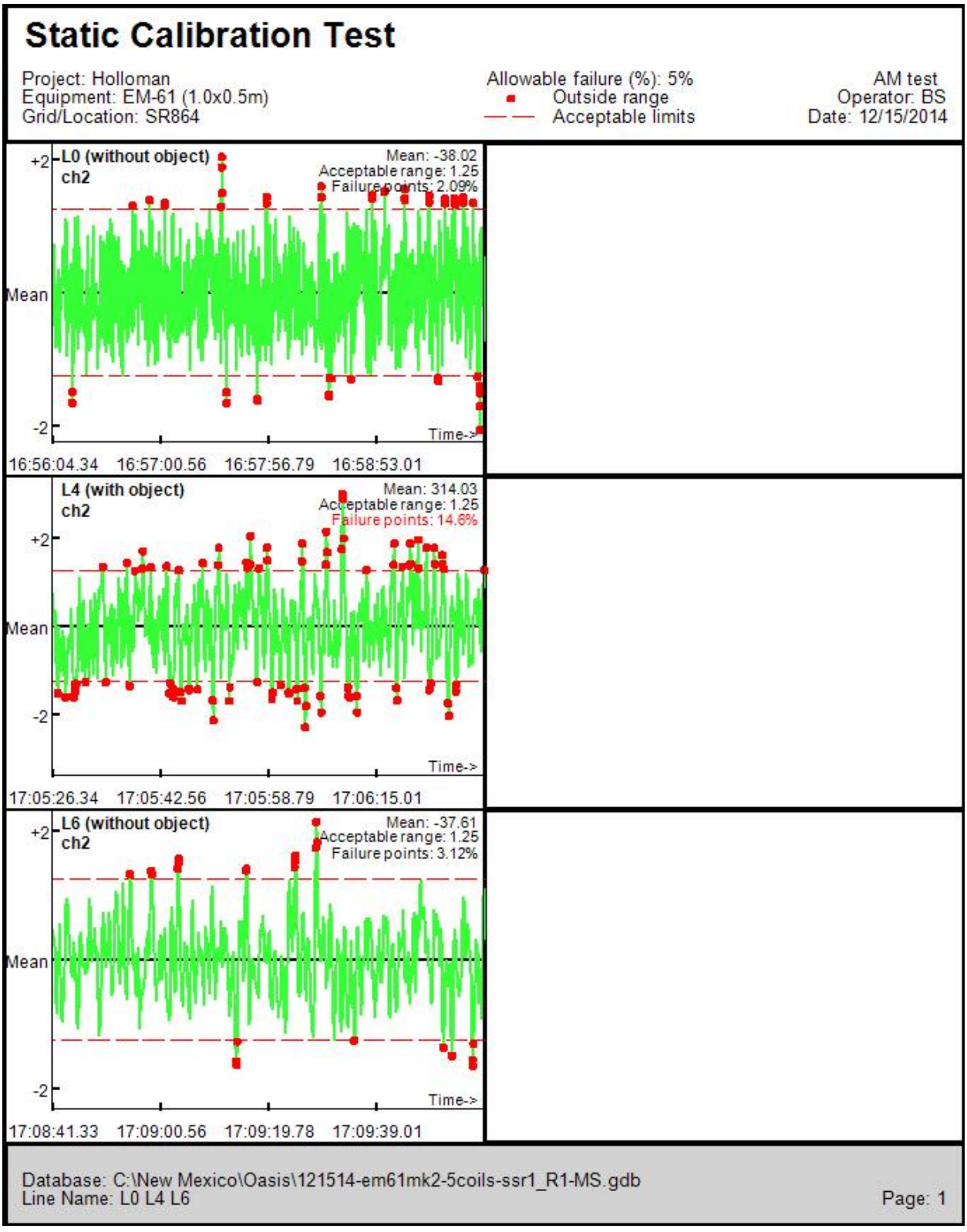


Figure C-196
12/15/2014 EM61 SSR AM Sensor R2 SR864 MRS

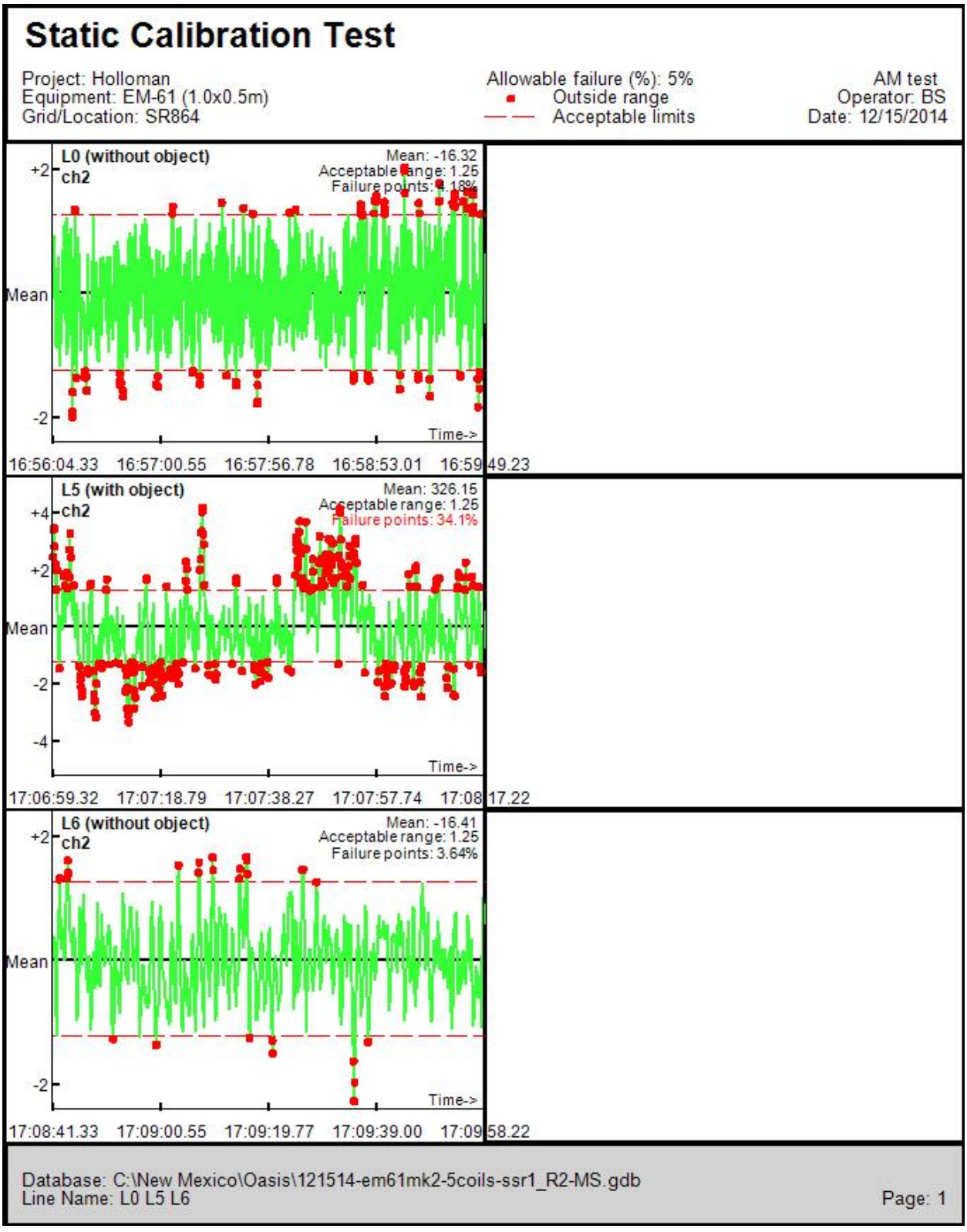


Figure C-197
12/16/2014 EM61 SSR AM Sensor C SR864 MRS

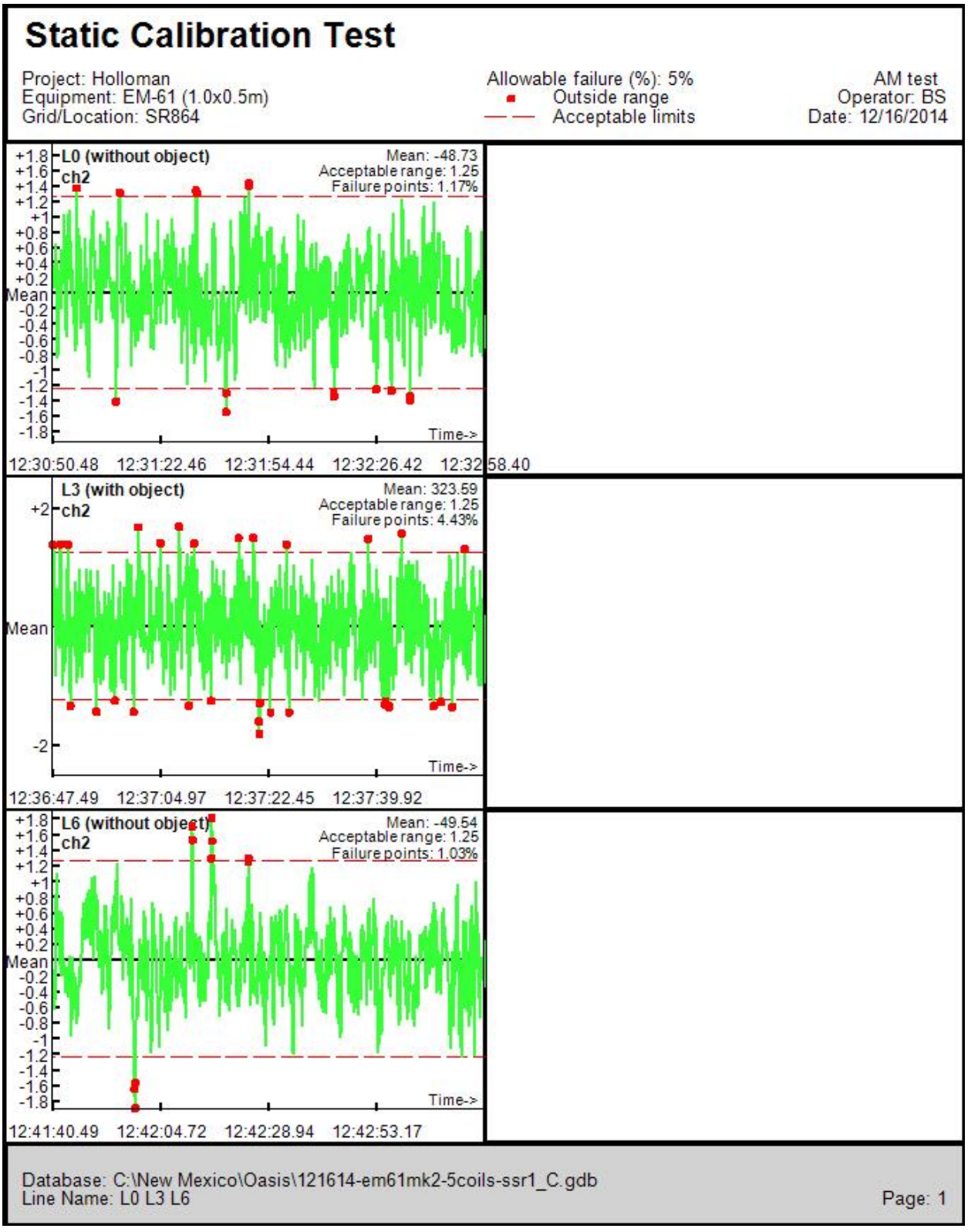


Figure C-198
12/16/2014 EM61 SSR AM Sensor L1 SR864 MRS

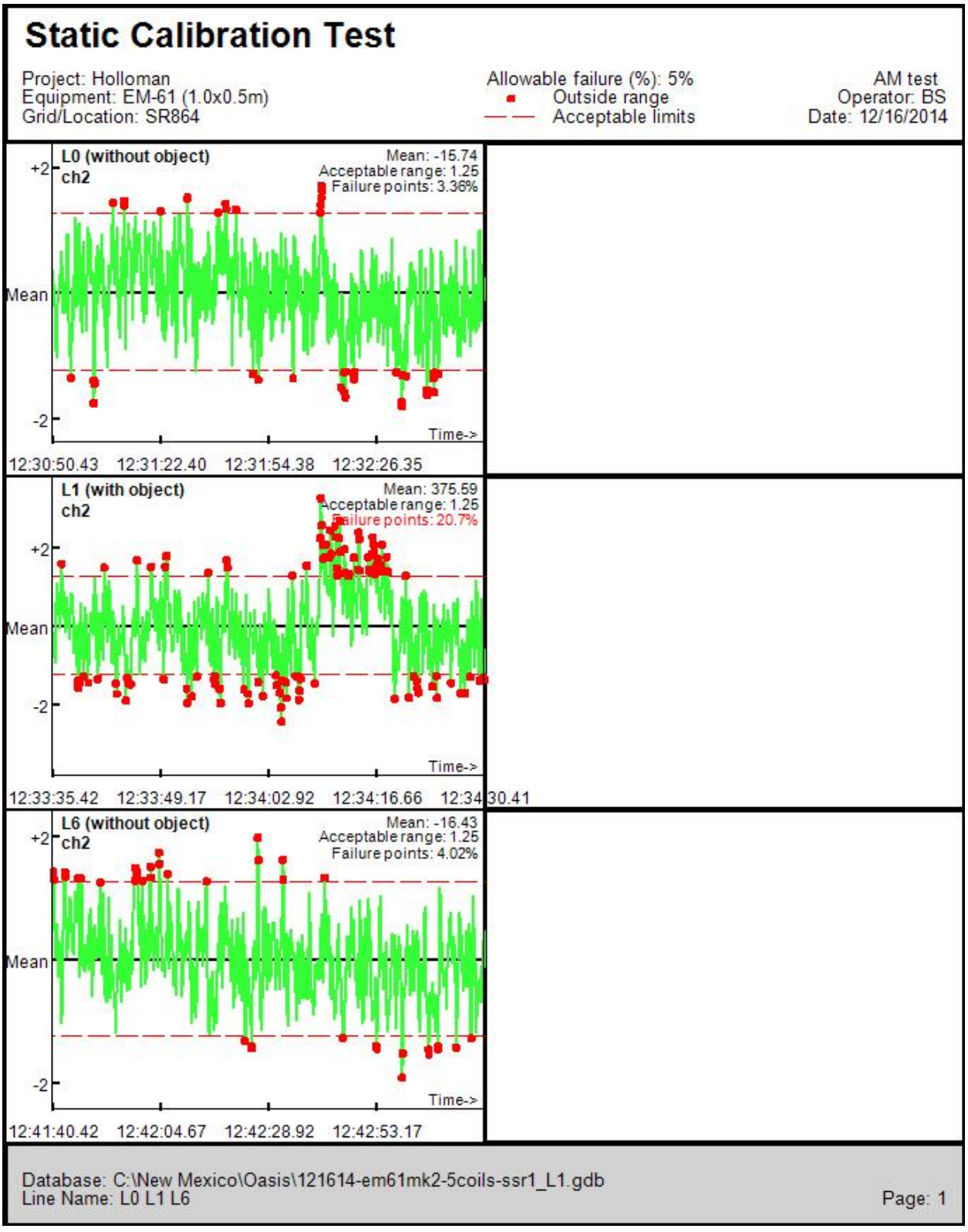


Figure C-199
12/16/2014 EM61 SSR AM Sensor L2 SR864 MRS

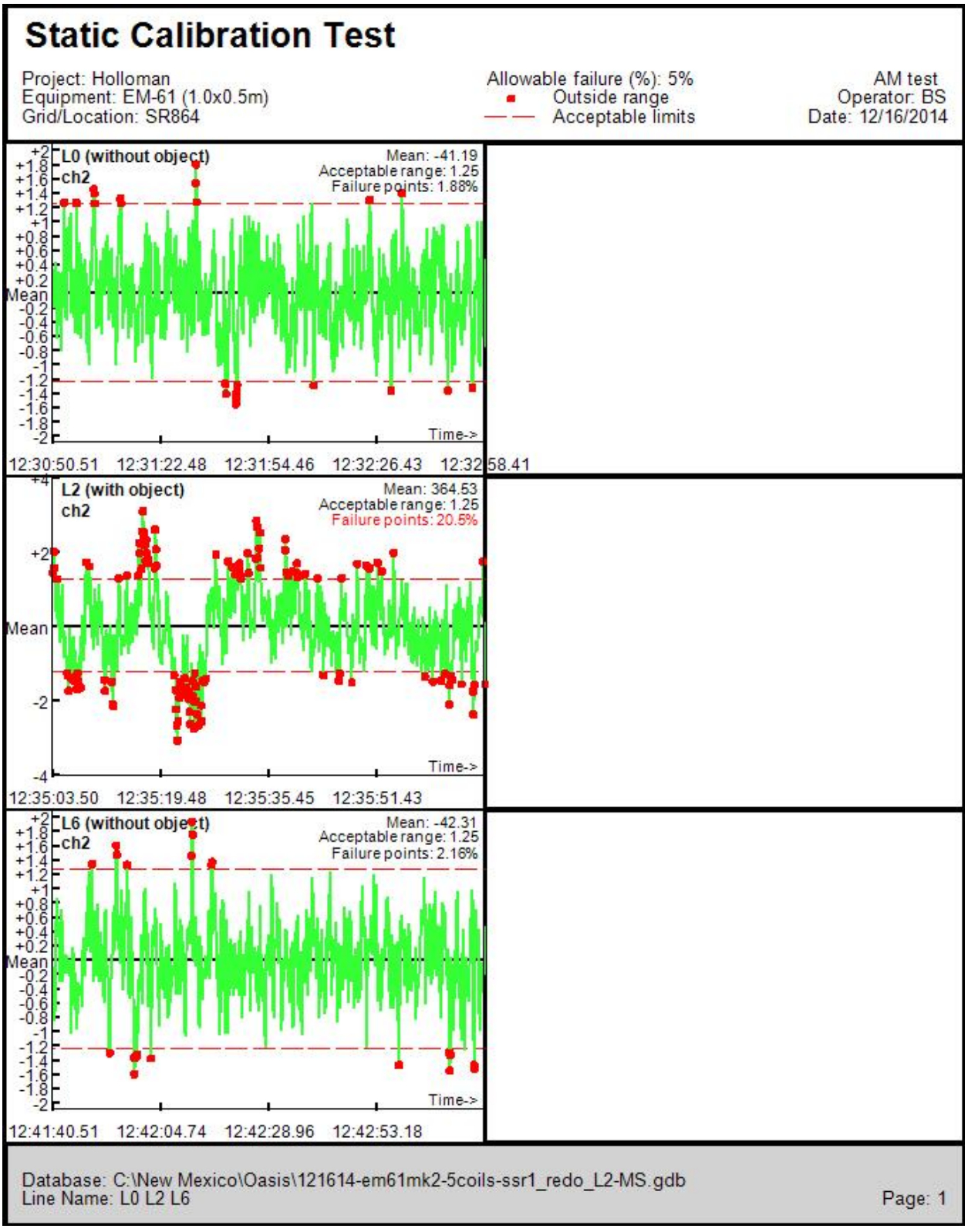


Figure C-200
12/16/2014 EM61 SSR AM Sensor R1 SR864 MRS

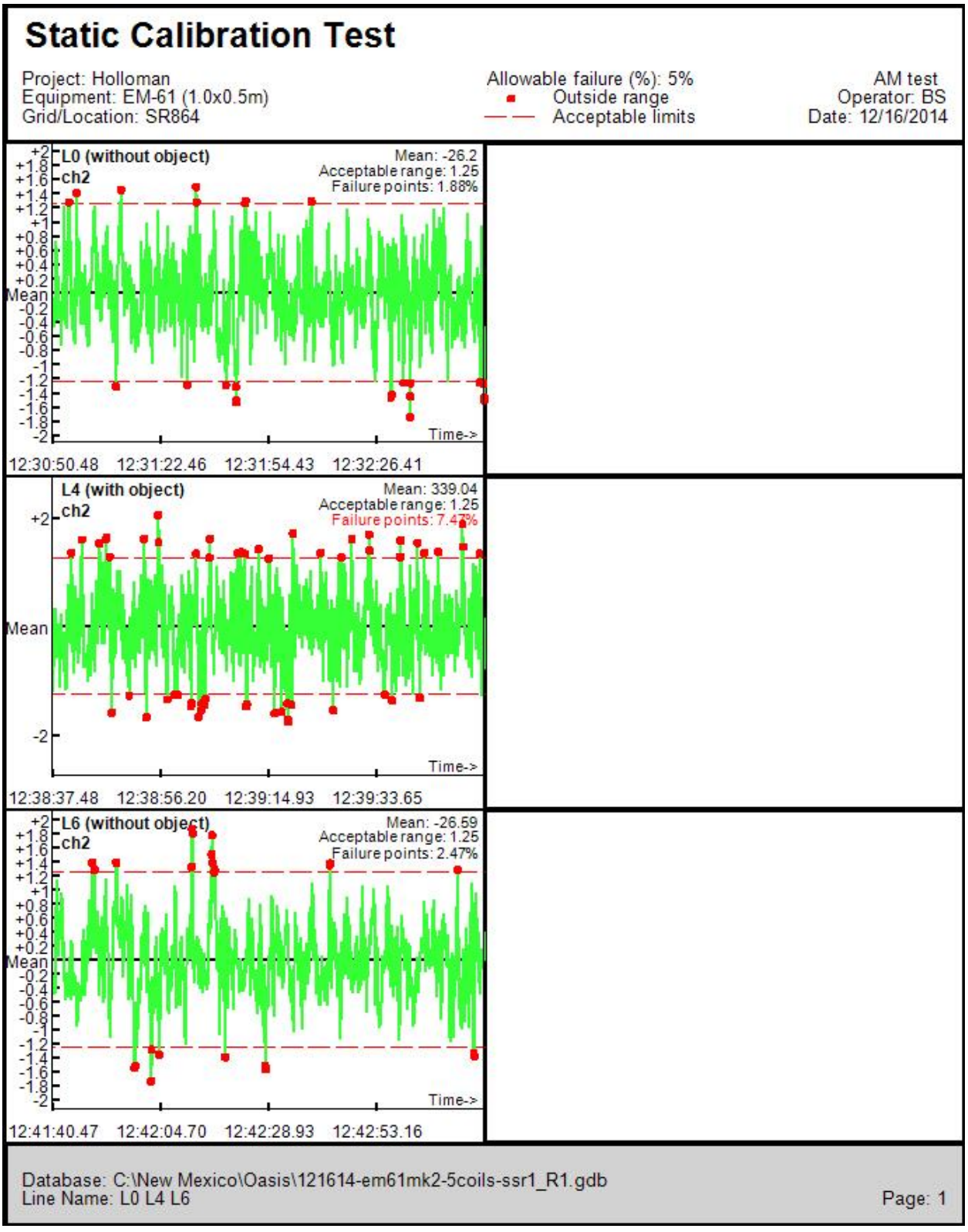


Figure C-201
12/16/2014 EM61 SSR AM Sensor R2 SR864 MRS

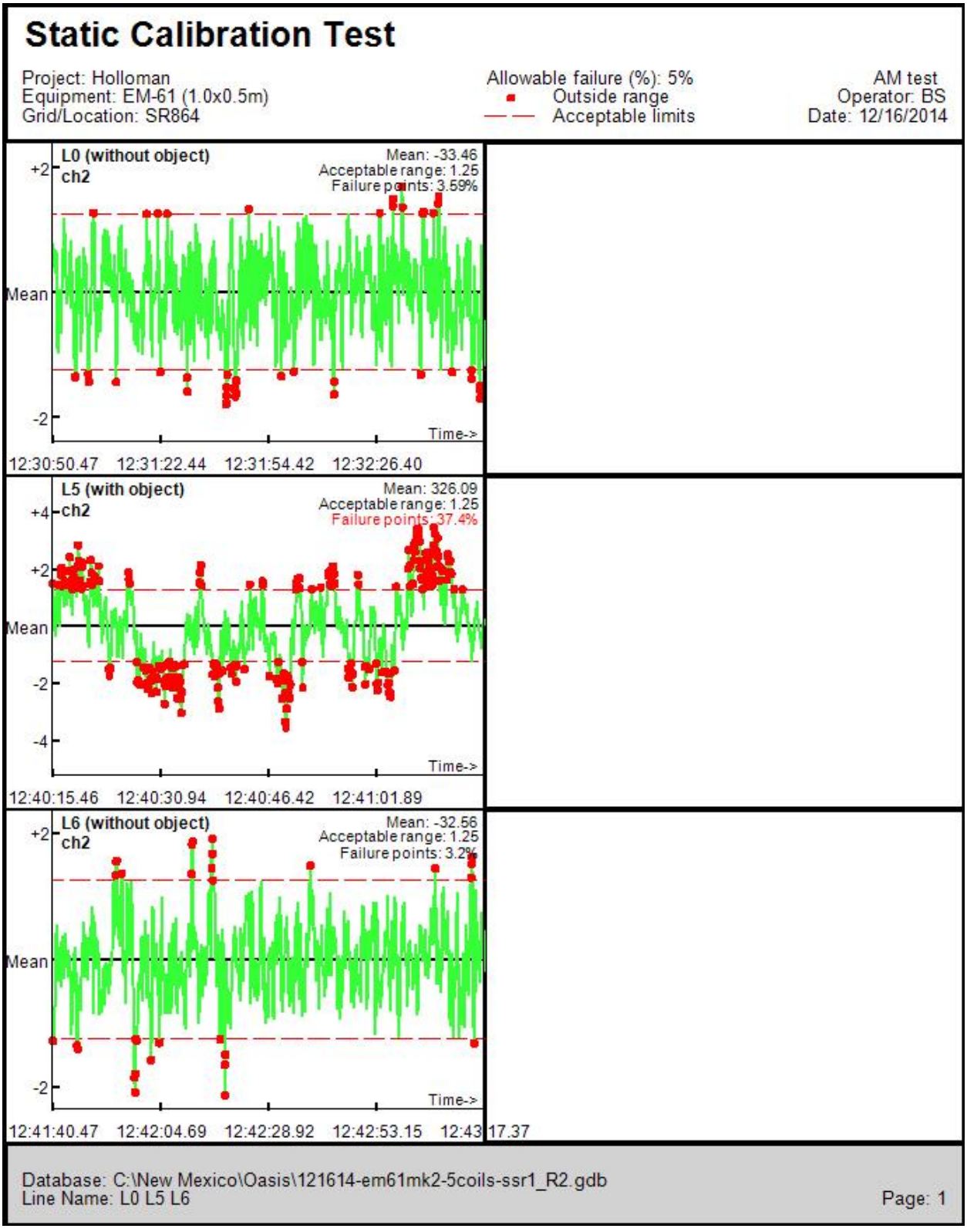


Figure C-202
12/16/2014 EM61 SSR PM Sensor C SR864 MRS

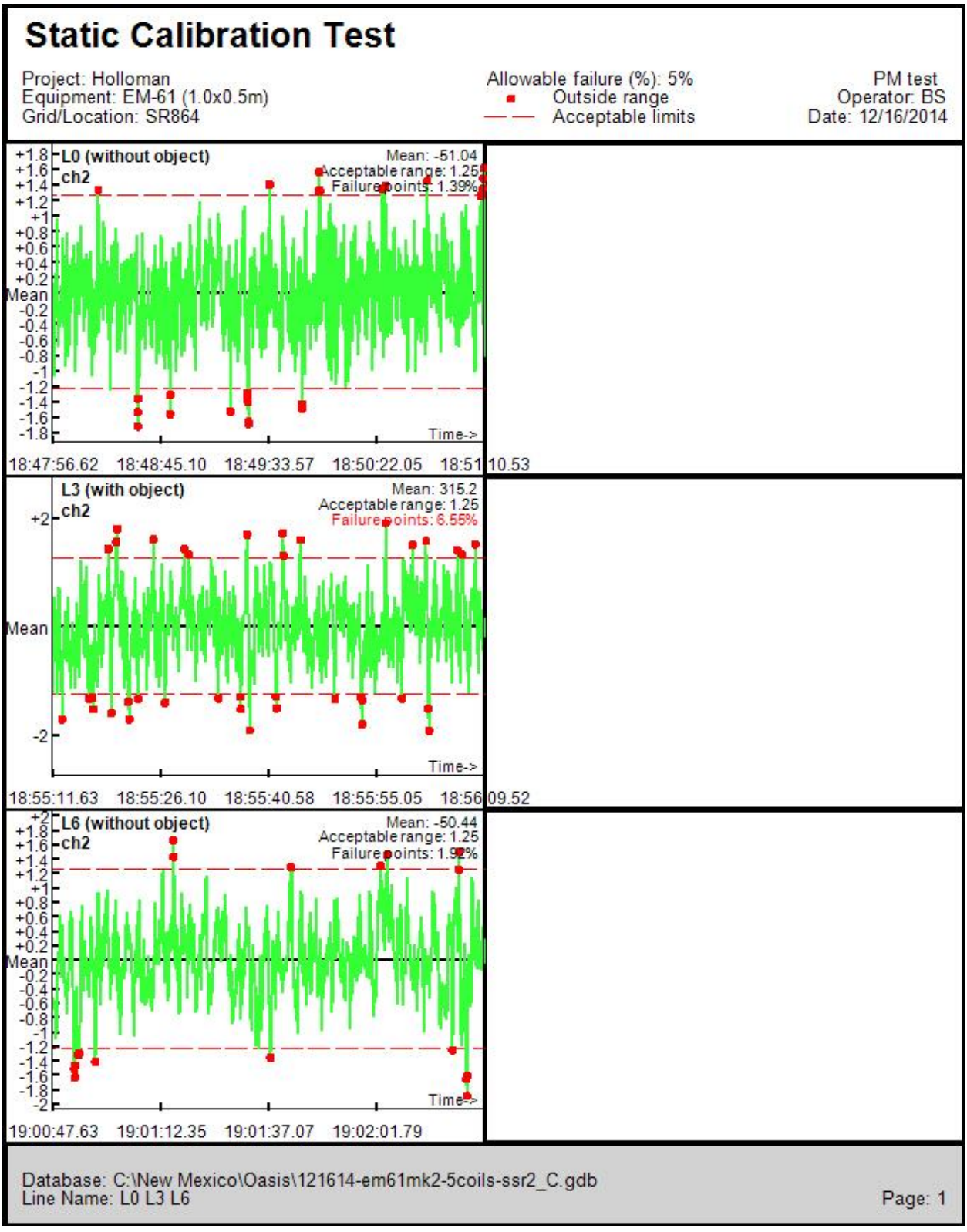


Figure C-203
12/16/2014 EM61 SSR PM Sensor L1 SR864 MRS

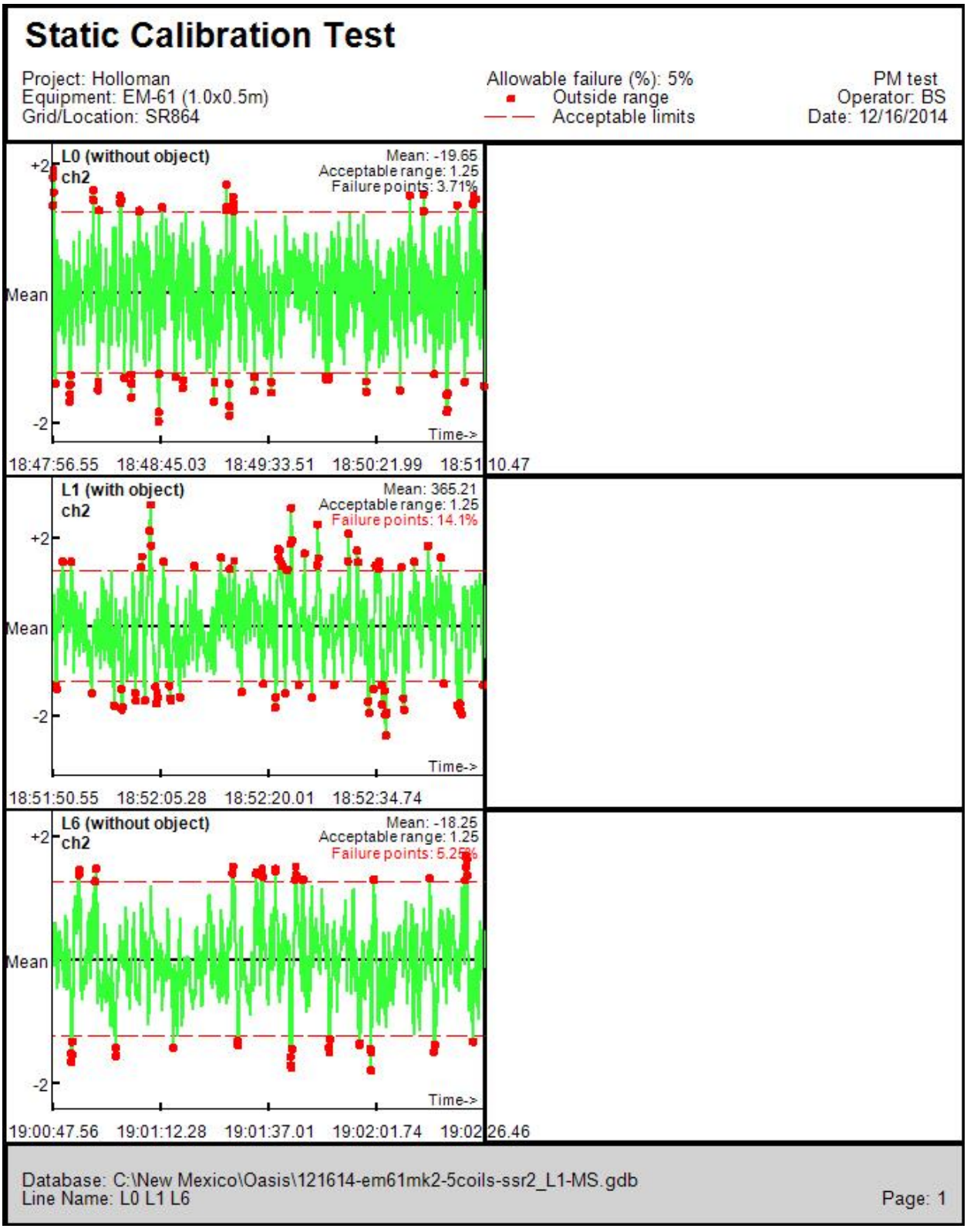


Figure C-204
12/16/2014 EM61 SSR PM Sensor L2 SR864 MRS

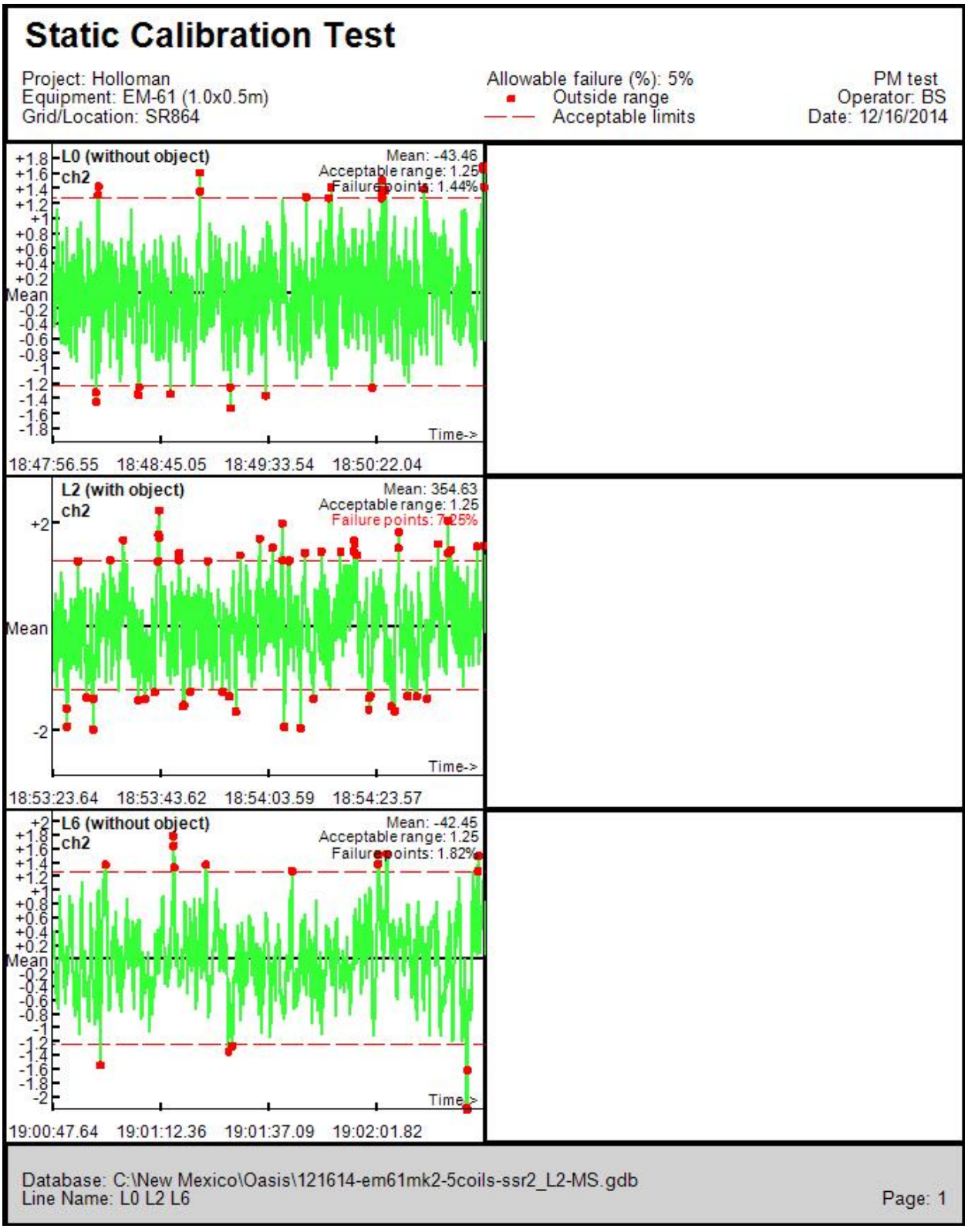


Figure C-205
12/16/2014 EM61 SSR PM Sensor R1 SR864 MRS

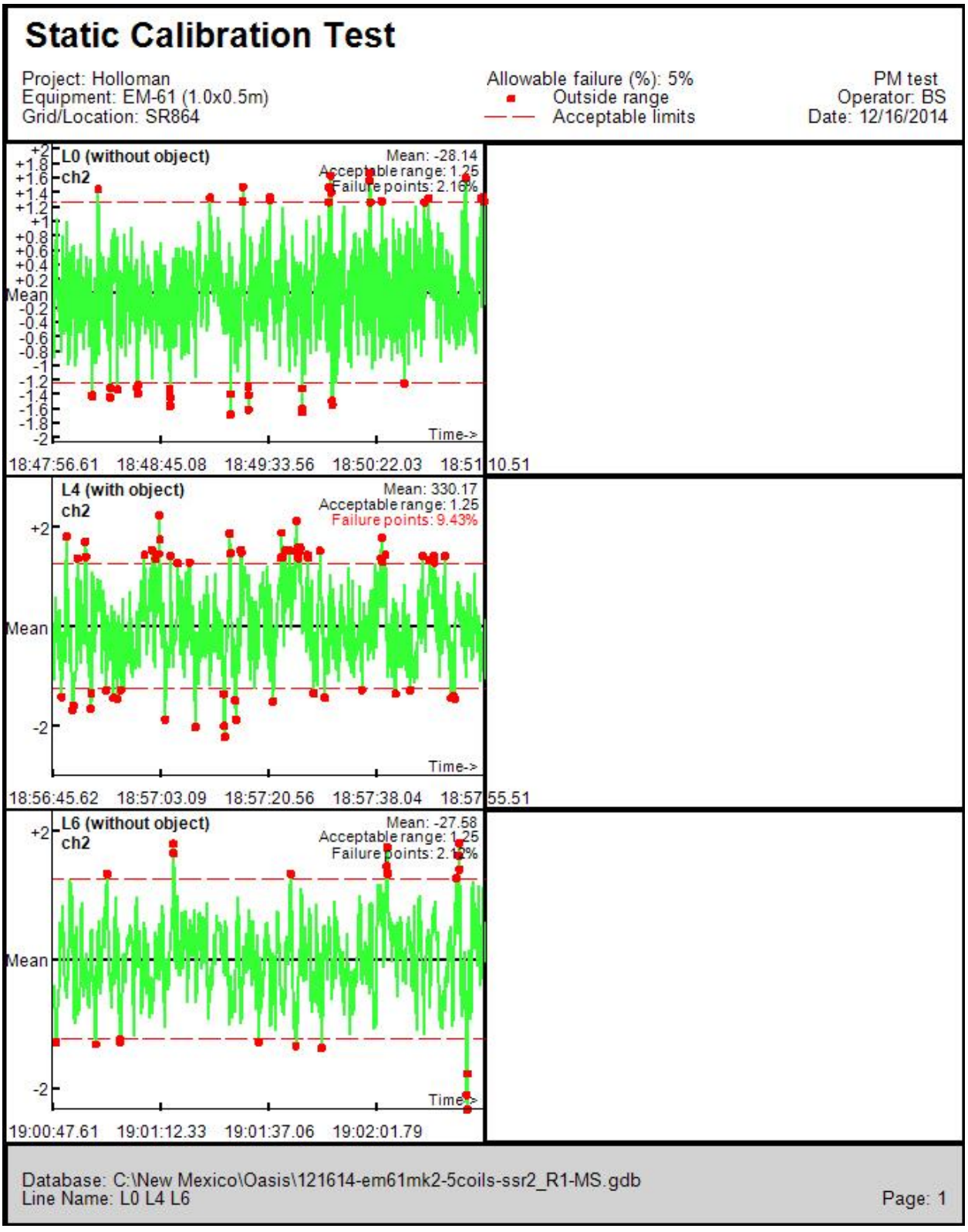


Figure C-206
12/16/2014 EM61 SSR PM Sensor R2 SR864 MRS

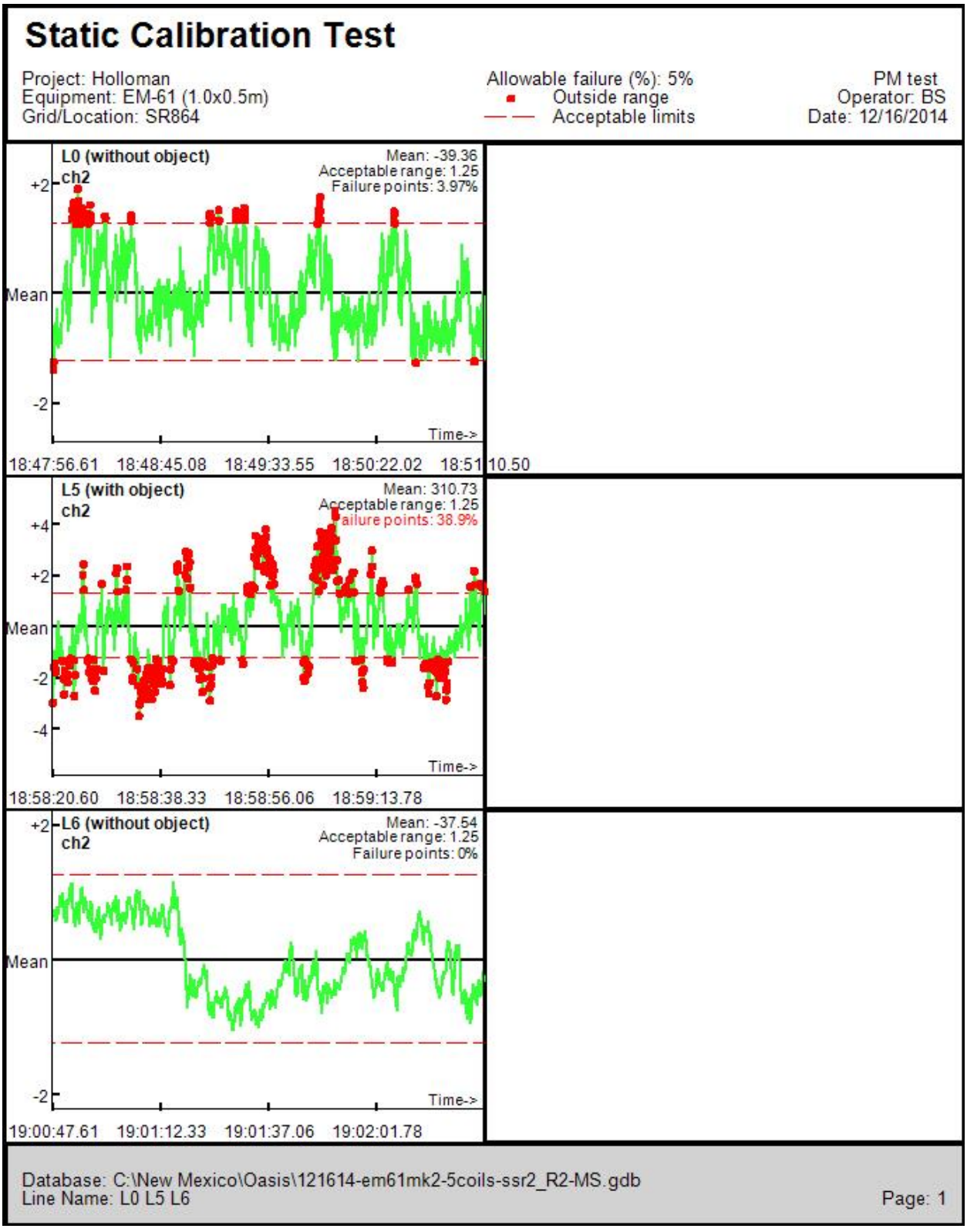


Figure C-207
12/18/2014 EM61 SSR AM Sensor C SR864 MRS

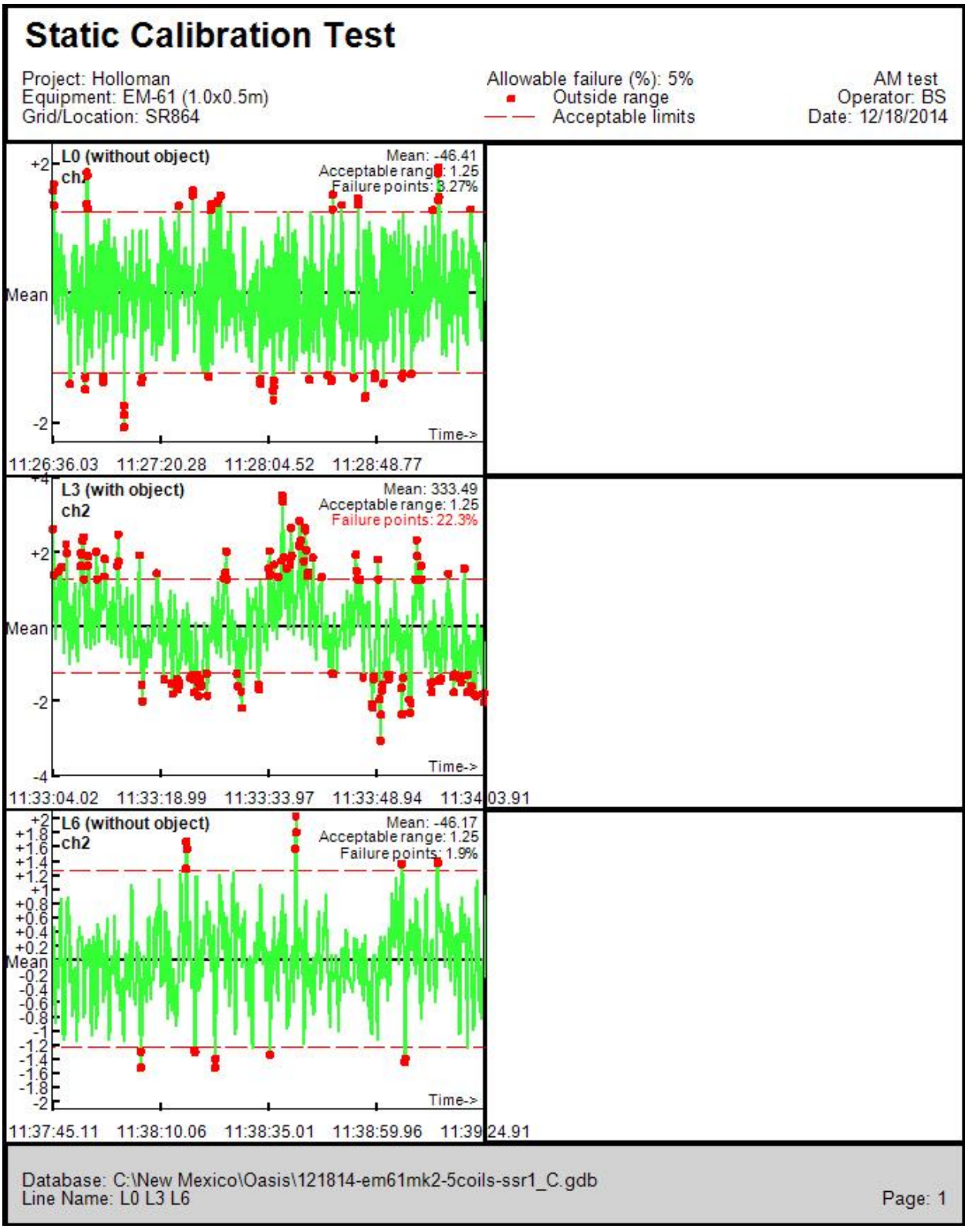


Figure C-208
12/18/2014 EM61 SSR AM Sensor L1 SR864 MRS

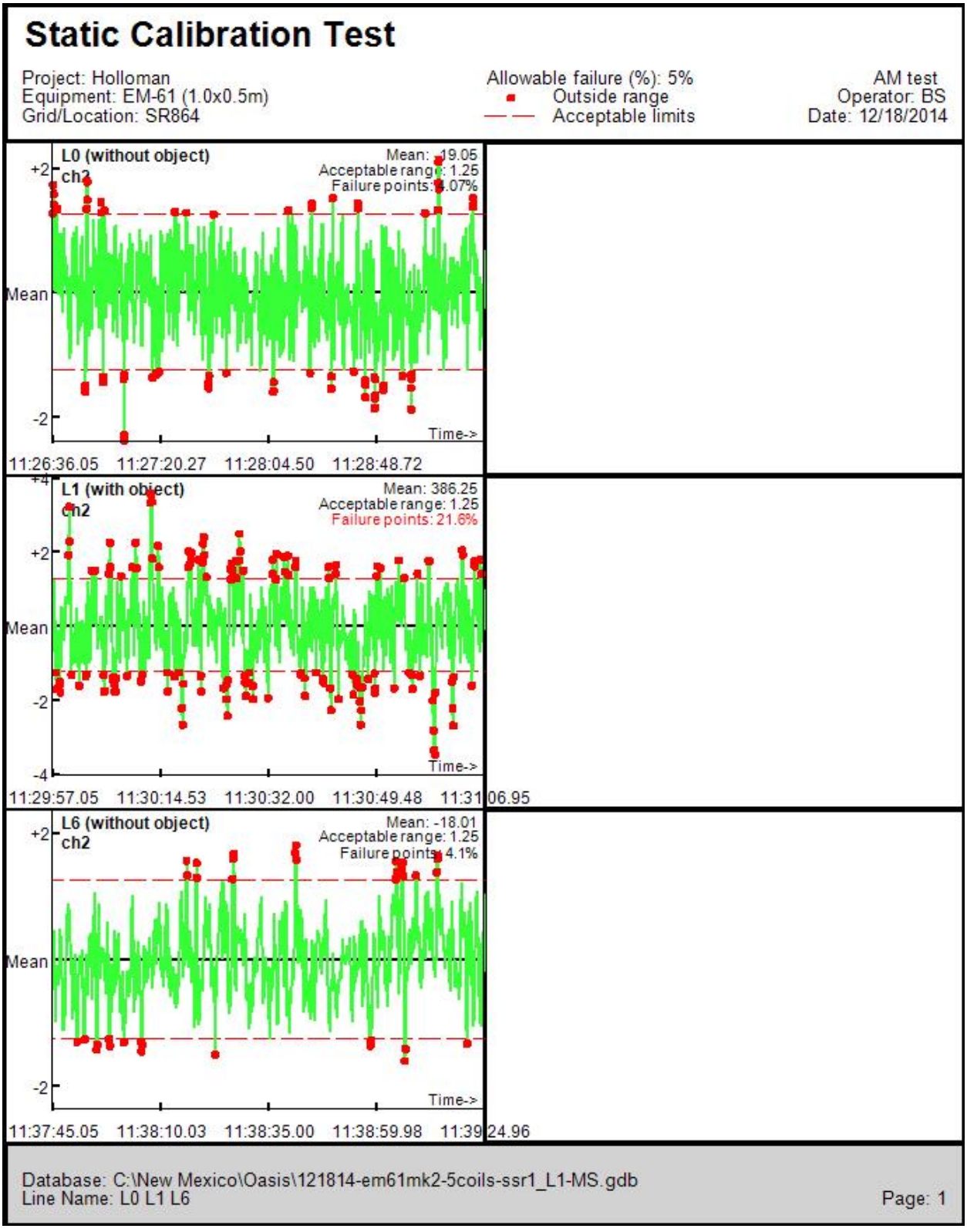


Figure C-209
12/18/2014 EM61 SSR AM Sensor L2 SR864 MRS

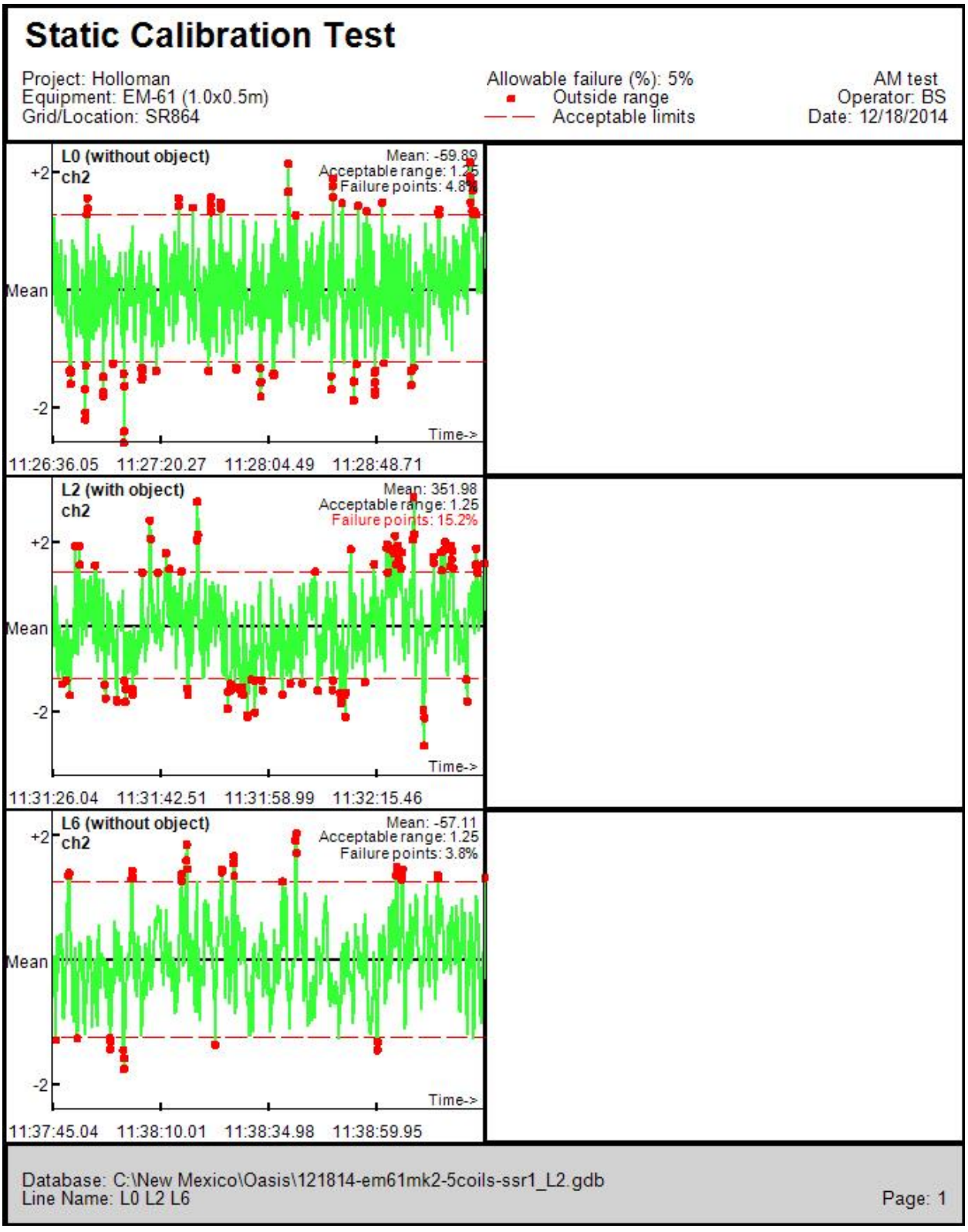


Figure C-210
12/18/2014 EM61 SSR AM Sensor R1 SR864 MRS

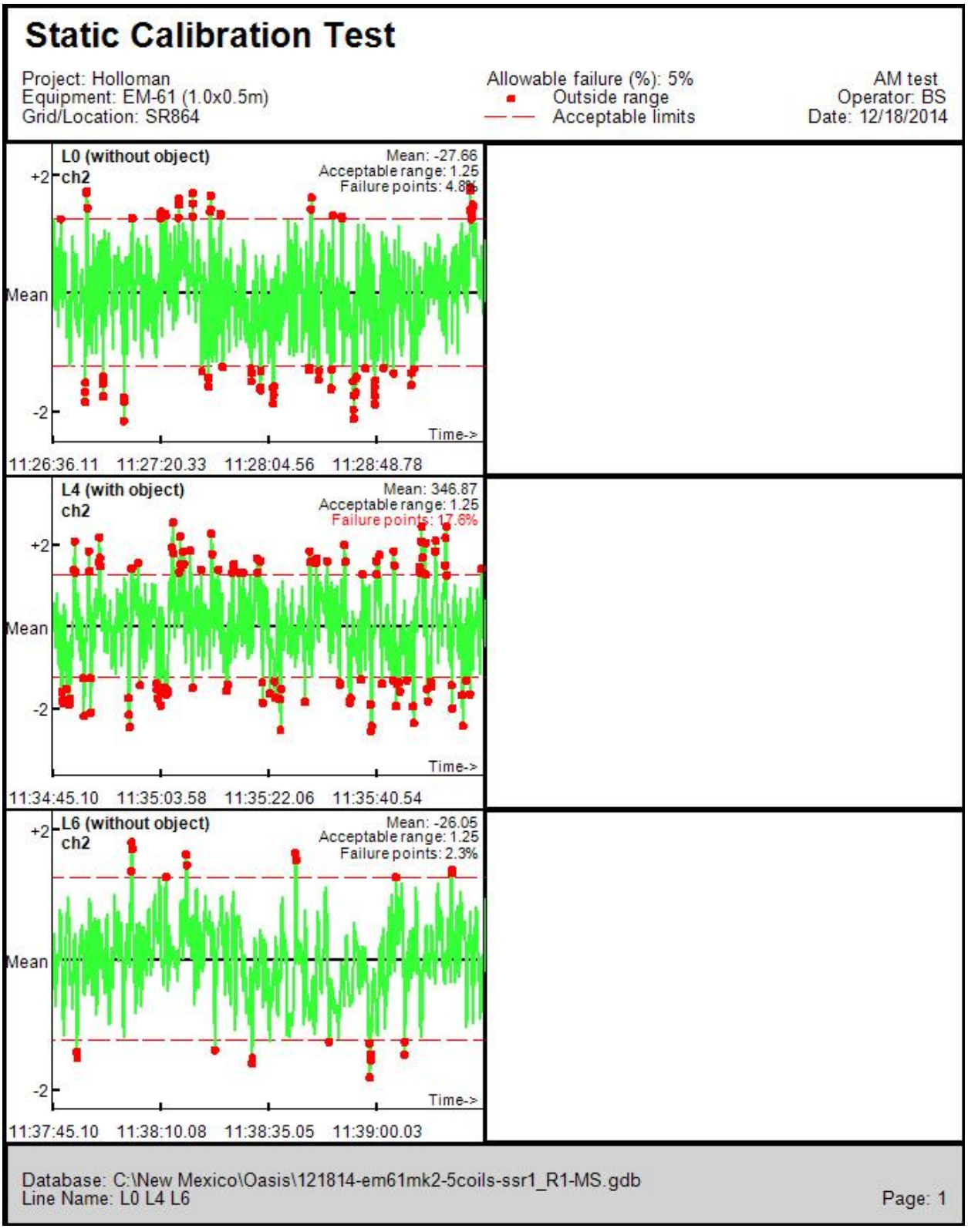


Figure C-211
12/18/2014 EM61 SSR AM Sensor R2 SR864 MRS

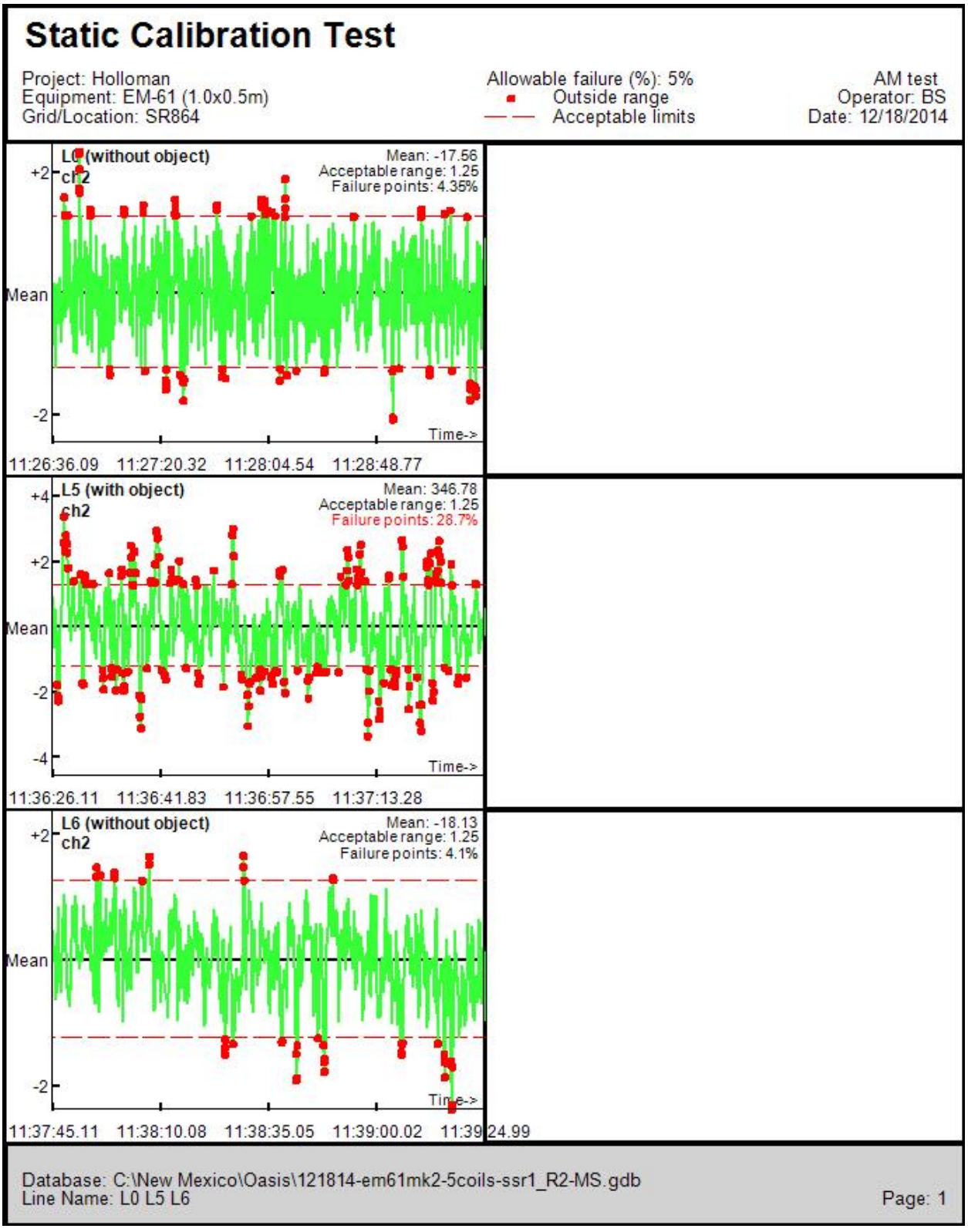


Figure C-212
12/18/2014 EM61 SSR PM Sensor C SR864 MRS

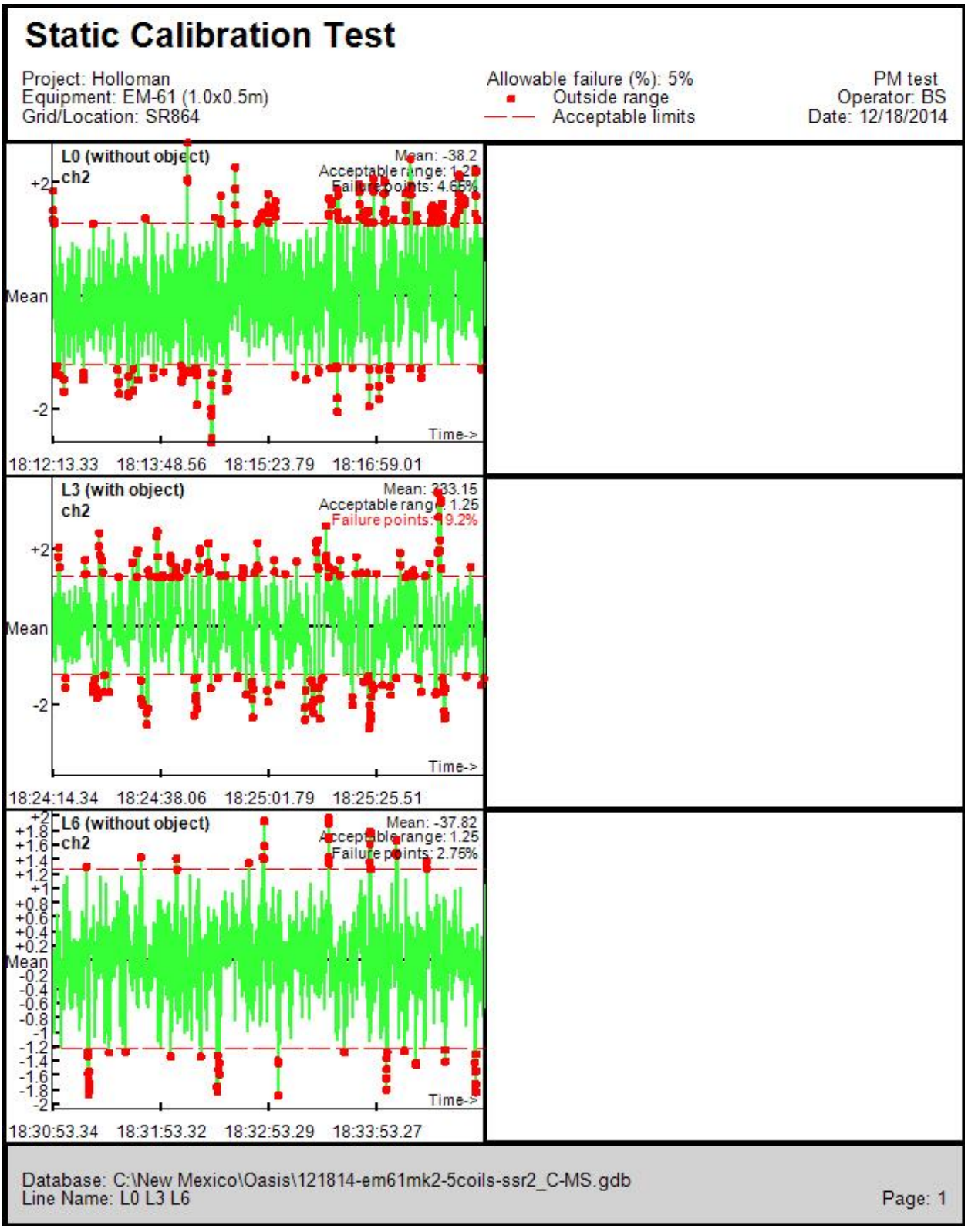


Figure C-213
12/18/2014 EM61 SSR PM Sensor L1 SR864 MRS

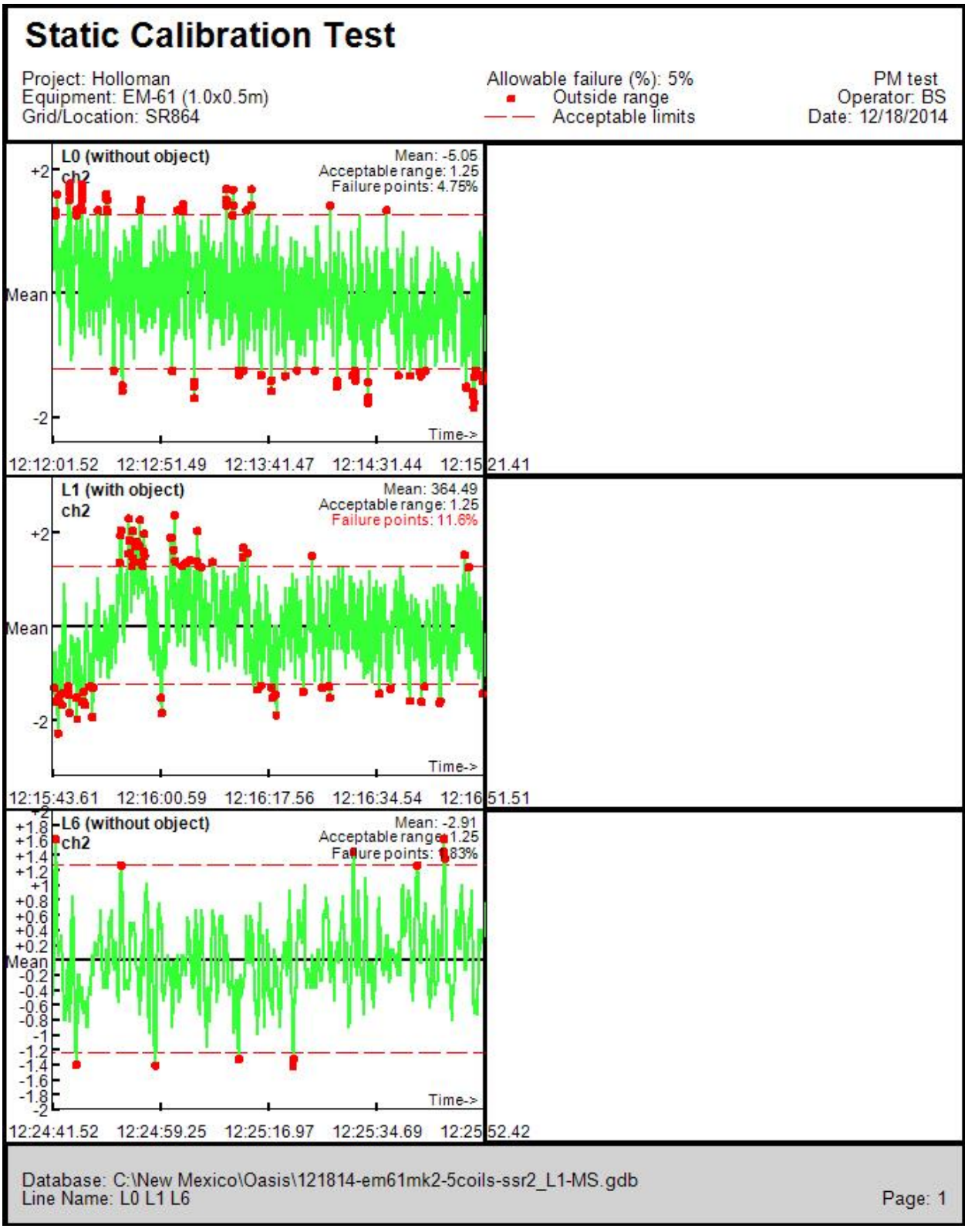


Figure C-214
12/18/2014 EM61 SSR PM Sensor L2 SR864 MRS

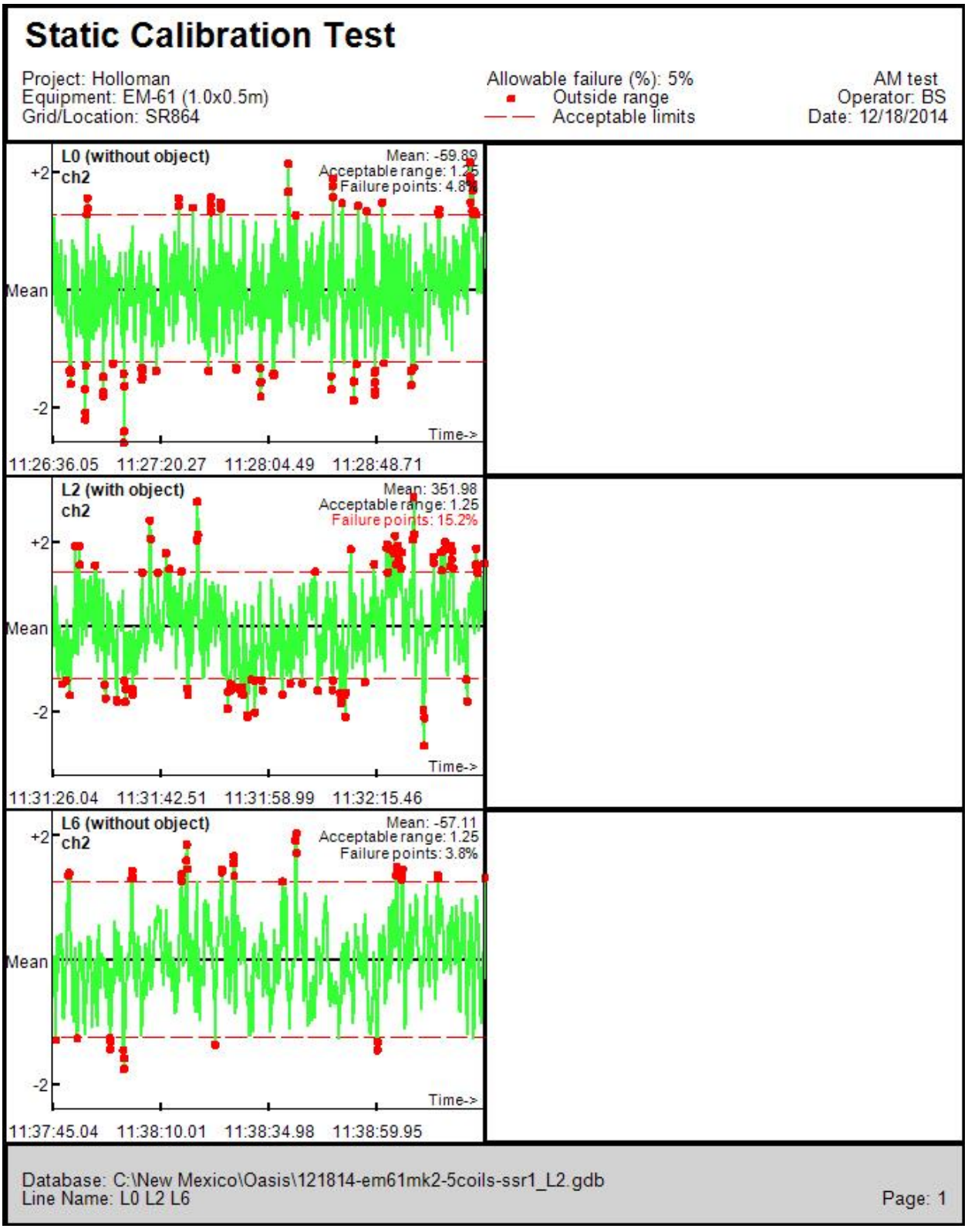


Figure C-215
12/18/2014 EM61 SSR PM Sensor R1 SR864 MRS

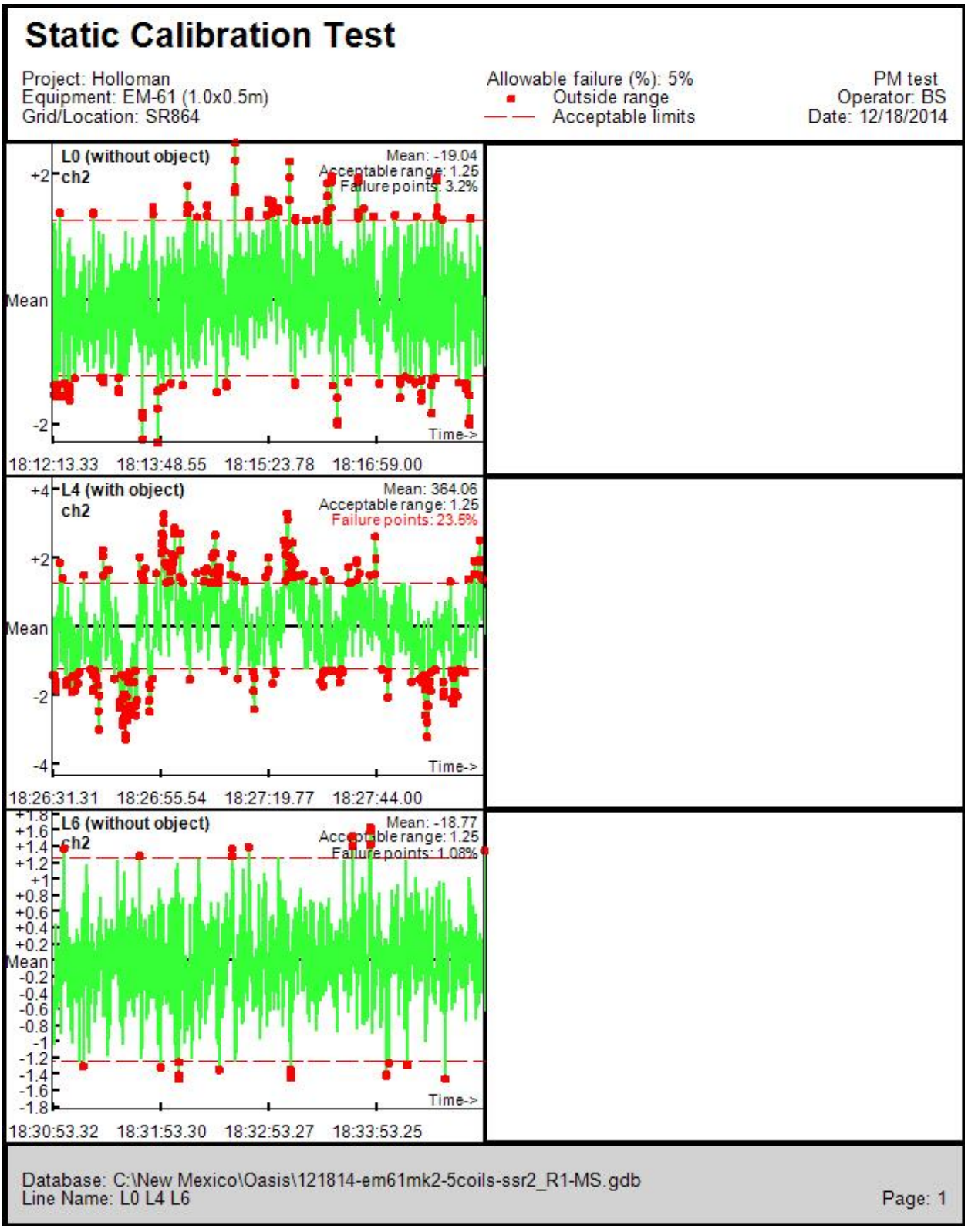


Figure C-216
12/18/2014 EM61 SSR PM Sensor R2 SR864 MRS

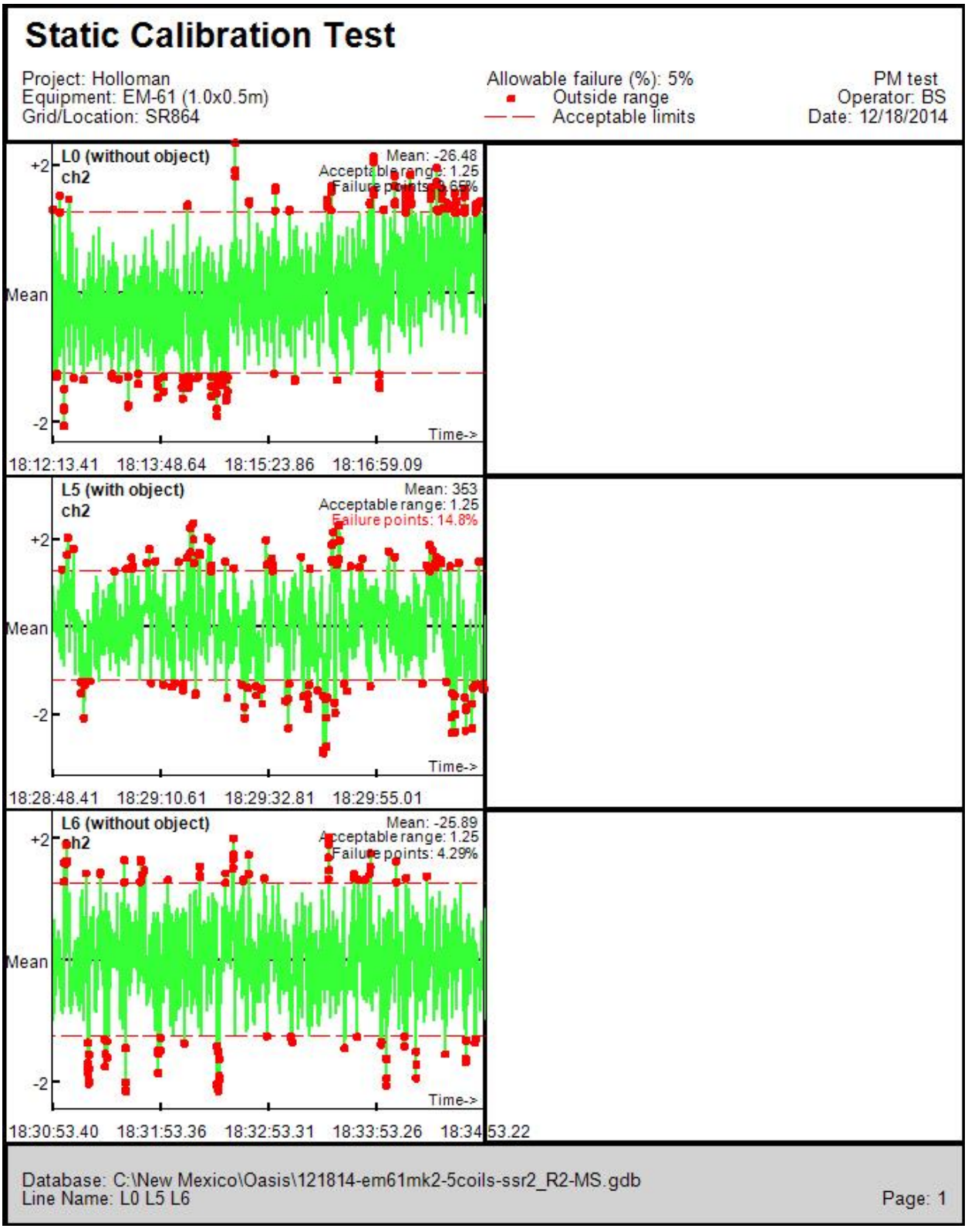


Figure C-217
12/19/2014 EM61 SSR AM Sensor C SR864 MRS

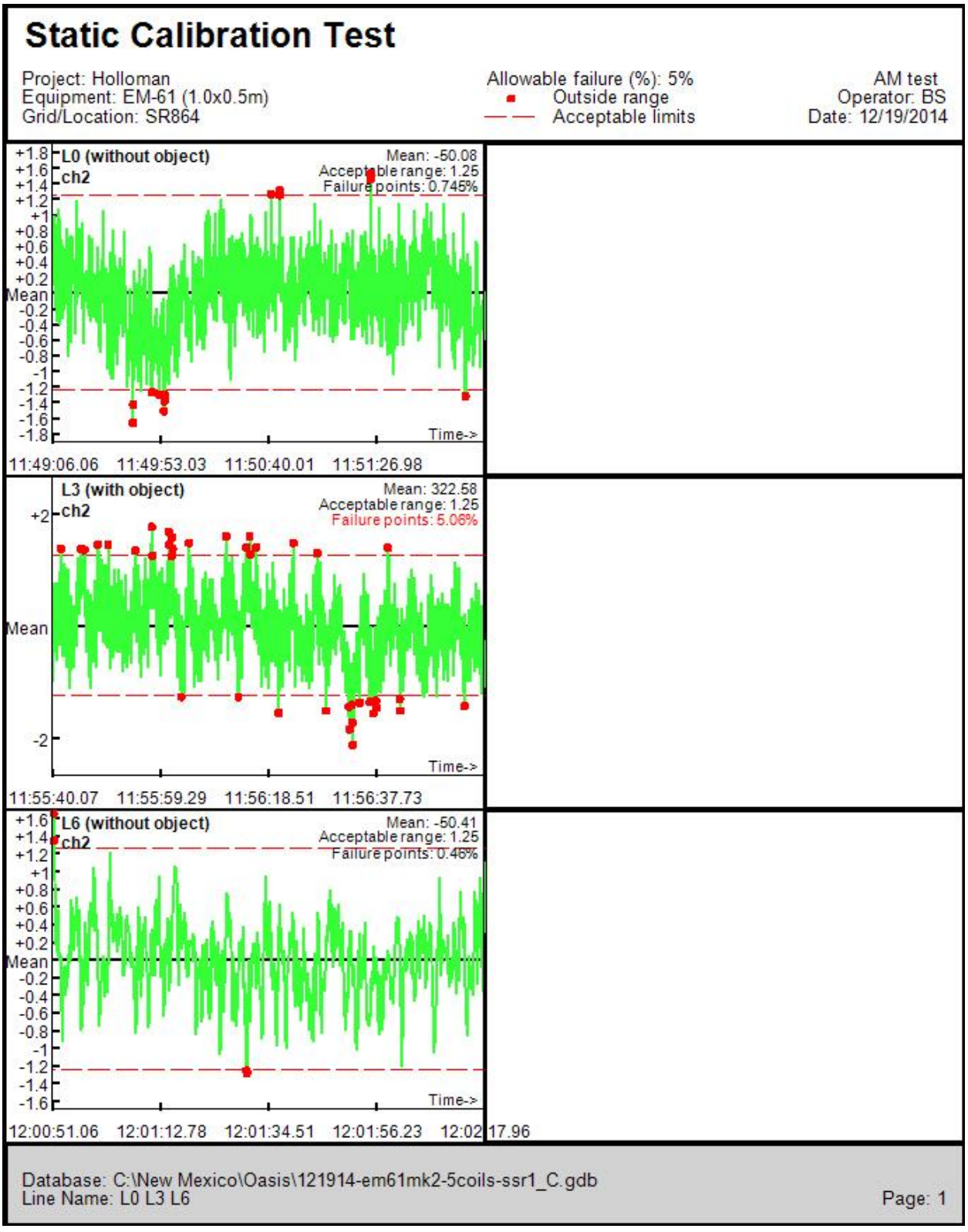


Figure C-218
12/19/2014 EM61 SSR AM Sensor L1 SR864 MRS

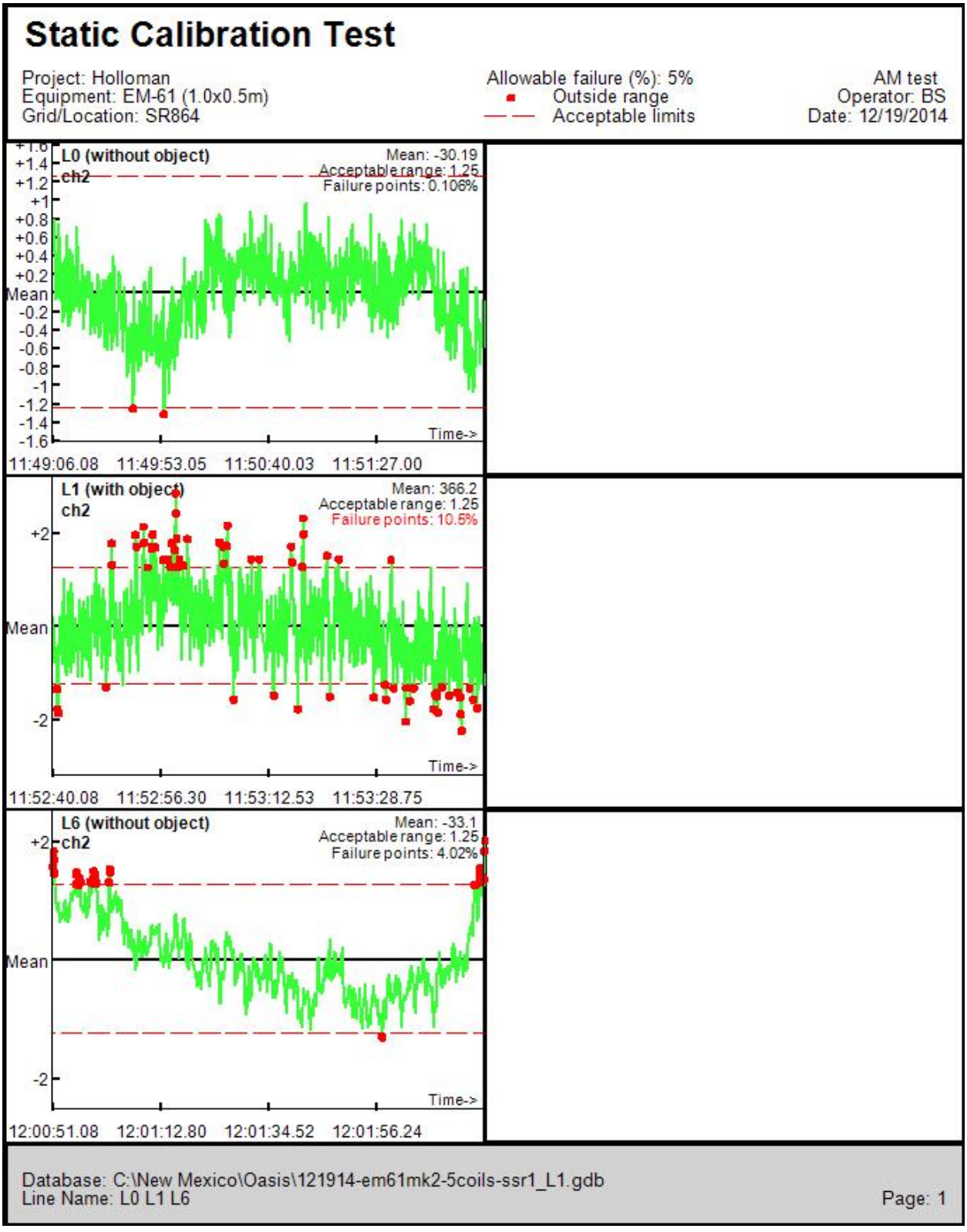


Figure C-219
12/19/2014 EM61 SSR AM Sensor L2 SR864 MRS

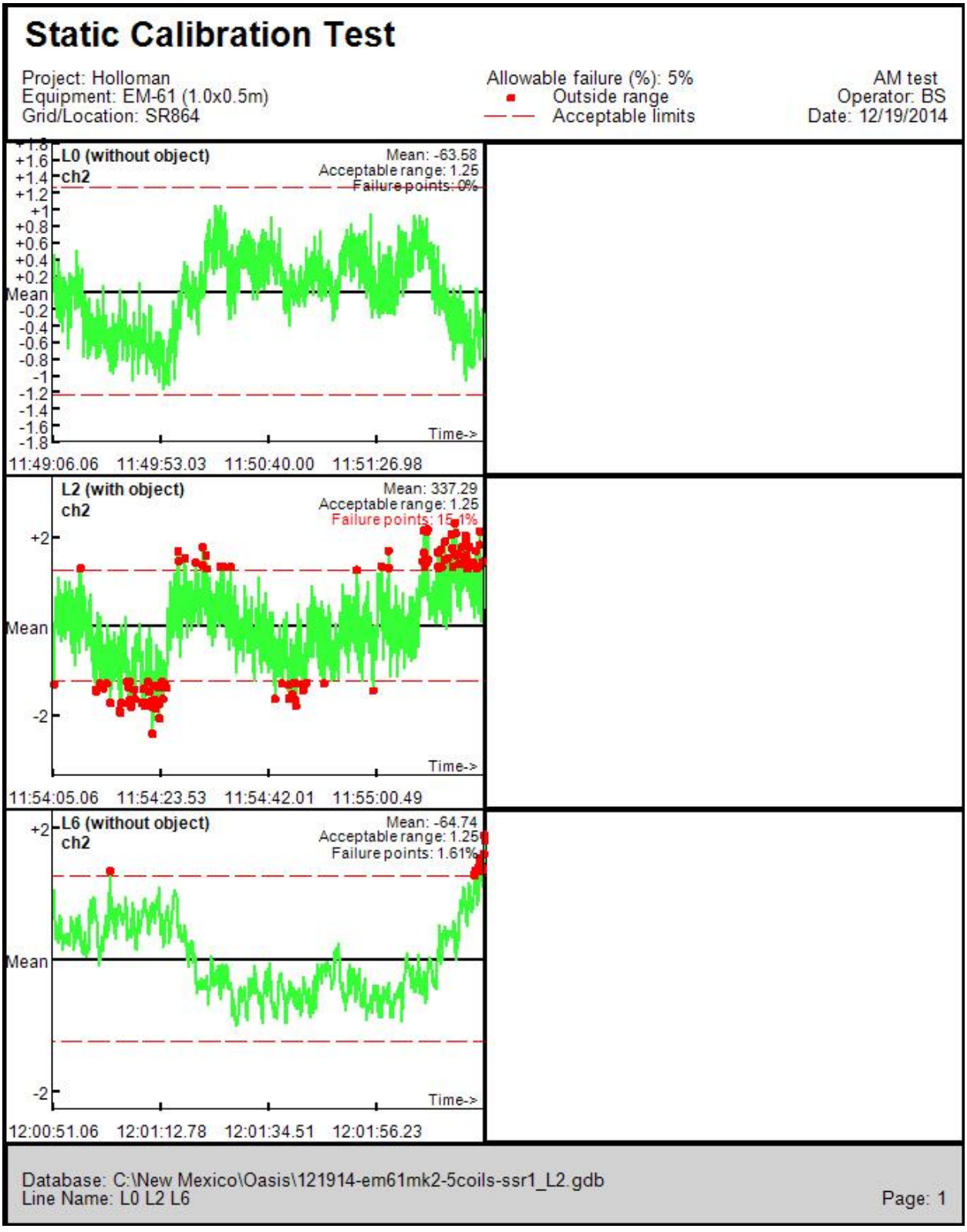


Figure C-220
12/19/2014 EM61 SSR AM Sensor R1 SR864 MRS

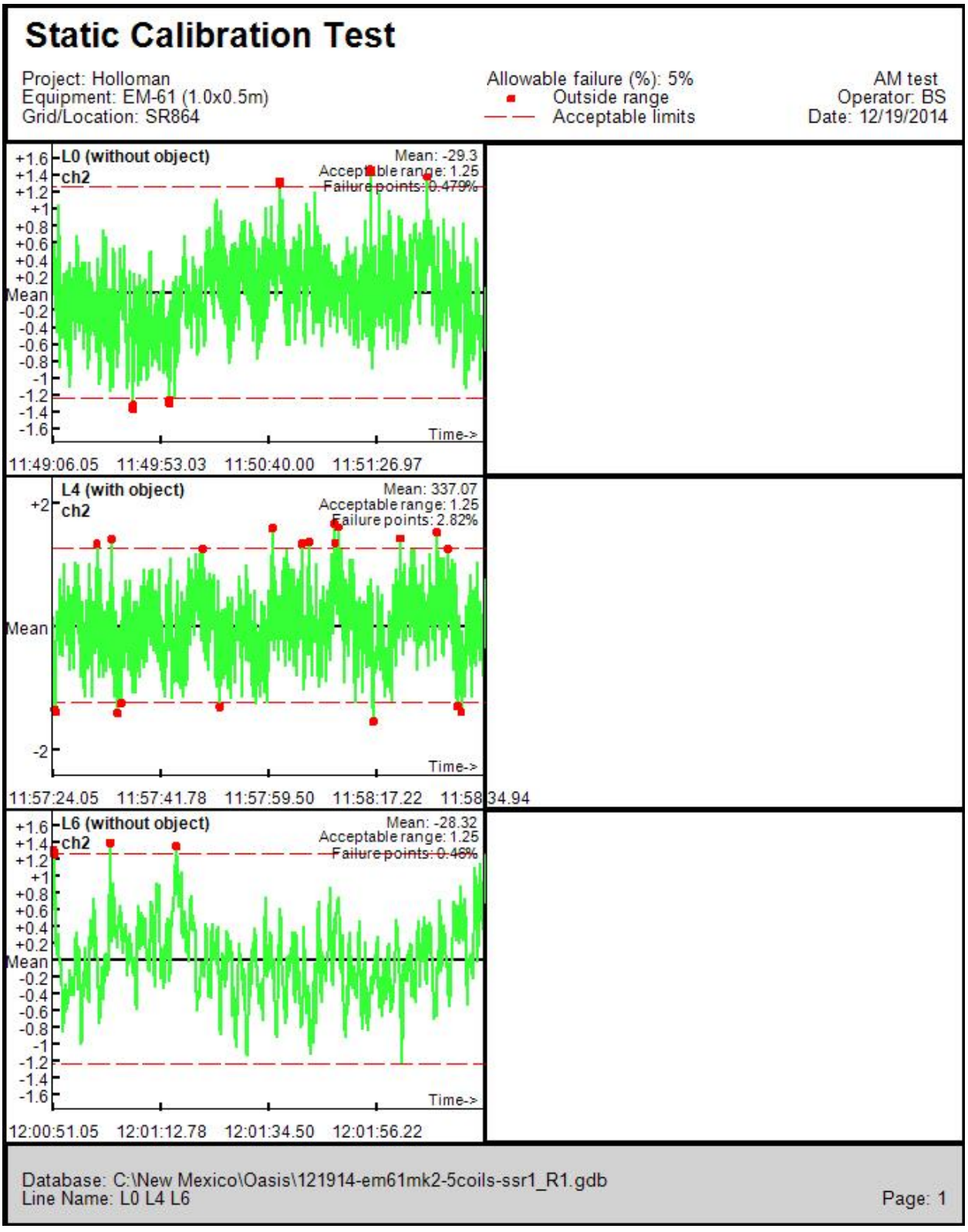


Figure C-221
12/19/2014 EM61 SSR AM Sensor R2 SR864 MRS

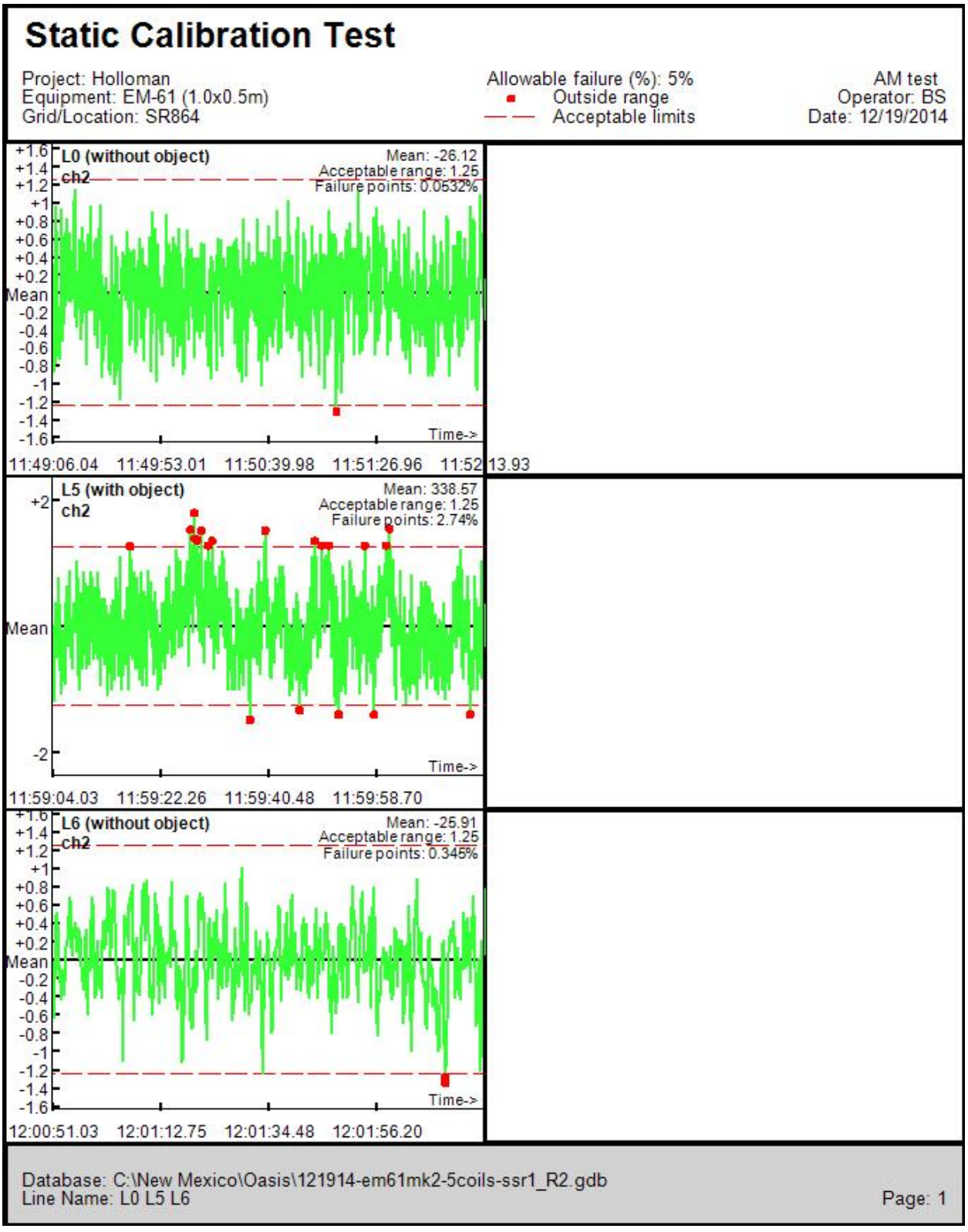


Figure C-222
12/19/2014 EM61 SSR PM Sensor C SR864 MRS

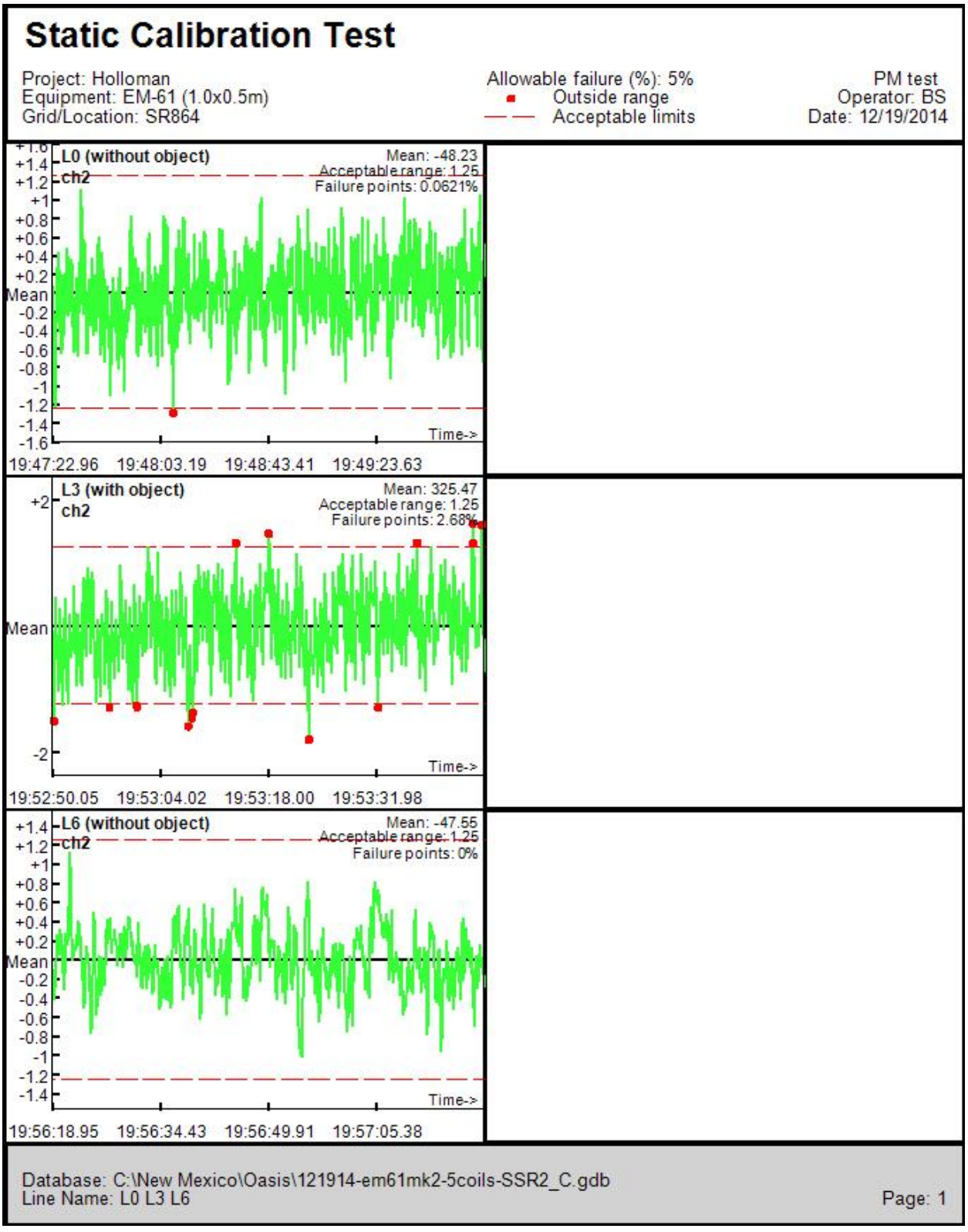


Figure C-223
12/19/2014 EM61 SSR PM Sensor L1 SR864 MRS

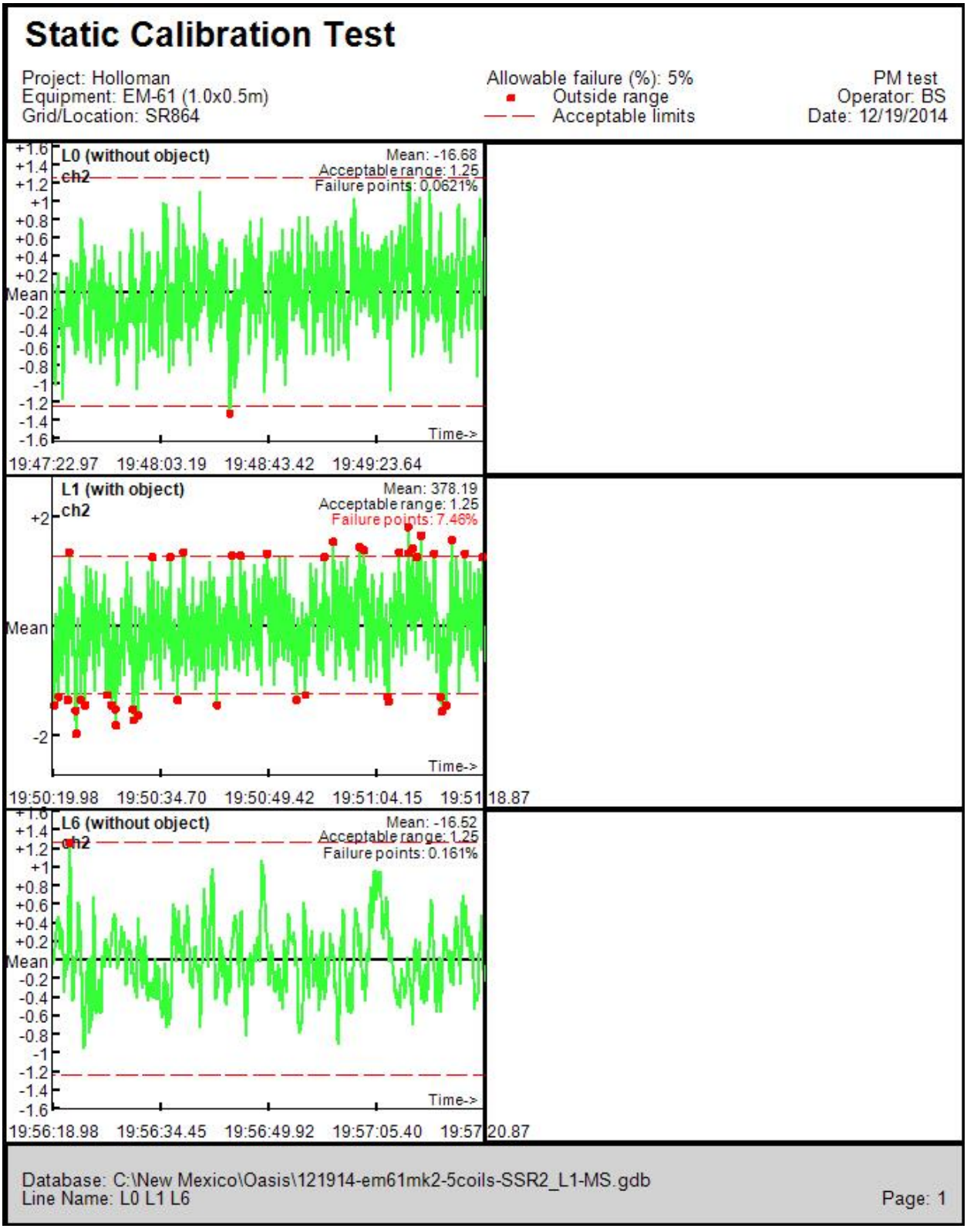


Figure C-224
12/19/2014 EM61 SSR PM Sensor L2 SR864 MRS

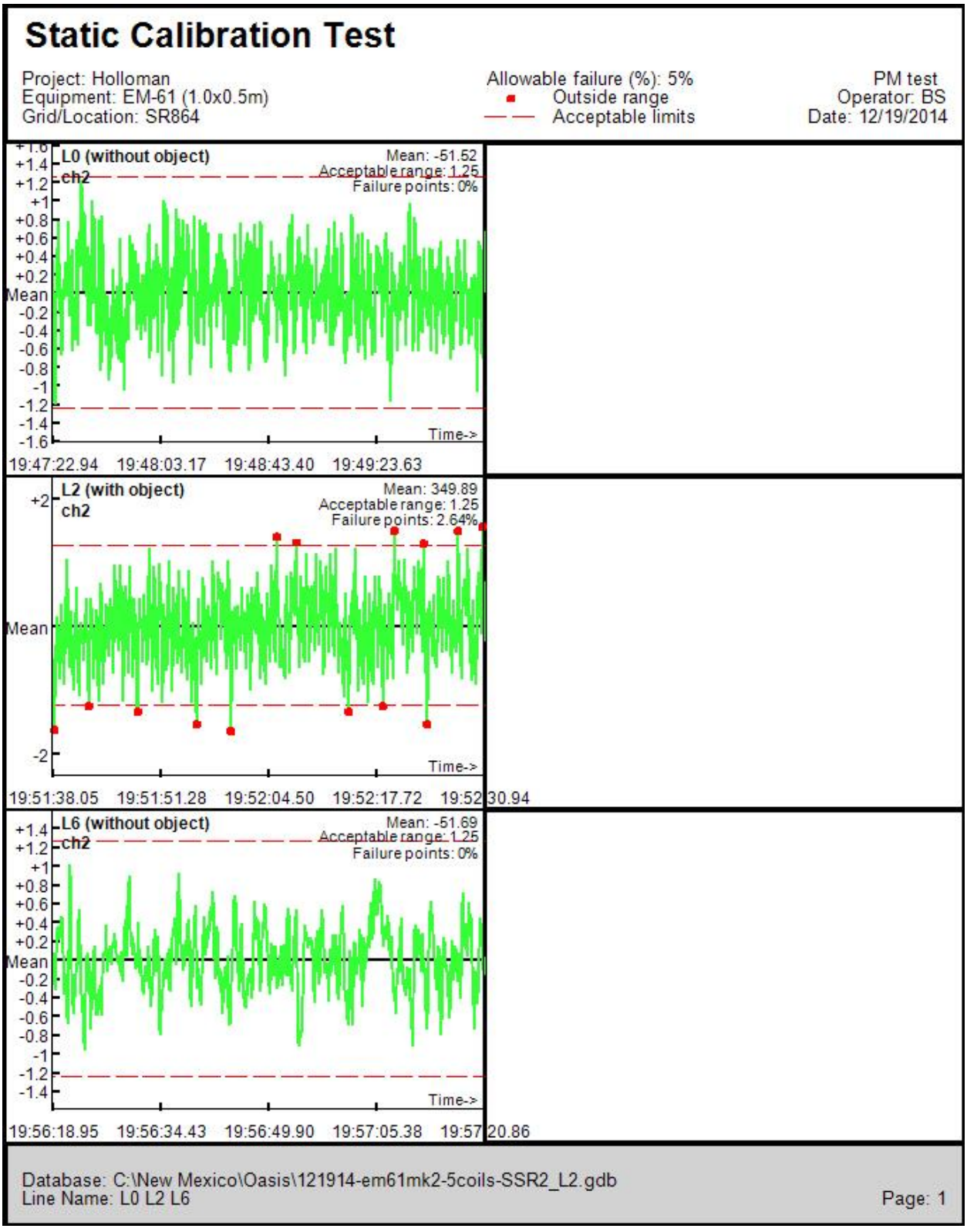


Figure C-225
12/19/2014 EM61 SSR PM Sensor R1 SR864 MRS

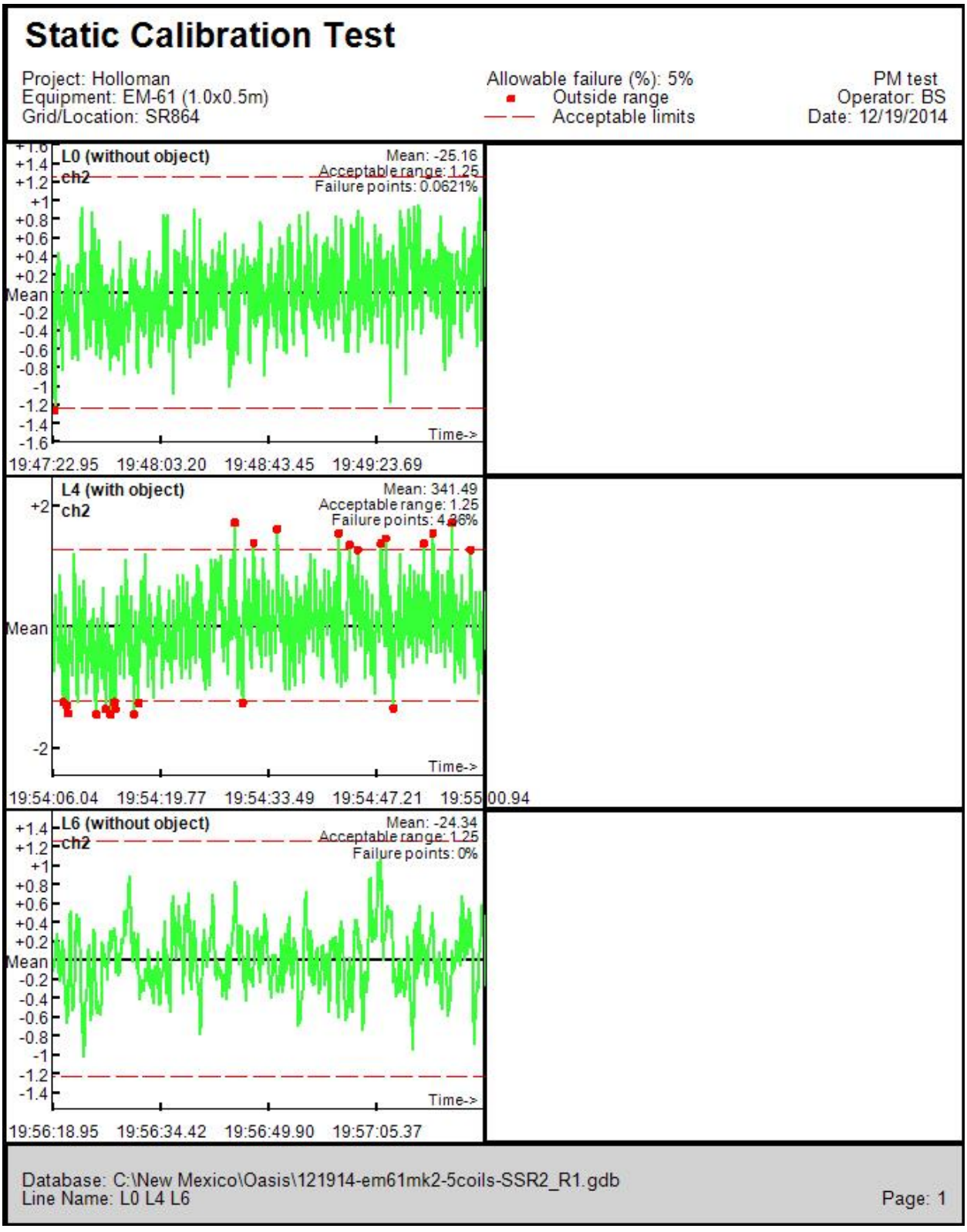


Figure C-226
12/19/2014 EM61 SSR PM Sensor R2 SR864 MRS

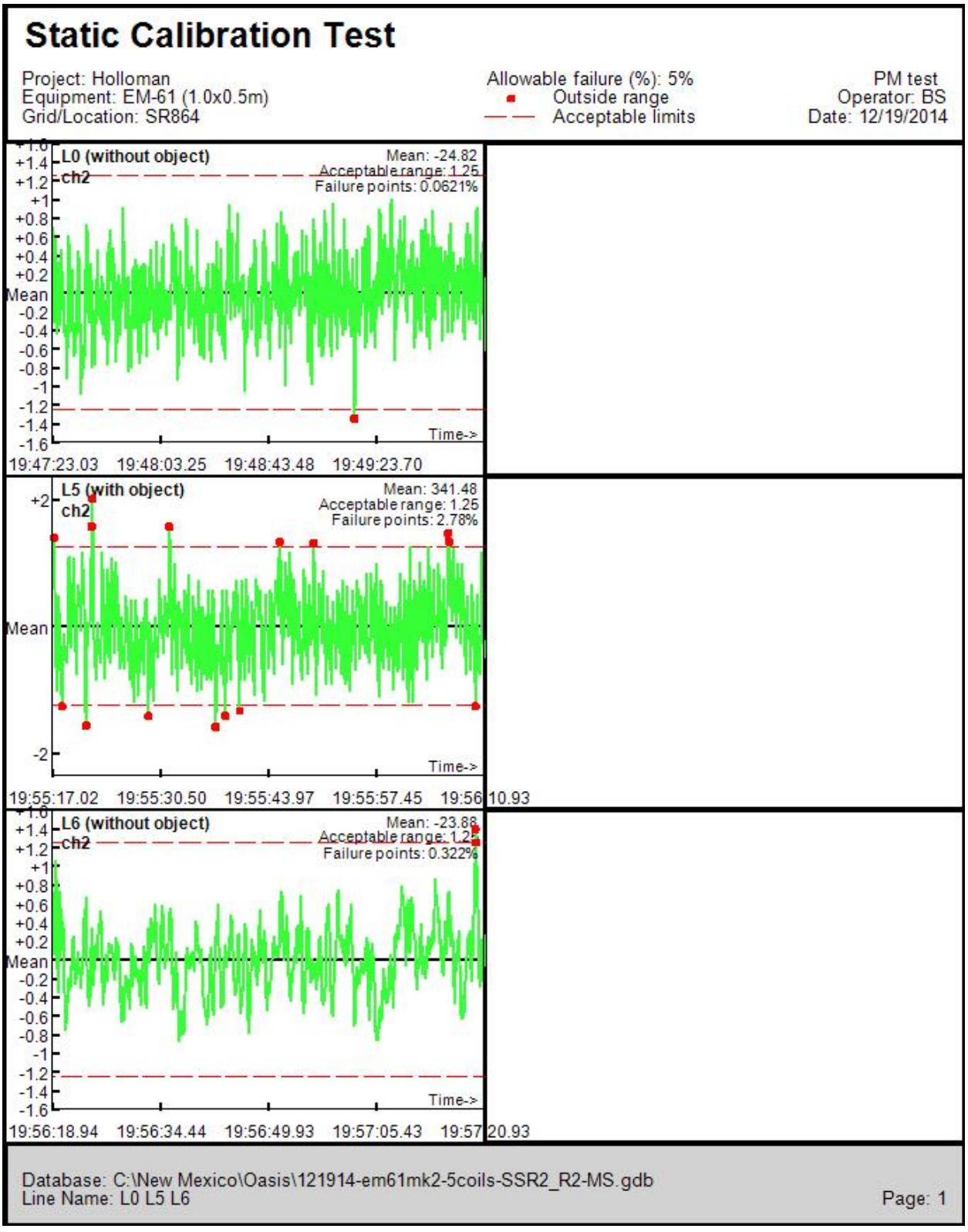


Figure C-227
1/8/2015 EM61 SSR AM Sensor C SR864 MRS

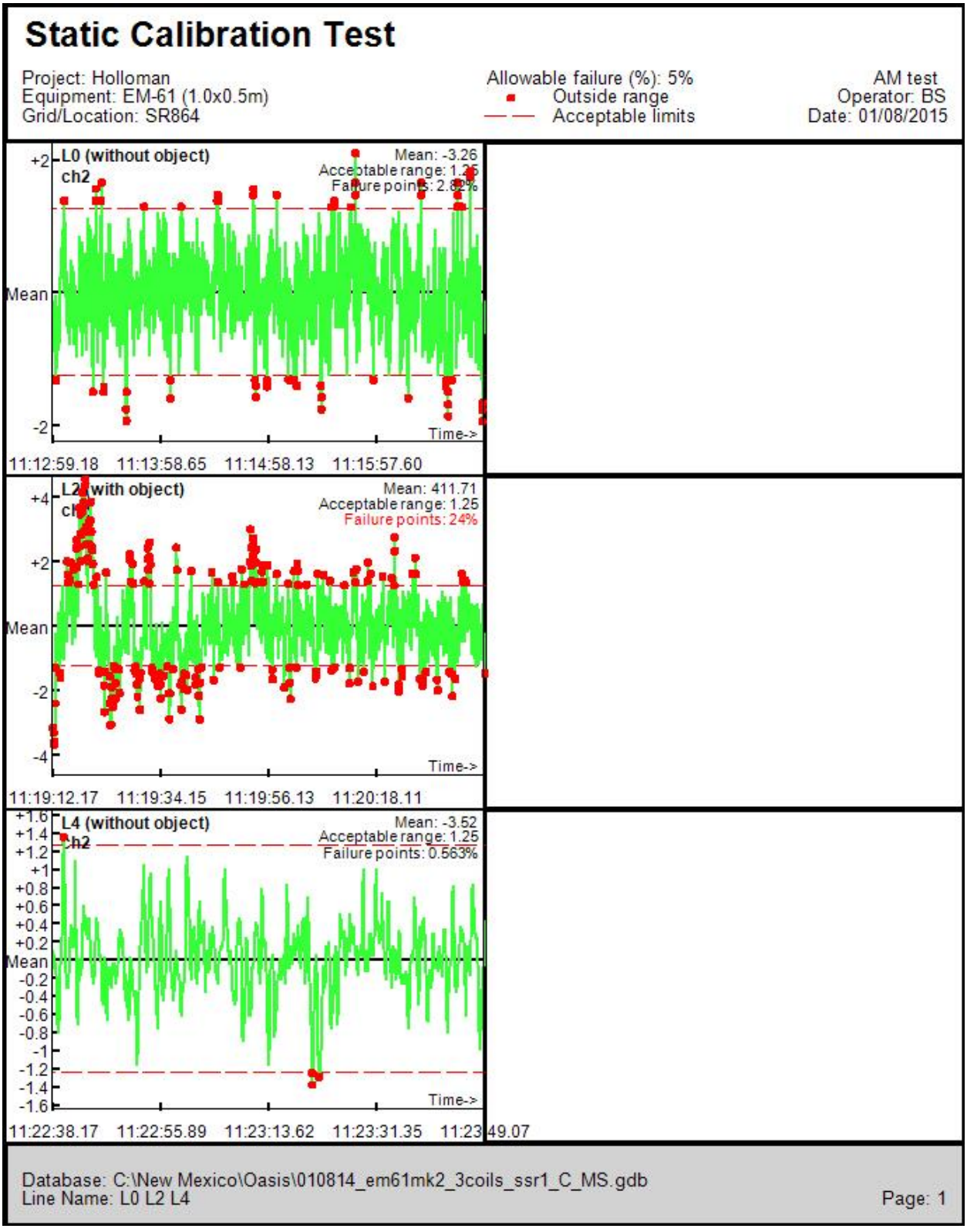


Figure C-228
1/8/2015 EM61 SSR AM Sensor L2 SR864 MRS

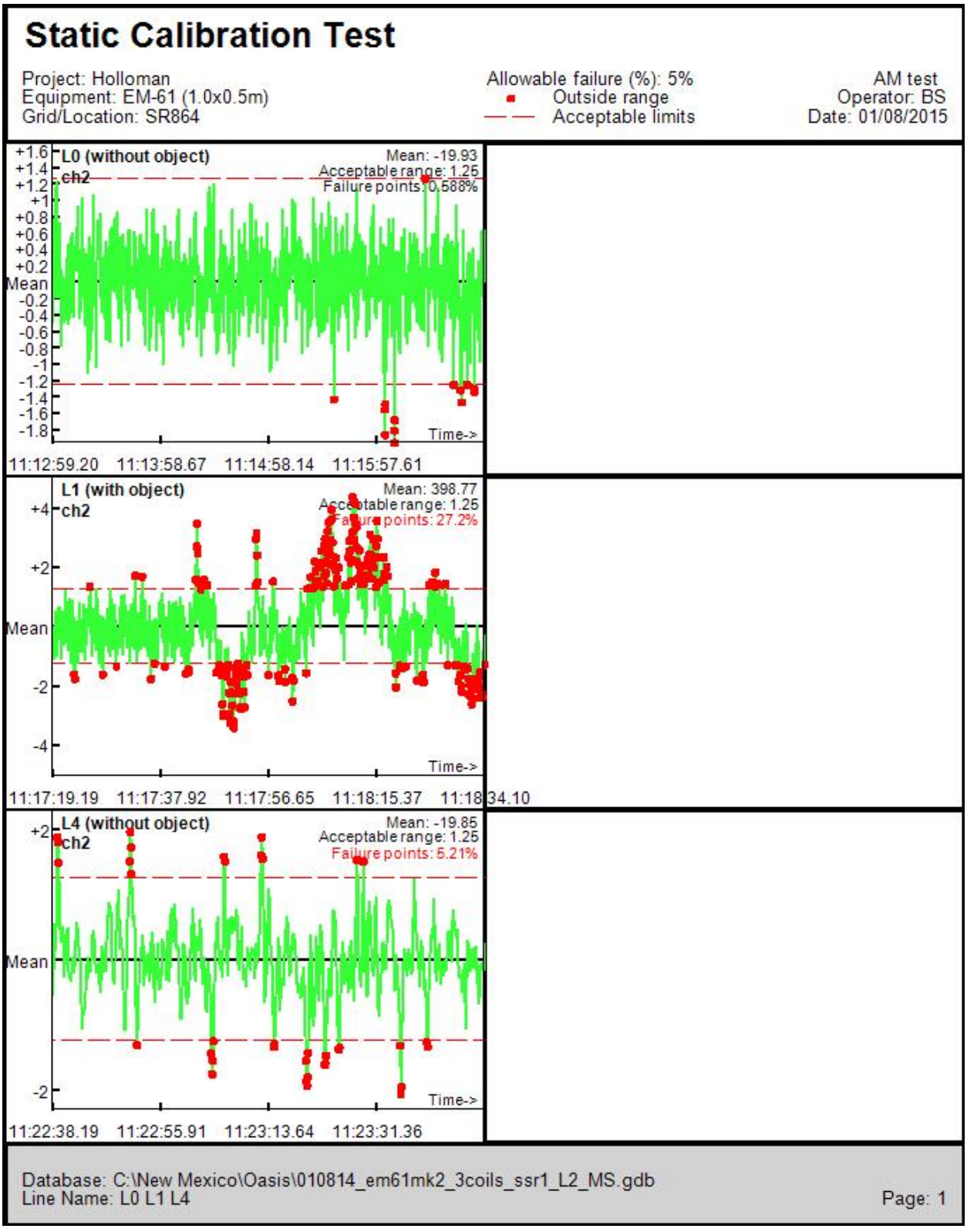


Figure C-229
1/8/2015 EM61 SSR AM Sensor R1 SR864 MRS

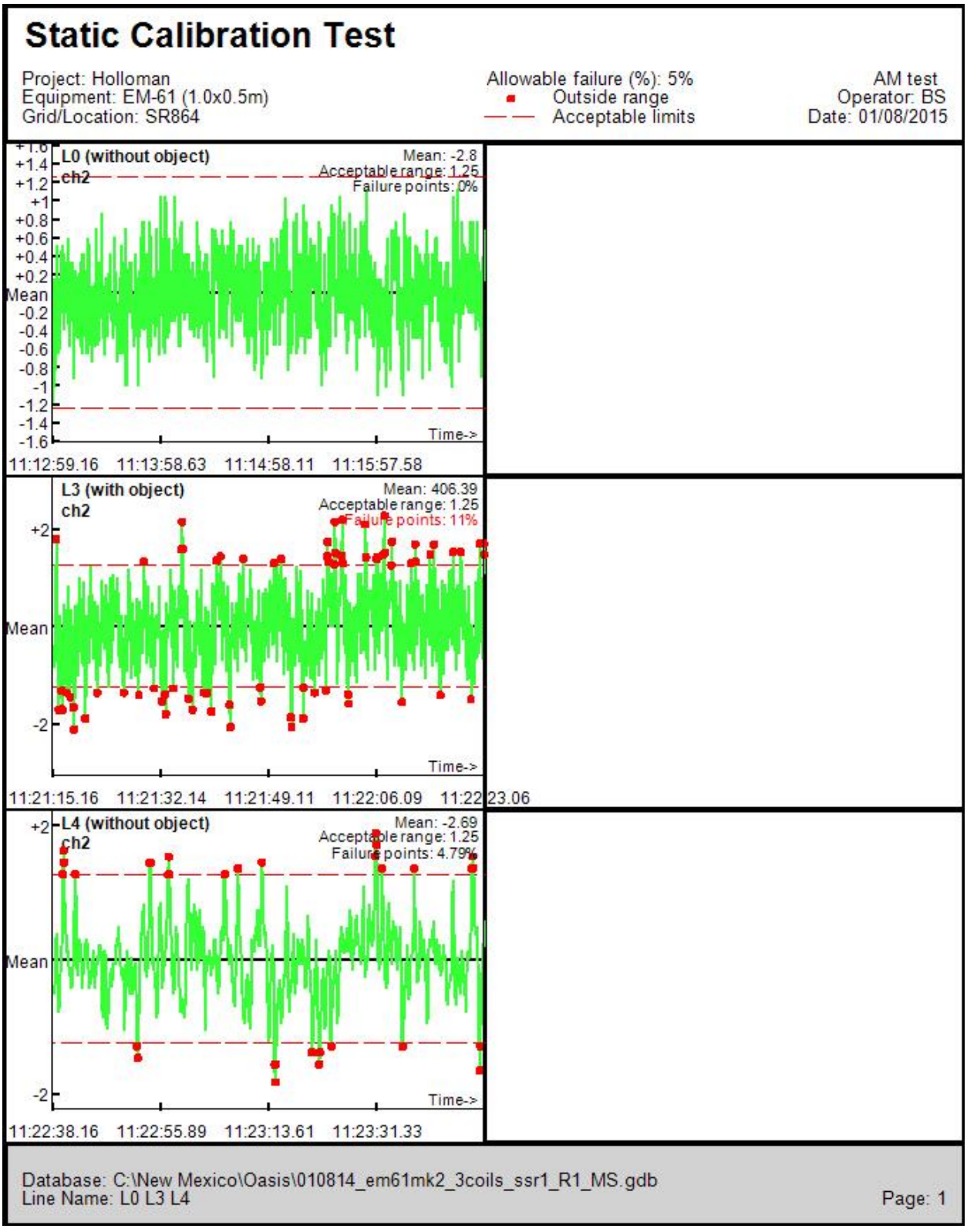


Figure C-230
1/8/2015 EM61 SSR PM Sensor C SR864 MRS

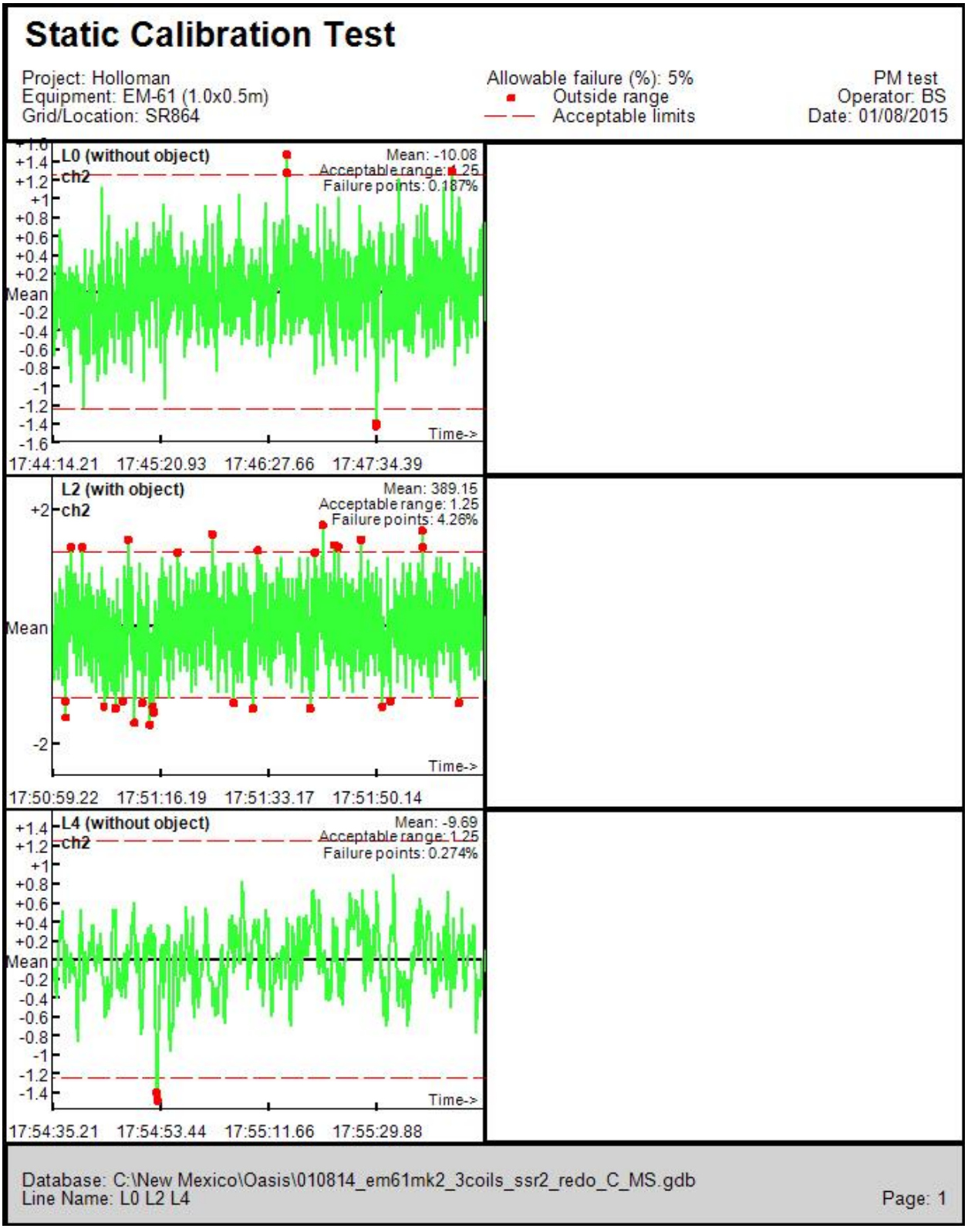


Figure C-231
1/8/2015 EM61 SSR PM Sensor L2 SR864 MRS

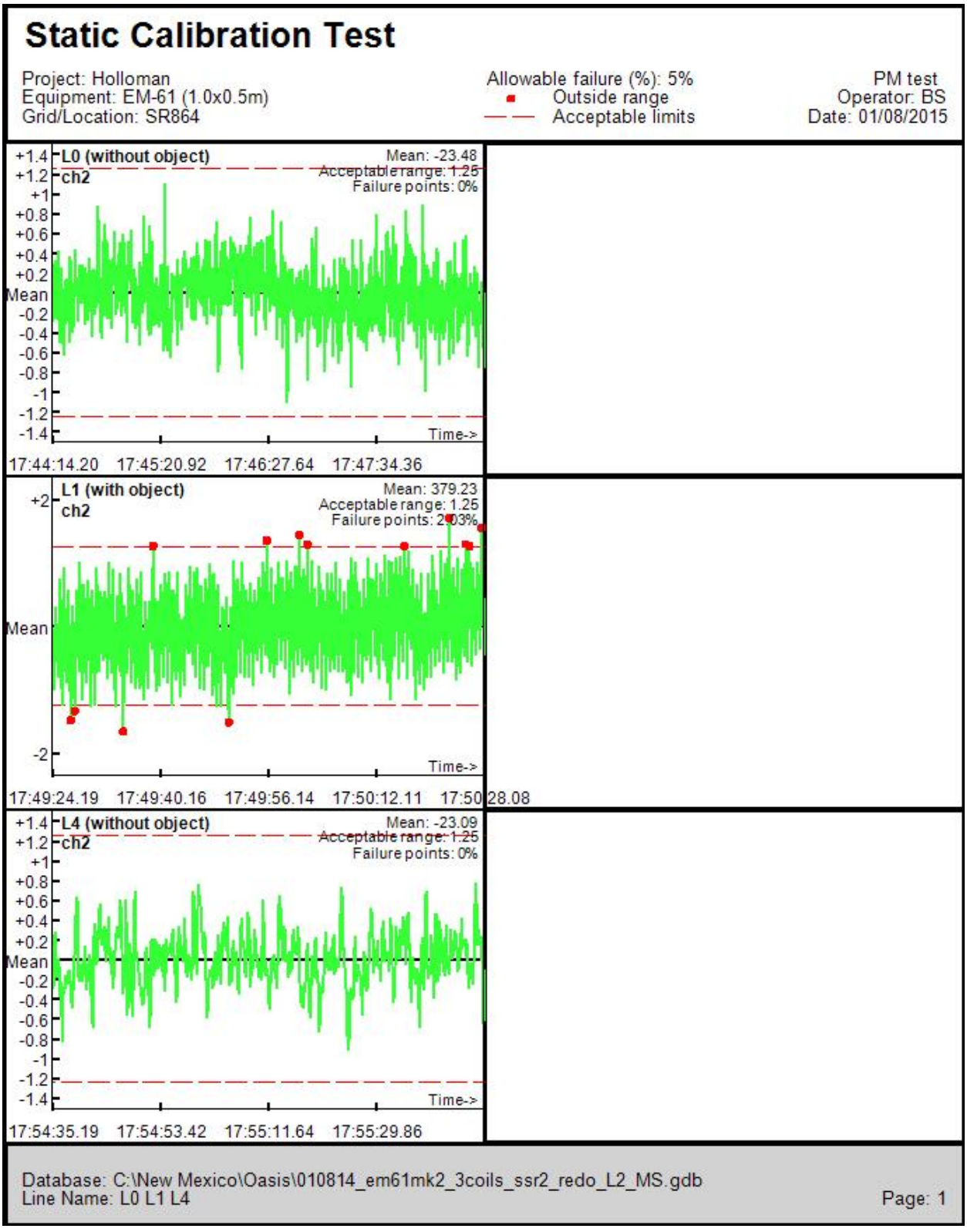


Figure C-232
1/8/2015 EM61 SSR PM Sensor R1 SR864 MRS

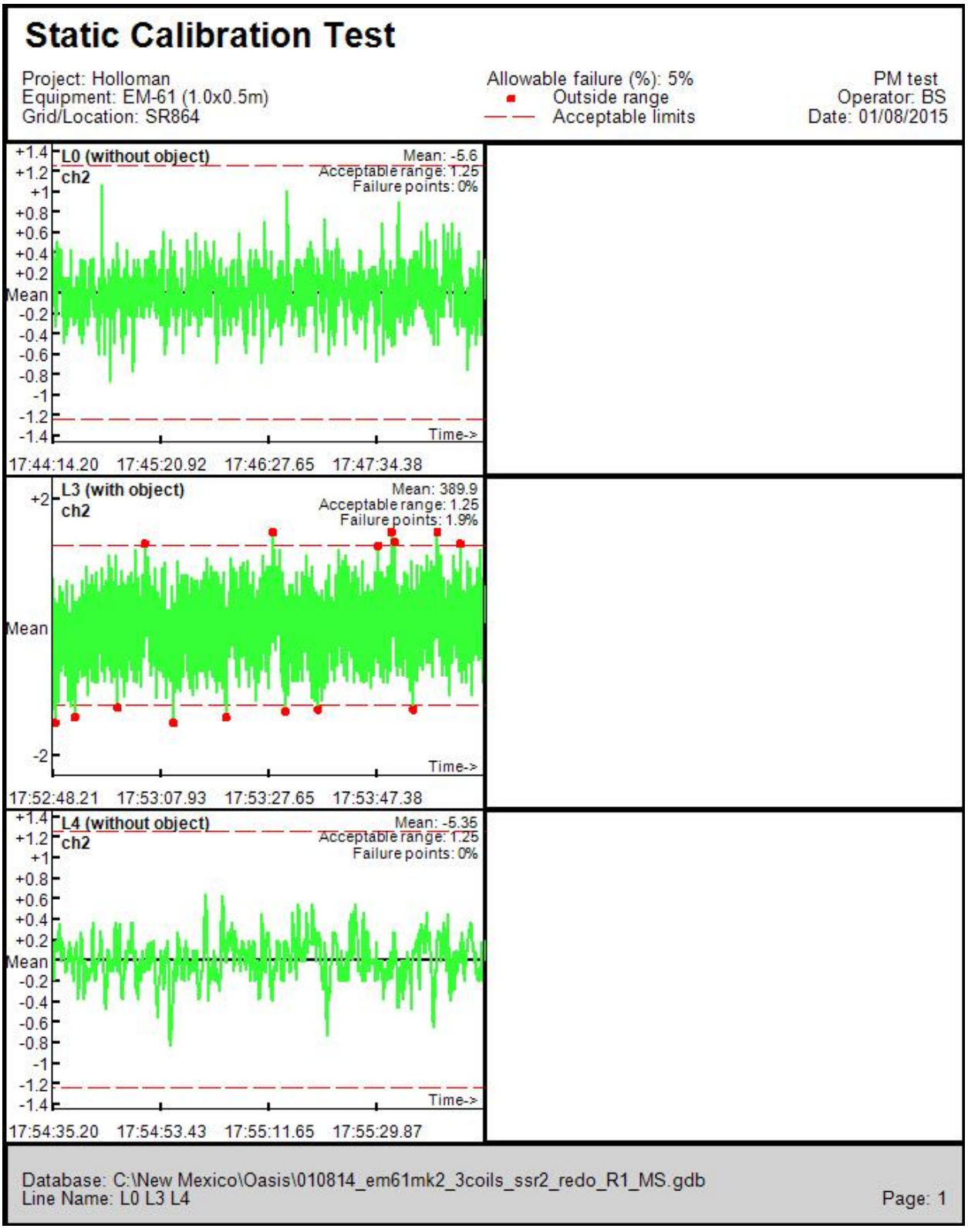


Figure C-233
1/9/2015 EM61 SSR AM Sensor C SR864 MRS

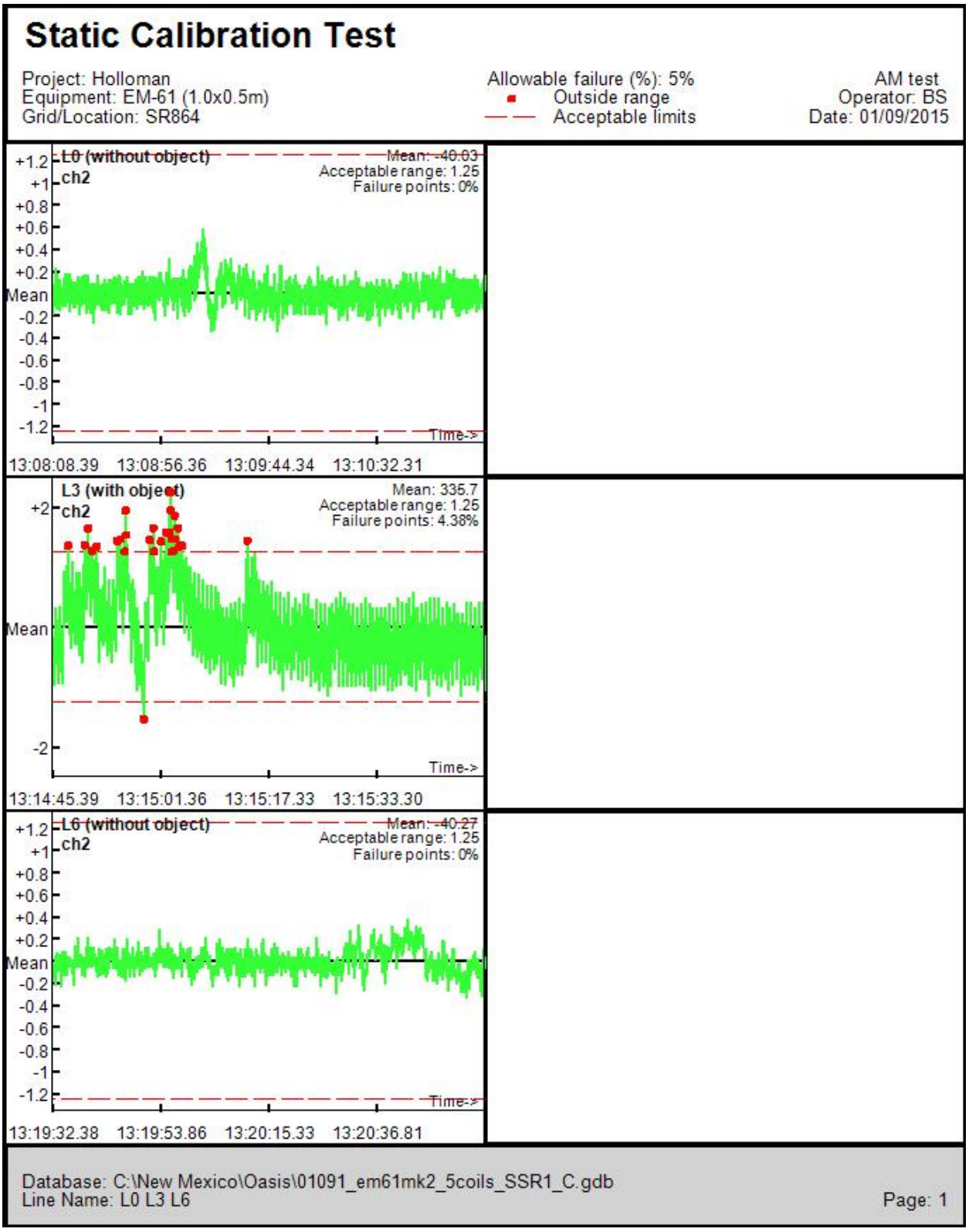


Figure C-234
1/9/2015 EM61 SSR AM Sensor L1 SR864 MRS

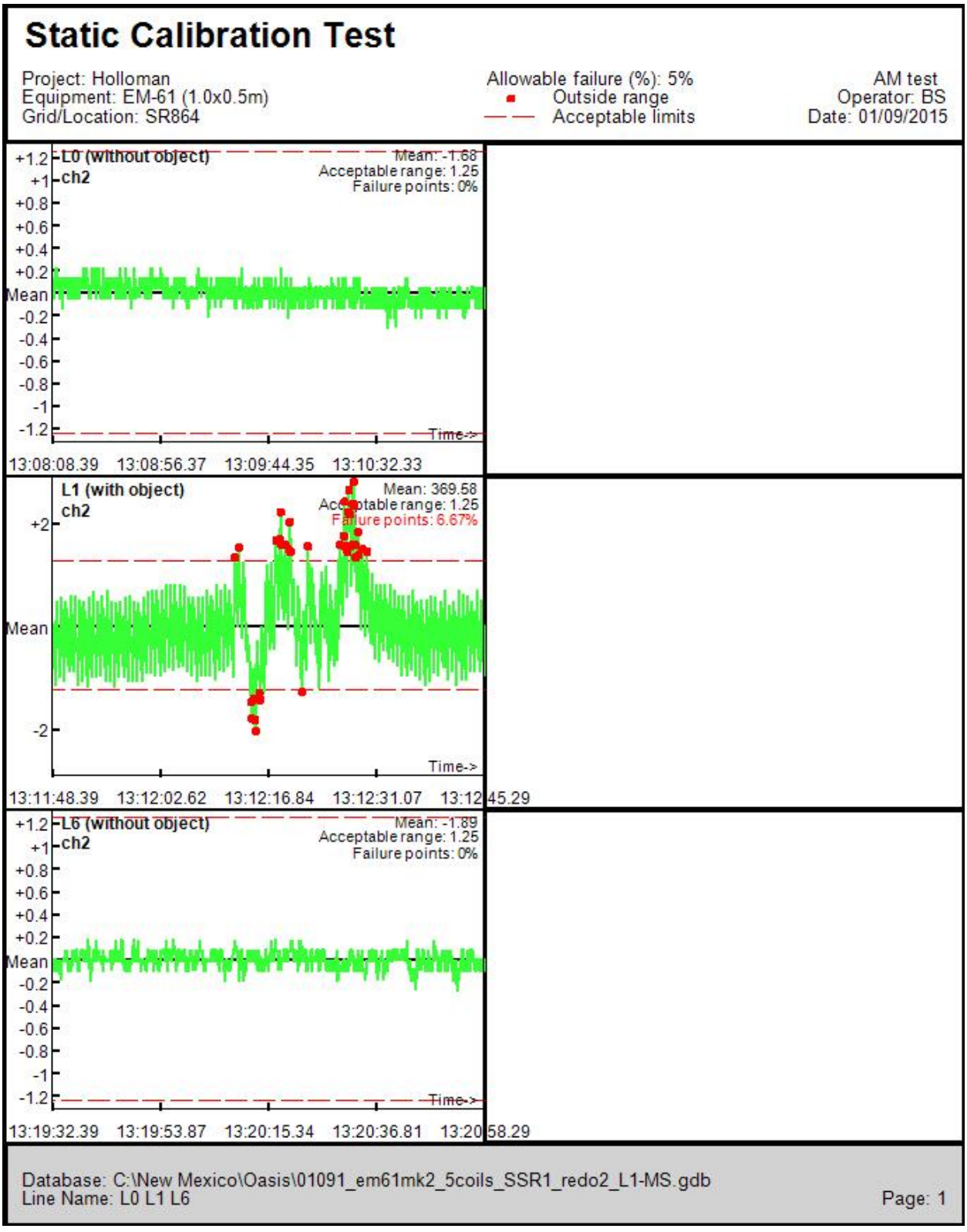


Figure C-235
1/9/2015 EM61 SSR AM Sensor L2 SR864 MRS

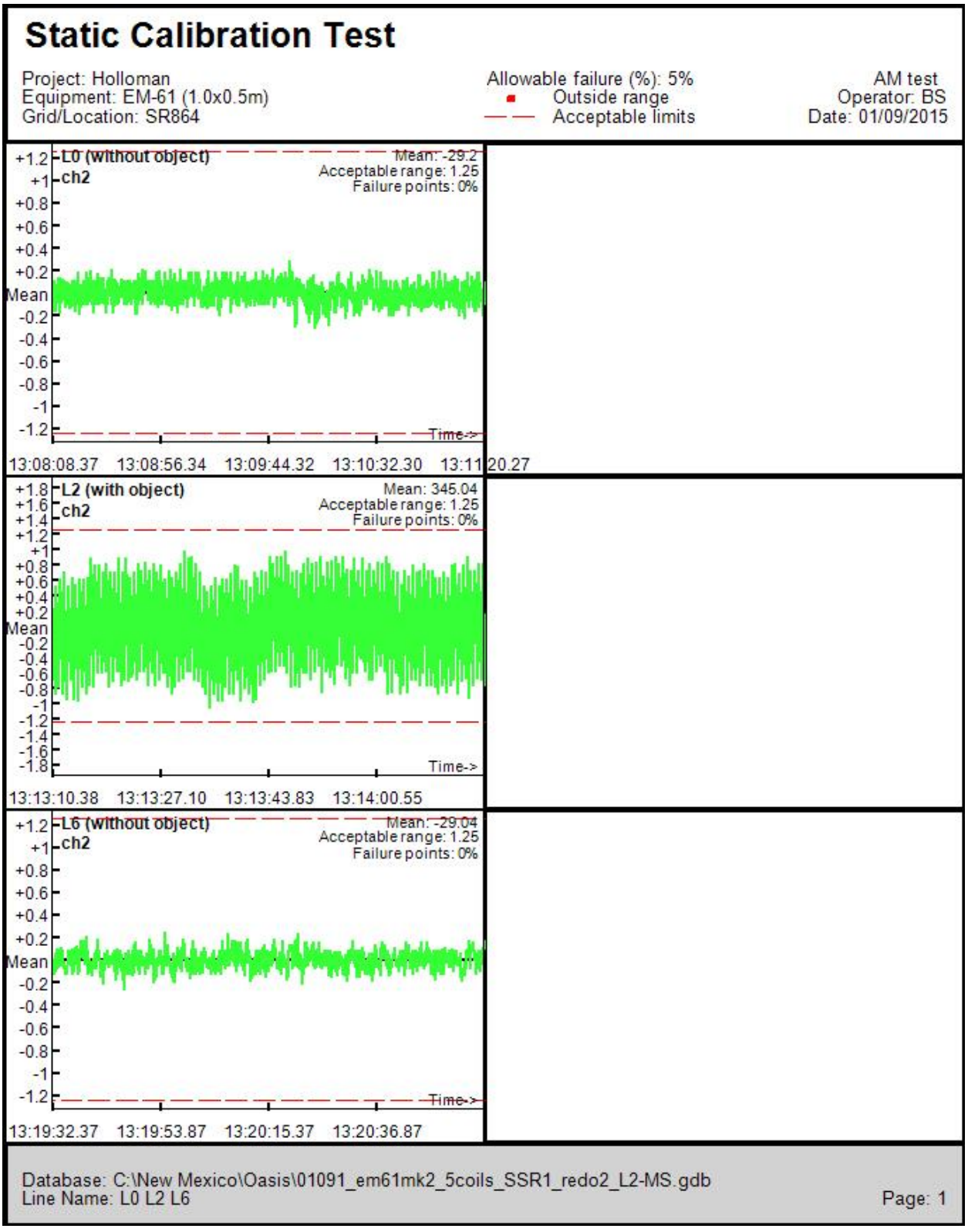


Figure C-236
1/9/2015 EM61 SSR AM Sensor R1 SR864 MRS

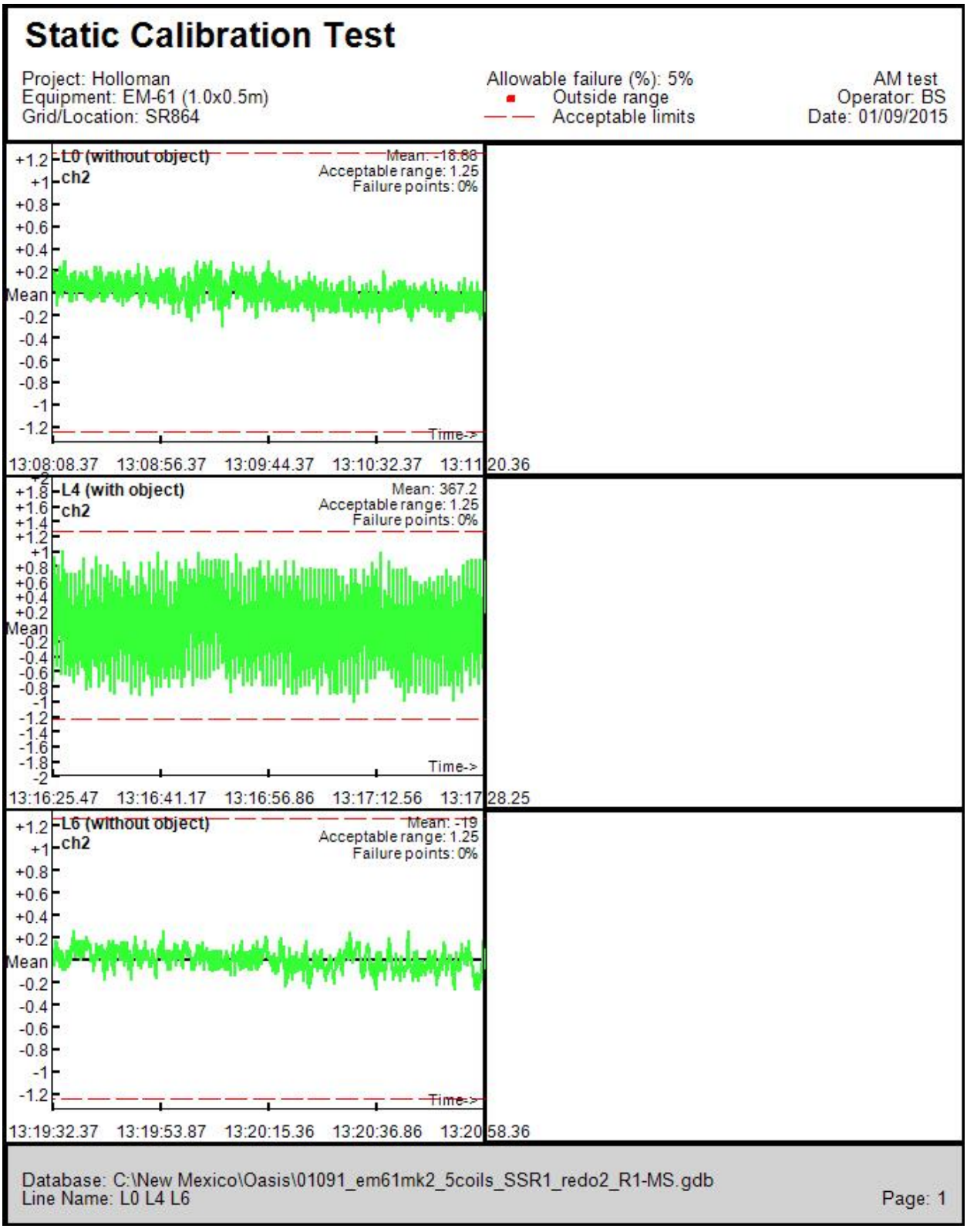


Figure C-237
1/9/2015 EM61 SSR AM Sensor R2 SR864 MRS

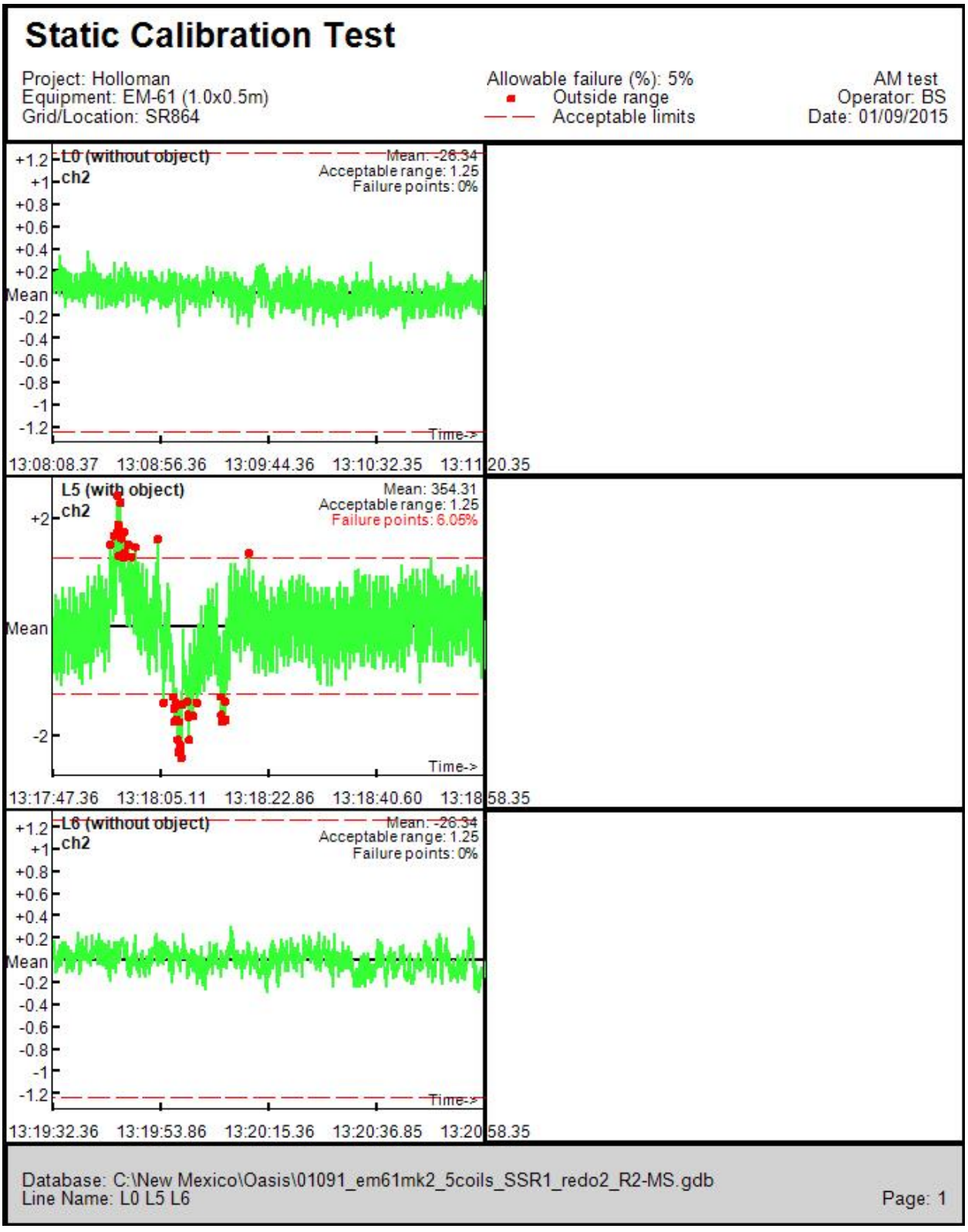


Figure C-238
1/9/2015 EM61 SSR PM Sensor C SR864 MRS

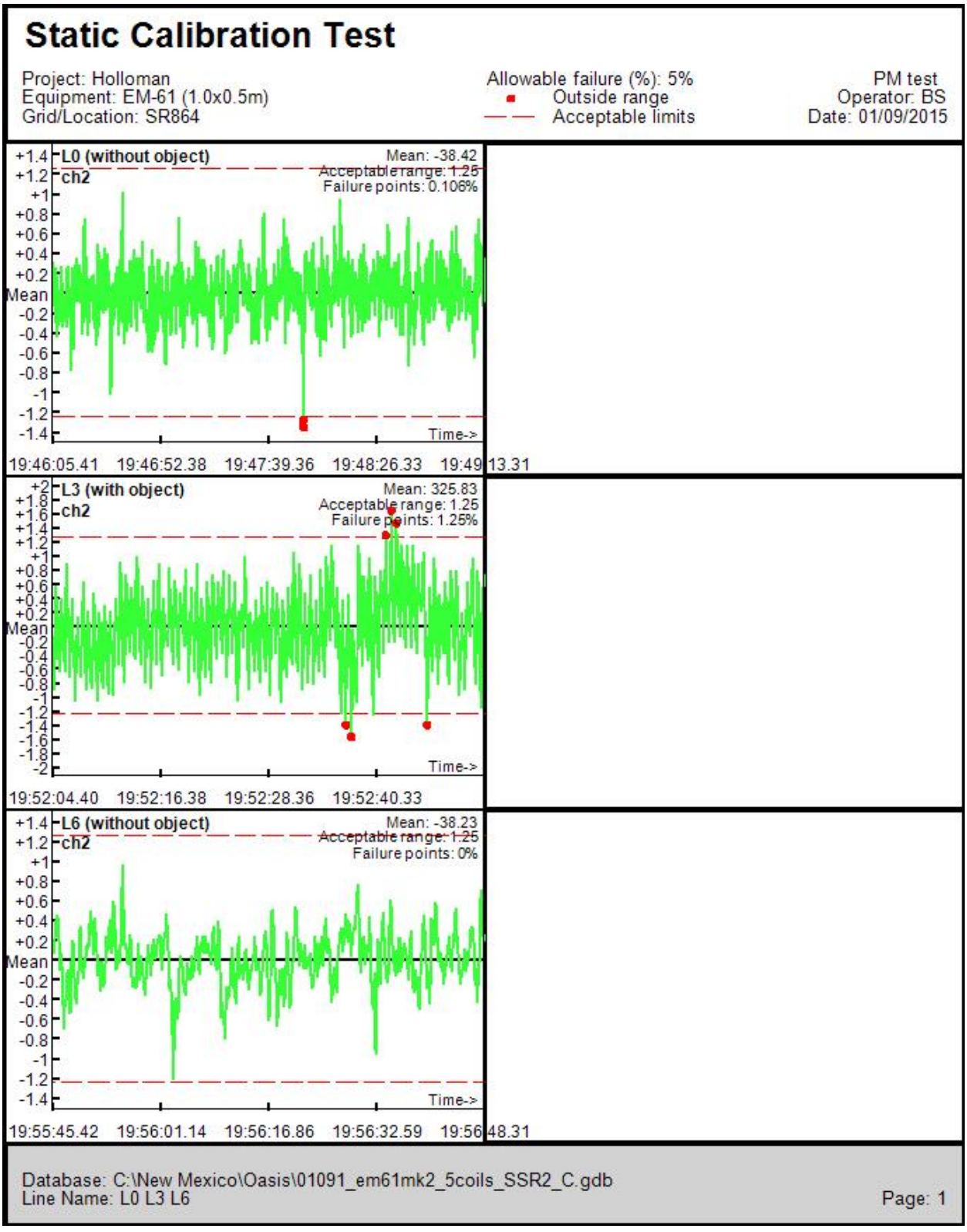


Figure C-239
1/9/2015 EM61 SSR PM Sensor L1 SR864 MRS

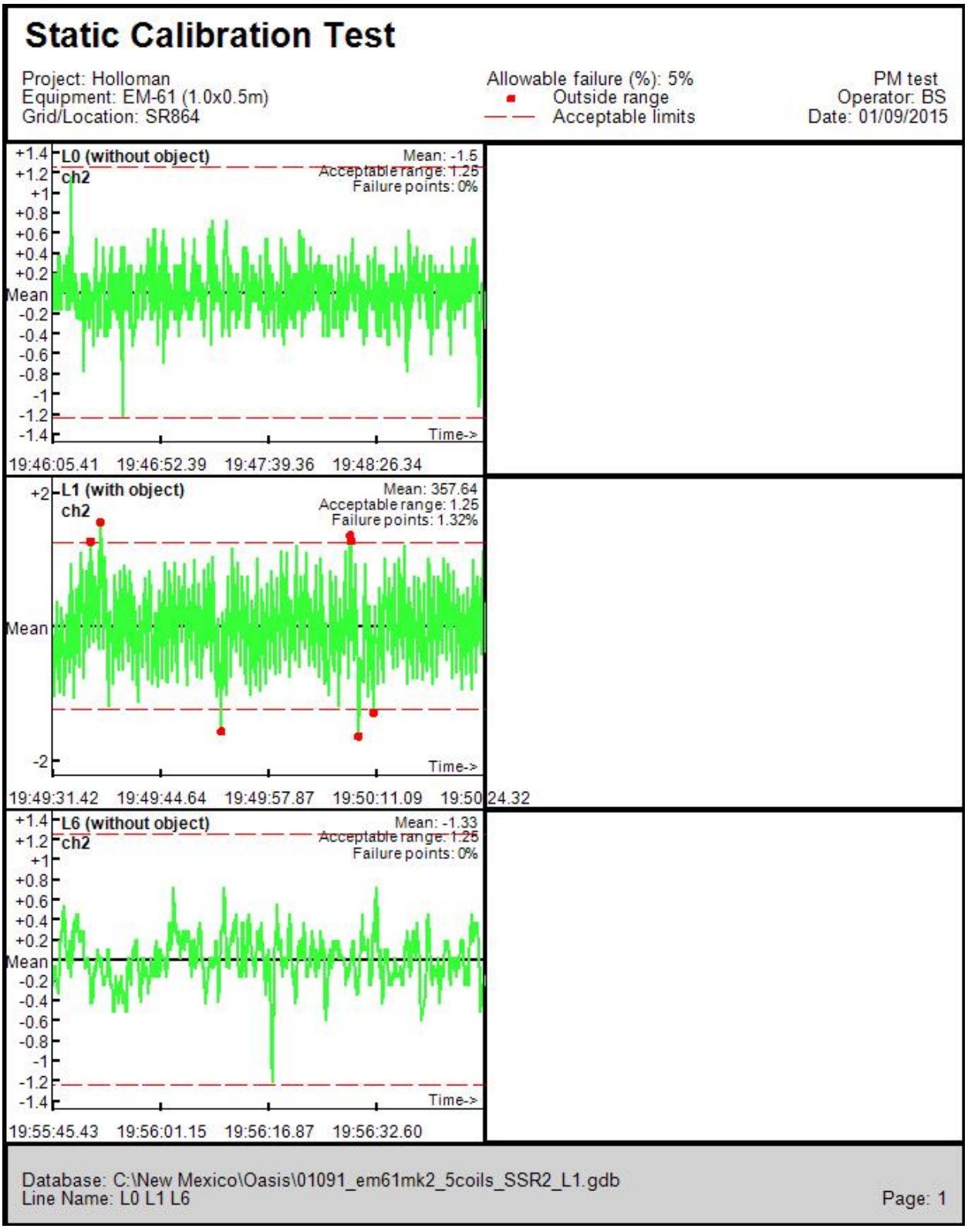


Figure C-240
1/9/2015 EM61 SSR PM Sensor L2 SR864 MRS

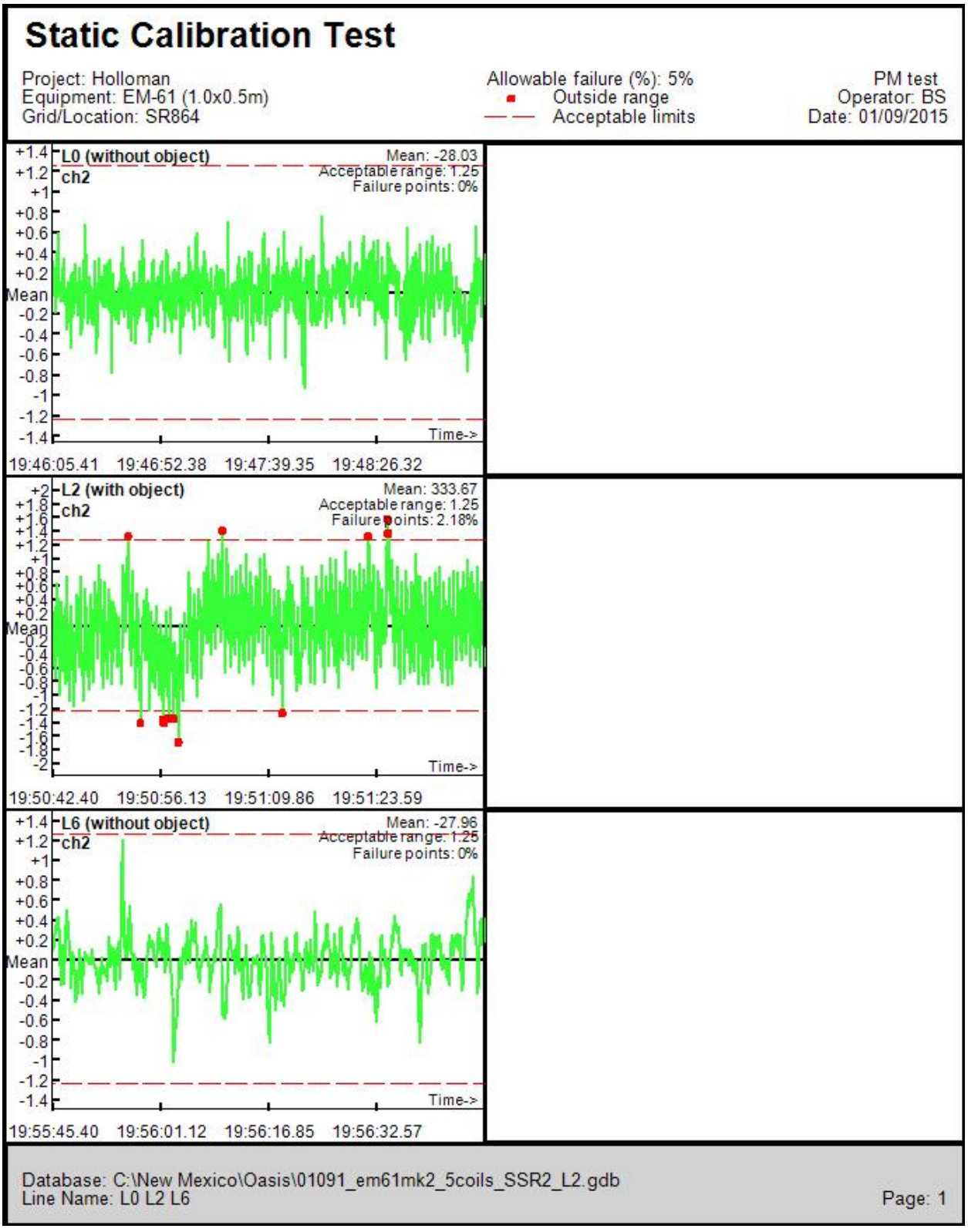


Figure C-241
1/9/2015 EM61 SSR PM Sensor R1 SR864 MRS

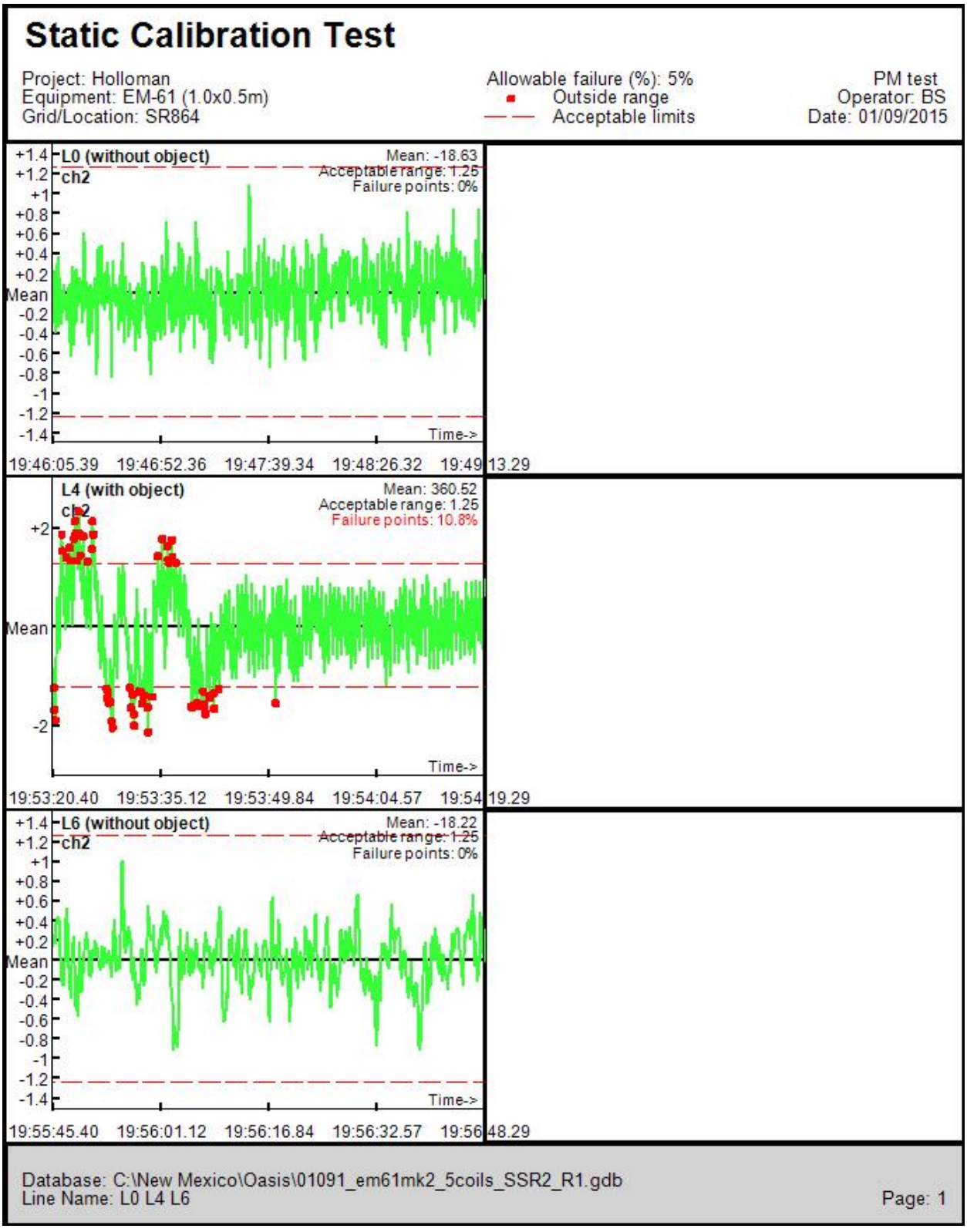


Figure C-242
1/9/2015 EM61 SSR PM Sensor R2 SR864 MRS

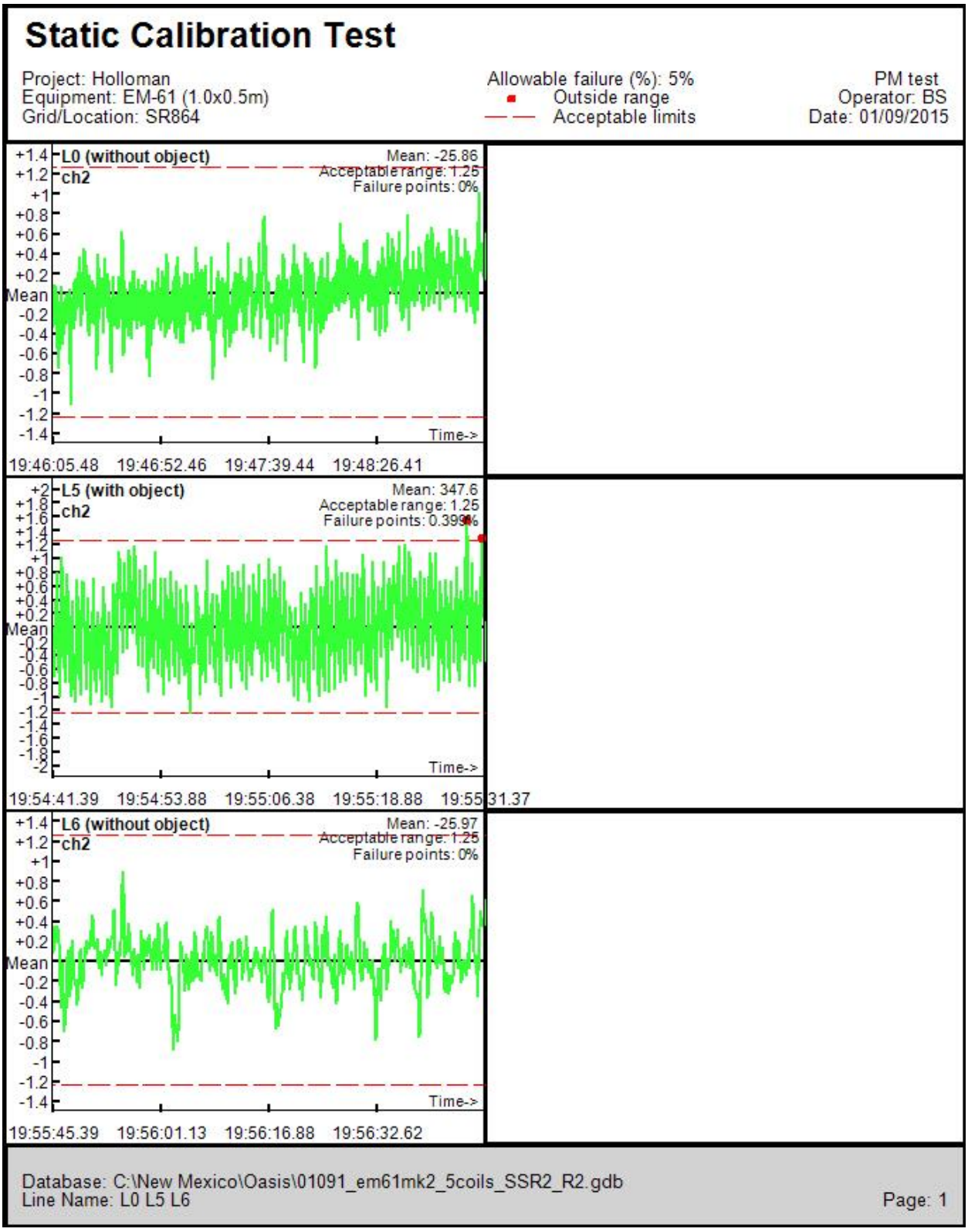


Figure C-243
1/13/2015 EM61 SSR AM Sensor C XU854 MRS

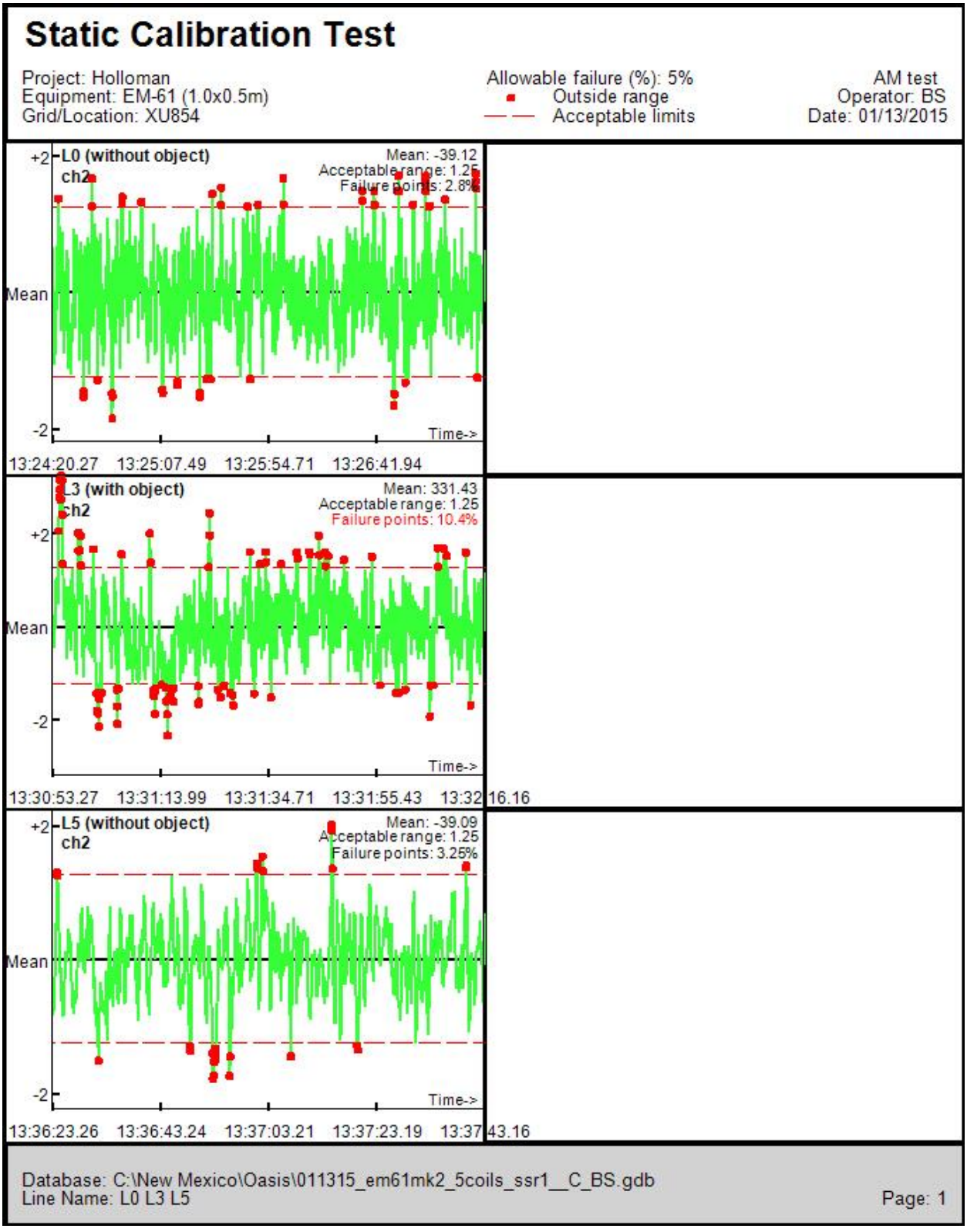


Figure C-244
1/13/2015 EM61 SSR AM Sensor L1 XU854 MRS

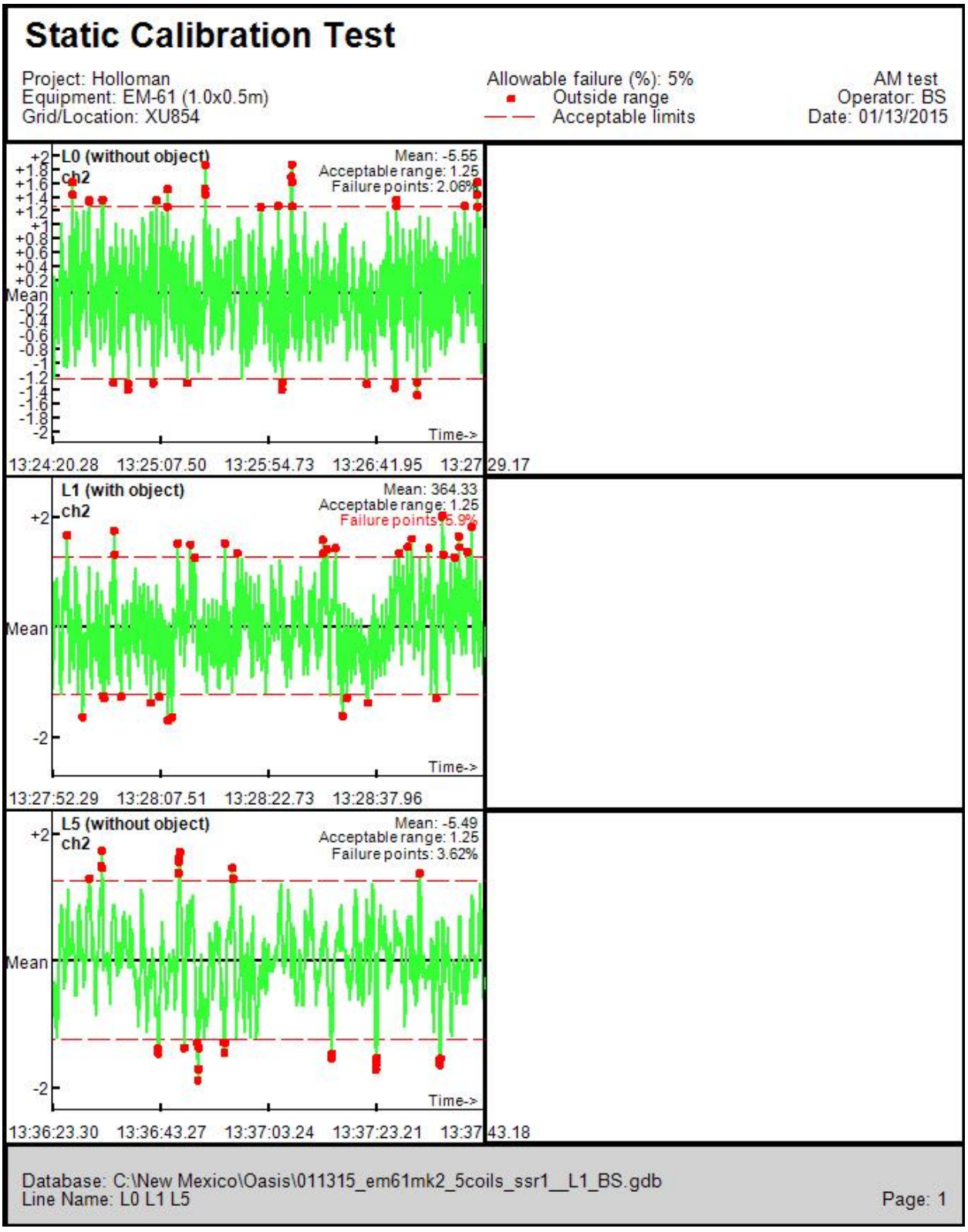


Figure C-245
1/13/2015 EM61 SSR AM Sensor L2 XU854 MRS

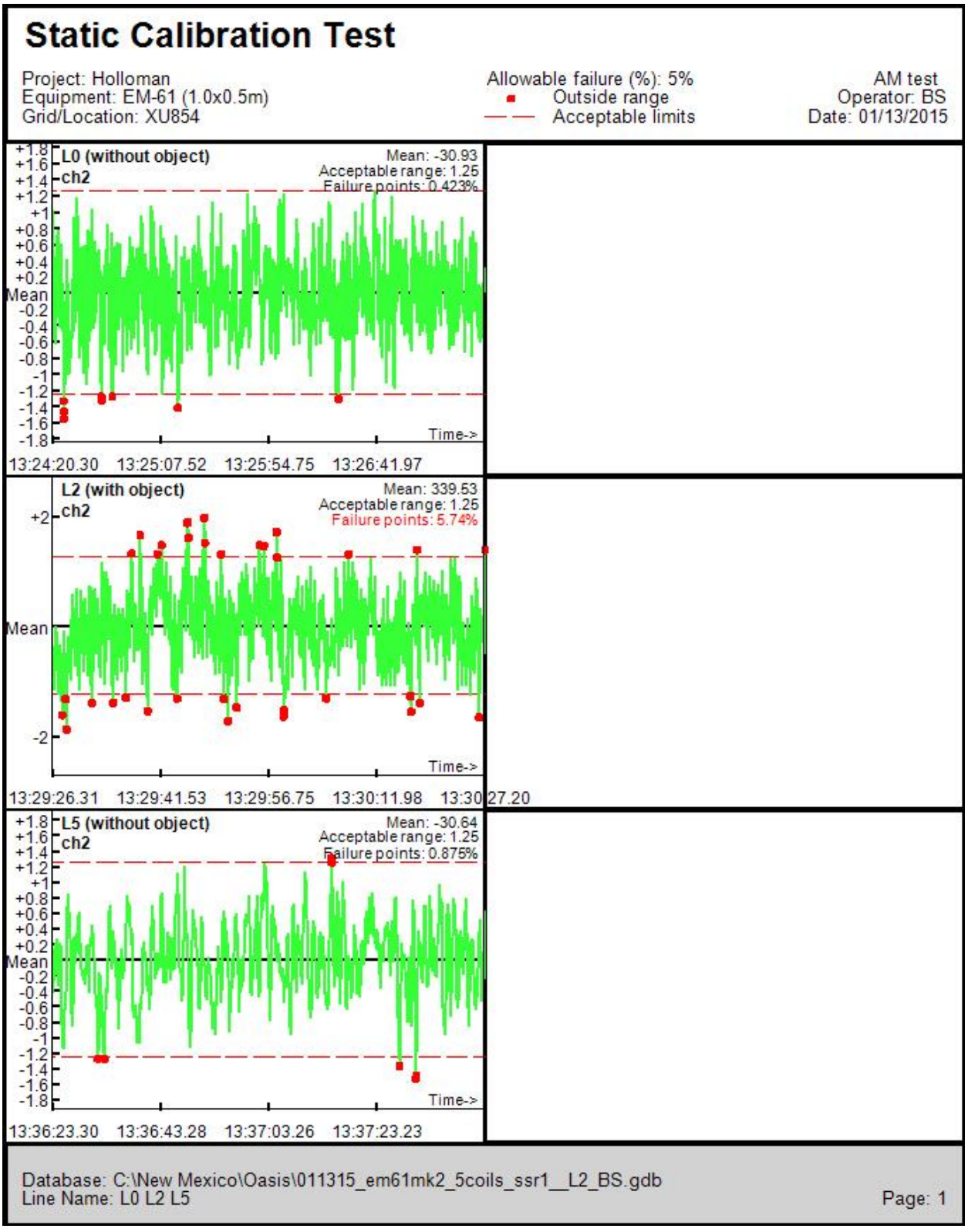


Figure C-246
1/13/2015 EM61 SSR AM Sensor R1 XU854 MRS

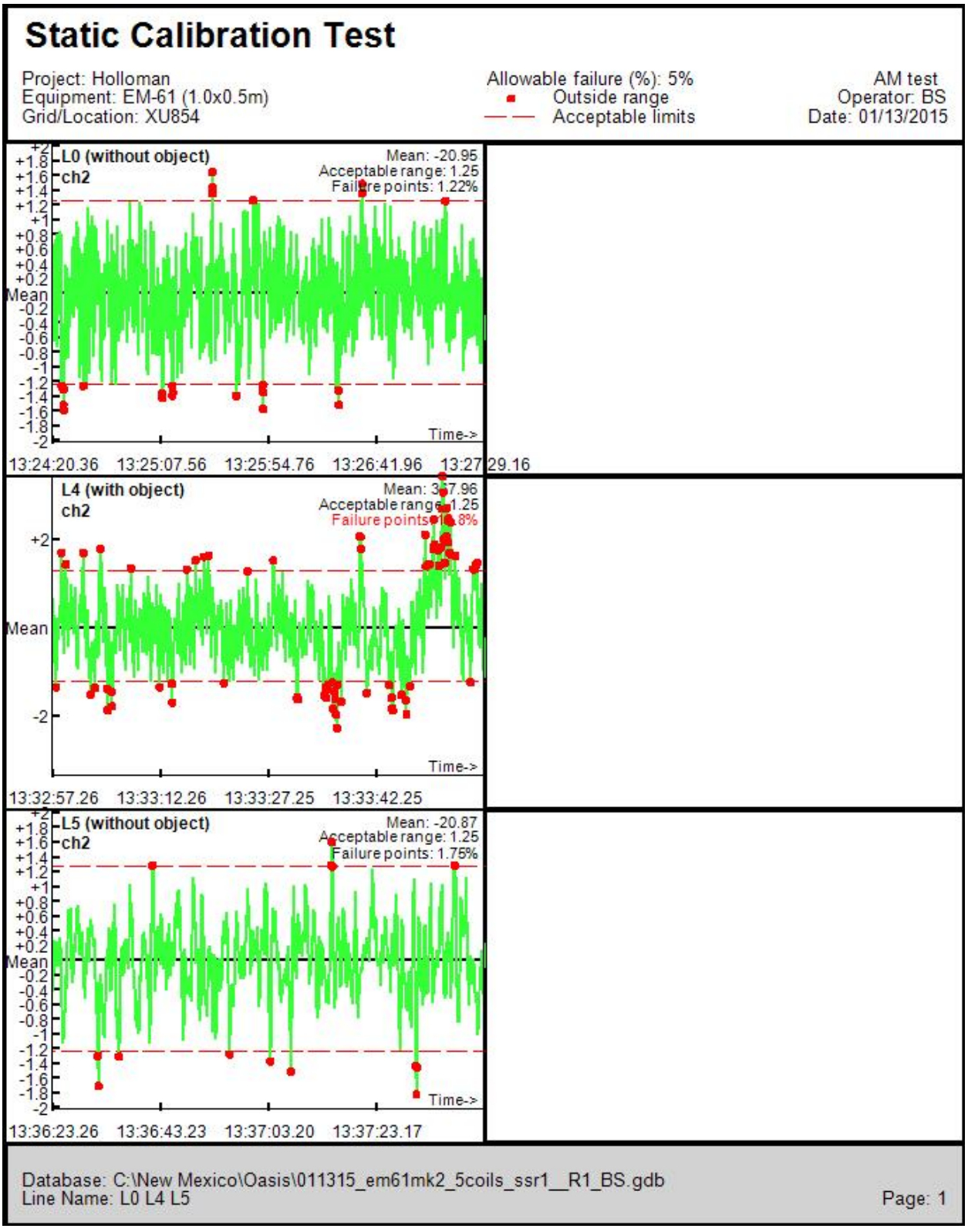


Figure C-247
1/13/2015 EM61 SSR AM Sensor R2 XU854 MRS

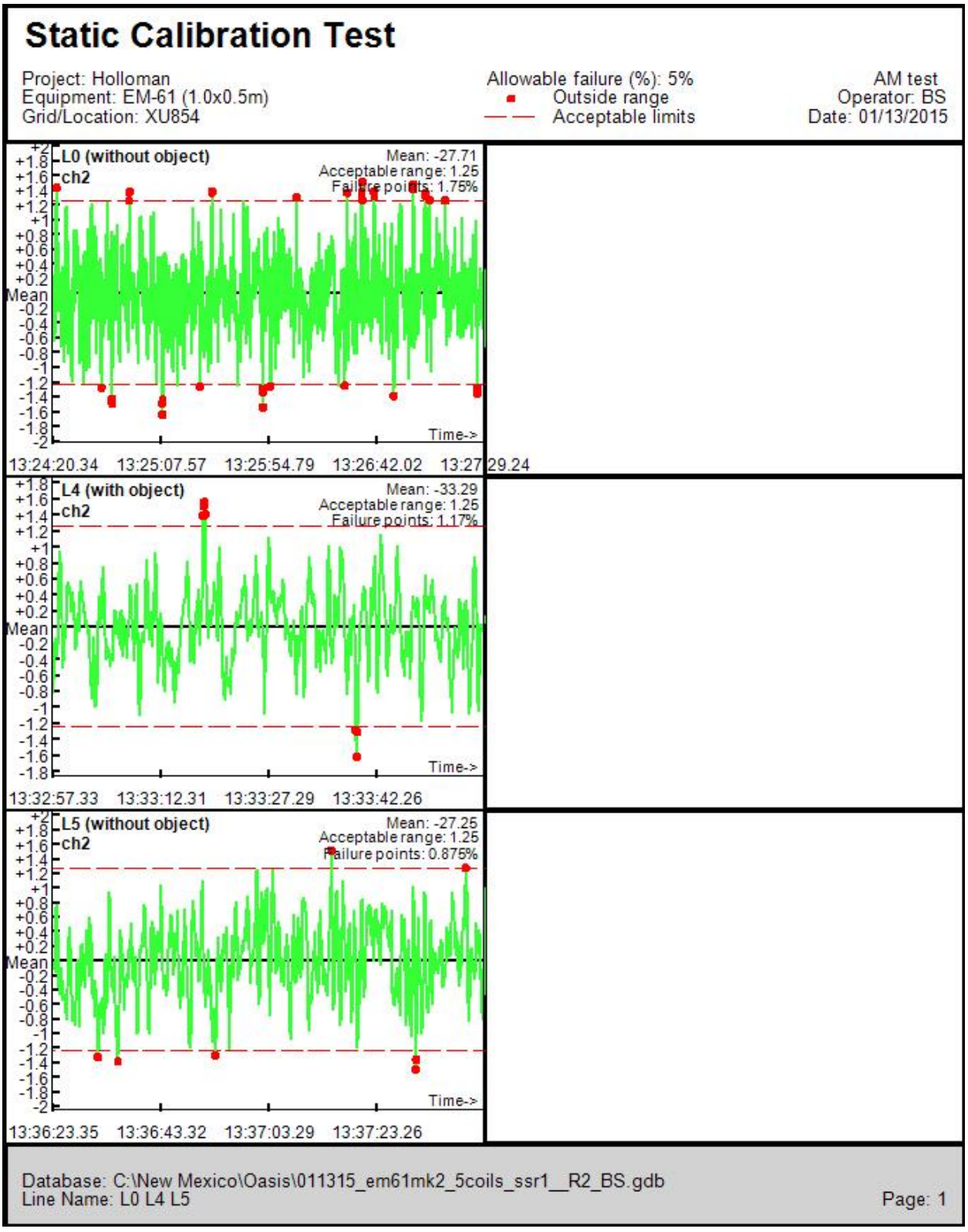


Figure C-248
1/13/2015 EM61 SSR PM Sensor C XU854 MRS

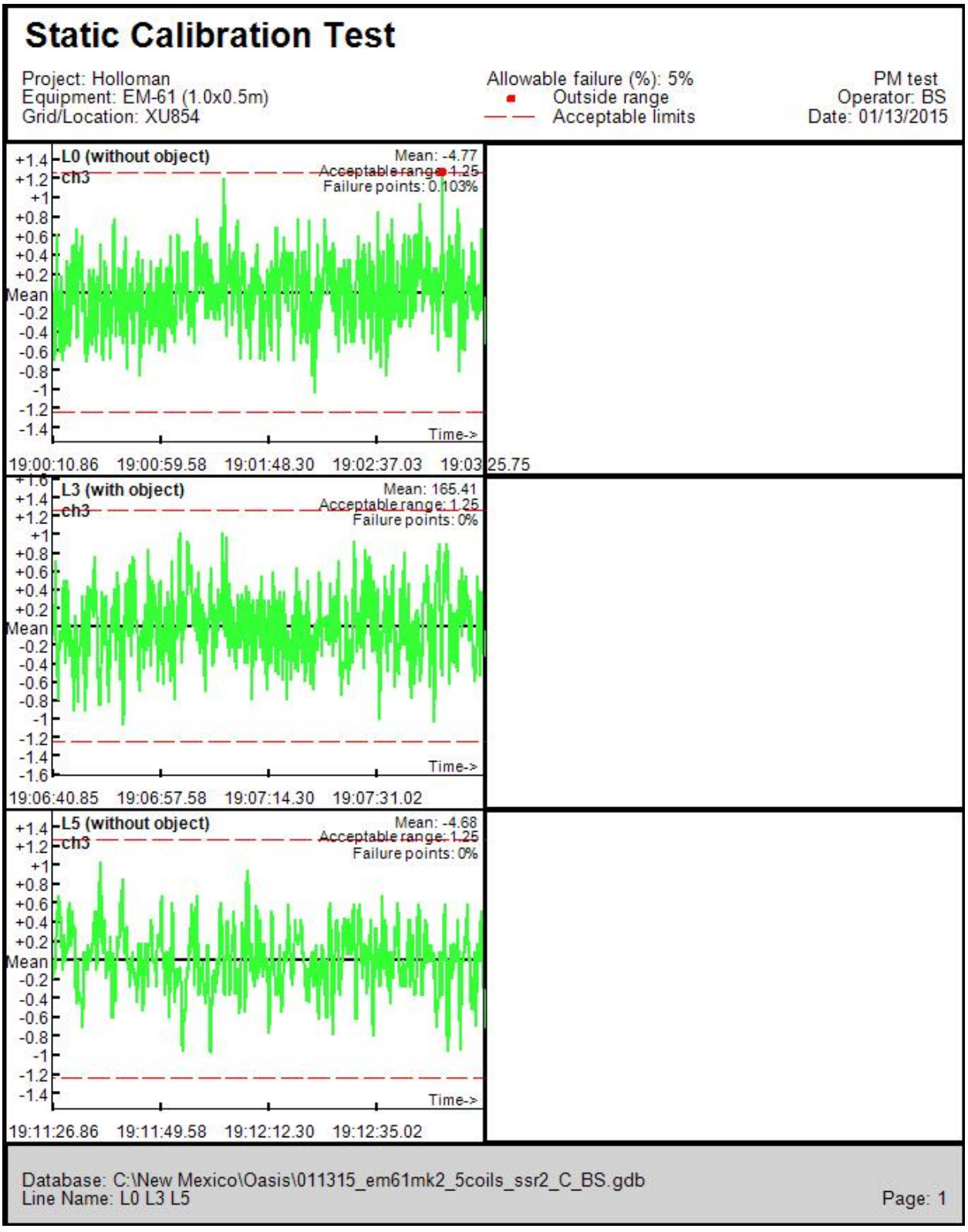


Figure C-249
1/13/2015 EM61 SSR PM Sensor L1 XU854 MRS

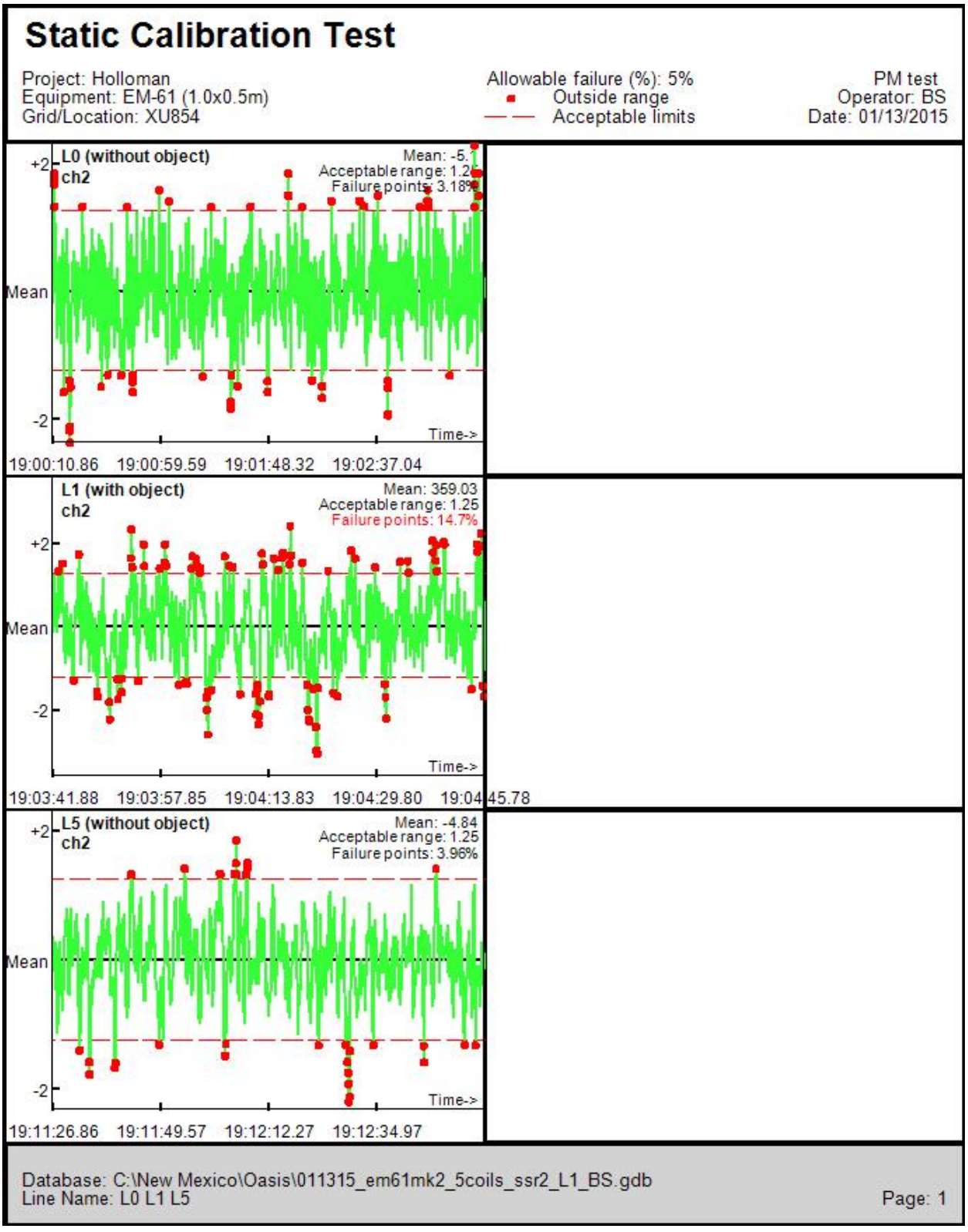


Figure C-250
1/13/2015 EM61 SSR PM Sensor L2 XU854 MRS

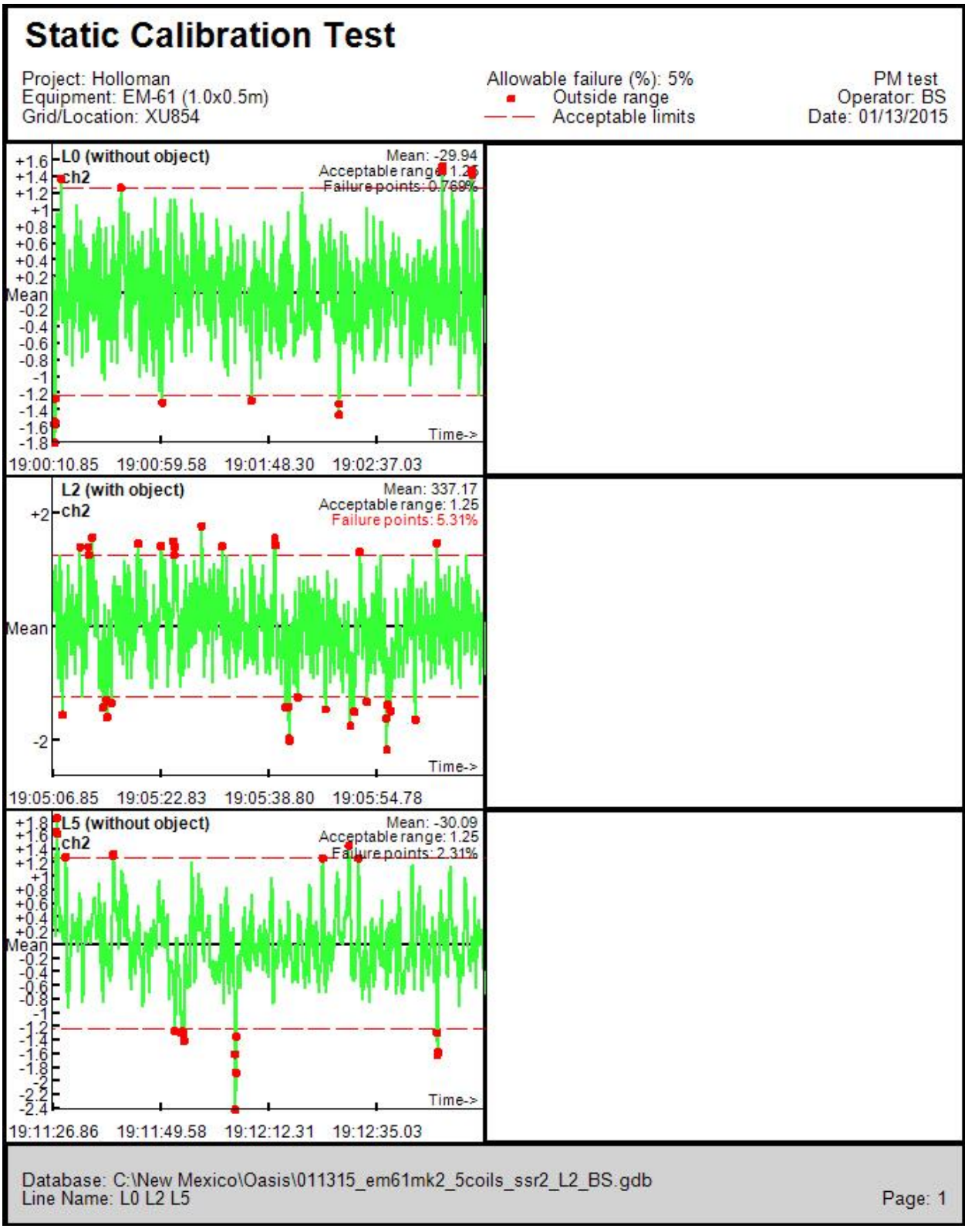


Figure C-251
1/13/2015 EM61 SSR PM Sensor R1 XU854 MRS

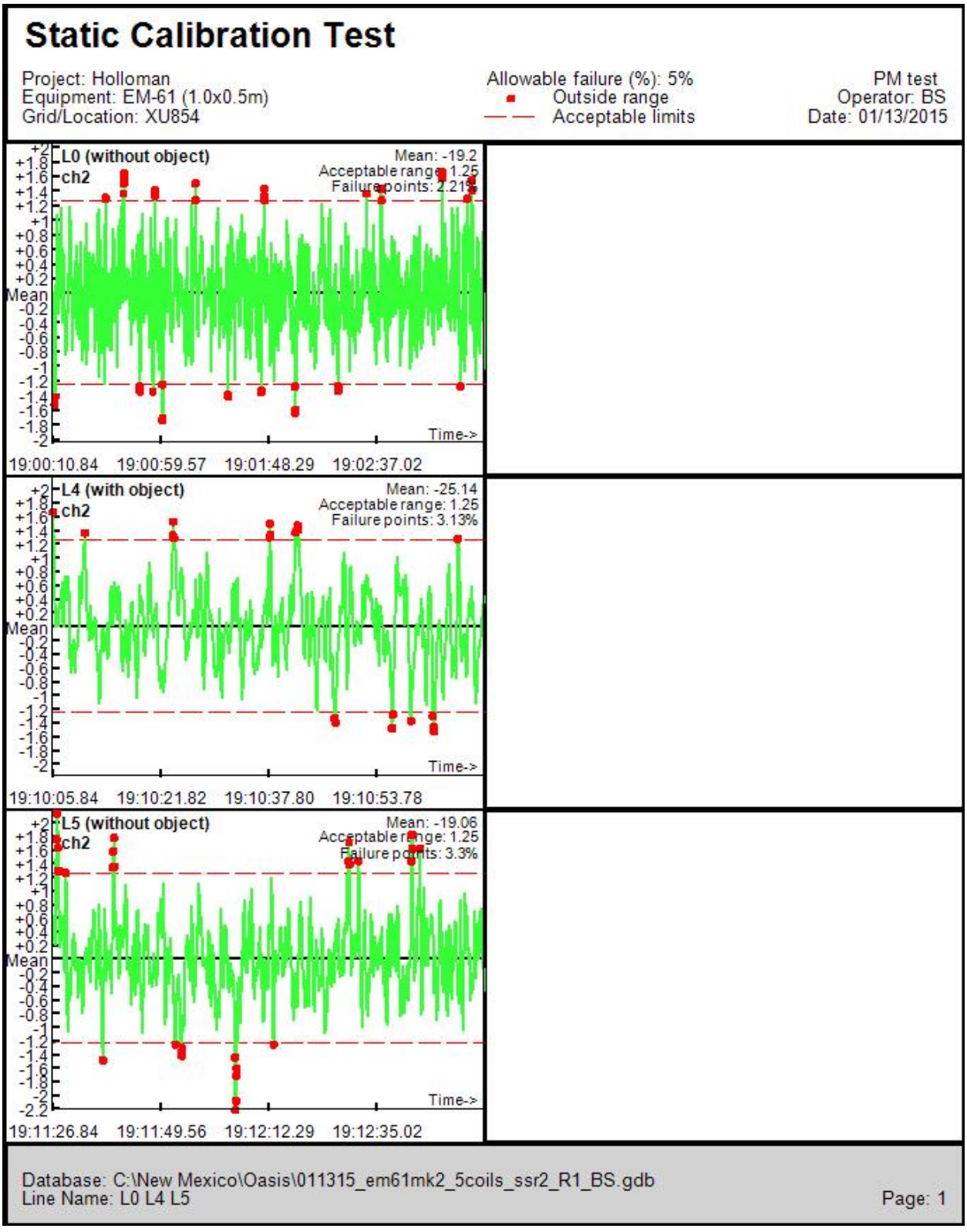


Figure C-252
1/13/2015 EM61 SSR PM Sensor R2 XU854 MRS

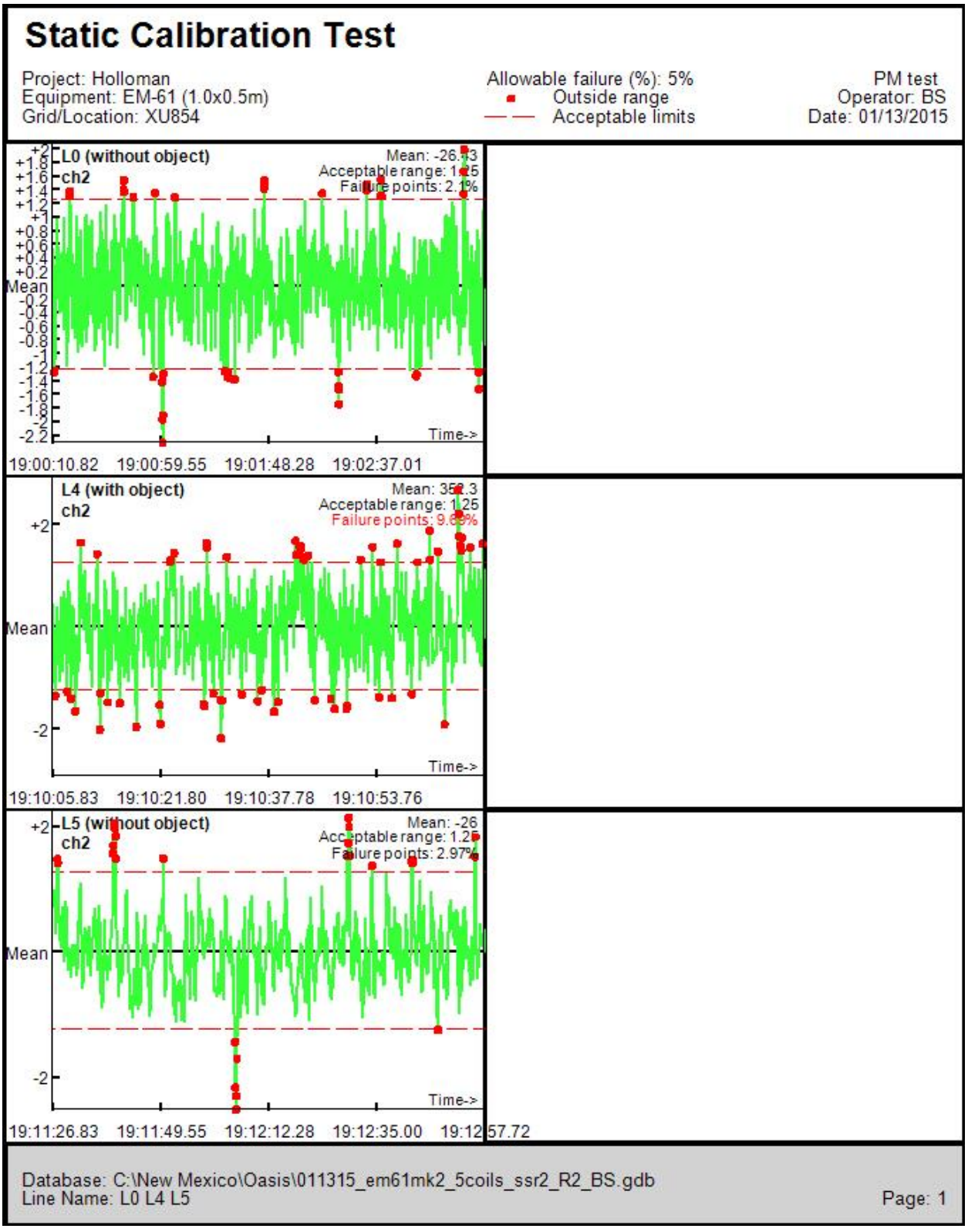


Figure C-253
1/20/2015 EM61 SSR AM Sensor C XU854 MRS

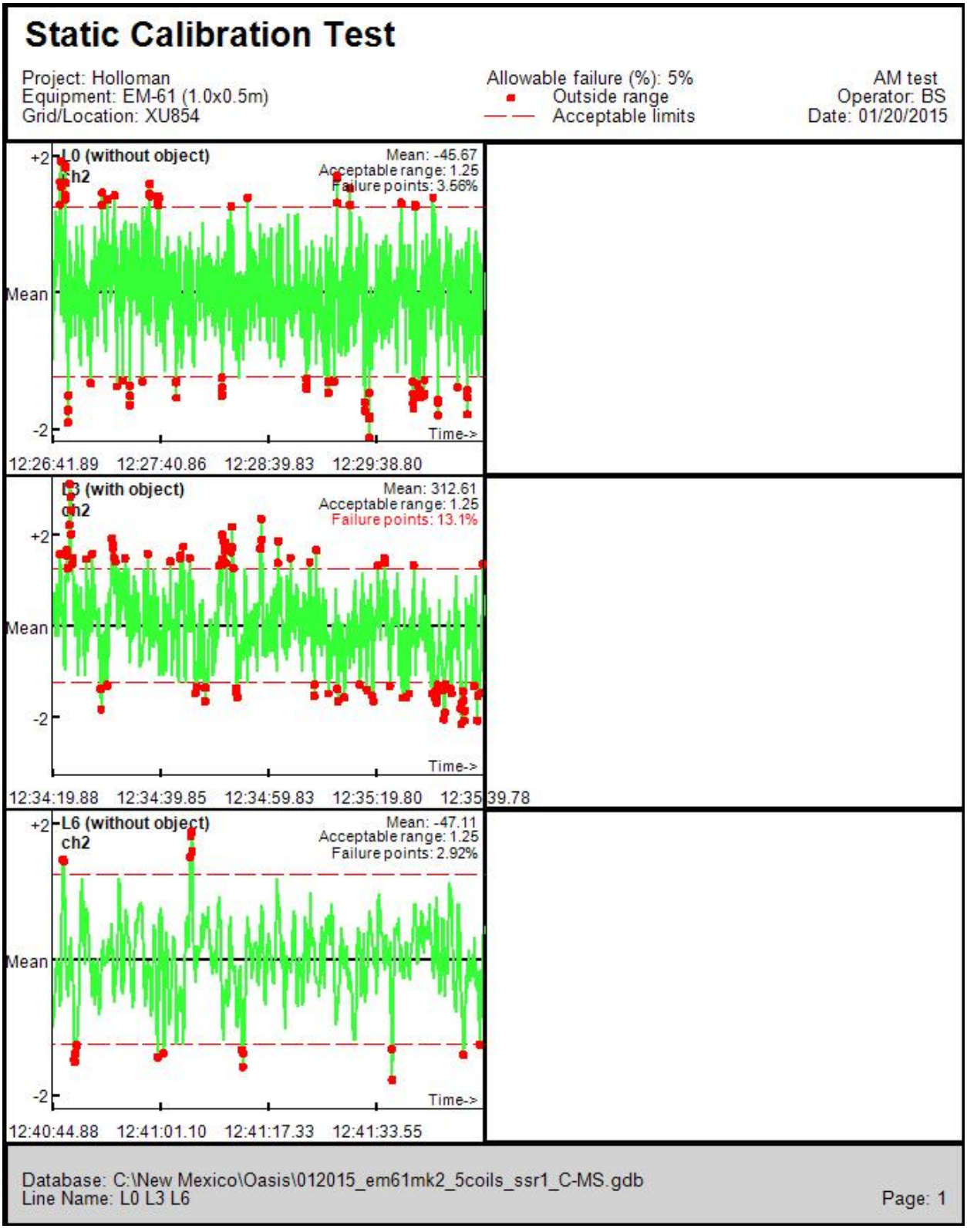


Figure C-254
1/20/2015 EM61 SSR AM Sensor L1 XU854 MRS

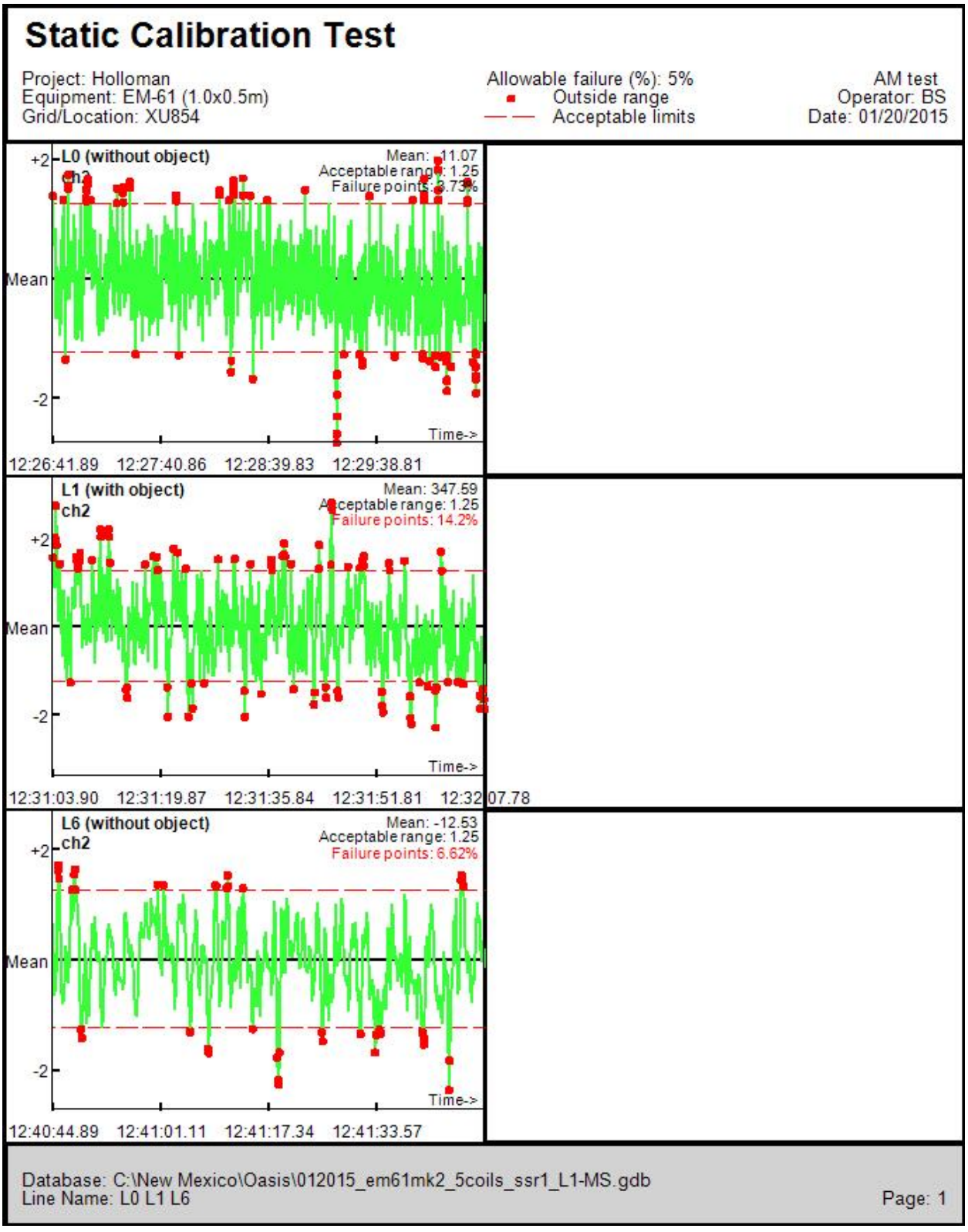


Figure C-255
1/20/2015 EM61 SSR AM Sensor L2 XU854 MRS

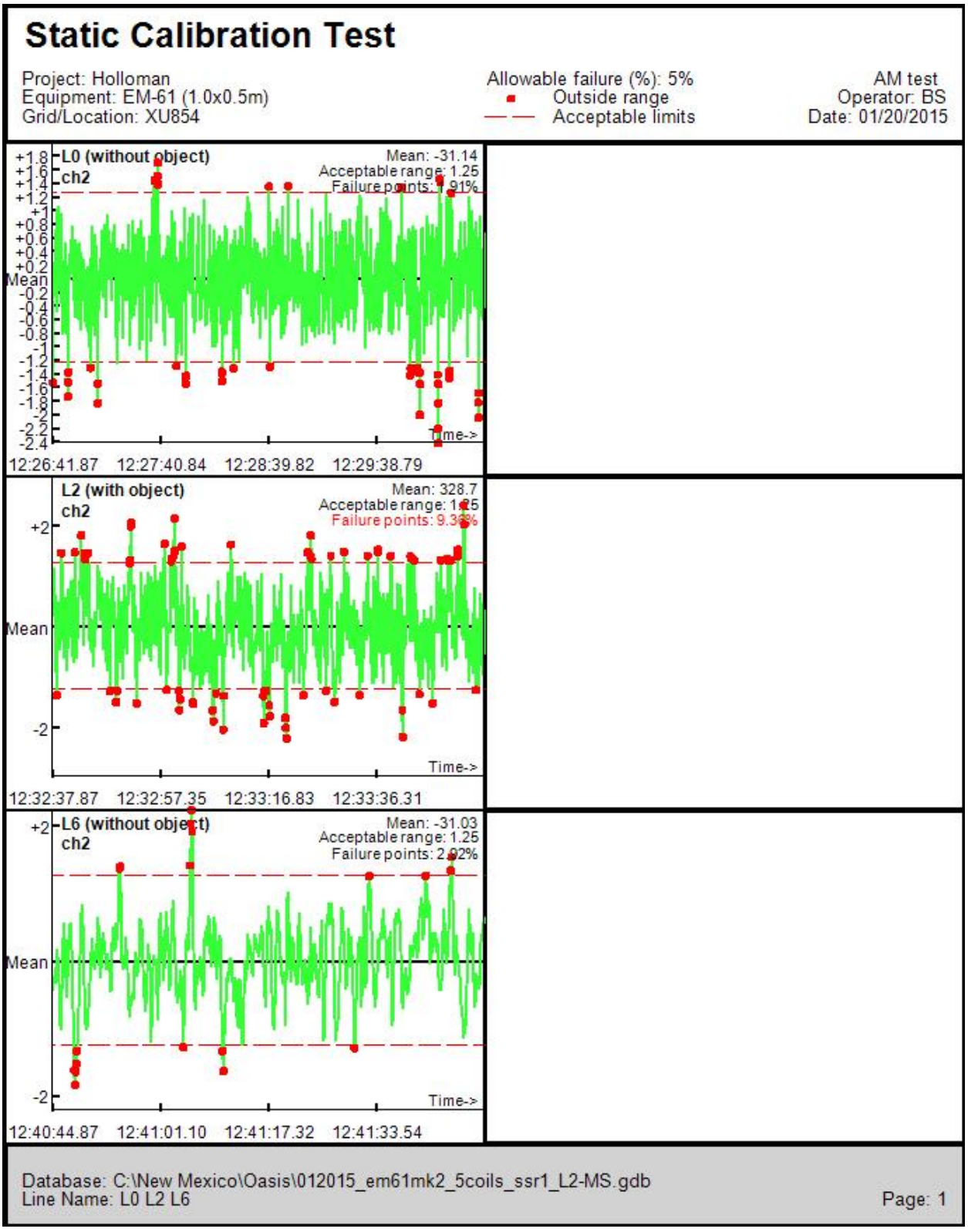


Figure C-256
1/20/2015 EM61 SSR AM Sensor R1 XU854 MRS

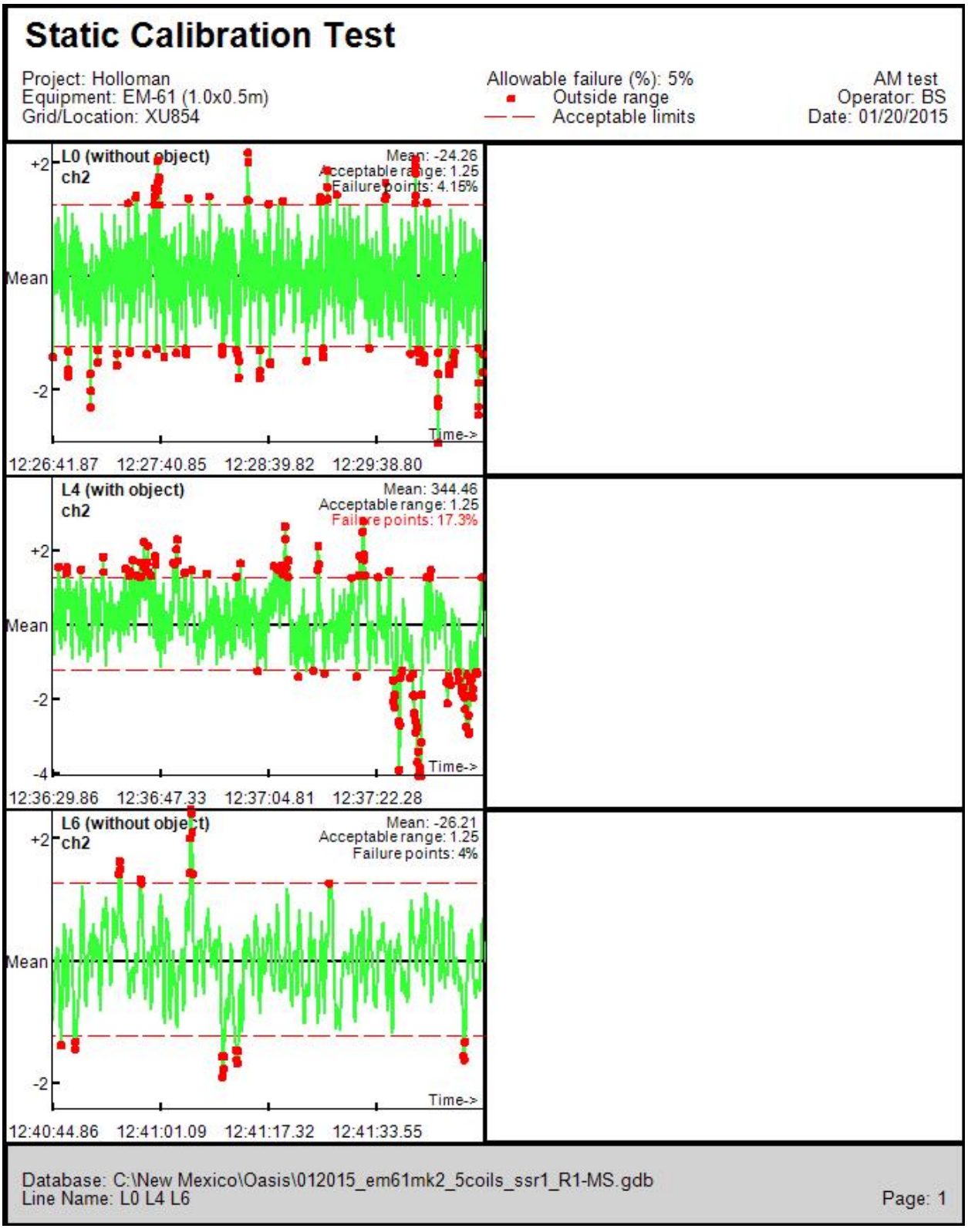


Figure C-257
1/20/2015 EM61 SSR AM Sensor R2 XU854 MRS

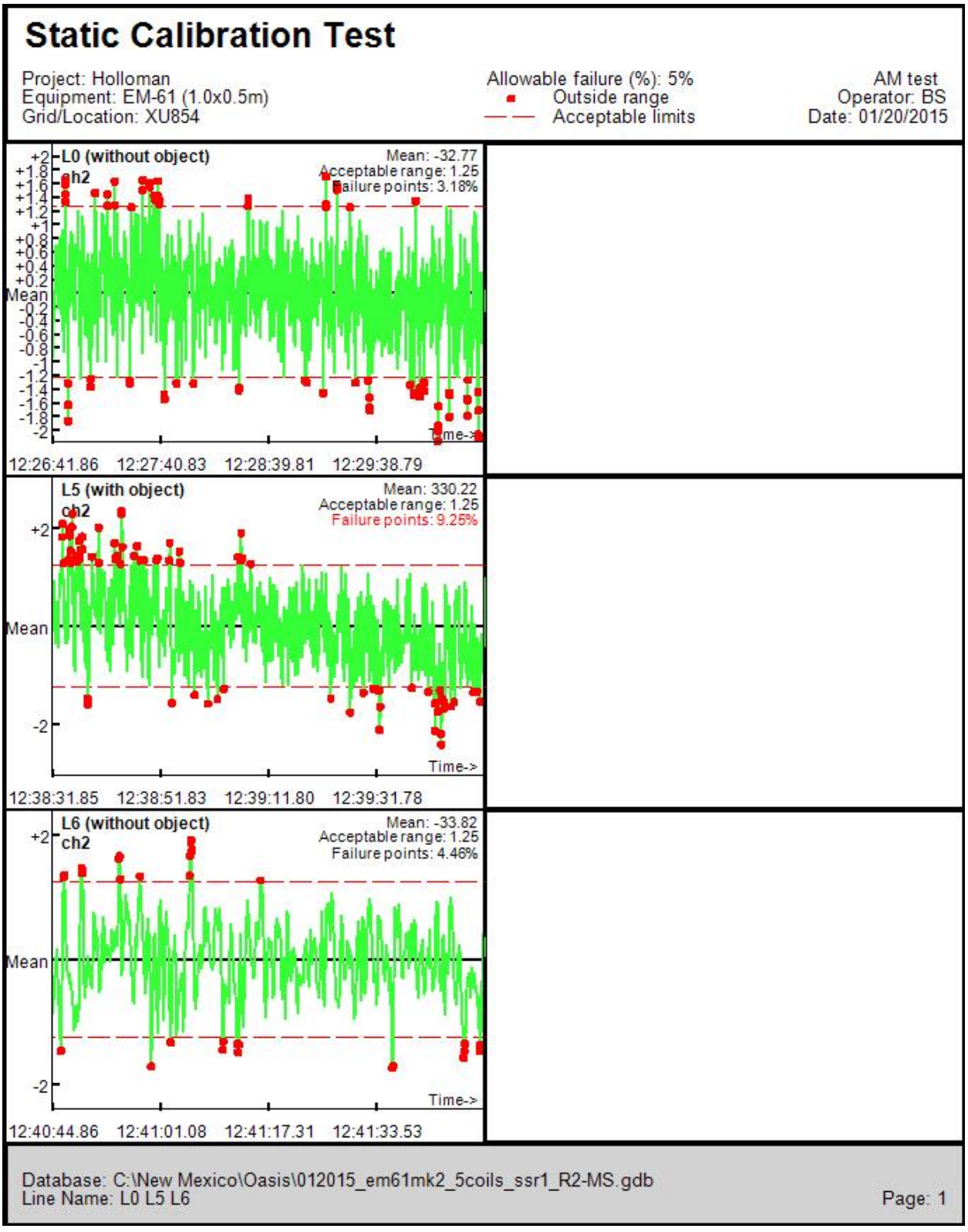


Figure C-258
1/20/2015 EM61 SSR PM Sensor C XU854 MRS

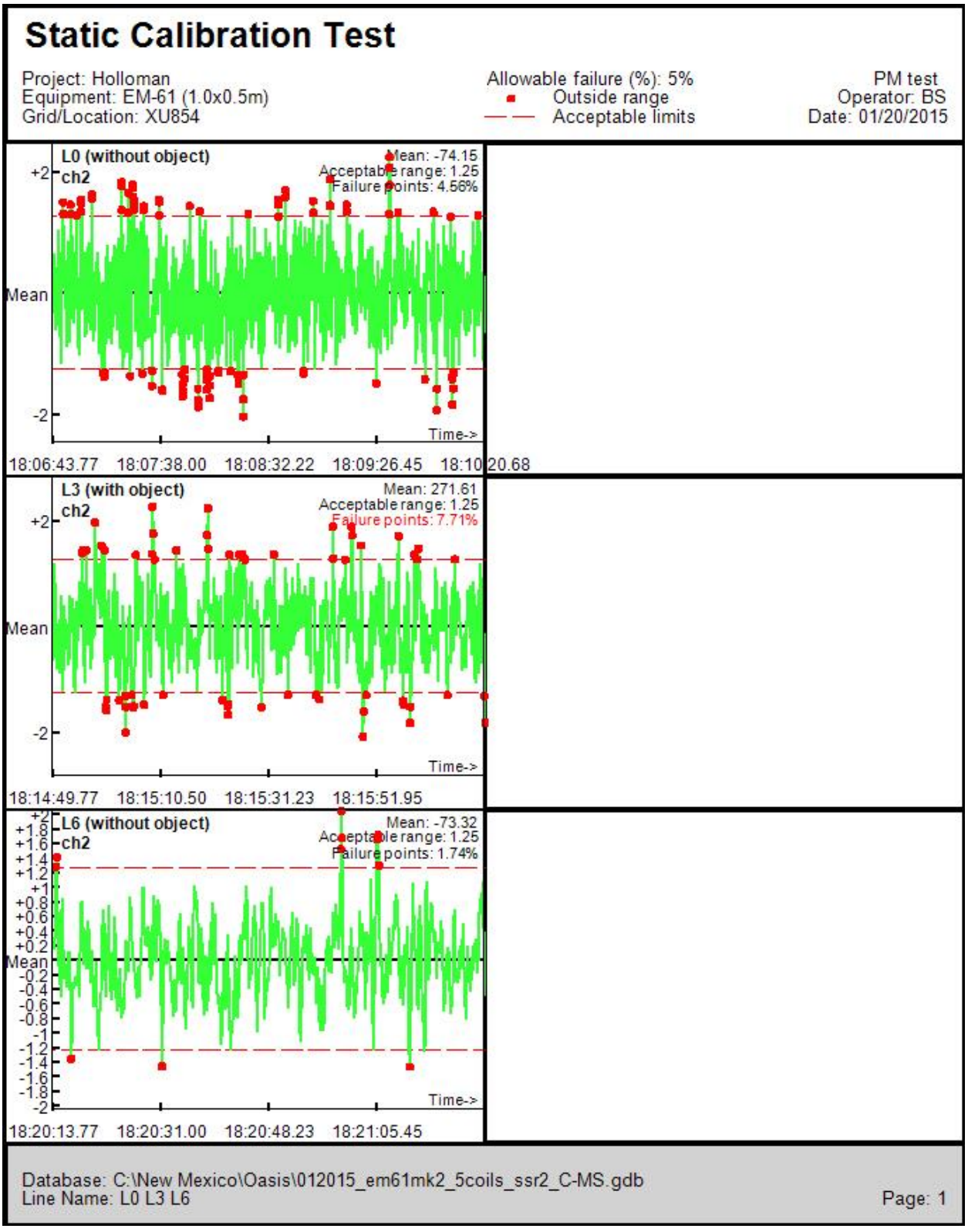


Figure C-259
1/20/2015 EM61 SSR PM Sensor L1 XU854 MRS

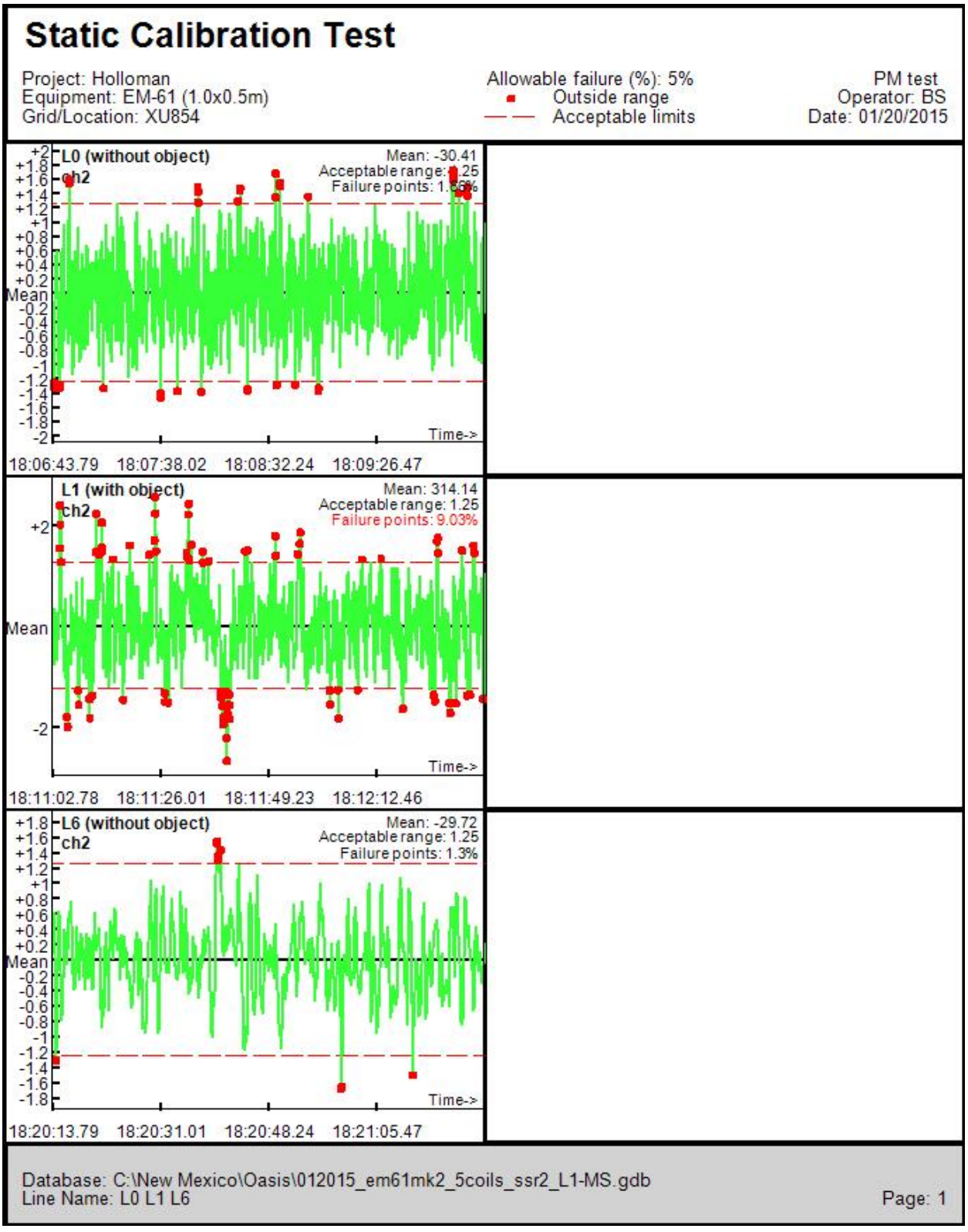


Figure C-260
1/20/2015 EM61 SSR PM Sensor L2 XU854 MRS

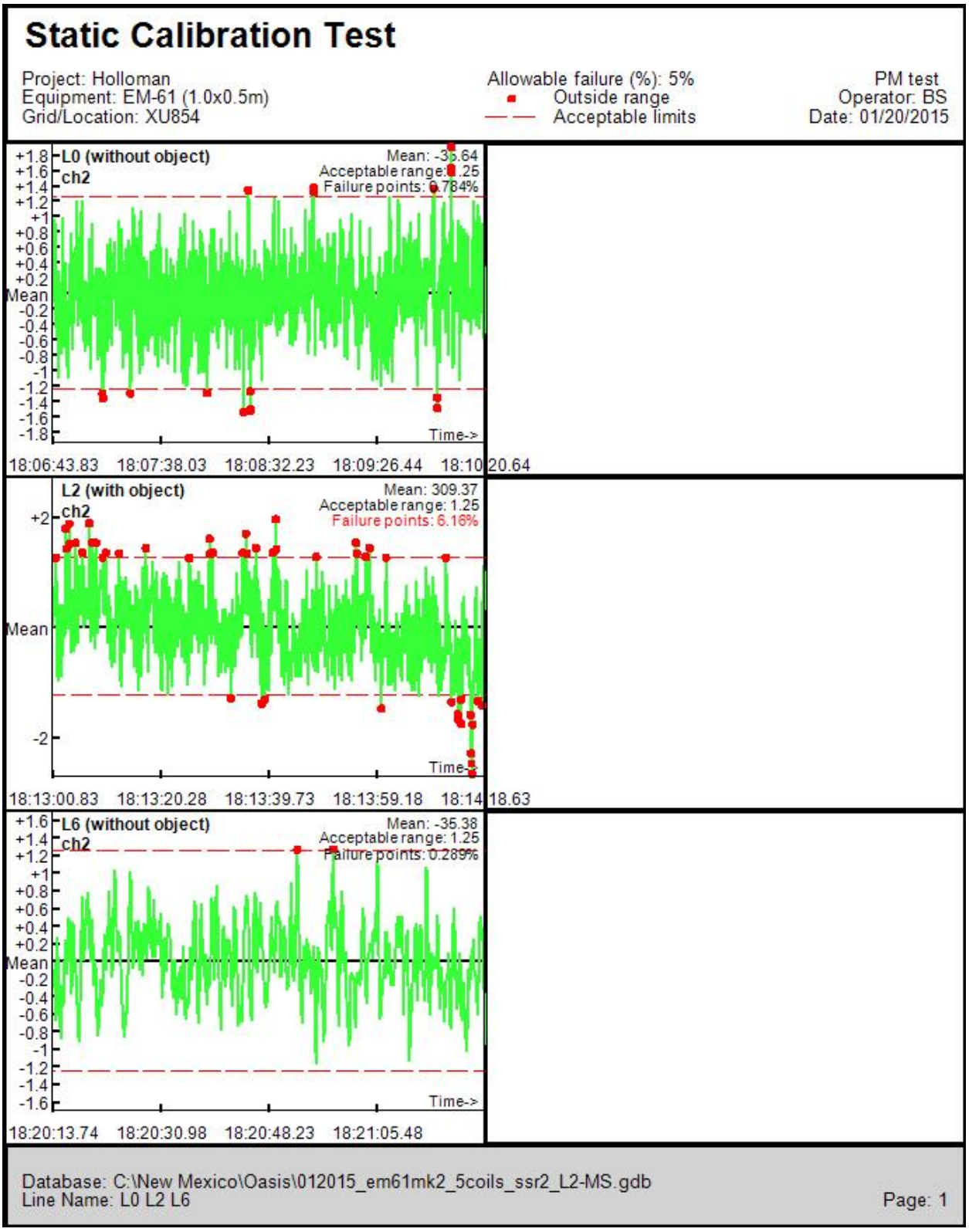


Figure C-261
1/20/2015 EM61 SSR PM Sensor R1 XU854 MRS

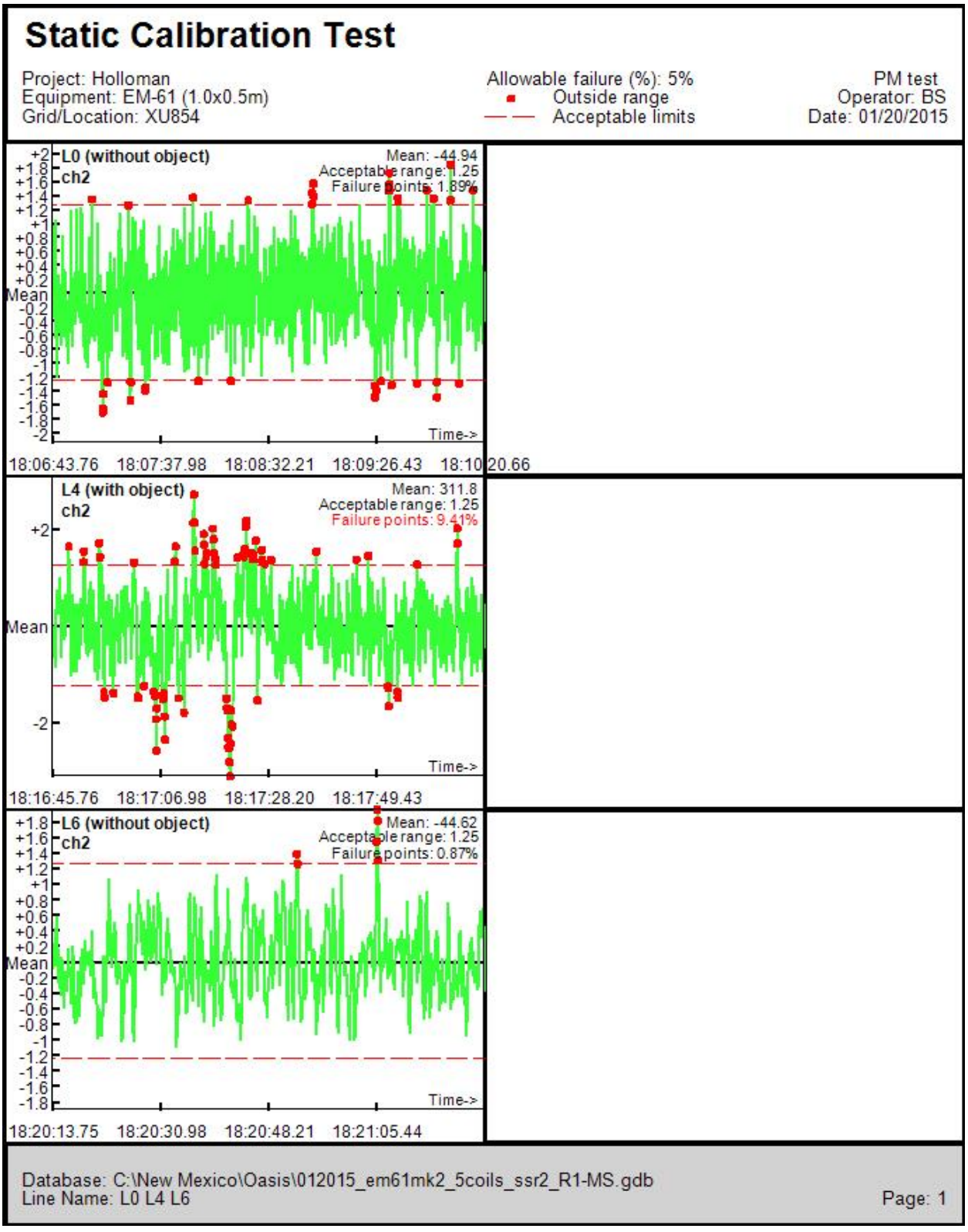


Figure C-262
1/20/2015 EM61 SSR PM Sensor R2 XU854 MRS

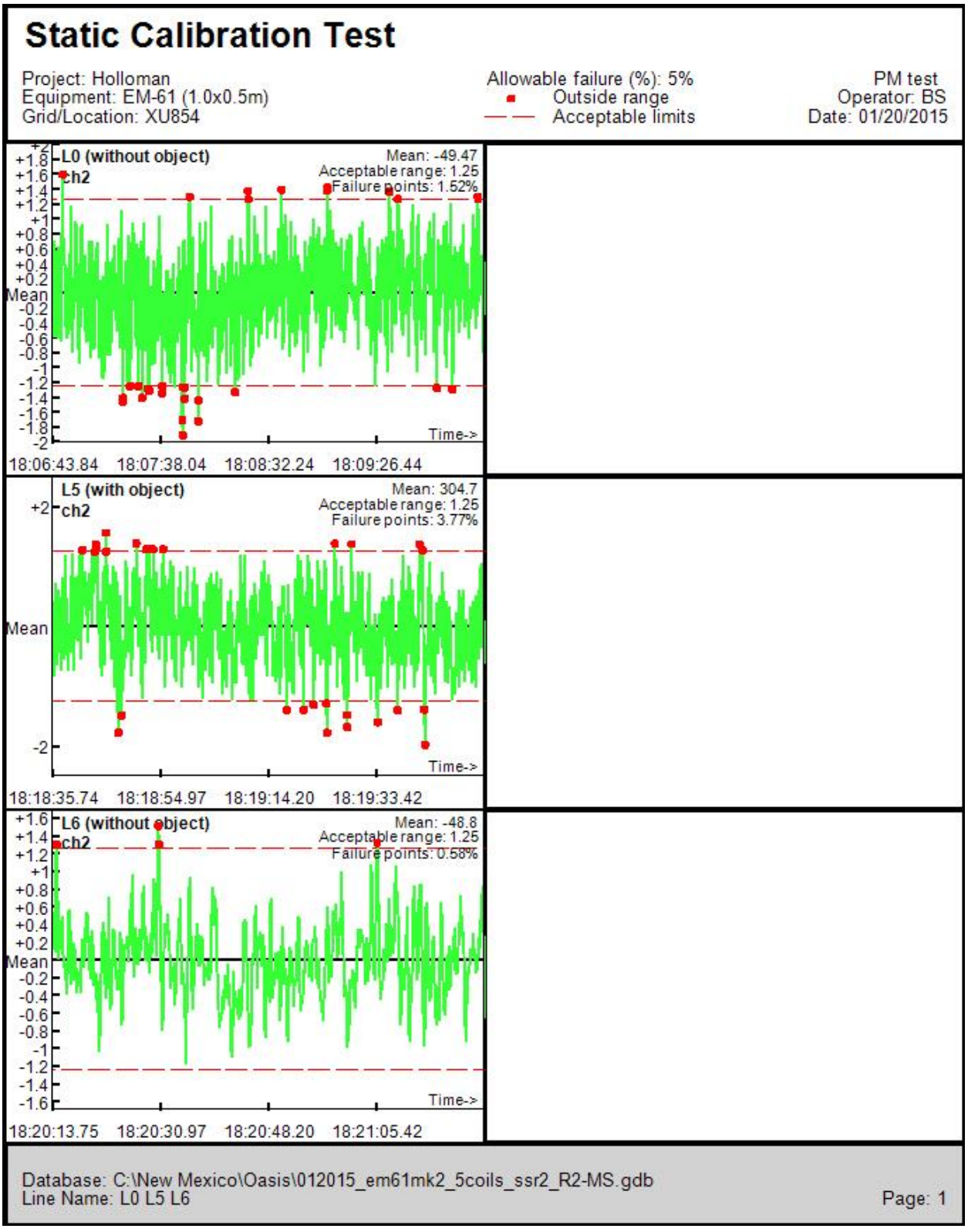


Figure C-263
1/23/2015 EM61 SSR AM Sensor C XU854 MRS

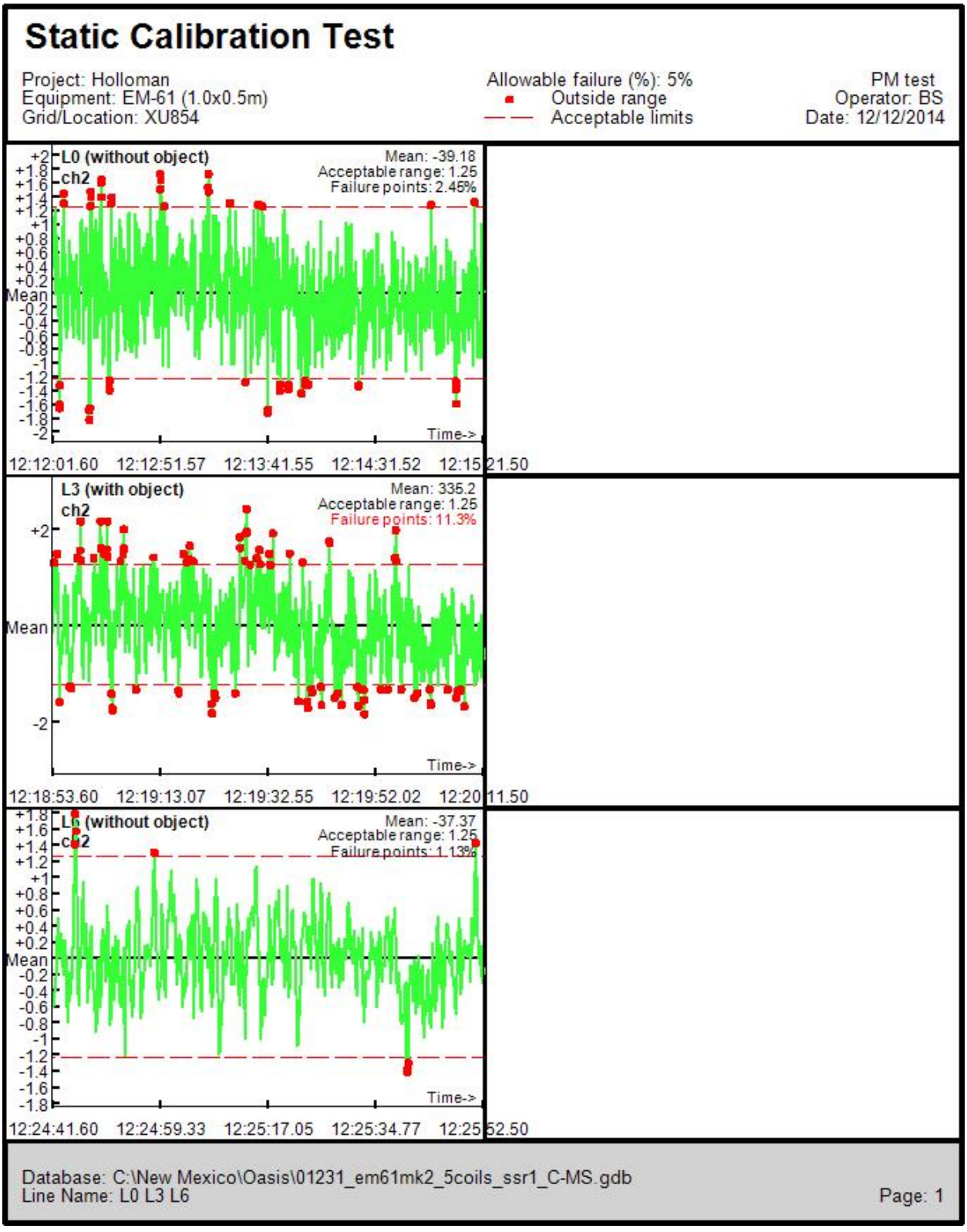


Figure C-264
1/23/2015 EM61 SSR AM Sensor L1 XU854 MRS

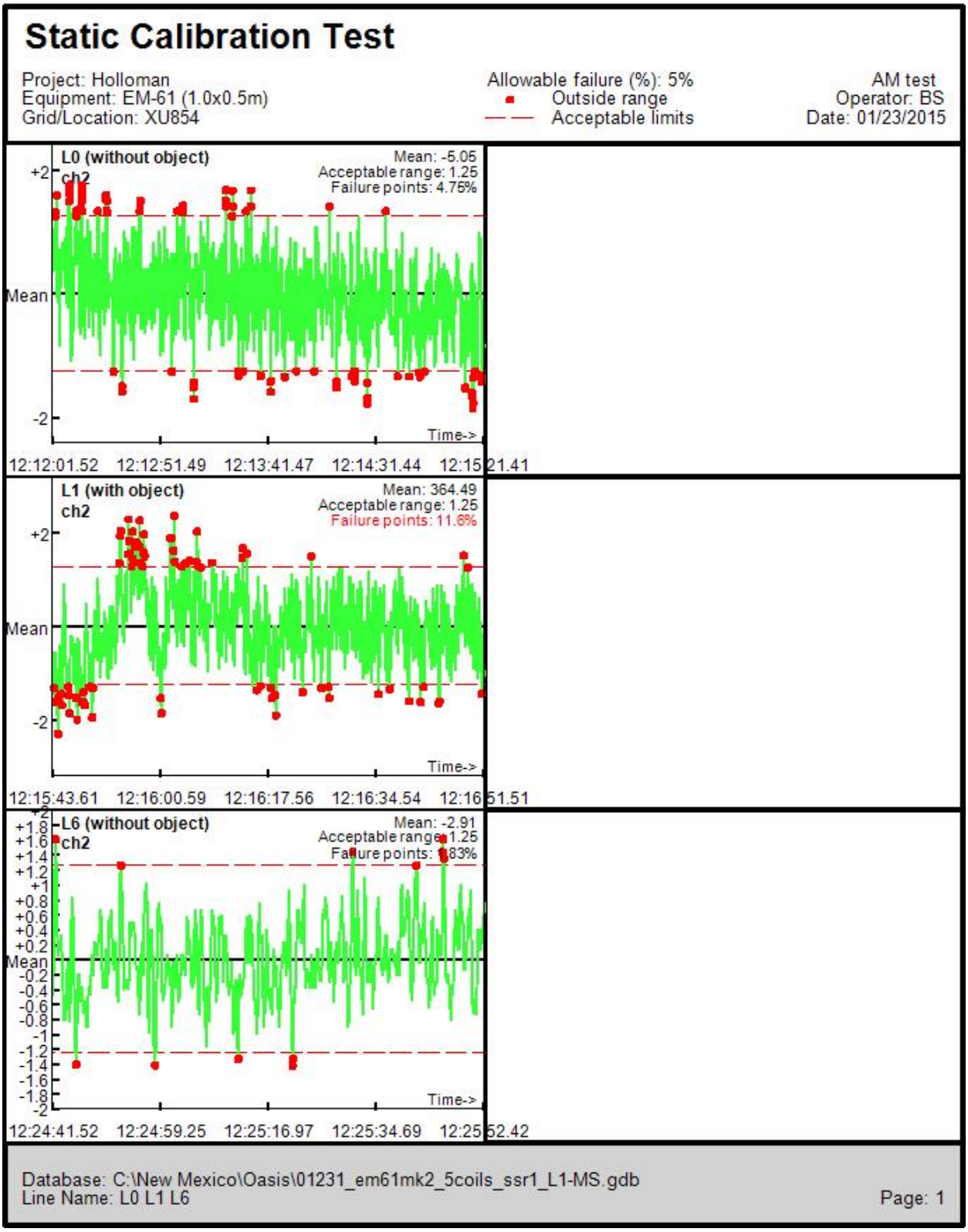


Figure C-265
1/23/2015 EM61 SSR AM Sensor L2 XU854 MRS

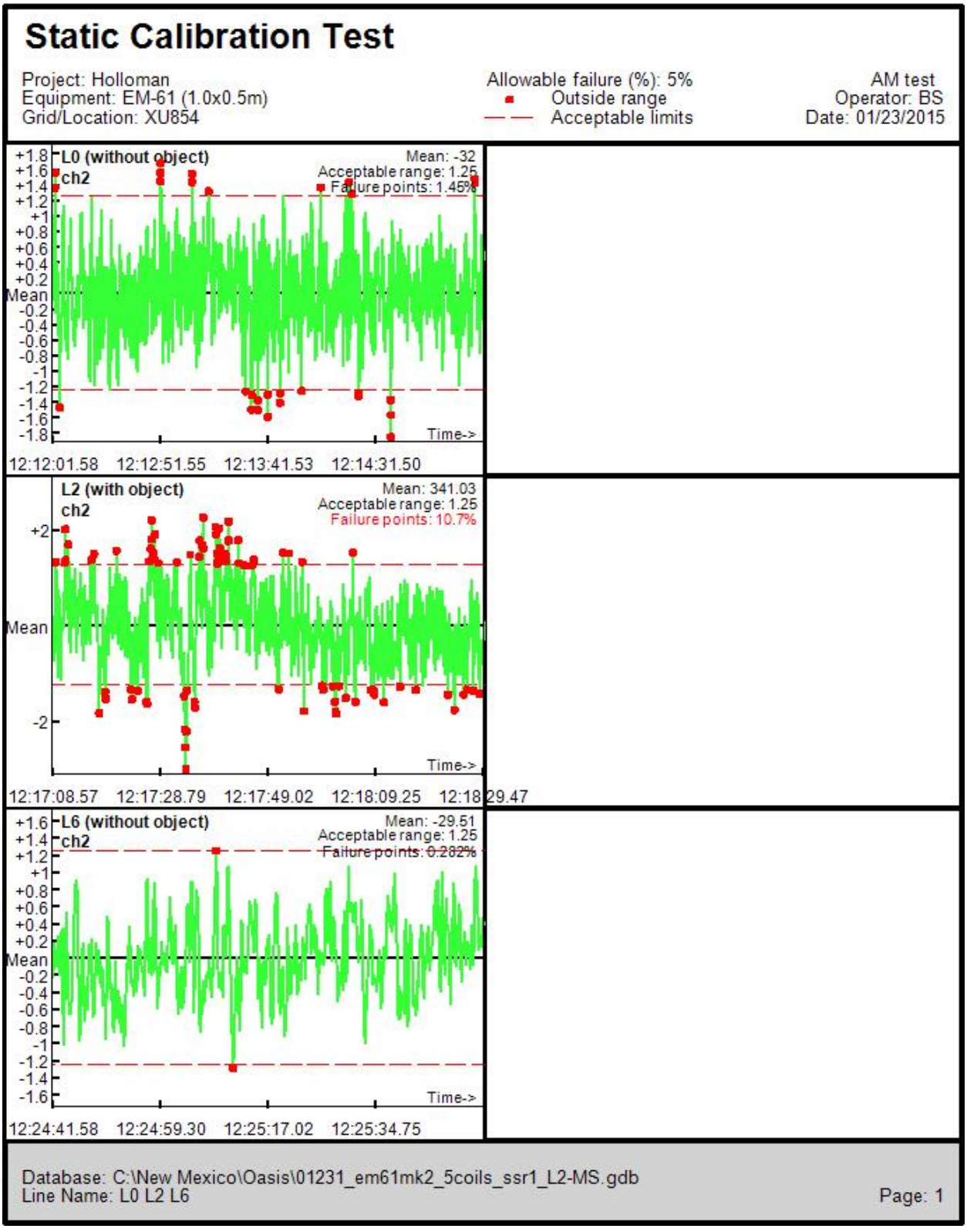


Figure C-266
1/23/2015 EM61 SSR AM Sensor R1 XU854 MRS

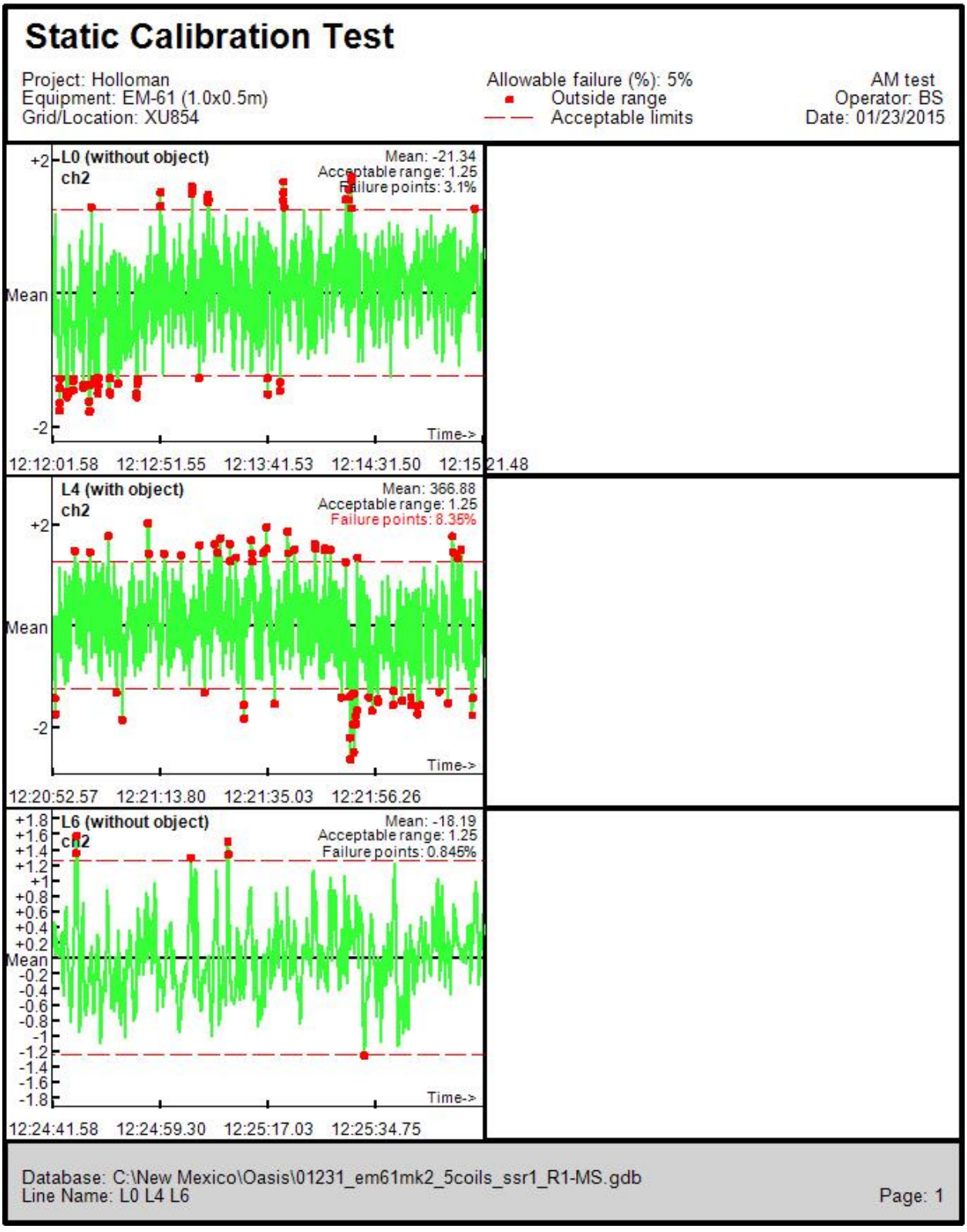


Figure C-267
1/23/2015 EM61 SSR AM Sensor R2 XU854 MRS

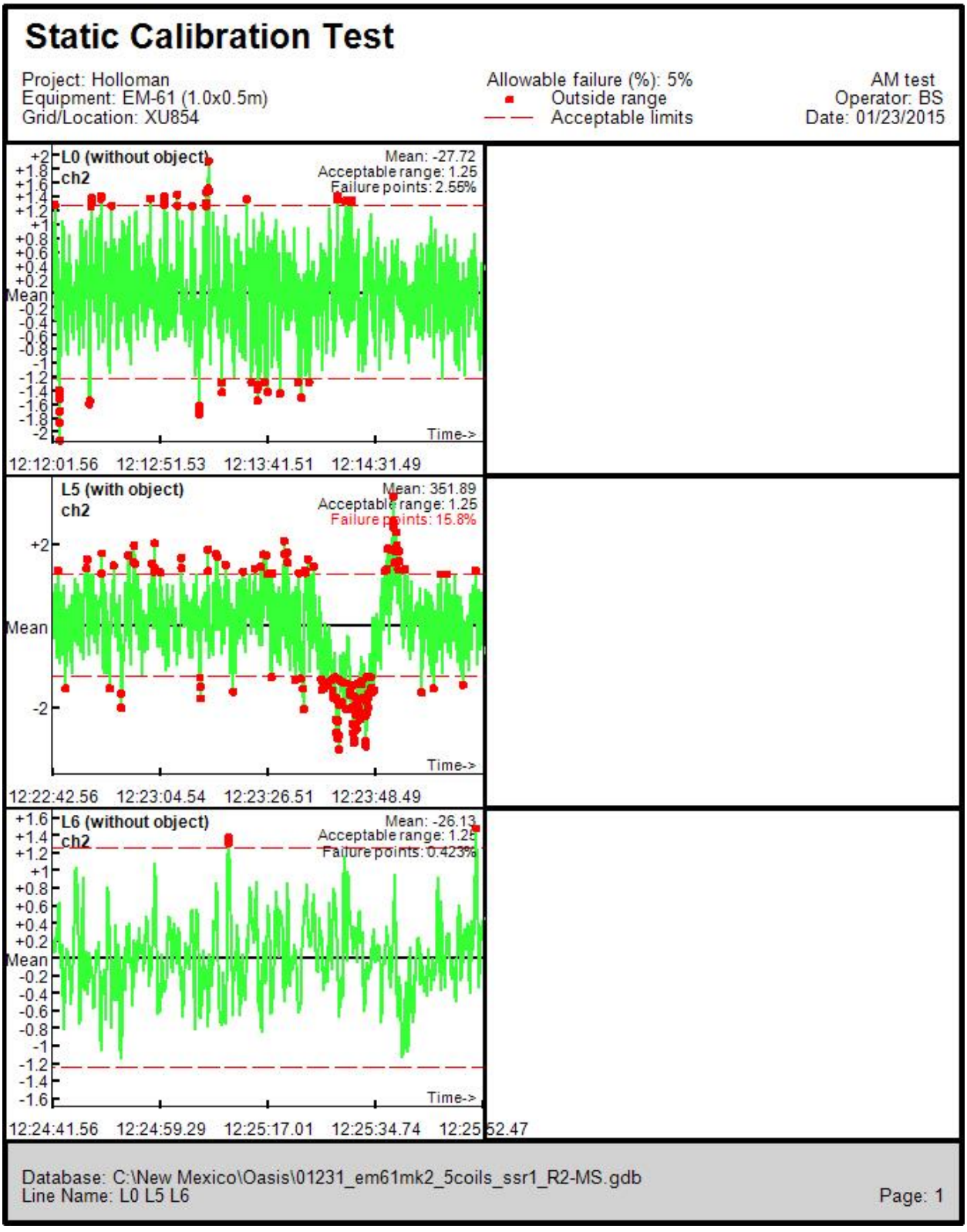


Figure C-268
1/23/2015 EM61 SSR PM Sensor C XU854 MRS

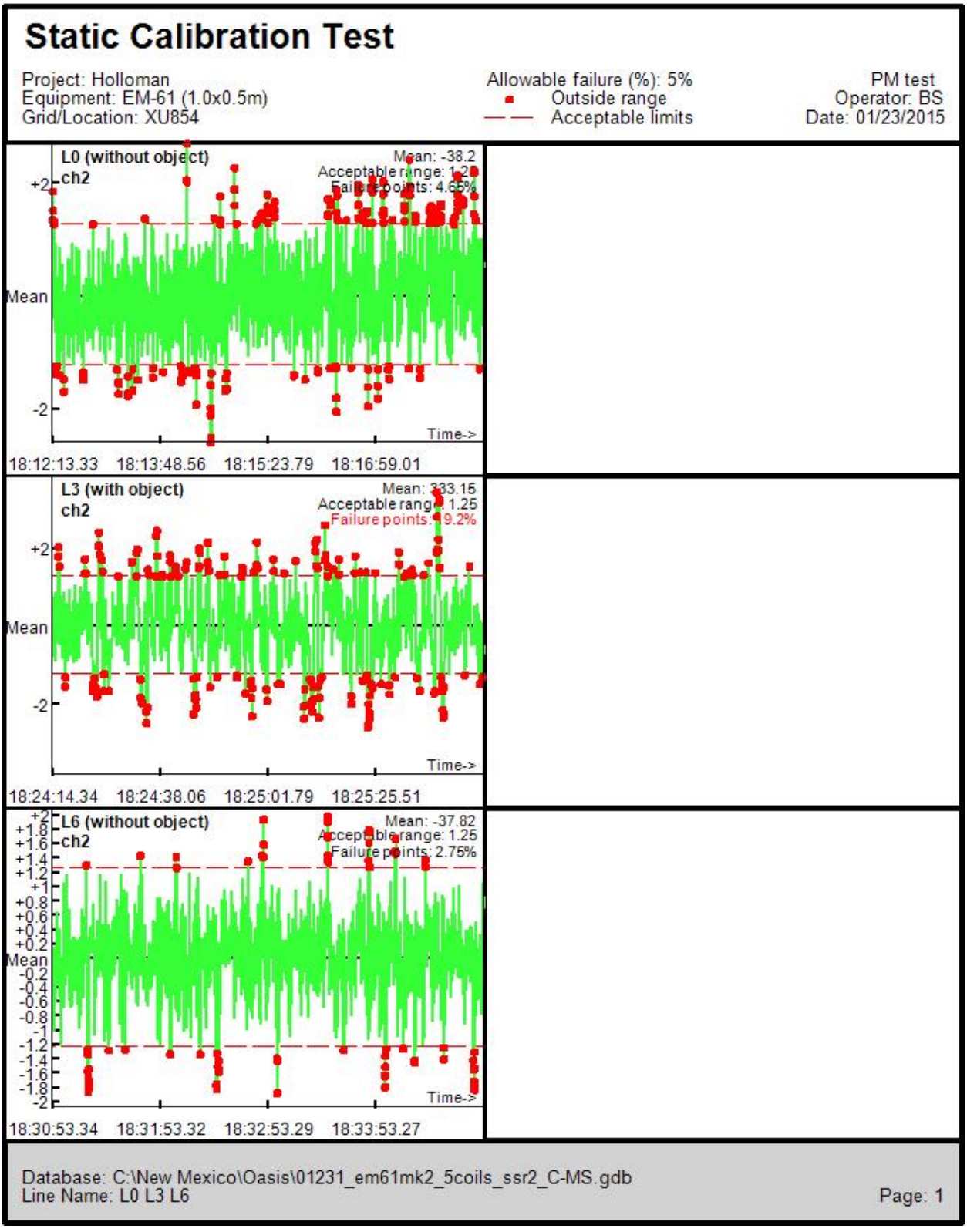


Figure C-269
1/23/2015 EM61 SSR PM Sensor L1 XU854 MRS

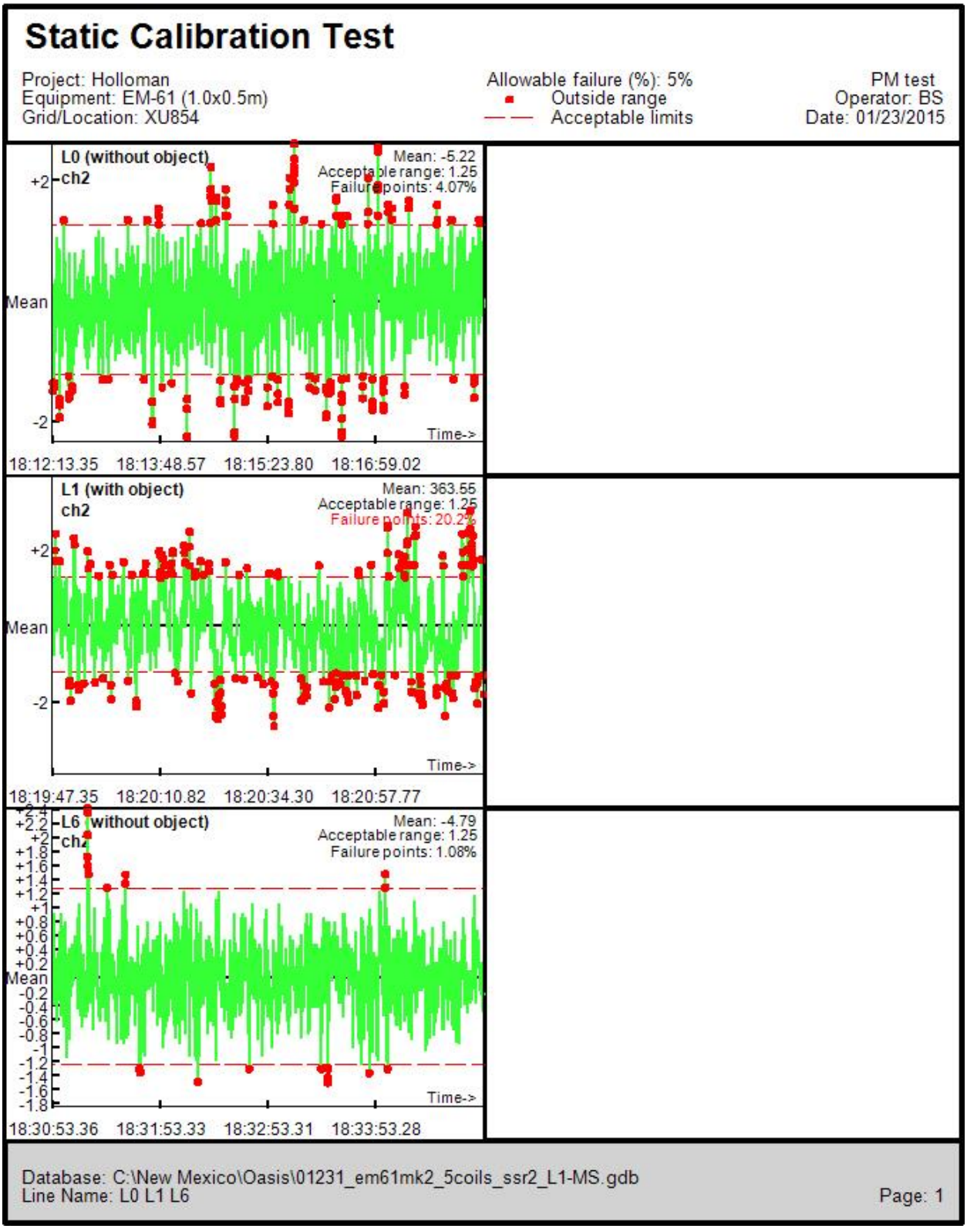


Figure C-270
1/23/2015 EM61 SSR PM Sensor L2 XU854 MRS

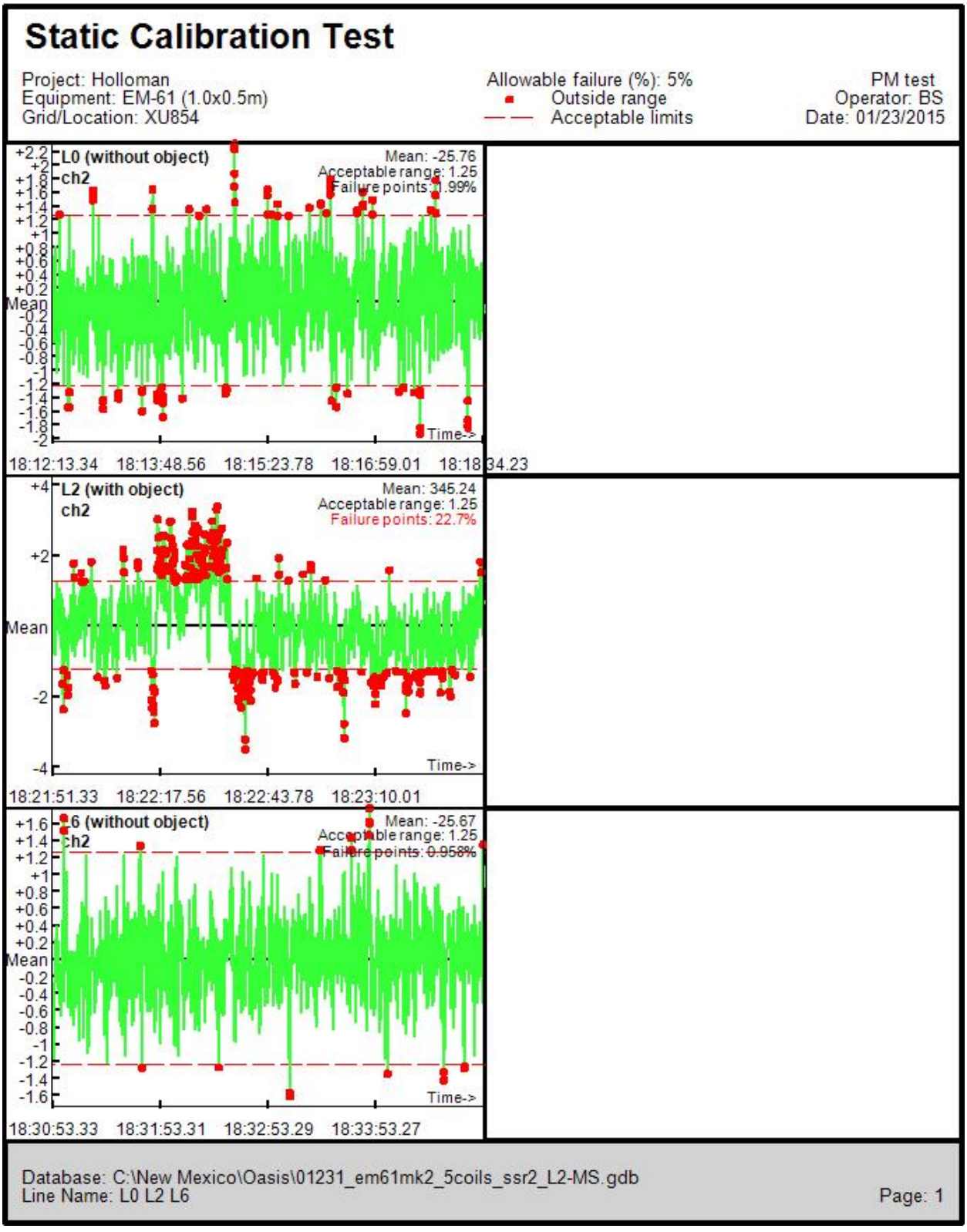


Figure C-271
1/23/2015 EM61 SSR PM Sensor R1 XU854 MRS

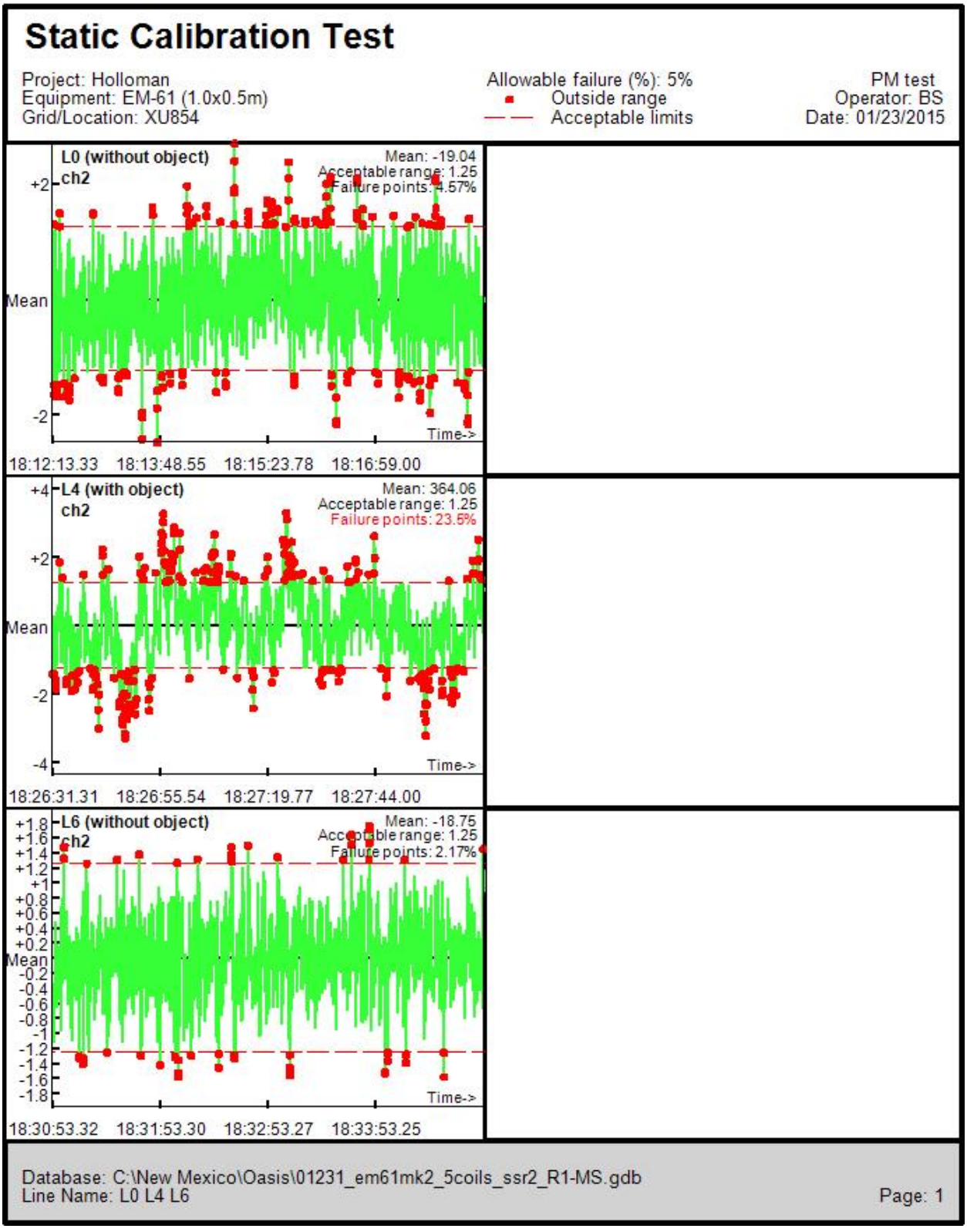


Figure C-272
1/23/2015 EM61 SSR PM Sensor R2 XU854 MRS

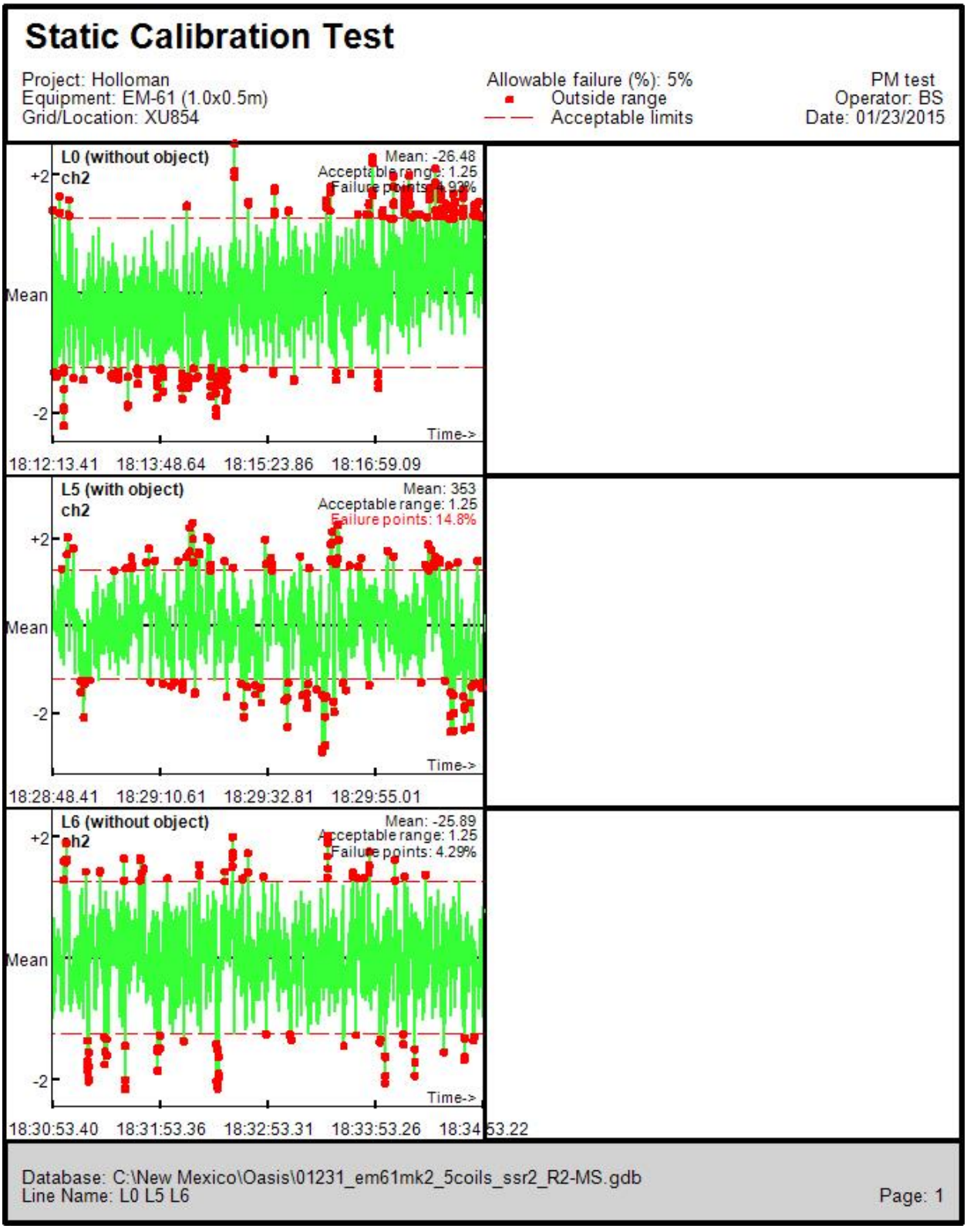


Figure C-273
1/26/2015 EM61 SSR AM Single Sensor XU854 MRS

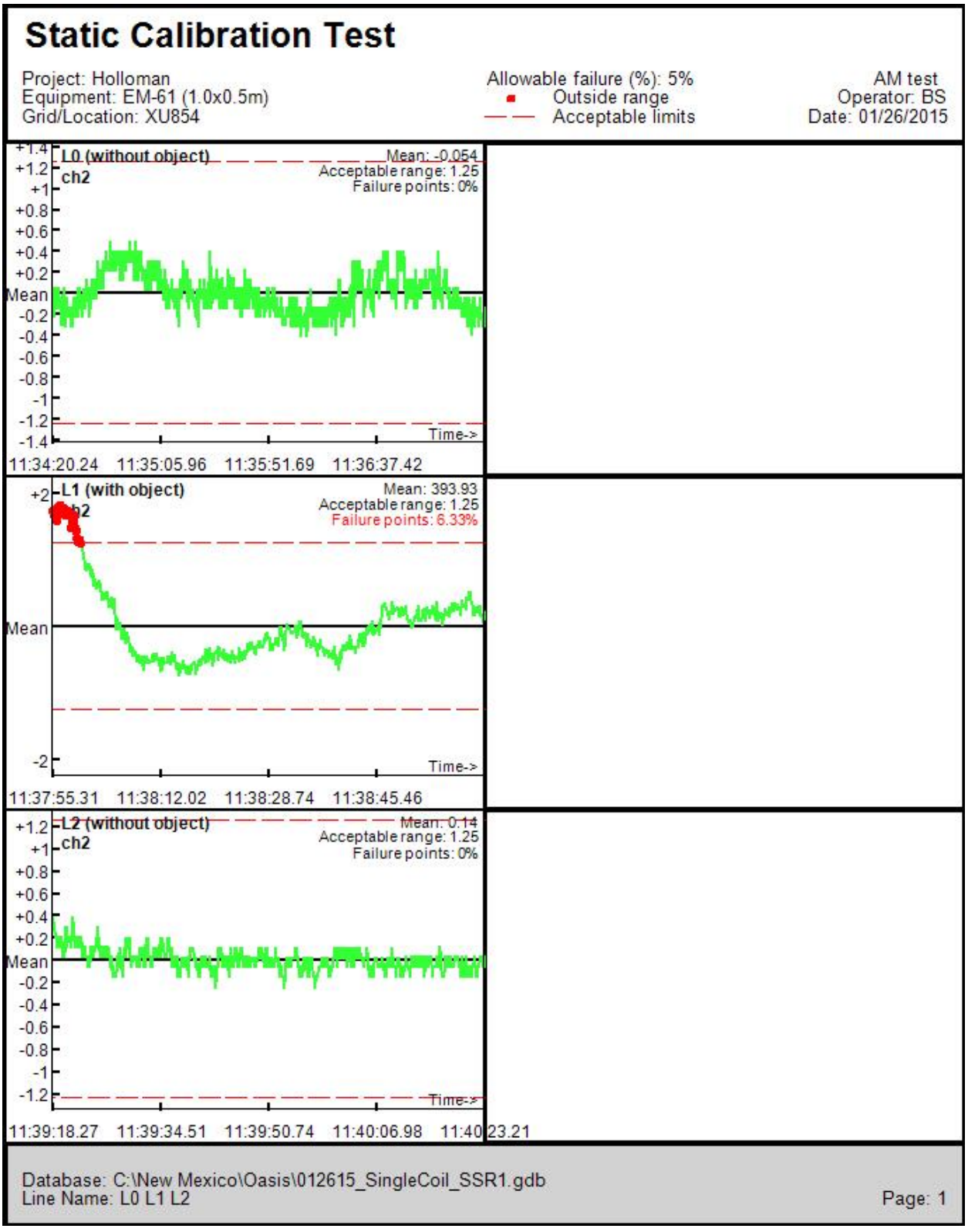


Figure C-274
1/26/2015 EM61 SSR PM Single Sensor XU854 MRS

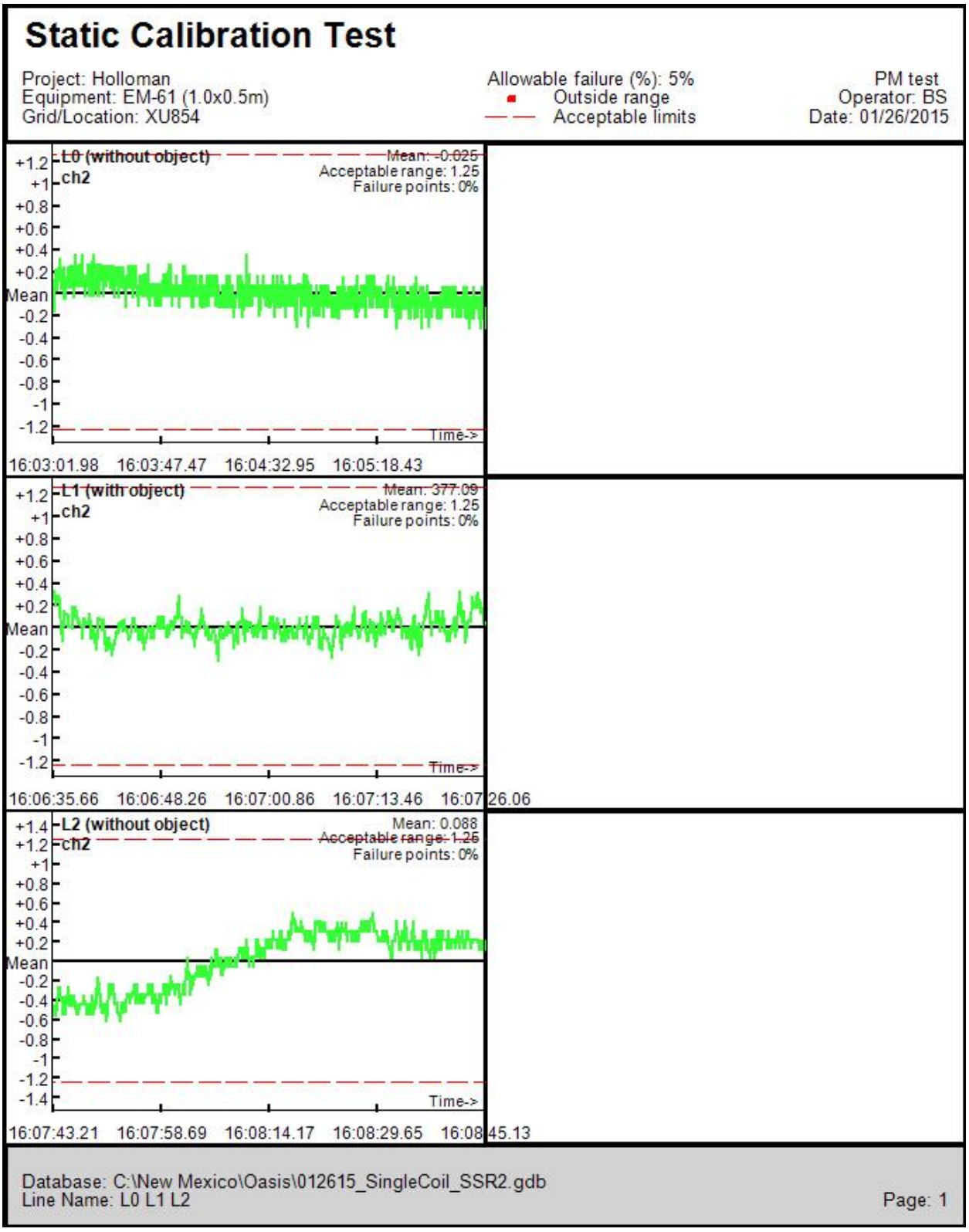
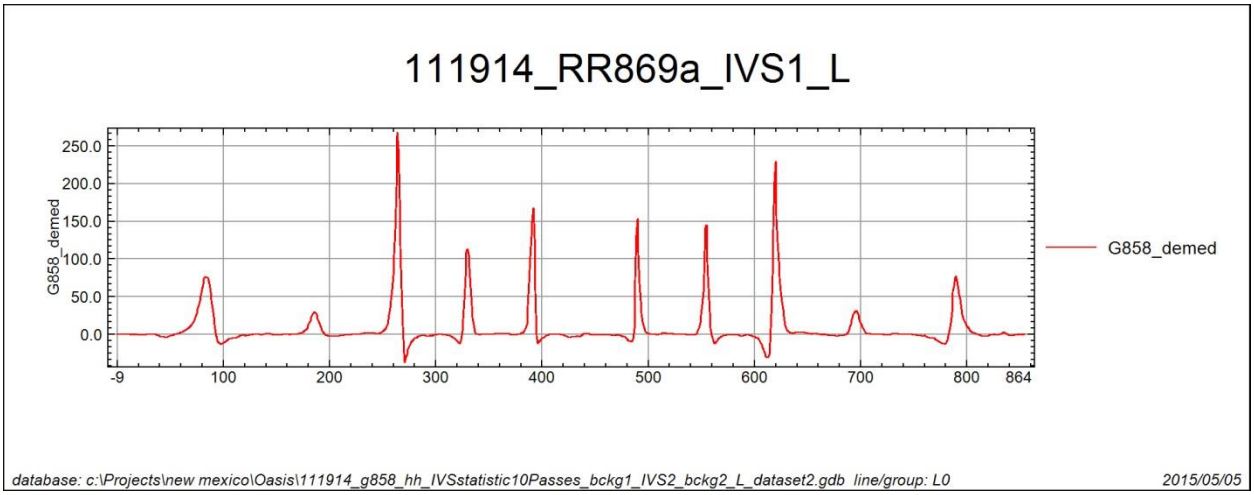
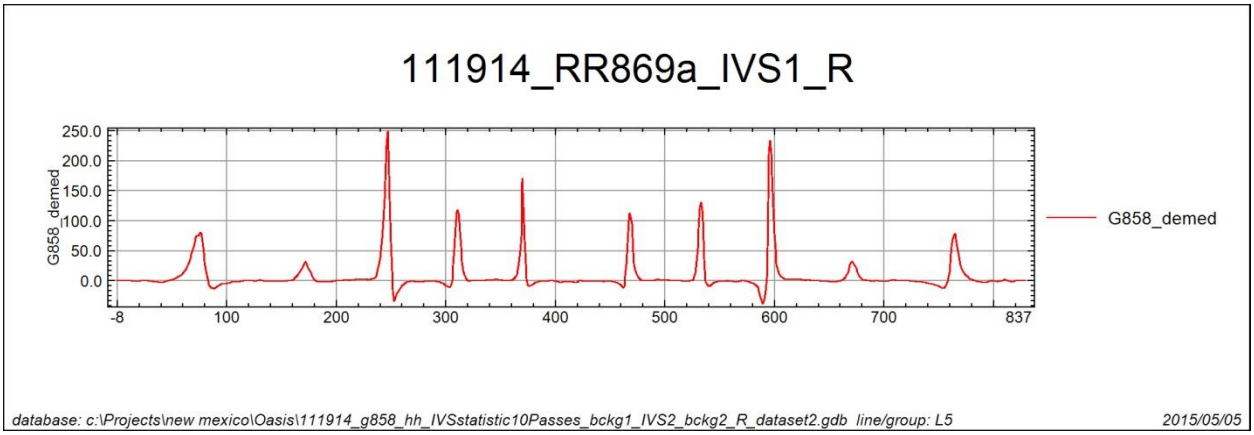


Figure C-275
11/19/2014 G-858 IVS AM and PM Sensor L
IVS Test Results RR869a MRS



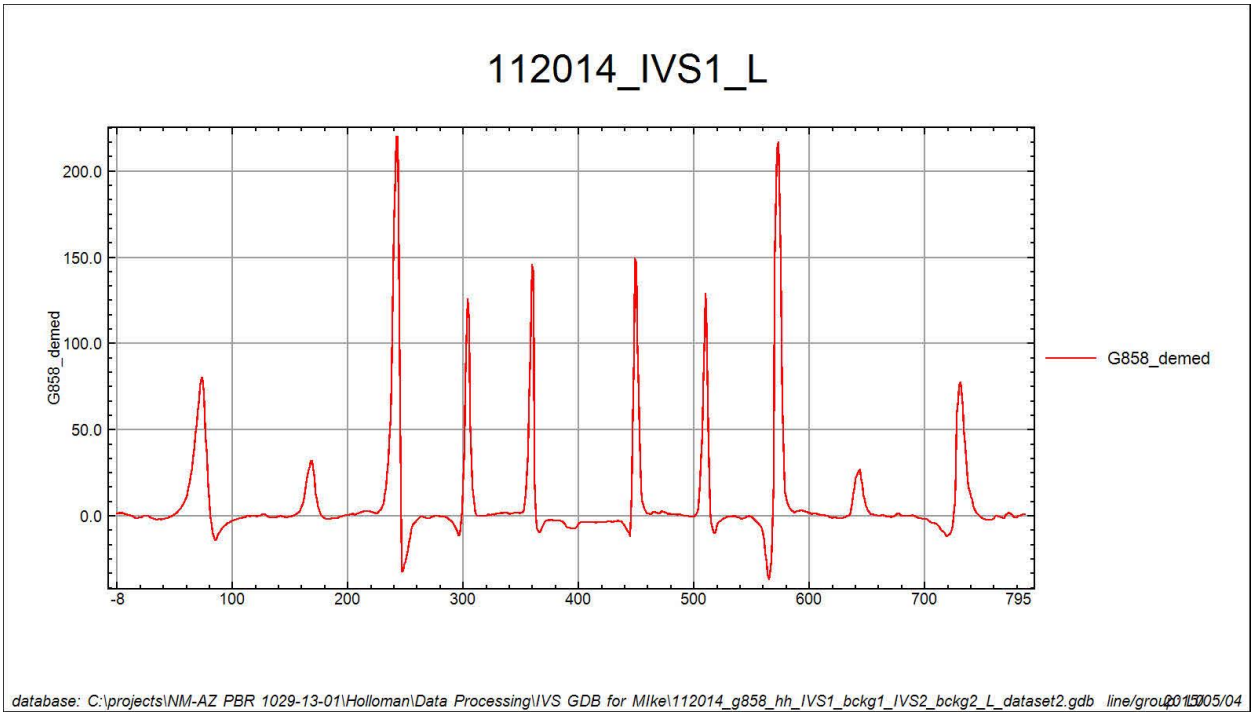
PM IVS Data File Corrupted

Figure C-276
11/19/2014 G-858 IVS AM and PM Sensor R
IVS Test Results RR869a MRS



PM IVS Data File Corrupted

Figure C-277
11/20/2014 G-858 IVS AM and PM Sensor L
IVS Test Results RR869a MRS



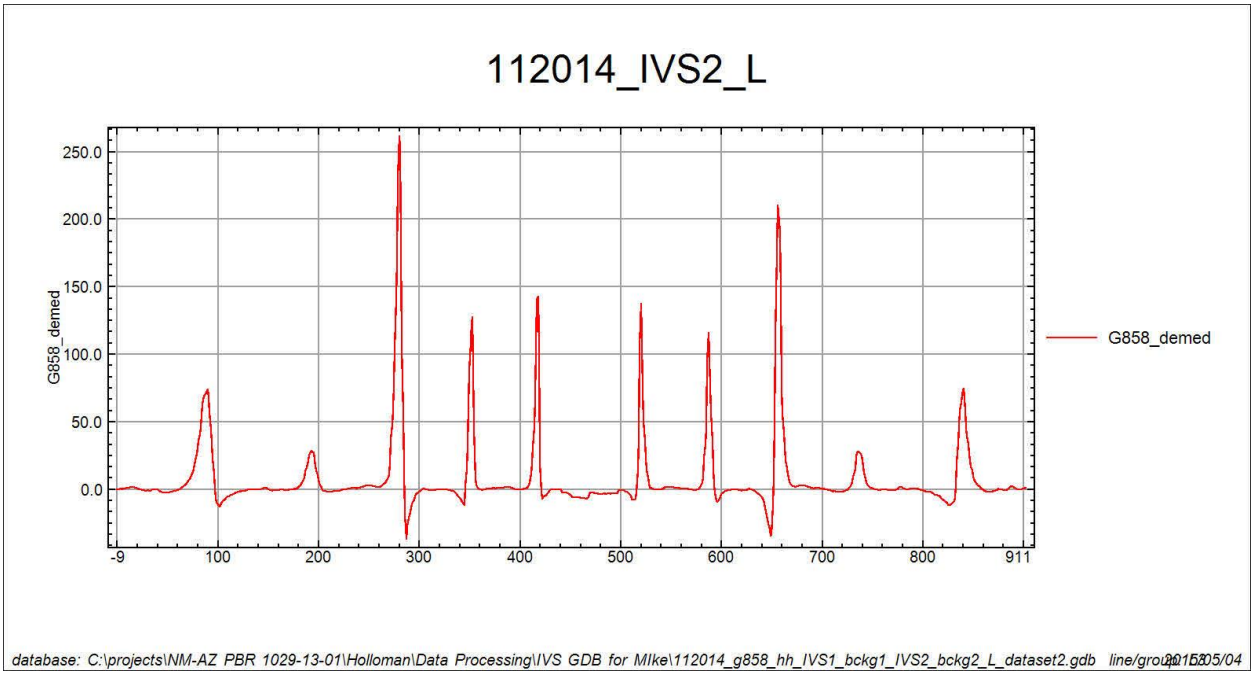
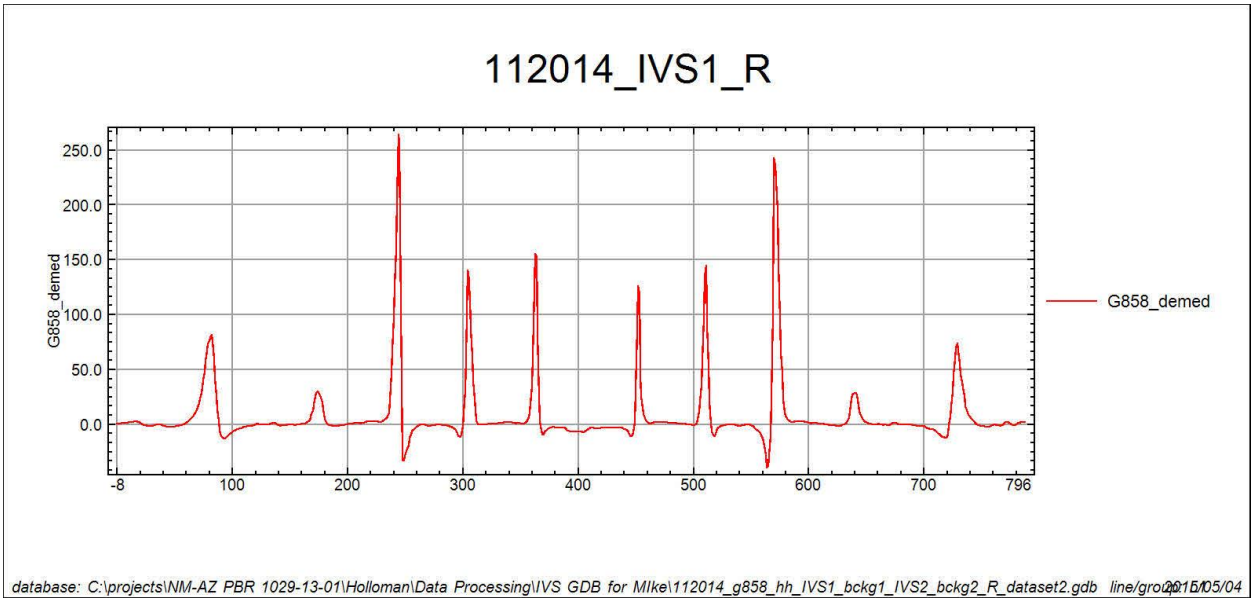


Figure C-278
11/20/2014 G-858 IVS AM and PM Sensor R
IVS Test Results RR869a MRS



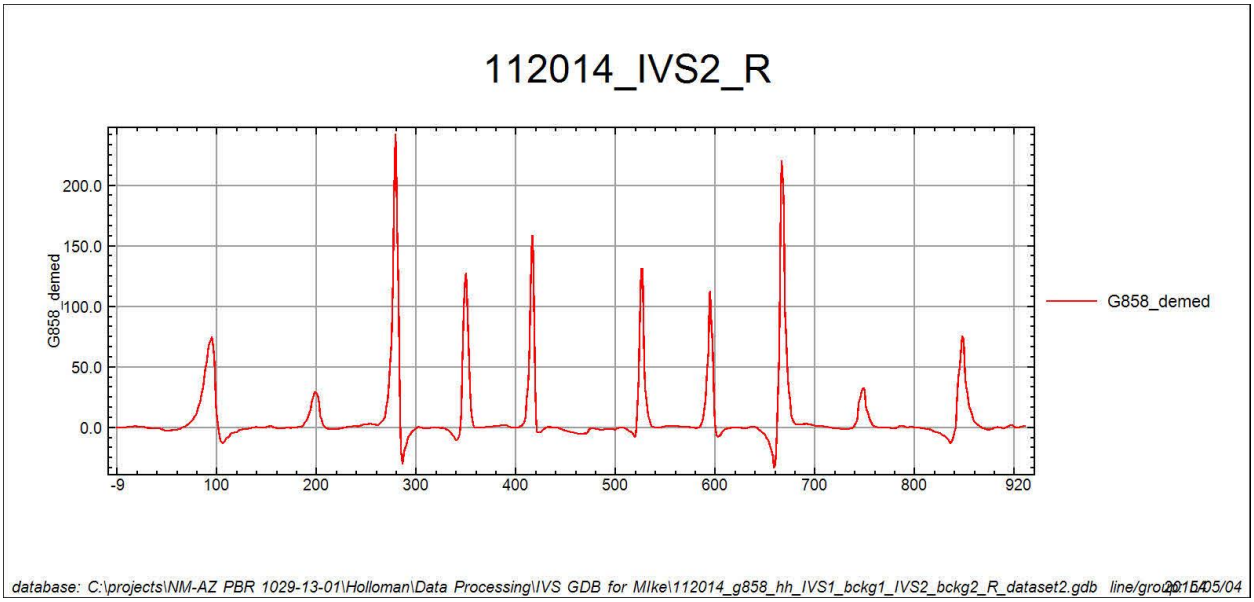
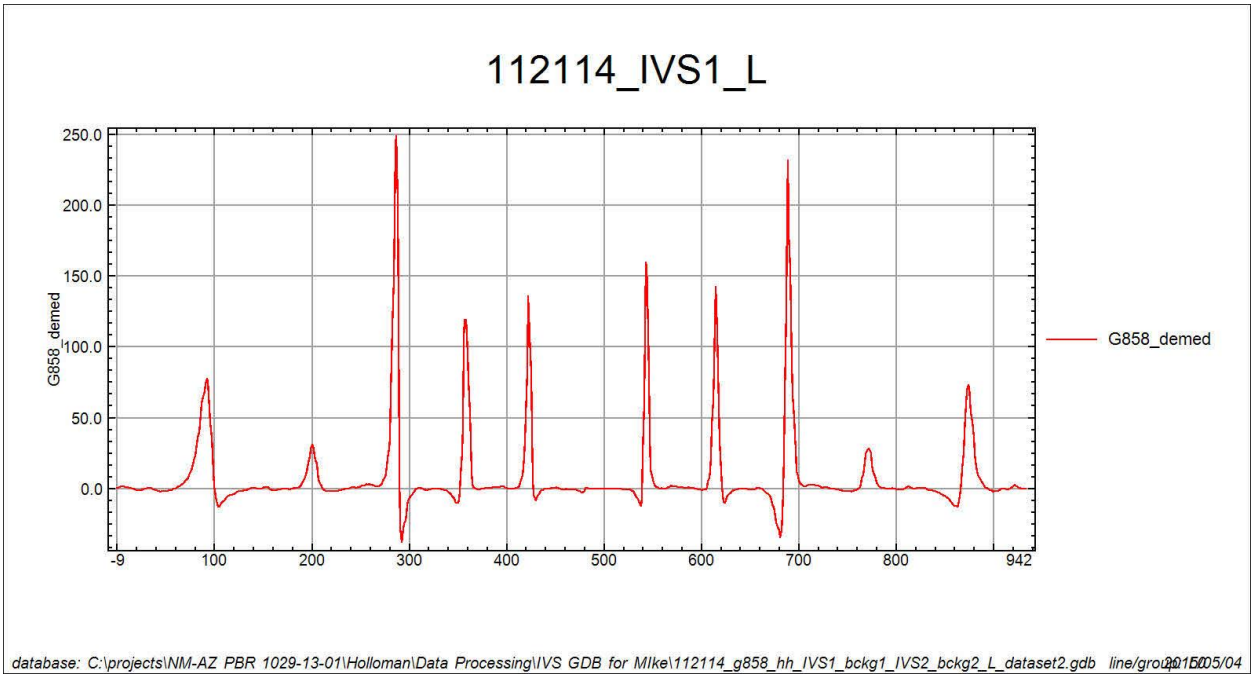


Figure C-279
11/21/2014 G-858 IVS AM and PM Sensor L
IVS Test Results RR869a MRS



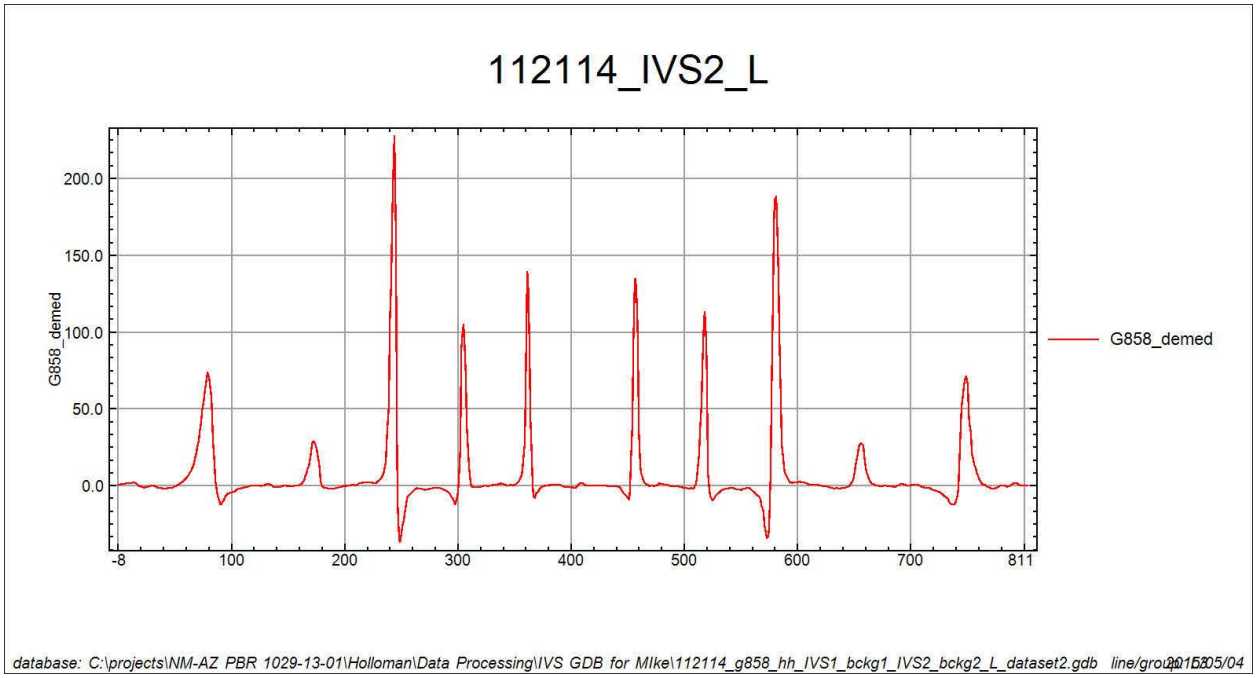
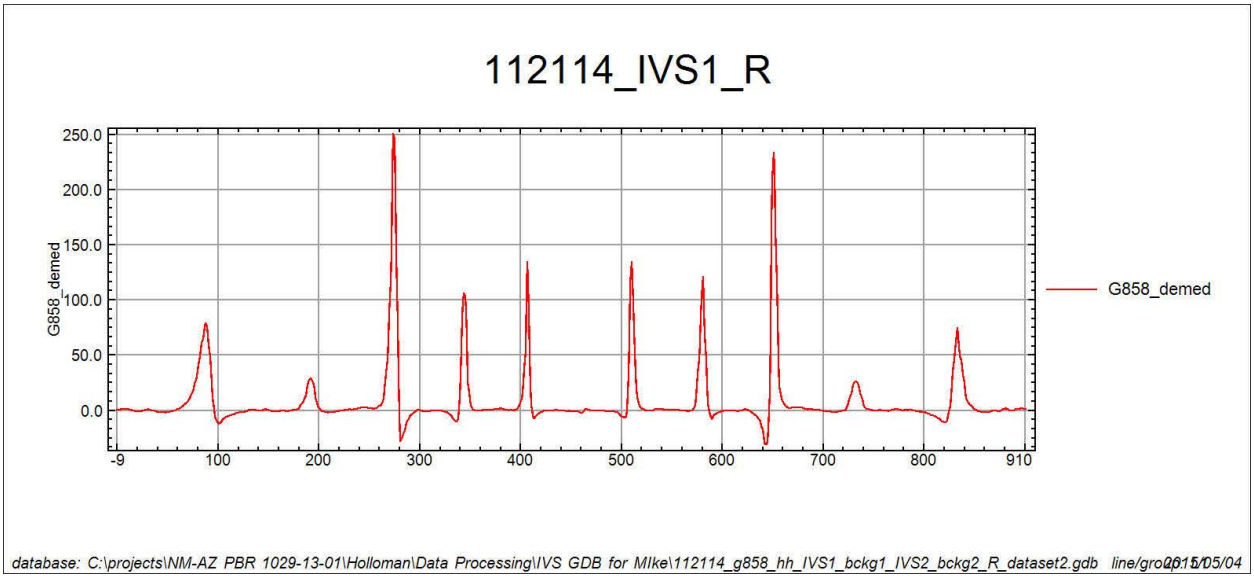


Figure C-280
11/21/2014 G-858 IVS AM and PM Sensor R
IVS Test Results RR869a MRS



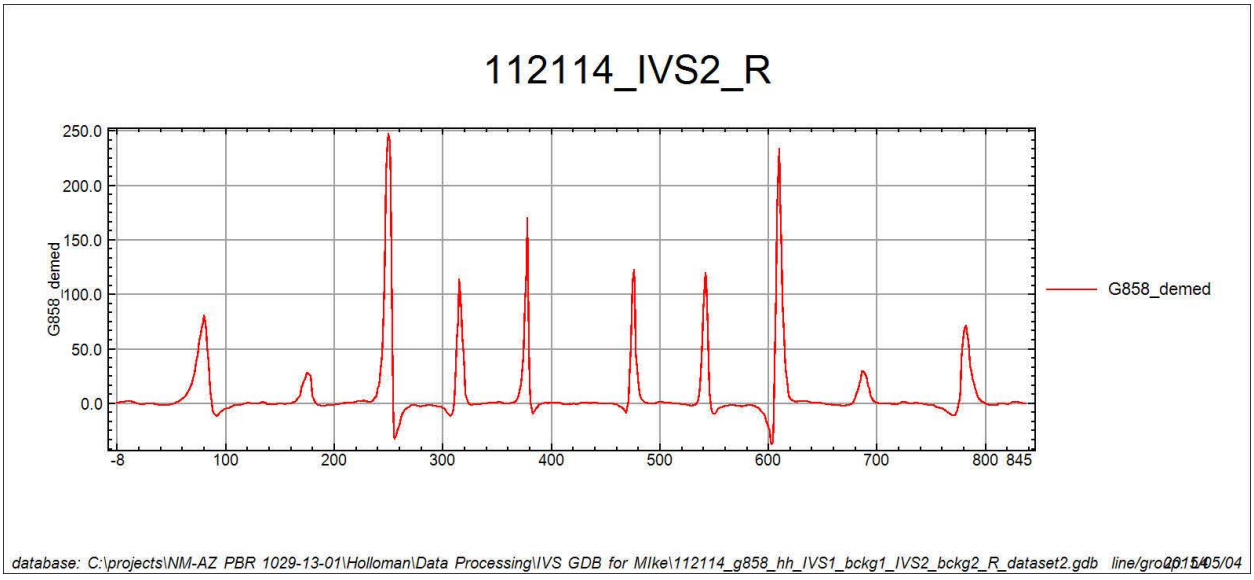
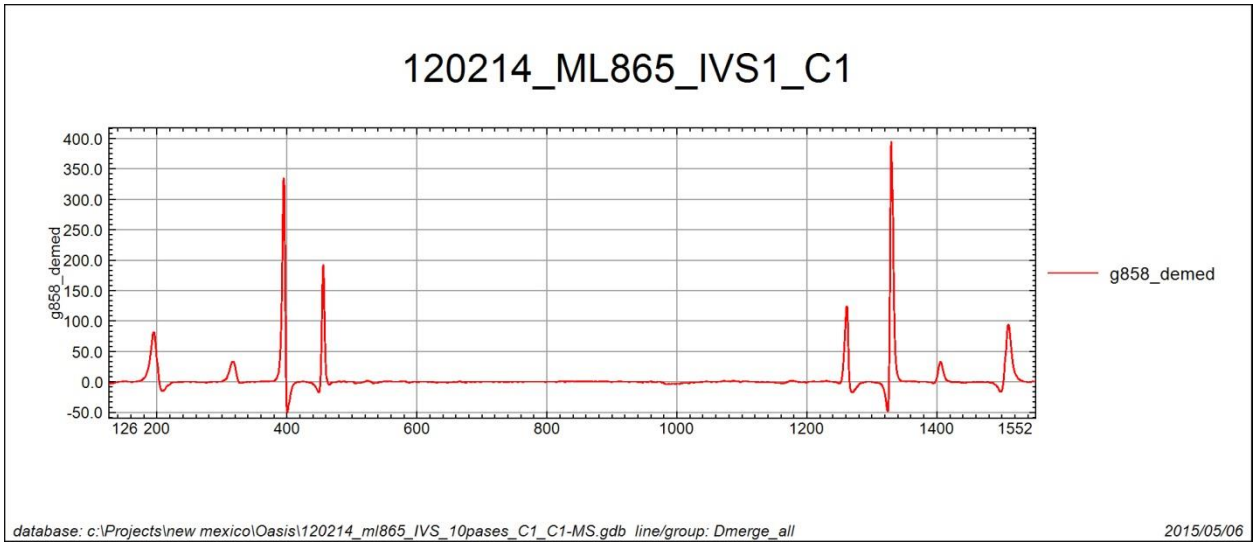


Figure C-281
12/02/2014 G-858 IVS AM and PM Sensor C1
IVS Test Results ML865 MRS



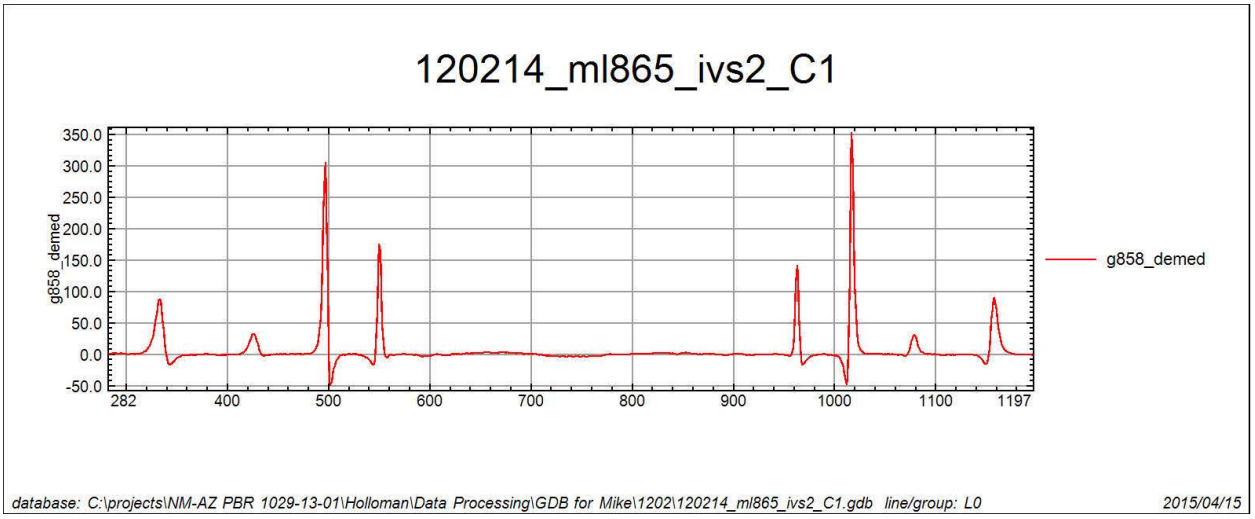
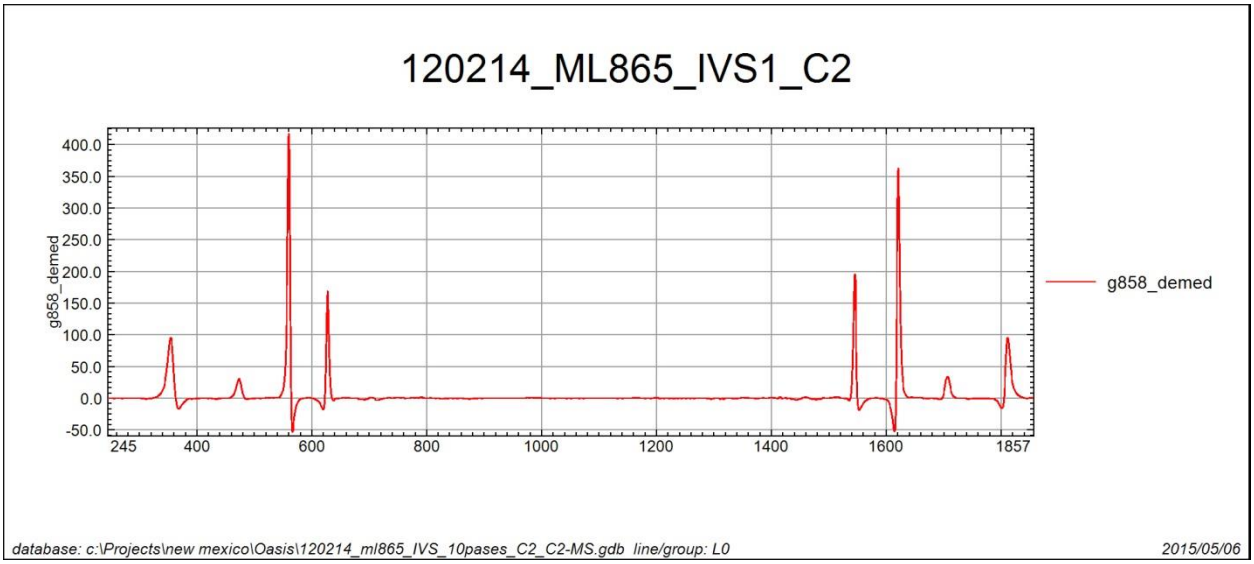


Figure C-282
12/02/2014 G-858 IVS AM and PM Sensor C2
IVS Test Results ML865 MRS



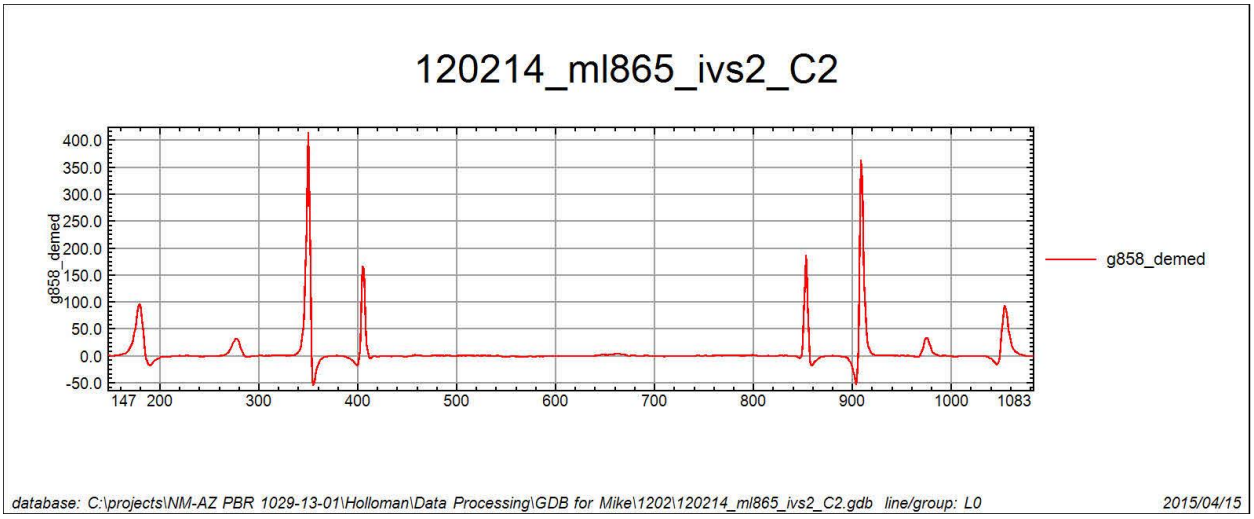


Figure C-283
12/02/2014 G-858 IVS AM and PM Sensor L1
IVS Test Results ML865 MRS

No AM IVS For This Sensor

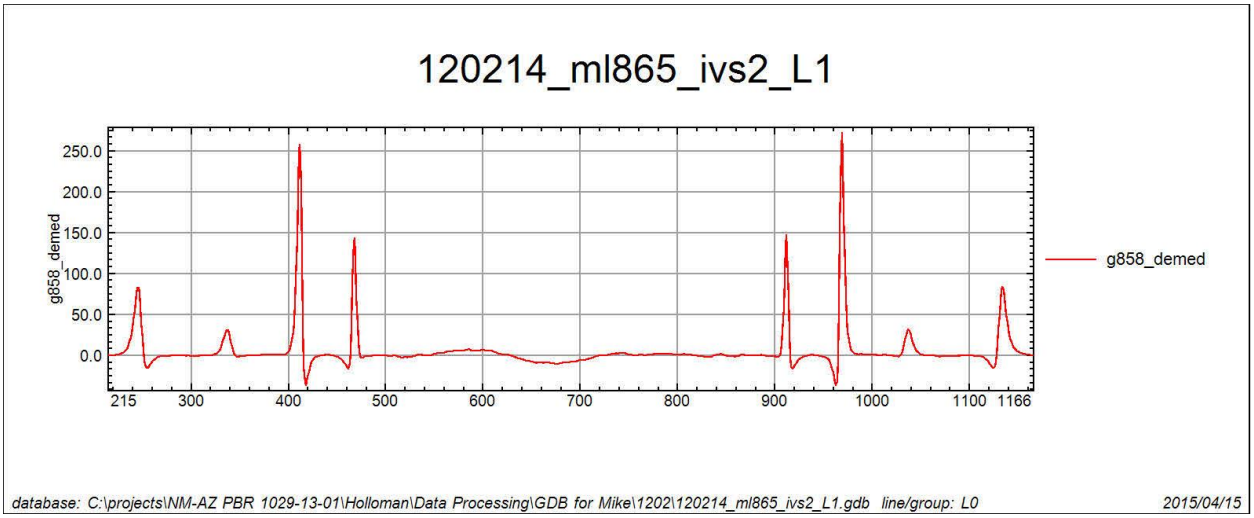


Figure C-284
12/02/2014 G-858 IVS AM and PM Sensor L2
IVS Test Results ML865 MRS

No AM IVS For This Sensor

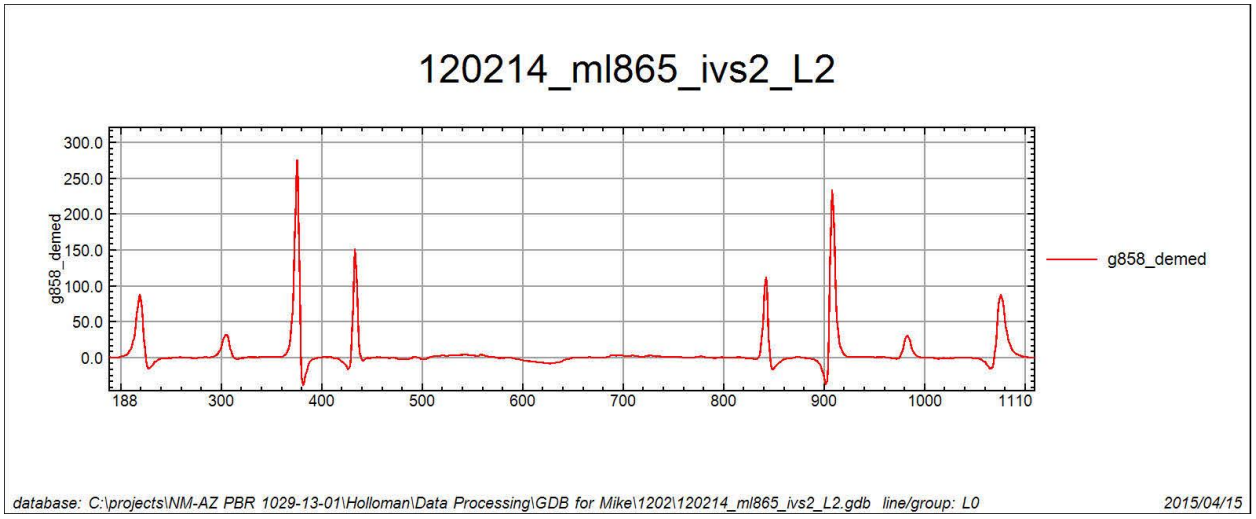
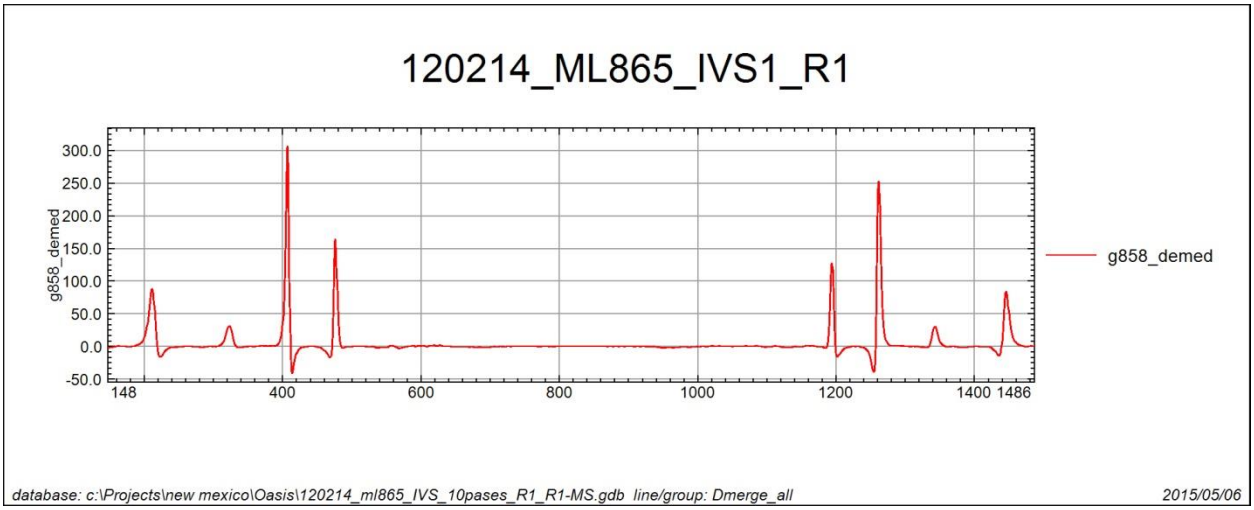


Figure C-285
12/02/2014 G-858 IVS AM and PM Sensor R1
IVS Test Results ML865 MRS



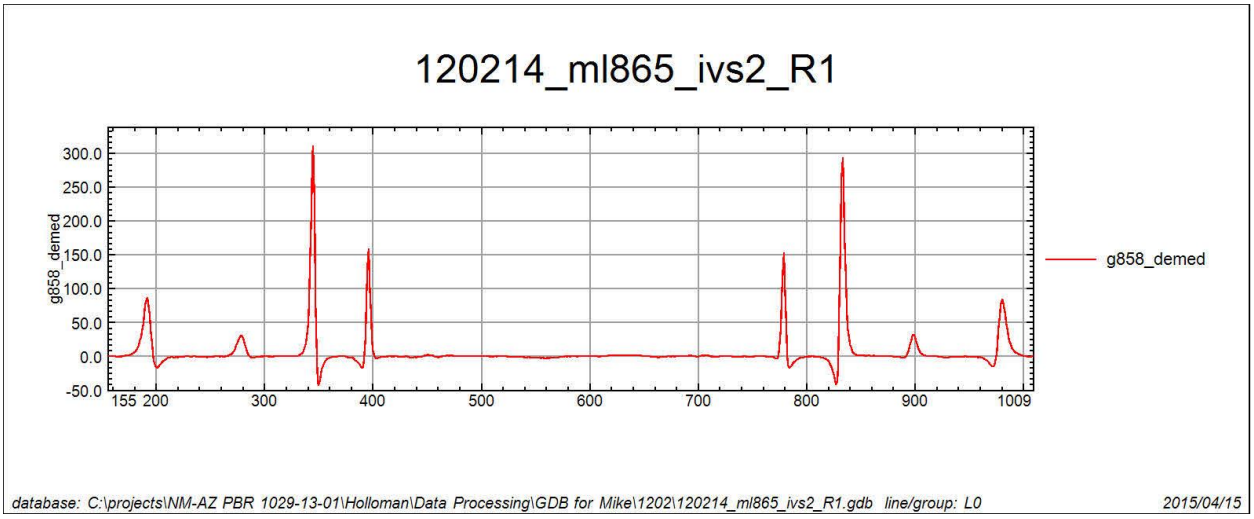
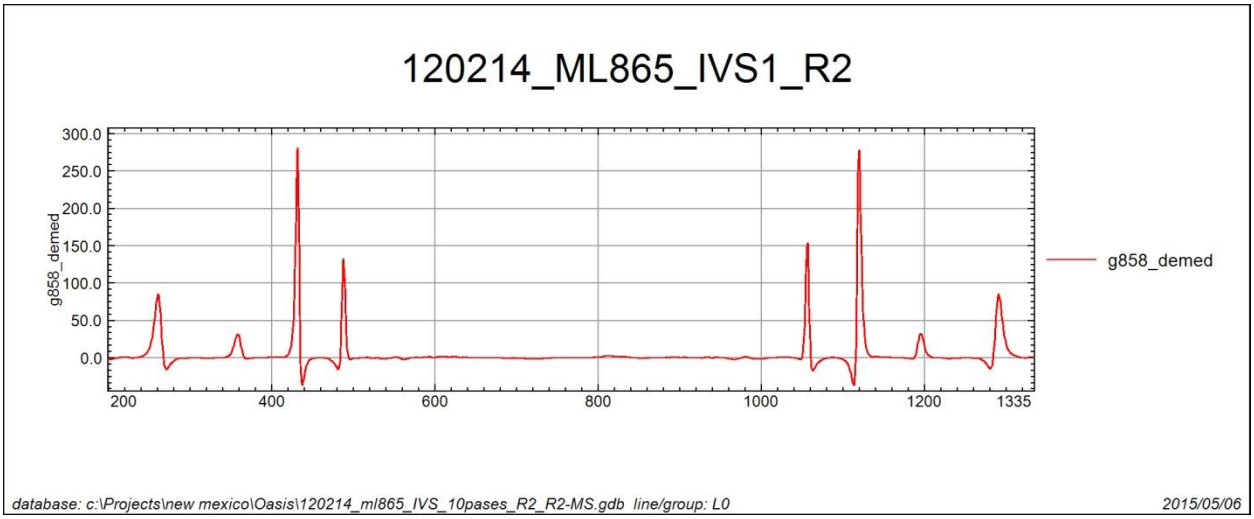


Figure C-286
12/02/2014 G-858 IVS AM and PM Sensor R2
IVS Test Results ML865 MRS



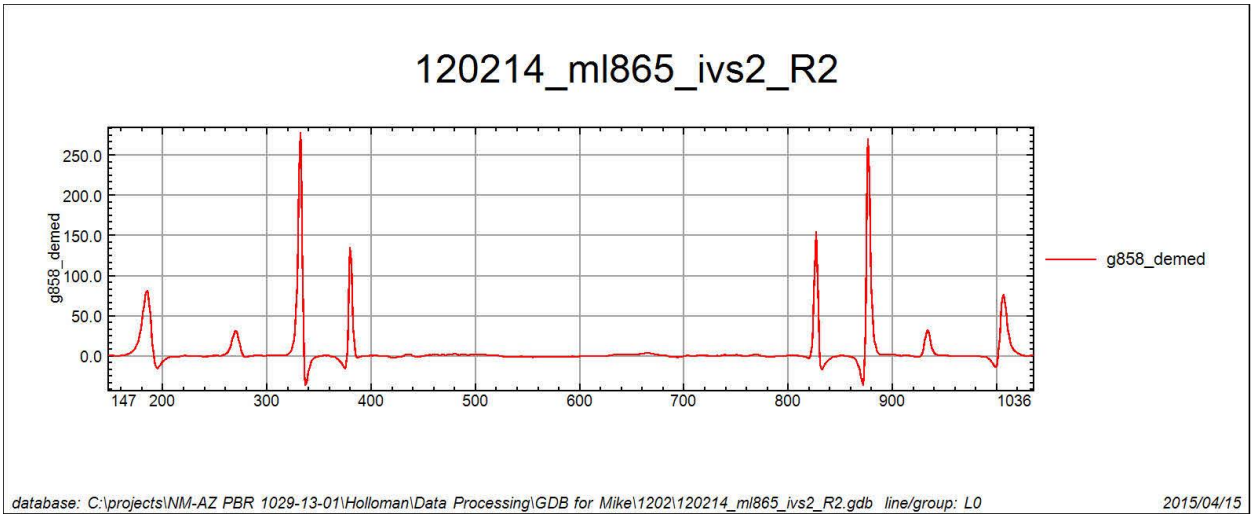
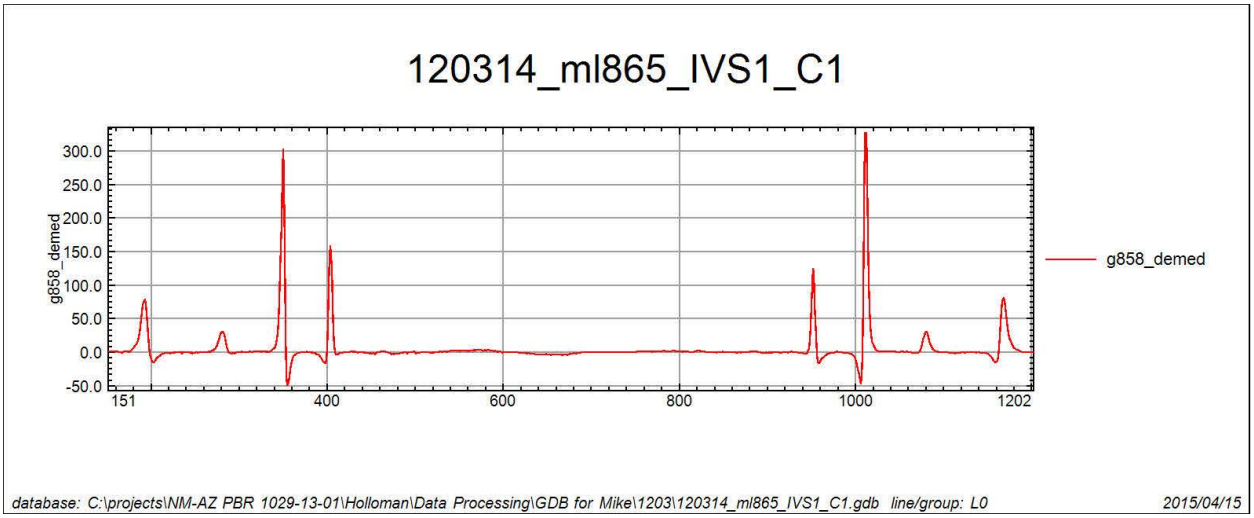


Figure C-287
12/03/2014 G-858 IVS AM and PM Sensor C1
IVS Test Results ML865 MRS



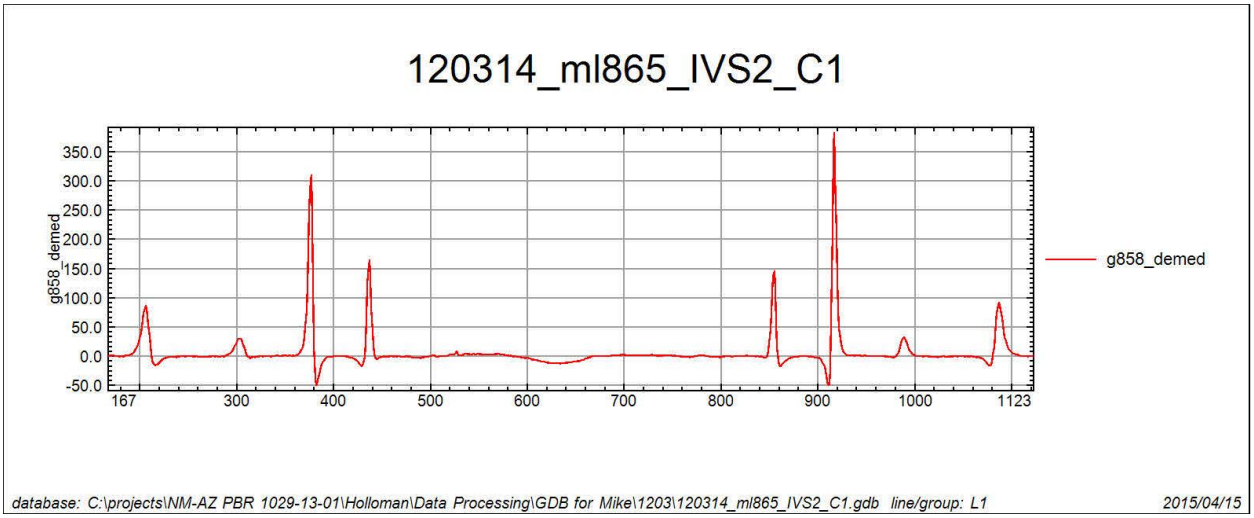
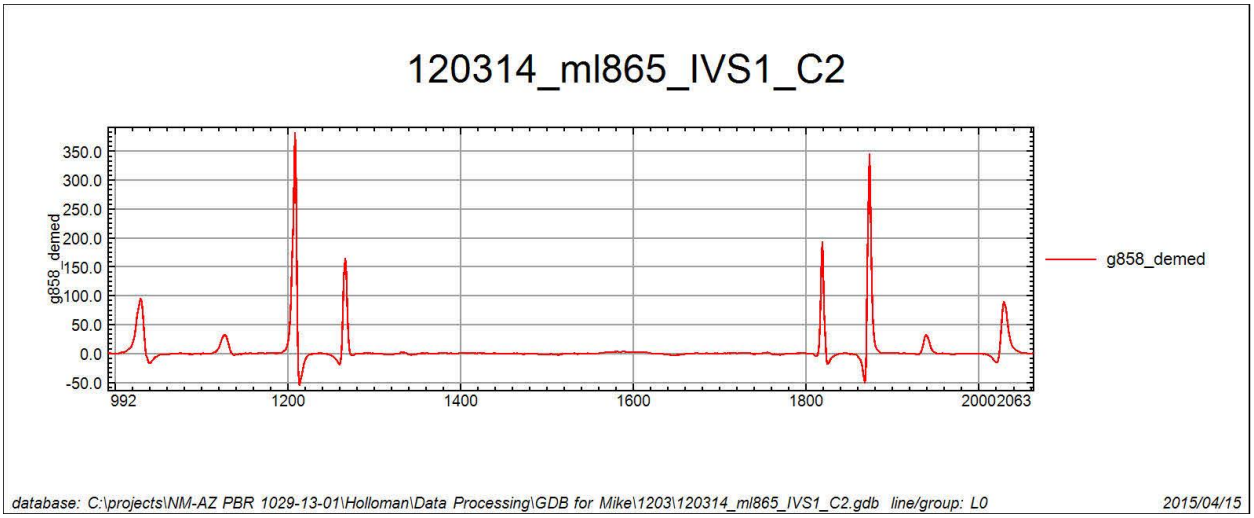


Figure C-288
12/03/2014 G-858 IVS AM and PM Sensor C2
IVS Test Results ML865 MRS



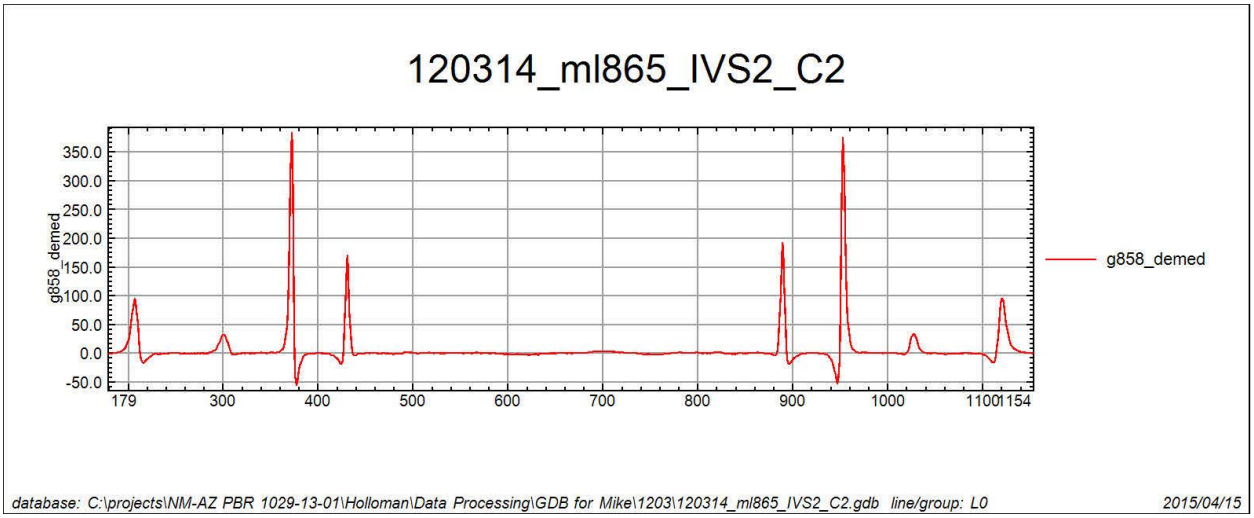
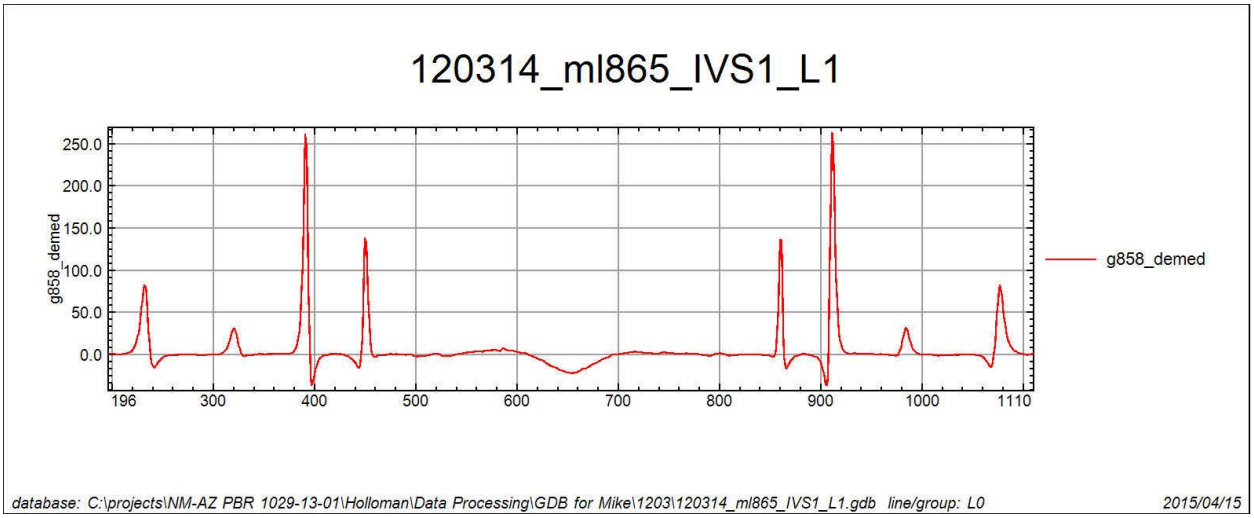


Figure C-289
12/03/2014 G-858 IVS AM and PM Sensor L1
IVS Test Results ML865 MRS



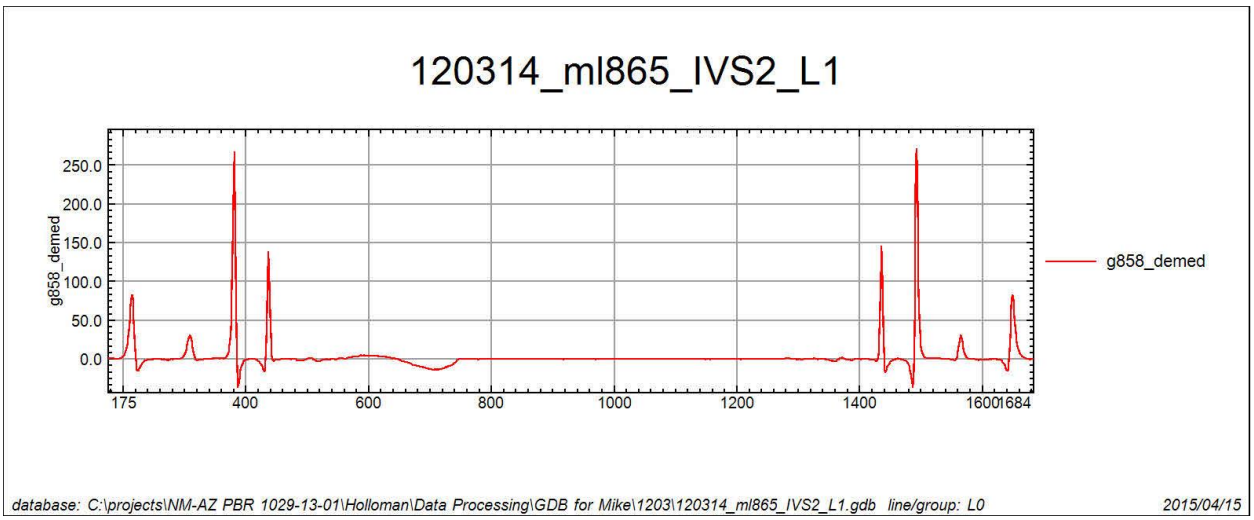
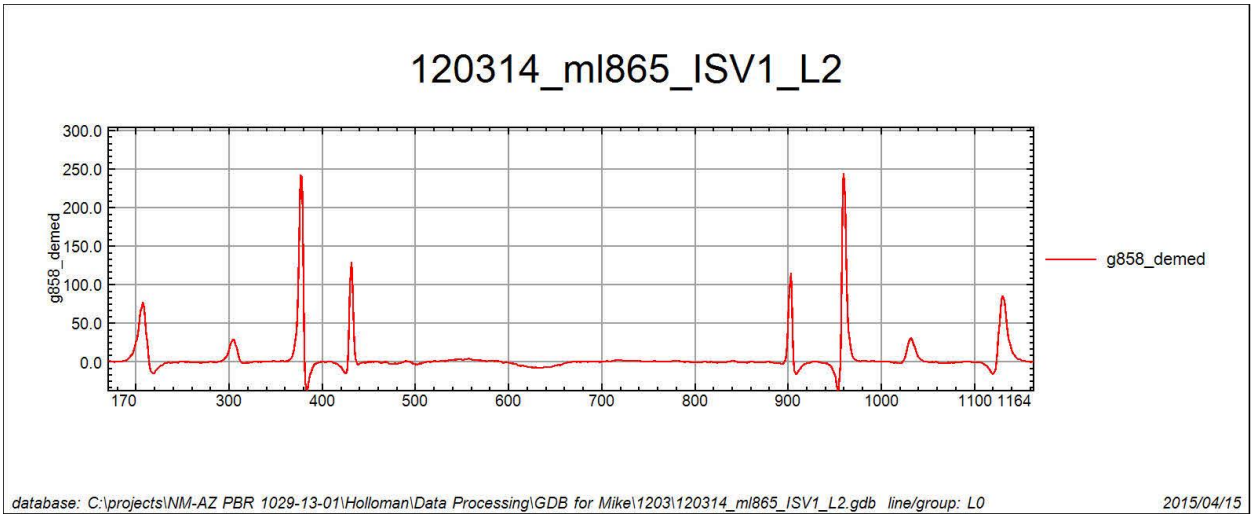


Figure C-290
12/03/2014 G-858 IVS AM and PM Sensor L2
IVS Test Results ML865 MRS



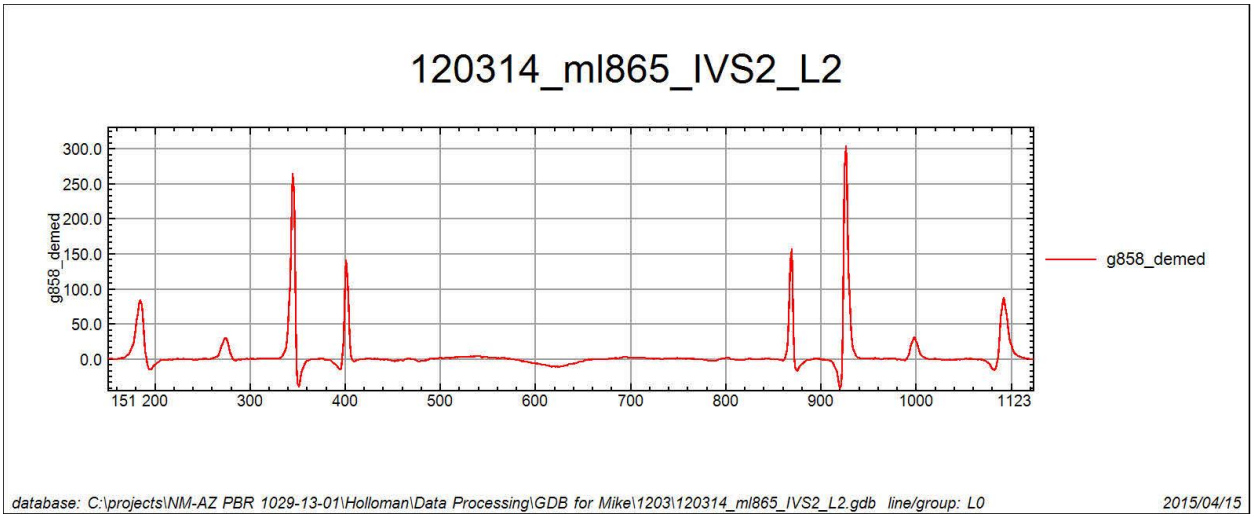
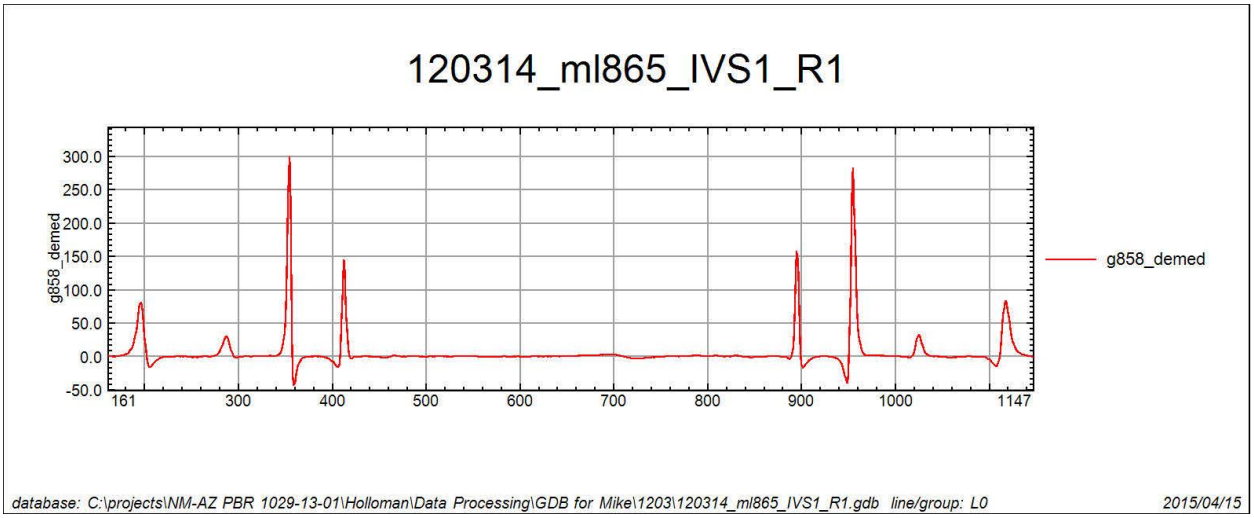


Figure C-291
12/03/2014 G-858 IVS AM and PM Sensor R1
IVS Test Results ML865 MRS



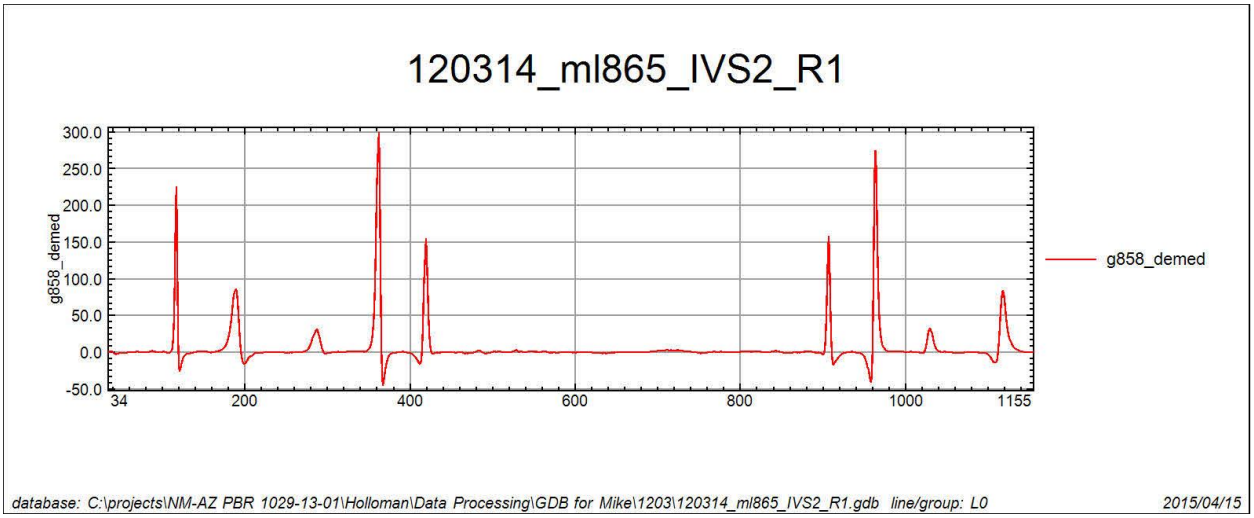
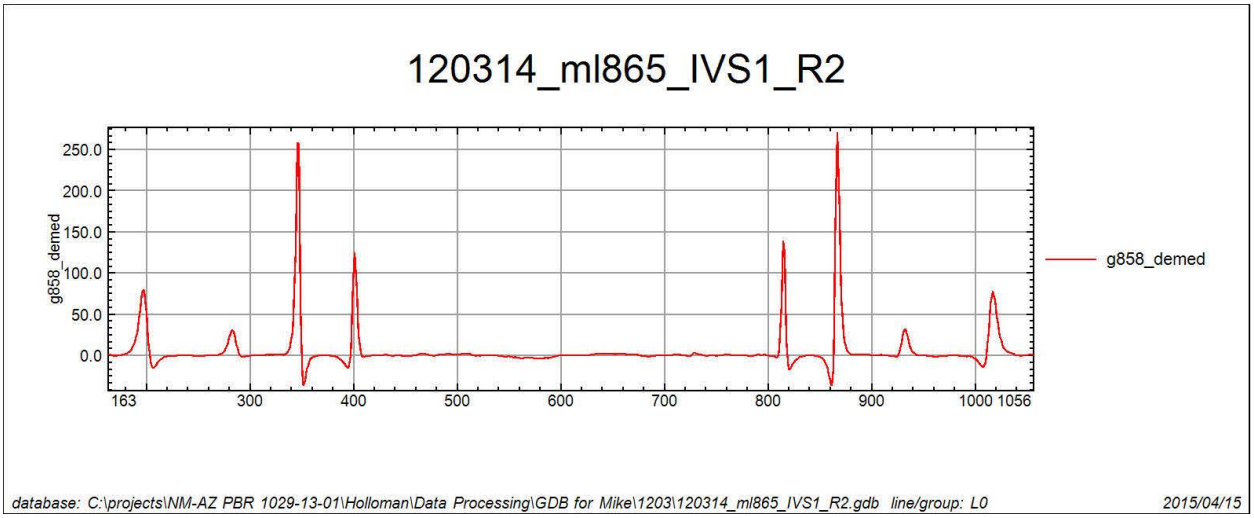


Figure C-292
12/03/2014 G-858 IVS AM and PM Sensor R2
IVS Test Results ML865 MRS



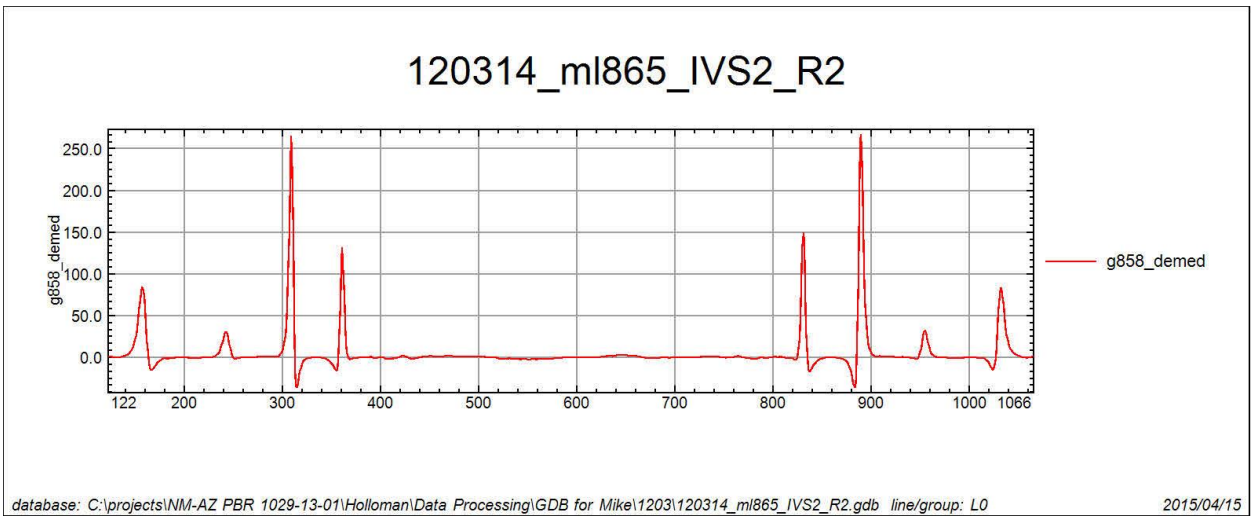
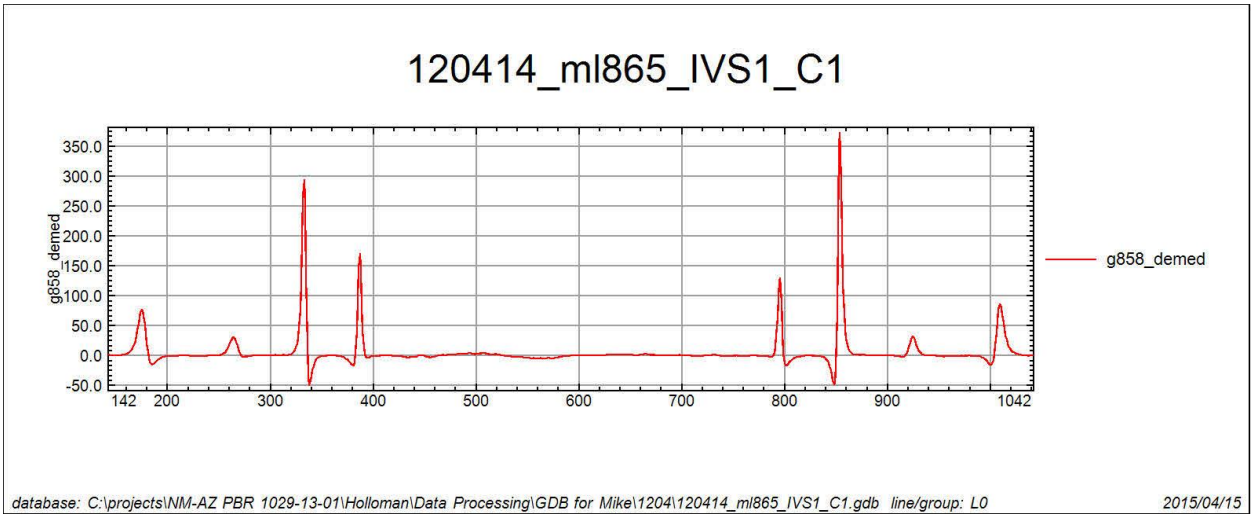


Figure C-293
12/04/2014 G-858 IVS AM and PM Sensor C1
IVS Test Results ML865 MRS



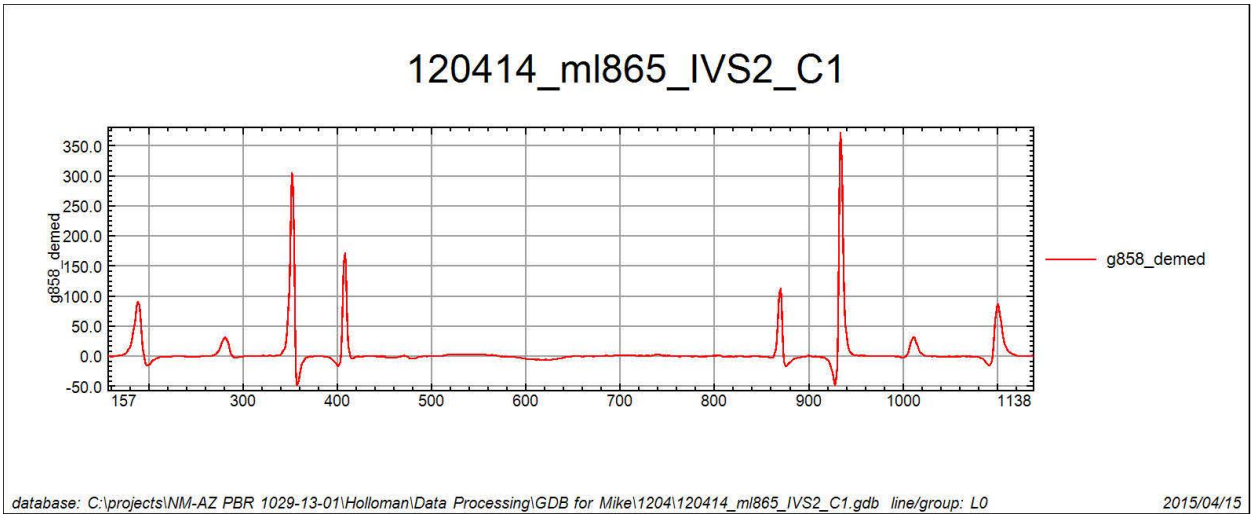
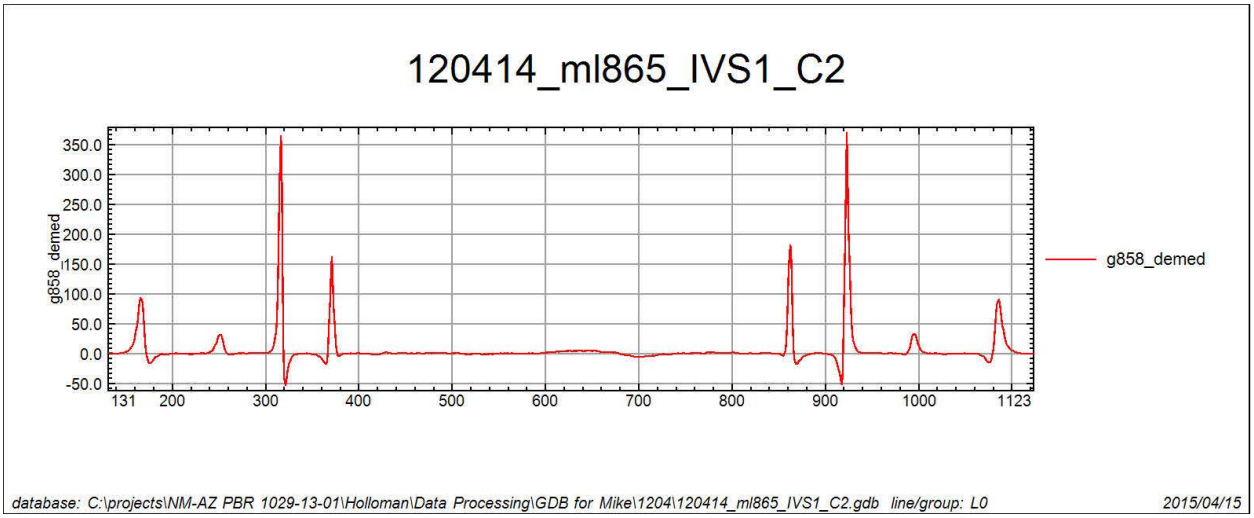


Figure C-294
12/04/2014 G-858 IVS AM and PM Sensor C2
IVS Test Results ML865 MRS



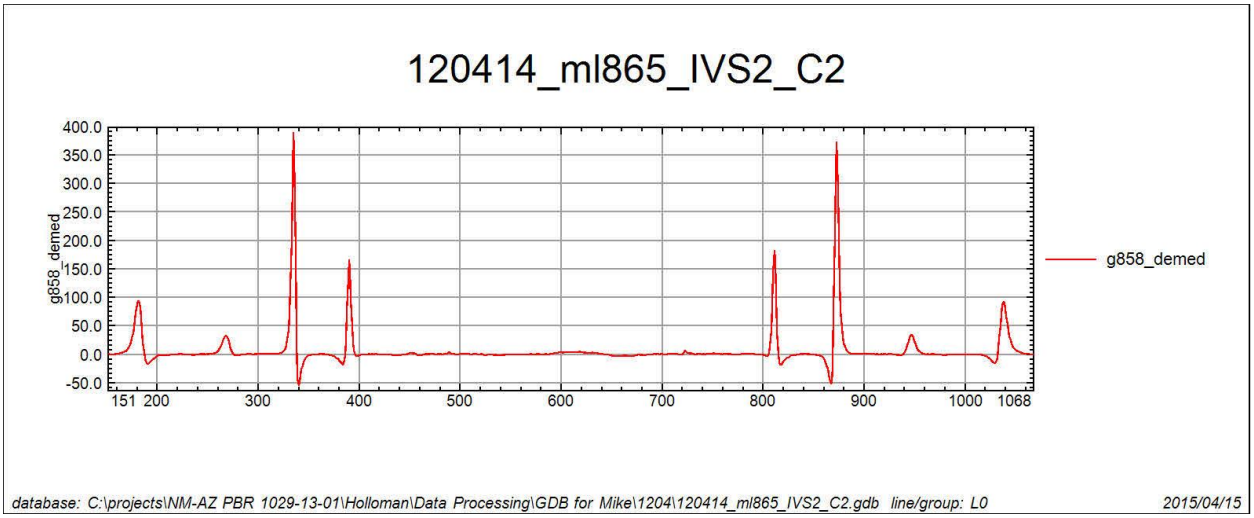
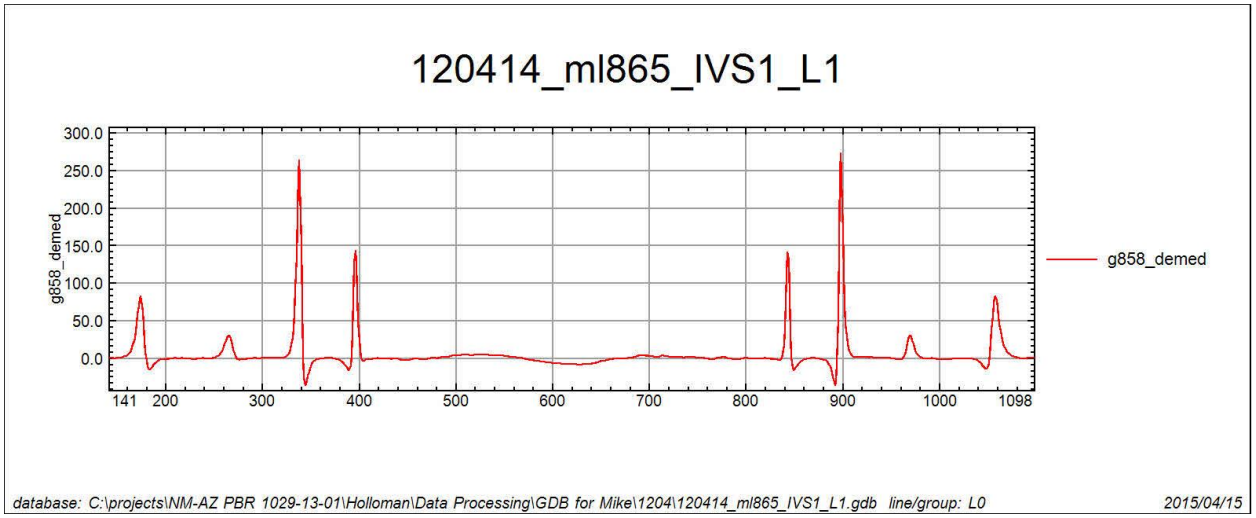


Figure C-295
12/04/2014 G-858 IVS AM and PM Sensor L1
IVS Test Results ML865 MRS



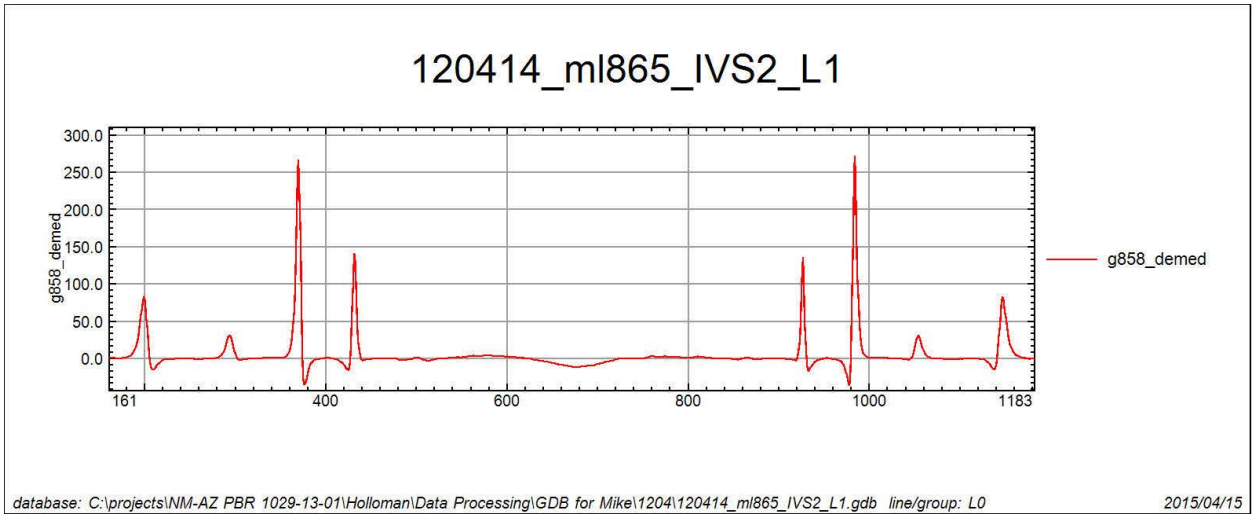
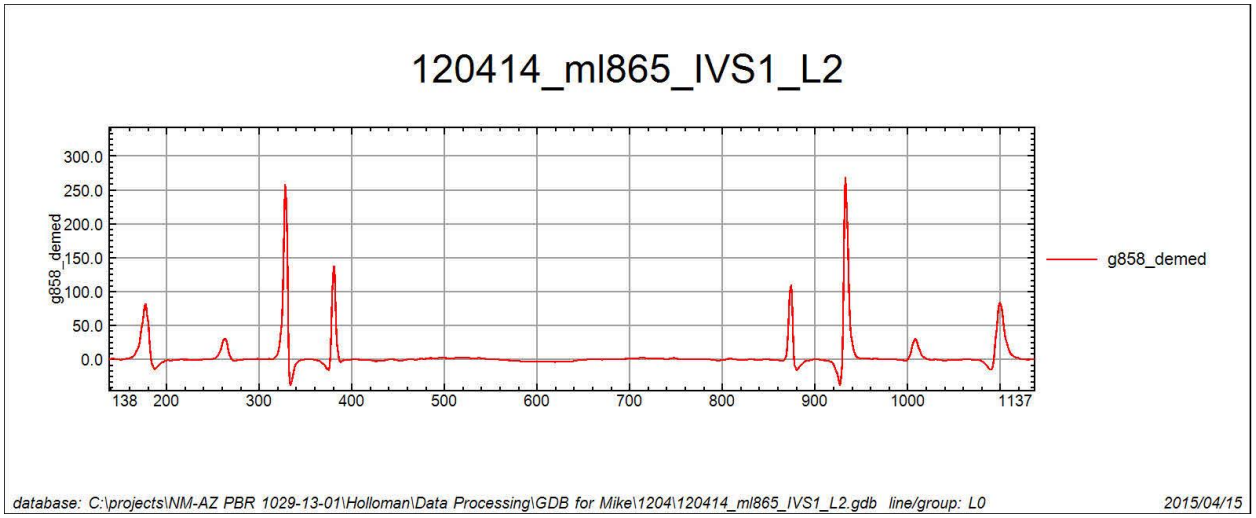


Figure C-296
12/04/2014 G-858 IVS AM and PM Sensor L2
IVS Test Results ML865 MRS



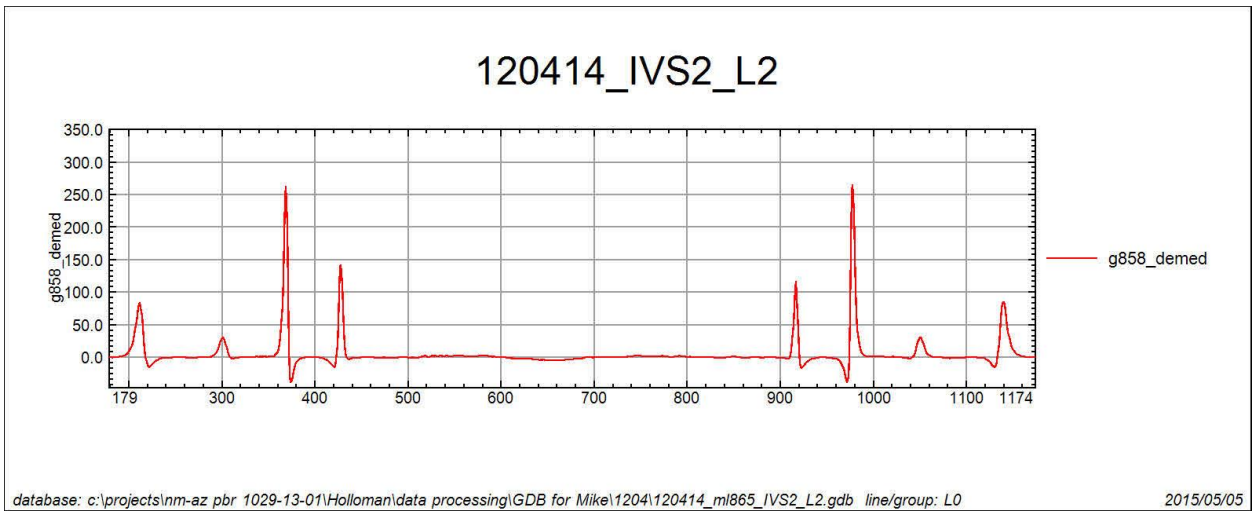
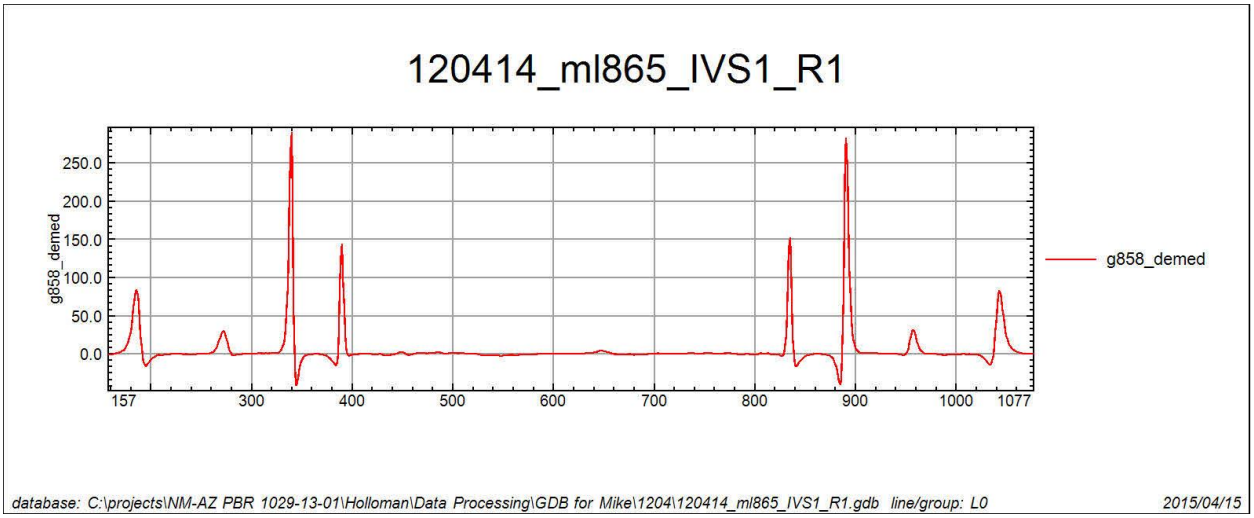


Figure C-297
12/04/2014 G-858 IVS AM and PM Sensor R1
IVS Test Results ML865 MRS



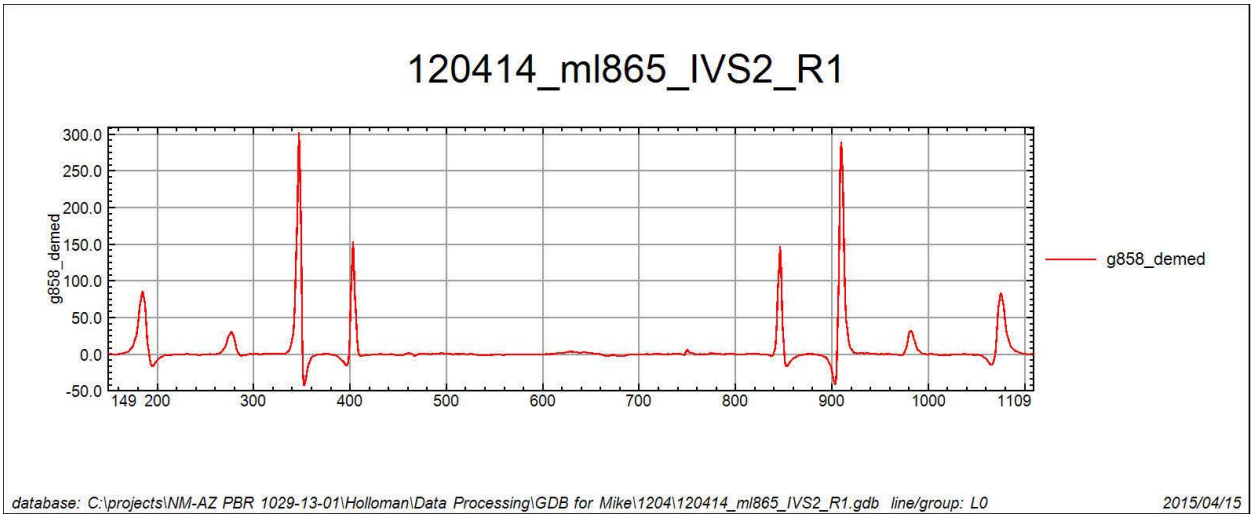
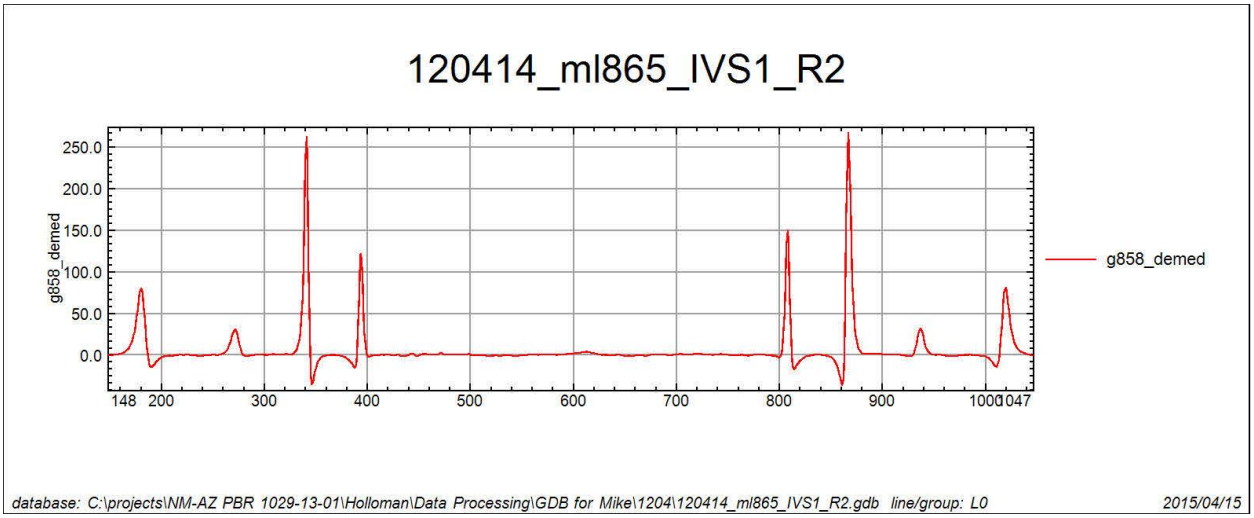


Figure C-298
12/04/2014 G-858 IVS AM and PM Sensor R2
IVS Test Results ML865 MRS



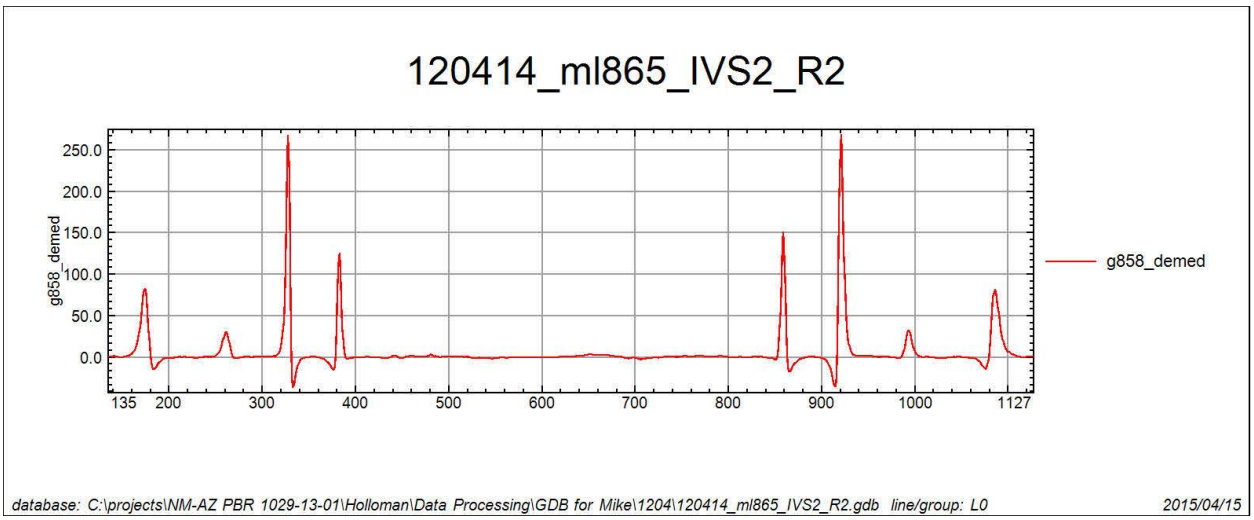
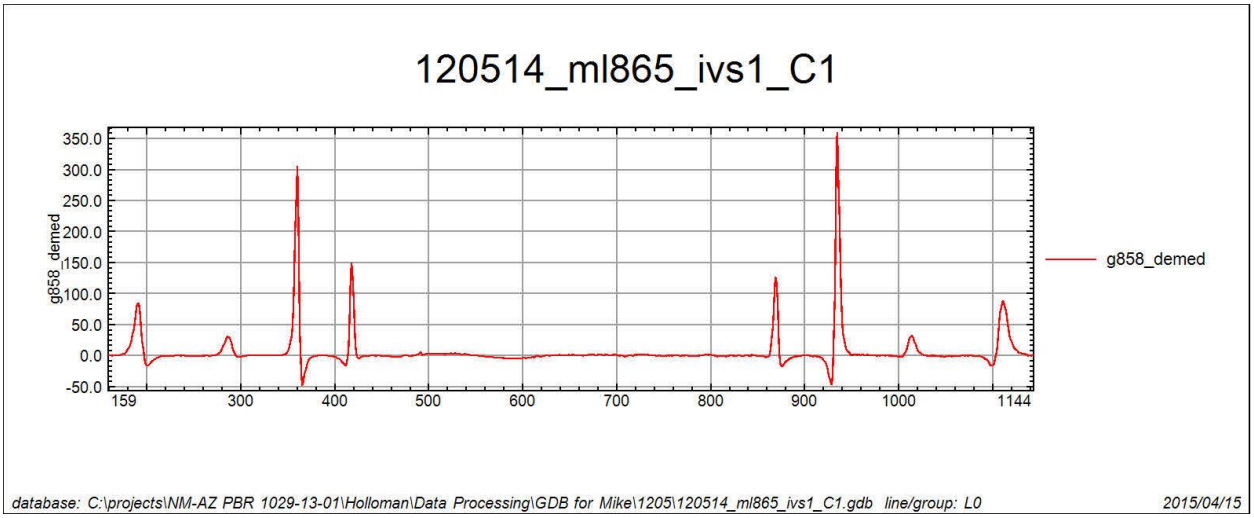


Figure C-299
12/05/2014 G-858 IVS AM and PM Sensor C1
IVS Test Results ML865 MRS



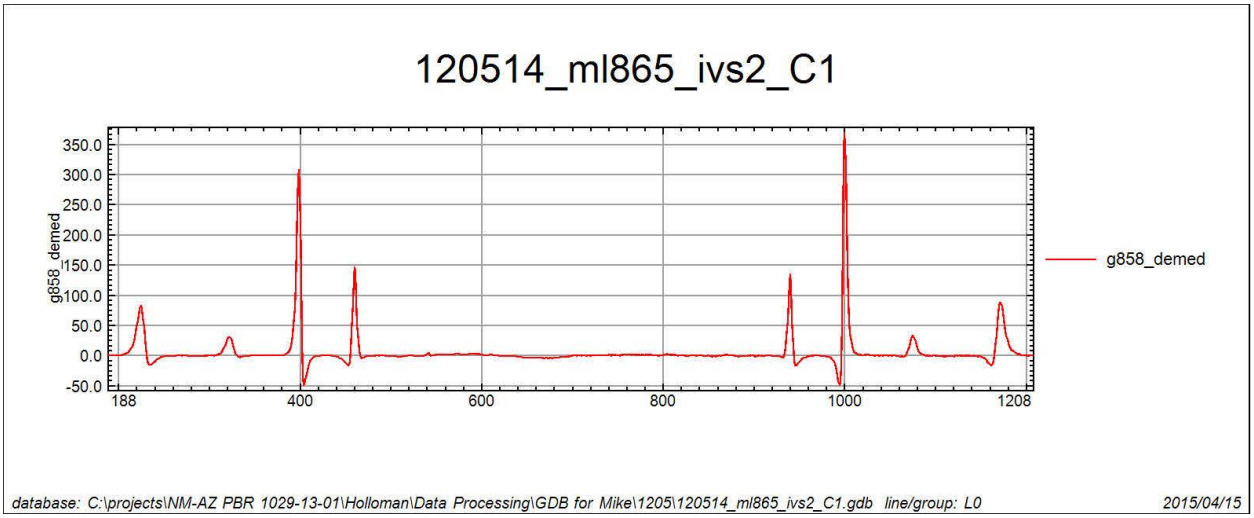
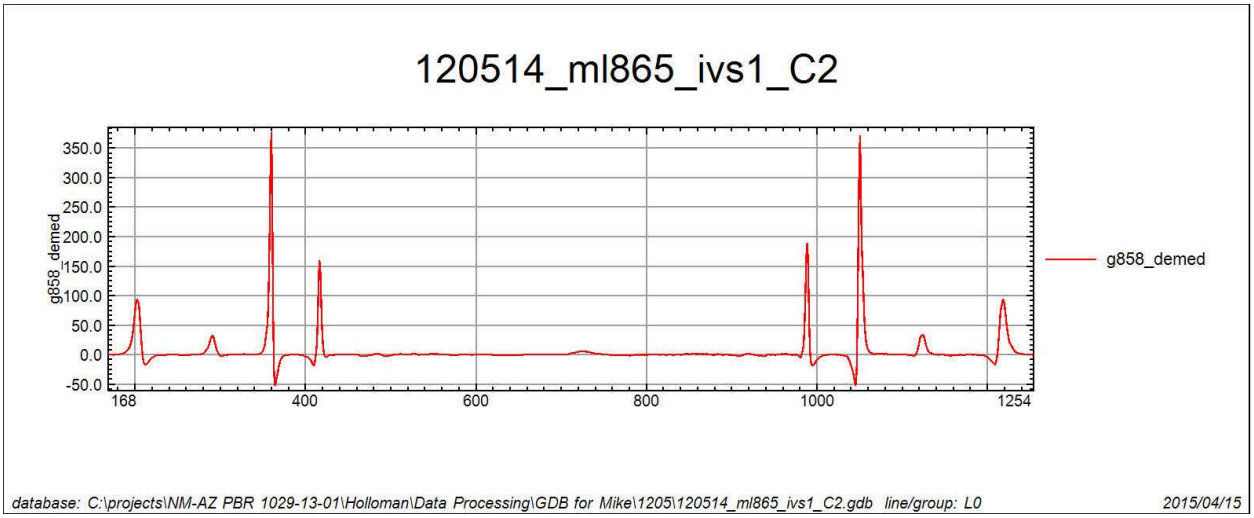


Figure C-300
12/05/2014 G-858 IVS AM and PM Sensor C2
IVS Test Results ML865 MRS



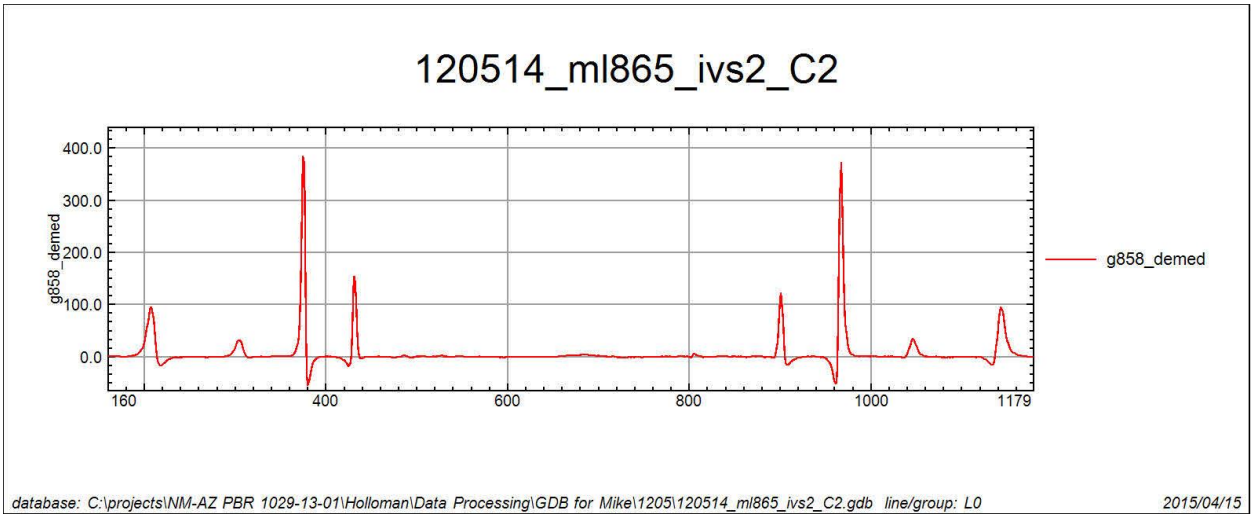
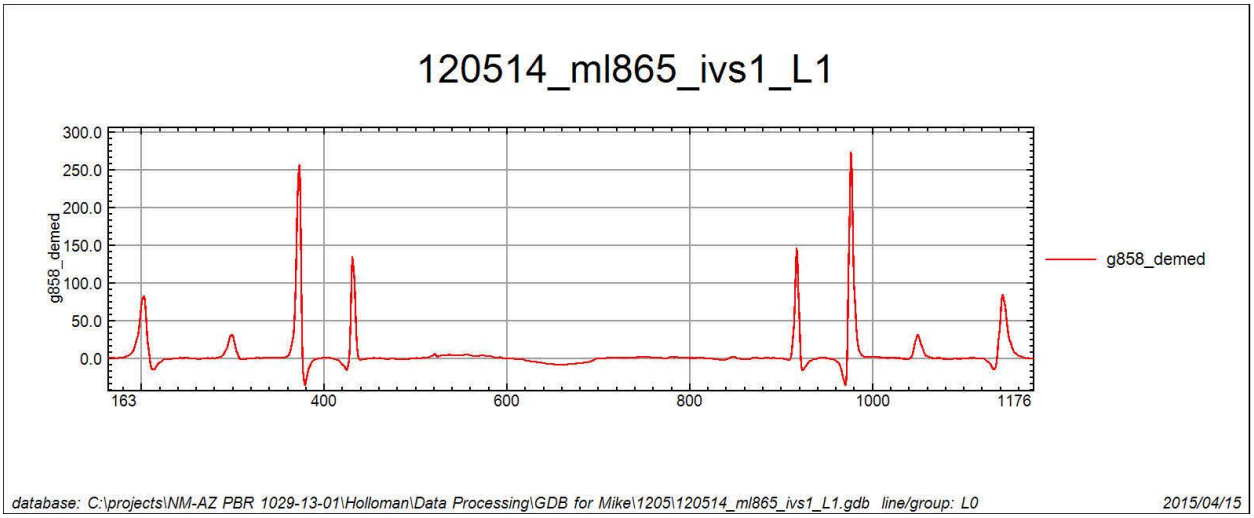


Figure C-301
12/05/2014 G-858 IVS AM and PM Sensor L1
IVS Test Results ML865 MRS



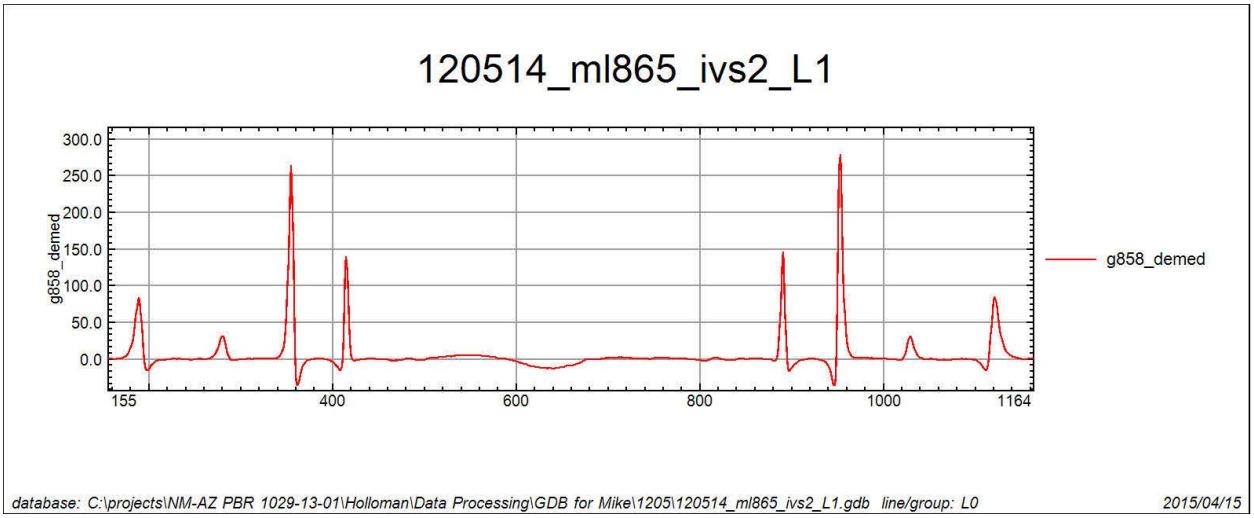
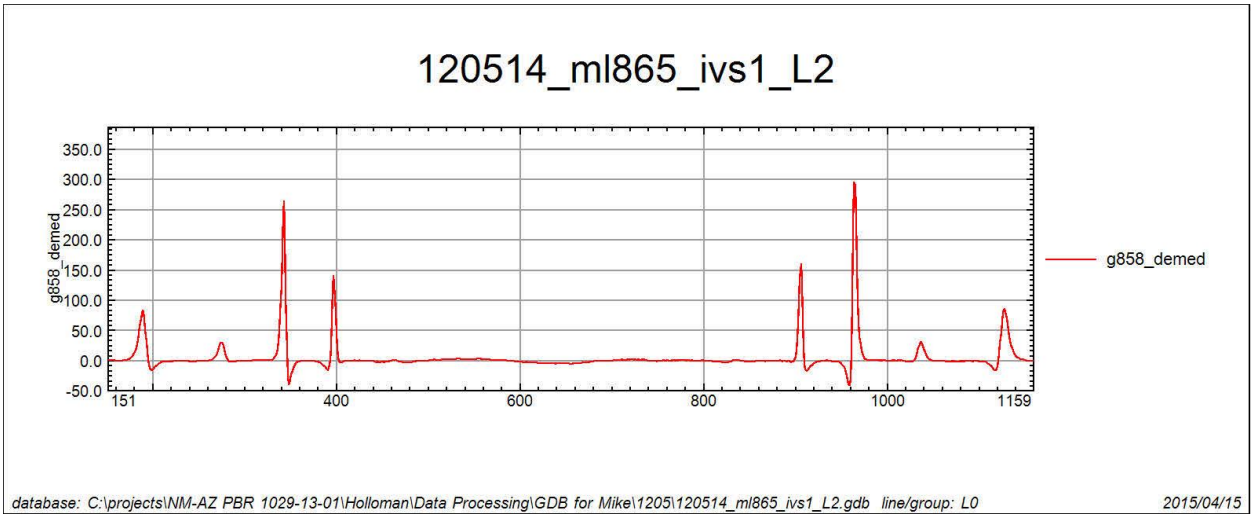


Figure C-302
12/05/2014 G-858 IVS AM and PM Sensor L2
IVS Test Results ML865 MRS



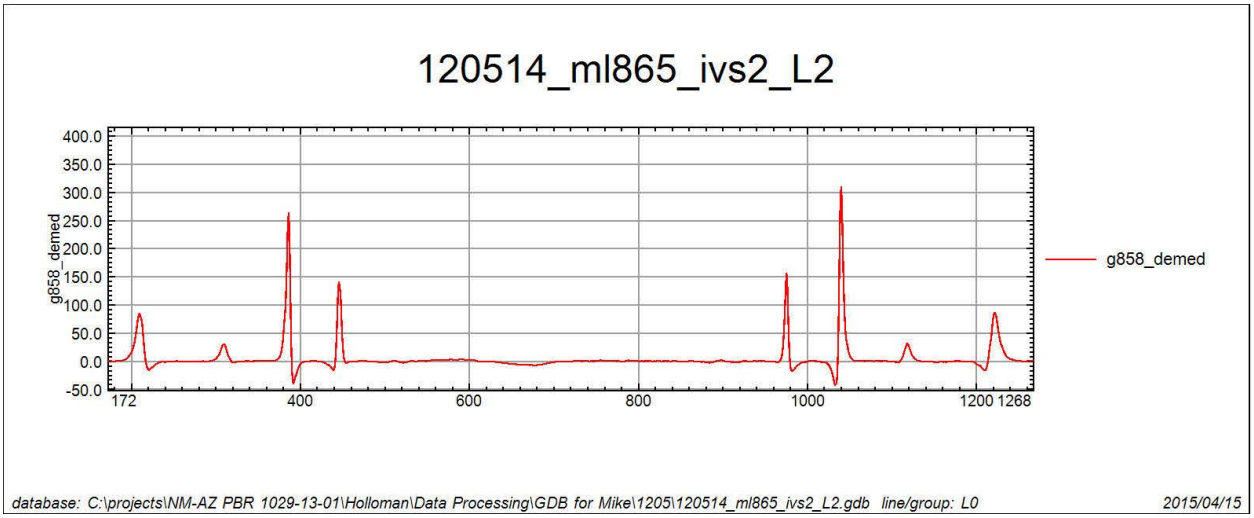
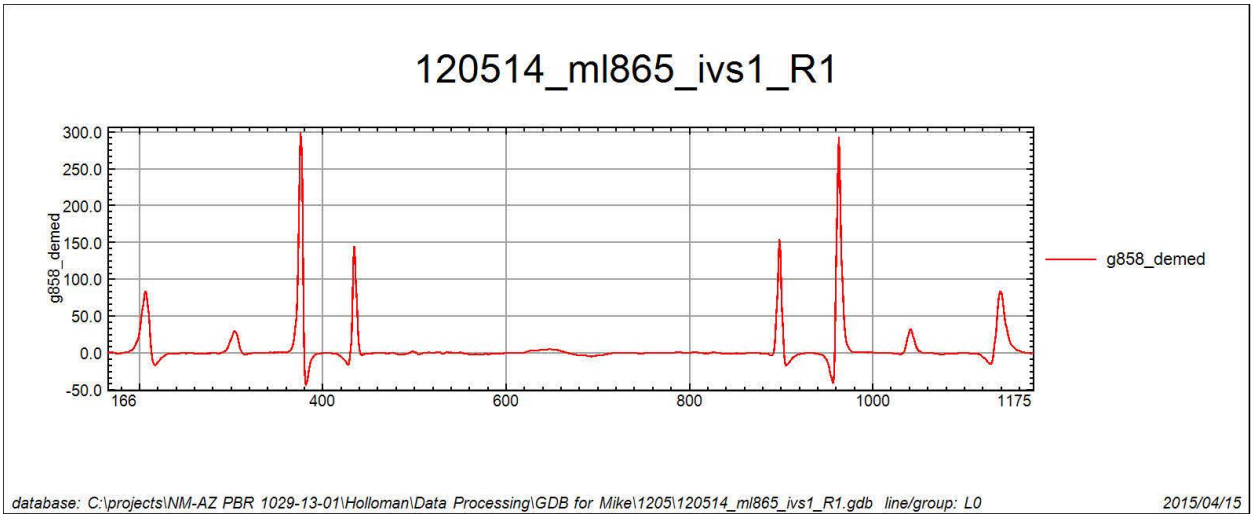


Figure C-303
12/05/2014 G-858 IVS AM and PM Sensor R1
IVS Test Results ML865 MRS



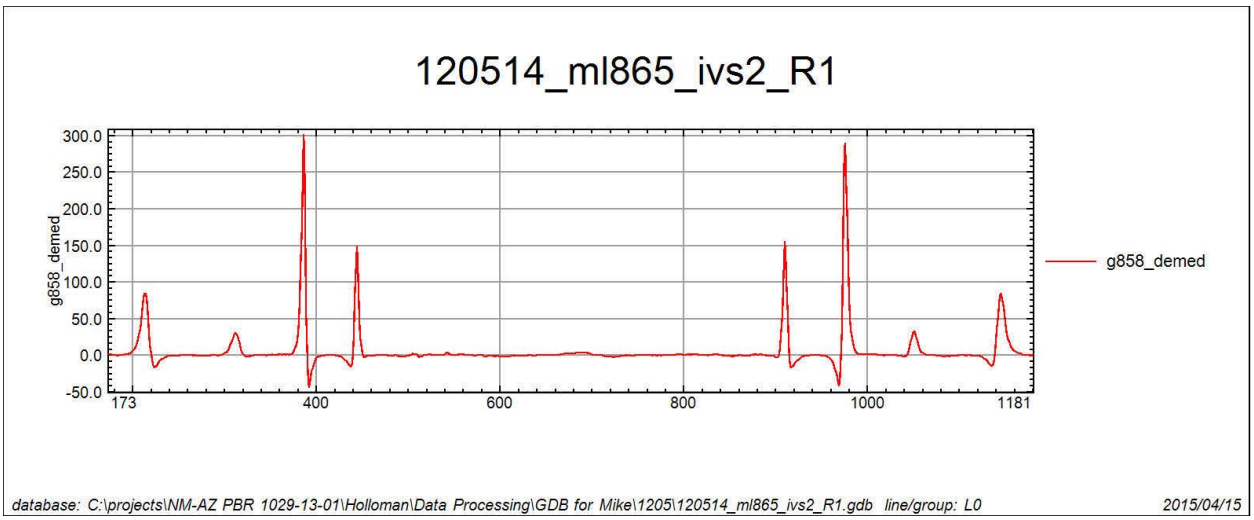
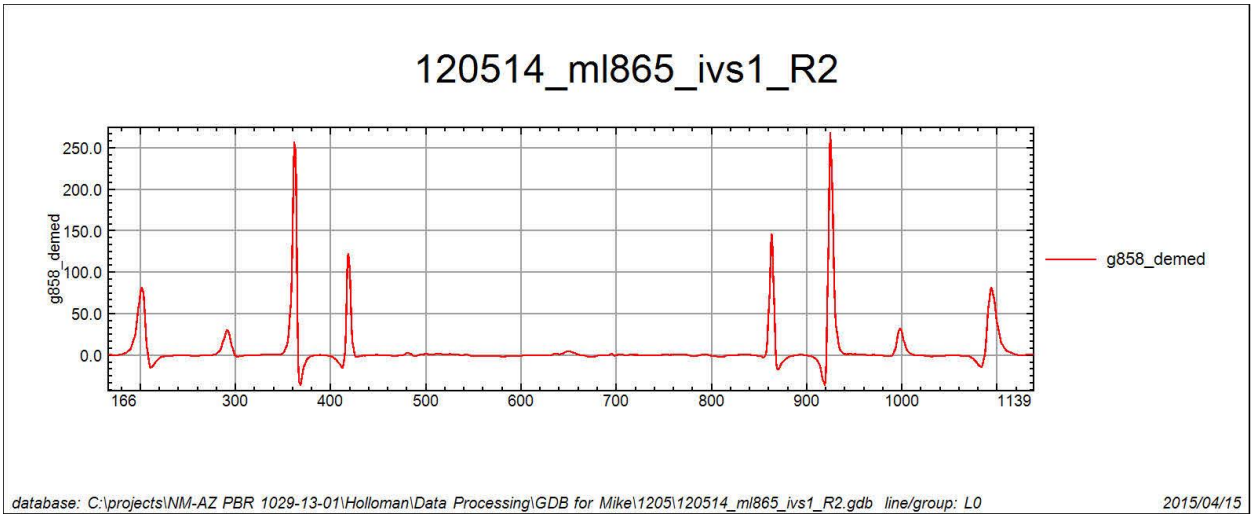


Figure C-304
12/05/2014 G-858 IVS AM and PM Sensor R2
IVS Test Results ML865 MRS



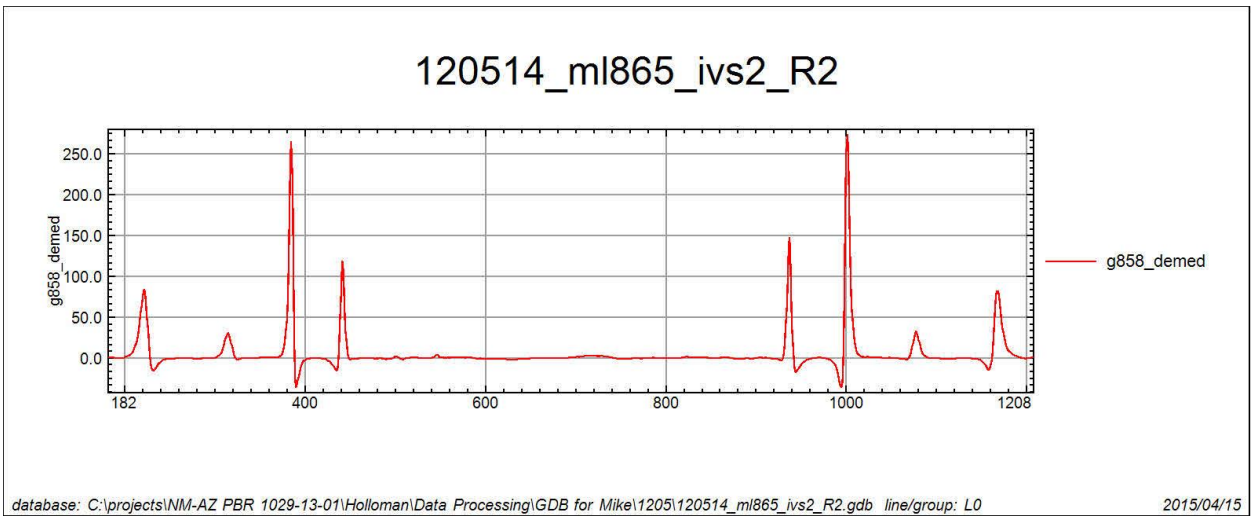
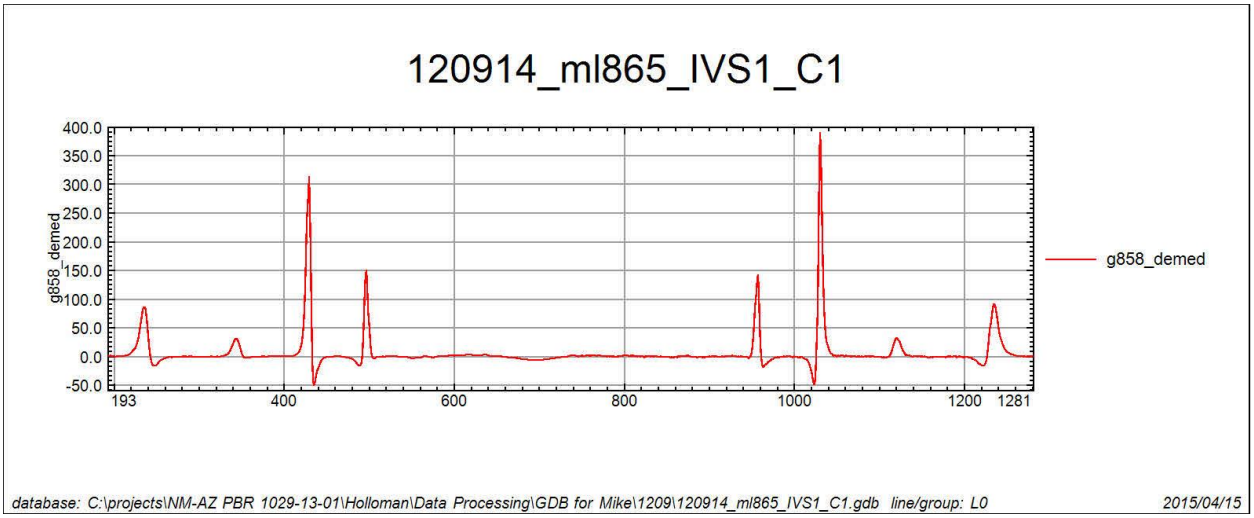


Figure C-305
12/09/2014 G-858 IVS AM and PM Sensor C1
IVS Test Results ML865 MRS



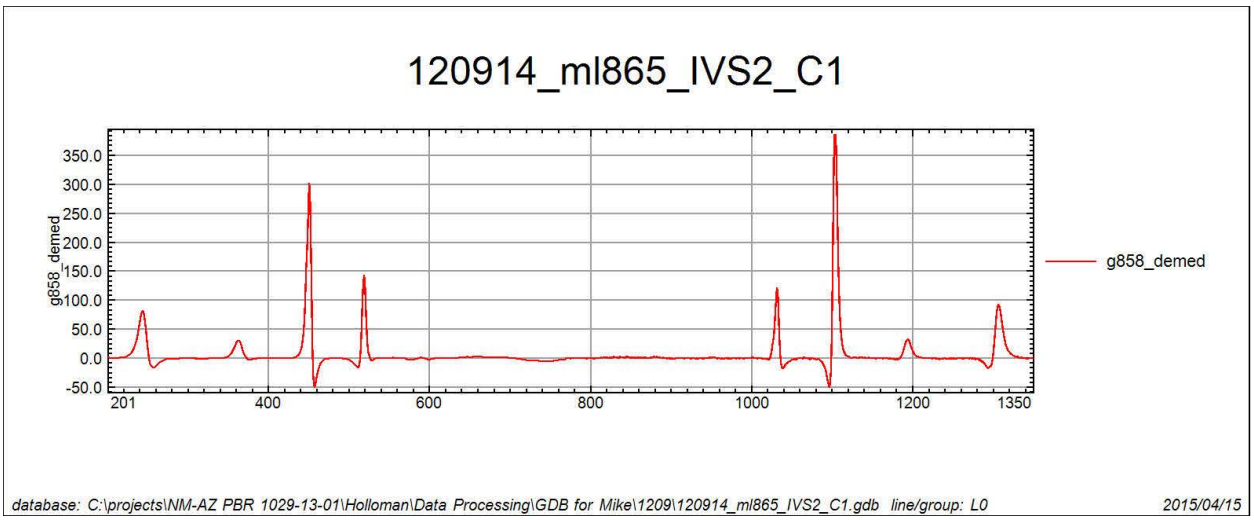
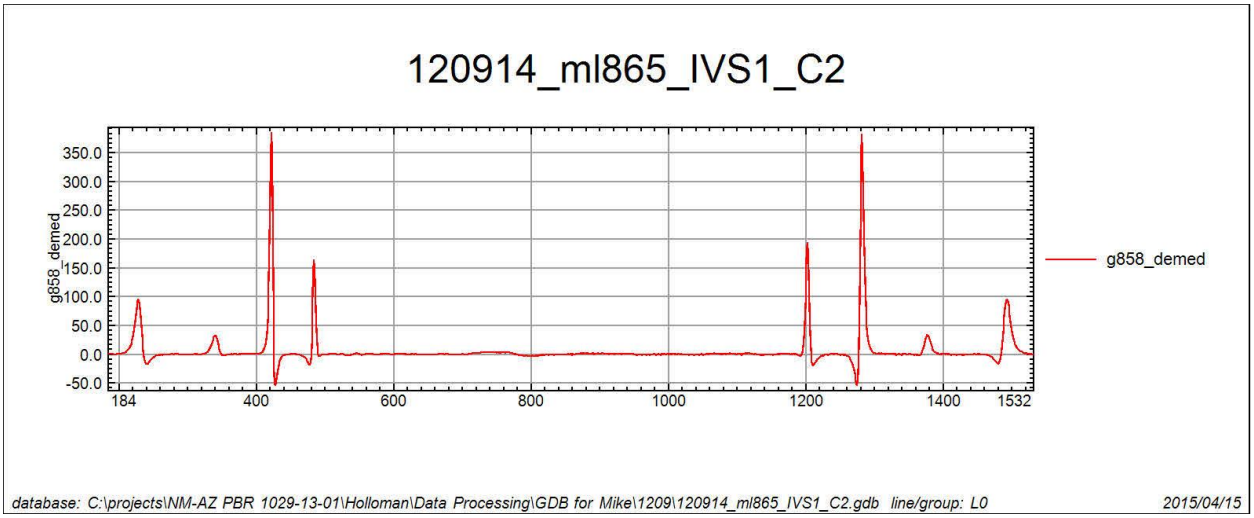


Figure C-306
12/09/2014 G-858 IVS AM and PM Sensor C2
IVS Test Results ML865 MRS



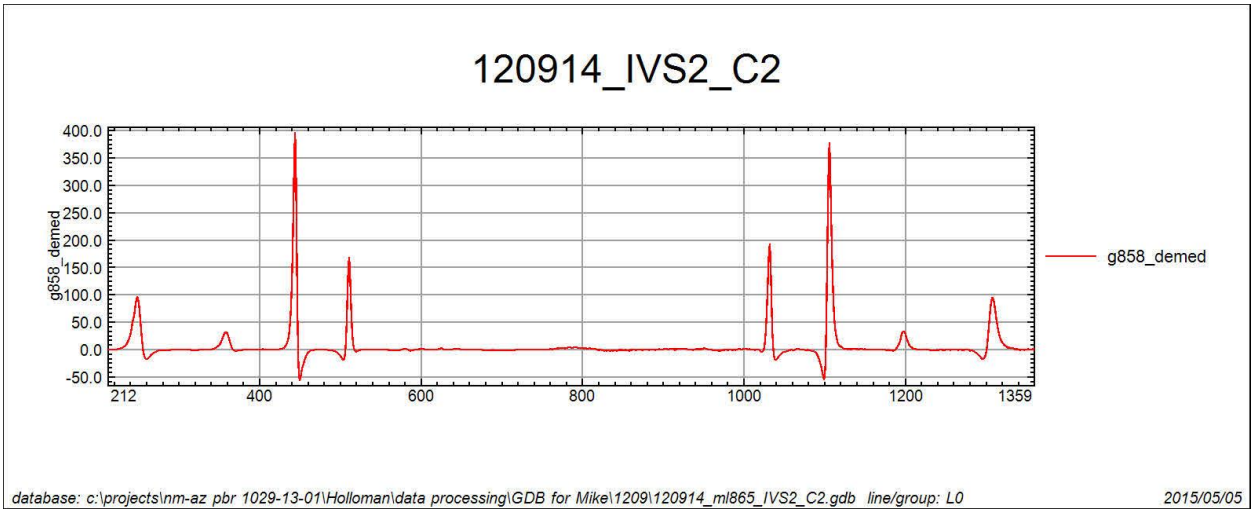
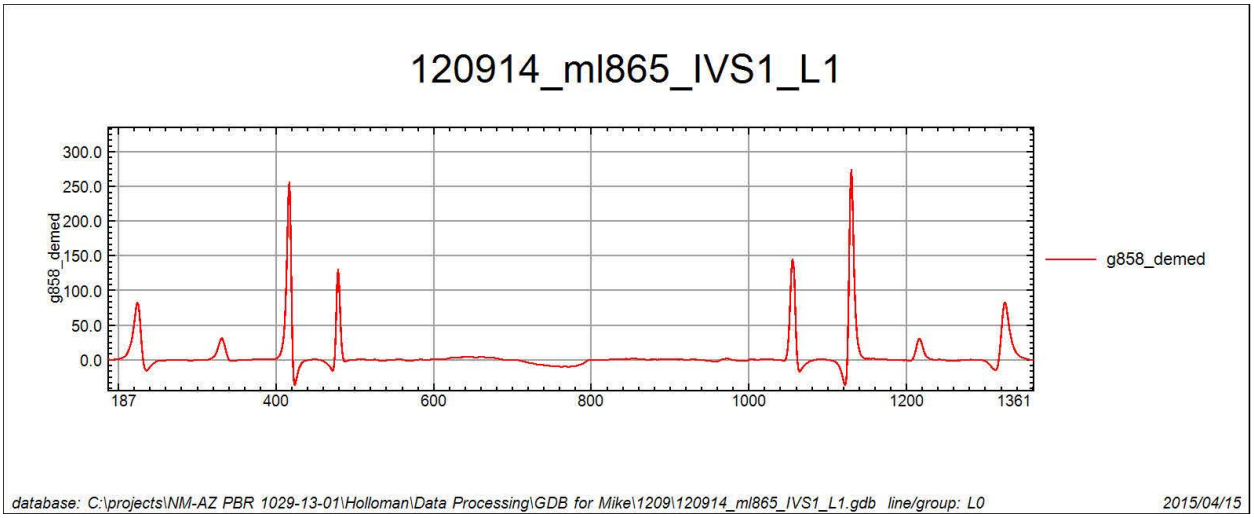


Figure C-307
12/09/2014 G-858 IVS AM and PM Sensor L1
IVS Test Results ML865 MRS



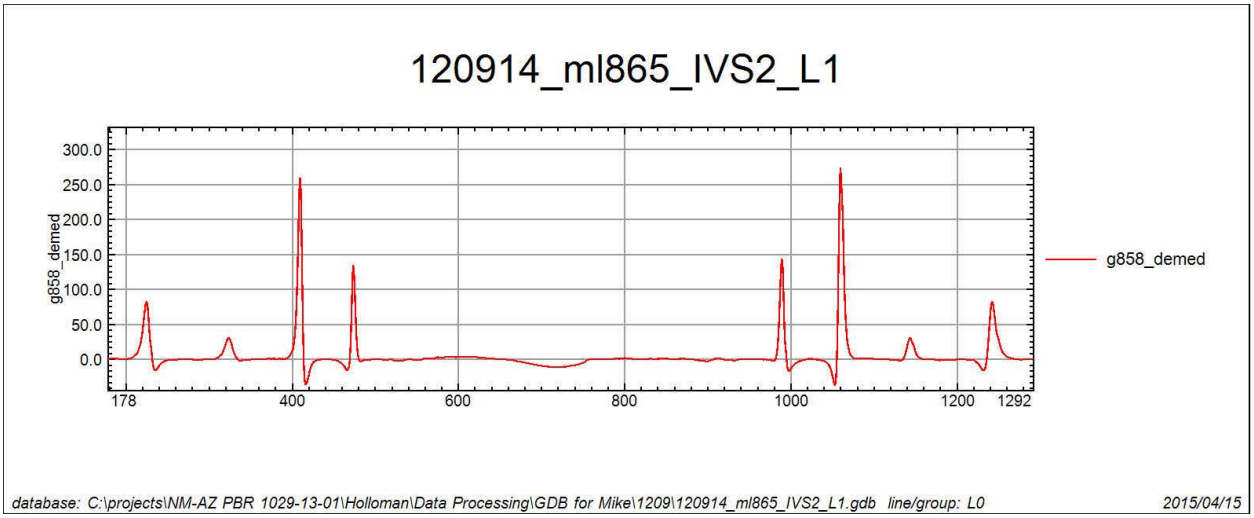
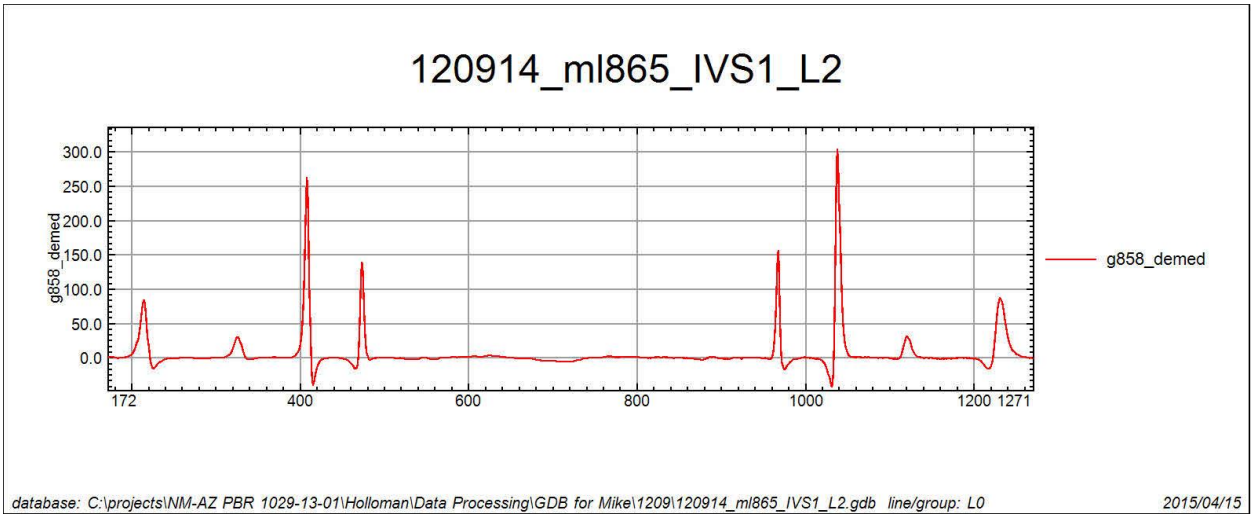


Figure C-308
12/09/2014 G-858 IVS AM and PM Sensor L2
IVS Test Results ML865 MRS



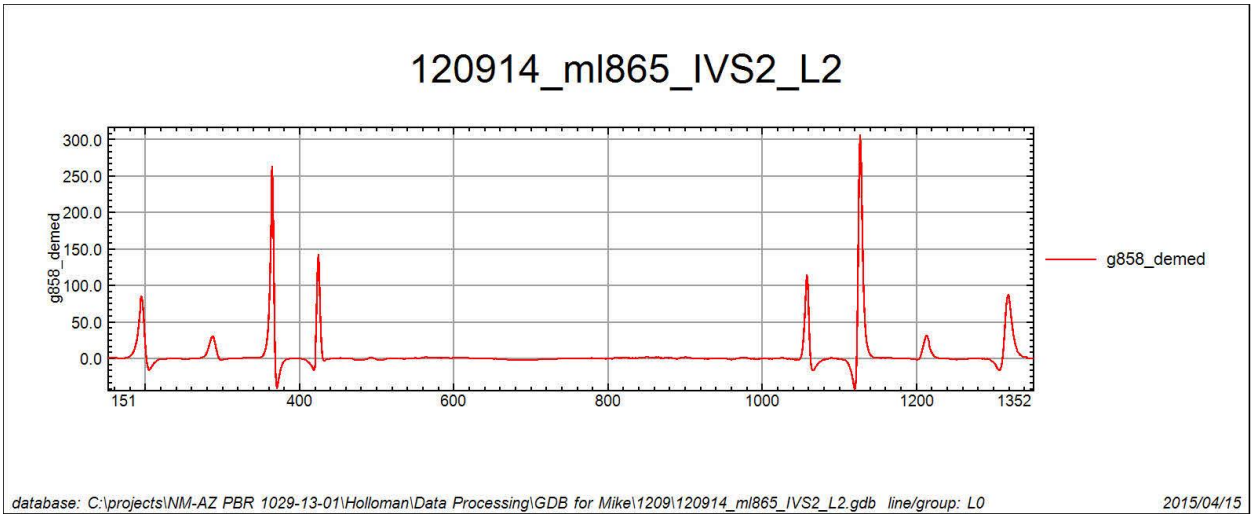
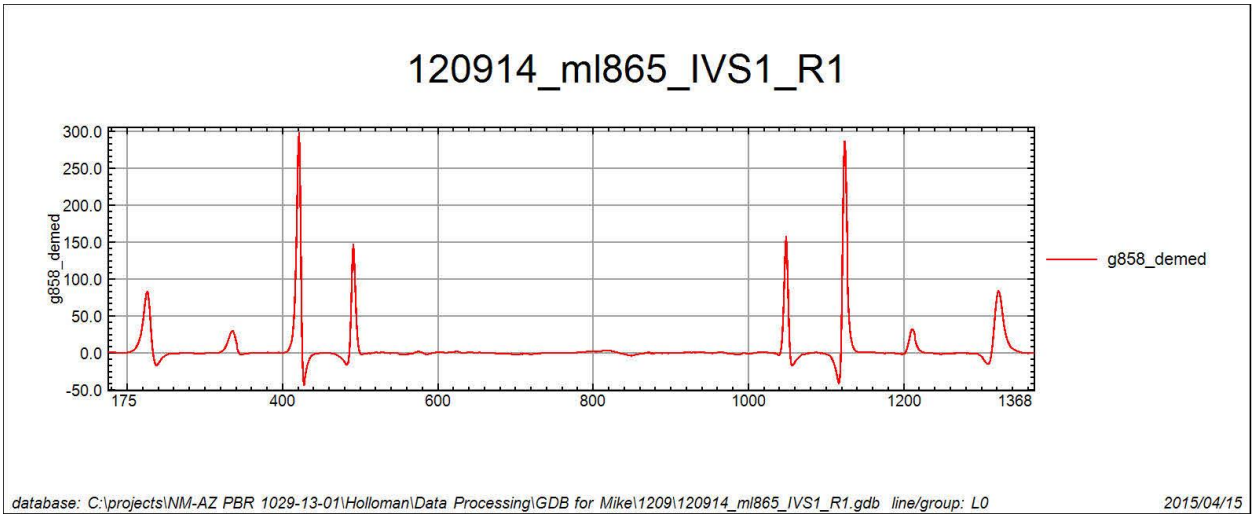


Figure C-309
12/09/2014 G-858 IVS AM and PM Sensor R1
IVS Test Results ML865 MRS



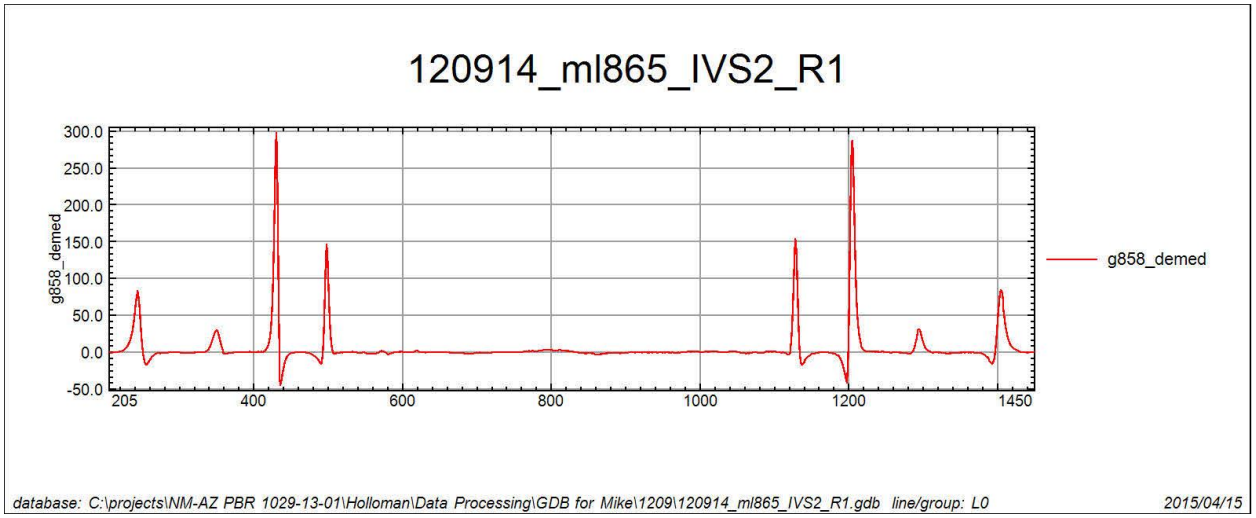
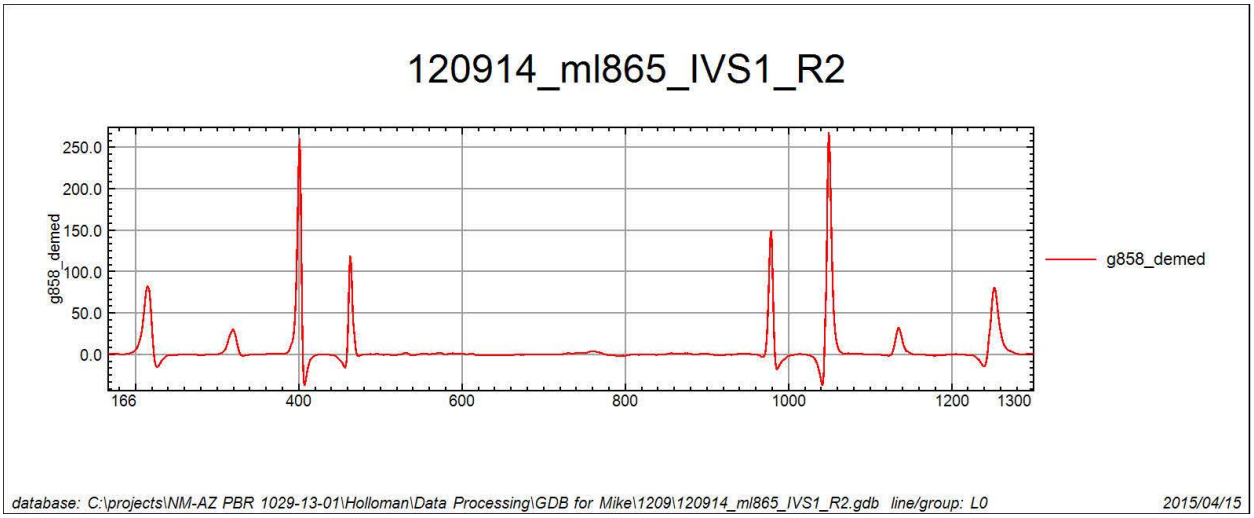


Figure C-310
12/09/2014 G-858 IVS AM and PM Sensor R2
IVS Test Results ML865 MRS



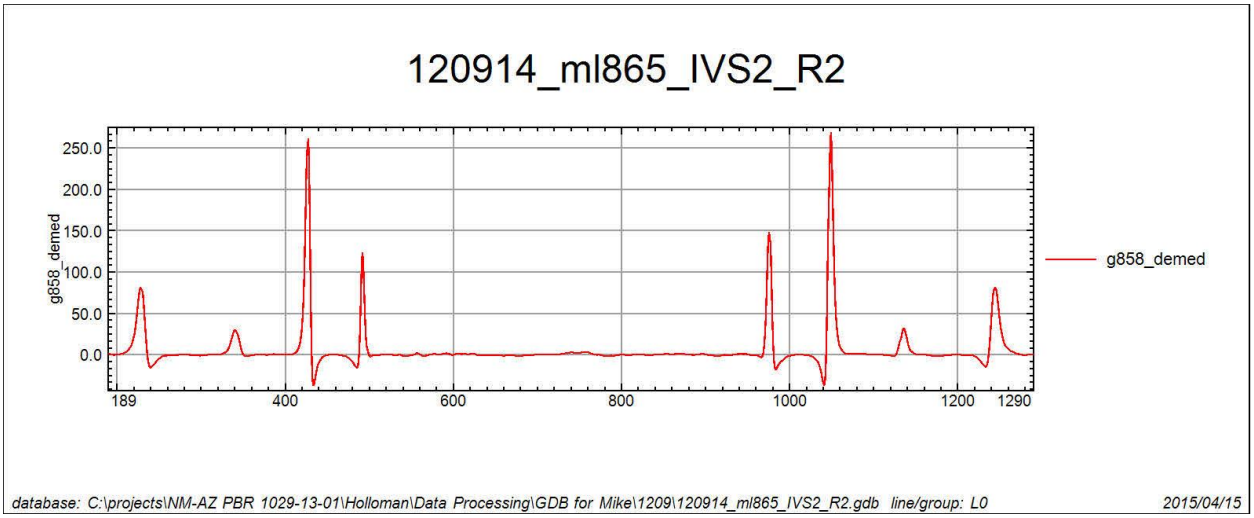
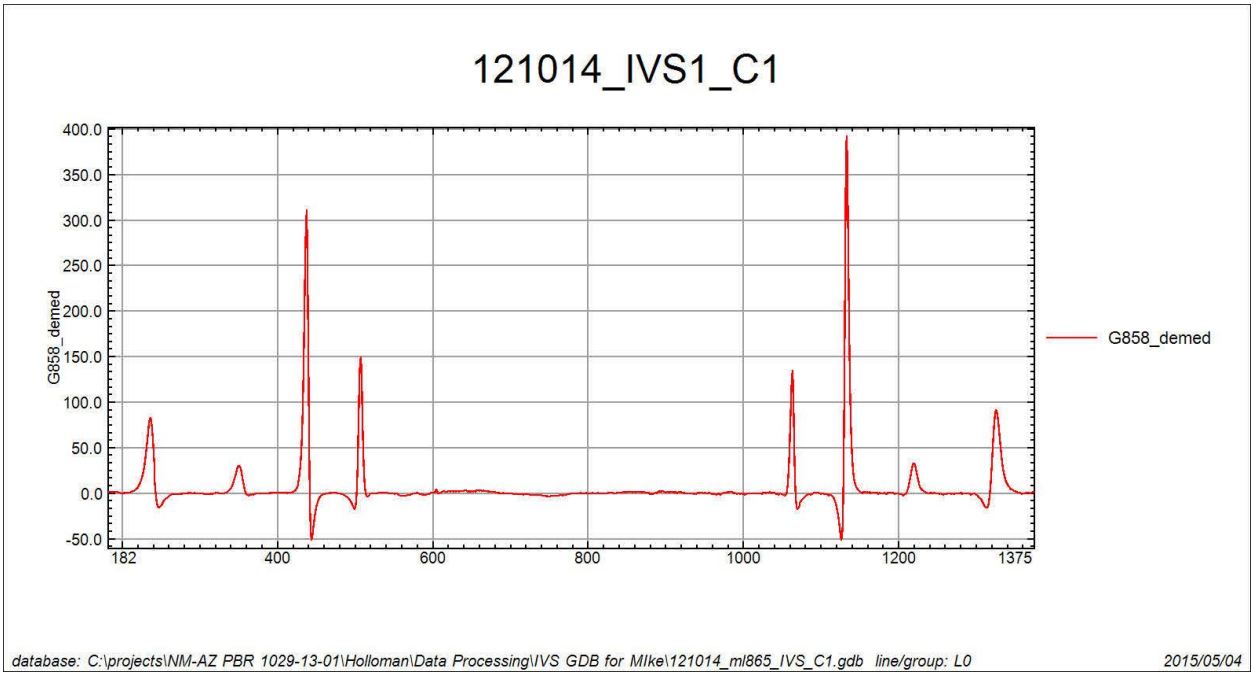


Figure C-311
12/10/2014 G-858 IVS AM and PM Sensor C1
IVS Test Results ML865 MRS



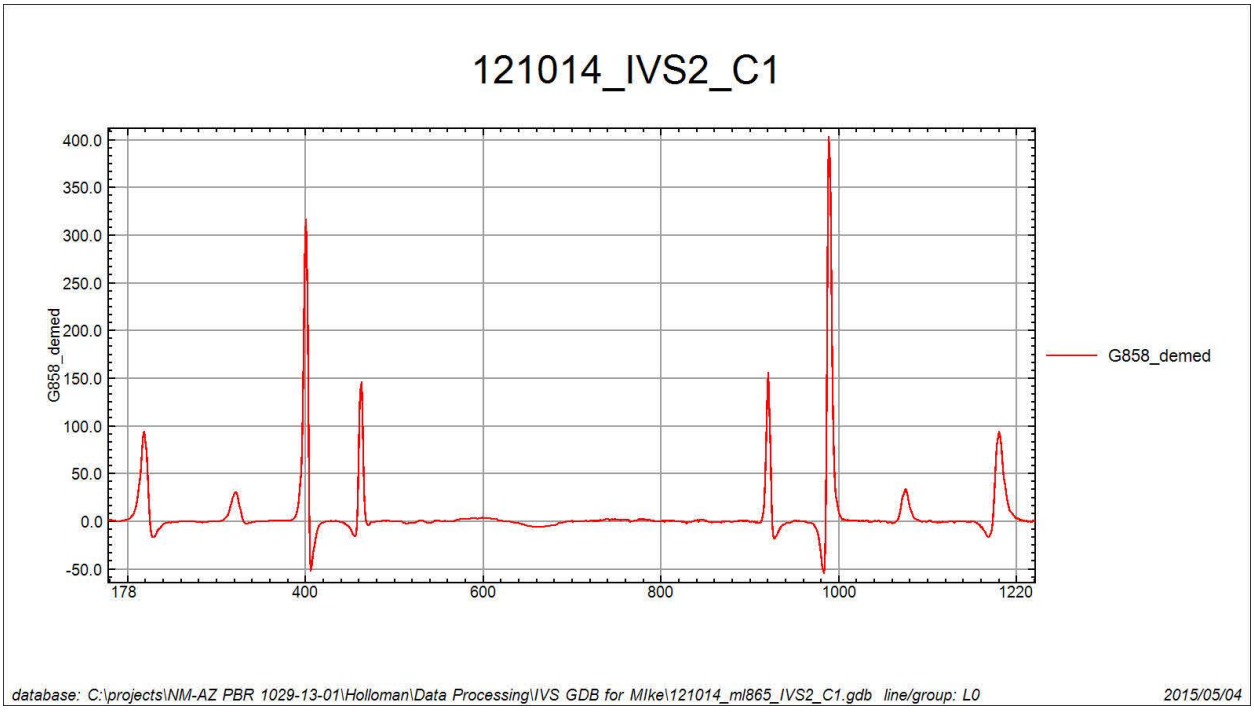
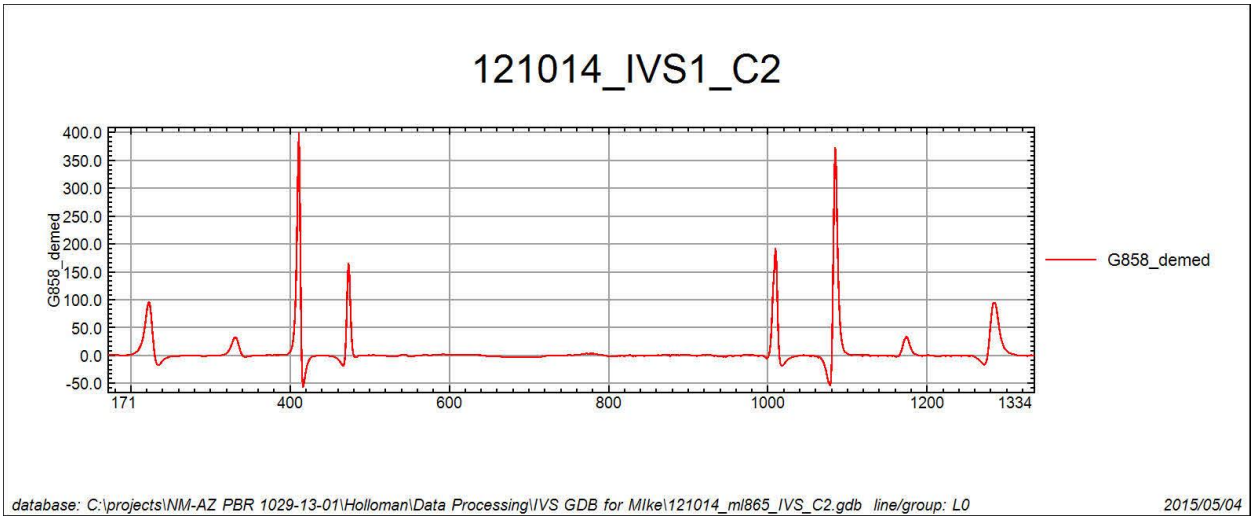


Figure C-312
12/10/2014 G-858 IVS AM and PM Sensor C2
IVS Test Results ML865 MRS



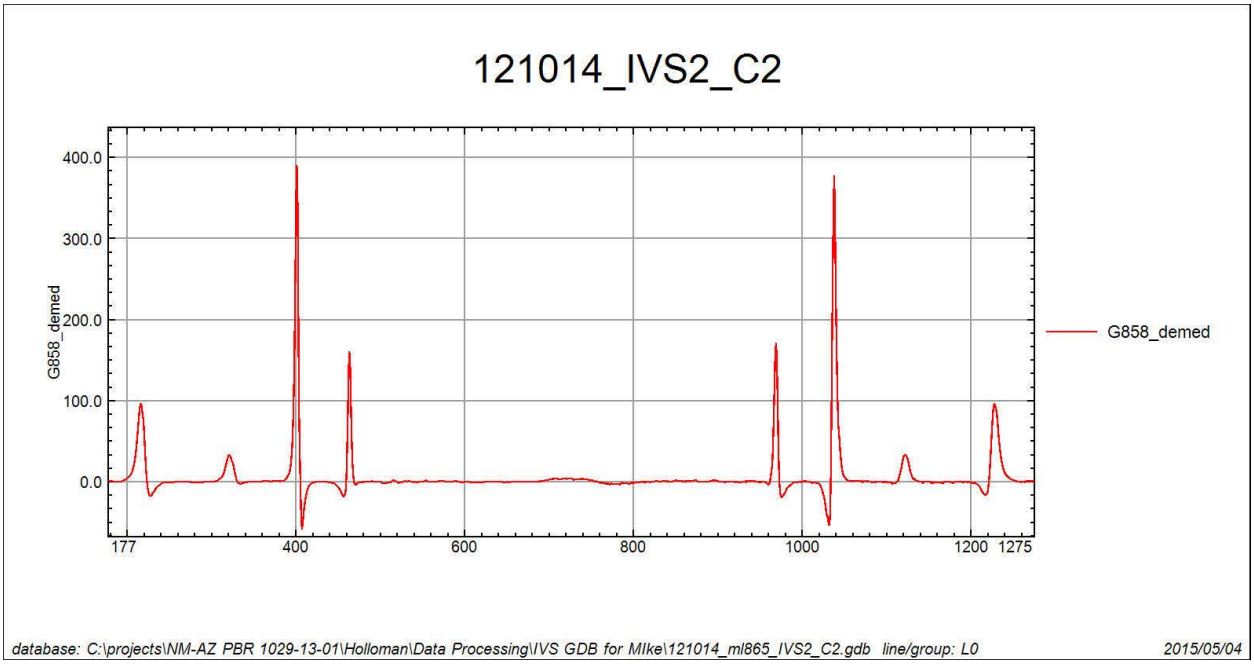
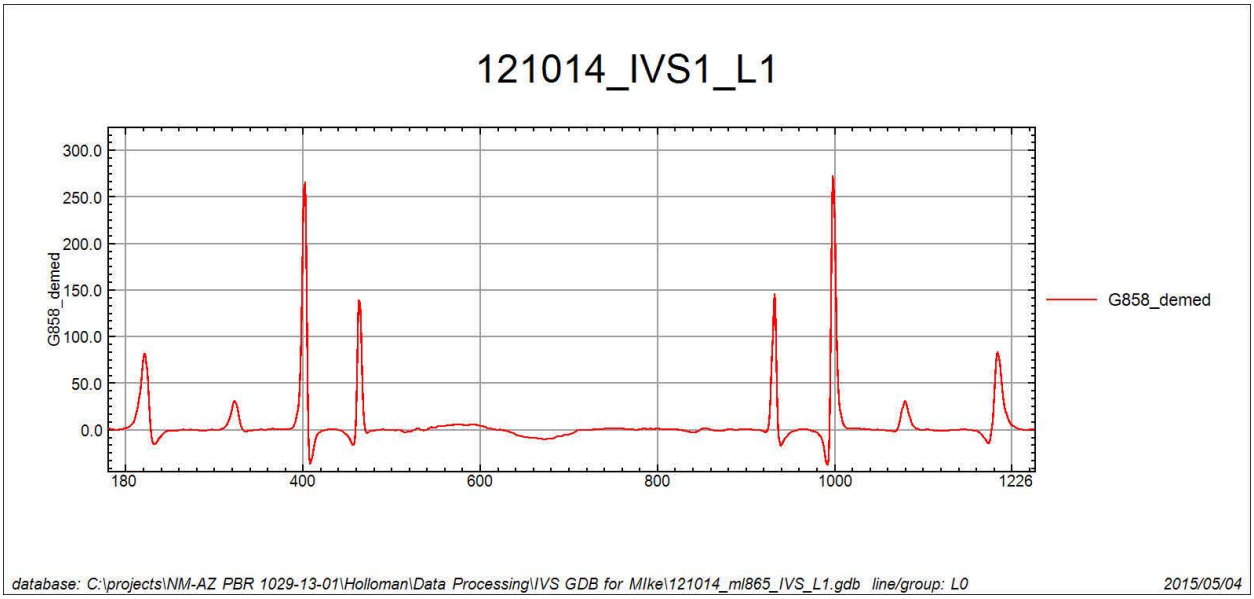


Figure C-313
12/10/2014 G-858 IVS AM and PM Sensor L1
IVS Test Results ML865 MRS



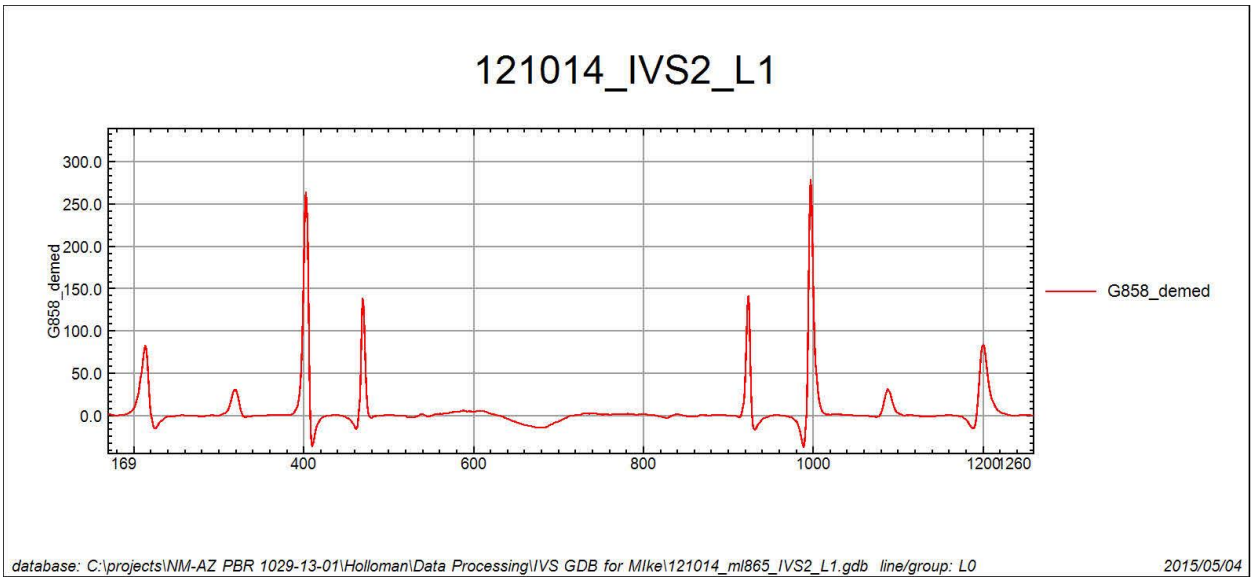
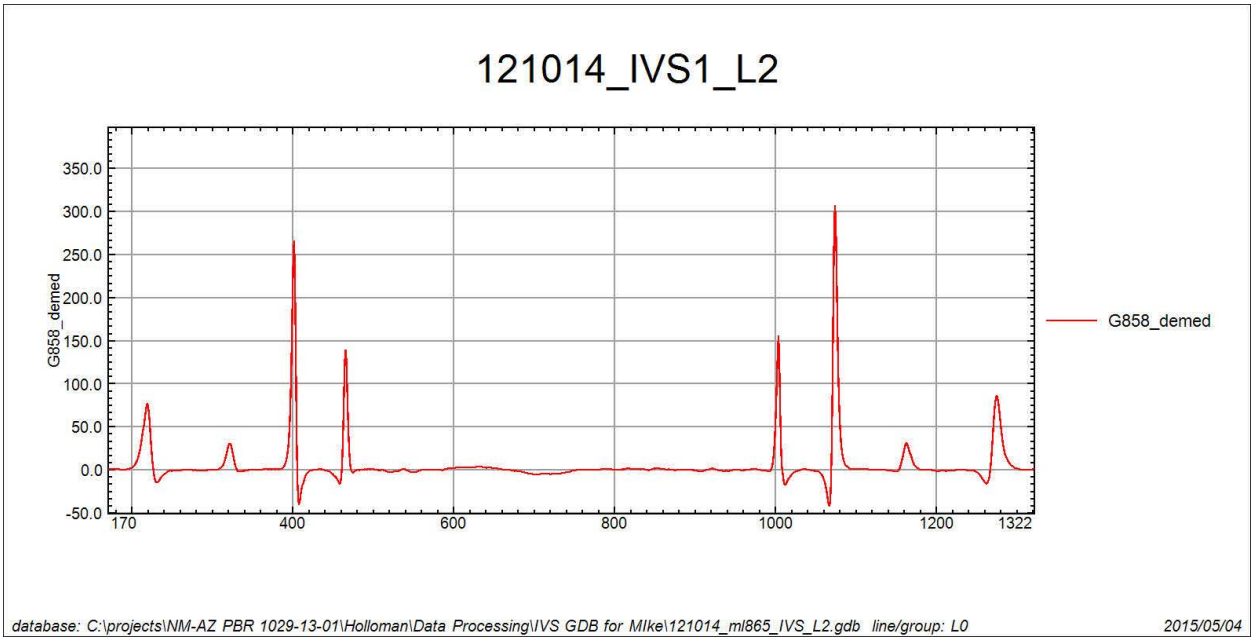


Figure C-314
12/10/2014 G-858 IVS AM and PM Sensor L2
IVS Test Results ML865 MRS



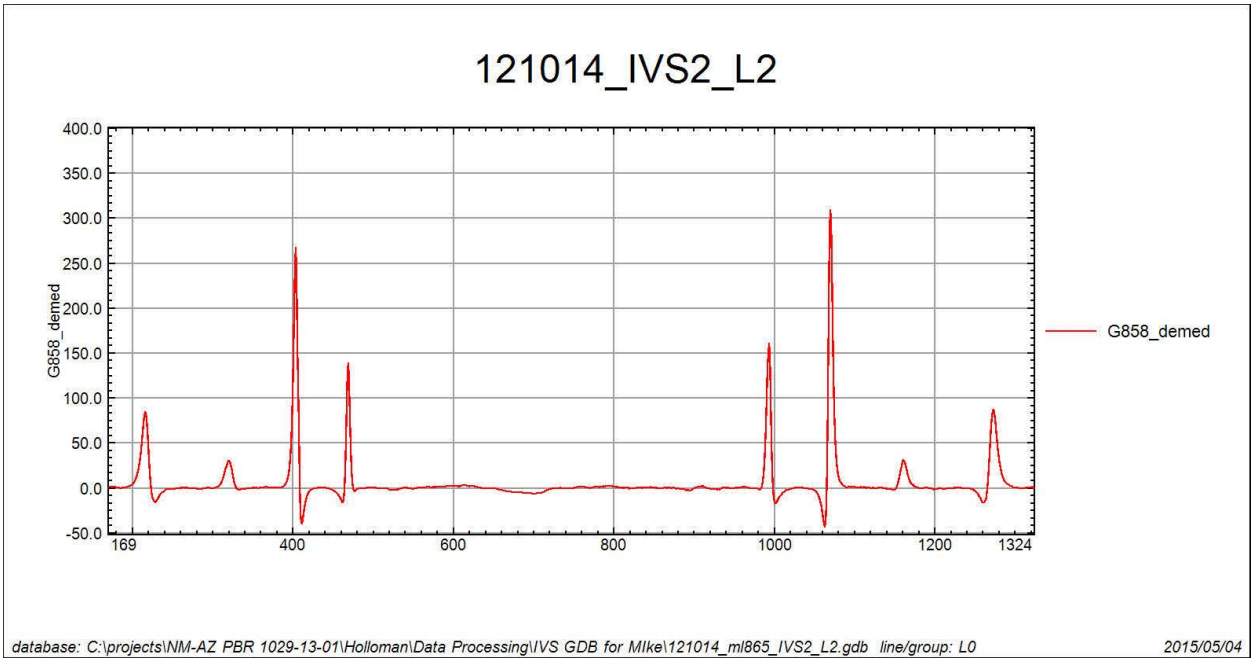
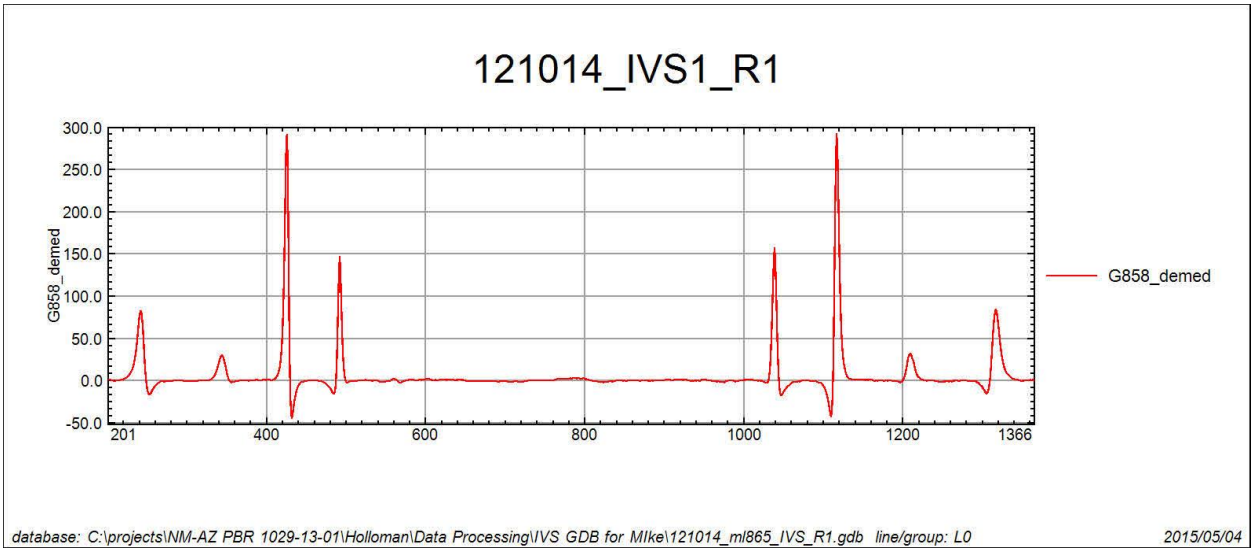


Figure C-315
12/10/2014 G-858 IVS AM and PM Sensor R1
IVS Test Results ML865 MRS



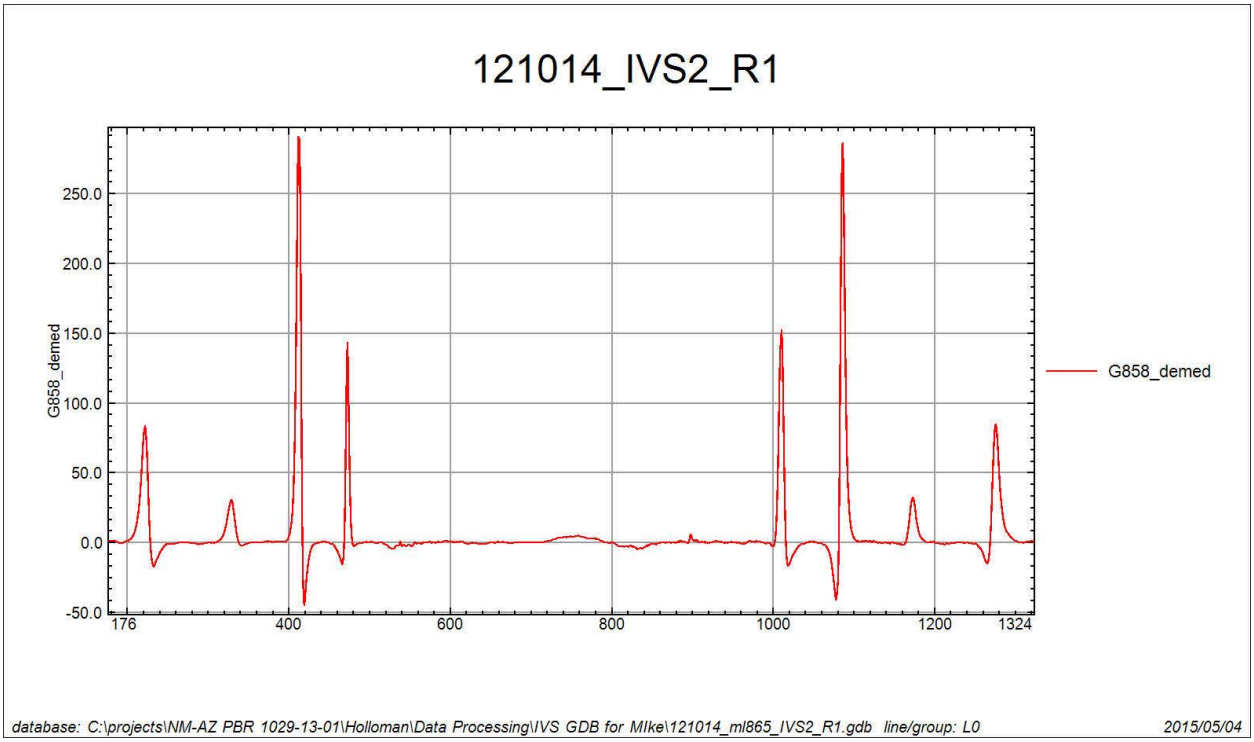
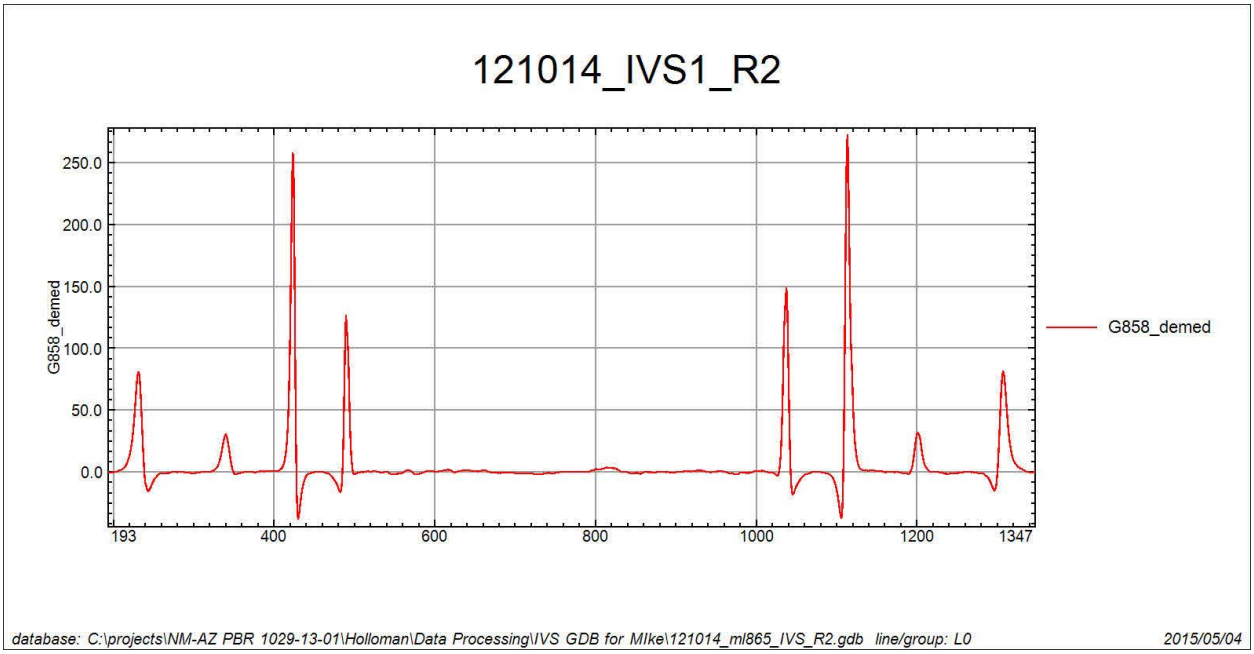


Figure C-316
12/10/2014 G-858 IVS AM and PM Sensor R2
IVS Test Results ML865 MRS



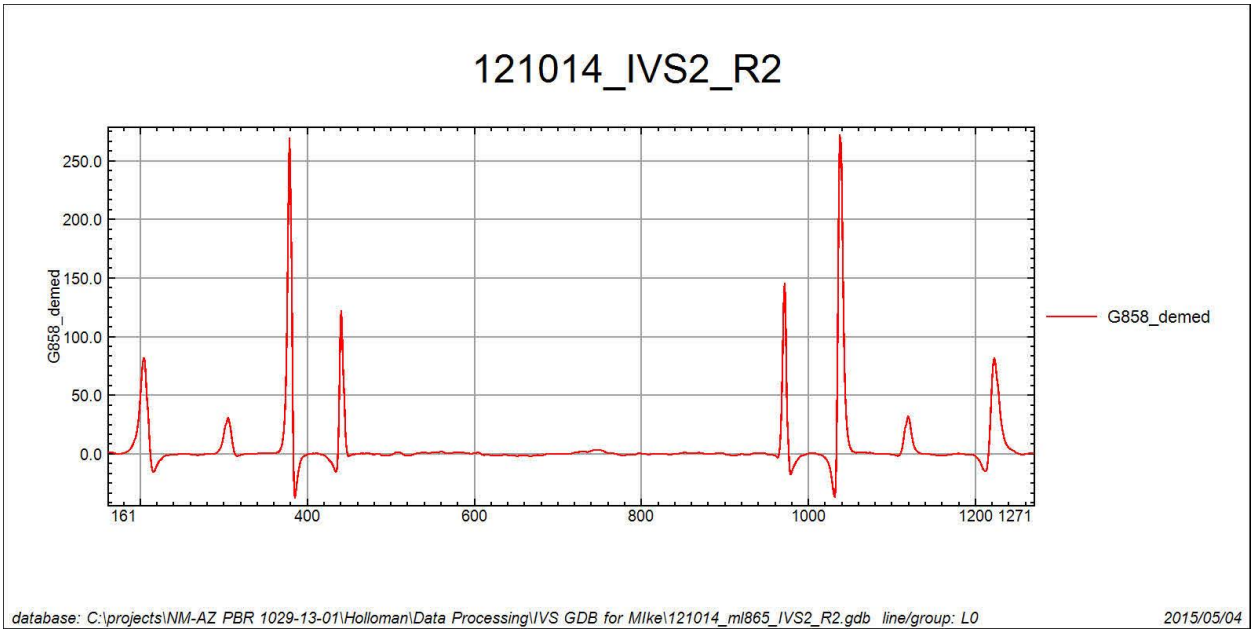
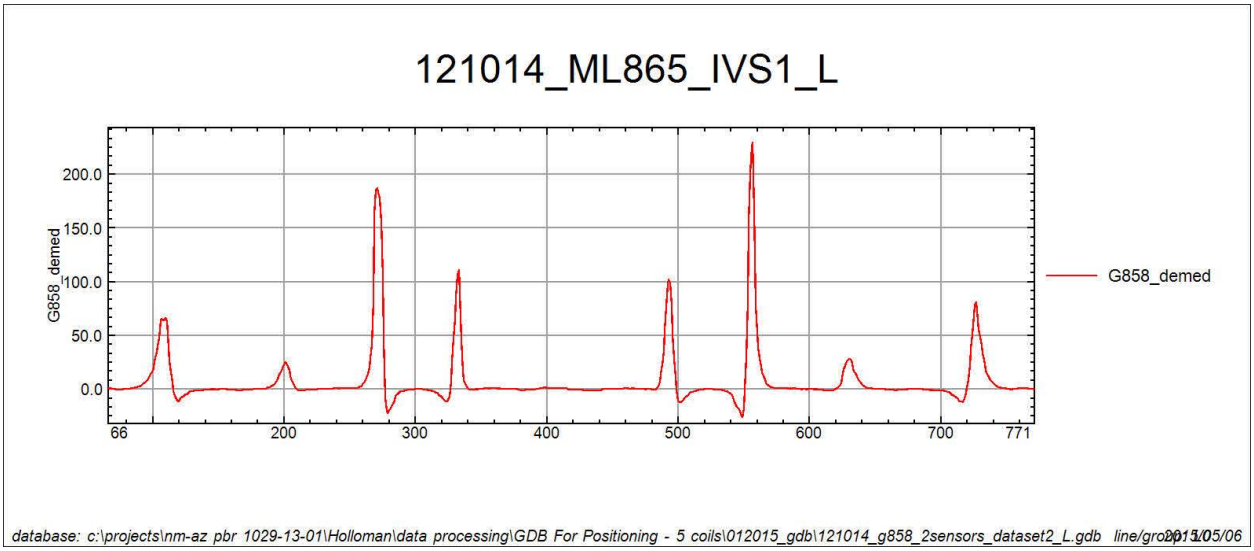


Figure C-317
12/10/2014 G-858 IVS AM and PM Sensor L
IVS Test Results ML865 MRS



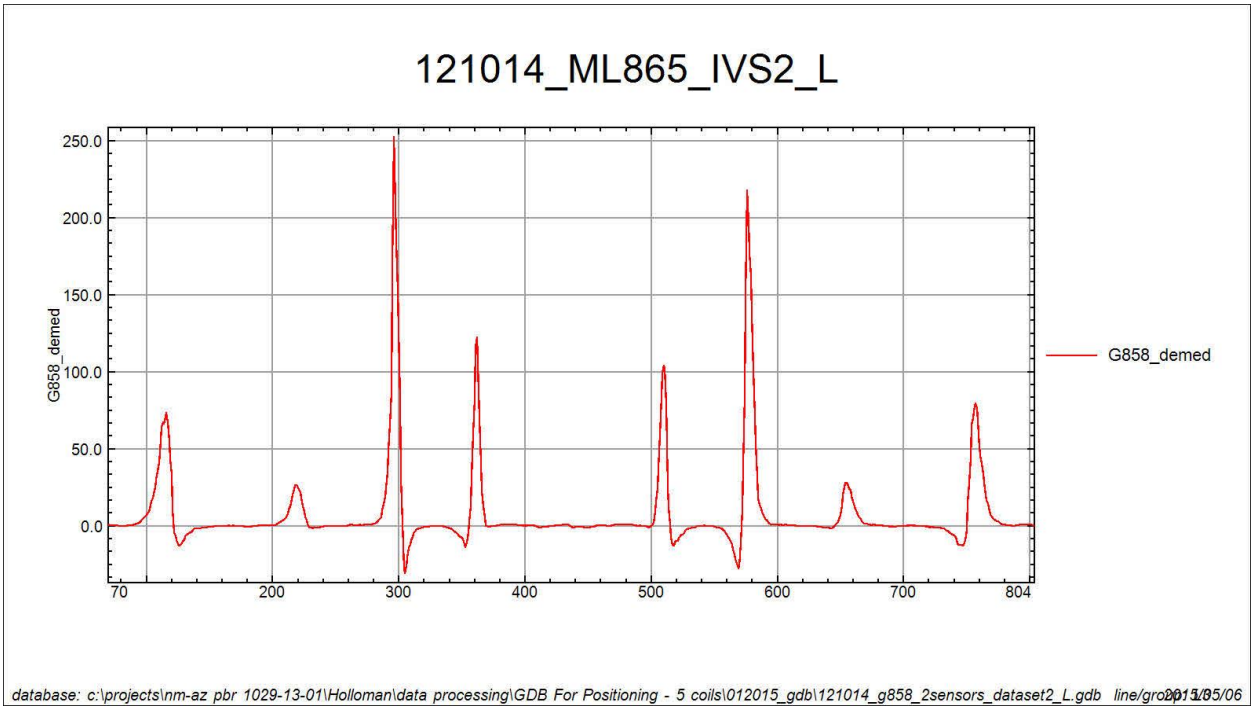
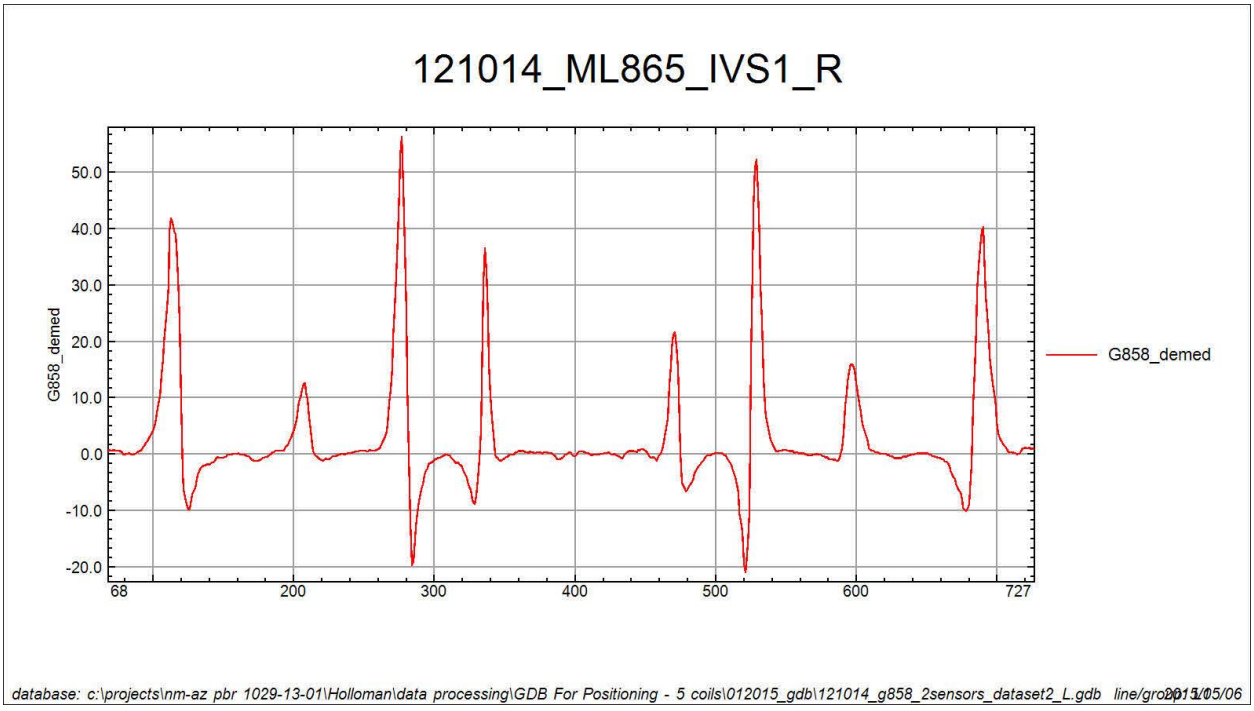


Figure C-318
12/10/2014 G-858 IVS AM and PM Sensor R
IVS Test Results ML865 MRS



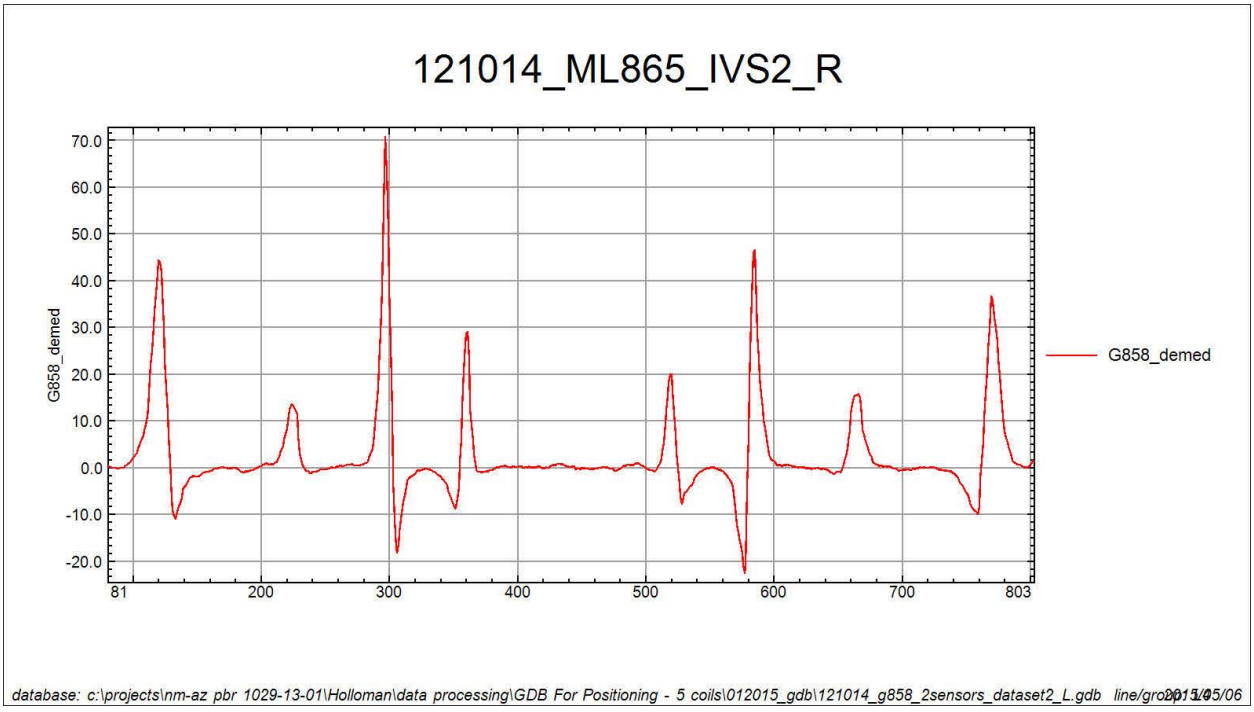
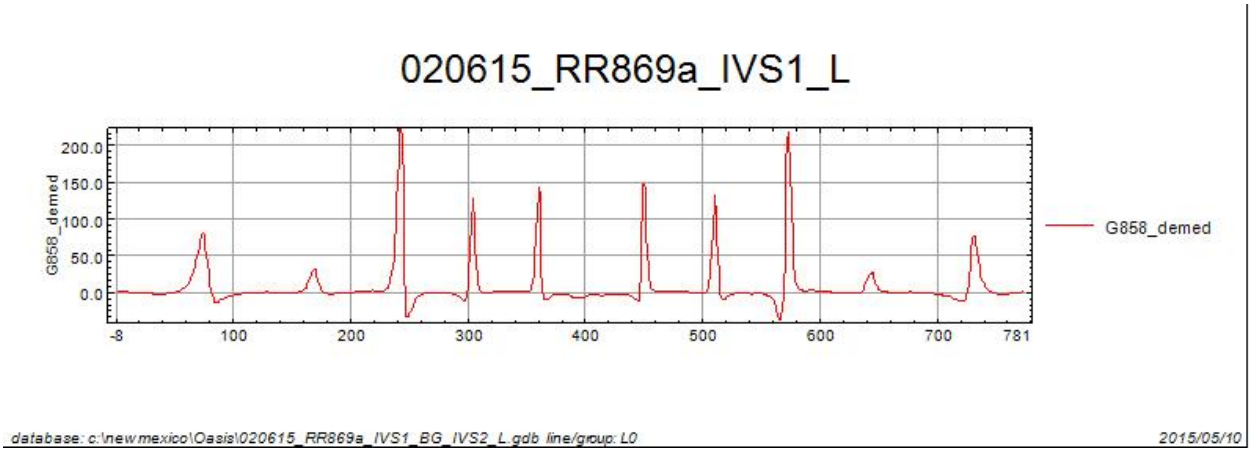


Figure C-319
2/06/2015 G-858 IVS AM and PM Sensor L
IVS Test Results RR869a MRS



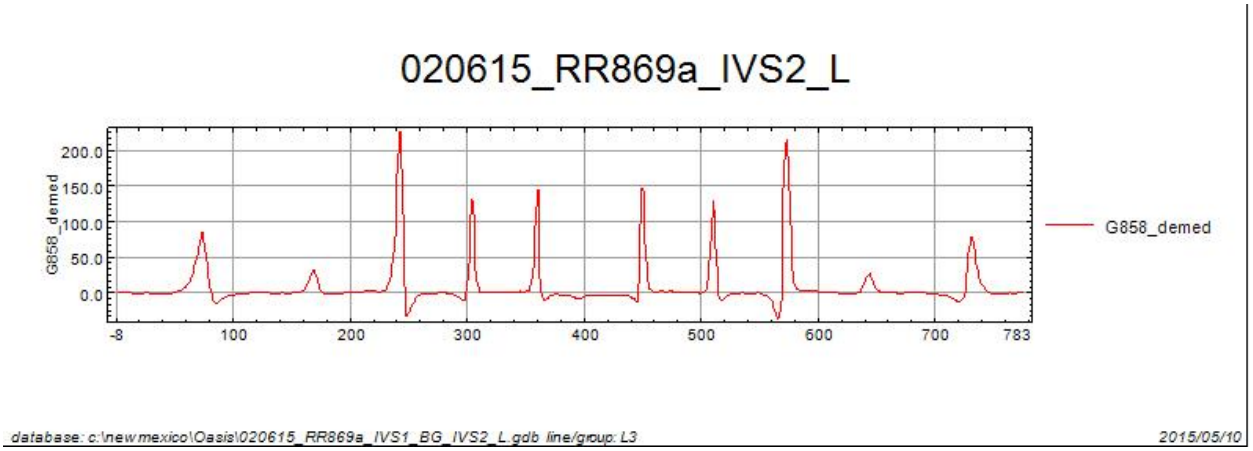
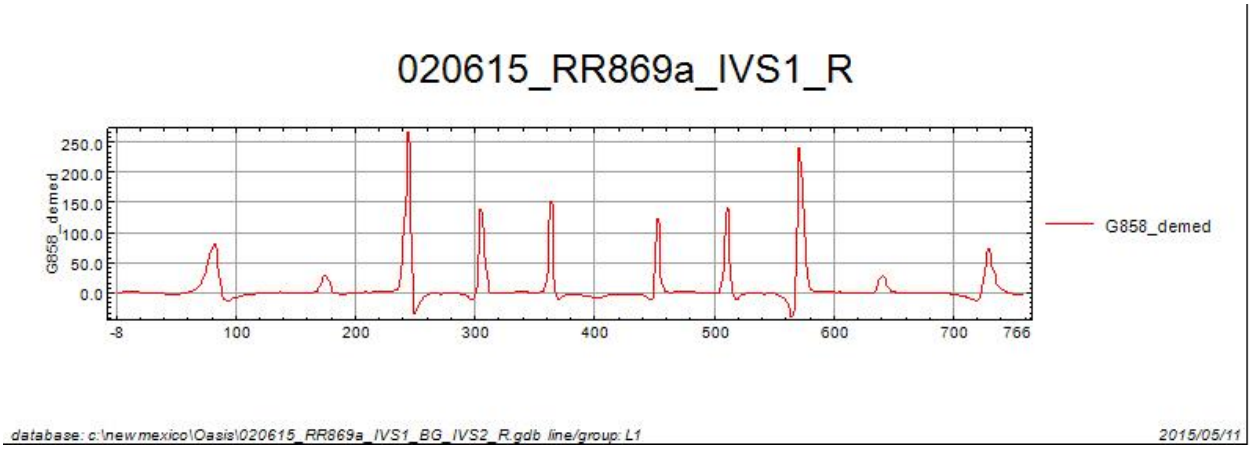


Figure C-320
2/06/2015 G-858 IVS AM and PM Sensor R
IVS Test Results RR869a MRS



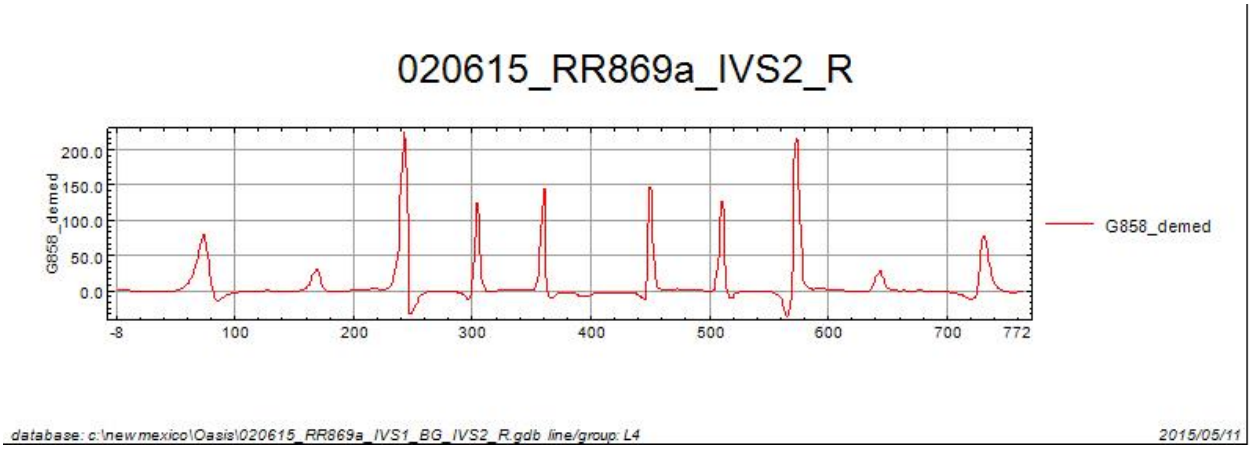
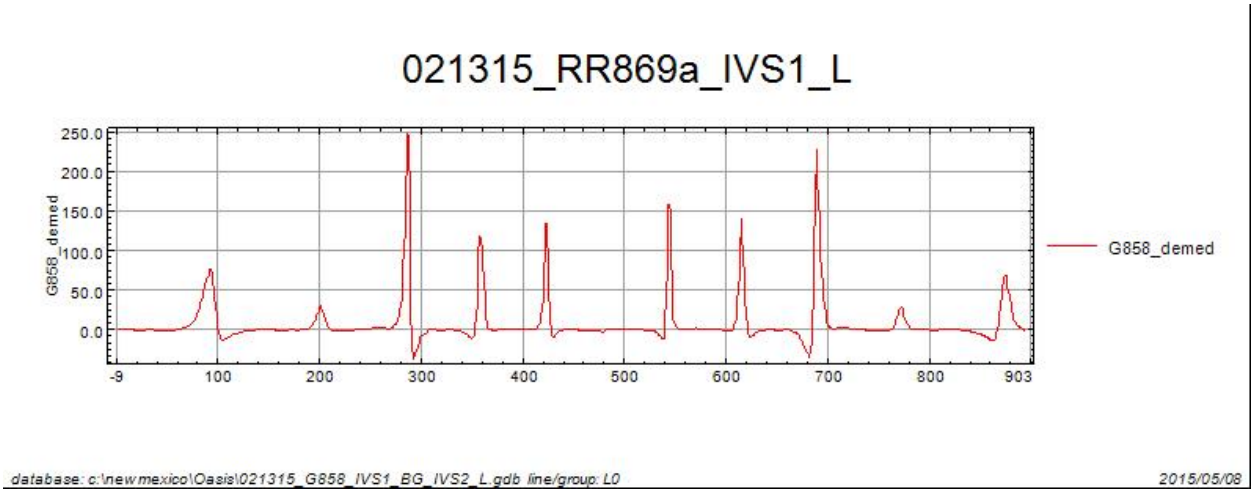


Figure C-321
2/13/2015 G-858 IVS AM and PM Sensor L
IVS Test Results RR869a MRS



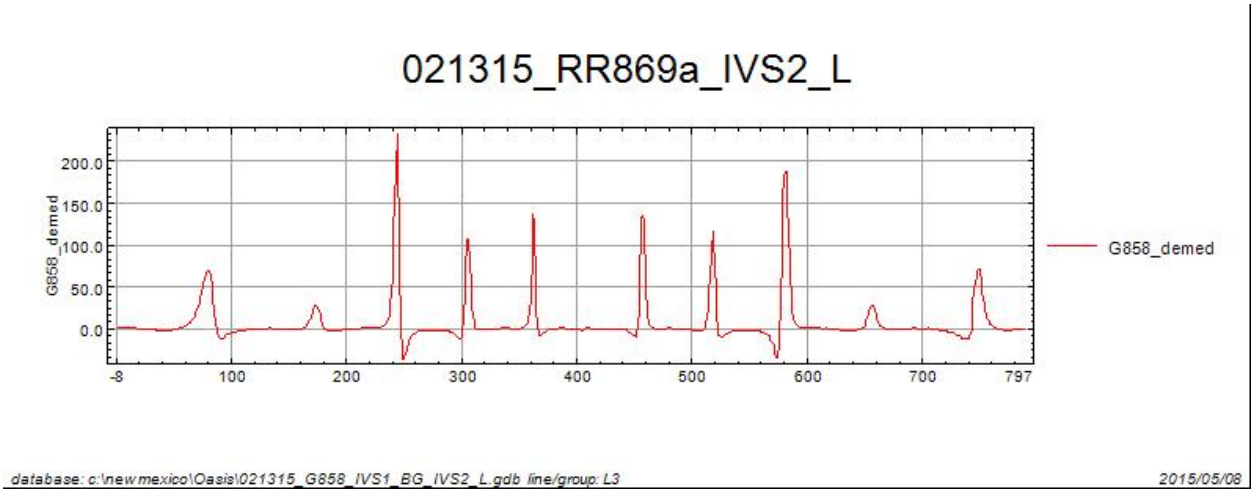
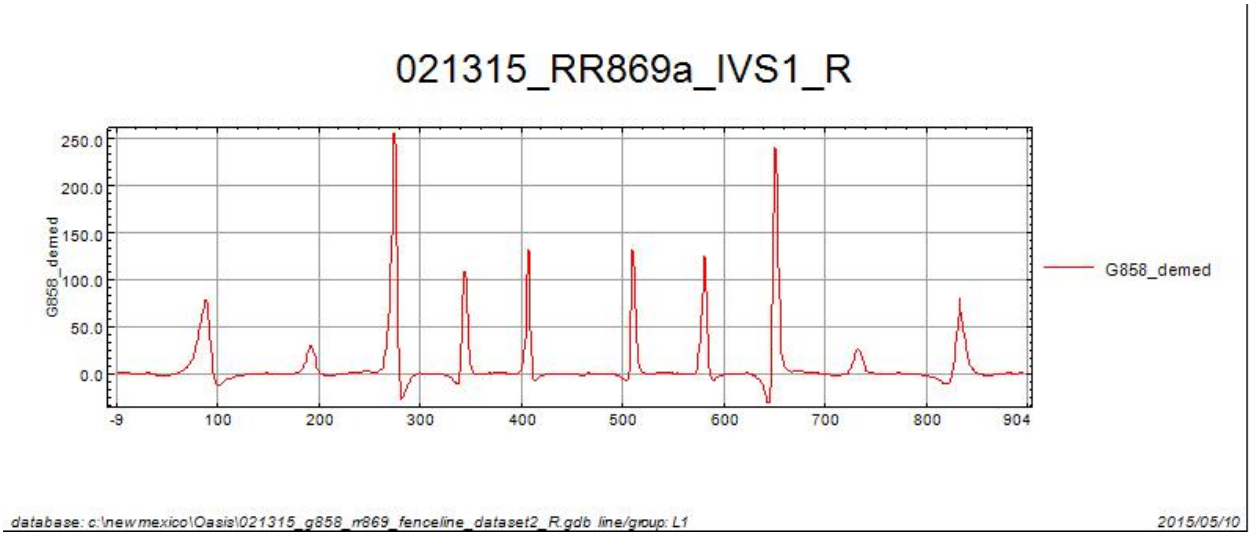


Figure C-322
2/13/2015 G-858 IVS AM and PM Sensor R
IVS Test Results RR869a MRS



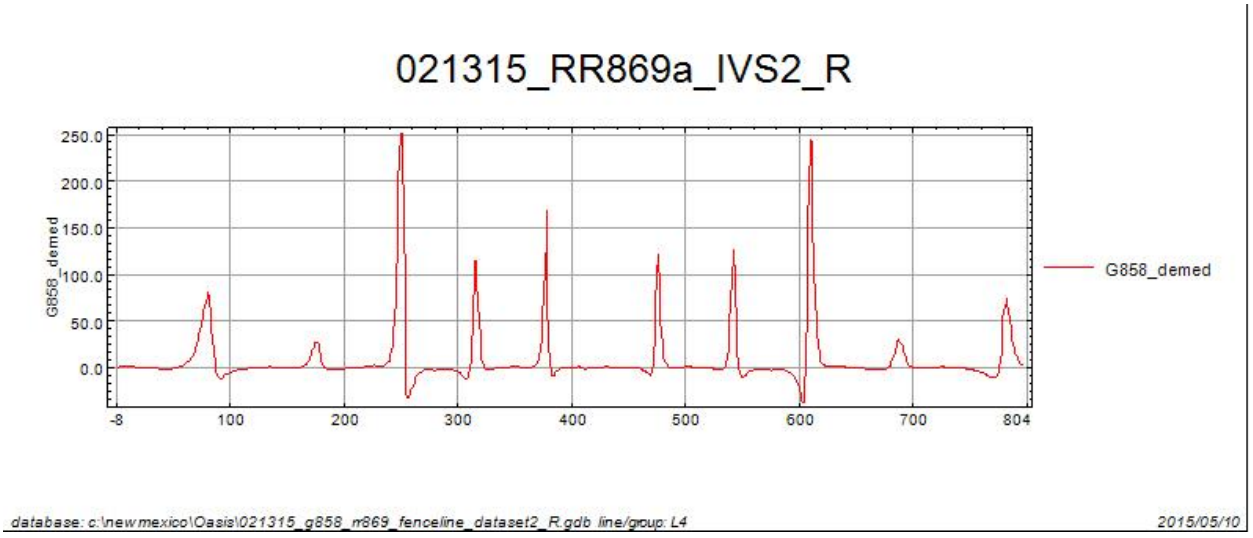


Figure C-323
12/12/2014 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

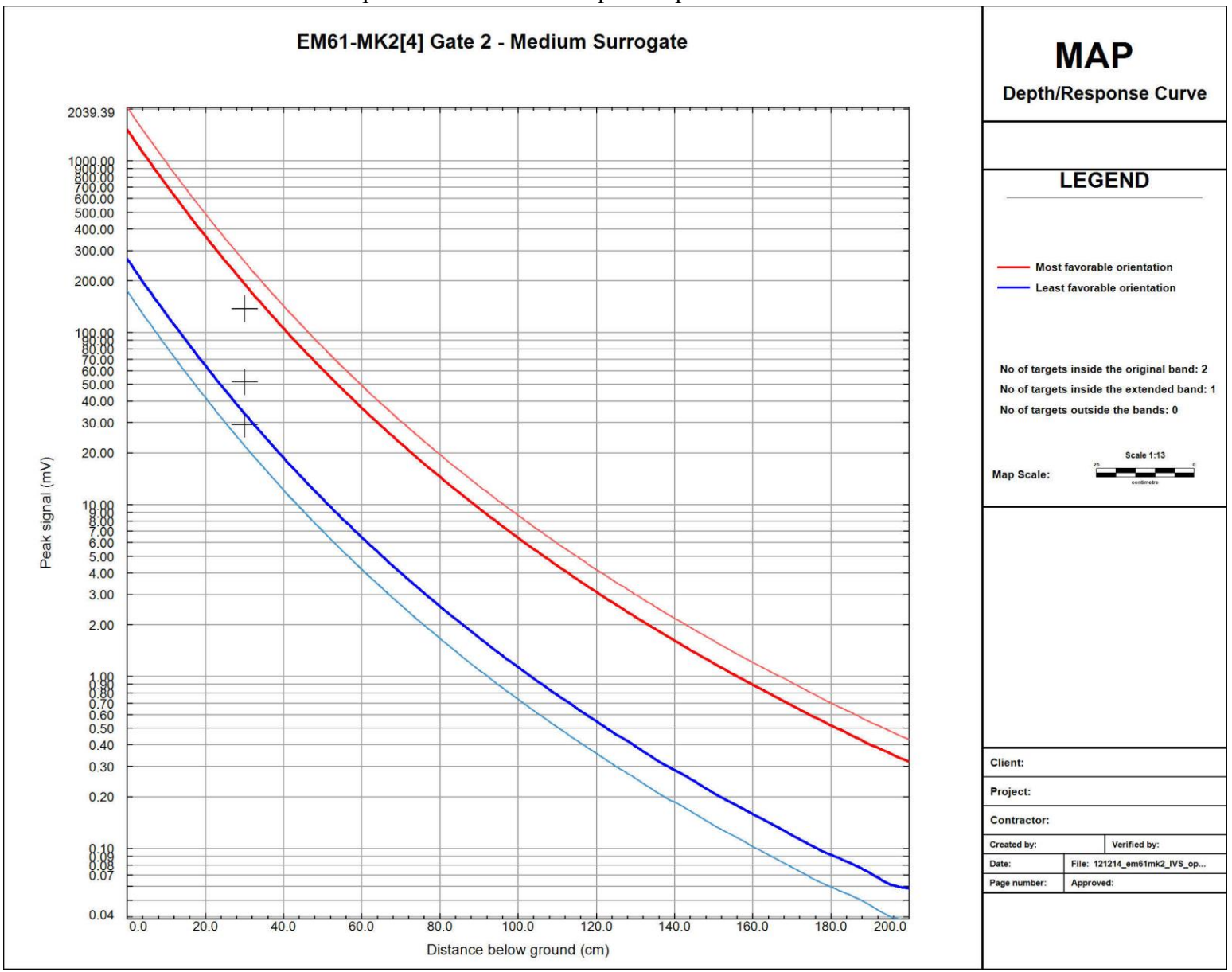


Figure C-324
12/12/2014 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

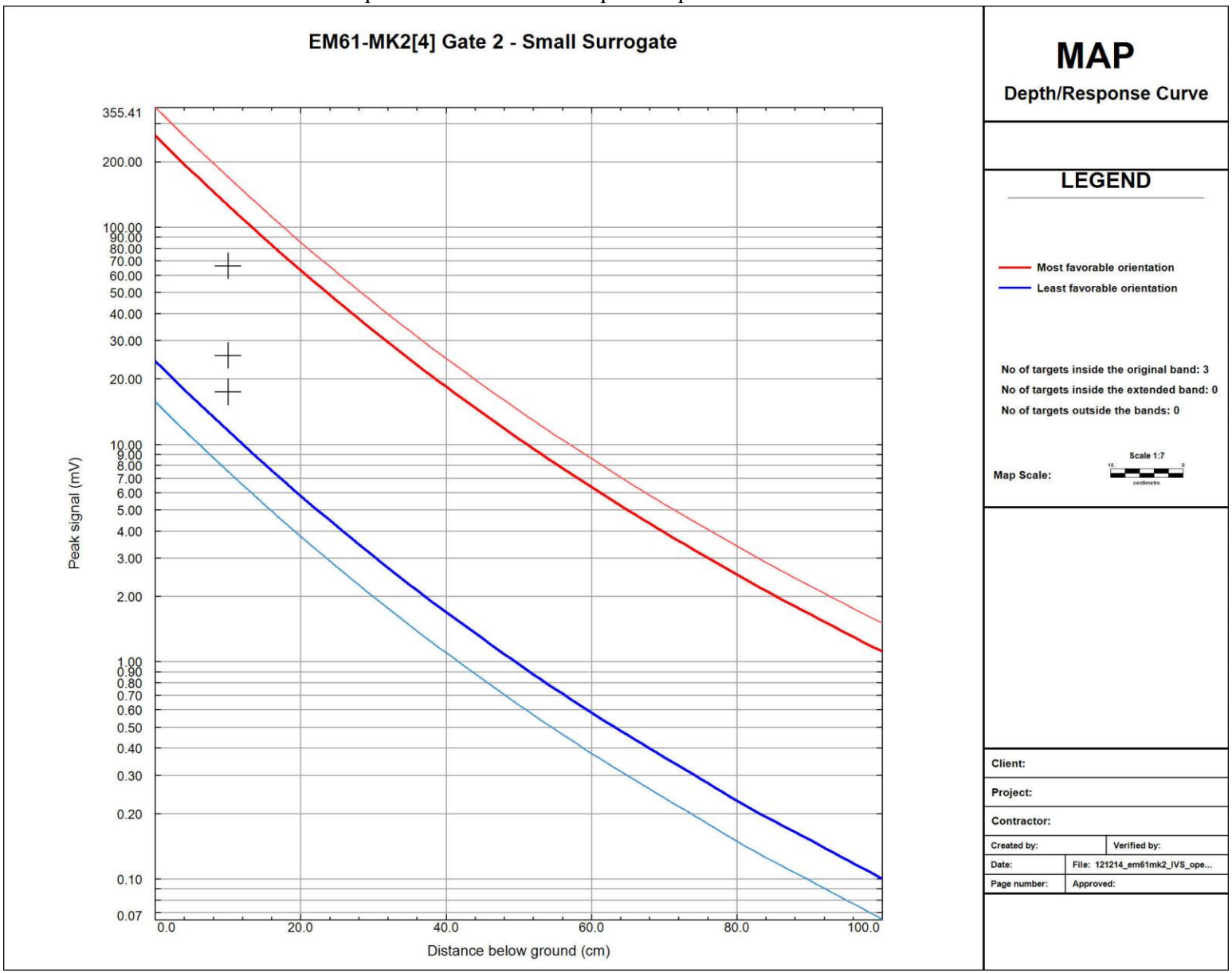


Figure C-325
12/12/2014 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

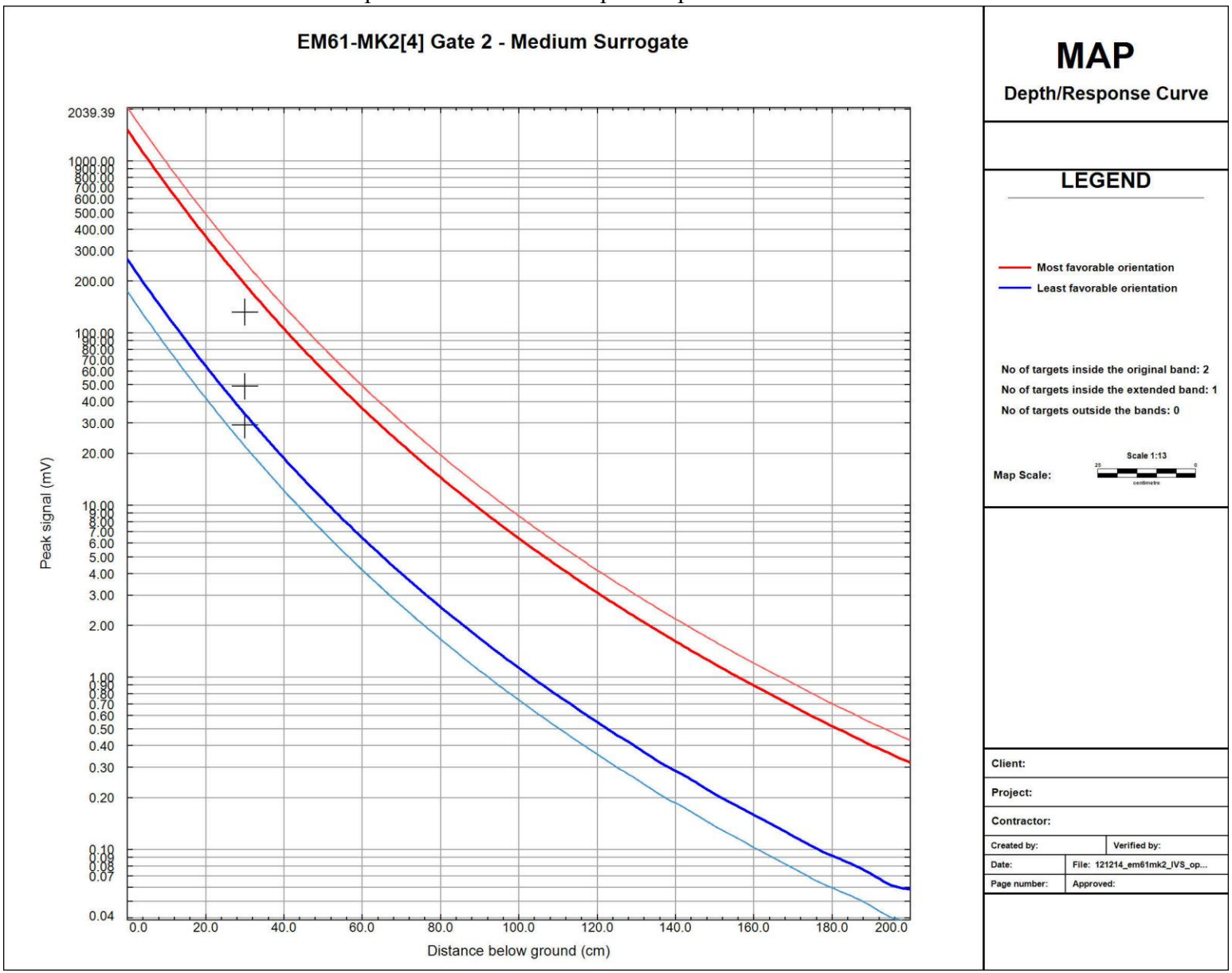


Figure C-326
12/12/2014 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

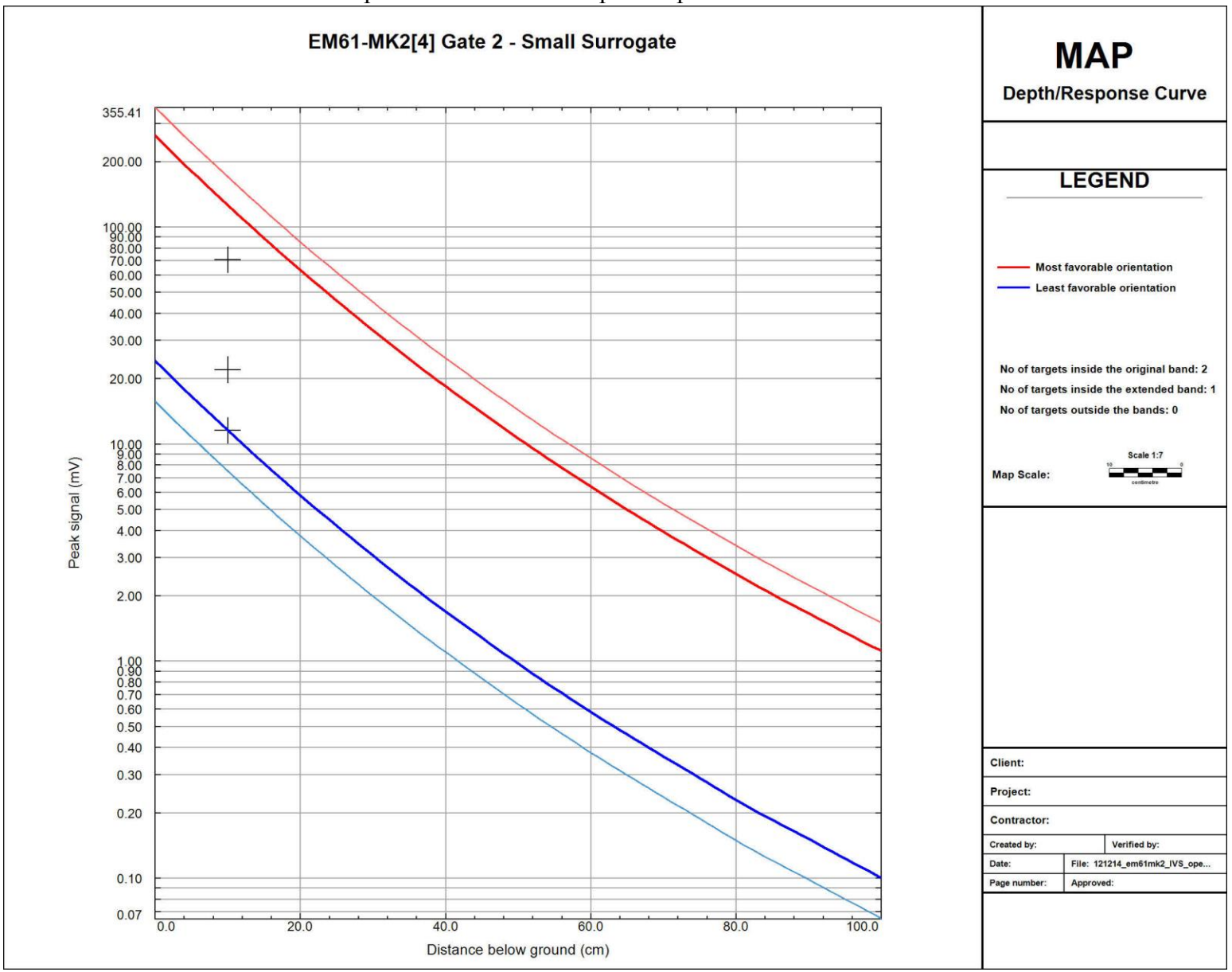


Figure C-327
12/12/2014 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

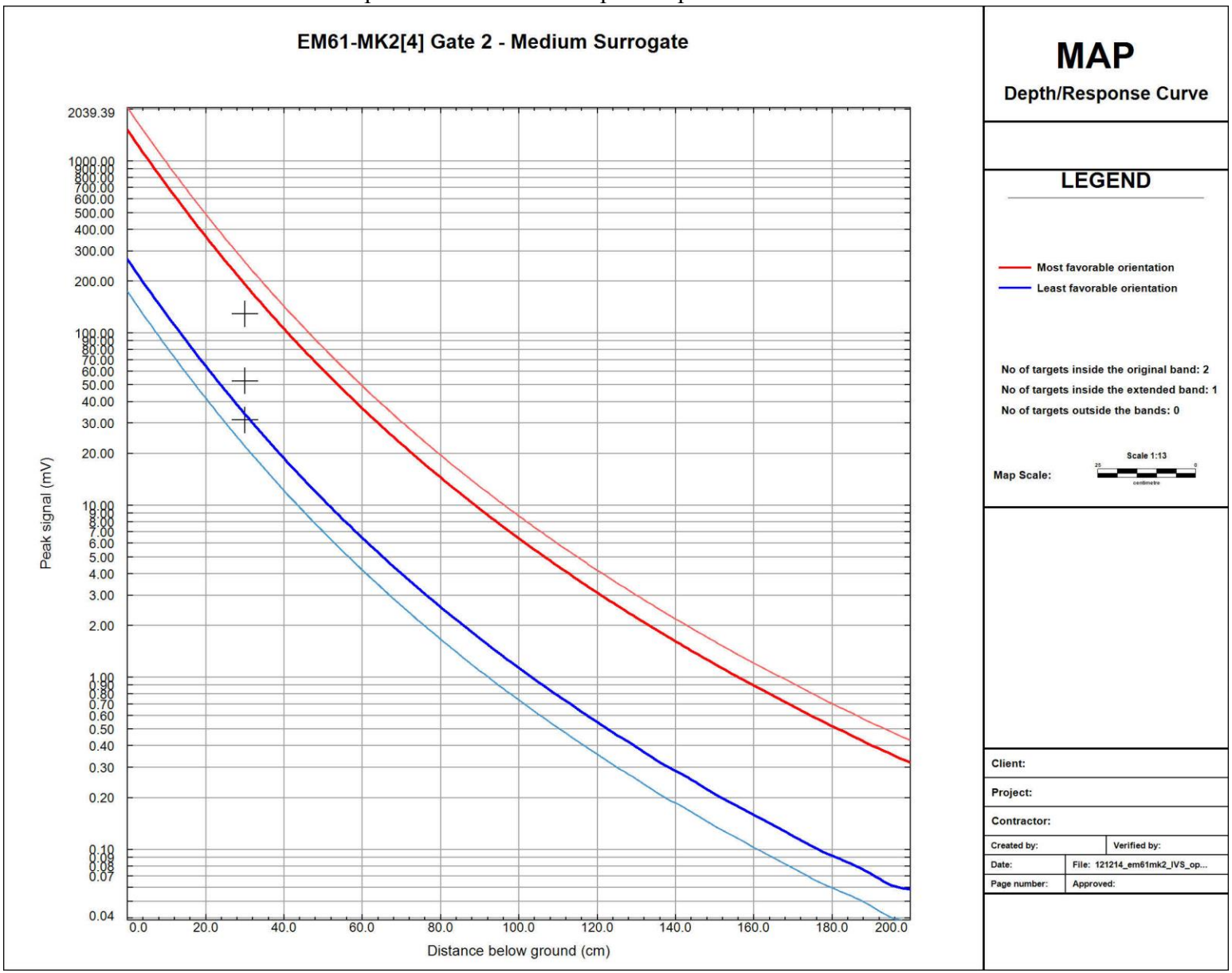


Figure C-328
12/12/2014 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

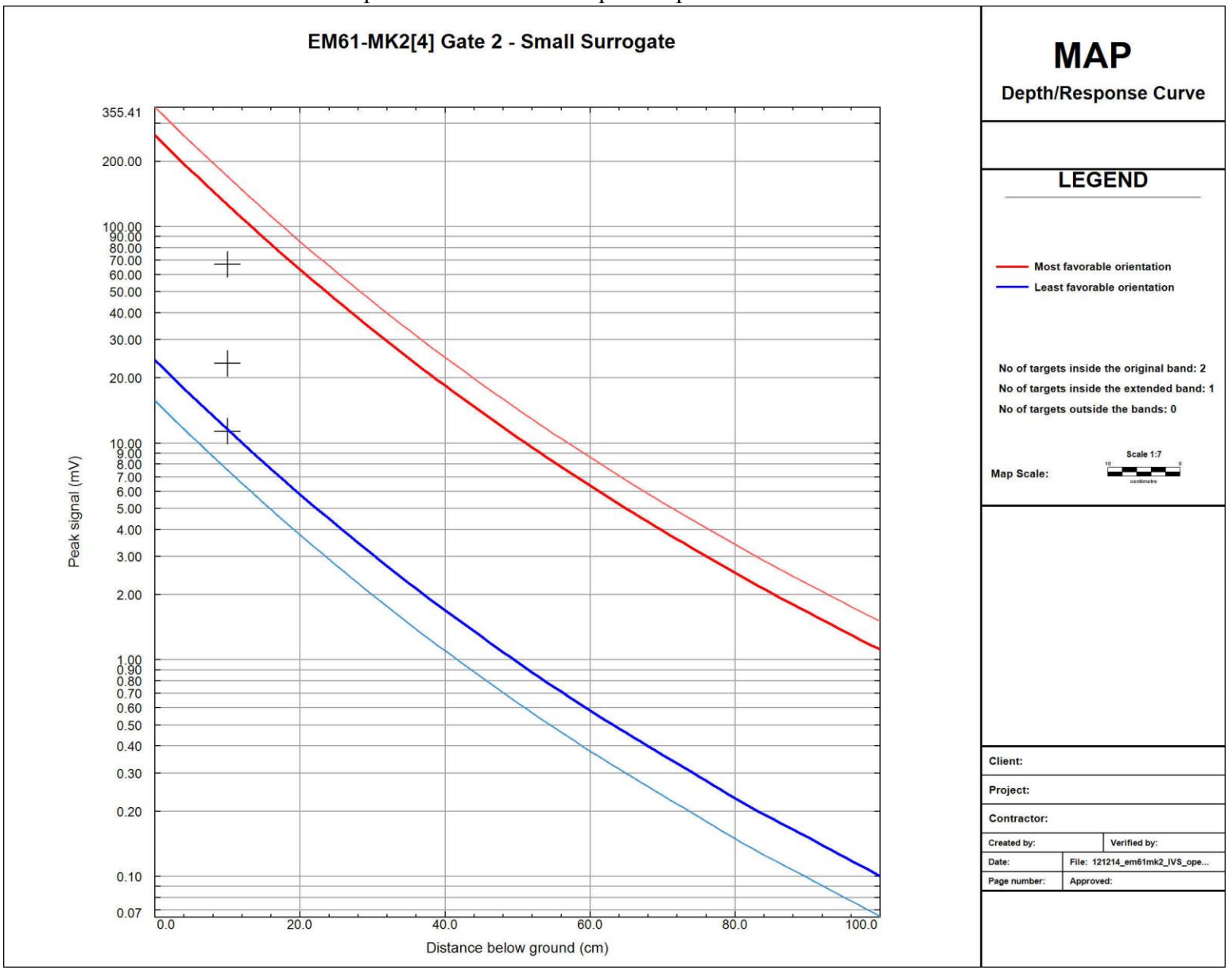


Figure C-329
12/12/2014 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

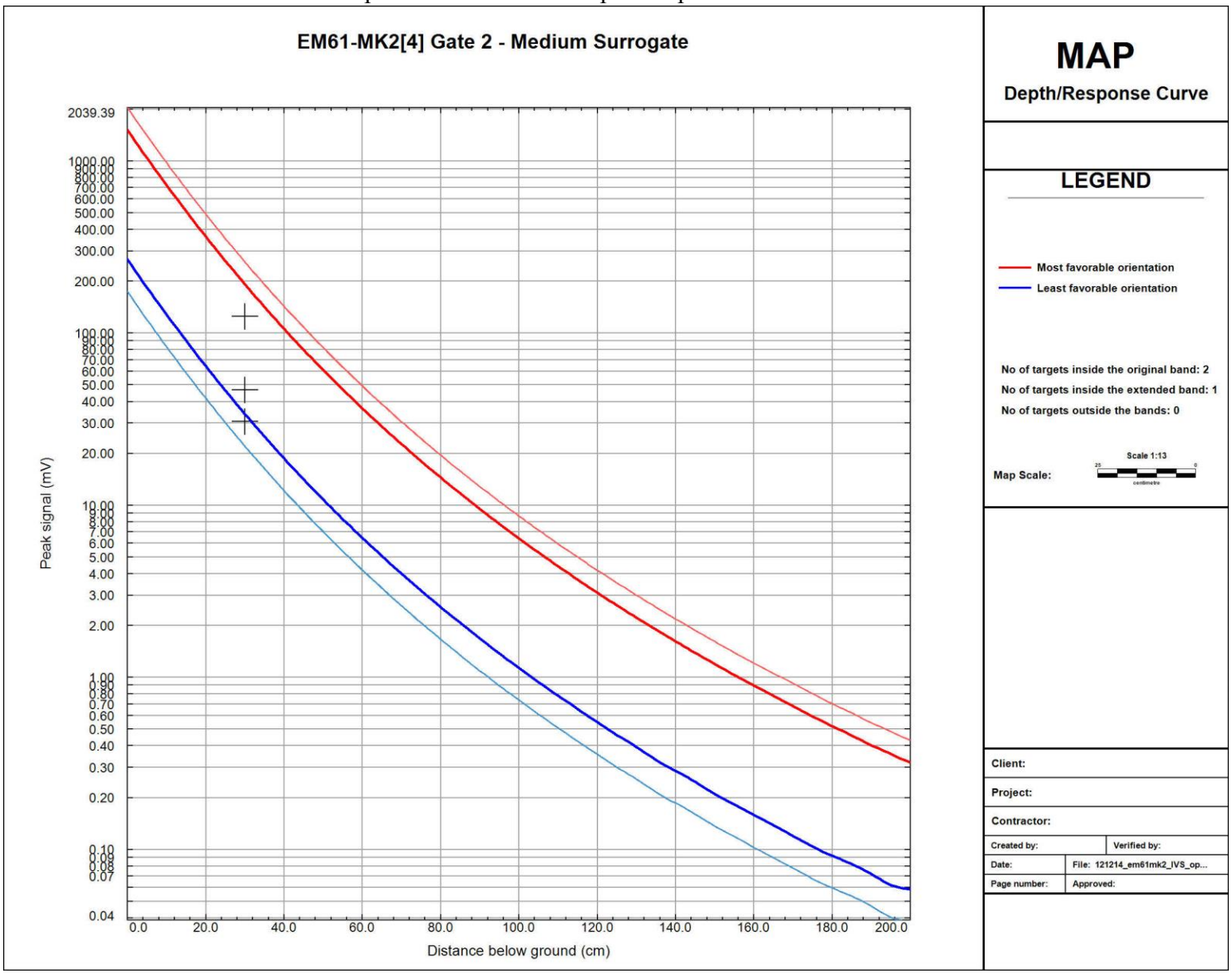


Figure C-330
12/12/2014 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

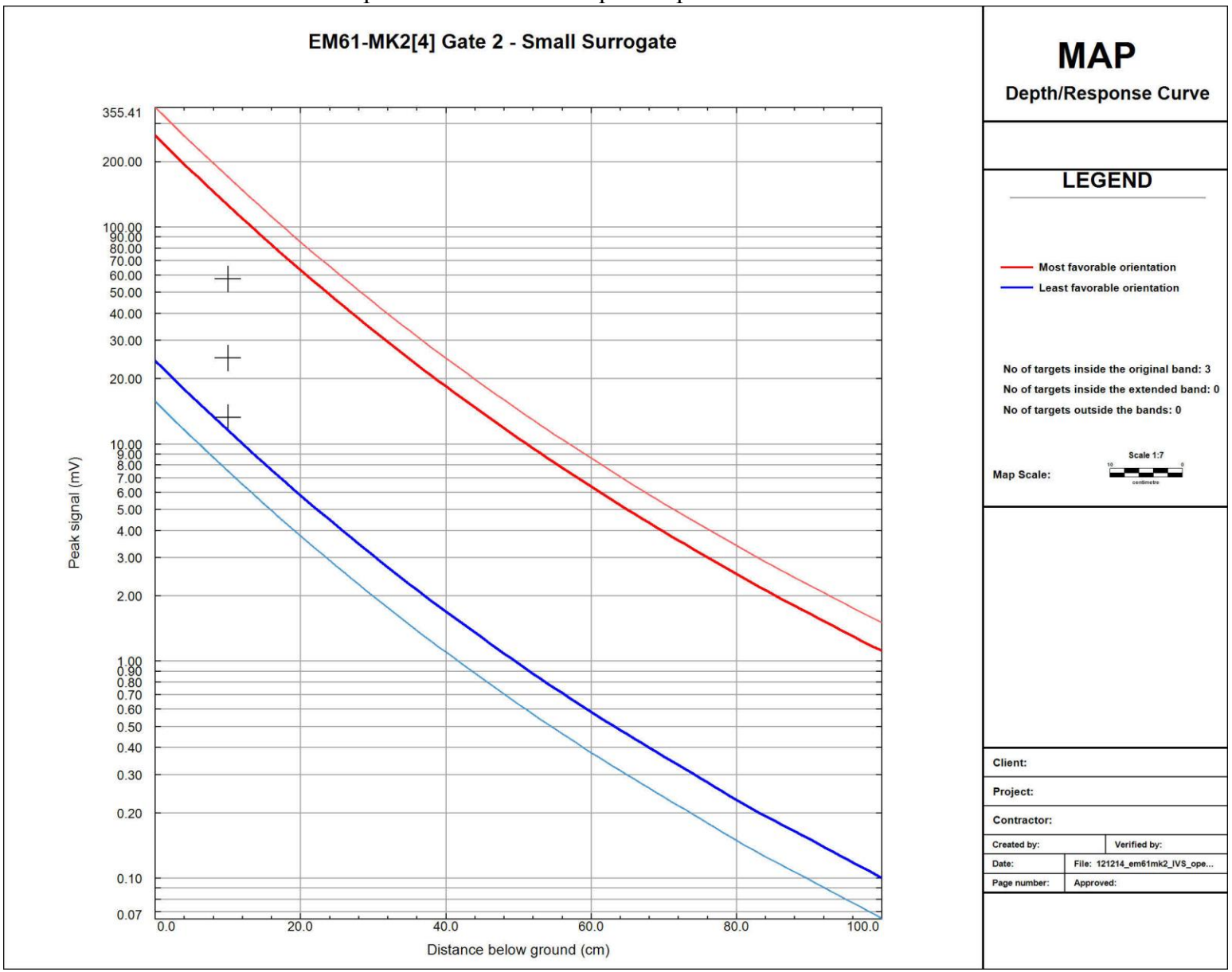


Figure C-331
12/12/2014 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

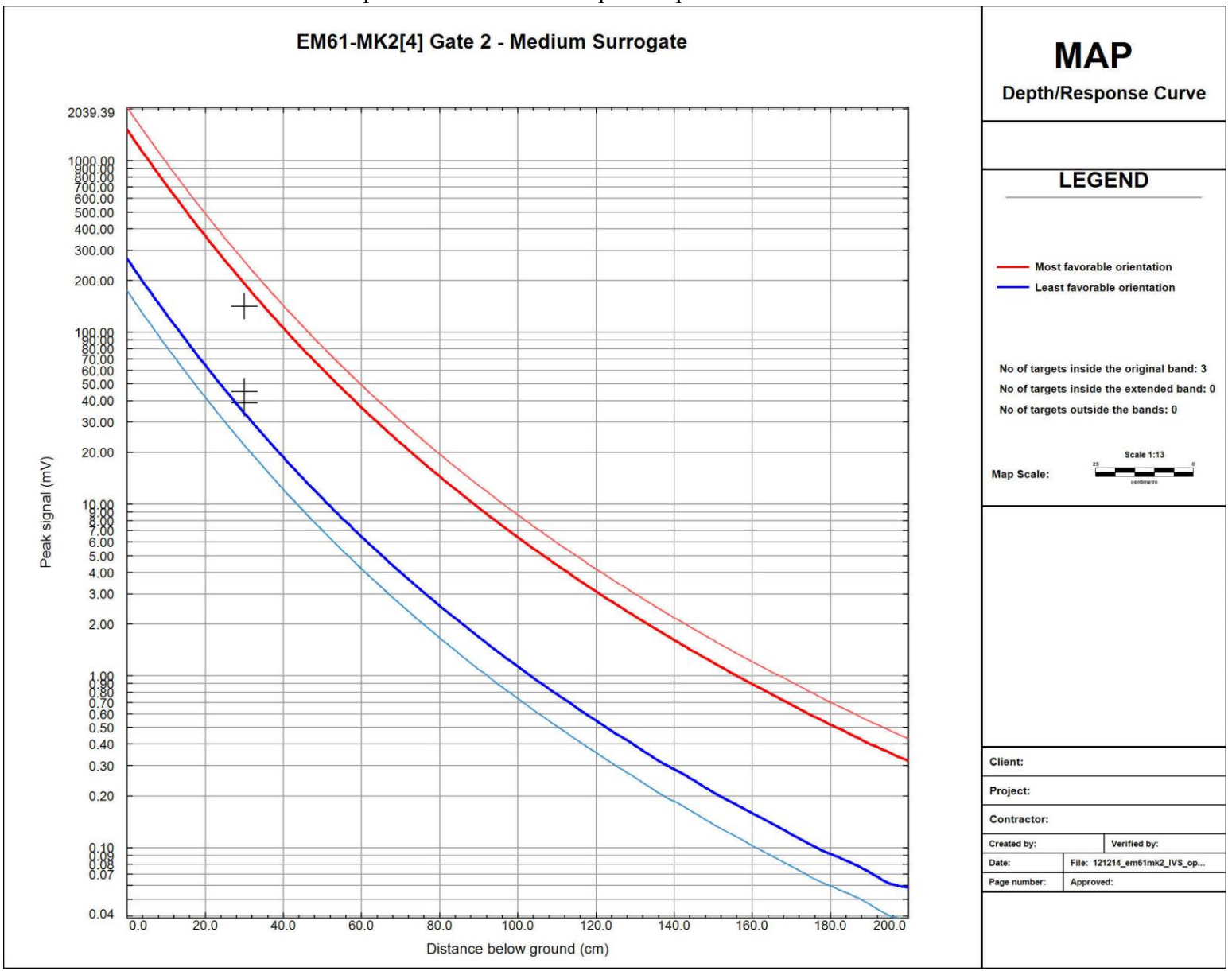


Figure C-332
12/12/2014 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

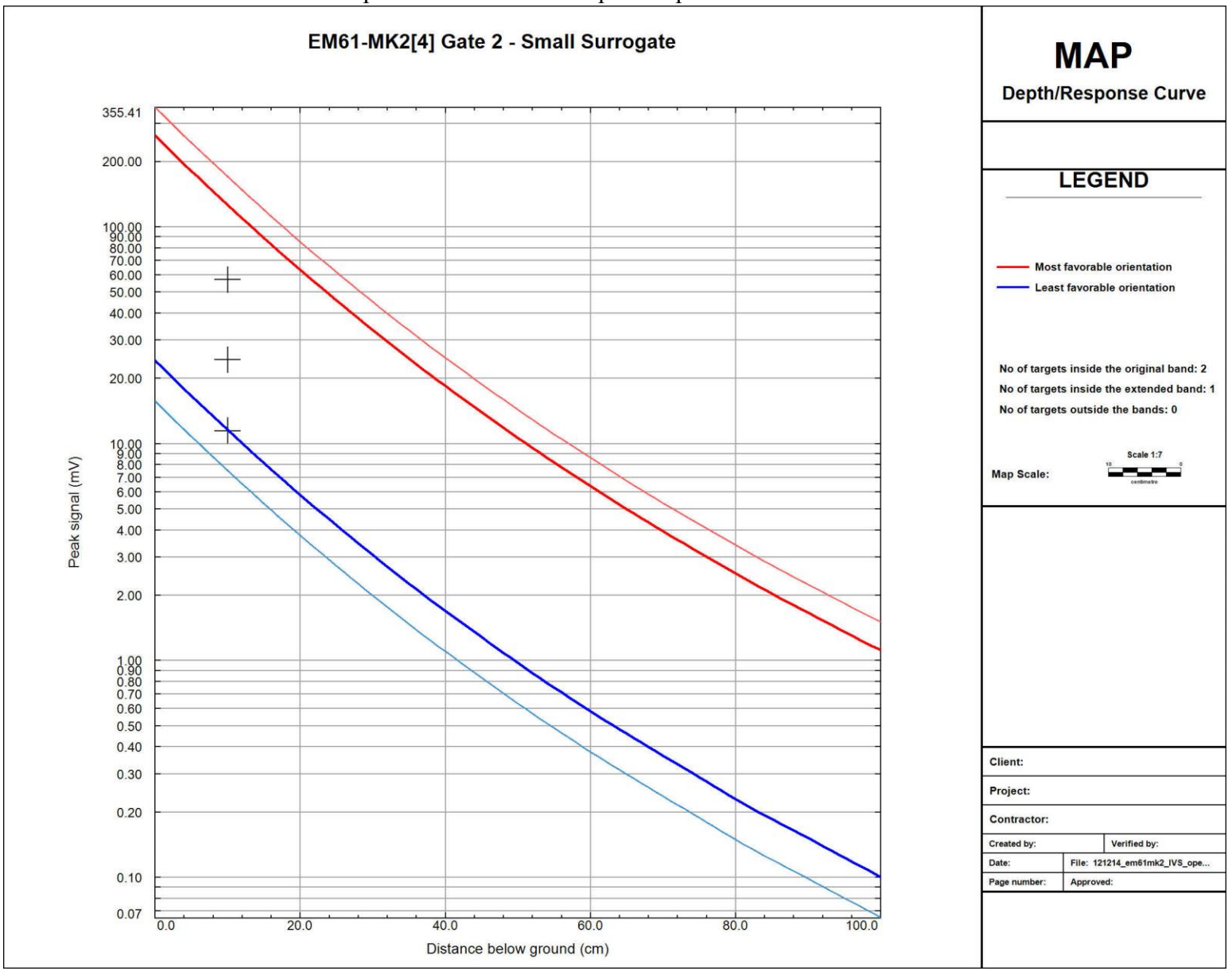


Figure C-333
12/15/2014 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

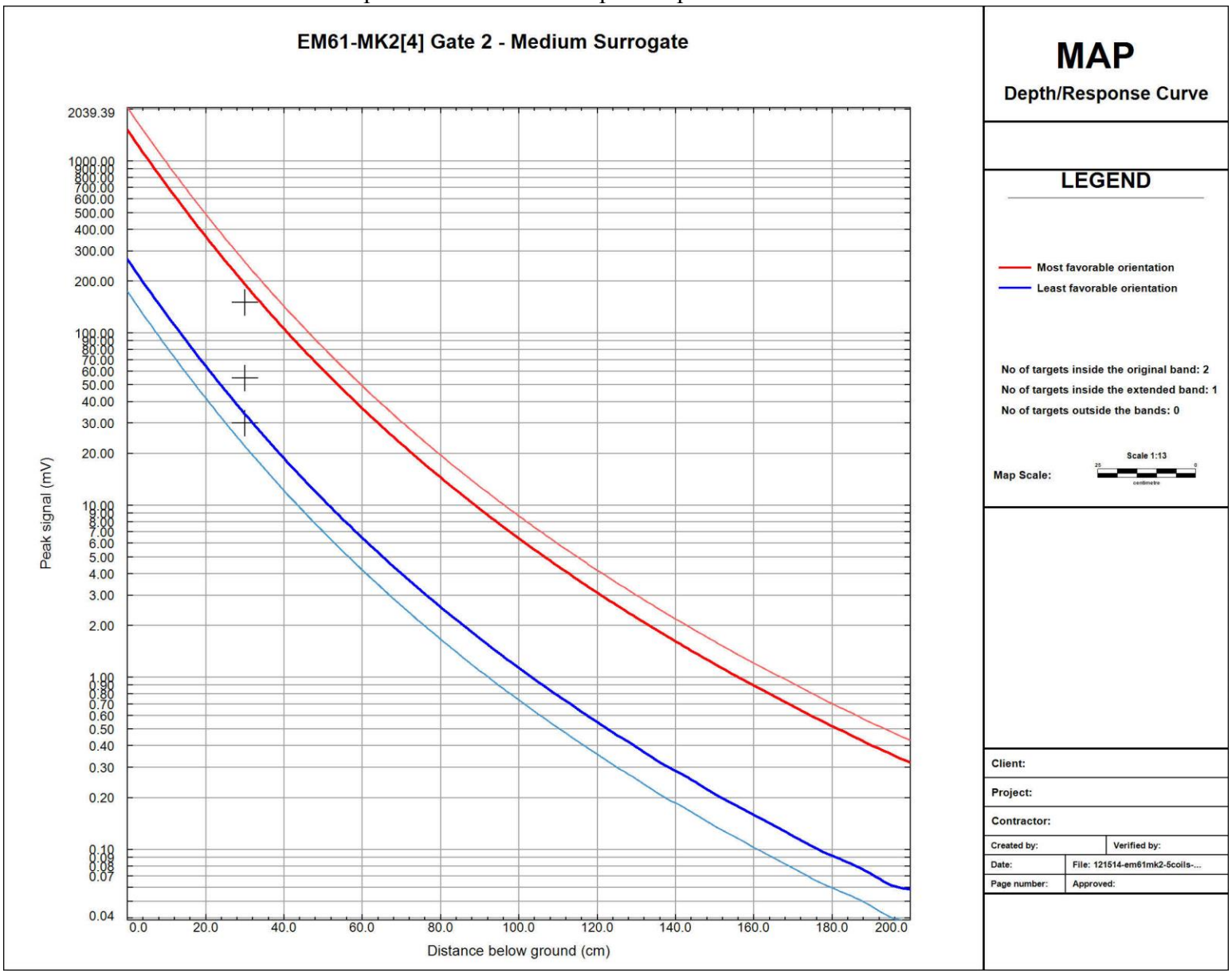


Figure C-334
12/15/2014 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

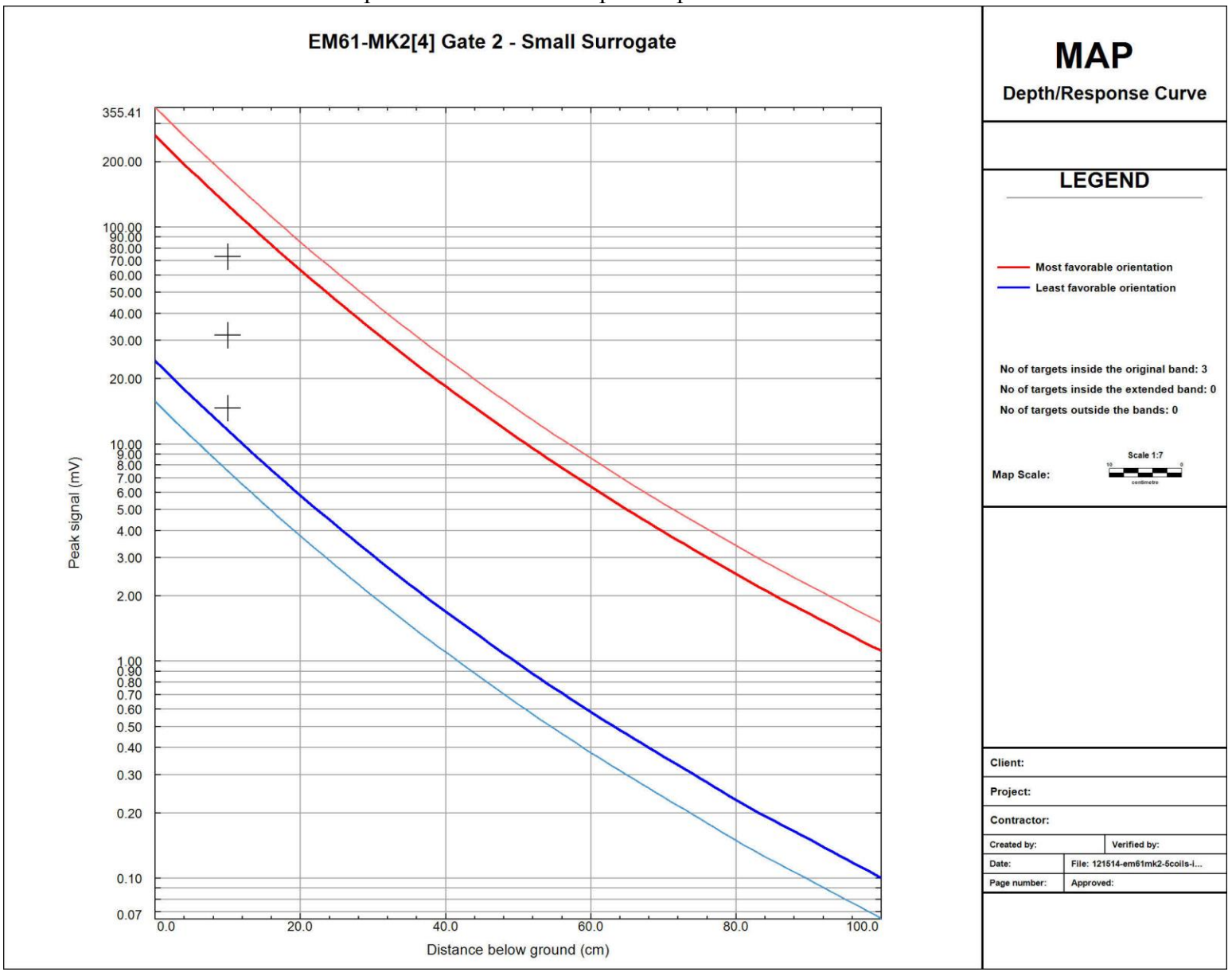


Figure C-335
12/15/2014 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

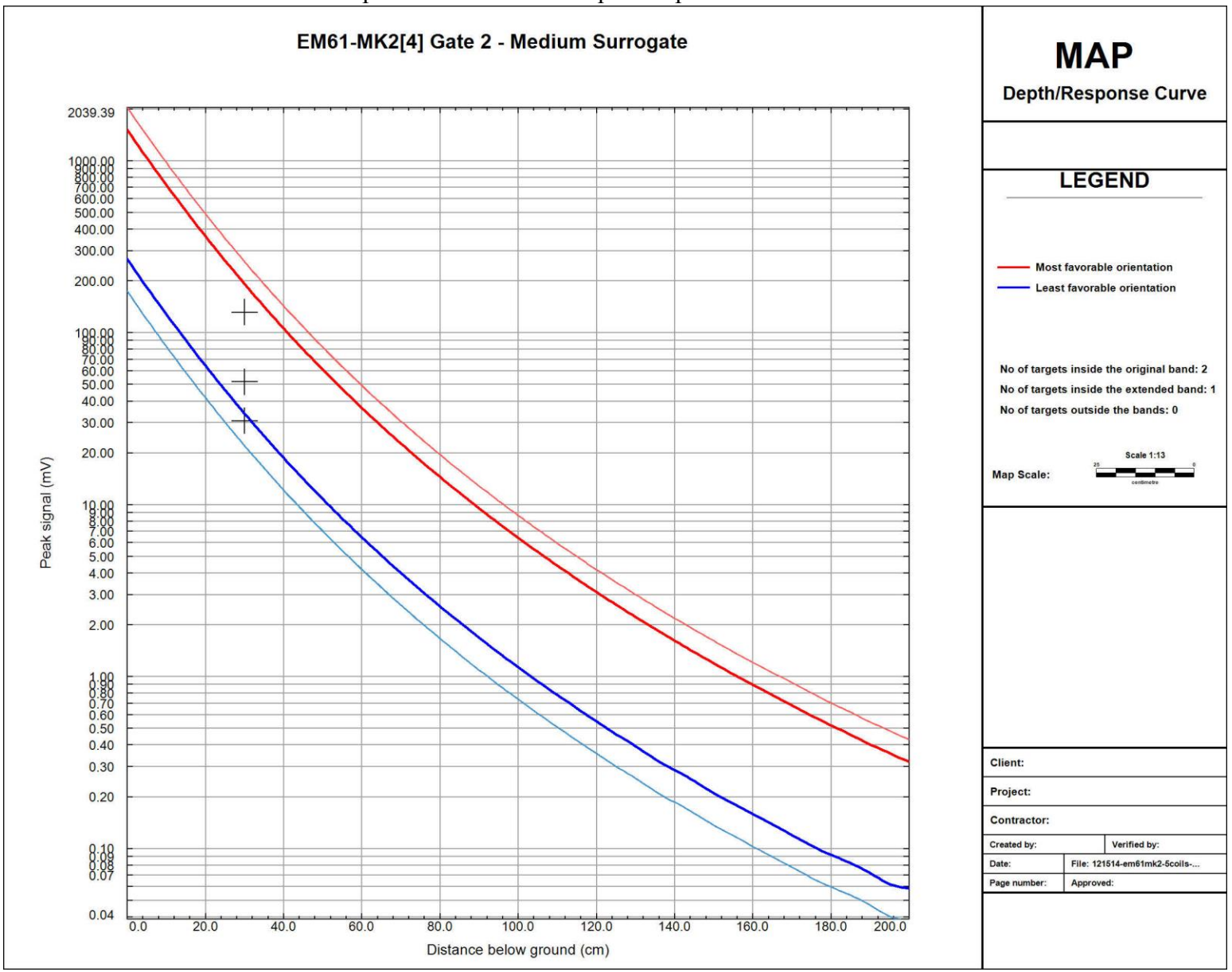


Figure C-336
12/15/2014 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

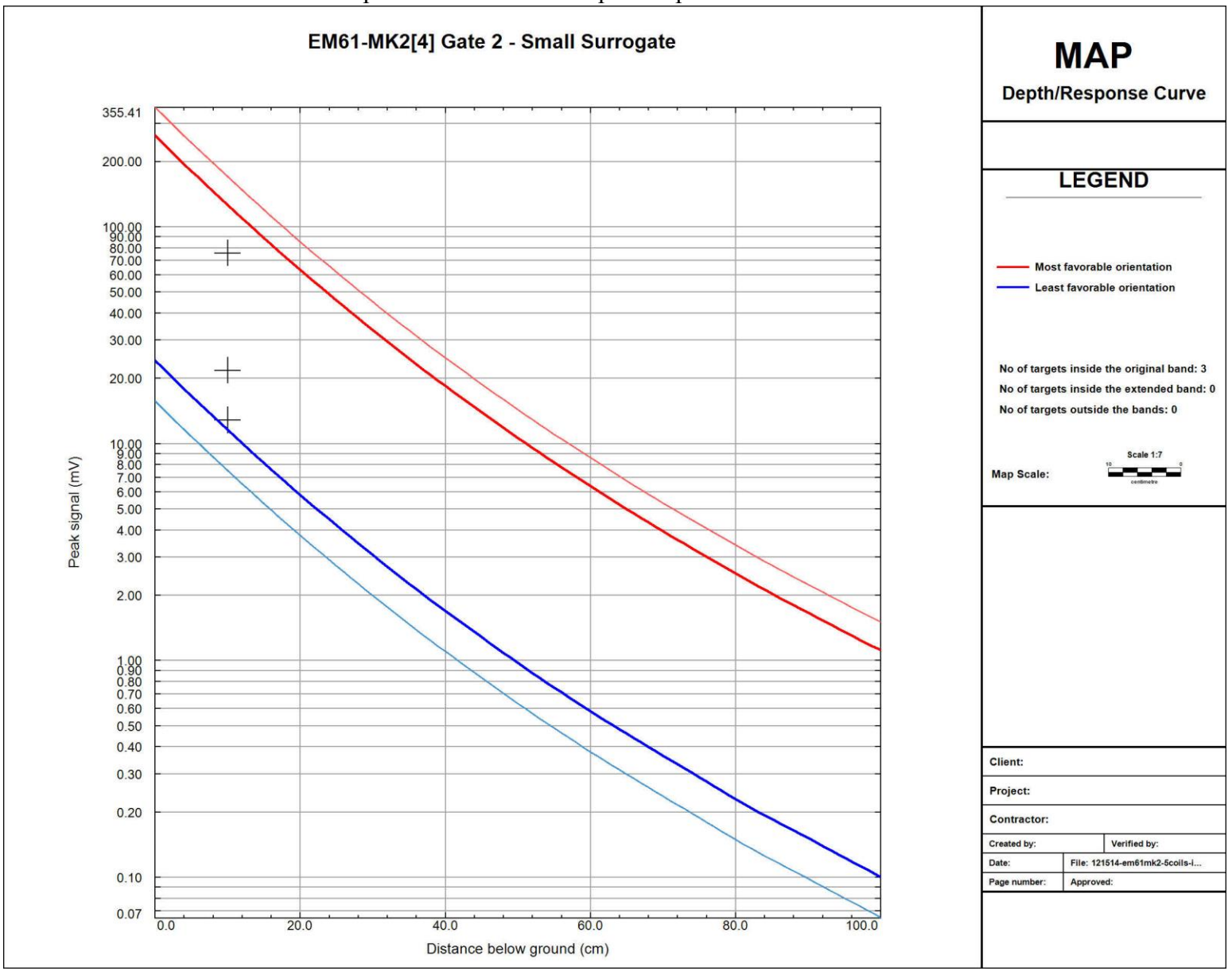


Figure C-337
12/15/2014 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

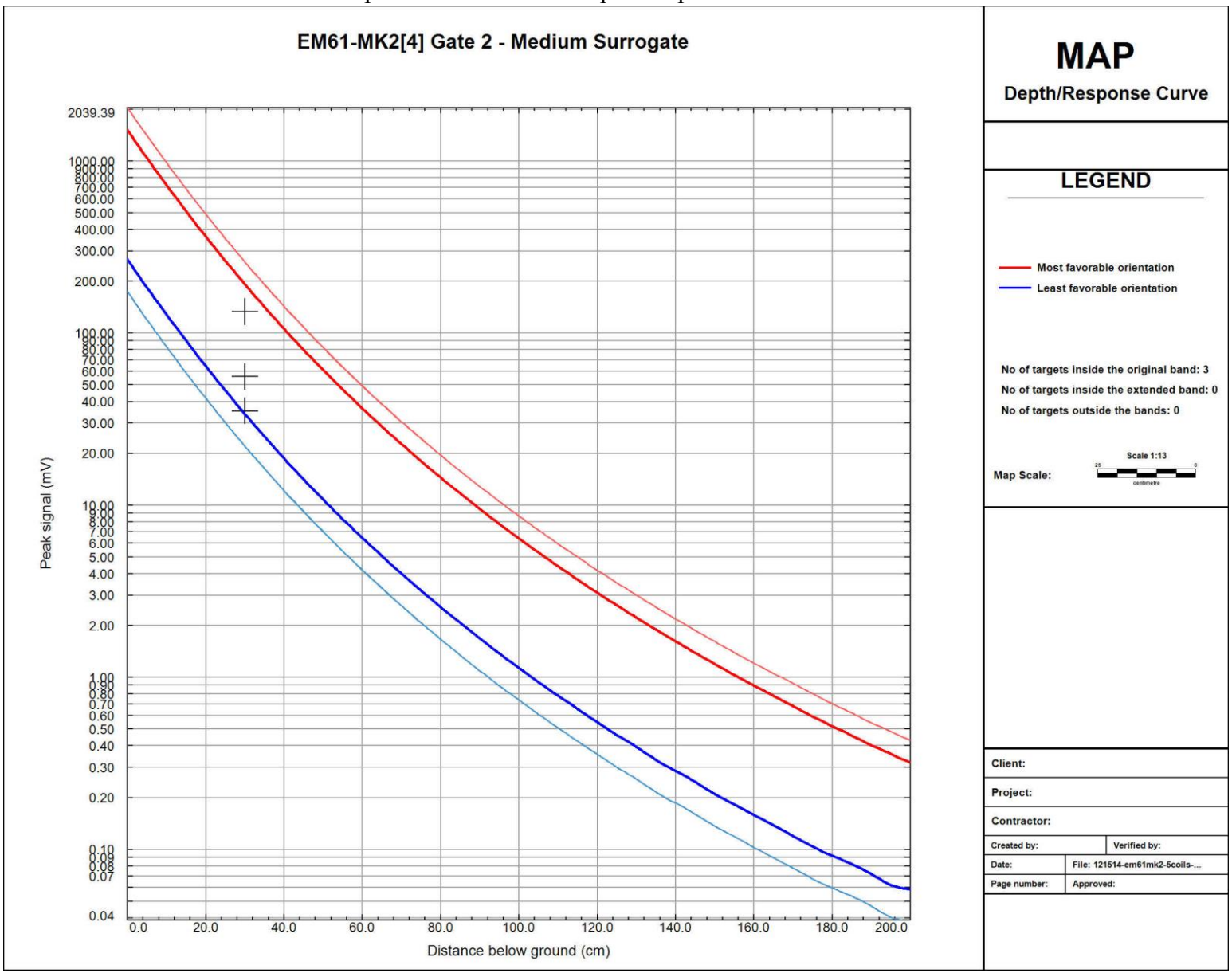


Figure C-338
12/15/2014 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

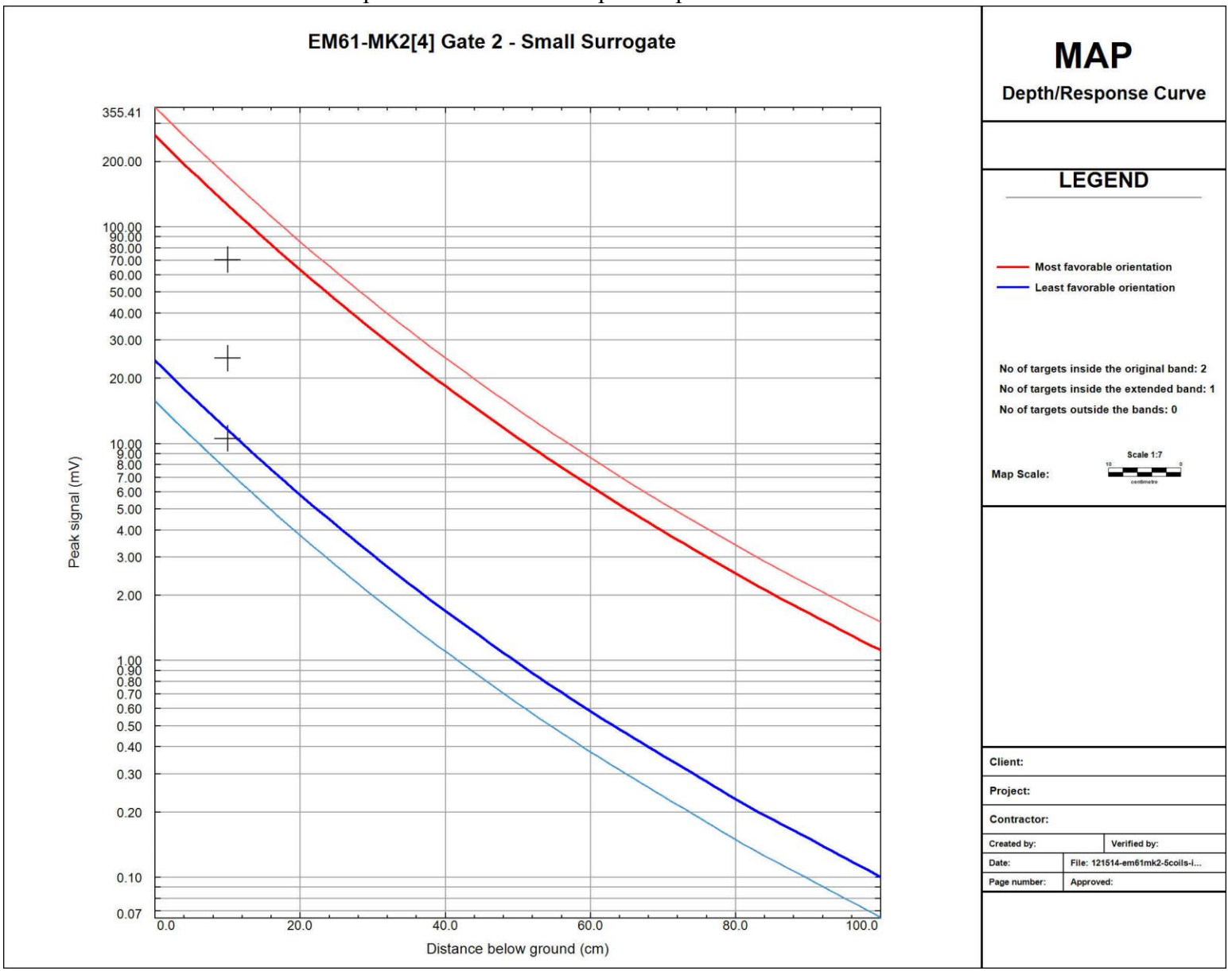


Figure C-339
12/15/2014 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

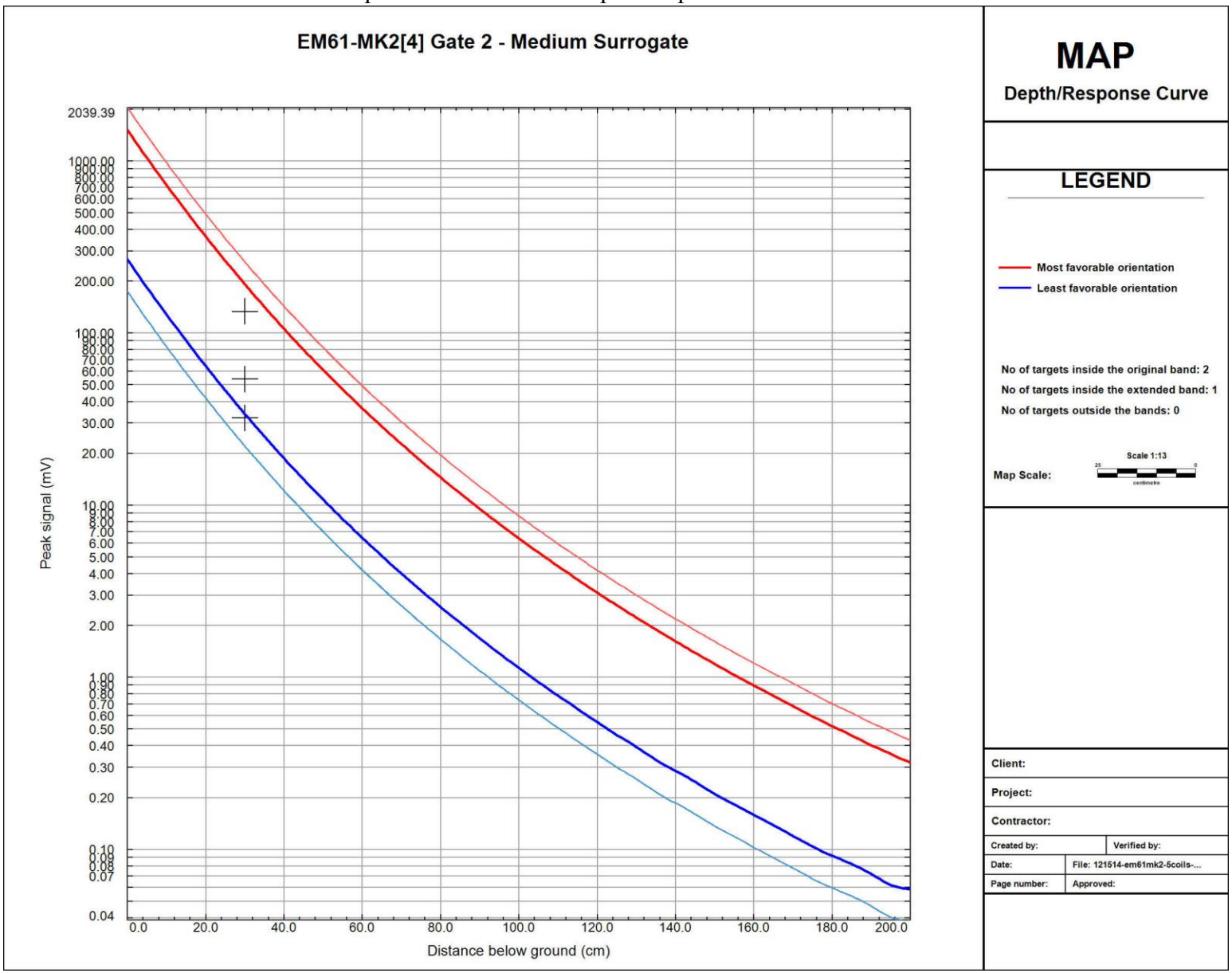


Figure C-340
12/15/2014 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

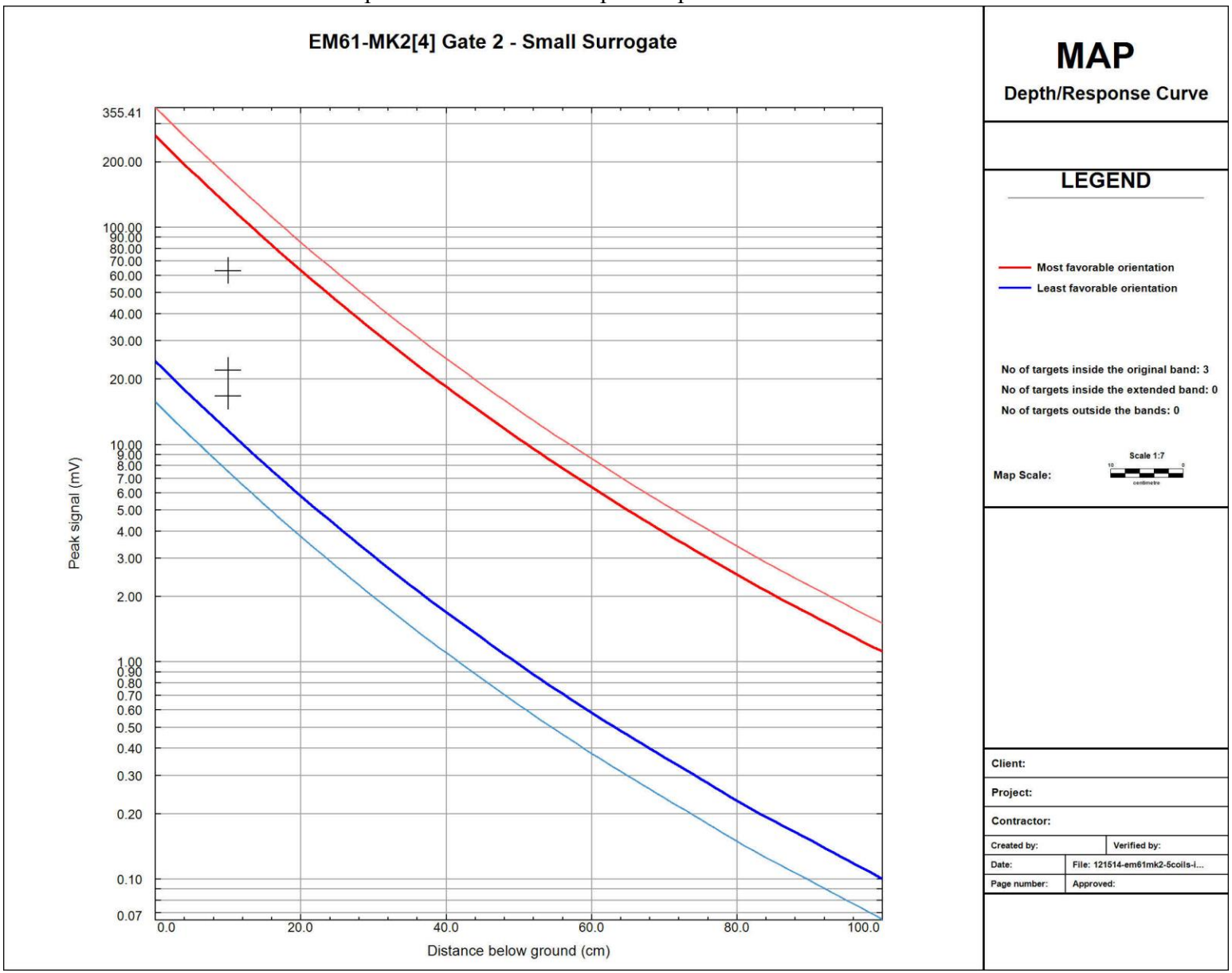


Figure C-341
12/15/2014 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

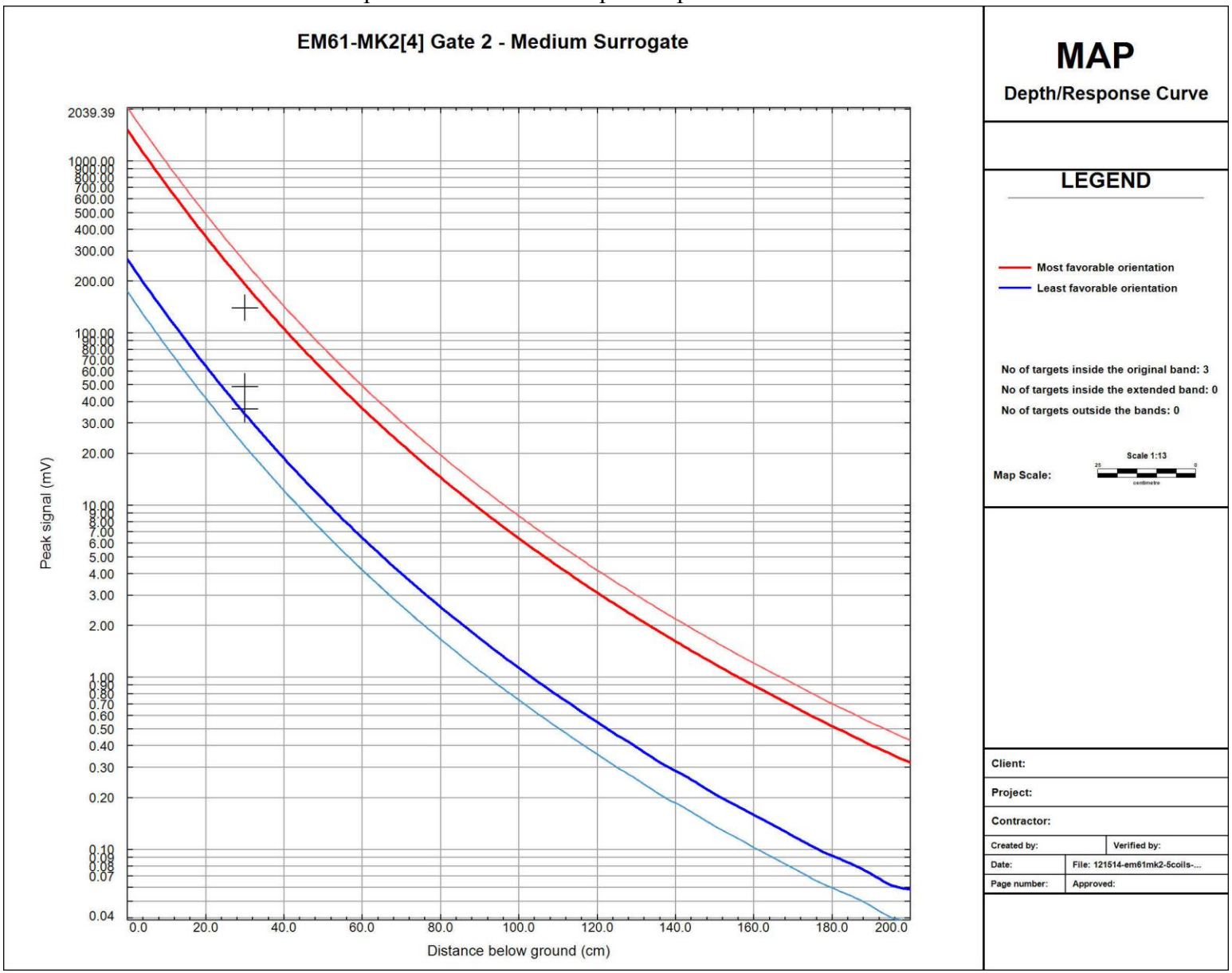


Figure C-342
12/15/2014 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

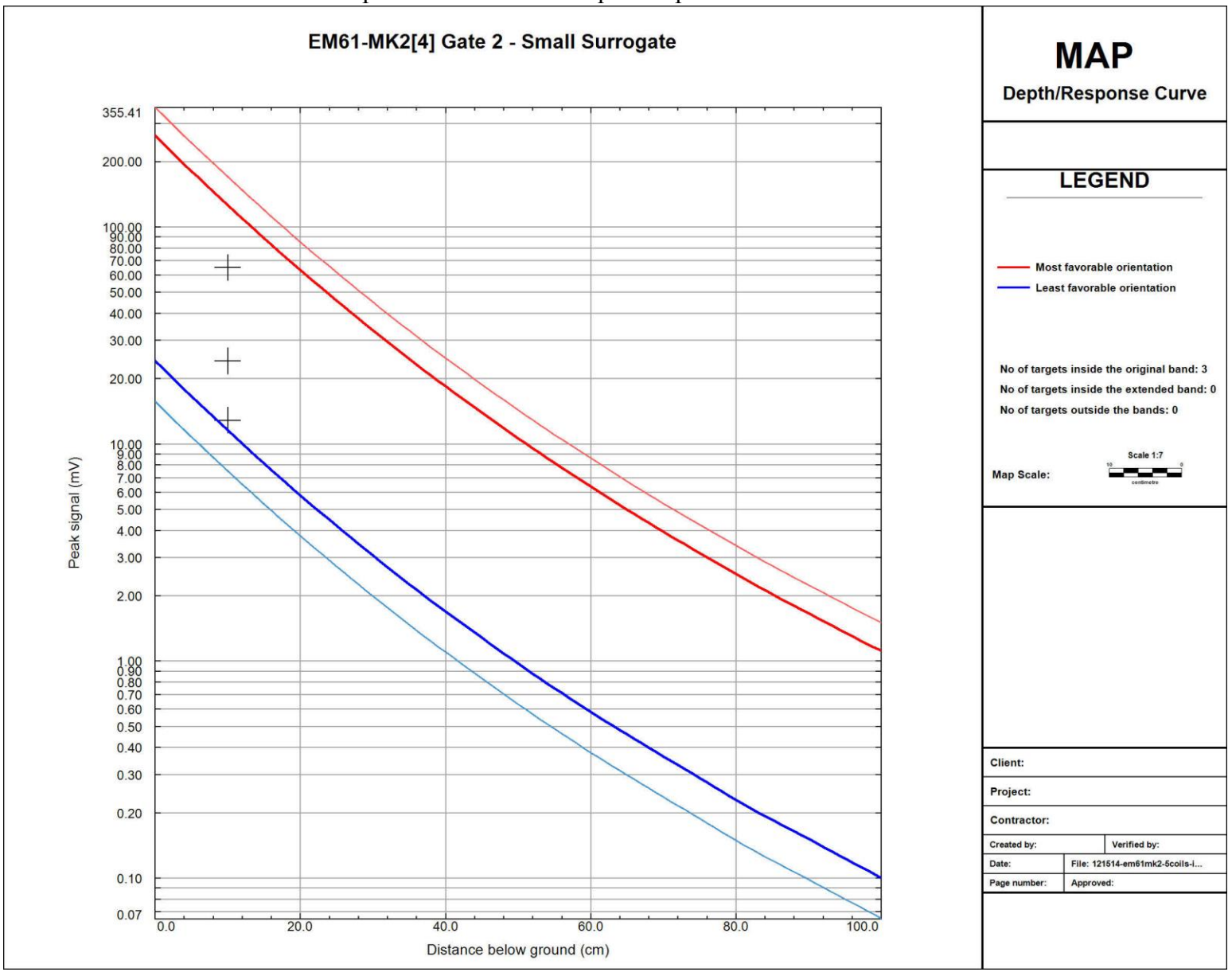


Figure C-343
12/16/2014 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

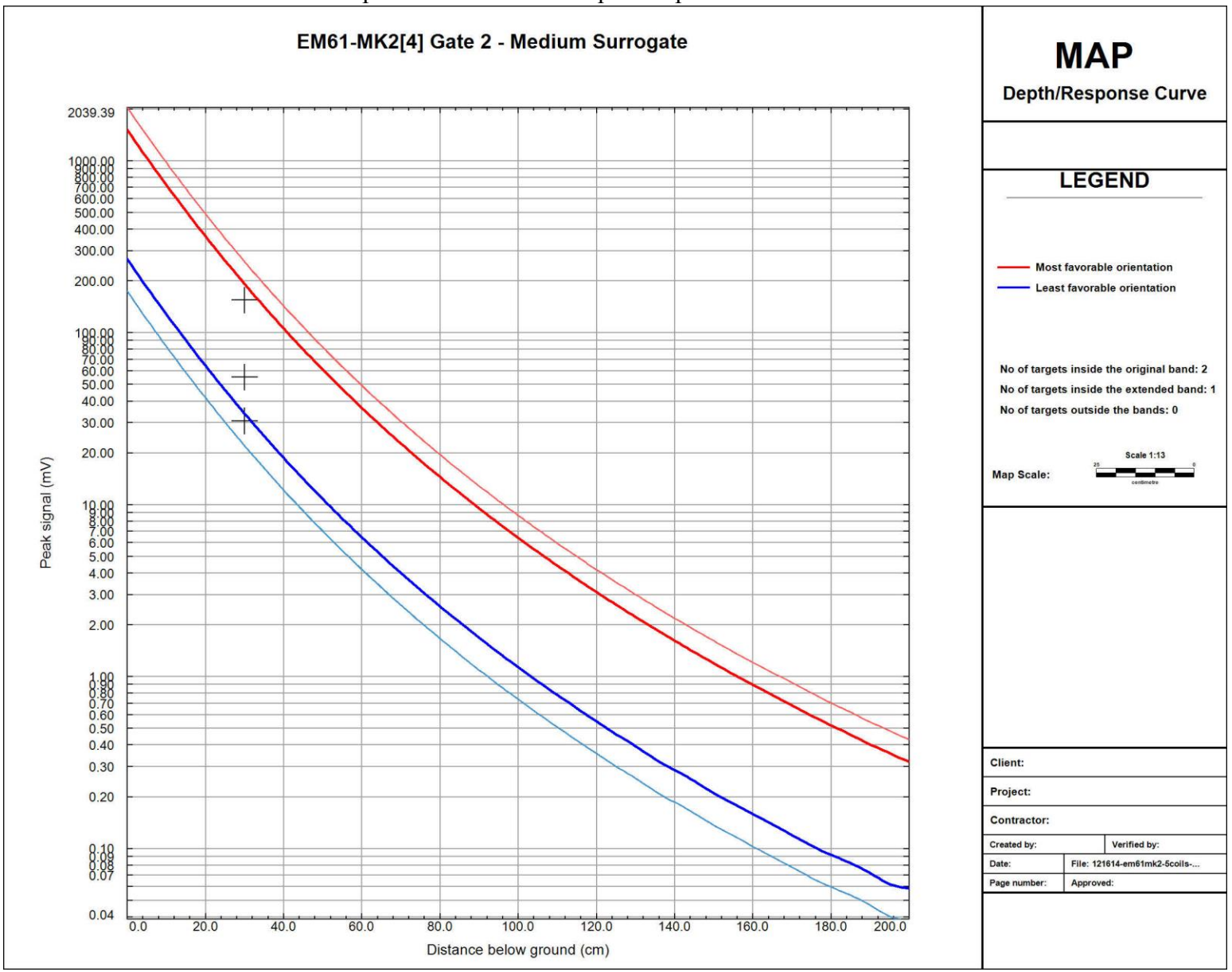


Figure C-344
12/16/2014 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

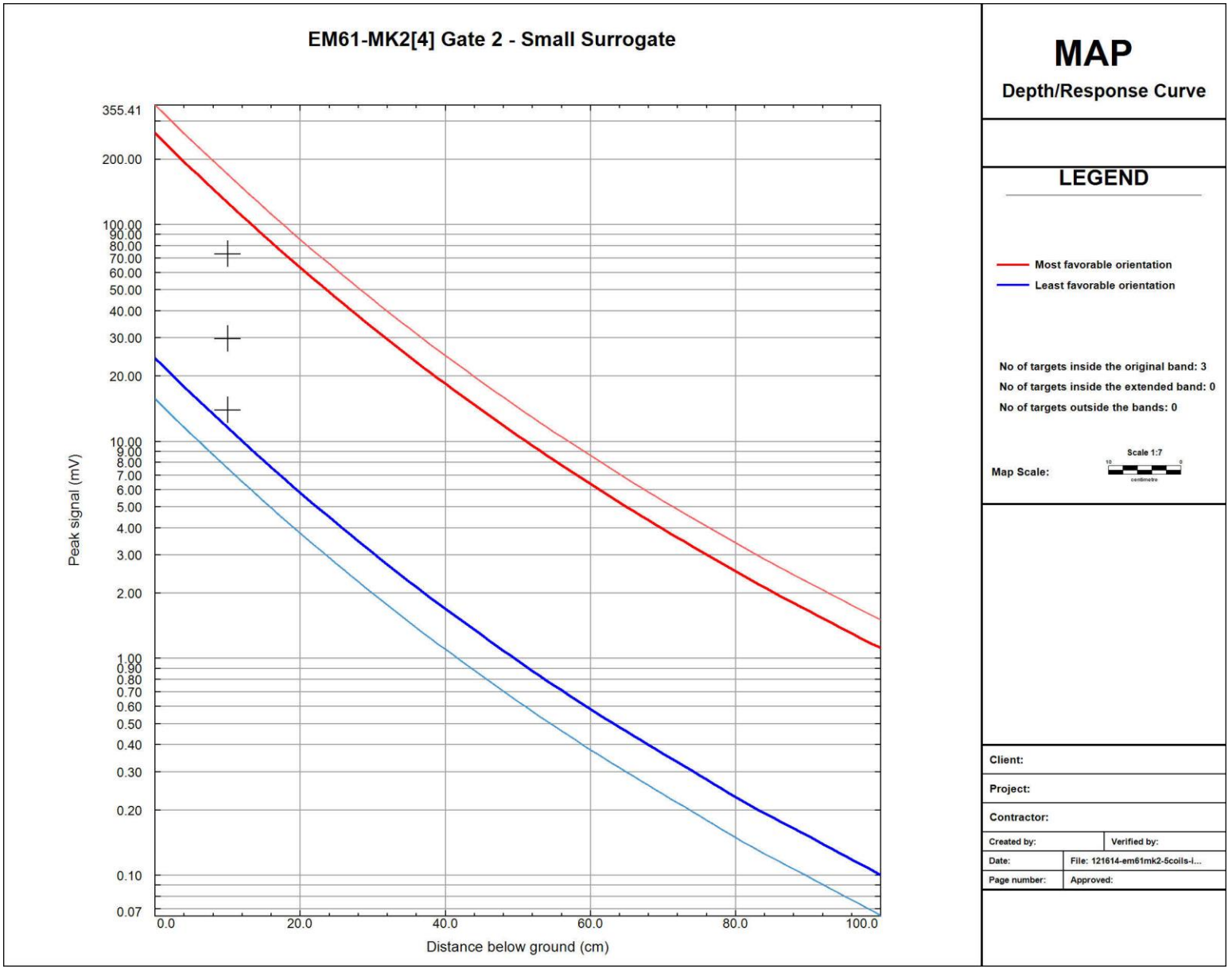


Figure C-345
12/16/2014 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

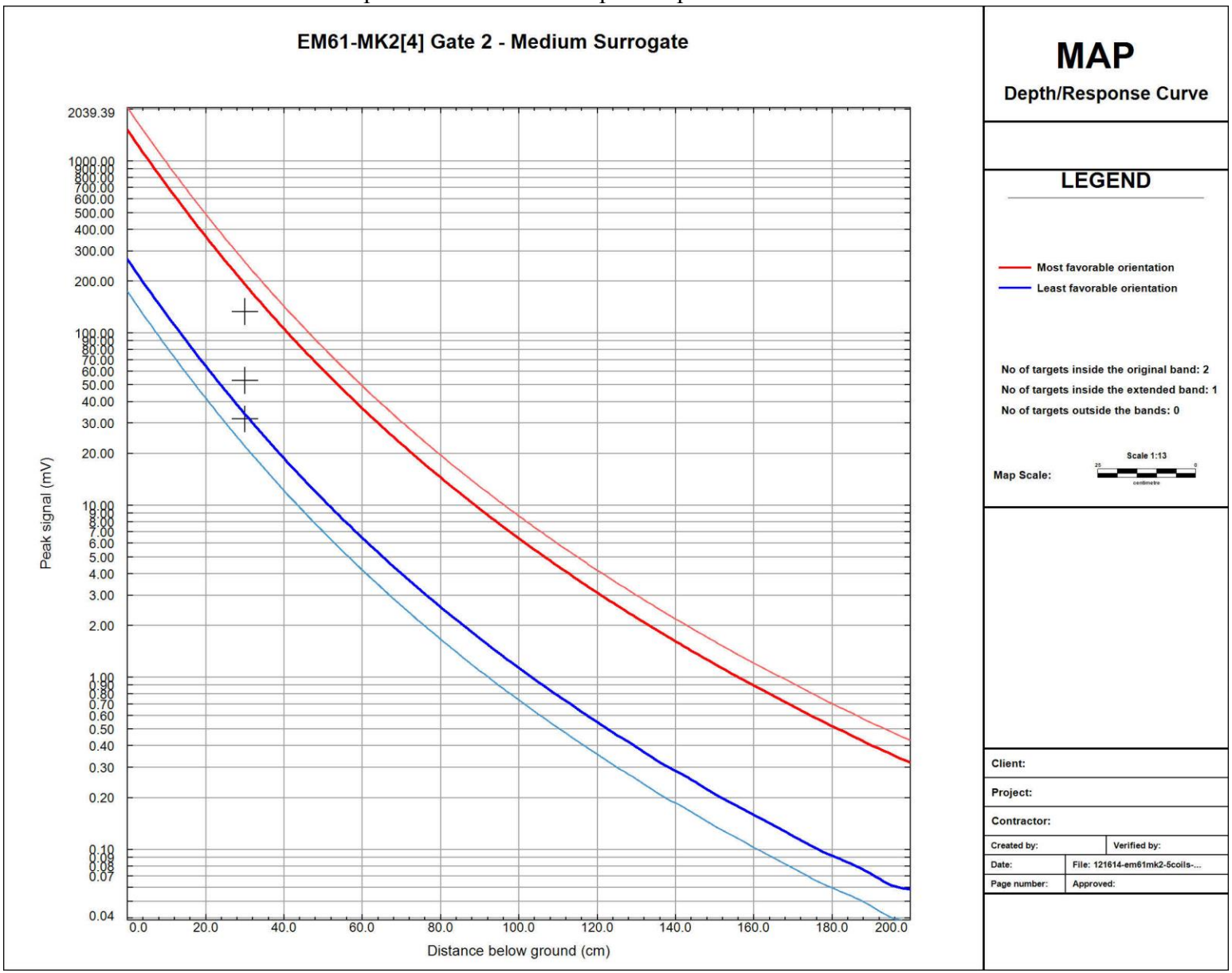


Figure C-346
12/16/2014 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

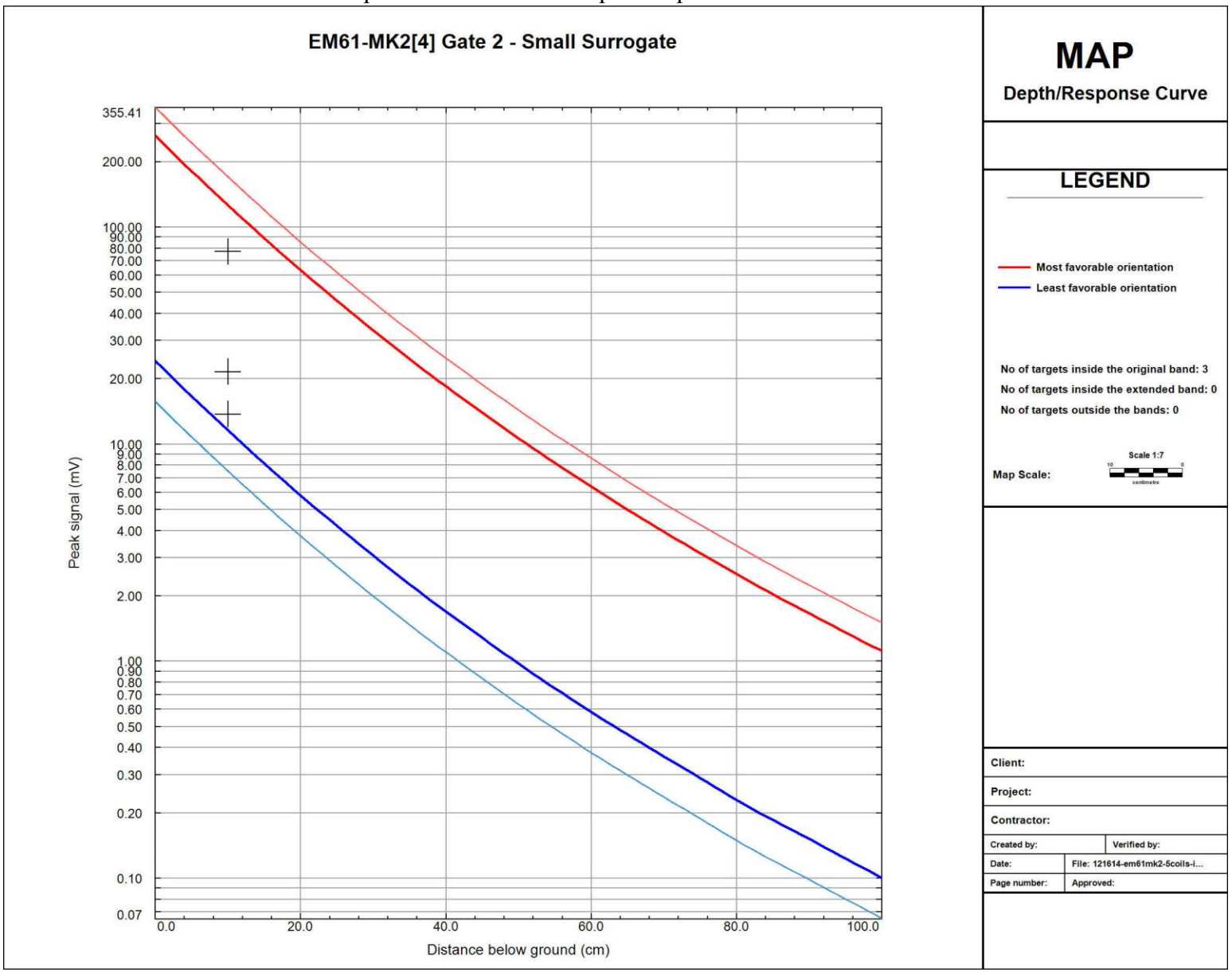


Figure C-347
12/16/2014 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

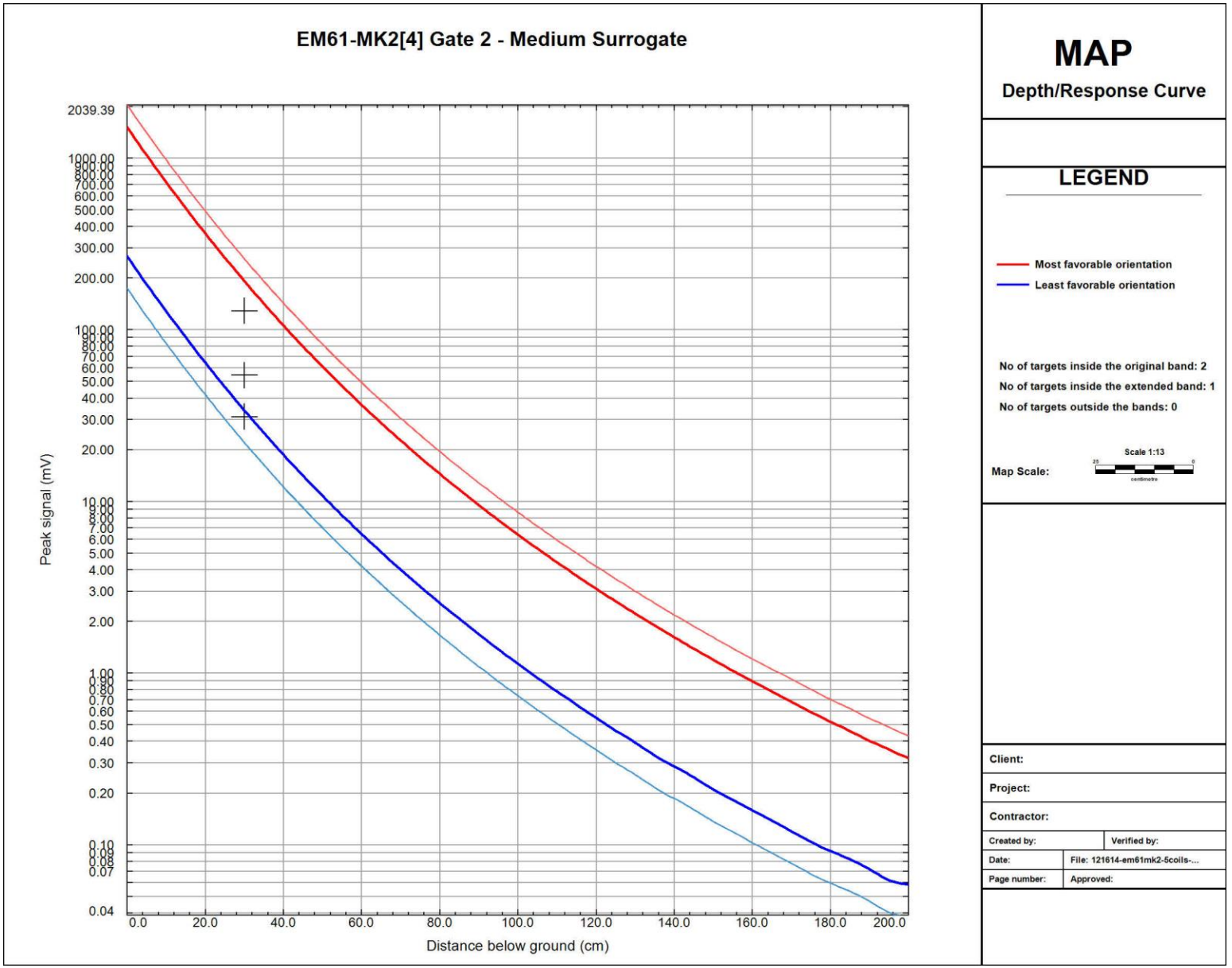


Figure C-348
12/16/2014 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

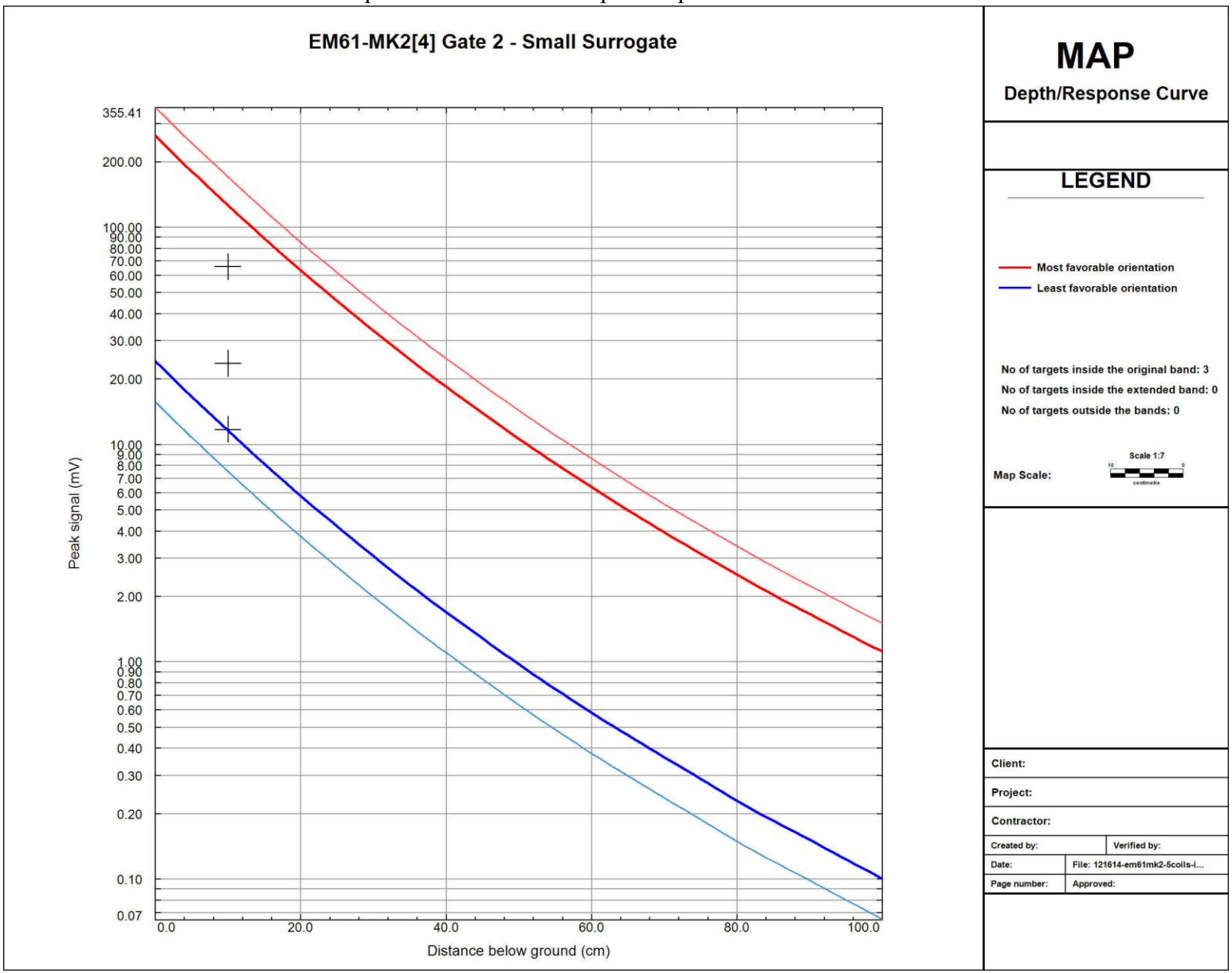


Figure C-349
12/16/2014 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

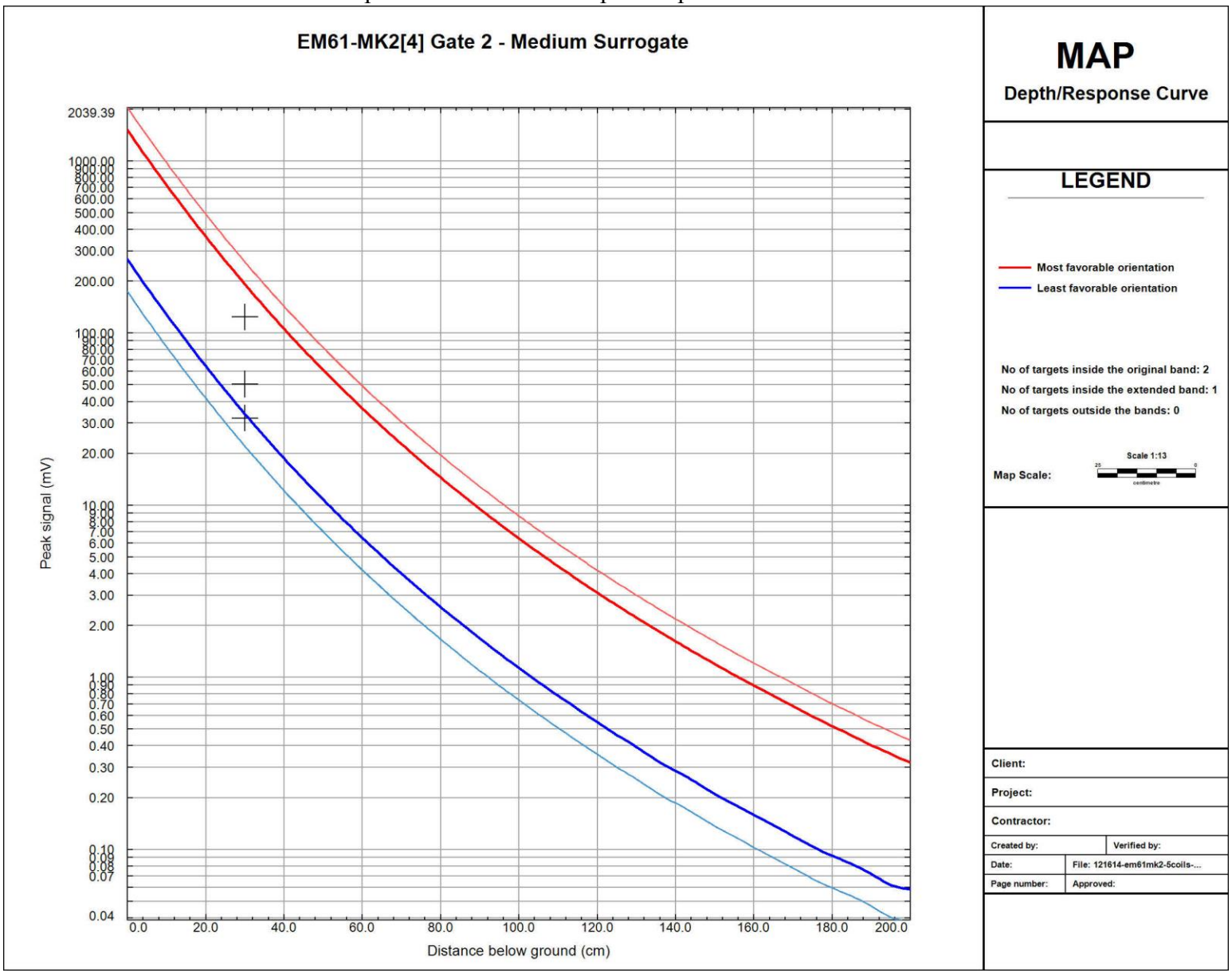


Figure C-350
12/16/2014 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

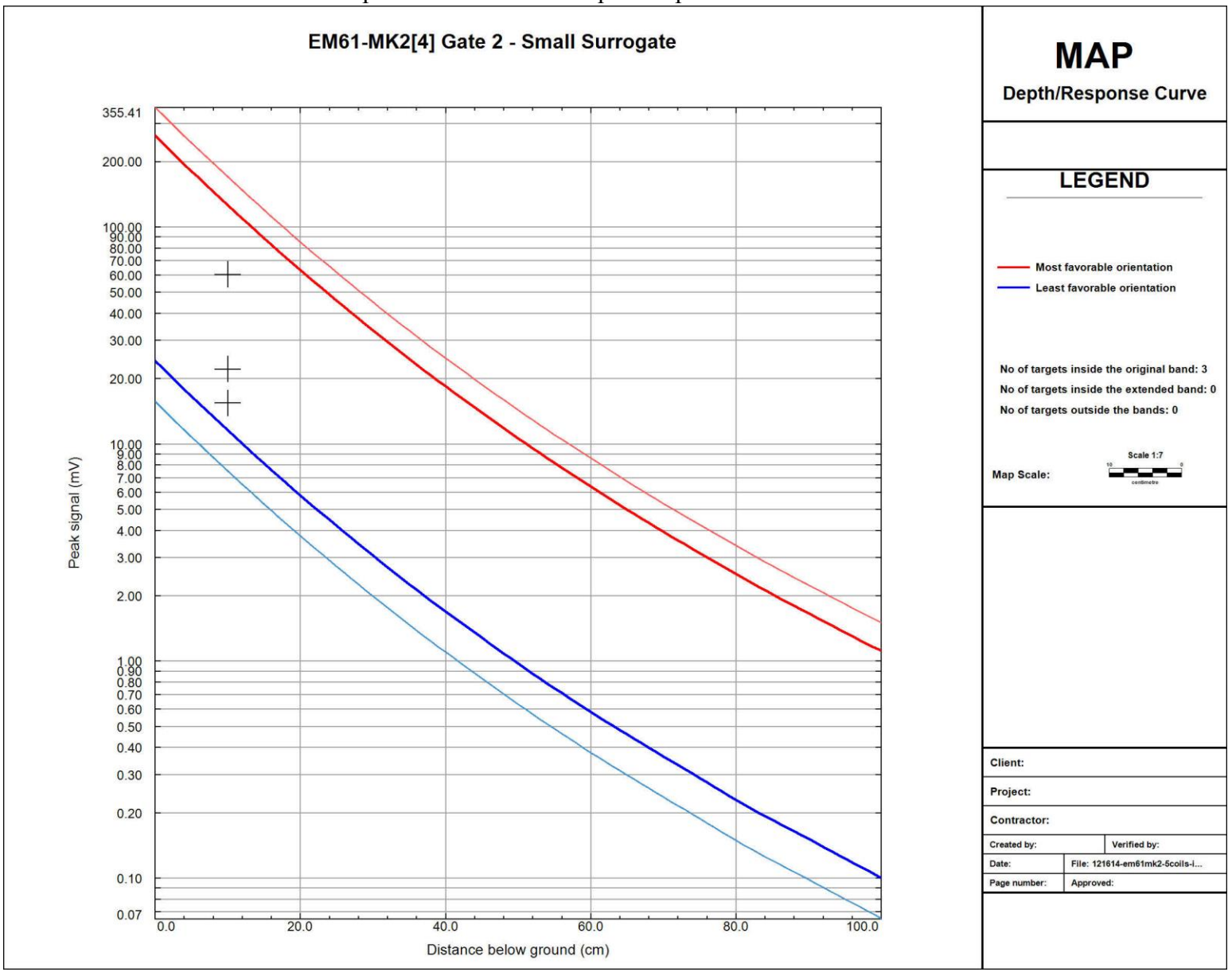


Figure C-351
12/16/2014 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

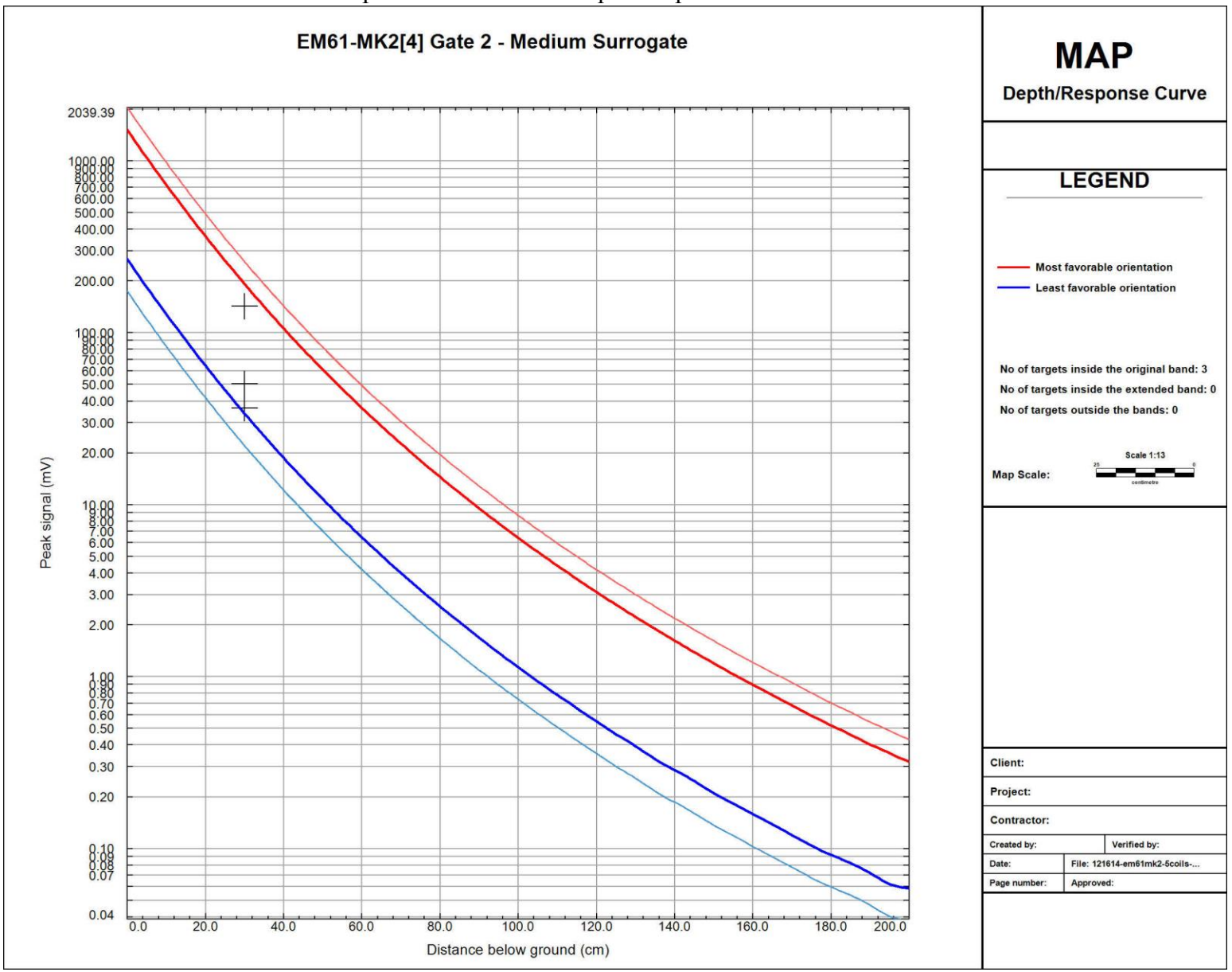


Figure C-352
12/16/2014 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

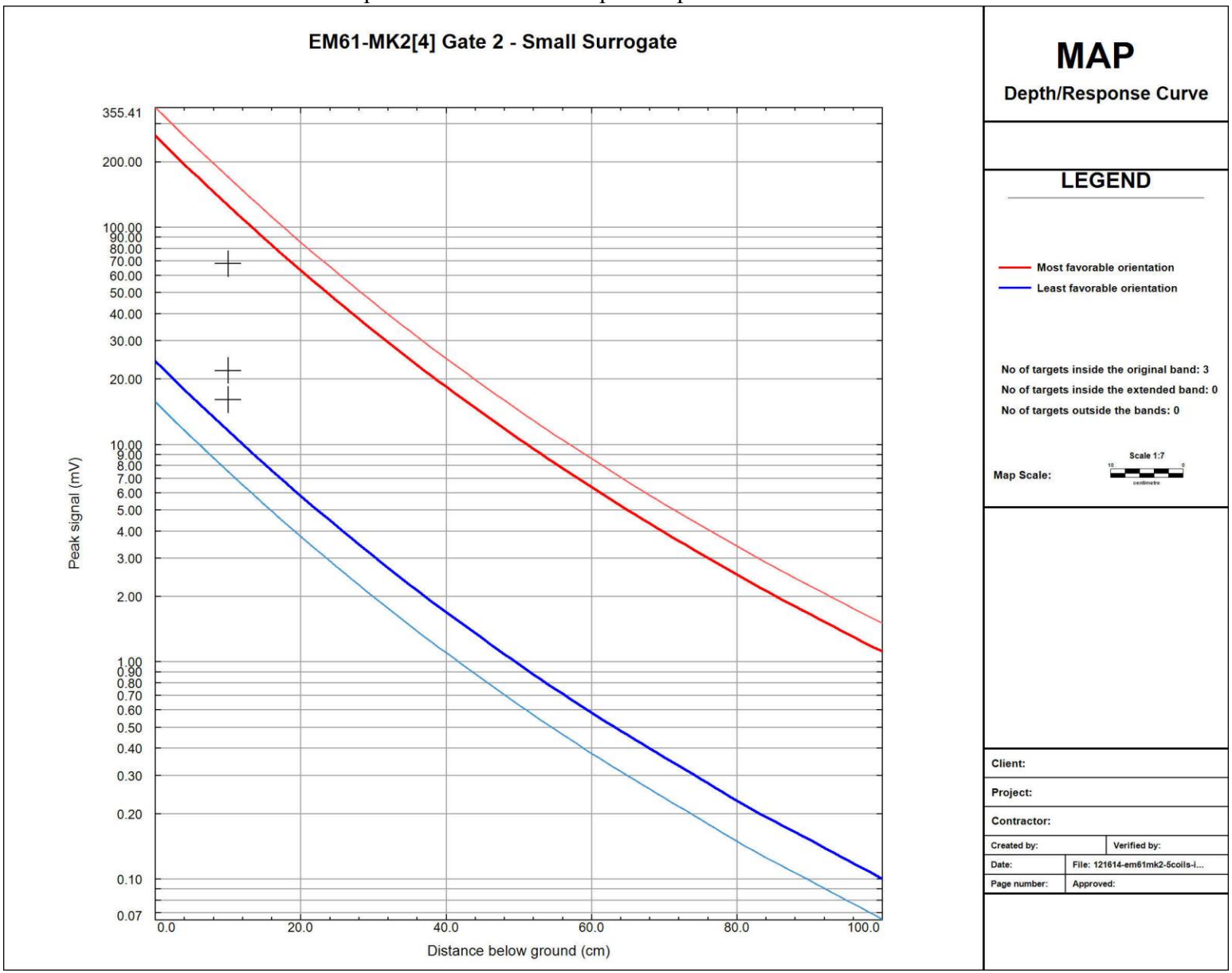


Figure C-353
12/16/2014 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

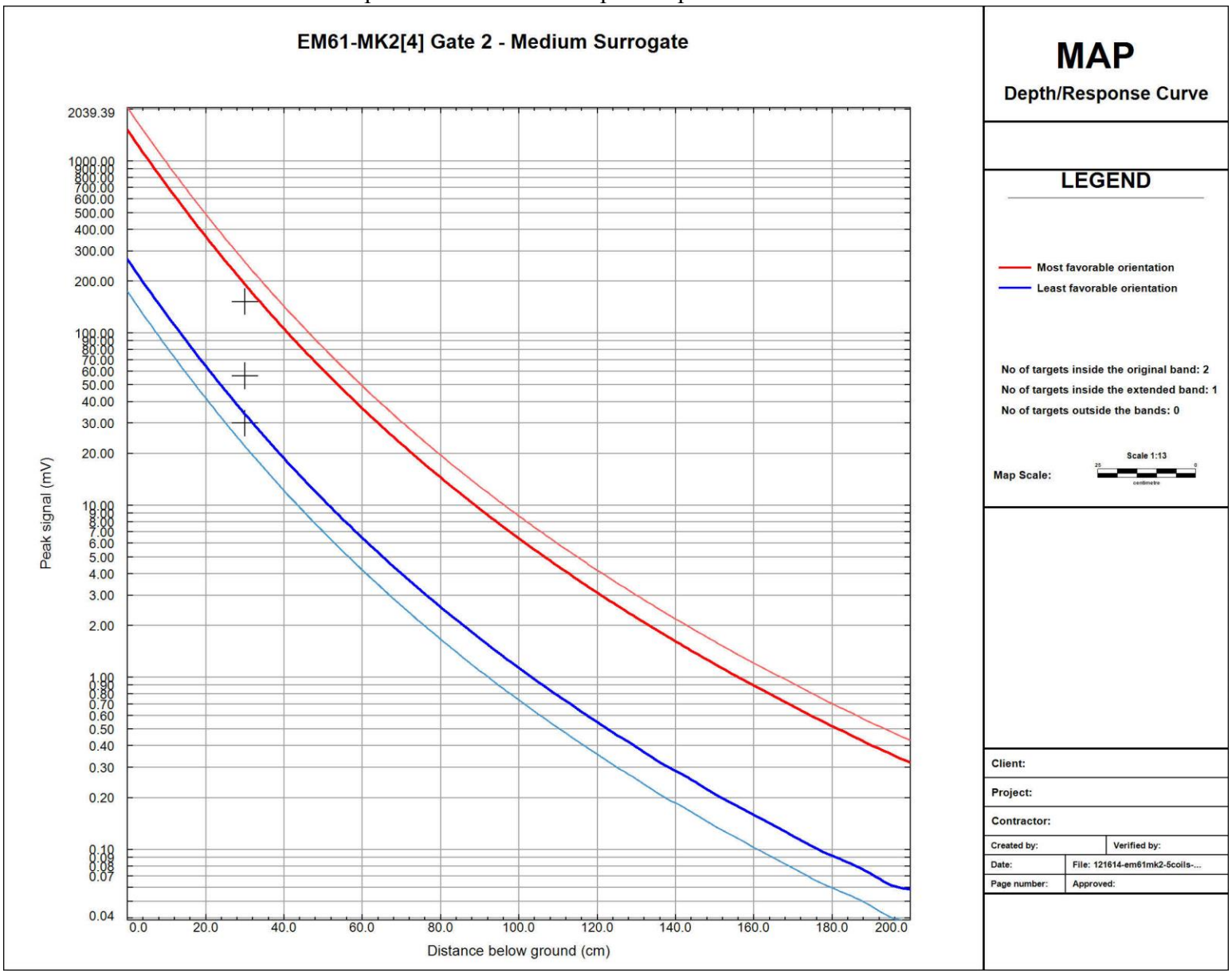


Figure C-354
12/16/2014 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

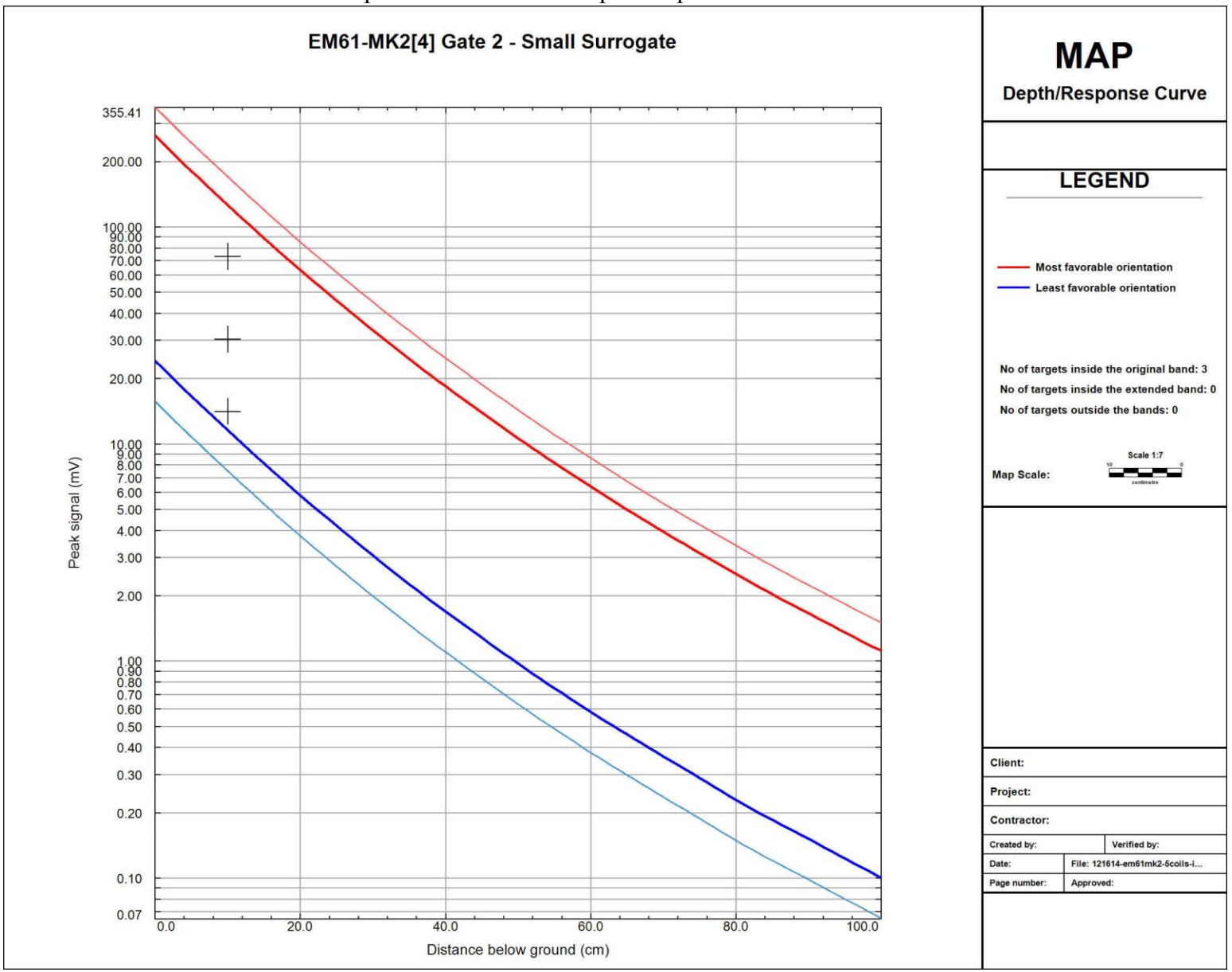


Figure C-355
12/16/2014 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

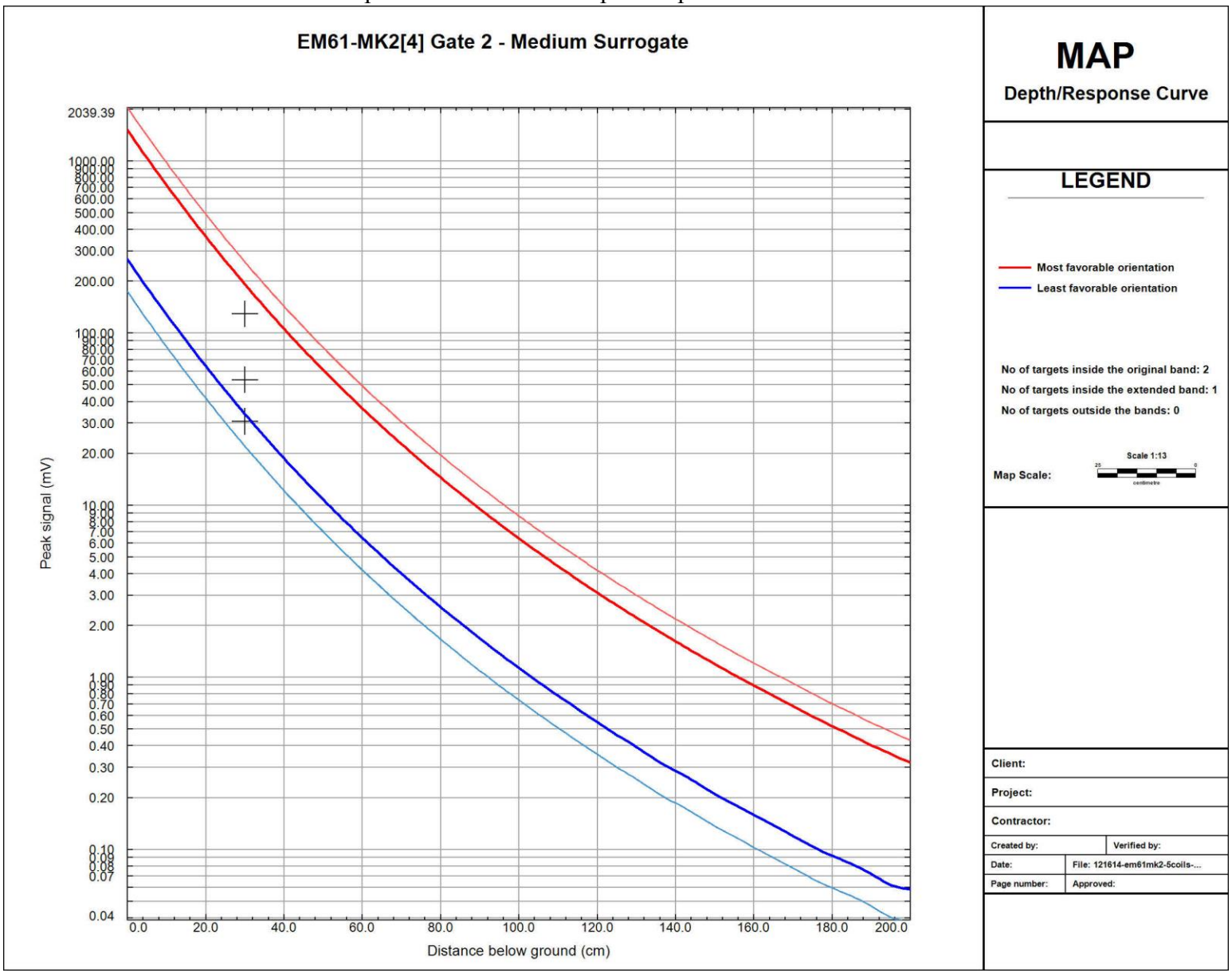


Figure C-356
12/16/2014 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

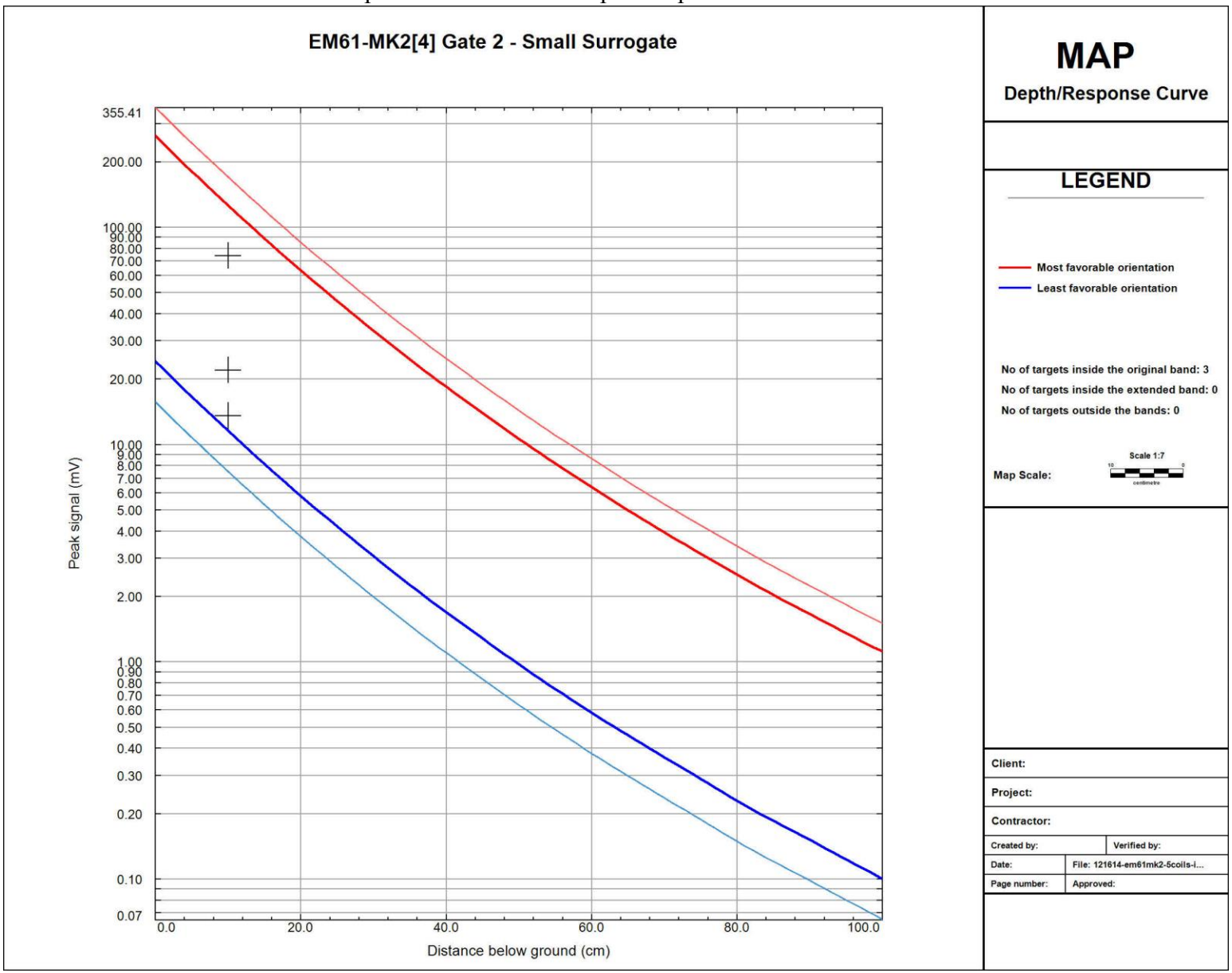


Figure C-357
12/16/2014 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

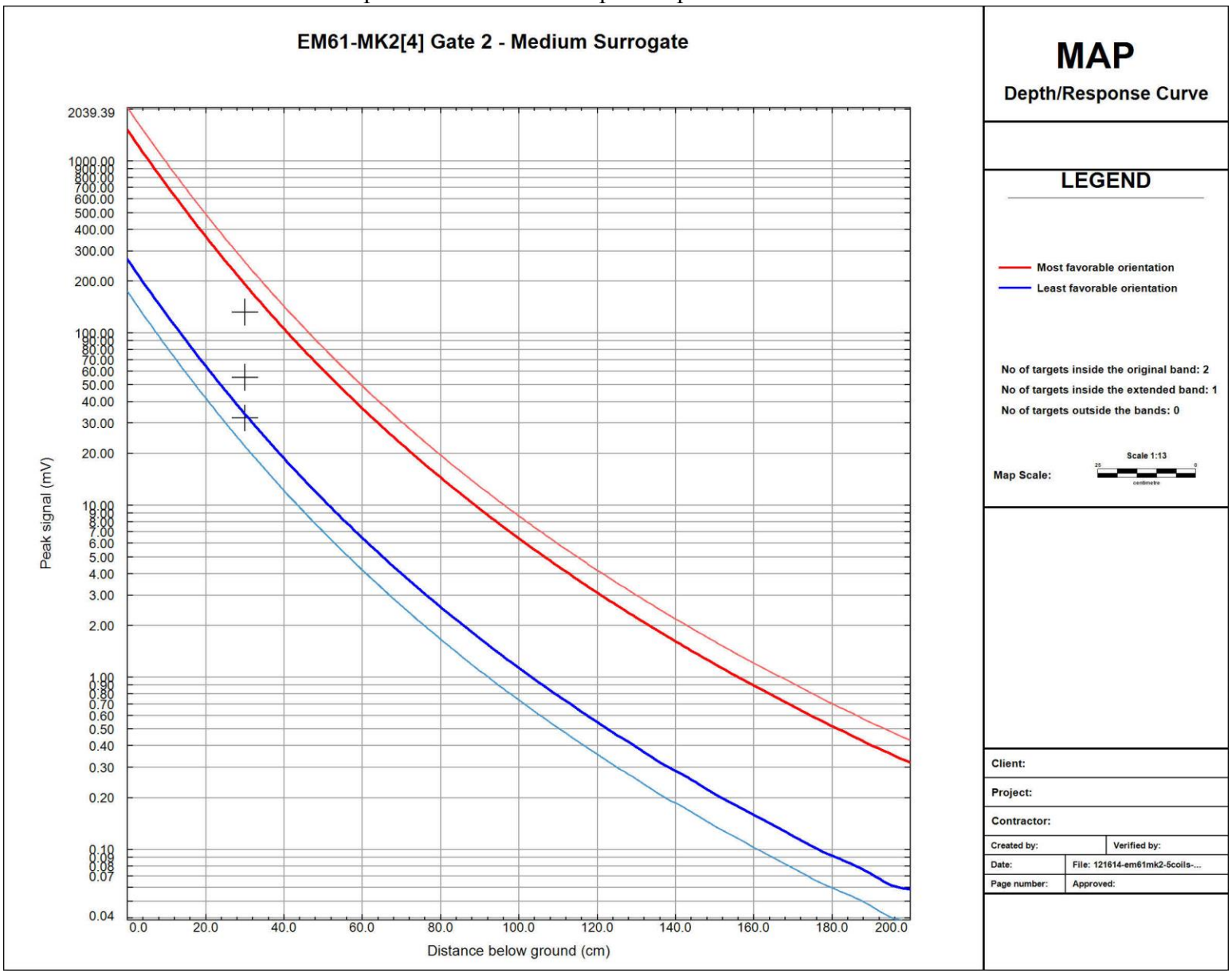


Figure C-358
12/16/2014 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

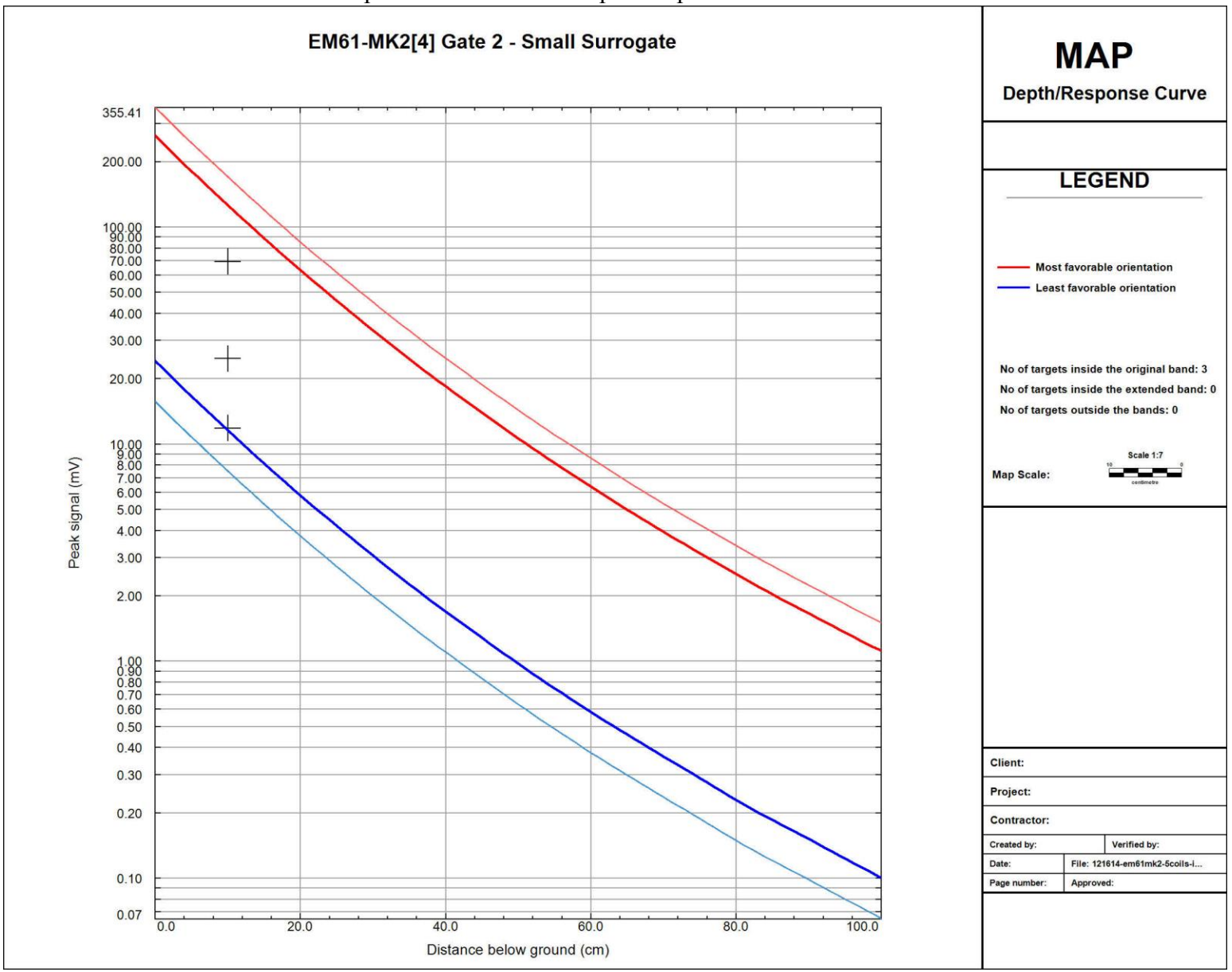


Figure C-359
12/16/2014 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

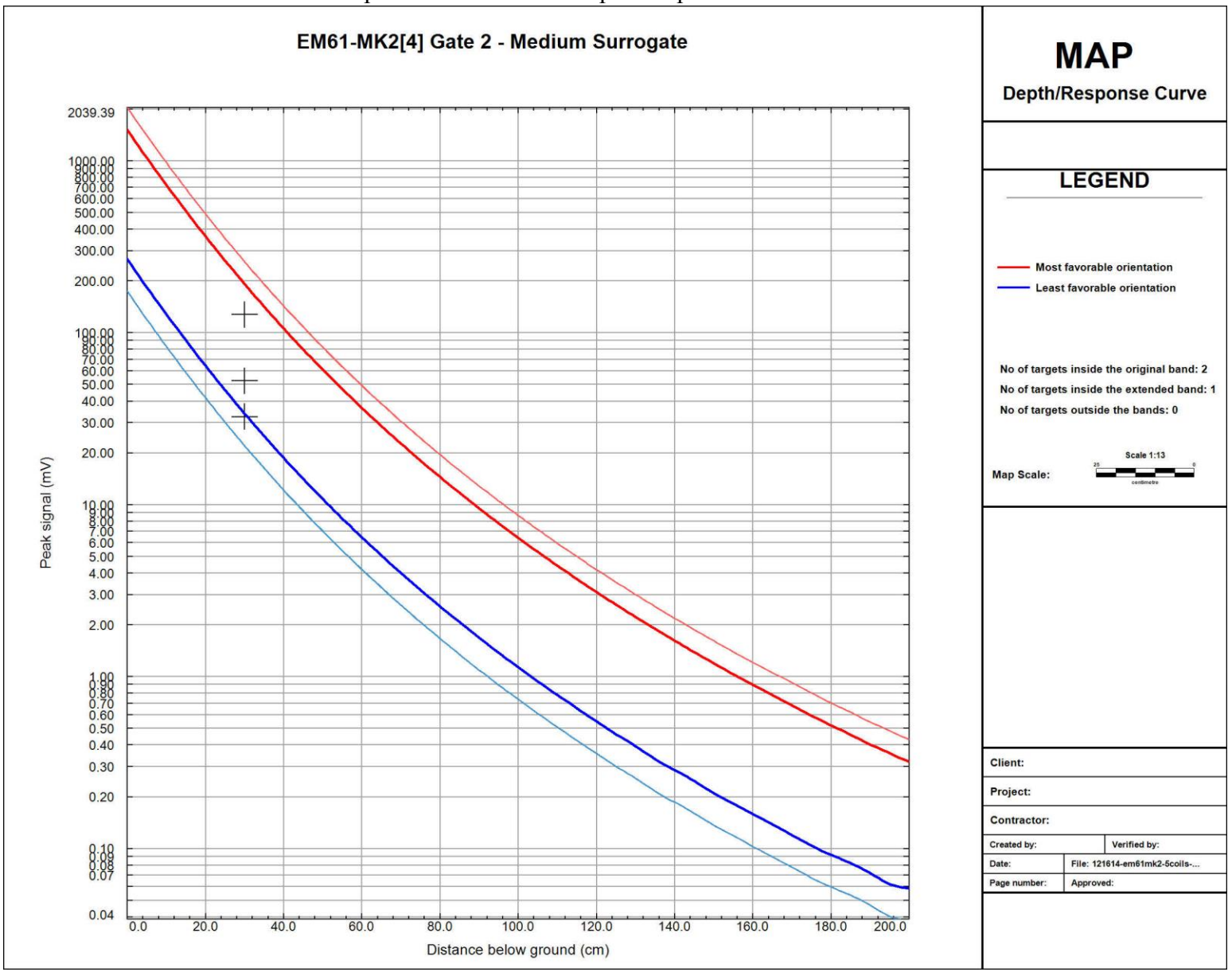


Figure C-360
12/16/2014 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

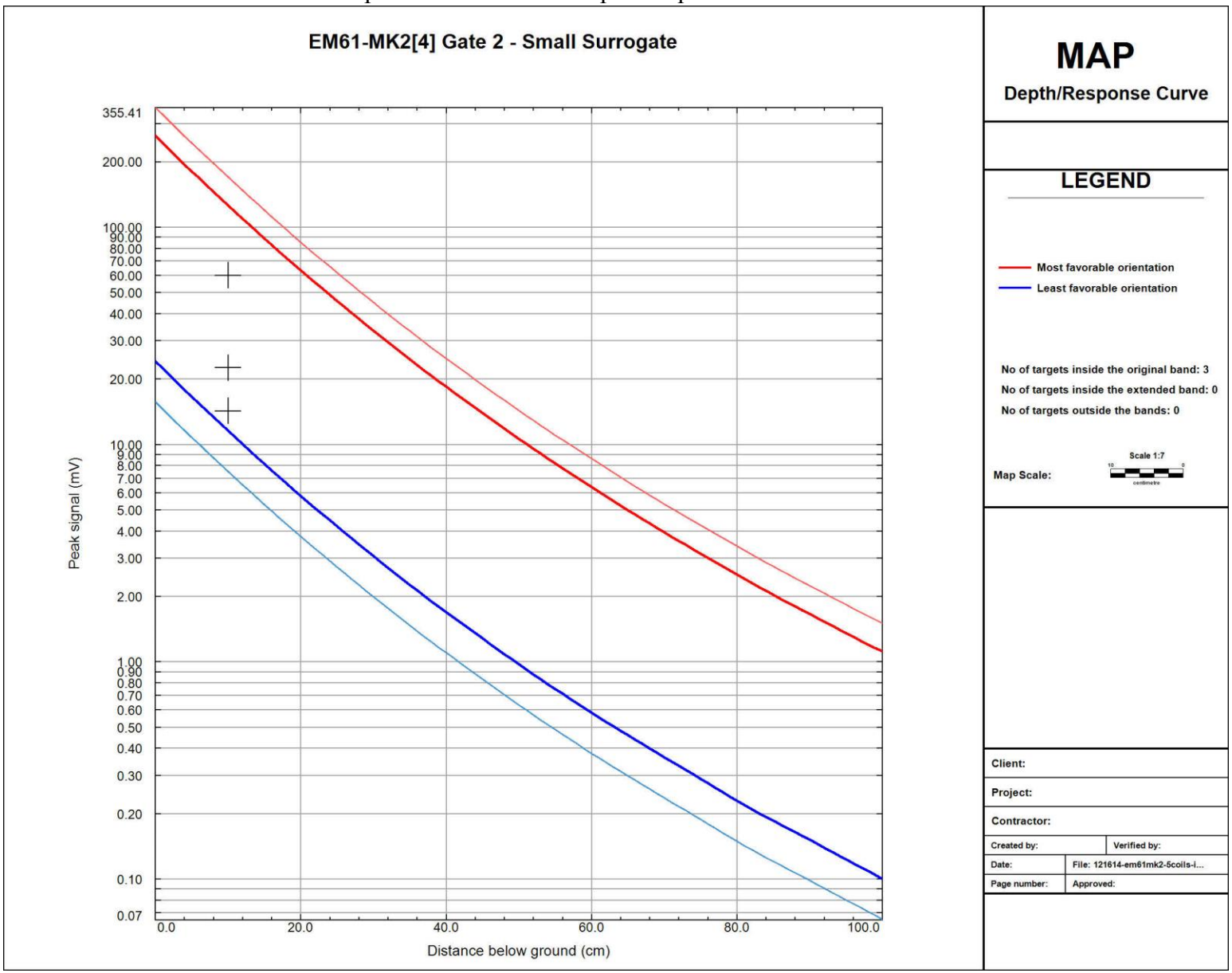


Figure C-361
12/16/2014 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

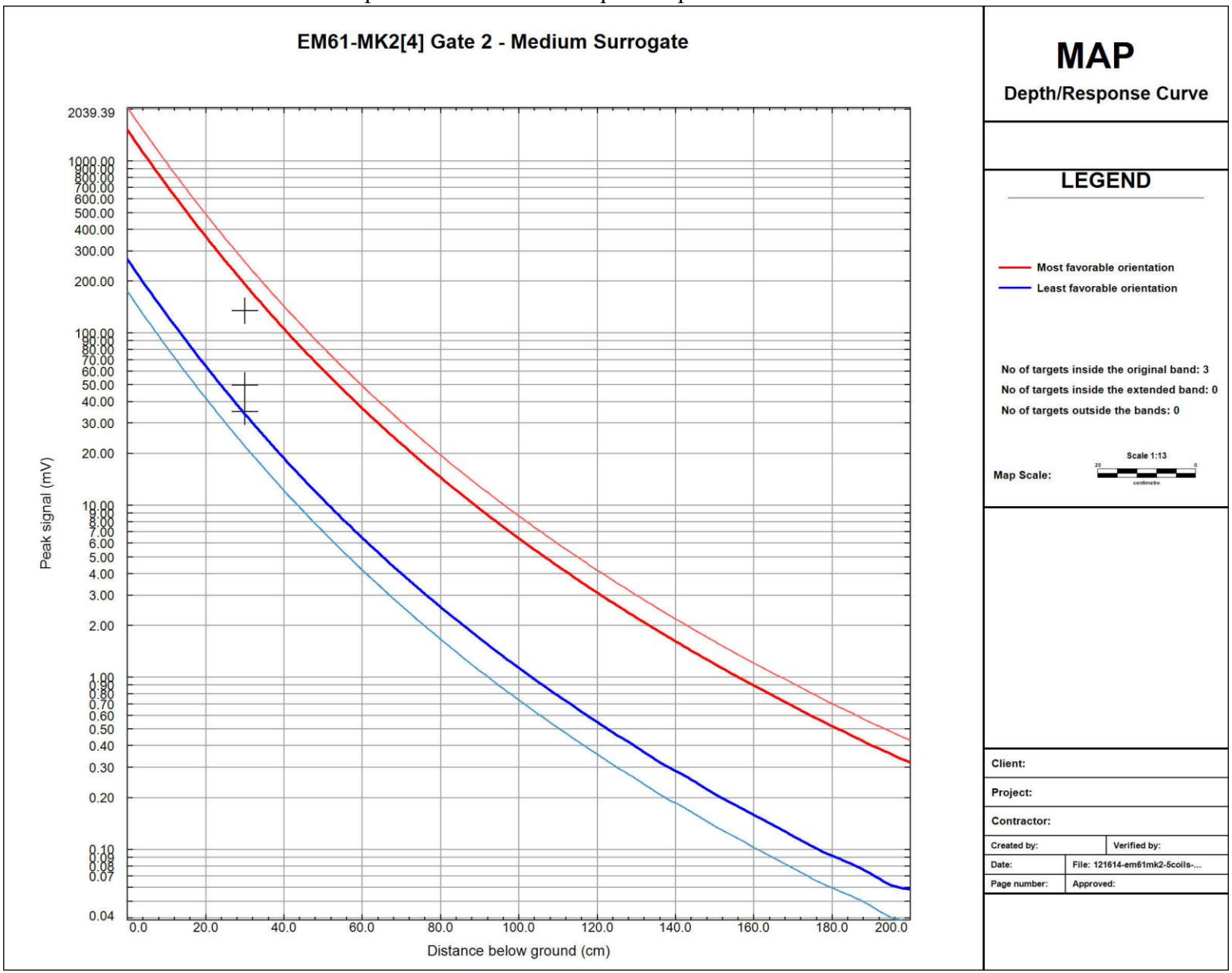


Figure C-362
12/16/2014 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

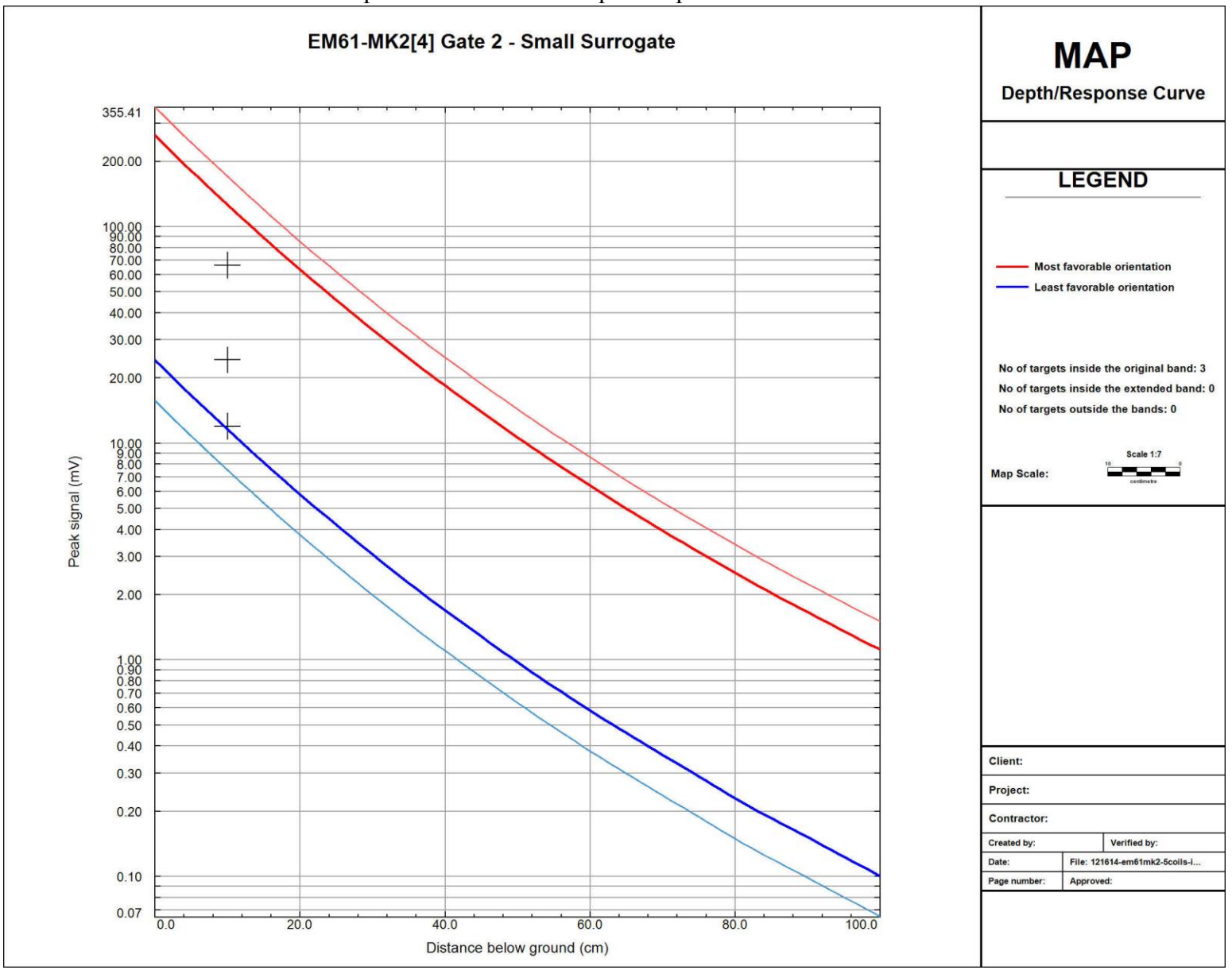


Figure C-363
12/18/2014 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

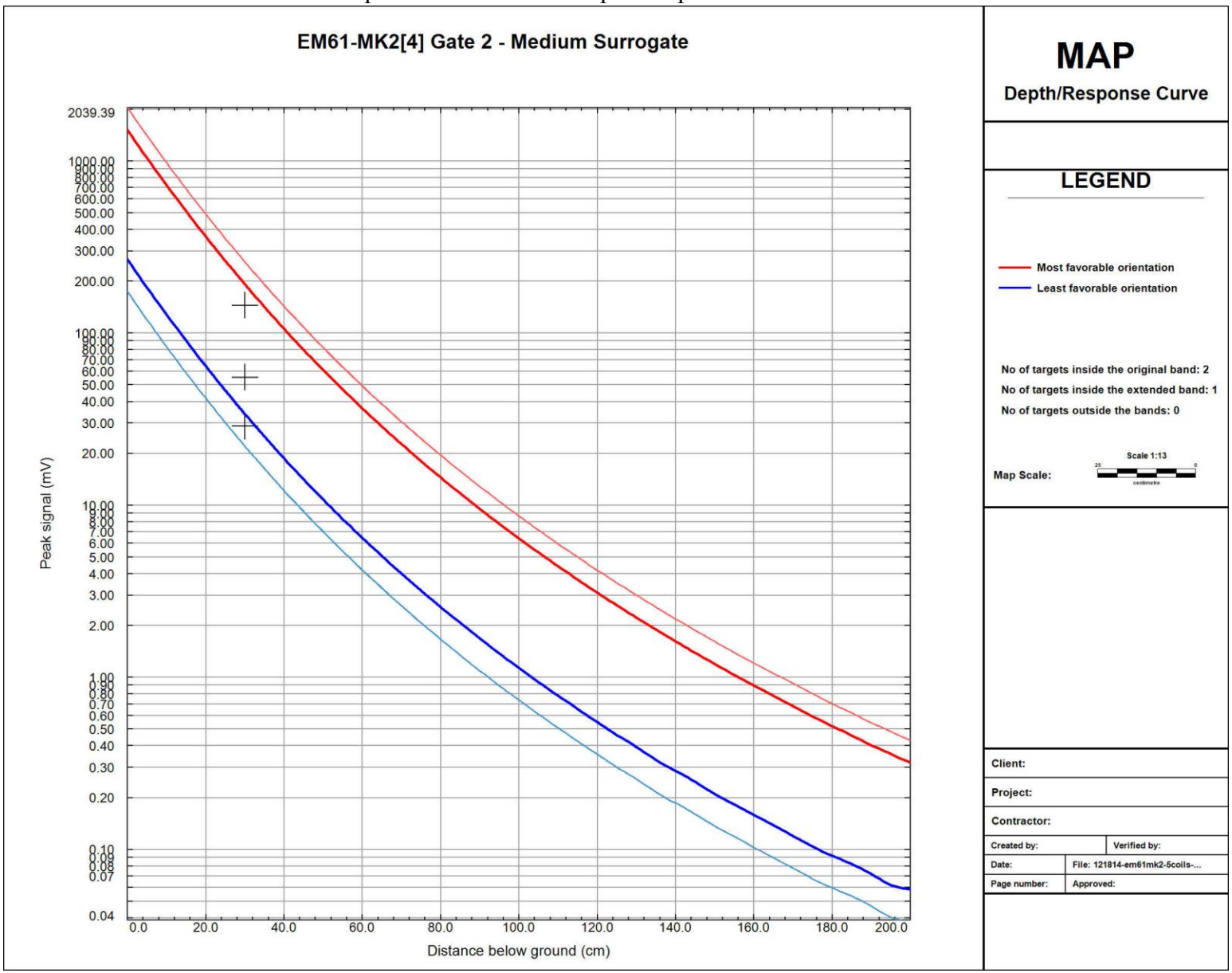


Figure C-364
12/18/2014 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

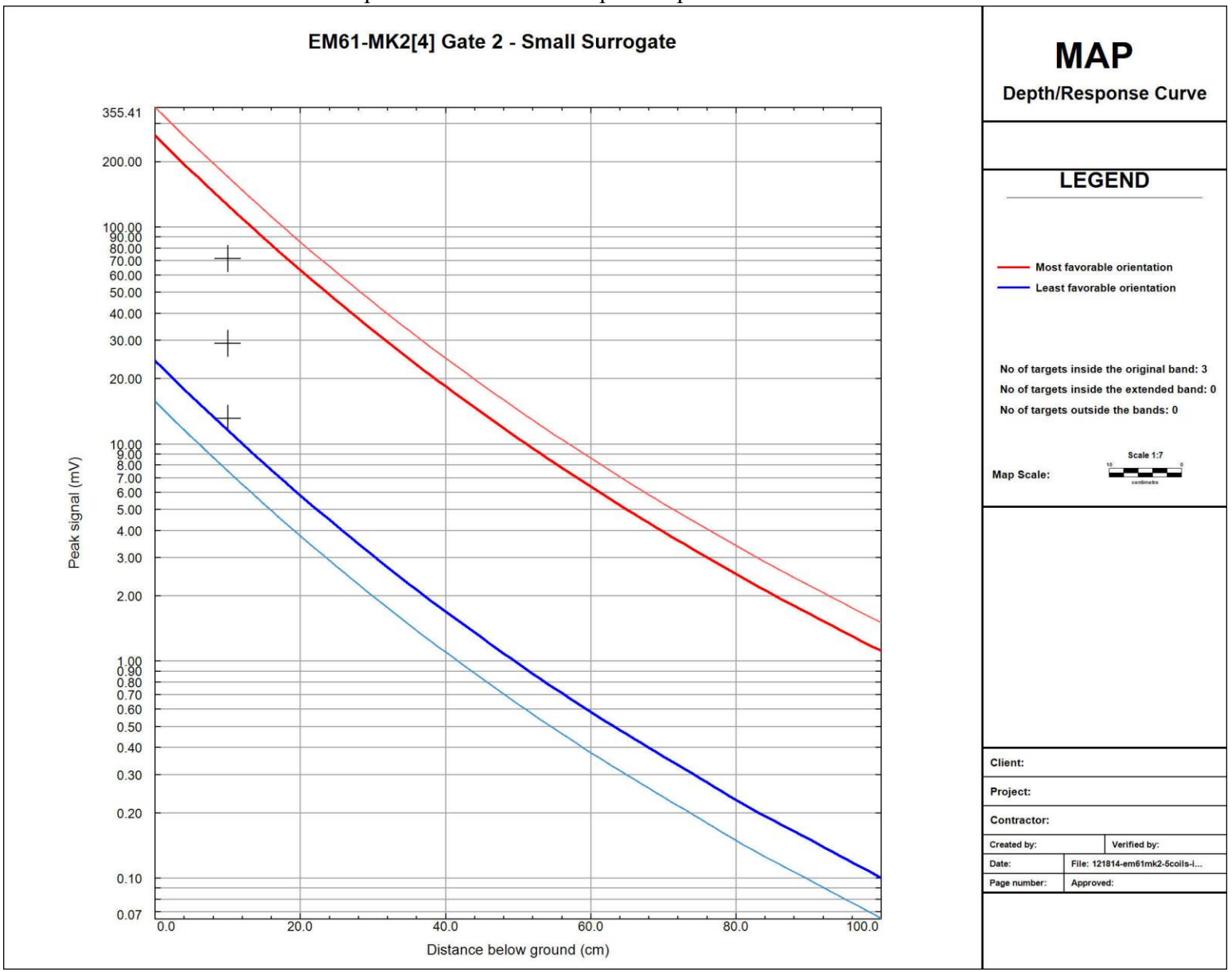


Figure C-365
12/18/2014 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

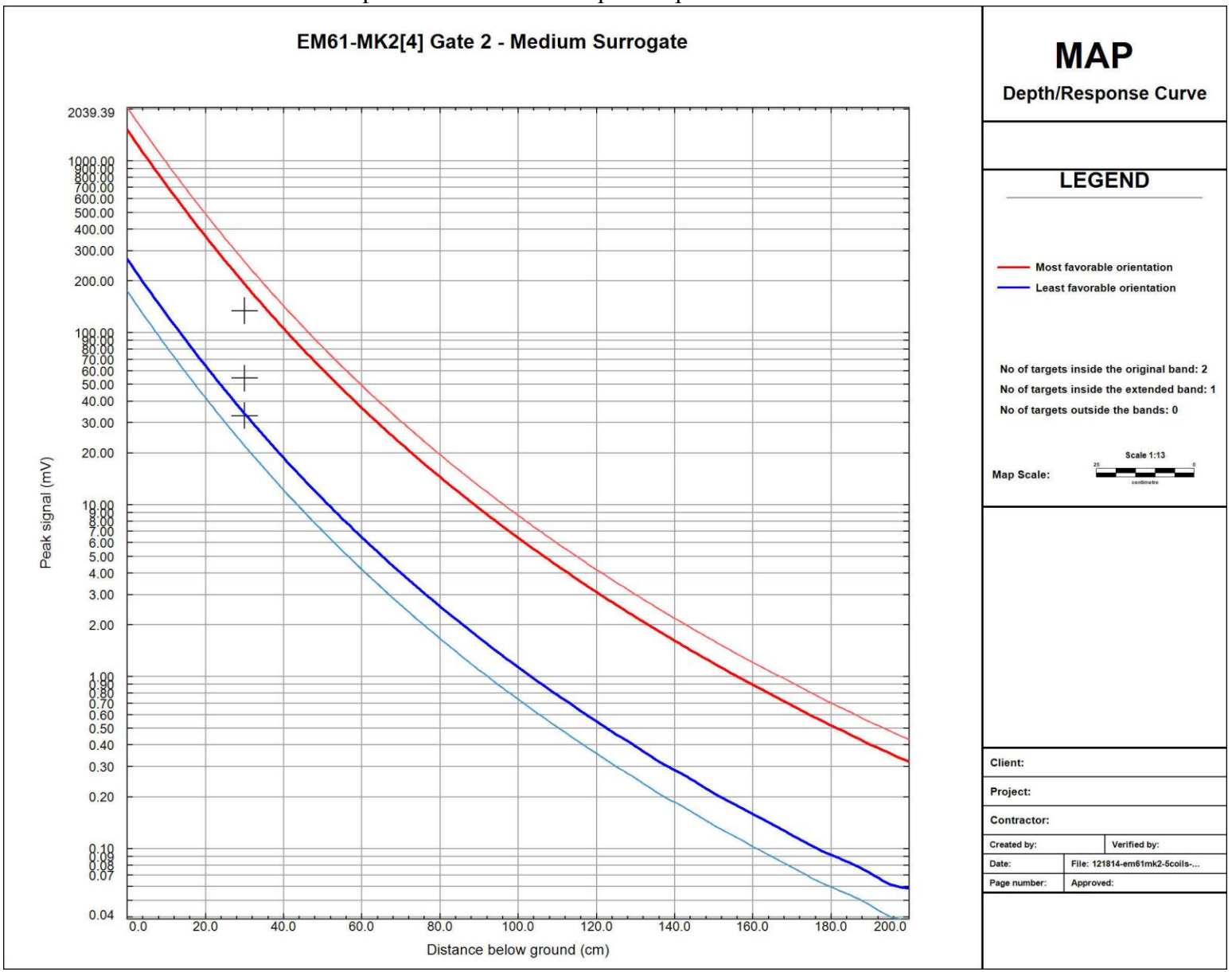


Figure C-366
12/18/2014 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

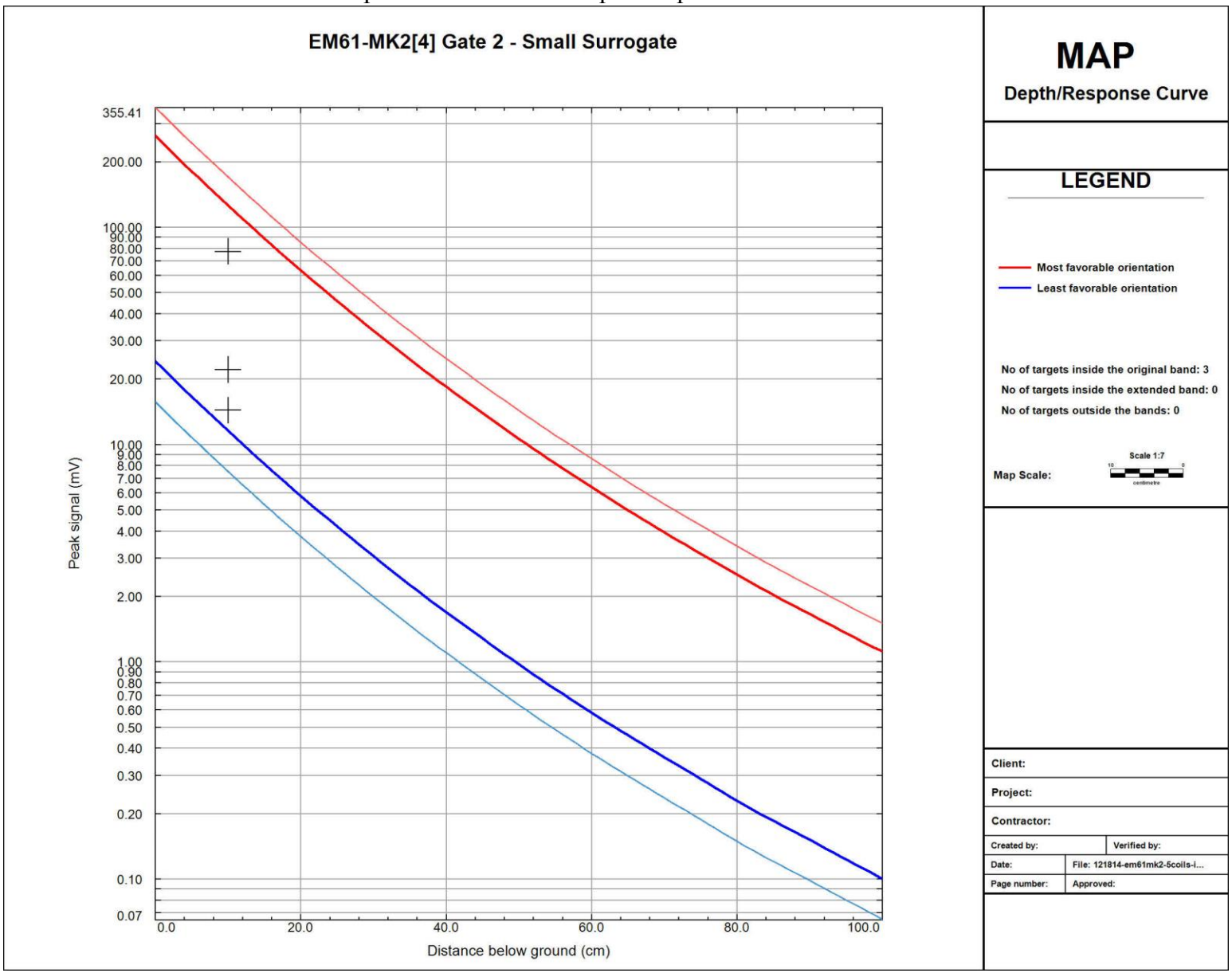


Figure C-367
12/18/2014 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

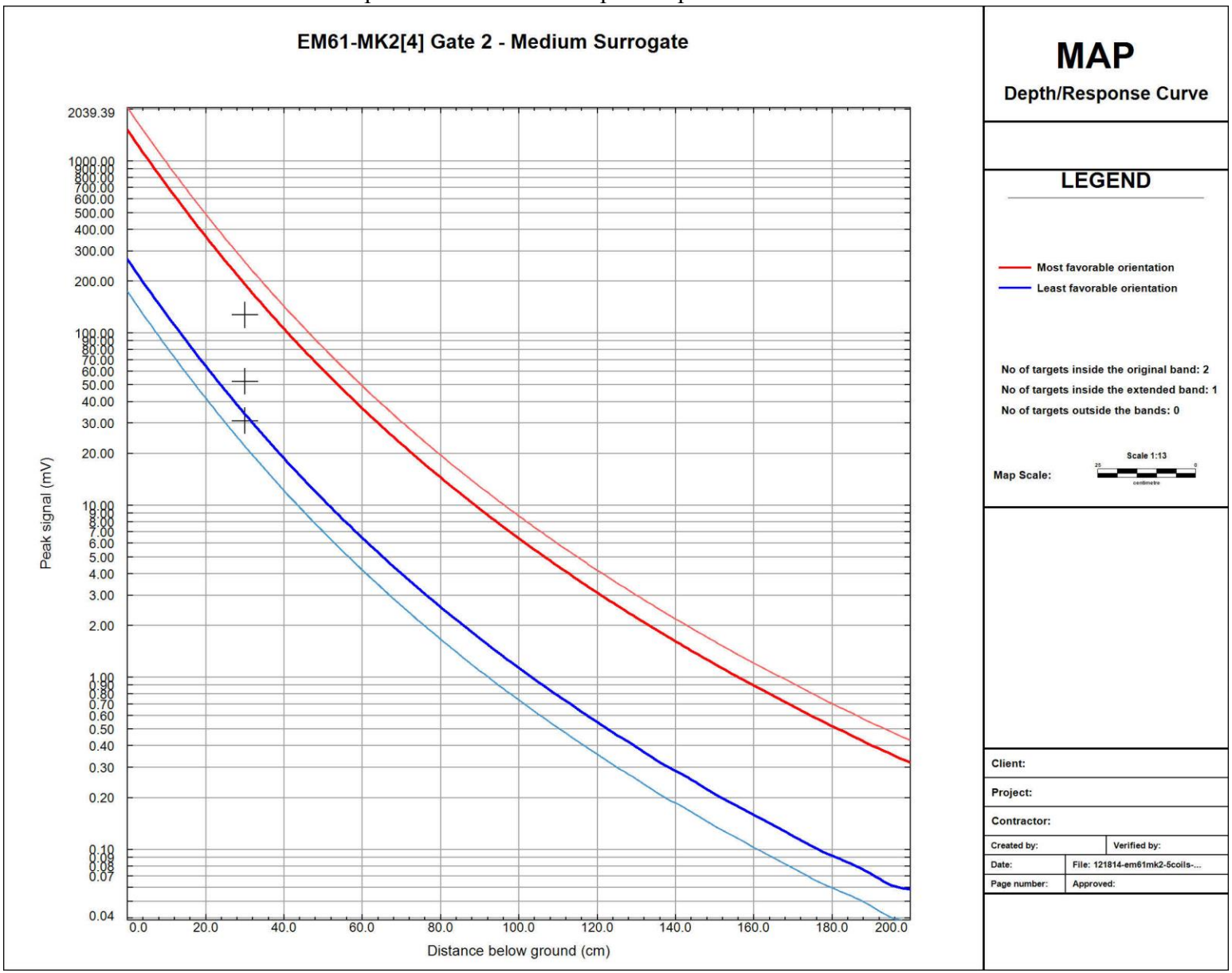


Figure C-368
12/18/2014 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

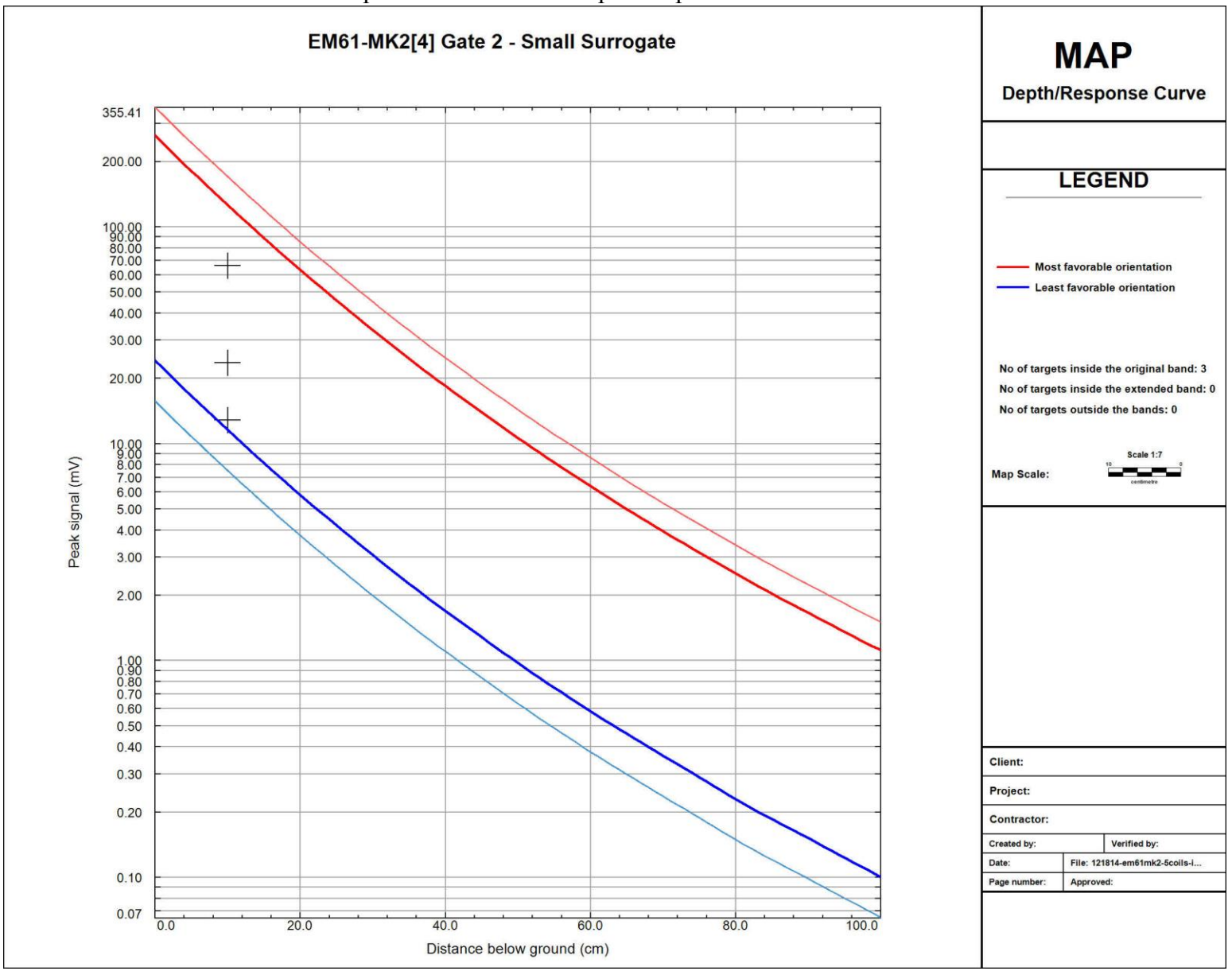


Figure C-369
12/18/2014 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

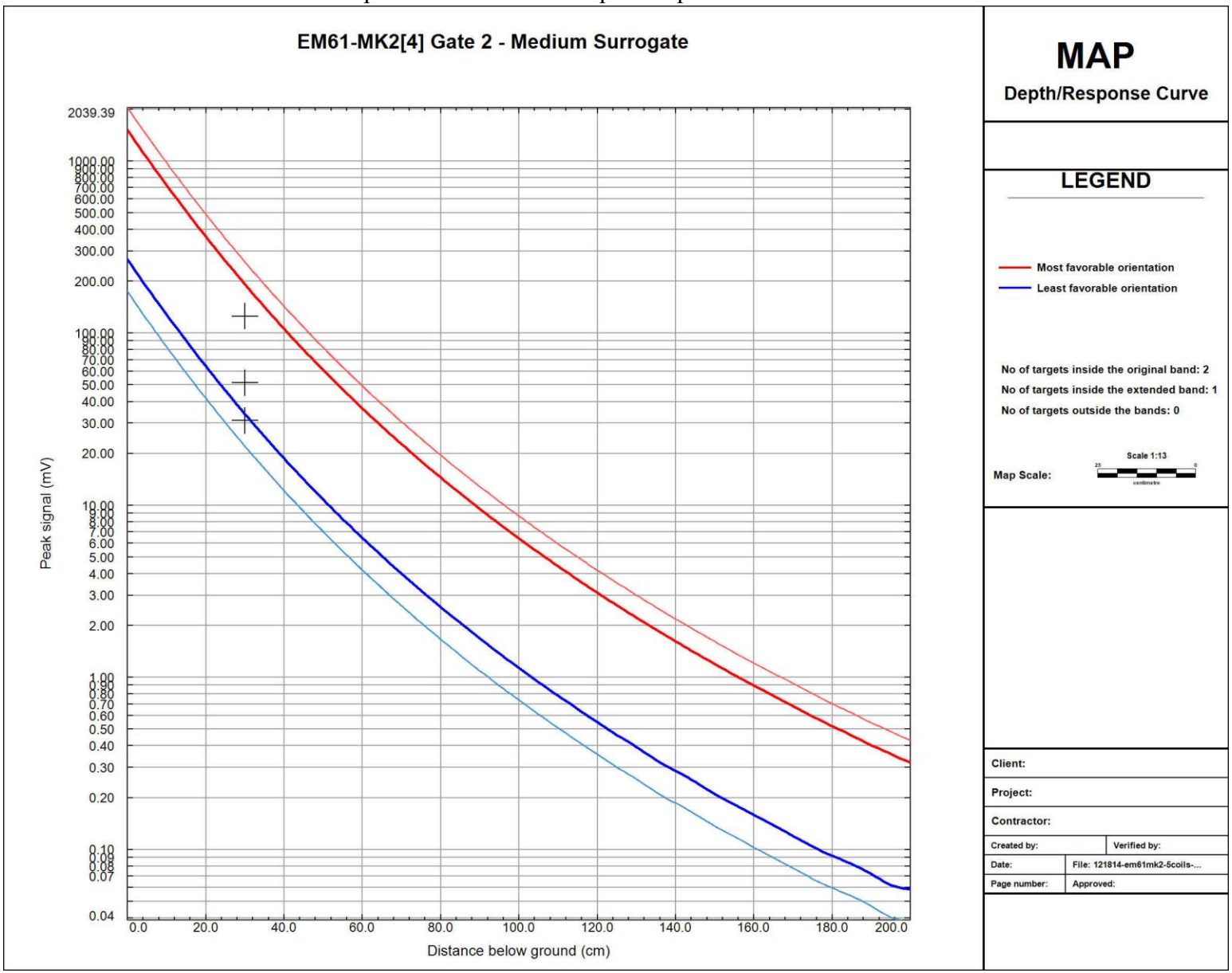


Figure C-370
12/18/2014 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

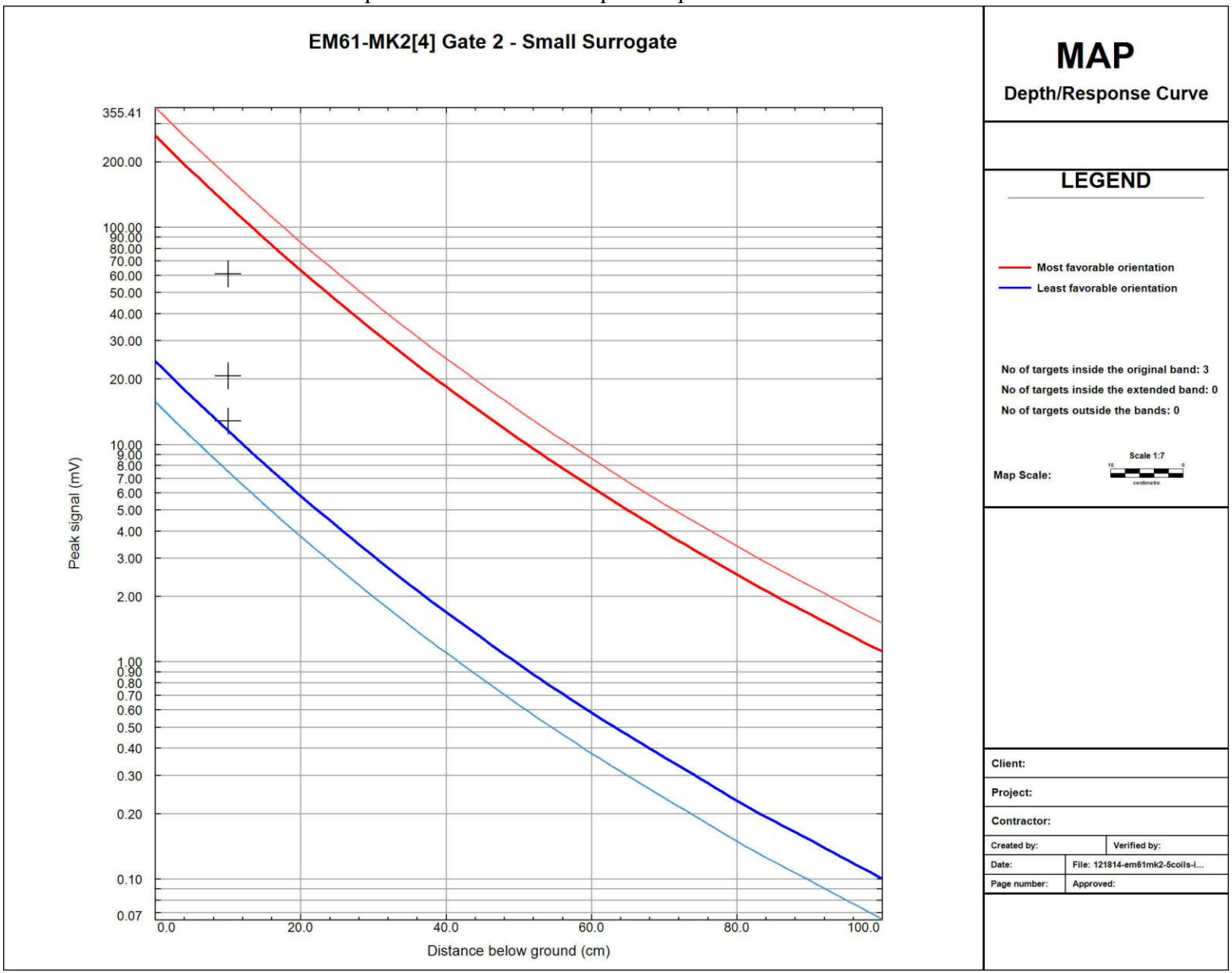


Figure C-371
12/18/2014 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

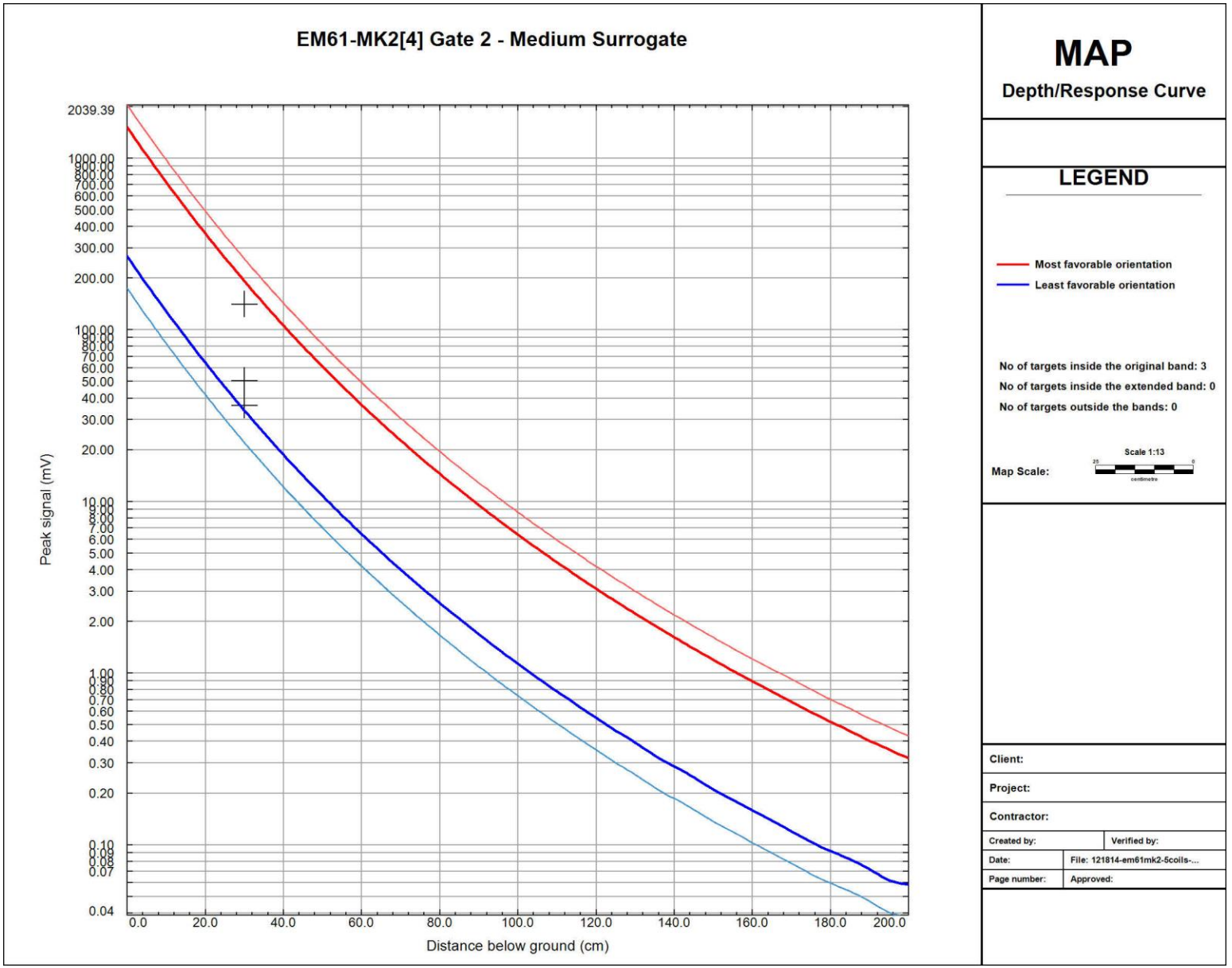


Figure C-372
12/18/2014 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

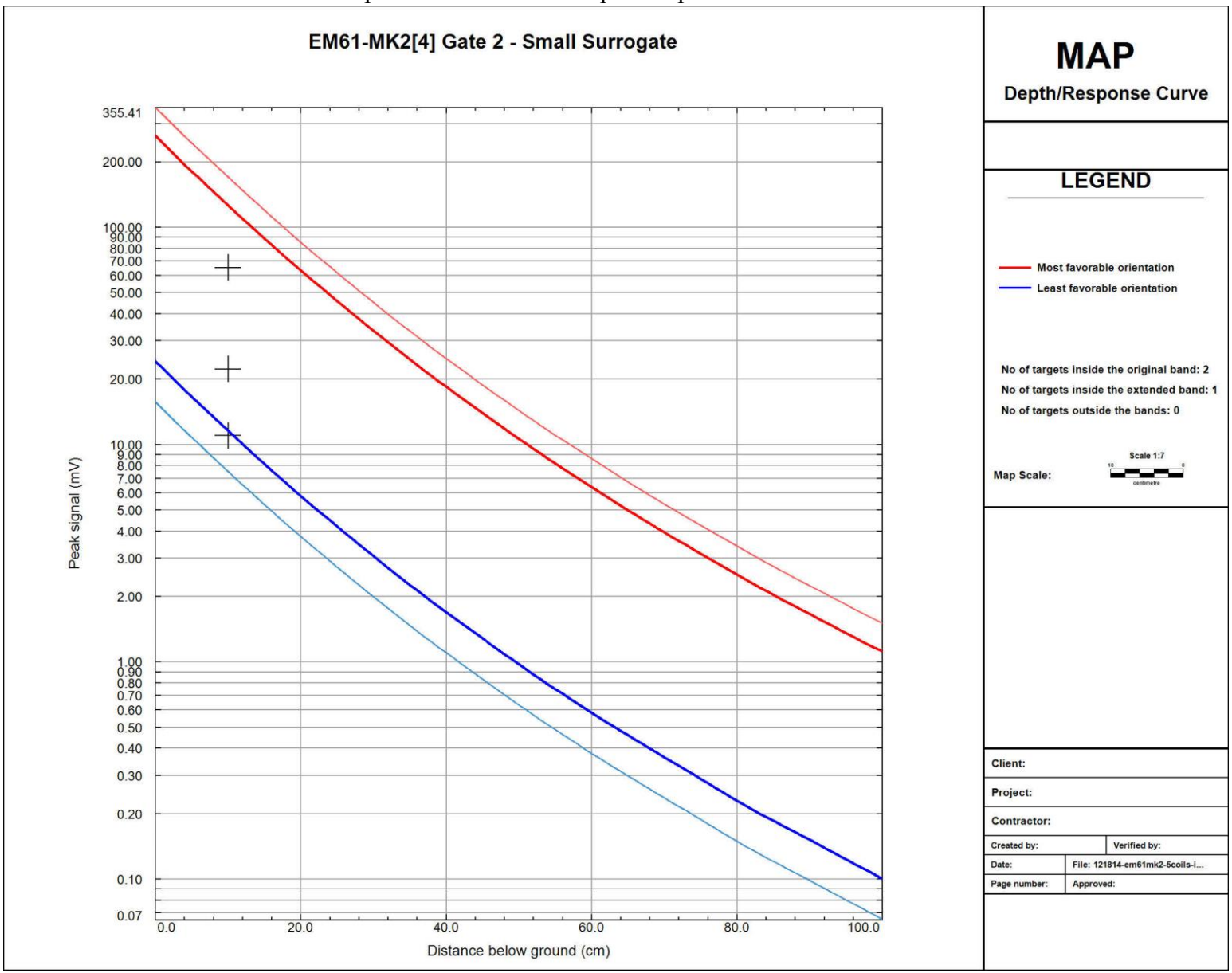


Figure C-373
12/18/2014 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

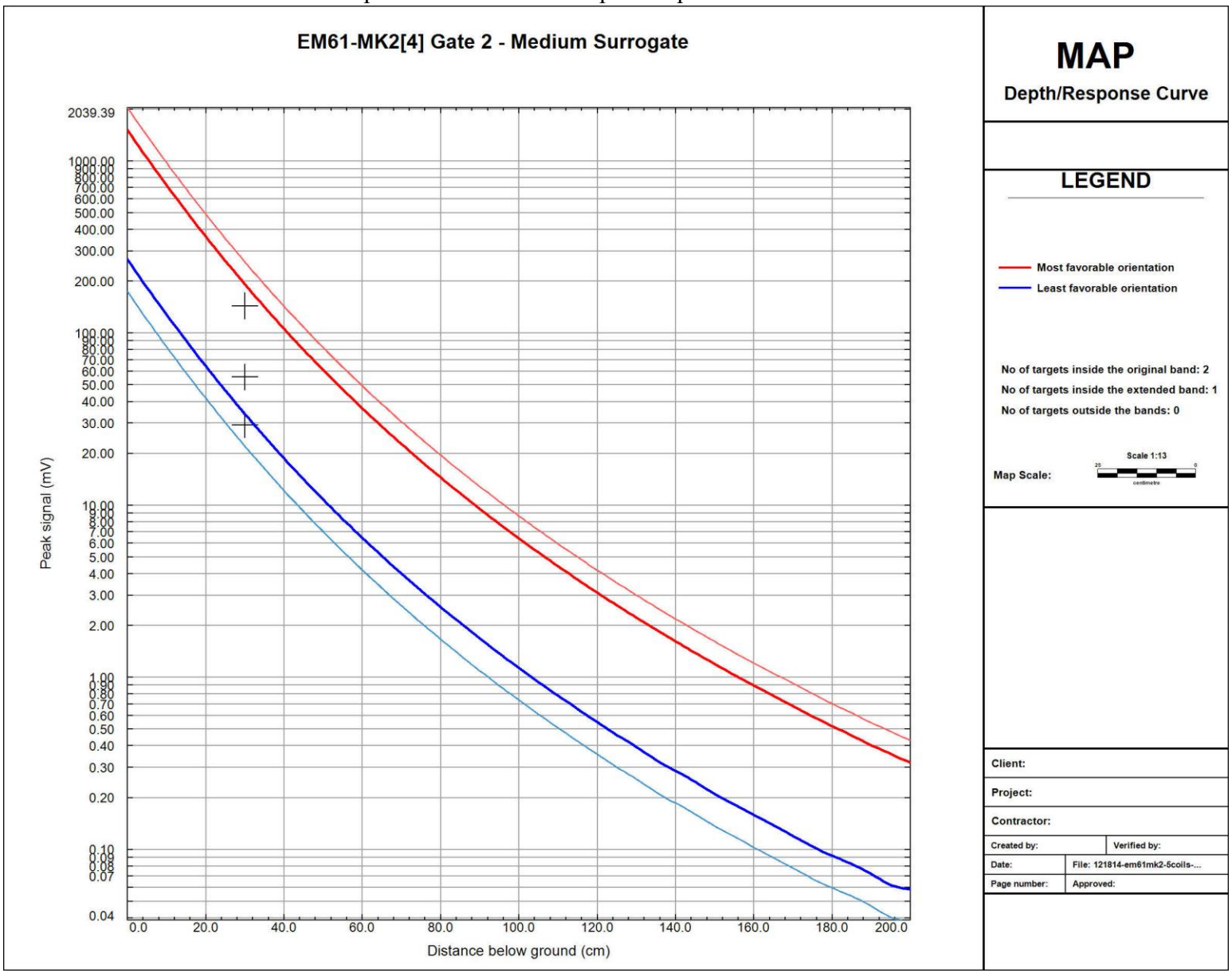


Figure C-374
12/18/2014 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

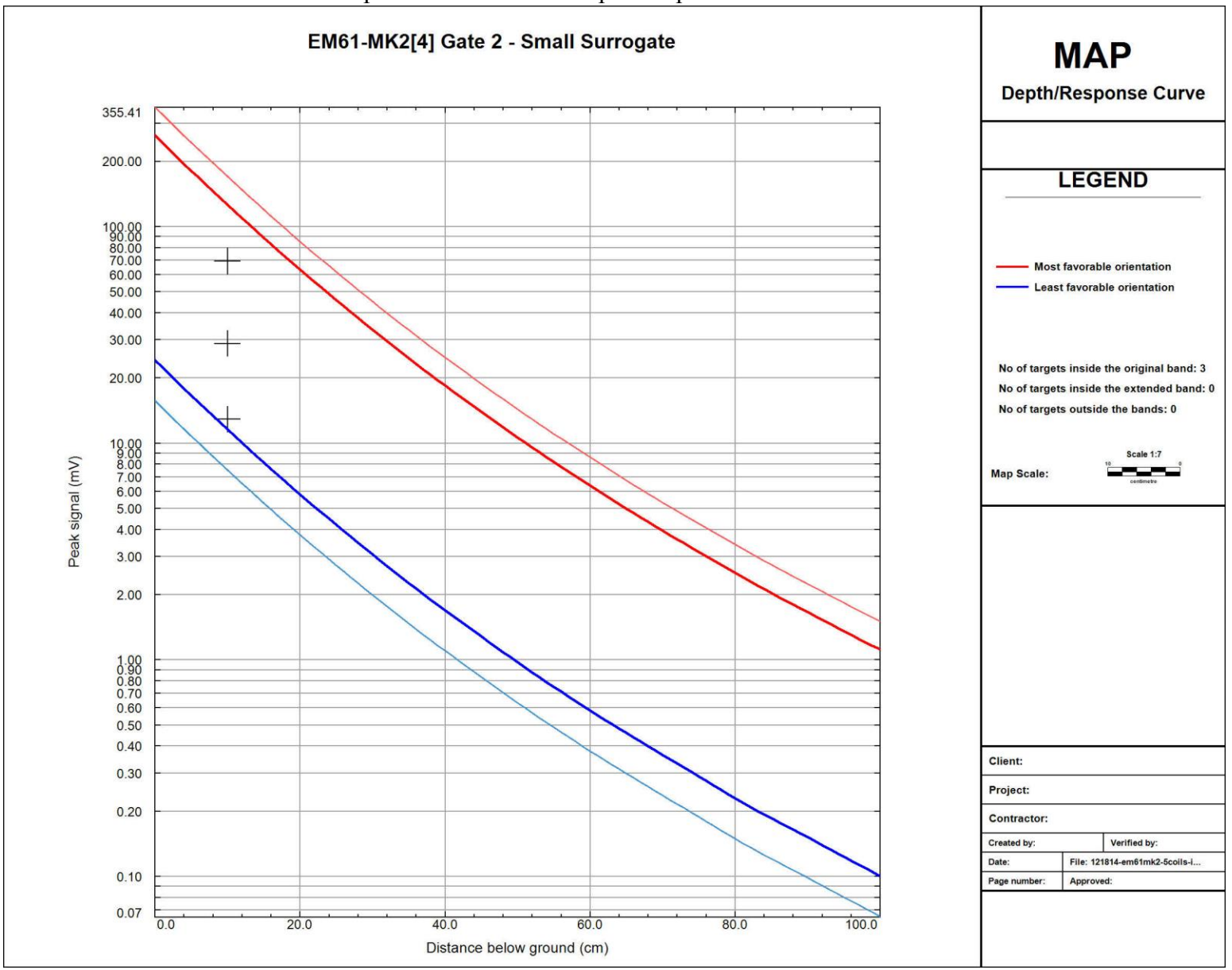


Figure C-375
12/18/2014 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

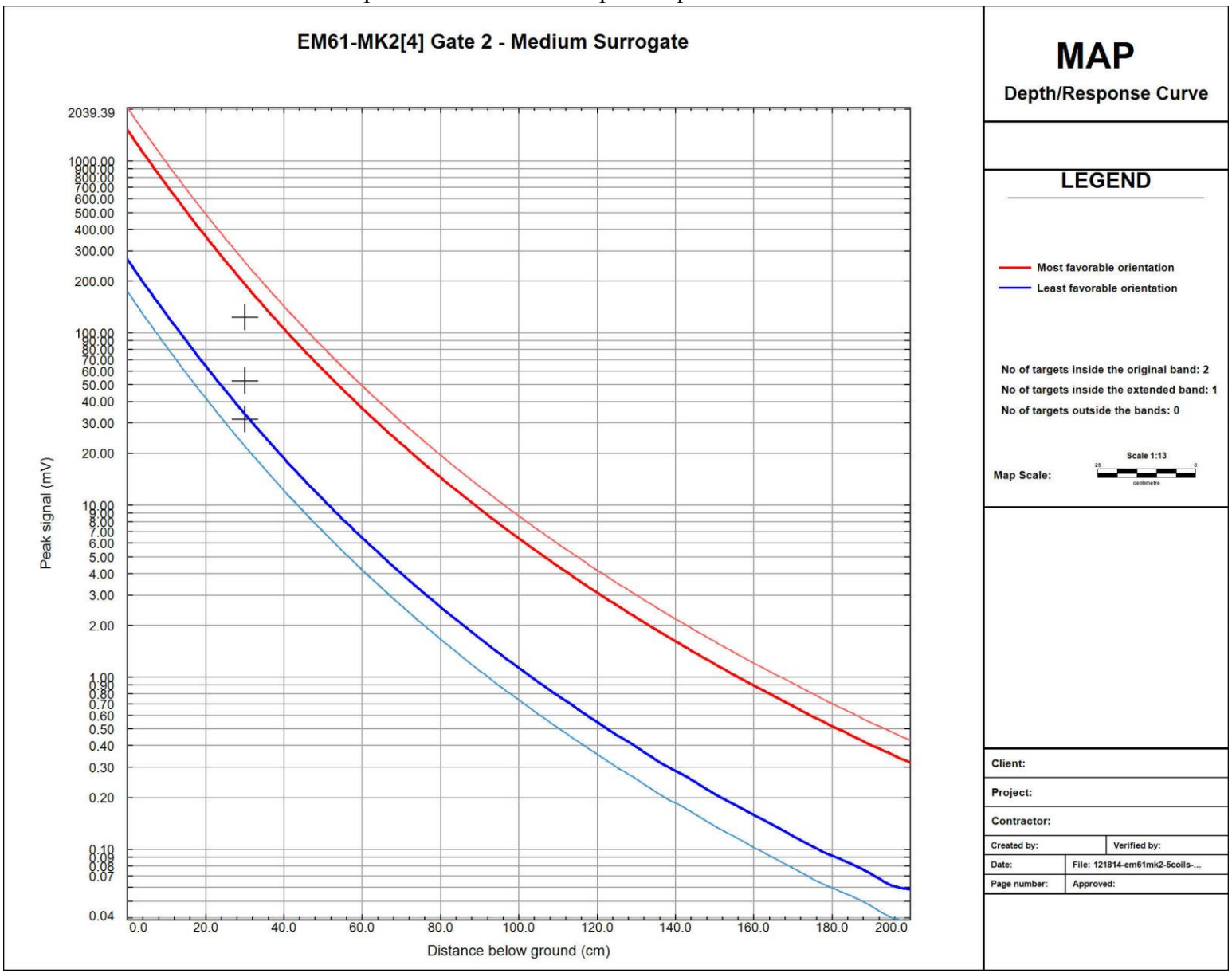


Figure C-376
12/18/2014 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

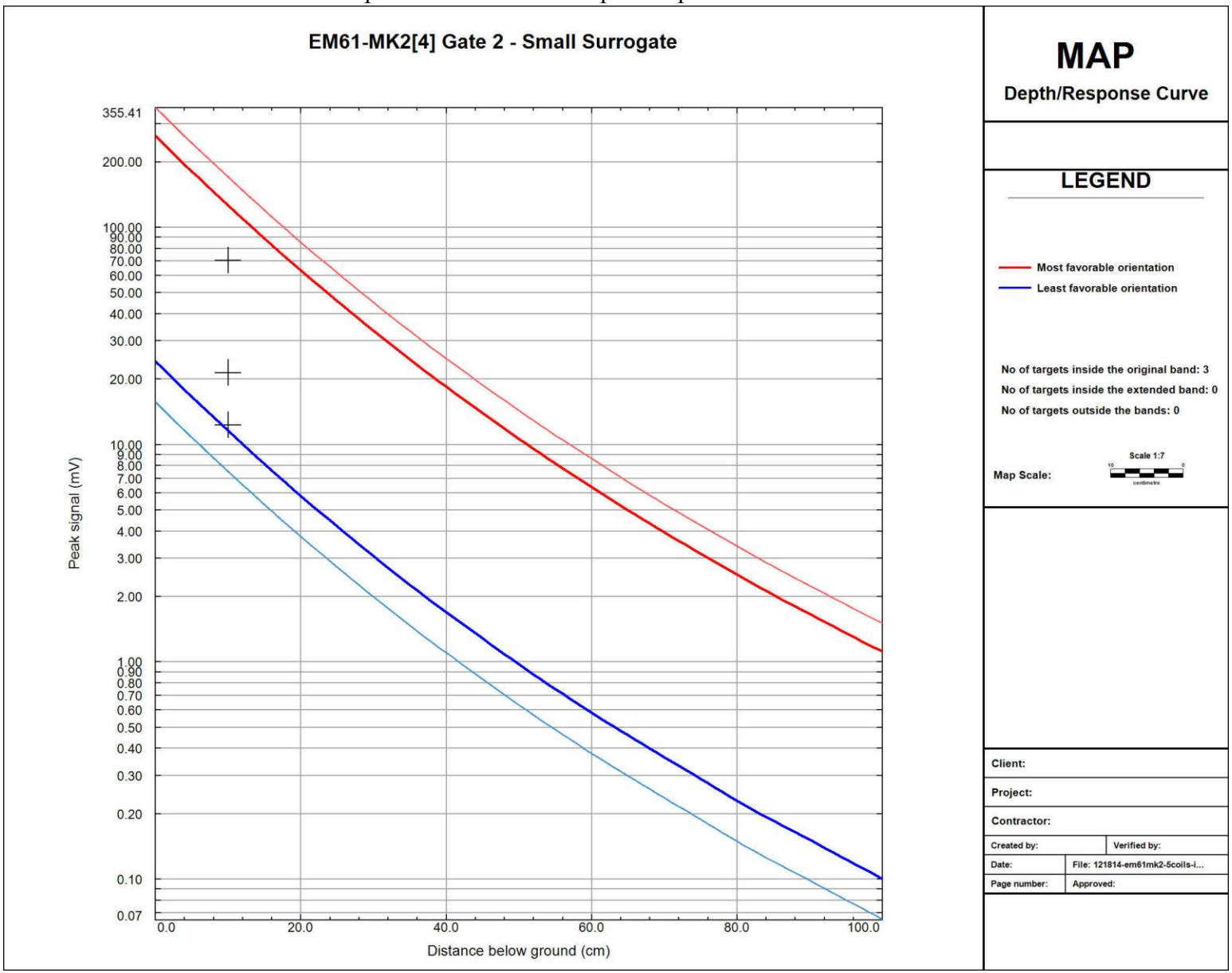


Figure C-377
12/18/2014 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

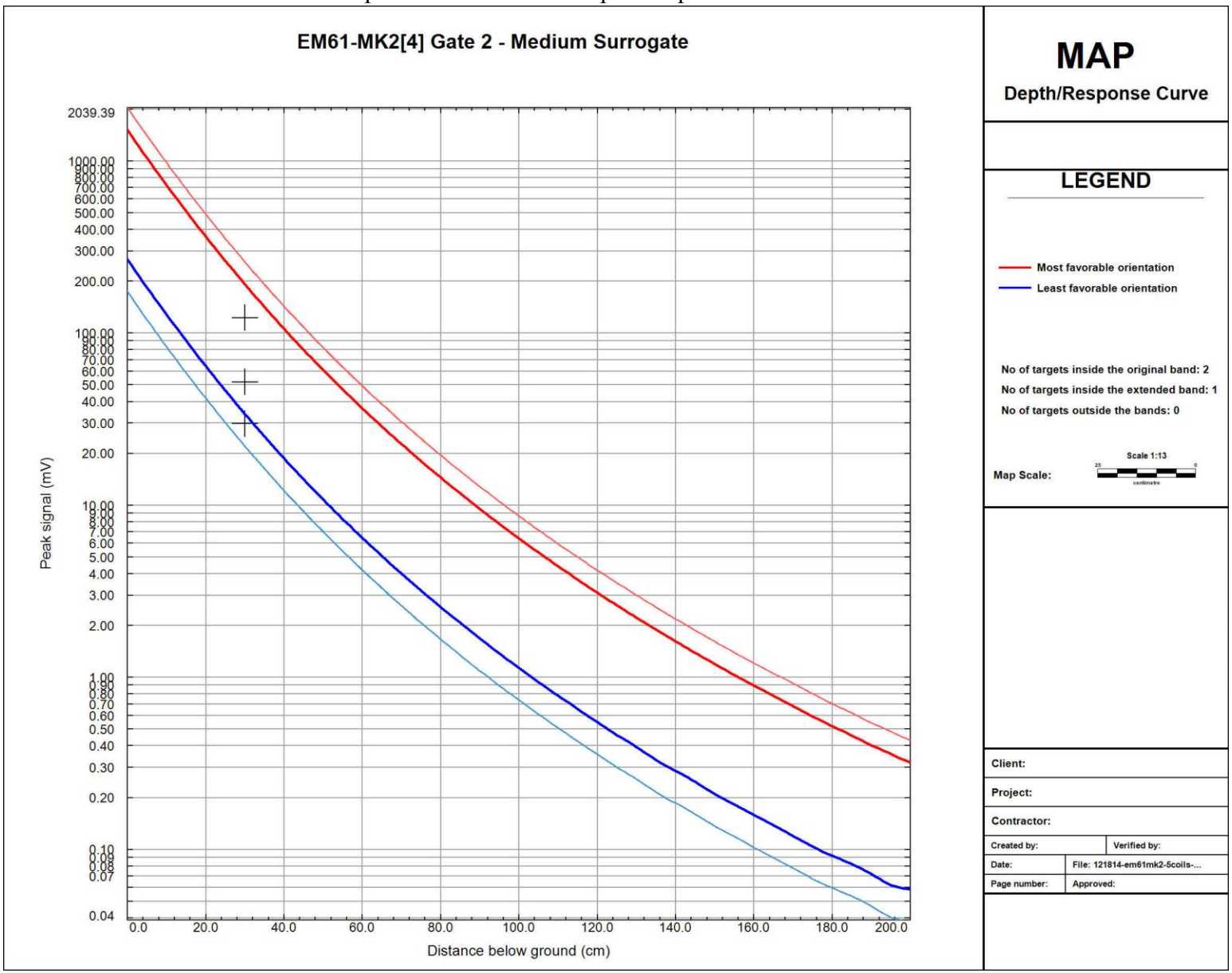


Figure C-378
12/18/2014 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

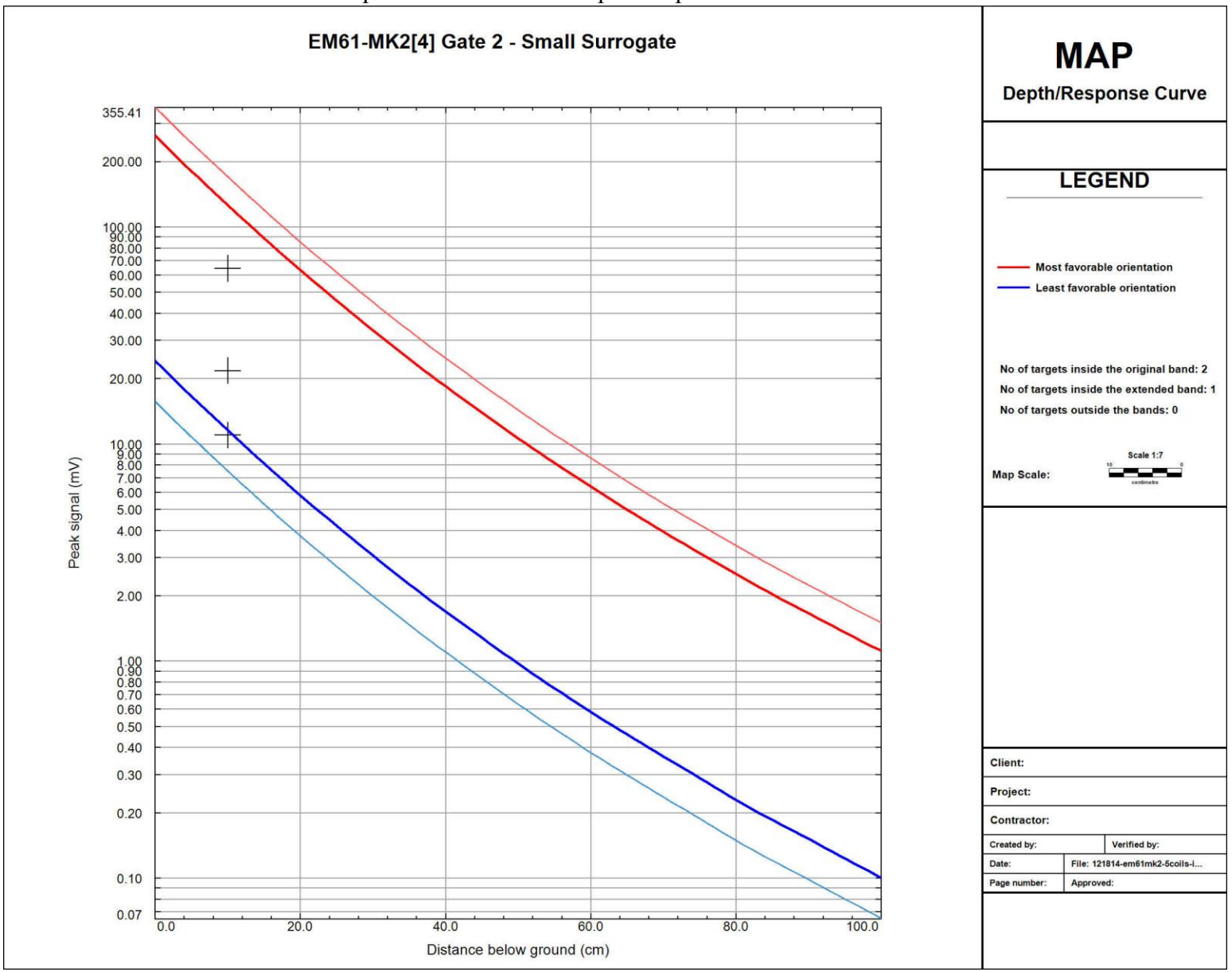


Figure C-379
12/18/2014 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

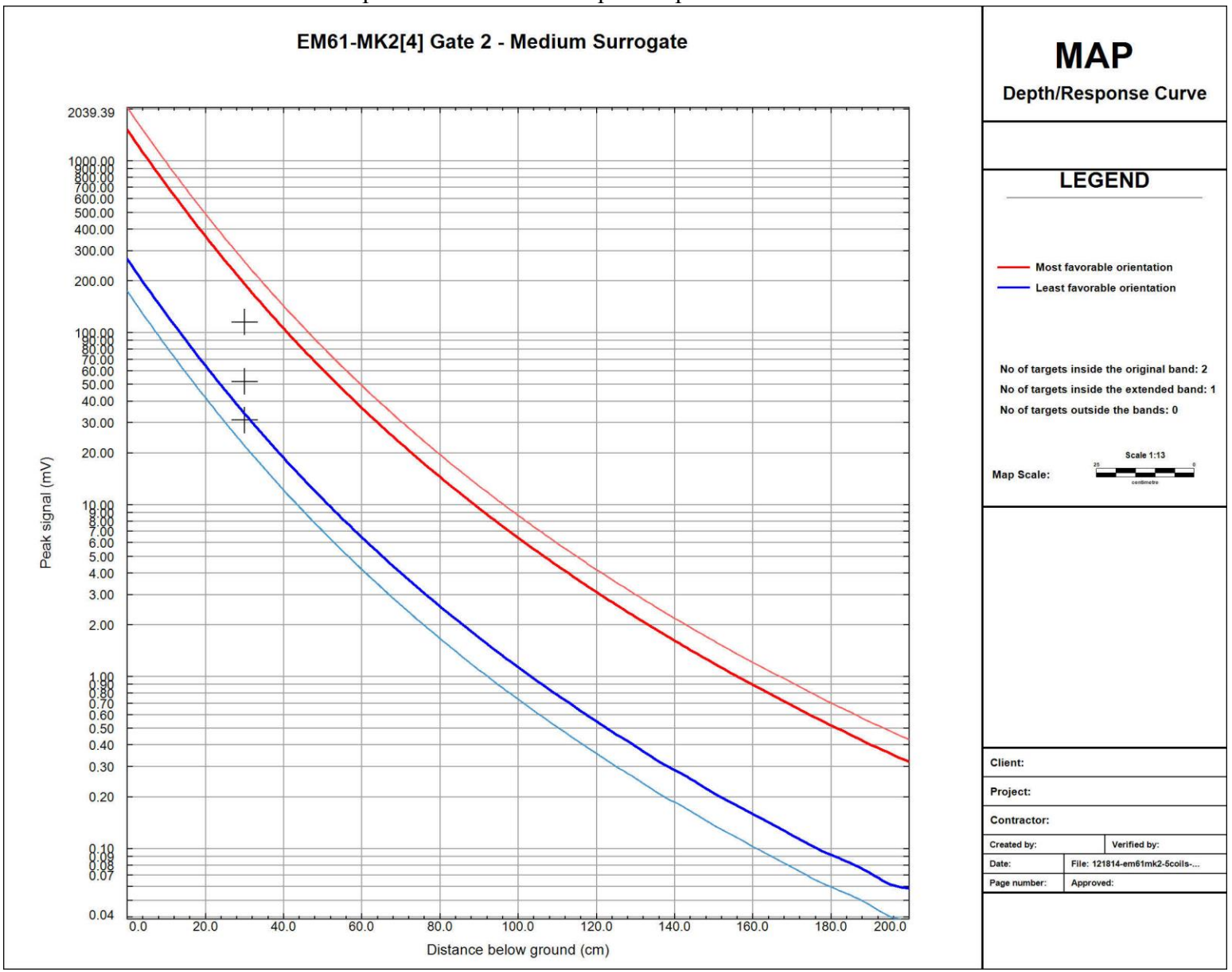


Figure C-380
12/18/2014 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

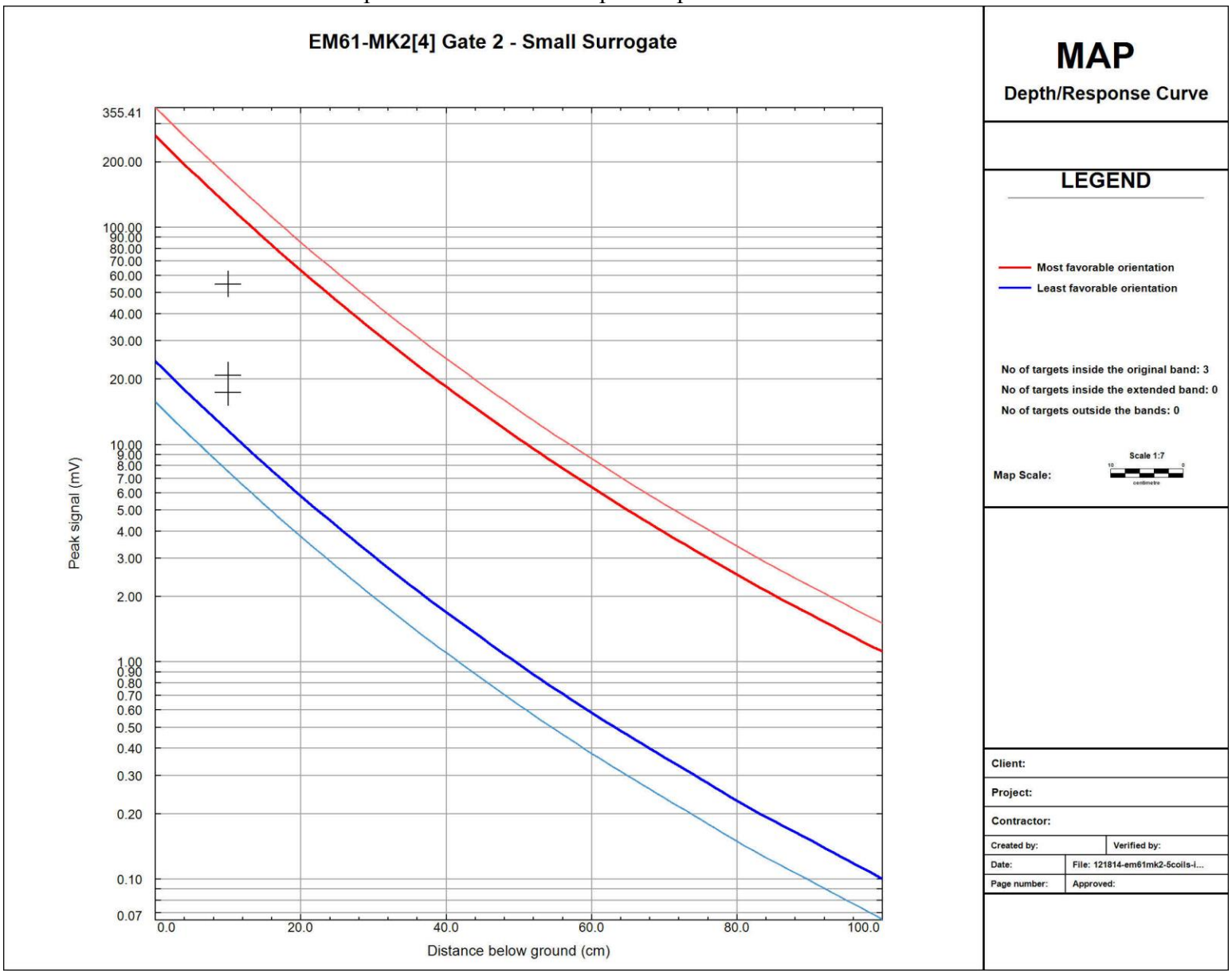


Figure C-381
12/18/2014 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

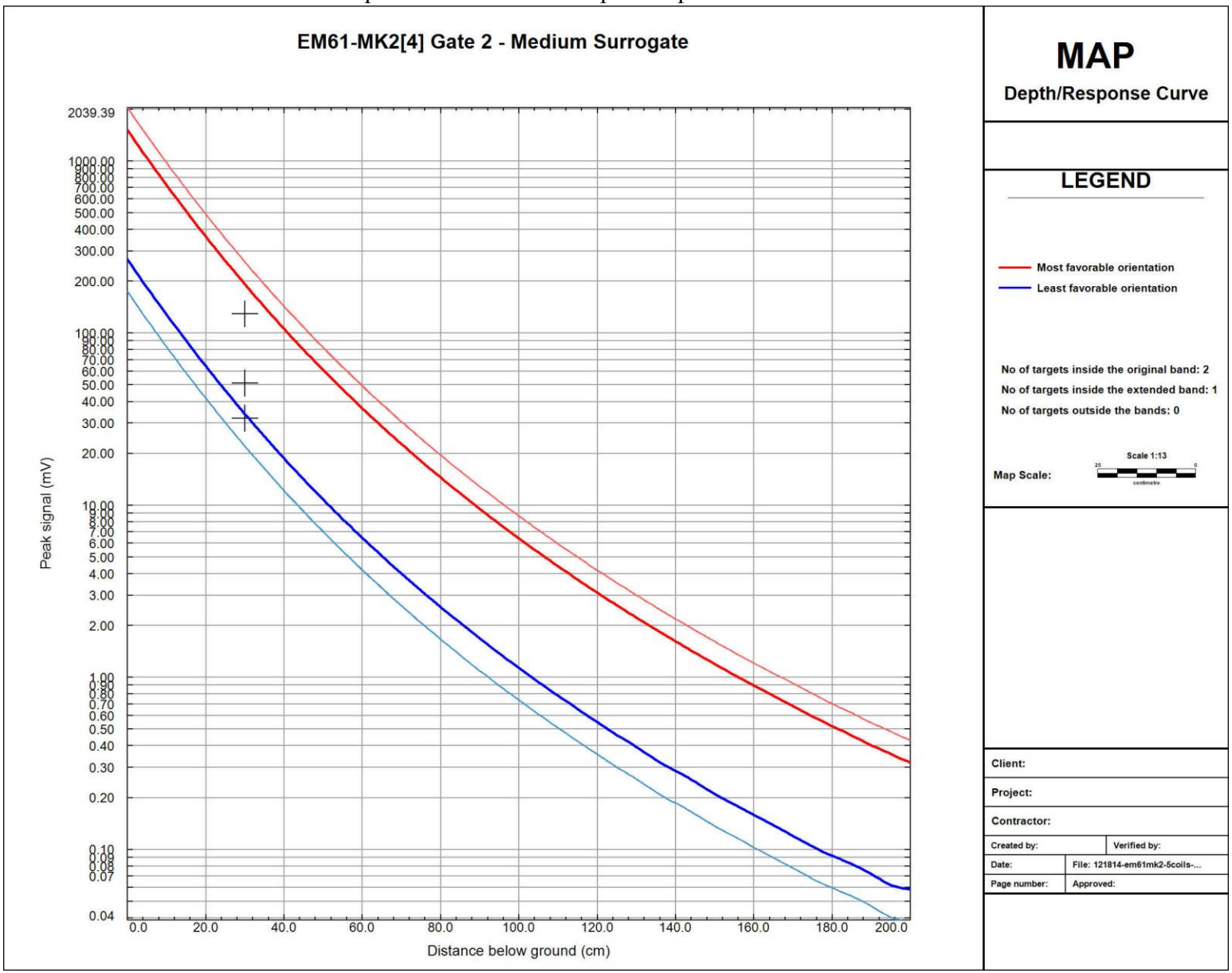


Figure C-382
12/18/2014 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

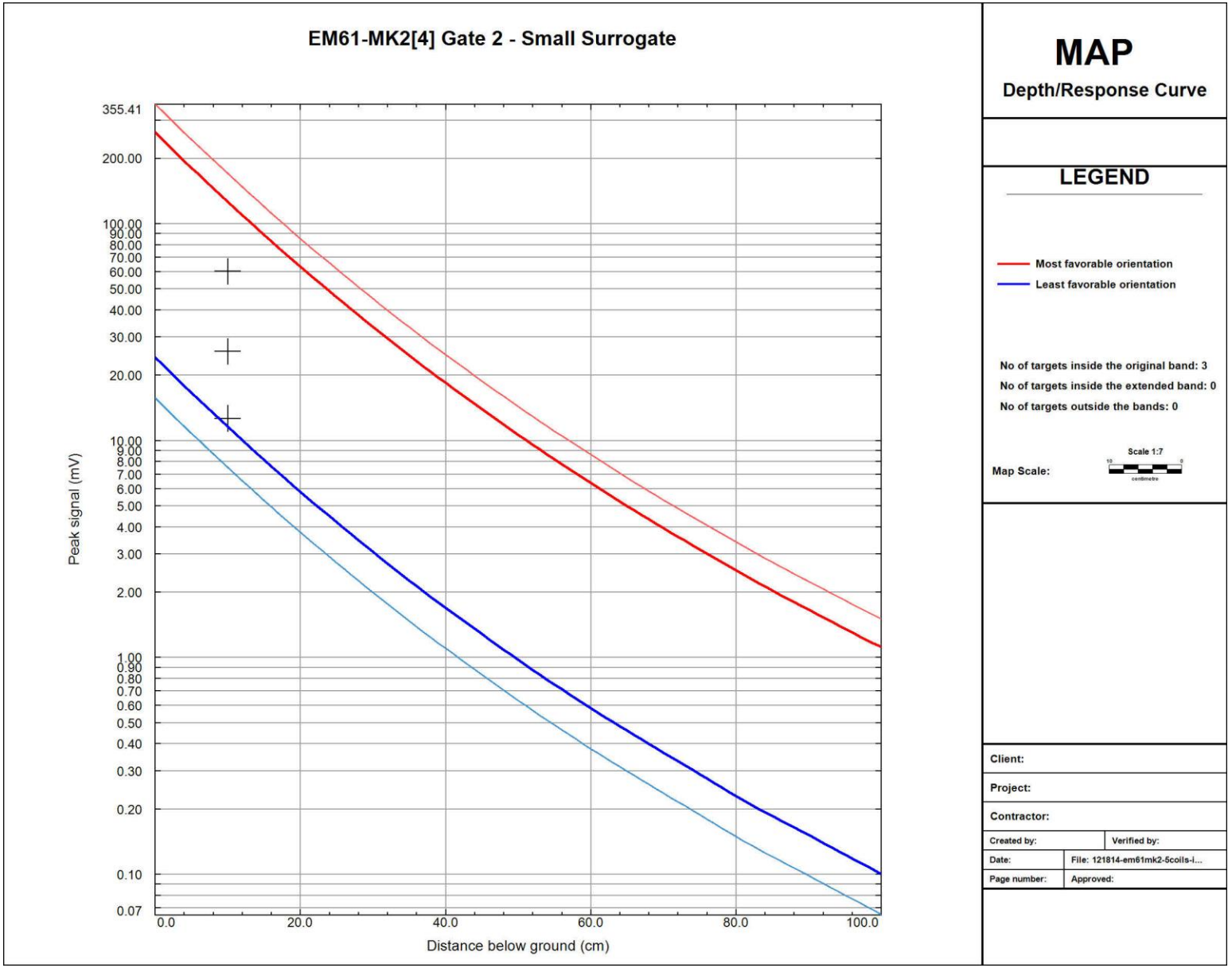


Figure C-383
12/19/2014 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

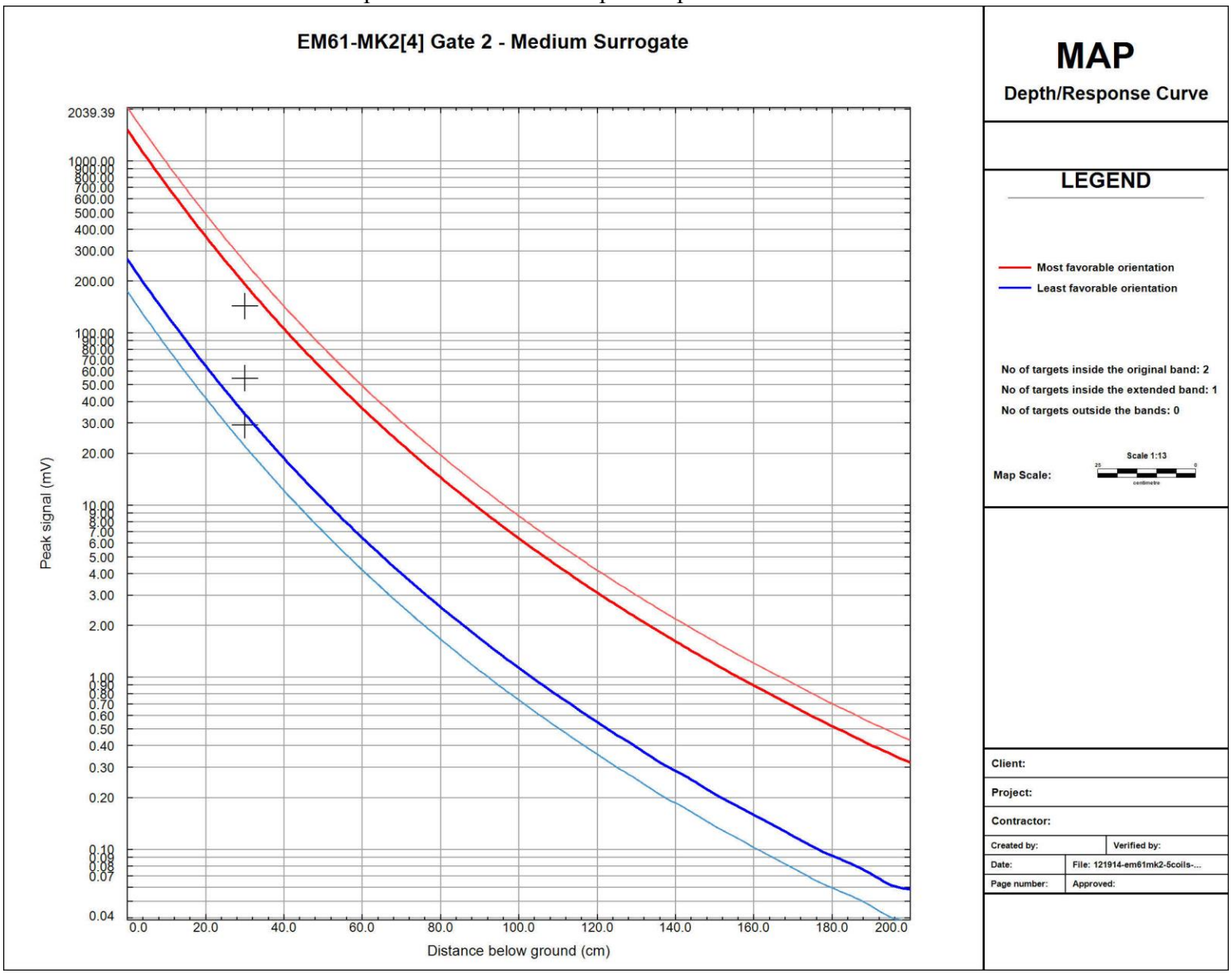


Figure C-384
12/19/2014 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

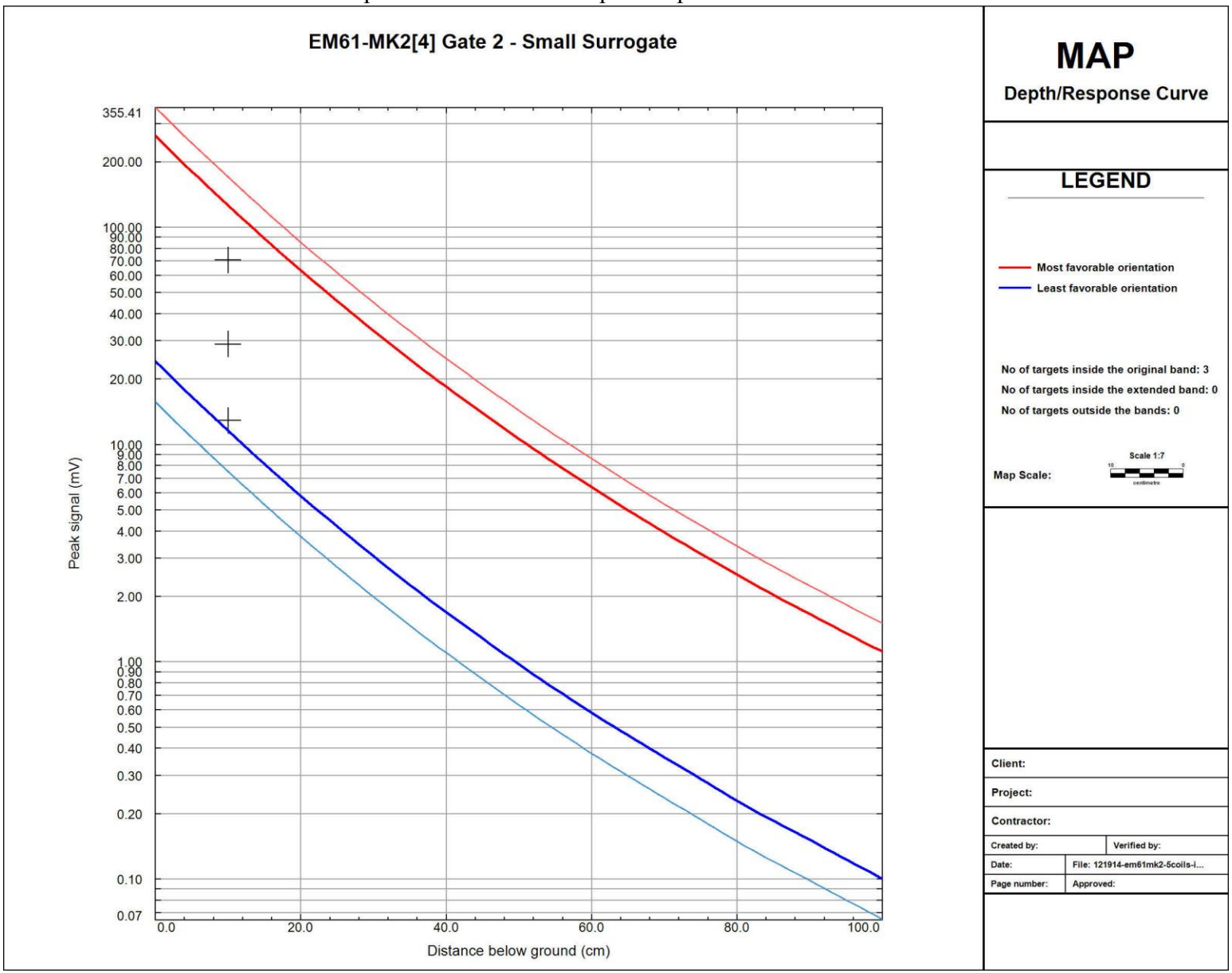


Figure C-385
12/19/2014 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

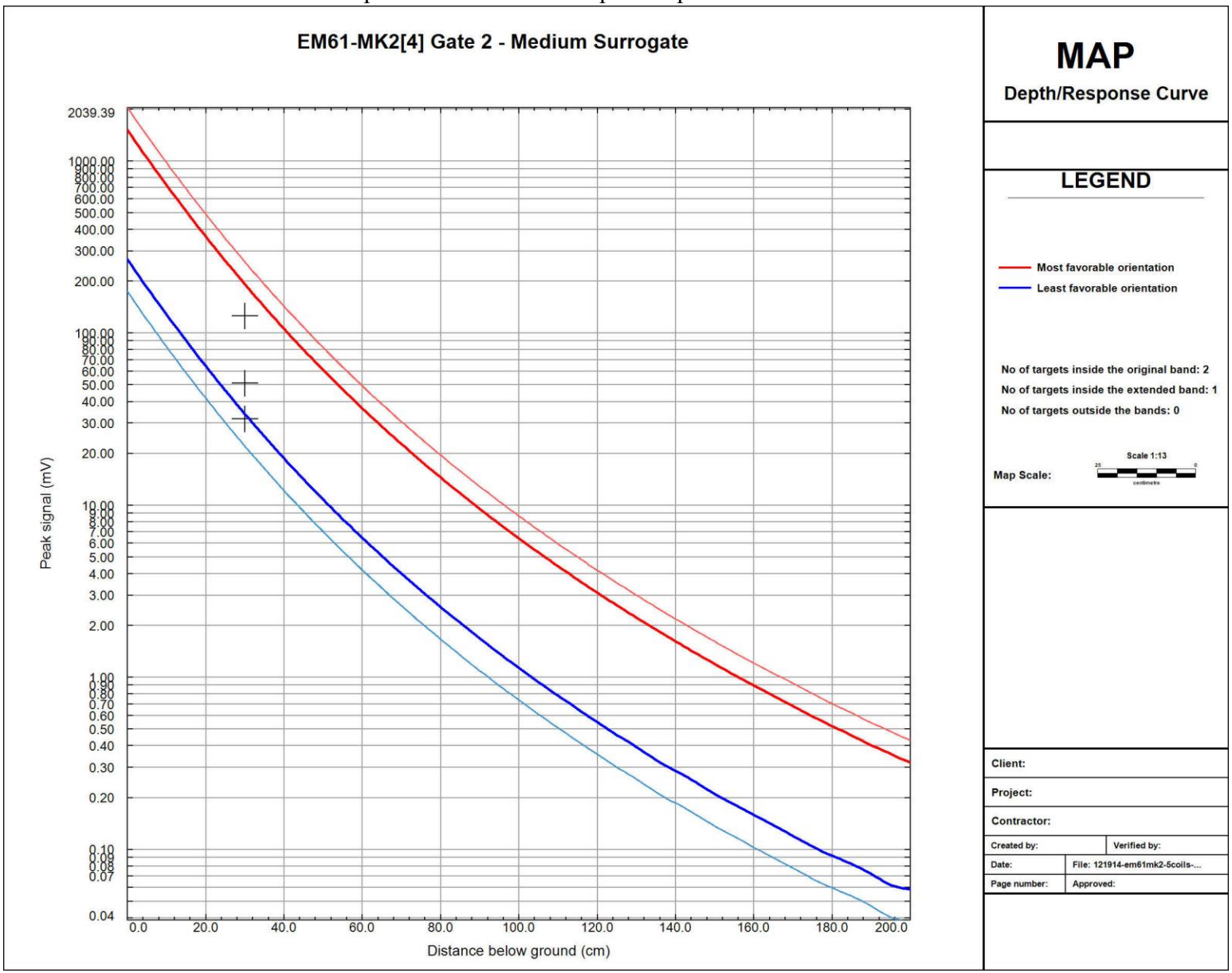


Figure C-386
12/19/2014 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

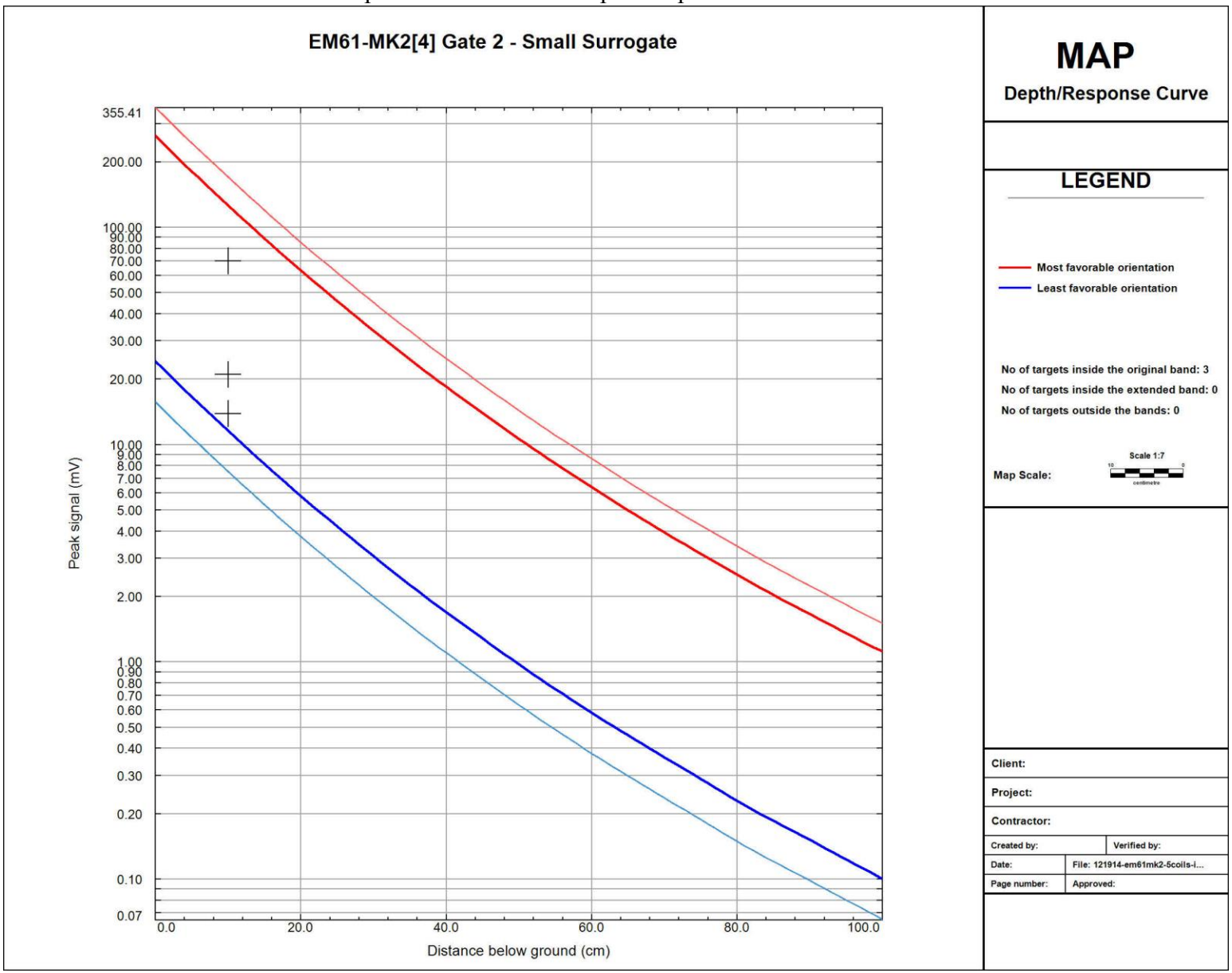


Figure C-387
12/19/2014 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

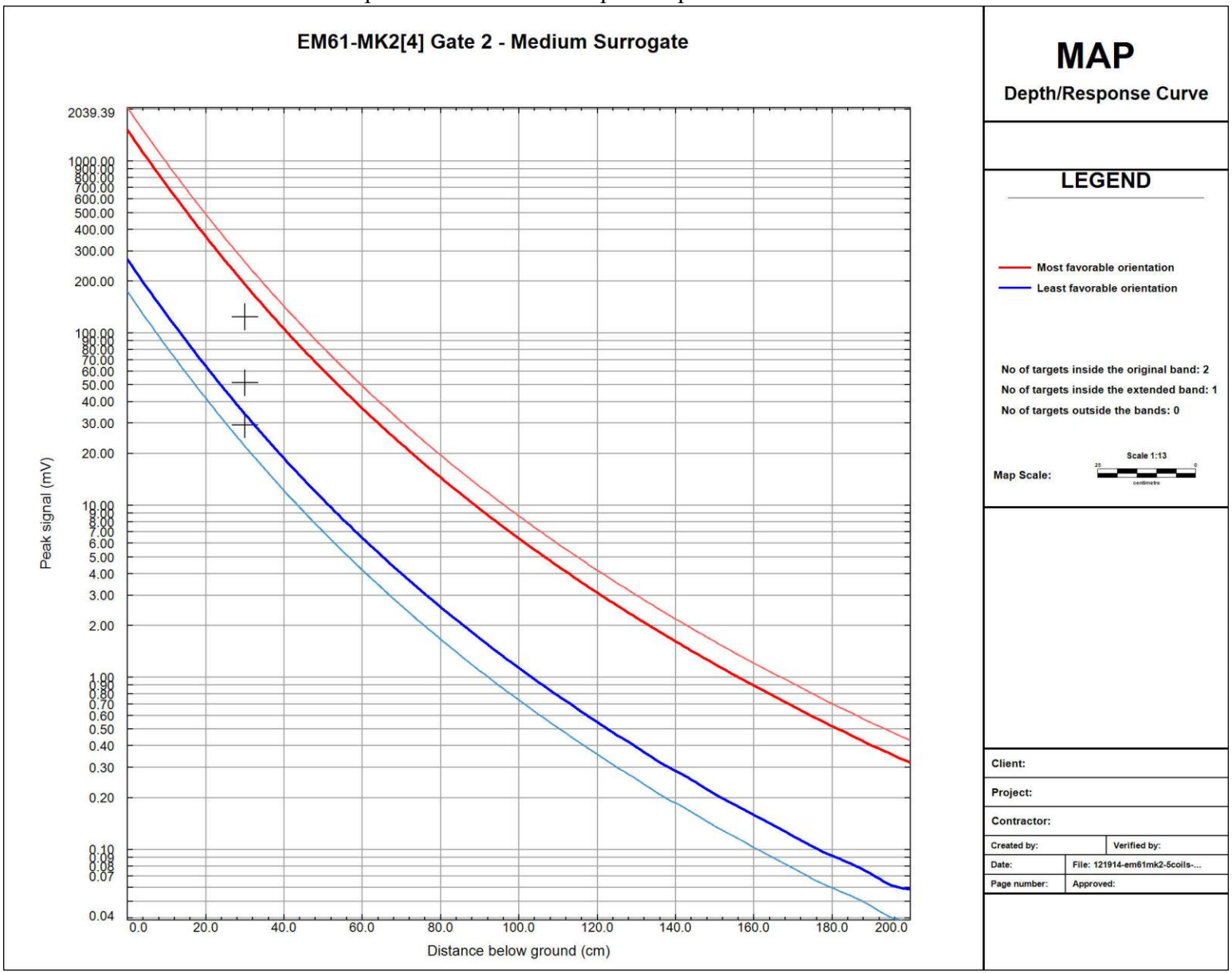


Figure C-388
12/19/2014 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

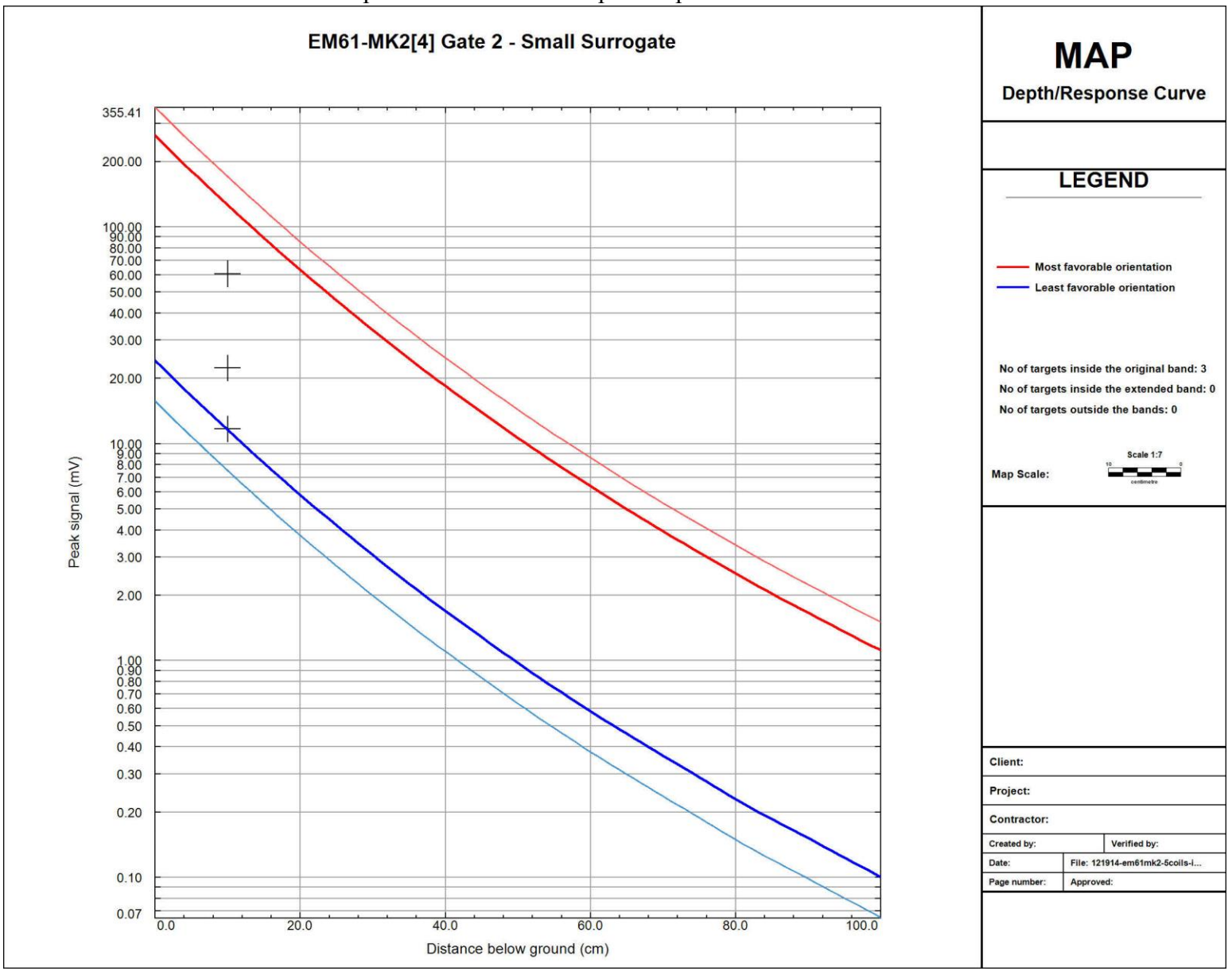


Figure C-389
12/19/2014 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

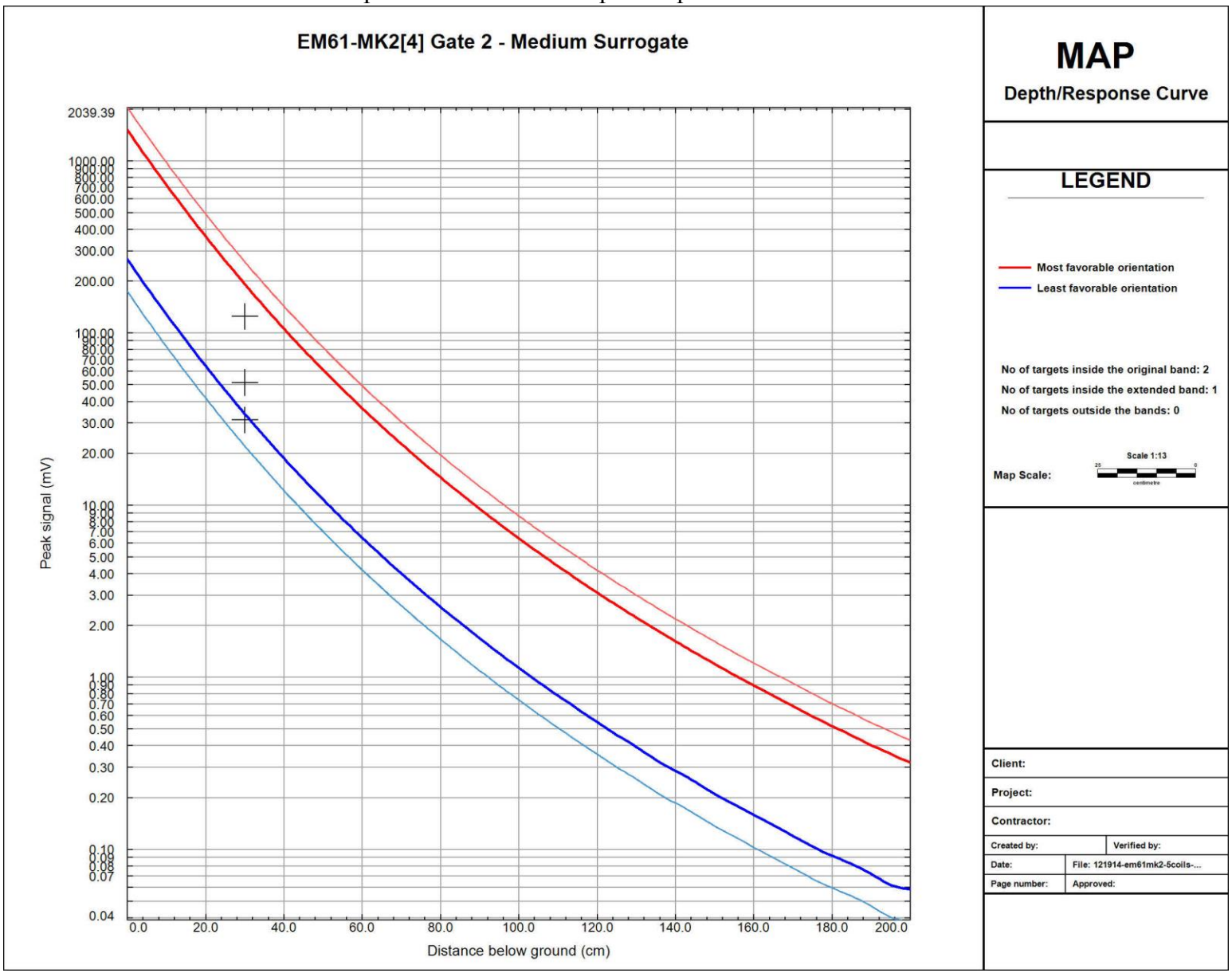


Figure C-390
12/19/2014 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

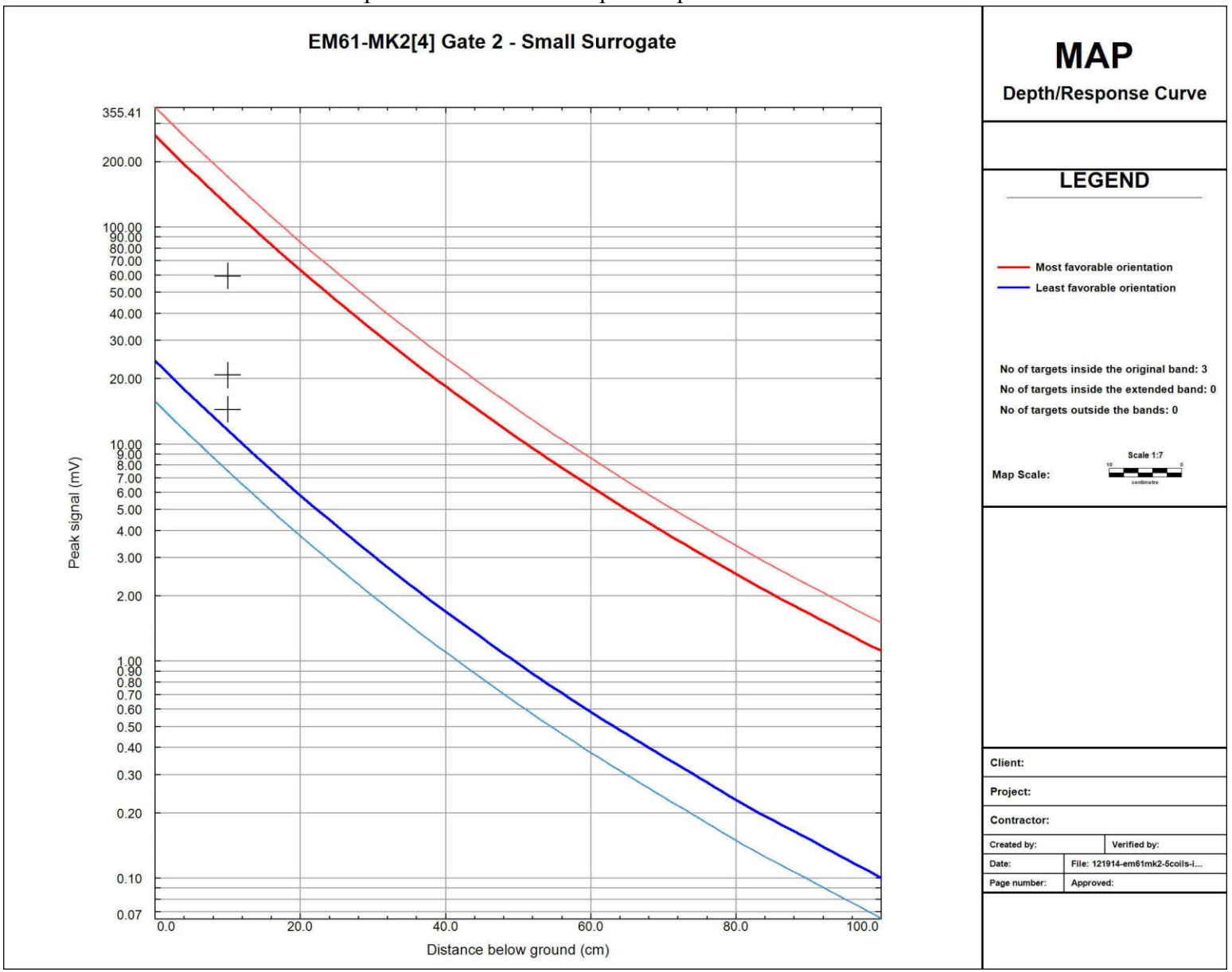


Figure C-391
12/19/2014 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

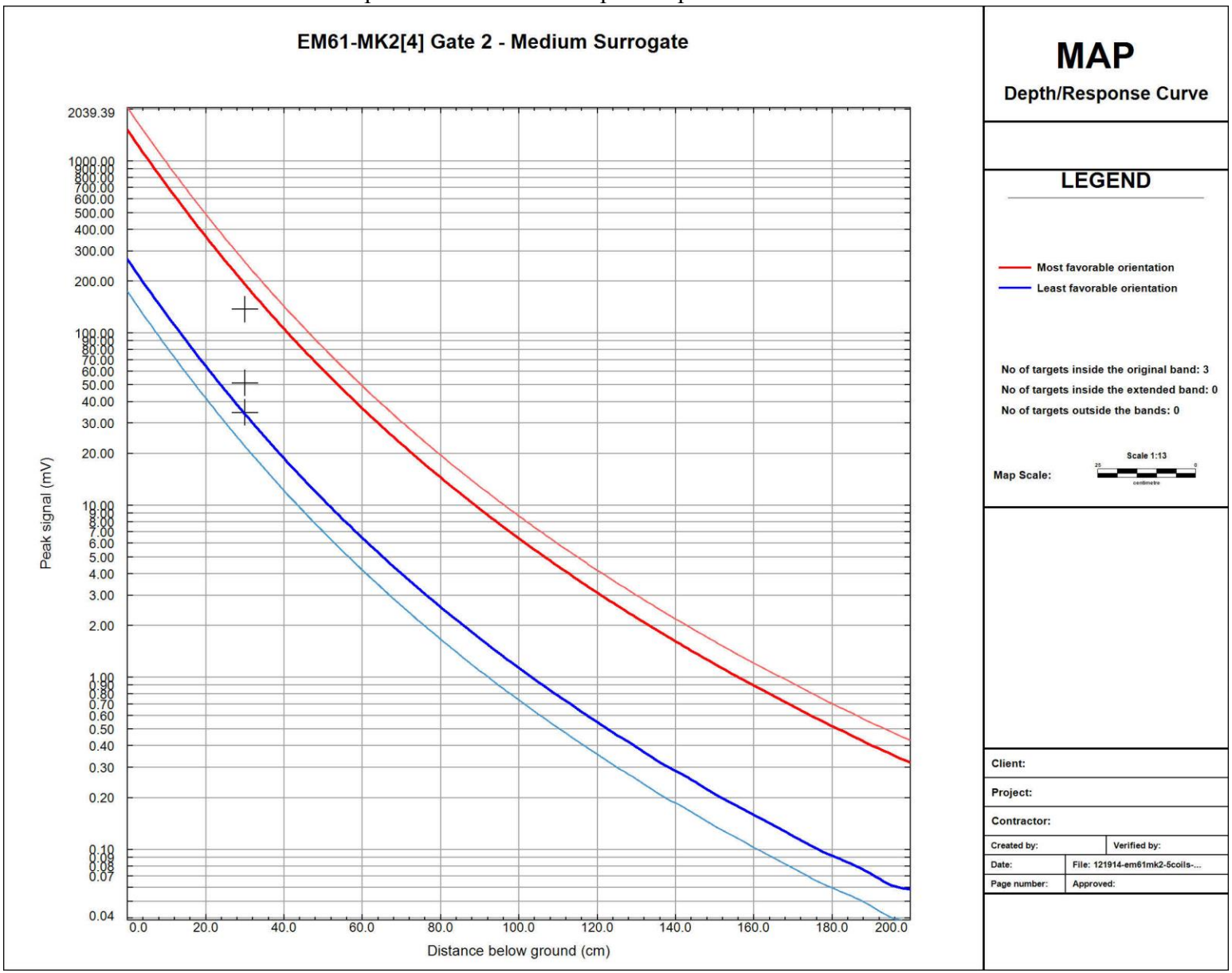


Figure C-392
12/19/2014 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

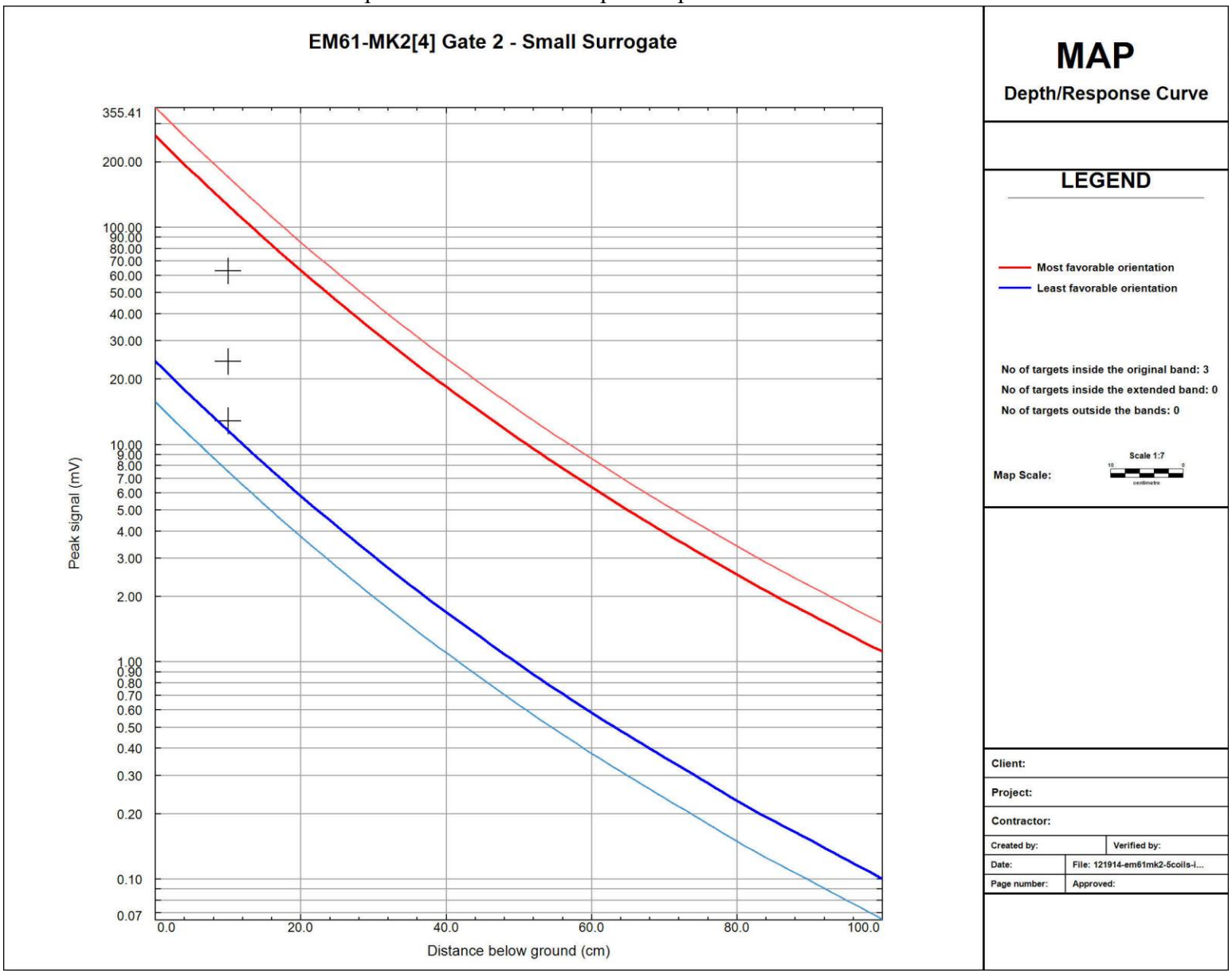


Figure C-393
12/19/2014 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

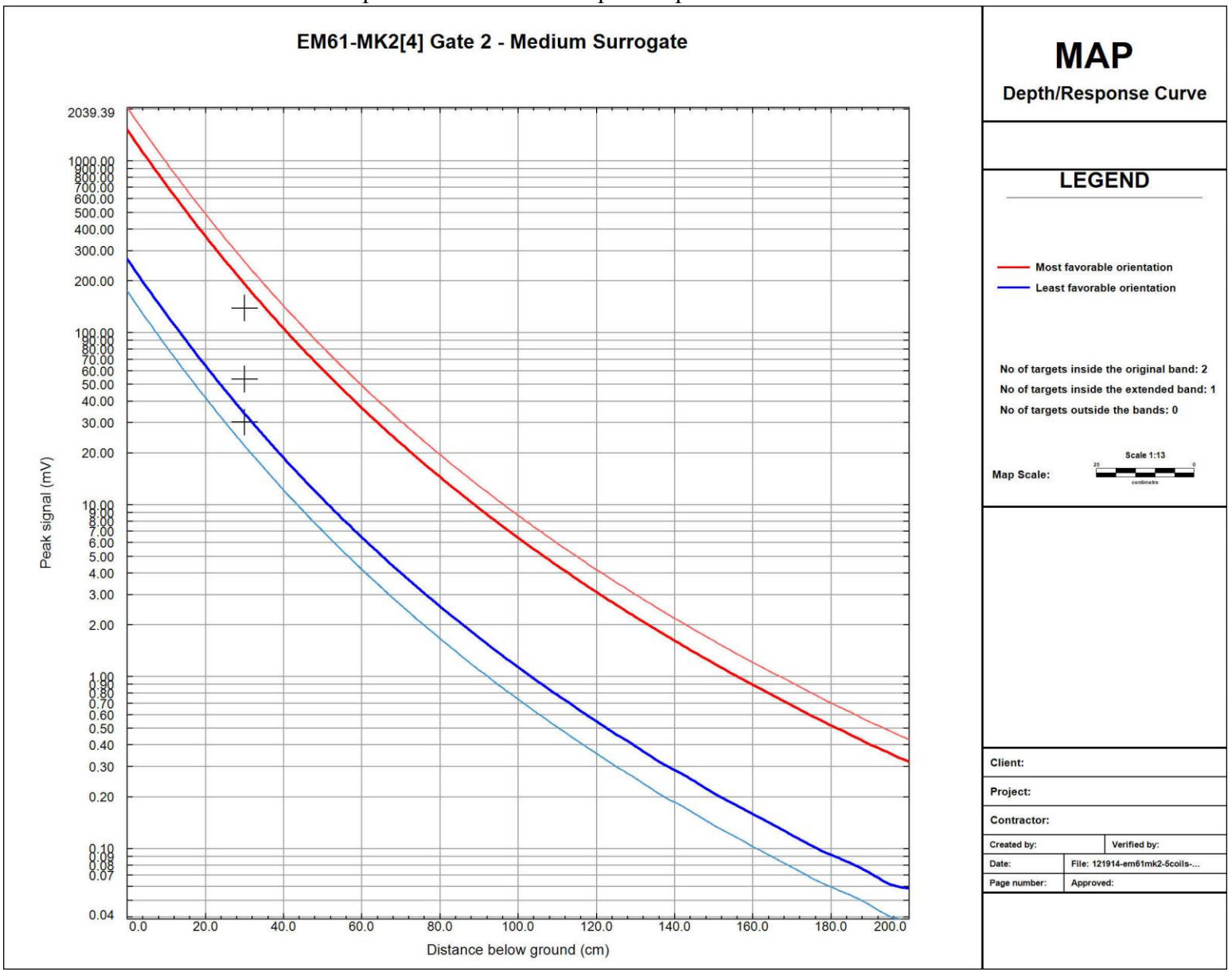


Figure C-394
12/19/2014 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

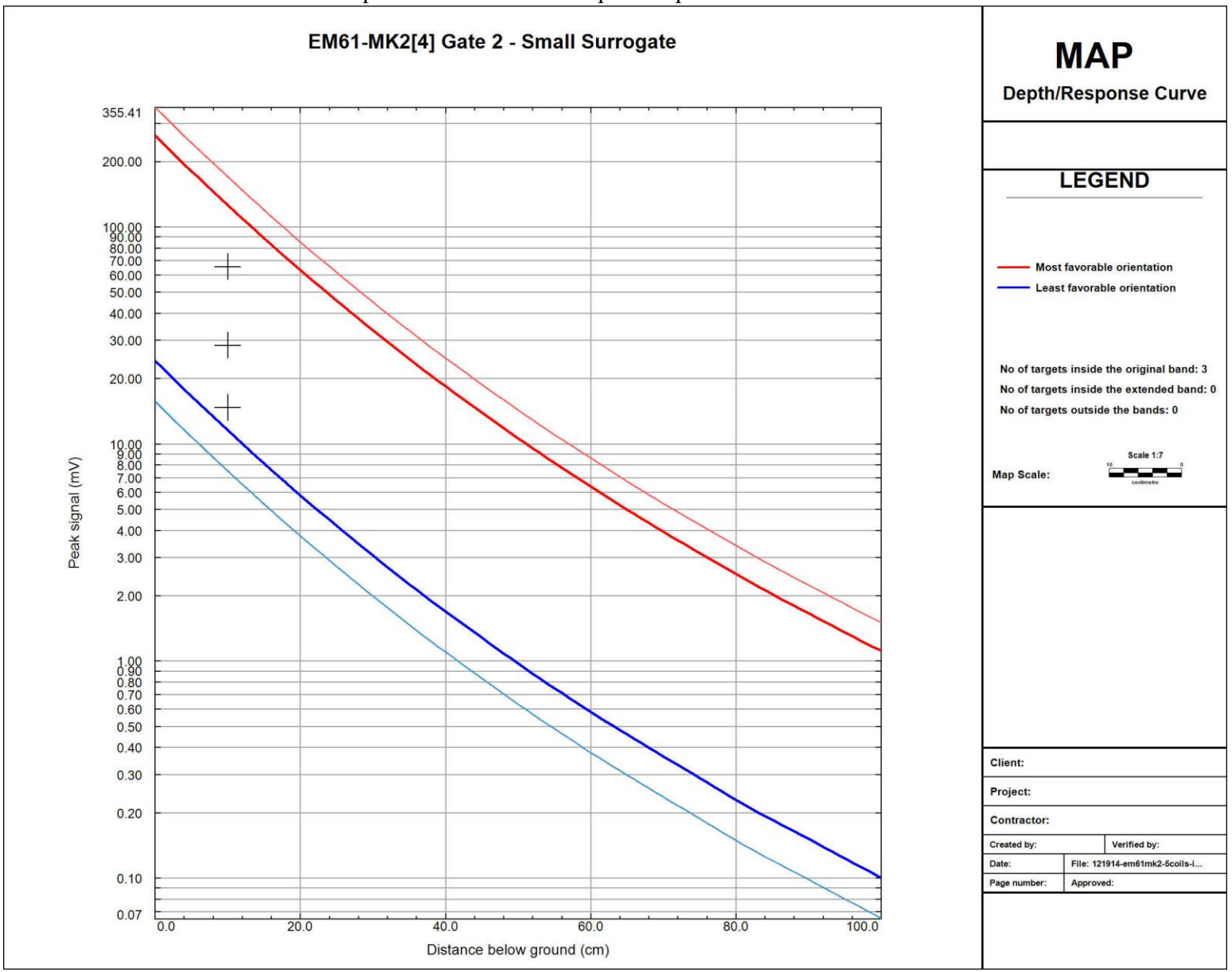


Figure C-395
12/19/2014 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

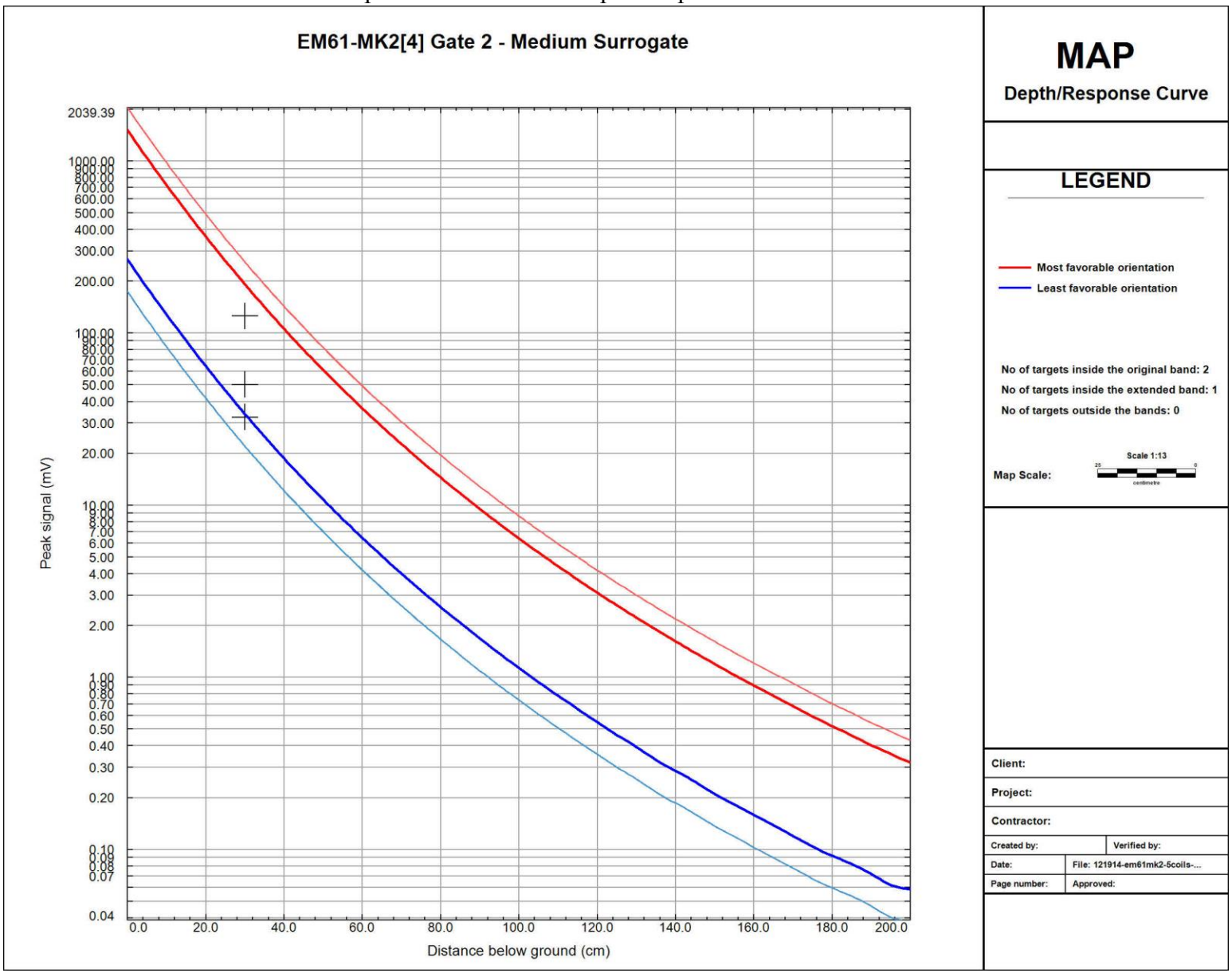


Figure C-396
12/19/2014 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

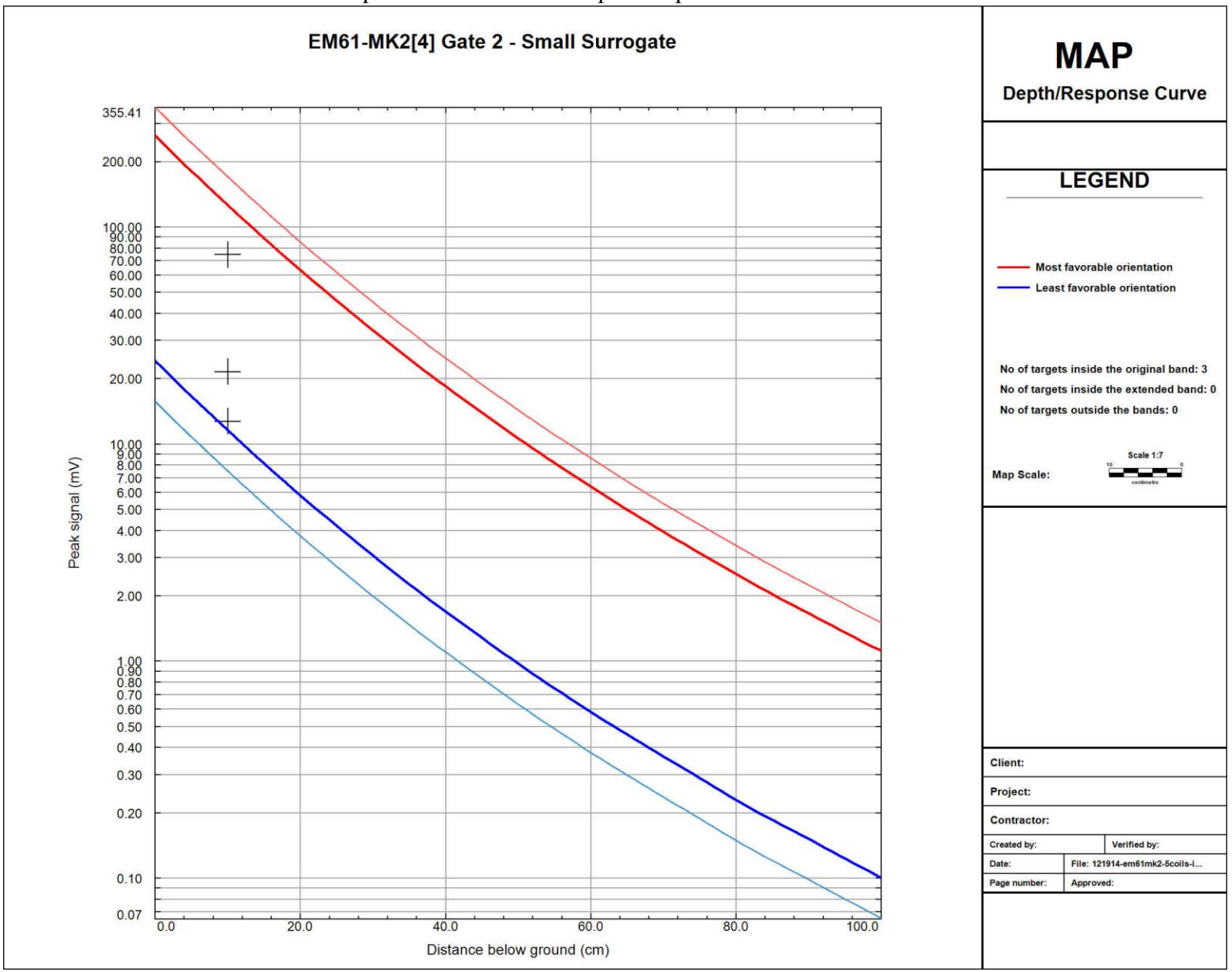


Figure C-397
12/19/2014 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

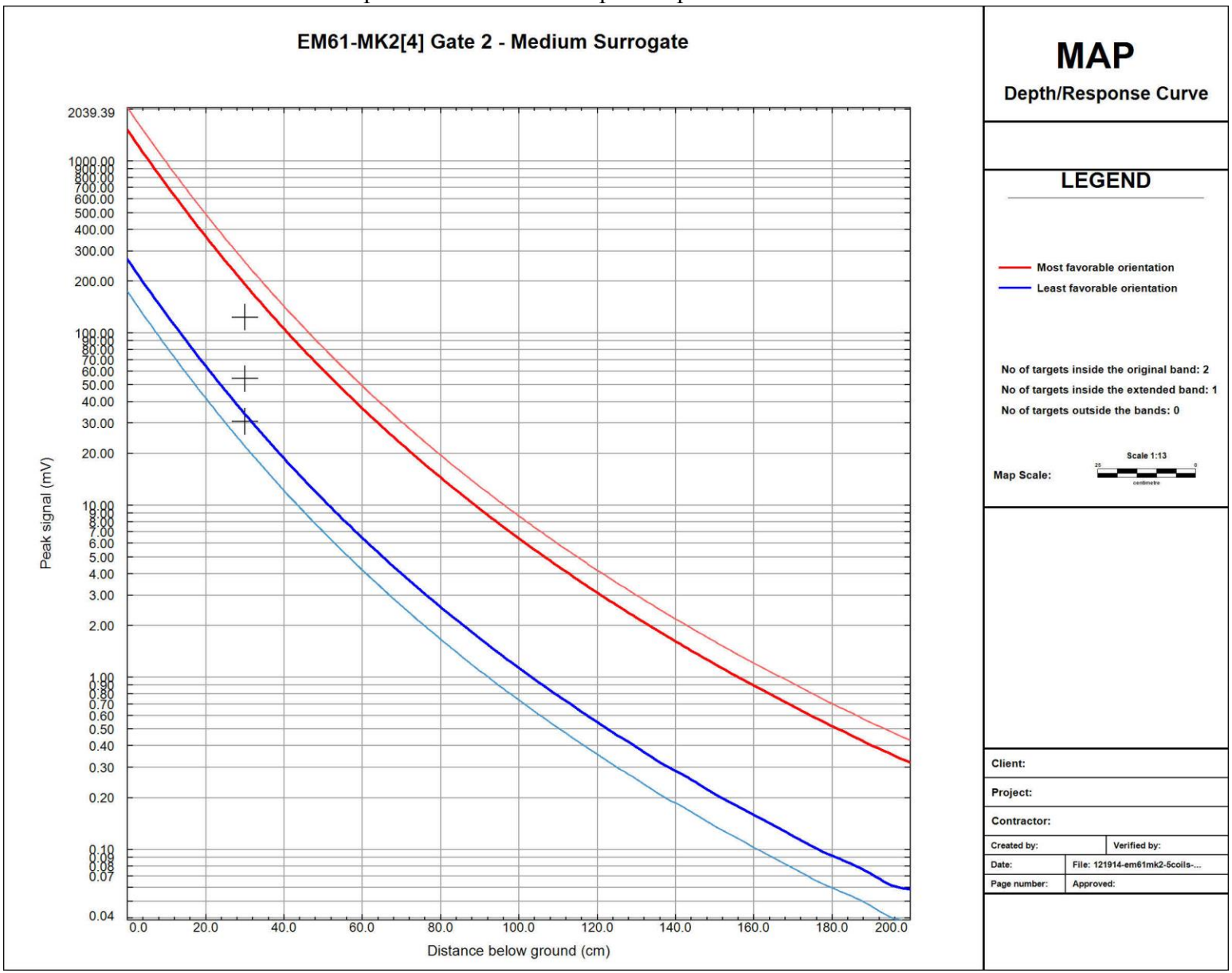


Figure C-398
12/19/2014 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

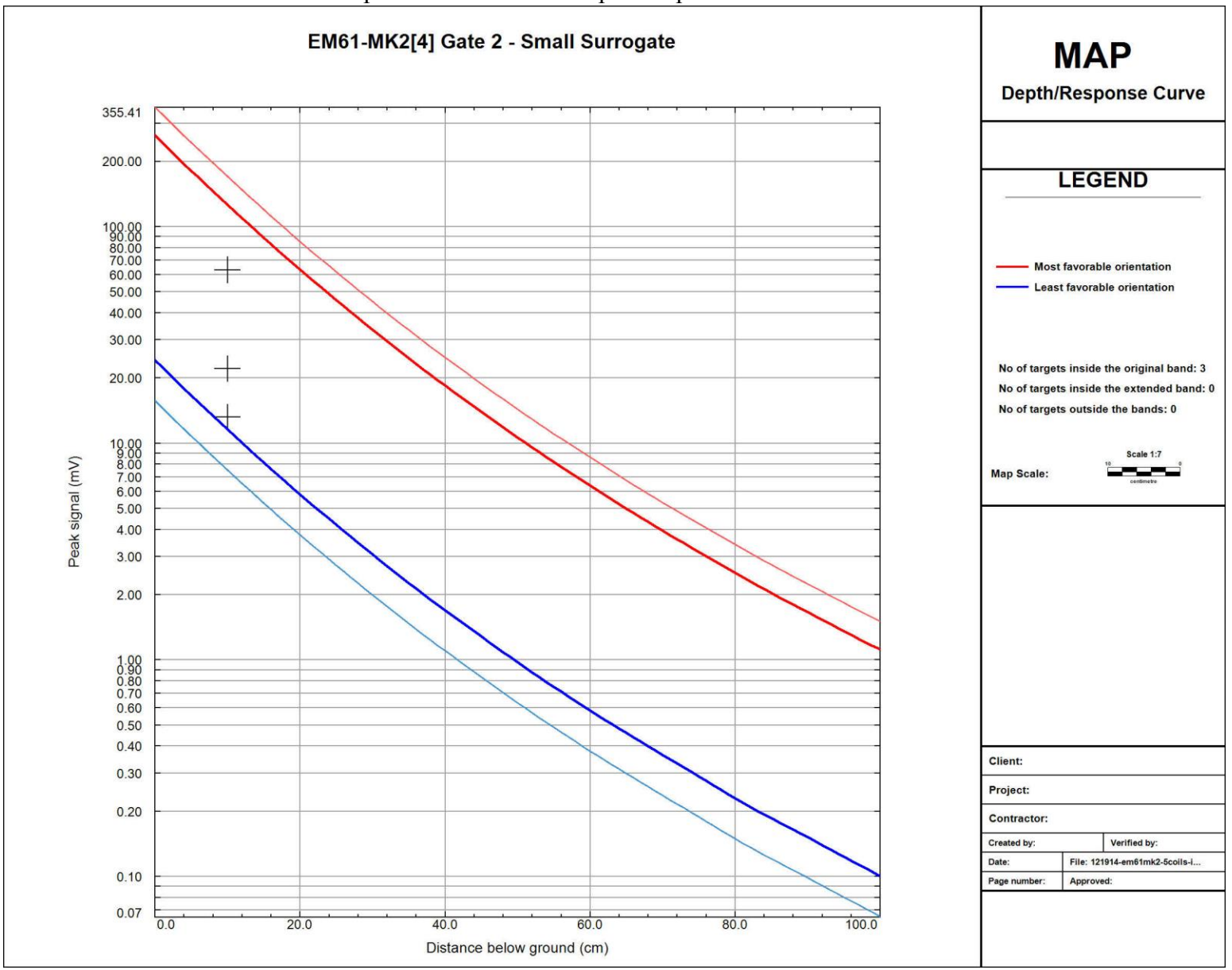


Figure C-399
12/19/2014 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

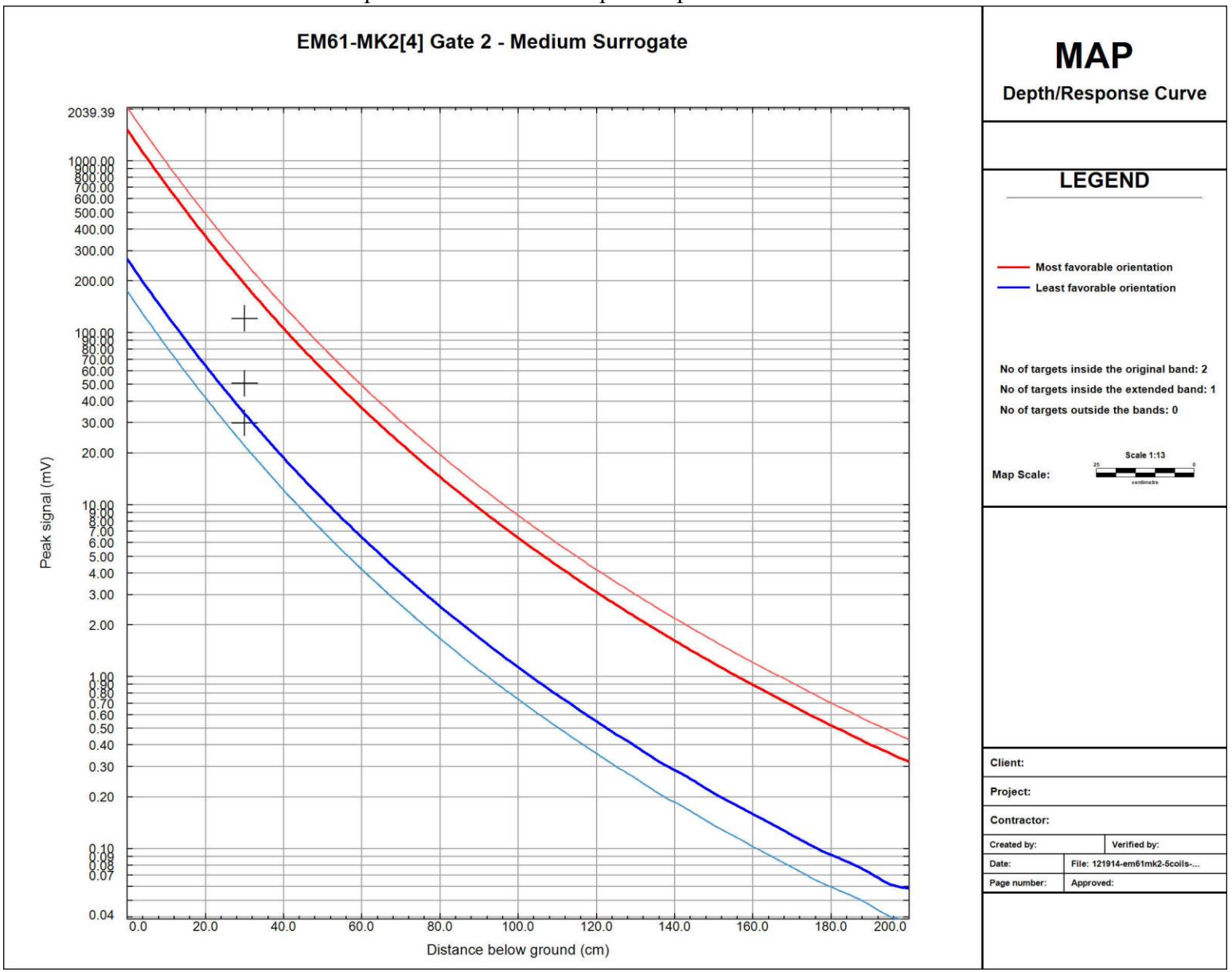


Figure C-400
12/19/2014 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

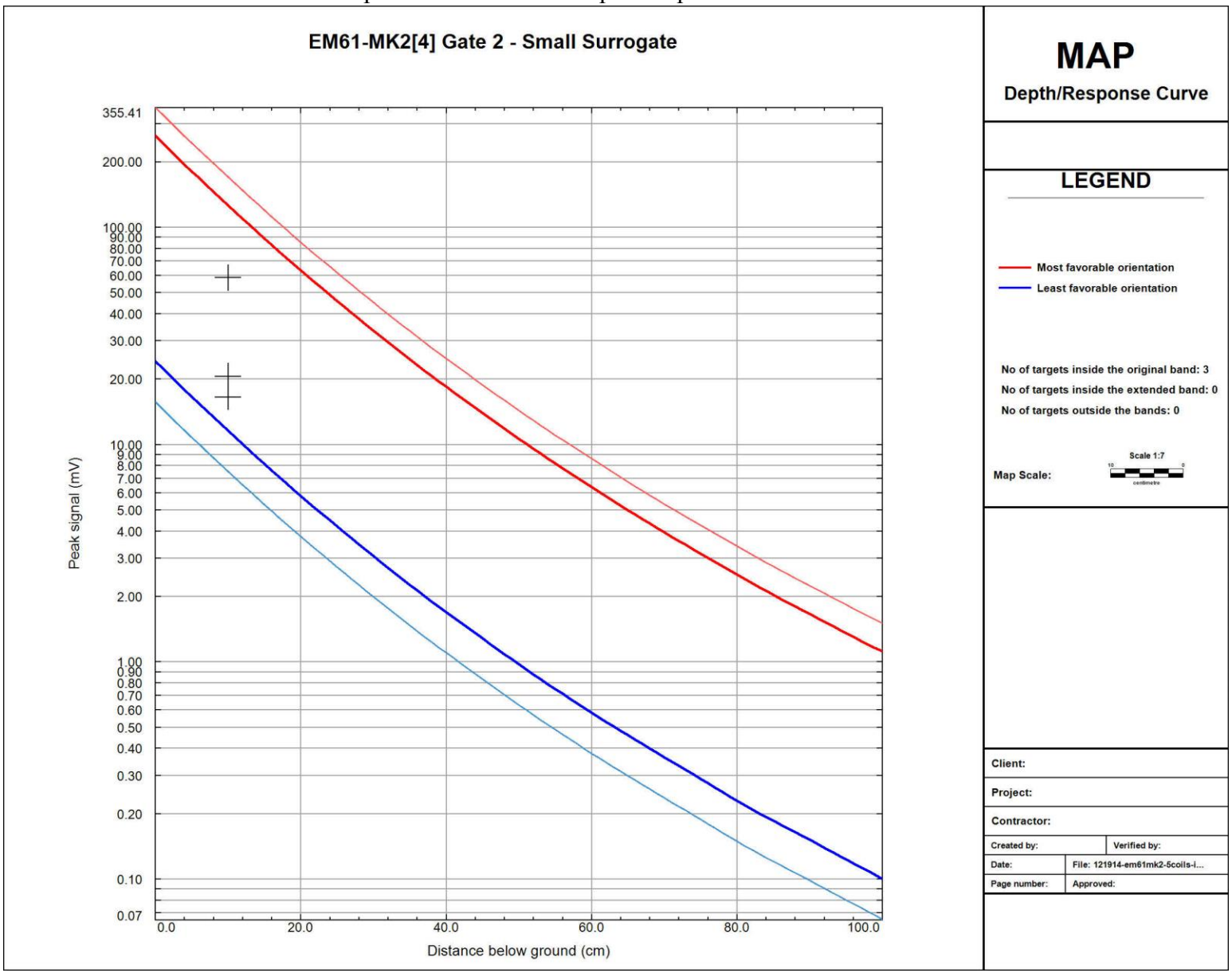


Figure C-401
12/19/2014 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

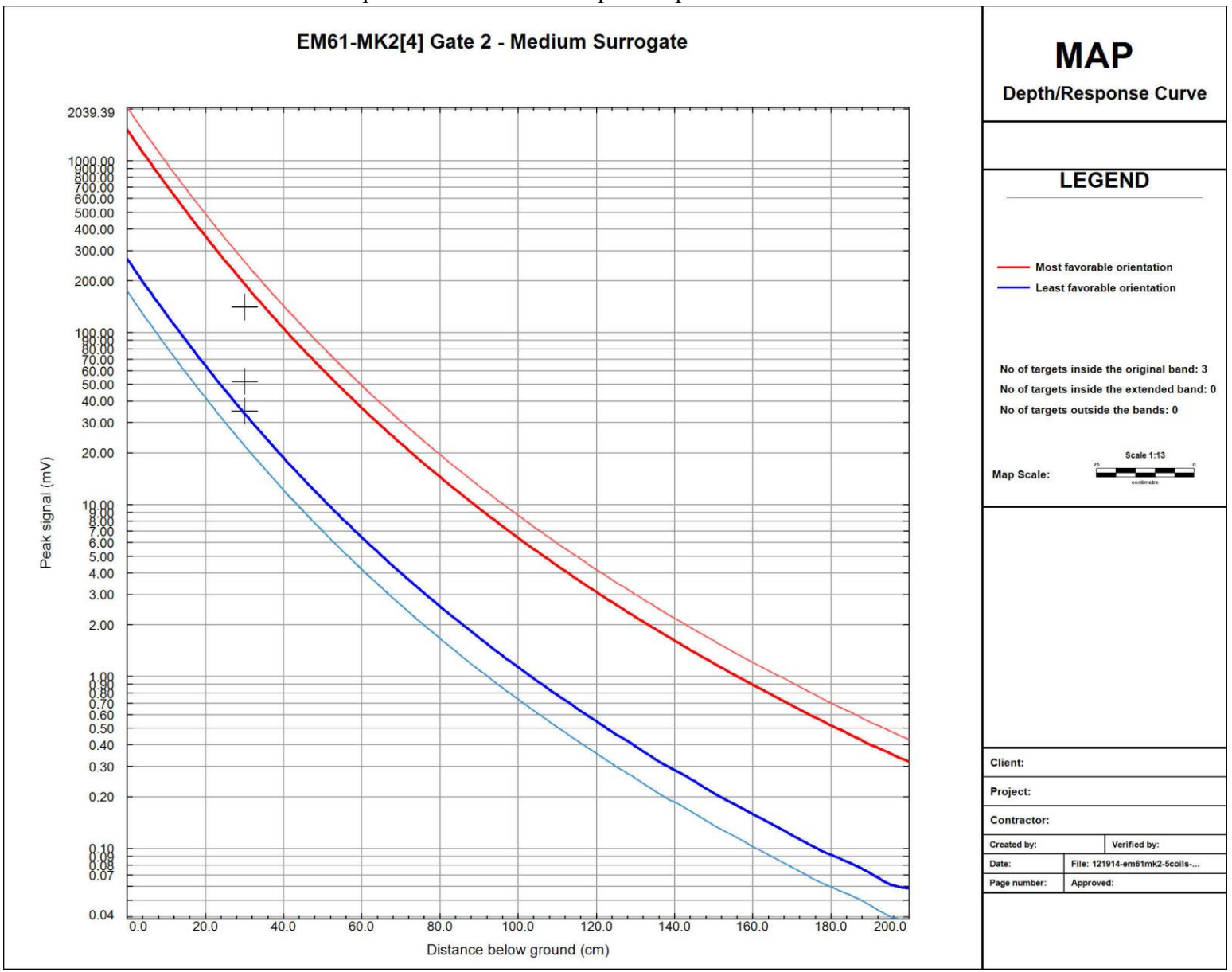


Figure C-402
12/19/2014 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

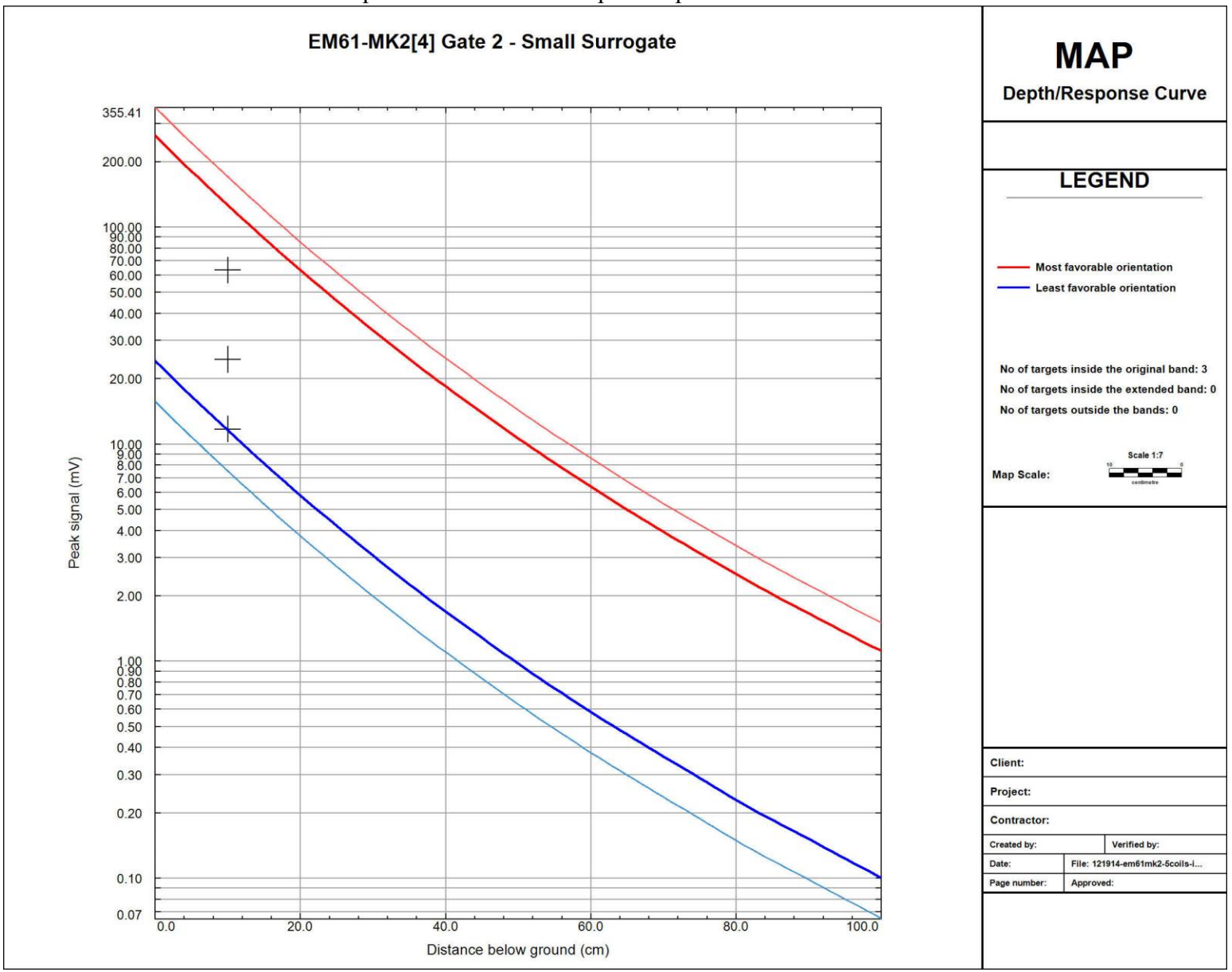


Figure C-403
1/8/2015 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

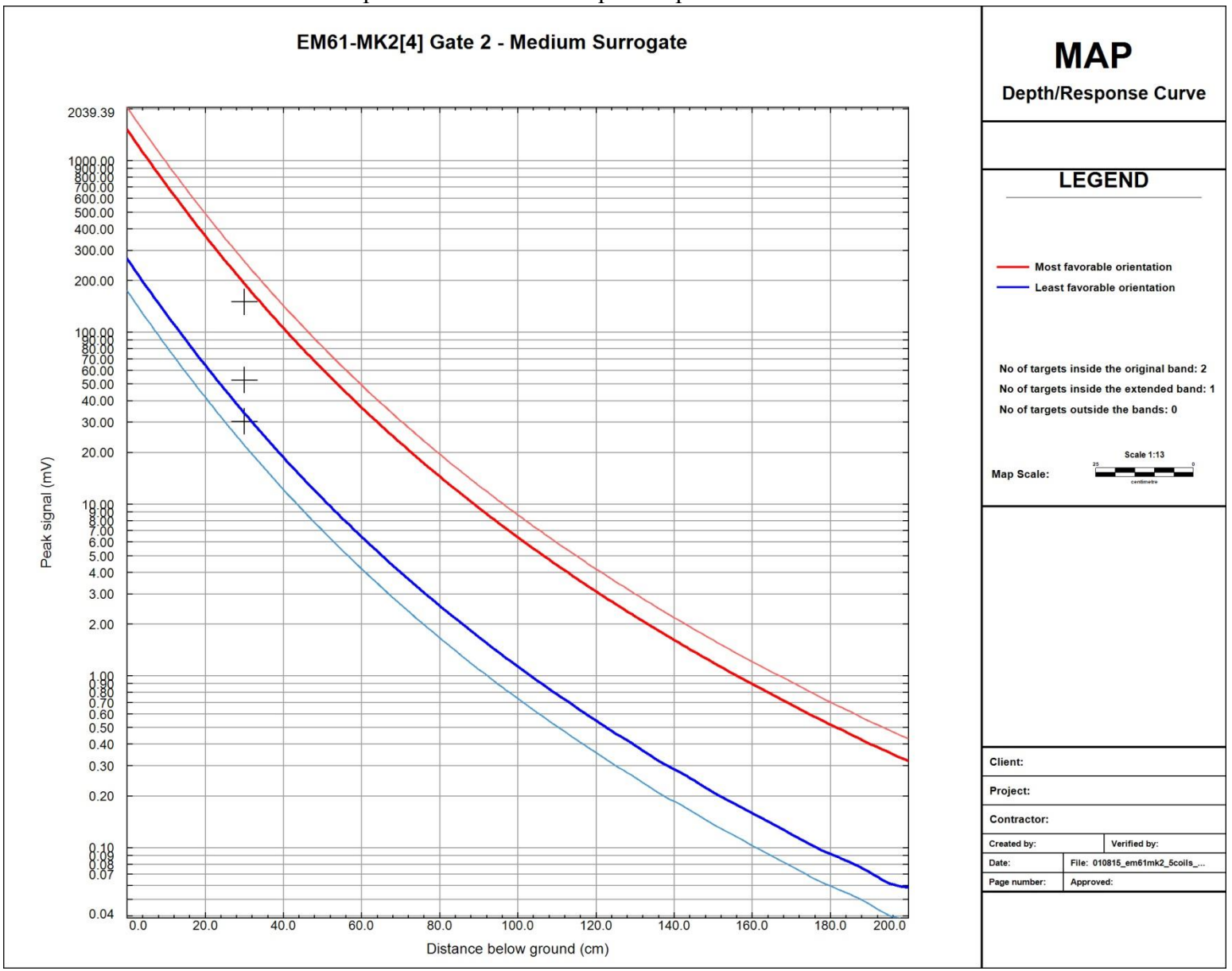


Figure C-404
1/8/2015 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

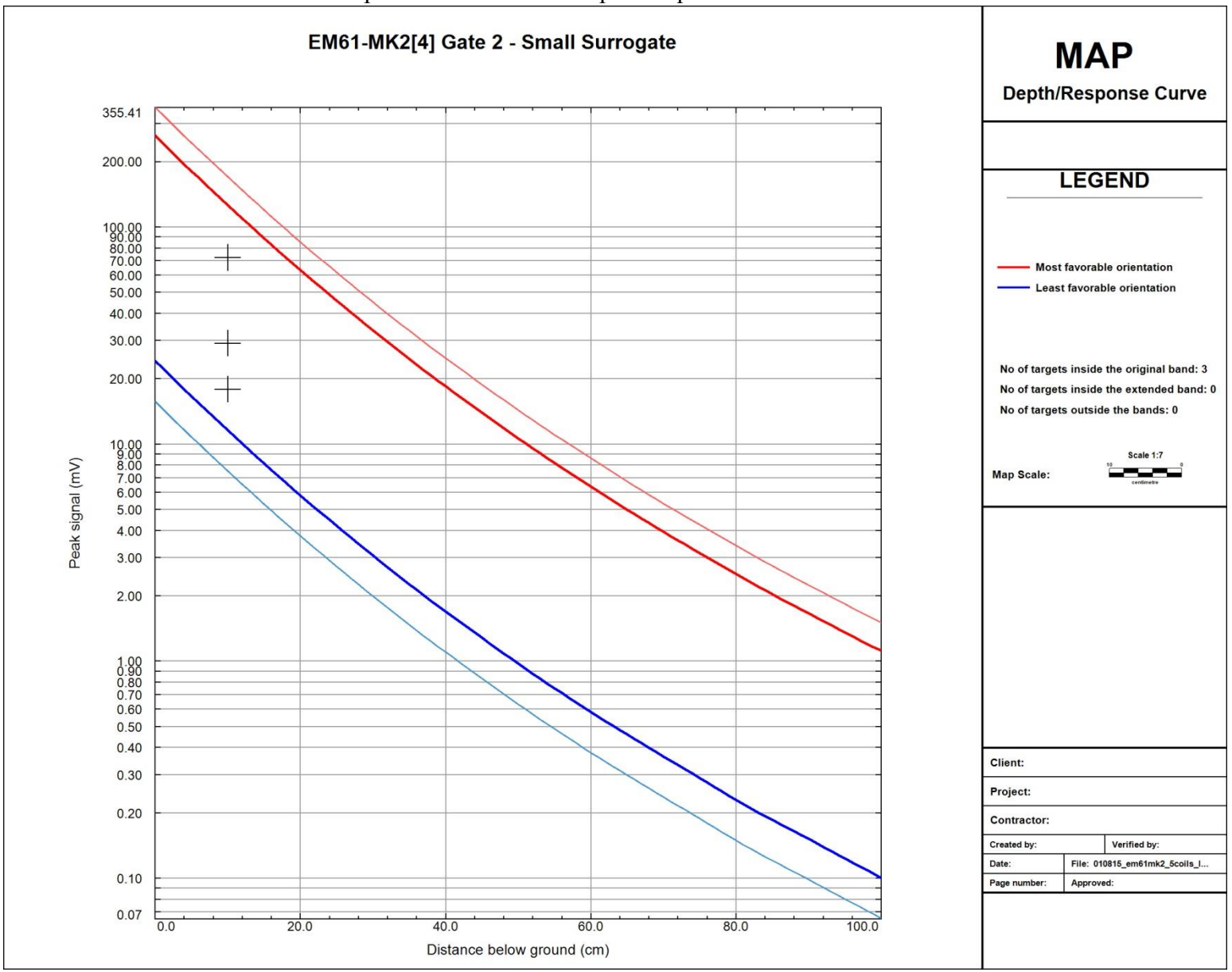


Figure C-405
1/8/2015 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

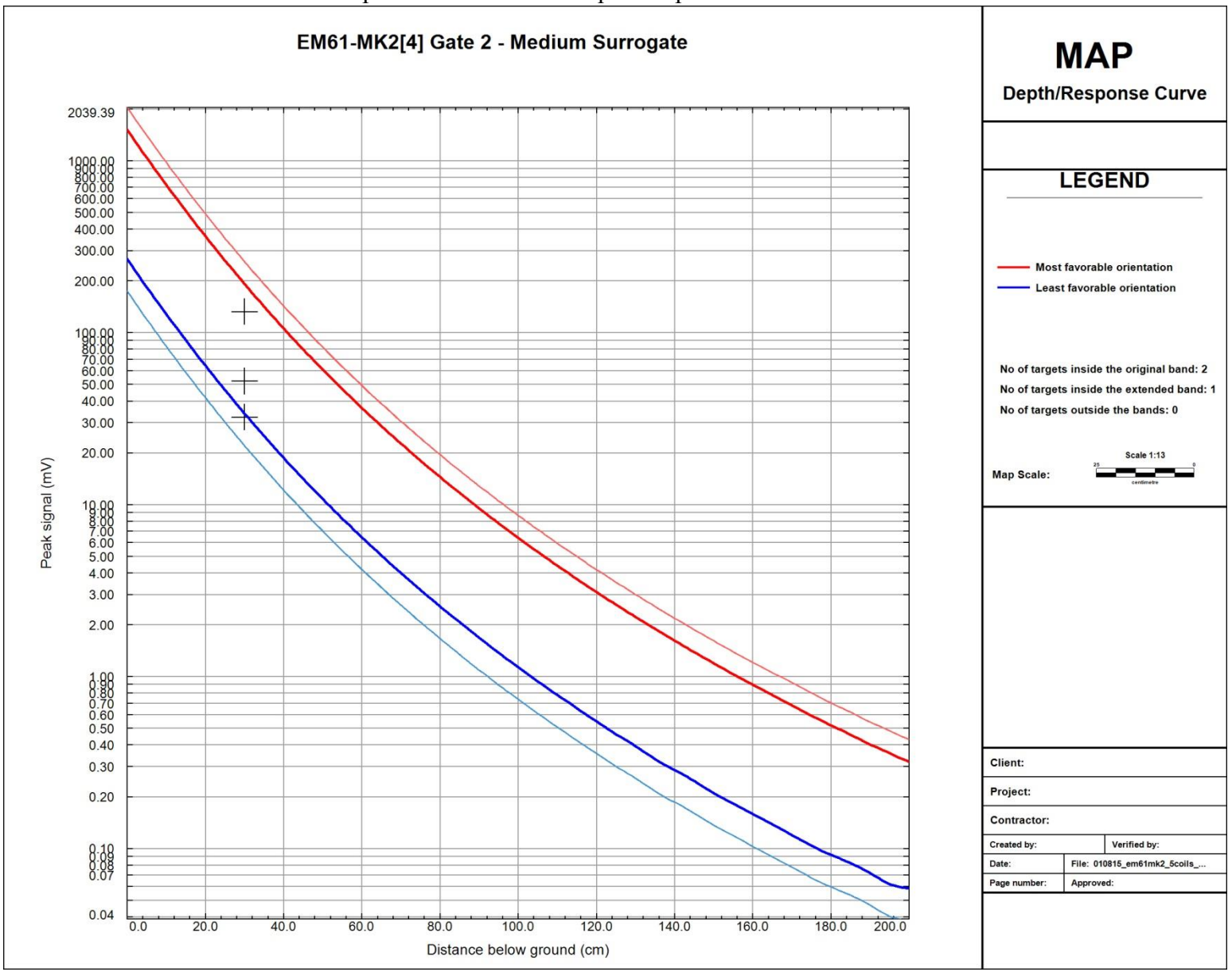


Figure C-406
1/8/2015 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

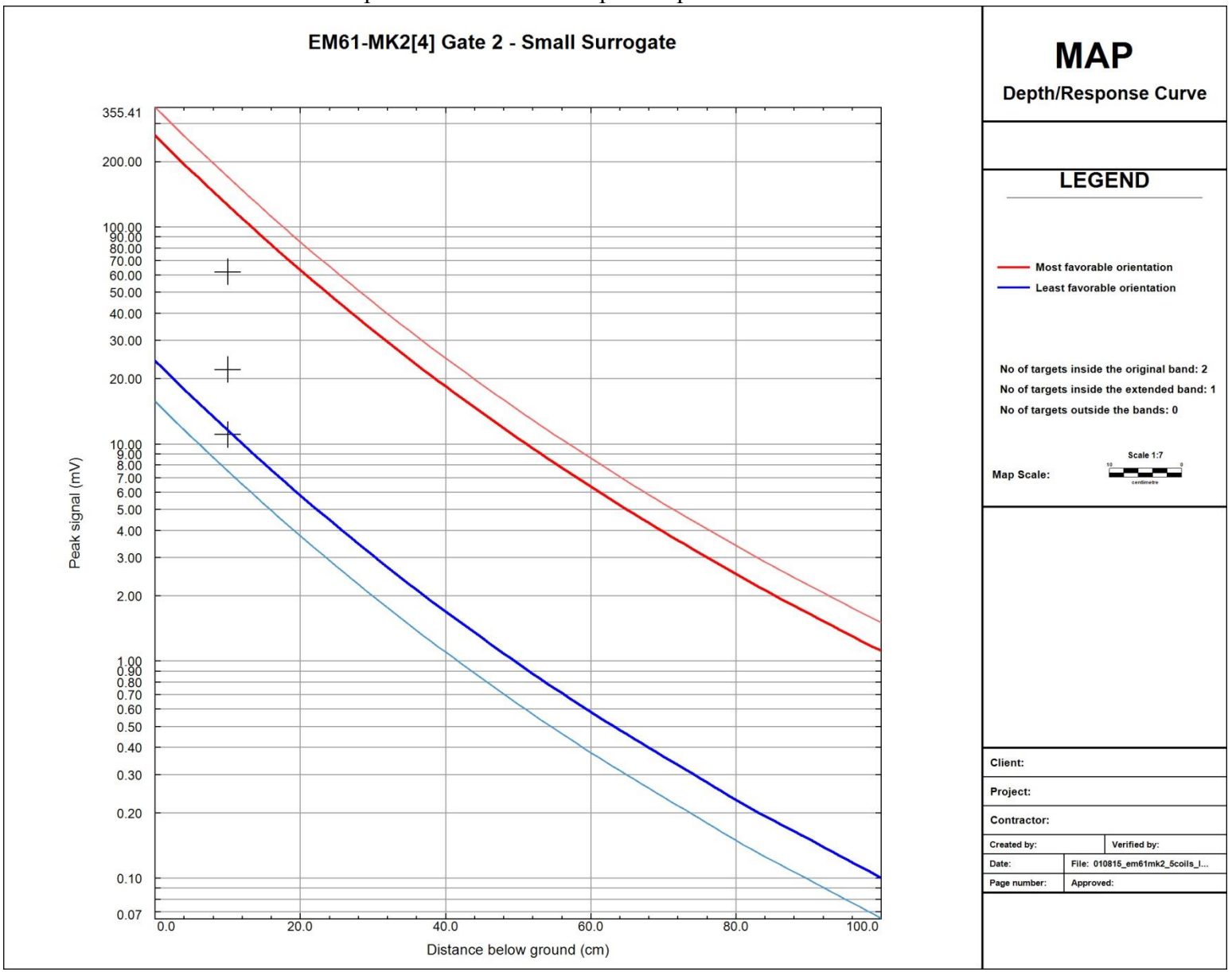


Figure C-407
1/8/2015 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

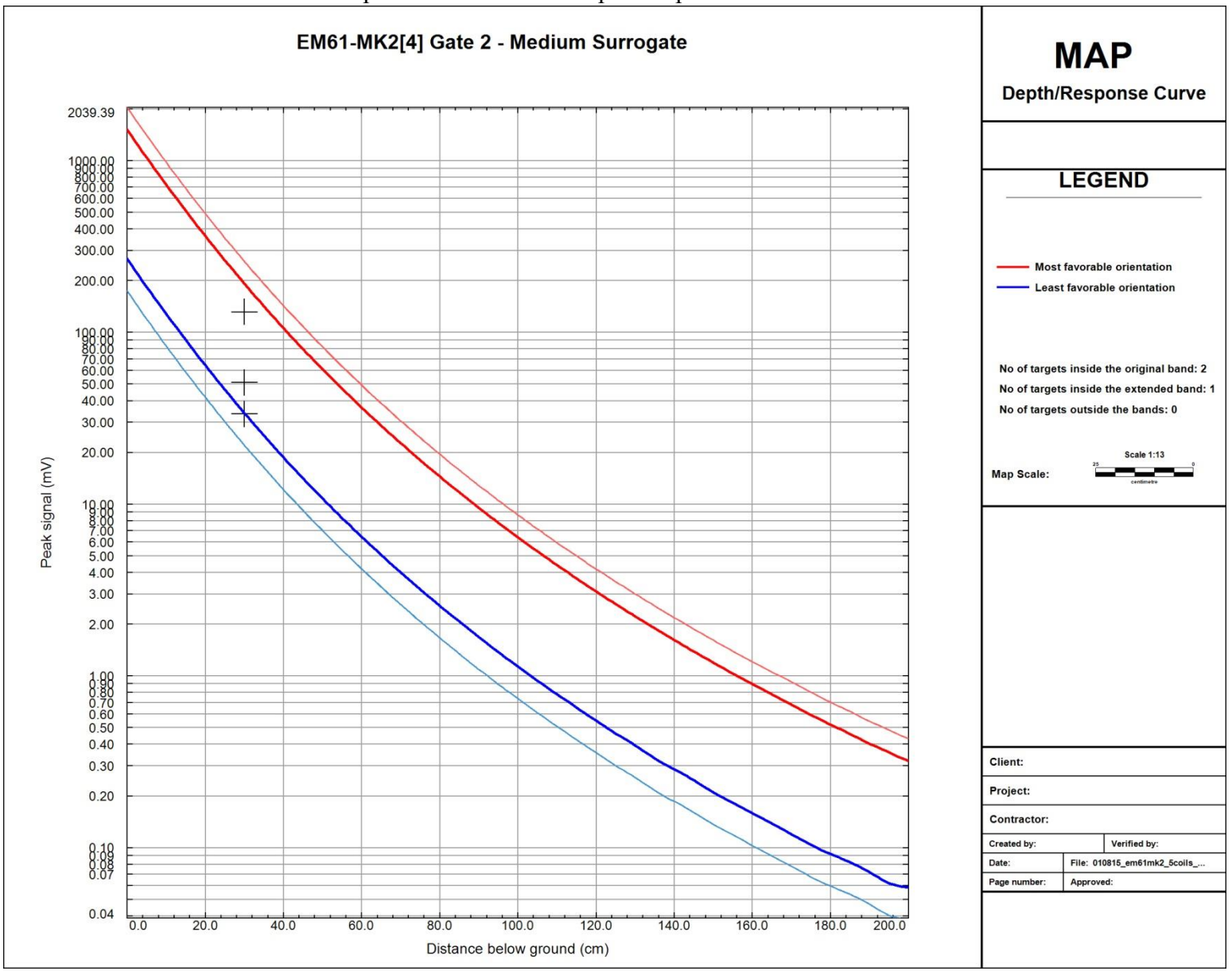


Figure C-408
1/8/2015 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

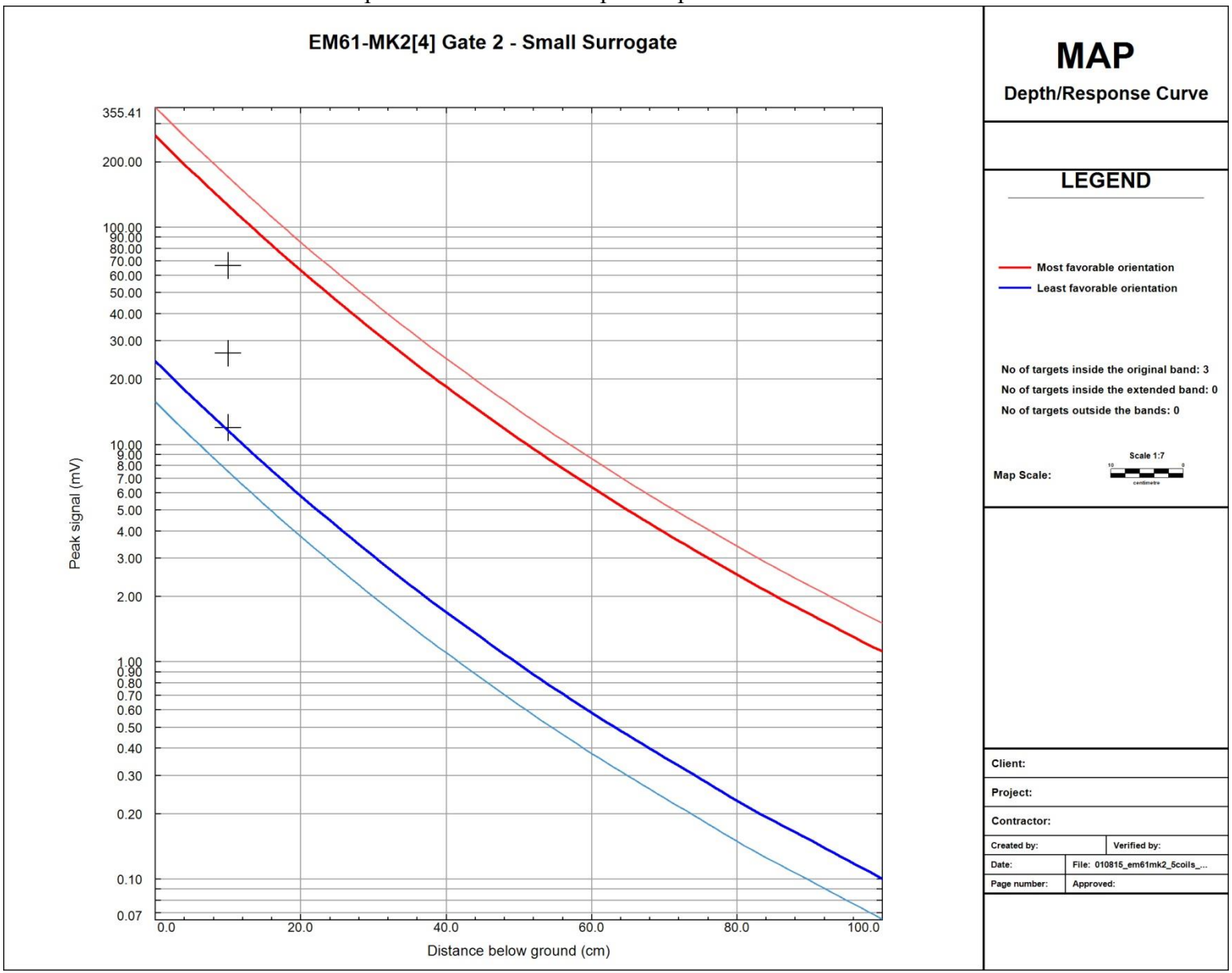


Figure C-409
1/8/2015 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

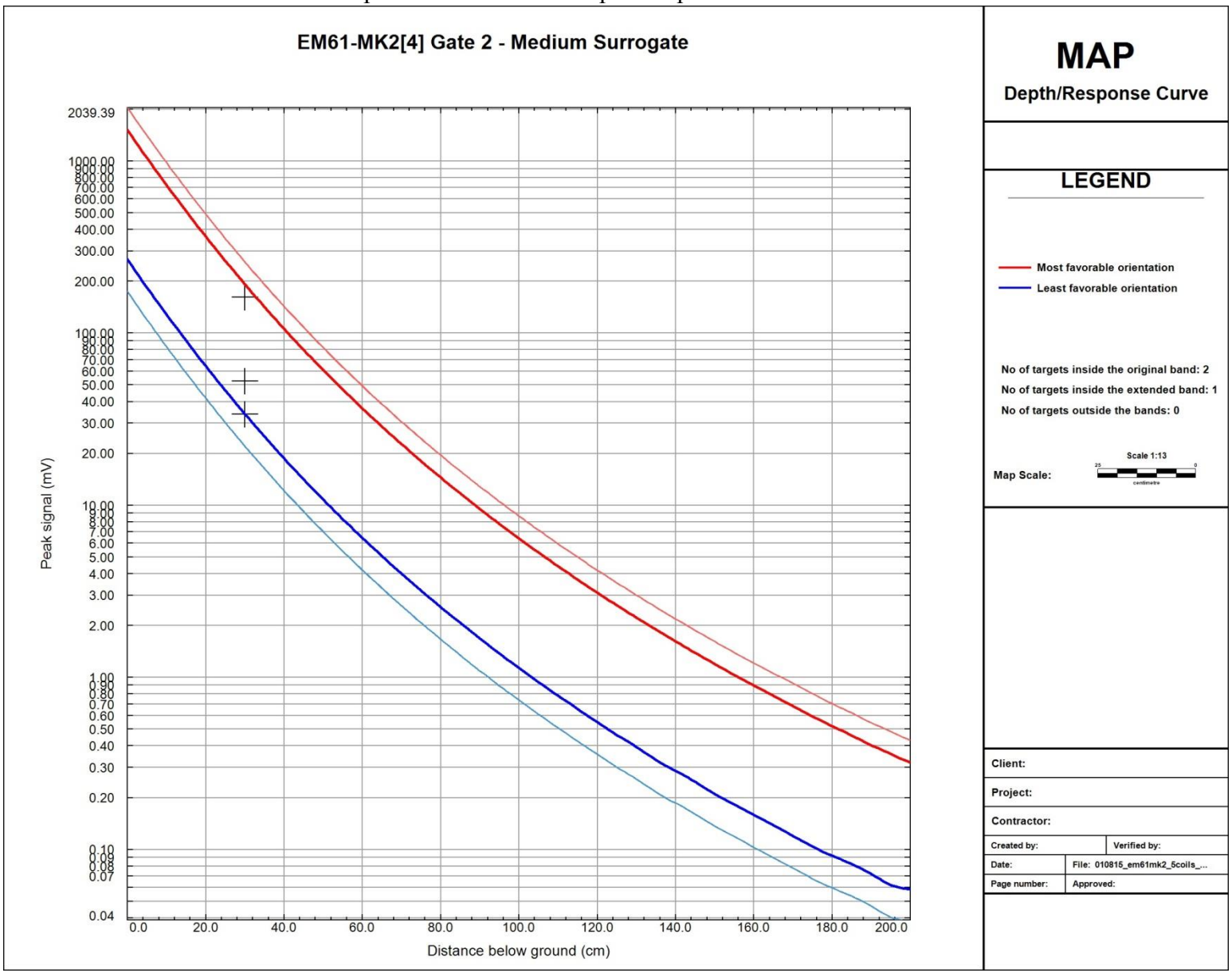


Figure C-410
1/8/2015 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

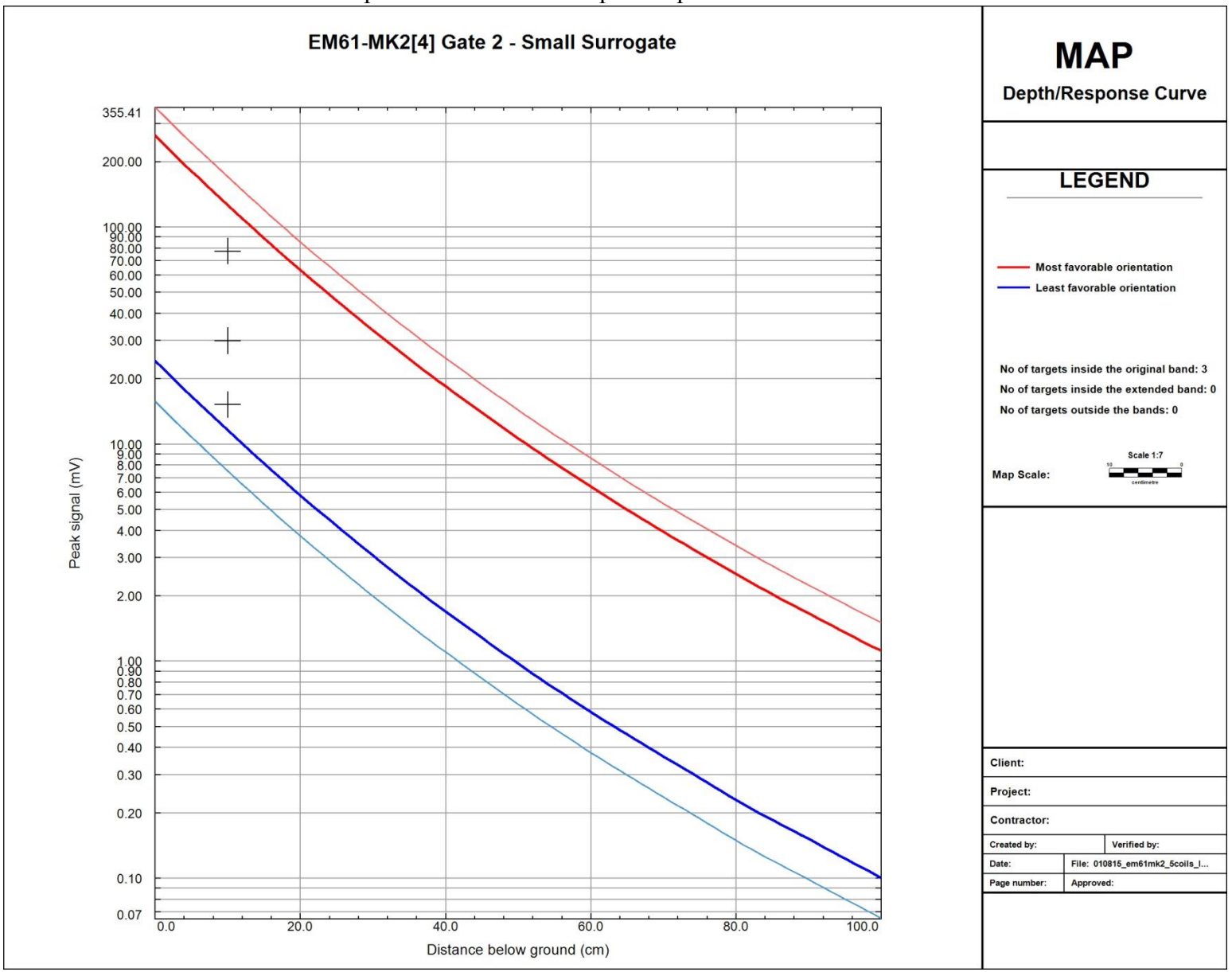


Figure C-412
1/8/2015 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

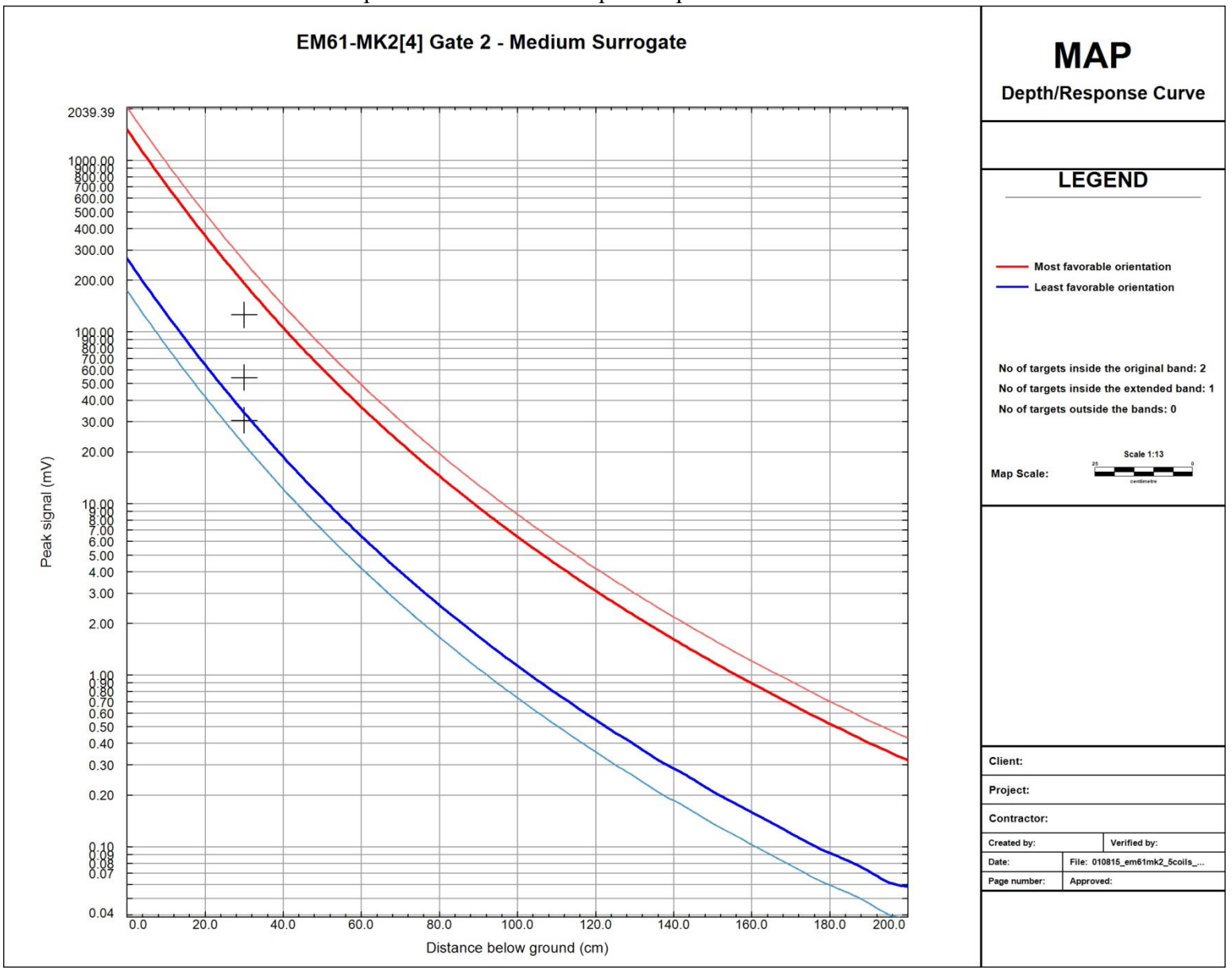


Figure C-412
1/8/2015 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

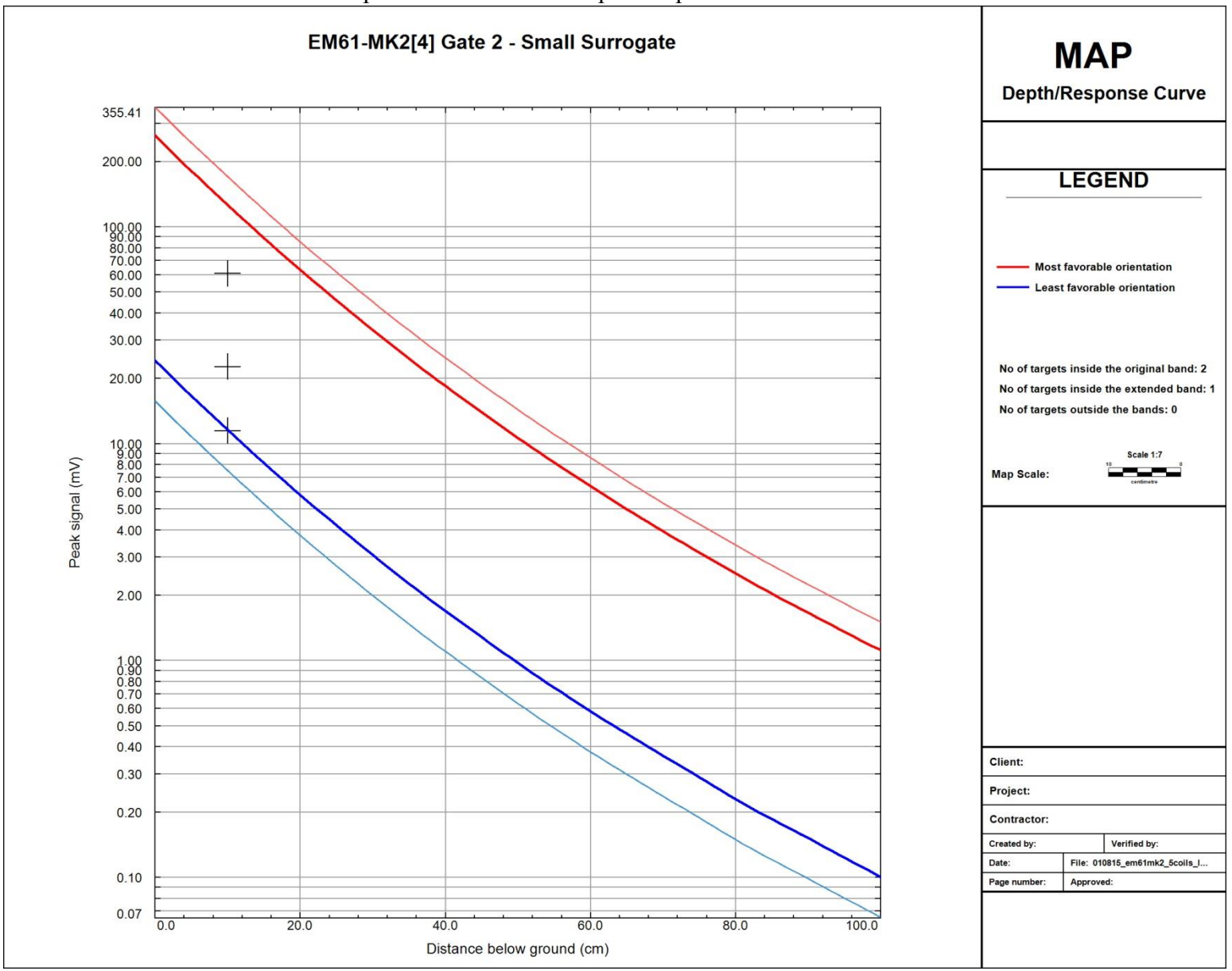


Figure C-413
1/8/2015 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

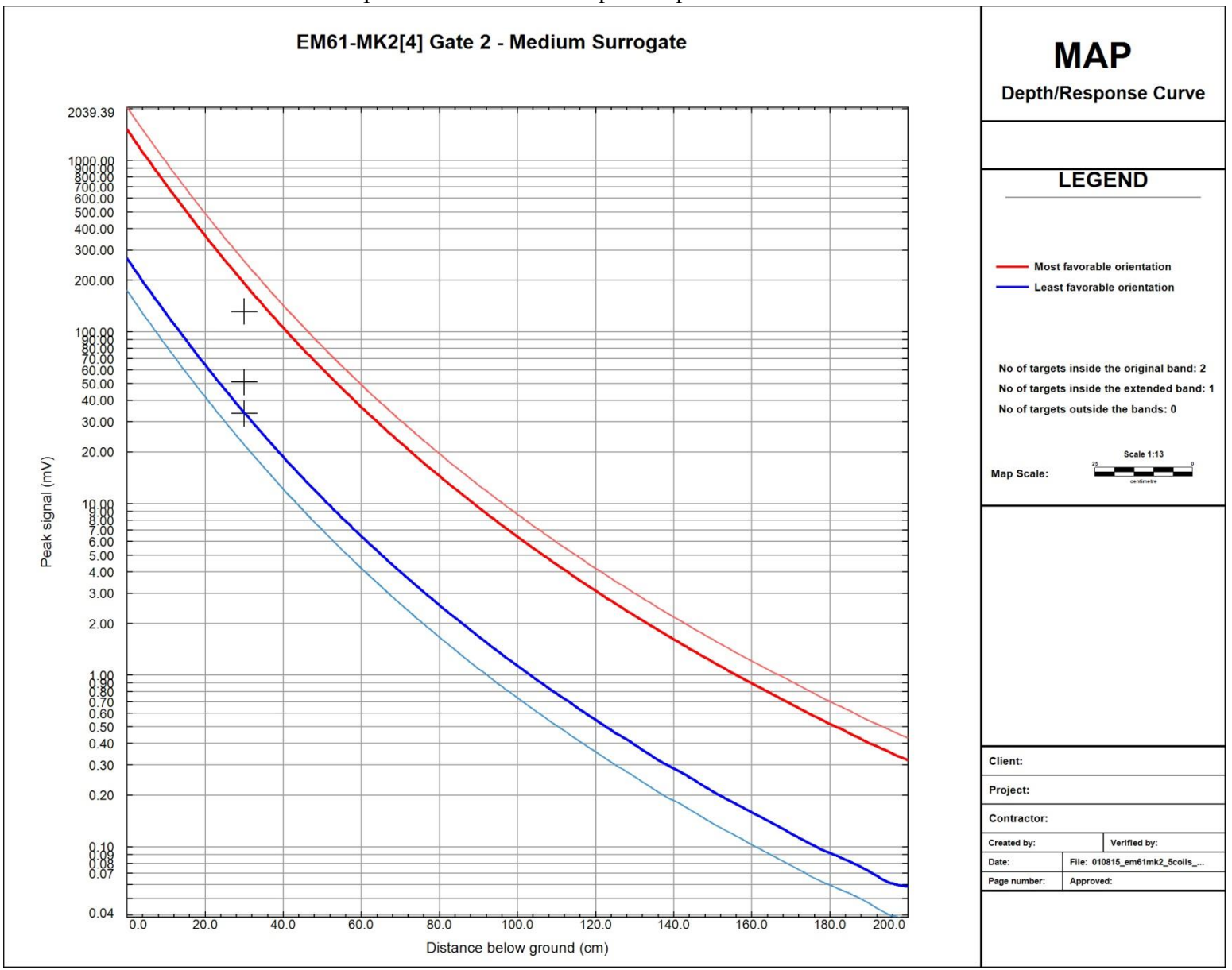


Figure C-414
1/8/2015 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

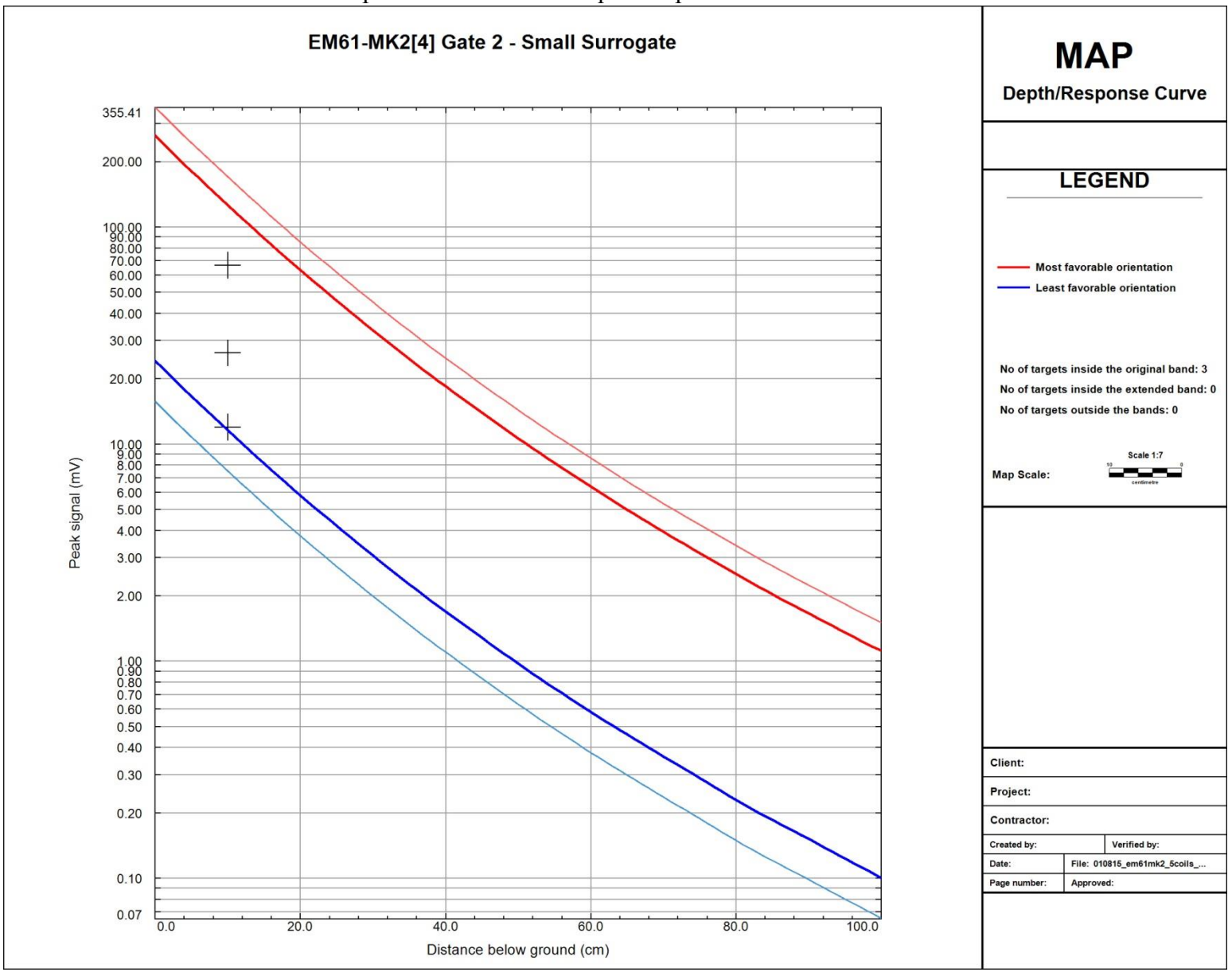


Figure C-415
1/9/2015 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

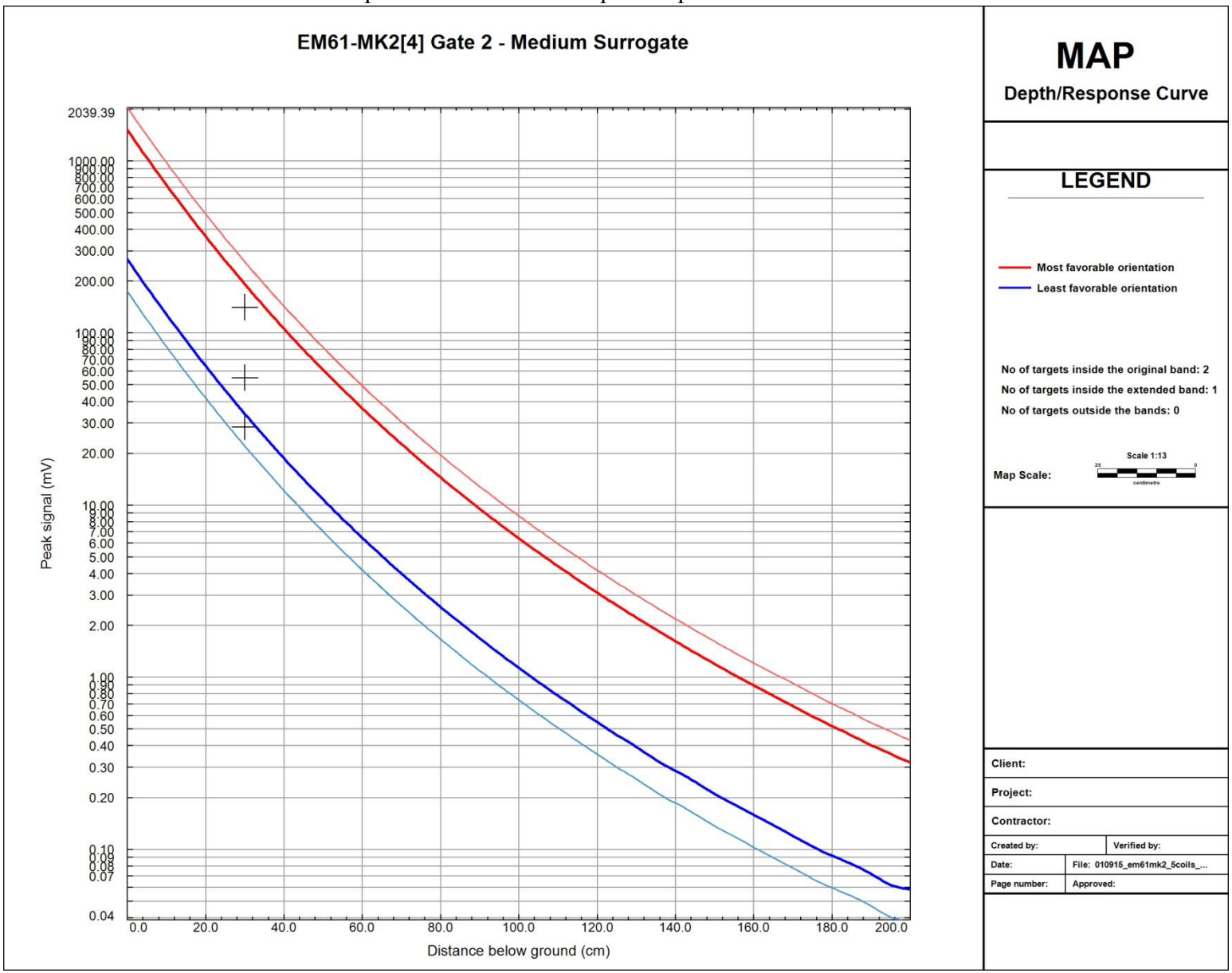


Figure C-416
1/9/2015 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

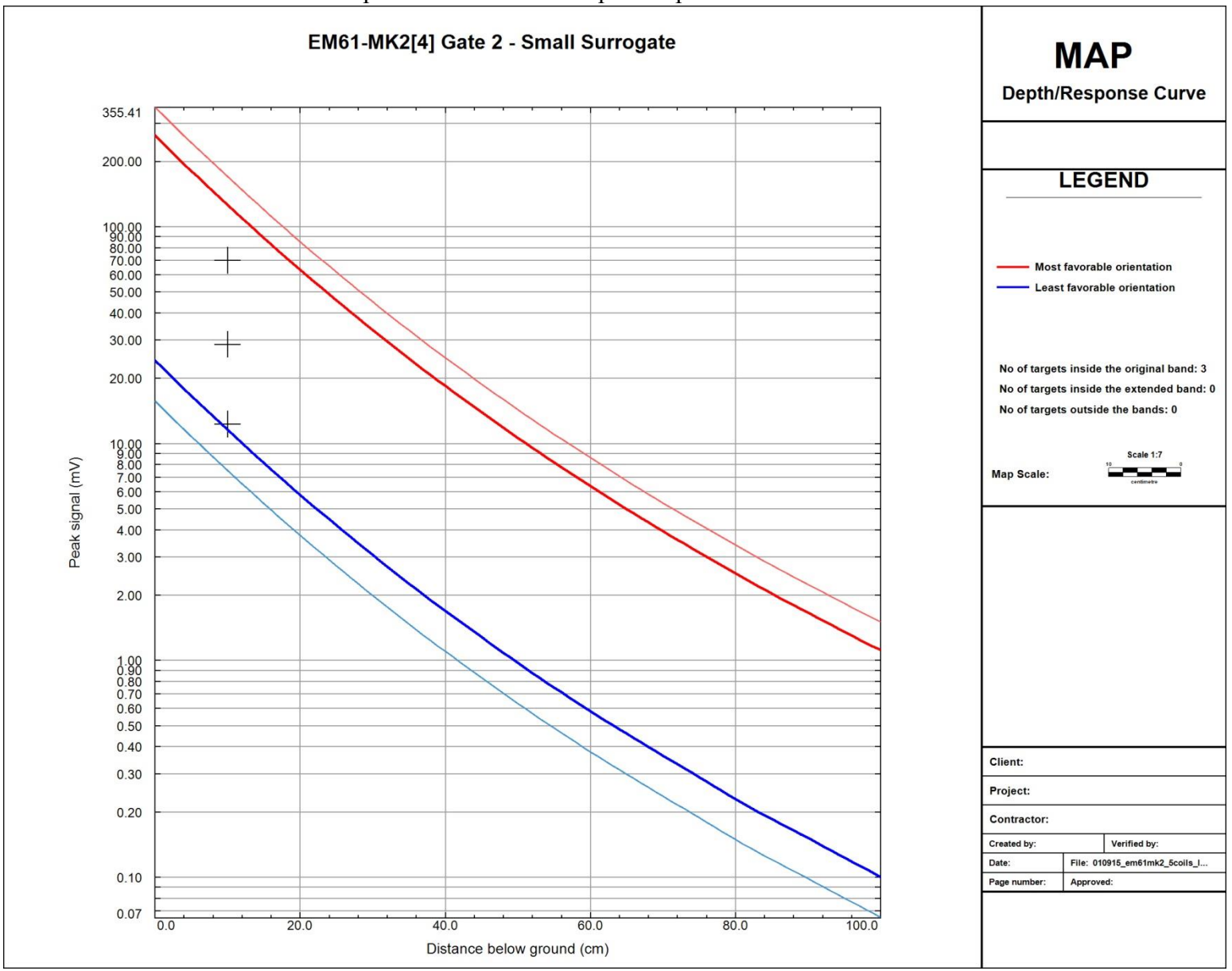


Figure C-417
1/9/2015 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

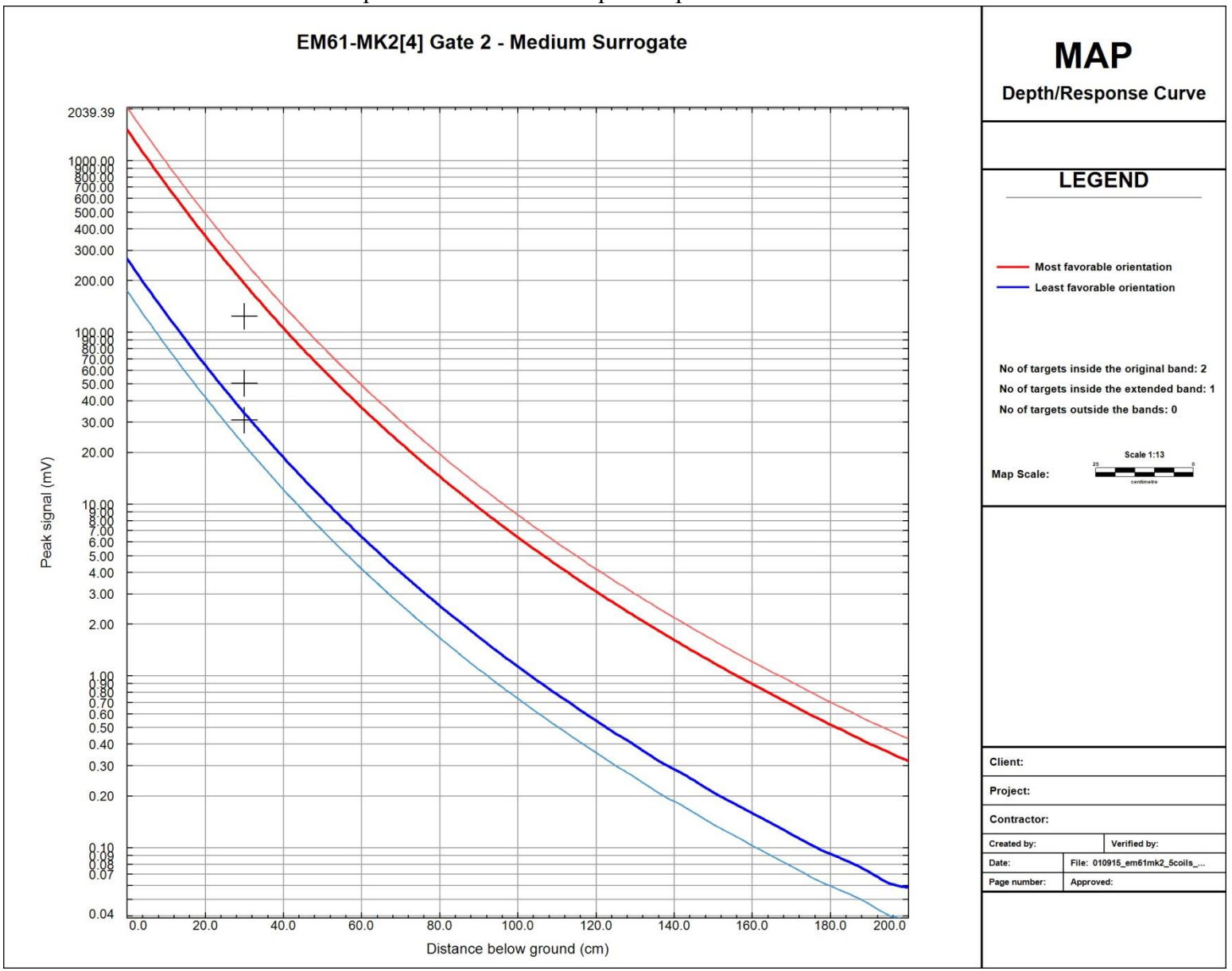


Figure C-418
1/9/2015 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

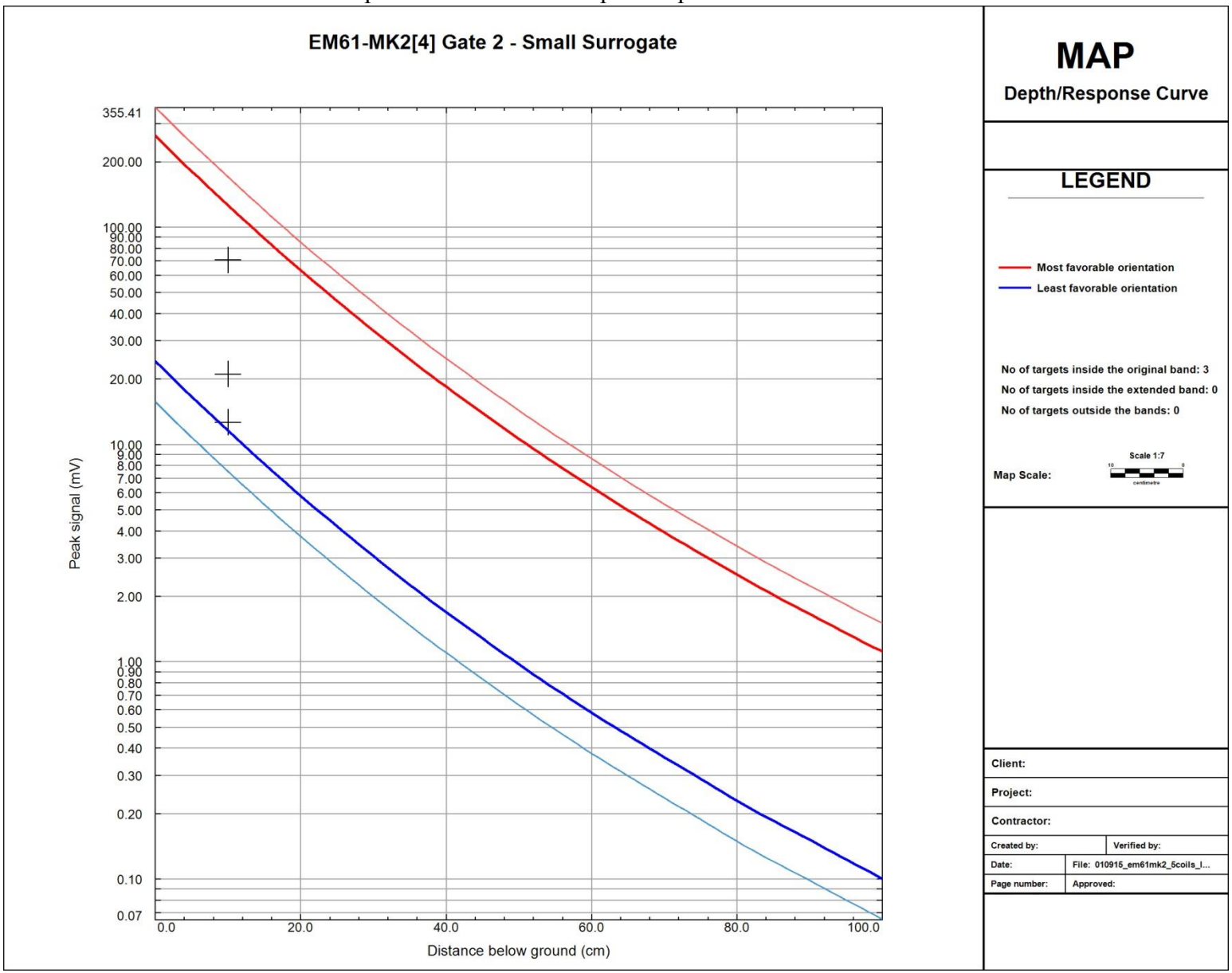


Figure C-419
1/9/2015 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

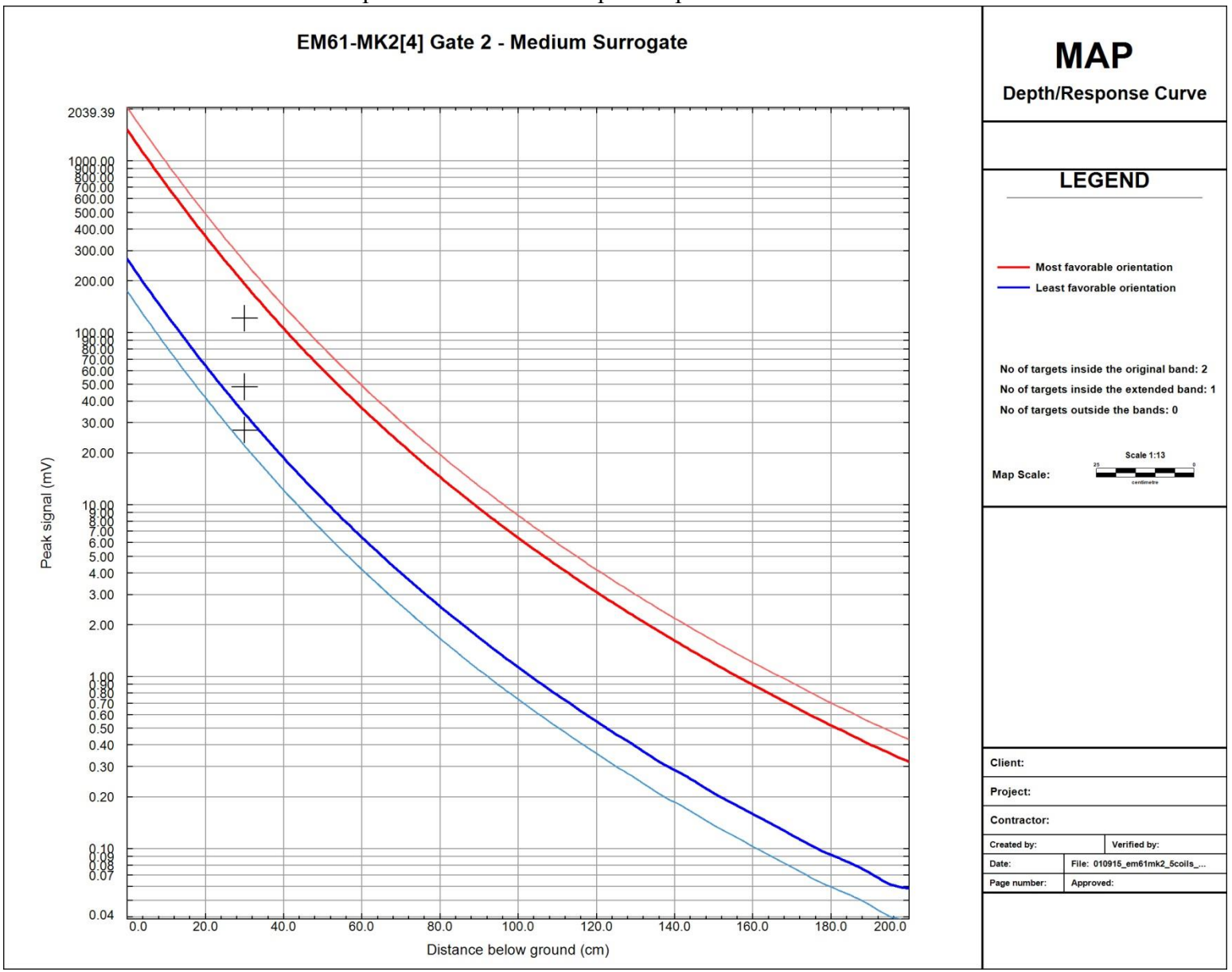


Figure C-420
1/9/2015 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

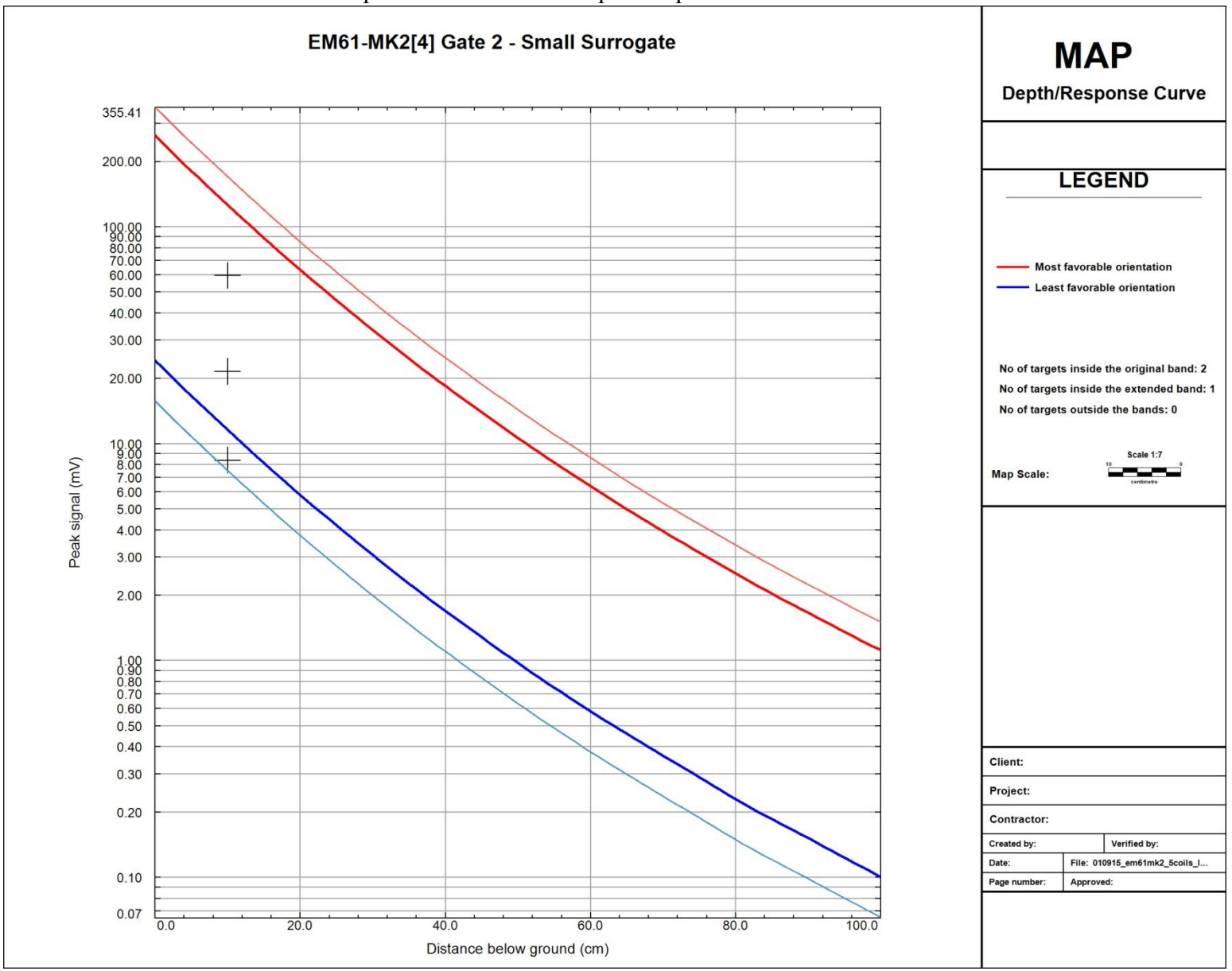


Figure C-421
1/9/2015 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

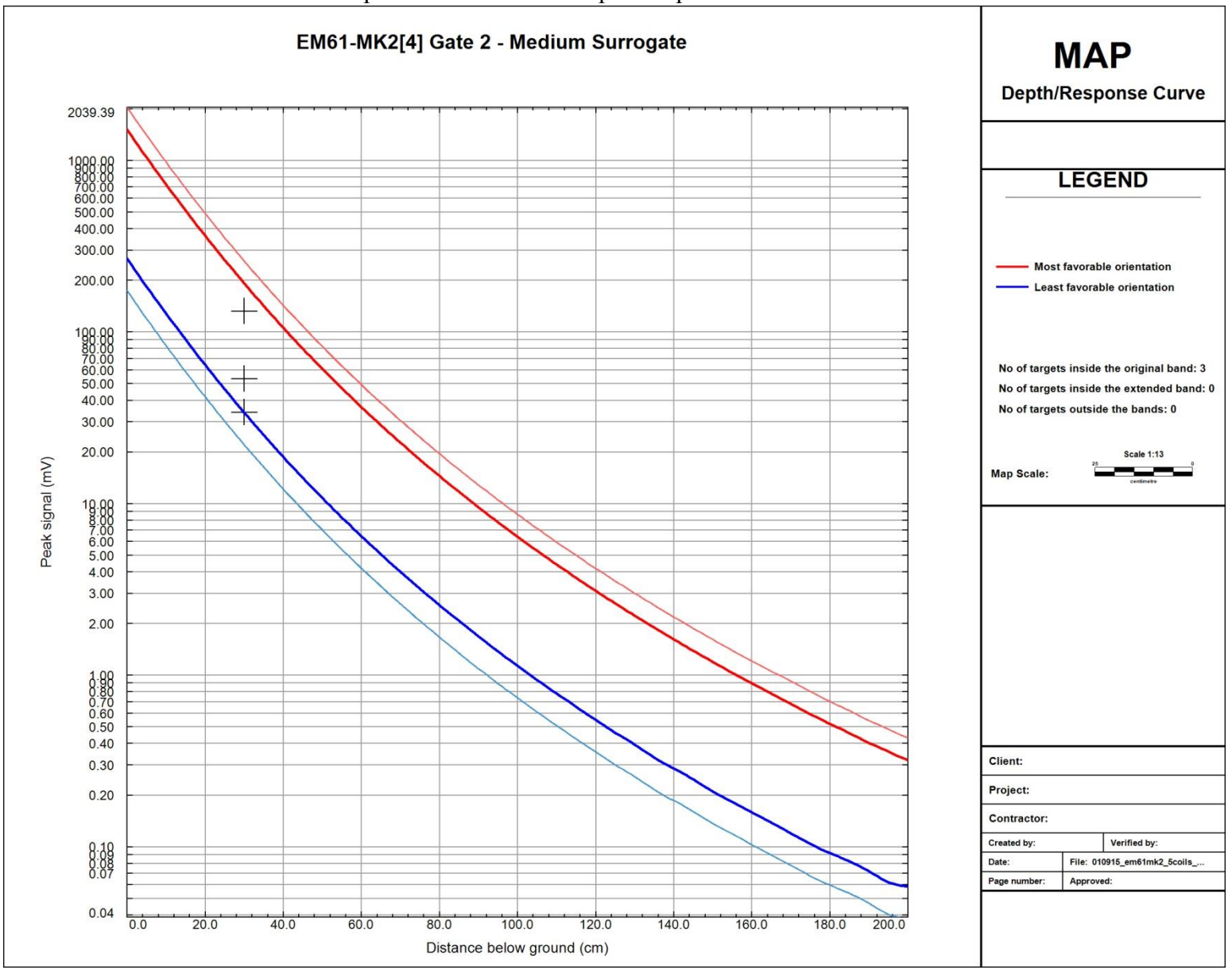


Figure C-422
1/9/2015 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

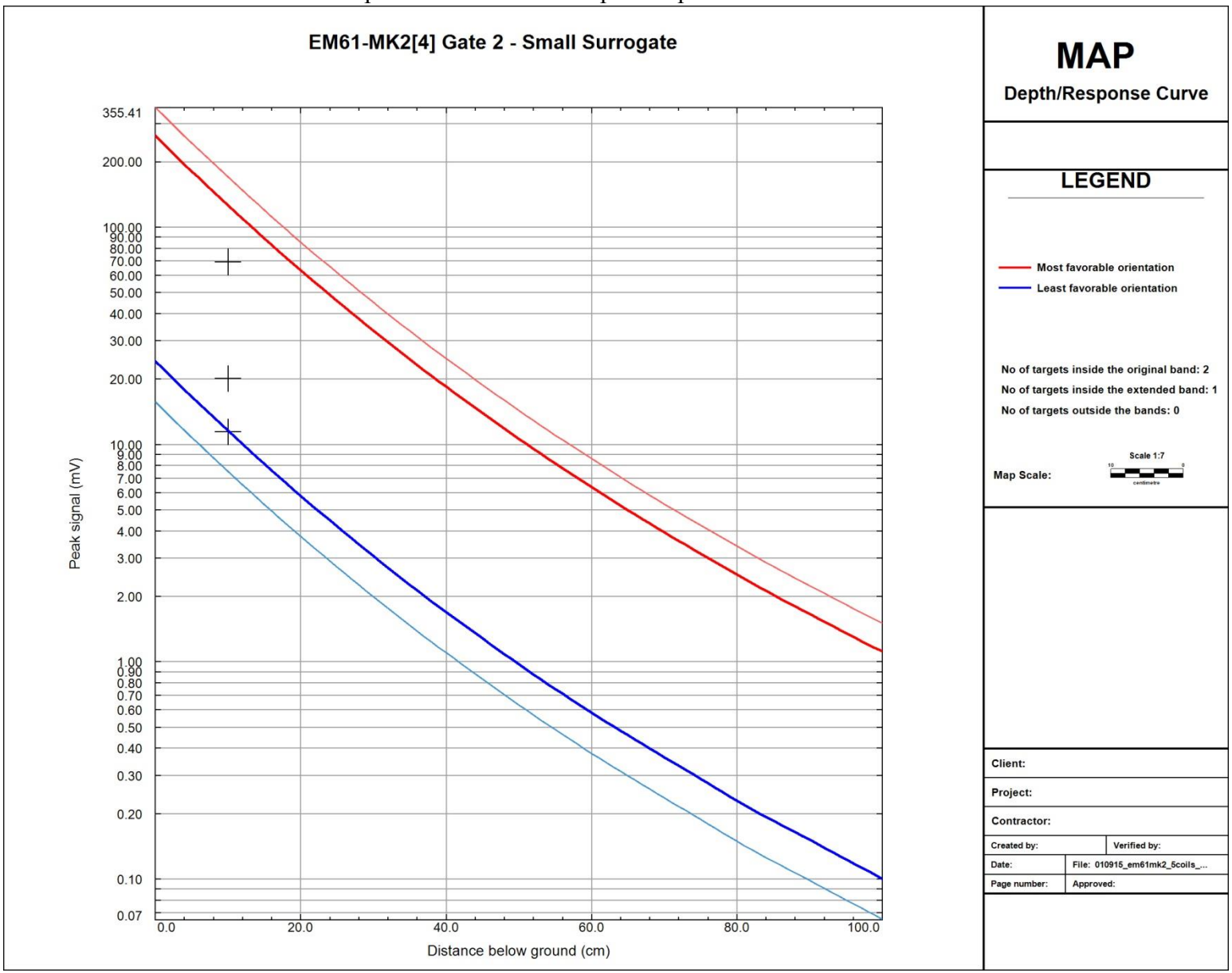


Figure C-423
1/9/2015 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

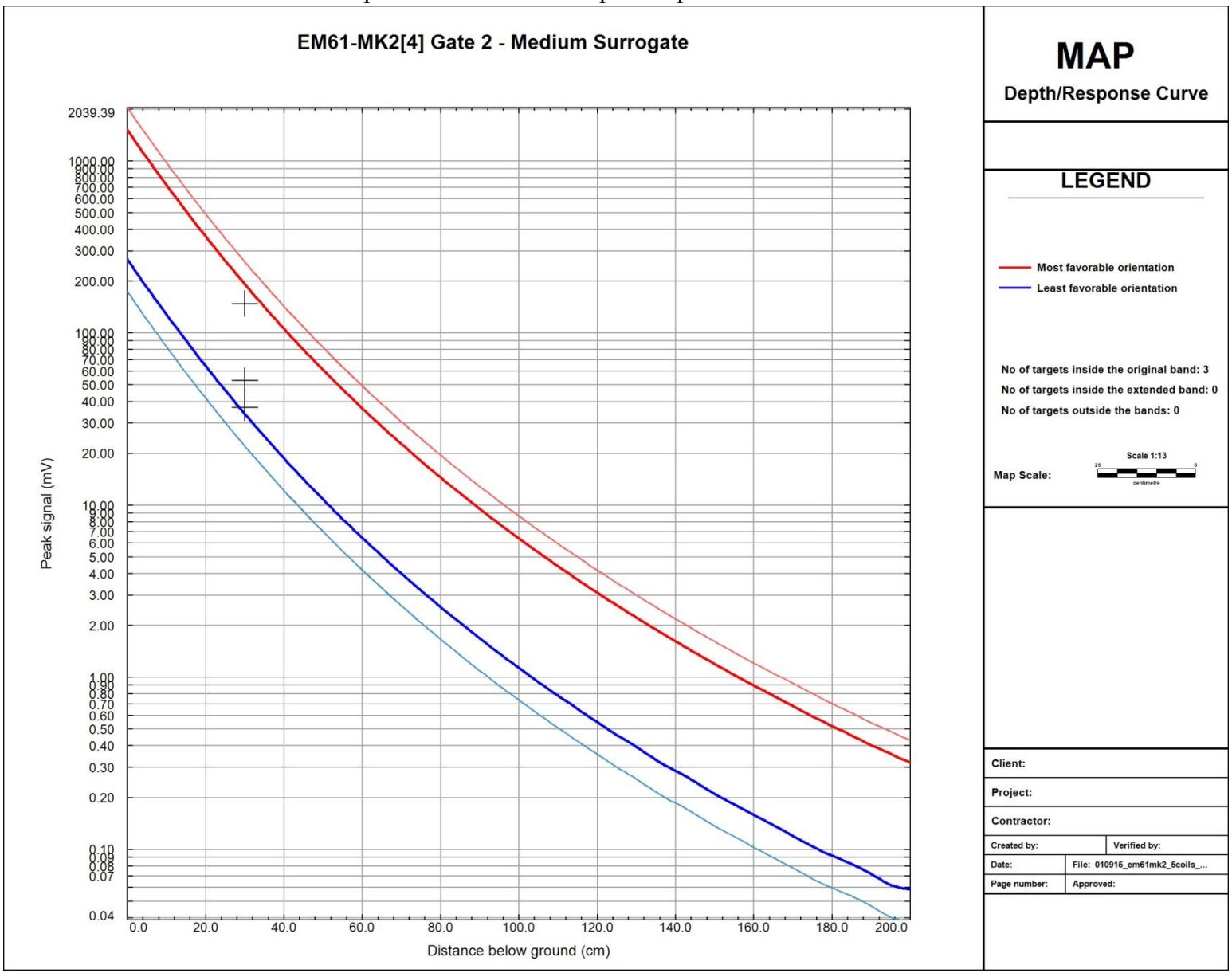


Figure C-424
1/9/2015 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

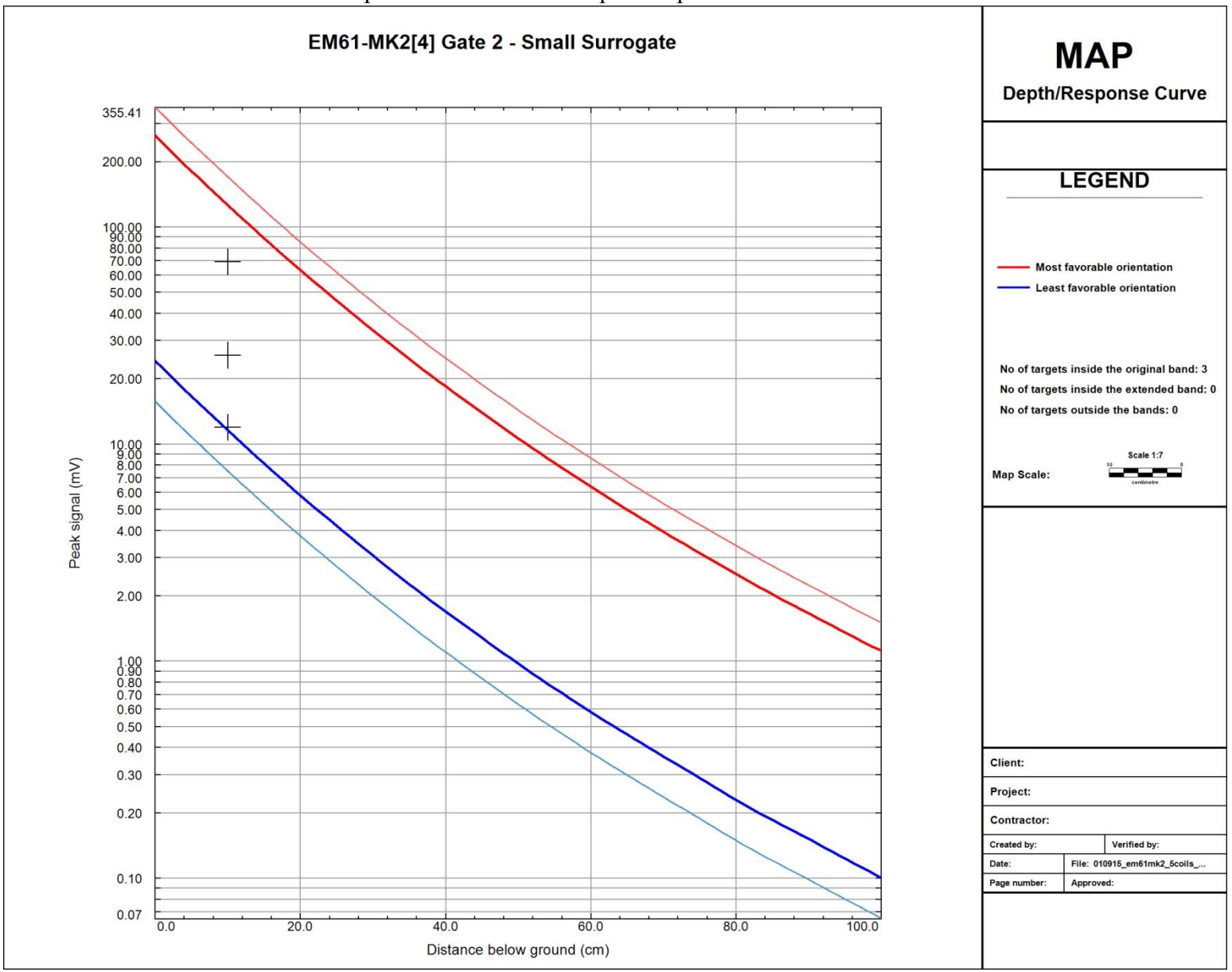


Figure C-425
1/9/2015 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

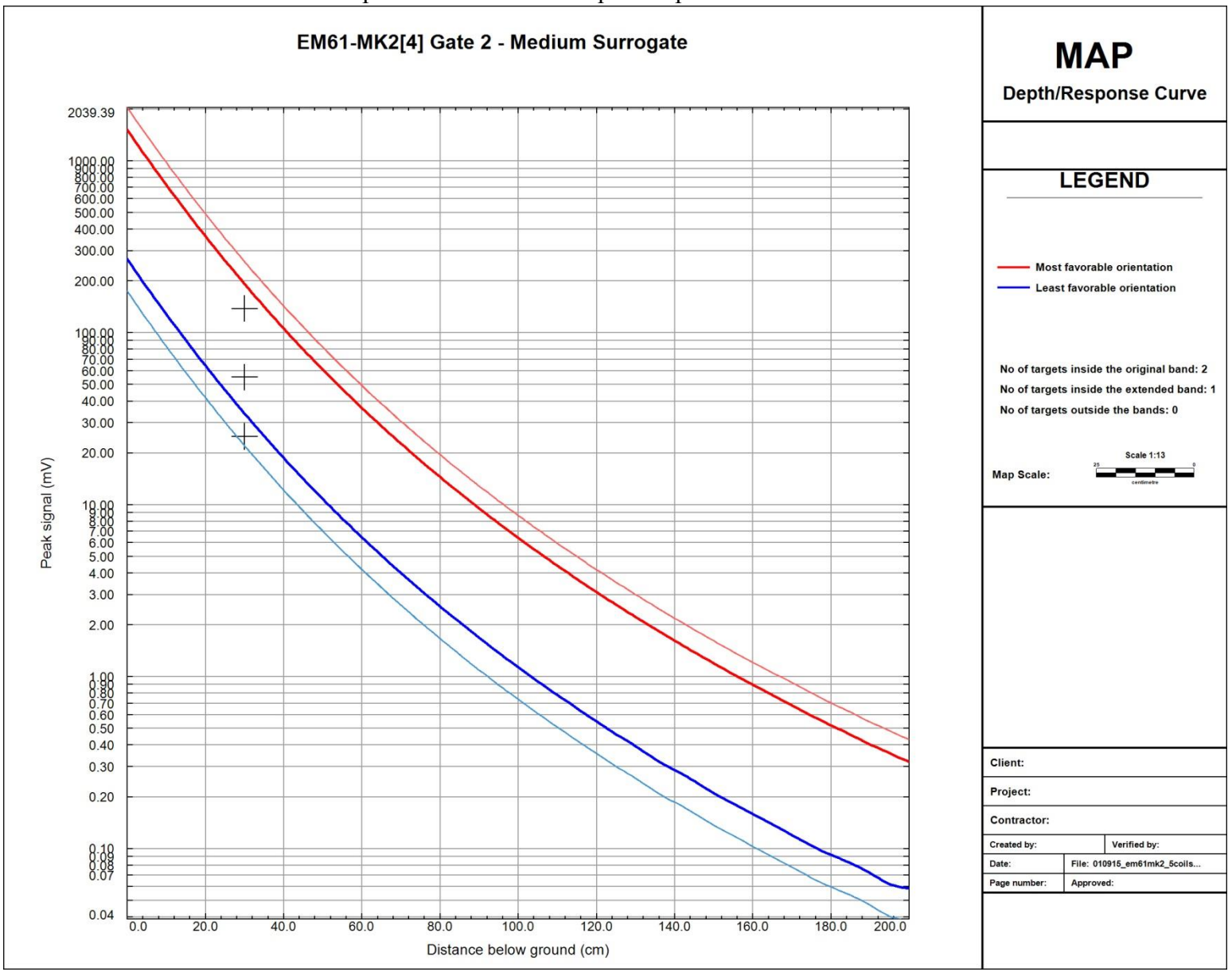


Figure C-426
1/9/2015 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

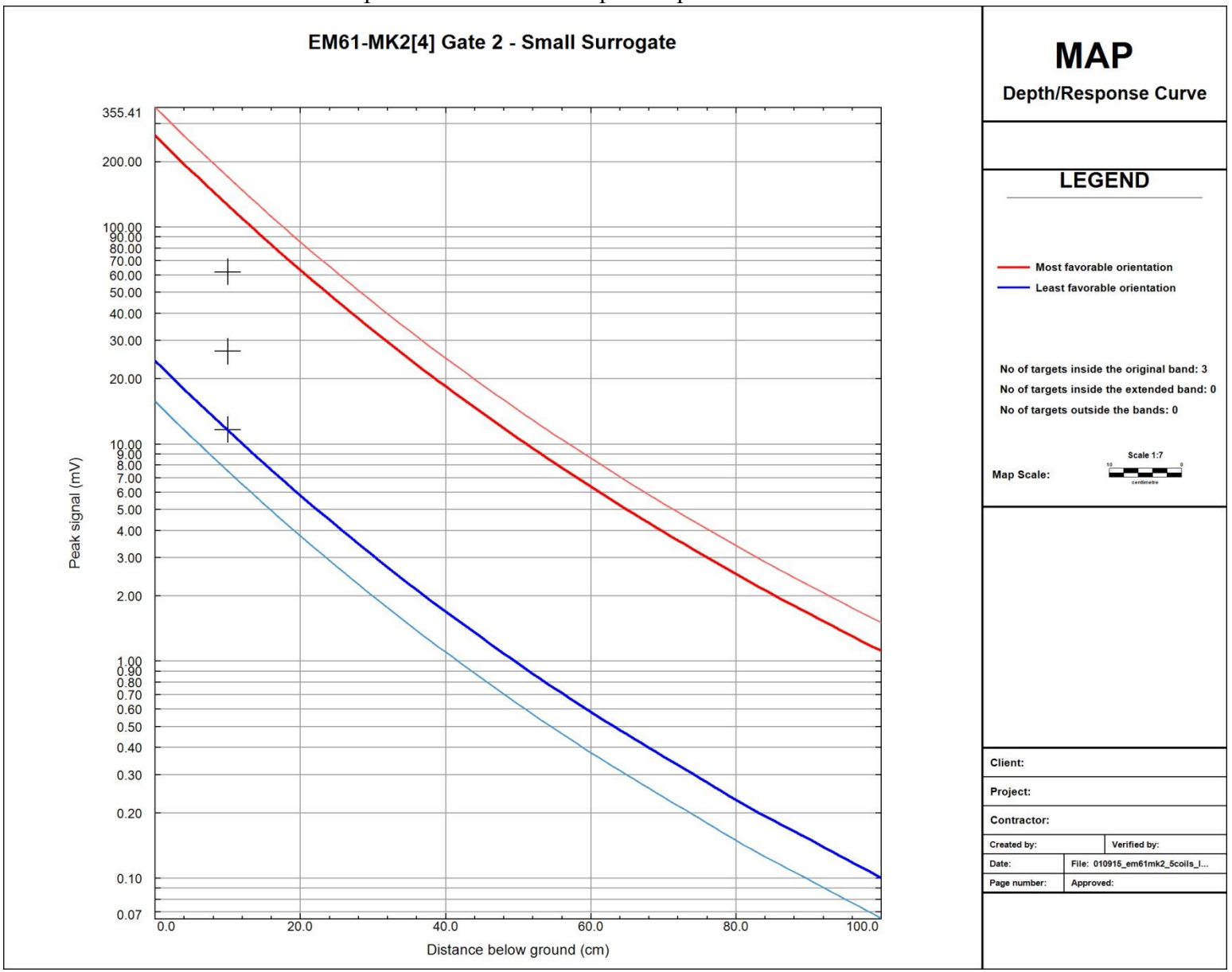


Figure C-427
1/9/2015 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

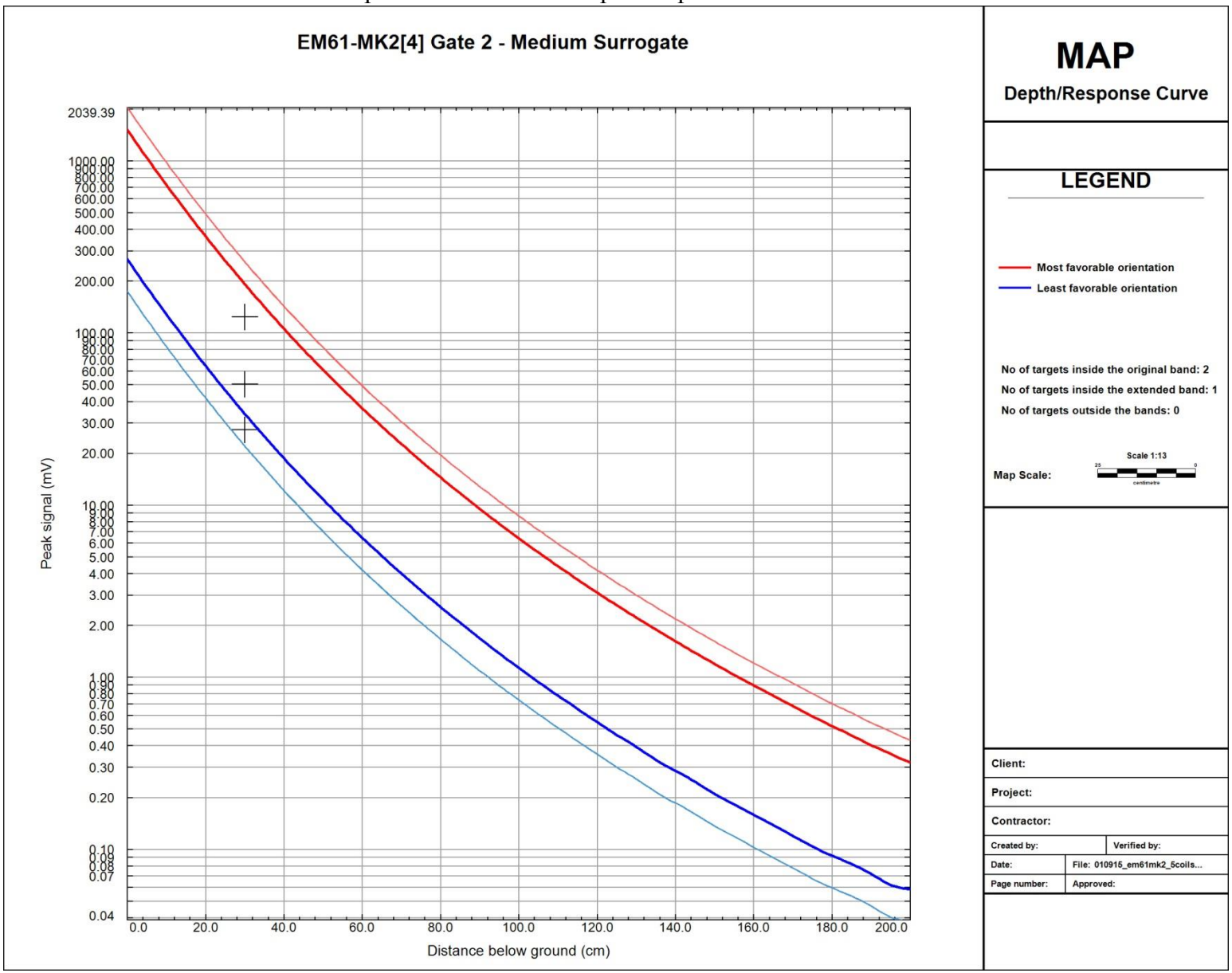


Figure C-428
1/9/2015 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

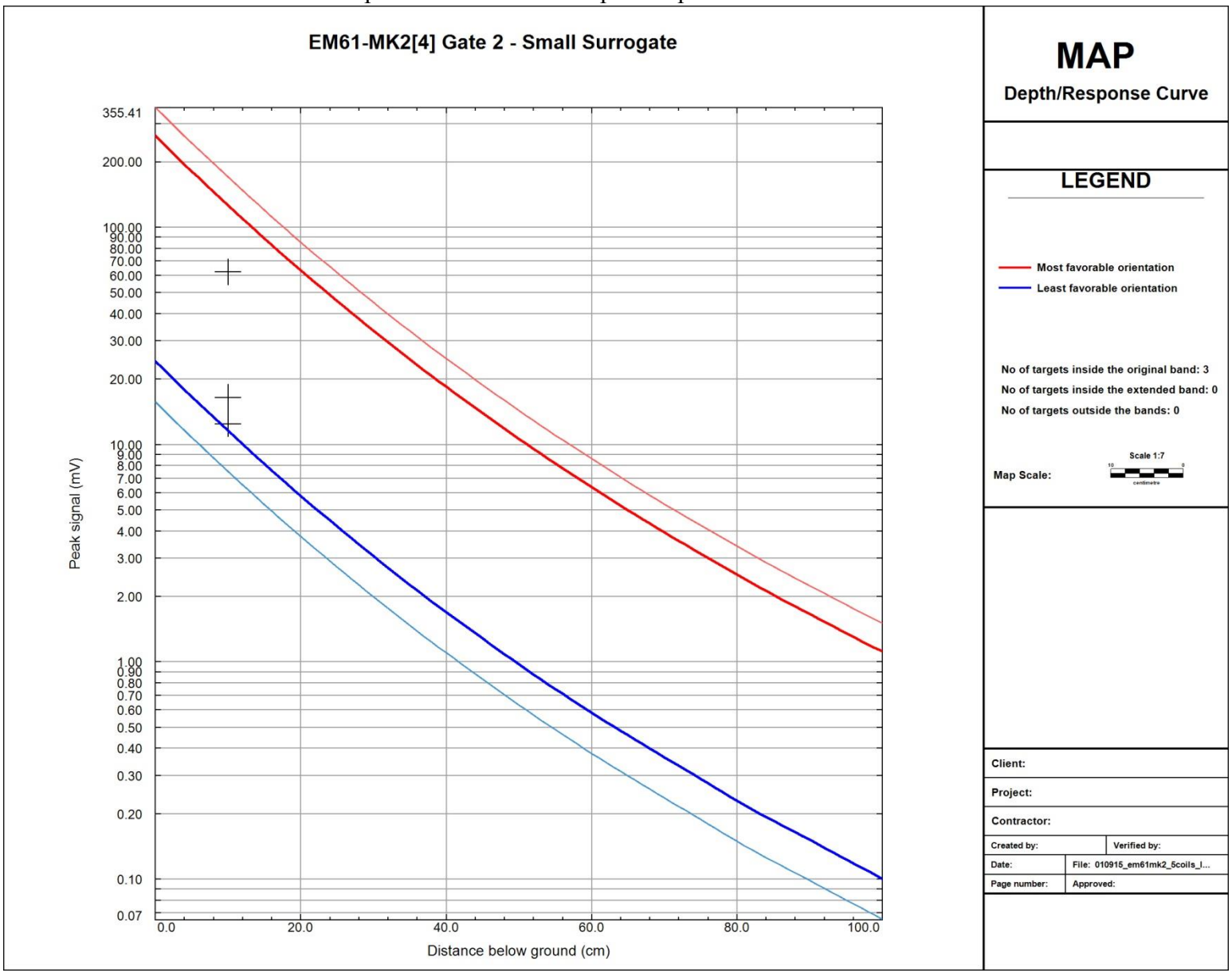


Figure C-429
1/9/2015 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

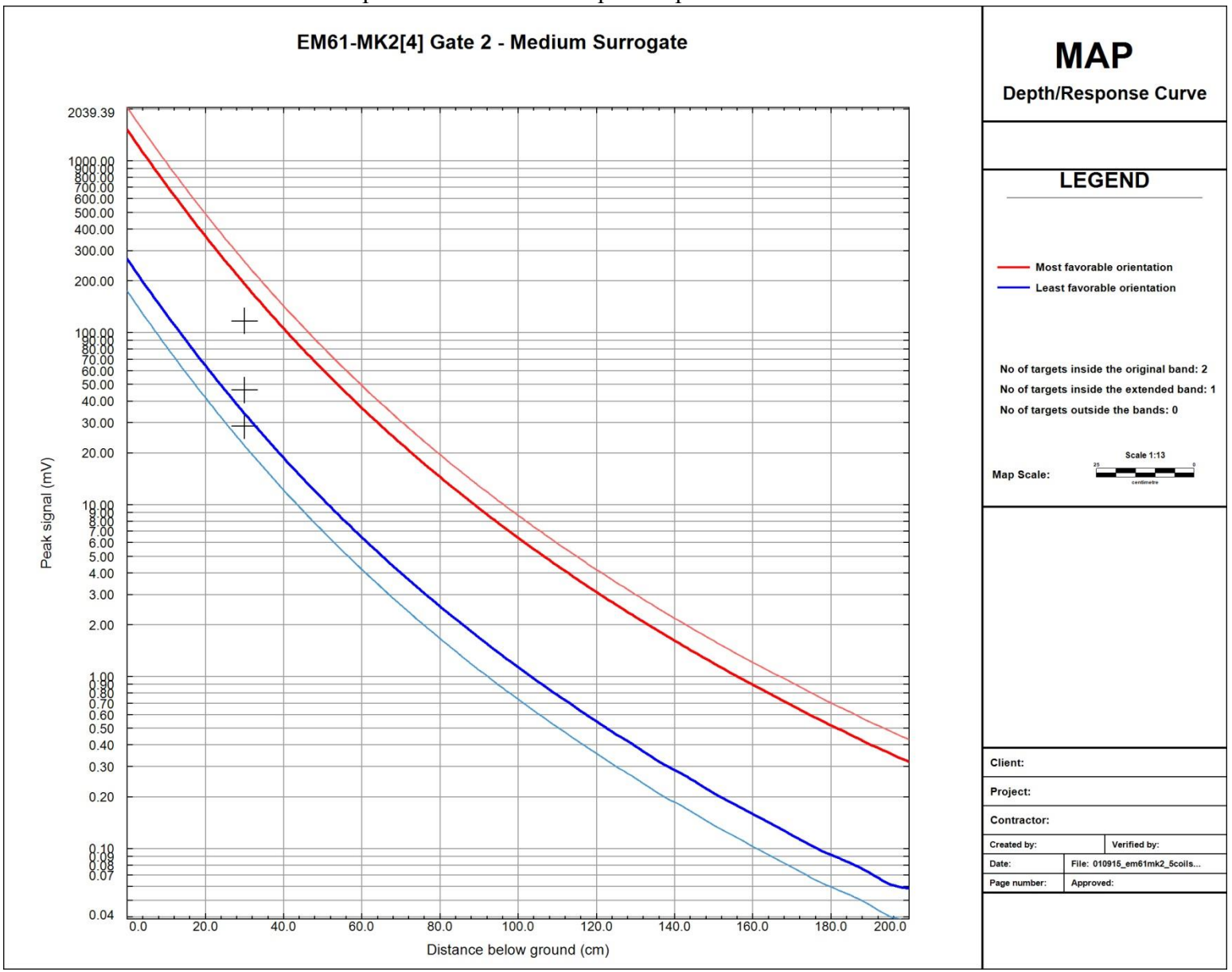


Figure C-430
1/9/2015 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

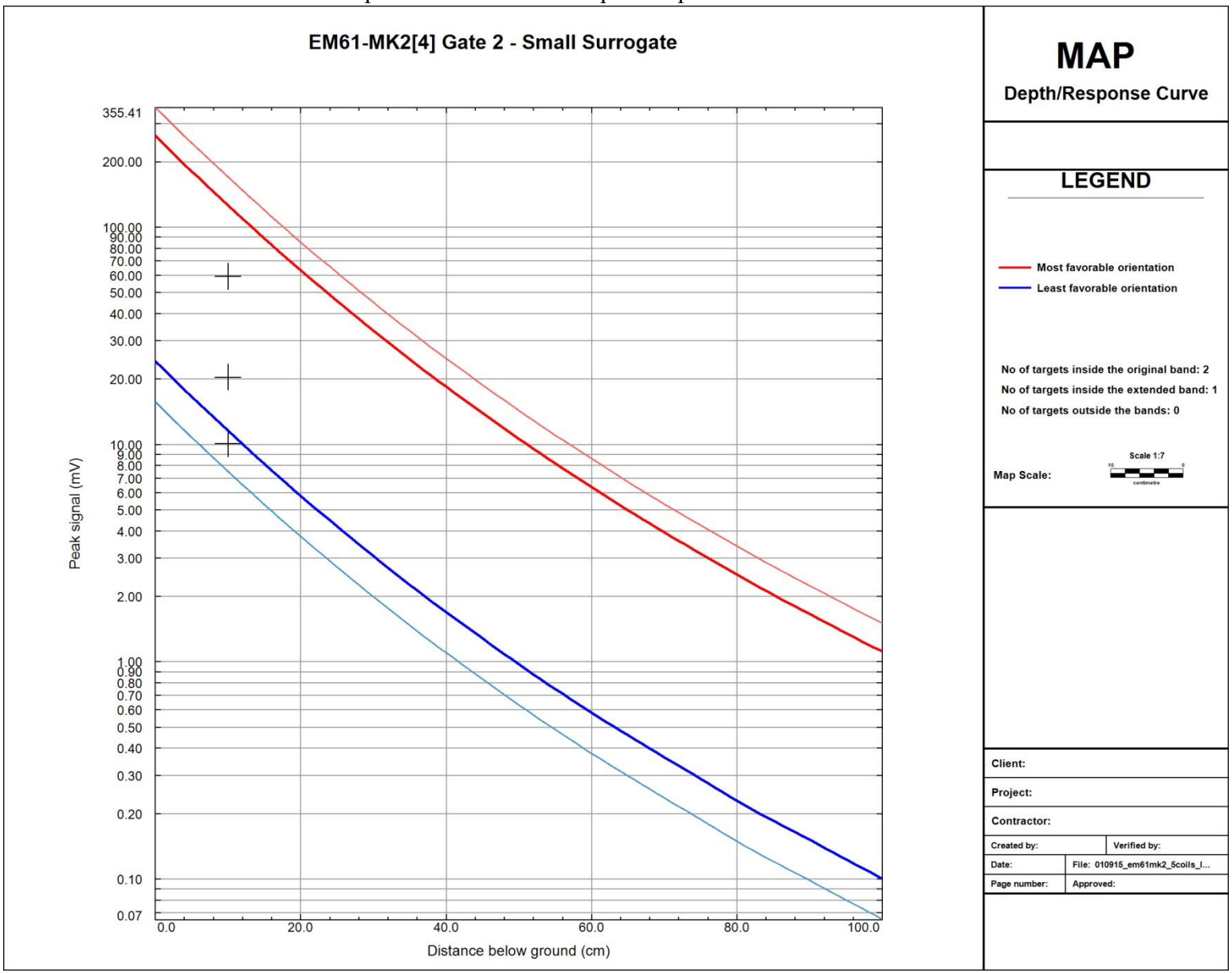


Figure C-431
1/9/2015 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

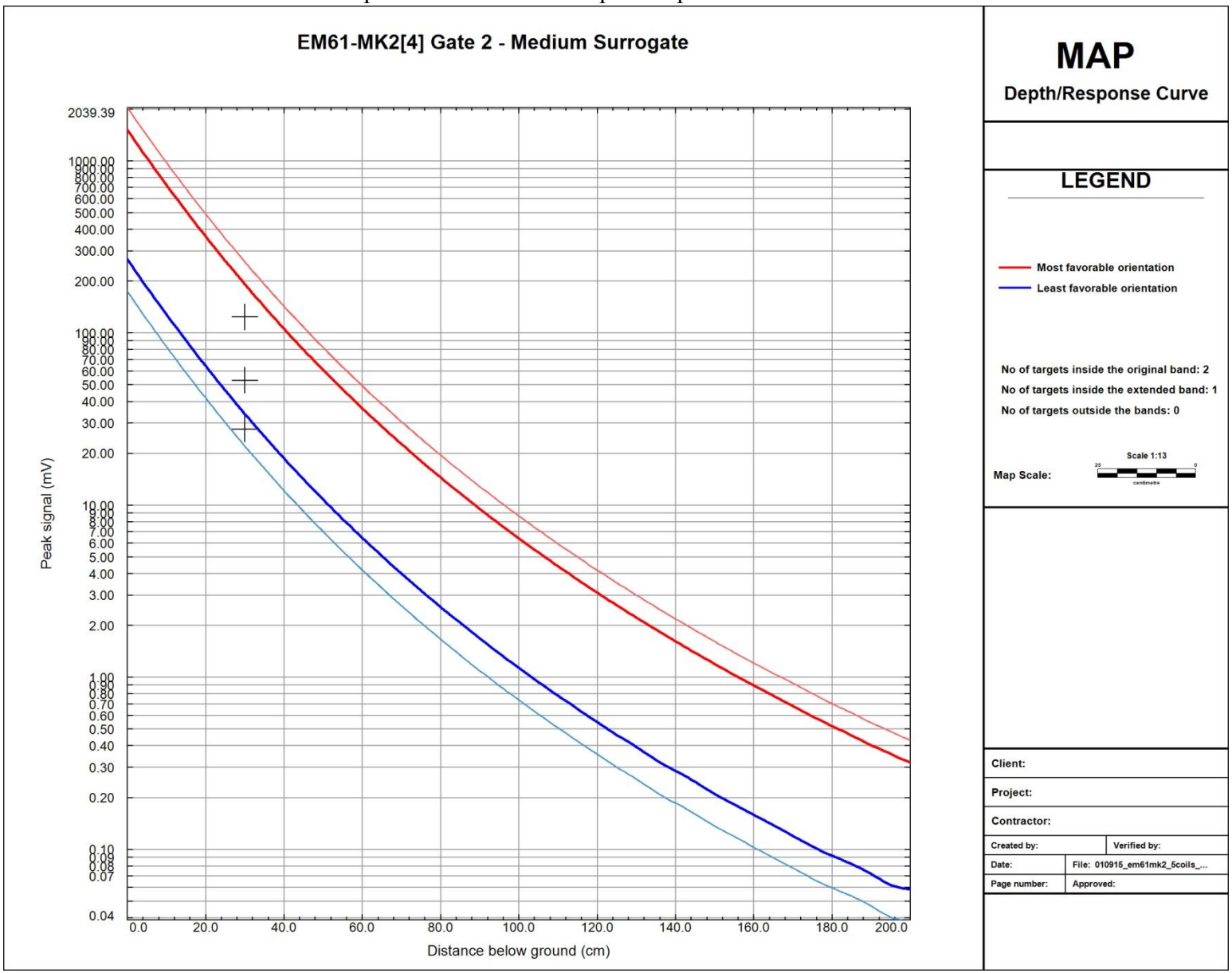


Figure C-432
1/9/2015 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

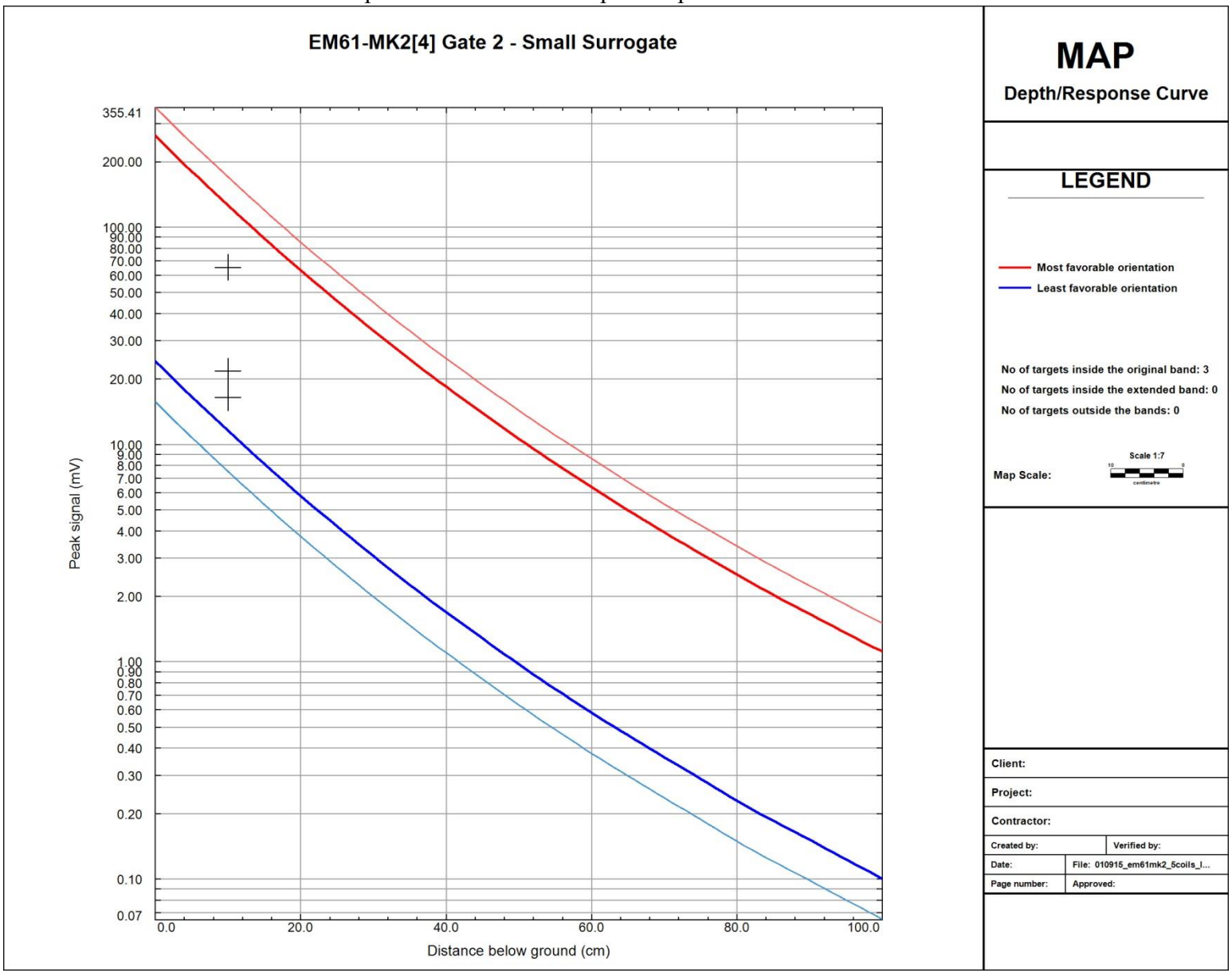


Figure C-433
1/9/2015 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

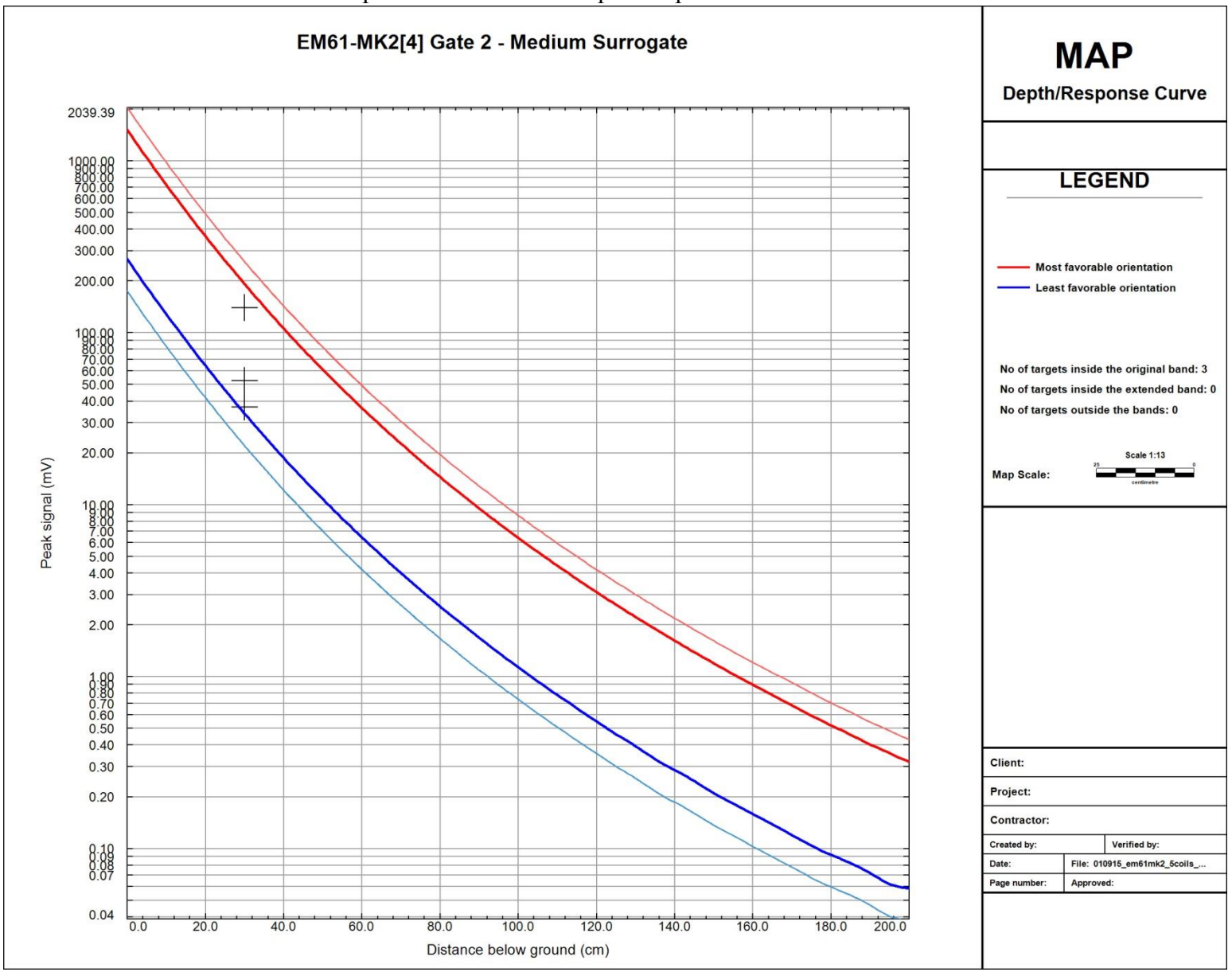


Figure C-434
1/9/2015 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves SR864 MRS

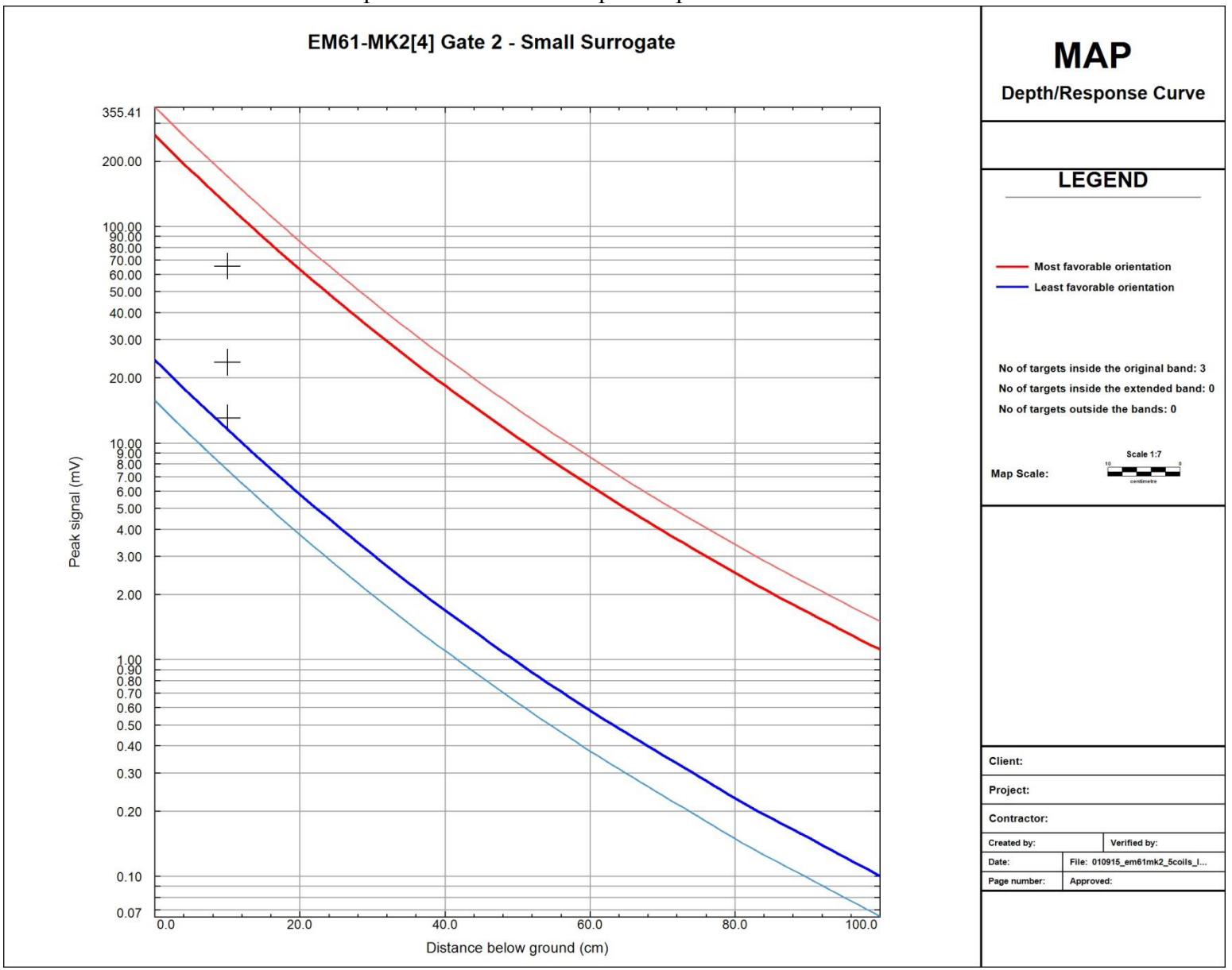


Figure C-435
1/13/2015 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

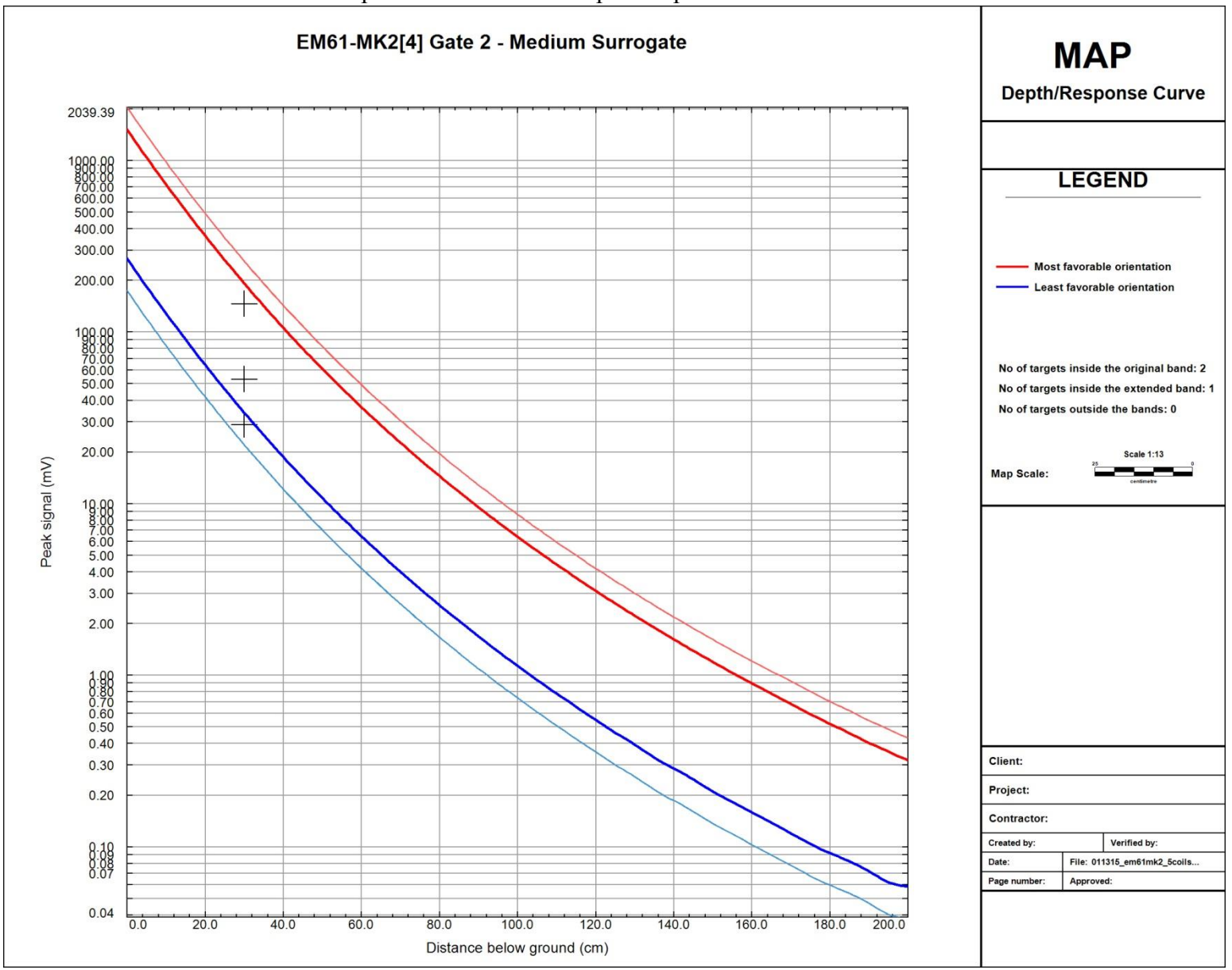


Figure C-436
1/13/2015 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

Figure C-437
1/13/2015 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

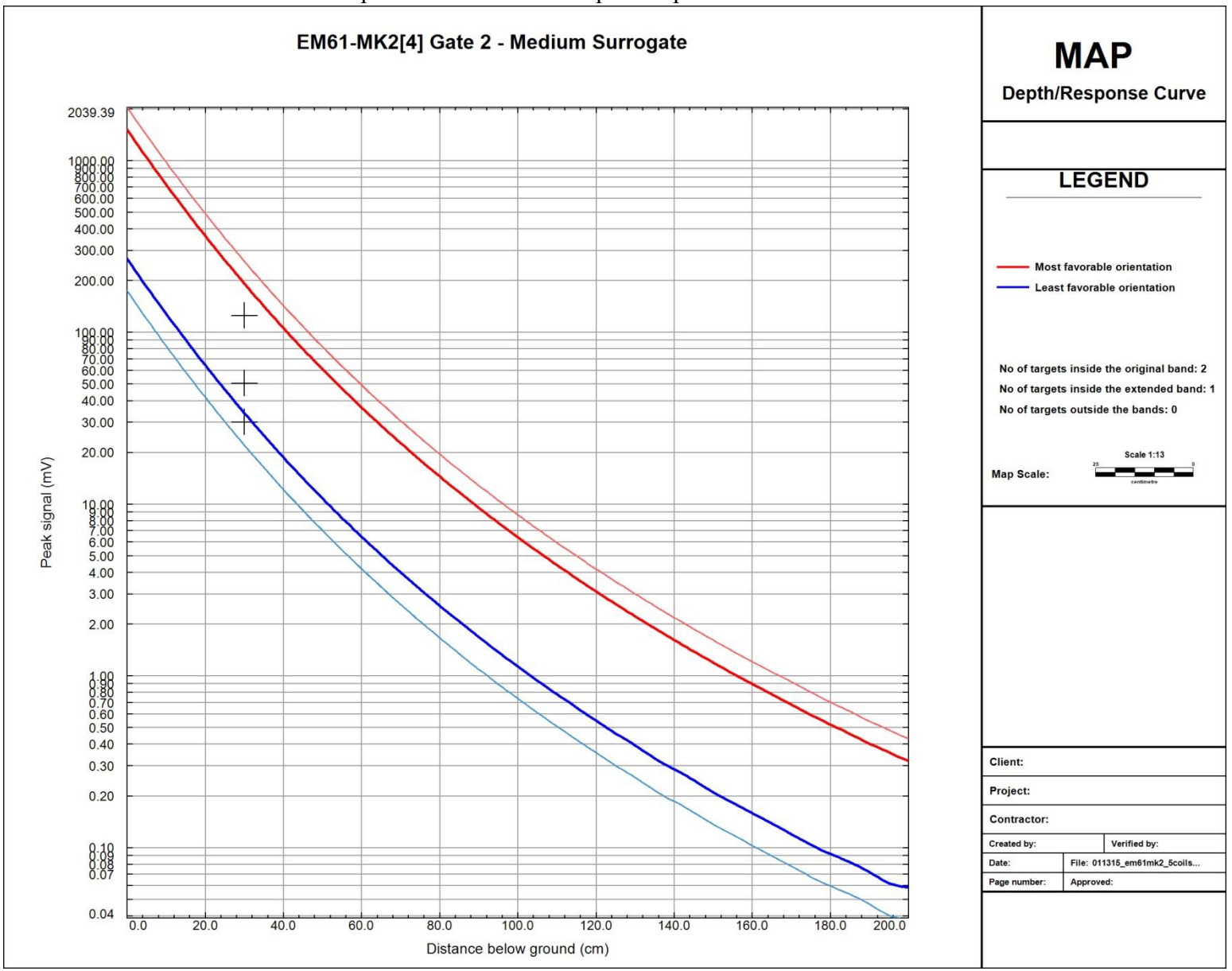


Figure C-438
1/13/2015 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

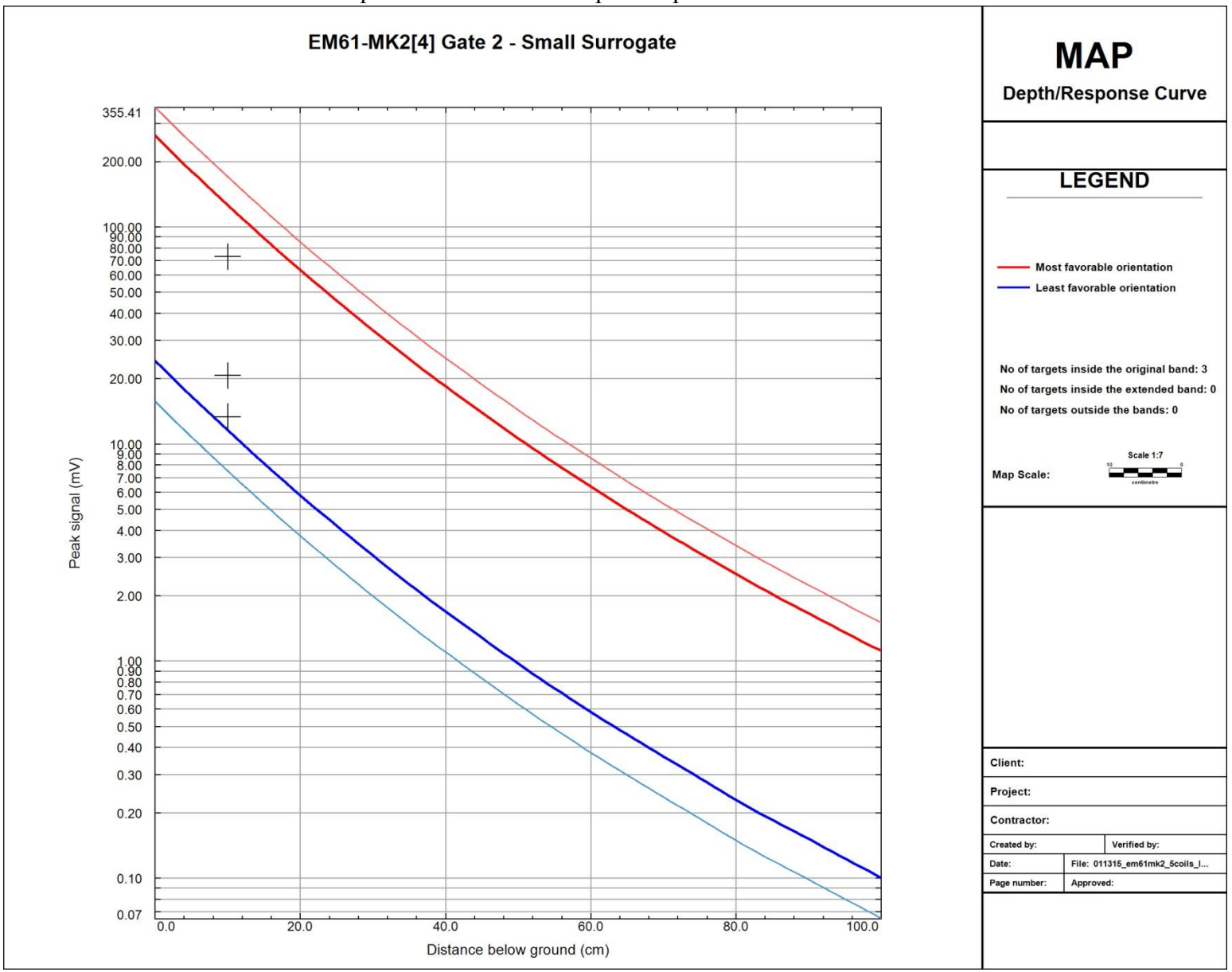


Figure C-439
1/13/2015 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

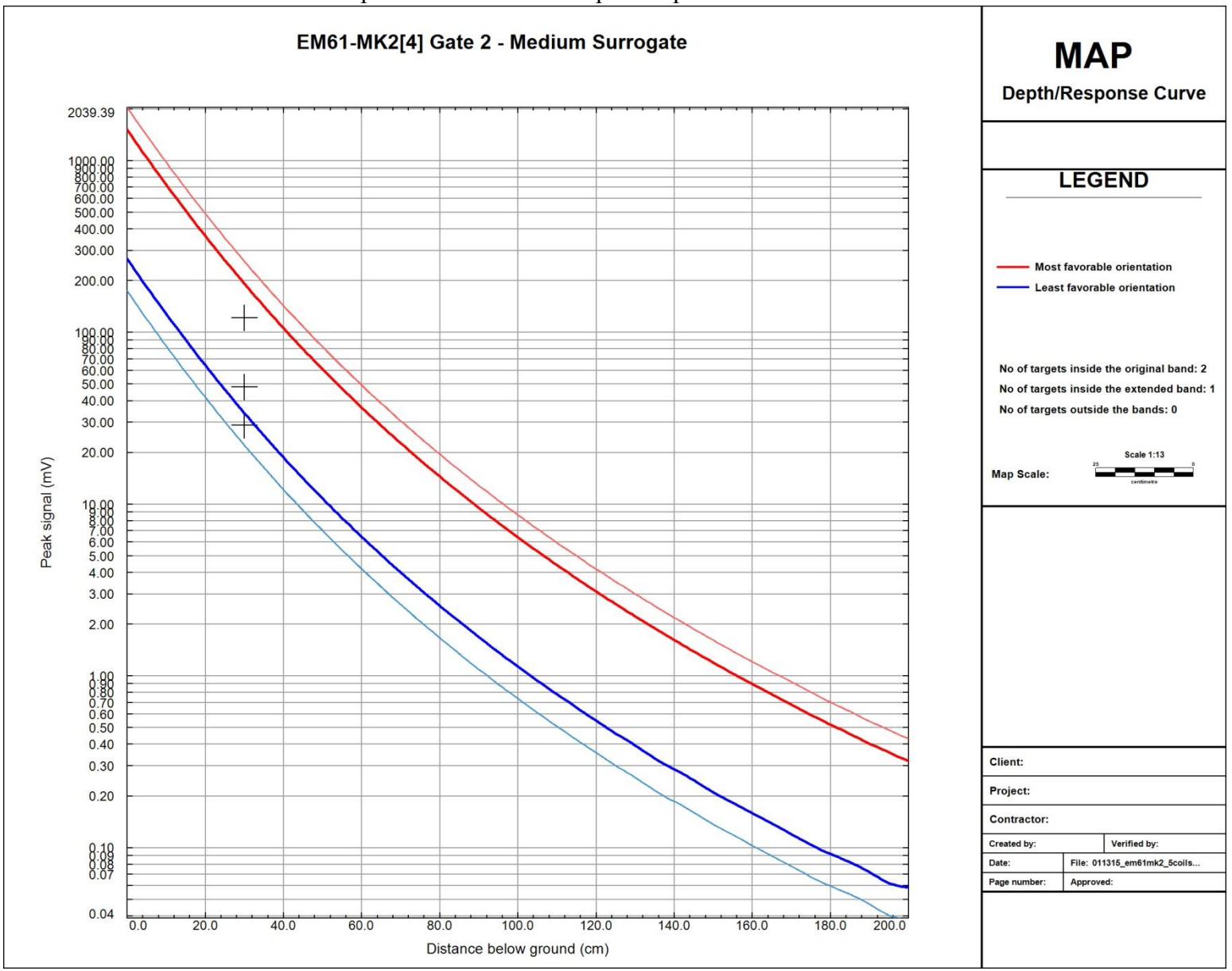


Figure C-440
1/13/2015 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

Figure C-441
1/13/2015 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

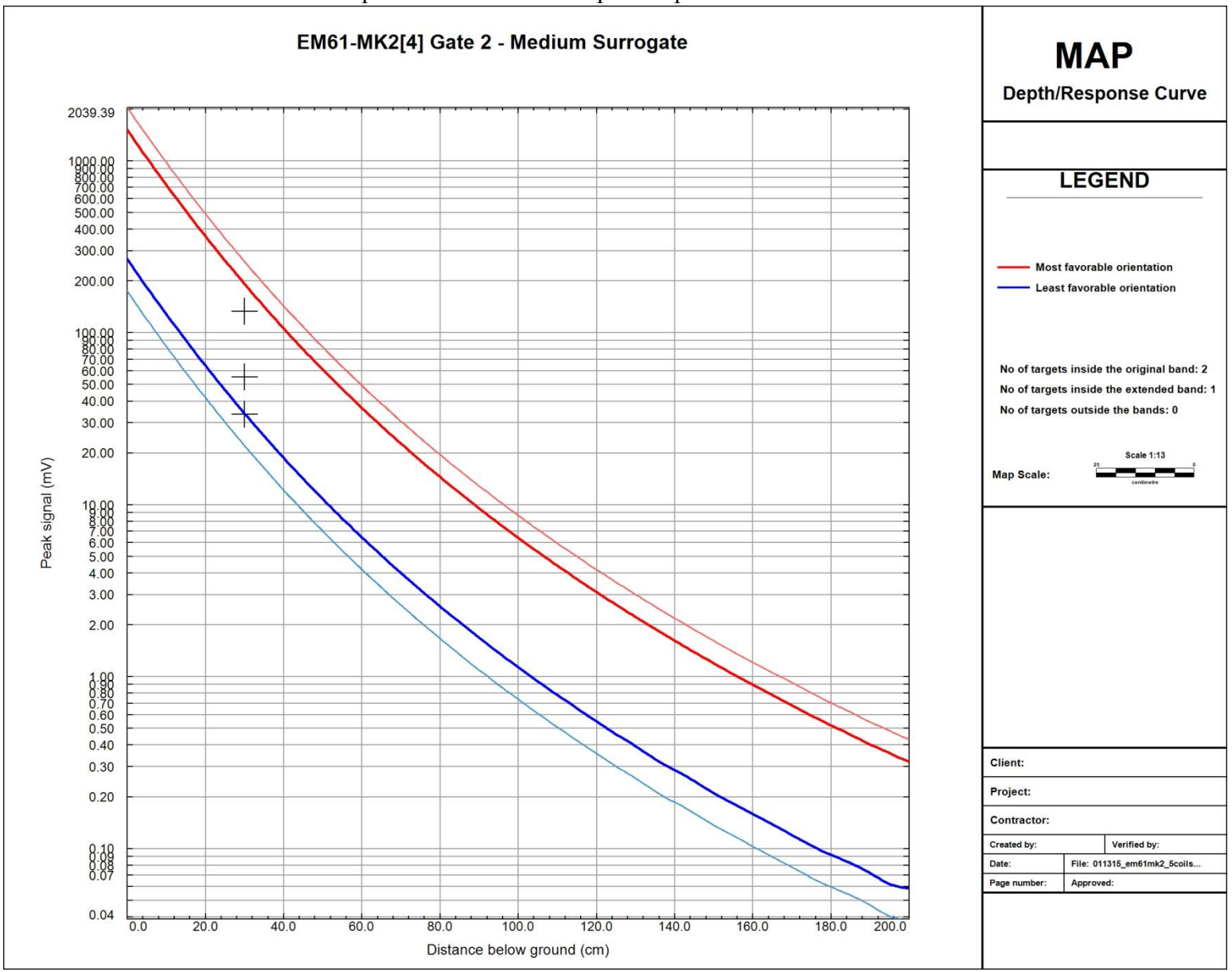


Figure C-442
1/13/2015 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

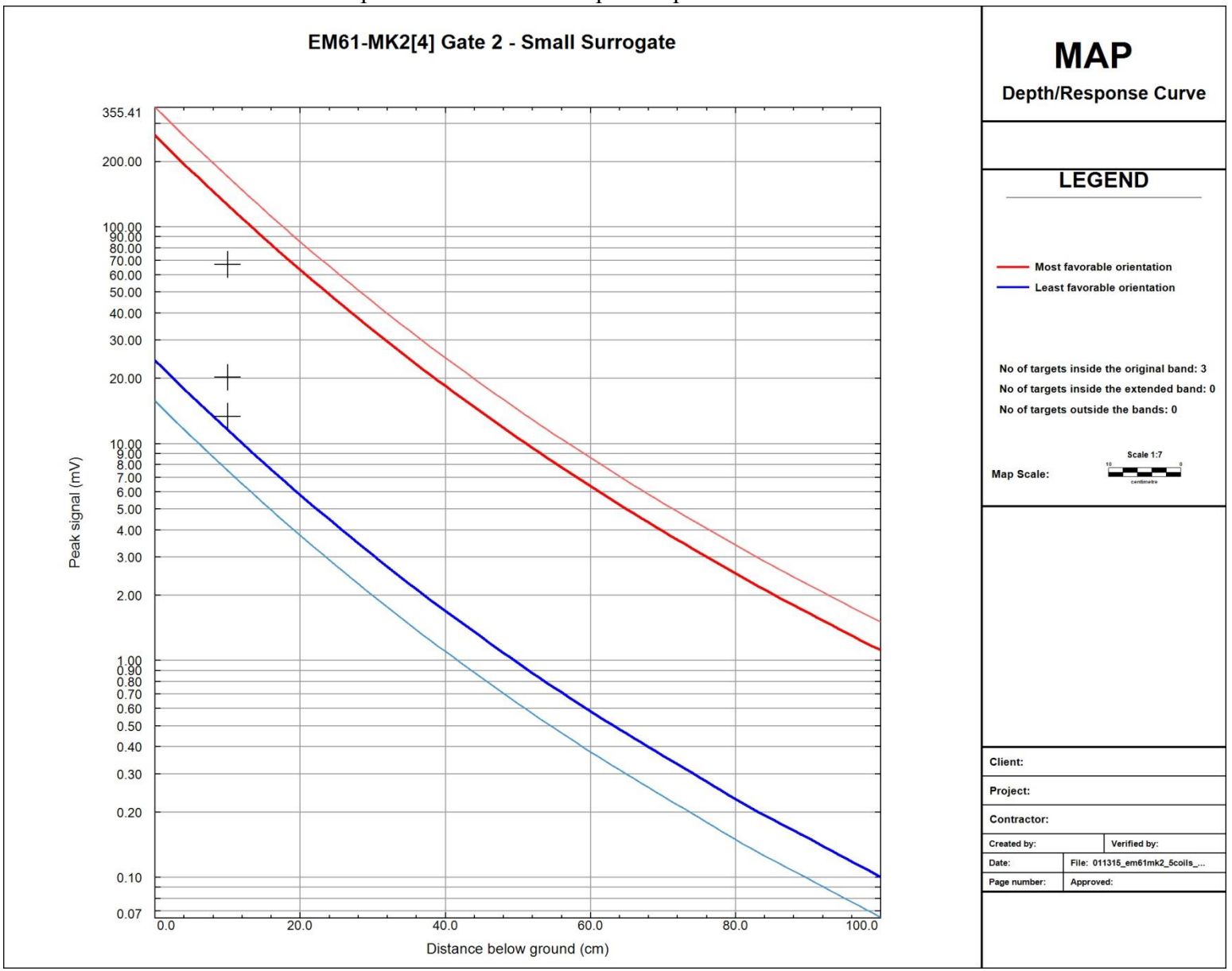


Figure C-443
1/13/2015 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

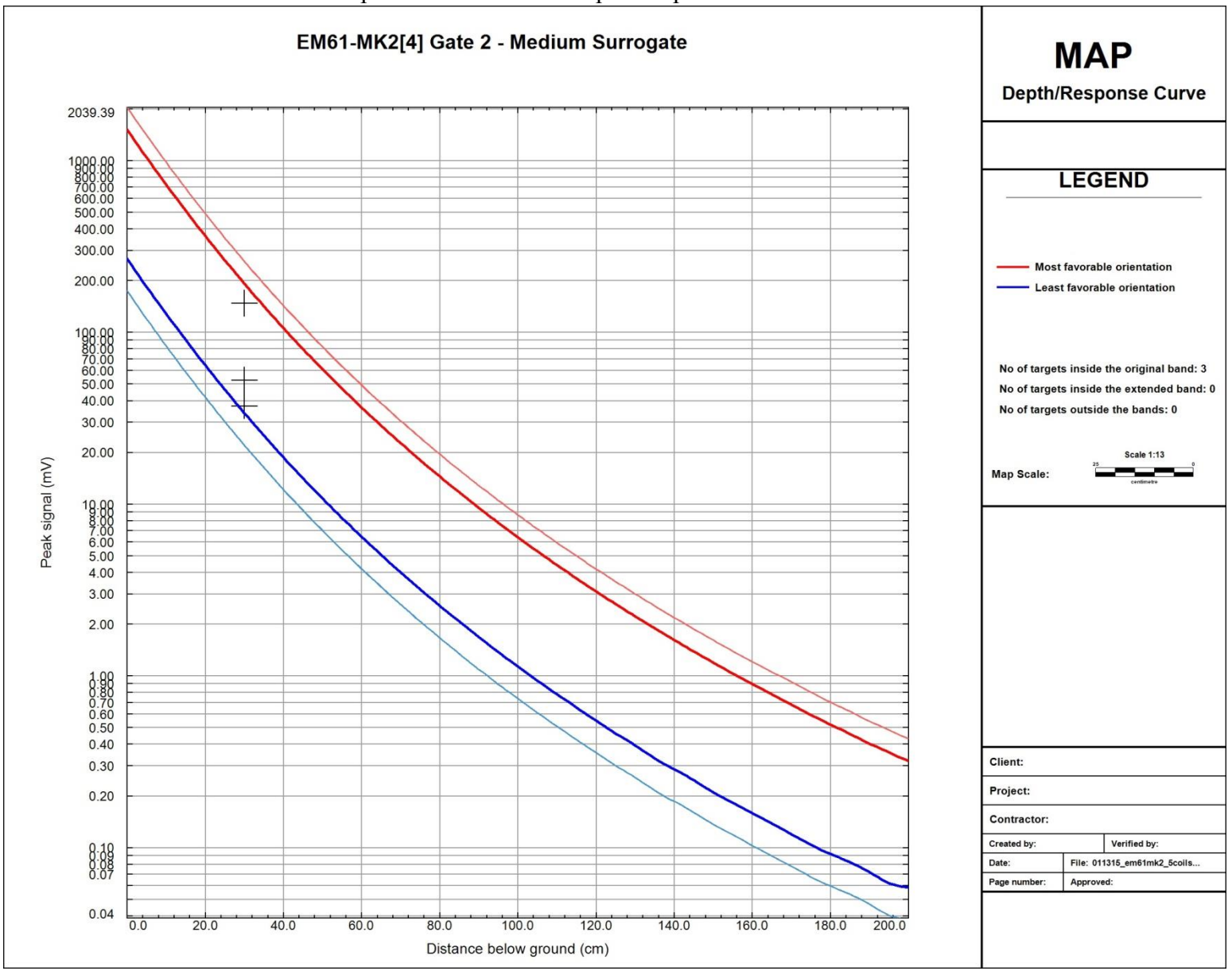


Figure C-444
1/13/2015 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

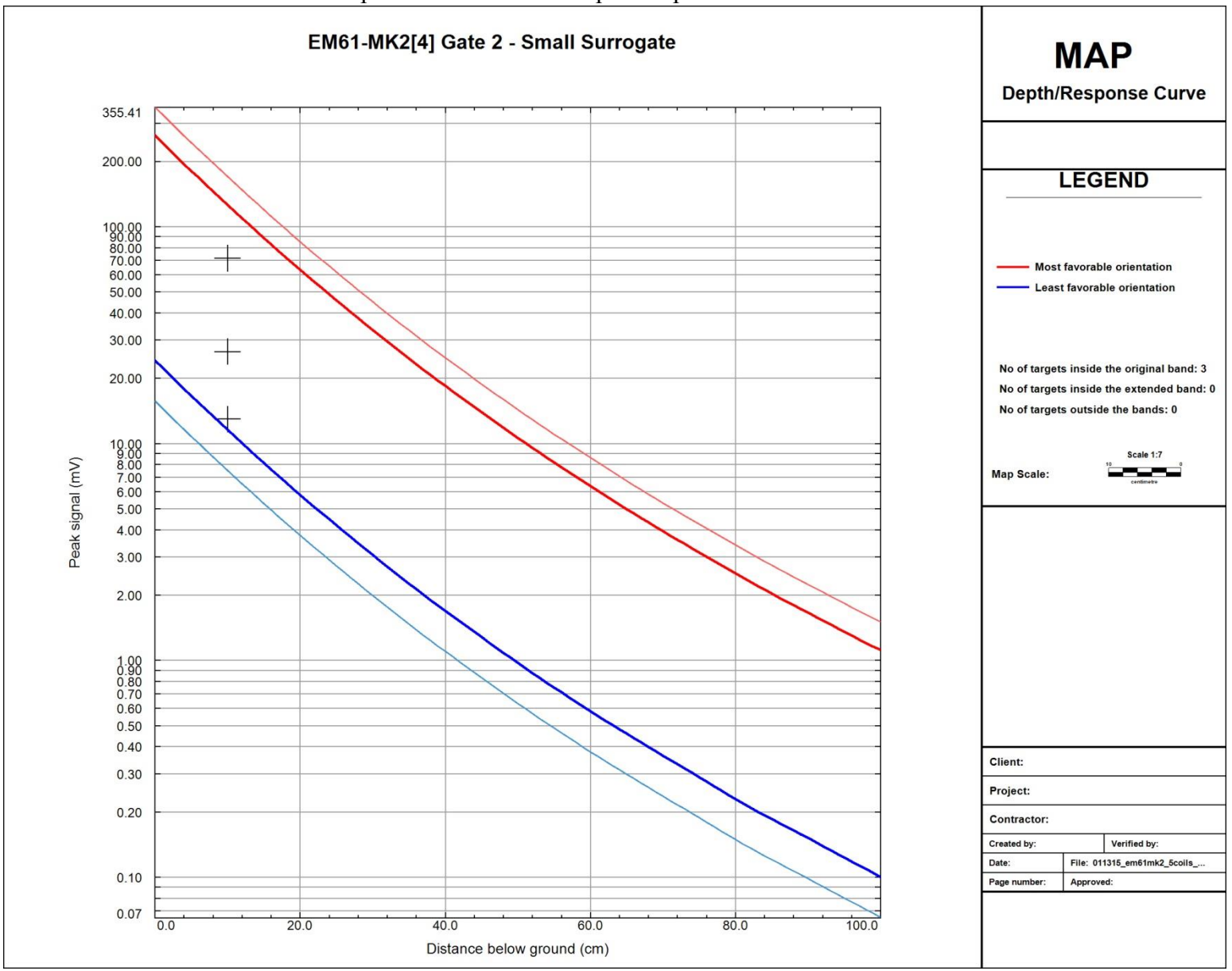


Figure C-445
1/13/2015 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

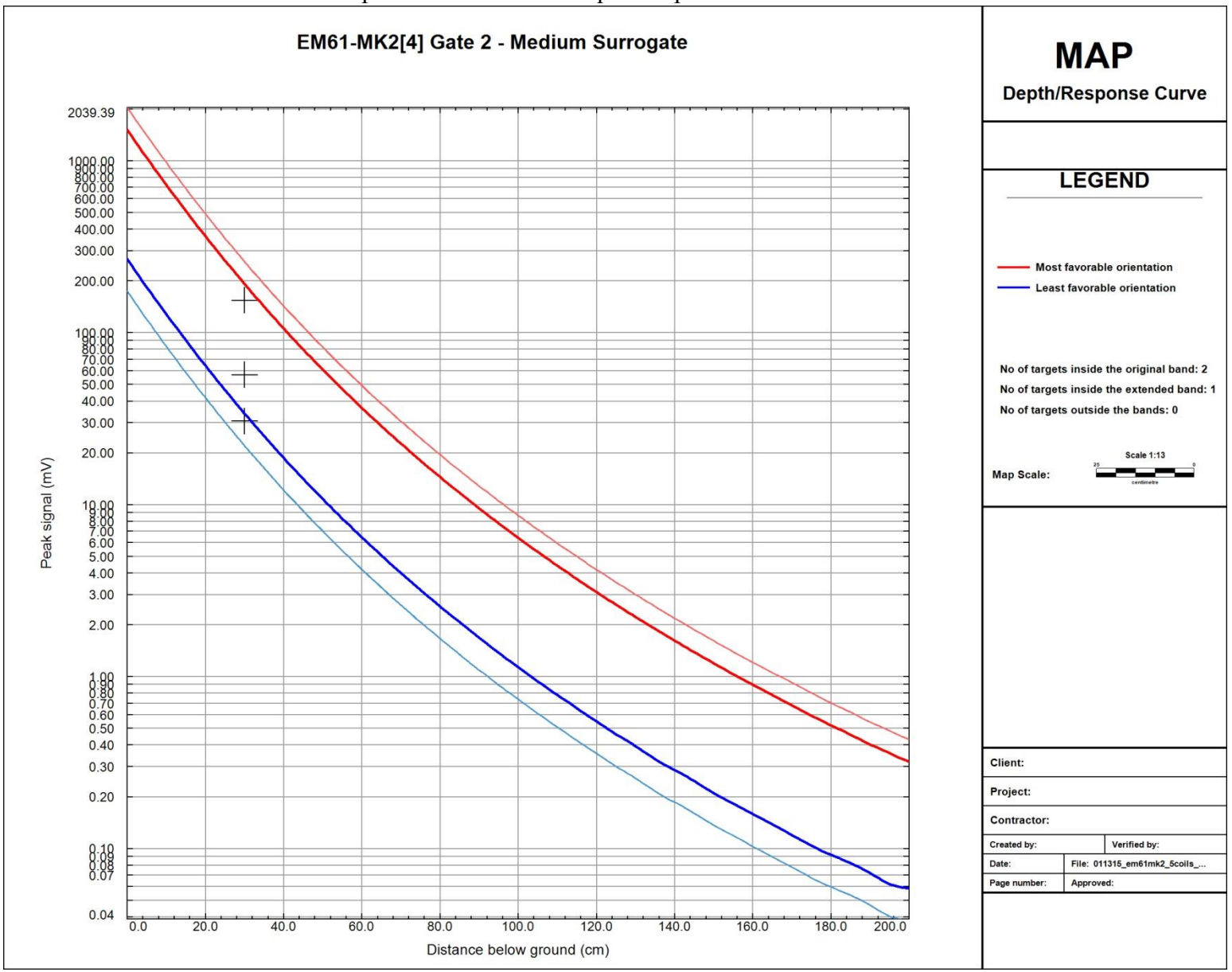


Figure C-446
1/13/2015 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

Figure C-447
1/13/2015 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

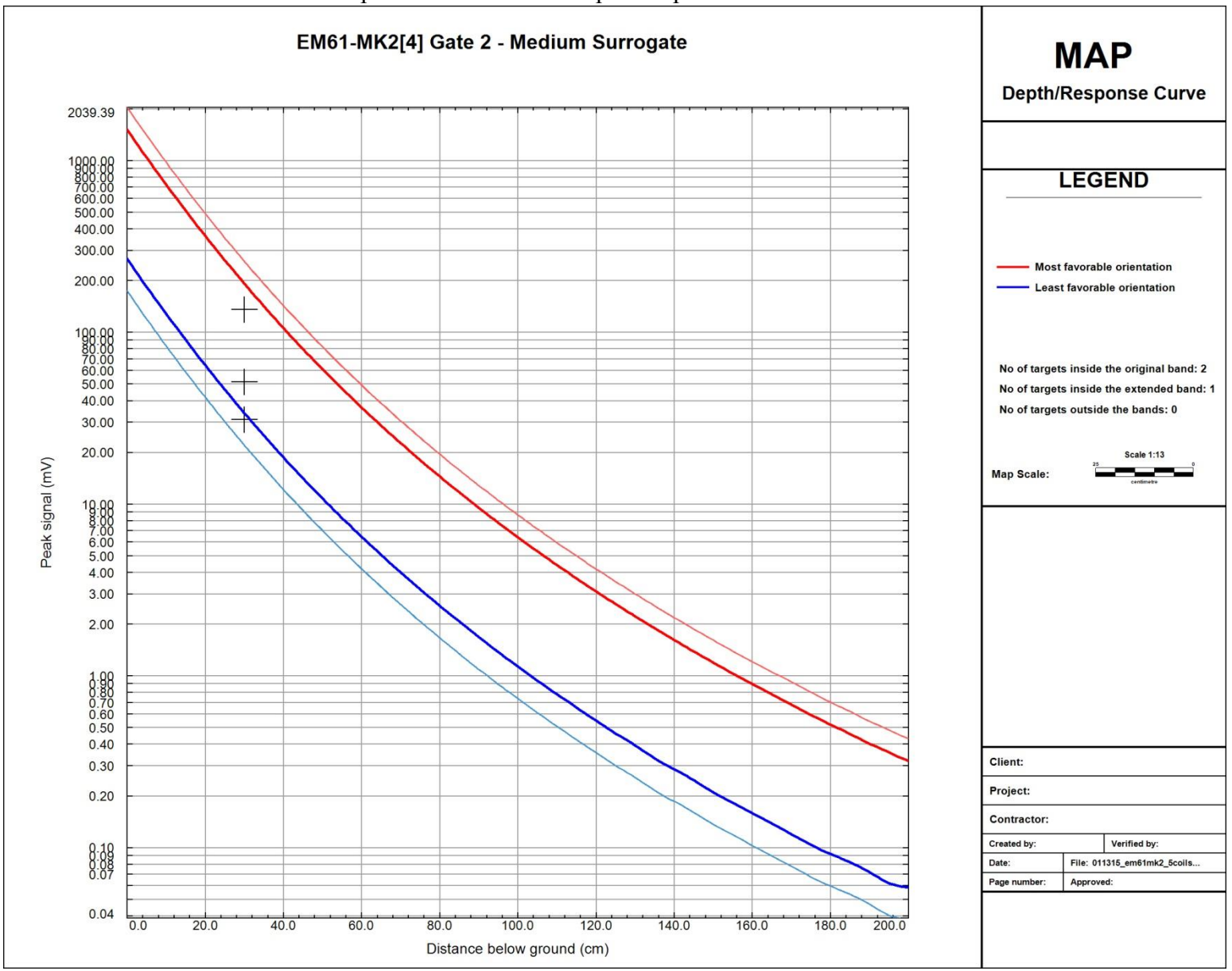


Figure C-448
1/13/2015 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

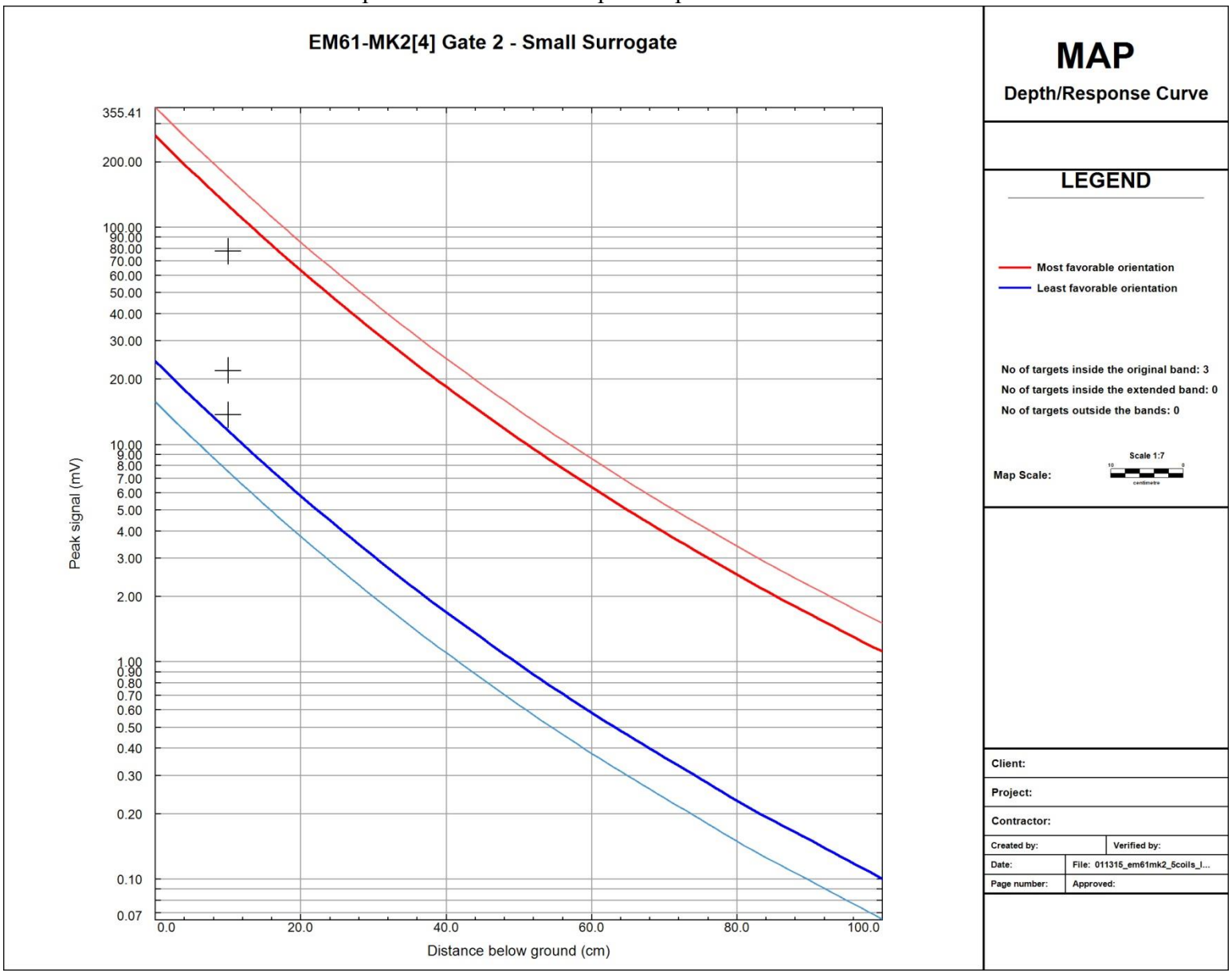


Figure C-449
1/13/2015 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

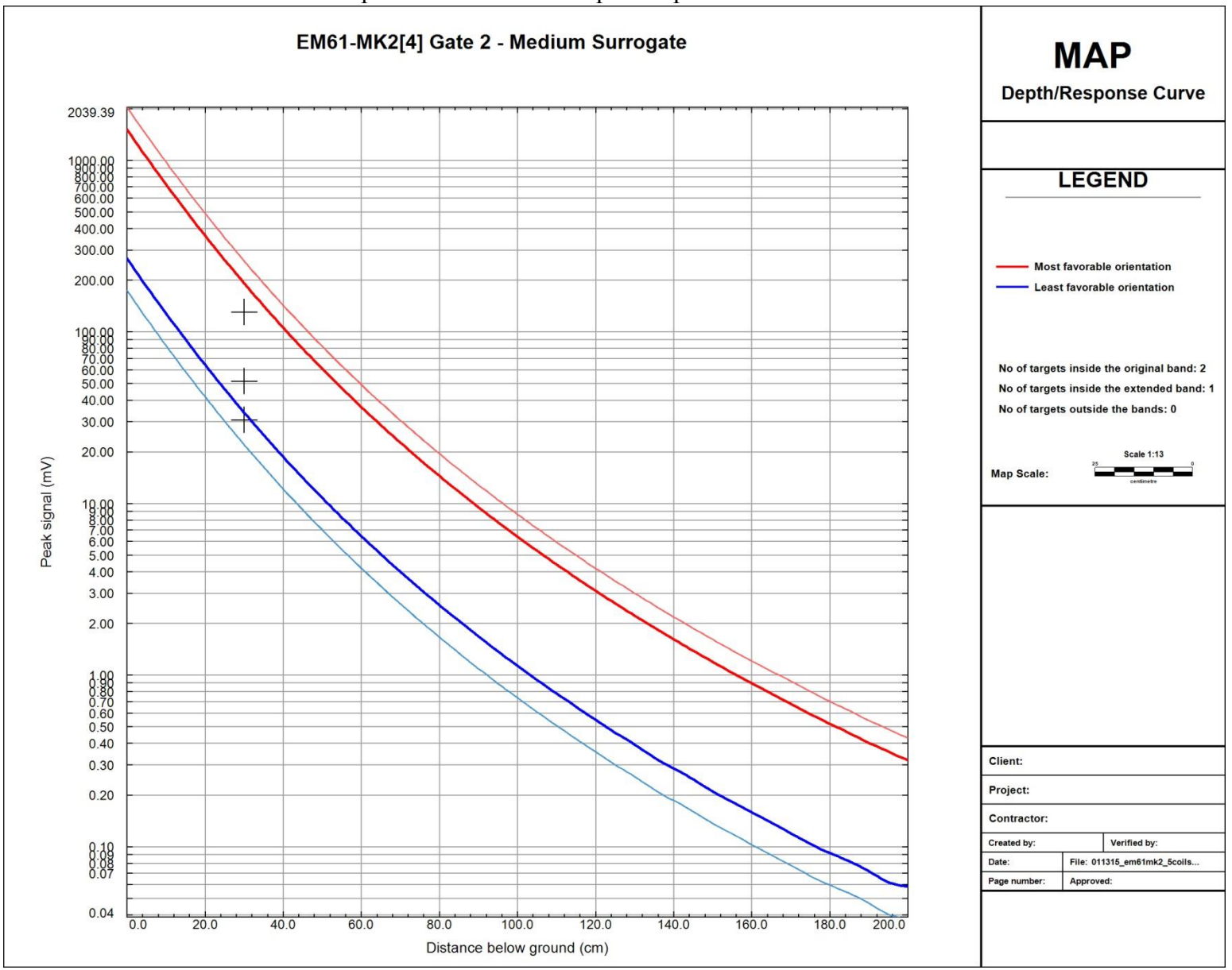


Figure C-450
1/13/2015 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

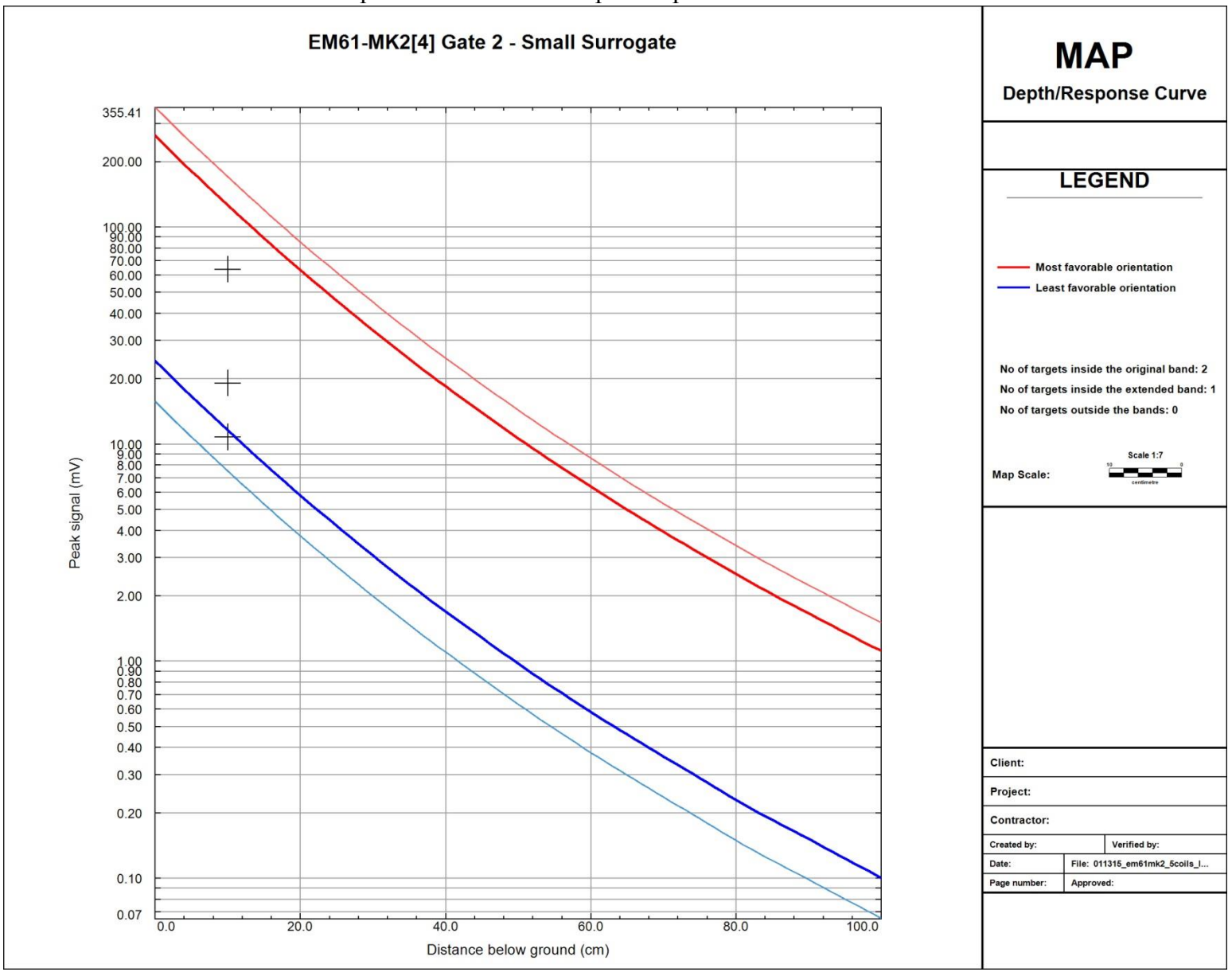


Figure C-451
1/13/2015 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

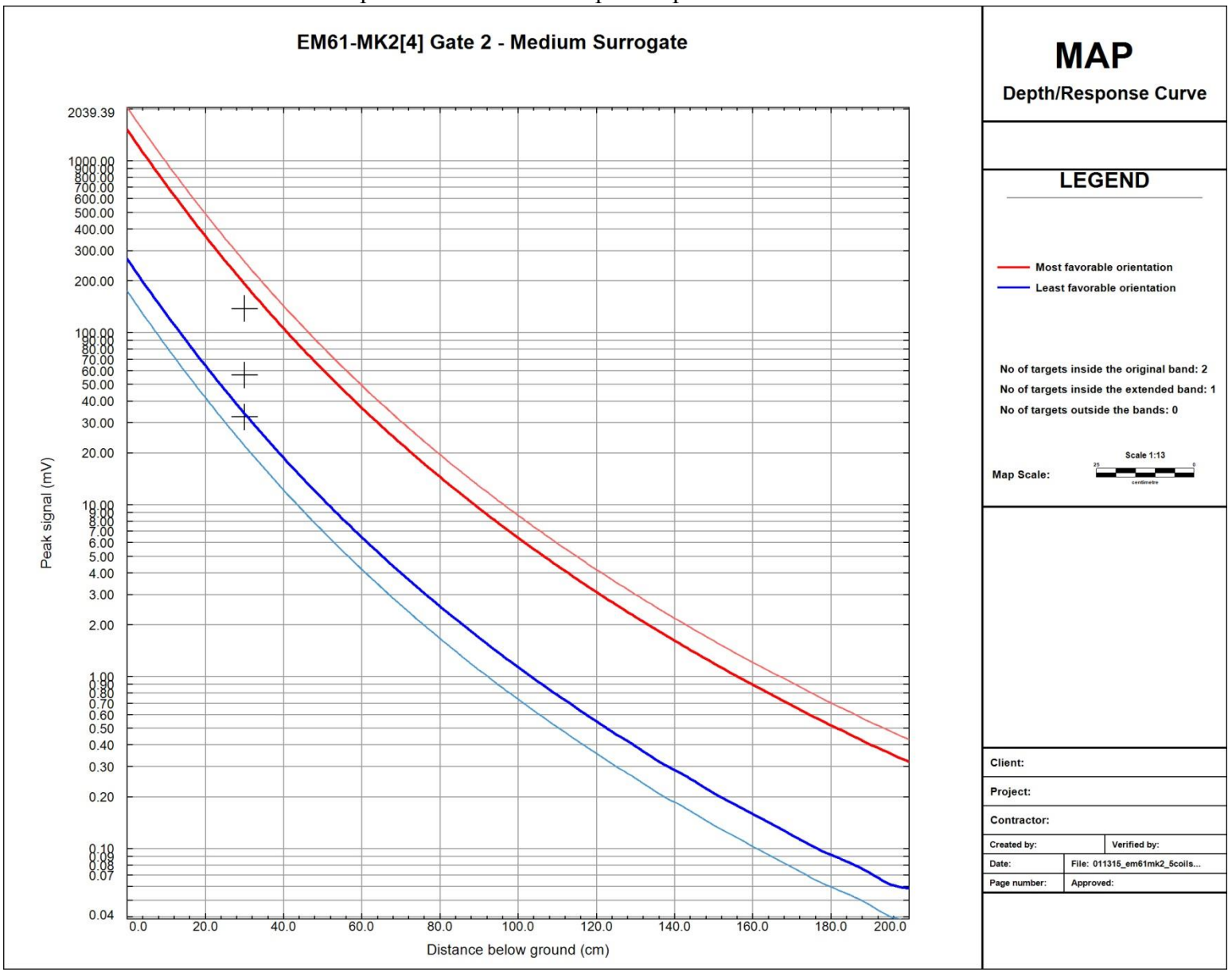


Figure C-452
1/13/2015 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

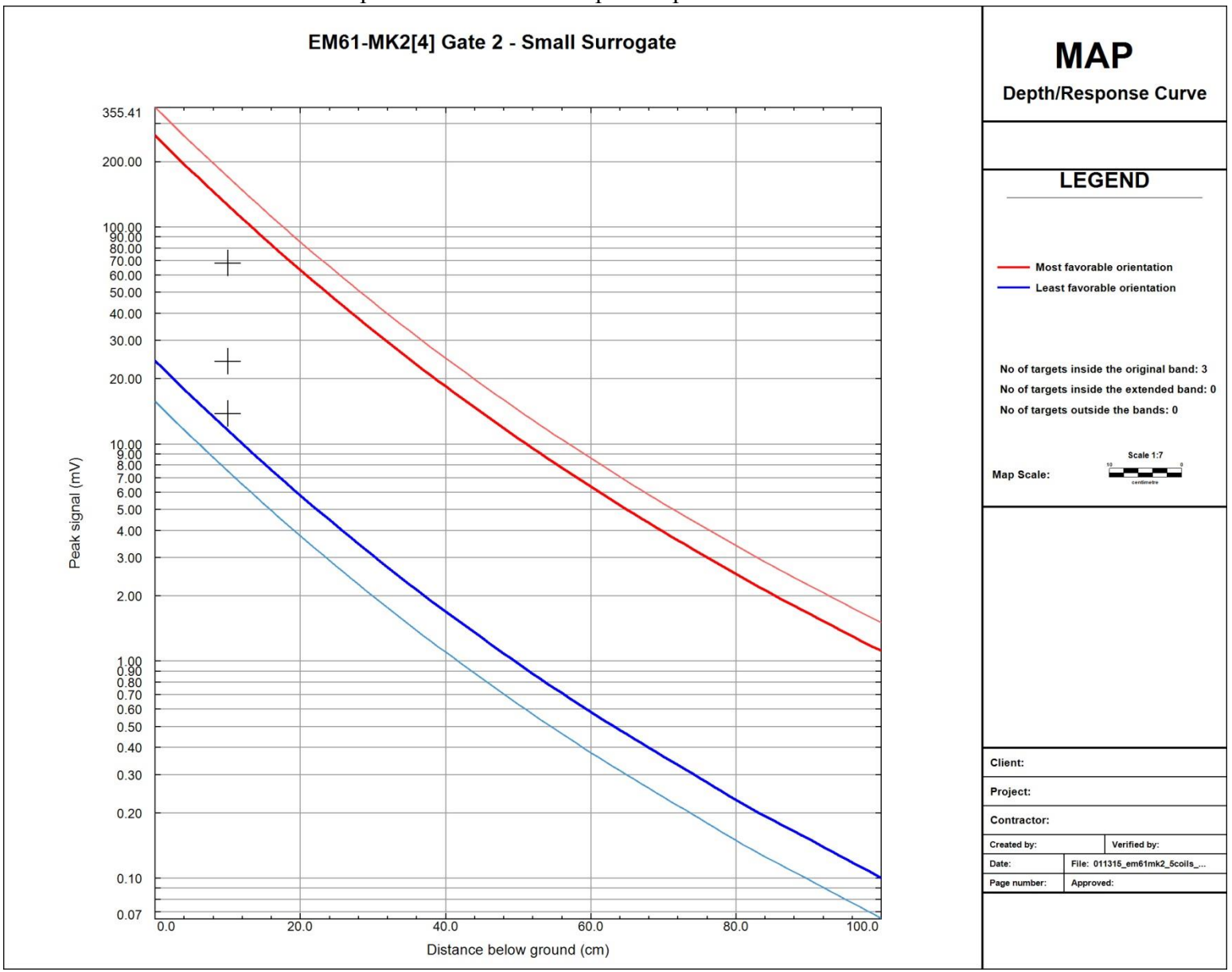


Figure C-453
1/13/2015 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

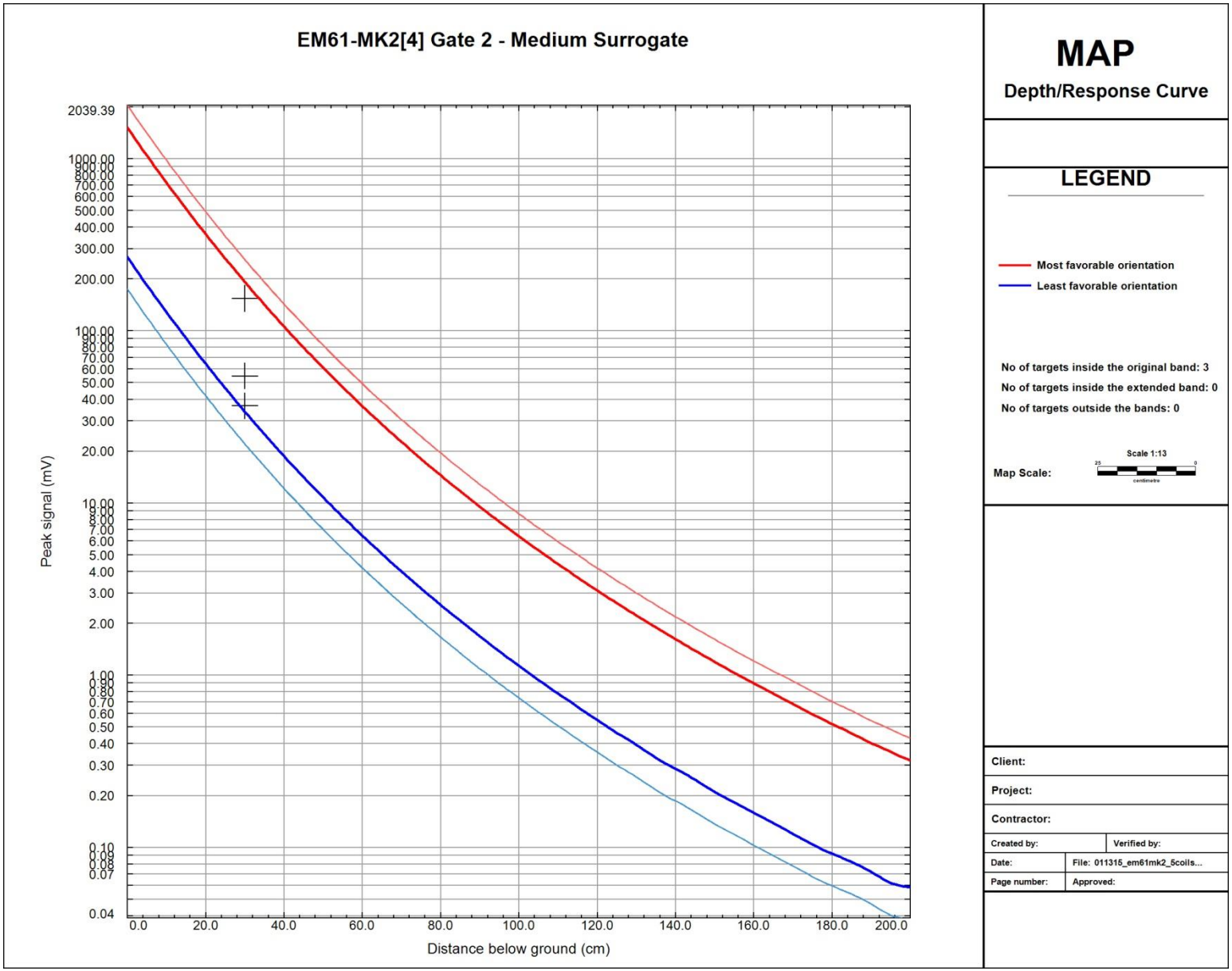


Figure C-454
1/13/2015 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

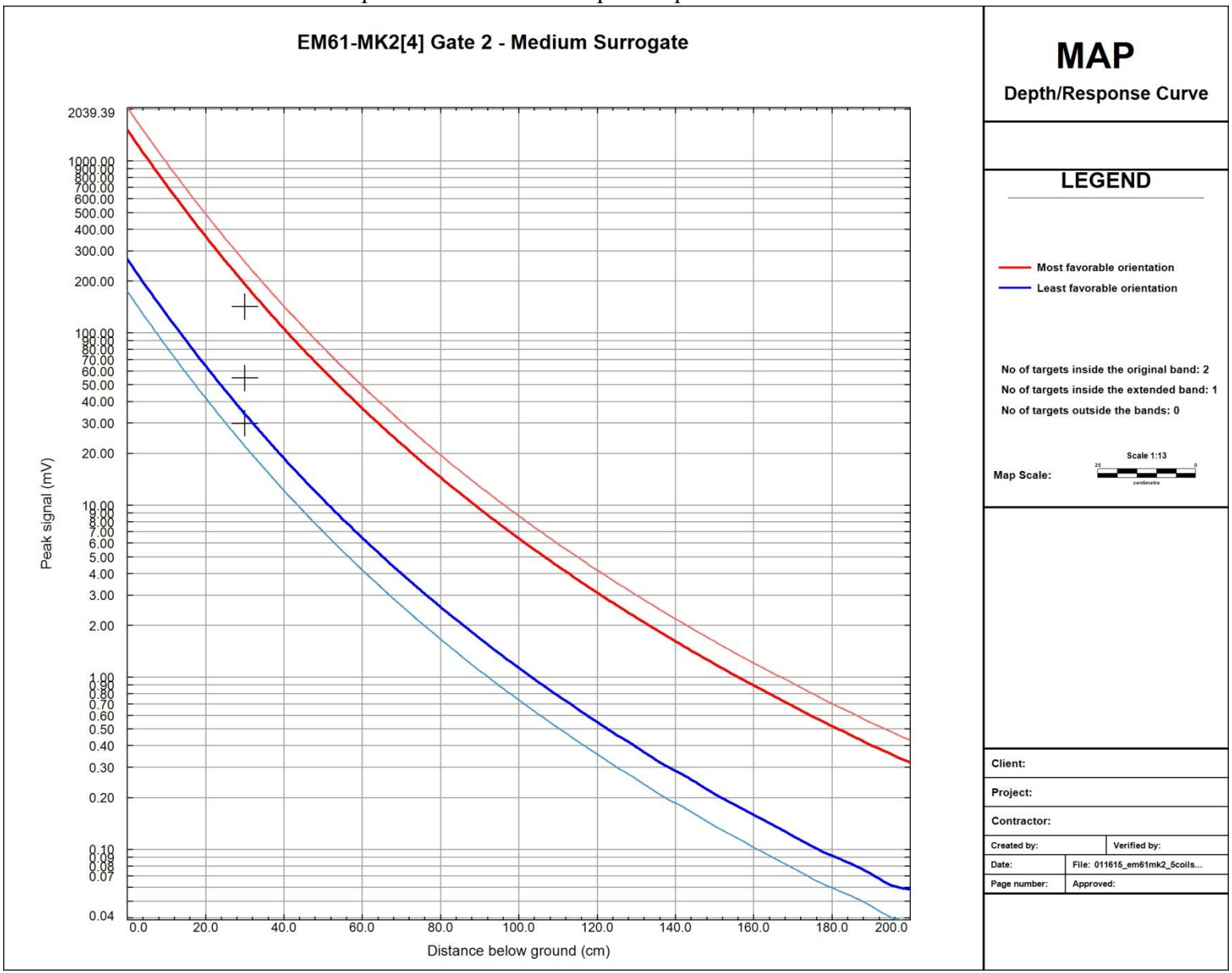


Figure C-455
1/20/2015 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

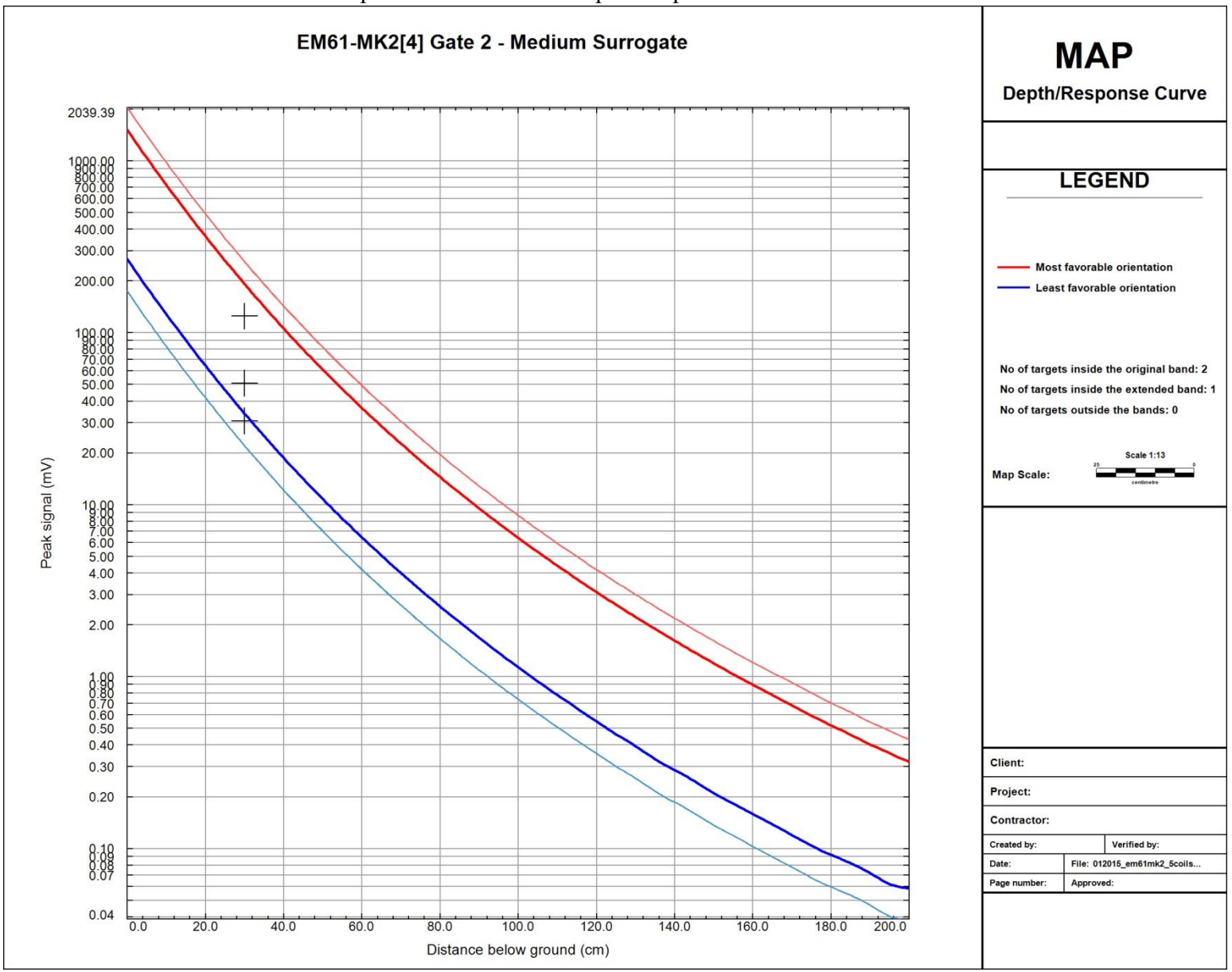


Figure C-456
1/20/2015 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

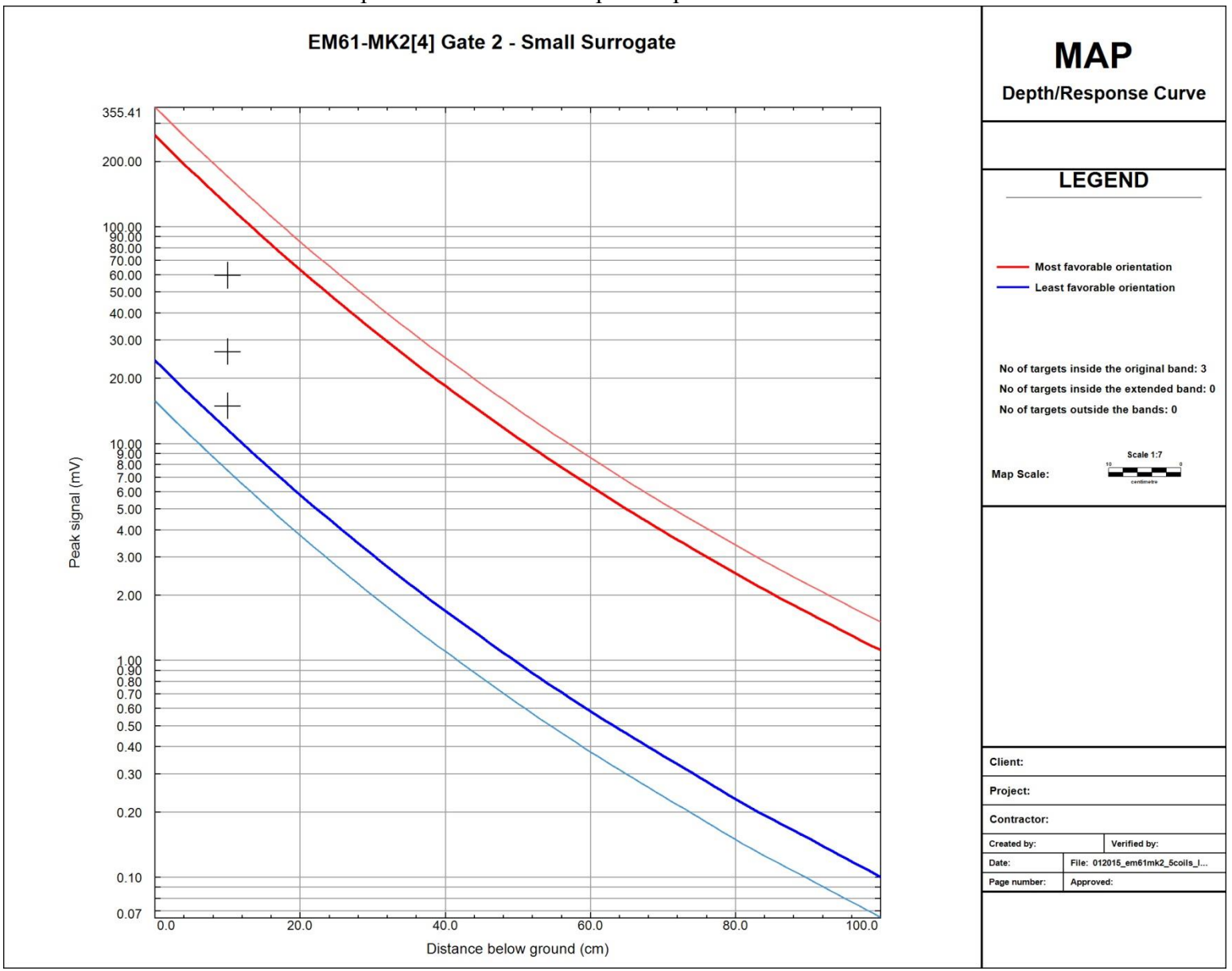


Figure C-457
1/20/2015 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

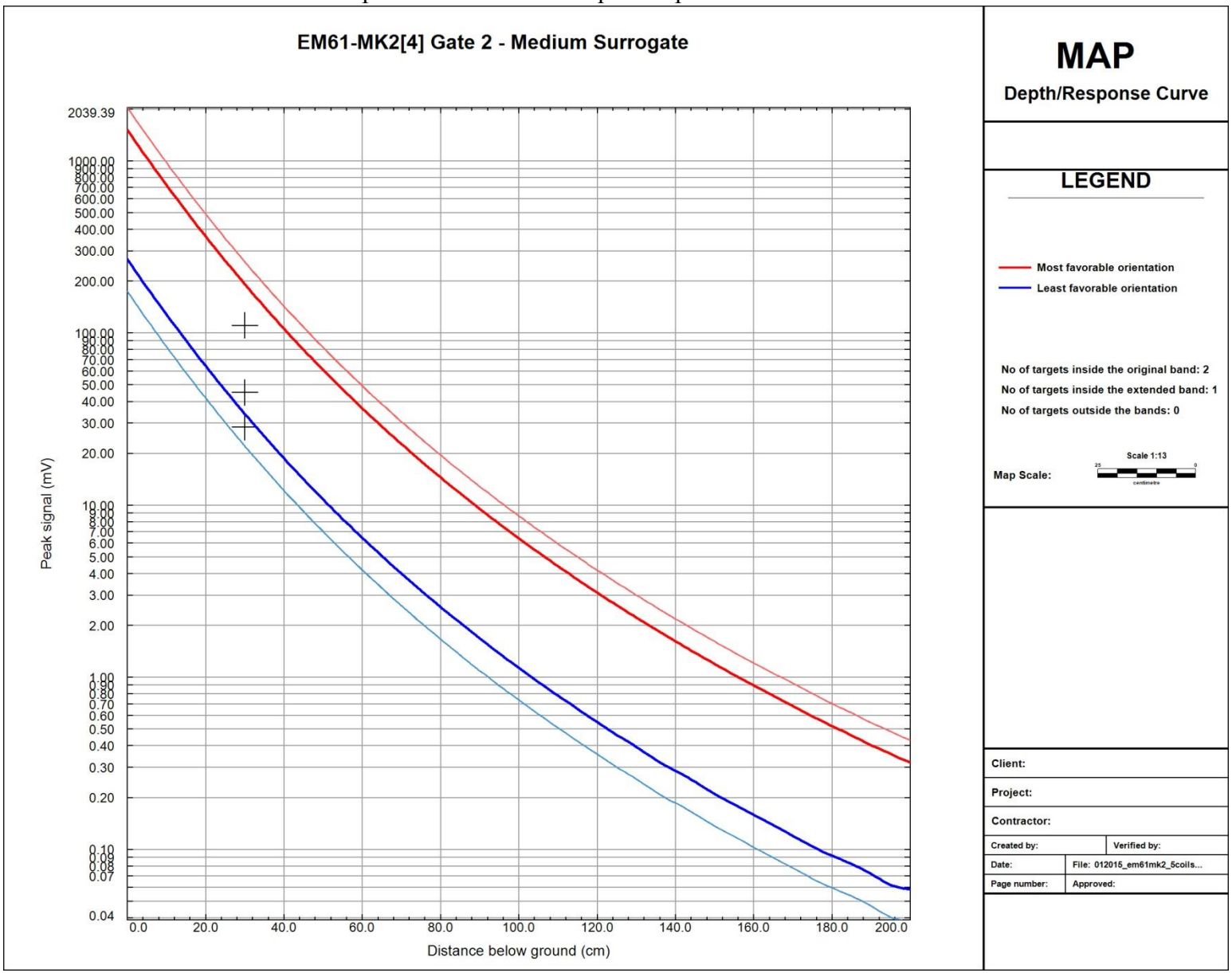


Figure C-458
1/20/2015 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

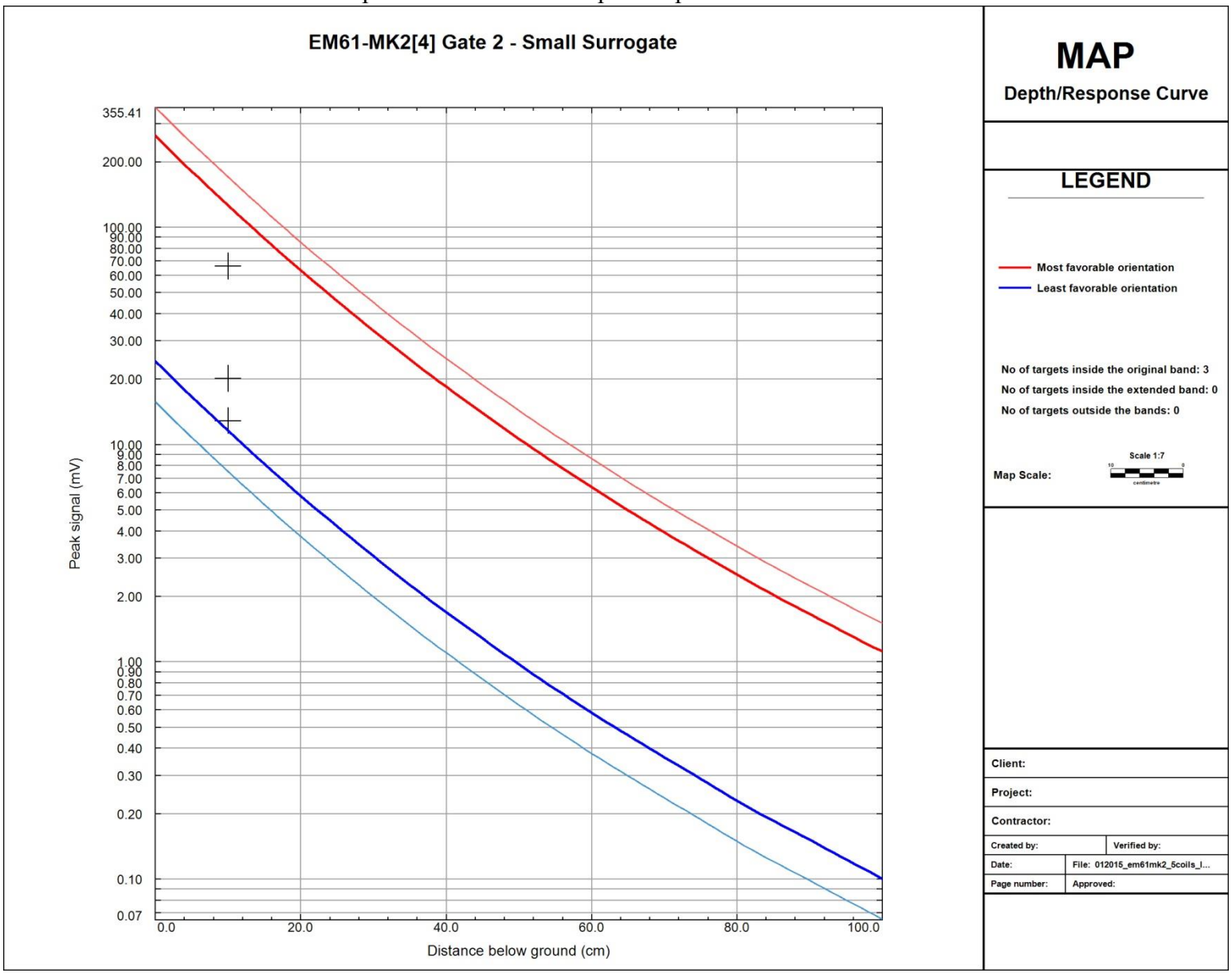


Figure C-459
1/20/2015 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

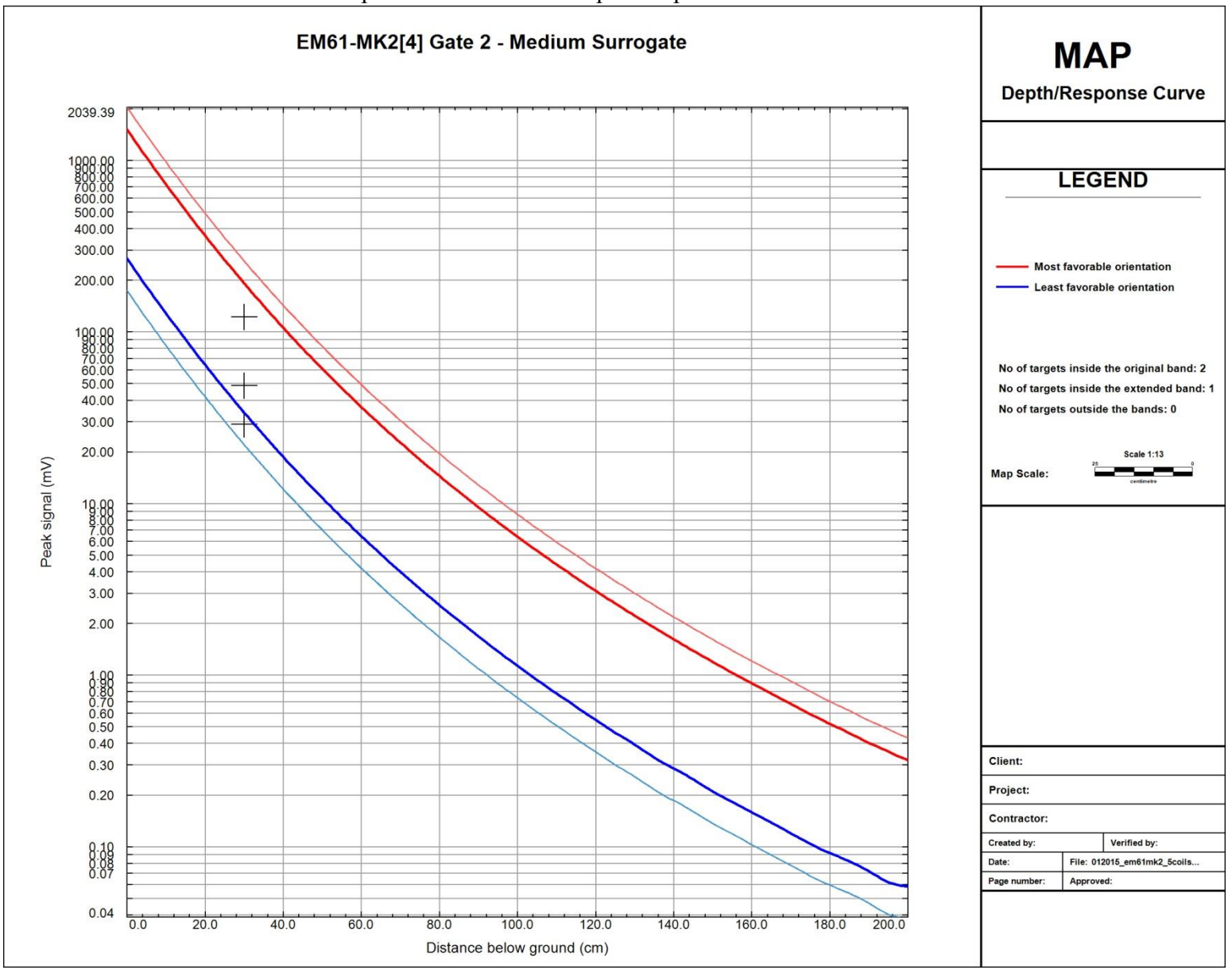


Figure C-460
1/20/2015 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

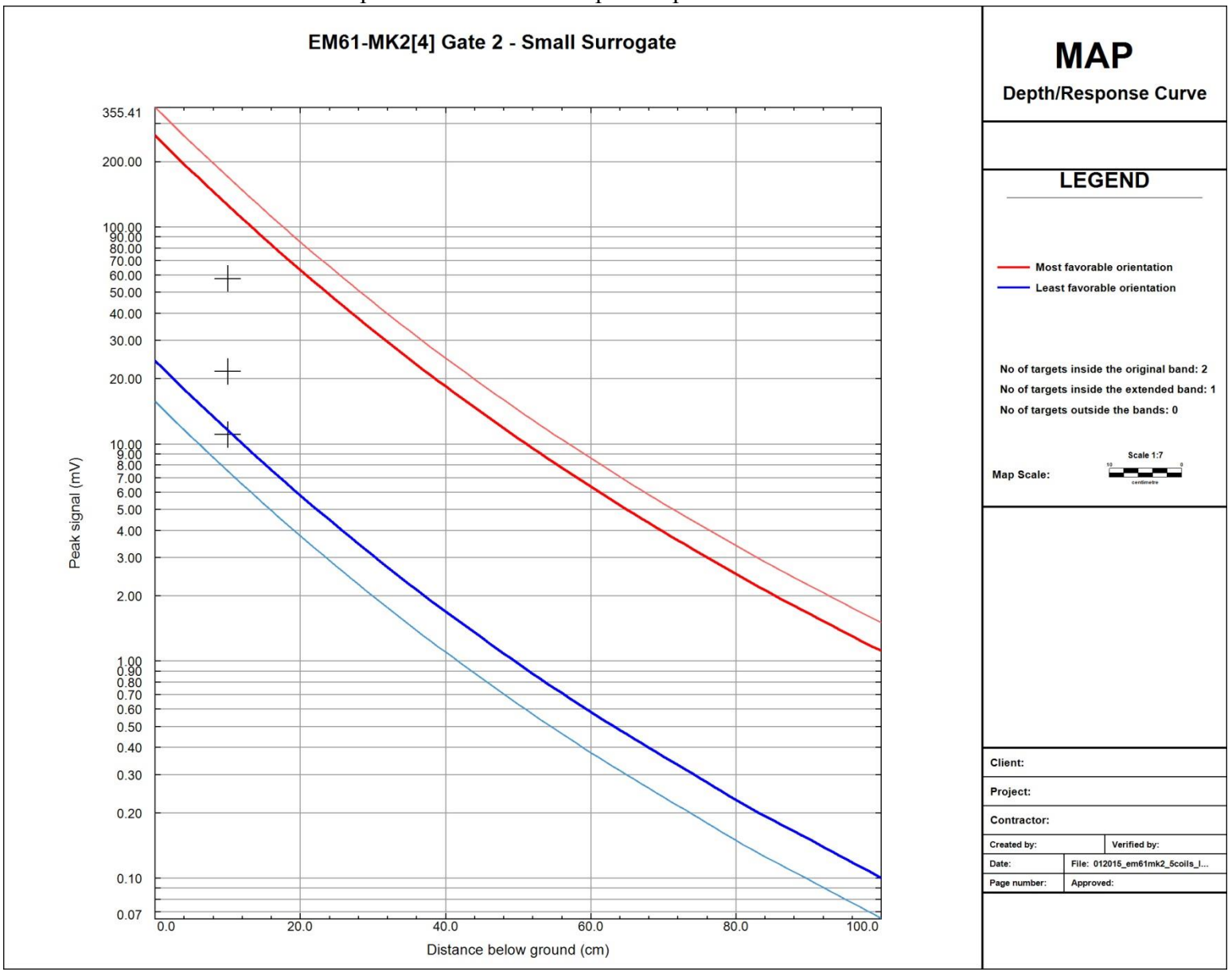


Figure C-461
1/20/2015 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

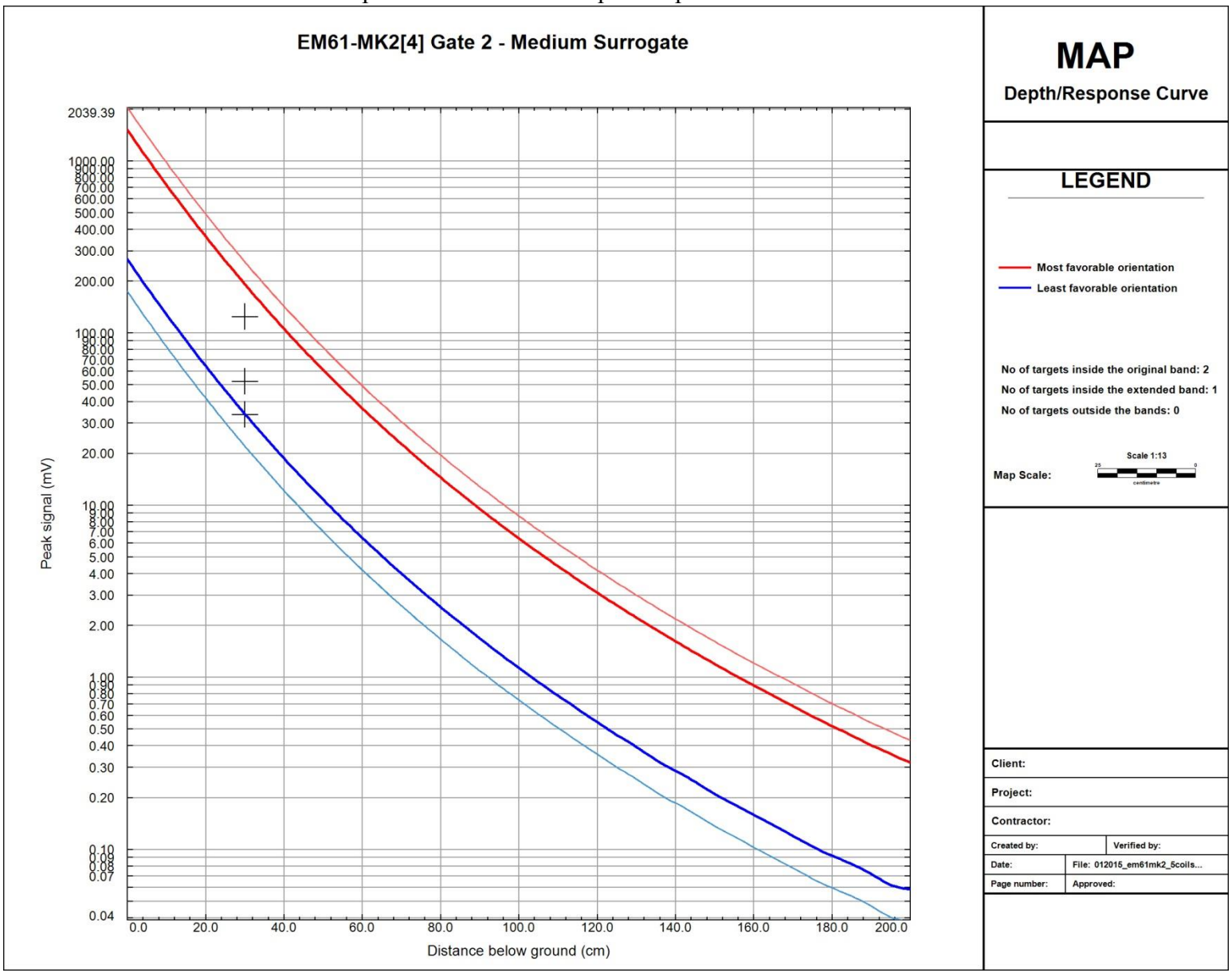


Figure C-462
1/20/2015 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

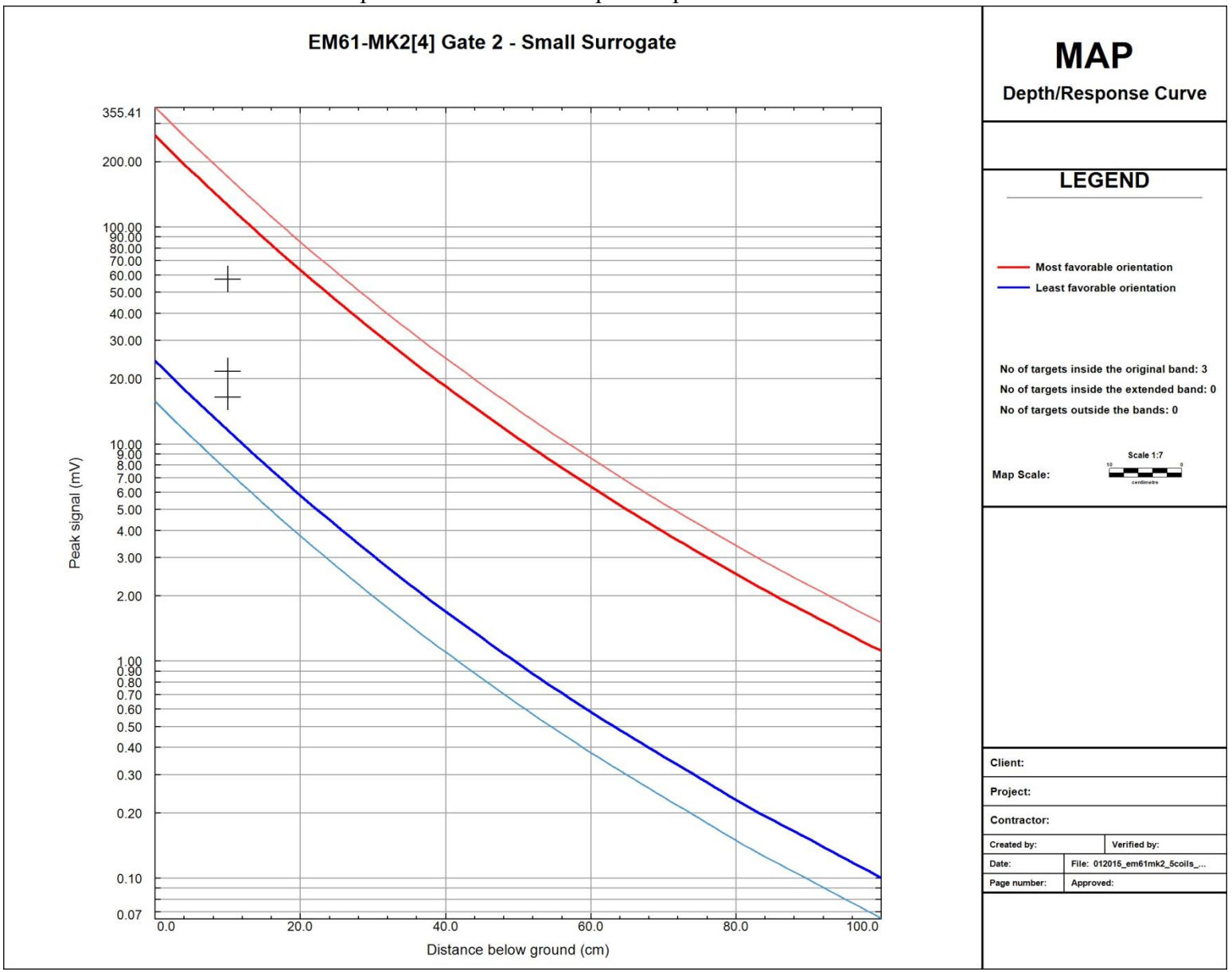


Figure C-463
1/20/2015 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

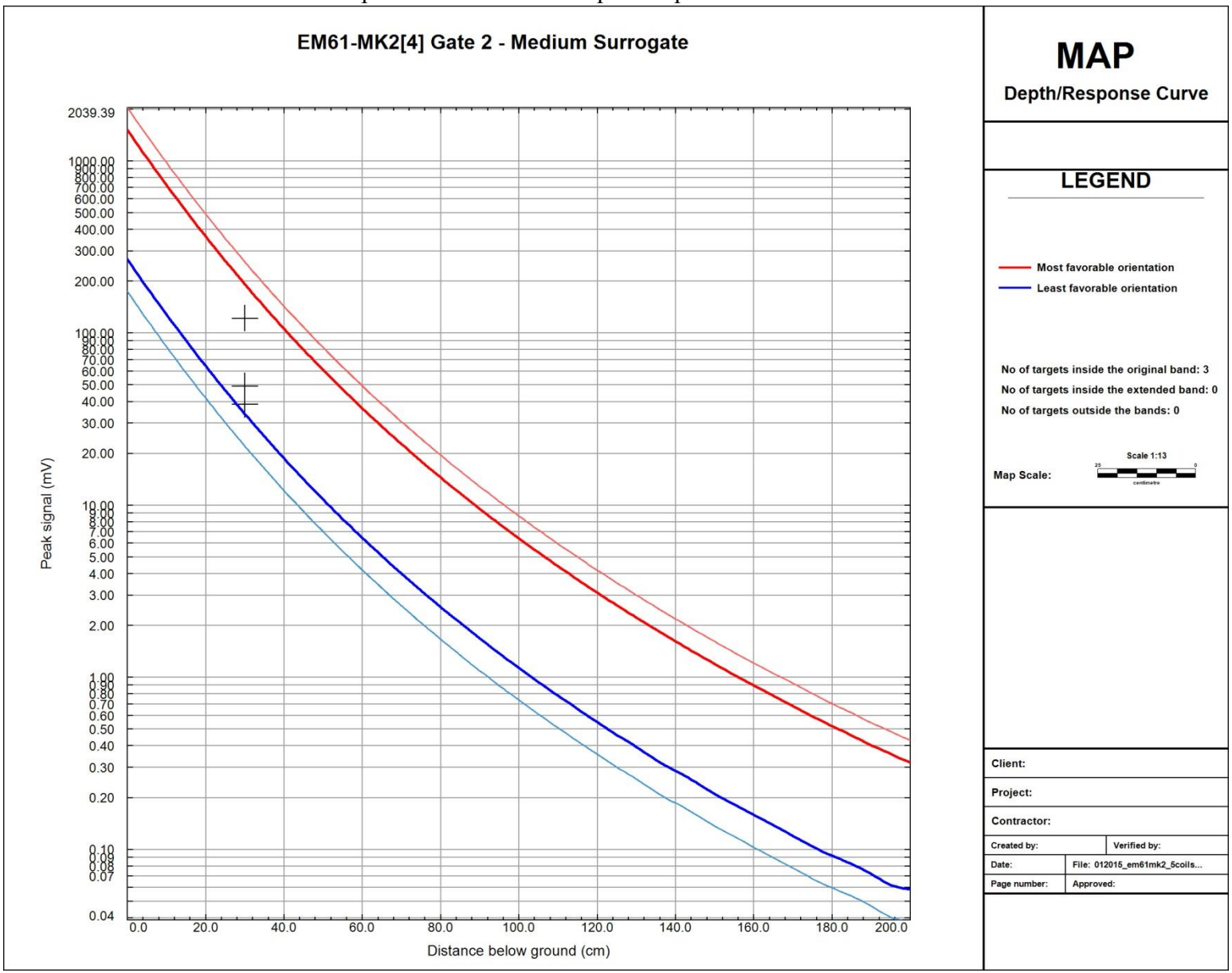


Figure C-464
1/20/2015 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

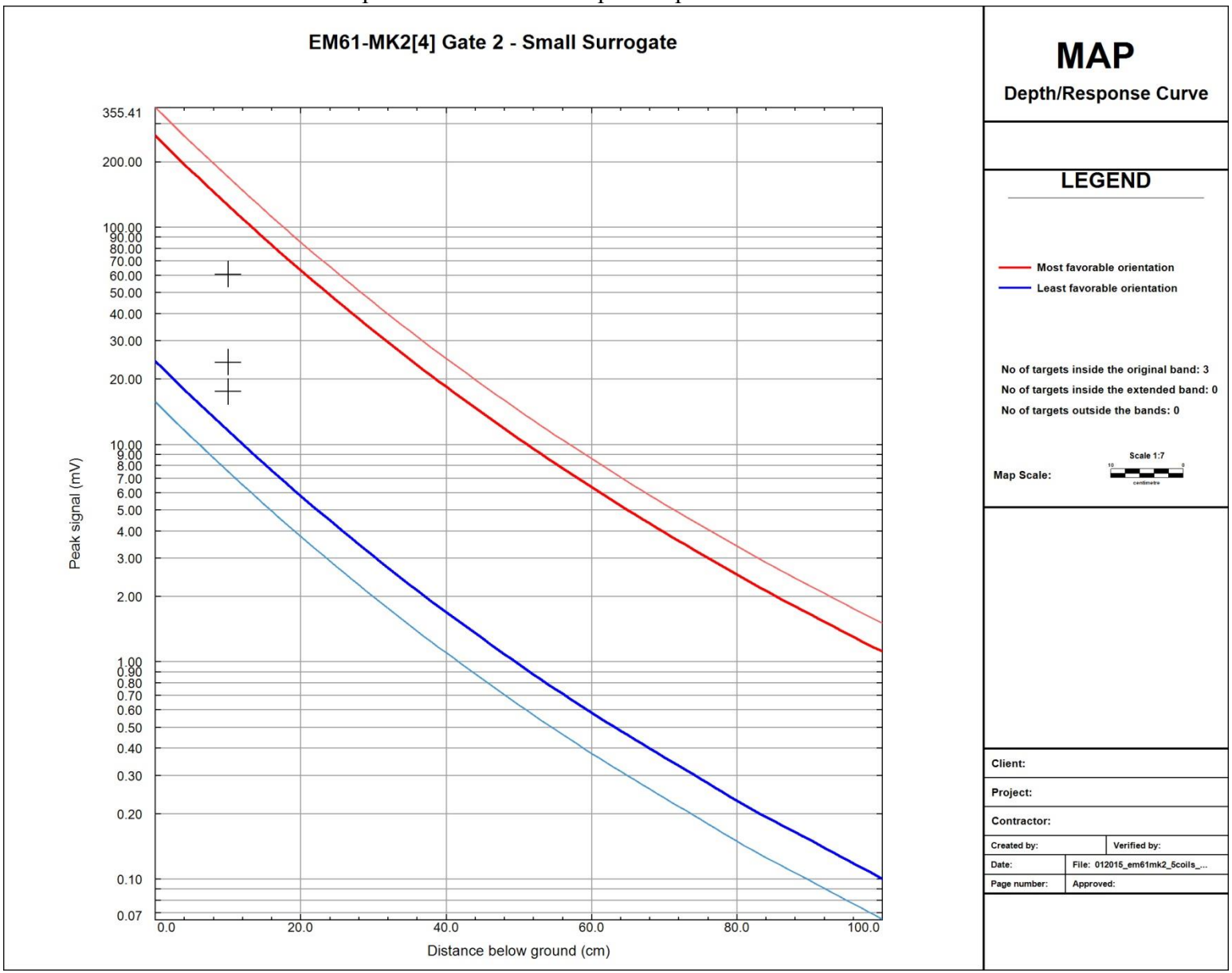


Figure C-465
1/20/2015 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

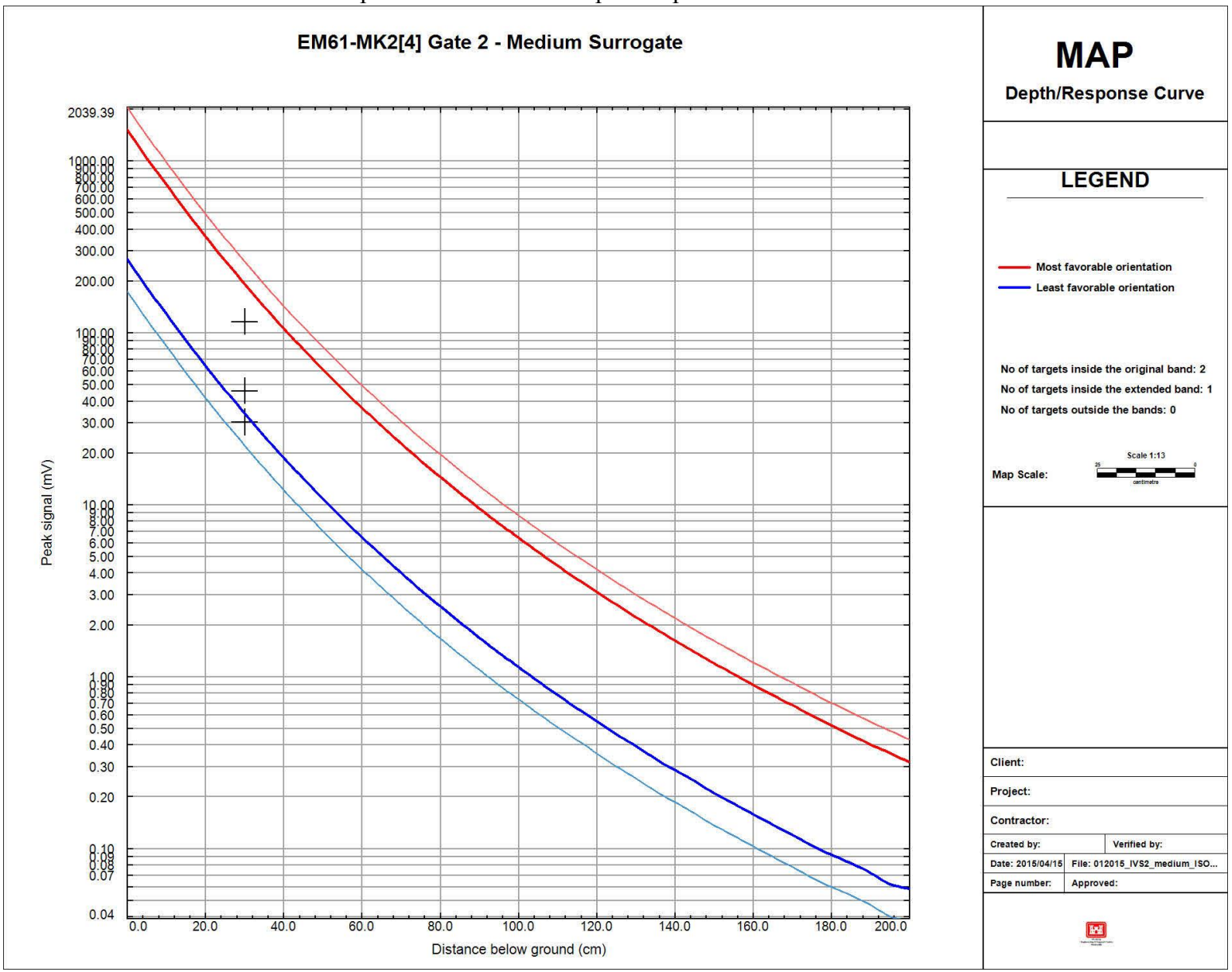


Figure C-466
1/20/2015 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

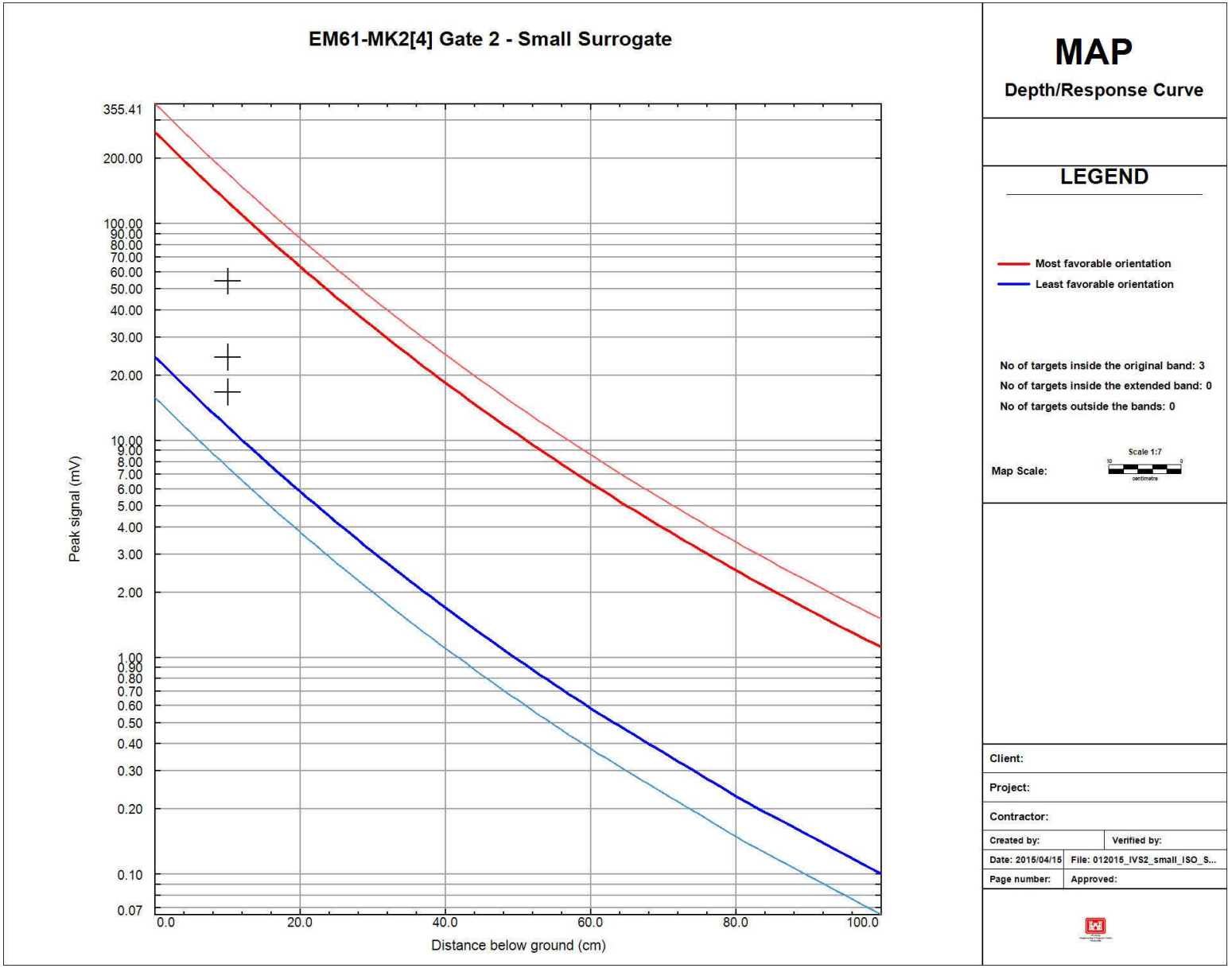


Figure C-467
1/20/2015 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

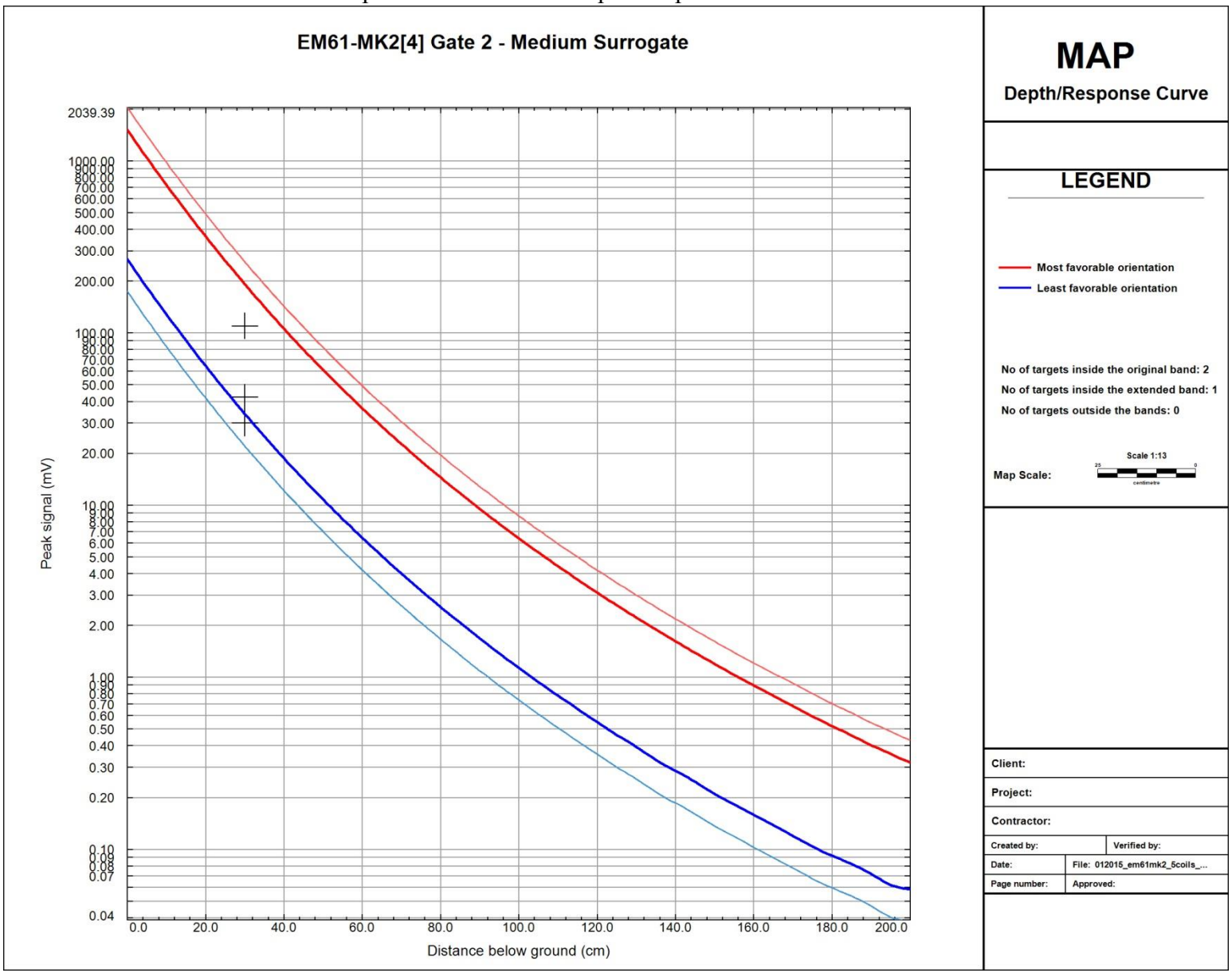


Figure C-468
1/20/2015 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

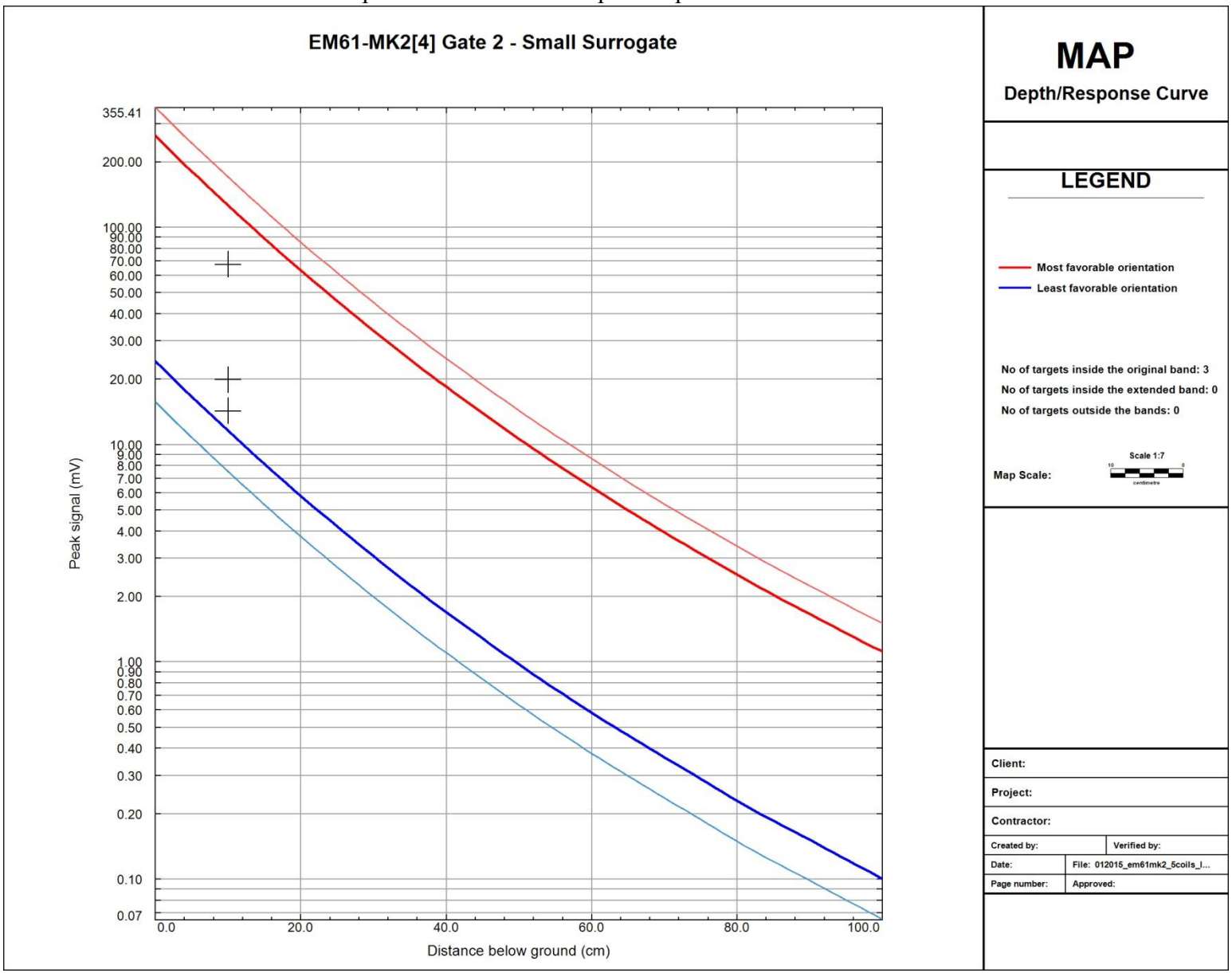


Figure C-469
1/20/2015 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

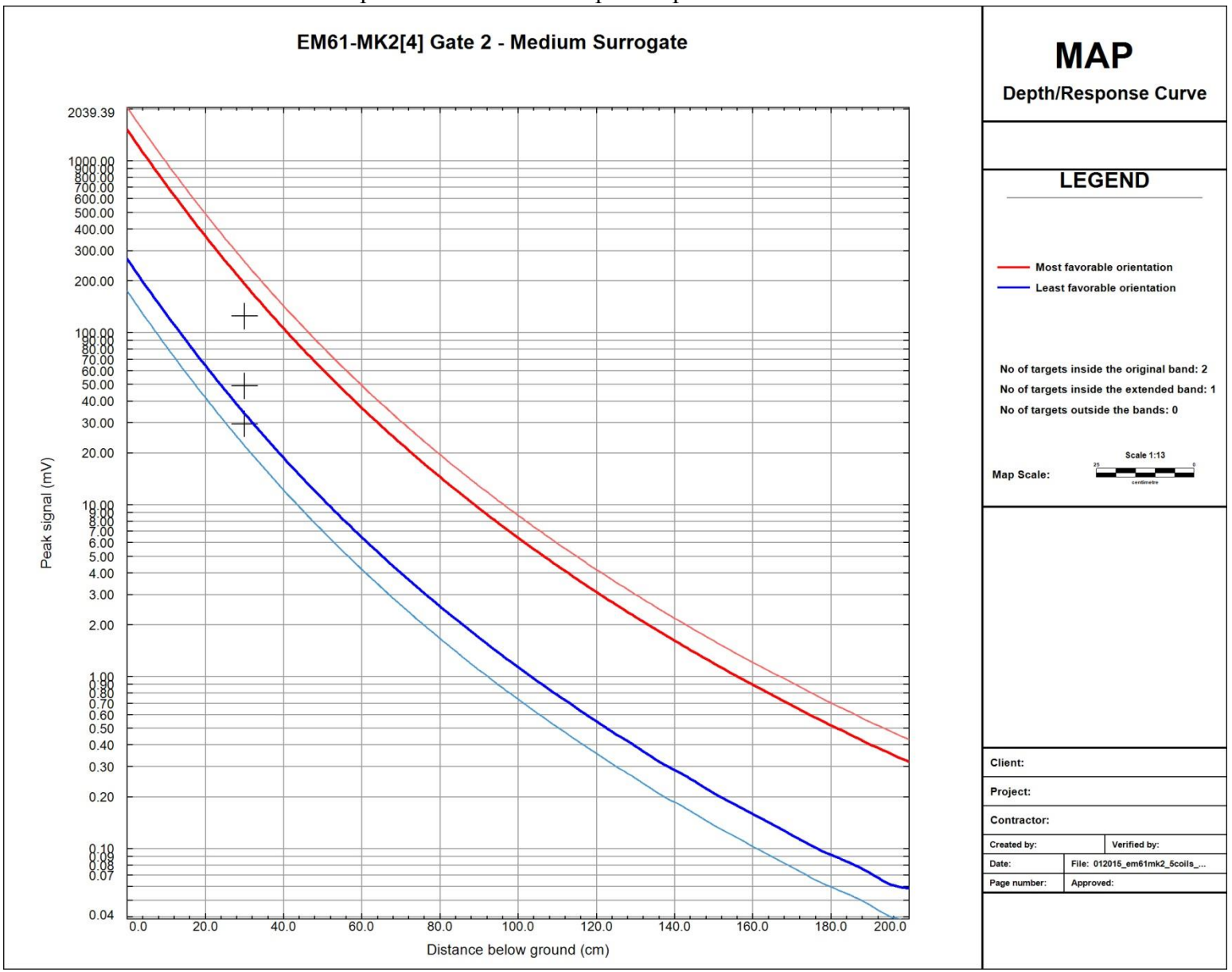


Figure C-470
1/20/2015 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

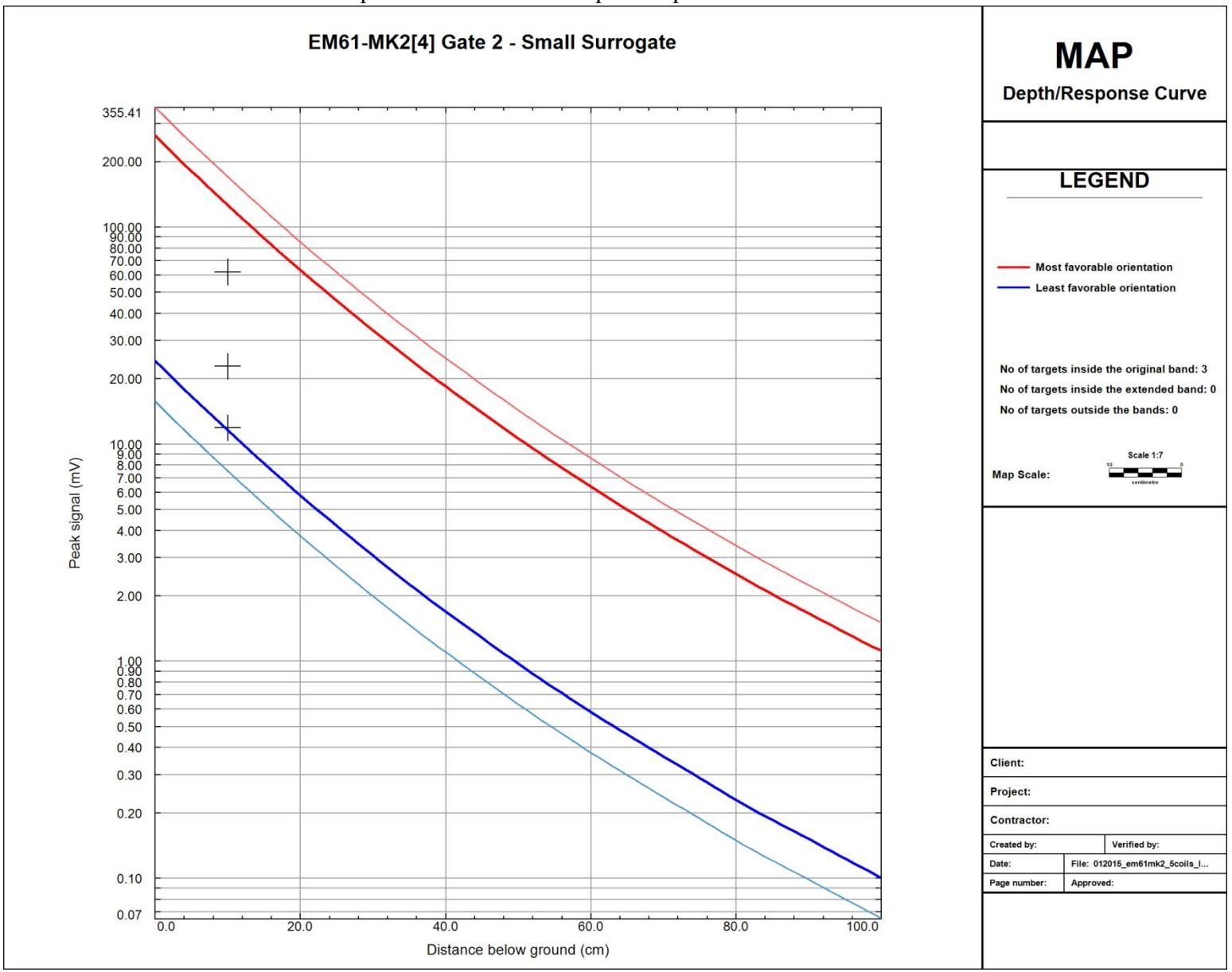


Figure C-471
1/20/2015 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

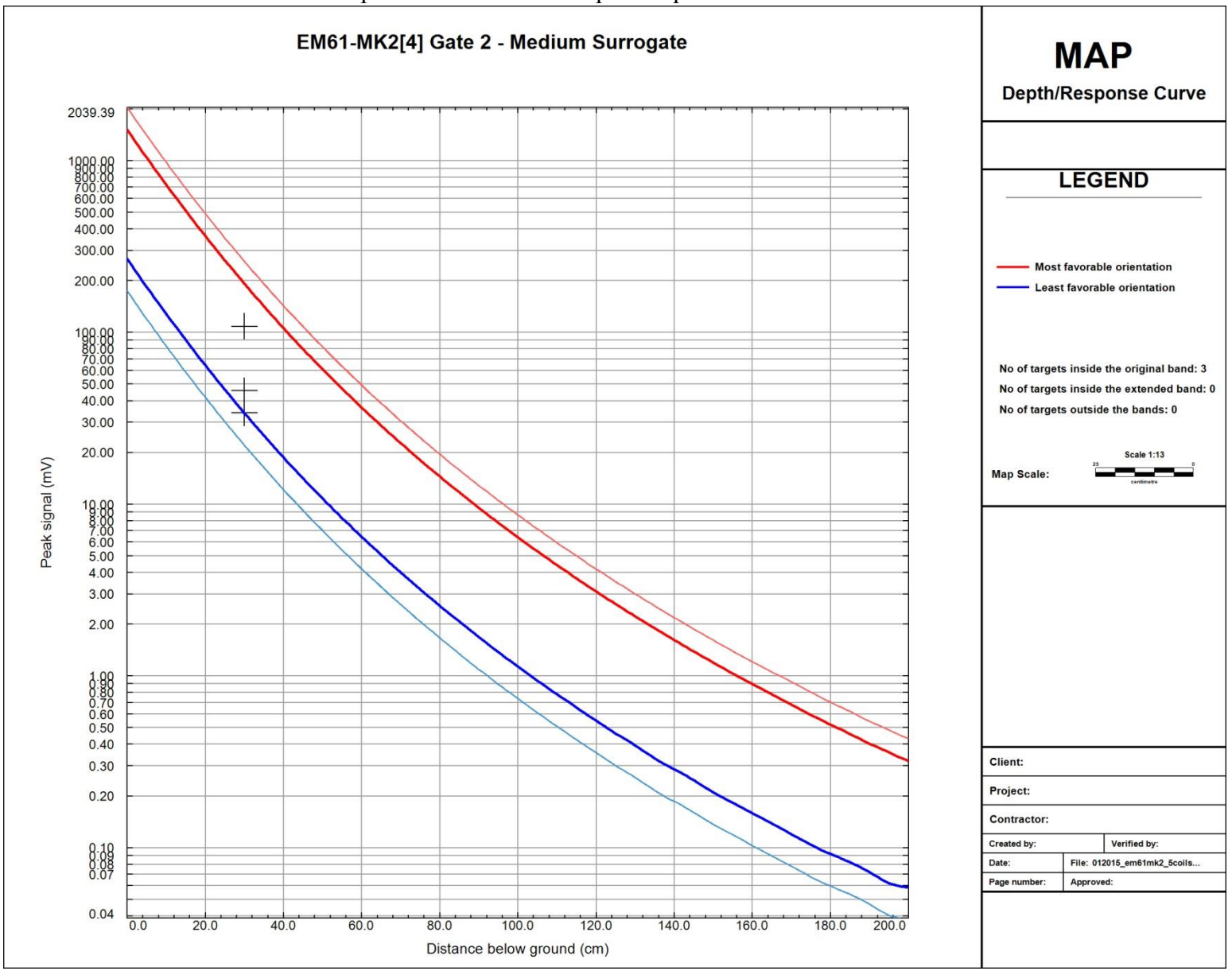


Figure C-472
1/20/2015 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

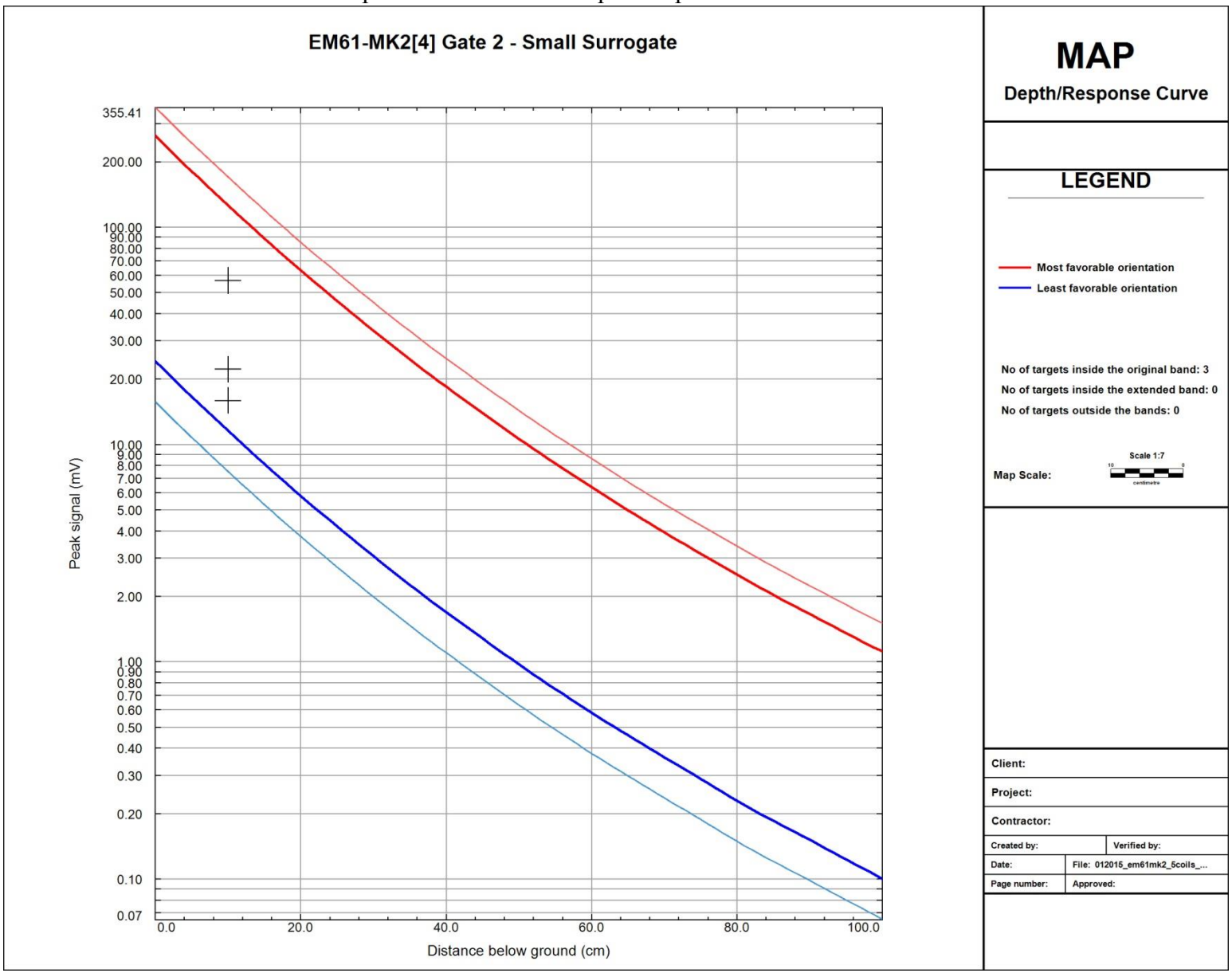


Figure C-473
1/20/2015 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

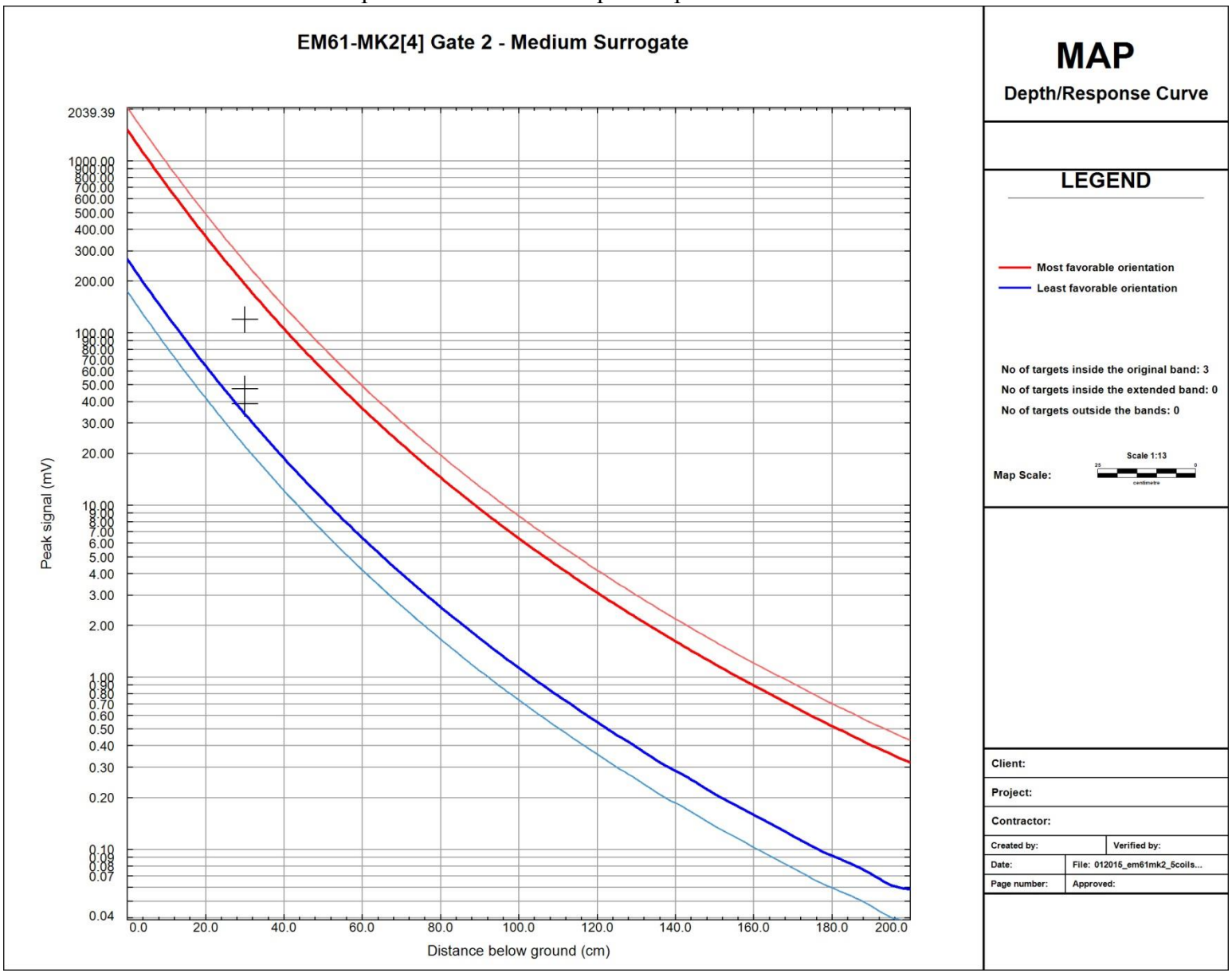


Figure C-474
1/20/2015 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

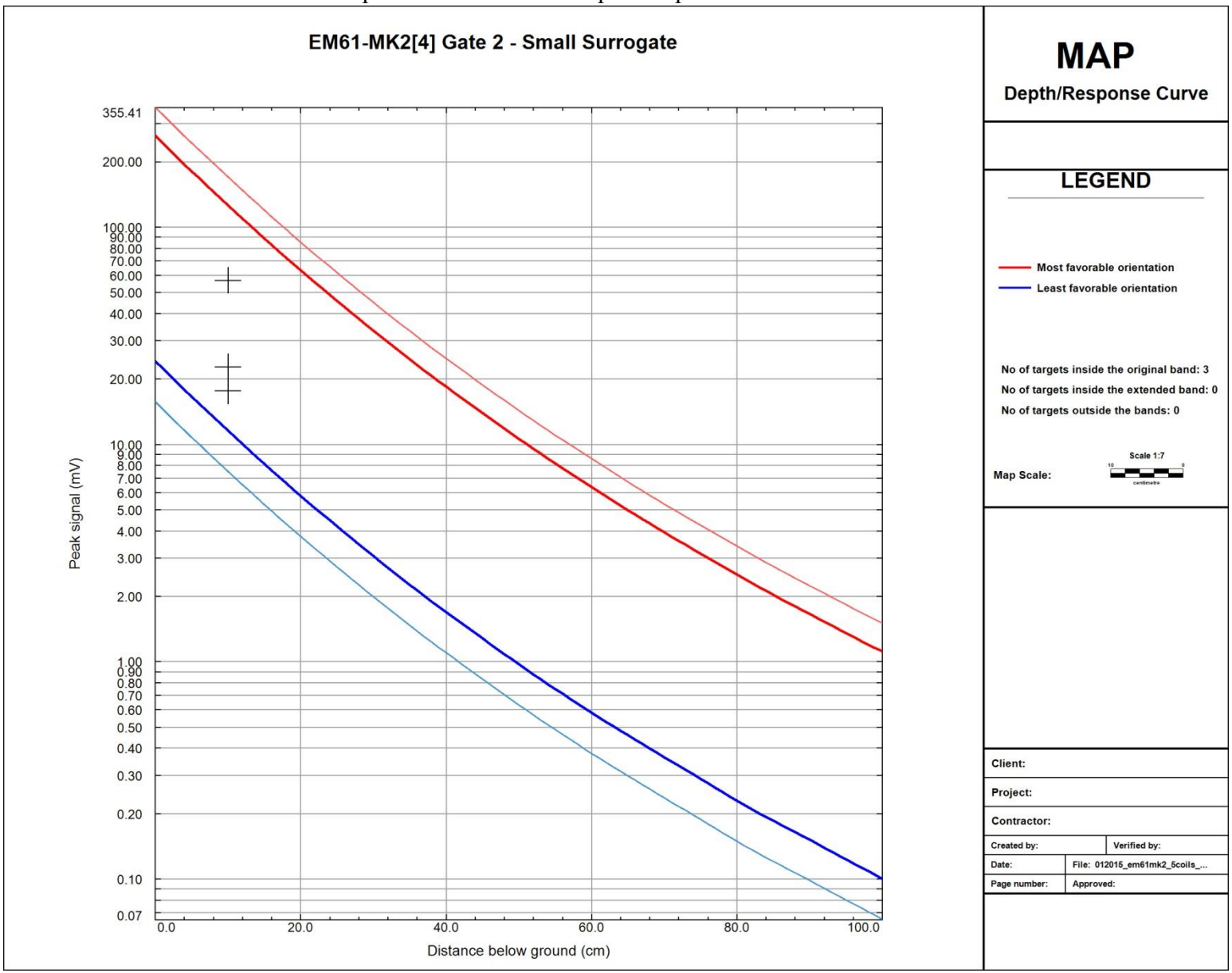


Figure C-475
1/23/2015 EM61 IVS AM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

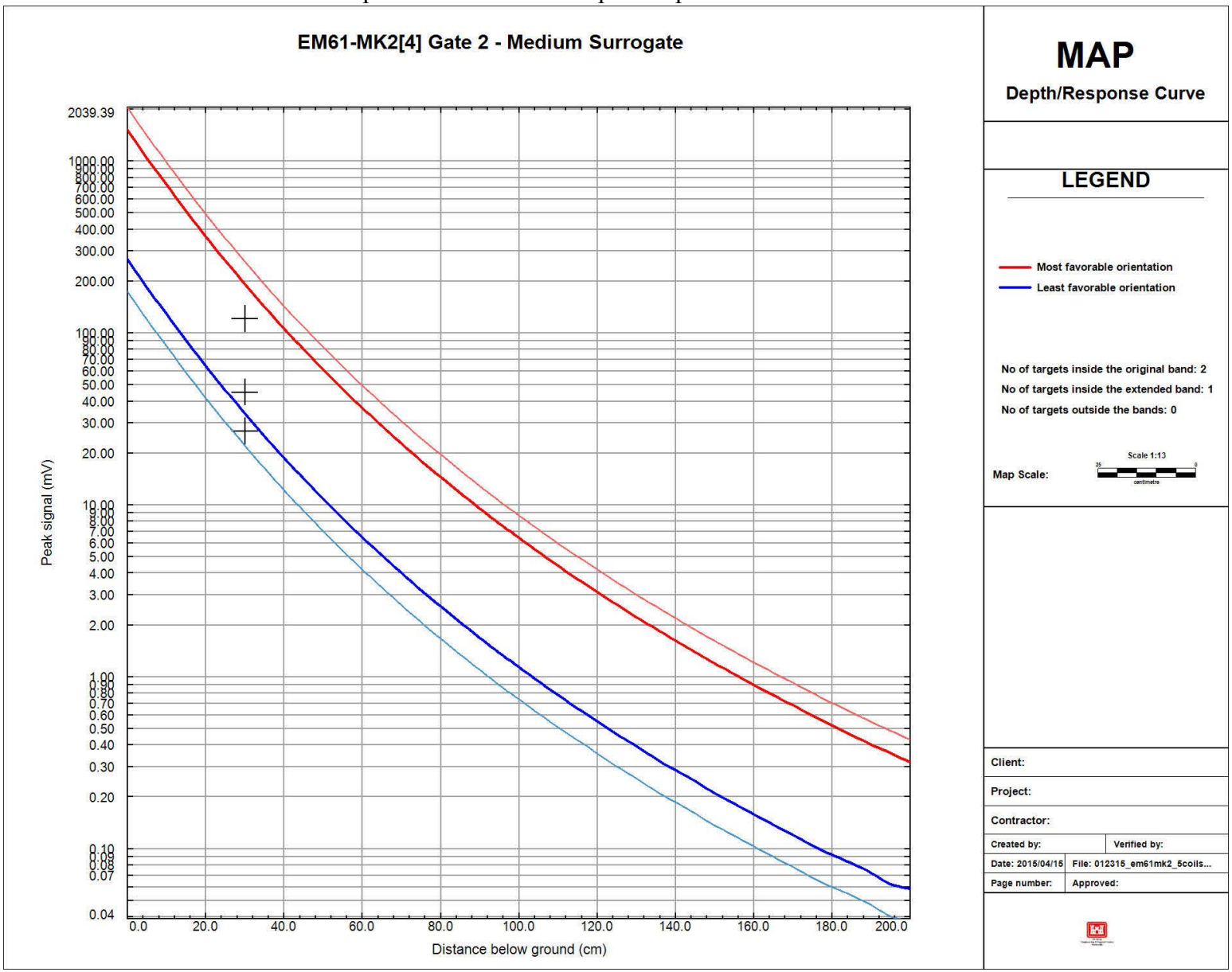


Figure C-476
1/23/2015 EM61 IVS AM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

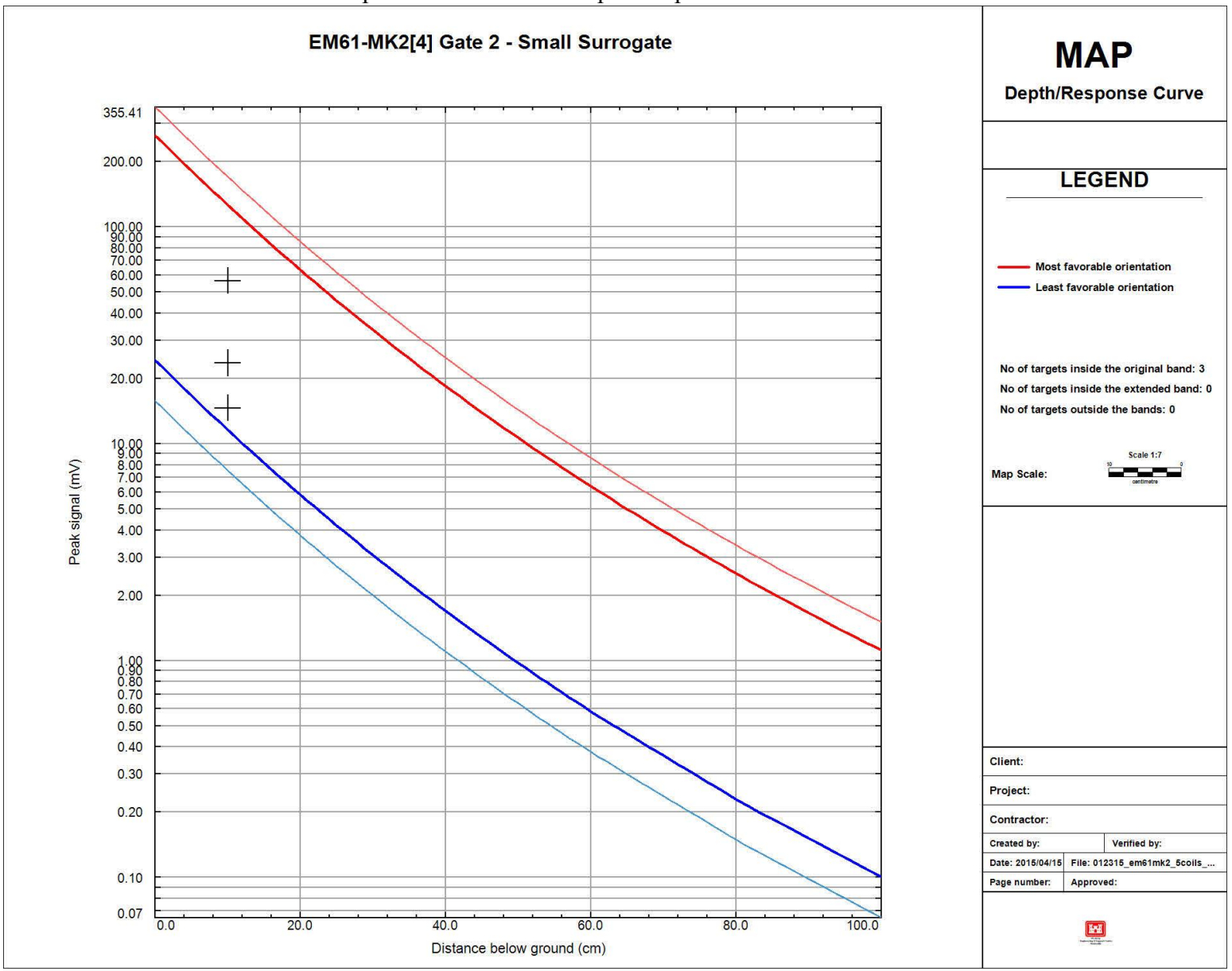


Figure C-477
1/23/2015 EM61 IVS AM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

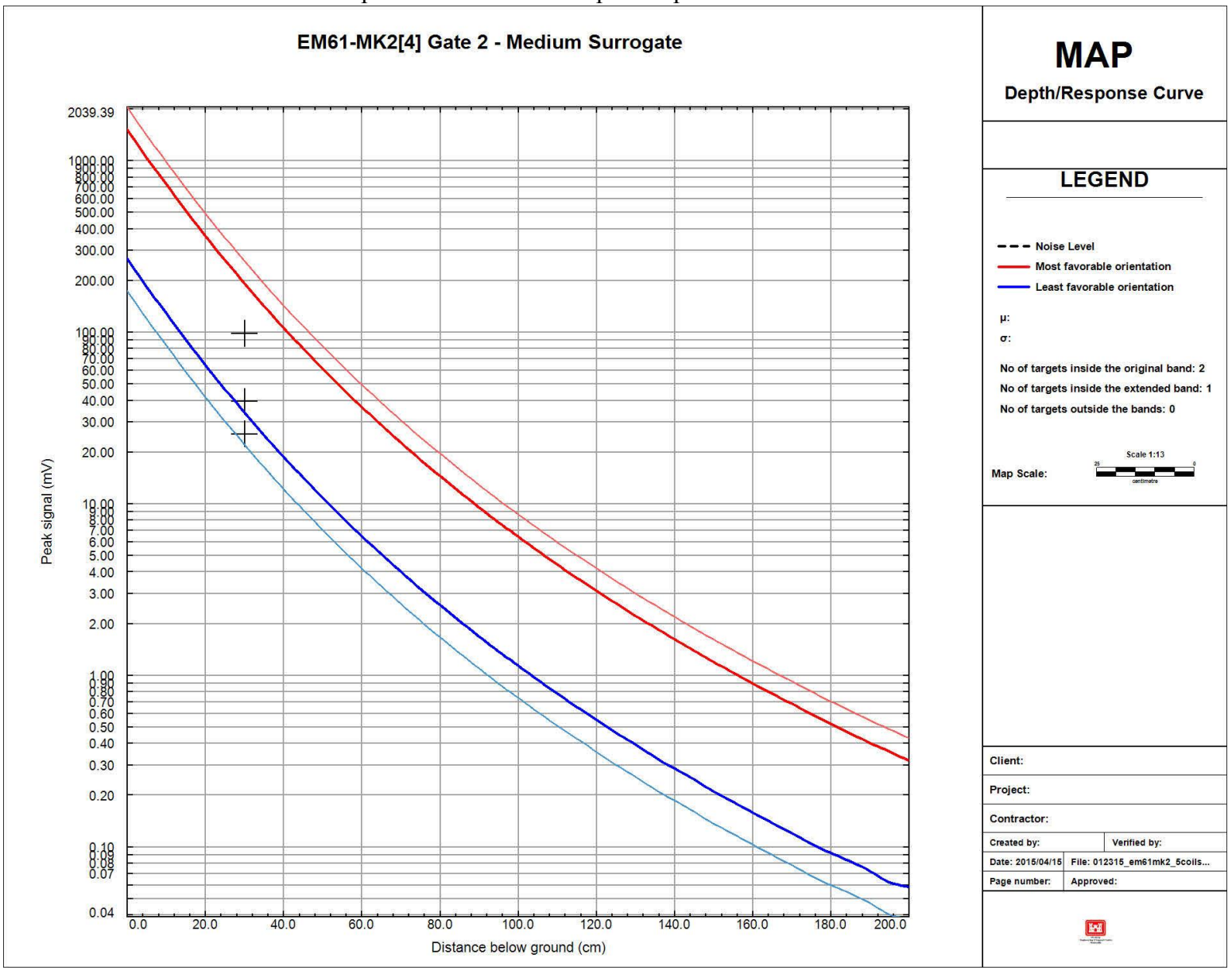


Figure C-478
1/23/2015 EM61 IVS AM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

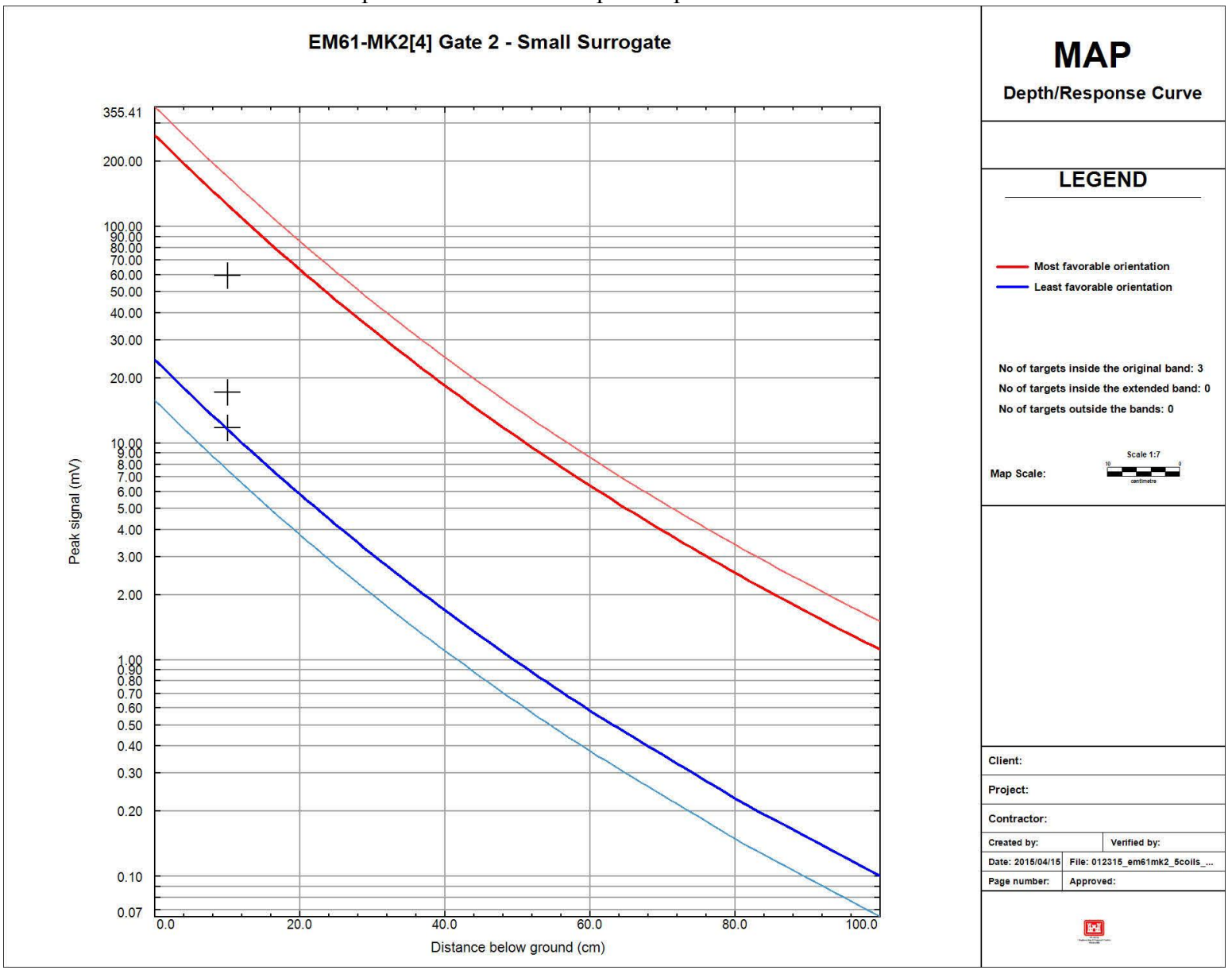


Figure C-479
1/23/2015 EM61 IVS AM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

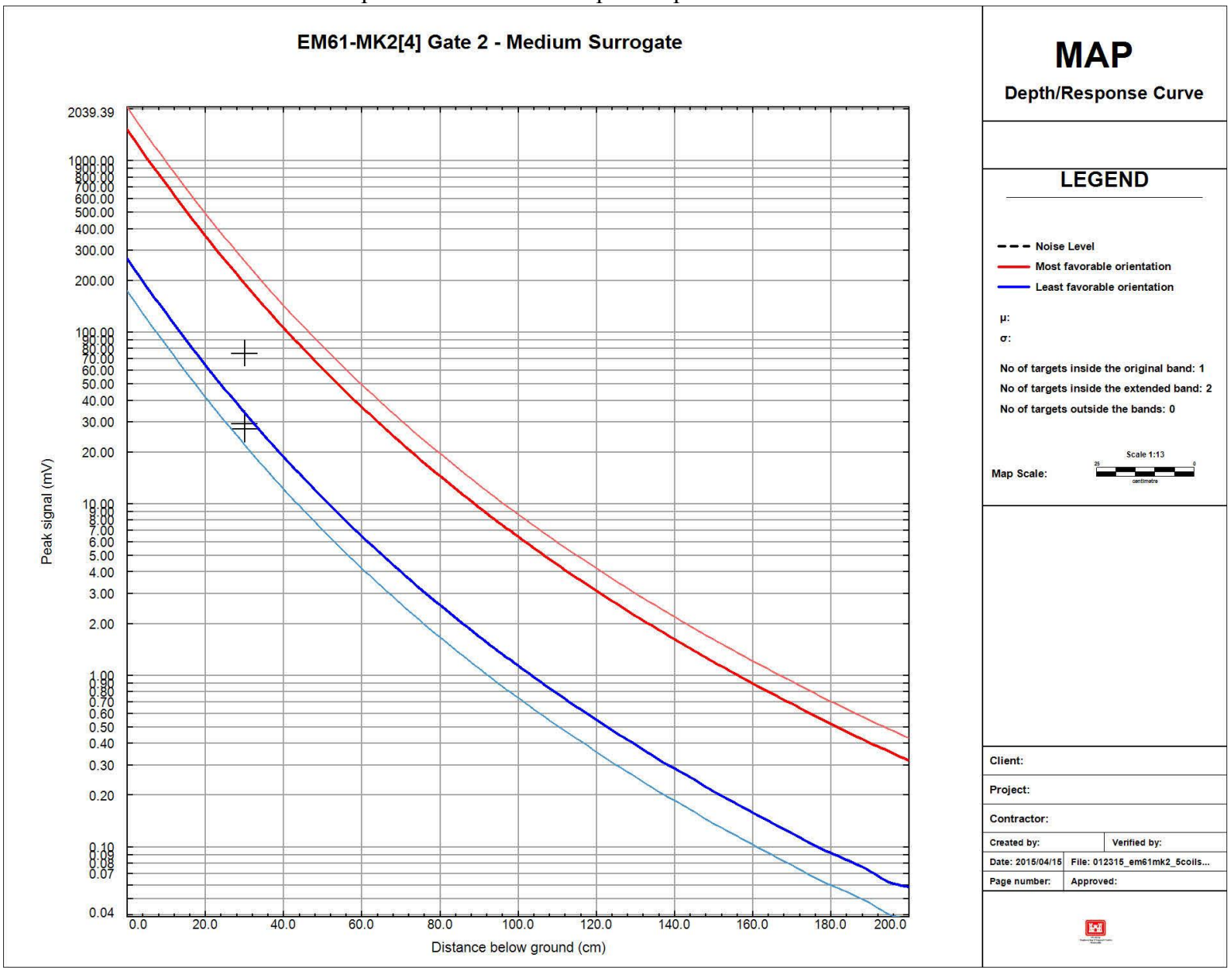


Figure C-480
1/23/2015 EM61 IVS AM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

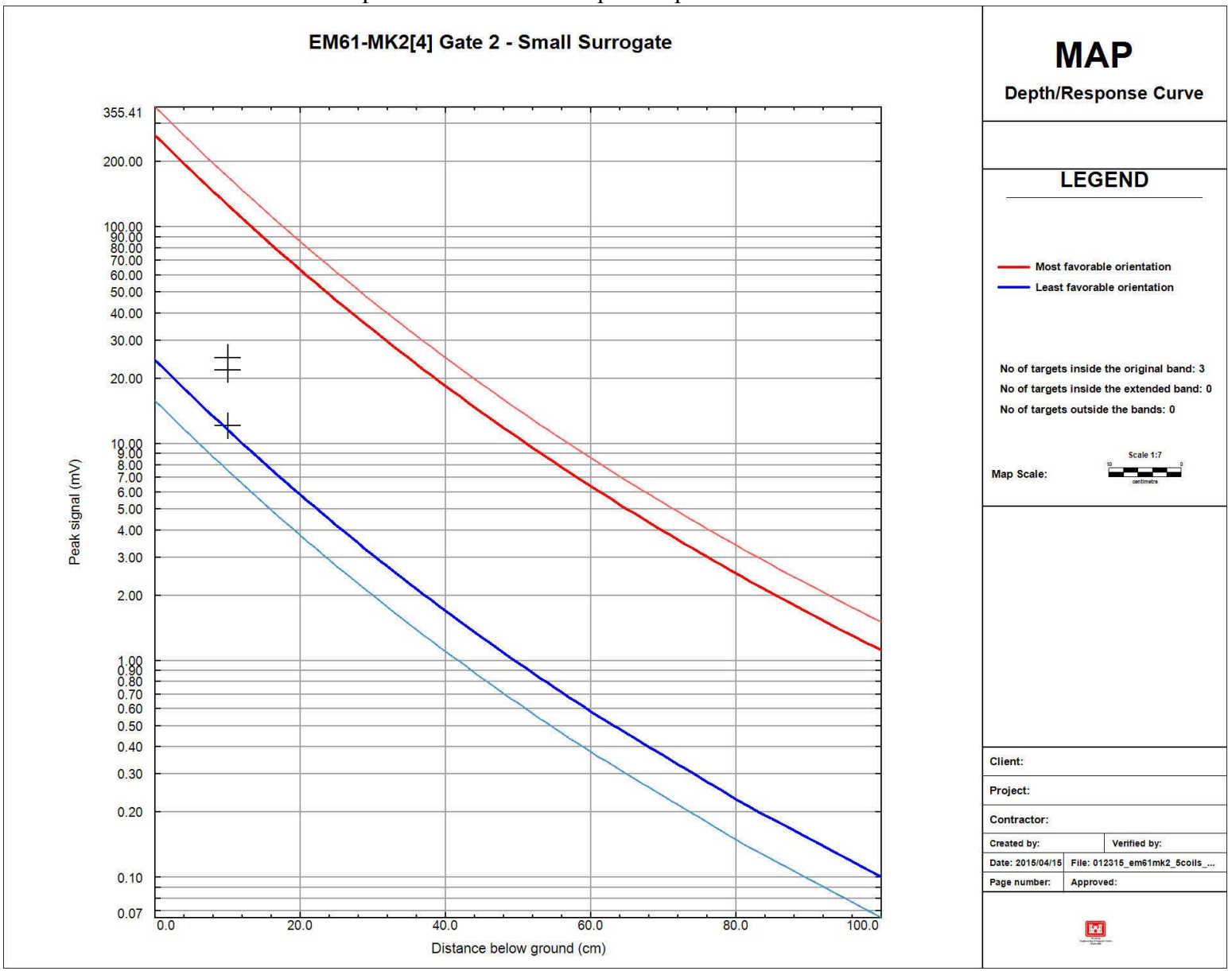


Figure C-481
1/23/2015 EM61 IVS AM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

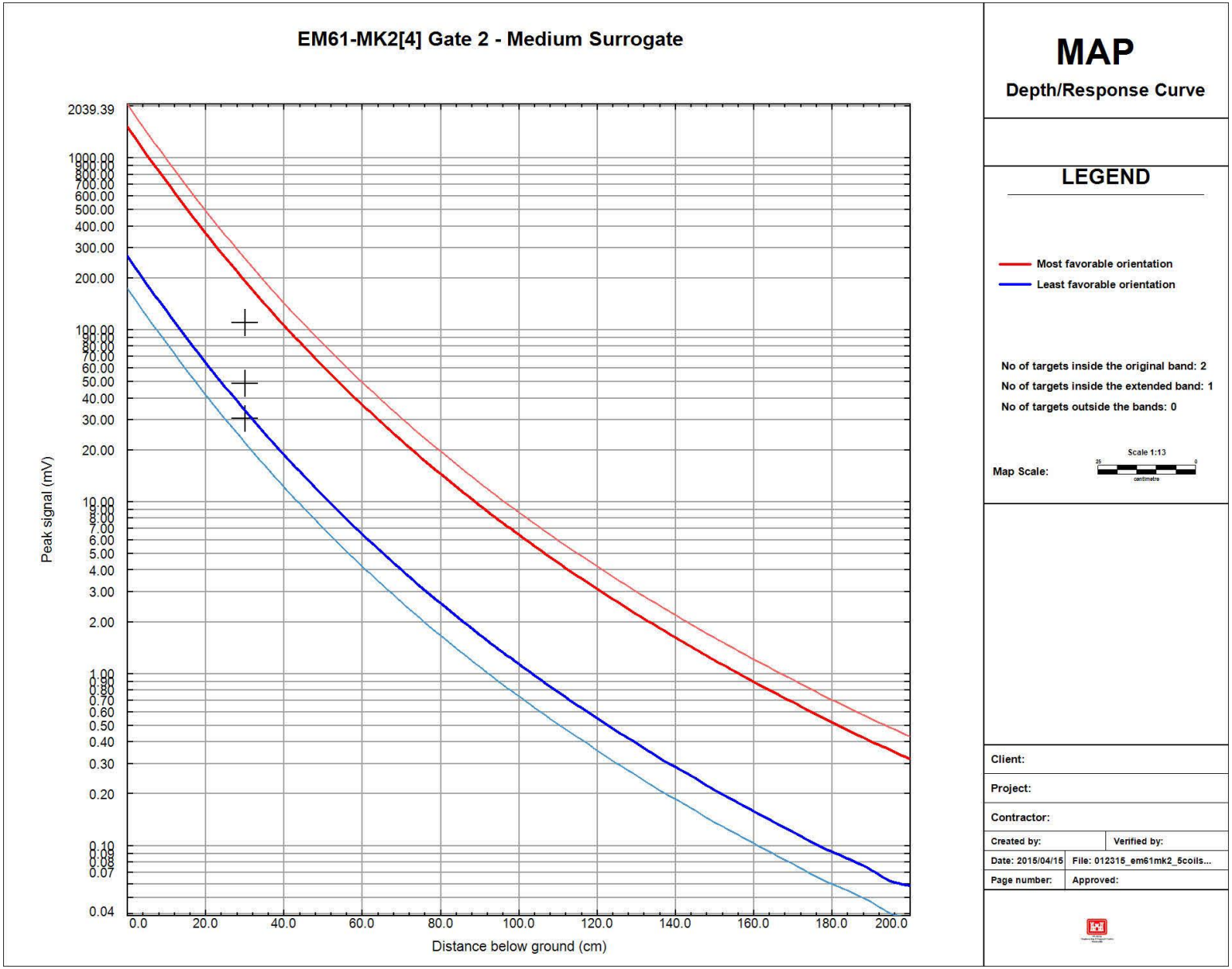


Figure C-482
1/23/2015 EM61 IVS AM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

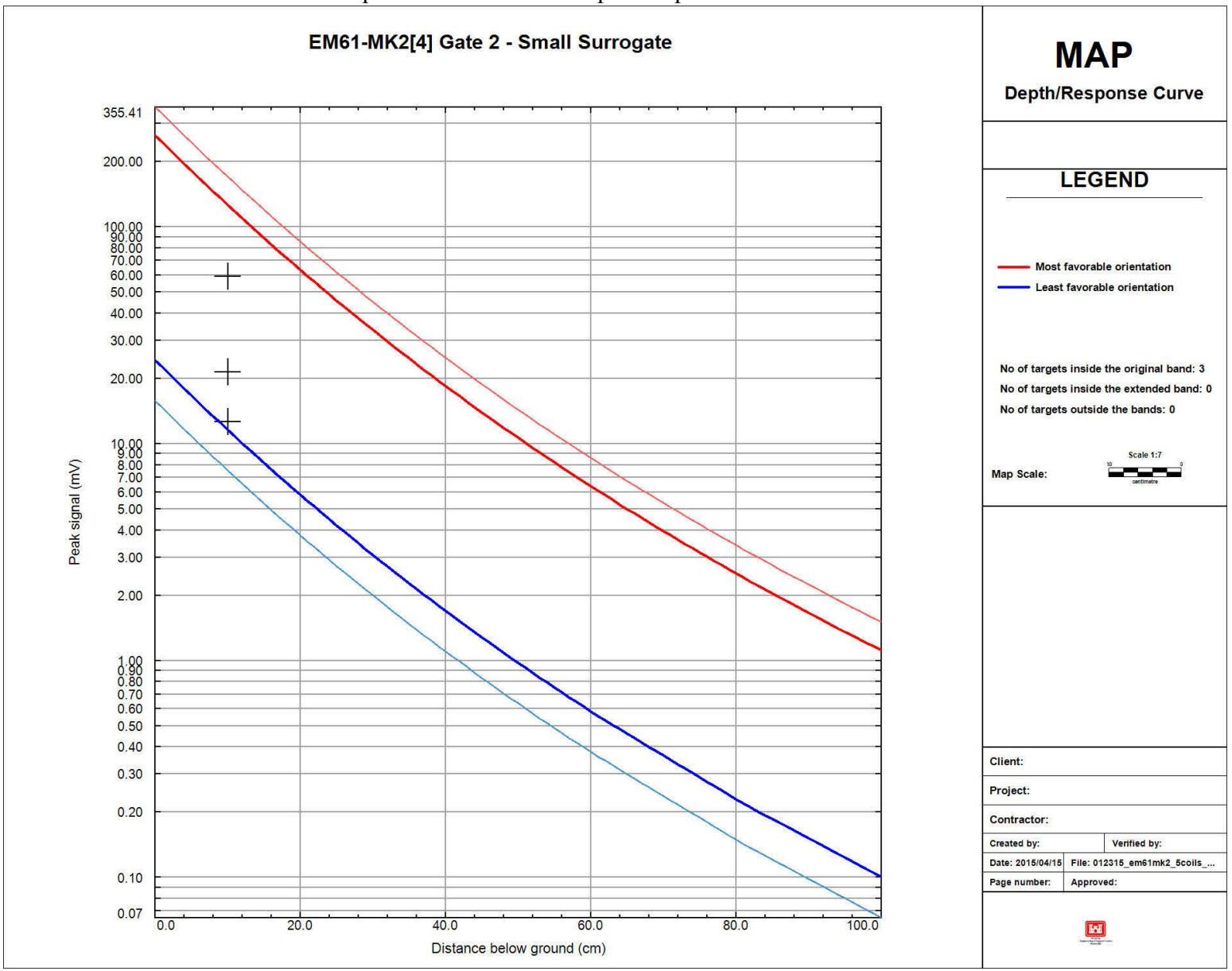


Figure C-483
1/23/2015 EM61 IVS AM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

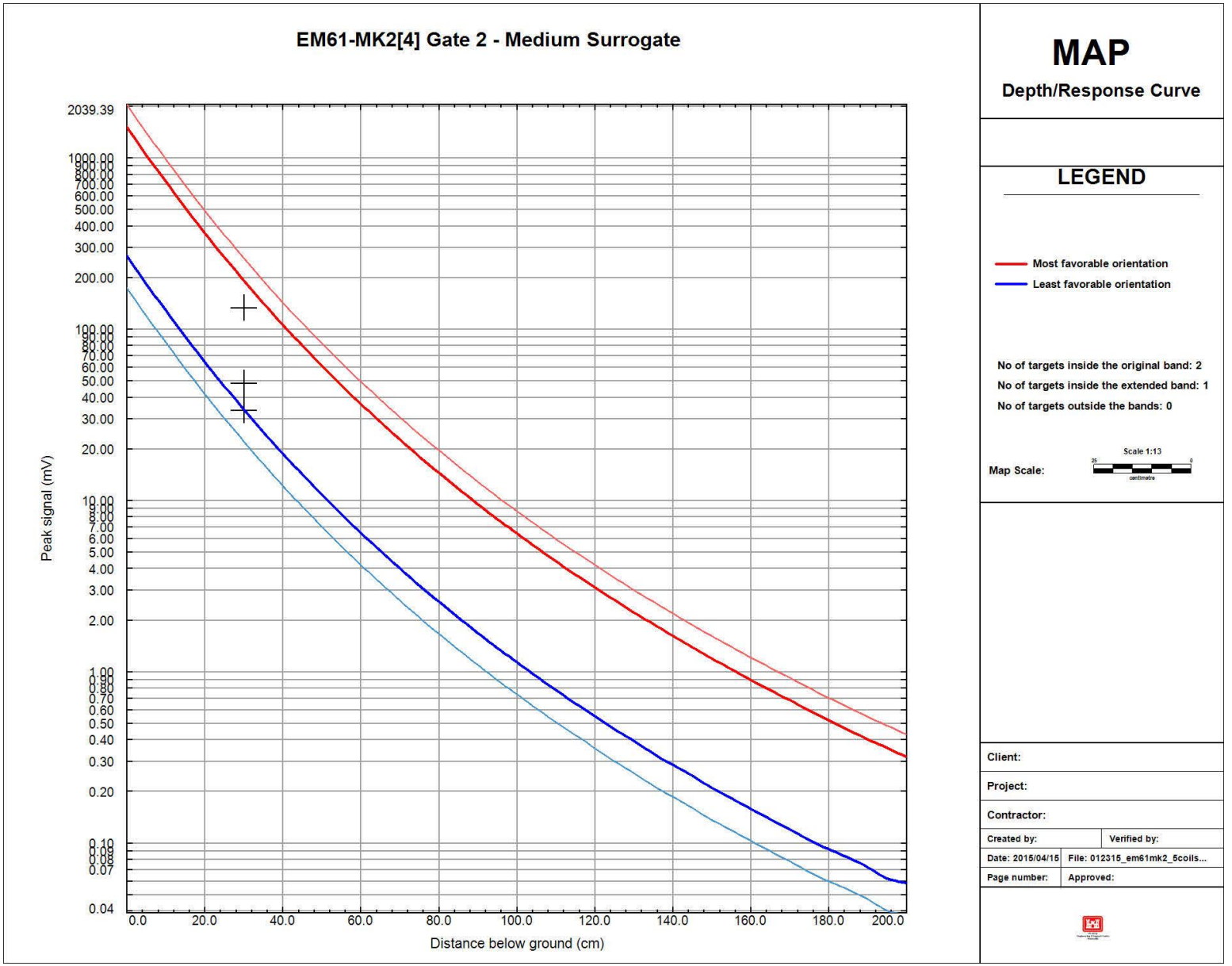


Figure C-484
1/23/2015 EM61 IVS AM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

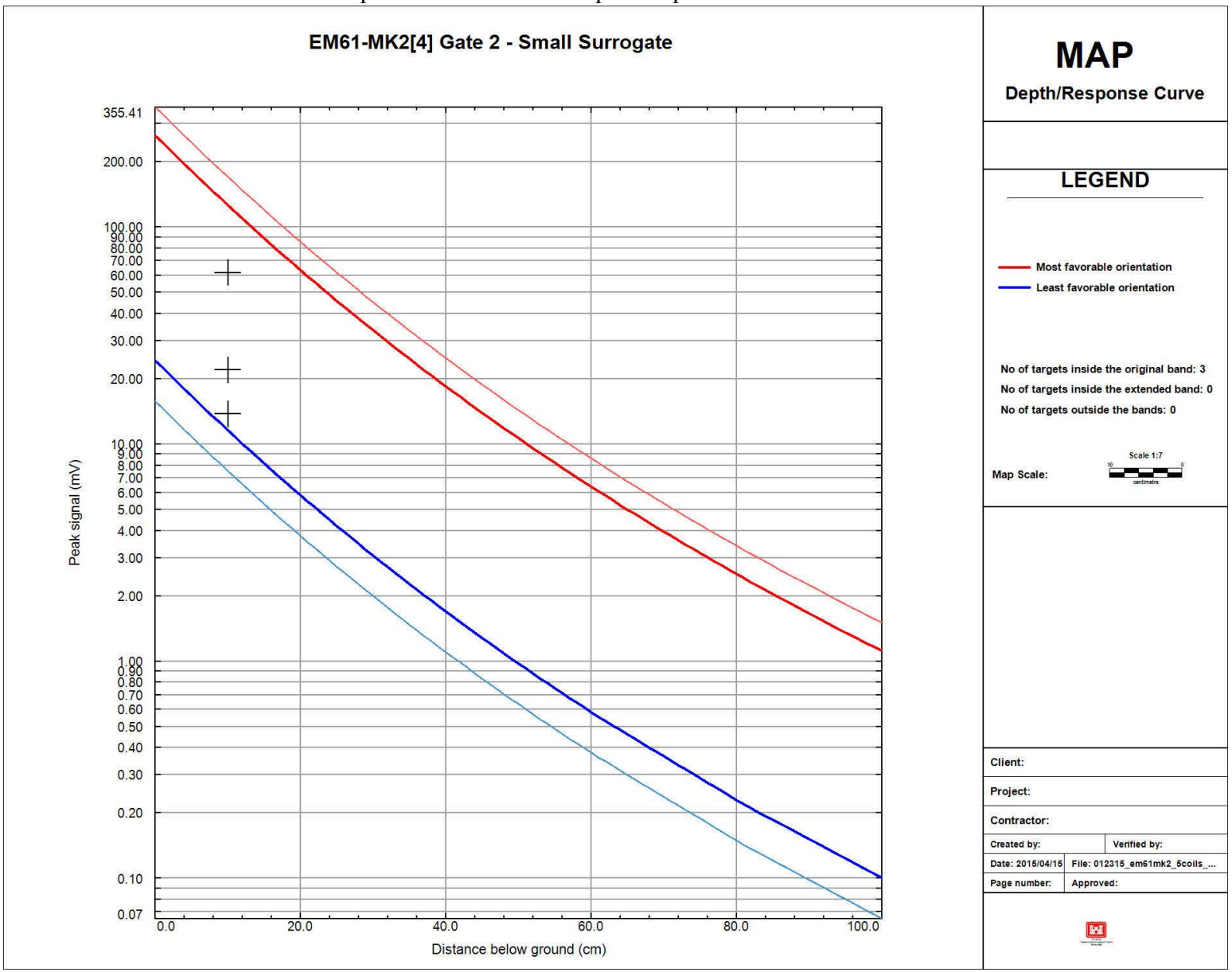


Figure C-485
1/23/2015 EM61 IVS PM Sensor C Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

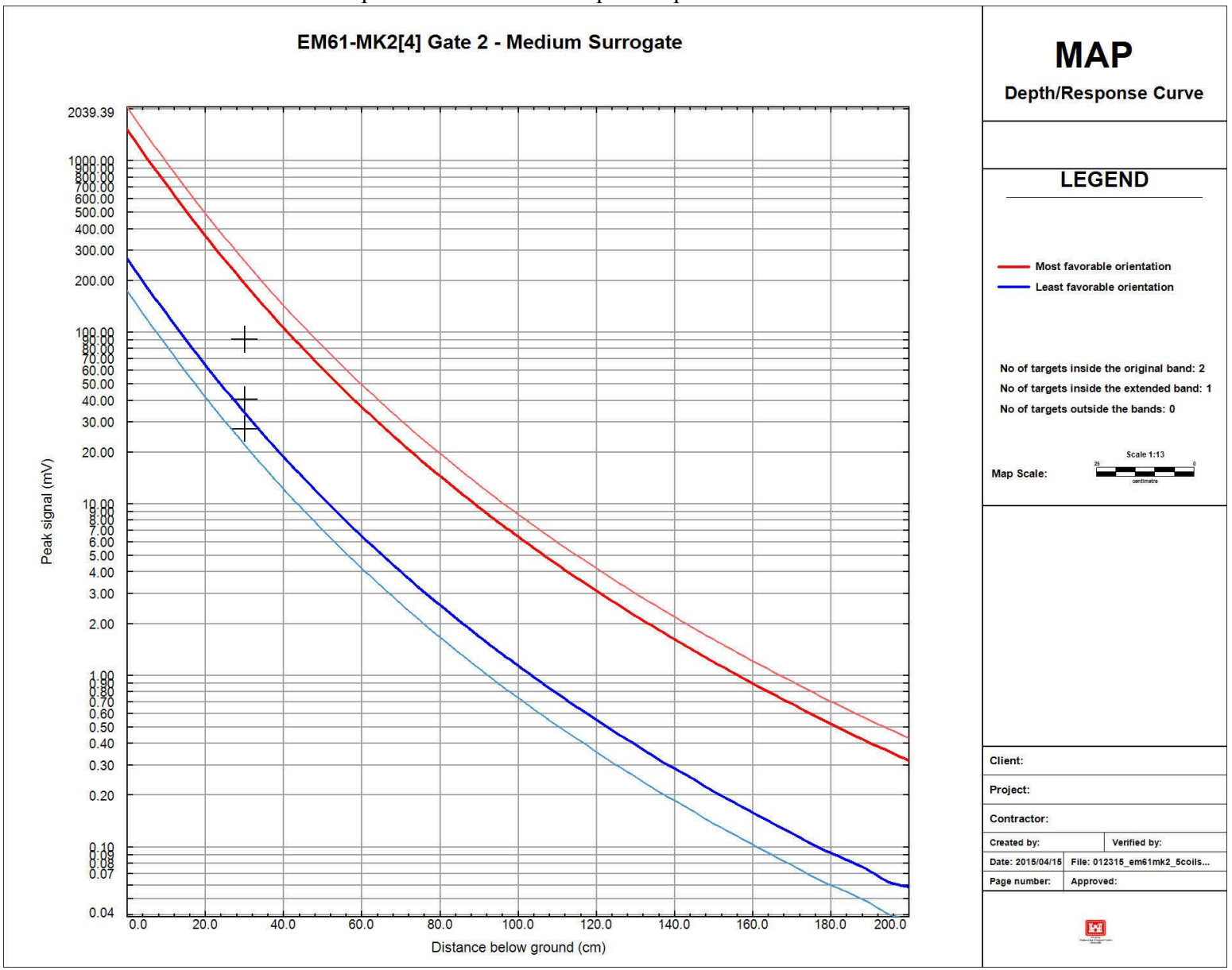


Figure C-486
1/23/2015 EM61 IVS PM Sensor C Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

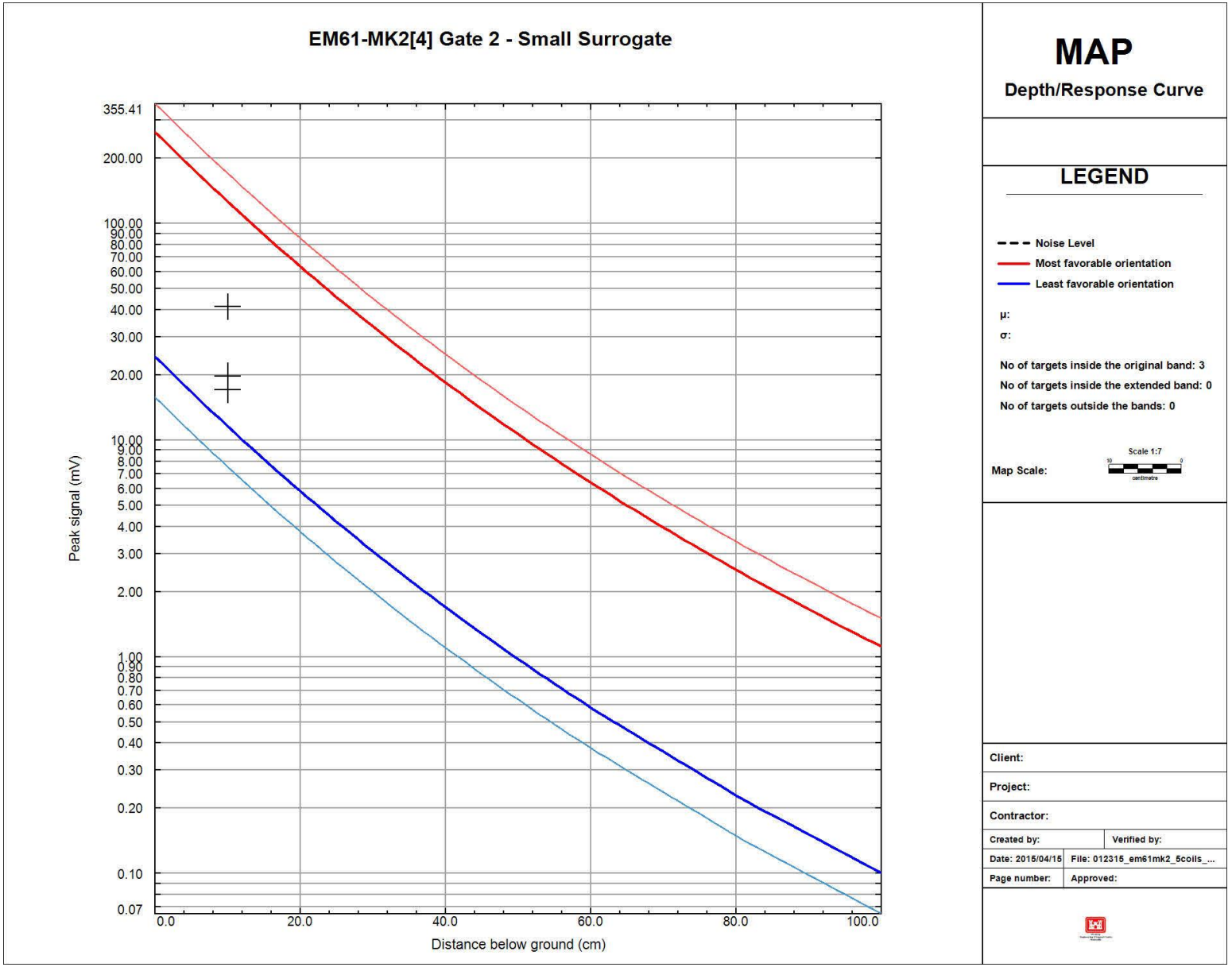


Figure C-487
1/23/2015 EM61 IVS PM Sensor L1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

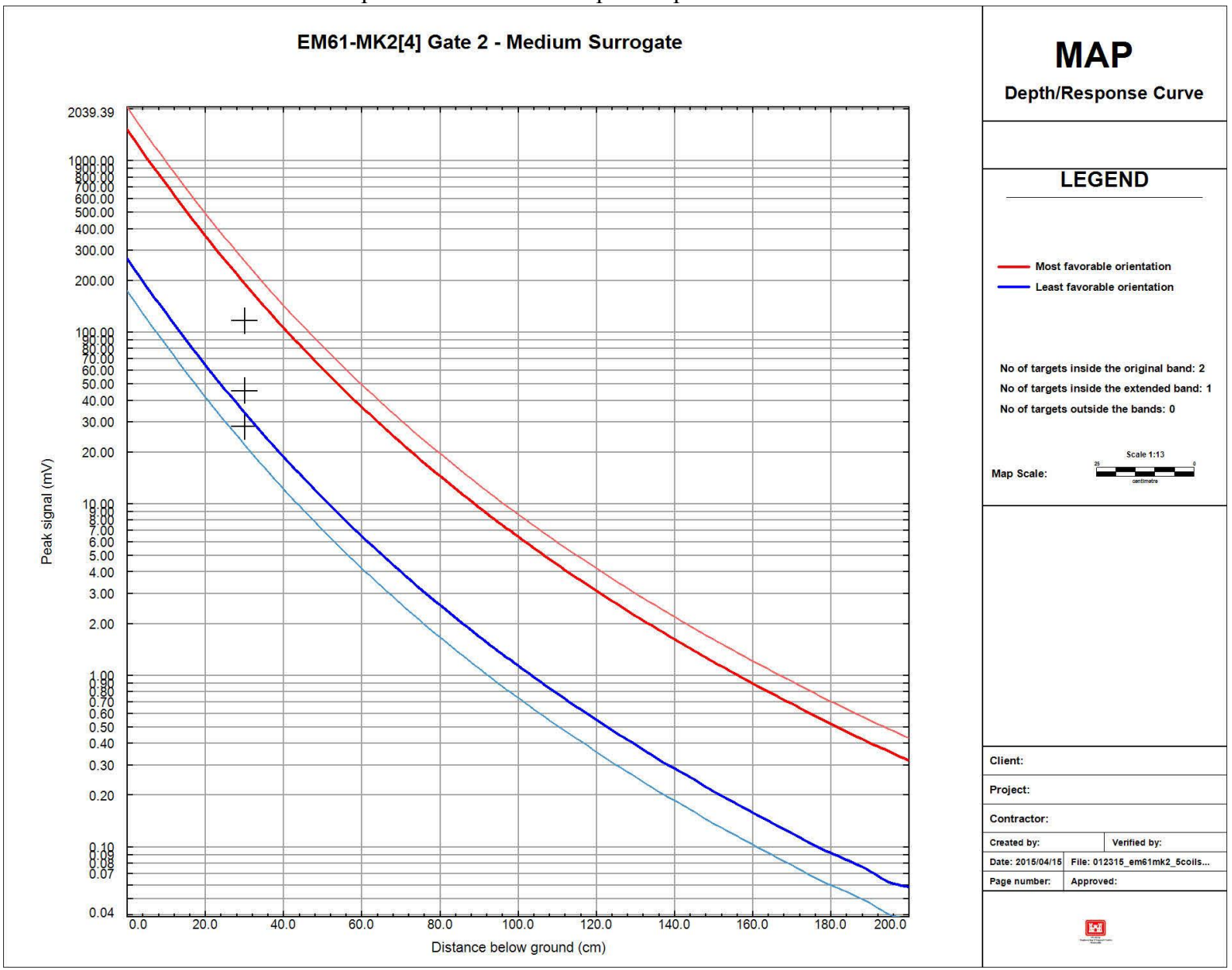


Figure C-488
1/23/2015 EM61 IVS PM Sensor L1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

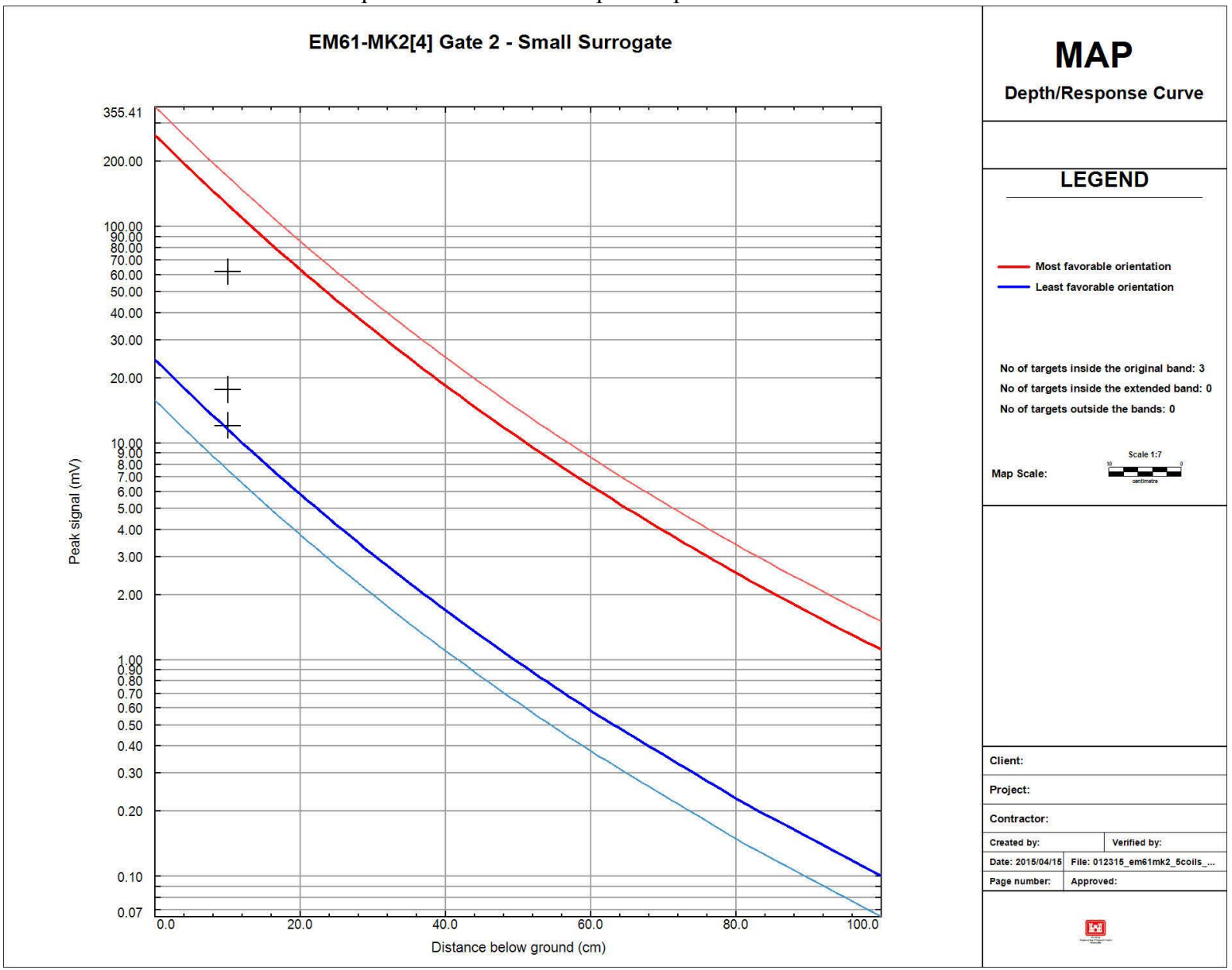


Figure C-489
1/23/2015 EM61 IVS PM Sensor L2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

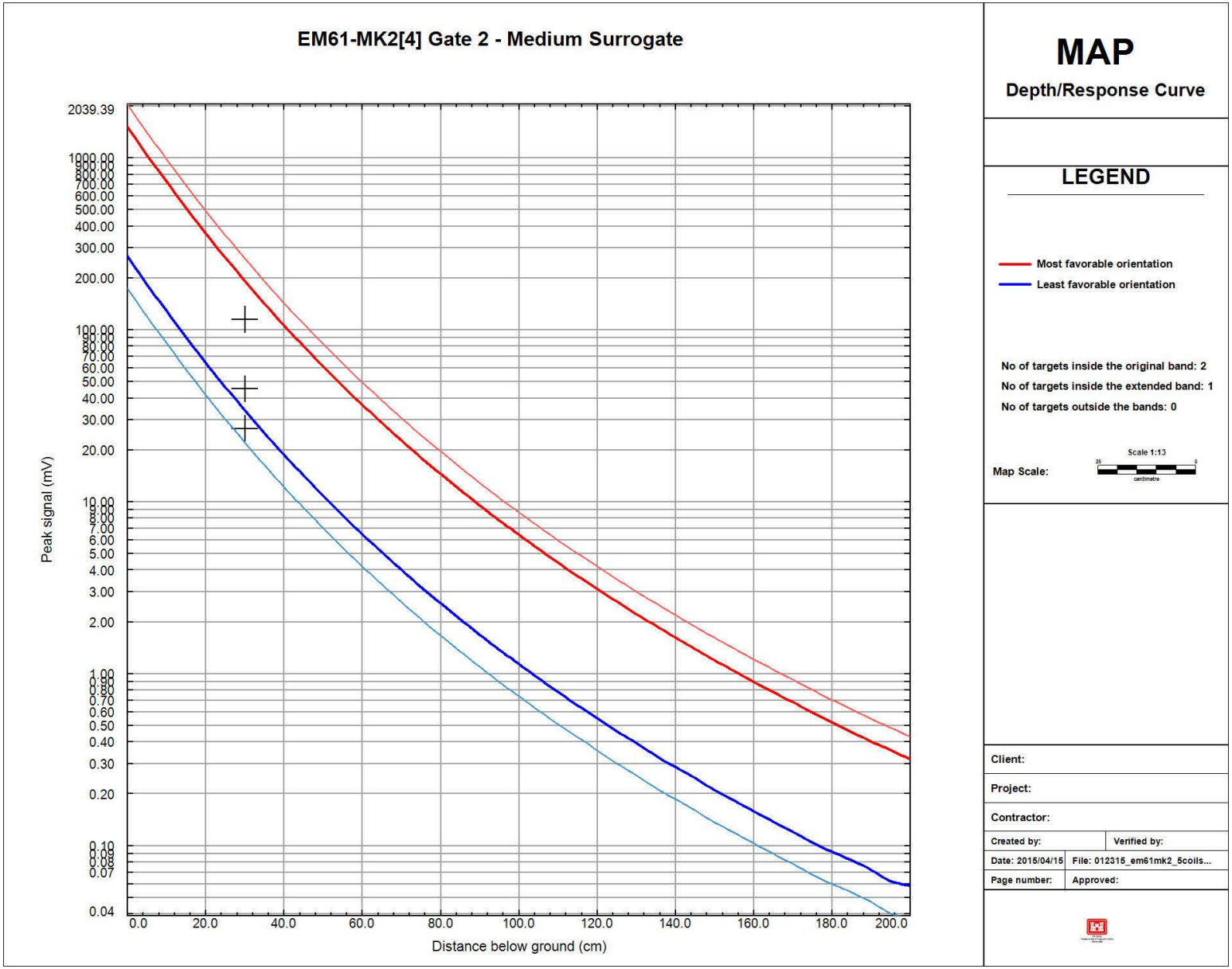


Figure C-490
1/23/2015 EM61 IVS PM Sensor L2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

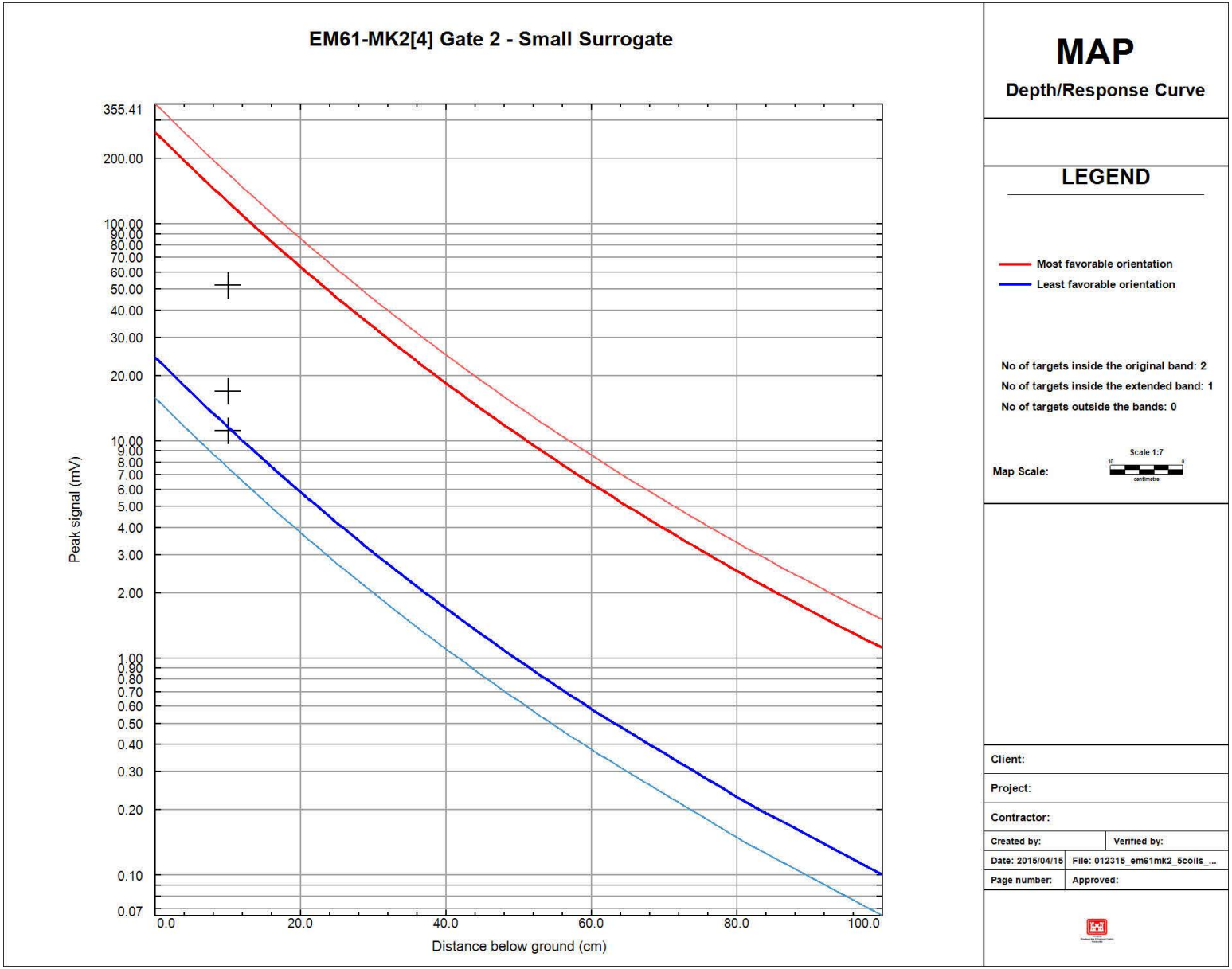


Figure C-491
1/23/2015 EM61 IVS PM Sensor R1 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

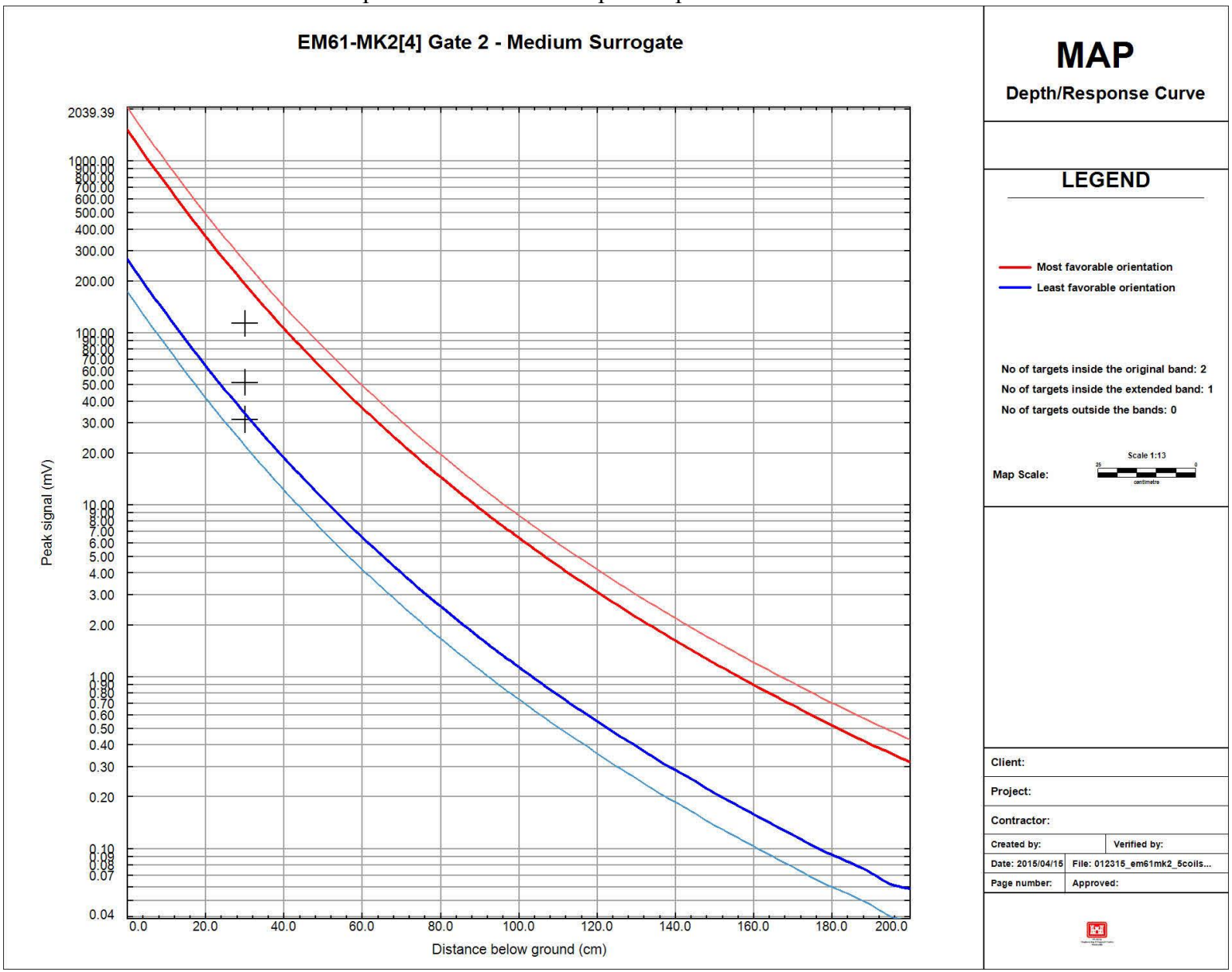


Figure C-492
1/23/2015 EM61 IVS PM Sensor R1 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

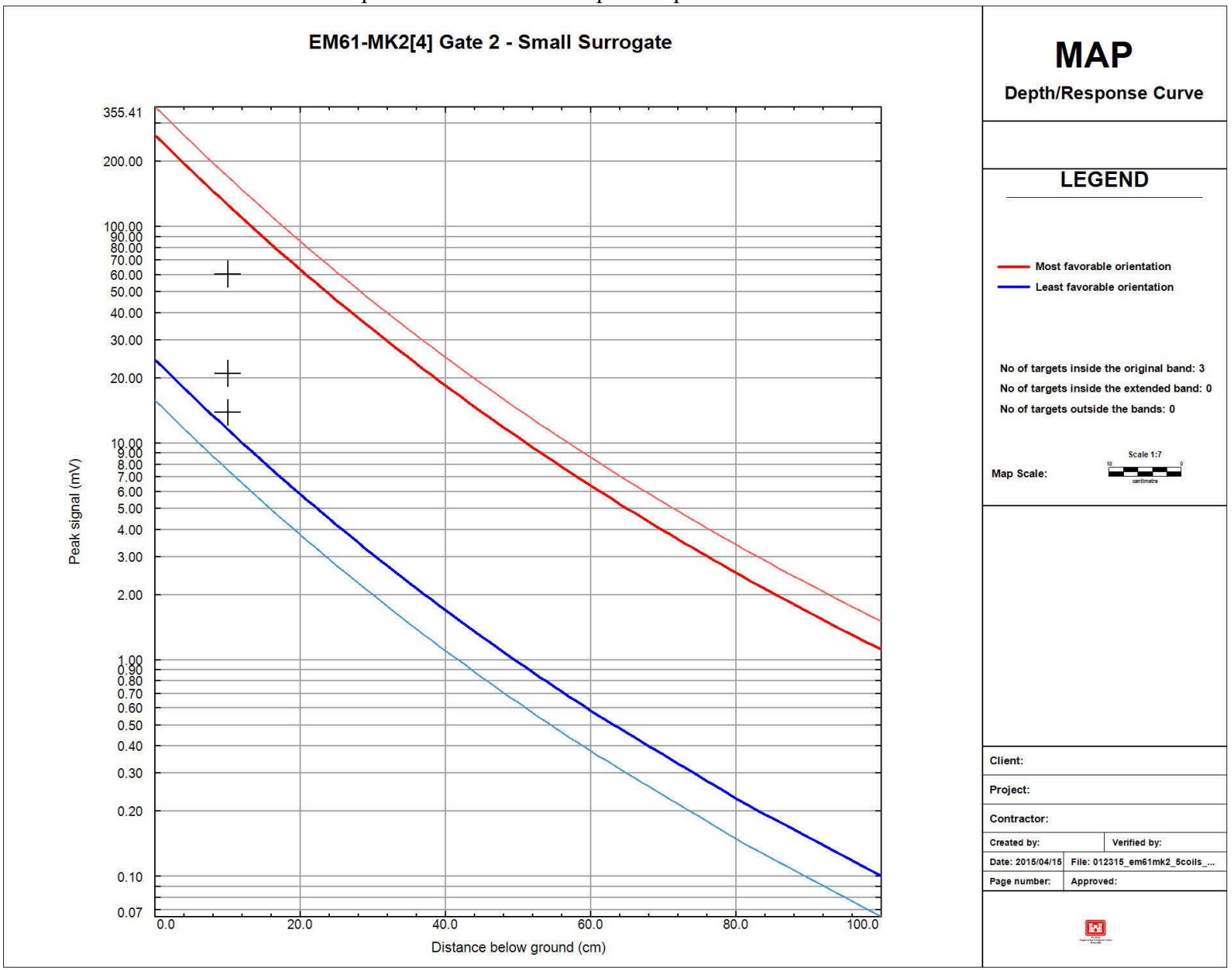


Figure C-493
1/23/2015 EM61 IVS PM Sensor R2 Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

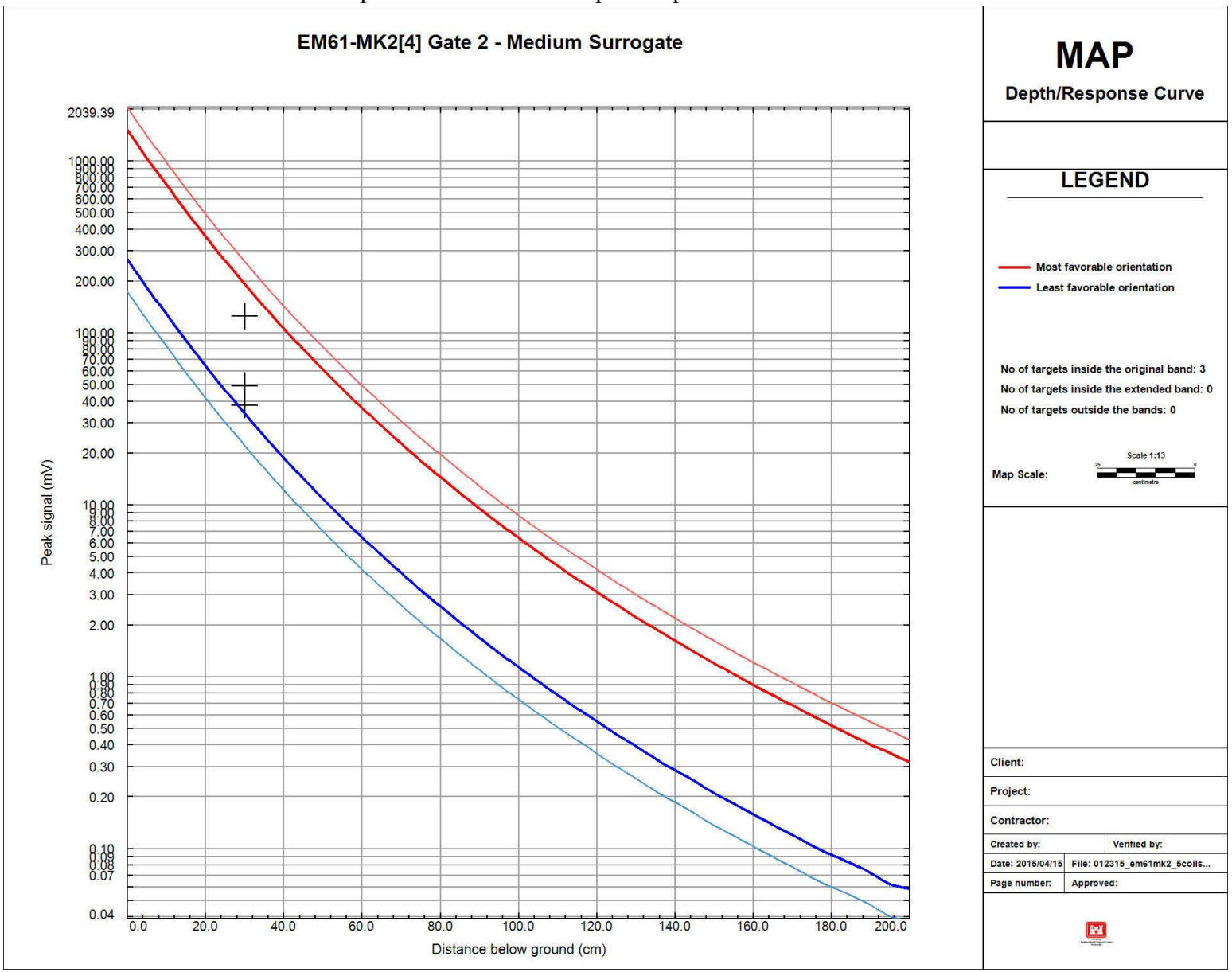


Figure C-494
1/23/2015 EM61 IVS PM Sensor R2 Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

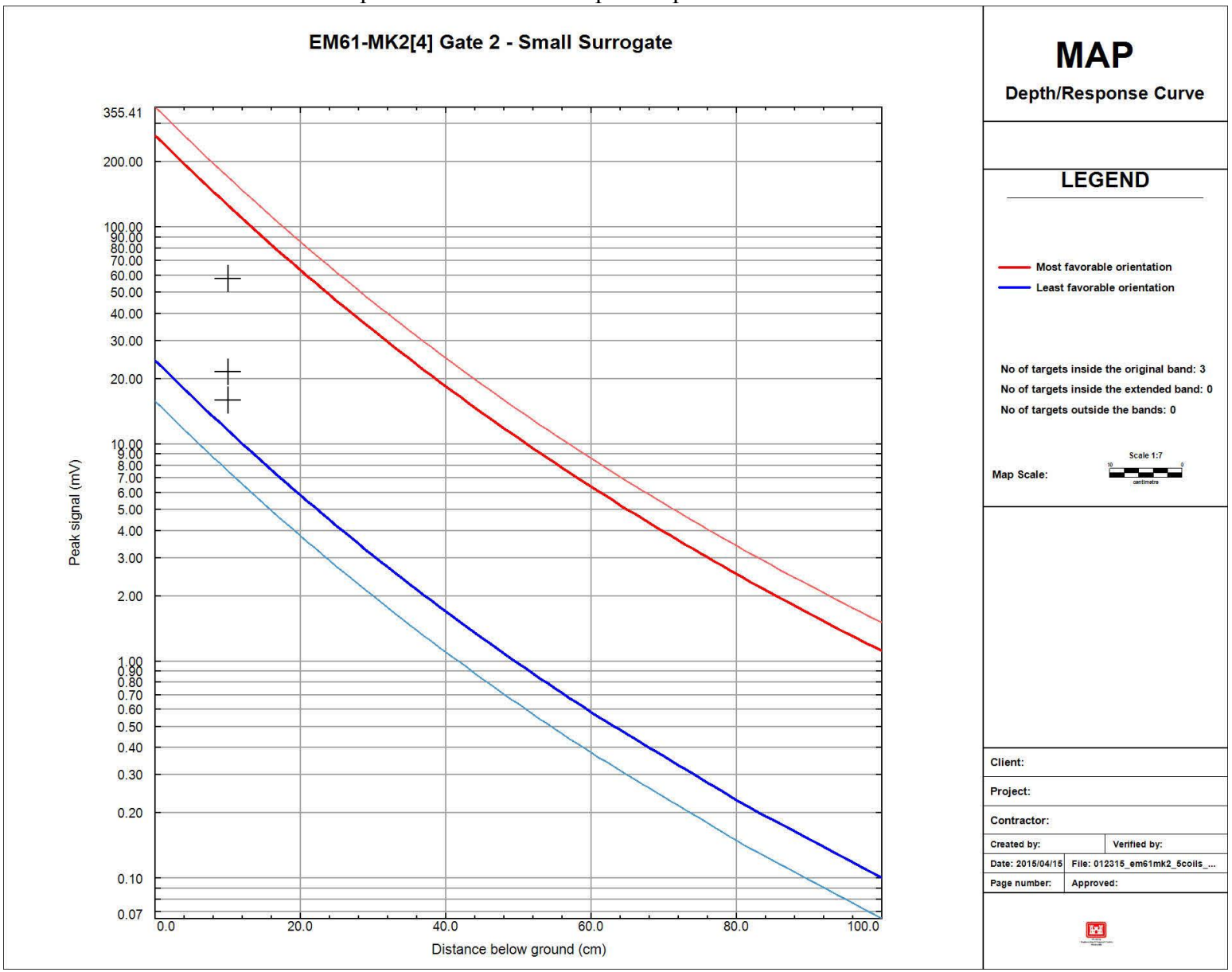


Figure C-495
1/26/2015 EM61 IVS AM Single Sensor Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

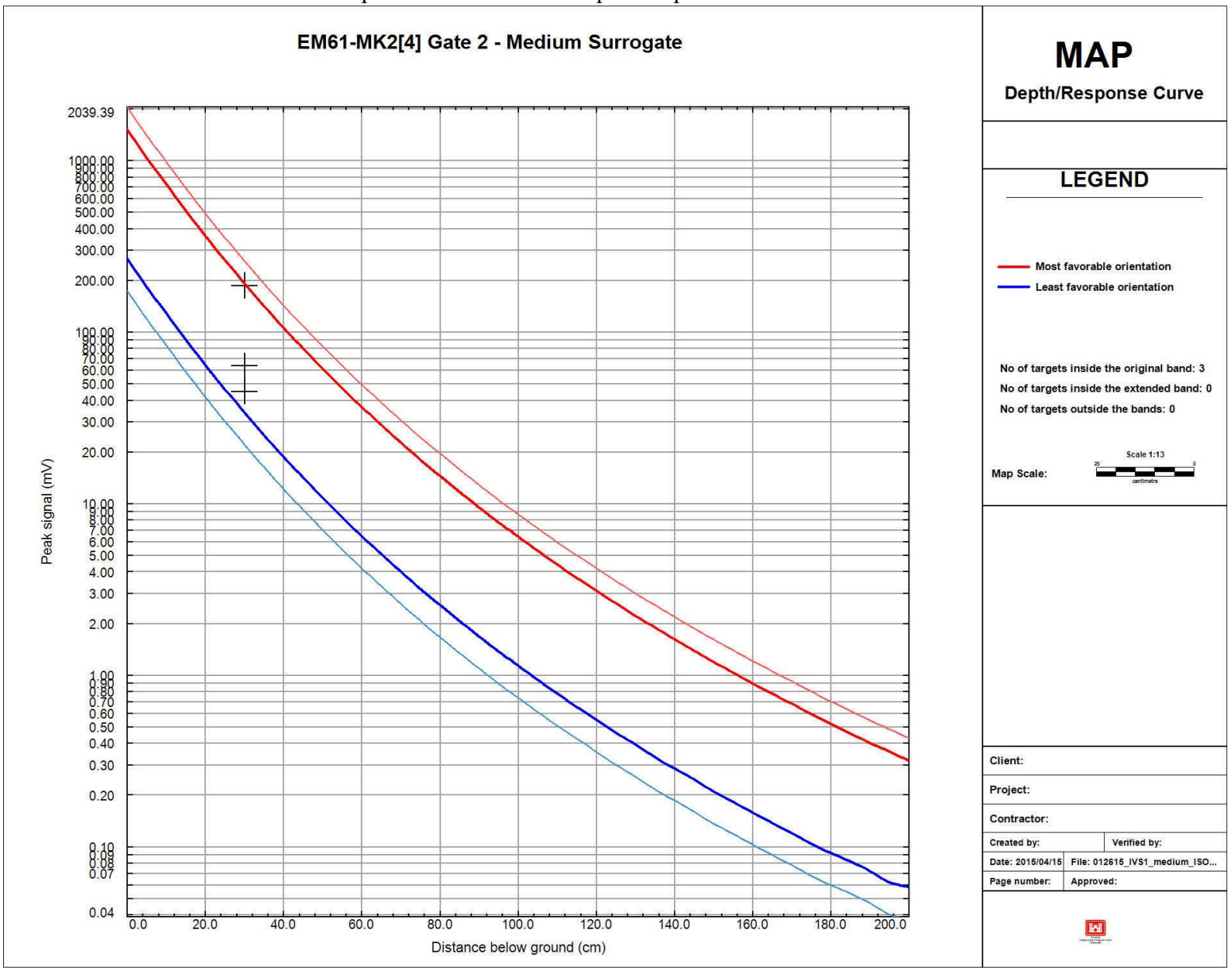


Figure C-496
1/26/2015 EM61 IVS AM Single Sensor Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

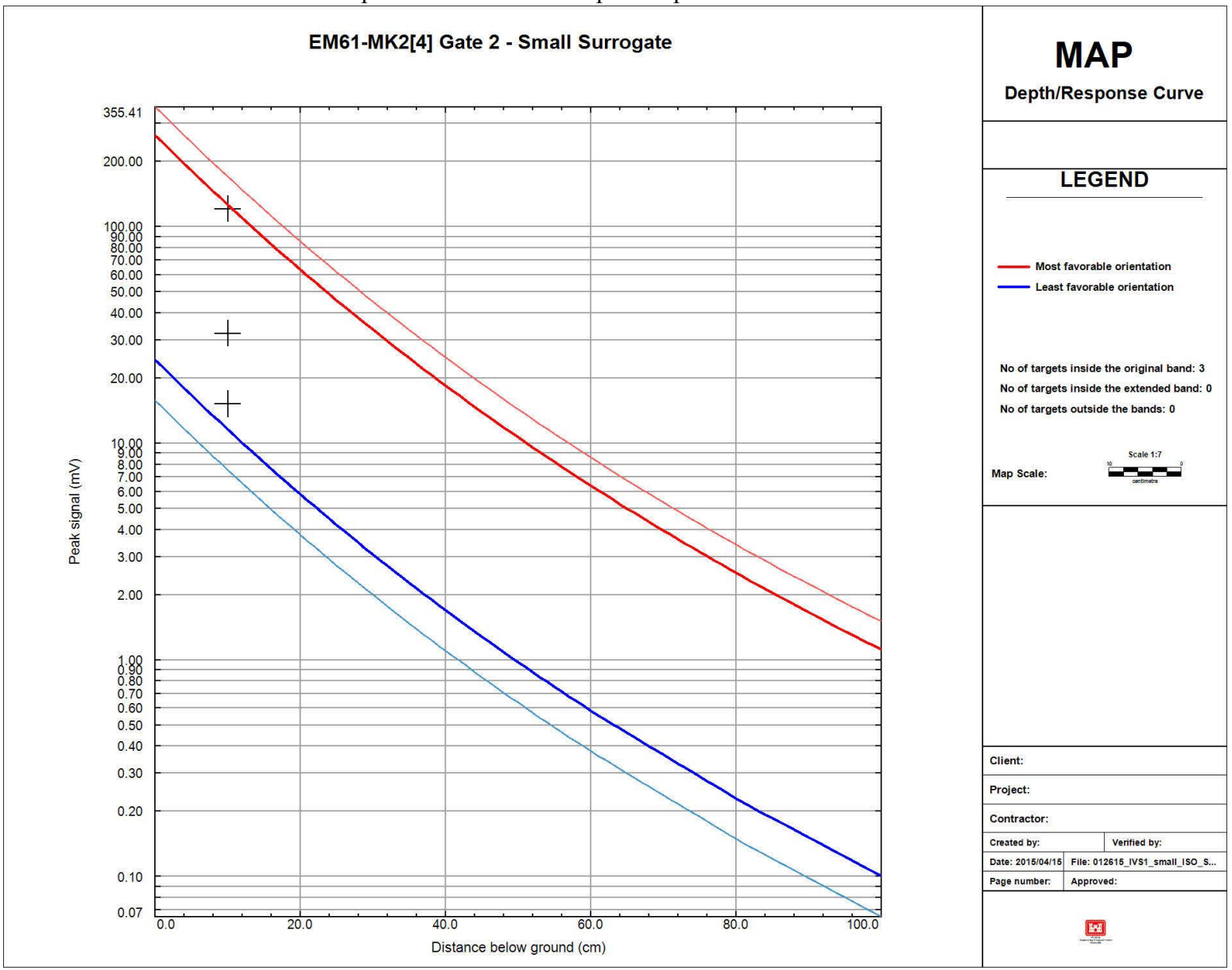


Figure C-497
1/26/2015 EM61 IVS PM Single Sensor Medium ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS

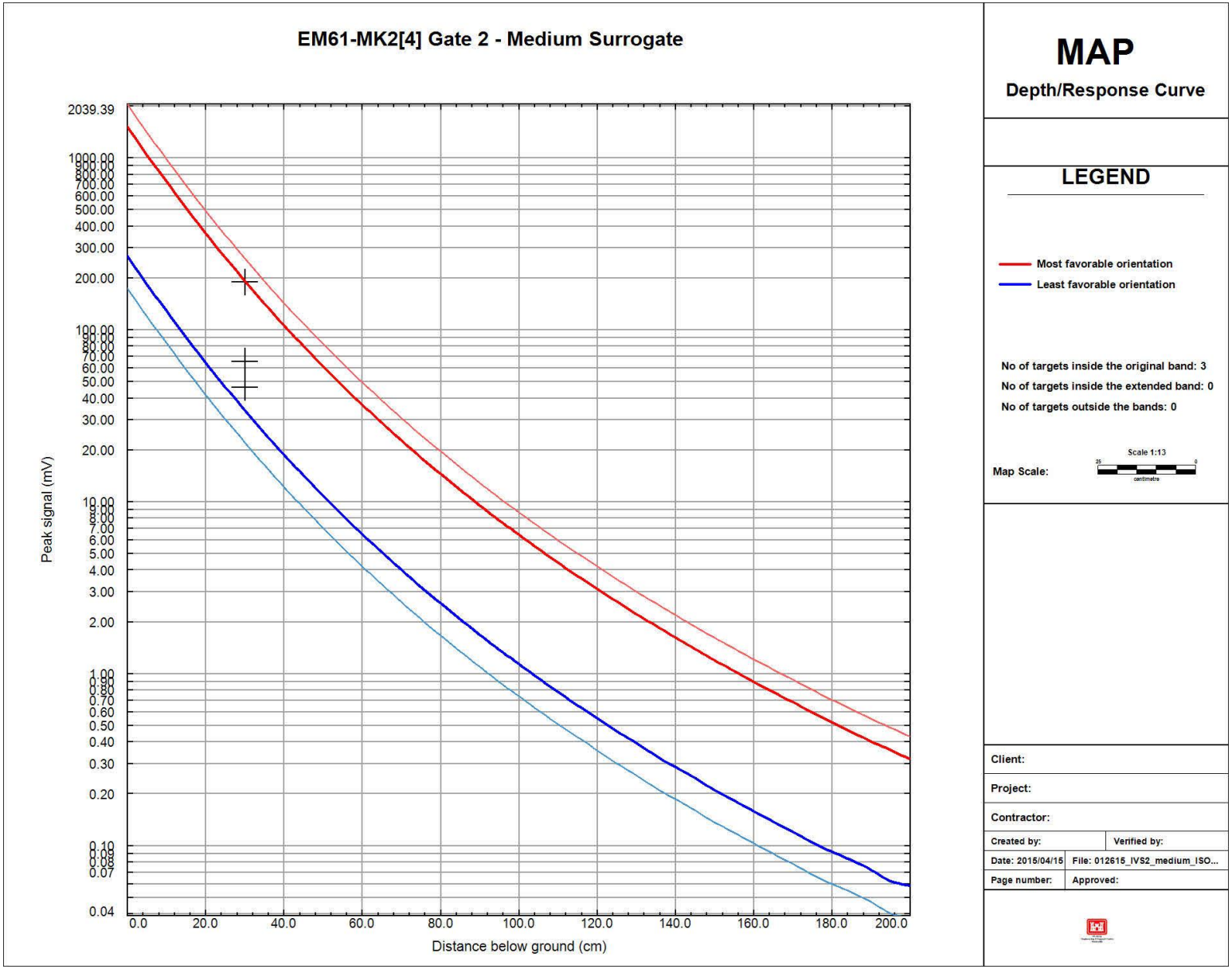
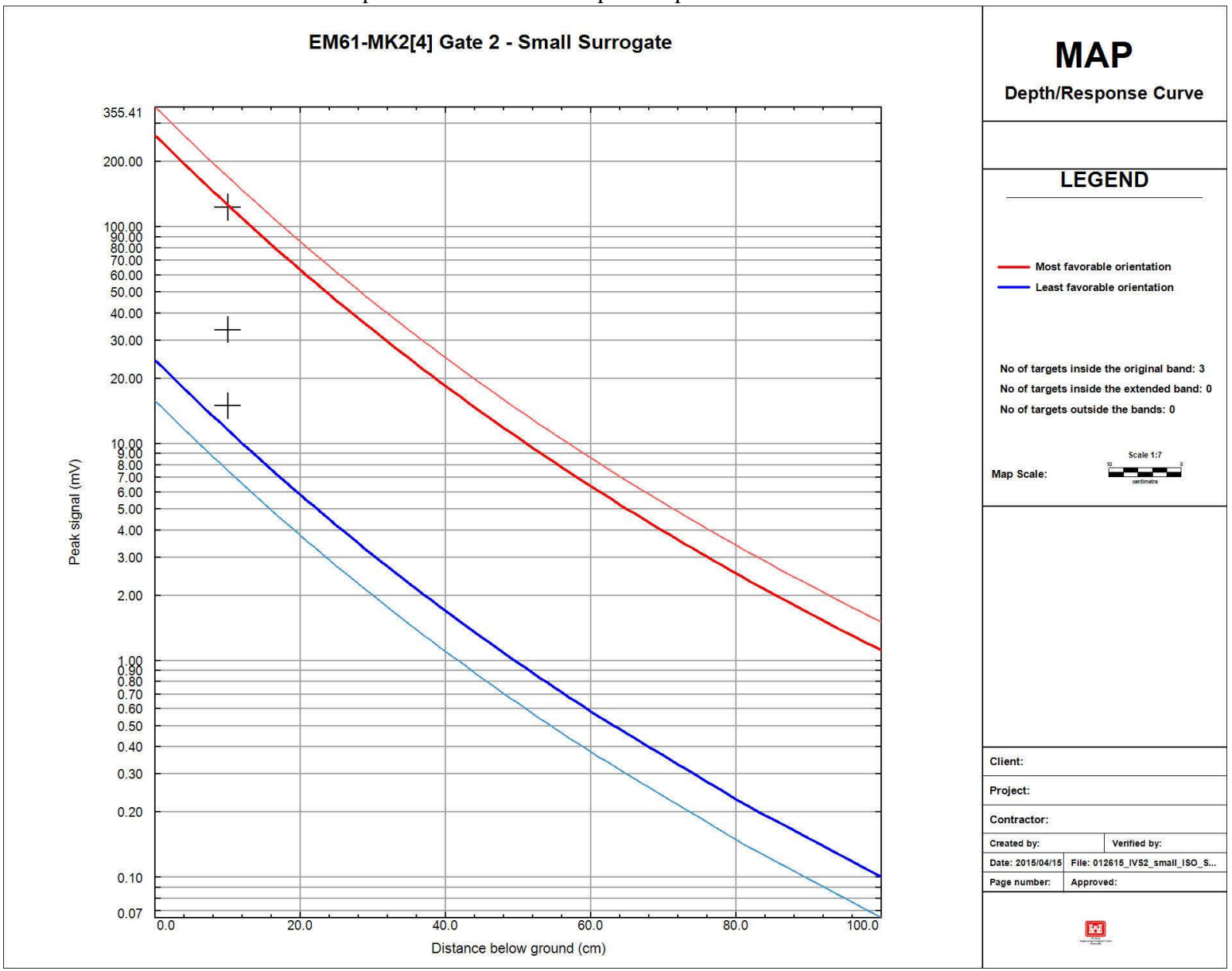


Figure C-498
1/26/2015 EM61 IVS PM Single Sensor Small ISO
ISO Amplitudes versus ISO Depth Response Curves XU854 MRS



Appendix D

Target Anomaly Lists and Dig Sheets

This page is intentionally left blank

Table of Contents

Table D-1 XU854 MRS Transects EM61 Geophysical Target Intrusive Investigation Results
Table D-2 XU854 MRS Grids EM61 Geophysical Target Intrusive Investigation Results
Table D-3 SR864 MRS Grids EM61 Geophysical Target Intrusive Investigation Results
Table D-4 SR864 MRS High Density Grids Intrusive Investigation Results
Table D-5 ML865MRS Grids G-858 Geophysical Target Anomaly List
Table D-6 RR869a MRS Grids G-858 Geophysical Target Anomaly List Inside MRS
Table D-7 RR869a MRS Grids G-858 Geophysical Target Anomaly List Outside MRS
Table D-8 RR869a MRS Fence Line Area G-858 Geophysical Target Intrusive Investigation Results Inside MRS
Table D-9 RR869a MRS Fence Line Area G-858 Geophysical Target Intrusive Investigation Results Outside MRS
Table D-10 Summary of Post Dig Quality Control Results

This page is intentionally left blank

Table D-1
XU854 MRS Transects
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_L1_1	392440.10	3637004.60	224.0	0	CD	Rolls of film x 20	0.08	0.75	0.03/0.08	NA	3-Feb-15	Yes	LP
XU854_L1_2	392438.00	3636936.20	178.2	0	QC seed	Medium ISO	0.08	0.5	0.05/0.20	NA	3-Feb-15	Yes	LP
XU854_L1_3	392440.40	3637020.40	115.2	0.05/E	CD	Steel plate	0.05	0.25	0.38/0.05	NA	3-Feb-15	Yes	LP
XU854_L1_4	392438.30	3637002.60	97.8	0	CD	Rusty pile of nuts and bolts	0.01	0.5	All small chunks	NA	3-Feb-15	Yes	LP
XU854_L1_5	392437.60	3637003.40	60.2	0	--	Same source as Target XU854_L1_4	--	--	--	NA	3-Feb-15	Yes	LP
XU854_L1_6	392438.70	3637032.20	51.8	0.30/N	MD	40 mm flare can	0.08	0.07	0.03/0.10	NA	3-Feb-15	Yes	LP
XU854_L1_7	392437.70	3637010.30	30.7	0.05/N	CD	Wire	0.03	<0.01	0.15 long	NA	3-Feb-15	Yes	LP
XU854_L1_8	392438.60	3637166.30	24.5	0.38/W	CD	Aluminum pipe	0.01	0.04	0.03/0.15	NA	3-Feb-15	Yes	LP
XU854_L1_9	392437.80	3636984.10	21.7	0	CD	Chunk of aluminum	0.08	0.03	0.08/0.13	NA	3-Feb-15	Yes	LP
XU854_L1_10	392440.40	3637026.70	20.0	0.10/N	CD	Nut x 1, metal plate x 2	0.03	0.5	0.05/0.05/0.05	NA	3-Feb-15	Yes	LP
XU854_L1_11	392438.50	3636952.80	18.0	0.23/SE	CD	Chunk of steel	0.08	0.5	0.08/0.10	NA	3-Feb-15	Yes	LP
XU854_L1_12	392438.10	3637030.80	14.9	0	CD	Steel cap	0.15	<0.01	0.03/<0.01	NA	3-Feb-15	Yes	LP
XU854_L1_13	392440.30	3637038.10	13.5	0	CD	Rebar	0.08	0.5	0.30/<0.01	NA	3-Feb-15	Yes	LP
XU854_L1_14	392439.40	3637013.00	10.1	0.23/S	CD	Steel rod	0.01	<0.01	0.13 long	NA	3-Feb-15	Yes	LP
XU854_L1_15	392439.80	3636894.10	6.0	0.15/N	CD	Bolt x 1	0.01	0.03	0.08/<0.01	NA	3-Feb-15	Yes	LP
XU854_L1_16	392436.90	3636976.70	5.9	0.05/S	CD	Bolts x 2, aluminum scrap	0.01	0.03	0.05/<0.01	NA	3-Feb-15	Yes	LP
XU854_L2_1	392476.00	3636881.90	72.3	0.10/S	CD	Bolts x 5, steel rod, aluminum cap	0.01	0.5	0.20/<0.01	NA	3-Feb-15	Yes	LP
XU854_L2_2	392469.80	3636969.20	31.0	0.30/W	CD	Melted aluminum	0.10	0.5	0.05/0.05	NA	3-Feb-15	Yes	LP
XU854_L2_3	392472.00	3636966.50	28.2	0.08/N	CD	Aluminum scrap	0.01	0.02	0.08/0.10	NA	3-Feb-15	Yes	LP
XU854_L2_4	392468.00	3636973.80	23.3	0.08/NW	CD	Bolt, nail, washer	0.03	0.05	0.13/<0.01	NA	3-Feb-15	Yes	LP
XU854_L2_5	392468.10	3637019.90	20.5	0	CD	Pipe	0.20	1	0.03/2.0	NA	3-Feb-15	Yes	LP
XU854_L2_6	392472.60	3636963.80	17.3	0.46/NE	CD	Steel plate, bolt x 2	0.08	0.5	0.15/0.15	NA	3-Feb-15	Yes	LP
XU854_L2_7	392467.90	3637043.70	13.5	0.05/E	CD	Burn pit of electric wire and connectors	0.15	2	--	NA	3-Feb-15	Yes	LP
XU854_L2_8	392466.30	3637026.10	12.8	0.20/W	CD	Wire	0.01	<0.01	0.13 long	NA	3-Feb-15	Yes	LP
XU854_L2_9	392470.80	3636967.90	12.7	0.15/N	CD	Melted/corroded aluminum	0.10	0.2	0.05/0.05	NA	3-Feb-15	Yes	LP
XU854_L2_10	392464.40	3636997.40	10.4	0.25/E	CD	Steel rod	0.01	0.03	0.13 long	NA	3-Feb-15	Yes	LP
XU854_L2_11	392470.00	3636966.80	8.8	0.13/N	CD	Melted aluminum	0.01	0.5	0.05/0.05	NA	3-Feb-15	Yes	LP
XU854_L2_12	392467.30	3637057.70	7.9	0.15/W	CD	Nails x 3	0.01	<0.01	0.05/--	NA	3-Feb-15	Yes	LP
XU854_L2_13	392469.80	3636973.50	7.9	0.61/S	CD	Aluminum scrap	Surface	0.01	0.03/0.05	NA	3-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-1 (Continued)
XU854 MRS Transects
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_L2_14	392469.70	3637052.20	6.5	0.23/S	CD	Nails x 3	0.01	0.03	0.05/0.13	NA	3-Feb-15	Yes	LP
XU854_L2_15	392468.30	3637054.60	5.3	0.20/NW	CD	Bolt x 1, nut x 1	0.01	0.03	0.05/0.13	NA	3-Feb-15	Yes	LP
XU854_L2_16	392467.90	3637031.50	5.3	0	CD	Circular plate	0.01	0.1	0.05/0.03	NA	3-Feb-15	Yes	LP
XU854_L3_1	392496.30	3637008.10	2132.5	0	CD	Concrete trench w/track (left in place)	Surface	--	--	NA	3-Feb-15	No	LP
XU854_L3_2	392497.60	3637073.90	352.8	0.38/E	CD	Drum/barrel	1.25	--	0.95/0.5	NA	5-Feb-15	Yes	LP
XU854_L3_3	392495.60	3637073.90	218.9	0	--	Same source as Target XU854_L3_2	--	--	--	NA	5-Feb-15	Yes	LP
XU854_L3_4	392495.60	3637068.80	204.2	0	CD	Pipe/concrete	0.30	2	0.05/0.36	NA	4-Feb-15	Yes	LP
XU854_L3_5	392494.60	3637010.00	111.0	0.30/NW	CD	Steel banding	0.01	0.03	0.46/<0.01	NA	3-Feb-15	Yes	LP
XU854_L3_6	392513.10	3637147.00	67.5	0.15/E	CD	Sprocket	0.01	0.5	0.01/0.10	NA	3-Feb-15	Yes	LP
XU854_L3_7	392514.20	3637230.20	56.0	0	CD	Aluminum scrap	0.08	0.04	0.08/0.30	NA	3-Feb-15	Yes	LP
XU854_L3_8	392496.70	3637005.80	54.6	0	CD	Ball of communication wire	0.10	0.5	2.7 long	NA	4-Feb-15	Yes	LP
XU854_L3_9	392493.40	3637010.60	46.0	0.30/SW	--	Same source as Target XU854_L3_5	--	--	--	NA	3-Feb-15	Yes	LP
XU854_L3_10	392504.70	3636987.30	34.9	0.10/E	CD	Aluminum scrap	0.05	0.01	0.05/0.08	NA	3-Feb-15	Yes	LP
XU854_L3_11	392515.00	3636818.60	23.5	0.08/W	CD	Aluminum scrap	0.03	<0.01	0.08/0.13	NA	3-Feb-15	Yes	LP
XU854_L3_12	392492.20	3637025.60	19.2	0	CD	Aluminum can	Surface	0.03	0.08/0.15	NA	3-Feb-15	Yes	LP
XU854_L3_13	392513.80	3636827.90	13.9	0.05/N	CD	Electronic component	0.01	0.05	0.03/0.08	NA	3-Feb-15	Yes	LP
XU854_L3_14	392488.80	3637019.10	12.6	0.30/W	SD, CD	5.56 mm proj. x 3, steel plate	0.01	0.02	0.03/0.13	NA	3-Feb-15	Yes	LP
XU854_L3_15	392494.70	3637053.10	10.2	0.05/W	CD	Bolt x 1	0.03	0.03	0.01/0.18	NA	3-Feb-15	Yes	LP
XU854_L3_16	392494.60	3637065.90	9.6	0.25/SE	CD	Bolt x 1	0.03	0.03	0.01/0.08	NA	3-Feb-15	Yes	LP
XU854_L3_17	392505.90	3637109.80	7.1	0.10/W	CD	Wire x 3	0.03	<0.01	0.08 long	NA	3-Feb-15	Yes	LP
XU854_L3_18	392499.20	3637083.00	7.1	0.10/E	CD	Steel rod	0.03	<0.02	0.46/(1/8 inch)	NA	3-Feb-15	Yes	LP
XU854_L3_19	392505.20	3636994.70	7.0	0	CD	Bolt and nails	0.05	0.03	0.13/<0.01	NA	3-Feb-15	Yes	LP
XU854_L3_20	392507.40	3636979.90	6.5	0.15/SW	CD	Washer x 1	0.05	0.03	0.08/0.08	NA	3-Feb-15	Yes	LP
XU854_L3_21	392495.50	3637052.20	6.5	0.03/S	CD	Wire	0.01	<0.01	0.24 long	NA	3-Feb-15	Yes	LP
XU854_L3_22	392490.70	3637018.30	6.2	0.03/S	CD	Electronic connector	0.01	0.04	0.03/0.05	NA	3-Feb-15	Yes	LP
XU854_L3_23	392509.00	3636967.60	5.5	0.08/E	CD	Steel rod, aluminum scrap	Surface	0.03	0.03/0.05	NA	3-Feb-15	Yes	LP
XU854_L4_1	392554.60	3637002.00	218.0	--	--	No find (QC verified same day)	--	--	--	--	04-Feb-15	Yes	RV
XU854_L4_2	392549.70	3636964.10	52.1	0.38/SW	CD	"L" bracket x 2	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-1 (Continued)
XU854 MRS Transects
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_L4_3	392547.60	3637066.20	41.0	0	CD	Steel I beam	0.25	0.5	0.05/0.30	NA	04-Feb-15	Yes	LP
XU854_L4_4	392548.90	3637141.00	39.7	0	CD	Aluminum tube	0.01	0.02	0.05/0.08	NA	04-Feb-15	Yes	LP
XU854_L4_5	392540.80	3636900.50	22.3	0/10/SE	CD	Aluminum scrap	0.03	0.03	0.05/0.48	NA	04-Feb-15	Yes	LP
XU854_L4_6	392568.90	3637006.50	15.8	0.15/NW	CD	Bolt x 1	0.05	0.03	0.01/0.10	NA	04-Feb-15	Yes	LP
XU854_L4_7	392572.40	3637008.40	13.4	0	CD	"L" bracket x 2	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_8	392557.30	3637002.20	11.8	0.30/S	CD	"L" bracket x 2	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_9	392552.20	3636966.90	11.7	0.30/E	CD	"L" bracket x 1	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_10	392550.30	3636962.80	10.6	0.25/E	CD	"L" bracket x 1	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_11	392579.10	3637011.20	10.0	0.10/N	CD	"L" bracket x 1	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_12	392578.50	3637018.30	9.7	0.10/E	CD	"L" bracket x 1	0.03	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_13	392548.00	3637124.60	9.5	0	CD	Survey mark (left in place)	--	--	--	NA	04-Feb-15	No	LP
XU854_L4_14	392552.20	3636971.30	9.3	0.10/E	CD	"L" bracket x 1	Surface	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_15	392578.60	3637013.00	9.1	0.18/SW	CD	Washer x 1	0.13	0.02	0.05/0.05	NA	04-Feb-15	Yes	LP
XU854_L4_16	392560.10	3637002.60	9.0	0.61/W	CD	"L" bracket x 1	0.03	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_17	392577.60	3637013.60	8.2	0.20/E	CD	Steel bar	0.10	0.12	0.30/0.03	NA	04-Feb-15	Yes	LP
XU854_L4_18	392563.40	3637006.00	8.0	0.38/E	CD	"L" bracket x 1	0.25	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L4_19	392546.30	3637090.60	7.6	0.15/E	CD	Bolt x 1	0.01	0.02	0.01/0.13	NA	04-Feb-15	Yes	LP
XU854_L4_20	392552.00	3636996.20	7.2	0.01/W	CD	Steel hook	0.03	0.03	0.05/0.01	NA	04-Feb-15	Yes	LP
XU854_L4_21	392579.60	3637018.40	5.7	0	CD	Rust flakes	Surface	--	--	NA	04-Feb-15	Yes	LP
XU854_L4_22	392568.90	3637005.00	4.5	0.03/W	CD	"L" bracket x 1, washer x 1	0.01	0.03	0.20/<0.01	NA	04-Feb-15	Yes	LP
XU854_L5_1	392588.60	3637038.30	158.3	0	CD	Fence wire	0.01	0.17	2.5 long	NA	04-Feb-15	Yes	LP
XU854_L5_2	392589.40	3637037.50	48.7	0	--	Same source as Target XU854_L5_1	--	--	--	NA	04-Feb-15	Yes	LP
XU854_L5_3	392591.00	3637150.70	43.1	0	MD	40 mm flare casing (empty)	0.10	0.04	0.04/0.10	NA	04-Feb-15	Yes	LP
XU854_L5_4	392556.70	3637071.80	29.9	0.03/NE	CD	Wire	0.01	0.15	2.0 long	NA	04-Feb-15	Yes	LP
XU854_L5_5	392572.00	3637106.20	25.8	0.18/SE	CD	Aluminum cap	0.10	0.02	0.05/0.05/0.01	NA	04-Feb-15	Yes	LP
XU854_L5_6	392580.80	3637112.30	25.5	0	CD	Wire fence clips x 24	0.01	<0.01	0.05/--	NA	04-Feb-15	Yes	LP
XU854_L5_7	392586.80	3637127.00	24.7	0.03/W	CD	Wire	0.03	0.04	0.30 long	NA	04-Feb-15	Yes	LP
XU854_L5_8	392587.60	3636990.50	24.4	0	CD	Aluminum can	0.03	0.01	0.08/0.15	NA	04-Feb-15	Yes	LP
XU854_L5_9	392583.70	3637118.30	22.6	0.30/W	CD	Wire	0.01	0.04	2.3 long	NA	04-Feb-15	Yes	LP
XU854_L5_10	392592.40	3637152.20	22.1	0.25/E	CD	Steel plate	0.01	0.17	0.05/0.13	NA	04-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-1 (Continued)
XU854 MRS Transects
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_L5_11	392586.60	3636928.00	20.6	0.30/W	CD	Can lid	0.01	0.04	0.20 diameter	NA	04-Feb-15	Yes	LP
XU854_L5_12	392578.10	3637108.70	20.0	0	CD	Wire	0.01	0.02	0.30 long	NA	04-Feb-15	Yes	LP
XU854_L5_13	392588.40	3637132.50	18.6	0.20/E	CD	Aluminum plate	0.10	0.03	0.08/0.08	NA	04-Feb-15	Yes	LP
XU854_L5_14	392568.30	3637103.90	14.8	0.15/E	CD	Wire	0.01	0.01	0.61 long	NA	04-Feb-15	Yes	LP
XU854_L5_15	392586.30	3637117.60	11.0	0.30/E	CD	Aluminum ring	0.01	<0.01	0.03 diameter	NA	04-Feb-15	Yes	LP
XU854_L5_16	392585.40	3637116.90	9.9	0	CD	Chain link	0.01	0.03	0.20/--	NA	04-Feb-15	Yes	LP
XU854_L5_17	392558.90	3637071.60	7.4	0.10/E	CD	Large nut x 1	0.03	0.03	0.03/0.05	NA	04-Feb-15	Yes	LP
XU854_L5_18	392555.60	3637095.60	7.4	0	CD	Aluminum can	Surface	0.01	0.08/0.15	NA	04-Feb-15	Yes	LP
XU854_L5_19	392592.60	3637173.20	7.3	0.15/E	CD	Cable thimble	0.10	0.03	0.01/0.15	NA	04-Feb-15	Yes	LP
XU854_L5_20	392585.90	3637124.60	7.1	0.30/E	CD	Bolt x 1	0.05	0.03	0.01/0.10	NA	04-Feb-15	Yes	LP
XU854_L5_21	392590.70	3637157.40	6.9	0.38/E	MD	40 mm flare base	0.01	0.02	0.04/0.01	NA	04-Feb-15	Yes	LP
XU854_L5_22	392586.90	3637121.40	6.6	0	CD	Aluminum can	0.01	0.02	0.05/0.08	NA	04-Feb-15	Yes	LP
XU854_L5_23	392551.90	3637083.40	6.2	0	CD	Wire	0.01	0.02	0.32 long	NA	04-Feb-15	Yes	LP
XU854_L5_24	392587.20	3637018.70	5.1	0.15	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	04-Feb-15	Yes	LP
XU854_L6_1	392633.50	3637111.30	2130.6	0	CD	Abandoned utility (left in place)	Surface	--	--	NA	04-Feb-15	No	LP
XU854_L6_2	392635.10	3637113.10	1501.9	0	CD	Abandoned utility (left in place)	Surface	--	--	NA	04-Feb-15	No	LP
XU854_L6_3	392636.10	3637110.90	115.1	--	--	Target not found (possibly same source as XU854_ L6_01, L6_02)	--	--	--	--	04-Feb-15	Yes	RV
XU854_L6_4	392636.00	3637108.80	27.2	--	--	Target not found (possibly same source as XU854_ L6_01, L6_02)	--	--	--	--	04-Feb-15	Yes	RV
XU854_L6_5	392638.30	3637090.60	20.8	0.08/SW	CD	Copper sheet x 1	0.01	0.02	0.05/0.08	NA	04-Feb-15	Yes	LP
XU854_L6_6	392634.50	3637079.80	17.2	0	CD	Copper sheet x 1	0.03	0.02	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L6_7	392633.80	3637080.80	12.2	0.05/S	CD	Copper sheet x 1	0.01	0.02	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L6_8	392621.10	3636973.60	10.9	0.05/S	CD	Aluminum cap	0.03	0.02	0.03/0.03	NA	04-Feb-15	Yes	LP
XU854_L6_9	392632.50	3637025.20	8.8	0.38/E	CD	Copper sheet x 2	Surface	0.02	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L6_10	392629.60	3637178.80	7.4	0	CD	Bolt x 1	0.01	0.1	0.01/0.08	NA	04-Feb-15	Yes	LP
XU854_L6_11	392636.00	3637081.10	6.0	0.30/W	CD	Copper sheet x 1	0.01	0.02	0.08/0.10	NA	04-Feb-15	Yes	LP
XU854_L6_12	392637.80	3637084.70	5.9	0.05/E	CD	Copper sheet x 1	0.03	0.02	0.05/0.05	NA	04-Feb-15	Yes	LP
XU854_L6_13	392636.20	3637087.50	5.8	0.30/W	CD	Nail (spike)	0.01	0.01	0.08/<0.01	NA	04-Feb-15	Yes	LP
XU854_L6_14	392637.30	3637089.10	5.1	0	CD	Wire	0.03	<0.01	0.10 long	NA	04-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-1 (Continued)
XU854 MRS Transects
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_L6_15	392633.20	3637114.60	5.0	--	--	Target not found (possibly same source as XU854_ L6_01, L6_02)	--	--	--	--	04-Feb-15	Yes	RV
XU854_L7_1	392659.60	3637053.00	32.5	0.23/W	CD	Copper sheet x 2	0.10	0.02	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L7_2	392662.80	3637096.50	6.6	0	CD	Abandoned utility (left in place)	0.30	--	--	NA	04-Feb-15	No	LP
XU854_L7_3	392661.90	3637095.70	5.8	0	CD	Abandoned utility (left in place)	0.30	--	--	NA	04-Feb-15	No	LP
XU854_L7_4	392660.80	3637037.30	5.8	0.05/N	CD	Copper sheet x 1	Surface	0.02	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L7_5	392665.70	3637209.60	5.8	0.30/W	CD	Steel rod	0.15	0.01	0.15/<0.01	NA	04-Feb-15	Yes	LP
XU854_L7_6	392657.50	3637070.70	5.5	0.15/N	CD	Copper sheet x 1	0.15	0.02	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L7_7	392660.90	3637094.70	4.5	0	CD	Abandoned utility (left in place)	0.30	--	--	NA	04-Feb-15	No	LP
XU854_L8_1	392697.70	3636907.60	188.6	0.05/W	CD	Round steel cap	0.03	0.1	0.20 diameter	NA	04-Feb-15	Yes	LP
XU854_L8_2	392698.10	3636993.10	51.0	0	CD	Film roll	0.08	<0.01	0.13 diameter	NA	04-Feb-15	Yes	LP
XU854_L8_3	392701.10	3637229.90	41.7	0	CD	Film roll	Surface	0.02	0.10 diameter	NA	04-Feb-15	Yes	LP
XU854_L8_4	392698.30	3637177.60	22.2	0.08/N	CD	Door knob	0.05	0.3	0.08/0.13	NA	04-Feb-15	Yes	LP
XU854_L8_5	392699.60	3636960.00	5.0	--	--	No find (QC verified same day)	--	--	--	--	04-Feb-15	Yes	RV
XU854_L9_1	392735.10	3637195.40	67.2	0	CD	Foil backed insullation	0.15	0.05	0.20/0.25	NA	04-Feb-15	Yes	LP
XU854_L9_2	392737.90	3637106.30	22.4	0.30/--	CD	Alligator clamp	0.01	0.03	0.03/0.10	NA	04-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

This page is intentionally left blank

Table D-2
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_G_1	392637.90	3637114.40	######	0.30/W	CD	Metal covered concrete trench (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_2	392637.10	3637115.50	######	0.15/E	CD	Metal covered concrete trench (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_3	392677.20	3637118.30	1676.3	0	CD	Concrete pad (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_4	392648.50	3637128.00	759.0	0.60/NE	CD	Metal covered concrete trench (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_5	392651.60	3637128.10	652.1	0.61/--	CD	Concrete pad (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_6	392642.30	3637135.10	361.8	0	CD	Survey marker (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_7	392636.00	3637116.80	93.3	0	CD	Wire bus fuze	0.03	0.01	0.30/--	NA	19-Feb-15	Yes	DH
XU854_Gr_G_8	392639.20	3637112.90	57.7	2.0/--	CD	Metal covered concrete trench (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_9	392673.50	3637101.10	56.8	1.0/E	CD	Fence post	Surface	2	1.0/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_G_10	392619.80	3637129.30	47.4	0.03/E	CD	Fence bracket	<0.01	0.4	0.30/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_G_11	392651.90	3637126.10	41.5	0.20/W	CD	Wire	<0.01	0.01	0.20/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_G_12	392647.90	3637128.90	32.6	2.0/E	CD	Metal covered concrete trench (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_G_13	392639.20	3637132.00	31.6	0	CD	Rebar	0.30	0.5	0.48/0.05	NA	21-Feb-15	Yes	DH
XU854_Gr_G_14	392625.80	3637129.30	29.6	0.38/S	CD	Fence bracket	<0.01	0.4	0.30/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_G_15	392643.30	3637133.90	24.9	0	CD	Rebar	0.30	0.5	0.48/0.05	NA	21-Feb-15	Yes	DH
XU854_Gr_G_16	392641.60	3637136.50	18.4	0.20/S	CD	Part of T post	0.30	0.2	0.30/0.05	NA	21-Feb-15	Yes	DH
XU854_Gr_G_17	392623.90	3637135.10	17.4	0.38/S	CD	Fence bracket	<0.01	0.4	0.30/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_G_18	392625.30	3637128.50	14.8	0.38/W	CD	Same source as Target XU854_Gr_G_15	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_G_19	392626.60	3637140.00	11.7	0	CD	Wire	<0.01	0.03	0.60 long	NA	19-Feb-15	Yes	DH
XU854_Gr_G_20	392664.80	3637114.90	10.0	0	CD	Aluminum piece	0.03	0.02	0.10/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_G_21	392647.50	3637115.00	10.0	0	CD	Metal rod	0.08	0.8	0.15/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_G_22	392633.20	3637154.90	9.9	0.5/SW	CD	Wire	<0.01	0.02	0.25 long	NA	19-Feb-15	Yes	DH
XU854_Gr_G_23	392622.50	3637148.90	7.8	0	CD	Chunk of steel	0.08	0.4	0.08/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_G_24	392640.10	3637138.10	7.1	0.61/S	CD	Bolt x 1	0.08	0.03	0.10/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_G_25	392626.90	3637120.30	6.5	0	CD	Aluminum can	0.08	0.01	0.15/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_G_26	392666.40	3637108.90	6.5	0	CD	Flat copper piece	0.03	0.01	0.08/0.05	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_G_27	392638.10	3637131.40	6.4	0.61/S	CD	Wire (heavy)	<0.01	0.02	0.15 long	NA	19-Feb-15	Yes	DH
XU854_Gr_G_28	392630.90	3637129.70	6.3	0.20/E	CD	Wire	Surface	0.01	0.15 long	NA	19-Feb-15	Yes	DH
XU854_Gr_G_29	392623.90	3637152.10	6.2	0.5/W	CD	Metal rod	<0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_G_30	392664.10	3637098.00	4.8	0	CD	Communication cable (left in place)	0.30	--	--	NA	19-Feb-15	No	DH
XU854_Gr_H_1	392689.70	3637132.80	1223.8	1.0/W	CD	Cable post (left in place)	0.00	--	--	NA	19-Feb-15	No	DH
XU854_Gr_H_2	392639.30	3637154.30	132.1	0	QC seed	Medium ISO	0.20	1	0.05/0.20	NA	20-Feb-15	Yes	DH
XU854_Gr_H_3	392663.50	3637167.10	79.1	0	CD	Aluminum plate	0.05	0.03	0.08/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_H_4	392696.00	3637124.60	69.5	0	CD	Aluminum plate	0.05	0.5	0.20 diameter	NA	19-Feb-15	Yes	DH
XU854_Gr_H_5	392665.10	3637164.80	49.7	0	CD	Copper sheet	0.05	0.11	0.10/0.13	NA	20-Feb-15	Yes	DH
XU854_Gr_H_6	392635.60	3637157.00	29.4	0	CD	Survey marker (left in place)	0.00	--	--	NA	20-Feb-15	No	DH
XU854_Gr_H_7	392649.40	3637157.20	16.9	0.30/S	CD	Aluminum can	0.03	0.02	0.08/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_H_8	392636.50	3637174.60	15.1	0	CD	Pieces of steel x 2	0.05	<0.01	0.03/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_H_9	392656.80	3637160.00	12.8	0	CD	Steel rod	0.05	0.02	0.30/0.02	NA	20-Feb-15	Yes	DH
XU854_Gr_H_10	392692.00	3637131.80	11.1	0.20/SE	SD	.45 caliber slug x 1	0.05	0.01	<0.01/--	NA	19-Feb-15	Yes	DH
XU854_Gr_H_11	392657.10	3637161.30	9.2	0.05/W	CD	Wire	<0.01	0.01	0.48 long	NA	20-Feb-15	Yes	DH
XU854_Gr_H_12	392691.10	3637117.90	8.8	0.30/S	CD	Steel bar	0.15	0.5	0.15/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_H_13	392682.70	3637158.20	8.3	0	CD	Steel pin	0.03	0.4	0.01/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_H_14	392649.40	3637153.10	7.9	1.0/N	CD	Copper slag	0.08	0.06	0.05/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_H_15	392663.70	3637169.30	7.5	1.0/N	CD	Utility cable (left in place)	0.30	--	--	NA	20-Feb-15	No	DH
XU854_Gr_H_16	392686.60	3637130.00	7.4	0.30/SE	SD	.45 caliber slug x 1	0.10	0.01	<0.01/--	NA	20-Feb-15	Yes	DH
XU854_Gr_H_17	392684.20	3637128.70	7.2	0.20/W	SD, CD	.45 caliber slug x 1, washer	<0.01	0.01	<0.01/--	NA	20-Feb-15	Yes	DH
XU854_Gr_H_18	392685.80	3637135.30	7.0	0	SD	.45 caliber slug x 9	0.00	0.01	<0.01/--	NA	19-Feb-15	Yes	DH
XU854_Gr_H_19	392683.50	3637127.60	6.6	0.35/W	CD	Steel pin	<0.01	0.4	0.01/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_H_20	392696.40	3637122.10	6.6	0.20/S	CD	Aluminum can	0.08	0.02	0.05/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_H_21	392673.60	3637152.70	6.6	0	CD	Nut x 1	0.00	0.4	0.05/--	NA	20-Feb-15	Yes	DH
XU854_Gr_H_22	392658.20	3637159.70	6.2	0.08/S	CD	Steel rod	0.03	0.02	0.30/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_H_23	392690.60	3637116.80	6.0	0.5/N	CD	Same source as Target XU854_Gr_H_12	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_H_24	392654.60	3637158.10	5.6	0.30/SW	CD	Rebar	0.03	0.2	0.05/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_H_25	392686.90	3637127.80	5.6	0.30/S	CD	Wire	<0.01	<0.01	0.16 long	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_H_26	392647.00	3637167.40	5.1	0.15/W	CD	Pipe fitting	0.05	0.11	0.20/0.02	NA	20-Feb-15	Yes	DH
XU854_Gr_H_27	392651.00	3637175.50	5.1	0.48/S	CD	Metal rod	<0.01	0.03	0.30/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_H_28	392641.80	3637161.90	4.9	0.30/S	CD	Bolt x 1	<0.02	0.02	0.08/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_I_1	392527.80	3637058.40	352.0	0	CD	Channel iron	<0.01	1	0.30/0.05/0.03	NA	17-Feb-15	Yes	LP
XU854_Gr_I_2	392527.30	3637057.70	229.9	0	CD	Same source as Target XU854_Gr_I_1	--	--	--	NA	17-Feb-15	Yes	LP
XU854_Gr_I_3	392544.50	3637060.10	145.9	0	CD	Valve	Surface	1	0.20/0.10/0.03	NA	17-Feb-15	Yes	LP
XU854_Gr_I_4	392520.80	3637060.30	86.0	0	CD	Pole piece	0.48	5	0.60/0.10	NA	20-Feb-15	Yes	DH
XU854_Gr_I_5	392538.90	3637059.40	73.6	0	CD	Sprocket x 2, bolt x 2	0.03	0.5	0.08 diameter star	NA	17-Feb-15	Yes	DH
XU854_Gr_I_6	392526.80	3637053.10	55.6	0	CD	Utility pipe (left in place)	0.30	--	--	NA	17-Feb-15	No	LP
XU854_Gr_I_7	392521.40	3637070.50	50.6	--	--	Source outside of grid (not dug)	--	--	--	--	20-Feb-15	No	DH
XU854_Gr_I_8	392545.30	3637036.10	35.7	0	CD	Bolt x 1, wire	0.05	0.02	0.25/--	NA	17-Feb-15	Yes	LP
XU854_Gr_I_9	392532.00	3637069.40	33.4	0.30/N	CD	Sprocket x 1	Surface	0.5	0.08 diameter star	NA	17-Feb-15	Yes	LP
XU854_Gr_I_10	392525.40	3637062.50	30.7	0	CD	Sprocket x 1	<0.01	0.5	0.10 diameter star	NA	17-Feb-15	Yes	LP
XU854_Gr_I_11	392539.70	3637046.50	30.3	0.08/SW	CD	Sprocket x 1	0.02	0.5	0.10 diameter star	NA	17-Feb-15	Yes	LP
XU854_Gr_I_12	392528.30	3637065.80	30.3	0	CD	Crank handle	<0.01	0.5	0.48/0.20	NA	17-Feb-15	Yes	LP
XU854_Gr_I_13	392533.20	3637070.30	28.3	0.15/N	CD	Sprocket x 1	0.03	0.5	0.08 diameter star	NA	17-Feb-15	Yes	LP
XU854_Gr_I_14	392552.80	3637039.30	28.3	0.20/S	CD	Steel rod	0.15	0.07	0.48/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_15	392531.10	3637046.90	25.6	0.75/N	CD	Wire	0.00	0.02	0.05/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_16	392552.30	3637023.20	24.8	0.15/SW	CD	Rebar	0.08	0.5	0.30/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_I_17	392543.20	3637039.00	24.1	0.15/S	CD	Wire	0.02	0.01	0.05/<0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_18	392533.30	3637057.30	23.5	0	CD	Bolt x 1, wire	0.03	0.03	0.61/--	NA	17-Feb-15	Yes	LP
XU854_Gr_I_19	392542.00	3637056.20	21.3	0.05/N	CD	Bolt x 3	0.08	0.03	0.05/0.02	NA	17-Feb-15	Yes	DH
XU854_Gr_I_20	392550.70	3637025.50	19.9	0.50/N	CD	Foil wrapper	0.03	<0.01	0.15/0.15	NA	19-Feb-15	Yes	DH
XU854_Gr_I_21	392530.30	3637054.60	19.4	0	CD	Aluminum can	<0.01	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_22	392546.60	3637034.60	19.2	0	CD	Steel bar x 2	0.02	0.03	0.15/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_23	392540.90	3637046.20	19.1	0	CD	Chunk of steel	0.48	0.5	0.10/0.10	NA	20-Feb-15	Yes	DH
XU854_Gr_I_24	392512.80	3637060.70	17.3	0.30/W	CD	Sprocket x 1	0.05	0.5	0.08 diameter star	NA	17-Feb-15	Yes	LP
XU854_Gr_I_25	392567.30	3637018.60	17.2	0.15/N	CD	Steel rod	Surface	0.02	0.15/<0.01	NA	17-Feb-15	Yes	DH
XU854_Gr_I_26	392539.70	3637055.60	17.1	0.48/W	CD	Bolt and nut	0.03	0.02	0.20/<0.01	NA	17-Feb-15	Yes	DH
XU854_Gr_I_27	392559.10	3637038.40	17.1	0	CD	Steel bar	0.10	0.4	0.30/0.08	NA	19-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_I_28	392516.80	3637057.60	16.3	0.15/S	CD	Aluminum plate	<0.01	0.02	0.03/0.10	NA	17-Feb-15	Yes	LP
XU854_Gr_I_29	392570.90	3637032.90	16.2	0.13/NE	CD	Bolt, nut, and washer x 2	Surface	0.11	0.20/0.15	NA	19-Feb-15	Yes	DH
XU854_Gr_I_30	392548.20	3637037.90	16.1	0	CD	Steel rod	0.20	0.02	0.25/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_31	392556.10	3637039.40	15.8	0	CD	Rebar	0.10	1	0.48/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_I_32	392518.50	3637058.70	15.8	0.15/E	CD	Aluminum can	0.03	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_33	392564.20	3637036.70	15.0	0	CD	Rebar	0.15	0.4	1.0/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_I_34	392565.20	3637031.30	14.5	0.15/N	CD	Chunk of steel	0.10	1	0.30/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_35	392544.00	3637057.40	14.4	0.30/S	CD	Bolts x 2	0.05	0.03	0.05/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_36	392531.80	3637057.30	14.4	0.08/N	CD	Sprocket	0.05	0.5	0.08 diameter star	NA	17-Feb-15	Yes	LP
XU854_Gr_I_37	392555.40	3637030.10	14.2	0.30/E	CD	Steel rod	0.05	0.03	0.25/0.02	NA	19-Feb-15	Yes	DH
XU854_Gr_I_38	392574.80	3637031.20	14.1	0.13/N	CD	Hook	0.13	0.03	0.25/0.02	NA	19-Feb-15	Yes	DH
XU854_Gr_I_39	392544.60	3637039.60	12.9	0.15/N	CD	Rebar	0.02	0.2	0.15/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_40	392523.50	3637072.10	12.8	--	--	Source outside of grid (not dug)	--	--	--	--	20-Feb-15	No	DH
XU854_Gr_I_41	392566.00	3637031.90	12.7	0.61/S	CD	Same source as Target XU854_Gr_I_34	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_I_42	392547.30	3637033.70	12.6	0	CD	Bolt x 3	0.05	0.01	0.15/<0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_43	392561.90	3637021.90	11.4	0.5/SE	CD	Same source as Target XU854_Gr_I_89	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_I_44	392521.60	3637054.90	11.4	0	CD	Rebar	0.60	1	0.48/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_I_45	392557.70	3637027.20	11.4	0.15/S	CD	Steel rod	0.03	0.01	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_46	392551.10	3637027.30	11.1	0.15/W	CD	U bolt	0.16	0.02	0.10/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_47	392520.50	3637052.00	10.0	0.15/W	SD	5.56 mm brass	Surface	<0.01	0.05/0.01	NA	19-Feb-15	Yes	LP
XU854_Gr_I_48	392552.90	3637038.20	10.0	0.30/N	--	Same source as Target XU854_Gr_I_18 (wire)	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_I_49	392558.00	3637024.40	9.2	0.05/NE	CD	Steel rod	0.08	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_50	392541.30	3637061.40	9.0	0	CD	Aluminum can	0.03	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_51	392541.90	3637062.00	8.9	0.38/N	CD	Bolt x 1	0.03	0.03	0.08/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_52	392531.30	3637054.30	8.9	0.10/W	CD	Bolt x 1	0.05	0.03	0.15/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_53	392518.50	3637055.40	8.7	0.30/W	CD	Steel bar	0.03	0.03	0.08/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_54	392548.40	3637035.10	8.4	0.30/S	CD	Steel rod x 2	0.03	0.01	0.15/<0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_55	392538.60	3637055.10	8.4	0.08/E	CD	Aluminum can	0.03	0.01	0.08/0.05	NA	17-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_I_56	392524.20	3637062.90	8.2	0	CD	Alluminum can x 4	0.02	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_57	392519.20	3637054.10	8.1	0	SD	7.62 mm brass	<0.01	<0.01	0.08/0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_58	392558.50	3637025.00	7.9	0	CD	Steel Rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_59	392554.80	3637031.10	7.8	0.30/W	CD	Steel Rod, bracket	0.03	0.02	0.15/0.02	NA	19-Feb-15	Yes	DH
XU854_Gr_I_60	392557.20	3637022.30	7.6	0.61/SW	CD	Steel Rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_61	392553.00	3637030.70	7.3	0.15/S	CD	Steel Rod	0.05	0.01	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_62	392561.90	3637046.70	7.2	0	CD	Aluminum can	0.02	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_63	392521.60	3637063.10	7.1	0	CD	Aluminum can	0.03	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_64	392529.00	3637056.30	7.1	0	CD	Aluminum can	0.03	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_65	392554.90	3637028.80	7.0	0.5/SE	CD	Bolt x 1	0.15	0.01	0.05/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_66	392554.70	3637039.70	6.9	0.30/S	CD	Rebar	0.48	1	0.30/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_I_67	392556.10	3637021.50	6.8	0.11/N	CD	Same source as Target XU854_Gr_I_60	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_I_68	392527.00	3637063.10	6.7	0	MD	40 mm case (empty)	0.05	0.02	0.04/0.03	NA	17-Feb-15	Yes	LP
XU854_Gr_I_69	392554.90	3637040.80	6.5	0.30/N	CD	Same source as Target XU854_Gr_I_66	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_I_70	392536.30	3637056.50	6.3	0.15/E	CD	Wire	Surface	0.03	0.30 long	NA	17-Feb-15	Yes	DH
XU854_Gr_I_71	392519.10	3637066.10	6.2	0.30/E	CD	Steel plate	0.10	0.2	0.13/0.08	NA	17-Feb-15	Yes	LP
XU854_Gr_I_72	392535.80	3637069.10	6.2	0.10/SW	CD	Steel rod	0.05	0.03	0.18/<0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_73	392515.90	3637063.00	6.2	0.08/W	CD	Brass padlock	Surface	0.1	0.08/0.05/0.03	NA	19-Feb-15	Yes	LP
XU854_Gr_I_74	392550.10	3637040.40	6.2	0.05/W	CD	Nut and bolt	0.05	0.03	0.08/0.02	NA	19-Feb-15	Yes	DH
XU854_Gr_I_75	392556.80	3637024.80	6.1	0.15/S	CD	Steel rod	0.13	0.03	0.18/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_76	392542.60	3637058.30	6.1	0.30/E	CD	Bolts x 3	0.05	0.08	0.08/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_77	392551.50	3637032.60	5.9	0.15/W	CD	Steel rod	Surface	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_78	392552.80	3637025.40	5.8	0.48/N	CD	Steel rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_79	392530.20	3637060.00	5.5	0.15/N	CD	Alunimum can	0.02	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_80	392551.10	3637031.20	5.4	0.08/NW	CD	Bolt x 1	0.13	0.02	0.05/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_81	392535.90	3637074.80	5.4	0	CD	Steel tube	<0.01	0.02	0.25/<0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_82	392528.50	3637060.00	5.4	0	CD	Wire	<0.01	<0.01	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_83	392522.30	3637051.20	5.4	0	SD	7.62 mm brass	Surface	<0.01	0.08/0.02	NA	17-Feb-15	Yes	LP
XU854_Gr_I_84	392562.60	3637023.20	5.0	0.10/NE	CD	Bolt x 1	0.05	0.02	0.15/0.05	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_I_85	392561.00	3637024.50	4.9	0	CD	Steel rod	0.08	0.02	0.13/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_86	392529.40	3637054.60	4.8	0	CD	Bolts x 3	0.03	0.02	0.15/<0.01	NA	17-Feb-15	Yes	LP
XU854_Gr_I_87	392562.80	3637024.50	4.7	0	CD	Steel rod	0.08	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_I_88	392523.60	3637063.60	4.6	0	CD	Aluminum can x 2	0.02	0.01	0.08/0.05	NA	17-Feb-15	Yes	LP
XU854_Gr_I_89	392561.40	3637021.40	3.5	0.10/NE	CD	Steel rod, nail	0.08	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_1	392529.20	3637014.20	######	0.30/W	CD	Rail track (left in place)	0.05	--	--	NA	19-Feb-15	No	DH
XU854_Gr_J_2	392542.10	3637006.70	2272.9	0.61/W	CD	Steel I beam (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_J_3	392505.50	3637011.10	803.2	0.30/E	CD	Rail track (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_J_4	392523.00	3637014.80	427.2	0.61/W	CD	Rail track (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_J_5	392515.70	3637029.00	198.0	1.0/W	CD	Steel building (left in place)	Surface	--	--	NA	19-Feb-15	No	DH
XU854_Gr_J_6	392536.00	3637002.40	182.4	0	CD	Rebar	0.30	1	2.0/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_J_7	392543.30	3637006.20	159.7	0	CD	Fence post	0.48	2	1.5/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_J_8	392507.30	3637056.40	92.4	0	CD	Cable x2 (left in place)	0.30	--	--	NA	20-Feb-15	No	DH
XU854_Gr_J_9	392507.40	3637009.50	91.4	0.30/S	CD	Connector	0.08	0.02	0.10/0.10	NA	19-Feb-15	Yes	DH
XU854_Gr_J_10	392507.00	3637015.10	60.6	0.10/N	CD	Steel chunk	0.03	0.5	0.10/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_11	392503.10	3637031.70	57.3	0	CD	Angle bracket	0.03	0.4	0.08/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_12	392504.90	3637012.10	53.1	0.61/W	CD	Aluminum chunk	0.01	0.71	0.05/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_13	392543.40	3637005.40	47.3	0	CD	Conduit (left in place)	1.50	--	--	NA	20-Feb-15	No	DH
XU854_Gr_J_14	392510.00	3637023.50	34.7	0	CD	Steel connector	0.01	0.5	0.09/0.09	NA	19-Feb-15	Yes	DH
XU854_Gr_J_15	392505.70	3637054.30	34.2	0.61/E	CD	Utility pipe (left in place)	0.30	--	--	NA	19-Feb-15	No	DH
XU854_Gr_J_16	392510.60	3637024.10	33.1	0.30/N	CD	Wire	0.03	0.03	1.0 long	NA	19-Feb-15	Yes	DH
XU854_Gr_J_17	392504.60	3637032.30	32.3	0.25/SE	CD	Steel rod, lid		0.01	0.08/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_J_18	392504.00	3637054.30	32.2	0.15/E	CD	Steel chunk	<0.01	0.5	0.15/0.10	NA	19-Feb-15	Yes	DH
XU854_Gr_J_19	392502.00	3637051.40	32.0	0	CD	Metal rod, flake	0.03	0.02	0.20/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_20	392508.30	3637035.90	31.8	0.30/N	CD	Steel fitting	0.03	0.5	0.13/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_J_21	392522.20	3637016.50	29.7	1.0/N	CD	Aluminum can	Surface	0.01	0.15/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_J_22	392499.10	3637041.40	28.8	0	CD	Nail x 1	0.15	0.01	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_23	392506.10	3637040.50	28.5	0.10/W	CD	Bracket	0.10	0.5	0.08/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_24	392521.00	3637022.00	27.5	0.61/N	CD	Alunimum foil	<0.01	0.06	0.05/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_25	392507.90	3637008.40	25.2	0.30/W	CD	Aluminum plate	0.01	0.01	0.08/0.05	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_J_26	392547.70	3637005.00	24.5	0.30/E	CD	Steel rods x 2	0.13	0.03	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_27	392544.90	3637005.20	24.1	0.05/NW	CD	Steel plates	0.30	1	0.20/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_28	392545.50	3637007.10	24.1	0.30/NW	CD	Sprocket	0.03	0.4	0.10 diameter star	NA	19-Feb-15	Yes	DH
XU854_Gr_J_29	392511.60	3637024.50	21.4	0.45/S	CD	Same source as Target XU854_Gr_J_16	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_J_30	392545.40	3637004.50	21.0	0.30/E	CD	Same source as Target XU854_Gr_J_27	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_J_31	392530.50	3637013.30	20.7	0.05/E	CD	Steel rod, bolt	0.10	0.03	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_32	392551.70	3637007.50	20.3	0.48/N	CD	Steel rod x 2	0.03	0.04	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_33	392552.40	3637009.00	19.8	0.30/E	CD	Scrap steel, bolt	0.05	0.04	0.15/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_34	392500.90	3637051.10	19.7	0	CD	Sprocket, wire	0.03	0.41	0.10/0.10	NA	19-Feb-15	Yes	DH
XU854_Gr_J_35	392548.40	3637002.40	17.7	0	CD	Aluminum ring	0.08	<0.01	0.08/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_36	392498.90	3637044.90	17.3	0	CD	Bracket	<0.01	0.02	0.08/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_37	392522.50	3637009.60	16.7	0.30/S	CD	Aluminum chunk	0.05	0.01	0.05/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_38	392504.60	3637040.40	16.3	0.20/S	CD	Cable end	0.10	0.5	0.15/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_39	392510.70	3637029.30	15.6	0.15/S	CD	Steel rod x 5	0.03	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_40	392504.00	3637056.10	15.4	0	CD	Sprocket	0.10	0.4	0.10 diameter star	NA	19-Feb-15	Yes	DH
XU854_Gr_J_41	392500.00	3637042.60	14.4	0.08/E	CD	Lock	0.01	0.5	0.10/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_42	392528.80	3637009.60	13.5	0.15/N	CD	Steel rod x 2	0.03	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_43	392500.30	3637045.60	13.1	0	CD	Bucket handle	<0.01	0.02	0.61/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_44	392489.70	3637037.10	12.4	0	CD	Steel plate x 4	0.03	0.03	0.10/0.02	NA	19-Feb-15	Yes	DH
XU854_Gr_J_45	392536.60	3637006.60	12.4	0.30/SW	CD	Steel rod, nails x 3	0.13	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_46	392532.80	3637009.80	12.3	0.15/NW	CD	Steel rod, Spike x 2	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_47	392522.20	3637018.30	12.0	0.61/S	CD	Steel rod	Surface	0.4	0.30/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_48	392528.90	3637007.70	11.9	0.30/N	CD	Steel rod x 5, nail	0.08	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_49	392531.60	3637006.30	11.8	0	CD	Steel rod, steel plate	0.13	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_50	392528.40	3636998.70	11.7	0	CD	Steel rod	0.03	0.02	0.20/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_J_51	392522.40	3637006.10	11.6	0.15/NE	CD	Steel rod x 2	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_52	392518.20	3637008.50	11.4	0	CD	Steel rod	<0.01	0.02	0.20/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_53	392533.80	3636996.40	11.4	0.15/E	CD	Steel rod x 3	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_54	392505.10	3637038.20	11.4	0.30/NE	CD	Aluminum can	0.03	0.08	0.15/0.08	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_J_55	392535.90	3637007.30	11.0	0.30/W	CD	Steel rod x 2	0.13	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_56	392522.30	3637008.50	11.0	0.38/NW	CD	Steel rod x 2	<0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_57	392500.80	3637034.80	10.8	0.08/E	CD	U bolt	0.03	0.02	0.13/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_58	392509.10	3637037.20	10.6	0.30/W	CD	Rebar	0.10	0.03	0.20/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_59	392521.60	3637017.70	10.6	0.81/N	CD	Same source as Target XU854_Gr_J_47	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_J_60	392535.40	3636995.90	10.5	0	CD	Steel rod x 3	0.13	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_61	392529.90	3637008.90	10.1	0.15/S	CD	Stee; rod x 3, bolt	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_62	392522.20	3636994.70	10.0	0.15/S	CD	Steel rod, washer	0.05	0.03	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_63	392542.10	3637004.20	9.7	0	CD	Same source as Target XU854_Gr_J_13	--	--	--	NA	21-Feb-15	No	DH
XU854_Gr_J_64	392506.20	3637037.40	9.5	1.0/N	CD	Sign and post	Surface	2	1.0/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_65	392511.70	3637022.90	9.3	0.08/W	CD	Connector plug, nails x 2	0.08	0.01	0.03/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_66	392539.20	3637005.90	9.2	0	CD	Bolt	0.05	0.02	0.05/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_67	392522.60	3637005.30	9.0	0.30/W	CD	Steel rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_68	392511.10	3637060.90	9.0	0.15/SW	CD	Steel chunk, aluminum chink	0.03	0.4	0.05/0.03/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_J_69	392486.40	3637034.80	8.8	0	CD	Hasp	Surface	0.06	0.13/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_70	392501.20	3637036.20	8.7	0	CD	Chain links x 2	0.03	0.03	0.08/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_71	392505.40	3637055.50	8.7	0.15/N	CD	Bolt	0.08	0.02	0.08/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_72	392536.90	3636995.90	8.7	0.15/SW	CD	Steel rod	<0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_73	392548.00	3637004.00	8.6	0.30/N	CD	Steel rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_74	392554.10	3637006.70	8.2	0.61/N	CD	Steel rod x 3	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_75	392521.10	3637020.60	8.2	1.0/--	CD	Same source as Target XU854_Gr_J_24	--	--	--	NA	19-Feb-15	Yes	DH
XU854_Gr_J_76	392537.80	3636995.40	8.0	0.10/E	CD	Steel rod x 3	0.13	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_77	392505.20	3637056.70	7.9	0	CD	Light bulb end	0.03	0.02	0.05/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_78	392532.80	3637006.10	7.8	0	CD	Steel rod, aluminum rod	0.03	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_79	392537.20	3636994.30	7.8	0.25/W	CD	Steel rod	<0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_80	392540.40	3637005.20	7.7	0.30/N	CD	Washer	0.27	0.02	0.01/<0.01	NA	21-Feb-15	Yes	DH
XU854_Gr_J_81	392505.90	3637035.70	7.5	0.25/E	CD	Metal plate	0.03	0.01	0.03/0.03	NA	21-Feb-15	Yes	DH
XU854_Gr_J_82	392519.60	3637008.60	7.4	0.15/E	CD	Steel rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_J_83	392543.00	3637000.30	7.4	0.30/N	CD	Steel rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_84	392530.30	3636997.60	7.3	0.15/NE	CD	Steel rod x 4, bolt x 2	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_85	392515.90	3637008.10	7.2	0.15/W	CD	Steel rod	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_86	392534.10	3637010.80	7.2	0.30/SE	CD	Steel rod x 2, bolt x 4	0.08	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_87	392543.50	3637001.40	7.2	0.08/N	CD	Chunk of steel	0.20	0.02	0.15/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_88	392497.40	3637020.70	7.1	0.15/S	CD	Nut and bolt	0.03	0.02	0.05/0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_89	392485.90	3637037.30	6.9	0	CD	Washer	0.03	0.02	0.03/--	NA	19-Feb-15	Yes	DH
XU854_Gr_J_90	392530.70	3637006.80	6.8	0.20/S	CD	Steel rod x 3	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_91	392507.30	3637034.60	6.4	0.48/S	CD	Sprocket	0.10	0.4	0.10 diameter star	NA	19-Feb-15	Yes	DH
XU854_Gr_J_92	392509.50	3637058.90	6.4	0	CD	Aluminum foil	<0.01	0.01	0.08/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_J_93	392538.30	3637005.40	6.4	0.17/S	CD	Aluminum tube	0.03	0.02	0.18/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_94	392497.50	3637030.00	6.3	0	CD	Steel rod	0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_95	392496.20	3637047.50	6.0	0.15/E	CD	Washer, bolt x 2	0.03	0.02	0.05/--	NA	19-Feb-15	Yes	DH
XU854_Gr_J_96	392513.30	3637006.80	5.9	0.48/S	CD	Aluminum can	<0.01	0.01	0.15/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_J_97	392505.40	3637033.30	5.8	0.5/N	CD	Bolt	0.03	0.02	0.08/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_98	392510.10	3637028.50	5.7	0.60/N	CD	Copper chunk	Surface	0.02	0.10/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_99	392501.70	3637053.20	5.6	0.30/S	CD	Aluminum can	0.05	0.01	0.15/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_J_100	392485.10	3637039.10	5.4	0	MD	Grenade spoon	0.03	0.01	0.10/0.03	NA	19-Feb-15	Yes	DH
XU854_Gr_J_101	392532.10	3636998.60	5.4	0	CD	Steel rod x 3	0.01	0.03	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_102	392500.00	3637040.60	5.4	0	CD	Aluminum can	0.10	0.01	0.15/0.08	NA	19-Feb-15	Yes	DH
XU854_Gr_J_103	392503.60	3637014.30	5.3	0.30/S	CD	Screw, chunk of steel	0.03	0.01	0.03/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_104	392539.30	3636995.50	5.3	0.30/SE	CD	Steel rod	0.05	0.01	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_105	392530.20	3637000.10	5.2	0.15/E	CD	Steel rod x 2	0.05	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_106	392506.70	3637033.90	5.2	0.08/E	CD	Bolt	0.05	0.03	0.01/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_107	392506.60	3637019.40	5.1	0.48/W	CD	Steel rod	0.03	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_108	392535.40	3636996.90	5.0	0.15/W	CD	Screws x 3	Surface	0.01	0.03/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_109	392530.10	3636994.60	5.0	0.61/NW	CD	Steel rod	0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_110	392522.90	3636999.30	4.5	0.13/N	CD	Steel rod x 2, screw	0.03	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_111	392546.60	3637005.90	4.5	0.30/W	CD	Chunk of steel	0.30	0.4	0.23/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_112	392535.10	3637006.90	4.3	0.61/W	CD	Steel rod	0.13	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_J_113	392530.30	3636993.40	4.3	0.10/SW	CD	Chunk of steel	<0.01	0.03	0.05/0.05	NA	19-Feb-15	Yes	DH
XU854_Gr_J_114	392524.80	3637005.80	3.7	0	CD	Steel rod, nut	<0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_115	392508.60	3637025.00	3.4	0	CD	Steel rod	0.01	0.02	0.15/<0.01	NA	19-Feb-15	Yes	DH
XU854_Gr_J_116	392509.20	3637019.20	3.0	0.15/S	CD	Wire	0.03	0.02	0.30 long	NA	19-Feb-15	Yes	DH
XU854_Gr_J_117	392542.40	3637003.10	2.7	0.24/E	CD	Same source as Target XU854_Gr_J_13	--	--	--	NA	20-Feb-15	No	DH
XU854_Gr_K_1	392447.70	3636959.90	258.1	0	CD	Steel plate	0.05	1.5	0.20/0.20	NA	20-Feb-15	Yes	DH
XU854_Gr_K_2	392444.60	3636964.10	69.2	0.30/SE	CD	Same source as Target XU854_Gr_K_32	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_K_3	392462.60	3636956.60	56.9	0.30/W	SD	.45 caliber slug	0.05	<0.01	<0.01/--	NA	20-Feb-15	Yes	DH
XU854_Gr_K_4	392457.40	3636953.70	51.6	0	CD	Concrete pad (left in place)	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_K_5	392464.70	3636953.20	48.6	0.15/W	MD	40 mm cartridge	0.05	0.02	0.05/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_K_6	392459.60	3636959.70	36.0	0.30/N	SD	.45 caliber slug x 2	0.03	<0.01	0.03/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_7	392461.70	3636959.20	32.0	1.0/E	CD	Pressure gauge	Surface	0.03	0.05/--	NA	20-Feb-15	Yes	DH
XU854_Gr_K_8	392455.40	3636954.80	28.7	0	CD	Concrete pad (left in place)	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_K_9	392464.20	3636956.40	24.0	0.48/W	CD	Bolt x 1	0.10	0.03	0.05/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_10	392457.80	3636952.40	23.4	0.61/S	SD	.45 caliber slug x 1	0.03	<0.01	0.03/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_11	392443.40	3636967.20	22.1	0	CD	Wire (bailed)	0.03	0.02	2.4/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_12	392463.90	3636953.40	20.2	0.30/N	CD	Pop top	Surface	0.01	0.01/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_13	392461.00	3636960.10	19.6	0.35/W	SD	.45 caliber slug x 1	0.01	<0.01	<0.01/--	NA	20-Feb-15	Yes	DH
XU854_Gr_K_14	392454.20	3636955.10	19.2	0	CD	Concrete pad (left in place)	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_K_15	392460.90	3636952.30	18.9	0.15/E	CD	Aluminum scrap	0.08	0.01	0.13/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_16	392459.30	3636952.30	17.6	0.30/NE	SD	.45 caliber slug x 1	0.03	<0.01	0.03/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_17	392457.80	3636961.30	16.9	0.20/E	CD	Tin scrap	0.00	--	0.03/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_K_18	392443.70	3636965.30	15.4	11.0/S	CD	Steel chunks	0.05	0.4	0.08/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_K_19	392452.10	3636955.90	14.4	0	CD	Wire	<0.01	0.01	5.0 long	NA	20-Feb-15	Yes	DH
XU854_Gr_K_20	392449.20	3636959.10	13.6	0	CD	Aluminum scrap	0.10	0.01	0.08/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_K_21	392456.30	3636953.40	13.0	0	CD	Concrete pad (left in place)	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_K_22	392461.90	3636957.70	11.9	0.30/E	CD	Pop top	0.03	0.01	0.01/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_23	392449.70	3636967.10	10.7	0.48/W	CD	Communication wire	0.08	<0.01	1.0 long	NA	20-Feb-15	Yes	DH
XU854_Gr_K_24	392443.30	3636969.40	9.6	0	CD	Aluminum slag	0.05	-0.17	0.10/0.05	NA	20-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_K_25	392442.40	3636971.30	9.5	0	CD	Aluminum sheet	0.03	0.02	0.27/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_K_26	392446.40	3636960.60	6.9	0	CD	Aluminum scrap	0.08	--	0.05/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_K_27	392444.20	3636968.60	5.8	0.08/W	CD	Aluminum slag	0.10	0.03	0.05/0/05	NA	20-Feb-15	Yes	DH
XU854_Gr_K_28	392447.90	3636968.00	5.6	0	CD	Concrete pad (left in place)	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_K_29	392455.70	3636963.70	5.6	0.15/S	SD	.45 caliber slug	<0.01	0.71	0.03/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_30	392456.60	3636962.20	5.5	0.61/E	CD	Bolt x 1	0.10	0.03	0.03/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_31	392465.80	3636951.80	5.0	0.25/SE	CD	Aluminum can	0.00	0.02	0.08/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_K_32	392445.00	3636963.10	0.4	0.61/NW	CD	Electrical connector	0.08	0.5	0.10/0.10	NA	20-Feb-15	Yes	DH
XU854_Gr_K_33	392462.80	3636950.80	0.2	0.61/NW	CD	Pop top	0.00	0.01	0.01/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_K_34	392445.70	3636961.60	0.1	0	CD	Aluminum scrap	0.10	0.01	0.08/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_1	392523.60	3637101.50	762.6	0	CD	Pipe, cog, lid	Surface	10	2.0/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_L_2	392531.00	3637099.50	188.4	0.05/W	CD	Aluminum strap	Surface	0.01	0.15/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_L_3	392530.80	3637100.20	129.2	0.38/W	CD	Lead seal	0.05	0.01	0.05/--	NA	20-Feb-15	Yes	DH
XU854_Gr_L_4	392522.30	3637096.50	97.7	0.15/W	SD	5.56 mm x 3	<0.01	0.01	0.11/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_5	392529.10	3637095.50	95.9	0.03/N	SD	5.56 mm x 2	0.05	0.01	0.11/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_6	392525.90	3637101.40	67.2	1.0/E	CD	Pipe valve	Surface	0.4	0.08/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_L_7	392531.70	3637100.80	62.3	0.15/N	CD	Pipe fitting	<0.01	0.2	0.08/0/05	NA	20-Feb-15	Yes	DH
XU854_Gr_L_8	392521.00	3637096.30	55.3	0.15/W	CD	Steel plate	0.05	0.4	0.15/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_L_9	392528.10	3637094.10	42.7	1.0/S	CD	Bolt x 1	0.05	0.02	0.03/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_10	392522.00	3637099.90	38.9	0	CD	Fitting, wire	0.05	0.1	0.05/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_11	392523.10	3637095.20	37.8	0	SD	5.56 mm x 7	Surface	0.01	0.11/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_12	392529.60	3637094.40	33.2	0	SD	5.56 mm x 6	Surface	0.01	0.11/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_13	392530.60	3637095.00	27.5	0	CD	Wire	<0.01	0.01	0.30 long	NA	20-Feb-15	Yes	DH
XU854_Gr_L_14	392528.60	3637094.70	26.2	0.15/S	SD	5.56 mm x 1	<0.01	0.01	0.11/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_15	392531.60	3637098.60	22.7	0.30/N	CD	Aluminum can	Surface	0.03	0.15/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_L_16	392526.30	3637093.30	7.1	1.0/NW	CD	Bolt x 1	0.03	0.02	0.03/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_17	392528.50	3637102.90	6.6	0	CD	Copper sheet	Surface	0.01	0.10/0.10	NA	20-Feb-15	Yes	DH
XU854_Gr_L_18	392529.20	3637101.70	6.2	1.0/--	CD	Alunminum sheet	0.05	0.01	0.03/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_L_19	392521.70	3637097.80	2.7	0	CD	Wire	<0.01	0.01	0.20/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_L_20	392531.30	3637095.70	0.2	0	CD	Wire	<0.01	0.01	0.15/<0.01	NA	20-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_L_21	392523.90	3637094.10	0.1	0	SD	Ammunition link	0.05	0.01	0.03/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_M_1	392406.90	3636909.50	143.9	0	CD	Tie down (left in place)	0.15	--	--	NA	20-Feb-15	No	DH
XU854_Gr_M_2	392408.10	3636913.40	88.6	0	CD	Pipe (left in place)	0.38	--	--	NA	20-Feb-15	No	DH
XU854_Gr_M_3	392404.40	3636911.50	75.0	0	CD	Utility pipe (left in place)	0.46	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_M_4	392410.10	3636913.10	57.4	0	CD	Pipe (left in place)	0.38	--	--	NA	20-Feb-15	No	DH
XU854_Gr_M_5	392406.20	3636913.60	39.0	0	CD	Same source as Target XU854_Gr_M_3	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_M_6	392405.70	3636912.50	35.2	0	CD	Same source as Target XU854_Gr_M_3	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_M_7	392403.60	3636915.00	21.1	0.30/S	CD	Steel circle	Surface	0.03	0.10 diameter	NA	20-Feb-15	Yes	DH
XU854_Gr_M_8	392411.80	3636912.40	6.9	0.15/S	SD	.45 caliber slug x 3	Surface	0.01	<0.01/--	NA	20-Feb-15	Yes	DH
XU854_Gr_M_9	392411.20	3636903.20	4.0	0.10/N	CD	Nail x 1	Surface	0.01	0.08/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_1	392600.10	3637055.50	33.7	0	CD	Copper sheet	0.02	0.01	0.08/0.15	NA	20-Feb-15	Yes	DH
XU854_Gr_N_2	392614.60	3637069.60	15.6	0.38/W	CD	Rebar	0.05	0.03	0.15/0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_3	392598.50	3637053.40	11.0	0.30/W	CD	Fence wire	0.03	0.02	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_4	392615.80	3637071.10	10.8	0.30/W	CD	Chunk of steel	0.03	0.03	0.05/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_N_5	392598.90	3637054.30	9.6	0.30/S	CD	Same source as Target XU854_Gr_N_3	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_N_6	392599.80	3637054.00	8.8	0	CD	Bolt, fence wire	0.03	0.03	0.05/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_7	392597.20	3637052.20	7.0	0.30/W	CD	Steel rod	0.03	0.02	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_8	392601.90	3637057.60	6.8	0.60/N	CD	Wire	Surface	0.01	0.08/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_9	392602.00	3637055.90	6.5	0	CD	Copper ring	0.03	0.01	0.03 diameter	NA	20-Feb-15	Yes	DH
XU854_Gr_N_10	392613.50	3637068.00	5.7	0.48/W	CD	Fence wire	Surface	0.02	0.13/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_N_11	392615.90	3637069.60	5.0	0.08/SE	CD	Wire	<0.01	0.02	0.52 long	NA	20-Feb-15	Yes	DH
XU854_Gr_O_1	392579.40	3637058.90	492.9	0	CD	Pipe (left in place)	0.30	--	--	NA	20-Feb-15	No	DH
XU854_Gr_O_2	392578.80	3637059.60	458.6	0	CD	Pipe (left in place)	0.33	--	--	NA	20-Feb-15	No	DH
XU854_Gr_O_3	392577.30	3637062.10	217.4	0	CD	Pipe (left in place)	0.35	--	--	NA	20-Feb-15	No	DH
XU854_Gr_O_4	392575.90	3637063.40	95.9	0	CD	Pipe (left in place)	0.36	--	--	NA	20-Feb-15	No	DH
XU854_Gr_O_5	392575.20	3637064.40	81.7	0	CD	Pipe (left in place)	0.48	--	--	NA	20-Feb-15	No	DH
XU854_Gr_O_6	392588.20	3637050.20	6.6	0.30/S	CD	Wire	Surface	0.03	0.15 long	NA	20-Feb-15	Yes	DH
XU854_Gr_P_1	392583.00	3637106.20	15.9	1.0/W	CD	Fence tie	<0.01	0.02	<0.01/--	NA	20-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_P_2	392579.80	3637103.20	15.1	1.0/NE	CD	Aluminum scrap	0.03	0.01	0.05/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_P_3	392558.40	3637085.50	12.5	0	CD	Pole tension cable above flag (left in place)	--	--	--	NA	20-Feb-15	No	GHV
XU854_Gr_P_4	392580.60	3637104.90	10.4	0	CD	Nail x 1	0.05	0.01	0.03/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_P_5	392580.60	3637106.40	7.1	0.30/W	CD	Pipe	0.05	0.5	0.15/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_P_6	392560.10	3637086.20	5.3	0.30/S	CD	Metal flakes x 2, also pole tension cable above flag (left in place)	0.00	--	0.03/0/03	NA	20-Feb-15	No	GHV
XU854_Gr_P_7	392578.30	3637104.80	4.3	0.15/W	CD	D ring	0.05	0.03	0.05/--	NA	20-Feb-15	Yes	DH
XU854_Gr_Q_1	392591.80	3637115.50	1317.4	0.75/SE	CD	Guide wire (left in place)	0.00	--	--	NA	20-Feb-15	No	DH
XU854_Gr_Q_2	392600.60	3637118.00	18.6	0	CD	Sprocket	0.00	0.4	0.10 diameter star	NA	20-Feb-15	Yes	DH
XU854_Gr_Q_3	392590.60	3637115.90	14.6	1.0/W	CD	Fence hook	0.00	0.02	0.10/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_Q_4	392602.30	3637115.80	8.8	0.75/SE	CD	Fence wire	0.00	0.02	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_Q_5	392591.20	3637117.00	6.0	0	CD	Fence hook	0.00	0.02	0.10/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_Q_6	392594.70	3637118.50	3.9	0	CD	Fence hook x 2	0.00	0.02	0.10/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_1	392622.10	3637096.60	######	0	CD	RR track (left in place)	Surface	--	--	NA	20-Feb-15	No	DH
XU854_Gr_R_2	392620.00	3637094.90	######	0	CD	RR track (left in place)	Surface	--	--	NA	20-Feb-15	No	DH
XU854_Gr_R_3	392606.90	3637112.20	115.1	0	CD	Cable (left in place)	0.30	--	--	NA	20-Feb-15	No	DH
XU854_Gr_R_4	392620.20	3637099.10	61.3	0.08/W	CD	Bolt, aluminum piece	0.08	0.03	0.10/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_R_5	392605.40	3637110.50	57.7	0	CD	Cable (left in place)	0.30	--	--	NA	20-Feb-15	No	DH
XU854_Gr_R_6	392617.90	3637096.80	57.4	0.15/SE	CD	Wire	Surface	0.02	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_7	392630.10	3637084.60	35.8	0.30/SE	CD	Fence wire x 2	Surface	0.02	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_8	392625.50	3637080.70	28.7	0.15/N	CD	Fence wire x 2	0.03	0.03	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_9	392624.00	3637079.30	25.5	0.74/NW	CD	Wire	Surface	<0.01	0.10 long	NA	20-Feb-15	Yes	DH
XU854_Gr_R_10	392622.70	3637093.40	20.8	0.61/N	CD	Nail x 1, wire	<0.01	<0.01	0.38/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_11	392624.50	3637094.00	20.2	1.0/S	CD	Same source as Target XU854_Gr_R_10	--	--	--	NA	20-Feb-15	Yes	DH
XU854_Gr_R_12	392616.80	3637072.00	18.9	0.38/W	CD	Steel triangle	Surface	0.03	0.13/0.05	NA	20-Feb-15	Yes	DH
XU854_Gr_R_13	392630.50	3637086.80	13.9	0	CD	Aluminum can	Surface	0.02	0.15/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_R_14	392623.60	3637078.60	13.2	--	CD	Source is fence (left in place)	--	--	--	NA	19-Feb-15	No	GV
XU854_Gr_R_15	392626.40	3637079.90	10.8	0.30/S	CD	Fence wire x 4	0.05	0.02	0.15/0.08	NA	20-Feb-15	Yes	DH
XU854_Gr_R_16	392625.30	3637089.40	10.2	0.48/NE	CD	Wire x 4	0.08	0.01	0.61/<0.01	NA	20-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-2 (Continued)
XU854 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
XU854_Gr_R_17	392624.60	3637078.10	8.7	0.60/SE	CD	Fence wire x 1	0.01	0.02	0.10/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_18	392622.50	3637076.90	7.3	--	CD	Source is fence (left in place)	--	--	--	NA	19-Feb-15	No	GV
XU854_Gr_R_19	392625.00	3637079.40	6.7	0.30/NE	CD	Nail x 1, wire	Surface	0.01	0.05/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_20	392608.50	3637109.20	6.7	0.05/S	CD	Fence wire x 1	Surface	0.02	0.15/<0.01	NA	20-Feb-15	Yes	DH
XU854_Gr_R_21	392622.10	3637076.40	6.0	0.60/W	CD	Steel chunk	Surface	0.02	0.15/0.03	NA	20-Feb-15	Yes	DH
XU854_Gr_R_22	392623.60	3637077.40	4.2	--	CD	Source is fence (left in place)	--	--	--	NA	19-Feb-15	No	GV

Note: -- = No data
NA = Not Applicable

Table D-3
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_II311_1	393704.31	3638105.61	28.6	0.10/W	SD, CD	.50 cal x 1, 5.56 mm x 2, bolt x1	0.05	0.11	0.38/0.01	NA	29-Jan-15	Yes	DH
SR864_II311_2	393703.26	3638109.24	12.1	0.05/N	SD	.50 cal x 2	0.05	0.03	0.08/0.01	NA	29-Jan-15	Yes	DH
SR864_II311_3	393707.10	3638111.16	9.6	0.15/W	SD	.50 cal x 1, 5.56 mm x 1	0.08	0.03	0.08/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ310_1	393735.84	3638084.61	270.8	0	CD	Rebar, aluminum plate	0.08	0.17	0.18/0.13/<0.01	NA	02-Feb-15	Yes	DH
SR864_IJ310_2	393734.40	3638097.24	113.7	0	CD	Bar	0.05	1	0.11/0.05/0.01	NA	28-Jan-15	Yes	DH
SR864_IJ310_3	393732.63	3638086.62	64.5	0	CD	Rod, wire	0.08	1.5	0.61/0.05	NA	28-Jan-15	Yes	DH
SR864_IJ310_4	393726.51	3638098.29	40.2	0	CD	Rebar	0.30	1	0.91/0.01	NA	02-Feb-15	Yes	DH
SR864_IJ310_5	393731.43	3638086.35	24.0	0.15/W	CD	Rod	0.08	1.5	0.61/0.05	NA	28-Jan-15	Yes	DH
SR864_IJ310_6	393733.50	3638087.70	11.0	0	SD, CD	5.56 mm x 1, wire x 2	0.10	0.03	0.15/<0.01	NA	28-Jan-15	Yes	DH
SR864_IJ310_7	393739.02	3638095.98	11.0	0.18/W	CD	Bolt x 1	0.08	0.06	0.10/0.01	NA	28-Jan-15	Yes	DH
SR864_IJ310_8	393738.30	3638097.60	10.4	0.15/W	SD, CD	.50 cal x 1, bolt x 1, wire	0.05	0.06	0.10/0.01	NA	28-Jan-15	Yes	DH
SR864_IJ310_9	393735.90	3638094.00	9.9	0.28/E	CD	Nail x 1, wire	0.05	0.03	0.15/<0.01	NA	28-Jan-15	Yes	DH
SR864_IJ310_10	393734.82	3638088.60	7.2	0.20/W	CD	Bolt x 1, wire	0.03	0.03	0.10/0.01	NA	28-Jan-15	Yes	DH
SR864_IJ310_11	393733.02	3638098.92	7.2	0.15/W	SD, CD	5.56 mm x 1, nut x 1, washer x 1, wire	0.08	0.03	0.05/<0.01	NA	28-Jan-15	Yes	DH
SR864_IJ311_1	393726.12	3638127.84	213.8	0.15/E	CD	Part of pole	0.03	1	0.38/0.52	NA	02-Feb-15	Yes	DH
SR864_IJ311_2	393711.90	3638107.59	67.3	0	CD	Part of pole	0.61	4	0.46/0.15	NA	02-Feb-15	Yes	DH
SR864_IJ311_3	393715.02	3638111.88	40.1	0.25/E	SD, CD	5.56 mm x 3, wire	0.01	0.06	0.61/<0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_4	393726.84	3638127.06	36.7	0.76/NW	--	Same source as target SR864_IJ311_1	--	--	--	NA	02-Feb-15	Yes	DH
SR864_IJ311_5	393720.72	3638107.92	34.9	0.03/S	CD	Bolt x 1	0.01	0.5	0.48/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_6	393731.40	3638103.60	33.1	0.03/N	CD	Aluminum scrap	0.05	0.06	0.20/0.15/<0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_7	393731.10	3638100.96	29.6	0.38/SE	CD	Bolt x 1	0.13	0.5	0.38/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_8	393712.71	3638124.69	25.8	0.18/E	CD	Bolt x 1, aluminum tube	0.15	0.5	0.61/0.02	NA	29-Jan-15	Yes	DH
SR864_IJ311_9	393719.34	3638124.48	21.2	0	CD	Aluminum plate	0.01	0.11	0.15/0.10/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_10	393738.69	3638119.86	17.4	0.08/W	CD	Washer x 1	0.08	0.09	0.08/0.08/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_11	393727.98	3638123.34	15.6	0.61/S	CD	Bolt x 1	0.05	0.06	0.10/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_12	393732.66	3638100.12	12.0	0	CD	Aluminum scrap	0.05	0.06	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_13	393715.44	3638123.04	11.5	0.05/W	CD	Washer x 1	0.05	0.03	0.05/0.05/<0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_14	393726.72	3638123.94	10.9	0	SD, CD	.50 cal x 2, aluminum scrap	0.01	0.03	0.03/0.03/<0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_15	393720.54	3638105.10	10.9	0.30/S	SD	.50 cal x 1, 5.56 mm x 2	0.01	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IJ311_16	393720.66	3638113.08	10.6	0.60/S	SD	5.56 mm x 2	0.15	0.06	0.08/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_17	393722.10	3638122.98	9.6	0.30/W	CD	Bolt x 1	0.10	0.03	0.10/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_18	393732.51	3638105.31	9.4	0.61/E	SD	5.56 mm x 1, 7.62 mm x 1	0.01	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_19	393718.50	3638122.56	9.1	0.15/S	SD, CD	.50 cal x 1, wire	0.15	0.06	0.10/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_20	393716.70	3638111.94	8.2	0.25/N	CD	Aluminum scrap	0.10	0.03	0.10/0.08	NA	29-Jan-15	Yes	DH
SR864_IJ311_21	393729.42	3638128.50	7.3	0.30/SW	SD	.50 cal x 1	0.01	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_22	393718.65	3638121.39	7.1	0	SD, CD	.50 cal x 1, bolt x 1	0.01	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_23	393712.68	3638122.05	5.7	0.08/N	SD, CD	.50 cal x 2, bolt x 1	0.01	0.03	0.05/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_24	393715.78	3638127.76	5.6	0.18/W	SD, CD	5.56 mm x 1, bolt x 1	0.01	0.06	0.10/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ311_25	393716.67	3638124.75	4.6	0.18/NW	SD	.50 cal x 1	0.08	0.03	0.13/0.02	NA	29-Jan-15	Yes	DH
SR864_IJ312_1	393726.12	3638142.42	172.3	0	QC seed	Small ISO	0.01	0.11	0.10/0.03	NA	29-Jan-15	Yes	DH
SR864_IJ312_2	393724.77	3638139.78	91.5	0	SD, CD	.45 cal. x 1, angle brace x 1	0.15	1	0.20/0.20/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_3	393734.22	3638152.98	63.7	0	CD	Sardine can	0.08	0.06	0.15/0.08	NA	29-Jan-15	Yes	DH
SR864_IJ312_4	393716.58	3638130.42	13.9	0.15/E	SD, CD	.50 cal x 1, bolt x 1	0.08	0.06	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_5	393727.86	3638133.42	12.9	0.03/E	SD	.50 cal x 4	0.03	0.06	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_6	393721.17	3638137.08	11.7	0.31/SE	SD	.50 cal x 4	0.08	0.06	0.08/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_7	393721.59	3638133.51	10.4	0.05/N	SD, CD	.50 cal x 3, washer x 1, wire	0.05	0.03	0.08/0.08/<0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_8	393725.58	3638138.34	10.1	0.15/SW	SD	.50 cal x 1	0.10	0.02	0.03/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_9	393723.36	3638138.16	9.0	0.20/N	SD	.50 cal x 4	0.08	0.03	0.08/0.05	NA	29-Jan-15	Yes	DH
SR864_IJ312_10	393733.92	3638135.58	8.7	0.13/W	SD	.50 cal x 1	0.08	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_11	393731.82	3638143.74	8.4	--	--	No Find (target not found on relocate)	--	--	--	--	03-Feb-15	Yes	RV
SR864_IJ312_12	393725.16	3638141.52	8.4	0.18/N	SD	.50 cal x 1	0.10	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_13	393726.84	3638139.90	8.1	0.05/W	SD	.50 cal x 1	0.08	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_14	393729.90	3638135.46	8.1	0.05/E	SD, CD	.50 cal x 1, wire	0.05	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_15	393729.48	3638144.04	7.7	0.10/W	SD, CD	.50 cal x 1, nail x 1	0.13	0.03	0.03/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_16	393727.98	3638143.92	7.4	0.25/W	CD	Spike	0.08	0.03	0.15/0.01	NA	29-Jan-15	Yes	DH
SR864_IJ312_17	393730.74	3638147.94	7.3	0.15/NW	SD, CD	.50 cal x 1, scrap metal	0.10	0.03	0.13/0.01	NA	29-Jan-15	Yes	DH
SR864_IK309_1	393767.58	3638059.92	21.3	0	CD	Bolt and rust	Surface	0.06	0.08/0.08	NA	02-Feb-15	Yes	DH
SR864_IK309_2	393763.56	3638064.42	20.0	0.20/W	CD	Bolt x 2, Nut x 1	0.08	0.06	0.15/0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_3	393756.30	3638068.32	19.1	0.30/N	SD, CD	5.56 mm x 1, bolt x 1, washer x 1	0.08	0.06	0.10/0.01	NA	02-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IK309_4	393766.38	3638060.76	14.5	0.61/SW	CD	Bolt x 2, washer x 1	0.08	0.06	0.10/0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_5	393758.40	3638067.21	12.0	0.36/S	CD	Bolt x 1	0.05	0.06	0.10/0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_6	393754.86	3638068.08	11.3	0.10/S	SD, CD	wire	0.05	0.03	0.10/0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_7	393765.78	3638064.48	10.4	0.08/E	CD	Bolt x 1	0.15	0.08	0.20/0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_8	393769.68	3638065.50	8.7	0.30/S	CD	Bolt x 1	0.08	0.03	0.10/0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_9	393766.86	3638069.16	8.6	0.30/NW	CD	Bolt x 1	0.08	0.03	0.05/0.01	NA	29-Jan-15	Yes	DH
SR864_IK309_10	393765.24	3638062.44	8.5	0.05/S	CD	Nail x 2	Surface	0.03	0.05/<0.01	NA	02-Feb-15	Yes	DH
SR864_IK309_11	393761.25	3638067.06	8.0	0.18/S	CD	Nut x 2, bolt x 1	0.08	0.03	0.05/0.01	NA	29-Jan-15	Yes	DH
SR864_IK309_12	393759.72	3638069.22	8.0	0.05/S	CD	Nut x 1, bolt x 1	Surface	0.03	0.05/0.01	NA	29-Jan-15	Yes	DH
SR864_IK309_13	393764.88	3638069.22	8.0	0.30/NW	CD	Nut x 1, bolt x 1	0.05	0.03	0.15/<0.01	NA	29-Jan-15	Yes	DH
SR864_IK309_14	393757.44	3638069.79	4.7	0.10/NW	CD	Staple	0.05	0.03	0.03/<0.01	NA	02-Feb-15	Yes	DH
SR864_IK310_1	393744.66	3638099.40	228.1	0	CD	Metal strap	0.01	1	0.46/0.01	NA	02-Feb-15	Yes	DH
SR864_IK310_2	393741.42	3638078.52	36.2	0.20/SW	CD	Eye bolt	0.03	0.17	0.05/0.05/<0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_3	393740.64	3638079.18	29.9	0.20/SE	CD	Bolt x 1	0.13	0.17	0.23/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_4	393740.79	3638086.59	23.5	0	CD	Bolt, Aluminum scrap	0.05	0.17	0.23/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_5	393744.84	3638075.04	20.5	0	CD	Nail x 1	0.08	0.03	0.15/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_6	393755.82	3638096.94	19.3	0.15/N	CD	Bolt x 1	0.05	0.09	0.48/0.01	NA	02-Feb-15	Yes	DH
SR864_IK310_7	393740.58	3638085.36	17.1	0.15/N	CD	Bolt x 1	0.05	0.17	0.23/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_8	393749.16	3638084.34	15.4	0.30/N	CD	Bolt, washer, wire	0.18	0.17	0.23/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_9	393764.37	3638072.07	15.4	0.30/NW	CD	Bolt x 1	0.08	0.06	0.15/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_10	393740.58	3638096.22	14.1	0	CD	Bolt x 1	0.13	1	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IK310_11	393765.96	3638071.50	11.3	0.47/S	CD	Bolt x 1	0.10	0.14	0.10/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_12	393740.16	3638077.92	10.7	--	--	No Find (target not found on relocate)	--	--	--	--	02-Feb-15	Yes	RV
SR864_IK310_13	393767.10	3638082.78	9.6	0.18/W	CD	Bots, washers	0.18	0.03	0.05/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_14	393762.42	3638071.74	9.6	0.30/N	CD	Bolt x 1	0.18	0.03	0.05/0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_15	393748.50	3638073.84	9.0	0.20/SW	CD	Bolt x 2	0.08	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IK310_16	393743.04	3638099.10	8.1	--	--	No Find (target not found on relocate)	--	--	--	--	03-Feb-15	Yes	RV
SR864_IK310_17	393767.64	3638073.36	7.9	0.05/SW	CD	Nail x 1	Surface	0.03	0.08/<0.01	NA	29-Jan-15	Yes	DH
SR864_IK310_18	393755.79	3638086.20	4.7	0.08/N	CD	Bolt x 1	0.05	0.03	0.13/0.01	NA	02-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IK311_1	393750.18	3638116.02	125.8	0.05/E	CD	Aluminum	0.05	0.03	0.10/0.10	NA	16-Jan-15	Yes	LP
SR864_IK311_2	393746.52	3638121.78	81.2	0.30/NW	CD	Wire and aluminum	0.05	0.1	0.10/0.15	NA	16-Jan-15	Yes	LP
SR864_IK311_3	393752.31	3638110.05	36.8	0.20/W	CD	Angle iron	0.10	0.45	0.15/0.03	NA	16-Jan-15	Yes	LP
SR864_IK311_4	393768.54	3638103.48	17.5	0.30/S	CD	Carriage bolt	0.03	0.11	0.13/0.01	NA	16-Jan-15	Yes	LP
SR864_IK311_5	393740.16	3638129.22	13.4	0.30/E	CD	Aluminum foil	0.03	<0.03	0.08/0.10	NA	16-Jan-15	Yes	LP
SR864_IK311_6	393740.04	3638101.32	11.2	0	CD	Bolt	0.10	0.45	0.13/0.02	NA	16-Jan-15	Yes	LP
SR864_IK311_7	393767.76	3638111.04	10.9	0.05/E	SD, CD	.50 cal x 1, beer can x 1	0.01	0.03	0.08/0.15	NA	16-Jan-15	Yes	LP
SR864_IK311_8	393746.70	3638101.62	10.5	0.30/S	CD	Carriage bolt	0.03	0.11	0.13/0.01	NA	16-Jan-15	Yes	LP
SR864_IK311_9	393740.40	3638106.54	9.1	0.48/S	SD	.45 cal x 1	0.20	0.01	0.012/0.012	NA	16-Jan-15	Yes	LP
SR864_IK311_10	393741.18	3638129.70	7.6	0.61/--	SD	.50 cal x 1	0.10	0.03	0.012/0.05	NA	16-Jan-15	Yes	LP
SR864_IK312_1	393743.10	3638156.46	54.2	0.10/NW	CD	Wire	0.05	<0.02	0.25 long	NA	16-Jan-15	Yes	LP
SR864_IK312_2	393744.12	3638155.74	23.1	0.01/S	SD	.50 cal x 1	0.10	0.03	0.05/0.01	NA	16-Jan-15	Yes	LP
SR864_IK312_3	393742.32	3638151.66	20.7	0	SD	.50 cal x 6, 5.56 mm x 4	0.10	0.17	0.05/0.10	NA	16-Jan-15	Yes	LP
SR864_IK312_4	393757.56	3638140.08	13.4	0	CD	Aluminum plate	0.01	0.01	0.05/0.10	NA	16-Jan-15	Yes	LP
SR864_IK312_5	393744.30	3638153.85	12.5	0.30/W	SD	.50 cal x 2	0.15	0.03	0.05/0.01	NA	16-Jan-15	Yes	LP
SR864_IK312_6	393744.78	3638151.84	12.3	0.30/W	SD	.50 cal x 4	0.15	0.1	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK312_7	393744.96	3638153.40	11.9	0.30/W	SD	.50 cal x 2, 5.56 mm x 1	0.08	0.03	0.05/0.01	NA	16-Jan-15	Yes	LP
SR864_IK312_8	393765.84	3638146.44	10.1	0.08/W	SD	.50 cal x 1	0.01	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_1	393747.00	3638161.53	35.3	0.08/W	SD, CD	5.56 mm x 2, bolt x 1	0.05	0.5	0.30/0.02	NA	16-Jan-15	Yes	LP
SR864_IK313_2	393757.56	3638185.14	19.3	0.05/W	SD	.50 cal x 2	0.05	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_3	393749.94	3638174.16	16.3	0.15/S	CD	Wire	0.05	<0.01	0.48 long	NA	16-Jan-15	Yes	LP
SR864_IK313_4	393748.20	3638162.28	16.1	0.10/E	SD	5.56 mm blank x 8	0.08	<0.01	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_5	393753.90	3638180.04	11.3	0.25/N	SD	.50 cal x 4, 5.56 mm x 4	0.15	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_6	393760.68	3638189.64	10.7	0.03/W	SD, CD	.50 cal x 1, wire	0.05	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_7	393760.20	3638176.62	10.1	0.10/W	SD	.50 cal x 3	0.01	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_8	393758.76	3638181.24	9.8	0.13/W	SD	.50 cal x 3	0.01	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_9	393746.46	3638170.50	9.5	0.15/--	SD	.50 cal x 3	0.10	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_10	393742.92	3638164.62	8.8	--	--	No Find (target not found on relocate)	--	--	--	--	19-Jan-15	Yes	RV
SR864_IK313_11	393744.30	3638166.06	8.0	0.61/N	SD	.50 cal x 1	0.05	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_12	393766.68	3638188.14	7.9	0.03/N	SD	.50 cal x 2	0.03	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IK313_13	393767.64	3638187.24	7.6	0.13/S	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK313_14	393748.08	3638172.15	7.4	0.15/--	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK314_1	393765.48	3638196.24	18.5	0.08/W	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK314_2	393761.52	3638190.78	16.4	0.48/W	SD	.50 cal x 2	0.05	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK314_3	393769.14	3638201.34	12.0	0.30/SW	SD	.50 cal x 2	0.30	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IK314_4	393765.90	3638194.80	10.7	0.05/N	SD	.50 cal x 2	0.08	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL309_1	393780.54	3638060.22	247.3	0	CD	Square washer x 9, bolts x 5	0.03	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IL309_2	393797.16	3638046.78	73.0	0	CD	Aluminum oval	0.03	0.01	0.08/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_3	393789.36	3638045.52	35.1	0.15/E	SD, CD	5.56 mm x 1, aluminum scrap	0.05	0.02	0.05/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_4	393797.88	3638057.04	33.8	0.18/SW	SD, CD	5.56 mm x 3, bolt and washer	0.01	0.4	0.01/0.10	NA	29-Jan-15	Yes	LP
SR864_IL309_5	393780.84	3638058.00	32.8	0.30/W	CD	Square washer	0.08	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IL309_6	393797.70	3638051.28	32.4	0.30/W	CD	Bolt x 1	0.03	0.3	--	NA	29-Jan-15	Yes	LP
SR864_IL309_7	393791.34	3638055.48	31.1	0.30/N	CD	Rebar	0.30	0.45	0.03/0.30	NA	04-Feb-15	Yes	GV
SR864_IL309_8	393797.70	3638042.46	27.4	0.30/S	CD	Square washer	0.08	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IL309_9	393799.74	3638050.62	21.8	0.48/W	SD, CD	5.56 mm x 1, bolt x 1	0.08	0.3	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_10	393792.84	3638056.92	21.7	0.30/--	CD	Bolt and nail	0.08	0.3	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_11	393798.54	3638059.20	18.9	0.30/S	SD, CD	5.56 mm x 2, bolt x 1	0.05	0.3	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_12	393793.56	3638049.12	16.4	1.0/--	CD	Nut x 1, wire	0.01	<0.01	0.15/--	NA	29-Jan-15	Yes	LP
SR864_IL309_13	393798.60	3638048.94	14.7	0.15/W	CD	Bolt x 1	0.15	0.23	0.01/0.08	NA	29-Jan-15	Yes	LP
SR864_IL309_14	393791.88	3638052.36	14.0	0.15/E	CD	Square washer	0.03	0.2	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_15	393799.92	3638063.64	13.8	0.61/W	SD, CD	5.56 mm x 1, bolt x 1	0.05	0.4	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_16	393790.98	3638053.56	12.7	0.15/N	CD	Bolts x 3	0.03	0.4	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_17	393798.48	3638054.58	12.3	0	CD	Bolt x 1	0.08	0.03	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_18	393784.62	3638053.86	12.1	0.08/NW	CD	Scrap metal	0.03	0.06	0.01/0.10	NA	29-Jan-15	Yes	LP
SR864_IL309_19	393797.58	3638050.23	11.9	0.30/W	CD	Bolt x 1 and washers x 3	0.05	0.4	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IL309_20	393796.68	3638058.06	11.3	0.20/W	CD	Bolt x 1	0.05	0.4	0.01/0.10	NA	29-Jan-15	Yes	LP
SR864_IL309_21	393784.20	3638064.00	10.7	0.15/W	CD	Bolt x 1	0.03	0.35	0.01/0.05	NA	29-Jan-15	Yes	LP
SR864_IL309_22	393798.33	3638060.82	10.6	0	CD	Bolt x 1	0.08	0.4	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IL309_23	393789.42	3638051.34	9.4	0	CD	Square washer x 1	0.03	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IL309_24	393798.78	3638064.00	8.0	0.61/E	--	Same source as target SR864_IL309_15	--	--	--	NA	29-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IL309_25	393792.90	3638042.64	7.8	0.30/--	CD	Aluminum scrap	0.01	<0.02	0.20/0.03	NA	29-Jan-15	Yes	LP
SR864_IL309_26	393783.72	3638050.38	7.6	0.05/E	CD	Nails x 6	0.01	0.03	0.08/--	NA	29-Jan-15	Yes	LP
SR864_IL310_1	393783.75	3638086.59	33.4	0.15/SW	CD	Bolt x 2, washer x 4	0.02	0.1	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IL310_2	393780.75	3638088.30	15.5	0.03/N	CD	Bolt x 1, washer x 2	0.03	0.1	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IL310_3	393786.12	3638084.22	13.3	0.05/E	CD	Square washer x 1, nut x 2	0.01	0.1	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IL310_4	393792.96	3638074.50	11.9	0.30/N	CD	Bolt x 1	0.08	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_5	393773.46	3638095.92	11.3	0.20/SW	CD	Square washer x 1	0.05	0.1	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IL310_6	393784.98	3638086.80	10.6	0.20/W	CD	Bolt x 1	0.01	0.1	0.05/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_7	393787.02	3638096.10	10.0	0	CD	Bolt x 1, wire	0.01	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_8	393790.68	3638098.20	9.0	0.30/E	CD	Electronic connector	0.01	0.01	0.01/0.03	NA	02-Feb-15	Yes	LP
SR864_IL310_9	393790.62	3638096.04	8.8	0.30/S	CD	Bolt x 2	0.05	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_10	393786.64	3638085.64	7.7	0.10/W	CD	Bolt x 2	0.08	0.01	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_11	393791.04	3638086.50	7.4	0.20/NW	CD	Padlock	0.03	0.15	0.05/0.08	NA	02-Feb-15	Yes	LP
SR864_IL310_12	393785.88	3638094.09	7.2	0.03/E	CD	Bolt x 2	0.08	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_13	393773.97	3638091.36	6.5	0.61/W	CD	Cable	0.01	0.05	0.48/<0.01	NA	02-Feb-15	Yes	LP
SR864_IL310_14	393782.52	3638098.02	5.2	0.15/W	SD, CD	5.56 mm x 2, bolt x 1	0.05	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_15	393789.70	3638094.80	4.5	0.61/S	CD	Bolt x 3	0.05	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL310_16	393781.32	3638098.56	3.5	0.15/SE	SD, CD	5.56 mm x 2, bolt x 1	0.03	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IL311_1	393782.94	3638102.28	222.7	0.25/E	CD	Steel strap	0.03	0.5	0.03/0.46	NA	16-Jan-15	Yes	LP
SR864_IL311_2	393770.88	3638111.64	176.3	0.25/W	CD	Steel strap	0.03	0.5	0.03/1	NA	16-Jan-15	Yes	LP
SR864_IL311_3	393784.23	3638101.47	67.6	0.38/W	--	Same source as Target SR864_IL311_1	--	--	--	NA	16-Jan-15	Yes	LP
SR864_IL311_4	393786.90	3638109.90	20.2	0.30/E	CD	Bolt x 1	0.05	0.1	0.15/0.01	NA	16-Jan-15	Yes	LP
SR864_IL311_5	393782.22	3638109.90	18.2	0.30/S	SD, CD	5.56 mm x 1, bolt x 1	0.10	0.15	0.13/<0.01	NA	16-Jan-15	Yes	LP
SR864_IL311_6	393784.20	3638115.12	16.8	0.30/S	CD	Lag bolt	0.03	0.17	0.15/0.01	NA	16-Jan-15	Yes	LP
SR864_IL311_7	393784.50	3638129.34	16.6	0	CD	Wire x 1	Surface	0.03	0.61 long	NA	16-Jan-15	Yes	LP
SR864_IL311_8	393785.16	3638114.70	12.9	0.48/W	--	Same source as target SR864_IL311_6	--	--	--	NA	16-Jan-15	Yes	LP
SR864_IL311_9	393793.44	3638111.10	11.4	0.15/N	CD	Washers x 2, nuts x 4	0.08	0.2	0.05/0.05	NA	16-Jan-15	Yes	LP
SR864_IL311_10	393775.50	3638103.06	10.7	0.46/W	CD	Bolt x 1	0.13	0.2	0.15/0.01	NA	16-Jan-15	Yes	LP
SR864_IL311_11	393783.60	3638110.44	10.4	0.30/S	CD	Bolt x 1	0.03	0.2	0.15/0.01	NA	16-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IL311_12	393784.20	3638108.34	10.3	0.05/W	CD	Beer can x 1	0.05	0.05	0.08/0.15	NA	16-Jan-15	Yes	LP
SR864_IL311_13	393772.14	3638106.06	9.7	0.30/--	CD	Bolt x 1	0.03	0.03	0.13/<0.01	NA	16-Jan-15	Yes	LP
SR864_IL311_14	393793.02	3638112.84	9.4	0.08/NE	CD	Nuts x 3, screw x 1	0.05	0.05	0.05/0.05	NA	16-Jan-15	Yes	LP
SR864_IL311_15	393772.98	3638105.40	8.5	0	CD	Washer x 1	0.01	0.11	0.05/0.05	NA	16-Jan-15	Yes	LP
SR864_IL311_16	393789.51	3638111.88	8.3	0.025/S	CD	Washer x 1	0.03	0.1	0.05/0.05	NA	16-Jan-15	Yes	LP
SR864_IL311_17	393799.11	3638105.43	6.1	0.30/W	CD	Nail x 10	0.05	0.17	0.05/--	NA	16-Jan-15	Yes	LP
SR864_IL311_18	393786.72	3638103.03	5.6	0.10/E	CD	Bolt x 1	0.08	0.1	0.10/<0.01	NA	16-Jan-15	Yes	LP
SR864_IL312_1	393790.86	3638135.22	7.0	0.30/W	SD	5.56 mm x 1	0.01	< 0.01	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IL313_1	393771.12	3638173.20	9.3	1.0/W	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IL314_1	393781.08	3638218.14	11.7	0.20/NE	SD	.50 cal x 2	0.08	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_2	393780.48	3638212.98	10.5	0.03/E	SD	.50 cal x 5	0.08	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_3	393778.32	3638209.86	9.2	0.48W	SD	.50 cal x 1	0.01	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_4	393779.04	3638205.60	9.1	0.03/N	SD	.50 cal x 1, .45 cal case x 1	0.01	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_5	393780.84	3638215.92	9.0	0.61/S	SD	.50 cal x 1	0.15	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_6	393770.70	3638200.44	7.9	0.10/NE	SD	.50 cal x 2	0.05	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_7	393786.00	3638204.40	7.8	0.15/E	SD	.50 cal x 3	0.03	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_8	393789.84	3638208.96	7.7	0.38/N	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL314_9	393779.94	3638216.07	6.9	0.13/E	SD	.50 cal x 1	0.01	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IL315_1	393796.68	3638227.32	13.3	0.05/W	SD, CD	.50 cal x 2, nails x 9	0.03	<0.01	0.10 x --	NA	16-Jan-15	Yes	LP
SR864_IL315_2	393799.14	3638238.16	10.2	0.30/S	CD	Wire	0.05	0.1	0.30 long	NA	16-Jan-15	Yes	LP
SR864_IL315_3	393791.94	3638232.66	8.5	0	SD	.50 cal x 2	0.10	0.03	0.01 x 0.05	NA	16-Jan-15	Yes	LP
SR864_IL315_4	393796.98	3638235.00	7.7	0	SD	.50 cal x 3	0.05	0.03	0.01 x 0.05	NA	16-Jan-15	Yes	LP
SR864_IL315_5	393799.86	3638233.32	7.2	0.15/W	SD	.50 cal x 1	0.05	0.03	0.01 x 0.05	NA	16-Jan-15	Yes	LP
SR864_IM308_1	393823.74	3638028.18	72.0	0.05/SE	CD	Bolt x 1	0.03	0.45	0.01 x 0.25	NA	27-Jan-15	Yes	LP
SR864_IM308_2	393820.26	3638023.32	22.1	0.30/S	CD	Bolt x 1	0.08	0.45	0.01 x 0.25	NA	27-Jan-15	Yes	LP
SR864_IM308_3	393814.56	3638039.82	19.5	0.30/E	CD	Scrap metal x 4	0.05	0.17	0.01 x 0.05	NA	27-Jan-15	Yes	LP
SR864_IM308_4	393811.80	3638036.13	19.1	0.30/W	CD	Bolt x 1	0.08	0.45	0.01 x 0.25	NA	27-Jan-15	Yes	LP
SR864_IM308_5	393816.02	3638037.46	8.7	0.20/S	SD	.45 cal slug x 1	0.01	0.01	0.01 x 0.01	NA	27-Jan-15	Yes	LP
SR864_IM308_6	393815.58	3638036.22	7.9	0.70/S	SD	.45 cal casing x 1, 7.62 mm x 1	0.01	0.01	0.01 x 0.05	NA	27-Jan-15	Yes	LP
SR864_IM308_7	393813.24	3638039.76	7.5	0.30/N	CD	Wire	0.05	<0.01	0.20 long	NA	27-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IM309_1	393801.66	3638067.36	211.0	0	CD	Aluminum sheet metal	0.08	0.05	0.10/0.25	NA	29-Jan-15	Yes	LP
SR864_IM309_2	393812.16	3638067.06	80.6	0.08/W	CD	Aluminum sheet metal	0.03	0.02	0.08/0.16	NA	29-Jan-15	Yes	LP
SR864_IM309_3	393815.04	3638061.48	46.3	0	CD	Aluminum scrap x 7	0.05	0.45	0.05/0.10	NA	29-Jan-15	Yes	LP
SR864_IM309_4	393825.42	3638049.66	43.0	0.30/N	CD	Square washer, aluminum scrap	0.08	0.03	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IM309_5	393816.54	3638059.26	37.4	0	CD	Aluminum scrap x 4	0.05	0.15	0.05/0.10	NA	29-Jan-15	Yes	LP
SR864_IM309_6	393818.16	3638059.26	32.4	0	CD	Aluminum scrap	0.01	0.04	0.05/0.13	NA	02-Feb-15	Yes	LP
SR864_IM309_7	393811.02	3638065.35	30.8	0	CD	Aluminum scrap	0.01	0.17	0.10/0.15	NA	29-Jan-15	Yes	LP
SR864_IM309_8	393812.10	3638065.20	29.2	0.30/S	CD	Wire	0.08	0.02	0.78 long	NA	29-Jan-15	Yes	LP
SR864_IM309_9	393820.56	3638053.68	16.4	0.05/E	CD	Aluminum scrap	0.08	0.02	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IM309_10	393801.66	3638051.40	15.0	0.30/E	CD	Bolt x 1	0.05	0.4	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IM309_11	393804.96	3638069.16	11.8	0.15/N	CD	Nails x 4	0.05	<0.01	0.08/--	NA	03-Feb-15	Yes	LP
SR864_IM309_12	393804.30	3638070.00	11.1	0.30/S	CD	Bolt	0.01	0.4	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IM309_13	393812.82	3638064.06	10.8	0.05/W	CD	Chunk of aluminum	0.03	0.05	0.03/0.03	NA	29-Jan-15	Yes	LP
SR864_IM309_14	393800.82	3638052.48	10.6	0.15/E	CD	Bolt x 1	0.15	0.45	0.01/0.13	NA	29-Jan-15	Yes	LP
SR864_IM309_15	393800.55	3638049.66	10.3	0.15/S	CD	Cable clamp	0.08	0.45	0.05/0.10	NA	29-Jan-15	Yes	LP
SR864_IM309_16	393815.88	3638047.98	9.5	0.13/--	CD	Aluminum sheet metal, Wire	0.01	0.02	0.05/0.05, 50' wire	NA	02-Feb-15	Yes	LP
SR864_IM309_17	393801.00	3638045.76	8.6	0.48/SW	CD	Square washer	0.08	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IM309_18	393822.36	3638043.36	7.5	0.15/W	CD	Aluminum foil	0.08	<0.01	0.03/0.10	NA	02-Feb-15	Yes	LP
SR864_IM309_19	393800.37	3638049.03	6.6	0	CD	Wire	0.03	<0.01	0.15 long	NA	29-Jan-15	Yes	LP
SR864_IM310_1	393810.54	3638098.98	40.3	0.15/W	CD	Steel rod	0.05	0.15	0.01/0.61	NA	02-Feb-15	Yes	LP
SR864_IM310_2	393809.76	3638099.25	33.3	0.15/W	CD	Banding and wire	0.01	0.05	0.03/0.10	NA	02-Feb-15	Yes	LP
SR864_IM310_3	393806.40	3638074.44	31.5	0.10/S	CD	Concrete w/rebar	Surface	15	0.30/0.48	NA	02-Feb-15	Yes	LP
SR864_IM310_4	393807.42	3638074.02	23.1	0.15/N	--	Same source as target SR864_IM310_3	--	--	--	NA	02-Feb-15	Yes	LP
SR864_IM310_5	393804.30	3638070.00	11.1	0.30/S	CD	Same source as target SR864_IM309_12 (bolt)	0.01	0.7	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IM310_6	393820.50	3638079.12	8.3	0.08/W	CD	Aluminum scrap	0.08	<0.01	0.05/0.10	NA	02-Feb-15	Yes	LP
SR864_IM310_7	393801.39	3638075.19	7.1	0.08/SW	CD	Bolt x 1	0.05	0.05	0.01/0.10	NA	02-Feb-15	Yes	LP
SR864_IM311_1	393803.16	3638101.86	80.5	0.03/N	CD	Bolt x 1	Surface	0.4	0.02/0.30	NA	16-Jan-15	Yes	LP
SR864_IM311_2	393802.53	3638103.06	58.1	0.48/NW	CD	Bolt x 1	0.10	0.4	0.02/0.25	NA	16-Jan-15	Yes	LP
SR864_IM311_3	393800.52	3638103.93	40.0	0.02/--	QC seed	Small ISO	0.05	0.2	0.03/0.10	NA	16-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IM311_4	393807.60	3638122.80	10.8	--	--	No Find (target not found on relocate)	--	--	--	--	19-Jan-15	Yes	RV
SR864_IM312_1	393810.84	3638138.94	102.0	0.30/N	CD	Wire pit	0.05	0.5	0.38/<0.01	NA	19-Jan-15	Yes	LP
SR864_IM312_2	393810.54	3638141.10	26.5	0.15/--	CD	Wire pit	0.05	0.25	0.38/<0.01	NA	19-Jan-15	Yes	LP
SR864_IM312_3	393811.62	3638140.26	22.4	0	CD	Wire pit	0.08	0.5	0.38/<0.01	NA	19-Jan-15	Yes	LP
SR864_IM312_4	393825.12	3638155.74	14.9	0.08/--	CD	Conduit	0.08	0.08	0.03/0.08	NA	19-Jan-15	Yes	LP
SR864_IM313_1	393817.47	3638186.34	8.4	0.15/N	CD	Wire	0.10	<0.01	0.38	NA	19-Jan-15	Yes	LP
SR864_IM314_1	393800.88	3638217.12	9.9	0.30/--	SD	.50 cal x 1	0.05	0.03	0.01/0.04	NA	19-Jan-15	Yes	LP
SR864_IM314_2	393809.58	3638217.30	7.6	0.08	SD	.50 cal x 2	0.08	0.03	0.01/0.04	NA	19-Jan-15	Yes	LP
SR864_IM315_1	393807.66	3638221.62	9.8	0.15/NW	SD	.50 cal x 1	0.13	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IM315_2	393810.72	3638233.62	9.5	0.30/N	SD	.50 cal x 1, 5.56 mm x 9	0.15	0.01	0.05/<0.01	NA	16-Jan-15	Yes	LP
SR864_IM315_3	393801.42	3638245.80	8.7	0.05/W	SD	.50 cal x 2	0.10	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IM315_4	393805.20	3638249.40	8.6	0.05/W	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IM315_5	393804.30	3638249.88	8.2	0	SD	.50 cal x 1	0.05	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IM315_6	393808.50	3638243.94	7.8	0.03/E	SD	.50 cal x 2	0.10	0.03	0.01/0.05	NA	16-Jan-15	Yes	LP
SR864_IM316_1	393821.40	3638272.26	98.6	0.10/S	SD, CD	.50 cal x 2, comm wire	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_2	393817.68	3638278.38	22.3	0.30/W	SD	.50 cal x 1, 5.56 mm x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_3	393813.96	3638272.44	18.0	0.30/N	SD	.50 cal x 3, 5.56 mm x 1	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_4	393804.36	3638258.34	16.6	0.08/S	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_5	393828.30	3638276.28	11.4	0.05/--	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_6	393818.78	3638268.26	11.1	0	CD	Wire (comm)	0.05	<0.01	0.5 long	NA	19-Jan-15	Yes	LP
SR864_IM316_7	393817.56	3638279.88	10.8	0.15/E	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_8	393816.60	3638267.58	10.3	0.30/--	SD	.30 carbine brass x 2	0.15	0.01	0.03/<0.01	NA	19-Jan-15	Yes	LP
SR864_IM316_9	393829.44	3638277.06	9.5	0.03/--	SD	.50 cal x 2	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_10	393810.54	3638256.72	9.5	0.13/N	SD	.50 cal x 1	0.20	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_11	393826.26	3638279.40	9.0	0.03/W	SD, CD	.50 cal x 1, wire	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_12	393818.22	3638262.90	8.9	0.08/NE	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_13	393820.20	3638272.98	8.4	0.48/NE	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM316_14	393815.70	3638263.08	8.2	0.48/--	CD	Wire	0.08	0.01	0.3 long	NA	19-Jan-15	Yes	LP
SR864_IM316_15	393819.60	3638268.00	7.2	0.30/--	SD	7.62 mm brass	0.25	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_1	393829.68	3638309.58	30.9	0	SD	.50 cal x 1	0.01	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IM317_2	393826.56	3638296.62	29.4	0.30/W	SD	.50 cal x 3	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_3	393825.57	3638293.14	14.0	0.30/W	SD	.50 cal x 2	0.20	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_4	393826.86	3638301.30	12.1	0.15/W	SD	.50 cal x 2	0.15	0.06	0.01/0.05	NA	27-Jan-15	Yes	DH
SR864_IM317_5	393828.90	3638306.94	11.4	0.10/N	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_6	393816.54	3638281.14	9.5	0.30/N	SD	.50 cal x 4, 5.56 mm x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_7	393828.42	3638302.74	9.4	0.30/W	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_8	393827.34	3638299.50	7.0	0.03/W	SD	.50 cal x 2	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM317_9	393829.02	3638284.23	4.7	0.61/E	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM318_1	393828.96	3638310.42	12.7	0	CD	Steel plate	0.13	0.03	0.50/0.76	NA	19-Jan-15	Yes	LP
SR864_IM318_2	393828.06	3638311.50	10.3	0.15/W	SD	.50 cal x 2, 5.56 mm x 2	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IM318_3	393829.77	3638318.40	8.1	0.20/E	SD	.50 cal x 2, 5.56 mm x 17	0.08	0.03	0.05/0.08	NA	19-Jan-15	Yes	LP
SR864_IM318_4	393827.34	3638339.82	7.3	0.15/S	SD	.50 cal x 1	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN307_1	393857.85	3637997.73	668.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IN307_2	393856.02	3638004.84	177.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IN307_3	393852.96	3638003.04	155.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IN307_4	393855.84	3637999.44	117.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IN307_5	393854.16	3638003.40	114.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IN307_6	393853.38	3638009.82	59.6	0.05/E	CD	Steel ring	0.10	0.5	5 inch dia.	NA	28-Jan-15	Yes	LP
SR864_IN307_7	393844.92	3638009.10	9.6	0.30/E	CD	Bolt x 1, hose clamp	0.08	0.02	0.05/0.05	NA	28-Jan-15	Yes	LP
SR864_IN308_1	393858.60	3638011.08	231.1	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IN308_2	393858.39	3638010.09	121.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IN308_3	393832.80	3638035.32	26.6	0	SD, CD	5.56 mm x 2, cans	0.05	0.11	0.08/0.10	NA	27-Jan-15	Yes	LP
SR864_IN308_4	393834.99	3638031.24	12.0	0.05/SE	CD	Spike	0.05	0.23	0.01/0.20	NA	27-Jan-15	Yes	LP
SR864_IN308_5	393858.48	3638037.90	10.5	0	CD	Wire	0.08	0.02	0.61 long	NA	27-Jan-15	Yes	LP
SR864_IN308_6	393831.96	3638029.08	9.9	0.30/E	CD	Melted aluminum	0.15	0.09	0.05/0.10	NA	27-Jan-15	Yes	LP
SR864_IN308_7	393839.34	3638034.96	9.7	0.10/W	CD	Wire, scrap metal	0.05	0.06	0.05/0.08	NA	27-Jan-15	Yes	LP
SR864_IN308_8	393839.40	3638033.40	7.7	0.20/S	CD	Scrap metal x 3	0.08	0.11	0.05/0.08	NA	27-Jan-15	Yes	LP
SR864_IN309_1	393854.22	3638067.81	11.1	0.08/N	SD, CD	.50 cal brass x 1, aluminum scrap	0.08	0.01	0.05/0.13	NA	28-Jan-15	Yes	LP
SR864_IN310_1	393851.76	3638097.42	399.8	0	CD	Copper sheet	0.01	0.07	0.13/0.20	NA	19-Jan-15	Yes	LP
SR864_IN310_2	393849.84	3638085.21	61.7	0.15/W	CD	Bolt x 1	0.01	0.45	0.01/0.38	NA	19-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IN311_1	393852.84	3638125.62	65.0	0.03/S	CD	Bolts w/washers	0.05	0.5	0.01/0.30	NA	19-Jan-15	Yes	LP
SR864_IN312_1	393836.40	3638136.84	93.5	0.30/S	CD	Insulator pin, wire	0.03	0.45	0.02/0.20	NA	19-Jan-15	Yes	LP
SR864_IN312_2	393837.24	3638136.24	78.6	0.48/N	--	Same source as target SR864_IN312_1	--	--	--	NA	19-Jan-15	Yes	LP
SR864_IN312_3	393853.56	3638133.52	11.9	0.05/W	CD	Bolt x 1	0.03	0.11	0.13/<0.01	NA	19-Jan-15	Yes	LP
SR864_IN316_1	393838.44	3638266.44	11.8	0	MD	M-18 smoke Grenade (empty)	0.01	0.5	0.05/0.13	NA	19-Jan-15	Yes	LP
SR864_IN316_2	393841.68	3638279.34	8.5	0.30/N	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN316_3	393833.34	3638257.38	8.4	0.15/W	SD	.50 cal x 2	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN316_4	393830.40	3638277.36	8.1	0.05/SE	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN317_1	393852.03	3638281.68	24.5	0.05/N	CD	Aluminum scrap	0.05	0.2	0.05/0.10	NA	19-Jan-15	Yes	LP
SR864_IN317_2	393834.66	3638299.26	17.6	0.13/E	SD	.50 cal x 1, 5.56 mm x 1	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN317_3	393836.07	3638309.64	13.5	0.18/E	SD, CD	5.56 mm x 1, spike x 1	0.08	0.14	0.01/0.25	NA	19-Jan-15	Yes	LP
SR864_IN317_4	393830.82	3638287.92	12.9	0.13/N	SD	.50 cal x 2	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN317_5	393830.22	3638287.02	10.9	0.13/N	SD	.50 cal x 5	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN317_6	393834.30	3638296.44	8.6	0	SD	.50 cal x 1	0.38	0.03	0.01/0.05	NA	10-Feb-15	Yes	LP
SR864_IN317_7	393834.18	3638284.08	7.9	0.10/--	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_1	393837.66	3638335.08	50.8	1.0/E	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_2	393837.96	3638311.14	48.6	0.30/S	SD, CD	.50 cal x 3, wire	0.13	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_3	393837.36	3638333.76	42.3	0.30/E	SD	.50 cal x 1, 5.56 mm x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_4	393839.10	3638327.52	31.8	0.15/E	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_5	393837.36	3638330.04	31.2	0.30/E	SD	.50 cal x 1, 5.56 mm x 1	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_6	393837.00	3638339.88	26.7	0.20/E	SD, CD	5.56 mm x 1, wire x 5	0.05	0.01	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_7	393830.76	3638318.46	22.3	0.15/N	SD	.50 cal x 1, 5.56 mm x 2	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_8	393830.70	3638322.90	21.3	0.15/W	SD	.50 cal x 1, 5.56 mm x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_9	393837.60	3638316.42	16.8	0.30/S	SD	.50 cal x 3	0.20	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_10	393830.76	3638320.86	16.5	0.08/NE	SD	.50 cal x 1, 5.56 mm x 8	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_11	393838.86	3638329.26	16.1	0.30/S	SD	.50 cal x 2	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_12	393830.55	3638316.45	14.6	0.15/W	SD	.50 cal x 2	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_13	393838.56	3638317.68	14.6	0.10/E	SD, CD	.50 cal x 2, wire	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_14	393836.52	3638310.30	14.1	--	--	Same source as target SR864_IN317_3	--	--	--	NA	19-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IN318_15	393839.91	3638326.35	13.0	0.30/E	SD	.50 cal x 1, 9 mm x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_16	393830.16	3638312.04	12.1	0.10/W	SD	.50 cal x 1	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_17	393830.64	3638326.44	11.7	0.30/W	SD	.50 cal x 1, 5.56 mm x 2	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_18	393836.40	3638336.76	10.7	0.30/W	SD	.50 cal x 1	0.05	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_19	393837.36	3638328.42	9.6	0.15/W	SD	.50 cal x 1	0.15	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_20	393830.16	3638324.97	9.5	0.08/W	SD	.50 cal x 2, 5.56 mm x 5	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_21	393830.07	3638313.63	8.9	0.15/W	SD, CD	.50 cal x 1, wire x 3	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_22	393835.38	3638336.64	8.2	0.08/N	SD	.50 cal x 1	0.03	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_23	393836.49	3638335.71	8.0	0.61/--	SD	.50 cal x 1, 5.56 mm x 2	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_24	393854.04	3638332.14	7.7	0.15/W	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN318_25	393839.04	3638323.14	7.3	0.30/S	CD	Wire	0.10	0.03	0.15 long	NA	19-Jan-15	Yes	LP
SR864_IN318_26	393836.49	3638337.45	6.0	0.30/W	--	Same source as target SR864_IN318_18	--	--	--	NA	19-Jan-15	Yes	LP
SR864_IN319_1	393856.56	3638343.54	124.5	0	QC seed	Medium ISO	0.15	0.5	0.05/0.20	NA	19-Jan-15	Yes	LP
SR864_IN319_2	393835.98	3638343.66	23.5	0.15/N	MD	Grenade spoon, trip flare bracket	0.10	0.17	0.05/0.08	NA	19-Jan-15	Yes	LP
SR864_IN319_3	393836.28	3638341.74	16.4	0.30/E	SD	.50 cal x 3, 5.56 mm x 5	0.13	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN319_4	393837.30	3638340.96	11.3	0.15/E	CD	Wire	0.08	<0.05	0.61 long	NA	19-Jan-15	Yes	LP
SR864_IN319_5	393834.93	3638343.84	11.2	0.15/N	SD	.50 cal x 1, 5.56 mm x 2	0.10	0.03	0.01/0.05	NA	19-Jan-15	Yes	LP
SR864_IN319_6	393835.32	3638342.22	9.6	0.48/E	MD	Grenade spoon	0.15	0.01	0.01/0.10	NA	19-Jan-15	Yes	LP
SR864_IN319_7	393846.12	3638343.78	7.5	0.08/--	SD	.50 cal x 2	0.15	0.03	0.01/0.10	NA	19-Jan-15	Yes	LP
SR864_IN319_8	393842.28	3638345.10	7.4	0.15/W	SD	.50 cal x 4	0.15	0.03	0.01/0.10	NA	19-Jan-15	Yes	LP
SR864_IO307_1	393866.10	3638009.88	1859.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IO307_2	393868.26	3637998.72	1295.8	0	CD	Guy wire stake (backhoe dig)	0.30	5	0.03/2.0	NA	28-Jan-15	Yes	LP
SR864_IO307_3	393862.86	3638010.00	287.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IO307_4	393862.38	3637994.88	271.1	0	SD, CD	5.56 mm x 1, Aluminum sign	0.13	0.4	0.25/0.30	NA	29-Jan-15	Yes	LP
SR864_IO307_5	393870.27	3637995.06	177.0	0	CD	Pipe	0.10	2	0.03/1.3	NA	29-Jan-15	Yes	LP
SR864_IO307_6	393870.33	3638001.84	155.1	0	CD	Cable and clamp	0.01	1	0.01/0.20	NA	28-Jan-15	Yes	LP
SR864_IO307_7	393864.30	3638005.02	96.2	0.03/SW	CD	Aluminum cap	0.03	0.12	0.10 diameter	NA	28-Jan-15	Yes	LP
SR864_IO307_8	393885.84	3637984.68	46.7	0.30/S	CD	Rebar, source shared with SR854_IO307_13	0.20	2	0.02/0.61	NA	29-Jan-15	Yes	LP
SR864_IO307_9	393864.66	3638008.62	29.6	1.0/E	SD	.50 cal brass x 1	0.15	0.03	0.08/0.10	NA	28-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IO307_10	393861.93	3638000.52	26.5	0	CD	Concrete pad - not dug	--	--	--	--	29-Jan-15	No	LP
SR864_IO307_11	393867.48	3637997.58	21.1	0.08	CD	Wire	0.05	<0.01	0.15 long	NA	29-Jan-15	Yes	LP
SR864_IO307_12	393862.04	3638001.84	20.8	0.13/NW	CD	Bolt x 1	0.03	0.5	0.01/0.20	NA	29-Jan-15	Yes	LP
SR864_IO307_13	393884.28	3637984.29	15.8	0.30/N	CD	Same source as target SR854_IO307_8	--	--	--	NA	29-Jan-15	Yes	LP
SR864_IO307_14	393868.20	3638000.34	13.3	0.20/E	CD	Steel rods x 2	0.20	0.03	0.20/<0.01	NA	28-Jan-15	Yes	LP
SR864_IO307_15	393877.62	3637998.94	10.7	0.10/W	CD	Bolt x 1	0.08	0.01	0.01/0.20	NA	29-Jan-15	Yes	LP
SR864_IO307_16	393882.42	3637998.48	10.7	0	CD	Copper wire	0.08	0.03	0.15 long	NA	29-Jan-15	Yes	LP
SR864_IO307_17	393871.08	3637997.31	10.5	0.15/E	CD	Square washer	0.05	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IO307_18	393882.54	3638009.64	9.9	0.08	CD	Wire	0.01	0.01	0.61 long	NA	29-Jan-15	Yes	LP
SR864_IO307_19	393887.46	3638006.40	9.6	0	CD	Beer can x 1	0.05	0.02	0.08/0.10	NA	29-Jan-15	Yes	LP
SR864_IO307_20	393878.52	3637983.72	9.3	0.25/S	CD	Chunk of aluminum	0.05	0.01	0.08/0.08	NA	29-Jan-15	Yes	LP
SR864_IO307_21	393889.14	3638003.58	8.9	0.05/E	CD	Aluminum scrap	0.10	0.17	0.05/0.10	NA	29-Jan-15	Yes	LP
SR864_IO307_22	393867.84	3638009.46	8.9	0.10/W	CD	Wire	0.01	<0.01	0.15 long	NA	29-Jan-15	Yes	LP
SR864_IO307_23	393866.88	3638005.86	7.6	1.0/SE	CD	Aluminum can	0.01	0.01	0.05/0.05	NA	28-Jan-15	Yes	LP
SR864_IO307_24	393864.36	3638009.58	7.5	0.30/S	SD	0.45 cal. Casing	0.05	<0.01	0.01/0.02	NA	28-Jan-15	Yes	LP
SR864_IO307_25	393871.02	3638009.58	7.5	0.15/S	CD	Nail x 1, Brass "L"	0.05	0.02	0.03/0.08	NA	29-Jan-15	Yes	LP
SR864_IO307_26	393880.20	3638003.25	6.8	0.05/N	CD	Bolt x 1	0.05	0.5	0.01/0.20	NA	28-Jan-15	Yes	LP
SR864_IO308_1	393874.62	3638022.42	1420.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_2	393883.14	3638035.02	1356.5	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_3	393883.08	3638032.92	301.9	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_4	393862.86	3638010.00	287.1	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_5	393861.42	3638015.64	197.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_6	393880.20	3638034.84	195.8	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_7	393867.12	3638024.04	186.2	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_8	393875.58	3638036.58	181.8	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_9	393864.36	3638011.95	180.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_10	393865.02	3638018.82	157.2	0.25/E	CD	Nut (near concrete pad)	0.08	0.03	0.01/0.01	NA	27-Jan-15	Yes	LP
SR864_IO308_11	393866.88	3638022.66	152.6	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_12	393863.04	3638018.76	151.5	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_13	393871.50	3638022.66	147.3	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IO308_14	393875.46	3638035.26	121.0	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_15	393881.70	3638037.00	114.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_16	393862.89	3638016.36	113.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_17	393872.76	3638024.64	100.9	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_18	393873.12	3638023.20	93.3	0.03/N	CD	Bolt and washer	0.01	0.02	0.01/0.08	NA	27-Jan-15	Yes	LP
SR864_IO308_19	393871.02	3638028.66	90.6	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_20	393878.96	3638026.06	58.6	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_21	393870.48	3638013.48	58.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_22	393887.40	3638038.77	47.2	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_23	393870.00	3638028.20	45.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_24	393870.90	3638017.08	41.8	0.05/N	CD	Nail x 2	0.03	<0.01	0.05/--	NA	27-Jan-15	Yes	LP
SR864_IO308_25	393864.36	3638017.29	41.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_26	393873.51	3638031.63	39.3	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_27	393865.68	3638016.78	38.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_28	393872.13	3638030.82	34.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_29	393887.76	3638037.90	33.0	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_30	393874.56	3638030.34	32.3	0.61/E	CD	Scrap metal	0.10	0.11	0.05/0.08	NA	27-Jan-15	Yes	LP
SR864_IO308_31	393872.22	3638028.90	29.7	--	--	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_32	393865.80	3638011.74	26.0	0.30/S	CD	Nails x 10, wire	0.13	<0.01	0.05/--	NA	27-Jan-15	Yes	LP
SR864_IO308_33	393886.98	3638032.50	22.0	0	CD	Nails x 8, washer x 1	0.13	0.01	0.08/--	NA	27-Jan-15	Yes	LP
SR864_IO308_34	393874.32	3638024.34	21.4	0.05/N	CD	Bolts x 20	0.03	0.02	0.01/0.08	NA	27-Jan-15	Yes	LP
SR864_IO308_35	393870.51	3638015.04	20.4	0.30/S	CD	Bolt x 1	0.05	--	0.20/0.01	NA	27-Jan-15	Yes	LP
SR864_IO308_36	393882.96	3638037.06	20.0	0.05/W	CD	Nail x 1	0.08	0.01	0.05/--	NA	27-Jan-15	Yes	LP
SR864_IO308_37	393872.94	3638021.28	13.4	0.20/N	CD	Bolt x 1	0.01	0.02	0.02/0.02	NA	29-Jan-15	Yes	LP
SR864_IO308_38	393875.70	3638020.56	11.7	0.15/W	CD	Bolt x 1, nail x 1	0.05	0.14	--	NA	27-Jan-15	Yes	LP
SR864_IO308_39	393876.60	3638024.22	9.2	0.05/N	CD	Nut and bolt	0.05	0.01	0.02/0.02	NA	27-Jan-15	Yes	LP
SR864_IO308_40	393882.06	3638034.60	8.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO308_41	393860.40	3638033.52	7.4	0.30/N	CD	Bolt and switch	0.10	0.14	0.01/0.05	NA	27-Jan-15	Yes	LP
SR864_IO308_42	393872.22	3638012.34	7.1	0.38/N	CD	Nail x 1	0.05	<0.01	0.05/--	NA	27-Jan-15	Yes	LP
SR864_IO308_43	393860.28	3638017.23	5.9	0.015/S	CD	Nails x 2	0.05	<0.01	0.05/--	NA	27-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IO308_44	393873.93	3638029.53	4.1	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IO309_1	393888.60	3638047.44	256.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_2	393889.98	3638049.72	150.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_3	393883.98	3638049.42	108.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_4	393888.30	3638053.62	99.7	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_5	393888.96	3638056.23	85.6	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_6	393878.55	3638040.75	83.1	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_7	393884.16	3638047.86	56.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_8	393887.16	3638053.40	46.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_9	393880.20	3638043.72	46.3	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_10	393889.23	3638054.34	37.3	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_11	393882.72	3638041.92	34.3	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_12	393879.75	3638041.26	32.2	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_13	393881.92	3638043.32	27.2	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_14	393880.80	3638042.10	22.4	0	CD	Concrete pad - not dug	--	--	--	NA	27-Jan-15	No	LP
SR864_IO309_15	393867.39	3638046.03	9.2	0.15/N	CD	Nails x 12	0.03	0.01	0.08/--	NA	28-Jan-15	Yes	LP
SR864_IO309_16	393869.76	3638044.08	9.2	0.03/E	CD	Nails x 3, steel block	0.01	0.45	0.03/0.05/0.08	NA	28-Jan-15	Yes	LP
SR864_IO309_17	393875.88	3638049.57	7.9	0.20/W	CD	Nails x 6, scrap metal	0.01	<0.01	0.03/0.05	NA	28-Jan-15	Yes	LP
SR864_IO309_18	393879.72	3638050.26	7.9	0	CD	Nails x 15	0.05	<0.01	0.05/--	NA	27-Jan-15	Yes	LP
SR864_IO309_19	393870.72	3638047.62	7.7	0.30/NW	CD	Nails x 8	0.02	<0.01	0.05/--	NA	28-Jan-15	Yes	LP
SR864_IO309_20	393872.88	3638049.66	7.4	0.10/N	CD	Nails x 3	0.05	<0.01	0.05/--	NA	28-Jan-15	Yes	LP
SR864_IO309_21	393860.70	3638069.64	7.4	0.15/NW	SD	5.56 mm (empty) x 1	0.01	<0.01	0.01/0.05	NA	29-Jan-15	Yes	LP
SR864_IO309_22	393876.90	3638047.44	7.3	0	CD	Nails x 16	0.03	<0.01	0.05/--	NA	27-Jan-15	Yes	LP
SR864_IO309_23	393885.48	3638045.10	7.1	0.30/E	CD	Nails x 4	0.03	<0.01	0.08 --	NA	28-Jan-15	Yes	LP
SR864_IO310_1	393861.48	3638072.52	59.6	0.15/E	QC seed	QC seed	0.15	0.34	0.03/0.10	NA	28-Jan-15	Yes	LP
SR864_IO311_1	393875.15	3638111.33	28.1	0.05/NE	CD	Bracket and bolt	0.03	0.75	0.13/0.08/0.05	NA	28-Jan-15	Yes	LP
SR864_IO311_2	393874.62	3638114.22	23.5	0.05/W	CD	Piece of steel	0.01	0.03	0.03/0.05	NA	28-Jan-15	Yes	LP
SR864_IO311_3	393879.30	3638107.44	12.0	0	CD	Steel plate (rust)	0.03	18.14	0.61/0.61	NA	28-Jan-15	Yes	LP
SR864_IO311_4	393876.84	3638110.80	11.5	0.20/E	CD	Bracket	0.05	0.05	0.03/0.61	NA	28-Jan-15	Yes	LP
SR864_IO311_5	393876.30	3638109.12	8.5	0.15/N	CD	Banding	0.08	0.02	0.02/0.10	NA	28-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IO314_1	393883.32	3638208.66	7.3	0.15/NW	SD	.50 cal x 1	0.13	0.03	0.01/0.05	NA	28-Jan-15	Yes	LP
SR864_IO318_1	393867.72	3638321.46	25.7	--	--	No Find (target not found on relocate)	--	--	--	--	10-Feb-15	Yes	RV
SR864_IO318_2	393877.68	3638313.30	9.2	0.3/E	CD	Washer	0.05	0.03	0.08/0.08/<0.01	NA	27-Jan-15	Yes	DH
SR864_IP306_1	393912.66	3637977.81	65.4	0	CD	Steel bar	0.05	1	0.04/1.2	NA	29-Jan-15	Yes	LP
SR864_IP306_2	393914.04	3637977.54	8.0	0.10/N	SD	5.56 mm x 1	0.01	<0.01	0.01/0.05	NA	29-Jan-15	Yes	LP
SR864_IP306_3	393907.86	3637967.70	7.5	0.10/SE	CD	Square washer	0.08	0.03	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IP307_1	393894.42	3637986.42	2351.7	0	CD	Steel sign	0.05	0.4	0.38/0.38	NA	29-Jan-15	Yes	LP
SR864_IP307_2	393918.18	3638001.66	119.5	0	QC seed	Medium ISO	0.16	0.15	0.05/0.20	NA	29-Jan-15	Yes	LP
SR864_IP307_3	393901.98	3637981.56	80.2	0.03	CD	Pipe (copper)	0.05	0.5	0.03/0.25	NA	29-Jan-15	Yes	LP
SR864_IP307_4	393897.72	3638006.52	17.0	0	CD	Aluminum can	0.13	0.01	0.05/0.08	NA	29-Jan-15	Yes	LP
SR864_IP307_5	393893.22	3637985.88	8.4	--	--	No Find, possible same source as target SR864_IP307_1	--	--	--	--	03-Feb-15	Yes	RV
SR864_IP307_6	393919.20	3637982.16	7.2	0.15/S	CD	Bolt x 1	0.13	0.14	0.02/0.05	NA	29-Jan-15	Yes	LP
SR864_IP307_7	393911.01	3638007.66	7.1	0.08/E	CD	Wire	0.05	<0.01	0.10 long	NA	29-Jan-15	Yes	LP
SR864_IP307_8	393900.48	3637981.44	7.0	0.30/E	SD	5.56 mm x 1 (empty)	0.10	0.01	0.01/0.05	NA	29-Jan-15	Yes	LP
SR864_IP307_9	393894.84	3637987.71	4.9	--	--	No Find, possible same source as target SR864_IP307_1	--	--	--	--	03-Feb-15	Yes	RV
SR864_IP307_10	393911.19	3637981.65	1.8	0.10/E	CD	Chunk of steel	0.10	0.23	0.13/0.04	NA	29-Jan-15	Yes	LP
SR864_IP307_11	393894.18	3637985.04	0.9	--	--	No Find, possible same source as target SR864_IP307_1	--	--	--	--	03-Feb-15	Yes	RV
SR864_IP307_12	393895.71	3637986.33	0.1	0.48/E	CD	Aluminum can	0.10	0.01	0.05/0.08	NA	29-Jan-15	Yes	LP
SR864_IP308_1	393915.51	3638033.19	17.2	0	CD	Chunks of steel	0.08	0.5	0.04/0.10	NA	29-Jan-15	Yes	LP
SR864_IP308_2	393891.24	3638036.04	16.1	0.05/E	CD	Nail x 3	0.01	0.01	0.08/--	NA	29-Jan-15	Yes	LP
SR864_IP308_3	393915.18	3638031.72	12.9	0.08/W	CD	Pipe "T"	0.05	0.11	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IP308_4	393891.90	3638031.00	12.7	0.05/E	CD	Nail x 2	0.01	<0.01	0.05/--	NA	29-Jan-15	Yes	LP
SR864_IP308_5	393913.92	3638010.90	12.0	0.30/E	CD	Cable clamp	0.03	0.5	0.05/0.08	NA	29-Jan-15	Yes	LP
SR864_IP308_6	393890.88	3638031.24	9.8	0.30/E	CD	Spike	0.01	0.17	0.20/<0.01	NA	29-Jan-15	Yes	LP
SR864_IP308_7	393893.64	3638030.28	9.1	0.15/N	CD	Nail x 7	0.01	<0.01	0.05/--	NA	29-Jan-15	Yes	LP
SR864_IP308_8	393897.66	3638013.96	8.6	0.15/E	CD	Aluminum scrap	0.15	0.05	0.05/0.05	NA	29-Jan-15	Yes	LP
SR864_IP308_9	393890.76	3638034.24	8.3	0.30/S	CD	Nail x 2	0.01	0.01	0.08/--	NA	29-Jan-15	Yes	LP
SR864_IP308_10	393910.80	3638014.98	7.2	0.10/N	CD	Scrap metal	0.10	0.1	0.03/0.08	NA	29-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IP308_11	393903.72	3638024.70	7.0	0.30/E	CD	Chunk of steel	0.13	0.03	0.08/0.05	NA	29-Jan-15	Yes	LP
SR864_IP309_1	393891.96	3638047.65	1040.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_2	393900.18	3638059.80	640.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_3	393897.42	3638060.34	526.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_4	393892.68	3638061.96	379.1	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IP309_5	393898.74	3638062.44	361.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_6	393892.74	3638060.68	262.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_7	393896.88	3638066.40	196.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_8	393891.06	3638056.56	193.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_9	393895.83	3638065.95	160.3	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IP309_10	393905.46	3638064.00	142.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_11	393890.88	3638054.88	102.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_12	393890.13	3638055.75	83.1	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IP309_13	393897.78	3638068.65	82.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_14	393904.77	3638063.46	81.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_15	393898.62	3638067.69	72.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_16	393899.76	3638067.24	69.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_17	393896.16	3638051.28	65.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_18	393899.04	3638060.94	26.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_19	393899.36	3638068.88	26.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_20	393911.04	3638041.50	22.4	0.48/S	CD	Aluminum can	0.03	0.08	0.01/0.08	NA	28-Jan-15	Yes	LP
SR864_IP309_21	393906.60	3638056.68	18.5	0.30/W	CD	Bolt x 1	0.05	0.04	0.01/0.20	NA	28-Jan-15	Yes	LP
SR864_IP309_22	393907.80	3638065.38	15.8	0.15/S	CD	Bolt x 1	0.08	0.04	0.01/0.20	NA	28-Jan-15	Yes	LP
SR864_IP309_23	393906.30	3638057.46	12.6	0.30/E	--	Same source as target SR864_IP309_21	--	--	--	NA	28-Jan-15	Yes	LP
SR864_IP309_24	393913.14	3638054.58	11.9	1.0/SE	SD	.50 cal brass x 1	0.05	0.03	0.02/0.10	NA	28-Jan-15	Yes	LP
SR864_IP309_25	393893.58	3638046.18	11.0	0.48/SE	SD, CD	.45 cal brass x 1, nails x 3	0.03	<0.01	0.01/0.02	NA	28-Jan-15	Yes	LP
SR864_IP309_26	393916.14	3638047.38	10.2	0	CD	Piece of steel	0.30	0.23	0.02/0.05	NA	10-Feb-15	Yes	LP
SR864_IP309_27	393893.04	3638064.24	9.1	1.0/--	CD	Chunk of steel	0.05	0.02	0.02/0.02	NA	28-Jan-15	Yes	LP
SR864_IP309_28	393891.84	3638063.04	7.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP309_29	393893.70	3638042.22	7.0	0.03/E	CD	Nails x 10	0.03	<0.01	0.08/--	NA	28-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IP310_1	393908.52	3638072.10	653.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_2	393914.28	3638085.36	590.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_3	393907.44	3638074.86	402.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_4	393905.79	3638072.88	352.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_5	393910.14	3638087.04	268.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_6	393918.58	3638098.92	259.2	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IP310_7	393917.16	3638084.52	253.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_8	393901.42	3638073.76	252.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_9	393915.66	3638087.58	218.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_10	393917.94	3638084.88	214.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_11	393909.90	3638085.99	210.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_12	393905.34	3638079.12	185.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_13	393912.99	3638091.09	167.7	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_14	393904.32	3638078.61	158.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_15	393913.47	3638076.30	150.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_16	393908.52	3638079.78	80.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_17	393906.39	3638081.19	69.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_18	393917.04	3638092.38	60.2	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IP310_19	393907.72	3638081.06	59.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_20	393914.46	3638091.81	51.7	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_21	393914.58	3638093.97	42.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_22	393915.62	3638093.08	33.3	0	CD	Concrete pad - not dug	--	--	--	NA	29-Jan-15	No	LP
SR864_IP310_23	393906.72	3638079.78	26.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_24	393916.44	3638094.10	19.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	LP
SR864_IP310_25	393908.46	3638073.84	12.4	0.30/N	CD	Steel band and screw	0.08	0.03	0.02/0.10	NA	28-Jan-15	Yes	LP
SR864_IP310_26	393904.62	3638073.42	12.1	0.30/S	CD	Nail x 2	0.02	<0.01	0.08/--	NA	28-Jan-15	Yes	LP
SR864_IP310_27	393902.94	3638097.06	9.5	0.30/SE	CD	Bolt x 1	0.08	<0.01	0.01/0.08	NA	28-Jan-15	Yes	LP
SR864_IP310_28	393911.76	3638076.12	8.9	0.38/N	CD	Nails x 3	0.05	<0.01	0.05/--	NA	28-Jan-15	Yes	LP
SR864_IP310_29	393898.56	3638096.94	7.6	0.30/SW	CD	Bolt and nut	0.10	0.04	0.01/0.10	NA	28-Jan-15	Yes	LP
SR864_IP310_30	393898.32	3638070.90	7.2	0.61/--	SD	5.56 mm x 1	0.05	0.01	0.01/0.08	NA	28-Jan-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IP311_1	393890.04	3638102.76	17.4	0.15/W	CD	Spike	0.03	0.1	0.01/0.10	NA	28-Jan-15	Yes	LP
SR864_IP311_2	393900.48	3638102.10	7.9	0.10/W	CD	Bolt x 1	0.01	0.03	0.01/0.08	NA	28-Jan-15	Yes	LP
SR864_IP312_1	393895.47	3638150.85	18.6	0.08/E	CD	Insulator pin	0.05	0.5	0.01/0.20	NA	28-Jan-15	Yes	LP
SR864_IP312_2	393894.96	3638148.15	17.6	0	CD	Insulator pin	0.08	0.5	0.01/0.20	NA	28-Jan-15	Yes	LP
SR864_IP312_3	393919.68	3638132.22	13.9	0.10/W	CD	Aluminum fuel pump part	0.10	0.1	0.05/0.05/0.05	NA	28-Jan-15	Yes	LP
SR864_IP312_4	393916.02	3638146.56	12.8	0.15/W	CD	Aluminum casting	0.10	0.1	0.08/0.08	NA	28-Jan-15	Yes	LP
SR864_IP312_5	393916.62	3638154.78	12.2	0.48/S	CD	Aluminum sheet metal	0.10	0.1	0.05/0.05	NA	28-Jan-15	Yes	LP
SR864_IP313_1	393916.68	3638165.88	13.5	0.38	CD	Railroad spike	0.05	0.25	0.01/0.15	NA	28-Jan-15	Yes	LP
SR864_IP313_2	393918.06	3638171.31	10.9	0	CD	Alum sheet metal	0.03	0.02	0.05/0.20	NA	28-Jan-15	Yes	LP
SR864_IP313_3	393919.68	3638186.76	9.5	0.05/W	CD	Alum sheet metal	0.03	0.02	0.01/0.08	NA	28-Jan-15	Yes	LP
SR864_IP313_4	393915.78	3638166.78	7.3	0.15/S	CD	Brass scrap	0.03	0.01	0.02/0.02	NA	28-Jan-15	Yes	LP
SR864_IP314_1	393918.90	3638190.96	61.7	0	CD	Aluminum T-post	0.23	1	0.05/1.2	NA	28-Jan-15	Yes	LP
SR864_IP317_1	393890.34	3638288.22	8.4	0.25/S	SD	.50 cal x 2	0.15	0.56	0.01/0.05	NA	19-Jan-15	Yes	DH
SR864_IP318_1	393897.48	3638319.54	41.9	0.23/W	--	Same source as target SR864_IP318_2	--	--	--	NA	27-Jan-15	Yes	DH
SR864_IP318_2	393896.92	3638319.30	35.9	0.10/E	CD	Bolt w/washer	0.10	0.5	0.30/0.01	NA	27-Jan-15	Yes	DH
SR864_IP318_3	393896.37	3638331.39	9.4	0.33/N	CD	Scrap metal	0.07	0.5	0.15/0.15/0.01	NA	27-Jan-15	Yes	DH
SR864_IP318_4	393894.12	3638339.28	7.3	0.20/W	CD	Soda can	0.02	0.01	0.10/0.05/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ306_1	393926.22	3637974.54	14.5	0.48/E	CD	Bolt	0.00	0.28	0.10/0.01/0.01	NA	27-Jan-15	Yes	DH
SR864_IQ306_2	393928.44	3637971.60	9.9	0.48/W	Geo	Hot rock	0.08	0.24	0.03/0.03/0.03	NA	27-Jan-15	Yes	DH
SR864_IQ306_3	393927.18	3637974.18	7.1	0.61/W	--	Same source as target SR864_IQ306_1	--	--	--	NA	27-Jan-15	Yes	DH
SR864_IQ307_1	393923.18	3638004.06	24.0	0	CD	Nails x 43, screw x 1	0.01	0.56	0.05/<0.01/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ307_2	393935.04	3637981.86	11.8	0.13/S	CD	Washer	0.10	0.28	0.08/0.08/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ307_3	393920.28	3637992.24	11.2	0.15/S	CD	Aluminum collar	0.08	0.85	0.08/0.08/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ307_4	393948.96	3638008.50	8.8	0.08/E	SD	.50 cal cartridge x 1	0.03	0.03	0.20/0.05	NA	27-Jan-15	Yes	DH
SR864_IQ307_5	393932.94	3637996.80	7.5	0.10/S	CD	nails x 20, wire	0.01	0.28	0.05/0.01/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ308_1	393933.84	3638014.44	299.9	0	CD	Pipe	0.08	2	0.46/0.08	NA	02-Feb-15	Yes	DH
SR864_IQ308_2	393927.66	3638019.54	56.6	0.03/S	SD, CD	.50 cal x 2, nails x 30	0.01	0.06	0.05/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_3	393924.54	3638023.14	18.4	0	CD	Nails x 15, washer x 10, cable	0.01	0.03	0.05/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_4	393923.94	3638023.92	14.0	0.03/S	CD	Nail x 1	0.15	0.03	0.05/<0.01	NA	02-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IQ308_5	393943.62	3638022.72	13.8	0.08/SE	CD	Nails x 25	0.03	0.03	0.05/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ308_6	393938.46	3638034.63	13.7	0.15/W	CD	Bolt x 1	0.08	0.11	0.15/0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_7	393924.60	3638024.79	13.5	0.15/N	CD	Nut x 1	0.03	0.06	0.03/0.03/0/03	NA	28-Jan-15	Yes	DH
SR864_IQ308_8	393949.02	3638017.26	10.6	0.15/N	CD	Butter knife	0.05	0.06	0.17/003/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ308_9	393926.52	3638025.90	9.9	0.03/E	CD, Geo	Wire, nut x 1, Geo	0.03	0.03	0.07/<0.01/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_10	393923.64	3638026.04	8.6	0.08/N	CD	Wire, nut x 20	0.05	0.03	0.08/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_11	393949.74	3638014.98	8.1	0.52/W	CD	Aluminum pieces x 2	0.10	0.03	0.05/0.05/<0.01	NA	27-Jan-15	Yes	DH
SR864_IQ308_12	393923.40	3638027.58	7.9	0	CD	nuts x 9, allen wrench	0.05	0.03	0.01/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_13	393922.08	3638026.92	7.4	0.28/S	SD	.50 cal brass x 1	0.08	0.03	0.05/ --	NA	28-Jan-15	Yes	DH
SR864_IQ308_14	393926.76	3638021.13	6.8	0.15/E	CD	Nails x 2	0.01	0.02	0.08/<0.01/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_15	393926.22	3638024.64	6.8	0	CD	Nails x 6, nuts x 10	0.03	0.03	0.08/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ308_16	393922.71	3638012.16	4.1	0.30/W	CD	Aluminum scrap	0.03	0.01	0.01/0.02/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ309_1	393946.80	3638055.30	8.3	0.08	CD	Wire x 4, nail x 4	0.01	0.03	0.04/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ309_2	393943.50	3638064.78	8.2	--	--	No Find (target not found on relocate)	--	--	--	--	03-Feb-15	Yes	RV
SR864_IQ310_1	393925.98	3638095.92	712.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ310_2	393926.52	3638096.88	466.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ310_3	393923.04	3638097.84	456.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ310_4	393925.97	3638097.53	407.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ310_5	393927.18	3638098.32	163.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ310_6	393922.10	3638088.70	68.7	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ310_7	393920.82	3638070.78	21.7	0.61/E	CD	Breaker bar tip	0.00	0.45	0.13/0.37	NA	28-Jan-15	Yes	DH
SR864_IQ310_8	393947.04	3638072.70	19.7	0.15/SW	CD	Wire	0.00	0.07	0.8/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ310_9	393944.19	3638076.30	18.0	0.30/SE	CD	Wire	0.00	0.02	0.8/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ310_10	393939.18	3638074.20	17.2	0.30/W	CD	Wire	0.00	0.02	0.8/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ310_11	393924.90	3638076.90	15.3	0.30/S	CD	Wire	0.00	0.02	0.8/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ310_12	393947.76	3638073.42	14.7	0.61/W	CD	Wire	0.00	0.02	0.8/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ310_13	393920.64	3638082.84	14.6	0.30/N	CD	Bolt x 2	0.05	0.06	0.05/0.03/0.03	NA	28-Jan-15	Yes	DH
SR864_IQ310_14	393948.57	3638072.73	9.2	0.13 /E	--	Same source as target SR864_IQ310_12	--	--	--	NA	28-Jan-15	Yes	DH
SR864_IQ310_15	393932.76	3638083.38	7.3	0.15/E	SD	.50 cal x 1	0.05	0.03	0.05/0.5	NA	28-Jan-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IQ311_1	393940.14	3638123.34	496.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_2	393941.52	3638125.32	480.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_3	393931.68	3638110.38	477.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_4	393934.98	3638110.32	423.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_5	393932.97	3638112.72	387.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_6	393934.50	3638110.02	347.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_7	393935.58	3638123.34	320.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_8	393924.33	3638100.12	309.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_9	393935.82	3638124.84	290.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_10	393943.08	3638122.86	276.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_11	393934.02	3638117.52	260.1	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_12	393929.82	3638116.08	206.7	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_13	393927.15	3638111.55	201.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_14	393922.62	3638104.14	179.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_15	393921.60	3638103.63	166.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_16	393930.90	3638100.94	153.9	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_17	393930.96	3638116.53	131.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_18	393938.78	3638128.70	114.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_19	393947.82	3638126.76	102.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_20	393940.06	3638129.48	95.3	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_21	393925.14	3638106.96	79.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_22	393923.10	3638106.60	78.7	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_23	393925.56	3638104.98	56.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_24	393932.16	3638118.90	52.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_25	393924.54	3638105.86	41.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_26	393942.15	3638122.71	41.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_27	393933.66	3638119.05	35.7	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_28	393939.33	3638114.04	35.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_29	393923.82	3638104.98	31.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ311_30	393932.52	3638117.43	26.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IQ311_31	393939.24	3638125.98	10.4	0.61/N	CD	Metal plate	0.00	<0.01	0.01/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ311_32	393933.06	3638110.80	10.2	0.48/N	CD	Bolt x 3	0.05	0.01	0.05/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ311_33	393932.46	3638109.42	9.7	0.13/NE	CD	Rivet x 2	0.03	0.01	0.03/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ311_34	393928.14	3638104.80	9.6	0	CD	Bolt x 2, nuts x 4	0.03	0.03	0.05/0.02	NA	28-Jan-15	Yes	DH
SR864_IQ311_35	393932.82	3638103.12	8.6	0.10/E	CD	Bolt x 1	0.13	0.06	0.08/0.01	NA	28-Jan-15	Yes	DH
SR864_IQ311_36	393944.22	3638117.40	8.3	0.20/E	CD	Bolt x 4, nut x 1	0.08	0.01	0.08/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ311_37	393944.46	3638126.46	7.7	--	CD	Set collar	0.01	<0.01	0.01/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ311_38	393944.40	3638124.70	0.1	0.30/N	CD	Washer x 1	0.03	0.03	<0.01/ --	NA	28-Jan-15	Yes	DH
SR864_IQ312_1	393948.90	3638135.70	445.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_2	393942.90	3638130.18	237.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_3	393944.52	3638137.38	213.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_4	393940.38	3638146.65	205.2	0	CD	metal plate	0.05	0.45	0.38/0.13/0.01	NA	28-Jan-15	Yes	DH
SR864_IQ312_5	393944.37	3638136.33	147.5	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_6	393942.63	3638132.31	127.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_7	393949.80	3638143.08	95.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_8	393948.81	3638142.21	82.2	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_9	393947.46	3638141.31	81.0	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_10	393940.38	3638131.74	70.4	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_11	393941.43	3638131.02	49.8	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_12	393949.23	3638144.10	44.6	0	CD	Concrete pad - not dug	--	--	--	NA	28-Jan-15	No	DH
SR864_IQ312_13	393920.94	3638140.08	21.6	0.15/E	CD	hunk of aluminum	0.10	0.23	0.15/0.05	NA	28-Jan-15	Yes	DH
SR864_IQ312_14	393944.64	3638145.42	11.7	0.30/NW	CD	Bolt x 3, washer x 2, nut x 1	0.03	0.03	0.01/<0.01	NA	28-Jan-15	Yes	DH
SR864_IQ312_15	393940.20	3638148.24	8.7	0.20/E	CD	Nut x 1, nail x 1	0.03	0.03	0.03/0.02	NA	28-Jan-15	Yes	DH
SR864_IQ312_16	393947.40	3638136.18	8.2	0.28/S	CD	Bolt x 1	0.03	0.03	0.03/0.03	NA	28-Jan-15	Yes	DH
SR864_IQ312_17	393920.46	3638155.00	7.3	0.03/S	CD	Metal rod	0.05	0.09	0.18/0.01	NA	28-Jan-15	Yes	DH
SR864_IQ313_1	393943.20	3638183.94	28.3	--	--	No Find (target not found on relocate)	--	--	--	--	09-Feb-15	Yes	RV
SR864_IQ313_2	393942.66	3638184.63	17.8	0.15/W	CD	File	0.01	0.06	0.30/0.03/0.01	NA	03-Feb-15	Yes	DH
SR864_IQ313_3	393933.72	3638177.10	11.3	0.15/W	CD	Wire	0.01	0.06	1.5/0.01	NA	03-Feb-15	Yes	DH
SR864_IQ314_1	393924.66	3638199.72	8.5	0	SD	.50 cal x 1	0.00	0.03	012/050	NA	10-Feb-15	Yes	LP
SR864_IR307_1	393951.60	3638005.20	7.1	-- /S	CD	Aluminum plate	0.10	0.03	0/03/0.08/<0.01	NA	02-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IR308_1	393953.58	3638015.70	117.0	0	QC seed	Medium ISO	0.23	0.5	0.13/0.05	NA	02-Feb-15	Yes	DH
SR864_IR308_2	393956.46	3638022.96	30.4	0.15/E	CD	Battery cable, can	0.15	0.45	1.49/0.05	NA	02-Feb-15	Yes	DH
SR864_IR308_3	393956.88	3638035.02	7.8	0	CD	Bolt x 1	0.01	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IR310_1	393953.70	3638092.80	67.3	0.15/S	CD	Aluminum bracket	0.08	0.04	0.08/0.15/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR311_1	393961.20	3638123.82	70.3	0	CD	Steel wire	0.05	0.17	2.0 long	NA	02-Feb-15	Yes	LP
SR864_IR311_2	393950.62	3638128.84	47.2	0.08/E	CD	Bolt x 2, nuts x 1, washer x 3	0.10	0.1	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IR311_3	393974.70	3638117.64	34.7	0.30/W	CD	Chunk of steel	0.08	0.5	0.08/0.08	NA	02-Feb-15	Yes	LP
SR864_IR311_4	393979.02	3638126.10	9.7	0.20/W	CD	Aluminum flange	0.15	0.05	0.05/0.08	NA	02-Feb-15	Yes	LP
SR864_IR312_1	393960.60	3638148.24	1834.7	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_2	393952.20	3638135.46	1627.1	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_3	393968.64	3638158.92	411.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_4	393958.62	3638150.46	366.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_5	393950.22	3638137.74	363.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_6	393957.30	3638148.48	354.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_7	393952.92	3638150.04	211.8	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_8	393979.68	3638153.22	191.0	0	CD	Backhoe dig (guy wire/anchor)	--	20	3.0/0.03	NA	02-Feb-15	Yes	LP
SR864_IR312_9	393952.89	3638148.87	114.8	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_10	393955.98	3638154.09	105.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_11	393959.58	3638155.59	70.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_12	393951.36	3638142.72	69.7	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_13	393956.43	3638139.18	57.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_14	393959.46	3638157.42	53.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_15	393959.20	3638156.74	48.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_16	393965.01	3638151.84	46.7	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_17	393957.75	3638156.76	46.0	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_18	393958.17	3638155.38	45.0	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_19	393950.73	3638144.28	41.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_20	393962.70	3638148.24	23.8	0.30/N	CD	Bolt x 3, nut x 1	0.05	0.1	0.02/0.08	NA	02-Feb-15	Yes	LP
SR864_IR312_21	393968.97	3638148.15	23.0	0	CD	Bracket	0.05	0.5	0.01/0.20	NA	02-Feb-15	Yes	LP
SR864_IR312_22	393978.39	3638158.89	22.6	0	CD	Cable	0.03	0.5	0.01/0.61	NA	02-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IR312_23	393972.54	3638147.52	22.5	0	CD	Backhoe dig (guy wire/anchor)	--	20	--	NA	02-Feb-15	Yes	LP
SR864_IR312_24	393972.24	3638152.20	22.4	0	CD	Backhoe dig (grounding rod)	--	12	--	NA	02-Feb-15	Yes	LP
SR864_IR312_25	393955.86	3638157.30	21.0	0	CD	Bolt x 2	0.08	0.05	0.01/0.05	NA	02-Feb-15	Yes	LP
SR864_IR312_26	393966.54	3638157.00	19.5	0.15/N	CD	Nails x 2, brass cap	0.05	0.02	0.03/0.03	NA	02-Feb-15	Yes	LP
SR864_IR312_27	393961.82	3638140.96	14.6	0	CD	Nails x 20	0.03	<0.01	0.08/--	NA	02-Feb-15	Yes	LP
SR864_IR312_28	393964.50	3638147.40	14.0	0	CD	Aluminum scrap	0.03	0.05	0.03/0.10	NA	02-Feb-15	Yes	LP
SR864_IR312_29	393958.92	3638152.80	13.9	0	CD	Bolt x 2, washer x 1	0.01	0.1	0.01/0.13	NA	02-Feb-15	Yes	LP
SR864_IR312_30	393967.56	3638159.58	12.9	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_31	393950.64	3638134.32	12.5	0.38/W	CD	Washer x 1, nut x 1	0.03	0.02	0.03/0.03	NA	02-Feb-15	Yes	LP
SR864_IR312_32	393970.86	3638149.26	11.5	0.15/W	CD	Bolt, nut, bracket	0.10	0.17	0.08/0.05	NA	02-Feb-15	Yes	LP
SR864_IR312_33	393970.62	3638153.58	10.3	0.10/W	CD	Square washer	0.05	0.03	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IR312_34	393971.58	3638148.54	10.1	0	CD	Wire	0.05	0.01	0.15 long	NA	02-Feb-15	Yes	LP
SR864_IR312_35	393954.54	3638157.12	9.8	0.15/E	CD	Bolt x 3	0.05	0.1	0.02/0.08	NA	02-Feb-15	Yes	LP
SR864_IR312_36	393970.05	3638144.13	9.5	0.10/S	CD	Nails x 4, washer x 1	0.08	0.01	0.08/--	NA	02-Feb-15	Yes	LP
SR864_IR312_37	393971.88	3638150.76	9.1	0.15/S	CD	Bolt, nail, cable	0.08	0.02	0.01/0.08	NA	02-Feb-15	Yes	LP
SR864_IR312_38	393960.06	3638143.32	9.0	0	CD	Nails x 6	0.03	<0.01	0.08/--	NA	02-Feb-15	Yes	LP
SR864_IR312_39	393950.34	3638156.10	8.9	0	CD	Nut and bolt	0.10	0.17	0.01/0.08	NA	02-Feb-15	Yes	LP
SR864_IR312_40	393952.38	3638130.60	8.2	0.15/SE	CD	Nails x 6	0.03	<0.01	0.08/--	NA	02-Feb-15	Yes	LP
SR864_IR312_41	393969.72	3638145.36	7.4	0.15/N	CD	Nail x 1	0.15	<0.01	0.08/--	NA	02-Feb-15	Yes	LP
SR864_IR312_42	393958.83	3638147.16	7.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IR312_43	393954.06	3638137.20	7.3	0.38/E	CD	Nut x 1, wire	0.08	0.01	0.20 long	NA	02-Feb-15	Yes	LP
SR864_IR312_44	393966.24	3638148.63	5.1	0.15/N	CD	Spike	0.08	0.02	0.01/0.15	NA	02-Feb-15	Yes	LP
SR864_IR313_1	393969.24	3638160.78	1774.8	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_2	393978.00	3638173.32	1139.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_3	393965.94	3638161.02	397.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_4	393974.58	3638173.44	353.0	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_5	393967.38	3638163.06	328.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_6	393975.84	3638175.54	276.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_7	393965.58	3638167.08	179.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_8	393961.68	3638162.52	164.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IR313_9	393978.87	3638187.72	158.0	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_10	393970.16	3638174.36	148.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_11	393974.04	3638179.74	143.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_12	393961.53	3638161.50	140.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_13	393978.66	3638186.52	137.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_14	393964.32	3638166.36	91.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_15	393973.68	3638164.32	85.7	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_16	393973.29	3638179.14	73.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_17	393976.83	3638180.64	63.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_18	393966.06	3638169.60	60.7	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_19	393979.11	3638184.15	52.7	0	CD	Aluminum can	0.01	0.06	0.08/0.03	NA	02-Feb-15	Yes	DH
SR864_IR313_20	393963.75	3638178.75	52.0	0.25/NE	CD	Bracket, bolt x 1	0.01	0.06	0.10/0.15/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_21	393969.18	3638162.64	50.2	0.52/W	CD	Nails x 3, bracket	0.08	0.06	0.08/0.08/0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_22	393967.32	3638168.97	48.1	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_23	393968.28	3638168.01	48.0	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_24	393975.03	3638181.90	47.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_25	393962.73	3638178.69	39.2	0	SD, CD	.50 cal x 1, bolt x 1, bracket	0.01	0.06	0.10/0.15/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_26	393975.30	3638180.49	38.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_27	393968.28	3638169.72	36.0	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_28	393974.58	3638172.36	34.9	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_29	393976.47	3638182.11	29.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_30	393966.84	3638167.77	17.9	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	DH
SR864_IR313_31	393964.98	3638169.72	17.4	0.61/E	CD	Bolts x 2	0.01	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_32	393960.60	3638189.85	16.8	0.03/W	CD	Metal plate, nails	0.01	0.03	0.13/0.05/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_33	393978.54	3638170.74	15.7	0.15/NE	CD	Bolt x 1, nut x 1, washer x 1	0.10	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_34	393966.78	3638175.72	12.8	0	CD	Bolt x 2, nuts x 4, washers	0.08	0.03	0.05.0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_35	393976.32	3638172.00	11.3	0.15/S	CD	Nut x 1	0.10	0.03	0.05/0.05	NA	02-Feb-15	Yes	DH
SR864_IR313_36	393966.06	3638180.82	10.9	0.15/NW	CD	Bolt x 1, nut x 1, washer x 1	0.13	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_37	393967.62	3638165.52	10.4	0.15/W	CD	Nails x 3	0.01	0.03	0.05/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_38	393967.80	3638175.24	10.0	0.08/SE	CD	Bolt x 2, washer x 1	0.13	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IR313_39	393971.34	3638168.82	9.1	0.08/W	CD	Bolt x 1	0.08	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_40	393972.72	3638168.04	8.2	0.08/SW	CD	Bolt x 4, nut x 1	0.08	0.03	0.05/0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_41	393970.56	3638183.40	7.8	0.05/W	CD	Bolt x 1	0.10	0.03	0.05/0.03	NA	02-Feb-15	Yes	DH
SR864_IR313_42	393970.92	3638162.61	4.1	0.05/E	CD	Wire and bracket	0.01	0.01	0.08/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR313_43	393979.71	3638175.21	2.6	0	CD	Wire	0.01	0.01	1.5/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR314_1	393977.10	3638198.16	9.0	0.21/SE	CD	Bolt x 1	0.20	0.03	0.15/0.10	NA	02-Feb-15	Yes	DH
SR864_IR314_2	393957.90	3638195.28	7.4	0.18/W	CD	Nails x 3	0.05	0.03	0.15/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR314_3	393971.82	3638215.56	7.4	0.46/N	SD	5.56 mm x 2	0.01	0.01	0.03/<0.01	NA	02-Feb-15	Yes	DH
SR864_IR315_1	393975.60	3638234.16	156.6	0	CD	Pipe	0.30	2	0.46/0.08	NA	02-Feb-15	Yes	DH
SR864_IR317_1	393952.80	3638280.24	29.7	0.13/W	CD	Wire	0.01	0.01	0.46/0.01	NA	02-Feb-15	Yes	DH
SR864_IR318_1	393977.58	3638326.92	12.1	0	CD	Trailer hitch Ball	Surface	1	0.05/0.05	NA	02-Feb-15	Yes	DH
SR864_IS310_1	393998.52	3638075.88	7.0	--	--	No Find (target not found on relocate)	--	--	--	--	09-Feb-15	Yes	RV
SR864_IS310_2	393983.46	3638092.47	4.8	0.03/W	CD	Nails x 5	0.01	0.02	0.05/--	NA	03-Feb-15	Yes	DH
SR864_IS311_1	393981.24	3638127.36	23.0	0.08/W	CD	Aluminum scrap	0.02	0.06	0.08/0.05/0.01	NA	03-Feb-15	Yes	DH
SR864_IS311_2	393999.36	3638112.42	13.5	0.05/S	CD	Bolt x 1, strap	0.03	0.06	0.03/0.05	NA	03-Feb-15	Yes	DH
SR864_IS311_3	393993.54	3638115.09	11.4	0.15/S	CD	Bolt x 1	0.01	0.06	0.15/0.03	NA	03-Feb-15	Yes	DH
SR864_IS311_4	393992.82	3638106.84	10.1	0.08/SE	CD	Strap	0.03	0.03	0.13/0.03/<0.01	NA	03-Feb-15	Yes	DH
SR864_IS311_5	393989.58	3638116.92	7.2	0.30/E	CD	Nails	0.01	0.03	0.03/<0.01	NA	03-Feb-15	Yes	DH
SR864_IS312_1	394000.17	3638153.43	2101.2	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS312_2	393995.58	3638148.66	155.3	0	CD	Backhoe dig (guy wire anchor)	0.13	5	0.05/2.42	NA	03-Feb-15	Yes	LP
SR864_IS312_3	393999.24	3638154.18	143.5	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS312_4	393991.08	3638131.50	42.2	0.03/NW	CD	Electric connector	0.01	0.06	0.05/0.08/0.05	NA	03-Feb-15	Yes	LP
SR864_IS312_5	393988.74	3638136.42	27.0	0.20/N	CD	Electric connector	0.01	0.06	0.05/0.08/0.05	NA	03-Feb-15	Yes	DH
SR864_IS312_6	393990.21	3638142.66	22.6	0.05/N	CD	Chunk of aluminum	0.05	0.06	0.03/0.05/0.08	NA	03-Feb-15	Yes	DH
SR864_IS312_7	393994.02	3638143.38	19.9	0.03/S	CD	Roller bearing	0.03	0.5	0.08/0.08	NA	03-Feb-15	Yes	LP
SR864_IS312_8	394002.30	3638149.14	13.9	0.30/W	CD	Wire	0.01	0.01	0.46 long	NA	03-Feb-15	Yes	LP
SR864_IS312_9	393999.96	3638151.78	13.0	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS312_10	394009.26	3638133.24	12.9	0	CD	Nails x 33	0.01	0.03	0.05/<0.01	NA	03-Feb-15	Yes	DH
SR864_IS312_11	394001.82	3638153.22	11.8	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS312_12	394008.58	3638133.40	11.0	0	CD	Nails x 27	0.01	0.03	0.05/<0.01	NA	03-Feb-15	Yes	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IS312_13	393987.84	3638136.52	10.7	0.45/W	CD	Electric connector, wire	0.13	0.06	0.61/0.01	NA	03-Feb-15	Yes	DH
SR864_IS312_14	393989.16	3638134.80	10.7	0	CD	Chunk of aluminum	0.01	0.06	0.05/0.05	NA	03-Feb-15	Yes	DH
SR864_IS312_15	393988.80	3638138.94	10.0	0.20/SE	CD	Brackets	0.08	0.06	0.05/0.05/0.02	NA	03-Feb-15	Yes	DH
SR864_IS312_16	393995.64	3638135.46	8.9	0.08/S	CD	Nails x 9	0.01	<0.01	0.05/--	NA	03-Feb-15	Yes	LP
SR864_IS312_17	393992.16	3638139.54	8.6	0.20/E	CD	Chunk of aluminum	0.05	0.08	0.01/0.05	NA	03-Feb-15	Yes	LP
SR864_IS312_18	393995.82	3638130.72	8.4	0.08/W	CD	Nails x 7	0.01	<0.01	0.05/--	NA	03-Feb-15	Yes	LP
SR864_IS312_19	393991.08	3638140.53	8.2	0.08/W	CD	Angle iron	0.05	0.04	0.05/0.05	NA	03-Feb-15	Yes	LP
SR864_IS312_20	393992.46	3638134.32	7.6	0.10/NW	CD	Bolt x 1	0.05	0.05	0.03/0.05	NA	03-Feb-15	Yes	LP
SR864_IS313_1	393986.52	3638185.98	2040.1	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS313_2	393984.36	3638188.26	396.0	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS313_3	393983.19	3638186.10	330.9	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS313_4	393982.14	3638177.04	62.6	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS313_5	393990.81	3638189.49	57.6	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	LP
SR864_IS313_6	394000.77	3638182.65	40.0	0	CD	Wire	0.03	<0.01	0.30 long	NA	03-Feb-15	Yes	LP
SR864_IS313_7	393980.19	3638162.79	28.3	0	CD	Cable	0.10	2	2.0/<0.01	NA	03-Feb-15	Yes	LP
SR864_IS313_8	393987.96	3638185.71	14.8	0.10/S	CD	Bolt, nut and washer	0.03	0.01	0.08/<0.01	NA	03-Feb-15	Yes	LP
SR864_IS313_9	394003.86	3638185.86	14.4	0.61/NE	CD	Nail x 2, door knob	0.01	0.25	0.08/0.13	NA	03-Feb-15	Yes	LP
SR864_IS313_10	393984.72	3638185.14	11.1	1.0/W	CD	Nut and washer	0.03	<0.02	0.08/0.08	NA	03-Feb-15	Yes	LP
SR864_IS313_11	393982.08	3638186.64	10.0	0.61/W	CD	Wire	0.03	<0.01	0.08 long	NA	03-Feb-15	Yes	LP
SR864_IS313_12	393987.15	3638161.47	9.5	0.30/E	CD	Cable	0.15	0.2	0.01/0.46	NA	03-Feb-15	Yes	LP
SR864_IS313_13	393995.37	3638183.43	9.1	0	CD	Nut and bolt	0.01	0.03	0.13/0.01	NA	03-Feb-15	Yes	LP
SR864_IS313_14	394005.66	3638186.46	9.1	1.0/--	CD	Large screw	0.05	0.03	0.10 long	NA	03-Feb-15	Yes	LP
SR864_IS313_15	394007.28	3638180.52	8.8	--	--	No Find (target not found on relocate -on road and may have been removed)	--	--	--	--	09-Feb-15	Yes	RV
SR864_IS313_16	393988.02	3638161.32	8.2	0.30/W	--	Same source as target SR864_IS313_12	--	--	--	NA	03-Feb-15	Yes	LP
SR864_IS313_17	393987.24	3638160.06	7.6	0.10/S	CD	Steel bracket	0.20	0.5	0.08/0.08	NA	03-Feb-15	Yes	LP
SR864_IS313_18	393982.02	3638184.06	7.0	0.30/W	CD	Nail x 2, washer x 2	0.01	0.01	0.08/--	NA	03-Feb-15	Yes	LP
SR864_IS313_19	393988.11	3638187.87	0.6	0	CD	Washer x 1	0.08	<0.01	0.08/--	NA	03-Feb-15	Yes	LP
SR864_IS314_1	393995.22	3638198.70	2583.4	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IS314_2	394003.74	3638211.06	1853.0	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_3	394000.26	3638211.18	425.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_4	393991.56	3638198.88	338.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_5	394001.70	3638213.28	322.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_6	393993.18	3638200.80	219.8	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_7	393996.00	3638212.98	149.4	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_8	393982.32	3638192.16	135.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_9	393987.24	3638200.38	132.6	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_10	394007.76	3638214.30	123.0	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_11	394000.08	3638217.24	122.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_12	393987.24	3638199.27	119.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_13	393995.86	3638211.66	119.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_14	393998.88	3638217.03	87.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_15	393990.27	3638204.43	85.4	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_16	393985.44	3638193.21	67.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_17	394000.23	3638204.16	64.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_18	393994.38	3638205.48	52.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_19	393983.64	3638194.38	45.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_20	394002.66	3638218.41	40.8	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_21	394000.44	3638219.88	40.0	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_22	394000.98	3638217.72	39.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_23	393990.66	3638200.80	39.1	0	CD	Nails x 5, wire	0.01	0.02	0.46 long	NA	05-Feb-15	Yes	LP
SR864_IS314_24	393993.09	3638206.08	38.6	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_25	393994.68	3638200.50	35.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_26	393992.16	3638207.13	35.8	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_27	393991.86	3638205.03	34.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_28	393985.92	3638207.04	32.9	0.30/E	CD	Block of steel	0.03	0.5	0.03/0.08/<0.01	NA	05-Feb-15	Yes	LP
SR864_IS314_29	394001.48	3638218.96	32.8	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_30	393985.11	3638194.65	31.1	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_31	393993.57	3638207.25	25.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IS314_32	393983.97	3638192.97	20.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS314_33	394000.68	3638208.96	19.0	0.61/W	CD	Bolts x 11	0.03	0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IS314_34	393994.38	3638196.66	16.8	0.30/E	CD	Nail x 1	0.03	0.04	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IS314_35	393991.68	3638200.38	16.0	0.46/S	CD	Bolt x 1	0.01	0.03	0.01/0.10	NA	05-Feb-15	Yes	LP
SR864_IS314_36	394005.36	3638210.64	15.7	0.61/W	CD	Gear	0.03	0.05	0.03/0.05	NA	05-Feb-15	Yes	LP
SR864_IS314_37	394005.06	3638207.70	14.6	0.41/SW	CD	Screw and flange	0.01	0.01	0.01/0.05	NA	05-Feb-15	Yes	LP
SR864_IS314_38	393987.18	3638202.18	11.3	0	CD	Bolt x 1	0.05	0.03	0.01/0.08	NA	05-Feb-15	Yes	LP
SR864_IS314_39	394003.86	3638198.52	10.7	0	CD	Wire	0.01	<0.01	0.61 long	NA	05-Feb-15	Yes	LP
SR864_IS314_40	394001.82	3638212.02	10.1	0	CD	Bolt x 3	0.05	0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IS314_41	393997.02	3638200.26	10.0	--	--	No Find (Target not found on relocate -may be related to concrete pad)	--	--	--	--	09-Feb-15	Yes	RV
SR864_IS314_42	394002.54	3638209.62	9.7	0.20/W	CD	Bolt x 1	0.01	0.03	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IS314_43	393995.70	3638208.18	7.8	0.30/S	CD	Bolts x 5	0.05	0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IS314_44	393990.06	3638199.06	7.4	0.30/W	CD	Bolts x 2, nail x 1	0.08	0.03	0.01/0.08	NA	05-Feb-15	Yes	LP
SR864_IS314_45	394004.34	3638209.20	7.3	0.25/W	CD	Bolt x 1	0.05	0.02	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IS314_46	394004.82	3638218.86	7.2	0.15/W	CD	Nail x 1	0.08	<0.01	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IS315_1	394008.78	3638224.02	354.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS315_2	394004.66	3638224.70	136.1	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS315_3	394007.49	3638229.66	95.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS315_4	394009.17	3638230.05	48.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS315_5	394009.26	3638232.24	28.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS315_6	394006.04	3638224.54	24.2	0	CD	Wire	0.01	0.02	1.0 long	NA	05-Feb-15	Yes	LP
SR864_IS315_7	394002.45	3638220.12	13.0	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IS315_8	393989.34	3638236.08	8.6	0.15/E	CD	Wire	0.05	<0.01	0.25 long	NA	05-Feb-15	Yes	LP
SR864_IS315_9	394002.48	3638223.78	7.4	0.20/SE	CD	Bolt x 1, Nails x 2	0.03	0.03	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IS315_10	394003.98	3638239.26	7.2	0.20/W	CD	Nails x 4	0.01	<0.01	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IS318_1	393992.58	3638317.50	67.8	0	CD	Mini Maglight	0.00	0.12	0.15/0.03	NA	05-Feb-15	Yes	LP
SR864_IT311_1	394013.58	3638123.16	7.5	0.15/E	CD	Nails x 4	0.01	<0.01	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IT311_2	394013.43	3638122.02	7.4	0.08/E	CD	Nail x 1, wire	0.01	<0.01	0.38/--	NA	05-Feb-15	Yes	LP
SR864_IT311_3	394012.80	3638120.70	7.3	0.03/E	CD	Wire	0.01	<0.01	0.38/--	NA	05-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IT312_1	394029.48	3638144.28	188.0	0	CD	Oval steel door	0.01	0.01	0.08/0.13	NA	05-Feb-15	Yes	LP
SR864_IT312_2	394013.76	3638155.32	46.5	0.30/W	CD	Bolts x 2	0.01	0.01	0.08/0.01	NA	05-Feb-15	Yes	LP
SR864_IT312_3	394015.02	3638156.04	32.7	0	CD	Bolt x 1	0.01	0.01	0.01/0.08	NA	05-Feb-15	Yes	LP
SR864_IT312_4	394018.70	3638133.44	17.3	0	CD	Steel cable	0.03	0.25	0.01/0.61	NA	05-Feb-15	Yes	LP
SR864_IT312_5	394026.24	3638145.60	13.7	0.10/N	CD	Sheet metal x 2, wire	0.03	0.02	0.05/0.05	NA	05-Feb-15	Yes	LP
SR864_IT312_6	394028.04	3638146.95	8.0	0	CD	Wire	0.01	0.04	0.78 long	NA	05-Feb-15	Yes	LP
SR864_IT312_7	394012.62	3638156.70	7.2	0.2	CD	Bolt x 1	0.08	0.01	0.01/0.08	NA	05-Feb-15	Yes	LP
SR864_IT313_1	394020.60	3638186.28	119.6	0	CD	Alluminum sheet metal	0.01	0.02	0.15/0.25	NA	05-Feb-15	Yes	LP
SR864_IT314_1	394013.70	3638207.10	18.3	0.38/E	CD	Wire	0.01	0.02	0.51 long	NA	05-Feb-15	Yes	LP
SR864_IT314_2	394011.60	3638196.24	17.8	0	CD	Wire	0.01	0.01	0.40 long	NA	05-Feb-15	Yes	LP
SR864_IT315_1	394029.54	3638248.98	2423.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_2	394012.50	3638223.96	1763.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_3	394020.72	3638236.38	1101.7	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_4	394011.78	3638221.80	603.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_5	394026.00	3638249.10	502.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_6	394017.54	3638236.38	387.8	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_7	394010.16	3638225.94	334.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_8	394021.68	3638249.10	329.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_9	394019.16	3638238.48	299.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_10	394013.10	3638238.12	189.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_11	394013.08	3638236.90	133.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_12	394017.48	3638242.86	119.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_13	394019.34	3638243.82	113.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_14	394018.29	3638238.96	109.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_15	394016.20	3638242.20	102.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_16	394025.10	3638239.44	101.6	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_17	394025.13	3638240.28	99.9	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_18	394016.52	3638226.84	68.5	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_19	394019.64	3638245.32	67.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_20	394020.30	3638243.22	60.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IT315_21	394012.32	3638230.14	50.1	0.10/W	CD	Steel plate	0.03	0.4	0.03/0.13	NA	02-Feb-15	Yes	LP
SR864_IT315_22	394018.66	3638244.30	46.4	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_23	394010.55	3638231.07	42.3	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_24	394011.75	3638230.53	39.1	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_25	394011.06	3638232.78	29.2	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_26	394014.36	3638231.76	15.0	0.08/W	CD	Nut x 1, bolt x 4	0.03	0.17	0.02/0.03	NA	02-Feb-15	Yes	LP
SR864_IT315_27	394014.60	3638228.88	12.1	0.08/W	CD	Nut x 1, bolt x 4	0.05	0.17	0.02/0.03	NA	02-Feb-15	Yes	LP
SR864_IT315_28	394022.76	3638238.06	10.1	0.61/W	CD	Washer x 1	0.05	0.03	0.05/0.05	NA	02-Feb-15	Yes	LP
SR864_IT315_29	394027.92	3638247.60	8.9	0	CD	Concrete pad - not dug	--	--	--	NA	02-Feb-15	No	LP
SR864_IT315_30	394017.62	3638234.88	8.2	0	CD	Bolt x 1	0.03	0.05	0.02/0.03	NA	02-Feb-15	Yes	LP
SR864_IT315_31	394018.08	3638231.70	8.2	0.10/SW	CD	Bolt and nut	0.03	0.05	0.02/0.03	NA	02-Feb-15	Yes	LP
SR864_IT315_32	394027.44	3638249.34	8.1	0.30/NE	CD	Bolt x 1	0.03	0.05	0.02/0.03	NA	02-Feb-15	Yes	LP
SR864_IT316_1	394038.00	3638261.46	2039.4	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_2	394034.70	3638261.64	454.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_3	394035.96	3638263.74	244.5	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_4	394027.56	3638251.05	242.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_5	394030.34	3638262.48	170.6	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_6	394025.94	3638255.10	158.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_7	394039.08	3638275.74	154.1	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_8	394038.81	3638274.81	137.0	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_9	394033.35	3638267.28	97.4	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_10	394037.22	3638268.48	96.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_11	394033.70	3638252.28	87.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_12	394021.62	3638250.36	80.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_13	394023.06	3638254.14	80.3	0	CD	Bolts x 2	0.01	0.01	0.01/0.10	NA	05-Feb-15	Yes	LP
SR864_IT316_14	394034.60	3638267.94	73.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_15	394024.62	3638254.80	66.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_16	394028.34	3638256.00	65.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_17	394026.18	3638257.62	65.6	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_18	394035.96	3638269.02	48.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IT316_19	394027.56	3638256.72	47.6	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_20	394028.40	3638257.74	42.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_21	394035.03	3638270.01	39.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_22	394025.64	3638273.22	36.7	0	CD	Steel ring	0.05	0.05	0.13 diameter	NA	05-Feb-15	Yes	LP
SR864_IT316_23	394038.78	3638260.08	30.0	0.41/E	CD	Nail (near concrete pad)	0.01	<0.01	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IT316_24	394023.27	3638252.94	19.3	0	CD	Bolt x 1	0.01	0.01	0.01/0.10	NA	05-Feb-15	Yes	LP
SR864_IT316_25	394036.44	3638270.22	19.1	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IT316_26	394029.60	3638250.78	15.2	0.30/N	CD	Steel scrap	0.01	0.02	0.01/0.01	NA	05-Feb-15	Yes	LP
SR864_IT316_27	394022.31	3638253.72	13.3	0	CD	Bolt x 1	0.01	0.01	0.01/0.10	NA	05-Feb-15	Yes	LP
SR864_IT316_28	394023.54	3638264.76	12.1	0.41/E	CD	Nails x 10	0.01	<0.01	0.05/--	NA	05-Feb-15	Yes	LP
SR864_IT316_29	394034.40	3638259.00	10.3	0.30/S	CD	Bolts x 3	0.03	0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IT316_30	394026.18	3638267.64	9.7	0.20/E	CD	Nails 15	0.03	<0.01	0.05/--	NA	05-Feb-15	Yes	LP
SR864_IT316_31	394030.08	3638258.40	9.4	0.10/E	CD	Bolts x 4	0.03	0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IT316_32	394027.74	3638267.04	8.3	0	CD	Nails x 3	0.03	0.01	0.10/--	NA	05-Feb-15	Yes	LP
SR864_IT316_33	394030.02	3638275.06	7.6	0.10/W	CD	Bolt x 1	0.03	0.03	0.01/0.10	NA	05-Feb-15	Yes	LP
SR864_IT317_1	394017.90	3638306.16	11.9	0.01/SE	CD	Spike	0.00	0.05	0.15/<0.01	NA	05-Feb-15	Yes	LP
SR864_IT318_1	394017.48	3638334.00	7.5	0.05	SD	.50 cal x 1	0.08	0.03	0.01/0.05	NA	05-Feb-15	Yes	LP
SR864_IU313_1	394052.64	3638172.09	21.9	0	CD	Wire	0.03	0.01	0.61 long	NA	05-Feb-15	Yes	LP
SR864_IU315_1	394042.74	3638225.70	10.0	0.10/W	CD	Aluminum plate	0.05	0.02	0.03/0.08/<0.01	NA	05-Feb-15	Yes	LP
SR864_IU316_1	394046.46	3638274.18	2573.2	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IU316_2	394043.22	3638274.30	414.9	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IU316_3	394044.60	3638276.34	343.7	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IU316_4	394050.99	3638277.42	115.1	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IU316_5	394041.96	3638279.82	100.1	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IU316_6	394042.35	3638265.24	45.3	0	CD	Concrete pad - not dug	--	--	--	NA	05-Feb-15	No	LP
SR864_IU316_7	394047.18	3638279.58	14.1	0.30/E	CD	Bolts x 9, washer x 1	0.08	0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IU316_8	394050.00	3638254.32	9.3	0.15/N	CD	Nails x 3	0.01	<0.01	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IU316_9	394045.20	3638278.92	8.4	0.30/SE	CD	Bolts x 3	0.05	0.02	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IU316_10	394045.98	3638276.22	8.1	1.0/E	CD	Bolt x 1	0.03	0.03	0.01/0.10	NA	05-Feb-15	Yes	LP
SR864_IU316_11	394049.46	3638279.97	7.9	0	CD	Bolt x 8	0.10	0.02	0.03/0.03	NA	05-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IU316_12	394044.72	3638274.42	7.7	0.46/E	CD	Bolt x 1	0.05	0.02	0.01/0.15	NA	05-Feb-15	Yes	LP
SR864_IU316_13	394046.58	3638257.38	7.6	0.15/E	CD	Nut x 1, nail x 1	0.03	<0.01	0.03/0.03	NA	05-Feb-15	Yes	LP
SR864_IU316_14	394041.96	3638256.78	7.1	0.30/N	CD	Nails x 6	0.03	<0.01	0.08/--	NA	05-Feb-15	Yes	LP
SR864_IU316_15	394058.25	3638254.83	5.3	0	CD	Scrap metal	0.10	<0.01	0.03/0.15	NA	05-Feb-15	Yes	LP
SR864_IU317_1	394055.25	3638286.66	1249.2	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_2	394054.74	3638284.74	707.9	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_3	394060.56	3638299.32	514.5	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_4	394051.74	3638286.84	437.9	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_5	394063.23	3638298.75	328.7	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_6	394061.88	3638301.48	328.6	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_7	394056.06	3638301.00	246.8	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_8	394052.10	3638295.36	184.5	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_9	394054.56	3638296.80	169.1	0.03/W	CD	Bracket	0.01	0.5	0.15/0.10/0.13	NA	03-Feb-15	Yes	DH
SR864_IU317_10	394064.52	3638306.76	131.8	0	CD	Chunk of aluminum	0.01	0.23	0.23/0.24/<0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_11	394056.03	3638299.95	127.4	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_12	394052.85	3638288.61	126.1	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_13	394047.50	3638287.72	123.0	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_14	394060.20	3638305.44	122.4	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_15	394051.56	3638292.90	107.9	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_16	394059.15	3638305.02	102.7	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_17	394050.39	3638292.57	94.0	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_18	394062.60	3638308.20	90.8	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_19	394043.28	3638282.70	76.7	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_20	394054.56	3638293.56	74.2	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_21	394060.68	3638307.78	73.3	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_22	394059.72	3638290.02	69.1	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_23	394053.60	3638294.52	66.2	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_24	394044.50	3638281.94	62.4	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_25	394045.38	3638283.00	59.9	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_26	394062.66	3638306.43	58.7	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH

Note: -- = No data
NA = Not Applicable

Table D-3 (Continued)
SR864 MRS Grids
EM61 Geophysical Target Intrusive Investigation Results

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (mV)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
SR864_IU317_27	394045.53	3638281.26	55.3	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_28	394043.40	3638280.57	51.0	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_29	394061.16	3638305.80	48.2	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_30	394052.52	3638293.20	45.3	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_31	394061.70	3638306.85	43.6	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_32	394054.08	3638295.63	35.2	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_33	394051.74	3638281.29	23.9	0.05/NW	CD	Bracket, wire	0.01	0.06	0.45/0.10/0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_34	394068.20	3638302.38	22.5	0	CD	Concrete pad - not dug	--	--	--	NA	03-Feb-15	No	DH
SR864_IU317_35	394065.90	3638306.43	14.7	0	CD	Belt buckle, bolt x 1, nail x 1	0.01	0.06	0.07/0.05/<0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_36	394047.84	3638306.70	12.0	0.08/NW	CD	Bolts x 6	0.01	0.03	0.05/0.02	NA	03-Feb-15	Yes	DH
SR864_IU317_37	394066.86	3638306.64	11.5	0.10/N	CD	Buckle, aluminum scrap, washer	0.01	0.03	0.08/0.08/<0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_38	394051.02	3638283.00	10.3	0.15/N	CD	Bolt x 3, nut x 2	0.01	0.03	0.08/0.05/<0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_39	394046.34	3638287.98	7.7	0.91/W	CD	Nail x 1	0.01	0.01	0.05/<0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_40	394058.58	3638286.84	7.6	0.15/N	CD	Nails x 9	0.10	0.01	0.08/<0.01	NA	03-Feb-15	Yes	DH
SR864_IU317_41	394056.33	3638288.85	3.6	0.23/S	CD	Bolt x 1	0.10	0.03	0.08/0.01	NA	03-Feb-15	Yes	DH
SR864_IV317_1	394073.16	3638299.20	124.4	0	CD	Backhoe dig (guy wire anchor)	0.10	10	0.01/2.5	NA	05-Feb-15	Yes	LP
SR864_IV317_2	394070.04	3638294.40	49.8	0	CD	Steel plate and pole	0.30	6	0.01/2.0	NA	05-Feb-15	Yes	LP

Note: -- = No data
NA = Not Applicable

Table D-4
SR864 MRS High Density Grids
Intrusive Investigation Results

SR864 - Subsurface High Density Grid #	Date Cleared	~Total CD Weight Removed (lbs)	~Total MD Weight Removed (lbs)	MEC Quantity Today	MPPEH/MEC Description	MD description	CD description	Grid Cleared (Y-1/N-0)
HD-1	1/20/2015	75	1	0		5.56 x 1 / 50cal bullet x 2	metal sign, file box, guide wire stake, 8 steel bars	1
HD-2	1/20/2015	25	1	0		5.56 x 1 / 50cal bullet x 2	Bolts, aluminum foil, screws, 18"x18"x1" steel plate	1
HD-3	1/20/2015	10	1	0		5.56 x 10	Gas well in center of grid left in place	1
HD-4	1/21/2015	923	0	0			most of CD were pieces used on telephone poles	1
HD-5	1/26/2015	915	1	0		5.56 / 50cal bullet, M18 smoke Grenade pieces		1
HD-6	1/27/2015	821	2	0		5.56 / 50cal bullet		1
HD-7	1/21/2015	12	1	0		5.56 x 4	bolts, screws, nails, metal hanging straps	1
HD-8	1/23/2015	14	1	0		5.56 / 50cal bullet		1
HD-9	1/21/2015	10	1	0		5.56 x 5	bolts, screws, metal washers, 12" long bolts, nails, wire	1
HD-10	1/21/2015	11	1	0		5.56 x 10	square washers, metal straps, 12" long bolts, nails wire	1
HD-11	1/21/2015	47	1	0		5.56 x 6 / 50cal bullet x 2	60" metal pipe, bolts, screws, washers, 12" long bolts, nails	1
TOTAL		2863	11	0				11

Table D-5
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EX586_1	391021.68	3646350.18	194.2
ML865_EX586_2	391010.22	3646354.30	139.4
ML865_EX586_3	391033.50	3646364.94	54.9
ML865_EX586_4	391016.34	3646371.78	54.6
ML865_EX587_1	391028.76	3646399.47	1681.1
ML865_EX587_2	391029.60	3646399.50	797.0
ML865_EX587_3	391010.16	3646398.24	527.4
ML865_EX587_4	391024.44	3646399.20	265.1
ML865_EX587_5	391012.53	3646381.80	245.9
ML865_EX587_6	391038.66	3646400.28	178.0
ML865_EX587_7	391016.88	3646406.28	158.0
ML865_EX587_8	391035.90	3646408.50	133.6
ML865_EX587_9	391038.60	3646405.05	97.4
ML865_EX587_10	391029.12	3646392.48	87.6
ML865_EX587_11	391028.10	3646405.68	86.0
ML865_EX587_12	391019.04	3646399.08	85.7
ML865_EX587_13	391038.96	3646407.78	78.7
ML865_EX587_14	391013.76	3646381.74	68.4
ML865_EX587_15	391017.36	3646398.75	61.7
ML865_EX587_16	391033.98	3646400.04	56.7
ML865_EX587_17	391011.96	3646398.57	53.6
ML865_EX587_18	391019.28	3646404.36	53.4
ML865_EX587_19	391011.36	3646407.54	49.2
ML865_EX587_20	391039.86	3646400.88	48.9
ML865_EX587_21	391024.00	3646405.46	48.7
ML865_EX587_22	391009.98	3646403.58	48.2
ML865_EX587_23	391027.32	3646399.26	43.0
ML865_EX587_24	391016.26	3646398.54	26.6
ML865_EX588_1	391034.52	3646435.02	239.9
ML865_EX588_2	391011.12	3646430.10	203.3
ML865_EX588_3	391012.68	3646435.98	151.3
ML865_EX588_4	391033.74	3646433.94	141.5
ML865_EX588_5	391024.92	3646424.10	131.6
ML865_EX588_6	391039.08	3646428.12	122.3
ML865_EX588_7	391032.18	3646427.70	110.2
ML865_EX588_8	391037.52	3646425.84	105.6
ML865_EX588_9	391036.26	3646428.78	68.2
ML865_EX588_10	391021.50	3646417.92	65.2
ML865_EX588_11	391012.20	3646433.28	56.4
ML865_EX588_12	391028.16	3646423.14	54.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EX588_13	391010.82	3646437.54	47.5
ML865_EX588_14	391023.21	3646427.52	46.7
ML865_EX588_15	391010.28	3646434.78	46.4
ML865_EX588_16	391024.14	3646424.38	43.9
ML865_EX588_17	391012.44	3646437.12	43.5
ML865_EX588_18	391036.92	3646436.67	40.7
ML865_EX588_19	391029.24	3646412.37	28.9
ML865_EX589_1	391032.45	3646454.49	423.2
ML865_EX589_2	391027.20	3646467.60	231.1
ML865_EX589_3	391029.33	3646455.00	144.0
ML865_EX589_4	391038.36	3646440.06	84.1
ML865_EX589_5	391021.56	3646440.54	83.7
ML865_EX589_6	391036.20	3646465.26	79.2
ML865_EX589_7	391033.68	3646458.75	78.3
ML865_EX589_8	391014.00	3646467.84	78.0
ML865_EX589_9	391012.62	3646450.02	76.6
ML865_EX589_10	391039.26	3646455.66	75.7
ML865_EX589_11	391034.88	3646465.08	74.0
ML865_EX589_12	391037.10	3646460.28	57.4
ML865_EX589_13	391016.55	3646467.87	55.9
ML865_EX589_14	391038.99	3646456.92	54.2
ML865_EX589_15	391034.10	3646440.06	49.2
ML865_EX589_16	391038.00	3646455.60	47.3
ML865_EX589_17	391014.30	3646444.38	47.1
ML865_EX589_18	391019.40	3646466.94	43.0
ML865_EX589_19	391012.20	3646460.28	32.6
ML865_EX590_1	391030.80	3646483.38	438.5
ML865_EX590_2	391018.08	3646474.62	196.9
ML865_EX590_3	391023.12	3646481.16	183.4
ML865_EX590_4	391029.62	3646476.34	164.5
ML865_EX590_5	391015.17	3646474.17	164.0
ML865_EX590_6	391013.90	3646474.06	158.3
ML865_EX590_7	391024.62	3646475.58	141.3
ML865_EX590_8	391028.16	3646476.24	132.2
ML865_EX590_9	391016.58	3646474.56	109.2
ML865_EX590_10	391022.70	3646475.46	103.2
ML865_EX590_11	391019.07	3646479.06	95.4
ML865_EX590_12	391039.68	3646486.20	95.0
ML865_EX590_13	391035.81	3646477.35	71.0
ML865_EX590_14	391029.24	3646481.70	64.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EX590_15	391020.42	3646479.06	62.5
ML865_EX590_16	391030.92	3646476.24	57.1
ML865_EX590_17	391012.30	3646474.02	52.5
ML865_EX590_18	391032.06	3646476.72	50.7
ML865_EX590_19	391018.74	3646480.68	50.2
ML865_EX590_20	391021.20	3646475.13	50.1
ML865_EX590_21	391026.06	3646475.76	47.3
ML865_EX590_22	391020.06	3646475.70	45.9
ML865_EX590_23	391037.16	3646483.86	45.4
ML865_EX590_24	391010.88	3646473.63	39.5
ML865_EX590_25	391019.61	3646474.80	37.3
ML865_EX590_26	391017.64	3646479.64	30.6
ML865_EX590_27	391018.40	3646477.98	29.5
ML865_EX590_28	391039.98	3646478.16	29.1
ML865_EY586_1	391041.56	3646365.98	1125.8
ML865_EY586_2	391052.28	3646354.98	406.7
ML865_EY586_3	391069.20	3646360.26	115.3
ML865_EY586_4	391047.42	3646357.86	48.9
ML865_EY586_5	391048.86	3646375.02	27.2
ML865_EY587_1	391044.18	3646405.74	818.7
ML865_EY587_2	391067.22	3646385.34	466.8
ML865_EY587_3	391048.92	3646400.10	307.0
ML865_EY587_4	391061.46	3646397.34	272.6
ML865_EY587_5	391044.24	3646401.06	253.1
ML865_EY587_6	391067.46	3646396.14	245.8
ML865_EY587_7	391040.82	3646400.10	193.8
ML865_EY587_8	391052.16	3646393.68	177.2
ML865_EY587_9	391040.76	3646405.26	115.9
ML865_EY587_10	391055.28	3646403.88	114.5
ML865_EY587_11	391061.10	3646408.08	110.3
ML865_EY587_12	391057.74	3646396.56	101.9
ML865_EY587_13	391067.94	3646398.36	98.9
ML865_EY587_14	391044.12	3646398.72	90.9
ML865_EY587_15	391056.66	3646404.51	74.7
ML865_EY587_16	391051.86	3646399.56	66.6
ML865_EY587_17	391068.84	3646405.62	63.8
ML865_EY587_18	391065.84	3646390.14	57.1
ML865_EY587_19	391041.72	3646406.79	57.1
ML865_EY587_20	391069.20	3646398.12	54.1
ML865_EY587_21	391051.72	3646404.24	53.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EY587_22	391042.08	3646399.62	52.0
ML865_EY587_23	391042.50	3646403.34	50.4
ML865_EY587_24	391062.66	3646399.20	50.1
ML865_EY587_25	391068.48	3646395.78	45.9
ML865_EY587_26	391055.70	3646383.87	44.0
ML865_EY587_27	391068.72	3646406.76	43.9
ML865_EY587_28	391048.05	3646400.07	43.5
ML865_EY587_29	391067.78	3646406.68	35.3
ML865_EY588_1	391045.62	3646418.40	167.8
ML865_EY588_2	391062.18	3646411.26	163.0
ML865_EY588_3	391068.00	3646439.22	89.5
ML865_EY588_4	391040.01	3646435.29	83.1
ML865_EY588_5	391041.18	3646418.28	74.1
ML865_EY588_6	391050.24	3646423.74	44.6
ML865_EY588_7	391041.36	3646416.92	44.4
ML865_EY588_8	391041.18	3646435.14	35.4
ML865_EY588_9	391042.35	3646434.63	21.0
ML865_EY589_1	391042.98	3646462.74	1514.8
ML865_EY589_2	391045.02	3646455.24	577.5
ML865_EY589_3	391050.48	3646463.58	559.3
ML865_EY589_4	391042.71	3646460.82	476.2
ML865_EY589_5	391061.76	3646463.94	413.8
ML865_EY589_6	391062.66	3646453.53	380.3
ML865_EY589_7	391056.24	3646453.68	332.7
ML865_EY589_8	391040.88	3646468.89	179.0
ML865_EY589_9	391050.48	3646465.20	158.1
ML865_EY589_10	391069.20	3646462.86	125.8
ML865_EY589_11	391045.92	3646444.44	107.3
ML865_EY589_12	391044.27	3646455.30	97.0
ML865_EY589_13	391049.76	3646463.97	87.1
ML865_EY589_14	391042.52	3646467.94	86.0
ML865_EY589_15	391044.24	3646469.10	77.6
ML865_EY589_16	391044.54	3646453.62	76.4
ML865_EY589_17	391042.56	3646458.75	71.4
ML865_EY589_18	391042.20	3646454.52	63.6
ML865_EY589_19	391052.19	3646454.31	61.1
ML865_EY589_20	391040.37	3646456.80	53.3
ML865_EY589_21	391040.64	3646454.13	47.2
ML865_EY589_22	391053.00	3646463.82	38.7
ML865_EY590_1	391055.46	3646490.28	509.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EY590_2	391065.81	3646481.22	137.8
ML865_EY590_3	391067.13	3646481.55	120.1
ML865_EY590_4	391063.92	3646490.80	102.3
ML865_EY590_5	391057.80	3646480.26	88.6
ML865_EY590_6	391068.54	3646486.38	81.0
ML865_EY590_7	391044.18	3646487.34	77.4
ML865_EY590_8	391041.90	3646481.16	74.1
ML865_EY590_9	391044.69	3646478.52	73.0
ML865_EY590_10	391052.82	3646479.87	69.3
ML865_EY590_11	391048.98	3646479.06	67.2
ML865_EY590_12	391040.94	3646486.62	64.3
ML865_EY590_13	391047.72	3646478.82	60.4
ML865_EY590_14	391060.32	3646480.62	59.8
ML865_EY590_15	391068.96	3646494.30	58.4
ML865_EY590_16	391043.40	3646478.46	55.1
ML865_EY590_17	391041.57	3646478.01	51.5
ML865_EY590_18	391056.42	3646480.20	50.0
ML865_EY590_19	391045.62	3646470.48	47.8
ML865_EY590_20	391054.17	3646479.90	47.1
ML865_EY590_21	391054.38	3646481.40	46.6
ML865_EY590_22	391051.56	3646479.69	46.4
ML865_EY590_23	391054.26	3646483.68	46.1
ML865_EY590_24	391063.41	3646481.19	46.0
ML865_EY590_25	391053.54	3646489.80	45.9
ML865_EY590_26	391057.11	3646490.49	35.2
ML865_EY590_27	391055.64	3646480.20	33.6
ML865_EZ585_1	391090.26	3646345.62	53.2
ML865_EZ586_1	391086.60	3646370.04	74.4
ML865_EZ587_1	391084.62	3646393.35	681.6
ML865_EZ587_2	391080.09	3646384.11	675.8
ML865_EZ587_3	391076.76	3646397.49	639.5
ML865_EZ587_4	391077.16	3646407.98	514.9
ML865_EZ587_5	391070.52	3646407.06	369.6
ML865_EZ587_6	391082.76	3646399.92	333.0
ML865_EZ587_7	391098.72	3646389.54	231.6
ML865_EZ587_8	391074.54	3646384.08	209.6
ML865_EZ587_9	391082.40	3646409.52	192.1
ML865_EZ587_10	391093.68	3646398.66	122.9
ML865_EZ587_11	391098.78	3646388.28	94.7
ML865_EZ587_12	391083.24	3646395.72	73.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EZ587_13	391073.04	3646408.14	63.9
ML865_EZ587_14	391073.58	3646382.88	54.4
ML865_EZ587_15	391095.78	3646399.20	49.0
ML865_EZ587_16	391073.40	3646399.62	45.7
ML865_EZ587_17	391072.14	3646398.24	44.2
ML865_EZ587_18	391075.71	3646407.66	39.5
ML865_EZ587_19	391072.50	3646407.51	35.8
ML865_EZ587_20	391076.01	3646384.32	19.5
ML865_EZ588_1	391097.88	3646424.76	701.7
ML865_EZ588_2	391092.06	3646416.36	460.2
ML865_EZ588_3	391072.74	3646414.80	340.6
ML865_EZ588_4	391096.56	3646422.42	318.3
ML865_EZ588_5	391096.56	3646421.73	144.9
ML865_EZ588_6	391099.20	3646424.52	109.8
ML865_EZ588_7	391073.22	3646411.32	104.8
ML865_EZ588_8	391074.78	3646413.45	98.9
ML865_EZ588_9	391091.28	3646415.64	96.5
ML865_EZ588_10	391092.48	3646423.35	93.8
ML865_EZ588_11	391099.74	3646428.78	85.4
ML865_EZ588_12	391073.10	3646431.18	82.2
ML865_EZ588_13	391087.30	3646412.14	76.0
ML865_EZ588_14	391086.84	3646418.76	76.0
ML865_EZ588_15	391097.76	3646421.70	68.9
ML865_EZ588_16	391095.64	3646420.40	63.6
ML865_EZ588_17	391088.07	3646412.19	58.6
ML865_EZ588_18	391075.44	3646410.24	49.0
ML865_EZ588_19	391080.72	3646418.76	46.3
ML865_EZ588_20	391097.58	3646413.24	45.1
ML865_EZ588_21	391078.77	3646426.26	41.1
ML865_EZ588_22	391094.04	3646418.43	28.7
ML865_EZ588_23	391081.74	3646424.70	19.5
ML865_EZ589_1	391081.68	3646454.94	186.1
ML865_EZ589_2	391073.46	3646441.38	152.4
ML865_EZ589_3	391099.50	3646464.18	144.5
ML865_EZ589_4	391079.22	3646453.86	116.9
ML865_EZ589_5	391070.04	3646447.02	78.3
ML865_EZ589_6	391085.40	3646456.32	70.3
ML865_EZ589_7	391074.00	3646448.88	56.8
ML865_EZ589_8	391075.74	3646469.52	52.4
ML865_EZ589_9	391083.12	3646455.69	13.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_EZ590_1	391088.79	3646484.49	1072.5
ML865_EZ590_2	391082.10	3646485.72	190.7
ML865_EZ590_3	391090.32	3646484.68	171.1
ML865_EZ590_4	391074.84	3646477.92	165.0
ML865_EZ590_5	391090.32	3646497.78	163.2
ML865_EZ590_6	391092.90	3646484.94	126.2
ML865_EZ590_7	391095.42	3646485.36	114.5
ML865_EZ590_8	391070.07	3646482.15	76.6
ML865_EZ590_9	391076.46	3646483.14	69.5
ML865_EZ590_10	391074.86	3646482.82	67.8
ML865_EZ590_11	391099.20	3646487.76	67.1
ML865_EZ590_12	391084.38	3646494.54	62.4
ML865_EZ590_13	391085.52	3646494.06	60.5
ML865_EZ590_14	391071.45	3646482.21	59.0
ML865_EZ590_15	391075.80	3646483.08	55.9
ML865_EZ590_16	391091.79	3646484.76	54.2
ML865_EZ590_17	391098.90	3646486.11	53.3
ML865_EZ590_18	391097.37	3646485.78	53.1
ML865_EZ590_19	391073.76	3646482.57	47.3
ML865_EZ590_20	391083.42	3646484.01	37.9
ML865_FA584_1	391113.60	3646317.72	45.7
ML865_FA585_1	391113.36	3646347.00	174.9
ML865_FA585_2	391103.52	3646345.44	93.1
ML865_FA585_3	391116.36	3646337.04	52.2
ML865_FA586_1	391112.64	3646379.16	181.0
ML865_FA586_2	391122.18	3646365.96	165.9
ML865_FA586_3	391111.14	3646379.28	70.4
ML865_FA586_4	391100.46	3646372.20	52.8
ML865_FA586_5	391116.36	3646376.40	49.4
ML865_FA586_6	391121.73	3646372.32	47.2
ML865_FA586_7	391119.48	3646376.28	45.4
ML865_FA586_8	391123.44	3646370.76	38.6
ML865_FA587_1	391128.30	3646381.50	1679.5
ML865_FA587_2	391110.48	3646380.90	606.9
ML865_FA587_3	391128.60	3646383.03	505.0
ML865_FA587_4	391102.62	3646392.36	406.5
ML865_FA587_5	391126.02	3646382.52	304.2
ML865_FA587_6	391111.50	3646403.34	149.4
ML865_FA587_7	391106.40	3646383.96	148.0
ML865_FA587_8	391125.54	3646398.96	113.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FA587_9	391102.98	3646396.98	75.2
ML865_FA587_10	391105.29	3646384.32	61.9
ML865_FA587_11	391109.52	3646406.52	60.5
ML865_FA587_12	391104.66	3646385.30	56.5
ML865_FA587_13	391126.38	3646403.88	55.0
ML865_FA587_14	391127.49	3646383.18	47.1
ML865_FA587_15	391115.04	3646391.46	47.0
ML865_FA588_1	391102.38	3646427.10	981.9
ML865_FA588_2	391111.68	3646429.98	691.3
ML865_FA588_3	391110.66	3646435.68	626.9
ML865_FA588_4	391126.80	3646415.10	530.2
ML865_FA588_5	391107.54	3646432.92	293.7
ML865_FA588_6	391108.05	3646431.78	232.1
ML865_FA588_7	391129.14	3646424.28	216.2
ML865_FA588_8	391127.04	3646418.10	134.9
ML865_FA588_9	391101.12	3646427.04	118.7
ML865_FA588_10	391109.52	3646422.78	112.8
ML865_FA588_11	391118.55	3646437.69	79.1
ML865_FA588_12	391106.88	3646423.14	77.5
ML865_FA588_13	391112.22	3646436.67	71.1
ML865_FA588_14	391117.44	3646416.90	71.0
ML865_FA588_15	391105.86	3646431.24	67.7
ML865_FA588_16	391125.72	3646428.72	62.4
ML865_FA588_17	391129.20	3646434.18	55.0
ML865_FA588_18	391129.42	3646433.66	53.3
ML865_FA588_19	391108.56	3646435.29	21.0
ML865_FA588_20	391100.55	3646426.08	20.2
ML865_FA588_21	391105.02	3646430.10	17.1
ML865_FA589_1	391125.96	3646464.48	2717.5
ML865_FA589_2	391115.28	3646440.24	914.5
ML865_FA589_3	391125.24	3646456.68	821.3
ML865_FA589_4	391116.84	3646459.68	677.1
ML865_FA589_5	391126.26	3646462.68	171.0
ML865_FA589_6	391120.02	3646460.82	116.4
ML865_FA589_7	391121.22	3646453.80	74.8
ML865_FA589_8	391128.18	3646451.40	67.1
ML865_FA589_9	391118.40	3646442.58	60.5
ML865_FA589_10	391128.92	3646440.52	59.9
ML865_FA589_11	391103.22	3646465.86	59.2
ML865_FA589_12	391104.42	3646462.02	53.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FA589_13	391122.27	3646461.18	47.7
ML865_FA589_14	391125.84	3646448.76	44.4
ML865_FA590_1	391110.54	3646488.54	341.6
ML865_FA590_2	391120.98	3646471.56	308.3
ML865_FA590_3	391129.23	3646493.58	274.9
ML865_FA590_4	391120.26	3646481.16	199.2
ML865_FA590_5	391126.74	3646493.22	194.3
ML865_FA590_6	391113.60	3646489.08	179.6
ML865_FA590_7	391125.78	3646493.07	172.2
ML865_FA590_8	391127.82	3646493.10	144.5
ML865_FA590_9	391108.29	3646488.12	141.3
ML865_FA590_10	391122.36	3646491.57	125.5
ML865_FA590_11	391104.03	3646487.16	120.0
ML865_FA590_12	391123.71	3646470.72	105.8
ML865_FA590_13	391118.28	3646490.40	104.9
ML865_FA590_14	391111.56	3646489.08	96.2
ML865_FA590_15	391119.24	3646490.70	92.7
ML865_FA590_16	391115.10	3646489.35	90.4
ML865_FA590_17	391124.94	3646472.64	90.1
ML865_FA590_18	391116.45	3646490.07	89.9
ML865_FA590_19	391125.60	3646491.78	81.8
ML865_FA590_20	391120.68	3646491.27	80.9
ML865_FA590_21	391109.76	3646488.09	70.2
ML865_FA590_22	391102.59	3646486.71	62.0
ML865_FA590_23	391114.98	3646483.89	50.5
ML865_FA590_24	391115.40	3646482.36	50.3
ML865_FA590_25	391124.70	3646470.36	50.2
ML865_FA590_26	391116.90	3646487.82	48.5
ML865_FA590_27	391121.82	3646489.86	47.2
ML865_FA590_28	391121.46	3646493.82	43.7
ML865_FA590_29	391101.62	3646486.62	43.5
ML865_FA590_30	391106.49	3646487.82	40.5
ML865_FA590_31	391100.10	3646486.71	28.8
ML865_FA590_32	391121.97	3646470.78	28.7
ML865_FA590_33	391128.03	3646474.41	14.0
ML865_FA591_1	391112.88	3646500.18	181.4
ML865_FB584_1	391143.84	3646309.08	89.9
ML865_FB584_2	391130.88	3646304.16	76.6
ML865_FB584_3	391145.04	3646292.28	59.9
ML865_FB584_4	391140.24	3646301.88	46.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FB584_5	391152.24	3646292.76	44.3
ML865_FB585_1	391132.20	3646341.12	862.6
ML865_FB585_2	391158.30	3646336.68	670.7
ML865_FB585_3	391158.78	3646340.16	307.6
ML865_FB585_4	391134.96	3646322.94	66.0
ML865_FB585_5	391149.96	3646349.58	54.3
ML865_FB585_6	391158.03	3646339.47	46.3
ML865_FB585_7	391156.50	3646345.77	31.5
ML865_FB586_1	391141.20	3646358.04	291.5
ML865_FB586_2	391152.62	3646369.24	272.8
ML865_FB586_3	391136.04	3646374.12	258.6
ML865_FB586_4	391134.15	3646361.73	225.4
ML865_FB586_5	391154.40	3646359.78	121.7
ML865_FB586_6	391138.42	3646371.82	117.7
ML865_FB586_7	391153.50	3646369.62	102.3
ML865_FB586_8	391133.16	3646378.26	91.3
ML865_FB586_9	391132.17	3646363.68	86.4
ML865_FB586_10	391140.30	3646357.92	67.9
ML865_FB586_11	391156.20	3646350.27	55.4
ML865_FB586_12	391132.44	3646371.18	47.7
ML865_FB586_13	391159.92	3646368.48	47.6
ML865_FB587_1	391146.96	3646386.18	1114.8
ML865_FB587_2	391130.58	3646383.12	458.5
ML865_FB587_3	391135.56	3646399.08	421.0
ML865_FB587_4	391137.09	3646398.63	263.8
ML865_FB587_5	391132.44	3646401.12	256.7
ML865_FB587_6	391142.22	3646385.04	228.2
ML865_FB587_7	391136.18	3646397.98	204.7
ML865_FB587_8	391135.44	3646400.34	147.6
ML865_FB587_9	391153.74	3646404.42	134.6
ML865_FB587_10	391144.50	3646396.74	114.8
ML865_FB587_11	391134.48	3646399.80	114.6
ML865_FB587_12	391143.42	3646400.28	103.6
ML865_FB587_13	391137.78	3646385.04	83.9
ML865_FB587_14	391142.88	3646400.76	78.7
ML865_FB587_15	391133.47	3646399.73	77.7
ML865_FB587_16	391144.32	3646394.28	71.5
ML865_FB587_17	391145.82	3646392.54	59.3
ML865_FB587_18	391139.10	3646398.90	58.0
ML865_FB587_19	391138.92	3646409.94	58.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FB587_20	391142.52	3646401.84	54.0
ML865_FB587_21	391137.84	3646383.30	53.5
ML865_FB587_22	391156.44	3646403.34	48.9
ML865_FB587_23	391140.24	3646399.32	47.7
ML865_FB587_24	391141.86	3646400.28	31.1
ML865_FB587_25	391135.86	3646384.47	29.0
ML865_FB587_26	391140.12	3646400.07	14.0
ML865_FB588_1	391131.78	3646432.50	10649.8
ML865_FB588_2	391132.80	3646433.88	8479.7
ML865_FB588_3	391132.92	3646432.62	2043.3
ML865_FB588_4	391133.19	3646431.60	1222.1
ML865_FB588_5	391157.52	3646439.70	708.5
ML865_FB588_6	391147.44	3646423.86	599.7
ML865_FB588_7	391131.66	3646431.72	549.1
ML865_FB588_8	391131.03	3646432.71	440.4
ML865_FB588_9	391135.92	3646427.70	426.4
ML865_FB588_10	391159.98	3646421.49	242.5
ML865_FB588_11	391159.74	3646427.34	238.2
ML865_FB588_12	391159.77	3646439.43	237.1
ML865_FB588_13	391146.60	3646419.54	219.9
ML865_FB588_14	391131.84	3646434.42	195.4
ML865_FB588_15	391156.64	3646439.30	148.0
ML865_FB588_16	391156.98	3646433.82	105.6
ML865_FB588_17	391144.68	3646427.52	103.5
ML865_FB588_18	391156.89	3646432.68	102.2
ML865_FB588_19	391156.23	3646437.03	93.2
ML865_FB588_20	391157.94	3646431.60	74.4
ML865_FB588_21	391142.34	3646434.84	66.1
ML865_FB588_22	391141.32	3646427.22	59.2
ML865_FB588_23	391159.44	3646437.24	57.6
ML865_FB588_24	391132.98	3646426.98	53.5
ML865_FB588_25	391156.98	3646435.26	47.2
ML865_FB588_26	391159.48	3646431.22	45.5
ML865_FB588_27	391134.84	3646431.90	45.2
ML865_FB588_28	391156.02	3646434.44	43.3
ML865_FB588_29	391130.32	3646435.74	39.0
ML865_FB588_30	391157.86	3646437.06	35.0
ML865_FB588_31	391130.76	3646438.50	30.5
ML865_FB589_1	391159.14	3646445.52	861.8
ML865_FB589_2	391158.96	3646443.06	458.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FB589_3	391147.17	3646464.21	373.8
ML865_FB589_4	391140.12	3646464.06	295.8
ML865_FB589_5	391139.36	3646466.32	206.1
ML865_FB589_6	391139.94	3646446.84	78.6
ML865_FB589_7	391143.54	3646452.63	77.5
ML865_FB589_8	391141.38	3646464.48	53.8
ML865_FB589_9	391157.82	3646442.37	53.1
ML865_FB589_10	391145.04	3646442.22	50.5
ML865_FB589_11	391151.28	3646454.70	48.9
ML865_FB589_12	391141.38	3646458.90	47.8
ML865_FB589_13	391158.93	3646441.86	47.2
ML865_FB589_14	391148.64	3646453.50	45.2
ML865_FB589_15	391141.08	3646452.42	43.6
ML865_FB589_16	391159.35	3646441.32	41.3
ML865_FB590_1	391145.19	3646497.81	278.0
ML865_FB590_2	391130.40	3646494.00	266.1
ML865_FB590_3	391141.32	3646473.12	117.9
ML865_FB590_4	391132.08	3646494.51	94.9
ML865_FB590_5	391148.60	3646499.14	91.0
ML865_FB590_6	391142.76	3646470.96	84.5
ML865_FB590_7	391146.81	3646498.38	77.5
ML865_FB590_8	391144.08	3646497.33	75.1
ML865_FB590_9	391138.38	3646490.76	61.7
ML865_FB590_10	391142.46	3646497.06	58.4
ML865_FB590_11	391133.22	3646494.66	52.6
ML865_FB590_12	391150.77	3646499.94	47.1
ML865_FB590_13	391139.82	3646496.40	43.4
ML865_FB590_14	391135.05	3646495.05	42.3
ML865_FB590_15	391152.45	3646499.91	24.4
ML865_FB591_1	391155.66	3646502.02	167.4
ML865_FB591_2	391156.17	3646501.95	153.4
ML865_FB591_3	391158.27	3646503.18	148.4
ML865_FB591_4	391158.90	3646508.88	121.6
ML865_FB591_5	391157.52	3646503.81	117.8
ML865_FB591_6	391157.22	3646502.22	113.5
ML865_FB591_7	391159.60	3646504.06	109.9
ML865_FB591_8	391141.38	3646512.66	85.1
ML865_FB591_9	391155.72	3646503.18	79.7
ML865_FB591_10	391153.39	3646500.86	64.6
ML865_FB591_11	391145.16	3646512.30	57.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FB591_12	391134.51	3646505.64	50.4
ML865_FB591_13	391153.92	3646500.36	44.2
ML865_FB591_14	391152.02	3646500.60	33.3
ML865_FC584_1	391161.78	3646318.92	3755.5
ML865_FC584_2	391160.08	3646318.74	725.5
ML865_FC584_3	391187.94	3646311.84	131.8
ML865_FC584_4	391167.12	3646311.24	70.8
ML865_FC584_5	391184.70	3646313.16	63.8
ML865_FC584_6	391188.66	3646316.82	53.6
ML865_FC584_7	391174.14	3646304.52	49.5
ML865_FC584_8	391162.92	3646316.76	46.6
ML865_FC584_9	391178.70	3646296.30	46.2
ML865_FC584_10	391167.90	3646312.74	45.7
ML865_FC584_11	391184.49	3646316.43	17.8
ML865_FC585_1	391160.32	3646325.94	351.3
ML865_FC585_2	391175.16	3646341.18	324.2
ML865_FC585_3	391161.69	3646320.51	305.7
ML865_FC585_4	391160.48	3646324.76	222.8
ML865_FC585_5	391178.34	3646345.80	172.0
ML865_FC585_6	391180.14	3646323.42	138.1
ML865_FC585_7	391161.06	3646340.34	118.5
ML865_FC585_8	391177.44	3646324.50	111.6
ML865_FC585_9	391160.91	3646323.90	77.3
ML865_FC585_10	391174.80	3646329.54	72.1
ML865_FC585_11	391163.10	3646338.66	64.9
ML865_FC585_12	391172.16	3646332.84	61.4
ML865_FC585_13	391180.50	3646322.10	52.9
ML865_FC585_14	391189.74	3646349.52	51.8
ML865_FC585_15	391161.60	3646322.34	43.6
ML865_FC586_1	391187.46	3646352.70	275.6
ML865_FC586_2	391189.80	3646362.96	109.1
ML865_FC586_3	391185.30	3646371.06	57.8
ML865_FC586_4	391187.16	3646350.54	48.0
ML865_FC587_1	391167.28	3646402.36	6846.5
ML865_FC587_2	391168.00	3646407.32	3065.3
ML865_FC587_3	391166.38	3646409.12	2940.8
ML865_FC587_4	391184.82	3646397.70	2837.6
ML865_FC587_5	391168.86	3646407.36	2353.3
ML865_FC587_6	391165.62	3646407.36	1828.5
ML865_FC587_7	391167.30	3646403.46	1824.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC587_8	391166.58	3646404.40	1479.9
ML865_FC587_9	391167.42	3646408.98	1412.2
ML865_FC587_10	391170.06	3646404.60	1319.5
ML865_FC587_11	391166.97	3646407.96	1306.9
ML865_FC587_12	391170.42	3646409.64	1203.8
ML865_FC587_13	391169.11	3646406.07	1113.7
ML865_FC587_14	391169.87	3646408.69	1103.9
ML865_FC587_15	391186.38	3646399.59	1095.5
ML865_FC587_16	391170.51	3646408.59	1061.7
ML865_FC587_17	391170.24	3646405.80	1047.0
ML865_FC587_18	391168.68	3646408.92	1006.0
ML865_FC587_19	391167.63	3646406.40	824.7
ML865_FC587_20	391171.26	3646407.66	809.9
ML865_FC587_21	391170.43	3646407.27	670.6
ML865_FC587_22	391188.00	3646393.50	636.4
ML865_FC587_23	391184.19	3646397.10	529.4
ML865_FC587_24	391171.77	3646408.83	506.9
ML865_FC587_25	391166.85	3646406.82	407.5
ML865_FC587_26	391172.61	3646408.29	400.4
ML865_FC587_27	391181.34	3646384.98	310.9
ML865_FC587_28	391186.20	3646397.16	280.6
ML865_FC587_29	391187.07	3646398.24	280.6
ML865_FC587_30	391174.14	3646408.50	245.5
ML865_FC587_31	391187.88	3646404.96	234.8
ML865_FC587_32	391180.74	3646400.40	228.4
ML865_FC587_33	391174.68	3646407.12	211.7
ML865_FC587_34	391178.46	3646405.50	191.7
ML865_FC587_35	391173.66	3646398.12	191.3
ML865_FC587_36	391173.21	3646409.61	187.8
ML865_FC587_37	391185.84	3646406.82	159.8
ML865_FC587_38	391185.06	3646405.44	153.2
ML865_FC587_39	391184.25	3646388.58	144.8
ML865_FC587_40	391183.71	3646406.55	133.7
ML865_FC587_41	391176.72	3646408.38	119.5
ML865_FC587_42	391171.53	3646406.64	114.4
ML865_FC587_43	391174.28	3646409.94	114.3
ML865_FC587_44	391173.26	3646406.85	112.8
ML865_FC587_45	391185.36	3646381.86	103.6
ML865_FC587_46	391181.80	3646403.12	101.1
ML865_FC587_47	391183.86	3646404.00	99.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC587_48	391168.62	3646404.27	95.4
ML865_FC587_49	391185.12	3646404.18	91.8
ML865_FC587_50	391183.41	3646399.62	91.3
ML865_FC587_51	391183.17	3646408.44	84.7
ML865_FC587_52	391182.33	3646399.74	83.6
ML865_FC587_53	391173.39	3646405.56	82.6
ML865_FC587_54	391183.38	3646402.86	80.2
ML865_FC587_55	391171.47	3646404.42	73.5
ML865_FC587_56	391175.76	3646407.51	72.6
ML865_FC587_57	391183.50	3646394.16	72.2
ML865_FC587_58	391188.72	3646400.70	70.8
ML865_FC587_59	391183.14	3646397.52	70.2
ML865_FC587_60	391170.60	3646402.92	68.4
ML865_FC587_61	391173.66	3646399.14	65.9
ML865_FC587_62	391175.58	3646399.68	65.5
ML865_FC587_63	391188.42	3646408.28	64.1
ML865_FC587_64	391181.46	3646404.48	59.5
ML865_FC587_65	391173.99	3646395.51	58.7
ML865_FC587_66	391185.36	3646409.52	56.7
ML865_FC587_67	391188.96	3646406.31	54.4
ML865_FC587_68	391189.53	3646408.89	53.6
ML865_FC587_69	391186.32	3646402.08	52.7
ML865_FC587_70	391175.38	3646409.56	52.6
ML865_FC587_71	391184.76	3646407.84	51.3
ML865_FC587_72	391178.16	3646408.08	47.8
ML865_FC587_73	391174.98	3646404.30	47.4
ML865_FC587_74	391176.96	3646409.76	47.4
ML865_FC587_75	391184.76	3646400.22	44.0
ML865_FC587_76	391183.26	3646405.50	43.7
ML865_FC587_77	391160.40	3646387.20	43.1
ML865_FC587_78	391182.48	3646401.54	43.0
ML865_FC587_79	391171.54	3646403.22	41.4
ML865_FC587_80	391180.35	3646408.83	34.1
ML865_FC587_81	391181.31	3646408.05	25.2
ML865_FC587_82	391179.18	3646409.13	13.4
ML865_FC588_1	391164.24	3646414.62	6021.2
ML865_FC588_2	391168.98	3646412.58	4938.3
ML865_FC588_3	391167.60	3646421.64	3758.6
ML865_FC588_4	391165.14	3646425.00	3581.7
ML865_FC588_5	391164.36	3646425.33	3322.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_6	391164.12	3646416.60	3274.0
ML865_FC588_7	391168.86	3646411.08	2946.1
ML865_FC588_8	391186.80	3646429.38	2097.8
ML865_FC588_9	391167.01	3646420.65	2062.0
ML865_FC588_10	391176.78	3646414.50	1901.4
ML865_FC588_11	391187.74	3646429.32	1894.3
ML865_FC588_12	391167.92	3646419.76	1846.7
ML865_FC588_13	391160.70	3646439.46	1742.2
ML865_FC588_14	391163.52	3646413.12	1683.0
ML865_FC588_15	391186.26	3646438.68	1400.6
ML865_FC588_16	391161.75	3646430.19	1335.3
ML865_FC588_17	391165.98	3646426.26	1278.5
ML865_FC588_18	391168.46	3646410.26	1275.6
ML865_FC588_19	391161.27	3646427.40	1263.4
ML865_FC588_20	391183.74	3646412.70	1244.2
ML865_FC588_21	391166.70	3646415.67	1212.0
ML865_FC588_22	391180.14	3646418.64	1192.6
ML865_FC588_23	391168.95	3646419.06	1155.8
ML865_FC588_24	391178.40	3646415.58	1135.8
ML865_FC588_25	391167.08	3646410.60	1119.4
ML865_FC588_26	391161.57	3646419.66	1065.0
ML865_FC588_27	391178.34	3646418.49	1045.5
ML865_FC588_28	391173.33	3646429.17	1045.1
ML865_FC588_29	391172.52	3646416.84	965.6
ML865_FC588_30	391182.24	3646438.86	948.7
ML865_FC588_31	391163.40	3646426.47	902.4
ML865_FC588_32	391176.24	3646430.64	886.7
ML865_FC588_33	391166.46	3646429.50	864.4
ML865_FC588_34	391176.51	3646413.03	850.7
ML865_FC588_35	391164.30	3646410.00	763.0
ML865_FC588_36	391166.88	3646419.36	758.4
ML865_FC588_37	391160.52	3646422.54	725.5
ML865_FC588_38	391189.35	3646419.81	688.9
ML865_FC588_39	391163.94	3646411.47	686.1
ML865_FC588_40	391182.30	3646417.38	685.8
ML865_FC588_41	391163.88	3646422.42	684.0
ML865_FC588_42	391189.84	3646431.10	682.8
ML865_FC588_43	391166.88	3646413.90	664.9
ML865_FC588_44	391177.86	3646435.44	640.4
ML865_FC588_45	391170.96	3646412.43	611.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_46	391165.14	3646420.32	598.3
ML865_FC588_47	391170.30	3646412.94	595.2
ML865_FC588_48	391184.46	3646438.32	593.5
ML865_FC588_49	391165.35	3646412.13	567.2
ML865_FC588_50	391160.82	3646419.53	566.1
ML865_FC588_51	391188.36	3646428.46	560.5
ML865_FC588_52	391173.33	3646426.32	527.3
ML865_FC588_53	391165.14	3646429.68	521.0
ML865_FC588_54	391174.62	3646422.30	515.8
ML865_FC588_55	391178.60	3646414.54	515.4
ML865_FC588_56	391176.12	3646425.22	504.3
ML865_FC588_57	391168.08	3646412.44	502.3
ML865_FC588_58	391162.86	3646415.13	496.8
ML865_FC588_59	391164.42	3646419.42	492.7
ML865_FC588_60	391167.72	3646423.54	484.1
ML865_FC588_61	391179.30	3646432.26	484.1
ML865_FC588_62	391189.08	3646413.96	479.3
ML865_FC588_63	391172.73	3646438.25	450.1
ML865_FC588_64	391168.08	3646426.08	439.7
ML865_FC588_65	391165.71	3646410.12	423.1
ML865_FC588_66	391170.66	3646411.00	423.0
ML865_FC588_67	391165.68	3646419.00	421.3
ML865_FC588_68	391167.18	3646417.05	405.8
ML865_FC588_69	391168.20	3646417.02	403.5
ML865_FC588_70	391178.61	3646431.00	388.9
ML865_FC588_71	391183.26	3646425.54	384.9
ML865_FC588_72	391161.60	3646437.48	384.1
ML865_FC588_73	391186.71	3646427.97	383.8
ML865_FC588_74	391178.67	3646436.25	374.5
ML865_FC588_75	391163.67	3646434.51	368.1
ML865_FC588_76	391161.26	3646421.66	367.7
ML865_FC588_77	391182.04	3646439.55	365.2
ML865_FC588_78	391166.14	3646413.54	361.7
ML865_FC588_79	391174.68	3646417.08	357.9
ML865_FC588_80	391167.99	3646416.48	335.5
ML865_FC588_81	391177.64	3646429.02	333.8
ML865_FC588_82	391184.43	3646436.40	328.7
ML865_FC588_83	391175.00	3646431.24	322.3
ML865_FC588_84	391170.78	3646413.96	320.0
ML865_FC588_85	391177.71	3646415.55	315.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_86	391169.76	3646426.74	313.2
ML865_FC588_87	391163.30	3646423.24	312.6
ML865_FC588_88	391174.56	3646414.44	312.4
ML865_FC588_89	391175.60	3646415.80	306.9
ML865_FC588_90	391172.46	3646416.24	301.5
ML865_FC588_91	391176.70	3646422.34	301.1
ML865_FC588_92	391166.46	3646422.51	300.4
ML865_FC588_93	391162.26	3646432.62	295.1
ML865_FC588_94	391175.19	3646418.46	282.1
ML865_FC588_95	391182.33	3646424.61	281.4
ML865_FC588_96	391185.72	3646427.55	280.0
ML865_FC588_97	391174.38	3646432.29	274.8
ML865_FC588_98	391177.71	3646438.83	272.0
ML865_FC588_99	391181.94	3646423.32	268.5
ML865_FC588_100	391177.71	3646436.79	267.1
ML865_FC588_101	391177.20	3646430.28	264.9
ML865_FC588_102	391166.18	3646423.90	263.6
ML865_FC588_103	391174.04	3646420.94	263.5
ML865_FC588_104	391185.99	3646436.91	259.7
ML865_FC588_105	391171.70	3646410.38	258.9
ML865_FC588_106	391162.77	3646422.42	256.0
ML865_FC588_107	391174.65	3646426.56	255.6
ML865_FC588_108	391162.78	3646424.82	251.2
ML865_FC588_109	391165.27	3646417.80	249.1
ML865_FC588_110	391177.68	3646422.66	248.5
ML865_FC588_111	391171.86	3646422.48	245.6
ML865_FC588_112	391169.16	3646423.98	238.3
ML865_FC588_113	391178.76	3646429.74	237.8
ML865_FC588_114	391181.28	3646426.02	231.1
ML865_FC588_115	391175.34	3646412.91	226.7
ML865_FC588_116	391164.15	3646429.92	224.2
ML865_FC588_117	391186.94	3646411.40	217.4
ML865_FC588_118	391185.60	3646439.40	214.6
ML865_FC588_119	391178.55	3646438.89	213.4
ML865_FC588_120	391183.83	3646436.70	213.1
ML865_FC588_121	391182.66	3646414.74	212.8
ML865_FC588_122	391163.54	3646428.46	208.4
ML865_FC588_123	391173.87	3646423.14	206.2
ML865_FC588_124	391175.49	3646429.53	204.9
ML865_FC588_125	391179.72	3646430.91	203.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_126	391164.60	3646437.45	202.5
ML865_FC588_127	391183.72	3646439.62	198.8
ML865_FC588_128	391162.35	3646425.75	197.9
ML865_FC588_129	391189.98	3646436.52	194.5
ML865_FC588_130	391187.52	3646426.20	192.4
ML865_FC588_131	391163.88	3646421.36	190.7
ML865_FC588_132	391165.89	3646416.63	189.9
ML865_FC588_133	391182.24	3646437.72	188.7
ML865_FC588_134	391185.30	3646435.86	185.5
ML865_FC588_135	391175.46	3646427.61	184.5
ML865_FC588_136	391172.88	3646413.57	184.3
ML865_FC588_137	391180.74	3646426.98	183.5
ML865_FC588_138	391188.24	3646418.88	182.4
ML865_FC588_139	391184.70	3646429.02	181.9
ML865_FC588_140	391187.37	3646421.43	181.6
ML865_FC588_141	391187.82	3646415.52	180.3
ML865_FC588_142	391183.32	3646435.84	179.7
ML865_FC588_143	391176.15	3646417.44	177.5
ML865_FC588_144	391173.03	3646427.70	176.8
ML865_FC588_145	391187.20	3646435.34	176.1
ML865_FC588_146	391186.08	3646426.26	175.2
ML865_FC588_147	391183.56	3646411.68	171.4
ML865_FC588_148	391178.46	3646434.09	170.3
ML865_FC588_149	391180.80	3646430.90	167.2
ML865_FC588_150	391176.12	3646411.86	167.0
ML865_FC588_151	391165.74	3646435.08	164.8
ML865_FC588_152	391172.50	3646431.36	163.8
ML865_FC588_153	391178.58	3646435.14	163.0
ML865_FC588_154	391173.36	3646412.70	162.5
ML865_FC588_155	391175.04	3646424.40	159.6
ML865_FC588_156	391179.72	3646429.20	158.3
ML865_FC588_157	391178.34	3646437.39	158.1
ML865_FC588_158	391179.44	3646437.96	157.3
ML865_FC588_159	391175.76	3646414.50	156.7
ML865_FC588_160	391167.94	3646418.06	155.9
ML865_FC588_161	391180.74	3646412.22	154.9
ML865_FC588_162	391169.52	3646425.48	152.1
ML865_FC588_163	391188.66	3646418.04	147.0
ML865_FC588_164	391164.30	3646432.80	146.0
ML865_FC588_165	391177.53	3646423.74	144.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_166	391179.12	3646418.52	143.7
ML865_FC588_167	391180.02	3646413.78	141.5
ML865_FC588_168	391181.34	3646419.12	137.3
ML865_FC588_169	391174.96	3646436.18	136.3
ML865_FC588_170	391179.66	3646433.34	133.7
ML865_FC588_171	391186.28	3646435.24	133.7
ML865_FC588_172	391179.60	3646422.90	132.5
ML865_FC588_173	391185.27	3646431.30	130.0
ML865_FC588_174	391166.62	3646428.14	129.5
ML865_FC588_175	391179.18	3646439.79	128.6
ML865_FC588_176	391174.62	3646428.57	126.2
ML865_FC588_177	391165.77	3646421.61	125.0
ML865_FC588_178	391173.72	3646411.23	124.9
ML865_FC588_179	391176.09	3646410.36	123.1
ML865_FC588_180	391180.72	3646439.38	119.8
ML865_FC588_181	391176.06	3646428.60	117.2
ML865_FC588_182	391168.02	3646429.26	114.2
ML865_FC588_183	391169.55	3646414.56	113.3
ML865_FC588_184	391186.47	3646421.73	112.7
ML865_FC588_185	391164.38	3646431.36	110.2
ML865_FC588_186	391178.70	3646420.14	109.8
ML865_FC588_187	391188.60	3646424.76	109.3
ML865_FC588_188	391177.17	3646421.40	109.2
ML865_FC588_189	391185.24	3646426.10	108.9
ML865_FC588_190	391173.78	3646430.58	108.6
ML865_FC588_191	391187.90	3646435.58	108.4
ML865_FC588_192	391164.93	3646426.98	106.6
ML865_FC588_193	391177.02	3646437.56	105.4
ML865_FC588_194	391189.14	3646427.88	105.2
ML865_FC588_195	391161.60	3646422.96	103.5
ML865_FC588_196	391178.26	3646432.44	103.4
ML865_FC588_197	391186.98	3646417.38	103.1
ML865_FC588_198	391164.39	3646427.85	101.0
ML865_FC588_199	391174.14	3646424.37	98.9
ML865_FC588_200	391186.42	3646423.08	98.2
ML865_FC588_201	391161.27	3646425.21	98.0
ML865_FC588_202	391189.18	3646437.11	98.0
ML865_FC588_203	391175.42	3646419.68	96.5
ML865_FC588_204	391170.72	3646423.02	96.1
ML865_FC588_205	391165.76	3646438.38	96.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_206	391169.23	3646436.43	95.4
ML865_FC588_207	391172.88	3646435.98	95.1
ML865_FC588_208	391179.84	3646427.82	94.8
ML865_FC588_209	391176.12	3646434.60	93.2
ML865_FC588_210	391166.43	3646412.28	93.0
ML865_FC588_211	391188.63	3646430.40	92.5
ML865_FC588_212	391183.20	3646418.13	92.0
ML865_FC588_213	391167.66	3646432.26	91.7
ML865_FC588_214	391164.90	3646433.58	91.4
ML865_FC588_215	391187.94	3646432.38	90.2
ML865_FC588_216	391170.96	3646421.70	88.5
ML865_FC588_217	391187.04	3646430.76	87.2
ML865_FC588_218	391172.46	3646418.28	86.6
ML865_FC588_219	391164.08	3646435.74	86.5
ML865_FC588_220	391189.38	3646430.01	86.1
ML865_FC588_221	391174.14	3646419.21	85.3
ML865_FC588_222	391163.68	3646432.50	84.4
ML865_FC588_223	391186.02	3646416.48	83.9
ML865_FC588_224	391162.47	3646418.52	83.0
ML865_FC588_225	391185.36	3646412.46	82.1
ML865_FC588_226	391178.67	3646424.46	81.7
ML865_FC588_227	391188.60	3646412.64	80.7
ML865_FC588_228	391171.50	3646424.07	80.0
ML865_FC588_229	391171.52	3646416.10	79.4
ML865_FC588_230	391187.74	3646436.84	77.0
ML865_FC588_231	391170.84	3646427.16	76.2
ML865_FC588_232	391184.40	3646429.77	75.9
ML865_FC588_233	391177.64	3646426.90	75.4
ML865_FC588_234	391180.66	3646437.14	71.8
ML865_FC588_235	391183.18	3646434.14	71.4
ML865_FC588_236	391181.94	3646413.54	69.8
ML865_FC588_237	391161.54	3646431.93	69.6
ML865_FC588_238	391180.92	3646415.46	69.4
ML865_FC588_239	391169.34	3646420.68	69.4
ML865_FC588_240	391175.90	3646423.28	68.6
ML865_FC588_241	391161.60	3646416.93	68.1
ML865_FC588_242	391183.68	3646433.10	67.2
ML865_FC588_243	391186.85	3646413.09	67.1
ML865_FC588_244	391163.38	3646430.94	67.1
ML865_FC588_245	391162.86	3646435.65	66.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_246	391165.23	3646423.44	66.2
ML865_FC588_247	391173.84	3646437.72	66.0
ML865_FC588_248	391182.57	3646411.70	65.5
ML865_FC588_249	391179.15	3646426.83	64.0
ML865_FC588_250	391172.10	3646413.29	63.8
ML865_FC588_251	391181.10	3646433.37	63.5
ML865_FC588_252	391188.54	3646434.72	63.2
ML865_FC588_253	391181.85	3646436.82	62.9
ML865_FC588_254	391163.60	3646439.76	62.8
ML865_FC588_255	391175.79	3646437.12	62.6
ML865_FC588_256	391186.50	3646415.58	62.3
ML865_FC588_257	391185.00	3646416.74	62.2
ML865_FC588_258	391170.93	3646430.43	62.2
ML865_FC588_259	391178.76	3646421.70	59.2
ML865_FC588_260	391171.90	3646429.06	58.6
ML865_FC588_261	391187.88	3646425.27	57.6
ML865_FC588_262	391170.84	3646425.82	57.1
ML865_FC588_263	391180.88	3646435.02	56.7
ML865_FC588_264	391175.73	3646435.95	56.6
ML865_FC588_265	391189.56	3646439.15	56.6
ML865_FC588_266	391181.32	3646423.92	56.1
ML865_FC588_267	391187.80	3646413.36	55.9
ML865_FC588_268	391188.75	3646433.16	55.5
ML865_FC588_269	391172.97	3646411.71	54.5
ML865_FC588_270	391162.95	3646418.01	54.4
ML865_FC588_271	391179.60	3646434.66	54.4
ML865_FC588_272	391184.13	3646417.47	54.0
ML865_FC588_273	391169.82	3646422.30	53.2
ML865_FC588_274	391180.98	3646410.24	53.0
ML865_FC588_275	391170.60	3646424.94	52.8
ML865_FC588_276	391171.02	3646420.20	52.3
ML865_FC588_277	391188.39	3646421.10	51.5
ML865_FC588_278	391174.26	3646415.70	51.4
ML865_FC588_279	391189.65	3646425.27	51.4
ML865_FC588_280	391181.94	3646434.26	51.1
ML865_FC588_281	391185.10	3646423.54	51.0
ML865_FC588_282	391172.04	3646420.44	50.6
ML865_FC588_283	391177.60	3646434.02	50.6
ML865_FC588_284	391172.05	3646414.88	50.4
ML865_FC588_285	391183.26	3646423.56	50.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_286	391186.80	3646431.86	50.1
ML865_FC588_287	391163.07	3646437.27	49.0
ML865_FC588_288	391189.92	3646412.43	48.9
ML865_FC588_289	391184.43	3646435.08	48.5
ML865_FC588_290	391181.67	3646420.65	48.3
ML865_FC588_291	391171.38	3646419.30	47.7
ML865_FC588_292	391164.60	3646439.70	47.6
ML865_FC588_293	391169.97	3646430.64	47.5
ML865_FC588_294	391180.28	3646426.18	47.3
ML865_FC588_295	391169.80	3646432.56	46.5
ML865_FC588_296	391180.56	3646420.02	46.3
ML865_FC588_297	391177.86	3646425.60	45.8
ML865_FC588_298	391183.92	3646431.12	45.6
ML865_FC588_299	391172.91	3646424.46	45.1
ML865_FC588_300	391175.10	3646411.74	44.8
ML865_FC588_301	391160.67	3646430.67	44.5
ML865_FC588_302	391175.91	3646432.74	44.5
ML865_FC588_303	391189.08	3646426.44	44.3
ML865_FC588_304	391184.12	3646415.34	43.8
ML865_FC588_305	391168.50	3646430.64	43.8
ML865_FC588_306	391172.70	3646435.17	43.6
ML865_FC588_307	391183.38	3646420.44	43.5
ML865_FC588_308	391172.90	3646432.78	43.5
ML865_FC588_309	391183.48	3646432.14	43.4
ML865_FC588_310	391182.99	3646427.10	41.9
ML865_FC588_311	391175.76	3646433.54	41.8
ML865_FC588_312	391178.97	3646416.78	40.9
ML865_FC588_313	391182.98	3646437.28	40.8
ML865_FC588_314	391171.59	3646418.04	40.5
ML865_FC588_315	391181.64	3646435.71	40.2
ML865_FC588_316	391165.88	3646431.12	40.1
ML865_FC588_317	391180.62	3646416.57	39.6
ML865_FC588_318	391189.48	3646416.24	39.4
ML865_FC588_319	391173.78	3646435.00	38.6
ML865_FC588_320	391184.54	3646427.30	38.1
ML865_FC588_321	391180.96	3646432.42	38.1
ML865_FC588_322	391173.56	3646438.84	37.7
ML865_FC588_323	391178.58	3646411.35	37.3
ML865_FC588_324	391185.30	3646434.15	37.0
ML865_FC588_325	391183.50	3646416.81	36.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC588_326	391161.51	3646434.72	36.6
ML865_FC588_327	391187.91	3646423.50	36.3
ML865_FC588_328	391183.14	3646430.22	35.1
ML865_FC588_329	391179.30	3646413.09	34.7
ML865_FC588_330	391186.11	3646419.90	34.6
ML865_FC588_331	391185.60	3646432.62	33.7
ML865_FC588_332	391188.42	3646410.10	31.8
ML865_FC588_333	391170.26	3646428.08	31.8
ML865_FC588_334	391188.93	3646431.81	31.7
ML865_FC588_335	391185.56	3646411.10	31.6
ML865_FC588_336	391174.29	3646434.00	30.4
ML865_FC588_337	391166.61	3646431.72	30.1
ML865_FC588_338	391163.82	3646438.55	28.9
ML865_FC588_339	391184.22	3646419.45	28.7
ML865_FC588_340	391186.11	3646424.76	28.6
ML865_FC588_341	391168.44	3646437.94	28.5
ML865_FC588_342	391189.35	3646432.80	28.3
ML865_FC588_343	391166.24	3646439.36	27.9
ML865_FC588_344	391177.42	3646411.44	25.2
ML865_FC588_345	391185.39	3646415.73	25.1
ML865_FC588_346	391177.53	3646420.50	24.7
ML865_FC588_347	391182.08	3646429.86	24.0
ML865_FC588_348	391168.74	3646438.68	20.5
ML865_FC588_349	391188.22	3646439.19	19.1
ML865_FC588_350	391186.77	3646433.22	15.5
ML865_FC588_351	391183.74	3646429.50	15.0
ML865_FC589_1	391189.68	3646464.18	3560.7
ML865_FC589_2	391177.08	3646456.74	2692.3
ML865_FC589_3	391177.20	3646455.72	2658.6
ML865_FC589_4	391184.34	3646462.50	2152.6
ML865_FC589_5	391182.16	3646453.52	2030.3
ML865_FC589_6	391169.90	3646456.68	1609.2
ML865_FC589_7	391183.68	3646449.12	1422.0
ML865_FC589_8	391187.82	3646456.62	1227.3
ML865_FC589_9	391168.44	3646442.64	1212.1
ML865_FC589_10	391187.31	3646463.19	1205.6
ML865_FC589_11	391181.22	3646444.80	1158.2
ML865_FC589_12	391183.02	3646445.40	1096.4
ML865_FC589_13	391186.02	3646459.26	1032.3
ML865_FC589_14	391183.89	3646454.13	978.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_15	391188.90	3646453.86	977.8
ML865_FC589_16	391179.66	3646462.20	945.2
ML865_FC589_17	391179.24	3646463.58	925.8
ML865_FC589_18	391172.23	3646457.61	917.1
ML865_FC589_19	391166.76	3646440.12	843.2
ML865_FC589_20	391183.56	3646442.76	831.3
ML865_FC589_21	391182.30	3646440.80	795.2
ML865_FC589_22	391182.30	3646451.40	793.2
ML865_FC589_23	391189.71	3646457.46	776.6
ML865_FC589_24	391180.80	3646462.26	769.8
ML865_FC589_25	391187.15	3646461.32	767.8
ML865_FC589_26	391182.88	3646442.52	721.5
ML865_FC589_27	391181.28	3646441.92	714.8
ML865_FC589_28	391181.44	3646443.54	698.0
ML865_FC589_29	391186.13	3646461.20	665.4
ML865_FC589_30	391188.75	3646460.24	650.8
ML865_FC589_31	391172.58	3646453.08	632.1
ML865_FC589_32	391169.88	3646441.64	625.6
ML865_FC589_33	391169.13	3646450.59	625.6
ML865_FC589_34	391184.34	3646447.98	613.3
ML865_FC589_35	391182.94	3646454.06	583.5
ML865_FC589_36	391170.66	3646441.38	581.5
ML865_FC589_37	391185.30	3646440.60	577.4
ML865_FC589_38	391172.79	3646458.57	551.6
ML865_FC589_39	391170.42	3646458.15	549.4
ML865_FC589_40	391188.69	3646458.00	544.1
ML865_FC589_41	391178.22	3646463.70	544.1
ML865_FC589_42	391182.72	3646444.47	541.1
ML865_FC589_43	391180.11	3646443.36	516.3
ML865_FC589_44	391181.04	3646454.22	501.8
ML865_FC589_45	391182.54	3646455.87	498.0
ML865_FC589_46	391161.12	3646444.84	484.3
ML865_FC589_47	391177.26	3646460.10	481.3
ML865_FC589_48	391180.77	3646455.33	472.5
ML865_FC589_49	391187.46	3646449.71	456.5
ML865_FC589_50	391188.84	3646452.12	449.5
ML865_FC589_51	391185.02	3646460.56	433.4
ML865_FC589_52	391170.66	3646444.68	426.4
ML865_FC589_53	391169.48	3646457.72	418.5
ML865_FC589_54	391186.41	3646445.46	412.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_55	391187.39	3646459.85	408.5
ML865_FC589_56	391180.38	3646444.68	405.3
ML865_FC589_57	391188.53	3646446.86	405.2
ML865_FC589_58	391187.37	3646446.48	400.1
ML865_FC589_59	391179.06	3646445.76	397.4
ML865_FC589_60	391161.33	3646443.84	387.1
ML865_FC589_61	391182.56	3646461.92	379.5
ML865_FC589_62	391184.07	3646444.71	376.3
ML865_FC589_63	391178.55	3646443.89	371.2
ML865_FC589_64	391172.08	3646459.22	366.7
ML865_FC589_65	391182.69	3646448.46	364.8
ML865_FC589_66	391167.96	3646449.60	358.3
ML865_FC589_67	391177.26	3646444.02	354.1
ML865_FC589_68	391176.24	3646442.88	352.6
ML865_FC589_69	391183.29	3646452.60	349.2
ML865_FC589_70	391174.50	3646460.04	348.6
ML865_FC589_71	391181.76	3646447.02	345.1
ML865_FC589_72	391181.26	3646456.36	341.9
ML865_FC589_73	391185.26	3646450.92	340.8
ML865_FC589_74	391188.66	3646465.14	336.3
ML865_FC589_75	391181.06	3646440.80	308.5
ML865_FC589_76	391172.26	3646452.00	289.8
ML865_FC589_77	391183.59	3646459.80	287.2
ML865_FC589_78	391179.51	3646452.87	281.0
ML865_FC589_79	391177.62	3646463.34	279.8
ML865_FC589_80	391172.22	3646456.56	274.7
ML865_FC589_81	391184.56	3646452.14	269.8
ML865_FC589_82	391173.63	3646453.65	269.8
ML865_FC589_83	391183.68	3646461.75	268.4
ML865_FC589_84	391189.26	3646444.90	261.2
ML865_FC589_85	391179.82	3646453.94	261.0
ML865_FC589_86	391187.10	3646443.06	254.4
ML865_FC589_87	391163.10	3646450.38	252.8
ML865_FC589_88	391189.64	3646456.26	252.3
ML865_FC589_89	391183.43	3646458.56	244.5
ML865_FC589_90	391171.64	3646449.76	237.1
ML865_FC589_91	391179.21	3646442.37	236.6
ML865_FC589_92	391180.53	3646463.91	236.5
ML865_FC589_93	391169.04	3646449.06	236.1
ML865_FC589_94	391178.22	3646446.26	235.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_95	391181.67	3646449.66	235.1
ML865_FC589_96	391188.56	3646450.92	233.2
ML865_FC589_97	391188.58	3646454.80	232.9
ML865_FC589_98	391177.83	3646444.74	223.8
ML865_FC589_99	391168.58	3646455.86	221.7
ML865_FC589_100	391180.68	3646447.20	219.9
ML865_FC589_101	391167.86	3646451.80	213.8
ML865_FC589_102	391166.64	3646448.64	210.7
ML865_FC589_103	391185.78	3646451.70	209.5
ML865_FC589_104	391179.86	3646458.36	204.4
ML865_FC589_105	391161.12	3646449.60	203.9
ML865_FC589_106	391173.58	3646459.60	202.4
ML865_FC589_107	391176.18	3646449.87	200.6
ML865_FC589_108	391189.70	3646449.70	199.5
ML865_FC589_109	391169.20	3646441.12	199.2
ML865_FC589_110	391181.50	3646446.08	198.7
ML865_FC589_111	391186.92	3646452.30	198.1
ML865_FC589_112	391175.76	3646453.74	198.0
ML865_FC589_113	391188.67	3646462.08	192.8
ML865_FC589_114	391180.32	3646445.97	191.8
ML865_FC589_115	391175.40	3646463.22	189.7
ML865_FC589_116	391189.52	3646441.10	187.9
ML865_FC589_117	391189.32	3646446.86	185.4
ML865_FC589_118	391178.82	3646453.78	185.4
ML865_FC589_119	391162.94	3646452.98	184.5
ML865_FC589_120	391165.14	3646440.54	183.6
ML865_FC589_121	391160.04	3646443.66	183.4
ML865_FC589_122	391171.50	3646444.47	182.0
ML865_FC589_123	391184.90	3646453.32	180.7
ML865_FC589_124	391180.68	3646453.32	180.5
ML865_FC589_125	391188.26	3646444.76	177.2
ML865_FC589_126	391178.70	3646448.66	176.0
ML865_FC589_127	391181.64	3646448.24	175.1
ML865_FC589_128	391170.84	3646457.00	170.8
ML865_FC589_129	391184.98	3646459.42	169.5
ML865_FC589_130	391161.63	3646447.89	169.1
ML865_FC589_131	391187.94	3646453.26	168.7
ML865_FC589_132	391180.68	3646452.06	167.8
ML865_FC589_133	391177.98	3646447.89	166.8
ML865_FC589_134	391185.54	3646463.34	166.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_135	391179.42	3646454.88	164.4
ML865_FC589_136	391175.22	3646461.78	161.4
ML865_FC589_137	391182.80	3646450.06	158.1
ML865_FC589_138	391177.74	3646461.36	157.7
ML865_FC589_139	391178.14	3646449.72	154.9
ML865_FC589_140	391170.72	3646446.72	152.2
ML865_FC589_141	391176.32	3646462.34	151.1
ML865_FC589_142	391174.22	3646461.76	150.3
ML865_FC589_143	391182.91	3646457.25	147.4
ML865_FC589_144	391181.16	3646450.94	145.7
ML865_FC589_145	391188.63	3646449.69	145.4
ML865_FC589_146	391172.06	3646462.12	140.1
ML865_FC589_147	391180.26	3646459.38	138.2
ML865_FC589_148	391169.22	3646454.40	136.8
ML865_FC589_149	391189.71	3646455.33	136.4
ML865_FC589_150	391172.76	3646460.82	135.3
ML865_FC589_151	391177.80	3646442.54	133.3
ML865_FC589_152	391178.31	3646456.65	132.5
ML865_FC589_153	391188.06	3646440.90	132.0
ML865_FC589_154	391170.60	3646443.48	131.9
ML865_FC589_155	391175.76	3646444.26	129.0
ML865_FC589_156	391167.18	3646449.99	126.4
ML865_FC589_157	391168.52	3646446.06	126.0
ML865_FC589_158	391184.97	3646449.60	124.2
ML865_FC589_159	391161.12	3646441.92	123.7
ML865_FC589_160	391170.48	3646459.86	123.1
ML865_FC589_161	391186.44	3646440.54	122.7
ML865_FC589_162	391168.88	3646454.46	121.6
ML865_FC589_163	391179.78	3646461.24	121.6
ML865_FC589_164	391162.56	3646448.40	118.7
ML865_FC589_165	391172.25	3646463.37	117.0
ML865_FC589_166	391184.04	3646450.20	114.9
ML865_FC589_167	391177.44	3646448.67	113.5
ML865_FC589_168	391185.78	3646444.26	113.1
ML865_FC589_169	391185.14	3646443.36	112.2
ML865_FC589_170	391187.26	3646455.44	112.1
ML865_FC589_171	391184.97	3646454.67	111.2
ML865_FC589_172	391178.64	3646441.53	110.6
ML865_FC589_173	391173.42	3646444.76	110.2
ML865_FC589_174	391169.30	3646455.06	109.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_175	391168.38	3646456.68	108.0
ML865_FC589_176	391178.82	3646451.10	107.8
ML865_FC589_177	391173.36	3646456.80	106.2
ML865_FC589_178	391171.04	3646451.16	105.6
ML865_FC589_179	391173.24	3646462.92	104.7
ML865_FC589_180	391183.89	3646440.81	104.6
ML865_FC589_181	391171.12	3646460.58	103.5
ML865_FC589_182	391177.46	3646461.78	102.8
ML865_FC589_183	391172.04	3646447.29	101.7
ML865_FC589_184	391182.12	3646459.10	100.9
ML865_FC589_185	391183.80	3646460.64	99.1
ML865_FC589_186	391185.68	3646447.90	98.0
ML865_FC589_187	391163.74	3646441.02	95.7
ML865_FC589_188	391179.56	3646449.96	93.4
ML865_FC589_189	391165.53	3646445.55	92.8
ML865_FC589_190	391186.11	3646446.66	91.3
ML865_FC589_191	391188.50	3646442.94	91.2
ML865_FC589_192	391185.46	3646445.22	91.1
ML865_FC589_193	391163.68	3646444.50	90.4
ML865_FC589_194	391177.17	3646453.14	89.4
ML865_FC589_195	391179.96	3646448.80	87.5
ML865_FC589_196	391167.90	3646453.38	87.0
ML865_FC589_197	391183.59	3646456.26	86.1
ML865_FC589_198	391172.02	3646460.72	85.9
ML865_FC589_199	391161.12	3646446.66	85.6
ML865_FC589_200	391167.90	3646441.98	85.5
ML865_FC589_201	391169.28	3646459.23	84.9
ML865_FC589_202	391165.86	3646442.00	84.5
ML865_FC589_203	391174.35	3646458.09	82.7
ML865_FC589_204	391169.97	3646440.12	82.5
ML865_FC589_205	391175.06	3646462.54	82.0
ML865_FC589_206	391183.92	3646451.62	81.4
ML865_FC589_207	391180.09	3646450.82	81.3
ML865_FC589_208	391185.44	3646455.18	80.3
ML865_FC589_209	391181.22	3646458.00	79.9
ML865_FC589_210	391176.72	3646447.35	79.7
ML865_FC589_211	391188.18	3646442.06	79.4
ML865_FC589_212	391184.76	3646446.74	79.4
ML865_FC589_213	391186.44	3646456.24	77.8
ML865_FC589_214	391162.44	3646443.42	75.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_215	391179.15	3646443.84	74.1
ML865_FC589_216	391176.22	3646465.26	74.1
ML865_FC589_217	391178.13	3646452.15	73.9
ML865_FC589_218	391164.53	3646442.21	73.5
ML865_FC589_219	391172.46	3646448.82	70.6
ML865_FC589_220	391187.67	3646448.28	70.2
ML865_FC589_221	391169.58	3646460.88	69.3
ML865_FC589_222	391184.22	3646456.59	69.1
ML865_FC589_223	391180.08	3646440.66	68.7
ML865_FC589_224	391175.64	3646451.22	68.2
ML865_FC589_225	391181.10	3646460.34	67.3
ML865_FC589_226	391187.04	3646453.70	67.1
ML865_FC589_227	391186.23	3646466.40	66.2
ML865_FC589_228	391175.64	3646448.64	66.0
ML865_FC589_229	391177.52	3646468.76	65.1
ML865_FC589_230	391172.40	3646455.09	65.0
ML865_FC589_231	391184.84	3646455.64	63.3
ML865_FC589_232	391189.80	3646468.53	63.2
ML865_FC589_233	391176.90	3646440.34	62.7
ML865_FC589_234	391166.31	3646455.39	62.0
ML865_FC589_235	391165.98	3646443.66	61.6
ML865_FC589_236	391167.18	3646444.80	61.1
ML865_FC589_237	391166.79	3646443.78	60.0
ML865_FC589_238	391168.68	3646440.12	59.5
ML865_FC589_239	391168.65	3646459.68	59.5
ML865_FC589_240	391178.58	3646458.06	58.6
ML865_FC589_241	391176.63	3646464.48	58.1
ML865_FC589_242	391182.78	3646463.10	57.5
ML865_FC589_243	391184.79	3646442.10	56.5
ML865_FC589_244	391175.97	3646459.23	55.7
ML865_FC589_245	391188.90	3646448.46	53.7
ML865_FC589_246	391160.28	3646441.98	53.4
ML865_FC589_247	391165.68	3646454.22	52.9
ML865_FC589_248	391176.66	3646458.60	51.1
ML865_FC589_249	391186.26	3646458.09	51.0
ML865_FC589_250	391181.88	3646463.24	50.9
ML865_FC589_251	391166.40	3646456.32	50.7
ML865_FC589_252	391184.82	3646457.91	50.7
ML865_FC589_253	391172.68	3646442.94	50.6
ML865_FC589_254	391170.36	3646467.42	50.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_255	391165.02	3646457.88	50.1
ML865_FC589_256	391180.20	3646466.76	50.0
ML865_FC589_257	391166.19	3646447.29	47.9
ML865_FC589_258	391171.20	3646455.12	47.9
ML865_FC589_259	391162.92	3646445.66	47.5
ML865_FC589_260	391173.36	3646450.74	47.3
ML865_FC589_261	391184.58	3646463.82	46.3
ML865_FC589_262	391169.28	3646444.23	45.2
ML865_FC589_263	391170.72	3646453.20	44.5
ML865_FC589_264	391174.44	3646455.36	44.0
ML865_FC589_265	391185.30	3646464.60	44.0
ML865_FC589_266	391178.10	3646459.26	43.4
ML865_FC589_267	391189.92	3646462.47	42.9
ML865_FC589_268	391179.52	3646447.40	41.0
ML865_FC589_269	391177.62	3646464.70	40.9
ML865_FC589_270	391178.36	3646440.04	39.5
ML865_FC589_271	391177.65	3646441.08	39.0
ML865_FC589_272	391170.45	3646448.10	38.8
ML865_FC589_273	391167.92	3646454.82	38.8
ML865_FC589_274	391178.52	3646465.44	38.7
ML865_FC589_275	391175.52	3646451.94	38.6
ML865_FC589_276	391178.55	3646461.93	38.6
ML865_FC589_277	391172.37	3646445.22	38.5
ML865_FC589_278	391170.00	3646452.24	38.1
ML865_FC589_279	391161.99	3646452.54	37.4
ML865_FC589_280	391185.99	3646449.66	36.9
ML865_FC589_281	391176.58	3646461.02	36.9
ML865_FC589_282	391176.27	3646466.55	36.6
ML865_FC589_283	391176.06	3646467.21	35.9
ML865_FC589_284	391162.35	3646440.30	35.4
ML865_FC589_285	391175.19	3646442.22	34.5
ML865_FC589_286	391169.58	3646462.74	34.3
ML865_FC589_287	391173.32	3646463.72	33.7
ML865_FC589_288	391175.82	3646460.33	32.6
ML865_FC589_289	391181.88	3646465.47	31.7
ML865_FC589_290	391186.98	3646457.24	29.4
ML865_FC589_291	391185.87	3646442.46	28.0
ML865_FC589_292	391174.08	3646446.99	26.4
ML865_FC589_293	391183.23	3646464.54	26.4
ML865_FC589_294	391164.42	3646446.42	26.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC589_295	391174.62	3646463.52	26.1
ML865_FC589_296	391167.42	3646460.79	25.9
ML865_FC589_297	391173.66	3646448.55	25.2
ML865_FC589_298	391173.99	3646442.43	25.1
ML865_FC589_299	391170.09	3646447.08	23.8
ML865_FC589_300	391179.99	3646456.08	21.3
ML865_FC589_301	391178.67	3646466.94	20.4
ML865_FC589_302	391185.48	3646456.78	19.9
ML865_FC589_303	391174.72	3646467.06	15.5
ML865_FC589_304	391170.57	3646454.79	10.9
ML865_FC590_1	391174.29	3646494.78	216.4
ML865_FC590_2	391185.78	3646497.48	89.5
ML865_FC590_3	391168.32	3646480.62	73.3
ML865_FC590_4	391174.74	3646486.38	66.1
ML865_FC590_5	391162.77	3646481.67	63.6
ML865_FC590_6	391181.52	3646470.06	52.3
ML865_FC590_7	391186.44	3646480.20	45.7
ML865_FC590_8	391165.62	3646485.06	20.2
ML865_FC591_1	391162.08	3646516.44	1758.8
ML865_FC591_2	391168.68	3646509.00	261.0
ML865_FC591_3	391178.82	3646517.46	251.6
ML865_FC591_4	391176.78	3646514.52	193.0
ML865_FC591_5	391171.50	3646510.83	163.3
ML865_FC591_6	391167.90	3646508.25	159.6
ML865_FC591_7	391164.20	3646506.70	143.4
ML865_FC591_8	391165.68	3646507.14	127.5
ML865_FC591_9	391163.28	3646505.92	124.1
ML865_FC591_10	391182.36	3646517.94	121.2
ML865_FC591_11	391175.07	3646512.93	99.9
ML865_FC591_12	391160.68	3646504.84	94.6
ML865_FC591_13	391167.24	3646512.90	92.0
ML865_FC591_14	391182.00	3646517.10	91.4
ML865_FC591_15	391166.88	3646508.49	90.0
ML865_FC591_16	391170.12	3646510.30	87.3
ML865_FC591_17	391168.80	3646509.78	78.1
ML865_FC591_18	391189.44	3646512.06	74.6
ML865_FC591_19	391187.01	3646520.49	68.3
ML865_FC591_20	391161.84	3646518.36	58.7
ML865_FC591_21	391173.78	3646512.42	57.8
ML865_FC591_22	391189.38	3646522.32	49.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FC591_23	391162.08	3646509.36	48.0
ML865_FC591_24	391171.86	3646512.18	48.0
ML865_FC591_25	391174.56	3646500.90	46.0
ML865_FC591_26	391179.36	3646503.48	45.1
ML865_FC591_27	391168.95	3646512.00	43.9
ML865_FC591_28	391163.34	3646508.46	43.0
ML865_FC591_29	391184.10	3646518.48	38.1
ML865_FC591_30	391188.78	3646521.54	37.3
ML865_FC591_31	391161.27	3646517.69	36.0
ML865_FC591_32	391163.43	3646516.29	26.2
ML865_FD584_1	391210.98	3646299.42	432.6
ML865_FD584_2	391201.98	3646312.68	371.9
ML865_FD584_3	391215.51	3646297.05	166.0
ML865_FD584_4	391190.52	3646299.66	138.3
ML865_FD584_5	391208.82	3646318.32	54.6
ML865_FD584_6	391208.82	3646300.32	47.2
ML865_FD584_7	391214.34	3646297.86	46.7
ML865_FD585_1	391200.60	3646340.25	225.0
ML865_FD585_2	391214.64	3646338.18	182.3
ML865_FD585_3	391212.03	3646325.94	55.8
ML865_FD585_4	391204.74	3646342.56	51.9
ML865_FD585_5	391213.98	3646335.42	51.0
ML865_FD585_6	391215.12	3646321.26	43.2
ML865_FD586_1	391198.56	3646368.48	639.7
ML865_FD586_2	391197.36	3646355.28	83.1
ML865_FD586_3	391206.36	3646371.66	55.1
ML865_FD587_1	391215.54	3646405.56	5059.3
ML865_FD587_2	391202.16	3646403.16	2211.7
ML865_FD587_3	391196.58	3646404.72	1237.7
ML865_FD587_4	391203.24	3646409.28	951.7
ML865_FD587_5	391202.16	3646406.91	774.3
ML865_FD587_6	391193.52	3646405.98	524.1
ML865_FD587_7	391191.74	3646402.40	391.7
ML865_FD587_8	391198.36	3646406.72	344.7
ML865_FD587_9	391197.96	3646405.08	227.2
ML865_FD587_10	391190.01	3646407.06	190.6
ML865_FD587_11	391196.88	3646406.48	174.4
ML865_FD587_12	391191.96	3646409.70	173.2
ML865_FD587_13	391192.65	3646405.47	156.7
ML865_FD587_14	391201.98	3646409.34	143.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD587_15	391190.88	3646407.78	142.4
ML865_FD587_16	391196.88	3646409.58	138.3
ML865_FD587_17	391219.50	3646389.54	136.0
ML865_FD587_18	391204.26	3646409.40	130.2
ML865_FD587_19	391200.72	3646391.82	122.4
ML865_FD587_20	391195.56	3646404.72	121.8
ML865_FD587_21	391194.00	3646407.66	119.4
ML865_FD587_22	391211.16	3646387.20	115.7
ML865_FD587_23	391190.82	3646406.64	110.2
ML865_FD587_24	391190.84	3646409.26	99.4
ML865_FD587_25	391195.95	3646403.64	92.2
ML865_FD587_26	391193.52	3646400.16	71.3
ML865_FD587_27	391193.16	3646407.45	69.8
ML865_FD587_28	391207.36	3646403.66	68.4
ML865_FD587_29	391199.52	3646402.38	58.3
ML865_FD587_30	391209.36	3646384.02	53.2
ML865_FD587_31	391217.58	3646403.70	51.0
ML865_FD587_32	391194.78	3646408.44	49.4
ML865_FD587_33	391192.26	3646392.36	45.1
ML865_FD587_34	391190.34	3646403.94	45.0
ML865_FD587_35	391217.13	3646409.97	44.0
ML865_FD587_36	391190.07	3646402.08	39.9
ML865_FD587_37	391216.98	3646382.61	39.5
ML865_FD587_38	391194.12	3646409.76	33.1
ML865_FD587_39	391192.11	3646386.48	25.8
ML865_FD587_40	391213.47	3646407.27	7.1
ML865_FD588_1	391198.38	3646439.87	1463.2
ML865_FD588_2	391198.98	3646439.76	1308.5
ML865_FD588_3	391196.13	3646414.29	1073.0
ML865_FD588_4	391195.68	3646424.04	1011.4
ML865_FD588_5	391191.06	3646430.58	944.1
ML865_FD588_6	391190.55	3646433.49	897.7
ML865_FD588_7	391212.72	3646414.86	830.6
ML865_FD588_8	391213.62	3646413.24	816.3
ML865_FD588_9	391190.13	3646419.06	636.9
ML865_FD588_10	391192.62	3646424.42	636.1
ML865_FD588_11	391190.16	3646410.84	587.1
ML865_FD588_12	391195.16	3646439.00	490.1
ML865_FD588_13	391195.44	3646438.20	474.3
ML865_FD588_14	391190.40	3646420.62	450.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD588_15	391193.22	3646424.88	400.1
ML865_FD588_16	391193.82	3646423.86	353.1
ML865_FD588_17	391193.66	3646436.96	353.0
ML865_FD588_18	391196.46	3646416.30	329.7
ML865_FD588_19	391198.20	3646413.42	312.0
ML865_FD588_20	391200.24	3646413.90	291.7
ML865_FD588_21	391198.44	3646421.94	285.6
ML865_FD588_22	391196.82	3646421.70	283.1
ML865_FD588_23	391193.91	3646437.66	279.1
ML865_FD588_24	391191.58	3646420.02	273.5
ML865_FD588_25	391195.02	3646426.20	269.1
ML865_FD588_26	391196.67	3646410.78	265.9
ML865_FD588_27	391197.32	3646438.80	234.5
ML865_FD588_28	391192.56	3646436.28	230.8
ML865_FD588_29	391190.64	3646429.98	224.1
ML865_FD588_30	391190.52	3646430.91	222.1
ML865_FD588_31	391192.59	3646439.88	214.9
ML865_FD588_32	391193.94	3646439.20	203.2
ML865_FD588_33	391194.33	3646439.88	203.0
ML865_FD588_34	391195.98	3646413.24	199.7
ML865_FD588_35	391211.82	3646410.12	190.9
ML865_FD588_36	391191.21	3646414.56	183.5
ML865_FD588_37	391192.74	3646413.60	157.9
ML865_FD588_38	391201.41	3646418.37	153.3
ML865_FD588_39	391193.80	3646421.66	144.5
ML865_FD588_40	391216.59	3646417.74	130.6
ML865_FD588_41	391192.68	3646414.83	130.2
ML865_FD588_42	391213.92	3646415.28	128.8
ML865_FD588_43	391192.54	3646437.18	122.1
ML865_FD588_44	391190.19	3646415.13	120.8
ML865_FD588_45	391195.20	3646415.28	120.4
ML865_FD588_46	391199.94	3646419.66	107.2
ML865_FD588_47	391213.86	3646416.48	104.1
ML865_FD588_48	391203.72	3646412.64	99.3
ML865_FD588_49	391193.46	3646410.75	94.5
ML865_FD588_50	391192.94	3646423.02	92.6
ML865_FD588_51	391195.80	3646411.68	89.8
ML865_FD588_52	391191.72	3646418.40	88.5
ML865_FD588_53	391199.70	3646421.04	88.4
ML865_FD588_54	391216.02	3646419.18	87.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD588_55	391209.00	3646412.58	83.2
ML865_FD588_56	391191.94	3646426.72	80.8
ML865_FD588_57	391192.26	3646433.16	70.3
ML865_FD588_58	391199.52	3646416.66	69.8
ML865_FD588_59	391191.72	3646416.24	69.5
ML865_FD588_60	391192.98	3646411.98	68.3
ML865_FD588_61	391191.64	3646424.10	66.0
ML865_FD588_62	391191.78	3646413.42	65.9
ML865_FD588_63	391190.86	3646436.80	65.5
ML865_FD588_64	391191.66	3646432.59	65.3
ML865_FD588_65	391207.98	3646411.92	65.2
ML865_FD588_66	391194.36	3646422.78	64.8
ML865_FD588_67	391197.36	3646411.74	63.5
ML865_FD588_68	391190.68	3646437.88	63.2
ML865_FD588_69	391193.94	3646418.22	60.8
ML865_FD588_70	391192.38	3646426.20	57.6
ML865_FD588_71	391192.08	3646410.96	56.7
ML865_FD588_72	391215.42	3646415.16	55.7
ML865_FD588_73	391191.18	3646412.74	52.4
ML865_FD588_74	391202.76	3646421.10	52.2
ML865_FD588_75	391201.56	3646421.58	50.5
ML865_FD588_76	391194.84	3646427.34	49.7
ML865_FD588_77	391217.94	3646418.46	49.3
ML865_FD588_78	391192.62	3646421.88	47.1
ML865_FD588_79	391204.98	3646421.04	44.3
ML865_FD588_80	391190.40	3646425.12	44.1
ML865_FD588_81	391191.24	3646428.40	41.1
ML865_FD588_82	391203.18	3646420.35	40.6
ML865_FD588_83	391191.63	3646412.22	40.2
ML865_FD588_84	391198.48	3646415.24	37.0
ML865_FD588_85	391195.56	3646420.53	37.0
ML865_FD588_86	391194.78	3646410.57	35.6
ML865_FD588_87	391203.15	3646414.95	32.8
ML865_FD588_88	391194.98	3646416.84	30.9
ML865_FD588_89	391194.36	3646415.43	30.8
ML865_FD588_90	391193.97	3646414.53	19.6
ML865_FD589_1	391196.34	3646463.94	12702.0
ML865_FD589_2	391192.56	3646458.60	7540.1
ML865_FD589_3	391204.10	3646452.68	7181.1
ML865_FD589_4	391204.72	3646457.62	4738.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD589_5	391204.32	3646446.54	4700.0
ML865_FD589_6	391207.42	3646444.84	4659.2
ML865_FD589_7	391202.43	3646458.24	4221.0
ML865_FD589_8	391205.28	3646458.42	3379.0
ML865_FD589_9	391207.50	3646452.72	3231.7
ML865_FD589_10	391192.56	3646456.02	3001.8
ML865_FD589_11	391203.22	3646443.38	2717.5
ML865_FD589_12	391197.81	3646455.03	2638.0
ML865_FD589_13	391193.58	3646460.70	2332.9
ML865_FD589_14	391196.64	3646442.52	2305.9
ML865_FD589_15	391205.07	3646456.38	2198.5
ML865_FD589_16	391206.34	3646444.60	2131.1
ML865_FD589_17	391194.96	3646458.96	2104.2
ML865_FD589_18	391197.97	3646445.37	2084.8
ML865_FD589_19	391202.22	3646454.94	2063.2
ML865_FD589_20	391200.81	3646446.96	2019.2
ML865_FD589_21	391196.61	3646455.57	1972.5
ML865_FD589_22	391206.36	3646442.46	1926.2
ML865_FD589_23	391199.91	3646446.51	1912.6
ML865_FD589_24	391208.07	3646451.16	1884.3
ML865_FD589_25	391198.50	3646446.12	1871.8
ML865_FD589_26	391206.76	3646451.20	1863.5
ML865_FD589_27	391199.34	3646452.46	1848.2
ML865_FD589_28	391200.99	3646456.98	1810.7
ML865_FD589_29	391201.98	3646448.82	1779.0
ML865_FD589_30	391207.62	3646443.39	1745.6
ML865_FD589_31	391198.74	3646453.59	1700.7
ML865_FD589_32	391216.47	3646446.96	1640.7
ML865_FD589_33	391196.19	3646452.06	1555.0
ML865_FD589_34	391198.14	3646444.14	1481.8
ML865_FD589_35	391199.46	3646442.22	1437.7
ML865_FD589_36	391200.24	3646440.42	1399.0
ML865_FD589_37	391197.24	3646451.88	1334.9
ML865_FD589_38	391205.40	3646453.32	1306.6
ML865_FD589_39	391208.90	3646446.16	1256.1
ML865_FD589_40	391204.77	3646442.85	1253.2
ML865_FD589_41	391215.32	3646447.16	1228.5
ML865_FD589_42	391199.67	3646443.39	1225.0
ML865_FD589_43	391199.70	3646451.34	1211.5
ML865_FD589_44	391206.00	3646443.27	1182.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD589_45	391195.26	3646454.34	1153.5
ML865_FD589_46	391208.60	3646444.72	1125.3
ML865_FD589_47	391201.50	3646450.02	1061.8
ML865_FD589_48	391201.19	3646448.87	1001.8
ML865_FD589_49	391204.72	3646444.26	985.4
ML865_FD589_50	391194.42	3646454.76	978.3
ML865_FD589_51	391203.51	3646448.10	966.7
ML865_FD589_52	391197.81	3646458.15	935.6
ML865_FD589_53	391201.38	3646445.46	926.2
ML865_FD589_54	391201.74	3646440.72	925.3
ML865_FD589_55	391194.00	3646449.90	905.8
ML865_FD589_56	391204.59	3646459.32	904.5
ML865_FD589_57	391201.11	3646452.00	892.5
ML865_FD589_58	391194.46	3646442.88	883.6
ML865_FD589_59	391194.60	3646461.84	882.8
ML865_FD589_60	391196.74	3646454.58	869.7
ML865_FD589_61	391199.88	3646457.08	869.5
ML865_FD589_62	391200.21	3646449.78	865.1
ML865_FD589_63	391202.26	3646452.92	856.7
ML865_FD589_64	391201.68	3646454.37	843.7
ML865_FD589_65	391190.34	3646445.52	839.3
ML865_FD589_66	391198.26	3646442.02	837.0
ML865_FD589_67	391203.03	3646446.90	824.4
ML865_FD589_68	391199.18	3646455.34	818.3
ML865_FD589_69	391192.50	3646450.26	777.1
ML865_FD589_70	391204.60	3646450.02	766.9
ML865_FD589_71	391202.52	3646460.28	745.0
ML865_FD589_72	391200.06	3646445.40	744.5
ML865_FD589_73	391203.78	3646445.18	742.0
ML865_FD589_74	391199.52	3646458.15	741.0
ML865_FD589_75	391191.58	3646459.12	723.9
ML865_FD589_76	391190.64	3646458.65	721.1
ML865_FD589_77	391199.79	3646454.52	719.4
ML865_FD589_78	391192.38	3646461.12	719.3
ML865_FD589_79	391195.62	3646455.12	713.8
ML865_FD589_80	391205.70	3646446.36	711.8
ML865_FD589_81	391198.08	3646456.26	699.0
ML865_FD589_82	391192.26	3646444.02	685.2
ML865_FD589_83	391199.34	3646444.62	683.0
ML865_FD589_84	391190.28	3646460.46	635.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD589_85	391198.89	3646447.59	632.0
ML865_FD589_86	391213.47	3646451.73	627.1
ML865_FD589_87	391190.70	3646440.06	620.9
ML865_FD589_88	391194.96	3646451.76	619.5
ML865_FD589_89	391203.78	3646455.93	602.0
ML865_FD589_90	391199.16	3646450.36	600.4
ML865_FD589_91	391200.98	3646451.20	594.6
ML865_FD589_92	391203.62	3646442.02	586.3
ML865_FD589_93	391193.94	3646444.20	569.3
ML865_FD589_94	391192.88	3646452.04	568.5
ML865_FD589_95	391193.42	3646457.48	562.6
ML865_FD589_96	391198.74	3646463.82	550.0
ML865_FD589_97	391197.18	3646449.94	546.4
ML865_FD589_98	391206.42	3646452.90	540.0
ML865_FD589_99	391196.13	3646453.86	539.7
ML865_FD589_100	391209.48	3646462.56	538.4
ML865_FD589_101	391198.29	3646451.10	525.2
ML865_FD589_102	391199.22	3646459.35	519.4
ML865_FD589_103	391192.29	3646454.04	514.2
ML865_FD589_104	391192.10	3646452.42	488.8
ML865_FD589_105	391201.83	3646442.37	466.4
ML865_FD589_106	391196.58	3646459.68	460.2
ML865_FD589_107	391199.56	3646441.04	457.2
ML865_FD589_108	391210.26	3646446.48	456.0
ML865_FD589_109	391190.55	3646441.35	453.4
ML865_FD589_110	391202.16	3646456.35	452.0
ML865_FD589_111	391194.72	3646460.58	446.0
ML865_FD589_112	391211.94	3646446.12	443.1
ML865_FD589_113	391197.60	3646443.45	435.2
ML865_FD589_114	391194.00	3646466.46	427.3
ML865_FD589_115	391202.40	3646444.50	421.4
ML865_FD589_116	391192.90	3646463.51	421.3
ML865_FD589_117	391206.00	3646450.32	421.1
ML865_FD589_118	391192.26	3646454.94	419.9
ML865_FD589_119	391204.59	3646455.12	418.4
ML865_FD589_120	391210.44	3646444.68	389.1
ML865_FD589_121	391201.01	3646455.45	381.8
ML865_FD589_122	391195.80	3646441.53	378.8
ML865_FD589_123	391191.08	3646457.58	378.1
ML865_FD589_124	391197.03	3646445.85	374.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD589_125	391194.54	3646451.16	369.0
ML865_FD589_126	391193.46	3646449.63	362.7
ML865_FD589_127	391193.82	3646459.02	360.9
ML865_FD589_128	391196.76	3646450.86	358.0
ML865_FD589_129	391203.14	3646449.98	350.2
ML865_FD589_130	391215.96	3646448.19	343.8
ML865_FD589_131	391193.55	3646443.00	340.8
ML865_FD589_132	391203.48	3646454.91	338.0
ML865_FD589_133	391203.94	3646450.96	333.2
ML865_FD589_134	391191.56	3646456.24	325.0
ML865_FD589_135	391211.36	3646445.74	320.0
ML865_FD589_136	391194.28	3646456.24	317.1
ML865_FD589_137	391190.78	3646461.64	316.3
ML865_FD589_138	391197.03	3646453.35	315.8
ML865_FD589_139	391201.48	3646459.70	309.0
ML865_FD589_140	391196.34	3646447.01	306.5
ML865_FD589_141	391193.22	3646445.19	297.1
ML865_FD589_142	391195.53	3646445.43	290.9
ML865_FD589_143	391194.84	3646467.54	275.1
ML865_FD589_144	391194.04	3646453.60	267.5
ML865_FD589_145	391192.98	3646441.17	261.0
ML865_FD589_146	391193.30	3646454.60	259.1
ML865_FD589_147	391194.78	3646457.52	254.6
ML865_FD589_148	391205.55	3646454.70	251.8
ML865_FD589_149	391194.42	3646464.15	244.3
ML865_FD589_150	391199.58	3646463.04	240.8
ML865_FD589_151	391219.68	3646452.66	233.8
ML865_FD589_152	391196.23	3646457.67	233.0
ML865_FD589_153	391206.66	3646456.50	232.0
ML865_FD589_154	391195.02	3646464.54	229.3
ML865_FD589_155	391201.00	3646443.52	228.5
ML865_FD589_156	391192.86	3646466.82	225.6
ML865_FD589_157	391195.56	3646448.40	224.7
ML865_FD589_158	391193.76	3646448.34	221.4
ML865_FD589_159	391207.50	3646459.56	221.0
ML865_FD589_160	391218.18	3646469.16	220.9
ML865_FD589_161	391191.57	3646462.56	219.9
ML865_FD589_162	391196.34	3646444.72	217.6
ML865_FD589_163	391199.73	3646448.85	216.7
ML865_FD589_164	391194.90	3646469.40	211.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD589_165	391190.94	3646444.32	208.5
ML865_FD589_166	391196.22	3646440.36	207.5
ML865_FD589_167	391213.32	3646446.18	203.3
ML865_FD589_168	391201.02	3646458.33	199.6
ML865_FD589_169	391190.88	3646449.36	196.4
ML865_FD589_170	391190.36	3646448.42	185.7
ML865_FD589_171	391193.40	3646446.98	173.2
ML865_FD589_172	391190.14	3646442.92	168.1
ML865_FD589_173	391198.16	3646449.06	164.4
ML865_FD589_174	391197.00	3646466.64	163.7
ML865_FD589_175	391209.00	3646447.74	160.3
ML865_FD589_176	391194.24	3646452.04	160.3
ML865_FD589_177	391195.23	3646449.24	156.0
ML865_FD589_178	391210.60	3646450.08	155.9
ML865_FD589_179	391205.40	3646448.98	153.5
ML865_FD589_180	391202.19	3646451.34	150.2
ML865_FD589_181	391202.38	3646461.34	146.2
ML865_FD589_182	391197.12	3646447.92	144.3
ML865_FD589_183	391206.68	3646448.66	143.0
ML865_FD589_184	391197.40	3646462.36	142.5
ML865_FD589_185	391194.42	3646445.78	141.5
ML865_FD589_186	391213.68	3646465.14	137.6
ML865_FD589_187	391206.56	3646455.86	126.3
ML865_FD589_188	391191.91	3646450.67	112.9
ML865_FD589_189	391213.20	3646445.22	110.7
ML865_FD589_190	391199.64	3646460.64	109.3
ML865_FD589_191	391196.82	3646465.47	108.7
ML865_FD589_192	391190.46	3646454.82	106.8
ML865_FD589_193	391196.49	3646461.03	106.6
ML865_FD589_194	391209.30	3646453.14	105.4
ML865_FD589_195	391192.68	3646448.10	102.6
ML865_FD589_196	391211.28	3646447.80	100.5
ML865_FD589_197	391208.10	3646462.26	98.4
ML865_FD589_198	391217.70	3646459.14	93.1
ML865_FD589_199	391207.83	3646454.13	93.0
ML865_FD589_200	391191.48	3646448.25	89.8
ML865_FD589_201	391195.90	3646450.10	88.0
ML865_FD589_202	391194.12	3646465.02	87.7
ML865_FD589_203	391191.22	3646446.65	87.5
ML865_FD589_204	391194.84	3646446.84	84.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD589_205	391219.92	3646460.34	82.5
ML865_FD589_206	391197.92	3646460.40	82.0
ML865_FD589_207	391215.30	3646445.70	78.2
ML865_FD589_208	391203.66	3646461.84	77.9
ML865_FD589_209	391210.20	3646452.66	76.8
ML865_FD589_210	391214.28	3646454.58	75.4
ML865_FD589_211	391190.49	3646451.64	73.4
ML865_FD589_212	391218.66	3646456.38	71.9
ML865_FD589_213	391195.44	3646443.81	71.2
ML865_FD589_214	391200.84	3646465.74	70.5
ML865_FD589_215	391200.54	3646462.50	66.8
ML865_FD589_216	391195.65	3646465.35	64.1
ML865_FD589_217	391190.61	3646453.35	56.6
ML865_FD589_218	391207.30	3646446.98	56.4
ML865_FD589_219	391213.98	3646469.52	55.4
ML865_FD589_220	391210.44	3646450.86	54.3
ML865_FD589_221	391207.35	3646461.39	52.8
ML865_FD589_222	391198.68	3646461.62	48.5
ML865_FD589_223	391200.66	3646468.08	48.5
ML865_FD589_224	391218.48	3646445.94	47.6
ML865_FD589_225	391191.72	3646463.97	33.6
ML865_FD589_226	391193.22	3646462.30	33.3
ML865_FD589_227	391191.96	3646445.25	32.1
ML865_FD589_228	391209.63	3646455.00	30.4
ML865_FD589_229	391212.57	3646446.84	22.9
ML865_FD590_1	391202.01	3646479.66	1700.5
ML865_FD590_2	391218.51	3646497.12	1272.9
ML865_FD590_3	391207.26	3646490.16	1082.4
ML865_FD590_4	391213.35	3646493.79	191.2
ML865_FD590_5	391209.96	3646484.22	188.5
ML865_FD590_6	391196.64	3646487.40	120.0
ML865_FD590_7	391199.01	3646497.39	95.8
ML865_FD590_8	391206.18	3646489.20	79.4
ML865_FD590_9	391217.64	3646488.78	72.9
ML865_FD590_10	391200.78	3646491.36	49.1
ML865_FD590_11	391214.04	3646470.42	46.1
ML865_FD591_1	391209.12	3646515.96	311.9
ML865_FD591_2	391203.84	3646519.68	190.2
ML865_FD591_3	391205.40	3646515.39	185.9
ML865_FD591_4	391217.52	3646517.16	134.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FD591_5	391205.19	3646516.80	112.3
ML865_FD591_6	391206.30	3646527.30	89.0
ML865_FD591_7	391191.68	3646511.44	75.1
ML865_FD591_8	391205.28	3646517.76	72.0
ML865_FD591_9	391203.66	3646514.52	64.0
ML865_FD591_10	391207.92	3646508.34	62.0
ML865_FD591_11	391201.68	3646511.52	48.0
ML865_FD591_12	391213.14	3646515.30	45.9
ML865_FD591_13	391205.82	3646522.14	45.1
ML865_FD591_14	391216.80	3646515.57	38.6
ML865_FD591_15	391207.38	3646517.49	37.2
ML865_FE584_1	391222.29	3646298.97	877.5
ML865_FE584_2	391224.96	3646301.67	387.2
ML865_FE584_3	391239.42	3646312.62	337.9
ML865_FE584_4	391230.96	3646303.14	154.0
ML865_FE584_5	391225.74	3646301.82	114.5
ML865_FE584_6	391242.84	3646318.32	74.6
ML865_FE584_7	391231.02	3646319.16	45.0
ML865_FE584_8	391238.37	3646317.30	40.9
ML865_FE585_1	391231.32	3646349.76	953.1
ML865_FE585_2	391245.06	3646324.32	930.2
ML865_FE585_3	391230.72	3646327.20	141.2
ML865_FE585_4	391225.38	3646324.62	130.7
ML865_FE585_5	391242.12	3646321.32	76.7
ML865_FE585_6	391246.56	3646333.08	74.7
ML865_FE585_7	391221.67	3646342.82	63.9
ML865_FE585_8	391232.16	3646342.14	51.9
ML865_FE585_9	391240.56	3646320.48	44.8
ML865_FE585_10	391233.42	3646344.24	43.8
ML865_FE586_1	391246.44	3646373.40	367.4
ML865_FE586_2	391237.62	3646374.90	50.9
ML865_FE586_3	391245.36	3646374.12	45.8
ML865_FE586_4	391246.62	3646351.74	42.3
ML865_FE586_5	391247.49	3646379.73	39.1
ML865_FE587_1	391241.46	3646389.78	930.2
ML865_FE587_2	391243.74	3646393.08	540.6
ML865_FE587_3	391243.68	3646384.98	331.0
ML865_FE587_4	391241.10	3646409.70	314.8
ML865_FE587_5	391245.56	3646403.22	294.6
ML865_FE587_6	391244.58	3646386.12	274.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE587_7	391247.70	3646395.48	240.9
ML865_FE587_8	391241.37	3646395.66	227.9
ML865_FE587_9	391223.04	3646407.72	211.0
ML865_FE587_10	391244.22	3646400.88	141.9
ML865_FE587_11	391241.55	3646388.19	103.3
ML865_FE587_12	391233.84	3646405.26	103.2
ML865_FE587_13	391249.38	3646393.44	87.7
ML865_FE587_14	391245.54	3646408.74	71.6
ML865_FE587_15	391248.36	3646397.28	70.5
ML865_FE587_16	391246.20	3646380.54	68.1
ML865_FE587_17	391248.18	3646402.80	65.9
ML865_FE587_18	391233.36	3646409.16	65.2
ML865_FE587_19	391232.46	3646396.38	61.6
ML865_FE587_20	391244.22	3646381.20	52.2
ML865_FE587_21	391224.66	3646408.08	51.0
ML865_FE587_22	391249.38	3646397.52	50.2
ML865_FE587_23	391249.68	3646403.49	39.8
ML865_FE588_1	391248.66	3646424.34	3029.6
ML865_FE588_2	391232.85	3646424.67	1032.3
ML865_FE588_3	391229.10	3646421.52	938.7
ML865_FE588_4	391220.10	3646420.02	904.7
ML865_FE588_5	391237.20	3646437.54	866.3
ML865_FE588_6	391237.68	3646434.00	793.0
ML865_FE588_7	391238.34	3646437.27	740.5
ML865_FE588_8	391236.21	3646430.10	699.0
ML865_FE588_9	391240.92	3646436.22	696.7
ML865_FE588_10	391242.48	3646431.84	661.1
ML865_FE588_11	391237.44	3646430.56	616.5
ML865_FE588_12	391238.16	3646435.23	590.9
ML865_FE588_13	391234.80	3646427.58	585.6
ML865_FE588_14	391236.93	3646439.58	568.0
ML865_FE588_15	391234.08	3646439.80	553.9
ML865_FE588_16	391236.72	3646427.91	535.6
ML865_FE588_17	391238.37	3646432.68	490.4
ML865_FE588_18	391236.30	3646427.01	458.3
ML865_FE588_19	391235.32	3646438.92	454.8
ML865_FE588_20	391235.76	3646428.42	437.3
ML865_FE588_21	391236.38	3646428.82	412.7
ML865_FE588_22	391245.72	3646431.84	383.8
ML865_FE588_23	391235.44	3646426.50	383.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE588_24	391237.32	3646431.63	379.3
ML865_FE588_25	391241.54	3646432.10	375.4
ML865_FE588_26	391222.08	3646432.08	342.1
ML865_FE588_27	391234.02	3646426.26	334.6
ML865_FE588_28	391248.39	3646431.84	310.8
ML865_FE588_29	391239.90	3646436.58	301.5
ML865_FE588_30	391245.54	3646434.54	296.9
ML865_FE588_31	391240.44	3646430.61	293.1
ML865_FE588_32	391225.08	3646430.46	286.2
ML865_FE588_33	391239.42	3646431.54	263.8
ML865_FE588_34	391234.20	3646422.93	259.1
ML865_FE588_35	391246.89	3646411.35	250.6
ML865_FE588_36	391228.08	3646418.34	244.5
ML865_FE588_37	391237.98	3646428.36	238.8
ML865_FE588_38	391236.52	3646438.56	227.3
ML865_FE588_39	391224.78	3646431.09	218.3
ML865_FE588_40	391248.75	3646435.11	206.9
ML865_FE588_41	391247.64	3646435.68	201.2
ML865_FE588_42	391223.49	3646433.43	198.7
ML865_FE588_43	391243.44	3646425.78	187.1
ML865_FE588_44	391241.82	3646430.88	185.7
ML865_FE588_45	391248.72	3646432.80	182.0
ML865_FE588_46	391239.92	3646434.04	167.2
ML865_FE588_47	391238.00	3646438.68	165.3
ML865_FE588_48	391239.18	3646438.14	162.9
ML865_FE588_49	391239.22	3646429.84	156.8
ML865_FE588_50	391243.02	3646435.20	151.8
ML865_FE588_51	391244.40	3646418.94	151.4
ML865_FE588_52	391222.44	3646410.36	151.1
ML865_FE588_53	391223.85	3646432.20	146.9
ML865_FE588_54	391227.78	3646419.78	137.4
ML865_FE588_55	391245.51	3646432.77	135.1
ML865_FE588_56	391231.86	3646423.74	120.1
ML865_FE588_57	391241.10	3646420.86	119.9
ML865_FE588_58	391222.83	3646430.91	118.4
ML865_FE588_59	391239.54	3646432.86	115.8
ML865_FE588_60	391237.86	3646429.26	114.4
ML865_FE588_61	391239.09	3646428.66	114.2
ML865_FE588_62	391243.83	3646429.20	112.2
ML865_FE588_63	391241.22	3646427.58	99.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE588_64	391243.98	3646424.70	99.4
ML865_FE588_65	391246.68	3646432.68	97.0
ML865_FE588_66	391221.42	3646433.04	92.1
ML865_FE588_67	391233.18	3646412.22	90.4
ML865_FE588_68	391243.98	3646436.46	90.2
ML865_FE588_69	391234.38	3646421.10	88.5
ML865_FE588_70	391249.86	3646429.50	86.9
ML865_FE588_71	391238.53	3646430.96	85.4
ML865_FE588_72	391244.58	3646433.19	83.2
ML865_FE588_73	391236.18	3646424.94	82.7
ML865_FE588_74	391245.84	3646427.97	79.8
ML865_FE588_75	391247.13	3646435.08	79.7
ML865_FE588_76	391244.56	3646427.82	78.4
ML865_FE588_77	391244.51	3646431.27	78.1
ML865_FE588_78	391227.48	3646413.72	76.7
ML865_FE588_79	391238.52	3646426.74	76.5
ML865_FE588_80	391238.98	3646439.40	75.5
ML865_FE588_81	391240.02	3646437.66	71.9
ML865_FE588_82	391242.99	3646439.01	71.1
ML865_FE588_83	391247.55	3646428.63	70.3
ML865_FE588_84	391247.10	3646417.62	69.8
ML865_FE588_85	391237.98	3646425.71	69.6
ML865_FE588_86	391242.22	3646435.04	69.5
ML865_FE588_87	391226.85	3646421.52	67.0
ML865_FE588_88	391244.88	3646438.14	66.1
ML865_FE588_89	391221.76	3646431.28	65.6
ML865_FE588_90	391241.52	3646439.37	64.8
ML865_FE588_91	391241.14	3646420.30	62.5
ML865_FE588_92	391248.50	3646429.90	61.4
ML865_FE588_93	391227.99	3646421.85	57.9
ML865_FE588_94	391247.58	3646434.48	56.8
ML865_FE588_95	391241.16	3646437.30	50.5
ML865_FE588_96	391231.47	3646422.81	50.4
ML865_FE588_97	391232.22	3646414.98	48.2
ML865_FE588_98	391245.66	3646431.00	48.0
ML865_FE588_99	391239.99	3646429.26	46.2
ML865_FE588_100	391241.70	3646410.54	45.2
ML865_FE588_101	391246.98	3646431.03	39.5
ML865_FE588_102	391241.00	3646429.02	35.5
ML865_FE588_103	391244.88	3646434.21	33.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE588_104	391244.60	3646435.32	31.9
ML865_FE588_105	391247.85	3646432.68	24.2
ML865_FE588_106	391240.68	3646439.82	23.4
ML865_FE588_107	391248.72	3646428.18	22.8
ML865_FE588_108	391249.30	3646427.00	22.1
ML865_FE589_1	391231.20	3646465.44	40600.0
ML865_FE589_2	391236.66	3646462.14	9997.0
ML865_FE589_3	391227.60	3646451.64	9499.1
ML865_FE589_4	391226.30	3646450.72	3326.9
ML865_FE589_5	391232.25	3646442.61	2883.7
ML865_FE589_6	391230.03	3646446.93	2691.1
ML865_FE589_7	391234.20	3646446.36	2487.1
ML865_FE589_8	391230.60	3646445.22	2182.8
ML865_FE589_9	391232.46	3646444.88	2064.2
ML865_FE589_10	391235.46	3646441.68	1858.2
ML865_FE589_11	391227.78	3646445.34	1788.7
ML865_FE589_12	391235.70	3646446.24	1422.8
ML865_FE589_13	391227.60	3646446.51	1413.5
ML865_FE589_14	391228.86	3646448.04	1397.2
ML865_FE589_15	391228.66	3646458.34	1375.7
ML865_FE589_16	391235.64	3646440.32	1272.7
ML865_FE589_17	391239.24	3646451.16	1261.9
ML865_FE589_18	391233.14	3646443.64	1062.0
ML865_FE589_19	391226.28	3646453.50	1029.1
ML865_FE589_20	391231.08	3646447.08	1009.2
ML865_FE589_21	391248.06	3646464.48	904.9
ML865_FE589_22	391231.32	3646451.52	835.8
ML865_FE589_23	391233.12	3646446.60	826.4
ML865_FE589_24	391220.82	3646452.06	743.6
ML865_FE589_25	391236.60	3646442.43	489.5
ML865_FE589_26	391246.23	3646462.80	448.1
ML865_FE589_27	391230.60	3646443.54	446.5
ML865_FE589_28	391231.76	3646457.60	416.3
ML865_FE589_29	391227.24	3646452.72	364.6
ML865_FE589_30	391231.77	3646447.53	347.3
ML865_FE589_31	391229.88	3646448.64	343.4
ML865_FE589_32	391237.04	3646464.56	338.6
ML865_FE589_33	391223.64	3646465.92	334.5
ML865_FE589_34	391245.36	3646465.26	331.3
ML865_FE589_35	391229.70	3646443.90	307.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE589_36	391235.34	3646442.49	307.2
ML865_FE589_37	391222.08	3646467.90	307.0
ML865_FE589_38	391226.94	3646449.18	301.0
ML865_FE589_39	391237.20	3646441.44	290.2
ML865_FE589_40	391235.58	3646465.86	274.1
ML865_FE589_41	391244.32	3646466.70	262.8
ML865_FE589_42	391238.07	3646440.24	262.5
ML865_FE589_43	391230.68	3646449.86	253.7
ML865_FE589_44	391243.92	3646463.88	235.1
ML865_FE589_45	391231.56	3646459.35	233.4
ML865_FE589_46	391248.26	3646442.36	228.9
ML865_FE589_47	391237.98	3646446.45	224.1
ML865_FE589_48	391227.66	3646454.46	216.5
ML865_FE589_49	391226.76	3646466.16	207.1
ML865_FE589_50	391242.84	3646467.06	204.3
ML865_FE589_51	391233.38	3646440.76	200.5
ML865_FE589_52	391229.34	3646449.84	192.8
ML865_FE589_53	391249.68	3646441.44	182.0
ML865_FE589_54	391247.76	3646450.38	181.4
ML865_FE589_55	391224.96	3646445.02	181.3
ML865_FE589_56	391223.82	3646445.37	181.0
ML865_FE589_57	391224.84	3646449.39	173.0
ML865_FE589_58	391236.12	3646444.08	172.4
ML865_FE589_59	391235.16	3646465.05	168.8
ML865_FE589_60	391247.82	3646445.25	164.3
ML865_FE589_61	391230.54	3646452.84	163.0
ML865_FE589_62	391243.29	3646462.41	160.2
ML865_FE589_63	391247.16	3646462.62	158.9
ML865_FE589_64	391234.70	3646463.56	158.1
ML865_FE589_65	391247.43	3646464.12	146.0
ML865_FE589_66	391247.21	3646468.79	138.2
ML865_FE589_67	391229.76	3646465.68	135.2
ML865_FE589_68	391233.90	3646441.98	130.1
ML865_FE589_69	391249.38	3646457.49	123.7
ML865_FE589_70	391224.00	3646459.80	123.0
ML865_FE589_71	391247.76	3646468.26	122.1
ML865_FE589_72	391237.92	3646449.00	118.0
ML865_FE589_73	391236.60	3646447.44	117.5
ML865_FE589_74	391229.16	3646456.20	116.6
ML865_FE589_75	391240.17	3646457.64	115.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE589_76	391246.24	3646444.44	107.6
ML865_FE589_77	391246.68	3646451.70	106.9
ML865_FE589_78	391246.74	3646449.60	106.3
ML865_FE589_79	391238.16	3646443.51	100.8
ML865_FE589_80	391246.56	3646457.40	100.6
ML865_FE589_81	391229.46	3646459.35	99.1
ML865_FE589_82	391220.22	3646447.86	98.9
ML865_FE589_83	391225.62	3646446.66	96.5
ML865_FE589_84	391242.66	3646448.88	96.5
ML865_FE589_85	391245.39	3646444.29	94.8
ML865_FE589_86	391224.54	3646454.16	94.1
ML865_FE589_87	391238.28	3646463.88	89.5
ML865_FE589_88	391223.01	3646444.62	87.6
ML865_FE589_89	391240.98	3646440.42	87.0
ML865_FE589_90	391244.08	3646462.64	85.8
ML865_FE589_91	391232.79	3646457.76	84.5
ML865_FE589_92	391225.98	3646464.00	83.2
ML865_FE589_93	391246.35	3646466.55	83.2
ML865_FE589_94	391225.08	3646461.60	82.9
ML865_FE589_95	391230.44	3646456.66	82.4
ML865_FE589_96	391224.90	3646460.40	78.3
ML865_FE589_97	391239.54	3646446.54	78.0
ML865_FE589_98	391249.41	3646462.80	76.6
ML865_FE589_99	391239.96	3646460.76	75.8
ML865_FE589_100	391245.00	3646449.48	75.4
ML865_FE589_101	391225.65	3646466.01	75.0
ML865_FE589_102	391242.36	3646454.34	72.2
ML865_FE589_103	391245.36	3646451.28	72.1
ML865_FE589_104	391235.82	3646458.72	71.6
ML865_FE589_105	391220.64	3646445.16	69.3
ML865_FE589_106	391248.36	3646462.08	64.5
ML865_FE589_107	391224.54	3646465.32	61.3
ML865_FE589_108	391228.05	3646455.30	60.8
ML865_FE589_109	391233.51	3646464.66	59.1
ML865_FE589_110	391226.22	3646468.26	58.7
ML865_FE589_111	391227.66	3646460.07	57.5
ML865_FE589_112	391224.45	3646455.03	55.0
ML865_FE589_113	391229.16	3646467.12	54.5
ML865_FE589_114	391236.24	3646451.34	54.3
ML865_FE589_115	391239.24	3646462.56	53.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE589_116	391240.50	3646441.68	53.3
ML865_FE589_117	391224.96	3646469.88	52.6
ML865_FE589_118	391238.52	3646457.73	52.0
ML865_FE589_119	391239.00	3646459.20	51.7
ML865_FE589_120	391233.66	3646447.77	51.4
ML865_FE589_121	391220.97	3646469.10	50.1
ML865_FE589_122	391224.44	3646464.54	50.0
ML865_FE589_123	391235.94	3646448.88	49.9
ML865_FE589_124	391228.44	3646453.08	49.6
ML865_FE589_125	391224.57	3646447.20	49.3
ML865_FE589_126	391220.50	3646445.78	49.0
ML865_FE589_127	391246.08	3646458.66	48.8
ML865_FE589_128	391222.14	3646447.74	48.5
ML865_FE589_129	391245.54	3646468.20	48.2
ML865_FE589_130	391234.56	3646461.60	45.3
ML865_FE589_131	391235.73	3646445.01	44.7
ML865_FE589_132	391224.72	3646452.96	44.6
ML865_FE589_133	391230.66	3646463.58	44.5
ML865_FE589_134	391240.06	3646452.68	43.6
ML865_FE589_135	391240.72	3646462.70	43.5
ML865_FE589_136	391248.69	3646444.26	39.9
ML865_FE589_137	391240.32	3646440.80	37.4
ML865_FE589_138	391246.80	3646443.81	36.6
ML865_FE589_139	391241.82	3646441.83	35.4
ML865_FE589_140	391223.96	3646446.60	34.9
ML865_FE589_141	391228.26	3646448.97	34.8
ML865_FE589_142	391241.91	3646452.63	26.3
ML865_FE589_143	391243.02	3646451.46	25.0
ML865_FE589_144	391234.83	3646460.70	21.5
ML865_FE589_145	391244.40	3646452.42	20.6
ML865_FE589_146	391238.20	3646455.72	17.2
ML865_FE590_1	391231.68	3646499.28	870.9
ML865_FE590_2	391230.72	3646482.18	331.3
ML865_FE590_3	391249.08	3646497.15	327.8
ML865_FE590_4	391247.40	3646491.87	237.2
ML865_FE590_5	391247.82	3646490.85	189.0
ML865_FE590_6	391246.84	3646492.90	157.1
ML865_FE590_7	391249.20	3646489.32	148.4
ML865_FE590_8	391244.16	3646496.37	126.9
ML865_FE590_9	391248.67	3646489.80	125.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE590_10	391242.57	3646499.22	119.1
ML865_FE590_11	391249.86	3646488.06	116.2
ML865_FE590_12	391243.96	3646497.68	115.5
ML865_FE590_13	391233.42	3646493.76	110.7
ML865_FE590_14	391239.42	3646479.00	110.4
ML865_FE590_15	391248.81	3646488.69	91.4
ML865_FE590_16	391244.88	3646497.54	90.6
ML865_FE590_17	391244.82	3646495.86	85.9
ML865_FE590_18	391230.42	3646487.46	80.2
ML865_FE590_19	391232.76	3646485.72	79.0
ML865_FE590_20	391246.02	3646495.38	74.2
ML865_FE590_21	391222.29	3646470.51	66.8
ML865_FE590_22	391249.02	3646492.20	63.1
ML865_FE590_23	391245.45	3646494.24	44.4
ML865_FE590_24	391236.70	3646488.16	37.4
ML865_FE590_25	391242.51	3646479.18	37.2
ML865_FE591_1	391234.64	3646512.82	1117.0
ML865_FE591_2	391238.22	3646507.20	659.4
ML865_FE591_3	391240.02	3646504.02	653.8
ML865_FE591_4	391224.52	3646505.24	649.5
ML865_FE591_5	391235.28	3646511.40	526.1
ML865_FE591_6	391233.42	3646514.25	415.4
ML865_FE591_7	391231.29	3646518.81	397.1
ML865_FE591_8	391235.94	3646510.41	366.2
ML865_FE591_9	391227.81	3646523.79	340.0
ML865_FE591_10	391242.04	3646500.54	334.2
ML865_FE591_11	391232.10	3646516.80	320.4
ML865_FE591_12	391232.98	3646515.46	305.1
ML865_FE591_13	391228.08	3646522.86	245.8
ML865_FE591_14	391230.30	3646519.62	243.5
ML865_FE591_15	391229.88	3646520.58	237.7
ML865_FE591_16	391238.91	3646505.79	200.6
ML865_FE591_17	391230.93	3646517.46	195.1
ML865_FE591_18	391241.16	3646502.37	192.5
ML865_FE591_19	391236.72	3646509.12	146.5
ML865_FE591_20	391226.40	3646526.52	108.8
ML865_FE591_21	391242.66	3646515.54	106.7
ML865_FE591_22	391229.13	3646521.36	101.3
ML865_FE591_23	391241.28	3646510.32	99.5
ML865_FE591_24	391241.79	3646516.65	83.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FE591_25	391233.30	3646529.76	79.2
ML865_FE591_26	391240.47	3646501.71	73.8
ML865_FE591_27	391248.86	3646511.78	72.3
ML865_FE591_28	391242.90	3646519.56	71.2
ML865_FE591_29	391225.44	3646527.75	67.4
ML865_FE591_30	391230.84	3646501.98	67.1
ML865_FE591_31	391226.76	3646525.56	63.3
ML865_FE591_32	391224.60	3646518.18	60.9
ML865_FE591_33	391224.34	3646529.54	59.5
ML865_FE591_34	391223.10	3646517.46	56.2
ML865_FE591_35	391237.05	3646519.95	55.5
ML865_FE591_36	391233.06	3646517.58	55.3
ML865_FE591_37	391242.24	3646509.12	54.2
ML865_FE591_38	391222.26	3646511.64	51.9
ML865_FE591_39	391234.95	3646509.78	47.8
ML865_FE591_40	391236.09	3646528.98	46.9
ML865_FE591_41	391245.54	3646511.52	46.2
ML865_FE591_42	391243.08	3646524.96	45.1
ML865_FE591_43	391231.92	3646519.92	36.1
ML865_FE591_44	391222.65	3646517.88	30.1
ML865_FE591_45	391225.92	3646525.78	28.9
ML865_FE592_1	391248.66	3646532.52	120.2
ML865_FE592_2	391241.10	3646530.30	44.3
ML865_FF584_1	391276.38	3646318.26	260.3
ML865_FF584_2	391278.45	3646313.19	114.1
ML865_FF584_3	391278.36	3646311.18	53.7
ML865_FF584_4	391259.28	3646310.16	50.3
ML865_FF584_5	391266.90	3646312.08	37.5
ML865_FF585_1	391265.64	3646343.67	138.7
ML865_FF585_2	391250.16	3646322.10	63.6
ML865_FF585_3	391269.96	3646331.64	56.9
ML865_FF585_4	391274.70	3646322.64	53.4
ML865_FF585_5	391258.32	3646340.10	49.2
ML865_FF586_1	391261.62	3646373.28	144.5
ML865_FF586_2	391260.22	3646370.34	34.7
ML865_FF587_1	391278.99	3646394.16	498.2
ML865_FF587_2	391262.94	3646391.04	407.7
ML865_FF587_3	391268.34	3646381.35	191.7
ML865_FF587_4	391261.14	3646392.66	124.0
ML865_FF587_5	391264.02	3646406.04	96.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF587_6	391271.76	3646404.84	95.1
ML865_FF587_7	391269.72	3646382.43	94.8
ML865_FF587_8	391277.49	3646394.40	84.1
ML865_FF587_9	391279.29	3646401.84	82.3
ML865_FF587_10	391273.74	3646395.60	81.9
ML865_FF587_11	391275.00	3646408.56	77.0
ML865_FF587_12	391267.11	3646398.78	73.9
ML865_FF587_13	391279.50	3646409.04	66.2
ML865_FF587_14	391266.12	3646402.26	64.2
ML865_FF587_15	391258.32	3646395.12	63.5
ML865_FF587_16	391264.44	3646385.13	62.3
ML865_FF587_17	391267.20	3646388.82	58.7
ML865_FF587_18	391256.52	3646390.26	58.6
ML865_FF587_19	391258.74	3646397.76	58.4
ML865_FF587_20	391260.78	3646381.65	58.0
ML865_FF587_21	391259.46	3646393.68	54.9
ML865_FF587_22	391250.40	3646409.76	53.9
ML865_FF587_23	391277.58	3646399.92	52.9
ML865_FF587_24	391273.08	3646396.80	52.7
ML865_FF587_25	391269.27	3646389.39	50.3
ML865_FF587_26	391270.74	3646400.46	50.0
ML865_FF587_27	391266.18	3646393.86	45.2
ML865_FF587_28	391253.52	3646381.98	43.3
ML865_FF587_29	391267.08	3646405.89	35.2
ML865_FF587_30	391266.30	3646409.10	35.2
ML865_FF587_31	391258.47	3646389.27	27.5
ML865_FF587_32	391255.83	3646394.82	12.8
ML865_FF588_1	391255.80	3646434.24	5630.9
ML865_FF588_2	391252.80	3646434.54	3752.2
ML865_FF588_3	391264.86	3646435.44	3037.8
ML865_FF588_4	391269.57	3646437.87	3022.8
ML865_FF588_5	391267.68	3646435.80	2780.8
ML865_FF588_6	391263.78	3646435.32	2613.2
ML865_FF588_7	391260.42	3646424.31	2446.7
ML865_FF588_8	391269.84	3646436.88	2235.9
ML865_FF588_9	391260.60	3646425.54	1956.8
ML865_FF588_10	391252.32	3646435.20	1663.6
ML865_FF588_11	391267.47	3646433.97	1626.4
ML865_FF588_12	391250.14	3646431.88	1320.9
ML865_FF588_13	391278.87	3646415.31	1295.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF588_14	391278.39	3646419.63	1251.5
ML865_FF588_15	391277.70	3646436.22	1228.3
ML865_FF588_16	391274.01	3646437.21	1175.0
ML865_FF588_17	391253.58	3646417.26	928.1
ML865_FF588_18	391275.06	3646434.36	798.9
ML865_FF588_20	391272.90	3646437.28	739.1
ML865_FF588_21	391266.06	3646435.92	731.6
ML865_FF588_22	391254.54	3646431.90	672.5
ML865_FF588_23	391274.91	3646435.11	512.5
ML865_FF588_24	391279.71	3646436.37	442.0
ML865_FF588_25	391275.42	3646436.46	421.4
ML865_FF588_26	391274.40	3646428.00	408.2
ML865_FF588_27	391275.33	3646438.17	406.5
ML865_FF588_28	391274.46	3646433.86	373.5
ML865_FF588_29	391258.26	3646428.78	372.6
ML865_FF588_30	391253.76	3646429.74	358.2
ML865_FF588_31	391279.82	3646439.44	342.0
ML865_FF588_32	391277.70	3646410.24	331.3
ML865_FF588_33	391269.36	3646435.92	319.2
ML865_FF588_34	391251.81	3646430.97	305.5
ML865_FF588_35	391251.24	3646418.88	303.7
ML865_FF588_36	391276.98	3646427.94	294.5
ML865_FF588_37	391257.50	3646431.90	292.4
ML865_FF588_38	391278.78	3646421.88	290.2
ML865_FF588_39	391256.28	3646431.32	281.2
ML865_FF588_40	391276.69	3646437.63	272.7
ML865_FF588_41	391263.82	3646433.58	269.2
ML865_FF588_42	391276.80	3646418.58	260.9
ML865_FF588_43	391262.73	3646434.36	234.7
ML865_FF588_44	391253.64	3646432.41	229.5
ML865_FF588_45	391266.87	3646428.99	229.3
ML865_FF588_46	391264.04	3646439.24	222.5
ML865_FF588_47	391277.40	3646417.14	211.2
ML865_FF588_48	391254.78	3646430.64	211.2
ML865_FF588_49	391251.66	3646434.36	210.7
ML865_FF588_50	391252.28	3646429.80	205.9
ML865_FF588_51	391269.06	3646439.40	202.7
ML865_FF588_52	391262.97	3646438.38	201.1
ML865_FF588_53	391273.38	3646417.32	198.3
ML865_FF588_54	391252.32	3646413.90	193.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF588_55	391279.96	3646418.42	193.5
ML865_FF588_56	391252.89	3646417.02	191.4
ML865_FF588_57	391279.86	3646426.26	180.3
ML865_FF588_58	391267.62	3646439.04	175.0
ML865_FF588_59	391264.95	3646433.67	174.2
ML865_FF588_60	391273.50	3646438.44	171.3
ML865_FF588_61	391276.47	3646417.92	170.7
ML865_FF588_62	391271.58	3646437.51	167.2
ML865_FF588_63	391251.36	3646429.22	166.7
ML865_FF588_64	391250.78	3646430.55	164.6
ML865_FF588_65	391266.86	3646439.90	159.4
ML865_FF588_66	391250.64	3646433.40	157.1
ML865_FF588_67	391278.82	3646432.32	151.1
ML865_FF588_68	391265.67	3646432.38	144.4
ML865_FF588_69	391261.86	3646415.16	141.3
ML865_FF588_70	391265.28	3646439.04	139.1
ML865_FF588_71	391275.78	3646420.58	138.8
ML865_FF588_72	391261.92	3646410.60	134.2
ML865_FF588_73	391274.24	3646424.06	131.7
ML865_FF588_74	391278.00	3646433.82	118.6
ML865_FF588_75	391265.79	3646427.55	114.6
ML865_FF588_76	391253.64	3646436.10	113.5
ML865_FF588_77	391279.14	3646434.69	110.8
ML865_FF588_78	391279.38	3646437.72	104.6
ML865_FF588_79	391271.58	3646436.06	104.2
ML865_FF588_80	391270.14	3646439.97	103.0
ML865_FF588_81	391277.58	3646412.44	101.9
ML865_FF588_82	391267.74	3646428.30	100.3
ML865_FF588_83	391279.86	3646430.64	98.4
ML865_FF588_84	391277.68	3646434.10	97.2
ML865_FF588_85	391255.26	3646438.80	96.2
ML865_FF588_86	391252.65	3646432.98	96.0
ML865_FF588_87	391270.72	3646412.84	95.6
ML865_FF588_88	391275.54	3646428.30	93.6
ML865_FF588_89	391260.42	3646420.50	92.6
ML865_FF588_90	391264.38	3646431.84	91.5
ML865_FF588_91	391261.14	3646438.27	91.3
ML865_FF588_92	391275.51	3646423.98	89.9
ML865_FF588_93	391272.06	3646427.82	85.9
ML865_FF588_94	391266.78	3646432.86	85.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF588_95	391278.20	3646413.58	85.0
ML865_FF588_96	391269.48	3646433.10	85.0
ML865_FF588_97	391278.66	3646417.14	84.9
ML865_FF588_98	391264.26	3646421.16	84.3
ML865_FF588_99	391277.59	3646431.41	84.0
ML865_FF588_100	391276.50	3646416.12	83.5
ML865_FF588_101	391262.04	3646439.58	81.3
ML865_FF588_102	391276.62	3646424.88	80.1
ML865_FF588_103	391261.86	3646432.50	79.3
ML865_FF588_104	391271.88	3646422.12	76.0
ML865_FF588_105	391278.39	3646417.89	75.1
ML865_FF588_106	391278.30	3646425.39	72.7
ML865_FF588_107	391266.48	3646410.84	71.8
ML865_FF588_108	391276.74	3646421.16	71.5
ML865_FF588_109	391260.54	3646435.02	71.3
ML865_FF588_110	391275.69	3646432.29	71.2
ML865_FF588_111	391274.34	3646429.14	70.9
ML865_FF588_112	391257.93	3646430.79	67.4
ML865_FF588_113	391278.84	3646424.82	66.6
ML865_FF588_114	391275.48	3646418.91	65.6
ML865_FF588_115	391277.34	3646413.42	64.0
ML865_FF588_116	391252.05	3646432.41	63.9
ML865_FF588_117	391265.16	3646429.02	63.3
ML865_FF588_118	391276.05	3646412.58	63.2
ML865_FF588_119	391255.12	3646428.64	62.2
ML865_FF588_120	391253.58	3646431.16	62.0
ML865_FF588_121	391250.94	3646415.34	61.4
ML865_FF588_122	391270.02	3646434.27	61.0
ML865_FF588_123	391255.92	3646436.64	61.0
ML865_FF588_124	391276.26	3646422.21	60.9
ML865_FF588_125	391265.04	3646418.64	60.7
ML865_FF588_126	391272.42	3646415.28	59.7
ML865_FF588_127	391259.76	3646415.49	59.2
ML865_FF588_128	391250.34	3646427.04	59.2
ML865_FF588_129	391274.70	3646413.42	57.8
ML865_FF588_130	391251.36	3646426.86	57.4
ML865_FF588_131	391275.75	3646426.77	57.3
ML865_FF588_132	391279.52	3646413.12	57.1
ML865_FF588_133	391274.64	3646432.44	56.6
ML865_FF588_134	391275.30	3646424.88	56.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF588_135	391263.48	3646417.26	55.5
ML865_FF588_136	391273.02	3646419.84	55.4
ML865_FF588_137	391275.66	3646439.88	55.4
ML865_FF588_138	391258.38	3646424.58	54.7
ML865_FF588_139	391261.05	3646434.03	53.7
ML865_FF588_140	391273.44	3646428.45	53.4
ML865_FF588_141	391259.18	3646418.50	52.9
ML865_FF588_142	391264.50	3646423.38	52.1
ML865_FF588_143	391258.56	3646434.12	51.5
ML865_FF588_144	391278.78	3646412.06	50.6
ML865_FF588_145	391257.21	3646428.84	50.3
ML865_FF588_146	391269.72	3646427.76	49.4
ML865_FF588_147	391250.40	3646417.08	48.4
ML865_FF588_148	391271.80	3646434.54	48.2
ML865_FF588_149	391259.94	3646418.76	47.8
ML865_FF588_150	391256.19	3646429.35	47.8
ML865_FF588_151	391270.89	3646433.01	47.7
ML865_FF588_152	391268.40	3646431.60	47.5
ML865_FF588_153	391277.82	3646422.87	46.9
ML865_FF588_154	391262.32	3646428.00	46.8
ML865_FF588_155	391277.84	3646426.54	46.2
ML865_FF588_156	391259.63	3646432.98	46.2
ML865_FF588_157	391263.03	3646422.36	45.8
ML865_FF588_158	391264.26	3646422.18	44.5
ML865_FF588_159	391279.65	3646423.98	44.5
ML865_FF588_160	391274.40	3646430.76	43.5
ML865_FF588_161	391254.82	3646433.70	43.3
ML865_FF588_162	391279.53	3646410.45	42.5
ML865_FF588_163	391260.96	3646432.78	42.5
ML865_FF588_164	391275.33	3646416.78	40.0
ML865_FF588_165	391277.91	3646414.71	38.6
ML865_FF588_166	391279.98	3646422.90	38.6
ML865_FF588_167	391276.94	3646430.88	38.0
ML865_FF588_168	391253.44	3646428.30	37.3
ML865_FF588_169	391252.53	3646426.83	36.7
ML865_FF588_170	391277.85	3646424.28	35.8
ML865_FF588_171	391279.90	3646427.20	34.9
ML865_FF588_172	391267.74	3646431.96	32.4
ML865_FF588_173	391263.16	3646413.66	30.1
ML865_FF588_174	391278.96	3646430.34	29.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF588_175	391276.08	3646431.00	28.6
ML865_FF588_176	391260.48	3646422.86	26.5
ML865_FF588_177	391254.12	3646438.98	26.0
ML865_FF588_178	391275.15	3646422.42	14.4
ML865_FF588_179	391272.00	3646439.13	12.4
ML865_FF588_180	391273.98	3646422.06	7.8
ML865_FF589_1	391254.06	3646458.09	16971.4
ML865_FF589_2	391265.70	3646447.74	2404.3
ML865_FF589_3	391272.42	3646453.86	2085.8
ML865_FF589_4	391265.10	3646455.96	1579.8
ML865_FF589_5	391252.80	3646457.04	1508.6
ML865_FF589_6	391271.13	3646454.25	1427.3
ML865_FF589_7	391257.63	3646458.51	1198.5
ML865_FF589_8	391266.75	3646464.00	1129.2
ML865_FF589_9	391253.28	3646464.48	1041.2
ML865_FF589_10	391258.56	3646466.04	984.4
ML865_FF589_11	391267.35	3646456.56	915.3
ML865_FF589_12	391250.76	3646461.72	863.9
ML865_FF589_13	391256.82	3646464.48	778.5
ML865_FF589_14	391255.20	3646440.00	777.9
ML865_FF589_15	391264.20	3646456.56	768.5
ML865_FF589_16	391255.32	3646468.86	741.8
ML865_FF589_17	391269.24	3646467.06	737.8
ML865_FF589_18	391257.72	3646449.03	705.1
ML865_FF589_19	391276.02	3646458.42	665.1
ML865_FF589_20	391268.70	3646464.72	588.5
ML865_FF589_21	391255.14	3646459.08	535.4
ML865_FF589_22	391268.82	3646460.94	533.6
ML865_FF589_23	391252.77	3646467.75	532.6
ML865_FF589_24	391260.03	3646465.62	526.9
ML865_FF589_25	391258.47	3646460.16	526.5
ML865_FF589_26	391265.16	3646465.44	499.0
ML865_FF589_27	391267.95	3646459.50	480.8
ML865_FF589_28	391271.94	3646458.18	428.8
ML865_FF589_29	391256.40	3646457.28	418.8
ML865_FF589_30	391256.46	3646468.68	417.3
ML865_FF589_31	391265.14	3646466.46	395.3
ML865_FF589_32	391273.95	3646462.26	395.0
ML865_FF589_33	391255.56	3646455.51	379.5
ML865_FF589_34	391277.04	3646447.86	376.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF589_35	391268.02	3646467.86	363.5
ML865_FF589_36	391278.06	3646443.18	347.9
ML865_FF589_37	391265.22	3646464.06	344.7
ML865_FF589_38	391264.86	3646467.88	331.8
ML865_FF589_39	391268.48	3646463.44	323.4
ML865_FF589_40	391263.54	3646455.42	304.9
ML865_FF589_41	391264.23	3646458.09	302.2
ML865_FF589_42	391266.00	3646468.08	299.7
ML865_FF589_43	391258.29	3646464.72	293.8
ML865_FF589_44	391267.62	3646461.00	284.9
ML865_FF589_45	391259.34	3646440.54	272.2
ML865_FF589_46	391256.16	3646466.74	261.6
ML865_FF589_47	391274.67	3646447.92	247.7
ML865_FF589_48	391257.18	3646456.17	246.2
ML865_FF589_49	391255.53	3646464.84	243.6
ML865_FF589_50	391274.61	3646445.82	229.5
ML865_FF589_51	391263.96	3646446.84	225.6
ML865_FF589_52	391254.99	3646440.78	223.5
ML865_FF589_53	391276.80	3646443.48	213.3
ML865_FF589_54	391256.73	3646449.63	212.8
ML865_FF589_55	391259.80	3646456.04	209.3
ML865_FF589_56	391260.84	3646441.40	200.5
ML865_FF589_57	391270.50	3646456.89	198.1
ML865_FF589_58	391262.64	3646467.36	193.2
ML865_FF589_59	391277.94	3646441.35	187.7
ML865_FF589_60	391272.96	3646444.83	186.9
ML865_FF589_61	391274.82	3646449.42	185.3
ML865_FF589_62	391279.40	3646455.48	184.9
ML865_FF589_63	391274.90	3646444.36	173.6
ML865_FF589_64	391268.97	3646466.28	167.8
ML865_FF589_65	391255.74	3646441.86	162.3
ML865_FF589_66	391262.76	3646466.16	159.6
ML865_FF589_67	391267.53	3646462.47	149.9
ML865_FF589_68	391269.12	3646455.18	145.4
ML865_FF589_69	391252.86	3646441.08	145.3
ML865_FF589_70	391263.42	3646462.98	140.6
ML865_FF589_71	391256.37	3646465.32	140.5
ML865_FF589_72	391273.38	3646442.91	135.8
ML865_FF589_73	391253.68	3646455.84	133.9
ML865_FF589_74	391278.69	3646442.07	131.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF589_75	391279.62	3646440.99	127.8
ML865_FF589_76	391263.42	3646465.23	122.0
ML865_FF589_77	391258.92	3646458.24	120.3
ML865_FF589_78	391277.54	3646442.34	120.1
ML865_FF589_79	391276.98	3646445.94	117.9
ML865_FF589_80	391269.36	3646458.72	114.2
ML865_FF589_81	391279.62	3646442.97	108.9
ML865_FF589_82	391260.96	3646468.14	106.4
ML865_FF589_83	391259.04	3646452.48	106.1
ML865_FF589_84	391266.48	3646461.87	105.7
ML865_FF589_85	391260.72	3646447.38	101.4
ML865_FF589_86	391268.92	3646457.00	100.9
ML865_FF589_87	391270.68	3646458.18	99.1
ML865_FF589_88	391260.48	3646459.20	95.1
ML865_FF589_89	391274.76	3646457.28	94.7
ML865_FF589_90	391271.52	3646441.08	91.9
ML865_FF589_91	391265.94	3646456.80	89.9
ML865_FF589_92	391253.76	3646453.92	89.2
ML865_FF589_93	391264.83	3646463.19	87.9
ML865_FF589_94	391263.24	3646440.15	87.2
ML865_FF589_95	391254.09	3646440.78	82.4
ML865_FF589_96	391268.40	3646440.66	77.3
ML865_FF589_97	391256.64	3646459.56	76.4
ML865_FF589_98	391254.06	3646463.22	75.3
ML865_FF589_99	391262.94	3646445.46	74.3
ML865_FF589_100	391269.72	3646463.04	72.3
ML865_FF589_101	391277.19	3646458.93	72.0
ML865_FF589_102	391252.95	3646461.36	68.1
ML865_FF589_103	391273.41	3646446.45	66.0
ML865_FF589_104	391253.52	3646465.62	65.5
ML865_FF589_105	391258.17	3646440.18	64.0
ML865_FF589_106	391273.32	3646451.28	63.1
ML865_FF589_107	391263.60	3646443.99	60.8
ML865_FF589_108	391279.05	3646467.21	60.8
ML865_FF589_109	391262.04	3646448.10	60.3
ML865_FF589_110	391267.74	3646440.39	57.9
ML865_FF589_111	391257.14	3646440.98	57.9
ML865_FF589_112	391271.16	3646463.34	57.5
ML865_FF589_113	391278.30	3646466.10	57.3
ML865_FF589_114	391265.16	3646461.60	56.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF589_115	391273.14	3646450.23	56.3
ML865_FF589_116	391266.81	3646460.13	56.2
ML865_FF589_117	391279.08	3646448.64	56.1
ML865_FF589_118	391270.68	3646444.32	55.4
ML865_FF589_119	391251.66	3646467.78	54.1
ML865_FF589_120	391278.72	3646446.06	53.8
ML865_FF589_121	391262.07	3646440.63	52.4
ML865_FF589_122	391264.86	3646446.48	50.8
ML865_FF589_123	391254.18	3646459.98	50.4
ML865_FF589_124	391254.12	3646444.20	49.3
ML865_FF589_125	391276.64	3646444.94	48.3
ML865_FF589_126	391269.87	3646461.06	46.6
ML865_FF589_127	391273.68	3646465.86	46.1
ML865_FF589_128	391274.94	3646459.20	45.7
ML865_FF589_129	391254.96	3646461.36	44.4
ML865_FF589_130	391258.35	3646441.47	43.6
ML865_FF589_131	391260.18	3646458.06	43.0
ML865_FF589_132	391271.16	3646462.11	38.7
ML865_FF589_133	391262.04	3646458.45	37.0
ML865_FF589_134	391272.24	3646455.36	36.7
ML865_FF589_135	391265.70	3646440.78	35.6
ML865_FF589_136	391267.23	3646440.84	33.8
ML865_FF589_137	391264.80	3646440.52	33.5
ML865_FF589_138	391275.50	3646442.73	32.3
ML865_FF589_139	391279.86	3646458.84	31.1
ML865_FF589_140	391254.09	3646442.88	30.4
ML865_FF589_141	391260.21	3646460.70	30.4
ML865_FF589_142	391275.78	3646443.66	29.6
ML865_FF589_143	391269.98	3646444.24	28.3
ML865_FF589_144	391272.72	3646461.06	24.5
ML865_FF589_145	391270.95	3646440.78	23.2
ML865_FF589_146	391272.48	3646467.54	22.0
ML865_FF589_147	391279.80	3646445.34	19.1
ML865_FF589_148	391252.59	3646463.67	17.7
ML865_FF589_149	391269.82	3646440.50	12.4
ML865_FF590_1	391259.40	3646492.38	2461.6
ML865_FF590_2	391261.74	3646484.94	1019.6
ML865_FF590_3	391265.88	3646478.94	527.7
ML865_FF590_4	391252.98	3646484.04	183.7
ML865_FF590_5	391252.54	3646483.86	177.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FF590_6	391254.60	3646480.92	159.3
ML865_FF590_7	391260.78	3646493.52	153.0
ML865_FF590_8	391265.76	3646484.46	136.8
ML865_FF590_9	391261.20	3646478.16	102.5
ML865_FF590_10	391251.93	3646485.51	101.8
ML865_FF590_11	391279.80	3646477.92	98.7
ML865_FF590_12	391256.80	3646477.88	82.5
ML865_FF590_13	391250.88	3646487.64	80.9
ML865_FF590_14	391258.80	3646492.80	80.6
ML865_FF590_15	391254.00	3646482.12	71.6
ML865_FF590_16	391271.76	3646484.16	70.1
ML865_FF590_17	391261.83	3646491.30	60.7
ML865_FF590_18	391270.80	3646488.96	56.5
ML865_FF590_19	391256.36	3646478.98	52.2
ML865_FF590_20	391252.59	3646482.60	49.9
ML865_FF590_21	391250.34	3646486.59	48.0
ML865_FF590_22	391265.64	3646496.58	46.3
ML865_FF591_1	391270.71	3646524.54	2850.7
ML865_FF591_2	391271.64	3646524.24	730.4
ML865_FF591_3	391276.74	3646525.50	523.3
ML865_FF591_4	391275.30	3646528.62	441.9
ML865_FF591_5	391274.97	3646527.87	400.2
ML865_FF591_6	391254.60	3646511.10	199.8
ML865_FF591_7	391275.78	3646526.88	153.2
ML865_FF591_8	391273.02	3646528.32	136.5
ML865_FF591_9	391268.10	3646502.46	110.3
ML865_FF591_10	391277.40	3646529.55	96.7
ML865_FF591_11	391275.54	3646524.12	93.3
ML865_FF591_12	391252.50	3646517.94	79.7
ML865_FF591_13	391268.22	3646509.36	64.2
ML865_FF591_14	391254.78	3646528.62	59.8
ML865_FF591_15	391264.08	3646509.18	56.4
ML865_FF591_16	391275.04	3646523.54	39.0
ML865_FF591_17	391271.40	3646504.92	30.7
ML865_FF592_1	391273.02	3646530.18	895.1
ML865_FF592_2	391259.94	3646535.16	74.6
ML865_FF592_3	391270.02	3646534.20	59.2
ML865_FF592_4	391262.94	3646531.02	53.3
ML865_FF592_5	391275.93	3646530.96	27.4
ML865_FG584_1	391301.76	3646301.88	725.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG584_2	391297.86	3646313.22	79.3
ML865_FG584_3	391305.48	3646318.86	61.9
ML865_FG584_4	391298.40	3646303.26	47.1
ML865_FG584_5	391304.04	3646313.28	42.8
ML865_FG585_1	391289.31	3646321.89	275.7
ML865_FG585_2	391297.26	3646330.24	139.6
ML865_FG585_3	391307.97	3646349.61	70.4
ML865_FG585_4	391292.82	3646336.92	68.4
ML865_FG585_5	391305.96	3646337.19	54.7
ML865_FG585_6	391304.58	3646348.44	49.6
ML865_FG585_7	391305.12	3646340.10	47.1
ML865_FG585_8	391294.44	3646339.32	43.3
ML865_FG585_9	391308.68	3646349.16	40.9
ML865_FG585_10	391309.86	3646348.96	38.9
ML865_FG586_1	391297.44	3646376.64	67880.5
ML865_FG586_2	391296.90	3646375.98	31800.9
ML865_FG586_3	391296.14	3646376.45	20400.9
ML865_FG586_4	391297.08	3646377.99	15647.1
ML865_FG586_5	391296.16	3646374.56	6265.6
ML865_FG586_6	391304.88	3646365.24	6153.9
ML865_FG586_7	391295.34	3646375.80	5632.6
ML865_FG586_8	391304.54	3646378.34	4544.4
ML865_FG586_9	391305.54	3646378.62	3786.0
ML865_FG586_10	391305.96	3646377.45	3170.6
ML865_FG586_11	391304.70	3646376.70	3111.7
ML865_FG586_12	391307.88	3646352.94	2586.5
ML865_FG586_13	391296.06	3646378.53	2488.1
ML865_FG586_14	391307.52	3646354.50	1672.4
ML865_FG586_15	391306.80	3646371.63	1642.8
ML865_FG586_16	391307.79	3646365.69	1309.7
ML865_FG586_17	391297.26	3646379.28	1206.4
ML865_FG586_18	391294.95	3646378.83	1171.7
ML865_FG586_19	391307.44	3646379.70	1118.8
ML865_FG586_20	391299.48	3646374.18	1080.7
ML865_FG586_21	391302.66	3646378.44	997.8
ML865_FG586_22	391309.53	3646360.11	995.8
ML865_FG586_23	391293.60	3646377.72	991.8
ML865_FG586_24	391309.90	3646354.44	872.1
ML865_FG586_25	391295.98	3646373.37	870.0
ML865_FG586_26	391307.82	3646351.89	810.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG586_27	391306.80	3646352.22	794.8
ML865_FG586_28	391306.89	3646374.75	758.3
ML865_FG586_29	391296.51	3646372.56	748.9
ML865_FG586_30	391297.05	3646373.19	722.7
ML865_FG586_31	391304.10	3646375.76	667.4
ML865_FG586_32	391306.08	3646365.58	663.7
ML865_FG586_33	391309.88	3646379.66	646.2
ML865_FG586_34	391307.61	3646378.02	604.9
ML865_FG586_35	391304.97	3646375.58	567.8
ML865_FG586_36	391300.32	3646376.10	554.6
ML865_FG586_37	391302.36	3646376.64	543.4
ML865_FG586_38	391305.93	3646375.59	512.0
ML865_FG586_39	391309.98	3646364.22	488.1
ML865_FG586_40	391304.51	3646368.18	485.4
ML865_FG586_41	391307.94	3646374.84	468.9
ML865_FG586_42	391309.26	3646355.50	462.0
ML865_FG586_43	391295.50	3646372.02	460.9
ML865_FG586_44	391307.82	3646367.16	437.7
ML865_FG586_45	391306.26	3646370.66	429.2
ML865_FG586_46	391308.39	3646364.31	408.0
ML865_FG586_47	391305.54	3646374.24	394.7
ML865_FG586_48	391300.96	3646378.28	369.1
ML865_FG586_49	391304.31	3646366.92	349.8
ML865_FG586_50	391306.80	3646363.61	343.6
ML865_FG586_51	391303.92	3646371.84	327.2
ML865_FG586_52	391299.21	3646372.62	325.1
ML865_FG586_53	391300.74	3646374.04	315.3
ML865_FG586_54	391309.26	3646375.59	311.9
ML865_FG586_55	391305.42	3646367.28	294.0
ML865_FG586_56	391300.02	3646379.82	289.5
ML865_FG586_57	391300.40	3646372.28	282.0
ML865_FG586_58	391302.06	3646367.88	280.6
ML865_FG586_59	391308.66	3646357.20	277.8
ML865_FG586_60	391309.50	3646377.93	270.8
ML865_FG586_61	391301.61	3646375.53	270.5
ML865_FG586_62	391309.95	3646350.99	259.0
ML865_FG586_63	391309.22	3646359.28	258.0
ML865_FG586_64	391307.79	3646364.22	258.0
ML865_FG586_65	391297.53	3646371.06	256.1
ML865_FG586_66	391301.52	3646376.56	250.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG586_67	391296.30	3646370.76	248.7
ML865_FG586_68	391302.60	3646374.12	243.3
ML865_FG586_69	391308.06	3646370.40	233.9
ML865_FG586_70	391309.02	3646373.49	216.6
ML865_FG586_71	391305.81	3646363.05	209.5
ML865_FG586_72	391307.88	3646376.04	205.0
ML865_FG586_73	391306.14	3646355.52	196.5
ML865_FG586_74	391302.64	3646370.88	176.5
ML865_FG586_75	391309.20	3646368.48	176.3
ML865_FG586_76	391291.95	3646376.52	173.8
ML865_FG586_77	391295.10	3646370.00	168.0
ML865_FG586_78	391296.18	3646369.56	160.8
ML865_FG586_79	391293.81	3646370.12	157.7
ML865_FG586_80	391307.36	3646362.44	155.4
ML865_FG586_81	391308.87	3646378.50	149.1
ML865_FG586_82	391293.32	3646379.52	142.7
ML865_FG586_83	391308.72	3646372.65	140.1
ML865_FG586_84	391305.76	3646373.20	139.5
ML865_FG586_85	391301.38	3646371.18	129.4
ML865_FG586_86	391302.37	3646372.82	121.6
ML865_FG586_87	391304.97	3646351.47	118.2
ML865_FG586_88	391307.32	3646350.27	116.2
ML865_FG586_89	391296.88	3646369.78	115.0
ML865_FG586_90	391303.62	3646356.21	114.6
ML865_FG586_91	391307.06	3646356.32	112.0
ML865_FG586_92	391304.31	3646372.86	110.2
ML865_FG586_93	391309.72	3646371.54	108.6
ML865_FG586_94	391309.20	3646369.95	104.7
ML865_FG586_95	391305.36	3646361.60	102.0
ML865_FG586_96	391303.50	3646362.24	97.1
ML865_FG586_97	391301.34	3646369.92	94.4
ML865_FG586_98	391299.08	3646370.70	93.3
ML865_FG586_99	391300.65	3646371.06	91.8
ML865_FG586_100	391302.72	3646369.68	89.2
ML865_FG586_101	391309.48	3646350.32	87.8
ML865_FG586_102	391308.15	3646356.18	81.7
ML865_FG586_103	391295.40	3646364.76	81.7
ML865_FG586_104	391307.10	3646368.48	81.6
ML865_FG586_105	391307.76	3646357.74	80.9
ML865_FG586_106	391306.71	3646359.93	79.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG586_107	391298.13	3646369.92	74.9
ML865_FG586_108	391305.00	3646363.68	73.8
ML865_FG586_109	391307.04	3646373.31	68.0
ML865_FG586_110	391303.90	3646373.34	67.4
ML865_FG586_111	391304.58	3646357.62	66.1
ML865_FG586_112	391291.08	3646377.66	64.2
ML865_FG586_113	391306.29	3646369.26	53.7
ML865_FG586_114	391303.74	3646350.45	51.7
ML865_FG586_115	391290.18	3646375.08	50.8
ML865_FG586_116	391302.36	3646356.45	49.2
ML865_FG586_117	391289.82	3646376.28	47.8
ML865_FG586_118	391303.50	3646363.62	46.1
ML865_FG586_119	391300.26	3646368.24	46.1
ML865_FG586_120	391291.08	3646373.88	45.7
ML865_FG586_121	391308.18	3646368.94	44.5
ML865_FG586_122	391300.68	3646365.78	43.8
ML865_FG586_123	391306.93	3646357.65	40.0
ML865_FG586_124	391304.20	3646370.16	37.7
ML865_FG586_125	391300.48	3646370.30	25.8
ML865_FG587_1	391303.32	3646381.98	8437.6
ML865_FG587_2	391304.30	3646380.70	8345.6
ML865_FG587_3	391299.84	3646382.88	8140.4
ML865_FG587_4	391298.64	3646385.10	6307.2
ML865_FG587_5	391303.30	3646380.72	6222.1
ML865_FG587_6	391303.26	3646383.04	4168.5
ML865_FG587_7	391298.94	3646384.23	3750.3
ML865_FG587_8	391301.40	3646383.48	3353.9
ML865_FG587_9	391305.74	3646388.02	2882.7
ML865_FG587_10	391289.40	3646397.58	2234.5
ML865_FG587_11	391288.38	3646399.56	2099.6
ML865_FG587_12	391300.50	3646384.29	2015.6
ML865_FG587_13	391304.52	3646389.66	1893.7
ML865_FG587_14	391293.24	3646386.84	1864.0
ML865_FG587_15	391306.08	3646399.92	1818.0
ML865_FG587_16	391290.06	3646403.04	1311.4
ML865_FG587_17	391297.71	3646391.79	1285.7
ML865_FG587_18	391305.90	3646400.79	1273.7
ML865_FG587_19	391293.90	3646393.62	1141.1
ML865_FG587_20	391296.00	3646408.38	1139.6
ML865_FG587_21	391304.22	3646407.72	1124.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG587_22	391308.70	3646384.70	1112.7
ML865_FG587_23	391289.70	3646390.86	1091.2
ML865_FG587_24	391306.12	3646390.62	1083.7
ML865_FG587_25	391302.24	3646399.32	1060.2
ML865_FG587_26	391309.52	3646383.42	980.4
ML865_FG587_27	391289.22	3646395.78	974.8
ML865_FG587_28	391302.66	3646388.25	960.4
ML865_FG587_29	391291.35	3646396.20	960.4
ML865_FG587_30	391296.06	3646387.62	912.4
ML865_FG587_31	391285.38	3646400.40	883.7
ML865_FG587_32	391304.92	3646393.10	858.7
ML865_FG587_33	391288.22	3646393.86	837.8
ML865_FG587_34	391301.30	3646380.12	795.1
ML865_FG587_35	391288.23	3646404.06	783.6
ML865_FG587_36	391301.10	3646382.40	750.6
ML865_FG587_37	391306.56	3646407.78	742.6
ML865_FG587_38	391285.38	3646405.50	731.4
ML865_FG587_39	391304.37	3646388.46	689.2
ML865_FG587_40	391290.60	3646388.97	680.7
ML865_FG587_41	391291.62	3646387.92	641.3
ML865_FG587_42	391287.56	3646404.32	629.3
ML865_FG587_43	391298.38	3646390.44	624.1
ML865_FG587_44	391304.16	3646394.13	582.5
ML865_FG587_45	391291.83	3646398.15	580.9
ML865_FG587_46	391302.52	3646405.38	578.3
ML865_FG587_47	391283.46	3646408.80	559.6
ML865_FG587_48	391304.67	3646387.29	549.1
ML865_FG587_49	391303.62	3646389.33	544.1
ML865_FG587_50	391287.72	3646397.28	512.7
ML865_FG587_51	391293.36	3646397.12	502.8
ML865_FG587_52	391289.44	3646393.25	500.4
ML865_FG587_53	391303.98	3646398.48	496.2
ML865_FG587_54	391286.49	3646396.26	488.1
ML865_FG587_55	391309.02	3646380.84	487.2
ML865_FG587_56	391286.34	3646403.94	478.9
ML865_FG587_57	391304.94	3646396.26	469.8
ML865_FG587_58	391288.29	3646402.56	460.1
ML865_FG587_59	391303.80	3646403.55	459.8
ML865_FG587_60	391295.82	3646407.06	456.9
ML865_FG587_61	391304.58	3646402.95	433.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG587_62	391295.46	3646383.24	430.6
ML865_FG587_63	391309.62	3646407.84	426.3
ML865_FG587_64	391295.22	3646409.52	421.7
ML865_FG587_65	391307.16	3646406.64	419.0
ML865_FG587_66	391297.08	3646390.44	413.1
ML865_FG587_67	391308.15	3646407.51	408.4
ML865_FG587_68	391292.52	3646386.54	402.1
ML865_FG587_69	391308.75	3646395.63	400.5
ML865_FG587_70	391291.86	3646399.74	398.7
ML865_FG587_71	391290.66	3646406.40	390.4
ML865_FG587_72	391287.75	3646400.07	388.6
ML865_FG587_73	391309.50	3646381.98	387.1
ML865_FG587_74	391309.98	3646409.64	384.5
ML865_FG587_75	391303.53	3646384.83	382.3
ML865_FG587_76	391290.96	3646392.54	374.8
ML865_FG587_77	391284.84	3646409.16	372.3
ML865_FG587_78	391304.04	3646390.75	368.1
ML865_FG587_79	391307.64	3646387.14	365.9
ML865_FG587_80	391290.78	3646400.14	363.9
ML865_FG587_81	391289.26	3646390.20	358.1
ML865_FG587_82	391307.64	3646381.30	337.5
ML865_FG587_83	391289.58	3646406.34	332.5
ML865_FG587_84	391297.98	3646398.00	332.2
ML865_FG587_85	391307.31	3646385.61	325.1
ML865_FG587_86	391286.52	3646400.82	286.4
ML865_FG587_87	391290.78	3646402.20	286.4
ML865_FG587_88	391296.66	3646400.34	285.0
ML865_FG587_89	391307.70	3646383.06	284.3
ML865_FG587_90	391292.97	3646399.80	278.6
ML865_FG587_91	391291.80	3646406.88	267.8
ML865_FG587_92	391296.84	3646397.34	261.5
ML865_FG587_93	391305.66	3646402.59	251.5
ML865_FG587_94	391294.98	3646402.80	242.4
ML865_FG587_95	391309.14	3646408.92	241.9
ML865_FG587_96	391289.52	3646394.49	241.4
ML865_FG587_97	391287.34	3646408.60	241.2
ML865_FG587_98	391294.86	3646395.72	238.7
ML865_FG587_99	391302.06	3646400.91	234.6
ML865_FG587_100	391304.60	3646385.81	233.8
ML865_FG587_101	391297.14	3646387.08	229.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG587_102	391294.32	3646389.90	225.5
ML865_FG587_103	391305.58	3646408.92	224.4
ML865_FG587_104	391290.78	3646404.42	224.3
ML865_FG587_105	391293.45	3646389.78	220.5
ML865_FG587_106	391306.71	3646408.98	219.3
ML865_FG587_107	391304.92	3646391.34	219.0
ML865_FG587_108	391298.40	3646404.06	213.2
ML865_FG587_109	391297.72	3646407.72	211.0
ML865_FG587_110	391299.42	3646398.00	210.1
ML865_FG587_111	391305.81	3646407.09	206.5
ML865_FG587_112	391284.80	3646408.18	206.2
ML865_FG587_113	391305.06	3646384.56	205.9
ML865_FG587_114	391288.02	3646395.93	204.1
ML865_FG587_115	391296.36	3646403.04	200.3
ML865_FG587_116	391309.74	3646406.46	199.8
ML865_FG587_117	391293.99	3646382.19	198.5
ML865_FG587_118	391295.49	3646404.42	195.4
ML865_FG587_119	391294.36	3646399.46	195.3
ML865_FG587_120	391298.00	3646395.45	193.7
ML865_FG587_122	391291.60	3646404.00	191.6
ML865_FG587_123	391289.91	3646403.85	190.9
ML865_FG587_124	391295.94	3646395.84	187.9
ML865_FG587_125	391291.05	3646384.71	184.1
ML865_FG587_126	391293.63	3646405.05	181.8
ML865_FG587_127	391291.98	3646389.72	181.0
ML865_FG587_128	391293.81	3646402.17	176.6
ML865_FG587_129	391301.34	3646386.78	175.5
ML865_FG587_130	391296.06	3646386.30	171.2
ML865_FG587_131	391296.87	3646401.93	171.0
ML865_FG587_132	391301.44	3646406.60	165.3
ML865_FG587_133	391296.14	3646389.52	164.9
ML865_FG587_134	391295.04	3646405.74	164.8
ML865_FG587_135	391293.00	3646392.24	162.7
ML865_FG587_136	391296.99	3646393.41	161.0
ML865_FG587_137	391283.46	3646407.78	160.9
ML865_FG587_138	391297.36	3646405.32	159.8
ML865_FG587_139	391300.68	3646408.32	156.9
ML865_FG587_140	391306.74	3646382.04	156.8
ML865_FG587_141	391302.54	3646395.64	149.9
ML865_FG587_142	391292.86	3646391.02	148.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG587_143	391288.35	3646401.18	148.1
ML865_FG587_144	391295.40	3646401.30	146.7
ML865_FG587_145	391294.52	3646408.24	146.4
ML865_FG587_146	391301.61	3646396.23	146.0
ML865_FG587_147	391293.27	3646403.97	145.3
ML865_FG587_148	391292.94	3646381.40	144.6
ML865_FG587_149	391295.97	3646393.86	144.4
ML865_FG587_150	391288.72	3646405.84	142.8
ML865_FG587_151	391295.28	3646399.65	142.4
ML865_FG587_152	391295.76	3646397.28	142.2
ML865_FG587_153	391304.88	3646404.54	141.5
ML865_FG587_154	391304.94	3646395.12	139.0
ML865_FG587_155	391303.77	3646392.81	138.6
ML865_FG587_156	391288.71	3646408.50	138.6
ML865_FG587_157	391285.26	3646403.61	138.2
ML865_FG587_158	391296.72	3646389.24	137.9
ML865_FG587_159	391306.29	3646385.58	137.8
ML865_FG587_160	391291.89	3646408.50	137.3
ML865_FG587_161	391291.41	3646393.80	134.5
ML865_FG587_162	391285.20	3646404.72	132.6
ML865_FG587_163	391299.36	3646408.08	132.3
ML865_FG587_164	391293.50	3646388.70	131.9
ML865_FG587_165	391293.04	3646407.00	130.9
ML865_FG587_166	391304.88	3646398.96	130.2
ML865_FG587_167	391292.08	3646405.64	129.0
ML865_FG587_168	391289.70	3646399.38	127.4
ML865_FG587_169	391293.00	3646408.46	127.2
ML865_FG587_170	391294.95	3646406.82	126.5
ML865_FG587_171	391286.86	3646399.12	126.3
ML865_FG587_172	391309.86	3646385.82	123.8
ML865_FG587_173	391292.64	3646384.38	122.2
ML865_FG587_174	391294.04	3646391.00	121.3
ML865_FG587_175	391301.16	3646403.08	119.4
ML865_FG587_176	391303.38	3646396.32	118.0
ML865_FG587_177	391297.68	3646404.36	116.7
ML865_FG587_178	391280.76	3646406.34	116.7
ML865_FG587_179	391285.56	3646402.08	114.9
ML865_FG587_180	391288.17	3646408.98	112.6
ML865_FG587_181	391299.00	3646401.64	112.2
ML865_FG587_182	391286.06	3646408.14	112.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG587_183	391291.08	3646407.63	109.4
ML865_FG587_184	391296.54	3646381.26	107.8
ML865_FG587_185	391284.06	3646404.42	105.0
ML865_FG587_186	391295.07	3646385.37	104.9
ML865_FG587_187	391292.74	3646394.52	104.5
ML865_FG587_188	391290.99	3646409.10	103.6
ML865_FG587_189	391302.22	3646389.30	102.9
ML865_FG587_190	391298.82	3646407.42	102.4
ML865_FG587_191	391300.02	3646390.98	99.7
ML865_FG587_192	391299.54	3646389.78	98.3
ML865_FG587_193	391290.06	3646387.65	97.8
ML865_FG587_194	391304.10	3646408.98	97.6
ML865_FG587_195	391293.36	3646401.48	97.5
ML865_FG587_196	391293.51	3646409.04	94.4
ML865_FG587_197	391308.90	3646385.91	92.2
ML865_FG587_198	391286.31	3646397.52	91.9
ML865_FG587_199	391288.29	3646392.39	89.7
ML865_FG587_200	391293.48	3646380.12	89.0
ML865_FG587_201	391302.51	3646386.69	88.8
ML865_FG587_202	391290.63	3646395.00	88.5
ML865_FG587_203	391307.08	3646383.34	88.3
ML865_FG587_204	391300.50	3646404.06	88.2
ML865_FG587_205	391292.20	3646385.18	87.0
ML865_FG587_206	391301.82	3646409.03	86.1
ML865_FG587_207	391296.72	3646409.55	84.0
ML865_FG587_208	391299.96	3646406.70	80.1
ML865_FG587_209	391302.03	3646403.43	79.1
ML865_FG587_210	391291.36	3646386.80	78.1
ML865_FG587_211	391284.12	3646409.56	77.7
ML865_FG587_212	391289.72	3646402.08	77.5
ML865_FG587_213	391304.46	3646406.46	77.3
ML865_FG587_214	391292.31	3646409.10	76.5
ML865_FG587_215	391295.04	3646381.38	74.9
ML865_FG587_216	391302.66	3646408.22	74.8
ML865_FG587_217	391293.90	3646406.70	73.3
ML865_FG587_218	391300.98	3646389.36	72.1
ML865_FG587_219	391298.48	3646388.14	70.6
ML865_FG587_220	391291.42	3646391.00	70.6
ML865_FG587_221	391297.56	3646403.49	67.7
ML865_FG587_222	391295.69	3646398.60	66.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG587_223	391292.04	3646401.51	66.3
ML865_FG587_224	391280.58	3646401.78	64.2
ML865_FG587_225	391299.84	3646387.62	60.2
ML865_FG587_226	391307.94	3646388.60	58.3
ML865_FG587_227	391299.66	3646401.54	57.6
ML865_FG587_228	391297.68	3646394.10	56.7
ML865_FG587_229	391298.88	3646395.18	54.4
ML865_FG587_230	391308.66	3646389.30	53.3
ML865_FG587_231	391292.46	3646380.15	52.7
ML865_FG587_232	391293.96	3646385.48	52.6
ML865_FG587_233	391301.20	3646388.06	52.0
ML865_FG587_234	391292.25	3646383.42	51.5
ML865_FG587_235	391290.12	3646401.33	49.9
ML865_FG587_236	391303.68	3646399.92	49.1
ML865_FG587_237	391286.04	3646394.40	48.3
ML865_FG587_238	391299.42	3646396.20	47.7
ML865_FG587_239	391299.96	3646388.51	46.0
ML865_FG587_240	391286.86	3646406.44	45.9
ML865_FG587_241	391302.72	3646409.82	44.8
ML865_FG587_242	391302.72	3646393.02	44.5
ML865_FG587_243	391295.73	3646384.65	44.0
ML865_FG587_244	391294.41	3646392.18	41.8
ML865_FG587_245	391298.56	3646394.02	41.3
ML865_FG587_246	391303.35	3646408.80	39.9
ML865_FG587_247	391308.00	3646389.87	39.8
ML865_FG587_248	391298.86	3646409.42	37.7
ML865_FG587_249	391300.50	3646405.14	36.7
ML865_FG587_250	391290.10	3646408.52	33.3
ML865_FG587_251	391299.99	3646409.88	32.9
ML865_FG587_252	391301.20	3646393.44	32.7
ML865_FG587_253	391297.92	3646400.80	32.2
ML865_FG587_254	391299.21	3646405.41	28.1
ML865_FG587_255	391303.08	3646397.19	27.4
ML865_FG587_256	391287.74	3646406.92	27.0
ML865_FG587_257	391293.84	3646384.11	24.8
ML865_FG587_258	391294.89	3646400.64	23.7
ML865_FG587_259	391290.54	3646385.58	23.5
ML865_FG587_260	391302.33	3646394.45	22.6
ML865_FG587_261	391284.42	3646406.13	17.3
ML865_FG587_262	391299.63	3646403.52	12.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_1	391282.14	3646435.44	5702.2
ML865_FG588_2	391287.66	3646432.74	3550.3
ML865_FG588_3	391280.64	3646427.88	3513.5
ML865_FG588_4	391306.59	3646435.14	2026.6
ML865_FG588_5	391283.38	3646413.68	1728.5
ML865_FG588_6	391308.72	3646415.76	1703.2
ML865_FG588_7	391288.80	3646410.50	1654.1
ML865_FG588_8	391284.50	3646437.04	1543.0
ML865_FG588_9	391282.47	3646413.17	1393.8
ML865_FG588_10	391284.78	3646438.02	1304.7
ML865_FG588_11	391282.79	3646431.73	1257.7
ML865_FG588_12	391285.26	3646412.82	1215.7
ML865_FG588_13	391302.45	3646428.15	1174.9
ML865_FG588_14	391305.18	3646414.62	1043.6
ML865_FG588_15	391280.34	3646433.76	1034.2
ML865_FG588_16	391285.26	3646433.82	1014.5
ML865_FG588_17	391282.17	3646437.23	934.2
ML865_FG588_18	391280.90	3646436.04	912.3
ML865_FG588_19	391281.84	3646433.34	911.8
ML865_FG588_20	391281.00	3646434.60	894.2
ML865_FG588_21	391284.00	3646431.88	891.1
ML865_FG588_22	391298.82	3646421.28	882.8
ML865_FG588_23	391297.71	3646421.55	877.0
ML865_FG588_24	391299.36	3646420.08	852.7
ML865_FG588_25	391282.86	3646434.30	852.5
ML865_FG588_26	391285.86	3646420.53	843.3
ML865_FG588_27	391308.30	3646438.38	816.9
ML865_FG588_28	391307.34	3646420.08	779.4
ML865_FG588_29	391302.78	3646429.08	749.8
ML865_FG588_30	391297.90	3646418.00	735.9
ML865_FG588_31	391295.34	3646414.80	733.6
ML865_FG588_32	391290.18	3646423.02	729.7
ML865_FG588_33	391307.40	3646415.01	725.1
ML865_FG588_34	391286.01	3646432.47	675.8
ML865_FG588_35	391308.78	3646414.70	661.1
ML865_FG588_36	391282.32	3646427.04	646.8
ML865_FG588_37	391299.30	3646429.86	639.6
ML865_FG588_38	391283.64	3646426.08	639.2
ML865_FG588_39	391308.00	3646418.55	632.6
ML865_FG588_40	391300.26	3646429.20	626.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_41	391290.36	3646432.83	624.4
ML865_FG588_42	391284.54	3646416.54	610.1
ML865_FG588_43	391284.36	3646429.05	598.2
ML865_FG588_44	391286.79	3646412.61	588.7
ML865_FG588_45	391306.92	3646411.26	569.2
ML865_FG588_46	391283.46	3646430.54	565.5
ML865_FG588_47	391283.67	3646415.37	552.6
ML865_FG588_48	391287.24	3646431.90	548.3
ML865_FG588_49	391284.74	3646433.72	530.1
ML865_FG588_50	391291.83	3646418.67	521.5
ML865_FG588_51	391284.36	3646423.16	511.3
ML865_FG588_52	391305.42	3646413.20	506.5
ML865_FG588_53	391305.51	3646420.32	495.1
ML865_FG588_54	391284.78	3646419.48	477.6
ML865_FG588_55	391282.65	3646417.50	476.7
ML865_FG588_56	391281.90	3646425.84	476.0
ML865_FG588_57	391290.90	3646426.56	472.8
ML865_FG588_58	391292.76	3646426.56	460.8
ML865_FG588_59	391291.92	3646422.72	447.1
ML865_FG588_60	391299.90	3646418.76	445.0
ML865_FG588_61	391297.20	3646414.80	439.2
ML865_FG588_62	391299.39	3646422.21	438.8
ML865_FG588_63	391291.50	3646421.28	434.1
ML865_FG588_64	391307.64	3646417.02	432.6
ML865_FG588_65	391304.01	3646413.36	420.9
ML865_FG588_66	391288.74	3646432.08	415.3
ML865_FG588_67	391296.48	3646428.48	407.6
ML865_FG588_68	391308.66	3646417.74	398.2
ML865_FG588_69	391284.15	3646435.44	398.1
ML865_FG588_70	391282.77	3646415.85	381.6
ML865_FG588_71	391301.04	3646420.14	381.1
ML865_FG588_72	391290.72	3646421.55	371.7
ML865_FG588_73	391303.44	3646412.88	368.5
ML865_FG588_74	391285.02	3646430.16	362.7
ML865_FG588_75	391284.72	3646431.46	359.9
ML865_FG588_76	391289.86	3646413.86	355.7
ML865_FG588_77	391294.42	3646415.69	353.1
ML865_FG588_78	391302.99	3646420.29	345.7
ML865_FG588_79	391281.00	3646413.06	345.3
ML865_FG588_80	391285.50	3646425.24	344.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_81	391298.34	3646429.50	332.5
ML865_FG588_82	391309.38	3646437.90	325.6
ML865_FG588_83	391291.17	3646418.42	320.6
ML865_FG588_84	391293.96	3646425.48	320.4
ML865_FG588_85	391294.20	3646413.03	314.4
ML865_FG588_86	391295.88	3646410.84	307.7
ML865_FG588_87	391307.22	3646410.24	307.1
ML865_FG588_88	391281.39	3646419.30	305.8
ML865_FG588_89	391286.31	3646426.29	300.5
ML865_FG588_90	391285.65	3646431.30	297.2
ML865_FG588_91	391300.70	3646413.48	290.7
ML865_FG588_92	391295.76	3646413.78	286.2
ML865_FG588_93	391300.98	3646437.36	284.9
ML865_FG588_94	391292.91	3646421.22	283.3
ML865_FG588_95	391300.59	3646416.09	280.2
ML865_FG588_96	391289.68	3646430.10	272.5
ML865_FG588_97	391285.86	3646421.34	264.0
ML865_FG588_98	391288.80	3646415.28	261.7
ML865_FG588_99	391307.12	3646418.10	257.1
ML865_FG588_100	391301.80	3646413.90	253.6
ML865_FG588_101	391298.94	3646432.02	251.5
ML865_FG588_102	391304.12	3646437.18	246.7
ML865_FG588_103	391302.16	3646418.81	245.4
ML865_FG588_104	391285.02	3646436.16	244.4
ML865_FG588_105	391289.37	3646422.15	239.9
ML865_FG588_106	391309.50	3646416.42	239.5
ML865_FG588_107	391303.47	3646439.28	231.6
ML865_FG588_108	391292.16	3646424.46	226.9
ML865_FG588_109	391283.64	3646432.83	226.7
ML865_FG588_110	391288.84	3646430.42	223.9
ML865_FG588_111	391291.31	3646424.95	223.2
ML865_FG588_112	391280.46	3646438.62	223.2
ML865_FG588_113	391308.72	3646419.30	223.1
ML865_FG588_114	391304.16	3646415.76	221.6
ML865_FG588_115	391301.58	3646415.46	219.8
ML865_FG588_116	391288.08	3646424.31	216.7
ML865_FG588_117	391301.76	3646429.32	216.7
ML865_FG588_118	391305.66	3646411.44	213.7
ML865_FG588_119	391293.02	3646413.52	211.4
ML865_FG588_120	391302.36	3646436.82	208.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_121	391290.84	3646412.94	206.5
ML865_FG588_122	391307.34	3646413.72	206.0
ML865_FG588_123	391289.82	3646416.63	203.8
ML865_FG588_124	391309.41	3646425.96	202.5
ML865_FG588_125	391284.42	3646439.22	195.5
ML865_FG588_126	391287.78	3646421.28	194.7
ML865_FG588_127	391308.84	3646410.00	193.7
ML865_FG588_128	391301.25	3646430.25	193.7
ML865_FG588_129	391293.84	3646414.16	192.6
ML865_FG588_130	391283.67	3646439.94	189.9
ML865_FG588_131	391285.59	3646428.15	187.2
ML865_FG588_132	391295.50	3646428.34	183.4
ML865_FG588_133	391283.31	3646438.71	182.3
ML865_FG588_134	391287.78	3646422.48	181.2
ML865_FG588_135	391288.02	3646429.14	180.6
ML865_FG588_136	391283.91	3646417.56	179.9
ML865_FG588_137	391305.45	3646430.28	176.5
ML865_FG588_138	391294.68	3646431.60	174.8
ML865_FG588_139	391306.35	3646414.35	174.5
ML865_FG588_140	391309.26	3646421.73	170.9
ML865_FG588_141	391301.94	3646412.70	169.5
ML865_FG588_142	391290.16	3646428.52	169.4
ML865_FG588_143	391301.94	3646420.80	168.9
ML865_FG588_144	391290.28	3646431.10	166.8
ML865_FG588_145	391293.63	3646422.66	166.7
ML865_FG588_146	391309.53	3646413.51	166.3
ML865_FG588_147	391283.76	3646412.67	165.7
ML865_FG588_148	391298.41	3646424.84	162.8
ML865_FG588_149	391296.81	3646418.55	157.1
ML865_FG588_150	391302.57	3646417.65	156.2
ML865_FG588_151	391307.06	3646413.06	155.2
ML865_FG588_152	391281.78	3646429.56	155.2
ML865_FG588_153	391297.00	3646413.90	153.7
ML865_FG588_154	391288.24	3646413.28	151.8
ML865_FG588_155	391291.84	3646431.42	151.5
ML865_FG588_156	391304.40	3646414.92	149.7
ML865_FG588_157	391299.69	3646413.39	149.5
ML865_FG588_158	391298.14	3646419.06	148.3
ML865_FG588_159	391309.96	3646410.90	147.3
ML865_FG588_160	391304.97	3646412.10	146.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_161	391301.85	3646411.05	145.6
ML865_FG588_162	391301.39	3646417.91	145.2
ML865_FG588_163	391289.18	3646439.42	144.7
ML865_FG588_164	391280.07	3646432.26	144.3
ML865_FG588_165	391303.86	3646423.74	144.1
ML865_FG588_166	391303.92	3646420.56	140.3
ML865_FG588_167	391305.84	3646432.77	140.0
ML865_FG588_168	391290.60	3646410.45	139.9
ML865_FG588_169	391285.59	3646422.66	138.3
ML865_FG588_170	391306.50	3646419.33	138.1
ML865_FG588_171	391291.16	3646420.24	137.8
ML865_FG588_172	391292.01	3646433.46	137.3
ML865_FG588_173	391294.62	3646429.22	137.2
ML865_FG588_174	391298.28	3646420.50	136.0
ML865_FG588_175	391306.80	3646423.74	136.0
ML865_FG588_176	391290.18	3646434.72	136.0
ML865_FG588_177	391291.86	3646413.64	135.6
ML865_FG588_178	391297.92	3646416.45	134.6
ML865_FG588_179	391307.76	3646431.78	133.3
ML865_FG588_180	391299.02	3646414.26	132.1
ML865_FG588_181	391292.82	3646415.25	131.4
ML865_FG588_182	391283.52	3646424.58	130.2
ML865_FG588_183	391297.86	3646410.72	127.3
ML865_FG588_184	391300.95	3646412.46	127.3
ML865_FG588_185	391305.42	3646417.47	125.8
ML865_FG588_186	391288.95	3646418.37	125.5
ML865_FG588_187	391287.74	3646417.34	124.2
ML865_FG588_188	391305.90	3646425.66	124.2
ML865_FG588_189	391283.40	3646422.24	123.8
ML865_FG588_190	391293.08	3646417.68	123.2
ML865_FG588_191	391297.94	3646411.84	122.7
ML865_FG588_192	391294.36	3646421.20	122.3
ML865_FG588_193	391287.72	3646430.22	121.2
ML865_FG588_194	391297.38	3646420.26	121.1
ML865_FG588_195	391306.98	3646438.98	118.4
ML865_FG588_196	391301.94	3646424.01	117.0
ML865_FG588_197	391289.28	3646412.10	116.8
ML865_FG588_198	391281.18	3646414.40	116.7
ML865_FG588_199	391299.06	3646426.26	116.7
ML865_FG588_200	391308.24	3646411.53	116.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_201	391285.17	3646418.16	114.7
ML865_FG588_202	391305.84	3646438.98	112.4
ML865_FG588_203	391291.11	3646411.32	111.9
ML865_FG588_204	391281.36	3646430.98	111.8
ML865_FG588_205	391289.74	3646420.60	111.7
ML865_FG588_206	391286.47	3646418.72	111.2
ML865_FG588_207	391287.02	3646410.72	108.8
ML865_FG588_208	391299.81	3646417.77	107.5
ML865_FG588_209	391300.47	3646423.71	107.4
ML865_FG588_210	391284.90	3646410.42	106.5
ML865_FG588_211	391296.60	3646422.48	106.1
ML865_FG588_212	391306.30	3646416.30	105.5
ML865_FG588_213	391308.44	3646429.12	105.4
ML865_FG588_214	391308.51	3646430.43	105.1
ML865_FG588_215	391286.67	3646430.34	104.7
ML865_FG588_216	391296.75	3646429.95	103.4
ML865_FG588_217	391286.52	3646428.96	101.5
ML865_FG588_218	391293.60	3646419.87	101.3
ML865_FG588_219	391292.28	3646429.08	100.3
ML865_FG588_220	391287.68	3646427.92	100.0
ML865_FG588_221	391287.39	3646425.66	98.7
ML865_FG588_222	391309.14	3646412.22	97.6
ML865_FG588_223	391306.65	3646437.53	96.9
ML865_FG588_224	391283.40	3646419.18	96.5
ML865_FG588_225	391286.28	3646417.44	96.3
ML865_FG588_226	391287.90	3646418.61	95.7
ML865_FG588_227	391302.66	3646425.00	95.7
ML865_FG588_228	391294.47	3646411.71	95.2
ML865_FG588_229	391293.00	3646425.54	95.0
ML865_FG588_230	391306.62	3646431.00	94.7
ML865_FG588_231	391295.84	3646411.72	93.5
ML865_FG588_232	391304.43	3646422.60	92.0
ML865_FG588_233	391286.64	3646437.66	91.0
ML865_FG588_234	391287.80	3646415.76	90.2
ML865_FG588_235	391308.18	3646422.39	90.1
ML865_FG588_236	391304.82	3646419.36	88.7
ML865_FG588_237	391292.01	3646417.53	88.2
ML865_FG588_238	391286.52	3646435.86	85.5
ML865_FG588_239	391282.35	3646418.85	85.4
ML865_FG588_240	391301.82	3646416.87	85.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_241	391287.15	3646418.39	84.6
ML865_FG588_242	391281.60	3646439.13	84.2
ML865_FG588_243	391298.13	3646413.48	83.1
ML865_FG588_244	391299.36	3646424.88	82.7
ML865_FG588_245	391282.80	3646411.89	82.4
ML865_FG588_246	391294.83	3646419.90	82.2
ML865_FG588_247	391286.34	3646415.94	81.5
ML865_FG588_248	391309.84	3646418.82	80.8
ML865_FG588_249	391299.66	3646424.01	80.7
ML865_FG588_250	391282.26	3646421.28	79.9
ML865_FG588_251	391297.08	3646426.35	79.9
ML865_FG588_252	391288.26	3646428.06	79.6
ML865_FG588_253	391300.72	3646426.64	79.2
ML865_FG588_254	391302.82	3646416.30	79.0
ML865_FG588_255	391296.96	3646434.96	78.9
ML865_FG588_256	391302.54	3646422.87	78.3
ML865_FG588_257	391297.83	3646431.45	78.1
ML865_FG588_258	391308.12	3646413.15	77.6
ML865_FG588_259	391295.01	3646430.72	77.5
ML865_FG588_260	391282.00	3646423.30	77.1
ML865_FG588_261	391286.28	3646414.55	77.0
ML865_FG588_262	391304.73	3646434.15	75.5
ML865_FG588_263	391281.26	3646416.12	75.3
ML865_FG588_264	391293.06	3646437.15	75.3
ML865_FG588_265	391289.28	3646424.76	75.1
ML865_FG588_266	391301.97	3646435.38	74.2
ML865_FG588_267	391291.89	3646415.79	73.6
ML865_FG588_268	391292.70	3646431.09	72.6
ML865_FG588_269	391282.62	3646410.72	71.2
ML865_FG588_270	391295.76	3646425.60	70.2
ML865_FG588_271	391280.86	3646421.32	70.1
ML865_FG588_272	391296.72	3646425.45	68.8
ML865_FG588_273	391290.88	3646430.04	68.6
ML865_FG588_274	391303.74	3646416.84	67.9
ML865_FG588_275	391290.66	3646415.25	67.4
ML865_FG588_276	391301.32	3646421.50	67.2
ML865_FG588_277	391305.06	3646416.30	67.0
ML865_FG588_278	391290.54	3646436.94	65.4
ML865_FG588_279	391296.06	3646420.80	65.2
ML865_FG588_280	391288.56	3646437.21	65.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_281	391296.00	3646437.30	65.0
ML865_FG588_282	391289.86	3646418.16	62.7
ML865_FG588_283	391296.32	3646435.84	62.3
ML865_FG588_284	391292.16	3646438.38	62.3
ML865_FG588_285	391308.04	3646436.72	62.0
ML865_FG588_286	391307.61	3646432.95	61.9
ML865_FG588_287	391295.25	3646422.12	61.5
ML865_FG588_288	391294.26	3646423.68	61.1
ML865_FG588_289	391286.58	3646438.92	60.7
ML865_FG588_290	391304.55	3646418.13	60.6
ML865_FG588_291	391293.15	3646433.46	60.6
ML865_FG588_292	391297.02	3646430.88	60.4
ML865_FG588_293	391284.03	3646421.01	59.5
ML865_FG588_294	391309.38	3646423.92	59.2
ML865_FG588_295	391305.96	3646433.52	58.8
ML865_FG588_296	391300.86	3646435.16	57.9
ML865_FG588_297	391280.16	3646411.20	57.7
ML865_FG588_298	391302.48	3646434.90	56.3
ML865_FG588_299	391299.58	3646416.66	56.2
ML865_FG588_300	391301.49	3646438.86	56.0
ML865_FG588_301	391294.36	3646418.12	55.4
ML865_FG588_302	391293.48	3646410.72	55.2
ML865_FG588_303	391298.19	3646427.55	55.2
ML865_FG588_304	391283.90	3646427.74	55.2
ML865_FG588_305	391292.46	3646439.82	54.6
ML865_FG588_306	391304.10	3646410.90	54.3
ML865_FG588_307	391291.44	3646439.58	54.1
ML865_FG588_308	391301.40	3646433.28	53.3
ML865_FG588_309	391294.60	3646427.54	52.5
ML865_FG588_310	391309.80	3646436.82	51.9
ML865_FG588_311	391289.79	3646425.90	51.8
ML865_FG588_312	391296.50	3646416.06	51.6
ML865_FG588_313	391302.66	3646438.65	51.2
ML865_FG588_314	391295.04	3646432.74	50.9
ML865_FG588_315	391307.82	3646423.86	50.4
ML865_FG588_316	391299.12	3646436.16	50.0
ML865_FG588_317	391292.97	3646411.56	49.7
ML865_FG588_318	391303.86	3646426.95	49.3
ML865_FG588_319	391289.82	3646427.43	49.3
ML865_FG588_320	391304.52	3646426.20	49.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_321	391303.80	3646432.02	49.0
ML865_FG588_322	391299.06	3646428.21	48.9
ML865_FG588_323	391281.54	3646418.22	47.8
ML865_FG588_324	391292.22	3646412.16	47.6
ML865_FG588_325	391281.24	3646424.28	47.1
ML865_FG588_326	391297.80	3646432.56	47.1
ML865_FG588_327	391288.80	3646436.34	46.7
ML865_FG588_328	391292.82	3646432.26	45.9
ML865_FG588_329	391305.80	3646410.46	45.8
ML865_FG588_330	391294.77	3646416.63	45.8
ML865_FG588_331	391300.12	3646411.14	45.1
ML865_FG588_332	391295.18	3646413.04	44.9
ML865_FG588_333	391300.44	3646431.42	44.9
ML865_FG588_334	391286.33	3646439.88	44.9
ML865_FG588_335	391285.44	3646424.10	44.7
ML865_FG588_336	391309.80	3646422.72	44.1
ML865_FG588_337	391303.92	3646425.06	43.9
ML865_FG588_338	391297.83	3646423.26	43.8
ML865_FG588_339	391308.00	3646434.42	43.2
ML865_FG588_340	391287.03	3646424.19	42.9
ML865_FG588_341	391288.64	3646426.34	41.6
ML865_FG588_342	391284.66	3646411.32	40.8
ML865_FG588_343	391306.35	3646422.24	37.8
ML865_FG588_344	391303.47	3646421.79	37.7
ML865_FG588_345	391295.54	3646418.60	37.5
ML865_FG588_346	391297.64	3646439.34	34.6
ML865_FG588_347	391298.73	3646431.12	34.4
ML865_FG588_348	391308.62	3646435.96	34.1
ML865_FG588_349	391287.46	3646414.18	34.0
ML865_FG588_350	391296.03	3646431.78	34.0
ML865_FG588_351	391309.50	3646435.11	33.8
ML865_FG588_352	391295.94	3646429.71	31.9
ML865_FG588_353	391293.48	3646430.91	30.5
ML865_FG588_354	391281.60	3646410.57	29.9
ML865_FG588_355	391292.52	3646430.22	29.4
ML865_FG588_356	391287.27	3646436.61	28.0
ML865_FG588_357	391306.06	3646424.00	27.5
ML865_FG588_358	391309.79	3646432.07	27.4
ML865_FG588_359	391299.90	3646415.13	27.3
ML865_FG588_360	391296.21	3646439.04	26.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG588_361	391301.30	3646425.18	23.9
ML865_FG588_362	391302.48	3646425.75	22.6
ML865_FG588_363	391295.94	3646434.96	21.7
ML865_FG588_364	391305.60	3646429.05	21.4
ML865_FG588_365	391293.54	3646428.90	20.2
ML865_FG588_366	391303.17	3646430.55	16.4
ML865_FG589_1	391290.18	3646455.96	23064.5
ML865_FG589_2	391294.74	3646468.80	8617.0
ML865_FG589_3	391288.98	3646441.92	3419.5
ML865_FG589_4	391292.28	3646453.62	2690.7
ML865_FG589_5	391296.12	3646445.70	1797.6
ML865_FG589_6	391304.07	3646453.89	1548.7
ML865_FG589_7	391296.24	3646443.24	1215.6
ML865_FG589_8	391285.32	3646447.68	799.2
ML865_FG589_9	391283.46	3646445.64	757.3
ML865_FG589_10	391309.38	3646457.76	741.3
ML865_FG589_11	391309.14	3646468.26	707.0
ML865_FG589_12	391283.94	3646459.44	695.4
ML865_FG589_13	391307.73	3646468.59	580.6
ML865_FG589_14	391291.35	3646445.31	534.5
ML865_FG589_15	391297.26	3646441.08	527.1
ML865_FG589_16	391288.92	3646456.92	513.2
ML865_FG589_17	391300.33	3646453.89	479.8
ML865_FG589_18	391297.29	3646442.97	477.8
ML865_FG589_19	391299.12	3646448.70	453.6
ML865_FG589_20	391296.81	3646441.74	439.6
ML865_FG589_21	391289.13	3646446.87	428.3
ML865_FG589_22	391304.16	3646465.86	425.6
ML865_FG589_23	391292.88	3646460.07	412.1
ML865_FG589_24	391302.72	3646461.36	409.7
ML865_FG589_25	391302.90	3646440.84	409.2
ML865_FG589_26	391289.10	3646464.00	368.2
ML865_FG589_27	391293.84	3646468.08	347.6
ML865_FG589_28	391291.86	3646466.46	343.0
ML865_FG589_29	391308.84	3646463.04	338.0
ML865_FG589_30	391292.04	3646463.52	335.5
ML865_FG589_31	391300.74	3646444.74	330.3
ML865_FG589_32	391287.84	3646444.72	330.1
ML865_FG589_33	391304.74	3646440.28	325.4
ML865_FG589_34	391292.31	3646444.53	325.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG589_35	391289.85	3646445.73	311.7
ML865_FG589_36	391290.90	3646450.86	298.8
ML865_FG589_37	391309.98	3646451.22	295.9
ML865_FG589_38	391288.23	3646447.56	289.6
ML865_FG589_39	391305.08	3646441.62	285.6
ML865_FG589_40	391299.42	3646444.38	276.8
ML865_FG589_41	391284.84	3646444.80	266.2
ML865_FG589_42	391288.32	3646446.18	265.5
ML865_FG589_43	391287.48	3646443.66	258.6
ML865_FG589_44	391300.80	3646449.30	249.4
ML865_FG589_45	391292.22	3646446.78	240.8
ML865_FG589_46	391285.56	3646442.55	240.5
ML865_FG589_47	391309.94	3646445.18	231.0
ML865_FG589_48	391290.84	3646444.11	228.6
ML865_FG589_49	391297.95	3646455.36	228.0
ML865_FG589_50	391281.18	3646441.44	226.9
ML865_FG589_51	391286.46	3646446.36	226.3
ML865_FG589_52	391297.86	3646449.24	223.9
ML865_FG589_53	391303.53	3646441.83	215.2
ML865_FG589_54	391281.84	3646444.32	212.6
ML865_FG589_55	391307.10	3646456.83	211.4
ML865_FG589_56	391283.40	3646441.17	209.0
ML865_FG589_57	391288.74	3646451.28	206.2
ML865_FG589_58	391307.82	3646446.36	206.0
ML865_FG589_59	391283.28	3646444.89	201.1
ML865_FG589_60	391297.53	3646445.19	200.6
ML865_FG589_61	391284.57	3646464.78	198.8
ML865_FG589_62	391304.82	3646453.77	196.0
ML865_FG589_63	391298.19	3646467.39	189.7
ML865_FG589_64	391304.22	3646444.98	189.2
ML865_FG589_65	391293.69	3646444.71	183.7
ML865_FG589_66	391291.56	3646442.10	179.1
ML865_FG589_67	391304.49	3646461.12	178.9
ML865_FG589_68	391280.70	3646449.30	178.4
ML865_FG589_69	391280.82	3646440.16	176.7
ML865_FG589_70	391290.00	3646441.38	173.8
ML865_FG589_71	391282.64	3646440.12	169.5
ML865_FG589_72	391283.40	3646460.64	166.2
ML865_FG589_73	391295.10	3646445.58	164.4
ML865_FG589_74	391285.38	3646465.98	158.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG589_75	391303.89	3646446.78	156.6
ML865_FG589_76	391291.50	3646447.38	155.4
ML865_FG589_77	391295.64	3646450.98	151.8
ML865_FG589_78	391299.12	3646440.88	150.8
ML865_FG589_79	391300.32	3646443.18	150.8
ML865_FG589_80	391286.37	3646442.79	149.8
ML865_FG589_81	391308.74	3646453.62	149.1
ML865_FG589_82	391284.51	3646447.20	145.1
ML865_FG589_83	391290.00	3646448.46	144.2
ML865_FG589_84	391302.72	3646462.11	143.5
ML865_FG589_85	391292.88	3646448.16	141.4
ML865_FG589_86	391280.76	3646444.68	140.7
ML865_FG589_87	391293.06	3646443.12	137.2
ML865_FG589_88	391285.95	3646441.05	136.1
ML865_FG589_89	391298.46	3646440.04	124.4
ML865_FG589_90	391309.06	3646443.18	122.7
ML865_FG589_91	391296.06	3646452.15	122.1
ML865_FG589_92	391295.52	3646459.02	121.4
ML865_FG589_93	391305.06	3646455.90	121.0
ML865_FG589_94	391289.55	3646459.20	119.9
ML865_FG589_95	391302.69	3646454.52	116.0
ML865_FG589_96	391306.74	3646442.79	115.1
ML865_FG589_97	391295.55	3646463.04	112.0
ML865_FG589_98	391294.68	3646443.46	111.5
ML865_FG589_99	391307.22	3646462.38	111.2
ML865_FG589_100	391302.75	3646446.63	110.8
ML865_FG589_101	391290.12	3646442.76	110.6
ML865_FG589_102	391293.06	3646467.42	109.7
ML865_FG589_103	391302.78	3646449.30	108.8
ML865_FG589_104	391295.85	3646440.72	108.5
ML865_FG589_105	391308.84	3646469.52	107.5
ML865_FG589_106	391290.07	3646453.68	106.3
ML865_FG589_107	391290.84	3646466.22	105.5
ML865_FG589_108	391284.96	3646446.06	104.7
ML865_FG589_109	391304.04	3646464.72	104.1
ML865_FG589_110	391293.28	3646441.30	102.6
ML865_FG589_111	391301.96	3646441.70	101.0
ML865_FG589_112	391285.17	3646454.88	100.2
ML865_FG589_113	391305.66	3646442.92	99.5
ML865_FG589_114	391298.16	3646461.66	96.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG589_115	391294.12	3646445.68	90.6
ML865_FG589_116	391295.94	3646464.30	88.7
ML865_FG589_117	391289.22	3646444.16	88.0
ML865_FG589_118	391281.96	3646446.18	87.7
ML865_FG589_119	391296.68	3646440.12	87.5
ML865_FG589_120	391285.50	3646460.04	87.4
ML865_FG589_121	391302.48	3646452.00	87.2
ML865_FG589_122	391281.66	3646464.42	86.5
ML865_FG589_123	391291.80	3646465.74	84.5
ML865_FG589_124	391298.70	3646441.98	81.6
ML865_FG589_125	391290.69	3646448.58	80.4
ML865_FG589_126	391301.28	3646443.54	79.7
ML865_FG589_127	391293.09	3646465.08	79.4
ML865_FG589_128	391291.14	3646464.24	79.2
ML865_FG589_129	391284.30	3646463.28	79.1
ML865_FG589_130	391309.74	3646441.58	78.7
ML865_FG589_131	391283.10	3646458.45	78.1
ML865_FG589_132	391284.24	3646457.40	77.8
ML865_FG589_133	391288.74	3646465.14	77.4
ML865_FG589_134	391309.30	3646454.60	76.6
ML865_FG589_135	391302.15	3646445.28	76.4
ML865_FG589_136	391296.42	3646468.32	71.7
ML865_FG589_137	391293.78	3646458.54	70.9
ML865_FG589_138	391285.98	3646444.68	70.1
ML865_FG589_139	391287.64	3646442.44	69.5
ML865_FG589_140	391308.48	3646445.04	68.2
ML865_FG589_141	391291.94	3646441.00	66.8
ML865_FG589_142	391306.20	3646462.71	66.8
ML865_FG589_143	391306.92	3646453.02	66.6
ML865_FG589_144	391295.16	3646467.48	66.2
ML865_FG589_145	391308.36	3646457.22	65.8
ML865_FG589_146	391280.82	3646465.98	65.2
ML865_FG589_147	391284.66	3646441.50	64.7
ML865_FG589_148	391309.74	3646453.68	64.6
ML865_FG589_149	391281.39	3646442.46	64.1
ML865_FG589_150	391283.14	3646454.28	63.8
ML865_FG589_151	391303.86	3646456.80	61.9
ML865_FG589_152	391289.82	3646449.78	61.7
ML865_FG589_153	391293.78	3646447.56	61.1
ML865_FG589_154	391299.66	3646461.72	60.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG589_155	391281.06	3646462.08	59.6
ML865_FG589_156	391288.83	3646448.76	59.3
ML865_FG589_157	391299.45	3646446.12	59.1
ML865_FG589_158	391307.64	3646463.64	59.0
ML865_FG589_159	391300.89	3646440.24	58.8
ML865_FG589_160	391294.56	3646440.75	58.4
ML865_FG589_161	391296.24	3646446.84	57.9
ML865_FG589_162	391291.38	3646461.36	57.7
ML865_FG589_163	391283.16	3646449.96	57.2
ML865_FG589_164	391309.48	3646440.48	56.9
ML865_FG589_165	391293.96	3646451.10	56.4
ML865_FG589_166	391301.34	3646447.38	56.2
ML865_FG589_167	391300.14	3646455.00	55.7
ML865_FG589_168	391288.92	3646466.40	55.6
ML865_FG589_169	391294.68	3646449.12	55.1
ML865_FG589_170	391306.98	3646461.84	53.9
ML865_FG589_171	391300.14	3646468.50	53.9
ML865_FG589_172	391302.48	3646442.85	53.8
ML865_FG589_173	391309.38	3646465.50	53.2
ML865_FG589_174	391282.02	3646467.18	51.6
ML865_FG589_175	391301.94	3646453.20	50.6
ML865_FG589_176	391288.02	3646462.92	50.4
ML865_FG589_177	391306.74	3646467.24	50.1
ML865_FG589_178	391290.96	3646462.98	49.9
ML865_FG589_179	391297.62	3646447.74	49.5
ML865_FG589_180	391291.08	3646458.66	49.3
ML865_FG589_181	391302.60	3646457.40	48.0
ML865_FG589_182	391306.56	3646441.47	47.5
ML865_FG589_183	391305.90	3646446.06	46.8
ML865_FG589_184	391291.00	3646461.72	46.8
ML865_FG589_185	391298.85	3646444.77	46.0
ML865_FG589_186	391307.94	3646459.14	46.0
ML865_FG589_187	391286.04	3646466.94	43.9
ML865_FG589_188	391281.68	3646447.62	43.4
ML865_FG589_189	391307.74	3646441.26	42.7
ML865_FG589_190	391285.50	3646459.06	42.6
ML865_FG589_191	391292.04	3646449.42	41.8
ML865_FG589_192	391291.44	3646443.75	41.5
ML865_FG589_193	391305.69	3646457.55	40.9
ML865_FG589_194	391309.14	3646460.58	40.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG589_195	391300.77	3646441.62	38.9
ML865_FG589_196	391298.82	3646443.27	38.0
ML865_FG589_197	391289.82	3646440.42	37.1
ML865_FG589_198	391295.30	3646444.32	36.7
ML865_FG589_199	391286.55	3646459.05	35.6
ML865_FG589_200	391307.46	3646454.02	35.0
ML865_FG589_201	391308.33	3646440.48	33.3
ML865_FG589_202	391291.71	3646452.42	33.0
ML865_FG589_203	391291.01	3646440.15	32.4
ML865_FG589_204	391305.90	3646444.82	27.4
ML865_FG589_205	391287.57	3646457.19	27.2
ML865_FG589_206	391293.81	3646440.00	25.4
ML865_FG589_207	391307.64	3646443.45	25.4
ML865_FG589_208	391308.75	3646461.27	25.1
ML865_FG589_209	391303.80	3646443.72	23.0
ML865_FG590_1	391309.80	3646470.06	1418.5
ML865_FG590_2	391285.68	3646492.44	1189.4
ML865_FG590_3	391305.00	3646499.52	733.2
ML865_FG590_4	391300.56	3646470.78	609.9
ML865_FG590_5	391298.76	3646470.72	271.2
ML865_FG590_6	391306.26	3646477.56	265.9
ML865_FG590_7	391301.64	3646471.98	264.6
ML865_FG590_8	391304.88	3646470.45	207.8
ML865_FG590_9	391305.06	3646472.67	193.2
ML865_FG590_10	391299.40	3646481.74	177.1
ML865_FG590_11	391299.58	3646476.82	175.5
ML865_FG590_12	391307.91	3646483.11	171.3
ML865_FG590_13	391299.72	3646471.38	155.5
ML865_FG590_14	391300.68	3646489.08	148.5
ML865_FG590_15	391308.30	3646488.48	133.4
ML865_FG590_16	391302.84	3646477.62	109.5
ML865_FG590_17	391302.78	3646483.86	106.8
ML865_FG590_18	391304.88	3646481.04	100.1
ML865_FG590_19	391287.66	3646499.70	91.5
ML865_FG590_20	391304.20	3646472.88	85.7
ML865_FG590_21	391298.70	3646474.08	83.5
ML865_FG590_22	391309.77	3646474.53	83.0
ML865_FG590_23	391307.52	3646497.90	79.2
ML865_FG590_24	391308.54	3646470.48	78.0
ML865_FG590_25	391308.18	3646473.40	65.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FG590_26	391294.35	3646472.16	64.6
ML865_FG590_27	391296.96	3646470.66	59.1
ML865_FG590_28	391281.36	3646493.64	56.6
ML865_FG590_29	391309.59	3646472.13	55.0
ML865_FG590_30	391298.01	3646477.71	54.6
ML865_FG590_31	391294.80	3646470.63	51.0
ML865_FG590_32	391307.52	3646490.22	50.5
ML865_FG590_33	391287.00	3646483.38	46.8
ML865_FG590_34	391297.26	3646473.84	45.7
ML865_FG590_35	391307.20	3646470.68	44.5
ML865_FG590_36	391307.70	3646493.88	43.4
ML865_FG590_37	391302.12	3646483.95	41.2
ML865_FG590_38	391306.35	3646473.24	40.6
ML865_FG590_39	391300.80	3646484.85	38.1
ML865_FG590_40	391308.45	3646471.50	37.9
ML865_FG590_41	391297.71	3646472.25	36.8
ML865_FG590_42	391299.90	3646473.00	36.8
ML865_FG590_43	391294.74	3646473.81	32.7
ML865_FG590_44	391295.74	3646472.08	21.1
ML865_FG591_1	391291.38	3646500.00	720.2
ML865_FG591_2	391309.56	3646520.10	425.7
ML865_FG591_3	391291.20	3646507.86	396.2
ML865_FG591_4	391307.88	3646501.05	149.0
ML865_FG591_5	391285.14	3646506.12	127.9
ML865_FG591_6	391286.10	3646507.80	109.6
ML865_FG591_7	391290.48	3646504.86	98.6
ML865_FG591_8	391284.78	3646515.48	97.9
ML865_FG591_9	391283.40	3646510.26	93.0
ML865_FG591_10	391295.04	3646506.30	63.4
ML865_FH584_1	391318.92	3646311.87	248.8
ML865_FH584_2	391327.98	3646317.84	102.7
ML865_FH584_3	391317.84	3646308.78	95.3
ML865_FH584_4	391315.32	3646318.86	49.2
ML865_FH584_5	391335.06	3646310.82	47.9
ML865_FH585_1	391318.32	3646349.28	3743.6
ML865_FH585_2	391325.58	3646349.82	1372.0
ML865_FH585_3	391328.70	3646339.80	703.0
ML865_FH585_4	391338.60	3646348.02	646.6
ML865_FH585_5	391319.88	3646347.84	396.5
ML865_FH585_6	391339.71	3646346.37	395.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH585_7	391337.37	3646349.49	364.1
ML865_FH585_8	391316.91	3646347.27	236.0
ML865_FH585_9	391323.14	3646348.80	206.7
ML865_FH585_10	391332.78	3646320.96	186.1
ML865_FH585_11	391326.78	3646336.98	151.3
ML865_FH585_12	391317.00	3646345.95	149.8
ML865_FH585_13	391318.98	3646348.38	145.5
ML865_FH585_14	391337.46	3646326.24	137.6
ML865_FH585_15	391339.08	3646349.10	104.8
ML865_FH585_16	391318.32	3646347.00	92.0
ML865_FH585_17	391339.86	3646344.27	79.4
ML865_FH585_18	391324.08	3646345.86	77.8
ML865_FH585_19	391310.94	3646348.62	75.0
ML865_FH585_20	391336.62	3646348.50	72.1
ML865_FH585_21	391322.40	3646346.34	69.7
ML865_FH585_22	391317.84	3646344.99	60.6
ML865_FH585_23	391339.26	3646323.66	60.5
ML865_FH585_24	391311.18	3646345.20	59.0
ML865_FH585_25	391318.02	3646329.36	53.0
ML865_FH585_26	391325.22	3646326.24	49.8
ML865_FH585_27	391328.94	3646333.86	43.6
ML865_FH585_28	391316.82	3646337.49	29.9
ML865_FH586_1	391310.30	3646361.32	15472.4
ML865_FH586_2	391310.43	3646363.08	5230.1
ML865_FH586_3	391312.14	3646360.32	5015.7
ML865_FH586_4	391310.50	3646358.26	3600.0
ML865_FH586_5	391316.16	3646374.42	3564.0
ML865_FH586_6	391316.30	3646372.94	3163.4
ML865_FH586_7	391321.20	3646360.74	2312.4
ML865_FH586_8	391334.88	3646356.00	1765.7
ML865_FH586_9	391314.06	3646355.52	1536.3
ML865_FH586_10	391319.22	3646357.74	1493.3
ML865_FH586_11	391313.58	3646367.76	1297.2
ML865_FH586_12	391311.72	3646356.06	1273.2
ML865_FH586_13	391311.00	3646359.54	1183.3
ML865_FH586_14	391327.47	3646350.99	1160.5
ML865_FH586_15	391311.22	3646379.34	1135.4
ML865_FH586_16	391323.12	3646372.74	1134.5
ML865_FH586_17	391316.49	3646371.33	1130.9
ML865_FH586_18	391313.28	3646366.74	1089.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH586_19	391313.88	3646373.10	1064.2
ML865_FH586_20	391312.42	3646368.40	1054.8
ML865_FH586_21	391321.14	3646356.75	969.4
ML865_FH586_22	391310.88	3646353.54	883.0
ML865_FH586_23	391316.24	3646370.28	882.6
ML865_FH586_24	391334.97	3646353.21	878.8
ML865_FH586_25	391315.08	3646369.65	802.1
ML865_FH586_26	391319.22	3646356.82	791.6
ML865_FH586_27	391320.96	3646355.46	755.9
ML865_FH586_28	391310.46	3646355.34	738.6
ML865_FH586_29	391315.62	3646371.26	736.2
ML865_FH586_30	391313.43	3646354.83	729.4
ML865_FH586_31	391320.00	3646359.48	727.5
ML865_FH586_32	391312.08	3646354.53	701.5
ML865_FH586_33	391319.28	3646358.76	681.3
ML865_FH586_34	391316.94	3646361.94	624.6
ML865_FH586_35	391312.47	3646359.51	621.6
ML865_FH586_36	391321.98	3646354.26	601.5
ML865_FH586_37	391311.90	3646357.14	600.7
ML865_FH586_38	391310.13	3646373.67	596.2
ML865_FH586_39	391312.80	3646356.54	585.4
ML865_FH586_40	391311.42	3646378.32	564.4
ML865_FH586_41	391310.40	3646377.90	562.8
ML865_FH586_42	391319.54	3646351.56	562.2
ML865_FH586_43	391317.66	3646370.70	550.9
ML865_FH586_44	391310.01	3646376.58	528.2
ML865_FH586_45	391323.36	3646371.54	508.8
ML865_FH586_46	391316.16	3646375.50	504.8
ML865_FH586_47	391314.66	3646360.56	489.1
ML865_FH586_48	391314.24	3646371.99	482.4
ML865_FH586_49	391330.98	3646360.77	469.9
ML865_FH586_50	391314.30	3646356.60	464.8
ML865_FH586_51	391317.50	3646365.24	449.2
ML865_FH586_52	391331.18	3646358.14	447.3
ML865_FH586_53	391315.08	3646355.34	440.2
ML865_FH586_54	391324.60	3646357.56	428.6
ML865_FH586_55	391315.47	3646359.51	422.3
ML865_FH586_56	391313.34	3646374.32	419.1
ML865_FH586_57	391318.08	3646373.46	412.2
ML865_FH586_58	391310.84	3646366.92	391.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH586_59	391321.56	3646374.93	387.6
ML865_FH586_60	391311.69	3646371.24	374.7
ML865_FH586_61	391324.32	3646370.64	356.5
ML865_FH586_62	391335.66	3646352.28	345.9
ML865_FH586_63	391311.81	3646372.92	324.8
ML865_FH586_64	391320.24	3646362.00	324.7
ML865_FH586_65	391318.02	3646358.34	323.0
ML865_FH586_66	391328.04	3646357.56	314.1
ML865_FH586_67	391335.54	3646360.14	310.4
ML865_FH586_68	391313.14	3646367.72	294.3
ML865_FH586_69	391313.92	3646377.32	281.9
ML865_FH586_70	391315.14	3646376.16	275.9
ML865_FH586_71	391311.93	3646370.49	271.0
ML865_FH586_72	391319.04	3646364.02	264.0
ML865_FH586_73	391312.44	3646363.83	259.6
ML865_FH586_74	391311.09	3646352.10	255.2
ML865_FH586_75	391319.73	3646373.34	250.4
ML865_FH586_76	391311.82	3646375.22	248.1
ML865_FH586_77	391316.42	3646369.10	246.1
ML865_FH586_78	391324.80	3646352.76	239.5
ML865_FH586_79	391324.08	3646350.90	236.9
ML865_FH586_80	391328.73	3646352.70	235.8
ML865_FH586_81	391319.22	3646371.54	234.3
ML865_FH586_82	391320.06	3646355.94	234.2
ML865_FH586_83	391313.04	3646372.50	233.8
ML865_FH586_84	391319.64	3646363.26	232.2
ML865_FH586_85	391310.19	3646372.70	232.1
ML865_FH586_86	391311.10	3646365.09	231.9
ML865_FH586_87	391313.25	3646358.49	231.8
ML865_FH586_88	391329.93	3646361.46	231.7
ML865_FH586_89	391312.59	3646379.43	230.3
ML865_FH586_90	391315.72	3646352.14	226.9
ML865_FH586_91	391313.22	3646375.80	217.6
ML865_FH586_92	391314.06	3646359.48	213.8
ML865_FH586_93	391315.98	3646351.32	213.0
ML865_FH586_94	391319.88	3646360.32	211.0
ML865_FH586_95	391337.79	3646361.31	209.9
ML865_FH586_96	391315.70	3646358.04	206.1
ML865_FH586_97	391313.48	3646362.98	205.0
ML865_FH586_98	391316.94	3646376.76	202.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH586_99	391330.17	3646359.99	198.7
ML865_FH586_100	391336.50	3646351.38	196.6
ML865_FH586_101	391311.50	3646375.85	193.4
ML865_FH586_102	391321.14	3646359.60	191.4
ML865_FH586_103	391315.62	3646376.70	190.3
ML865_FH586_104	391318.10	3646366.50	189.8
ML865_FH586_105	391321.11	3646353.75	189.0
ML865_FH586_106	391322.58	3646373.70	187.7
ML865_FH586_107	391326.36	3646360.08	187.5
ML865_FH586_108	391321.14	3646352.08	183.7
ML865_FH586_109	391312.20	3646351.68	173.8
ML865_FH586_110	391314.09	3646358.19	173.4
ML865_FH586_111	391334.04	3646359.78	161.2
ML865_FH586_112	391310.96	3646368.98	160.8
ML865_FH586_113	391313.10	3646371.39	160.6
ML865_FH586_114	391329.54	3646363.11	156.7
ML865_FH586_115	391333.38	3646356.42	156.4
ML865_FH586_116	391323.75	3646359.84	156.3
ML865_FH586_117	391312.86	3646369.68	153.9
ML865_FH586_118	391310.52	3646375.12	151.1
ML865_FH586_119	391332.63	3646358.28	149.5
ML865_FH586_120	391310.43	3646356.78	148.1
ML865_FH586_121	391317.24	3646367.61	146.3
ML865_FH586_122	391311.48	3646370.04	145.0
ML865_FH586_123	391328.26	3646360.06	144.9
ML865_FH586_124	391319.30	3646353.18	141.8
ML865_FH586_125	391318.32	3646368.78	135.8
ML865_FH586_126	391316.70	3646364.16	134.1
ML865_FH586_127	391334.43	3646355.10	129.8
ML865_FH586_128	391318.74	3646379.25	126.9
ML865_FH586_129	391321.95	3646371.75	125.7
ML865_FH586_130	391319.10	3646355.28	123.9
ML865_FH586_131	391314.96	3646364.58	119.0
ML865_FH586_132	391325.37	3646369.14	118.1
ML865_FH586_133	391314.60	3646353.78	117.4
ML865_FH586_134	391318.68	3646351.74	117.2
ML865_FH586_135	391318.08	3646368.00	116.7
ML865_FH586_136	391315.22	3646362.74	115.8
ML865_FH586_137	391320.00	3646375.08	115.4
ML865_FH586_138	391317.18	3646359.54	113.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH586_139	391320.69	3646354.74	113.5
ML865_FH586_140	391323.20	3646358.46	113.0
ML865_FH586_141	391317.84	3646350.48	107.4
ML865_FH586_142	391327.62	3646365.71	106.9
ML865_FH586_143	391322.06	3646358.30	104.7
ML865_FH586_144	391320.69	3646376.67	103.1
ML865_FH586_145	391320.62	3646371.52	100.3
ML865_FH586_146	391316.08	3646365.80	99.9
ML865_FH586_147	391310.70	3646371.33	98.8
ML865_FH586_148	391317.64	3646352.26	98.7
ML865_FH586_149	391317.90	3646353.96	93.4
ML865_FH586_150	391328.40	3646363.92	91.4
ML865_FH586_151	391325.07	3646359.72	91.1
ML865_FH586_152	391332.81	3646357.14	91.0
ML865_FH586_153	391319.13	3646365.72	88.2
ML865_FH586_154	391310.49	3646350.36	84.1
ML865_FH586_155	391328.04	3646353.96	83.7
ML865_FH586_156	391328.19	3646364.61	80.9
ML865_FH586_157	391312.08	3646377.02	80.2
ML865_FH586_158	391317.63	3646360.47	79.9
ML865_FH586_159	391332.51	3646360.02	76.6
ML865_FH586_160	391323.09	3646350.48	75.5
ML865_FH586_161	391312.18	3646366.52	75.4
ML865_FH586_162	391326.84	3646366.86	74.3
ML865_FH586_163	391322.85	3646364.88	70.6
ML865_FH586_164	391316.68	3646358.72	68.6
ML865_FH586_165	391326.09	3646368.12	66.7
ML865_FH586_166	391321.67	3646362.24	64.2
ML865_FH586_167	391313.56	3646353.24	63.7
ML865_FH586_168	391338.90	3646356.12	63.6
ML865_FH586_169	391318.23	3646376.46	62.4
ML865_FH586_170	391324.32	3646369.77	61.2
ML865_FH586_171	391325.22	3646354.86	59.0
ML865_FH586_172	391313.25	3646351.41	58.0
ML865_FH586_173	391323.21	3646363.77	57.9
ML865_FH586_174	391320.93	3646372.98	57.7
ML865_FH586_175	391314.30	3646378.80	57.6
ML865_FH586_176	391335.54	3646378.32	56.2
ML865_FH586_177	391328.13	3646356.15	54.6
ML865_FH586_178	391323.18	3646353.24	54.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH586_179	391312.98	3646377.90	52.3
ML865_FH586_180	391327.14	3646361.40	51.6
ML865_FH586_181	391339.14	3646362.66	51.0
ML865_FH586_182	391317.60	3646378.83	49.0
ML865_FH586_183	391334.04	3646352.16	47.9
ML865_FH586_184	391318.68	3646359.48	47.6
ML865_FH586_185	391325.46	3646356.48	46.6
ML865_FH586_186	391314.42	3646352.37	46.1
ML865_FH586_187	391337.88	3646376.58	46.1
ML865_FH586_188	391316.88	3646356.06	42.3
ML865_FH586_189	391314.45	3646363.59	40.5
ML865_FH586_190	391330.95	3646350.27	39.6
ML865_FH586_191	391317.87	3646357.44	36.1
ML865_FH586_192	391319.52	3646375.95	35.8
ML865_FH586_193	391321.35	3646370.85	34.9
ML865_FH586_194	391337.28	3646378.32	33.2
ML865_FH586_195	391317.65	3646355.37	30.8
ML865_FH586_196	391339.89	3646350.75	22.4
ML865_FH586_197	391320.12	3646370.76	20.1
ML865_FH586_198	391338.00	3646356.99	16.9
ML865_FH587_1	391315.38	3646388.94	2628.6
ML865_FH587_2	391324.38	3646399.68	2246.3
ML865_FH587_3	391326.02	3646408.74	1938.7
ML865_FH587_4	391336.50	3646401.60	1877.9
ML865_FH587_5	391324.70	3646408.58	1621.4
ML865_FH587_6	391327.66	3646404.85	1510.8
ML865_FH587_7	391312.32	3646407.24	1024.6
ML865_FH587_8	391325.22	3646406.58	971.9
ML865_FH587_9	391334.10	3646402.74	817.5
ML865_FH587_10	391310.55	3646380.60	753.1
ML865_FH587_11	391315.90	3646408.52	739.4
ML865_FH587_12	391310.94	3646392.15	679.2
ML865_FH587_13	391325.49	3646405.10	670.7
ML865_FH587_14	391334.70	3646396.26	606.3
ML865_FH587_15	391331.94	3646405.68	554.4
ML865_FH587_16	391320.54	3646405.86	476.2
ML865_FH587_17	391322.82	3646404.87	471.4
ML865_FH587_18	391328.98	3646407.88	459.3
ML865_FH587_19	391315.38	3646382.94	418.5
ML865_FH587_20	391326.12	3646406.16	407.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH587_21	391324.08	3646400.88	384.9
ML865_FH587_22	391325.62	3646402.94	374.0
ML865_FH587_23	391337.28	3646402.80	363.4
ML865_FH587_24	391331.31	3646405.14	326.9
ML865_FH587_25	391331.85	3646406.67	325.8
ML865_FH587_26	391314.64	3646408.90	315.6
ML865_FH587_27	391332.09	3646399.29	313.8
ML865_FH587_28	391318.68	3646409.16	305.5
ML865_FH587_29	391330.38	3646407.45	305.1
ML865_FH587_30	391337.76	3646391.25	303.2
ML865_FH587_31	391317.42	3646409.01	296.4
ML865_FH587_32	391315.56	3646399.14	296.2
ML865_FH587_33	391319.46	3646408.04	278.5
ML865_FH587_34	391311.27	3646409.61	273.8
ML865_FH587_35	391323.12	3646406.88	265.1
ML865_FH587_36	391336.50	3646393.26	256.4
ML865_FH587_37	391311.00	3646381.83	254.7
ML865_FH587_38	391310.96	3646408.08	247.9
ML865_FH587_39	391332.90	3646392.66	247.7
ML865_FH587_40	391337.07	3646398.78	245.6
ML865_FH587_41	391317.16	3646409.84	244.6
ML865_FH587_42	391333.08	3646404.54	239.4
ML865_FH587_43	391315.08	3646401.66	237.8
ML865_FH587_44	391326.60	3646404.03	236.7
ML865_FH587_45	391320.48	3646390.14	233.9
ML865_FH587_46	391332.00	3646400.28	227.4
ML865_FH587_47	391329.88	3646406.58	220.7
ML865_FH587_48	391331.52	3646398.00	220.6
ML865_FH587_49	391339.50	3646406.91	218.8
ML865_FH587_50	391332.06	3646391.52	218.4
ML865_FH587_51	391332.40	3646380.70	217.6
ML865_FH587_52	391311.12	3646393.95	210.2
ML865_FH587_53	391318.14	3646407.42	204.4
ML865_FH587_54	391328.54	3646403.14	199.3
ML865_FH587_56	391316.76	3646407.84	192.7
ML865_FH587_57	391311.06	3646391.28	182.2
ML865_FH587_58	391319.38	3646392.42	171.5
ML865_FH587_59	391323.18	3646407.72	170.9
ML865_FH587_60	391329.64	3646404.96	168.9
ML865_FH587_61	391321.58	3646409.08	165.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH587_62	391338.42	3646409.40	162.6
ML865_FH587_63	391331.55	3646409.55	159.1
ML865_FH587_64	391330.82	3646398.47	158.6
ML865_FH587_65	391326.60	3646407.03	155.6
ML865_FH587_66	391322.91	3646408.47	153.6
ML865_FH587_67	391327.54	3646407.76	151.3
ML865_FH587_68	391328.85	3646404.21	151.2
ML865_FH587_69	391336.50	3646409.52	147.6
ML865_FH587_70	391324.56	3646404.78	142.4
ML865_FH587_71	391312.89	3646408.68	142.3
ML865_FH587_72	391337.94	3646396.38	142.1
ML865_FH587_73	391317.84	3646399.71	140.0
ML865_FH587_74	391311.84	3646380.60	137.8
ML865_FH587_75	391337.94	3646409.78	135.8
ML865_FH587_76	391321.23	3646407.81	130.4
ML865_FH587_77	391335.12	3646397.46	129.2
ML865_FH587_78	391331.31	3646408.56	126.3
ML865_FH587_79	391333.32	3646395.90	125.5
ML865_FH587_80	391330.08	3646404.09	125.3
ML865_FH587_81	391315.74	3646381.08	124.2
ML865_FH587_82	391315.62	3646394.94	121.9
ML865_FH587_83	391333.42	3646399.36	117.0
ML865_FH587_84	391338.63	3646404.81	115.1
ML865_FH587_85	391326.26	3646400.52	112.2
ML865_FH587_86	391321.62	3646405.20	108.5
ML865_FH587_87	391319.12	3646400.08	105.8
ML865_FH587_88	391320.76	3646402.46	104.5
ML865_FH587_90	391332.38	3646409.42	101.9
ML865_FH587_91	391310.79	3646390.35	101.6
ML865_FH587_92	391322.10	3646406.40	100.3
ML865_FH587_93	391322.47	3646403.27	99.2
ML865_FH587_94	391329.80	3646401.82	95.6
ML865_FH587_95	391328.70	3646392.00	95.3
ML865_FH587_96	391315.38	3646405.26	95.3
ML865_FH587_97	391315.53	3646399.98	94.4
ML865_FH587_98	391320.51	3646408.68	93.1
ML865_FH587_99	391315.26	3646406.94	93.0
ML865_FH587_100	391317.54	3646400.88	91.5
ML865_FH587_101	391312.02	3646400.04	88.4
ML865_FH587_102	391314.36	3646385.34	87.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH587_103	391322.37	3646398.69	86.8
ML865_FH587_104	391324.78	3646402.10	86.4
ML865_FH587_105	391322.46	3646401.36	85.0
ML865_FH587_106	391324.74	3646403.61	84.9
ML865_FH587_107	391310.52	3646401.18	84.5
ML865_FH587_108	391327.38	3646401.42	84.2
ML865_FH587_109	391337.46	3646404.42	81.5
ML865_FH587_110	391317.96	3646380.93	81.1
ML865_FH587_111	391337.19	3646395.24	78.4
ML865_FH587_112	391333.72	3646409.64	78.2
ML865_FH587_113	391316.94	3646390.20	76.2
ML865_FH587_114	391334.94	3646406.16	73.3
ML865_FH587_115	391316.92	3646400.10	71.4
ML865_FH587_116	391321.62	3646398.98	70.9
ML865_FH587_117	391321.02	3646404.24	69.3
ML865_FH587_118	391316.54	3646383.36	69.1
ML865_FH587_119	391331.91	3646403.67	68.4
ML865_FH587_120	391310.58	3646404.60	67.9
ML865_FH587_121	391324.80	3646409.82	66.7
ML865_FH587_122	391320.00	3646388.88	66.6
ML865_FH587_123	391318.92	3646405.14	65.4
ML865_FH587_124	391338.66	3646400.34	65.0
ML865_FH587_125	391326.06	3646401.78	64.5
ML865_FH587_126	391329.12	3646398.27	64.2
ML865_FH587_127	391314.14	3646400.50	62.7
ML865_FH587_128	391337.36	3646408.44	60.6
ML865_FH587_129	391317.94	3646404.18	60.3
ML865_FH587_130	391323.00	3646402.44	59.5
ML865_FH587_131	391327.42	3646402.66	59.5
ML865_FH587_132	391336.08	3646394.43	58.8
ML865_FH587_133	391328.64	3646399.32	56.6
ML865_FH587_134	391327.50	3646399.02	56.3
ML865_FH587_135	391332.93	3646408.32	56.0
ML865_FH587_136	391329.70	3646409.90	55.2
ML865_FH587_137	391328.04	3646381.14	54.2
ML865_FH587_138	391334.19	3646381.35	53.4
ML865_FH587_139	391313.64	3646407.00	49.9
ML865_FH587_140	391312.62	3646381.56	49.3
ML865_FH587_141	391310.88	3646385.52	48.1
ML865_FH587_142	391316.82	3646406.34	48.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH587_143	391326.90	3646383.66	47.5
ML865_FH587_144	391338.36	3646398.60	46.3
ML865_FH587_145	391310.52	3646388.94	46.0
ML865_FH587_146	391331.04	3646389.90	45.1
ML865_FH587_147	391339.56	3646398.24	45.1
ML865_FH587_148	391318.56	3646402.80	44.4
ML865_FH587_149	391321.98	3646402.02	43.9
ML865_FH587_150	391339.98	3646382.58	43.1
ML865_FH587_151	391319.88	3646406.85	43.0
ML865_FH587_152	391337.67	3646383.45	37.2
ML865_FH587_153	391317.54	3646382.04	35.7
ML865_FH587_154	391312.23	3646405.44	34.8
ML865_FH587_155	391314.64	3646405.56	33.7
ML865_FH587_156	391311.27	3646405.53	33.4
ML865_FH587_157	391330.26	3646408.95	31.1
ML865_FH587_158	391312.18	3646395.24	29.2
ML865_FH587_159	391321.16	3646391.76	27.8
ML865_FH587_160	391319.82	3646405.14	27.5
ML865_FH587_161	391334.19	3646389.00	24.1
ML865_FH587_162	391334.61	3646394.97	21.6
ML865_FH587_163	391321.86	3646400.88	21.5
ML865_FH587_164	391339.08	3646408.53	19.8
ML865_FH587_165	391334.61	3646408.68	8.2
ML865_FH588_1	391325.76	3646417.20	22536.5
ML865_FH588_2	391331.16	3646429.20	13902.5
ML865_FH588_3	391324.38	3646418.76	11040.9
ML865_FH588_4	391329.30	3646430.88	10063.2
ML865_FH588_5	391328.91	3646426.58	9406.4
ML865_FH588_6	391324.20	3646416.06	9068.1
ML865_FH588_7	391331.64	3646425.66	8071.7
ML865_FH588_8	391331.44	3646430.98	7824.8
ML865_FH588_9	391330.64	3646431.44	4576.6
ML865_FH588_10	391329.68	3646429.56	4505.9
ML865_FH588_11	391325.85	3646418.52	4064.8
ML865_FH588_12	391315.29	3646418.01	3219.9
ML865_FH588_13	391330.62	3646430.08	2879.3
ML865_FH588_14	391318.44	3646410.48	2862.3
ML865_FH588_15	391337.56	3646414.36	2749.5
ML865_FH588_16	391332.78	3646430.10	2747.9
ML865_FH588_17	391327.60	3646414.22	2651.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_18	391332.18	3646428.48	2483.0
ML865_FH588_19	391322.10	3646414.68	2470.3
ML865_FH588_20	391335.42	3646413.99	2414.5
ML865_FH588_21	391338.18	3646418.70	2402.4
ML865_FH588_22	391329.78	3646428.12	2363.6
ML865_FH588_23	391314.66	3646437.60	2314.0
ML865_FH588_24	391326.60	3646419.24	2062.2
ML865_FH588_25	391322.40	3646428.06	1985.1
ML865_FH588_26	391315.80	3646413.60	1888.2
ML865_FH588_27	391330.11	3646413.93	1865.4
ML865_FH588_28	391327.32	3646415.40	1776.5
ML865_FH588_29	391329.03	3646424.64	1772.7
ML865_FH588_30	391317.93	3646418.04	1704.0
ML865_FH588_31	391328.16	3646419.15	1570.9
ML865_FH588_32	391320.84	3646415.13	1483.8
ML865_FH588_33	391318.44	3646416.06	1451.0
ML865_FH588_34	391332.06	3646422.45	1368.5
ML865_FH588_35	391327.86	3646423.50	1358.4
ML865_FH588_36	391331.26	3646426.92	1352.4
ML865_FH588_37	391328.98	3646421.44	1297.3
ML865_FH588_38	391327.70	3646418.10	1219.5
ML865_FH588_39	391328.64	3646428.00	1218.1
ML865_FH588_40	391336.56	3646411.32	1206.8
ML865_FH588_41	391318.80	3646418.52	1153.3
ML865_FH588_42	391322.28	3646421.46	1131.5
ML865_FH588_43	391313.22	3646423.26	1115.7
ML865_FH588_44	391327.71	3646420.80	1093.2
ML865_FH588_45	391327.68	3646427.58	1066.0
ML865_FH588_46	391328.52	3646433.70	980.2
ML865_FH588_47	391339.50	3646414.26	926.3
ML865_FH588_48	391325.46	3646429.80	917.6
ML865_FH588_49	391325.58	3646415.10	908.7
ML865_FH588_50	391320.24	3646416.10	902.0
ML865_FH588_51	391313.76	3646415.82	854.9
ML865_FH588_52	391324.14	3646414.26	847.1
ML865_FH588_53	391316.44	3646419.46	843.6
ML865_FH588_54	391325.34	3646431.12	833.8
ML865_FH588_55	391325.10	3646429.11	790.2
ML865_FH588_56	391329.54	3646432.38	767.7
ML865_FH588_57	391334.43	3646426.44	761.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_58	391323.16	3646432.64	753.7
ML865_FH588_59	391319.94	3646422.30	742.9
ML865_FH588_60	391324.68	3646426.50	737.8
ML865_FH588_61	391332.03	3646432.53	731.6
ML865_FH588_62	391332.60	3646426.26	730.3
ML865_FH588_63	391322.37	3646426.26	727.5
ML865_FH588_64	391328.70	3646432.68	696.7
ML865_FH588_65	391313.40	3646435.74	694.5
ML865_FH588_66	391328.01	3646430.45	689.2
ML865_FH588_67	391333.84	3646421.54	674.2
ML865_FH588_68	391333.95	3646414.38	673.7
ML865_FH588_69	391310.07	3646429.65	658.2
ML865_FH588_70	391321.14	3646421.10	656.5
ML865_FH588_71	391327.84	3646422.26	651.5
ML865_FH588_72	391326.75	3646413.33	649.1
ML865_FH588_73	391321.90	3646413.22	642.5
ML865_FH588_74	391322.61	3646434.57	630.3
ML865_FH588_75	391327.41	3646428.39	627.7
ML865_FH588_76	391321.56	3646419.96	611.6
ML865_FH588_77	391337.16	3646412.46	610.8
ML865_FH588_78	391317.63	3646416.93	597.7
ML865_FH588_79	391330.26	3646417.74	596.5
ML865_FH588_80	391324.86	3646427.68	583.1
ML865_FH588_81	391329.88	3646423.40	546.2
ML865_FH588_82	391327.62	3646416.96	545.1
ML865_FH588_83	391321.08	3646411.62	538.8
ML865_FH588_84	391327.06	3646421.36	530.0
ML865_FH588_85	391331.52	3646433.70	526.9
ML865_FH588_86	391326.69	3646427.97	523.6
ML865_FH588_87	391330.26	3646415.20	521.8
ML865_FH588_88	391323.78	3646429.50	517.6
ML865_FH588_89	391312.21	3646416.71	512.2
ML865_FH588_90	391313.64	3646410.22	509.1
ML865_FH588_91	391333.18	3646423.14	500.4
ML865_FH588_92	391330.35	3646425.39	493.4
ML865_FH588_93	391329.18	3646420.23	491.9
ML865_FH588_94	391335.64	3646411.10	490.9
ML865_FH588_95	391327.78	3646432.14	489.0
ML865_FH588_96	391321.32	3646410.64	486.4
ML865_FH588_97	391319.58	3646420.53	486.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_98	391319.34	3646432.05	484.6
ML865_FH588_99	391313.67	3646420.47	475.4
ML865_FH588_100	391317.90	3646413.86	471.9
ML865_FH588_101	391313.88	3646439.04	460.2
ML865_FH588_102	391318.24	3646415.02	457.0
ML865_FH588_103	391310.70	3646415.19	456.2
ML865_FH588_104	391328.70	3646417.26	440.1
ML865_FH588_105	391314.62	3646413.60	436.0
ML865_FH588_106	391331.73	3646423.65	432.7
ML865_FH588_107	391311.40	3646420.86	398.3
ML865_FH588_108	391319.43	3646410.18	395.5
ML865_FH588_109	391339.14	3646412.52	384.0
ML865_FH588_110	391323.00	3646410.30	368.4
ML865_FH588_111	391321.29	3646418.55	364.7
ML865_FH588_112	391339.29	3646411.08	363.9
ML865_FH588_113	391324.38	3646430.10	358.2
ML865_FH588_114	391319.18	3646414.58	355.7
ML865_FH588_115	391337.10	3646422.00	351.5
ML865_FH588_116	391324.12	3646411.46	347.8
ML865_FH588_117	391337.82	3646416.24	346.0
ML865_FH588_118	391335.30	3646421.52	341.8
ML865_FH588_119	391333.14	3646425.04	340.5
ML865_FH588_120	391317.76	3646421.74	339.7
ML865_FH588_121	391321.20	3646422.54	337.9
ML865_FH588_122	391322.52	3646431.75	337.4
ML865_FH588_123	391321.65	3646416.51	335.8
ML865_FH588_124	391332.48	3646436.94	335.1
ML865_FH588_125	391316.58	3646410.84	335.0
ML865_FH588_126	391310.76	3646416.12	334.0
ML865_FH588_127	391323.42	3646422.72	328.8
ML865_FH588_128	391319.00	3646437.00	325.3
ML865_FH588_129	391322.22	3646429.74	324.7
ML865_FH588_130	391326.36	3646434.84	321.4
ML865_FH588_131	391330.59	3646421.85	319.6
ML865_FH588_132	391327.34	3646435.76	313.8
ML865_FH588_133	391331.49	3646420.82	311.3
ML865_FH588_134	391335.28	3646434.68	310.7
ML865_FH588_135	391326.34	3646432.14	308.3
ML865_FH588_136	391338.24	3646417.38	307.8
ML865_FH588_137	391326.39	3646412.67	307.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_138	391313.88	3646432.74	302.4
ML865_FH588_139	391326.36	3646420.17	302.3
ML865_FH588_140	391334.46	3646424.07	300.5
ML865_FH588_141	391333.08	3646432.92	299.7
ML865_FH588_142	391334.22	3646436.34	296.3
ML865_FH588_143	391311.57	3646413.39	294.5
ML865_FH588_144	391329.58	3646412.56	293.1
ML865_FH588_145	391329.12	3646416.15	291.4
ML865_FH588_146	391320.00	3646413.66	288.3
ML865_FH588_147	391338.90	3646416.06	288.0
ML865_FH588_148	391310.16	3646417.71	286.8
ML865_FH588_149	391327.23	3646411.41	286.0
ML865_FH588_150	391325.94	3646433.73	284.7
ML865_FH588_151	391328.31	3646439.07	284.3
ML865_FH588_152	391319.13	3646419.78	284.2
ML865_FH588_153	391325.52	3646412.78	283.3
ML865_FH588_154	391310.16	3646421.04	276.5
ML865_FH588_155	391322.22	3646417.26	273.6
ML865_FH588_156	391332.48	3646434.66	271.9
ML865_FH588_157	391314.57	3646419.30	268.7
ML865_FH588_158	391311.50	3646418.25	268.1
ML865_FH588_159	391330.29	3646436.25	266.9
ML865_FH588_160	391333.32	3646415.64	264.3
ML865_FH588_161	391327.29	3646433.88	259.3
ML865_FH588_162	391328.28	3646411.44	257.1
ML865_FH588_163	391320.00	3646411.74	252.7
ML865_FH588_164	391311.60	3646432.47	241.4
ML865_FH588_165	391333.56	3646434.36	240.1
ML865_FH588_166	391334.28	3646411.65	239.1
ML865_FH588_167	391327.87	3646438.46	239.1
ML865_FH588_168	391316.08	3646416.57	238.4
ML865_FH588_169	391313.34	3646434.46	235.5
ML865_FH588_170	391313.82	3646417.08	231.6
ML865_FH588_171	391321.00	3646429.26	229.4
ML865_FH588_172	391337.94	3646412.13	228.8
ML865_FH588_173	391329.92	3646418.36	227.5
ML865_FH588_174	391334.94	3646425.57	224.4
ML865_FH588_175	391323.51	3646430.73	217.6
ML865_FH588_176	391313.92	3646412.70	217.3
ML865_FH588_177	391325.66	3646425.46	216.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_178	391314.84	3646435.14	209.5
ML865_FH588_179	391315.64	3646414.96	209.3
ML865_FH588_180	391312.92	3646414.11	208.8
ML865_FH588_181	391333.47	3646417.38	208.7
ML865_FH588_182	391326.00	3646410.21	207.0
ML865_FH588_183	391316.52	3646412.04	205.5
ML865_FH588_184	391332.54	3646420.86	205.5
ML865_FH588_185	391338.78	3646423.14	200.8
ML865_FH588_186	391331.04	3646416.51	199.9
ML865_FH588_187	391312.38	3646410.00	197.3
ML865_FH588_188	391313.01	3646418.70	194.9
ML865_FH588_189	391319.08	3646413.02	194.5
ML865_FH588_190	391334.55	3646412.64	192.2
ML865_FH588_191	391335.30	3646423.32	190.0
ML865_FH588_192	391329.84	3646435.08	187.9
ML865_FH588_193	391334.58	3646432.20	183.8
ML865_FH588_194	391322.16	3646410.96	181.7
ML865_FH588_195	391330.26	3646420.38	181.2
ML865_FH588_196	391321.08	3646431.06	180.2
ML865_FH588_197	391331.88	3646416.96	179.1
ML865_FH588_198	391318.40	3646411.90	178.8
ML865_FH588_199	391324.56	3646424.34	177.9
ML865_FH588_200	391333.83	3646437.15	177.4
ML865_FH588_201	391313.07	3646437.93	175.0
ML865_FH588_202	391315.18	3646432.22	173.7
ML865_FH588_203	391327.41	3646410.27	173.5
ML865_FH588_204	391322.79	3646419.93	172.4
ML865_FH588_205	391324.76	3646434.34	170.2
ML865_FH588_206	391316.58	3646422.66	169.8
ML865_FH588_207	391328.86	3646437.16	168.8
ML865_FH588_208	391328.58	3646435.88	168.6
ML865_FH588_209	391331.31	3646418.55	167.4
ML865_FH588_210	391313.26	3646411.96	165.5
ML865_FH588_211	391337.28	3646417.41	163.7
ML865_FH588_212	391333.71	3646420.38	163.4
ML865_FH588_213	391311.84	3646423.71	157.0
ML865_FH588_214	391321.22	3646432.92	157.0
ML865_FH588_215	391336.90	3646418.52	155.3
ML865_FH588_216	391319.79	3646438.77	155.3
ML865_FH588_217	391323.39	3646417.53	155.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_218	391321.74	3646437.00	154.8
ML865_FH588_219	391339.74	3646418.91	154.7
ML865_FH588_220	391325.90	3646422.93	154.6
ML865_FH588_221	391314.45	3646436.01	153.4
ML865_FH588_222	391312.90	3646424.52	153.2
ML865_FH588_223	391312.53	3646413.18	145.2
ML865_FH588_224	391319.97	3646417.41	143.8
ML865_FH588_225	391321.38	3646428.06	141.3
ML865_FH588_226	391319.46	3646435.62	140.9
ML865_FH588_227	391326.50	3646436.58	139.5
ML865_FH588_228	391336.50	3646419.98	139.4
ML865_FH588_229	391326.33	3646426.74	138.2
ML865_FH588_230	391314.45	3646411.74	138.1
ML865_FH588_231	391325.04	3646432.56	134.7
ML865_FH588_232	391331.92	3646411.79	134.1
ML865_FH588_233	391336.38	3646416.42	132.9
ML865_FH588_234	391314.42	3646421.28	132.7
ML865_FH588_235	391325.22	3646435.56	131.8
ML865_FH588_236	391323.99	3646435.35	129.4
ML865_FH588_237	391314.81	3646420.23	126.5
ML865_FH588_238	391332.21	3646438.32	124.1
ML865_FH588_239	391323.78	3646421.25	120.1
ML865_FH588_240	391312.65	3646415.01	119.6
ML865_FH588_241	391326.32	3646423.96	119.2
ML865_FH588_242	391330.36	3646412.00	117.0
ML865_FH588_243	391322.97	3646412.19	116.3
ML865_FH588_244	391325.88	3646437.60	114.6
ML865_FH588_245	391330.62	3646438.26	114.5
ML865_FH588_246	391333.50	3646411.86	114.0
ML865_FH588_247	391323.54	3646439.98	114.0
ML865_FH588_248	391312.54	3646436.00	113.6
ML865_FH588_249	391315.53	3646410.03	111.7
ML865_FH588_250	391325.82	3646411.14	111.5
ML865_FH588_251	391320.90	3646435.74	110.4
ML865_FH588_252	391335.30	3646417.92	109.6
ML865_FH588_253	391333.41	3646438.11	106.8
ML865_FH588_254	391332.16	3646419.46	105.1
ML865_FH588_255	391328.46	3646410.00	103.5
ML865_FH588_256	391316.38	3646432.26	101.6
ML865_FH588_257	391313.46	3646424.88	100.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_258	391315.29	3646412.07	99.8
ML865_FH588_259	391320.94	3646424.26	98.5
ML865_FH588_260	391310.40	3646438.98	95.9
ML865_FH588_261	391332.81	3646439.55	94.0
ML865_FH588_262	391334.31	3646439.91	92.6
ML865_FH588_263	391330.95	3646439.52	90.2
ML865_FH588_264	391327.71	3646436.97	89.1
ML865_FH588_265	391316.40	3646437.00	89.1
ML865_FH588_266	391327.08	3646425.36	88.0
ML865_FH588_267	391311.48	3646439.97	87.5
ML865_FH588_268	391315.94	3646437.30	85.0
ML865_FH588_269	391317.60	3646431.70	83.9
ML865_FH588_270	391330.35	3646410.96	83.2
ML865_FH588_271	391323.36	3646425.04	83.0
ML865_FH588_272	391331.79	3646439.67	82.4
ML865_FH588_273	391337.08	3646439.54	81.9
ML865_FH588_274	391336.60	3646422.78	81.3
ML865_FH588_275	391334.36	3646417.90	78.2
ML865_FH588_276	391315.11	3646416.18	77.2
ML865_FH588_277	391331.70	3646436.79	76.9
ML865_FH588_278	391315.74	3646420.92	75.1
ML865_FH588_279	391330.89	3646435.56	74.8
ML865_FH588_280	391332.54	3646418.01	74.5
ML865_FH588_281	391336.56	3646436.96	73.3
ML865_FH588_282	391312.80	3646439.22	73.1
ML865_FH588_283	391317.06	3646437.78	72.1
ML865_FH588_284	391333.60	3646435.76	70.8
ML865_FH588_285	391334.82	3646438.08	68.8
ML865_FH588_286	391337.50	3646424.64	68.1
ML865_FH588_287	391337.60	3646420.56	67.2
ML865_FH588_288	391332.90	3646410.81	66.5
ML865_FH588_289	391318.32	3646432.80	65.2
ML865_FH588_290	391310.46	3646431.48	64.9
ML865_FH588_291	391325.42	3646421.30	64.3
ML865_FH588_292	391316.34	3646439.04	64.0
ML865_FH588_293	391324.26	3646438.26	62.0
ML865_FH588_294	391333.32	3646419.18	60.7
ML865_FH588_295	391338.81	3646423.77	57.8
ML865_FH588_296	391334.85	3646410.03	57.3
ML865_FH588_297	391311.91	3646411.70	57.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH588_298	391311.10	3646411.98	56.2
ML865_FH588_299	391334.70	3646416.66	54.9
ML865_FH588_300	391322.30	3646418.96	53.3
ML865_FH588_301	391316.64	3646439.94	53.0
ML865_FH588_302	391311.72	3646419.12	52.8
ML865_FH588_303	391335.24	3646418.80	52.6
ML865_FH588_304	391321.68	3646424.82	52.3
ML865_FH588_305	391316.67	3646414.59	51.8
ML865_FH588_306	391311.26	3646436.94	51.7
ML865_FH588_307	391337.64	3646437.72	51.5
ML865_FH588_308	391325.60	3646439.00	49.9
ML865_FH588_309	391339.56	3646421.28	49.8
ML865_FH588_310	391321.80	3646439.85	49.5
ML865_FH588_311	391319.22	3646429.80	48.5
ML865_FH588_312	391322.64	3646436.28	47.8
ML865_FH588_313	391339.02	3646438.56	47.6
ML865_FH588_314	391315.68	3646422.24	47.3
ML865_FH588_315	391318.44	3646438.38	47.1
ML865_FH588_316	391318.50	3646424.10	46.1
ML865_FH588_317	391313.12	3646431.92	46.1
ML865_FH588_318	391316.04	3646423.80	45.2
ML865_FH588_319	391338.72	3646420.50	44.9
ML865_FH588_320	391326.63	3646438.14	44.4
ML865_FH588_321	391310.68	3646413.84	44.0
ML865_FH588_322	391316.70	3646435.84	42.7
ML865_FH588_323	391318.86	3646431.18	40.4
ML865_FH588_324	391311.69	3646437.90	35.2
ML865_FH588_325	391329.87	3646439.27	33.8
ML865_FH588_326	391311.40	3646435.56	33.5
ML865_FH588_327	391317.24	3646432.82	29.4
ML865_FH588_328	391335.94	3646439.42	26.3
ML865_FH588_329	391335.14	3646420.39	25.2
ML865_FH588_330	391317.93	3646436.58	20.9
ML865_FH588_331	391320.10	3646431.16	14.3
ML865_FH588_332	391320.66	3646436.61	13.8
ML865_FH589_1	391316.31	3646461.69	5884.5
ML865_FH589_2	391338.36	3646453.02	4385.7
ML865_FH589_3	391334.82	3646466.46	3305.1
ML865_FH589_4	391316.82	3646458.78	2717.2
ML865_FH589_5	391338.96	3646458.22	1899.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_6	391332.36	3646466.34	1735.4
ML865_FH589_7	391338.24	3646462.80	1680.6
ML865_FH589_8	391334.55	3646448.13	1578.3
ML865_FH589_9	391336.14	3646447.96	1536.6
ML865_FH589_10	391336.23	3646456.98	1456.9
ML865_FH589_11	391338.06	3646444.34	1187.2
ML865_FH589_12	391322.19	3646453.92	1121.6
ML865_FH589_13	391326.42	3646445.94	1113.1
ML865_FH589_14	391311.81	3646464.86	1107.6
ML865_FH589_15	391315.80	3646454.80	1105.7
ML865_FH589_16	391336.98	3646446.48	1044.6
ML865_FH589_17	391327.59	3646456.65	984.8
ML865_FH589_18	391323.60	3646443.42	963.6
ML865_FH589_19	391332.72	3646450.92	951.2
ML865_FH589_20	391319.25	3646443.54	926.9
ML865_FH589_21	391336.92	3646448.10	924.3
ML865_FH589_22	391336.68	3646464.63	896.0
ML865_FH589_23	391330.50	3646453.32	869.2
ML865_FH589_24	391318.08	3646459.14	854.1
ML865_FH589_25	391339.30	3646445.52	848.0
ML865_FH589_26	391315.44	3646443.84	835.5
ML865_FH589_27	391333.74	3646442.55	820.3
ML865_FH589_28	391339.38	3646441.08	814.4
ML865_FH589_29	391334.22	3646450.92	794.1
ML865_FH589_30	391326.18	3646467.84	769.0
ML865_FH589_31	391324.11	3646458.69	766.5
ML865_FH589_32	391310.70	3646446.18	717.1
ML865_FH589_33	391338.18	3646445.73	683.9
ML865_FH589_34	391336.76	3646443.88	674.0
ML865_FH589_35	391317.42	3646459.92	672.5
ML865_FH589_36	391339.71	3646462.83	638.0
ML865_FH589_37	391312.92	3646447.68	629.1
ML865_FH589_38	391334.22	3646455.18	622.6
ML865_FH589_39	391326.00	3646444.02	619.6
ML865_FH589_40	391335.48	3646455.24	582.0
ML865_FH589_41	391337.01	3646457.31	570.5
ML865_FH589_42	391337.16	3646461.93	569.7
ML865_FH589_43	391339.16	3646463.82	568.4
ML865_FH589_44	391310.64	3646457.22	561.7
ML865_FH589_45	391333.29	3646456.05	554.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_46	391329.54	3646466.64	532.1
ML865_FH589_47	391334.94	3646458.12	526.6
ML865_FH589_48	391339.78	3646442.62	526.2
ML865_FH589_49	391338.18	3646447.26	515.2
ML865_FH589_50	391336.20	3646466.94	497.0
ML865_FH589_51	391337.40	3646463.40	496.2
ML865_FH589_52	391329.60	3646462.53	494.5
ML865_FH589_53	391337.94	3646456.56	479.1
ML865_FH589_54	391336.82	3646445.44	474.3
ML865_FH589_55	391320.54	3646461.90	470.1
ML865_FH589_56	391314.28	3646443.58	465.8
ML865_FH589_57	391321.68	3646453.26	463.0
ML865_FH589_58	391318.44	3646451.58	460.3
ML865_FH589_59	391329.33	3646455.42	456.4
ML865_FH589_60	391338.46	3646454.98	455.6
ML865_FH589_61	391326.99	3646440.00	454.9
ML865_FH589_62	391334.02	3646449.94	454.7
ML865_FH589_63	391321.05	3646442.55	449.9
ML865_FH589_64	391320.72	3646462.90	444.8
ML865_FH589_65	391337.46	3646443.12	425.2
ML865_FH589_66	391339.50	3646459.44	415.9
ML865_FH589_67	391338.06	3646442.52	401.9
ML865_FH589_68	391316.34	3646444.44	398.1
ML865_FH589_69	391337.01	3646455.90	396.0
ML865_FH589_70	391325.40	3646469.70	390.6
ML865_FH589_71	391333.32	3646449.21	387.7
ML865_FH589_72	391328.97	3646460.58	387.3
ML865_FH589_73	391339.08	3646452.18	386.1
ML865_FH589_74	391313.58	3646455.42	385.9
ML865_FH589_75	391311.15	3646467.90	383.7
ML865_FH589_76	391324.65	3646440.30	382.3
ML865_FH589_77	391339.08	3646443.48	370.6
ML865_FH589_78	391316.67	3646457.79	368.2
ML865_FH589_79	391321.14	3646456.32	364.2
ML865_FH589_80	391311.10	3646444.08	362.7
ML865_FH589_81	391320.36	3646460.82	342.9
ML865_FH589_82	391330.65	3646444.02	336.0
ML865_FH589_83	391317.66	3646464.90	334.0
ML865_FH589_84	391312.96	3646442.96	328.2
ML865_FH589_85	391311.69	3646466.34	325.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_86	391320.78	3646454.88	324.8
ML865_FH589_87	391336.05	3646446.21	322.4
ML865_FH589_88	391320.18	3646442.61	318.6
ML865_FH589_89	391320.72	3646459.62	317.7
ML865_FH589_90	391313.19	3646440.21	315.9
ML865_FH589_91	391325.12	3646443.96	315.3
ML865_FH589_92	391335.12	3646443.00	314.0
ML865_FH589_93	391339.59	3646460.64	313.0
ML865_FH589_94	391335.17	3646449.69	310.3
ML865_FH589_95	391312.74	3646455.75	305.1
ML865_FH589_96	391316.82	3646469.28	304.4
ML865_FH589_97	391332.42	3646457.34	302.9
ML865_FH589_98	391339.74	3646444.41	302.6
ML865_FH589_99	391310.60	3646462.14	301.8
ML865_FH589_100	391325.73	3646455.48	298.6
ML865_FH589_101	391323.90	3646446.81	296.8
ML865_FH589_102	391310.58	3646448.16	290.9
ML865_FH589_103	391322.28	3646442.88	289.0
ML865_FH589_104	391329.92	3646444.40	283.4
ML865_FH589_105	391335.72	3646462.14	281.7
ML865_FH589_106	391315.32	3646446.48	280.1
ML865_FH589_107	391339.89	3646465.62	278.3
ML865_FH589_108	391338.18	3646441.50	274.9
ML865_FH589_109	391321.95	3646463.40	273.3
ML865_FH589_110	391335.27	3646445.37	264.8
ML865_FH589_111	391325.28	3646447.26	263.2
ML865_FH589_112	391329.60	3646458.84	262.4
ML865_FH589_113	391310.34	3646466.70	258.9
ML865_FH589_114	391328.55	3646464.39	258.5
ML865_FH589_115	391330.84	3646458.42	255.8
ML865_FH589_116	391322.22	3646457.07	252.3
ML865_FH589_117	391333.62	3646444.88	249.2
ML865_FH589_118	391314.66	3646444.68	248.7
ML865_FH589_119	391323.30	3646445.88	244.2
ML865_FH589_120	391315.18	3646440.42	241.6
ML865_FH589_121	391334.04	3646456.98	234.9
ML865_FH589_122	391314.18	3646441.47	234.8
ML865_FH589_123	391332.64	3646442.66	233.8
ML865_FH589_124	391327.16	3646453.18	233.5
ML865_FH589_125	391327.02	3646442.07	230.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_126	391315.92	3646456.56	227.2
ML865_FH589_127	391339.43	3646447.26	225.4
ML865_FH589_128	391328.52	3646461.66	225.3
ML865_FH589_129	391328.07	3646440.42	224.3
ML865_FH589_130	391319.00	3646461.62	218.9
ML865_FH589_131	391320.04	3646459.48	217.6
ML865_FH589_132	391336.56	3646465.92	216.7
ML865_FH589_133	391315.35	3646458.42	216.6
ML865_FH589_134	391310.31	3646467.96	211.2
ML865_FH589_135	391322.34	3646449.18	209.1
ML865_FH589_136	391314.21	3646445.31	204.4
ML865_FH589_137	391330.26	3646450.11	203.3
ML865_FH589_138	391315.74	3646467.32	200.9
ML865_FH589_139	391312.41	3646440.96	200.8
ML865_FH589_140	391333.54	3646454.42	200.1
ML865_FH589_141	391336.22	3646442.54	198.3
ML865_FH589_142	391323.26	3646460.46	195.0
ML865_FH589_143	391317.99	3646457.73	192.8
ML865_FH589_144	391335.18	3646456.11	192.7
ML865_FH589_145	391325.92	3646454.10	188.8
ML865_FH589_146	391321.50	3646448.10	186.7
ML865_FH589_147	391333.08	3646461.12	184.0
ML865_FH589_148	391331.08	3646445.28	183.9
ML865_FH589_149	391313.28	3646465.56	183.6
ML865_FH589_150	391312.08	3646448.28	182.3
ML865_FH589_151	391335.14	3646444.16	181.6
ML865_FH589_152	391324.42	3646460.68	180.4
ML865_FH589_153	391314.90	3646455.66	180.3
ML865_FH589_154	391330.90	3646454.72	177.4
ML865_FH589_155	391328.38	3646441.72	176.9
ML865_FH589_156	391339.45	3646468.82	176.7
ML865_FH589_157	391319.79	3646455.54	176.2
ML865_FH589_158	391330.56	3646450.74	173.7
ML865_FH589_159	391336.50	3646454.88	172.7
ML865_FH589_160	391334.94	3646446.48	172.1
ML865_FH589_161	391312.72	3646444.44	170.2
ML865_FH589_162	391339.26	3646440.00	163.9
ML865_FH589_163	391330.08	3646448.76	162.9
ML865_FH589_164	391328.79	3646456.59	158.6
ML865_FH589_165	391336.80	3646468.56	156.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_166	391321.64	3646461.50	156.0
ML865_FH589_167	391329.72	3646457.16	155.9
ML865_FH589_168	391327.72	3646442.96	151.7
ML865_FH589_169	391333.89	3646440.99	147.8
ML865_FH589_170	391334.90	3646464.44	146.7
ML865_FH589_171	391320.86	3646443.96	146.5
ML865_FH589_172	391326.10	3646445.02	146.4
ML865_FH589_173	391328.00	3646454.93	146.0
ML865_FH589_174	391318.44	3646441.86	145.5
ML865_FH589_175	391316.34	3646443.00	143.6
ML865_FH589_176	391336.20	3646458.72	143.2
ML865_FH589_177	391331.68	3646455.32	142.7
ML865_FH589_178	391317.90	3646444.89	142.1
ML865_FH589_179	391324.11	3646464.72	141.1
ML865_FH589_180	391339.98	3646454.94	140.2
ML865_FH589_181	391333.92	3646453.74	139.6
ML865_FH589_182	391314.81	3646442.67	135.9
ML865_FH589_183	391334.22	3646458.42	134.3
ML865_FH589_184	391335.30	3646469.10	131.7
ML865_FH589_185	391313.49	3646464.24	127.8
ML865_FH589_186	391337.49	3646459.56	126.9
ML865_FH589_187	391337.46	3646449.90	126.1
ML865_FH589_188	391325.16	3646468.38	124.9
ML865_FH589_189	391335.24	3646465.14	123.6
ML865_FH589_190	391317.84	3646440.00	121.8
ML865_FH589_191	391322.98	3646458.90	121.7
ML865_FH589_192	391338.48	3646460.80	121.6
ML865_FH589_193	391325.58	3646453.23	121.1
ML865_FH589_194	391325.78	3646441.40	118.0
ML865_FH589_195	391314.12	3646448.28	116.1
ML865_FH589_196	391335.85	3646454.12	115.4
ML865_FH589_197	391324.00	3646444.42	114.7
ML865_FH589_198	391323.44	3646454.14	114.6
ML865_FH589_199	391319.82	3646454.14	114.0
ML865_FH589_200	391327.89	3646445.67	113.4
ML865_FH589_201	391327.14	3646466.94	113.3
ML865_FH589_202	391318.14	3646442.52	113.2
ML865_FH589_203	391322.46	3646445.28	112.7
ML865_FH589_204	391323.42	3646442.22	112.5
ML865_FH589_205	391336.56	3646452.09	110.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_206	391330.14	3646440.51	109.5
ML865_FH589_207	391323.15	3646456.68	108.7
ML865_FH589_208	391334.93	3646467.83	105.9
ML865_FH589_209	391328.91	3646454.37	105.7
ML865_FH589_210	391311.54	3646449.30	105.1
ML865_FH589_211	391322.28	3646460.19	104.1
ML865_FH589_212	391324.98	3646456.74	103.4
ML865_FH589_213	391326.36	3646463.16	101.3
ML865_FH589_214	391332.21	3646445.07	100.0
ML865_FH589_215	391310.10	3646443.72	99.4
ML865_FH589_216	391316.04	3646466.28	98.0
ML865_FH589_217	391312.52	3646463.57	97.2
ML865_FH589_218	391313.37	3646446.51	95.7
ML865_FH589_219	391329.60	3646451.70	94.1
ML865_FH589_220	391337.19	3646453.80	94.1
ML865_FH589_221	391329.70	3646441.38	94.0
ML865_FH589_222	391320.24	3646469.82	93.4
ML865_FH589_223	391339.20	3646454.55	92.2
ML865_FH589_224	391336.68	3646449.33	90.2
ML865_FH589_225	391316.16	3646447.08	88.1
ML865_FH589_226	391331.90	3646444.28	88.0
ML865_FH589_227	391327.86	3646446.36	86.9
ML865_FH589_228	391338.16	3646440.34	86.0
ML865_FH589_229	391328.04	3646469.58	85.7
ML865_FH589_230	391329.70	3646464.38	85.3
ML865_FH589_231	391324.20	3646448.25	82.6
ML865_FH589_232	391332.48	3646450.02	82.1
ML865_FH589_233	391333.92	3646469.37	82.1
ML865_FH589_234	391332.30	3646463.28	81.9
ML865_FH589_235	391329.18	3646467.84	81.9
ML865_FH589_236	391334.16	3646459.98	80.1
ML865_FH589_237	391331.40	3646464.96	77.3
ML865_FH589_238	391328.73	3646442.82	76.8
ML865_FH589_239	391320.30	3646440.24	76.5
ML865_FH589_240	391331.27	3646441.70	76.2
ML865_FH589_241	391323.52	3646455.56	75.6
ML865_FH589_242	391338.60	3646461.51	75.0
ML865_FH589_243	391328.43	3646448.43	74.6
ML865_FH589_244	391316.34	3646468.29	74.5
ML865_FH589_245	391316.16	3646448.28	74.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_246	391324.44	3646451.25	73.7
ML865_FH589_247	391313.61	3646454.10	73.6
ML865_FH589_248	391310.67	3646441.41	73.4
ML865_FH589_249	391312.62	3646445.34	72.0
ML865_FH589_250	391319.67	3646444.65	71.7
ML865_FH589_251	391327.54	3646448.20	71.5
ML865_FH589_252	391314.36	3646447.44	70.8
ML865_FH589_253	391320.84	3646450.38	69.5
ML865_FH589_254	391315.08	3646453.56	68.8
ML865_FH589_255	391334.24	3646452.48	68.2
ML865_FH589_256	391333.56	3646459.08	68.0
ML865_FH589_257	391326.42	3646442.94	67.0
ML865_FH589_258	391329.03	3646465.29	66.0
ML865_FH589_259	391318.44	3646469.28	65.5
ML865_FH589_260	391334.82	3646463.52	63.8
ML865_FH589_261	391327.00	3646458.22	63.6
ML865_FH589_262	391336.23	3646450.17	62.4
ML865_FH589_263	391322.80	3646447.16	62.3
ML865_FH589_264	391325.31	3646445.94	61.7
ML865_FH589_265	391316.13	3646450.71	60.7
ML865_FH589_266	391313.58	3646462.18	60.7
ML865_FH589_267	391315.14	3646452.12	59.9
ML865_FH589_268	391320.96	3646464.18	59.9
ML865_FH589_269	391327.14	3646464.24	59.2
ML865_FH589_270	391335.98	3646459.76	58.9
ML865_FH589_271	391332.72	3646462.14	58.8
ML865_FH589_272	391324.41	3646457.34	57.9
ML865_FH589_273	391322.88	3646440.93	57.6
ML865_FH589_274	391334.94	3646441.17	57.3
ML865_FH589_275	391316.85	3646441.68	57.0
ML865_FH589_276	391315.02	3646460.22	56.4
ML865_FH589_277	391330.62	3646462.08	56.0
ML865_FH589_278	391327.50	3646468.44	55.7
ML865_FH589_279	391317.66	3646441.02	55.0
ML865_FH589_280	391327.32	3646465.30	55.0
ML865_FH589_281	391336.83	3646440.87	53.7
ML865_FH589_282	391328.07	3646459.89	53.6
ML865_FH589_283	391324.54	3646441.84	53.4
ML865_FH589_284	391333.96	3646462.12	52.7
ML865_FH589_285	391317.18	3646448.64	52.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_286	391329.12	3646449.24	51.0
ML865_FH589_287	391331.16	3646443.18	50.5
ML865_FH589_288	391316.49	3646464.93	49.7
ML865_FH589_289	391332.08	3646469.26	49.5
ML865_FH589_290	391332.63	3646441.05	49.2
ML865_FH589_291	391314.36	3646463.58	48.1
ML865_FH589_292	391325.10	3646454.38	47.9
ML865_FH589_293	391329.66	3646447.79	47.7
ML865_FH589_294	391312.26	3646452.99	47.6
ML865_FH589_295	391327.70	3646458.86	46.2
ML865_FH589_296	391330.08	3646442.52	46.0
ML865_FH589_297	391321.80	3646446.84	45.7
ML865_FH589_298	391338.78	3646450.44	45.4
ML865_FH589_299	391328.28	3646466.58	45.3
ML865_FH589_300	391315.26	3646465.50	45.1
ML865_FH589_301	391333.29	3646446.69	44.2
ML865_FH589_302	391332.54	3646458.48	43.7
ML865_FH589_303	391318.17	3646456.14	43.3
ML865_FH589_304	391330.36	3646446.72	41.9
ML865_FH589_305	391327.06	3646454.70	41.8
ML865_FH589_306	391328.22	3646458.78	39.9
ML865_FH589_307	391324.47	3646452.93	39.4
ML865_FH589_308	391330.98	3646452.12	36.6
ML865_FH589_309	391310.55	3646464.51	36.6
ML865_FH589_310	391331.61	3646448.61	36.3
ML865_FH589_311	391331.64	3646447.08	35.7
ML865_FH589_312	391325.70	3646460.70	35.7
ML865_FH589_313	391315.92	3646441.44	35.6
ML865_FH589_314	391314.30	3646466.31	35.6
ML865_FH589_315	391326.90	3646459.59	35.0
ML865_FH589_316	391323.48	3646466.49	34.4
ML865_FH589_317	391310.88	3646452.99	34.3
ML865_FH589_318	391312.26	3646462.11	32.3
ML865_FH589_319	391333.98	3646463.82	29.9
ML865_FH589_320	391328.06	3646450.42	29.7
ML865_FH589_321	391318.77	3646454.85	28.3
ML865_FH589_322	391339.98	3646467.12	28.1
ML865_FH589_323	391328.71	3646452.51	28.0
ML865_FH589_324	391332.87	3646451.88	27.9
ML865_FH589_325	391320.39	3646457.52	27.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH589_326	391331.13	3646463.85	27.1
ML865_FH589_327	391332.09	3646452.81	26.4
ML865_FH589_328	391322.08	3646444.24	25.0
ML865_FH589_329	391323.15	3646462.14	24.8
ML865_FH589_330	391317.84	3646454.04	23.7
ML865_FH589_331	391332.72	3646464.53	23.1
ML865_FH589_332	391321.38	3646445.16	22.3
ML865_FH589_333	391326.81	3646449.78	22.1
ML865_FH589_334	391328.79	3646450.20	21.7
ML865_FH589_335	391331.67	3646456.83	20.8
ML865_FH589_336	391332.54	3646446.40	19.3
ML865_FH589_337	391325.04	3646463.19	18.4
ML865_FH589_338	391326.09	3646464.75	18.3
ML865_FH590_1	391333.56	3646473.66	1762.2
ML865_FH590_2	391332.48	3646483.20	1150.7
ML865_FH590_3	391318.56	3646476.90	1010.1
ML865_FH590_4	391318.08	3646484.61	958.8
ML865_FH590_5	391324.56	3646471.14	506.5
ML865_FH590_6	391334.58	3646474.26	469.0
ML865_FH590_7	391334.82	3646471.44	468.5
ML865_FH590_8	391333.29	3646476.84	436.2
ML865_FH590_9	391333.47	3646478.49	415.0
ML865_FH590_10	391316.70	3646487.04	383.5
ML865_FH590_11	391316.04	3646473.90	379.6
ML865_FH590_12	391310.58	3646473.08	297.1
ML865_FH590_13	391336.35	3646473.66	296.5
ML865_FH590_14	391310.70	3646487.34	291.8
ML865_FH590_15	391334.61	3646470.51	288.4
ML865_FH590_16	391323.78	3646480.32	270.5
ML865_FH590_17	391331.70	3646475.52	212.0
ML865_FH590_18	391333.26	3646482.00	209.4
ML865_FH590_19	391330.05	3646475.79	200.7
ML865_FH590_20	391318.26	3646496.40	192.8
ML865_FH590_21	391334.64	3646472.70	167.0
ML865_FH590_22	391312.14	3646474.86	155.7
ML865_FH590_23	391313.88	3646474.98	129.0
ML865_FH590_24	391331.82	3646476.66	126.8
ML865_FH590_25	391325.64	3646493.55	112.4
ML865_FH590_26	391324.80	3646487.82	112.1
ML865_FH590_27	391334.88	3646475.46	111.6

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH590_28	391337.16	3646472.46	107.5
ML865_FH590_29	391327.62	3646473.24	95.5
ML865_FH590_30	391332.78	3646480.02	92.7
ML865_FH590_31	391331.70	3646497.30	92.6
ML865_FH590_32	391339.38	3646477.92	91.8
ML865_FH590_33	391310.91	3646478.31	89.0
ML865_FH590_34	391311.48	3646485.60	79.1
ML865_FH590_35	391335.24	3646476.42	77.3
ML865_FH590_36	391339.02	3646476.96	73.6
ML865_FH590_37	391311.60	3646488.48	73.0
ML865_FH590_38	391321.14	3646482.36	72.5
ML865_FH590_39	391330.35	3646480.23	71.5
ML865_FH590_40	391315.02	3646476.72	70.0
ML865_FH590_41	391336.80	3646470.06	69.9
ML865_FH590_42	391321.98	3646485.96	61.4
ML865_FH590_43	391317.30	3646494.54	61.0
ML865_FH590_44	391327.44	3646493.52	59.7
ML865_FH590_45	391323.12	3646472.70	59.1
ML865_FH590_46	391322.52	3646474.14	58.5
ML865_FH590_47	391330.92	3646482.54	54.9
ML865_FH590_48	391330.74	3646479.36	54.4
ML865_FH590_49	391324.50	3646491.12	50.2
ML865_FH590_50	391333.50	3646475.16	49.2
ML865_FH590_51	391322.52	3646479.72	48.5
ML865_FH590_52	391339.44	3646473.30	47.9
ML865_FH590_53	391329.84	3646493.46	47.5
ML865_FH590_54	391317.00	3646470.42	44.3
ML865_FH590_55	391323.84	3646474.92	44.2
ML865_FH590_56	391334.58	3646483.47	41.8
ML865_FH590_57	391333.11	3646472.24	38.2
ML865_FH590_58	391338.14	3646478.58	37.6
ML865_FH590_59	391330.98	3646477.08	21.7
ML865_FH590_60	391311.09	3646475.73	21.5
ML865_FH591_1	391329.96	3646500.24	635.7
ML865_FH591_2	391324.38	3646511.04	525.6
ML865_FH591_3	391316.70	3646502.52	136.0
ML865_FH591_4	391325.04	3646504.20	128.9
ML865_FH591_5	391319.70	3646505.46	127.1
ML865_FH591_6	391314.42	3646514.70	117.7
ML865_FH591_7	391310.88	3646515.18	113.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FH591_8	391329.00	3646501.68	98.9
ML865_FH591_9	391331.70	3646502.40	59.1
ML865_FI584_1	391362.12	3646310.40	1841.9
ML865_FI584_2	391363.80	3646307.64	765.7
ML865_FI584_3	391364.19	3646306.65	458.8
ML865_FI584_4	391364.58	3646305.84	452.9
ML865_FI584_5	391356.50	3646319.30	319.7
ML865_FI584_6	391363.07	3646307.97	213.8
ML865_FI584_7	391365.30	3646304.76	207.6
ML865_FI584_8	391361.22	3646311.86	184.5
ML865_FI584_9	391358.70	3646315.26	184.5
ML865_FI584_10	391357.38	3646318.26	150.3
ML865_FI584_11	391360.50	3646313.46	140.8
ML865_FI584_12	391353.51	3646313.64	135.3
ML865_FI584_13	391358.43	3646316.19	102.4
ML865_FI584_14	391359.70	3646313.92	85.8
ML865_FI584_15	391344.12	3646312.08	74.8
ML865_FI584_16	391357.20	3646317.06	74.0
ML865_FI584_17	391365.36	3646308.78	71.5
ML865_FI584_18	391365.84	3646305.66	60.7
ML865_FI585_1	391348.50	3646332.48	687.5
ML865_FI585_2	391349.98	3646329.74	673.5
ML865_FI585_3	391340.10	3646345.50	553.6
ML865_FI585_4	391354.94	3646321.74	528.2
ML865_FI585_5	391346.82	3646335.87	480.5
ML865_FI585_6	391353.39	3646324.32	442.9
ML865_FI585_7	391351.83	3646326.24	430.9
ML865_FI585_8	391347.12	3646334.91	390.4
ML865_FI585_9	391355.46	3646320.78	356.6
ML865_FI585_10	391352.76	3646325.37	348.0
ML865_FI585_11	391352.10	3646324.59	259.3
ML865_FI585_12	391342.98	3646340.88	230.6
ML865_FI585_13	391347.75	3646333.26	204.1
ML865_FI585_14	391345.92	3646336.86	194.0
ML865_FI585_15	391351.08	3646327.48	177.8
ML865_FI585_16	391343.31	3646330.02	173.1
ML865_FI585_17	391342.08	3646342.86	171.3
ML865_FI585_18	391340.82	3646344.12	138.8
ML865_FI585_19	391353.42	3646323.42	137.7
ML865_FI585_20	391352.40	3646334.88	135.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI585_21	391344.24	3646339.32	99.6
ML865_FI585_22	391343.62	3646339.28	99.1
ML865_FI585_23	391345.38	3646337.94	82.8
ML865_FI585_24	391343.28	3646348.74	49.7
ML865_FI586_1	391346.46	3646357.20	2273.2
ML865_FI586_2	391346.22	3646356.48	1058.7
ML865_FI586_3	391341.48	3646353.36	390.7
ML865_FI586_4	391366.62	3646373.52	196.4
ML865_FI586_5	391346.94	3646379.40	186.6
ML865_FI586_6	391341.21	3646376.58	146.2
ML865_FI586_7	391355.10	3646375.74	142.5
ML865_FI586_8	391341.51	3646355.97	142.3
ML865_FI586_9	391341.24	3646350.90	140.8
ML865_FI586_10	391340.37	3646355.88	104.4
ML865_FI586_11	391348.26	3646373.82	99.5
ML865_FI586_12	391350.30	3646356.12	85.7
ML865_FI586_13	391352.88	3646371.12	67.6
ML865_FI586_14	391343.70	3646350.30	55.0
ML865_FI586_15	391359.96	3646374.24	53.4
ML865_FI586_16	391346.76	3646359.12	49.3
ML865_FI586_17	391342.80	3646358.10	48.9
ML865_FI586_18	391342.26	3646350.78	45.8
ML865_FI587_1	391351.26	3646394.40	1109.8
ML865_FI587_2	391347.84	3646389.12	609.3
ML865_FI587_3	391359.99	3646403.25	565.4
ML865_FI587_4	391359.42	3646406.04	459.9
ML865_FI587_5	391350.48	3646406.04	368.3
ML865_FI587_6	391342.23	3646405.02	280.0
ML865_FI587_7	391345.05	3646392.63	221.5
ML865_FI587_8	391369.08	3646401.12	213.0
ML865_FI587_9	391341.81	3646391.22	207.2
ML865_FI587_10	391341.24	3646409.70	181.4
ML865_FI587_11	391363.32	3646407.06	179.8
ML865_FI587_12	391344.18	3646406.64	176.1
ML865_FI587_13	391342.50	3646398.87	173.0
ML865_FI587_14	391357.23	3646400.46	172.4
ML865_FI587_15	391363.11	3646392.39	166.2
ML865_FI587_16	391364.16	3646391.28	156.0
ML865_FI587_17	391346.94	3646402.41	153.3
ML865_FI587_18	391355.52	3646406.70	119.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI587_19	391362.66	3646396.80	115.4
ML865_FI587_20	391344.12	3646407.84	114.7
ML865_FI587_21	391352.16	3646386.12	111.9
ML865_FI587_22	391367.46	3646390.14	111.1
ML865_FI587_23	391349.13	3646393.71	107.8
ML865_FI587_24	391350.60	3646384.20	106.9
ML865_FI587_25	391344.36	3646409.40	103.2
ML865_FI587_26	391343.01	3646409.31	99.7
ML865_FI587_27	391365.54	3646396.02	94.1
ML865_FI587_28	391355.04	3646403.97	92.1
ML865_FI587_29	391355.19	3646409.85	87.8
ML865_FI587_30	391347.30	3646401.60	85.4
ML865_FI587_31	391343.88	3646401.78	81.0
ML865_FI587_32	391358.40	3646404.72	80.4
ML865_FI587_33	391359.63	3646397.97	69.5
ML865_FI587_34	391354.50	3646401.60	69.3
ML865_FI587_35	391340.22	3646406.64	68.3
ML865_FI587_36	391362.66	3646404.96	61.1
ML865_FI587_37	391350.96	3646409.67	60.7
ML865_FI587_38	391345.20	3646401.30	60.4
ML865_FI587_39	391353.34	3646385.40	59.9
ML865_FI587_40	391347.66	3646409.76	57.6
ML865_FI587_41	391348.32	3646382.16	55.6
ML865_FI587_42	391347.54	3646380.96	55.1
ML865_FI587_43	391360.98	3646409.76	53.9
ML865_FI587_44	391340.16	3646408.92	53.5
ML865_FI587_45	391365.66	3646398.48	53.2
ML865_FI587_46	391360.92	3646405.02	52.8
ML865_FI587_47	391340.10	3646405.74	51.5
ML865_FI587_48	391364.82	3646409.55	51.0
ML865_FI587_49	391356.60	3646409.94	50.3
ML865_FI587_50	391358.34	3646380.63	49.3
ML865_FI587_51	391360.26	3646399.71	48.5
ML865_FI587_52	391343.28	3646397.16	47.7
ML865_FI587_53	391360.44	3646407.96	47.4
ML865_FI587_54	391342.44	3646401.12	46.1
ML865_FI587_55	391342.92	3646406.64	46.1
ML865_FI587_56	391365.78	3646409.10	46.0
ML865_FI587_57	391369.54	3646395.36	45.9
ML865_FI587_58	391363.56	3646408.14	44.8

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI587_59	391341.60	3646408.68	43.4
ML865_FI587_60	391345.68	3646408.86	43.0
ML865_FI587_61	391359.54	3646407.44	40.5
ML865_FI587_62	391367.98	3646395.66	39.5
ML865_FI587_63	391362.70	3646409.52	38.4
ML865_FI587_64	391346.02	3646400.10	31.8
ML865_FI587_65	391359.21	3646399.20	25.7
ML865_FI587_66	391363.80	3646409.62	25.0
ML865_FI587_67	391342.10	3646402.76	22.8
ML865_FI588_1	391367.32	3646413.70	4650.4
ML865_FI588_2	391341.72	3646414.08	4382.4
ML865_FI588_3	391344.36	3646413.65	3811.2
ML865_FI588_4	391362.72	3646414.02	3273.0
ML865_FI588_5	391352.94	3646413.51	3013.4
ML865_FI588_6	391349.34	3646413.66	2840.8
ML865_FI588_7	391347.96	3646413.93	2503.1
ML865_FI588_8	391355.54	3646413.64	2396.7
ML865_FI588_9	391354.14	3646413.52	2352.8
ML865_FI588_10	391357.92	3646413.57	2007.3
ML865_FI588_11	391361.74	3646412.56	1865.8
ML865_FI588_12	391366.98	3646412.58	1659.3
ML865_FI588_13	391341.06	3646413.33	1642.2
ML865_FI588_14	391356.63	3646413.36	1378.8
ML865_FI588_15	391365.75	3646412.87	1261.2
ML865_FI588_16	391350.81	3646413.84	1234.5
ML865_FI588_17	391341.42	3646414.95	1219.8
ML865_FI588_18	391364.42	3646413.08	1208.6
ML865_FI588_19	391349.10	3646412.91	1193.3
ML865_FI588_20	391345.68	3646414.20	1129.7
ML865_FI588_21	391366.11	3646414.47	1124.8
ML865_FI588_22	391359.12	3646413.22	1045.4
ML865_FI588_23	391362.39	3646412.25	1017.0
ML865_FI588_24	391342.80	3646421.70	837.3
ML865_FI588_25	391369.38	3646413.60	729.7
ML865_FI588_26	391352.46	3646411.32	708.0
ML865_FI588_27	391363.76	3646412.20	609.1
ML865_FI588_28	391342.50	3646420.29	603.3
ML865_FI588_29	391354.68	3646411.62	560.0
ML865_FI588_30	391359.69	3646412.34	551.3
ML865_FI588_31	391366.44	3646414.98	515.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI588_32	391342.20	3646415.55	507.1
ML865_FI588_33	391360.56	3646414.26	504.7
ML865_FI588_34	391364.70	3646411.74	434.7
ML865_FI588_35	391343.55	3646423.62	384.9
ML865_FI588_36	391346.22	3646412.70	378.5
ML865_FI588_37	391342.71	3646412.10	360.4
ML865_FI588_38	391357.32	3646417.56	331.4
ML865_FI588_39	391343.76	3646410.54	325.4
ML865_FI588_40	391341.36	3646411.44	320.5
ML865_FI588_41	391359.78	3646415.16	314.9
ML865_FI588_42	391342.29	3646418.85	303.7
ML865_FI588_43	391351.74	3646414.92	295.5
ML865_FI588_44	391364.43	3646410.93	283.4
ML865_FI588_45	391361.06	3646411.75	281.8
ML865_FI588_46	391367.64	3646415.46	254.9
ML865_FI588_47	391343.16	3646410.90	249.1
ML865_FI588_48	391344.12	3646416.12	248.4
ML865_FI588_49	391357.05	3646411.62	245.6
ML865_FI588_50	391344.78	3646439.76	243.9
ML865_FI588_51	391354.38	3646414.68	241.6
ML865_FI588_52	391357.44	3646415.01	237.3
ML865_FI588_53	391368.36	3646411.98	236.0
ML865_FI588_54	391349.20	3646415.25	235.1
ML865_FI588_55	391362.73	3646415.60	225.8
ML865_FI588_56	391365.93	3646411.86	225.2
ML865_FI588_57	391361.79	3646410.69	213.9
ML865_FI588_58	391348.36	3646411.84	203.3
ML865_FI588_59	391344.18	3646411.82	188.1
ML865_FI588_60	391364.82	3646419.36	187.5
ML865_FI588_61	391353.72	3646410.99	173.8
ML865_FI588_62	391341.15	3646437.57	163.3
ML865_FI588_63	391355.94	3646410.60	159.6
ML865_FI588_64	391350.24	3646417.20	158.9
ML865_FI588_65	391347.36	3646420.68	156.5
ML865_FI588_66	391340.28	3646416.18	155.8
ML865_FI588_67	391354.86	3646415.70	155.3
ML865_FI588_68	391341.12	3646419.76	150.3
ML865_FI588_69	391340.66	3646411.66	149.6
ML865_FI588_70	391341.00	3646423.02	148.5
ML865_FI588_71	391349.43	3646411.05	148.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI588_72	391350.24	3646418.70	136.4
ML865_FI588_73	391356.48	3646415.19	135.7
ML865_FI588_74	391359.24	3646411.30	135.2
ML865_FI588_75	391342.44	3646423.68	127.4
ML865_FI588_76	391341.66	3646417.02	123.0
ML865_FI588_77	391365.12	3646416.18	117.0
ML865_FI588_78	391340.40	3646423.83	116.0
ML865_FI588_79	391364.58	3646439.13	114.7
ML865_FI588_80	391353.60	3646439.28	107.8
ML865_FI588_81	391366.08	3646416.60	104.5
ML865_FI588_82	391357.59	3646410.48	104.4
ML865_FI588_83	391346.52	3646437.78	94.6
ML865_FI588_84	391350.84	3646416.00	93.6
ML865_FI588_85	391345.32	3646410.06	91.3
ML865_FI588_86	391360.89	3646439.61	87.6
ML865_FI588_87	391350.93	3646410.99	85.5
ML865_FI588_88	391350.46	3646410.56	83.6
ML865_FI588_89	391363.69	3646416.77	83.2
ML865_FI588_90	391358.22	3646416.18	80.4
ML865_FI588_91	391341.06	3646421.82	80.3
ML865_FI588_92	391360.56	3646416.60	77.8
ML865_FI588_93	391342.20	3646410.42	76.6
ML865_FI588_94	391358.64	3646439.52	76.5
ML865_FI588_95	391340.25	3646417.65	75.9
ML865_FI588_96	391349.76	3646416.45	74.5
ML865_FI588_97	391351.62	3646420.20	73.0
ML865_FI588_98	391365.51	3646417.17	72.8
ML865_FI588_99	391347.98	3646410.62	70.8
ML865_FI588_100	391352.34	3646422.60	70.5
ML865_FI588_101	391358.02	3646439.52	70.0
ML865_FI588_102	391363.20	3646439.34	67.8
ML865_FI588_103	391343.22	3646416.62	65.3
ML865_FI588_104	391353.84	3646415.94	64.6
ML865_FI588_105	391342.05	3646438.71	64.5
ML865_FI588_107	391342.74	3646438.86	60.7
ML865_FI588_108	391366.02	3646410.33	58.7
ML865_FI588_109	391360.14	3646410.81	58.2
ML865_FI588_110	391345.32	3646420.14	57.2
ML865_FI588_111	391367.73	3646417.35	56.0
ML865_FI588_112	391351.38	3646410.27	54.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI588_113	391351.26	3646439.52	52.1
ML865_FI588_114	391341.24	3646417.98	50.8
ML865_FI588_115	391368.74	3646411.18	49.1
ML865_FI588_116	391347.96	3646437.72	48.1
ML865_FI588_117	391346.56	3646410.34	47.4
ML865_FI588_118	391345.74	3646422.99	47.2
ML865_FI588_119	391347.90	3646416.96	45.5
ML865_FI588_120	391346.52	3646423.29	41.3
ML865_FI588_121	391348.96	3646410.39	40.6
ML865_FI588_122	391347.15	3646415.25	40.5
ML865_FI588_123	391356.90	3646423.26	35.6
ML865_FI588_124	391352.91	3646415.70	35.1
ML865_FI588_125	391346.85	3646410.87	31.4
ML865_FI588_126	391356.60	3646416.06	28.4
ML865_FI588_127	391364.76	3646417.32	28.1
ML865_FI588_128	391366.38	3646417.70	27.1
ML865_FI588_129	391362.90	3646416.99	23.9
ML865_FI588_130	391359.87	3646416.66	21.2
ML865_FI588_131	391349.70	3646410.12	19.1
ML865_FI589_1	391342.56	3646467.30	5520.0
ML865_FI589_2	391344.81	3646444.26	3884.0
ML865_FI589_3	391341.54	3646467.30	2396.9
ML865_FI589_4	391349.55	3646465.20	2204.2
ML865_FI589_5	391363.92	3646462.08	1661.8
ML865_FI589_6	391345.08	3646462.38	1590.4
ML865_FI589_7	391341.04	3646446.84	1559.1
ML865_FI589_8	391346.97	3646465.20	1554.2
ML865_FI589_9	391341.54	3646444.56	1447.8
ML865_FI589_10	391345.35	3646460.64	1435.5
ML865_FI589_11	391347.69	3646469.43	1425.0
ML865_FI589_12	391343.04	3646469.31	1379.4
ML865_FI589_13	391349.14	3646464.62	1331.0
ML865_FI589_14	391345.02	3646463.62	1321.7
ML865_FI589_15	391343.32	3646444.64	1273.0
ML865_FI589_16	391345.20	3646465.05	1256.9
ML865_FI589_17	391366.98	3646462.74	1248.7
ML865_FI589_18	391369.44	3646468.08	1167.2
ML865_FI589_19	391367.88	3646462.08	1164.0
ML865_FI589_20	391359.48	3646456.71	1120.2
ML865_FI589_21	391348.08	3646467.00	1075.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_22	391363.98	3646467.78	1063.2
ML865_FI589_23	391351.98	3646459.08	1034.6
ML865_FI589_24	391355.86	3646461.10	1006.6
ML865_FI589_25	391363.46	3646461.04	1005.1
ML865_FI589_26	391349.01	3646462.23	993.8
ML865_FI589_27	391341.82	3646445.36	958.3
ML865_FI589_28	391364.28	3646443.60	955.2
ML865_FI589_29	391357.60	3646457.20	950.9
ML865_FI589_30	391352.85	3646469.22	932.2
ML865_FI589_31	391346.48	3646463.18	919.7
ML865_FI589_32	391363.08	3646463.04	905.9
ML865_FI589_33	391362.87	3646463.94	887.2
ML865_FI589_34	391346.82	3646443.96	875.9
ML865_FI589_35	391344.36	3646443.06	875.2
ML865_FI589_36	391361.52	3646444.32	858.3
ML865_FI589_37	391345.56	3646448.10	854.0
ML865_FI589_38	391359.22	3646444.92	852.4
ML865_FI589_39	391369.29	3646448.55	843.3
ML865_FI589_40	391342.06	3646453.74	823.2
ML865_FI589_41	391342.08	3646459.68	808.7
ML865_FI589_42	391342.30	3646463.54	807.3
ML865_FI589_43	391343.07	3646441.02	795.6
ML865_FI589_44	391359.32	3646461.58	785.5
ML865_FI589_45	391343.52	3646464.36	784.7
ML865_FI589_46	391353.12	3646458.48	784.3
ML865_FI589_47	391346.28	3646466.19	781.0
ML865_FI589_48	391354.28	3646455.18	774.2
ML865_FI589_49	391344.12	3646465.95	769.5
ML865_FI589_50	391340.47	3646445.43	765.5
ML865_FI589_51	391351.64	3646460.60	761.4
ML865_FI589_52	391356.81	3646458.42	735.5
ML865_FI589_53	391345.98	3646467.05	729.0
ML865_FI589_54	391346.92	3646467.74	710.7
ML865_FI589_55	391349.22	3646460.13	700.4
ML865_FI589_56	391368.98	3646467.74	698.1
ML865_FI589_57	391366.62	3646461.48	692.3
ML865_FI589_58	391352.58	3646460.10	691.2
ML865_FI589_59	391350.54	3646468.74	683.9
ML865_FI589_60	391369.70	3646464.74	681.7
ML865_FI589_61	391344.60	3646450.68	655.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_62	391343.04	3646453.86	645.7
ML865_FI589_63	391355.61	3646448.01	638.7
ML865_FI589_64	391357.89	3646460.67	631.5
ML865_FI589_65	391363.14	3646444.80	622.0
ML865_FI589_66	391341.27	3646461.81	612.9
ML865_FI589_67	391349.94	3646459.58	612.7
ML865_FI589_68	391343.46	3646455.63	612.4
ML865_FI589_69	391366.16	3646465.48	604.8
ML865_FI589_70	391342.88	3646445.97	602.5
ML865_FI589_71	391352.88	3646468.32	601.0
ML865_FI589_72	391360.94	3646464.66	597.6
ML865_FI589_73	391368.39	3646465.38	597.2
ML865_FI589_74	391350.90	3646463.55	597.1
ML865_FI589_75	391340.10	3646457.46	596.8
ML865_FI589_76	391351.23	3646464.81	595.5
ML865_FI589_77	391363.14	3646458.06	592.9
ML865_FI589_78	391347.54	3646458.81	589.9
ML865_FI589_79	391365.86	3646446.90	578.3
ML865_FI589_80	391341.00	3646442.73	577.7
ML865_FI589_81	391360.56	3646460.46	574.9
ML865_FI589_82	391362.18	3646458.06	564.2
ML865_FI589_83	391345.22	3646469.62	562.2
ML865_FI589_84	391356.90	3646460.76	559.4
ML865_FI589_85	391347.96	3646445.30	548.9
ML865_FI589_86	391346.31	3646462.26	544.9
ML865_FI589_87	391348.23	3646443.51	542.2
ML865_FI589_88	391353.90	3646444.26	512.5
ML865_FI589_89	391350.54	3646467.39	509.1
ML865_FI589_90	391348.11	3646462.98	504.0
ML865_FI589_91	391344.12	3646461.90	493.1
ML865_FI589_92	391347.00	3646445.64	492.6
ML865_FI589_93	391356.12	3646460.01	479.9
ML865_FI589_94	391342.08	3646447.50	478.5
ML865_FI589_95	391360.44	3646458.72	474.6
ML865_FI589_96	391340.32	3646462.04	472.4
ML865_FI589_97	391358.62	3646459.28	470.6
ML865_FI589_98	391352.88	3646457.26	462.3
ML865_FI589_99	391341.57	3646461.00	450.1
ML865_FI589_100	391364.40	3646458.69	446.3
ML865_FI589_101	391341.20	3646458.80	437.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_102	391365.87	3646461.78	434.8
ML865_FI589_103	391342.95	3646465.40	427.4
ML865_FI589_104	391366.36	3646467.38	422.0
ML865_FI589_105	391341.45	3646456.08	416.6
ML865_FI589_106	391342.24	3646458.66	415.3
ML865_FI589_107	391354.98	3646466.76	415.2
ML865_FI589_108	391343.40	3646459.92	409.9
ML865_FI589_109	391354.56	3646460.46	400.4
ML865_FI589_110	391343.34	3646451.04	373.2
ML865_FI589_111	391340.58	3646451.94	367.9
ML865_FI589_112	391369.08	3646457.58	366.3
ML865_FI589_113	391347.78	3646442.46	363.8
ML865_FI589_114	391363.68	3646464.84	362.4
ML865_FI589_115	391347.88	3646462.02	360.8
ML865_FI589_116	391344.33	3646454.43	360.5
ML865_FI589_117	391349.30	3646444.36	360.4
ML865_FI589_118	391353.84	3646459.89	354.6
ML865_FI589_119	391349.76	3646458.36	351.9
ML865_FI589_120	391352.97	3646444.80	349.8
ML865_FI589_121	391346.97	3646447.92	347.9
ML865_FI589_122	391346.37	3646449.24	346.2
ML865_FI589_123	391356.96	3646445.22	344.6
ML865_FI589_124	391359.84	3646445.28	341.9
ML865_FI589_125	391340.58	3646456.62	340.5
ML865_FI589_126	391343.91	3646468.56	339.7
ML865_FI589_127	391343.28	3646446.93	337.4
ML865_FI589_128	391342.44	3646443.42	335.6
ML865_FI589_129	391353.24	3646455.53	334.6
ML865_FI589_130	391358.08	3646463.14	334.6
ML865_FI589_131	391348.86	3646467.48	328.5
ML865_FI589_132	391349.46	3646463.25	324.2
ML865_FI589_133	391342.92	3646461.89	323.5
ML865_FI589_134	391342.38	3646460.76	323.0
ML865_FI589_135	391344.60	3646445.97	318.7
ML865_FI589_136	391349.82	3646466.72	318.2
ML865_FI589_137	391369.80	3646447.86	315.6
ML865_FI589_138	391348.12	3646460.06	310.9
ML865_FI589_139	391369.44	3646445.76	302.3
ML865_FI589_140	391346.20	3646443.48	296.4
ML865_FI589_141	391354.71	3646459.20	290.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_142	391344.78	3646458.59	287.1
ML865_FI589_143	391361.80	3646463.36	287.1
ML865_FI589_144	391346.46	3646455.84	284.9
ML865_FI589_145	391343.80	3646462.58	281.7
ML865_FI589_146	391365.03	3646460.64	281.4
ML865_FI589_147	391367.00	3646466.12	281.3
ML865_FI589_148	391340.34	3646464.28	274.2
ML865_FI589_149	391350.39	3646461.36	273.7
ML865_FI589_150	391369.08	3646462.08	273.7
ML865_FI589_151	391359.99	3646459.92	271.8
ML865_FI589_152	391344.30	3646460.01	264.6
ML865_FI589_153	391355.01	3646456.05	264.5
ML865_FI589_154	391364.67	3646463.04	263.0
ML865_FI589_155	391360.86	3646443.63	262.3
ML865_FI589_156	391352.70	3646441.62	259.2
ML865_FI589_157	391347.42	3646457.70	258.9
ML865_FI589_158	391355.48	3646444.50	256.1
ML865_FI589_159	391350.66	3646465.83	256.1
ML865_FI589_160	391354.65	3646465.95	252.8
ML865_FI589_161	391340.25	3646460.40	249.9
ML865_FI589_162	391344.66	3646467.27	249.8
ML865_FI589_163	391340.43	3646448.55	246.2
ML865_FI589_164	391341.69	3646443.66	244.8
ML865_FI589_165	391351.80	3646442.40	242.5
ML865_FI589_166	391341.90	3646441.70	239.5
ML865_FI589_167	391356.66	3646461.78	238.7
ML865_FI589_168	391354.32	3646468.26	237.3
ML865_FI589_169	391363.05	3646443.99	235.2
ML865_FI589_170	391340.31	3646454.28	234.8
ML865_FI589_171	391367.34	3646467.54	233.0
ML865_FI589_172	391366.22	3646464.02	231.9
ML865_FI589_173	391367.37	3646443.93	224.1
ML865_FI589_174	391355.13	3646449.24	223.3
ML865_FI589_175	391360.92	3646462.62	220.8
ML865_FI589_176	391342.62	3646449.36	219.8
ML865_FI589_177	391341.40	3646463.96	217.7
ML865_FI589_178	391355.97	3646466.07	214.6
ML865_FI589_179	391360.74	3646461.21	213.7
ML865_FI589_180	391358.80	3646463.68	204.4
ML865_FI589_181	391342.74	3646454.43	200.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_182	391349.28	3646442.58	193.6
ML865_FI589_183	391341.14	3646465.66	192.8
ML865_FI589_184	391349.64	3646442.10	192.1
ML865_FI589_185	391368.84	3646459.44	190.3
ML865_FI589_186	391368.95	3646463.61	188.1
ML865_FI589_187	391352.62	3646443.74	186.5
ML865_FI589_188	391360.50	3646457.79	186.4
ML865_FI589_189	391350.36	3646445.66	185.1
ML865_FI589_190	391365.93	3646458.69	183.2
ML865_FI589_191	391347.66	3646456.20	182.8
ML865_FI589_192	391367.94	3646449.72	182.4
ML865_FI589_193	391342.86	3646448.34	180.5
ML865_FI589_194	391368.21	3646458.03	179.6
ML865_FI589_195	391359.57	3646462.77	179.0
ML865_FI589_196	391364.58	3646447.23	177.8
ML865_FI589_197	391365.60	3646448.67	174.1
ML865_FI589_198	391346.04	3646446.36	172.9
ML865_FI589_199	391359.62	3646442.02	163.0
ML865_FI589_200	391354.08	3646462.08	162.4
ML865_FI589_201	391355.62	3646458.16	162.3
ML865_FI589_202	391362.06	3646442.22	158.3
ML865_FI589_203	391351.02	3646459.05	158.1
ML865_FI589_204	391359.50	3646446.64	156.8
ML865_FI589_205	391352.92	3646448.68	155.6
ML865_FI589_206	391348.02	3646446.75	154.8
ML865_FI589_207	391366.98	3646458.36	152.0
ML865_FI589_208	391366.29	3646445.25	151.3
ML865_FI589_209	391361.76	3646456.91	150.2
ML865_FI589_210	391358.74	3646443.52	149.9
ML865_FI589_211	391362.30	3646462.08	149.2
ML865_FI589_212	391351.70	3646468.10	149.1
ML865_FI589_213	391341.06	3646454.84	143.4
ML865_FI589_214	391363.56	3646449.48	139.5
ML865_FI589_215	391350.06	3646455.50	138.7
ML865_FI589_216	391365.42	3646443.00	137.0
ML865_FI589_217	391346.50	3646457.94	136.8
ML865_FI589_218	391361.16	3646445.28	135.7
ML865_FI589_219	391362.74	3646459.24	134.4
ML865_FI589_220	391345.20	3646456.32	133.4
ML865_FI589_221	391345.86	3646440.36	133.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_222	391360.65	3646455.72	132.7
ML865_FI589_223	391368.81	3646460.70	131.9
ML865_FI589_224	391349.00	3646457.10	128.3
ML865_FI589_225	391342.98	3646452.44	127.5
ML865_FI589_226	391364.85	3646445.16	123.6
ML865_FI589_227	391346.58	3646456.74	121.7
ML865_FI589_228	391354.62	3646469.70	121.2
ML865_FI589_229	391356.81	3646443.42	120.4
ML865_FI589_230	391348.80	3646448.28	113.9
ML865_FI589_231	391351.86	3646451.25	113.3
ML865_FI589_232	391350.81	3646450.56	111.7
ML865_FI589_233	391367.39	3646463.91	110.8
ML865_FI589_234	391348.14	3646452.72	105.9
ML865_FI589_235	391351.56	3646455.30	105.3
ML865_FI589_236	391369.06	3646444.16	104.0
ML865_FI589_237	391352.22	3646465.89	103.4
ML865_FI589_238	391359.24	3646450.44	103.1
ML865_FI589_239	391353.87	3646452.27	103.1
ML865_FI589_240	391342.17	3646468.74	102.5
ML865_FI589_241	391363.26	3646456.80	100.5
ML865_FI589_242	391346.01	3646455.06	100.2
ML865_FI589_243	391347.16	3646460.28	99.9
ML865_FI589_244	391354.14	3646446.81	99.6
ML865_FI589_245	391345.17	3646457.07	99.1
ML865_FI589_246	391346.28	3646453.92	97.9
ML865_FI589_247	391352.90	3646462.30	97.2
ML865_FI589_248	391369.86	3646465.92	97.0
ML865_FI589_249	391363.14	3646448.40	95.8
ML865_FI589_250	391367.50	3646446.58	95.4
ML865_FI589_251	391358.04	3646446.00	94.8
ML865_FI589_252	391358.58	3646455.72	94.8
ML865_FI589_253	391357.38	3646455.28	94.4
ML865_FI589_254	391349.34	3646446.66	93.3
ML865_FI589_255	391342.17	3646455.15	88.8
ML865_FI589_256	391351.56	3646444.14	87.4
ML865_FI589_257	391365.66	3646444.20	85.6
ML865_FI589_258	391344.72	3646447.98	84.2
ML865_FI589_259	391369.24	3646440.62	83.9
ML865_FI589_260	391350.20	3646451.22	83.5
ML865_FI589_261	391351.11	3646448.16	83.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_262	391361.88	3646446.70	82.7
ML865_FI589_263	391354.44	3646448.70	82.1
ML865_FI589_264	391354.02	3646445.52	80.7
ML865_FI589_265	391368.18	3646459.59	79.8
ML865_FI589_266	391353.12	3646449.66	79.7
ML865_FI589_267	391355.12	3646457.20	79.7
ML865_FI589_268	391343.94	3646449.99	77.6
ML865_FI589_269	391365.72	3646456.11	76.4
ML865_FI589_270	391352.79	3646450.74	76.3
ML865_FI589_271	391355.52	3646441.68	73.9
ML865_FI589_272	391369.86	3646447.05	73.8
ML865_FI589_273	391351.41	3646469.61	72.3
ML865_FI589_274	391353.27	3646442.91	69.0
ML865_FI589_275	391362.69	3646447.59	68.8
ML865_FI589_276	391367.34	3646445.10	67.7
ML865_FI589_277	391357.92	3646448.76	66.5
ML865_FI589_278	391358.25	3646450.41	66.2
ML865_FI589_279	391342.74	3646457.31	65.5
ML865_FI589_280	391362.10	3646440.41	65.2
ML865_FI589_281	391342.04	3646448.36	64.9
ML865_FI589_282	391363.02	3646455.06	64.5
ML865_FI589_283	391350.03	3646457.19	64.3
ML865_FI589_284	391358.10	3646448.01	63.9
ML865_FI589_285	391361.64	3646469.64	63.7
ML865_FI589_286	391352.16	3646440.00	63.3
ML865_FI589_287	391351.74	3646462.41	62.9
ML865_FI589_288	391343.85	3646457.73	60.5
ML865_FI589_289	391360.32	3646441.14	59.2
ML865_FI589_290	391368.00	3646441.62	58.6
ML865_FI589_291	391355.40	3646443.12	58.0
ML865_FI589_292	391352.49	3646466.94	57.8
ML865_FI589_293	391365.45	3646463.37	56.8
ML865_FI589_294	391348.58	3646454.80	53.9
ML865_FI589_295	391366.50	3646460.58	53.6
ML865_FI589_296	391364.30	3646445.84	53.1
ML865_FI589_297	391341.06	3646453.14	52.1
ML865_FI589_298	391344.33	3646452.51	51.4
ML865_FI589_299	391346.52	3646452.66	51.2
ML865_FI589_300	391363.06	3646446.58	51.0
ML865_FI589_301	391356.32	3646462.98	49.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI589_302	391350.60	3646454.70	47.8
ML865_FI589_303	391364.91	3646464.57	46.4
ML865_FI589_304	391350.92	3646442.82	46.3
ML865_FI589_305	391360.38	3646448.52	46.1
ML865_FI589_306	391340.82	3646440.24	45.5
ML865_FI589_307	391350.06	3646449.33	45.1
ML865_FI589_308	391367.82	3646451.43	44.6
ML865_FI589_309	391356.57	3646446.66	44.4
ML865_FI589_310	391361.22	3646449.72	44.2
ML865_FI589_311	391354.05	3646467.33	43.8
ML865_FI589_312	391358.82	3646454.52	43.6
ML865_FI589_313	391351.08	3646457.52	43.6
ML865_FI589_314	391353.32	3646465.44	41.7
ML865_FI589_315	391365.26	3646457.16	40.4
ML865_FI589_316	391352.62	3646447.40	39.0
ML865_FI589_317	391350.12	3646447.32	38.5
ML865_FI589_318	391362.48	3646445.55	38.2
ML865_FI589_319	391359.09	3646447.71	35.2
ML865_FI589_320	391345.11	3646453.53	34.7
ML865_FI589_321	391356.95	3646440.23	32.7
ML865_FI589_322	391356.99	3646465.32	32.6
ML865_FI589_323	391355.42	3646446.22	30.9
ML865_FI589_324	391366.56	3646457.52	26.5
ML865_FI589_325	391354.04	3646464.38	23.6
ML865_FI589_326	391351.68	3646446.21	22.2
ML865_FI589_327	391364.22	3646455.78	22.1
ML865_FI589_328	391363.62	3646440.00	17.4
ML865_FI590_1	391359.24	3646491.60	3459.0
ML865_FI590_2	391345.38	3646470.96	3350.9
ML865_FI590_3	391350.45	3646487.85	2981.8
ML865_FI590_4	391349.98	3646487.37	2886.2
ML865_FI590_5	391350.96	3646484.94	2603.6
ML865_FI590_6	391351.29	3646487.85	2459.8
ML865_FI590_7	391344.00	3646470.90	2447.5
ML865_FI590_8	391347.06	3646470.48	2419.7
ML865_FI590_9	391351.14	3646482.24	2386.4
ML865_FI590_10	391355.88	3646480.11	2333.9
ML865_FI590_11	391356.32	3646490.70	2177.5
ML865_FI590_12	391356.12	3646486.56	2045.6
ML865_FI590_13	391347.66	3646480.86	2044.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI590_14	391353.53	3646483.50	2031.0
ML865_FI590_15	391357.74	3646485.76	1885.1
ML865_FI590_16	391354.29	3646481.94	1495.0
ML865_FI590_17	391353.60	3646486.23	1485.4
ML865_FI590_18	391346.79	3646480.83	1343.5
ML865_FI590_19	391355.68	3646489.50	1340.5
ML865_FI590_20	391349.13	3646471.92	1283.8
ML865_FI590_21	391350.24	3646483.80	1207.3
ML865_FI590_22	391350.66	3646478.79	1193.5
ML865_FI590_23	391349.40	3646475.28	1170.7
ML865_FI590_24	391354.44	3646484.28	1142.1
ML865_FI590_25	391357.86	3646489.88	1133.8
ML865_FI590_26	391349.40	3646481.18	1122.9
ML865_FI590_27	391353.09	3646488.36	1107.3
ML865_FI590_28	391345.32	3646471.83	1049.0
ML865_FI590_29	391348.22	3646474.08	1024.3
ML865_FI590_30	391356.98	3646480.88	1021.7
ML865_FI590_31	391354.68	3646488.12	978.8
ML865_FI590_32	391353.96	3646473.84	975.8
ML865_FI590_33	391351.86	3646473.06	964.3
ML865_FI590_34	391345.26	3646474.14	932.7
ML865_FI590_35	391359.06	3646492.38	923.4
ML865_FI590_36	391353.54	3646480.65	921.2
ML865_FI590_37	391346.34	3646471.32	913.7
ML865_FI590_38	391347.69	3646472.10	899.0
ML865_FI590_39	391357.30	3646483.52	877.3
ML865_FI590_40	391357.68	3646484.82	836.4
ML865_FI590_41	391354.17	3646488.90	825.4
ML865_FI590_42	391356.24	3646473.18	799.9
ML865_FI590_43	391352.85	3646479.84	787.5
ML865_FI590_44	391346.55	3646475.73	776.5
ML865_FI590_45	391349.12	3646483.50	750.6
ML865_FI590_46	391359.78	3646490.40	735.2
ML865_FI590_47	391351.74	3646475.10	717.3
ML865_FI590_48	391347.08	3646473.30	692.9
ML865_FI590_49	391355.91	3646482.63	681.9
ML865_FI590_50	391352.13	3646486.83	680.4
ML865_FI590_51	391348.86	3646486.04	657.0
ML865_FI590_52	391354.14	3646493.76	647.0
ML865_FI590_53	391350.20	3646480.16	630.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI590_54	391350.27	3646488.87	608.6
ML865_FI590_55	391348.95	3646484.61	608.5
ML865_FI590_56	391355.94	3646491.96	606.6
ML865_FI590_57	391345.98	3646479.84	604.5
ML865_FI590_58	391355.10	3646485.96	568.3
ML865_FI590_59	391357.26	3646482.18	563.0
ML865_FI590_60	391354.08	3646475.40	546.1
ML865_FI590_61	391352.64	3646482.06	544.7
ML865_FI590_62	391345.56	3646481.16	541.5
ML865_FI590_63	391350.98	3646481.24	531.3
ML865_FI590_64	391353.18	3646490.18	508.6
ML865_FI590_65	391352.61	3646485.06	499.6
ML865_FI590_66	391343.72	3646473.66	497.5
ML865_FI590_67	391352.97	3646474.05	489.8
ML865_FI590_68	391357.92	3646488.72	489.3
ML865_FI590_69	391357.68	3646471.38	449.8
ML865_FI590_70	391354.98	3646473.18	444.8
ML865_FI590_71	391348.35	3646470.78	438.3
ML865_FI590_72	391349.22	3646478.22	434.6
ML865_FI590_73	391353.42	3646471.02	430.2
ML865_FI590_74	391351.32	3646479.66	419.9
ML865_FI590_75	391359.36	3646485.84	419.2
ML865_FI590_76	391354.53	3646480.08	407.4
ML865_FI590_77	391354.66	3646487.28	404.2
ML865_FI590_78	391345.59	3646475.94	401.0
ML865_FI590_79	391351.86	3646481.31	392.2
ML865_FI590_80	391355.82	3646478.58	385.6
ML865_FI590_81	391350.15	3646485.48	378.5
ML865_FI590_82	391356.15	3646487.70	375.6
ML865_FI590_83	391356.54	3646485.00	373.9
ML865_FI590_84	391350.00	3646476.48	373.0
ML865_FI590_85	391347.96	3646479.36	363.0
ML865_FI590_86	391358.10	3646474.86	358.8
ML865_FI590_87	391358.76	3646490.64	356.4
ML865_FI590_88	391352.05	3646489.29	353.5
ML865_FI590_89	391340.10	3646478.16	346.5
ML865_FI590_90	391356.00	3646481.88	336.3
ML865_FI590_91	391355.52	3646493.01	336.1
ML865_FI590_92	391355.42	3646483.26	334.7
ML865_FI590_93	391354.41	3646492.23	316.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI590_94	391356.93	3646489.02	315.6
ML865_FI590_95	391357.53	3646487.94	312.1
ML865_FI590_96	391349.50	3646479.34	289.9
ML865_FI590_97	391353.21	3646478.10	283.8
ML865_FI590_98	391354.56	3646476.60	280.4
ML865_FI590_99	391344.72	3646479.30	270.5
ML865_FI590_100	391344.98	3646473.18	258.8
ML865_FI590_101	391351.80	3646483.47	250.2
ML865_FI590_102	391352.32	3646490.96	233.5
ML865_FI590_103	391357.68	3646496.82	229.6
ML865_FI590_104	391357.56	3646491.96	219.3
ML865_FI590_105	391358.61	3646480.80	218.9
ML865_FI590_106	391342.50	3646470.72	218.5
ML865_FI590_107	391354.10	3646472.72	218.5
ML865_FI590_108	391359.15	3646494.03	212.0
ML865_FI590_109	391356.12	3646497.54	200.6
ML865_FI590_110	391355.22	3646478.20	196.7
ML865_FI590_111	391342.84	3646478.46	193.6
ML865_FI590_112	391346.64	3646474.14	180.9
ML865_FI590_113	391348.16	3646477.96	174.1
ML865_FI590_114	391347.51	3646495.82	170.4
ML865_FI590_115	391351.41	3646476.78	170.3
ML865_FI590_116	391357.32	3646493.94	150.6
ML865_FI590_117	391354.35	3646491.03	140.0
ML865_FI590_118	391346.22	3646477.17	131.7
ML865_FI590_119	391355.70	3646476.00	131.5
ML865_FI590_120	391355.36	3646496.48	129.5
ML865_FI590_121	391348.68	3646482.53	126.2
ML865_FI590_122	391346.96	3646477.28	125.6
ML865_FI590_123	391355.34	3646495.36	123.6
ML865_FI590_124	391351.89	3646474.14	120.1
ML865_FI590_125	391341.12	3646492.98	119.7
ML865_FI590_126	391356.98	3646492.64	116.3
ML865_FI590_127	391359.02	3646477.22	110.7
ML865_FI590_128	391345.62	3646483.14	110.6
ML865_FI590_129	391344.12	3646474.56	93.6
ML865_FI590_130	391343.16	3646472.16	92.2
ML865_FI590_131	391354.40	3646494.94	89.0
ML865_FI590_132	391349.88	3646474.26	88.8
ML865_FI590_133	391357.50	3646476.06	84.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FI590_134	391359.54	3646471.98	77.6
ML865_FI590_135	391367.73	3646473.84	77.5
ML865_FI590_136	391353.58	3646476.80	73.8
ML865_FI590_137	391342.44	3646490.04	72.3
ML865_FI590_138	391356.36	3646471.32	70.7
ML865_FI590_139	391355.10	3646474.98	66.9
ML865_FI590_140	391358.94	3646478.04	64.1
ML865_FI590_141	391342.20	3646475.16	62.7
ML865_FI590_142	391357.62	3646495.68	62.7
ML865_FI590_143	391349.46	3646490.28	61.2
ML865_FI590_144	391358.76	3646484.16	60.4
ML865_FI590_145	391343.28	3646479.54	57.0
ML865_FI590_146	391347.84	3646482.18	50.6
ML865_FI590_147	391356.58	3646494.66	50.0
ML865_FI590_148	391342.26	3646472.64	49.9
ML865_FI590_149	391340.70	3646480.20	48.5
ML865_FI590_150	391340.40	3646476.75	48.2
ML865_FI590_151	391352.40	3646471.38	47.6
ML865_FI590_152	391342.50	3646476.60	47.0
ML865_FI590_153	391341.06	3646470.24	43.2
ML865_FI590_154	391341.21	3646478.88	42.3
ML865_FI590_155	391346.76	3646478.52	28.2
ML865_FI590_156	391357.41	3646475.34	26.8
ML865_FI590_157	391348.88	3646476.32	20.2
ML865_FI591_1	391349.28	3646501.44	228.2
ML865_FI591_2	391358.82	3646502.16	103.0
ML865_FI591_3	391361.58	3646501.32	61.8
ML865_FJ584_1	391371.12	3646317.24	162.3
ML865_FJ585_1	391374.60	3646327.80	50.4
ML865_FJ586_1	391397.92	3646363.22	1409.2
ML865_FJ586_2	391391.70	3646372.20	822.5
ML865_FJ586_3	391397.82	3646364.88	660.3
ML865_FJ586_4	391383.90	3646379.40	141.8
ML865_FJ586_5	391389.78	3646369.92	93.8
ML865_FJ586_6	391393.50	3646374.66	78.4
ML865_FJ586_7	391397.04	3646361.46	67.0
ML865_FJ586_8	391378.02	3646378.26	54.3
ML865_FJ586_9	391392.00	3646369.44	54.1
ML865_FJ587_1	391373.22	3646390.74	9910.8
ML865_FJ587_2	391391.58	3646399.65	5071.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ587_3	391394.46	3646398.66	3623.2
ML865_FJ587_4	391373.22	3646391.52	3194.7
ML865_FJ587_5	391390.98	3646397.80	2510.0
ML865_FJ587_6	391381.80	3646404.14	2097.5
ML865_FJ587_7	391395.42	3646396.14	1627.1
ML865_FJ587_8	391389.30	3646388.10	1567.2
ML865_FJ587_9	391381.38	3646389.21	1460.9
ML865_FJ587_10	391382.70	3646409.22	1384.7
ML865_FJ587_11	391379.42	3646398.36	1318.6
ML865_FJ587_12	391396.47	3646391.70	1266.1
ML865_FJ587_13	391380.12	3646404.72	1236.6
ML865_FJ587_14	391379.76	3646399.62	992.7
ML865_FJ587_15	391389.60	3646388.88	914.9
ML865_FJ587_16	391386.36	3646394.40	635.3
ML865_FJ587_17	391380.12	3646400.79	595.7
ML865_FJ587_18	391395.54	3646400.64	584.4
ML865_FJ587_19	391376.36	3646406.66	576.3
ML865_FJ587_20	391382.12	3646401.06	546.5
ML865_FJ587_21	391393.86	3646395.48	500.7
ML865_FJ587_22	391378.71	3646399.17	494.8
ML865_FJ587_23	391380.36	3646398.36	490.4
ML865_FJ587_24	391386.12	3646403.22	450.1
ML865_FJ587_25	391382.34	3646405.05	447.1
ML865_FJ587_26	391387.98	3646408.83	434.1
ML865_FJ587_27	391379.90	3646403.45	418.9
ML865_FJ587_28	391384.54	3646399.46	418.3
ML865_FJ587_29	391383.84	3646402.77	404.3
ML865_FJ587_30	391382.34	3646405.68	394.0
ML865_FJ587_31	391386.90	3646396.32	377.2
ML865_FJ587_32	391393.05	3646390.65	363.4
ML865_FJ587_33	391392.78	3646398.12	357.9
ML865_FJ587_34	391382.58	3646389.12	339.5
ML865_FJ587_35	391389.48	3646400.58	321.1
ML865_FJ587_36	391389.75	3646398.81	303.4
ML865_FJ587_37	391384.60	3646401.05	303.1
ML865_FJ587_38	391385.52	3646390.52	301.1
ML865_FJ587_39	391380.87	3646405.86	292.3
ML865_FJ587_40	391393.71	3646392.12	288.6
ML865_FJ587_41	391379.00	3646405.22	284.6
ML865_FJ587_42	391391.64	3646400.94	279.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ587_43	391384.32	3646402.14	224.9
ML865_FJ587_44	391389.15	3646402.02	216.2
ML865_FJ587_45	391380.06	3646405.98	215.9
ML865_FJ587_46	391373.10	3646394.34	199.3
ML865_FJ587_47	391382.34	3646402.58	194.4
ML865_FJ587_48	391383.40	3646401.36	192.2
ML865_FJ587_49	391386.60	3646401.02	191.7
ML865_FJ587_50	391393.98	3646397.55	186.9
ML865_FJ587_51	391383.52	3646403.96	184.5
ML865_FJ587_52	391370.04	3646395.72	181.9
ML865_FJ587_53	391390.98	3646387.68	179.7
ML865_FJ587_54	391390.20	3646396.54	175.2
ML865_FJ587_55	391390.74	3646396.02	174.9
ML865_FJ587_56	391397.58	3646408.04	171.5
ML865_FJ587_57	391387.23	3646404.63	166.2
ML865_FJ587_58	391386.06	3646397.55	160.0
ML865_FJ587_59	391378.77	3646402.59	154.9
ML865_FJ587_60	391379.64	3646402.20	149.0
ML865_FJ587_61	391375.95	3646394.49	148.9
ML865_FJ587_62	391395.25	3646393.31	147.4
ML865_FJ587_63	391374.96	3646396.50	147.0
ML865_FJ587_64	391381.00	3646402.54	146.7
ML865_FJ587_65	391396.62	3646395.36	145.5
ML865_FJ587_66	391390.14	3646393.74	144.3
ML865_FJ587_67	391379.70	3646391.52	141.8
ML865_FJ587_68	391387.35	3646393.44	139.6
ML865_FJ587_69	391387.74	3646394.34	138.7
ML865_FJ587_70	391382.94	3646394.58	131.8
ML865_FJ587_71	391387.08	3646395.59	125.9
ML865_FJ587_72	391392.60	3646392.86	125.5
ML865_FJ587_73	391384.94	3646404.90	124.1
ML865_FJ587_74	391394.94	3646403.46	121.2
ML865_FJ587_75	391376.34	3646407.96	117.6
ML865_FJ587_76	391385.52	3646402.08	116.5
ML865_FJ587_77	391381.95	3646394.31	115.0
ML865_FJ587_78	391386.37	3646393.20	112.5
ML865_FJ587_79	391392.78	3646403.43	112.4
ML865_FJ587_80	391386.36	3646389.90	111.2
ML865_FJ587_81	391371.42	3646395.78	111.2
ML865_FJ587_82	391392.81	3646402.38	110.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ587_83	391395.03	3646406.85	106.5
ML865_FJ587_84	391385.40	3646395.66	104.2
ML865_FJ587_85	391392.24	3646406.88	100.5
ML865_FJ587_86	391393.26	3646407.24	98.4
ML865_FJ587_87	391388.22	3646392.18	97.4
ML865_FJ587_88	391388.30	3646401.70	96.6
ML865_FJ587_89	391381.62	3646391.31	95.5
ML865_FJ587_90	391382.73	3646384.89	94.7
ML865_FJ587_91	391388.28	3646404.78	94.4
ML865_FJ587_92	391380.90	3646392.18	93.5
ML865_FJ587_93	391386.06	3646403.86	88.7
ML865_FJ587_94	391382.43	3646391.40	87.2
ML865_FJ587_95	391392.42	3646385.91	83.5
ML865_FJ587_96	391388.28	3646384.62	83.3
ML865_FJ587_97	391394.58	3646400.34	83.2
ML865_FJ587_98	391399.53	3646392.27	83.0
ML865_FJ587_99	391386.45	3646398.54	82.3
ML865_FJ587_100	391387.76	3646398.44	81.8
ML865_FJ587_101	391377.87	3646408.20	81.1
ML865_FJ587_102	391376.10	3646396.08	80.7
ML865_FJ587_103	391395.36	3646405.20	79.3
ML865_FJ587_104	391378.80	3646395.18	77.4
ML865_FJ587_105	391388.88	3646399.68	77.4
ML865_FJ587_106	391376.46	3646390.32	76.8
ML865_FJ587_107	391394.01	3646402.74	76.2
ML865_FJ587_108	391395.90	3646394.34	75.5
ML865_FJ587_109	391379.40	3646396.86	74.2
ML865_FJ587_110	391377.75	3646390.89	73.1
ML865_FJ587_111	391389.54	3646391.94	71.8
ML865_FJ587_112	391388.82	3646403.28	71.3
ML865_FJ587_113	391386.75	3646391.94	71.1
ML865_FJ587_114	391384.20	3646397.94	70.2
ML865_FJ587_115	391370.76	3646398.18	70.2
ML865_FJ587_116	391370.10	3646397.22	70.1
ML865_FJ587_117	391399.62	3646386.86	69.6
ML865_FJ587_118	391393.35	3646400.52	66.5
ML865_FJ587_119	391397.88	3646399.20	64.3
ML865_FJ587_120	391370.34	3646408.92	64.3
ML865_FJ587_121	391399.88	3646405.38	64.0
ML865_FJ587_122	391385.94	3646388.34	63.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ587_123	391397.24	3646397.66	62.4
ML865_FJ587_124	391393.74	3646404.00	62.4
ML865_FJ587_125	391391.94	3646395.60	59.8
ML865_FJ587_126	391385.70	3646407.42	59.5
ML865_FJ587_127	391388.04	3646396.92	59.2
ML865_FJ587_128	391382.94	3646392.24	59.0
ML865_FJ587_129	391371.39	3646389.63	56.0
ML865_FJ587_130	391381.65	3646407.72	56.0
ML865_FJ587_131	391380.63	3646407.75	53.5
ML865_FJ587_132	391373.40	3646408.44	53.2
ML865_FJ587_133	391378.23	3646391.85	53.1
ML865_FJ587_134	391373.80	3646395.40	52.9
ML865_FJ587_135	391395.45	3646409.55	50.9
ML865_FJ587_136	391383.96	3646395.66	50.5
ML865_FJ587_137	391387.44	3646403.43	50.4
ML865_FJ587_138	391398.32	3646397.28	49.9
ML865_FJ587_139	391395.60	3646402.62	49.5
ML865_FJ587_140	391382.64	3646407.78	48.3
ML865_FJ587_141	391372.58	3646388.40	48.1
ML865_FJ587_142	391399.95	3646406.91	47.9
ML865_FJ587_143	391385.40	3646409.76	47.0
ML865_FJ587_144	391398.60	3646394.82	45.4
ML865_FJ587_145	391392.36	3646409.70	45.3
ML865_FJ587_146	391395.30	3646407.66	45.2
ML865_FJ587_147	391385.10	3646403.10	45.1
ML865_FJ587_148	391377.30	3646395.57	44.0
ML865_FJ587_149	391392.87	3646405.47	43.2
ML865_FJ587_150	391394.64	3646409.36	40.2
ML865_FJ587_151	391388.70	3646398.27	39.6
ML865_FJ587_152	391378.20	3646396.52	37.3
ML865_FJ587_153	391389.54	3646390.86	35.6
ML865_FJ587_154	391391.52	3646393.65	35.1
ML865_FJ587_155	391387.53	3646389.69	31.9
ML865_FJ587_156	391382.56	3646395.86	30.6
ML865_FJ587_157	391398.87	3646390.80	29.3
ML865_FJ587_158	391384.56	3646394.74	29.1
ML865_FJ587_159	391396.29	3646402.95	26.3
ML865_FJ587_160	391386.00	3646408.95	21.6
ML865_FJ587_161	391386.96	3646399.62	18.8
ML865_FJ587_162	391397.07	3646406.91	12.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ588_1	391373.73	3646413.45	7315.4
ML865_FJ588_2	391397.40	3646413.03	4999.7
ML865_FJ588_3	391395.78	3646412.70	4521.8
ML865_FJ588_4	391371.88	3646413.14	4243.5
ML865_FJ588_5	391378.32	3646413.48	4208.1
ML865_FJ588_6	391373.19	3646412.40	3996.0
ML865_FJ588_7	391378.08	3646412.76	2714.2
ML865_FJ588_8	391379.76	3646412.82	2534.1
ML865_FJ588_9	391372.56	3646413.03	2410.9
ML865_FJ588_10	391389.96	3646412.88	2277.4
ML865_FJ588_11	391384.70	3646413.04	2237.3
ML865_FJ588_12	391391.97	3646412.70	2190.2
ML865_FJ588_13	391395.72	3646413.90	2188.4
ML865_FJ588_14	391383.18	3646412.88	2131.5
ML865_FJ588_15	391375.35	3646413.21	2026.3
ML865_FJ588_16	391370.64	3646412.86	1550.8
ML865_FJ588_17	391394.34	3646413.48	1403.6
ML865_FJ588_18	391392.00	3646414.02	1317.9
ML865_FJ588_19	391386.60	3646413.12	1169.6
ML865_FJ588_20	391385.07	3646414.29	1131.7
ML865_FJ588_21	391382.70	3646413.54	1002.5
ML865_FJ588_22	391375.80	3646414.56	987.1
ML865_FJ588_23	391386.30	3646410.54	824.4
ML865_FJ588_24	391379.40	3646419.36	746.9
ML865_FJ588_25	391399.68	3646438.80	719.7
ML865_FJ588_26	391380.21	3646414.41	548.4
ML865_FJ588_27	391371.21	3646412.01	537.4
ML865_FJ588_28	391377.06	3646414.02	480.1
ML865_FJ588_29	391393.98	3646411.62	471.6
ML865_FJ588_30	391397.28	3646411.44	448.3
ML865_FJ588_31	391396.74	3646438.92	402.9
ML865_FJ588_32	391398.81	3646412.10	354.1
ML865_FJ588_33	391399.86	3646412.28	333.4
ML865_FJ588_34	391399.68	3646413.30	317.6
ML865_FJ588_35	391386.30	3646411.86	315.0
ML865_FJ588_36	391382.34	3646411.98	296.5
ML865_FJ588_37	391389.74	3646411.94	291.8
ML865_FJ588_38	391379.23	3646438.04	289.4
ML865_FJ588_39	391398.96	3646411.32	289.0
ML865_FJ588_40	391374.84	3646415.22	261.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ588_41	391390.17	3646414.41	232.8
ML865_FJ588_42	391387.38	3646414.08	230.1
ML865_FJ588_43	391372.35	3646415.55	212.4
ML865_FJ588_44	391391.61	3646411.41	211.9
ML865_FJ588_45	391383.48	3646415.10	202.8
ML865_FJ588_46	391397.70	3646438.65	196.3
ML865_FJ588_47	391371.15	3646415.37	180.4
ML865_FJ588_48	391374.72	3646410.78	176.0
ML865_FJ588_49	391377.69	3646416.27	168.1
ML865_FJ588_50	391395.42	3646415.58	166.0
ML865_FJ588_51	391395.66	3646416.84	162.3
ML865_FJ588_52	391383.00	3646410.57	151.5
ML865_FJ588_53	391388.58	3646412.79	150.0
ML865_FJ588_54	391378.98	3646439.69	147.7
ML865_FJ588_55	391392.18	3646421.88	141.6
ML865_FJ588_56	391381.60	3646439.72	140.5
ML865_FJ588_57	391380.75	3646411.23	131.3
ML865_FJ588_58	391381.50	3646416.36	131.0
ML865_FJ588_59	391376.52	3646411.02	125.5
ML865_FJ588_60	391393.02	3646417.32	123.6
ML865_FJ588_61	391399.44	3646419.90	116.9
ML865_FJ588_62	391382.64	3646439.04	113.7
ML865_FJ588_63	391379.76	3646416.04	110.7
ML865_FJ588_64	391380.39	3646438.32	102.7
ML865_FJ588_65	391370.08	3646411.06	102.3
ML865_FJ588_66	391395.42	3646410.78	99.6
ML865_FJ588_67	391397.85	3646415.25	98.6
ML865_FJ588_68	391394.64	3646416.36	93.0
ML865_FJ588_69	391371.69	3646439.40	85.4
ML865_FJ588_70	391388.97	3646410.72	83.3
ML865_FJ588_71	391381.38	3646436.16	79.0
ML865_FJ588_72	391373.74	3646410.36	76.5
ML865_FJ588_73	391390.32	3646410.54	72.2
ML865_FJ588_74	391378.82	3646415.64	71.0
ML865_FJ588_75	391391.52	3646438.65	66.2
ML865_FJ588_76	391398.03	3646419.33	64.8
ML865_FJ588_77	391370.70	3646439.99	64.8
ML865_FJ588_78	391393.02	3646438.38	59.1
ML865_FJ588_79	391393.76	3646414.82	56.0
ML865_FJ588_80	391396.80	3646416.24	55.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ588_81	391388.58	3646439.68	55.1
ML865_FJ588_82	391387.72	3646439.36	55.0
ML865_FJ588_83	391383.60	3646438.20	54.0
ML865_FJ588_84	391386.74	3646415.70	53.6
ML865_FJ588_85	391377.84	3646437.30	53.5
ML865_FJ588_86	391385.64	3646439.88	50.3
ML865_FJ588_87	391375.38	3646416.66	49.0
ML865_FJ588_88	391388.12	3646412.02	47.1
ML865_FJ588_89	391384.32	3646437.42	44.4
ML865_FJ588_90	391397.94	3646416.36	43.8
ML865_FJ588_91	391370.50	3646438.82	43.8
ML865_FJ588_92	391390.32	3646439.64	43.8
ML865_FJ588_93	391394.43	3646439.55	43.5
ML865_FJ588_94	391378.76	3646410.12	43.2
ML865_FJ588_95	391395.24	3646419.00	43.2
ML865_FJ588_96	391395.72	3646420.32	43.2
ML865_FJ588_97	391393.96	3646410.06	39.0
ML865_FJ588_98	391375.50	3646438.95	38.7
ML865_FJ588_99	391388.34	3646416.39	38.2
ML865_FJ588_100	391396.65	3646419.12	34.5
ML865_FJ588_101	391393.05	3646410.63	34.2
ML865_FJ588_102	391384.62	3646438.74	30.4
ML865_FJ588_103	391374.36	3646439.79	24.5
ML865_FJ588_104	391398.69	3646410.09	24.2
ML865_FJ588_105	391399.11	3646419.06	22.9
ML865_FJ588_106	391399.80	3646410.00	18.7
ML865_FJ589_1	391399.10	3646444.60	22995.1
ML865_FJ589_2	391394.85	3646447.17	17548.2
ML865_FJ589_3	391397.70	3646443.90	6642.7
ML865_FJ589_4	391396.32	3646445.70	5530.7
ML865_FJ589_5	391396.38	3646446.84	5117.5
ML865_FJ589_6	391388.34	3646445.28	4587.9
ML865_FJ589_7	391394.34	3646452.60	4322.9
ML865_FJ589_8	391392.10	3646447.38	3902.1
ML865_FJ589_9	391389.54	3646445.28	3524.7
ML865_FJ589_10	391388.82	3646448.04	3458.4
ML865_FJ589_11	391392.09	3646445.04	3255.0
ML865_FJ589_12	391379.70	3646444.74	2869.1
ML865_FJ589_13	391399.11	3646459.74	2760.9
ML865_FJ589_14	391382.88	3646448.55	2643.5

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ589_15	391378.92	3646456.80	2483.2
ML865_FJ589_16	391392.54	3646448.52	2382.9
ML865_FJ589_17	391388.26	3646446.44	2308.8
ML865_FJ589_18	391385.85	3646448.63	2196.1
ML865_FJ589_19	391390.74	3646444.74	2194.7
ML865_FJ589_20	391391.04	3646446.18	2177.0
ML865_FJ589_21	391390.08	3646446.96	2139.7
ML865_FJ589_22	391393.60	3646447.16	1980.4
ML865_FJ589_23	391394.60	3646444.46	1924.6
ML865_FJ589_24	391387.40	3646445.98	1910.8
ML865_FJ589_25	391383.99	3646444.11	1865.8
ML865_FJ589_26	391398.12	3646457.04	1762.9
ML865_FJ589_27	391393.98	3646448.58	1515.1
ML865_FJ589_28	391377.78	3646456.80	1506.7
ML865_FJ589_29	391380.48	3646457.34	1462.1
ML865_FJ589_30	391372.58	3646449.58	1448.9
ML865_FJ589_31	391397.28	3646466.52	1431.3
ML865_FJ589_32	391394.58	3646445.76	1405.8
ML865_FJ589_33	391399.00	3646458.36	1330.4
ML865_FJ589_34	391372.50	3646441.80	1284.6
ML865_FJ589_35	391384.74	3646448.46	1282.0
ML865_FJ589_36	391381.83	3646447.95	1207.3
ML865_FJ589_37	391383.78	3646447.20	1185.5
ML865_FJ589_38	391395.60	3646444.46	1099.6
ML865_FJ589_39	391387.02	3646449.00	1095.9
ML865_FJ589_40	391378.86	3646446.72	1078.4
ML865_FJ589_41	391399.23	3646446.45	988.6
ML865_FJ589_42	391385.41	3646443.87	926.6
ML865_FJ589_43	391376.01	3646446.90	886.8
ML865_FJ589_44	391387.26	3646447.38	873.0
ML865_FJ589_45	391392.45	3646443.69	827.9
ML865_FJ589_46	391396.60	3646457.70	784.9
ML865_FJ589_47	391373.67	3646448.88	744.3
ML865_FJ589_48	391372.08	3646464.00	730.4
ML865_FJ589_49	391370.79	3646462.85	730.3
ML865_FJ589_50	391399.98	3646443.30	711.4
ML865_FJ589_51	391375.44	3646447.20	708.4
ML865_FJ589_52	391385.16	3646445.34	690.4
ML865_FJ589_53	391395.42	3646449.20	669.8
ML865_FJ589_54	391398.03	3646455.21	621.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ589_55	391398.24	3646442.40	596.8
ML865_FJ589_56	391388.07	3646447.68	594.2
ML865_FJ589_57	391394.88	3646443.30	585.9
ML865_FJ589_58	391387.17	3646457.37	583.1
ML865_FJ589_59	391377.27	3646447.08	572.4
ML865_FJ589_60	391396.92	3646448.88	560.4
ML865_FJ589_61	391393.72	3646442.06	531.4
ML865_FJ589_62	391379.40	3646449.38	527.1
ML865_FJ589_63	391371.84	3646443.06	523.2
ML865_FJ589_64	391397.44	3646458.64	510.9
ML865_FJ589_65	391388.01	3646444.16	502.9
ML865_FJ589_66	391374.00	3646442.52	501.1
ML865_FJ589_67	391393.86	3646443.12	489.2
ML865_FJ589_68	391389.54	3646444.02	487.1
ML865_FJ589_69	391390.98	3646448.40	482.9
ML865_FJ589_70	391386.33	3646443.03	473.9
ML865_FJ589_71	391380.94	3646445.01	470.7
ML865_FJ589_72	391380.87	3646446.57	468.9
ML865_FJ589_73	391385.44	3646447.13	468.8
ML865_FJ589_74	391382.26	3646446.74	465.8
ML865_FJ589_75	391382.46	3646443.84	458.6
ML865_FJ589_76	391391.01	3646467.00	455.0
ML865_FJ589_77	391393.92	3646451.78	453.9
ML865_FJ589_78	391383.90	3646449.64	448.8
ML865_FJ589_79	391371.36	3646460.70	447.1
ML865_FJ589_80	391376.72	3646448.14	440.9
ML865_FJ589_81	391372.35	3646444.32	439.8
ML865_FJ589_82	391399.02	3646442.02	438.3
ML865_FJ589_83	391389.36	3646452.63	431.0
ML865_FJ589_84	391373.70	3646441.32	429.6
ML865_FJ589_85	391372.20	3646457.85	410.2
ML865_FJ589_86	391384.80	3646451.88	401.9
ML865_FJ589_87	391373.73	3646447.14	393.0
ML865_FJ589_88	391393.05	3646449.48	380.8
ML865_FJ589_89	391385.73	3646450.17	379.5
ML865_FJ589_90	391378.34	3646445.60	372.5
ML865_FJ589_91	391396.44	3646441.65	365.4
ML865_FJ589_92	391387.80	3646441.08	363.0
ML865_FJ589_93	391391.32	3646443.29	359.6
ML865_FJ589_94	391398.99	3646455.99	352.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ589_95	391395.45	3646458.66	352.2
ML865_FJ589_96	391379.76	3646445.76	349.6
ML865_FJ589_97	391381.98	3646444.41	347.9
ML865_FJ589_98	391373.04	3646445.34	344.2
ML865_FJ589_99	391371.78	3646461.90	338.0
ML865_FJ589_100	391377.30	3646446.15	330.2
ML865_FJ589_101	391391.94	3646465.50	326.4
ML865_FJ589_102	391386.87	3646444.38	309.9
ML865_FJ589_103	391371.00	3646444.40	285.5
ML865_FJ589_104	391387.98	3646453.32	275.2
ML865_FJ589_105	391383.42	3646445.13	268.0
ML865_FJ589_106	391390.50	3646451.82	266.9
ML865_FJ589_107	391390.88	3646441.80	266.0
ML865_FJ589_108	391395.18	3646464.36	260.8
ML865_FJ589_109	391370.37	3646445.37	259.2
ML865_FJ589_110	391392.36	3646455.42	248.1
ML865_FJ589_111	391391.19	3646452.93	247.9
ML865_FJ589_112	391384.77	3646445.94	229.7
ML865_FJ589_113	391370.11	3646459.98	223.8
ML865_FJ589_114	391389.69	3646448.91	219.1
ML865_FJ589_115	391371.08	3646464.58	213.8
ML865_FJ589_116	391379.20	3646447.80	213.1
ML865_FJ589_117	391371.00	3646448.52	212.8
ML865_FJ589_118	391379.76	3646440.48	209.2
ML865_FJ589_119	391394.32	3646450.22	208.6
ML865_FJ589_120	391399.92	3646454.76	202.4
ML865_FJ589_121	391398.72	3646440.94	198.9
ML865_FJ589_122	391389.30	3646457.52	196.2
ML865_FJ589_123	391382.84	3646440.56	193.7
ML865_FJ589_124	391382.19	3646445.88	192.8
ML865_FJ589_125	391398.72	3646466.10	176.9
ML865_FJ589_126	391371.96	3646445.40	174.5
ML865_FJ589_127	391377.72	3646441.86	174.4
ML865_FJ589_128	391396.50	3646456.68	172.8
ML865_FJ589_129	391379.28	3646444.17	172.4
ML865_FJ589_130	391387.14	3646455.06	167.5
ML865_FJ589_131	391395.30	3646441.80	164.9
ML865_FJ589_132	391375.80	3646445.28	164.0
ML865_FJ589_133	391371.08	3646457.04	163.4
ML865_FJ589_134	391374.36	3646445.02	159.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ589_135	391389.30	3646450.44	159.0
ML865_FJ589_136	391372.74	3646450.86	158.1
ML865_FJ589_137	391370.31	3646461.35	155.1
ML865_FJ589_138	391373.43	3646464.78	153.3
ML865_FJ589_139	391386.03	3646451.40	150.2
ML865_FJ589_140	391376.94	3646456.50	145.5
ML865_FJ589_141	391392.81	3646441.14	144.1
ML865_FJ589_142	391398.72	3646454.52	144.1
ML865_FJ589_143	391379.85	3646441.59	143.6
ML865_FJ589_144	391374.00	3646465.50	141.8
ML865_FJ589_145	391392.28	3646441.70	138.9
ML865_FJ589_146	391393.68	3646464.00	138.4
ML865_FJ589_147	391398.66	3646448.34	135.8
ML865_FJ589_148	391380.20	3646456.38	134.8
ML865_FJ589_149	391392.24	3646462.26	131.8
ML865_FJ589_150	391380.54	3646450.14	130.5
ML865_FJ589_151	391386.18	3646456.83	127.3
ML865_FJ589_152	391382.88	3646456.62	125.2
ML865_FJ589_153	391381.70	3646443.56	123.7
ML865_FJ589_154	391380.86	3646441.86	121.7
ML865_FJ589_155	391383.20	3646451.76	121.7
ML865_FJ589_156	391377.78	3646440.10	121.2
ML865_FJ589_157	391396.62	3646452.18	119.8
ML865_FJ589_158	391393.86	3646456.56	119.5
ML865_FJ589_159	391394.76	3646469.52	118.4
ML865_FJ589_160	391373.68	3646466.64	118.2
ML865_FJ589_161	391372.42	3646447.42	116.1
ML865_FJ589_162	391371.99	3646466.43	116.1
ML865_FJ589_163	391383.90	3646442.61	107.8
ML865_FJ589_164	391381.56	3646450.96	106.4
ML865_FJ589_165	391392.58	3646457.68	105.2
ML865_FJ589_166	391381.44	3646441.76	104.9
ML865_FJ589_167	391378.98	3646442.76	103.3
ML865_FJ589_168	391384.98	3646457.64	102.4
ML865_FJ589_169	391381.32	3646465.26	101.7
ML865_FJ589_170	391385.46	3646458.54	99.2
ML865_FJ589_171	391399.26	3646469.52	98.3
ML865_FJ589_172	391399.92	3646449.04	98.1
ML865_FJ589_173	391384.38	3646468.98	96.3
ML865_FJ589_174	391397.42	3646441.58	94.7

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ589_175	391396.42	3646440.30	93.9
ML865_FJ589_176	391377.04	3646444.68	92.7
ML865_FJ589_177	391376.40	3646441.38	90.1
ML865_FJ589_178	391397.34	3646452.60	89.8
ML865_FJ589_179	391394.88	3646440.78	89.1
ML865_FJ589_180	391378.50	3646440.54	88.7
ML865_FJ589_181	391390.86	3646469.10	88.1
ML865_FJ589_182	391393.62	3646440.03	87.9
ML865_FJ589_183	391385.16	3646441.35	86.5
ML865_FJ589_184	391391.40	3646455.06	84.3
ML865_FJ589_185	391373.10	3646462.74	81.1
ML865_FJ589_186	391394.16	3646458.78	80.7
ML865_FJ589_187	391393.91	3646457.50	80.1
ML865_FJ589_188	391382.04	3646455.88	77.4
ML865_FJ589_189	391382.10	3646451.72	76.8
ML865_FJ589_190	391374.60	3646452.78	74.7
ML865_FJ589_191	391375.14	3646465.92	74.4
ML865_FJ589_192	391397.68	3646451.68	73.4
ML865_FJ589_193	391392.54	3646456.62	73.2
ML865_FJ589_194	391377.99	3646443.33	72.8
ML865_FJ589_195	391389.39	3646441.56	72.7
ML865_FJ589_196	391374.96	3646459.68	71.2
ML865_FJ589_197	391376.70	3646458.63	70.8
ML865_FJ589_198	391388.46	3646458.24	68.4
ML865_FJ589_199	391371.72	3646456.08	66.7
ML865_FJ589_200	391396.80	3646463.04	65.6
ML865_FJ589_201	391375.38	3646456.80	63.9
ML865_FJ589_202	391392.21	3646450.44	63.1
ML865_FJ589_203	391383.18	3646458.30	62.8
ML865_FJ589_204	391387.86	3646469.94	61.9
ML865_FJ589_205	391370.10	3646458.78	60.9
ML865_FJ589_206	391390.41	3646465.77	60.6
ML865_FJ589_207	391383.14	3646442.10	59.7
ML865_FJ589_208	391384.86	3646466.85	58.8
ML865_FJ589_209	391388.31	3646455.66	58.0
ML865_FJ589_210	391375.50	3646444.14	57.8
ML865_FJ589_211	391371.48	3646459.82	56.8
ML865_FJ589_212	391391.40	3646440.30	56.7
ML865_FJ589_213	391384.17	3646440.06	56.2
ML865_FJ589_214	391376.34	3646449.84	56.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ589_215	391397.30	3646459.98	55.3
ML865_FJ589_216	391375.47	3646441.08	54.8
ML865_FJ589_217	391394.40	3646468.80	54.7
ML865_FJ589_218	391370.52	3646452.60	52.6
ML865_FJ589_219	391397.40	3646450.32	52.3
ML865_FJ589_220	391398.24	3646453.38	51.3
ML865_FJ589_221	391393.14	3646459.14	50.4
ML865_FJ589_222	391377.54	3646450.02	50.1
ML865_FJ589_223	391397.04	3646468.20	48.2
ML865_FJ589_224	391399.89	3646461.87	48.0
ML865_FJ589_225	391372.68	3646460.25	47.9
ML865_FJ589_226	391380.03	3646459.17	45.7
ML865_FJ589_227	391393.20	3646460.40	45.7
ML865_FJ589_228	391374.96	3646457.94	45.4
ML865_FJ589_229	391399.84	3646440.83	44.1
ML865_FJ589_230	391375.08	3646449.84	44.1
ML865_FJ589_231	391374.06	3646456.68	43.9
ML865_FJ589_232	391394.70	3646466.97	41.7
ML865_FJ589_233	391383.93	3646456.83	41.6
ML865_FJ589_234	391386.94	3646452.36	41.0
ML865_FJ589_235	391384.72	3646442.10	40.4
ML865_FJ589_236	391370.10	3646454.82	40.4
ML865_FJ589_237	391380.45	3646440.03	39.8
ML865_FJ589_238	391380.12	3646443.12	38.6
ML865_FJ589_239	391395.33	3646456.98	37.3
ML865_FJ589_240	391387.78	3646451.70	34.1
ML865_FJ589_241	391374.18	3646459.17	33.5
ML865_FJ589_242	391373.67	3646455.99	30.8
ML865_FJ589_243	391371.21	3646446.57	28.4
ML865_FJ589_244	391395.09	3646455.57	26.7
ML865_FJ589_245	391388.31	3646442.91	25.7
ML865_FJ589_246	391386.60	3646440.68	23.3
ML865_FJ590_1	391390.38	3646471.20	1477.3
ML865_FJ590_2	391376.52	3646477.92	616.6
ML865_FJ590_3	391388.82	3646479.06	423.6
ML865_FJ590_4	391391.31	3646474.98	371.0
ML865_FJ590_5	391384.08	3646475.82	290.5
ML865_FJ590_6	391390.08	3646473.60	236.3
ML865_FJ590_7	391388.86	3646473.98	207.5
ML865_FJ590_8	391389.30	3646474.96	190.2

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FJ590_9	391399.44	3646473.30	187.3
ML865_FJ590_10	391391.16	3646476.96	155.4
ML865_FJ590_11	391389.96	3646476.24	121.9
ML865_FJ590_12	391388.91	3646475.94	104.3
ML865_FJ590_13	391392.32	3646473.68	90.5
ML865_FJ590_14	391381.32	3646478.10	85.2
ML865_FJ590_15	391392.87	3646471.20	72.3
ML865_FJ590_16	391391.44	3646480.00	72.1
ML865_FJ590_17	391398.96	3646487.28	69.6
ML865_FJ590_18	391392.36	3646472.82	60.2
ML865_FJ590_19	391370.22	3646474.14	57.5
ML865_FJ590_20	391393.23	3646480.56	55.8
ML865_FJ590_21	391393.80	3646479.54	49.9
ML865_FJ590_22	391383.84	3646472.61	45.6
ML865_FJ590_23	391396.08	3646474.92	45.0
ML865_FJ590_24	391376.16	3646480.92	40.5
ML865_FJ590_25	391395.28	3646481.00	24.1
ML865_FJ590_26	391388.97	3646477.56	20.9
ML865_FJ590_27	391394.55	3646476.75	18.5
ML865_FK587_1	391406.64	3646406.34	6838.5
ML865_FK587_2	391408.32	3646404.18	4419.1
ML865_FK587_3	391405.80	3646397.91	3809.9
ML865_FK587_4	391414.41	3646409.07	2390.5
ML865_FK587_5	391410.30	3646406.46	2238.5
ML865_FK587_6	391404.66	3646409.28	2216.3
ML865_FK587_7	391400.76	3646402.56	2135.8
ML865_FK587_8	391406.34	3646405.38	1774.4
ML865_FK587_9	391403.43	3646407.78	1436.7
ML865_FK587_10	391414.20	3646407.84	1222.1
ML865_FK587_11	391404.93	3646407.30	1096.7
ML865_FK587_12	391409.34	3646401.00	1082.8
ML865_FK587_13	391409.22	3646405.14	882.5
ML865_FK587_14	391406.52	3646399.44	447.7
ML865_FK587_15	391407.22	3646408.78	445.2
ML865_FK587_16	391404.66	3646395.30	405.0
ML865_FK587_17	391407.72	3646394.40	335.6
ML865_FK587_18	391407.84	3646407.54	313.3
ML865_FK587_19	391400.49	3646401.69	304.2
ML865_FK587_20	391412.82	3646408.92	277.3
ML865_FK587_21	391404.30	3646393.26	212.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FK587_22	391403.22	3646409.34	202.1
ML865_FK587_23	391416.36	3646408.68	198.3
ML865_FK587_24	391408.32	3646398.90	192.1
ML865_FK587_25	391407.84	3646402.62	188.5
ML865_FK587_26	391406.19	3646404.21	167.3
ML865_FK587_27	391405.26	3646404.90	158.3
ML865_FK587_28	391401.96	3646409.43	157.7
ML865_FK587_29	391409.94	3646409.28	98.9
ML865_FK587_30	391404.24	3646406.16	89.1
ML865_FK587_31	391410.24	3646408.62	81.0
ML865_FK587_32	391401.90	3646405.08	76.0
ML865_FK587_33	391409.88	3646402.32	73.2
ML865_FK587_34	391404.96	3646396.32	70.4
ML865_FK587_35	391404.84	3646402.26	63.7
ML865_FK587_36	391400.85	3646408.11	58.7
ML865_FK587_37	391407.78	3646390.56	54.9
ML865_FK587_38	391413.66	3646406.34	54.0
ML865_FK587_39	391408.86	3646394.40	51.6
ML865_FK587_40	391409.88	3646389.18	46.5
ML865_FK587_41	391411.08	3646390.26	44.0
ML865_FK587_42	391402.62	3646406.46	40.0
ML865_FK588_1	391415.88	3646410.06	31638.8
ML865_FK588_2	391415.31	3646410.39	8286.1
ML865_FK588_3	391414.20	3646410.34	8059.9
ML865_FK588_4	391403.52	3646413.18	6860.1
ML865_FK588_5	391414.98	3646411.86	6812.4
ML865_FK588_6	391407.29	3646410.71	2201.0
ML865_FK588_7	391417.20	3646436.76	1962.9
ML865_FK588_8	391402.38	3646412.16	1741.1
ML865_FK588_9	391414.29	3646412.91	1547.2
ML865_FK588_10	391410.72	3646413.38	1014.2
ML865_FK588_11	391415.88	3646413.72	1011.5
ML865_FK588_12	391411.98	3646411.68	1010.6
ML865_FK588_13	391409.10	3646413.48	970.4
ML865_FK588_14	391406.88	3646439.07	720.6
ML865_FK588_15	391404.48	3646411.95	708.3
ML865_FK588_16	391411.14	3646411.48	659.3
ML865_FK588_17	391406.04	3646420.68	592.1
ML865_FK588_18	391414.35	3646414.56	587.1
ML865_FK588_19	391415.16	3646414.74	565.3

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FK588_20	391412.52	3646414.32	555.7
ML865_FK588_21	391415.04	3646413.54	544.1
ML865_FK588_22	391405.98	3646411.44	526.0
ML865_FK588_23	391407.84	3646413.18	524.1
ML865_FK588_24	391413.66	3646413.33	506.0
ML865_FK588_25	391412.18	3646413.16	498.6
ML865_FK588_26	391408.32	3646411.11	471.5
ML865_FK588_27	391416.96	3646413.54	455.0
ML865_FK588_28	391416.10	3646412.76	452.2
ML865_FK588_29	391408.74	3646410.42	451.2
ML865_FK588_30	391403.34	3646411.50	424.4
ML865_FK588_31	391404.60	3646411.02	413.4
ML865_FK588_32	391407.54	3646421.28	392.0
ML865_FK588_33	391404.27	3646414.47	386.0
ML865_FK588_34	391412.10	3646410.36	360.8
ML865_FK588_35	391413.90	3646422.48	345.4
ML865_FK588_36	391406.70	3646414.14	341.7
ML865_FK588_37	391401.76	3646411.40	338.7
ML865_FK588_38	391417.02	3646435.32	303.3
ML865_FK588_39	391416.96	3646439.49	301.4
ML865_FK588_40	391401.66	3646439.88	270.8
ML865_FK588_41	391417.20	3646437.96	232.6
ML865_FK588_42	391409.34	3646411.68	188.9
ML865_FK588_43	391406.13	3646414.86	151.7
ML865_FK588_44	391405.23	3646438.89	148.8
ML865_FK588_45	391403.19	3646410.45	140.4
ML865_FK588_46	391405.74	3646419.81	134.8
ML865_FK588_47	391410.96	3646410.30	134.4
ML865_FK588_48	391409.58	3646421.16	130.8
ML865_FK588_49	391411.62	3646415.04	129.7
ML865_FK588_50	391415.76	3646435.53	124.5
ML865_FK588_51	391400.58	3646439.34	124.0
ML865_FK588_52	391416.00	3646415.46	122.9
ML865_FK588_53	391408.83	3646439.19	118.1
ML865_FK588_54	391401.12	3646410.32	116.4
ML865_FK588_55	391409.46	3646438.80	107.9
ML865_FK588_56	391408.98	3646421.22	93.9
ML865_FK588_57	391401.75	3646416.00	83.4
ML865_FK588_58	391402.38	3646437.36	81.6
ML865_FK588_59	391411.35	3646422.21	81.4

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FK588_60	391402.89	3646415.61	77.9
ML865_FK588_61	391413.98	3646438.60	76.8
ML865_FK588_62	391410.24	3646422.72	73.2
ML865_FK588_63	391407.54	3646420.08	67.9
ML865_FK588_64	391412.82	3646422.76	60.5
ML865_FK588_65	391411.35	3646435.11	60.3
ML865_FK588_66	391415.37	3646422.66	57.6
ML865_FK588_67	391413.60	3646439.40	55.7
ML865_FK588_68	391403.96	3646416.12	55.2
ML865_FK588_69	391409.73	3646435.47	51.8
ML865_FK588_70	391408.74	3646419.00	49.6
ML865_FK588_71	391407.06	3646415.52	48.8
ML865_FK588_72	391415.58	3646438.02	48.1
ML865_FK588_73	391403.70	3646437.00	46.4
ML865_FK588_74	391406.06	3646436.82	46.1
ML865_FK588_75	391410.27	3646410.72	46.0
ML865_FK588_76	391408.26	3646415.40	44.2
ML865_FK588_77	391417.17	3646422.03	37.6
ML865_FK588_78	391402.74	3646438.98	34.2
ML865_FK588_79	391404.06	3646438.80	32.0
ML865_FK589_1	391409.16	3646458.48	35336.5
ML865_FK589_2	391400.16	3646445.40	17902.7
ML865_FK589_3	391401.42	3646456.44	5946.6
ML865_FK589_4	391400.76	3646446.72	4180.0
ML865_FK589_5	391406.20	3646454.48	3743.4
ML865_FK589_6	391402.44	3646457.28	3380.1
ML865_FK589_7	391413.06	3646461.06	2591.4
ML865_FK589_8	391402.92	3646453.92	2370.6
ML865_FK589_9	391417.20	3646449.12	2121.9
ML865_FK589_10	391406.34	3646455.69	1815.6
ML865_FK589_11	391403.10	3646458.48	1567.0
ML865_FK589_12	391405.54	3646457.64	1289.1
ML865_FK589_13	391400.85	3646459.41	1180.0
ML865_FK589_14	391404.90	3646456.44	1111.3
ML865_FK589_15	391407.24	3646440.12	1083.3
ML865_FK589_16	391407.42	3646446.24	1019.9
ML865_FK589_17	391404.96	3646458.66	942.3
ML865_FK589_18	391403.58	3646459.74	873.6
ML865_FK589_19	391409.64	3646460.88	855.3
ML865_FK589_20	391416.54	3646463.55	810.9

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FK589_21	391403.04	3646447.38	794.4
ML865_FK589_22	391412.52	3646446.60	755.8
ML865_FK589_23	391400.79	3646457.94	697.4
ML865_FK589_24	391400.28	3646456.38	666.8
ML865_FK589_25	391402.14	3646459.44	624.2
ML865_FK589_26	391416.50	3646460.78	596.9
ML865_FK589_27	391407.00	3646458.54	596.8
ML865_FK589_28	391410.18	3646456.98	593.8
ML865_FK589_29	391412.31	3646459.98	581.3
ML865_FK589_30	391414.22	3646459.32	504.1
ML865_FK589_31	391407.39	3646456.74	478.2
ML865_FK589_32	391413.24	3646448.67	434.3
ML865_FK589_33	391400.16	3646460.40	432.6
ML865_FK589_34	391416.60	3646447.98	429.0
ML865_FK589_35	391404.84	3646460.46	418.3
ML865_FK589_36	391414.92	3646460.16	405.1
ML865_FK589_37	391411.62	3646461.06	385.1
ML865_FK589_38	391414.86	3646468.50	371.6
ML865_FK589_39	391415.37	3646461.60	360.6
ML865_FK589_40	391413.78	3646448.19	359.3
ML865_FK589_41	391408.50	3646459.68	332.4
ML865_FK589_42	391405.56	3646443.60	293.0
ML865_FK589_43	391412.01	3646451.70	278.2
ML865_FK589_44	391404.36	3646454.07	274.4
ML865_FK589_45	391416.81	3646461.51	242.6
ML865_FK589_46	391414.62	3646448.58	240.3
ML865_FK589_47	391403.64	3646455.48	229.0
ML865_FK589_48	391411.14	3646457.64	209.7
ML865_FK589_49	391414.68	3646461.06	191.6
ML865_FK589_50	391415.10	3646459.02	183.2
ML865_FK589_51	391415.70	3646450.08	179.4
ML865_FK589_52	391415.24	3646447.34	165.7
ML865_FK589_53	391413.45	3646443.15	151.2
ML865_FK589_54	391414.50	3646449.72	148.7
ML865_FK589_55	391401.99	3646443.75	147.6
ML865_FK589_56	391408.05	3646461.42	144.0
ML865_FK589_57	391414.98	3646465.20	142.3
ML865_FK589_58	391415.34	3646453.68	141.5
ML865_FK589_59	391413.12	3646458.63	137.4
ML865_FK589_60	391417.26	3646459.74	135.0

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FK589_61	391406.04	3646460.04	116.3
ML865_FK589_62	391416.48	3646446.48	115.4
ML865_FK589_63	391403.88	3646445.40	114.3
ML865_FK589_64	391410.42	3646443.42	113.7
ML865_FK589_65	391404.57	3646440.78	113.2
ML865_FK589_66	391411.86	3646458.72	104.4
ML865_FK589_67	391401.72	3646442.00	103.3
ML865_FK589_68	391400.92	3646440.20	97.9
ML865_FK589_69	391403.49	3646441.29	94.3
ML865_FK589_70	391402.65	3646441.65	90.4
ML865_FK589_71	391406.88	3646452.72	86.4
ML865_FK589_72	391411.26	3646456.50	84.4
ML865_FK589_73	391404.60	3646446.90	81.7
ML865_FK589_74	391410.42	3646461.60	80.5
ML865_FK589_75	391405.86	3646445.97	78.8
ML865_FK589_76	391414.58	3646442.74	78.3
ML865_FK589_77	391416.03	3646441.77	77.7
ML865_FK589_78	391405.08	3646445.19	74.5
ML865_FK589_79	391400.70	3646449.24	72.7
ML865_FK589_80	391401.45	3646461.27	72.5
ML865_FK589_81	391406.62	3646461.22	71.7
ML865_FK589_82	391403.16	3646452.42	70.9
ML865_FK589_83	391403.40	3646443.27	69.0
ML865_FK589_84	391410.21	3646446.60	69.0
ML865_FK589_85	391413.72	3646445.10	66.7
ML865_FK589_86	391402.38	3646461.00	65.7
ML865_FK589_87	391405.74	3646447.56	64.2
ML865_FK589_88	391412.22	3646455.42	63.7
ML865_FK589_89	391413.87	3646456.08	63.6
ML865_FK589_90	391409.04	3646448.70	63.1
ML865_FK589_91	391412.90	3646444.82	61.1
ML865_FK589_92	391408.44	3646442.32	60.1
ML865_FK589_93	391406.58	3646444.86	59.5
ML865_FK589_94	391409.10	3646446.12	56.9
ML865_FK589_95	391406.04	3646452.60	56.5
ML865_FK589_96	391405.20	3646442.52	55.3
ML865_FK589_97	391415.04	3646466.46	53.3
ML865_FK589_98	391407.60	3646441.96	49.7
ML865_FK589_99	391417.11	3646440.63	49.3
ML865_FK589_100	391411.86	3646440.90	48.1

Projection NAD 1983 UTM Zone13N meters

Table D-5 (Continued)
ML865 MRS Grids
G-858 Geophysical Target Anomaly List

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
ML865_FK589_101	391409.19	3646455.33	47.8
ML865_FK589_102	391409.40	3646451.76	47.3
ML865_FK589_103	391417.14	3646451.04	47.2
ML865_FK589_104	391411.80	3646442.88	45.8
ML865_FK589_105	391404.78	3646448.28	44.8
ML865_FK589_106	391411.50	3646446.15	44.3
ML865_FK589_107	391411.35	3646447.32	41.9
ML865_FK589_108	391415.80	3646456.06	40.2
ML865_FK589_109	391415.34	3646443.15	38.4
ML865_FK589_110	391410.03	3646442.28	35.0
ML865_FK589_111	391415.44	3646463.40	34.0
ML865_FK589_112	391409.94	3646440.51	29.3
ML865_FK589_113	391414.24	3646462.54	27.6
ML865_FK589_114	391403.58	3646440.20	18.9
ML865_FK589_115	391410.60	3646445.07	15.6
ML865_FK590_1	391400.88	3646480.86	48.5

Projection NAD 1983 UTM Zone13N meters

Table D-6
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_ML385_1	396912.69	3640329.18	135.9
RR869a_MM384_1	396938.70	3640319.82	263.2
RR869a_MM384_2	396944.82	3640319.10	128.0
RR869a_MM384_3	396943.11	3640315.32	106.7
RR869a_MM385_1	396948.15	3640325.67	1756.4
RR869a_MM385_2	396940.32	3640333.77	273.8
RR869a_MM385_3	396945.00	3640324.14	213.2
RR869a_MM385_4	396933.57	3640329.13	210.0
RR869a_MM385_5	396945.63	3640333.95	147.6
RR869a_MM385_6	396948.64	3640328.37	107.9
RR869a_MM385_7	396943.11	3640328.28	74.0
RR869a_MM385_8	396926.37	3640327.47	72.5
RR869a_MM385_9	396925.38	3640327.79	57.5
RR869a_MN383_1	396976.32	3640279.59	662.1
RR869a_MN383_2	396969.84	3640286.52	321.9
RR869a_MN383_3	396975.42	3640280.28	299.6
RR869a_MN383_4	396969.00	3640289.04	272.4
RR869a_MN383_5	396971.37	3640281.75	271.4
RR869a_MN383_6	396974.79	3640278.57	262.0
RR869a_MN383_7	396966.51	3640277.97	241.0
RR869a_MN383_8	396965.88	3640285.89	240.9
RR869a_MN383_9	396973.38	3640278.00	200.0
RR869a_MN383_10	396974.88	3640281.57	191.7
RR869a_MN383_11	396973.89	3640283.10	191.4
RR869a_MN383_12	396976.59	3640277.79	182.8
RR869a_MN383_13	396964.53	3640288.77	176.9
RR869a_MN383_14	396959.76	3640289.04	166.9
RR869a_MN383_15	396971.01	3640288.05	157.9
RR869a_MN383_16	396968.98	3640286.61	156.0
RR869a_MN383_17	396970.29	3640284.09	153.3
RR869a_MN383_18	396971.14	3640287.29	150.1
RR869a_MN383_19	396970.11	3640288.63	145.9
RR869a_MN383_20	396971.19	3640289.13	145.0
RR869a_MN383_21	396969.39	3640279.05	144.7
RR869a_MN383_22	396968.44	3640287.46	139.9
RR869a_MN383_23	396973.10	3640281.37	139.7
RR869a_MN383_24	396976.28	3640278.69	128.9
RR869a_MN383_25	396967.32	3640285.58	119.6
RR869a_MN383_26	396973.98	3640286.70	118.2
RR869a_MN383_27	396972.41	3640284.18	116.0

Projection NAD 1983 UTM Zone13N

Table D-6 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_MN383_28	396965.88	3640280.22	114.1
RR869a_MN383_29	396965.73	3640288.41	112.1
RR869a_MN383_30	396972.09	3640285.35	111.7
RR869a_MN383_31	396971.67	3640284.39	105.0
RR869a_MN383_32	396965.43	3640284.54	98.2
RR869a_MN383_33	396970.83	3640279.32	97.7
RR869a_MN383_34	396972.72	3640278.78	97.1
RR869a_MN383_35	396971.55	3640275.36	94.5
RR869a_MN383_36	396970.65	3640280.67	91.1
RR869a_MN383_37	396969.21	3640277.61	90.0
RR869a_MN383_38	396967.64	3640286.88	89.8
RR869a_MN383_39	396977.67	3640280.76	89.5
RR869a_MN383_40	396973.71	3640280.13	84.6
RR869a_MN383_41	396973.17	3640285.17	81.0
RR869a_MN383_42	396977.52	3640278.75	80.7
RR869a_MN383_43	396975.87	3640283.32	79.3
RR869a_MN383_44	396967.86	3640277.56	77.3
RR869a_MN383_45	396970.88	3640285.21	76.8
RR869a_MN383_46	396974.70	3640276.21	74.4
RR869a_MN383_47	396964.89	3640281.84	73.3
RR869a_MN383_48	396961.80	3640288.65	72.6
RR869a_MN383_49	396974.25	3640284.54	72.4
RR869a_MN383_50	396971.64	3640280.22	71.7
RR869a_MN383_51	396962.73	3640289.49	70.6
RR869a_MN383_52	396967.82	3640284.81	65.5
RR869a_MN383_53	396965.07	3640286.10	64.9
RR869a_MN383_54	396975.38	3640286.29	64.9
RR869a_MN383_55	396972.72	3640287.38	62.0
RR869a_MN383_56	396967.07	3640288.46	59.1
RR869a_MN383_57	396970.69	3640275.67	58.4
RR869a_MN383_58	396967.19	3640279.09	56.7
RR869a_MN383_59	396965.94	3640282.86	51.6
RR869a_MN383_60	396967.41	3640282.51	45.2
RR869a_MN383_61	396964.62	3640280.98	43.5
RR869a_MN383_62	396972.67	3640276.30	36.4
RR869a_MN383_63	396972.58	3640282.56	32.0
RR869a_MN383_64	396967.77	3640280.49	25.9
RR869a_MN384_1	396976.32	3640299.75	7210.0
RR869a_MN384_2	396976.09	3640298.54	2643.3
RR869a_MN384_3	396967.77	3640300.74	844.1

Projection NAD 1983 UTM Zone13N

Table D-6 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_MN384_4	396977.31	3640298.22	486.5
RR869a_MN384_5	396967.41	3640308.39	460.5
RR869a_MN384_6	396975.42	3640317.66	392.7
RR869a_MN384_7	396968.13	3640302.54	307.2
RR869a_MN384_8	396963.36	3640304.07	219.3
RR869a_MN384_9	396962.55	3640311.45	205.2
RR869a_MN384_10	396966.91	3640306.05	192.9
RR869a_MN384_11	396967.77	3640291.56	182.9
RR869a_MN384_12	396974.65	3640298.31	178.7
RR869a_MN384_13	396978.03	3640300.29	164.2
RR869a_MN384_14	396972.18	3640295.25	160.0
RR869a_MN384_15	396962.37	3640303.26	159.7
RR869a_MN384_16	396966.15	3640308.03	141.6
RR869a_MN384_17	396965.67	3640297.14	135.3
RR869a_MN384_18	396973.26	3640310.91	128.4
RR869a_MN384_19	396969.48	3640296.96	120.7
RR869a_MN384_20	396964.17	3640290.03	116.1
RR869a_MN384_21	396965.79	3640299.84	114.7
RR869a_MN384_22	396971.28	3640307.40	105.9
RR869a_MN384_23	396967.68	3640290.09	104.8
RR869a_MN384_24	396958.86	3640314.33	98.5
RR869a_MN384_25	396971.37	3640304.88	95.1
RR869a_MN384_26	396966.78	3640302.09	94.0
RR869a_MN384_27	396965.79	3640315.59	93.6
RR869a_MN384_28	396965.34	3640310.68	92.3
RR869a_MN384_29	396977.67	3640305.60	87.3
RR869a_MN384_30	396966.51	3640295.52	82.1
RR869a_MN384_31	396963.09	3640309.74	77.1
RR869a_MN384_32	396950.31	3640316.40	76.5
RR869a_MN384_33	396967.14	3640296.96	75.1
RR869a_MN384_34	396970.47	3640308.03	73.0
RR869a_MN384_35	396969.39	3640315.32	69.6
RR869a_MN384_36	396971.55	3640313.34	69.4
RR869a_MN384_37	396968.94	3640292.73	68.5
RR869a_MN384_38	396978.66	3640291.56	68.3
RR869a_MN384_39	396969.21	3640317.52	53.1
RR869a_MN384_40	396965.92	3640307.04	45.3
RR869a_MN385_1	396957.96	3640335.03	2397.2
RR869a_MN385_2	396956.97	3640334.40	1566.0
RR869a_MN385_3	396950.58	3640335.39	791.7

Projection NAD 1983 UTM Zone13N

Table D-6 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_MN385_4	396978.03	3640335.93	686.4
RR869a_MN385_5	396956.25	3640335.17	576.5
RR869a_MN385_6	396956.70	3640323.51	505.1
RR869a_MN385_7	396959.51	3640334.92	452.2
RR869a_MN385_8	396971.82	3640329.63	428.4
RR869a_MN385_9	396957.78	3640339.08	416.5
RR869a_MN385_10	396952.25	3640325.90	409.1
RR869a_MN385_11	396974.79	3640344.57	402.5
RR869a_MN385_12	396957.96	3640323.42	330.4
RR869a_MN385_13	396954.45	3640326.21	311.7
RR869a_MN385_14	396979.56	3640321.53	261.3
RR869a_MN385_15	396956.75	3640338.90	231.6
RR869a_MN385_16	396974.07	3640344.54	224.3
RR869a_MN385_17	396959.94	3640325.13	223.1
RR869a_MN385_18	396955.58	3640334.35	216.2
RR869a_MN385_19	396966.60	3640321.17	214.0
RR869a_MN385_20	396951.21	3640325.22	202.9
RR869a_MN385_21	396960.48	3640334.58	196.7
RR869a_MN385_22	396969.93	3640328.23	186.4
RR869a_MN385_23	396957.15	3640337.55	177.3
RR869a_MN385_24	396950.85	3640322.25	175.4
RR869a_MN385_25	396955.77	3640323.90	171.9
RR869a_MN385_26	396973.39	3640320.63	168.8
RR869a_MN385_27	396954.27	3640335.75	158.0
RR869a_MN385_28	396971.55	3640322.97	146.0
RR869a_MN385_29	396971.01	3640321.89	139.9
RR869a_MN385_30	396955.71	3640337.64	129.2
RR869a_MN385_31	396958.23	3640337.73	128.3
RR869a_MN385_32	396958.59	3640339.80	118.5
RR869a_MN385_33	396952.20	3640320.09	110.6
RR869a_MN385_34	396965.75	3640320.09	106.0
RR869a_MN385_35	396965.97	3640321.98	101.4
RR869a_MN385_36	396961.02	3640339.17	101.2
RR869a_MN385_37	396955.13	3640338.45	95.9
RR869a_MN385_38	396954.36	3640324.68	90.8
RR869a_MN385_39	396955.80	3640329.18	86.5
RR869a_MN385_40	396973.08	3640345.29	83.7
RR869a_MN385_41	396975.87	3640336.74	79.4
RR869a_MN385_42	396954.00	3640331.43	76.5
RR869a_MN385_43	396958.59	3640326.21	75.7

Projection NAD 1983 UTM Zone13N

Table D-6 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_MN385_44	396959.58	3640332.20	75.1
RR869a_MN385_45	396972.90	3640330.08	73.0
RR869a_MN385_46	396956.70	3640328.28	66.1
RR869a_MN385_47	396971.82	3640325.58	65.7
RR869a_MN385_48	396961.20	3640336.02	65.3
RR869a_MN385_49	396974.70	3640325.94	65.1
RR869a_MN385_50	396955.74	3640326.18	59.2
RR869a_MN385_51	396971.73	3640324.72	55.6
RR869a_MN385_52	396954.00	3640333.59	43.0
RR869a_MN385_53	396964.39	3640325.09	37.7
RR869a_MN385_54	396956.91	3640326.99	35.5
RR869a_MO382_1	396996.75	3640257.27	65.3
RR869a_MO383_1	396995.58	3640279.32	1802.0
RR869a_MO383_2	397002.73	3640269.24	1307.2
RR869a_MO383_3	396990.45	3640275.63	1025.0
RR869a_MO383_4	396995.27	3640278.24	603.5
RR869a_MO383_5	396995.79	3640282.02	583.3
RR869a_MO383_6	397002.24	3640278.96	454.1
RR869a_MO383_7	397001.34	3640275.72	310.0
RR869a_MO383_8	396998.46	3640280.94	306.7
RR869a_MO383_9	396998.19	3640264.11	267.3
RR869a_MO383_10	397000.89	3640266.63	241.6
RR869a_MO383_11	397003.95	3640265.19	237.8
RR869a_MO383_12	396998.64	3640265.05	235.2
RR869a_MO383_13	397003.86	3640261.68	229.5
RR869a_MO383_14	396997.25	3640261.50	191.6
RR869a_MO383_15	396991.08	3640273.92	180.0
RR869a_MO383_16	396989.01	3640276.71	145.3
RR869a_MO383_17	396988.86	3640274.70	144.4
RR869a_MO383_18	396993.46	3640278.33	141.7
RR869a_MO383_19	396999.30	3640263.57	119.4
RR869a_MO383_20	396998.23	3640279.41	117.8
RR869a_MO383_21	396994.23	3640287.06	110.1
RR869a_MO383_22	397001.52	3640270.23	106.1
RR869a_MO383_23	396992.16	3640275.90	103.9
RR869a_MO383_24	396998.23	3640261.72	97.0
RR869a_MO383_25	397002.87	3640265.82	92.2
RR869a_MO383_26	396981.90	3640282.29	89.9
RR869a_MO383_27	396998.37	3640283.19	87.4
RR869a_MO383_28	396986.85	3640275.36	80.1

Projection NAD 1983 UTM Zone13N

Table D-6 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_MO383_29	396995.76	3640262.13	79.5
RR869a_MO383_30	396986.34	3640276.56	75.0
RR869a_MO383_31	396982.62	3640271.76	72.9
RR869a_MO383_32	396998.10	3640260.73	71.3
RR869a_MO383_33	396999.00	3640282.02	70.7
RR869a_MO383_34	396994.32	3640282.92	68.5
RR869a_MO383_35	396999.90	3640261.95	67.2
RR869a_MO383_36	396982.35	3640275.45	66.9
RR869a_MO383_37	396997.20	3640265.55	65.5
RR869a_MO383_38	396992.34	3640277.43	62.8
RR869a_MO383_39	396988.83	3640277.52	61.4
RR869a_MO383_40	396999.63	3640280.85	53.6
RR869a_MO383_41	396988.32	3640276.56	40.8
RR869a_MO383_42	396996.12	3640260.46	30.3
RR869a_MO383_43	396993.38	3640276.98	26.9
RR869a_MO384_1	396988.59	3640294.98	442.4
RR869a_MO384_2	396981.78	3640309.11	250.8
RR869a_MO384_3	396982.35	3640292.19	233.0
RR869a_MO384_4	396988.42	3640319.55	180.8
RR869a_MO384_5	396982.26	3640311.09	178.3
RR869a_MO384_6	396984.38	3640313.11	170.6
RR869a_MO384_7	396985.23	3640312.44	162.4
RR869a_MO384_8	396980.37	3640309.74	160.3
RR869a_MO384_9	396980.64	3640308.39	125.9
RR869a_MO384_10	396983.65	3640293.18	82.1
RR869a_MO384_11	396990.54	3640291.11	80.6
RR869a_MO384_12	396986.31	3640293.54	74.6
RR869a_MO384_13	396986.94	3640294.84	71.5
RR869a_MO384_14	396984.33	3640292.64	71.3
RR869a_MO384_15	396983.75	3640308.71	67.2
RR869a_MO384_16	396986.45	3640314.82	46.5
RR869a_MO385_1	396988.92	3640337.37	182.0
RR869a_MO385_2	397006.74	3640330.71	115.8
RR869a_MO385_3	397007.28	3640326.03	110.4
RR869a_MO385_4	396980.46	3640331.07	102.9
RR869a_MO385_5	396981.22	3640323.01	91.4
RR869a_MO385_6	396982.17	3640322.97	82.4
RR869a_MO385_7	397005.44	3640330.71	71.4
RR869a_MO386_1	396991.71	3640351.32	103.1
RR869a_MP383_1	397025.64	3640276.98	1567.4

Projection NAD 1983 UTM Zone13N

Table D-6 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Inside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_MP383_2	397012.32	3640280.85	387.8
RR869a_MP383_3	397036.71	3640274.28	139.8
RR869a_MP383_4	397011.78	3640279.86	125.3
RR869a_MP383_5	397035.81	3640289.76	102.2
RR869a_MP383_6	397037.07	3640278.24	87.0
RR869a_MP383_7	397011.69	3640288.36	46.2
RR869a_MP384_1	397012.41	3640291.56	425.2
RR869a_MP384_2	397013.76	3640291.83	151.3
RR869a_MP384_3	397037.52	3640311.09	131.7
RR869a_MP384_4	397020.78	3640314.24	102.8
RR869a_MP384_5	397019.61	3640302.09	80.2
RR869a_MP384_6	397037.79	3640307.13	80.2
RR869a_MP385_1	397011.96	3640334.76	129.1
RR869a_MP385_2	397011.24	3640333.41	121.0
RR869a_MP385_3	397010.97	3640334.67	64.6
RR869a_MP386_1	397034.37	3640351.32	107.2
RR869a_MP386_2	397023.39	3640367.79	98.9
RR869a_MQ382_1	397048.05	3640249.26	98.2
RR869a_MQ383_1	397066.77	3640279.41	1065.5
RR869a_MQ383_2	397053.18	3640262.85	274.0
RR869a_MQ383_3	397054.98	3640260.60	237.4
RR869a_MQ383_4	397054.53	3640265.10	177.0
RR869a_MQ383_5	397055.07	3640276.98	135.1
RR869a_MQ383_6	397053.72	3640263.79	116.0
RR869a_MQ383_7	397055.83	3640268.56	108.6
RR869a_MQ383_8	397056.06	3640269.87	75.7
RR869a_MQ383_9	397051.65	3640262.67	69.4
RR869a_MQ383_10	397052.28	3640264.11	65.1
RR869a_MQ384_1	397051.83	3640311.09	254.1
RR869a_MQ384_2	397049.94	3640305.29	143.0
RR869a_MQ384_3	397064.52	3640309.83	90.2
RR869a_MQ385_1	397041.39	3640332.87	305.3
RR869a_MQ385_2	397044.99	3640333.86	105.2
RR869a_MR383_1	397082.47	3640278.42	107.8
RR869a_MR383_2	397072.62	3640276.44	97.3
RR869a_MR383_3	397078.83	3640268.43	95.3
RR869a_MR383_4	397082.25	3640283.55	86.0
RR869a_MR383_5	397081.89	3640273.74	81.5
RR869a_MR383_6	397080.54	3640268.61	71.0
RR869a_MR383_7	397078.92	3640269.48	64.7

This page is intentionally left blank

Table D-7
RR869a MRS Grids
G-858 Target Anomaly List Outside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_EA1_1	396963.90	3640278.15	217.4
RR869a_EA1_2	396976.86	3640265.37	216.8
RR869a_EA1_3	396968.22	3640273.92	136.3
RR869a_EA1_4	396964.53	3640276.35	119.2
RR869a_EA1_5	396972.31	3640270.05	115.0
RR869a_EA1_6	396961.29	3640277.25	107.5
RR869a_EA1_7	396962.37	3640279.59	104.4
RR869a_EA1_8	396963.45	3640279.14	99.0
RR869a_EA1_9	396960.84	3640276.26	98.5
RR869a_EA1_10	396969.12	3640272.75	88.0
RR869a_EA1_11	396971.28	3640272.57	87.0
RR869a_EA1_12	396967.32	3640273.34	83.3
RR869a_EA1_13	396963.90	3640269.15	75.3
RR869a_EA1_14	396968.22	3640274.82	72.4
RR869a_EA1_15	396963.72	3640271.04	69.8
RR869a_EA1_16	396969.48	3640273.83	68.8
RR869a_EA1_17	396962.19	3640269.24	66.5
RR869a_EA1_18	396963.36	3640275.45	64.9
RR869a_EA1_19	396966.12	3640276.98	64.3
RR869a_EA1_20	396970.88	3640270.81	50.4
RR869a_EA1_21	396963.66	3640276.80	42.5
RR869a_EA1_22	396966.45	3640273.98	38.2
RR869a_EA1_23	396965.47	3640275.50	37.7
RR869a_EA1_24	396963.04	3640273.79	22.6
RR869a_EA2_1	396949.45	3640346.55	723.5
RR869a_EA2_2	396949.54	3640344.97	351.6
RR869a_EA2_3	396949.41	3640340.97	327.7
RR869a_EA2_4	396950.58	3640346.55	324.4
RR869a_EA2_5	396957.69	3640341.24	305.0
RR869a_EA2_6	396947.70	3640347.00	261.6
RR869a_EA2_7	396956.30	3640340.88	244.9
RR869a_EA2_8	396954.27	3640350.42	232.5
RR869a_EA2_9	396952.38	3640348.80	220.3
RR869a_EA2_10	396948.33	3640345.29	210.1
RR869a_EA2_11	396950.58	3640348.17	187.0
RR869a_EA2_12	396948.55	3640340.97	141.6
RR869a_EA2_13	396946.62	3640347.81	129.1
RR869a_EA2_14	396948.24	3640343.76	105.2
RR869a_EA2_15	396946.02	3640341.03	102.0
RR869a_EA2_16	396952.65	3640342.18	92.8

Projection NAD 1983 UTM Zone13N

Table D-7 (Continued)
RR869a MRS Grids
G-858 Geophysical Target Anomaly List Outside MRS

Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)
RR869a_EA2_17	396947.61	3640344.88	87.4
RR869a_EA2_18	396957.24	3640343.58	74.8
RR869a_EA2_19	396960.21	3640342.95	68.0
RR869a_EA2_20	396947.16	3640338.72	62.6

Table D-8
RR869a MRS Fence Line Area
G-858 Geophysical Target Intrusive Investigation Results Inside MRS

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
RR869a_buff1_10	396955.80	3640290.80	48.5	0.30/E	CD	Bottle caps x 2	0.03	0.03	0.03/0.03	NA	18-Feb-15	Yes	RSL
RR869a_buff1_16	396960.00	3640300.40	33.2	0.10/NE	CD	Nail x 1	0.03	0.03	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_4	396958.40	3640295.20	1444.1	0	CD	Steel plate	0.15	2	0.21/0.21	NA	18-Feb-15	Yes	GHV
RR869a_buff2_6	396956.00	3640285.90	417.8	0.46/W	CD	Sheet metal, aluminum scrap	0.04	0.34	0.05/0.06	NA	18-Feb-15	Yes	RSL
RR869a_buff2_7	396956.50	3640287.40	335.1	0.15/S	CD, Geo	Metal rod x 1, hot rock x 2	0.03	0.17	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_8	396958.00	3640287.30	304.8	0.36/W	CD	Piece of metal x 1	0.04	0.23	0.05/0.13	NA	18-Feb-15	Yes	RSL
RR869a_buff2_37	396957.80	3640291.20	59.8	0.15/NE	CD	Piece of metal x 1	0.03	0.03	0.05/0.03	NA	18-Feb-15	Yes	RSL
RR869a_buff2_39	396958.80	3640290.90	51.1	0.25/SW	CD	Metal cylinder x 1	0.03	0.03	0.05/0.03	NA	18-Feb-15	Yes	RSL
RR869a_buff2_40	396956.80	3640292.40	50.7	0.30/E	CD	Metal strip x 1	0.03	0.06	0.03/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_48	396935.60	3640318.10	41.2	0.08/S	CD	Nail x 1	0.03	0.03	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_55	396959.60	3640297.90	31.5	0.08/S	CD	Piece of screen x 1	0.03	0.03	0.03/0.08	NA	18-Feb-15	Yes	GHV

Note: -- = No data
NA = Not Applicable

This page is intentionally left blank

Table D-9
RR869a MRS Fence Line Area
G-858 Geophysical Target Intrusive Investigation Results Outside MRS

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
RR869a_buff1_1	396950.60	3640280.50	10303.6	0	CD	Fence post (vertical)	Surface	4.5	0.76/0.05	NA	18-Feb-15	Yes	GHV
RR869a_buff1_2	396952.10	3640284.30	3397.8	0	CD	Fence post (vertical)	Surface	2.3	0.46/0.04	NA	18-Feb-15	Yes	GHV
RR869a_buff1_3	396916.30	3640320.40	251.7	0.3/NW	CD	Metal fence tie	Surface	0.11	0.15/0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff1_4	396949.90	3640277.50	97.9	0	CD	Wire, hot rocks	<0.01	0.04	0.10/0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff1_5	396958.80	3640302.50	83.4	0	CD	Sheet metal	0.20	0.45	0.08/0.25	NA	18-Feb-15	Yes	GHV
RR869a_buff1_6	396952.30	3640306.00	71.5	0	CD	Nails x 3, aluminum pieces x 2	<0.01	0.06	0.08/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff1_7	396939.40	3640312.30	68.6	0	CD	Wire	<0.01	0.03	0.13 long	NA	18-Feb-15	Yes	GHV
RR869a_buff1_8	396944.60	3640309.30	62.3	0.25/NW	CD	Nails x 2	<0.01	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff1_9	396930.90	3640316.30	53.9	0.46/S	CD	Nails x 1, aluminum pieces x 1	0.05	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff1_11	396942.90	3640310.20	46.6	0	CD	Piece of chain link	Surface	0.09	0.03/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff1_12	396951.00	3640306.40	41.9	0.05/S	CD	Wire, metal flakes	0.05	0.03	0.08/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff1_13	396925.50	3640318.30	40.6	0.15/S	CD	Nail x 1	0.05	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff1_14	396955.30	3640304.90	39.4	0	CD	Metal fence connector x 1	0.08	0.06	0.13/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff1_15	396924.80	3640319.10	34.4	0	CD	Nail x 1	0.05	0.03	0.05/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff1_17	396923.00	3640320.10	31.0	0.25/E	CD	Metal rod	0.25	0.03	0.25/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff1_18	396927.40	3640318.10	25.7	0.30/E	CD	Nail x 1, dime x 1	0.03	0.03	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_1	396932.80	3640313.90	6104.4	0.46/NW	CD	Fence post (vertical)	0.15	1.3	0.76/0.05	NA	18-Feb-15	Yes	RSL
RR869a_buff2_2	396934.90	3640312.80	3477.2	0.46/N	CD	Fence post (vertical)	0.25	0.45	0.46/0.04	NA	18-Feb-15	Yes	RSL
RR869a_buff2_3	396953.50	3640288.00	1495.1	0	CD	Fence post (vertical)	Surface	2	0.05/0.25	NA	18-Feb-15	Yes	GHV
RR869a_buff2_5	396939.50	3640310.20	1024.7	0.30/N	CD	Chunk of steel	0.05	0.23	0.25/0.03	NA	18-Feb-15	Yes	RSL
RR869a_buff2_9	396952.70	3640304.10	242.0	0	CD	Steel rod x 1	0.05	0.23	0.30/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_10	396943.60	3640308.80	234.4	0.46/N	CD	Steel plate	0.05	0.91	0.18/0.10	NA	18-Feb-15	Yes	RSL
RR869a_buff2_11	396918.70	3640322.60	218.0	0	CD	Chain link fence piece	0.03	0.23	0.15/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_12	396955.00	3640283.90	197.6	0.61/E	CD	Metal screen pieces x 2	0.08	0.03	0.05/0.05	NA	18-Feb-15	Yes	RSL
RR869a_buff2_13	396952.60	3640278.40	195.2	0.13/W	Geo	Hot rocks	Surface	0.06	0.08/0.05	NA	18-Feb-15	Yes	GHV
RR869a_buff2_14	396953.10	3640279.60	193.4	0.13/W	CD, Geo	Nail x 1, hot rocks	0.05	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_15	396917.70	3640322.00	192.5	0.15/W	CD	Chain link fence piece	0.03	0.03	0.20/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_16	396952.50	3640282.60	188.6	0	CD	Barbed wire	0.03	0.06	0.30/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_17	396953.40	3640280.70	168.2	0.10/W	CD	Piece of steel x 1	0.05	0.03	0.30/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_18	396936.50	3640315.80	165.1	0	CD	Communication wire	0.10	0.06	1.21/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_19	396951.30	3640275.70	164.2	0	CD	Piece of steel x 1	0.10	0.45	0.05/0.03	NA	18-Feb-15	Yes	GHV

Note: -- = No data
NA = Not Applicable

Table D-9 (Continued)
RR869 MRS Fence Line Area
G-858 Geophysical Target Intrusive Investigation Results Outside MRS

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
RR869a_buff2_20	396951.80	3640276.90	151.2	0	CD, Geo	Barbed wire, hot rocks	Surface	0.06	0.08/0.03	NA	18-Feb-15	Yes	GHV
RR869a_buff2_21	396954.30	3640281.20	143.5	0.38/NE	CD	Chain link fence piece	0.38	0.06	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_22	396954.40	3640282.60	140.3	0	CD	Nial x 3, wire	Surface	0.06	0.08/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_23	396954.30	3640285.70	112.1	0.15/E	CD	Piece of steel x 1	0.03	0.03	0.05/0.03	NA	18-Feb-15	Yes	RSL
RR869a_buff2_24	396950.00	3640276.50	110.0	0	CD	Nail x 1	0.03	0.03	0.05/0.03	NA	18-Feb-15	Yes	GHV
RR869a_buff2_25	396940.70	3640312.40	103.3	0.10/W	CD, Geo	Nail x 1, hot rock	0.03	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_26	396940.90	3640313.80	99.5	0.10/NE	CD	Nail x 1, wire	0.03	0.06	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_27	396954.90	3640295.30	95.7	0.23/S	CD	Sheet metal x 1	0.08	0.06	0.18/0.05	NA	18-Feb-15	Yes	GHV
RR869a_buff2_28	396955.60	3640296.50	95.7	0	CD	Nail x 1	0.03	0.06	0.10.0.03	NA	18-Feb-15	Yes	GHV
RR869a_buff2_29	396946.70	3640306.90	82.2	0.30/W	CD	Nail x 1	Surface	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_30	396920.20	3640319.30	74.9	0.5/W	CD	Piece of steel x 1	0.10	0.03	0.03/0.08	NA	18-Feb-15	Yes	RSL
RR869a_buff2_31	396956.80	3640299.10	69.1	--	--	No find (QC verified same day)	--	--	--	--	18-Feb-15	Yes	RV
RR869a_buff2_32	396953.90	3640304.50	67.8	0.05/S	CD	Piece of metal x 1	0.15	0.09	0.13/0.05	NA	18-Feb-15	Yes	GHV
RR869a_buff2_33	396955.20	3640303.70	67.4	0	CD	Nails x 2	0.06	0.06	0.08/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_34	396955.90	3640294.00	66.0	0.30/N	CD	Sheet metal x 1	0.20	0.09	0.08/0.20	NA	18-Feb-15	Yes	GHV
RR869a_buff2_35	396948.40	3640278.00	61.4	0.10/S	CD	Nails x2, wire	Surface	0.03	0.08/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_36	396930.10	3640315.20	60.8	0.05/E	CD	Nail x 2, wire	0.03	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_38	396955.20	3640302.30	52.1	0.15/S	CD	Nails x 2	Surface	0.03	0.05/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_41	396955.00	3640292.50	50.5	0	CD, Geo	Aluminum scrap, hot rocks	0.03	0.03	0.03/0.08	NA	18-Feb-15	Yes	GHV
RR869a_buff2_42	396941.60	3640310.30	50.0	0	CD	Nails x 1, metal flakes	0.05	0.03	0.10/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_43	396956.90	3640304.80	49.9	0.30/N	CD	Metal straps x 3	0.03	0.06	0.10/0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_44	396957.50	3640301.80	48.7	0.13/S	CD	Piece of metal x 1	0.03	0.03	0.08/0.03	NA	18-Feb-15	Yes	GHV
RR869a_buff2_45	396951.50	3640305.30	46.3	0.10/NE	CD	Nails x 2	0.03	0.03	0.05/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_46	396956.50	3640297.30	46.2	0.30/S	CD	Nail x 1, aluminum pieces x 2	0.10	0.03	0.05/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_47	396923.80	3640318.40	42.8	0.10/NE	CD	Nails x 2	0.03	0.03	0.05/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_49	396918.60	3640320.80	37.9	0.30/N	CD	Wire	0.08	0.03	0.10/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_50	396935.50	3640316.20	37.6	0.13/N	CD	Wire	0.03	0.03	0.01/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_51	396956.40	3640295.40	36.6	0	CD, Geo	Wire, hot rocks	0.05	0.03	0.05/<0.01	NA	18-Feb-15	Yes	GHV
RR869a_buff2_52	396956.40	3640302.40	36.2	0	CD	Piece of metal x 1	0.05	0.03	0.05/0.03	NA	18-Feb-15	Yes	GHV
RR869a_buff2_53	396937.60	3640312.20	33.6	0	CD	Piece of metal x 1	0.30	0.06	0.08/<0.01	NA	18-Feb-15	Yes	RSL
RR869a_buff2_54	396946.40	3640310.00	32.5	0.46/--	CD	Wire	Surface	0.03	0.15 long	NA	18-Feb-15	Yes	RSL

Note: -- = No data
NA = Not Applicable

Table D-9 (Continued)
RR869 MRS Fence Line Area
G-858 Geophysical Target Intrusive Investigation Results Outside MRS

Target Information				Dig Results									
Target ID	Easting (m)	Northing (m)	Grid Value (nT/m)	Offset Distance/ Direction (m/NE)	Anomaly Type (UXO, DMM, MD, Small Arms Debris [SD]), CD, RRD …)	Anomaly description and quantity (1 rebar, 5 nails, wire, MK3, Projectile 75mm MK1, Grenade M42, NoDig/Utility …)	Object depth to top (m)	Object Weight (kg)	Object Dimensions (Length/Width/ Thicknes) (m)	If is MEC, Physical Condition and Inclination and Azimuth (degree 0,45,90../ direction N, NE …)	Date	Hole Cleared (Y/N)	Team Leader Initials
RR869a_buff2_56	396957.40	3640297.70	31.4	0	CD	Piece of metal x 1	0.08	0.03	0.03/0.03	NA	18-Feb-15	Yes	GHV
RR869a_buff2_57	396925.60	3640316.70	30.7	0	CD	Wire	0.03	0.03	0.15 long	NA	18-Feb-15	Yes	GHV

Note: -- = No data
NA = Not Applicable

This page is intentionally left blank

Table D-10
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
SR864 MRS	**Post Dig QC completed on 215 of 994 (21%)**		
SR864_II311_1	Y	02/03/15	RV
SR864_II311_3	Y	02/03/15	RV
SR864_IJ310_3	Y	02/03/15	RV
SR864_IJ310_6	Y	02/03/15	RV
SR864_IJ310_7	Y	02/03/15	RV
SR864_IJ311_3	Y	02/03/15	RV
SR864_IJ311_9	Y	02/03/15	RV
SR864_IJ311_10	Y	02/03/15	RV
SR864_IJ311_11	Y	02/03/15	RV
SR864_IJ311_17	Y	02/03/15	RV
SR864_IJ311_22	Y	02/03/15	RV
SR864_IJ312_4	Y	02/03/15	RV
SR864_IJ312_7	Y	02/03/15	RV
SR864_IJ312_11	Y	02/03/15	RV
SR864_IK309_1	Y	02/03/15	RV
SR864_IK309_6	Y	02/03/15	RV
SR864_IK309_8	Y	02/03/15	RV
SR864_IK309_9	Y	02/03/15	RV
SR864_IK309_11	Y	02/03/15	RV
SR864_IK310_1	Y	02/03/15	RV
SR864_IK310_5	Y	02/03/15	RV
SR864_IK310_10	Y	02/03/15	RV
SR864_IK310_12	Y	02/03/15	RV
SR864_IK310_16	Y	02/03/15	RV
SR864_IK311_3	Y	01/19/15	RV
SR864_IK311_9	Y	01/19/15	RV
SR864_IK312_3	Y	01/19/15	RV
SR864_IK312_7	Y	01/19/15	RV
SR864_IK313_3	Y	01/19/15	RV
SR864_IK313_5	Y	01/19/15	RV
SR864_IK313_10	Y	01/19/15	RV
SR864_IK314_1	Y	01/19/15	RV
SR864_IL309_14	Y	02/03/15	RV
SR864_IL309_15	Y	02/03/15	RV
SR864_IL309_19	Y	02/03/15	RV
SR864_IL309_26	Y	02/03/15	RV
SR864_IL310_1	Y	02/03/15	RV
SR864_IL310_7	Y	02/03/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
SR864_IL310_9	Y	02/03/15	RV
SR864_IL310_16	Y	02/03/15	RV
SR864_IL311_2	Y	01/19/15	RV
SR864_IL311_9	Y	01/19/15	RV
SR864_IL311_15	Y	01/19/15	RV
SR864_IL312_1	Y	01/20/15	RV
SR864_IL313_1	Y	01/20/15	RV
SR864_IL314_2	Y	01/19/15	RV
SR864_IL314_9	Y	01/19/15	RV
SR864_IL315_1	Y	01/19/15	RV
SR864_IM308_1	Y	02/03/15	RV
SR864_IM308_6	Y	02/03/15	RV
SR864_IM309_2	Y	02/09/15	RV
SR864_IM309_10	Y	02/09/15	RV
SR864_IM309_13	Y	02/09/15	RV
SR864_IM310_1	Y	02/03/15	RV
SR864_IM311_1	Y	01/19/15	RV
SR864_IM311_4	Y	01/19/15	RV
SR864_IM312_1	Y	01/20/15	RV
SR864_IM313_1	Y	01/20/15	RV
SR864_IM314_1	Y	01/20/15	RV
SR864_IM315_2	Y	01/19/15	RV
SR864_IM315_6	Y	01/19/15	RV
SR864_IM316_6	Y	01/20/15	RV
SR864_IM316_10	Y	01/20/15	RV
SR864_IM316_11	Y	01/20/15	RV
SR864_IM317_1	Y	02/10/15	RV
SR864_IM317_3	Y	02/10/15	RV
SR864_IM317_8	Y	02/10/15	RV
SR864_IM318_2	Y	01/20/15	RV
SR864_IN307_6	Y	02/03/15	RV
SR864_IN307_7	Y	02/03/15	RV
SR864_IN308_4	Y	02/03/15	RV
SR864_IN309_1	Y	02/03/15	RV
SR864_IN310_1	Y	01/20/15	RV
SR864_IN310_2	Y	01/20/15	RV
SR864_IN311_1	Y	01/20/15	RV
SR864_IN312_1	Y	01/20/15	RV
SR864_IN316_1	Y	01/20/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
SR864_IN317_2	Y	01/20/15	RV
SR864_IN317_6	Y	01/20/15	RV
SR864_IN318_7	Y	01/20/15	RV
SR864_IN318_8	Y	01/20/15	RV
SR864_IN318_15	Y	01/20/15	RV
SR864_IN318_24	Y	01/20/15	RV
SR864_IN319_2	Y	01/20/15	RV
SR864_IN319_6	Y	01/20/15	RV
SR864_IO307_2	Y	02/03/15	RV
SR864_IO307_4	Y	02/03/15	RV
SR864_IO307_6	Y	02/03/15	RV
SR864_IO307_14	Y	02/03/15	RV
SR864_IO307_17	Y	02/03/15	RV
SR864_IO307_26	Y	02/03/15	RV
SR864_IO308_18	Y	02/03/15	RV
SR864_IO308_24	Y	02/03/15	RV
SR864_IO308_30	Y	02/03/15	RV
SR864_IO308_32	Y	02/03/15	RV
SR864_IO308_35	Y	02/03/15	RV
SR864_IO308_41	Y	02/03/15	RV
SR864_IO309_16	Y	02/03/15	RV
SR864_IO309_19	Y	02/03/15	RV
SR864_IO309_22	Y	02/03/15	RV
SR864_IO311_1	Y	02/03/15	RV
SR864_IO311_3	Y	02/03/15	RV
SR864_IO314_1	Y	02/09/15	RV
SR864_IO318_1	Y	02/10/15	RV
SR864_IO318_2	Y	02/10/15	RV
SR864_IP306_1	Y	02/03/15	RV
SR864_IP307_1	Y	02/03/15	RV
SR864_IP307_5	Y	02/03/15	RV
SR864_IP307_6	Y	02/03/15	RV
SR864_IP307_9	Y	02/03/15	RV
SR864_IP307_10	Y	02/03/15	RV
SR864_IP307_11	Y	02/03/15	RV
SR864_IP308_1	Y	02/03/15	RV
SR864_IP308_5	Y	02/03/15	RV
SR864_IP308_9	Y	02/03/15	RV
SR864_IP308_10	Y	02/03/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
SR864_IP308_11	Y	02/03/15	RV
SR864_IP309_21	Y	02/03/15	RV
SR864_IP309_22	Y	02/03/15	RV
SR864_IP309_27	Y	02/03/15	RV
SR864_IP310_25	Y	02/03/15	RV
SR864_IP310_27	Y	02/03/15	RV
SR864_IP310_30	Y	02/03/15	RV
SR864_IP311_2	Y	02/03/15	RV
SR864_IP312_3	Y	02/03/15	RV
SR864_IP313_1	Y	02/09/15	RV
SR864_IP314_1	Y	02/09/15	RV
SR864_IP317_1	Y	02/10/15	RV
SR864_IP318_2	Y	02/10/15	RV
SR864_IQ306_1	Y	02/03/15	RV
SR864_IQ307_5	Y	02/03/15	RV
SR864_IQ308_1	Y	02/03/15	RV
SR864_IQ308_5	Y	02/03/15	RV
SR864_IQ308_12	Y	02/03/15	RV
SR864_IQ309_1	Y	02/03/15	RV
SR864_IQ309_2	Y	02/03/15	RV
SR864_IQ310_7	Y	02/03/15	RV
SR864_IQ310_13	Y	02/03/15	RV
SR864_IQ311_31	Y	02/03/15	RV
SR864_IQ311_32	Y	02/03/15	RV
SR864_IQ311_33	Y	02/03/15	RV
SR864_IQ311_36	Y	02/03/15	RV
SR864_IQ312_4	Y	02/03/15	RV
SR864_IQ312_14	Y	02/03/15	RV
SR864_IQ312_15	Y	02/03/15	RV
SR864_IQ313_1	Y	02/09/15	RV
SR864_IQ313_2	Y	02/09/15	RV
SR864_IR307_1	Y	02/03/15	RV
SR864_IR308_3	Y	02/03/15	RV
SR864_IR310_1	Y	02/09/15	RV
SR864_IR311_1	Y	02/09/15	RV
SR864_IR312_26	Y	02/09/15	RV
SR864_IR312_31	Y	02/09/15	RV
SR864_IR312_32	Y	02/09/15	RV
SR864_IR312_35	Y	02/09/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
SR864_IR312_37	Y	02/09/15	RV
SR864_IR312_44	Y	02/09/15	RV
SR864_IR313_25	Y	02/09/15	RV
SR864_IR313_32	Y	02/09/15	RV
SR864_IR313_34	Y	02/09/15	RV
SR864_IR313_36	Y	02/09/15	RV
SR864_IR313_40	Y	02/09/15	RV
SR864_IR313_42	Y	02/09/15	RV
SR864_IR314_1	Y	02/09/15	RV
SR864_IR314_2	Y	02/09/15	RV
SR864_IR315_1	Y	02/09/15	RV
SR864_IR317_1	Y	02/10/15	RV
SR864_IR318_1	Y	02/10/15	RV
SR864_IS310_1	Y	02/09/15	RV
SR864_IS311_2	Y	02/09/15	RV
SR864_IS312_6	Y	02/09/15	RV
SR864_IS312_7	Y	02/09/15	RV
SR864_IS312_12	Y	02/09/15	RV
SR864_IS312_15	Y	02/09/15	RV
SR864_IS313_8	Y	02/09/15	RV
SR864_IS313_10	Y	02/09/15	RV
SR864_IS313_15	Y	02/09/15	RV
SR864_IS314_28	Y	02/09/15	RV
SR864_IS314_33	Y	02/09/15	RV
SR864_IS314_35	Y	02/09/15	RV
SR864_IS314_37	Y	02/09/15	RV
SR864_IS314_40	Y	02/09/15	RV
SR864_IS314_44	Y	02/09/15	RV
SR864_IS315_9	Y	02/09/15	RV
SR864_IS318_1	Y	02/10/15	RV
SR864_IT311_1	Y	02/09/15	RV
SR864_IT312_1	Y	02/09/15	RV
SR864_IT312_5	Y	02/09/15	RV
SR864_IT314_1	Y	02/09/15	RV
SR864_IT315_21	Y	02/09/15	RV
SR864_IT315_26	Y	02/09/15	RV
SR864_IT315_27	Y	02/09/15	RV
SR864_IT315_28	Y	02/09/15	RV
SR864_IT315_30	Y	02/09/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
SR864_IT316_22	Y	02/09/15	RV
SR864_IT316_23	Y	02/09/15	RV
SR864_IT316_28	Y	02/09/15	RV
SR864_IT316_29	Y	02/09/15	RV
SR864_IT316_33	Y	02/09/15	RV
SR864_IT317_1	Y	02/10/15	RV
SR864_IT318_1	Y	02/10/15	RV
SR864_IU313_1	Y	02/09/15	RV
SR864_IU315_1	Y	02/10/15	RV
SR864_IU316_7	Y	02/10/15	RV
SR864_IU316_9	Y	02/10/15	RV
SR864_IU316_11	Y	02/10/15	RV
SR864_IU316_15	Y	02/10/15	RV
SR864_IU317_9	Y	02/10/15	RV
SR864_IU317_10	Y	02/10/15	RV
SR864_IU317_33	Y	02/10/15	RV
SR864_IU317_35	Y	02/10/15	RV
SR864_IU317_37	Y	02/10/15	RV
SR864_IU317_40	Y	02/10/15	RV
SR864_IV317_1	Y	02/10/15	RV
SR864_IV317_2	Y	02/10/15	RV
RR869a MRS	**Post Dig QC completed on 75 of 75 (100%)**		
RR869a_buff1_1	Y	02/19/15	RV
RR869a_buff1_2	Y	02/19/15	RV
RR869a_buff1_3	Y	02/19/15	RV
RR869a_buff1_4	Y	02/19/15	RV
RR869a_buff1_5	Y	02/19/15	RV
RR869a_buff1_6	Y	02/19/15	RV
RR869a_buff1_7	Y	02/19/15	RV
RR869a_buff1_8	Y	02/19/15	RV
RR869a_buff1_9	Y	02/19/15	RV
RR869a_buff1_10	Y	02/19/15	RV
RR869a_buff1_11	Y	02/19/15	RV
RR869a_buff1_12	Y	02/19/15	RV
RR869a_buff1_13	Y	02/19/15	RV
RR869a_buff1_14	Y	02/19/15	RV
RR869a_buff1_15	Y	02/19/15	RV
RR869a_buff1_16	Y	02/19/15	RV
RR869a_buff1_17	Y	02/19/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
RR869a_buff1_18	Y	02/19/15	RV
RR869a_buff2_1	Y	02/19/15	RV
RR869a_buff2_2	Y	02/19/15	RV
RR869a_buff2_3	Y	02/19/15	RV
RR869a_buff2_4	Y	02/19/15	RV
RR869a_buff2_5	Y	02/19/15	RV
RR869a_buff2_6	Y	02/19/15	RV
RR869a_buff2_7	Y	02/19/15	RV
RR869a_buff2_8	Y	02/19/15	RV
RR869a_buff2_9	Y	02/19/15	RV
RR869a_buff2_10	Y	02/19/15	RV
RR869a_buff2_11	Y	02/19/15	RV
RR869a_buff2_12	Y	02/19/15	RV
RR869a_buff2_13	Y	02/19/15	RV
RR869a_buff2_14	Y	02/19/15	RV
RR869a_buff2_15	Y	02/19/15	RV
RR869a_buff2_16	Y	02/19/15	RV
RR869a_buff2_17	Y	02/19/15	RV
RR869a_buff2_18	Y	02/19/15	RV
RR869a_buff2_19	Y	02/19/15	RV
RR869a_buff2_20	Y	02/19/15	RV
RR869a_buff2_21	Y	02/19/15	RV
RR869a_buff2_22	Y	02/19/15	RV
RR869a_buff2_23	Y	02/19/15	RV
RR869a_buff2_24	Y	02/19/15	RV
RR869a_buff2_25	Y	02/19/15	RV
RR869a_buff2_26	Y	02/19/15	RV
RR869a_buff2_27	Y	02/19/15	RV
RR869a_buff2_28	Y	02/19/15	RV
RR869a_buff2_29	Y	02/19/15	RV
RR869a_buff2_30	Y	02/19/15	RV
RR869a_buff2_31	Y	02/19/15	RV
RR869a_buff2_32	Y	02/19/15	RV
RR869a_buff2_33	Y	02/19/15	RV
RR869a_buff2_34	Y	02/19/15	RV
RR869a_buff2_35	Y	02/19/15	RV
RR869a_buff2_36	Y	02/19/15	RV
RR869a_buff2_37	Y	02/19/15	RV
RR869a_buff2_38	Y	02/19/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
RR869a_buff2_39	Y	02/19/15	RV
RR869a_buff2_40	Y	02/19/15	RV
RR869a_buff2_41	Y	02/19/15	RV
RR869a_buff2_42	Y	02/19/15	RV
RR869a_buff2_43	Y	02/19/15	RV
RR869a_buff2_44	Y	02/19/15	RV
RR869a_buff2_45	Y	02/19/15	RV
RR869a_buff2_46	Y	02/19/15	RV
RR869a_buff2_47	Y	02/19/15	RV
RR869a_buff2_48	Y	02/19/15	RV
RR869a_buff2_49	Y	02/19/15	RV
RR869a_buff2_50	Y	02/19/15	RV
RR869a_buff2_51	Y	02/19/15	RV
RR869a_buff2_52	Y	02/19/15	RV
RR869a_buff2_53	Y	02/19/15	RV
RR869a_buff2_54	Y	02/19/15	RV
RR869a_buff2_55	Y	02/19/15	RV
RR869a_buff2_56	Y	02/19/15	RV
RR869a_buff2_57	Y	02/19/15	RV
XU854 MRS	**Post Dig QC completed on 117 of 510 (22%)**		
XU854_L1_1	Y	02/23/15	RV
XU854_L1_4	Y	02/23/15	RV
XU854_L1_5	Y	02/23/15	RV
XU854_L1_9	Y	02/23/15	RV
XU854_L1_11	Y	02/23/15	RV
XU854_L2_1	Y	02/23/15	RV
XU854_L2_7	Y	02/23/15	RV
XU854_L2_10	Y	02/23/15	RV
XU854_L2_16	Y	02/23/15	RV
XU854_L3_1	Y	02/23/15	RV
XU854_L3_2	Y	02/05/15	RV
XU854_L3_3	Y	02/05/15	RV
XU854_L3_6	Y	02/23/15	RV
XU854_L3_12	Y	02/23/15	RV
XU854_L3_18	Y	02/23/15	RV
XU854_L4_1	Y	02/04/15	RV
XU854_L4_2	Y	02/23/15	RV
XU854_L4_8	Y	02/23/15	RV
XU854_L4_13	Y	02/23/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
XU854_L4_20	Y	02/23/15	RV
XU854_L5_3	Y	02/23/15	RV
XU854_L5_6	Y	02/23/15	RV
XU854_L5_10	Y	02/23/15	RV
XU854_L5_21	Y	02/23/15	RV
XU854_L6_1	Y	02/23/15	RV
XU854_L6_3	Y	02/04/15	RV
XU854_L6_4	Y	02/04/15	RV
XU854_L6_14	Y	02/23/15	RV
XU854_L6_15	Y	02/04/15	RV
XU854_L7_2	Y	02/23/15	RV
XU854_L7_7	Y	02/23/15	RV
XU854_L8_1	Y	02/23/15	RV
XU854_L8_5	Y	02/04/15	RV
XU854_L9_2	Y	02/23/15	RV
XU854_Gr_G_1	Y	02/23/15	RV
XU854_Gr_G_2	Y	02/23/15	RV
XU854_Gr_G_4	Y	02/23/15	RV
XU854_Gr_G_6	Y	02/23/15	RV
XU854_Gr_G_8	Y	02/23/15	RV
XU854_Gr_G_12	Y	02/23/15	RV
XU854_Gr_G_13	Y	02/23/15	RV
XU854_Gr_G_15	Y	02/23/15	RV
XU854_Gr_G_18	Y	02/23/15	RV
XU854_Gr_G_30	Y	02/23/15	RV
XU854_Gr_H_1	Y	02/23/15	RV
XU854_Gr_H_6	Y	02/23/15	RV
XU854_Gr_H_12	Y	02/23/15	RV
XU854_Gr_H_15	Y	02/23/15	RV
XU854_Gr_H_16	Y	02/23/15	RV
XU854_Gr_H_20	Y	02/23/15	RV
XU854_Gr_H_23	Y	02/23/15	RV
XU854_Gr_I_1	Y	02/23/15	RV
XU854_Gr_I_2	Y	02/23/15	RV
XU854_Gr_I_3	Y	02/23/15	RV
XU854_Gr_I_4	Y	02/23/15	RV
XU854_Gr_I_5	Y	02/23/15	RV
XU854_Gr_I_6	Y	02/23/15	RV
XU854_Gr_I_7	Y	02/23/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
XU854_Gr_I_19	Y	02/23/15	RV
XU854_Gr_I_23	Y	02/23/15	RV
XU854_Gr_I_27	Y	02/23/15	RV
XU854_Gr_I_40	Y	02/23/15	RV
XU854_Gr_I_53	Y	02/23/15	RV
XU854_Gr_I_68	Y	02/23/15	RV
XU854_Gr_J_1	Y	02/23/15	RV
XU854_Gr_J_2	Y	02/23/15	RV
XU854_Gr_J_3	Y	02/23/15	RV
XU854_Gr_J_4	Y	02/23/15	RV
XU854_Gr_J_7	Y	02/23/15	RV
XU854_Gr_J_8	Y	02/23/15	RV
XU854_Gr_J_9	Y	02/23/15	RV
XU854_Gr_J_13	Y	02/23/15	RV
XU854_Gr_J_15	Y	02/23/15	RV
XU854_Gr_J_16	Y	02/23/15	RV
XU854_Gr_J_29	Y	02/23/15	RV
XU854_Gr_J_63	Y	02/23/15	RV
XU854_Gr_J_84	Y	02/23/15	RV
XU854_Gr_J_94	Y	02/23/15	RV
XU854_Gr_J_100	Y	02/23/15	RV
XU854_Gr_J_117	Y	02/23/15	RV
XU854_Gr_K_1	Y	02/23/15	RV
XU854_Gr_K_2	Y	02/23/15	RV
XU854_Gr_K_5	Y	02/23/15	RV
XU854_Gr_K_7	Y	02/23/15	RV
XU854_Gr_K_18	Y	02/23/15	RV
XU854_Gr_K_25	Y	02/23/15	RV
XU854_Gr_K_32	Y	02/23/15	RV
XU854_Gr_L_1	Y	02/23/15	RV
XU854_Gr_L_2	Y	02/23/15	RV
XU854_Gr_L_3	Y	02/23/15	RV
XU854_Gr_L_11	Y	02/23/15	RV
XU854_Gr_L_14	Y	02/23/15	RV
XU854_Gr_M_1	Y	02/23/15	RV
XU854_Gr_M_2	Y	02/23/15	RV
XU854_Gr_M_3	Y	02/23/15	RV
XU854_Gr_M_5	Y	02/23/15	RV
XU854_Gr_M_6	Y	02/23/15	RV

Table D-10 (Continued)
Summary of Post Dig QC Results

Target Information	Post Dig QC		
Target ID	**Passed QC (Y/N)**	**Date**	**QC Initials**
XU854_Gr_N_2	Y	02/23/15	RV
XU854_Gr_N_4	Y	02/23/15	RV
XU854_Gr_N_9	Y	02/23/15	RV
XU854_Gr_O_1	Y	02/23/15	RV
XU854_Gr_O_2	Y	02/23/15	RV
XU854_Gr_O_3	Y	02/23/15	RV
XU854_Gr_O_4	Y	02/23/15	RV
XU854_Gr_O_5	Y	02/23/15	RV
XU854_Gr_P_3	Y	02/23/15	RV
XU854_Gr_P_5	Y	02/23/15	RV
XU854_Gr_P_6	Y	02/23/15	RV
XU854_Gr_Q_1	Y	02/23/15	RV
XU854_Gr_R_1	Y	02/23/15	RV
XU854_Gr_R_2	Y	02/23/15	RV
XU854_Gr_R_3	Y	02/23/15	RV
XU854_Gr_R_5	Y	02/23/15	RV
XU854_Gr_R_12	Y	02/23/15	RV
XU854_Gr_R_14	Y	02/23/15	RV
XU854_Gr_R_18	Y	02/23/15	RV
XU854_Gr_R_22	Y	02/23/15	RV

This page is intentionally left blank

Appendix E

Geonics Electromagnetic Induction Sensor EM61-MK2 Channel 2 Gridded Data and Geometrics G-858 Cesium Vapor Magnetometer Analytic Signal Figures.

This page is intentionally left blank

Table of Contents

XU854 EM61-MK2 Channel 2 Gridded Data Map Figures 854-1 to 854-6
SR864 EM61-MK2 Channel 2 Gridded Data Map Figures 864-1 to 864-129
ML865 G-858 Analytic Signal Gridded Data Map Figures 865-1 to 865-102
RR869a G-858 Analytic Signal Gridded Data Map Figures 869a-1 to 869a-29

This page is intentionally left blank

Table of Contents

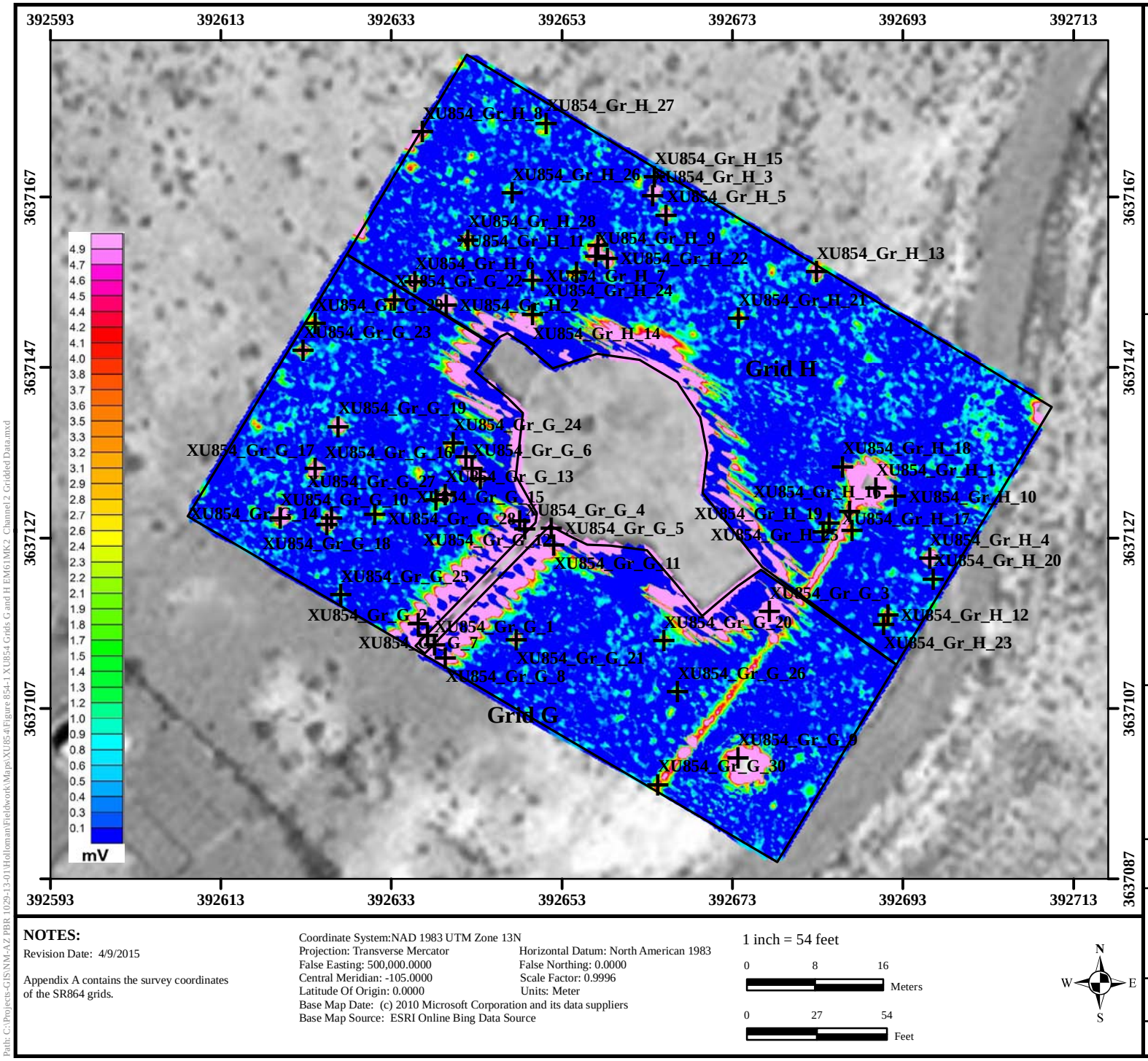
XU854 EM61-MK2 Channel 2 Gridded Data Map Figures 854-1 to 854-6
SR864 EM61-MK2 Channel 2 Gridded Data Map Figures 864-1 to 864-129
ML865 G-858 Analytic Signal Gridded Data Map Figures 865-1 to 865-102
RR869a G-858 Analytic Signal Gridded Data Map Figures 869a-1 to 869a-29

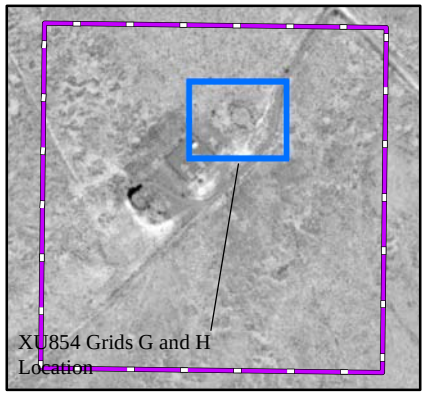
This page is intentionally left blank

Table of Contents

XU854 EM61-MK2 Channel 2 Gridded Data Map Figures 854-1 to 854-6
SR864 EM61-MK2 Channel 2 Gridded Data Map Figures 864-1 to 864-129
ML865 G-858 Analytic Signal Gridded Data Map Figures 865-1 to 865-102
RR869a G-858 Analytic Signal Gridded Data Map Figures 869a-1 to 869a-29

This page is intentionally left blank





Legend

- DGM Anomalies Exceeding 5 mV Threshold Intrusively Investigated
- Grid Boundary
- XU854 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 854-1

EM61-MK2 Channel 2 Gridded Data Grids G and H XU854

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

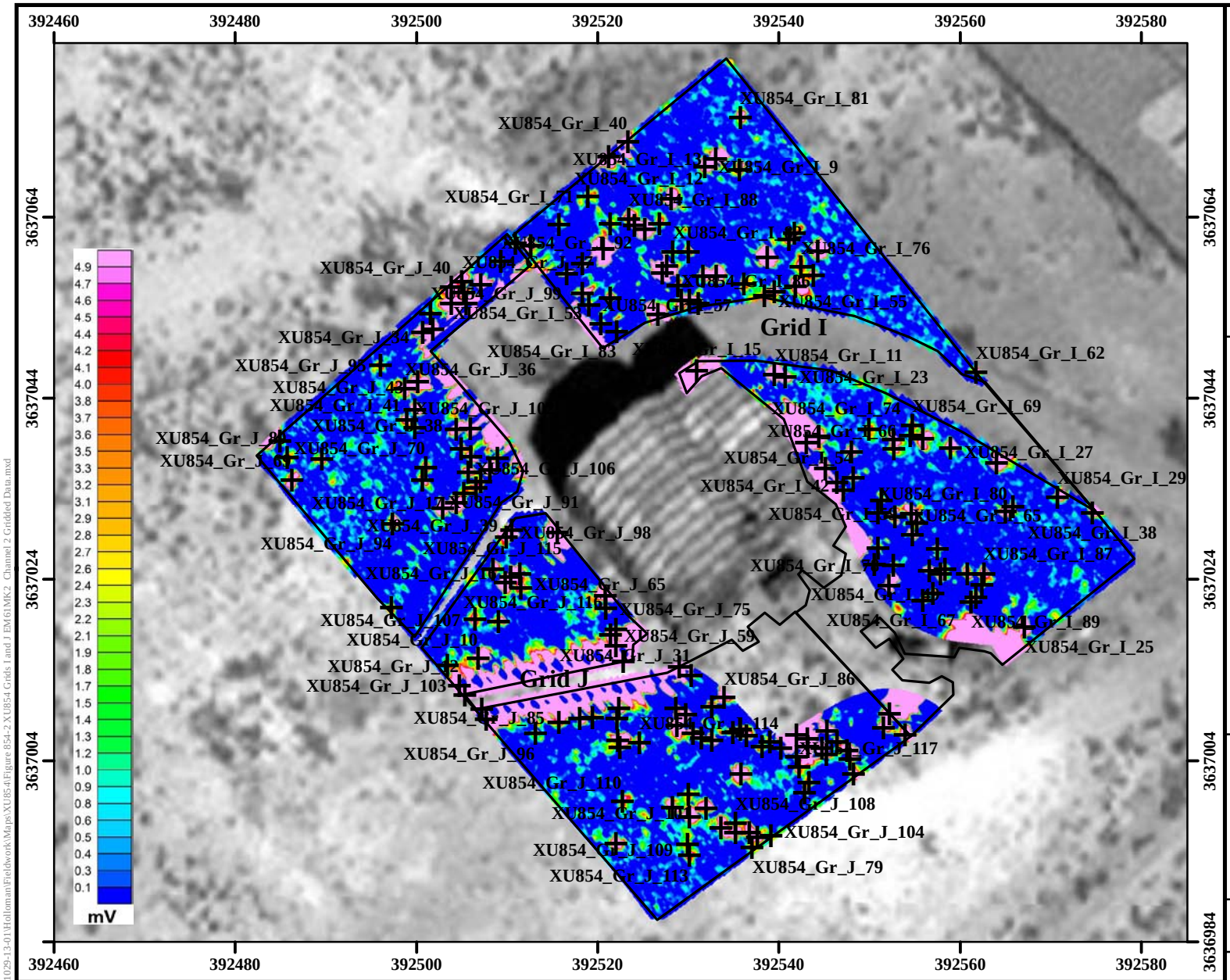
1 inch = 54 feet

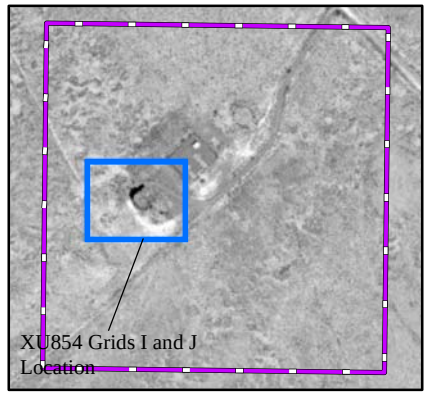
0 8 16 Meters

0 27 54 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\XU854\Figure 854-1 XU854 Grids G and H EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 5 mV Threshold Intrusively Investigated
- Grid Boundary
- XU854 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 854-2

EM61-MK2 Channel 2 Gridded Data Grids I and J XU854

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

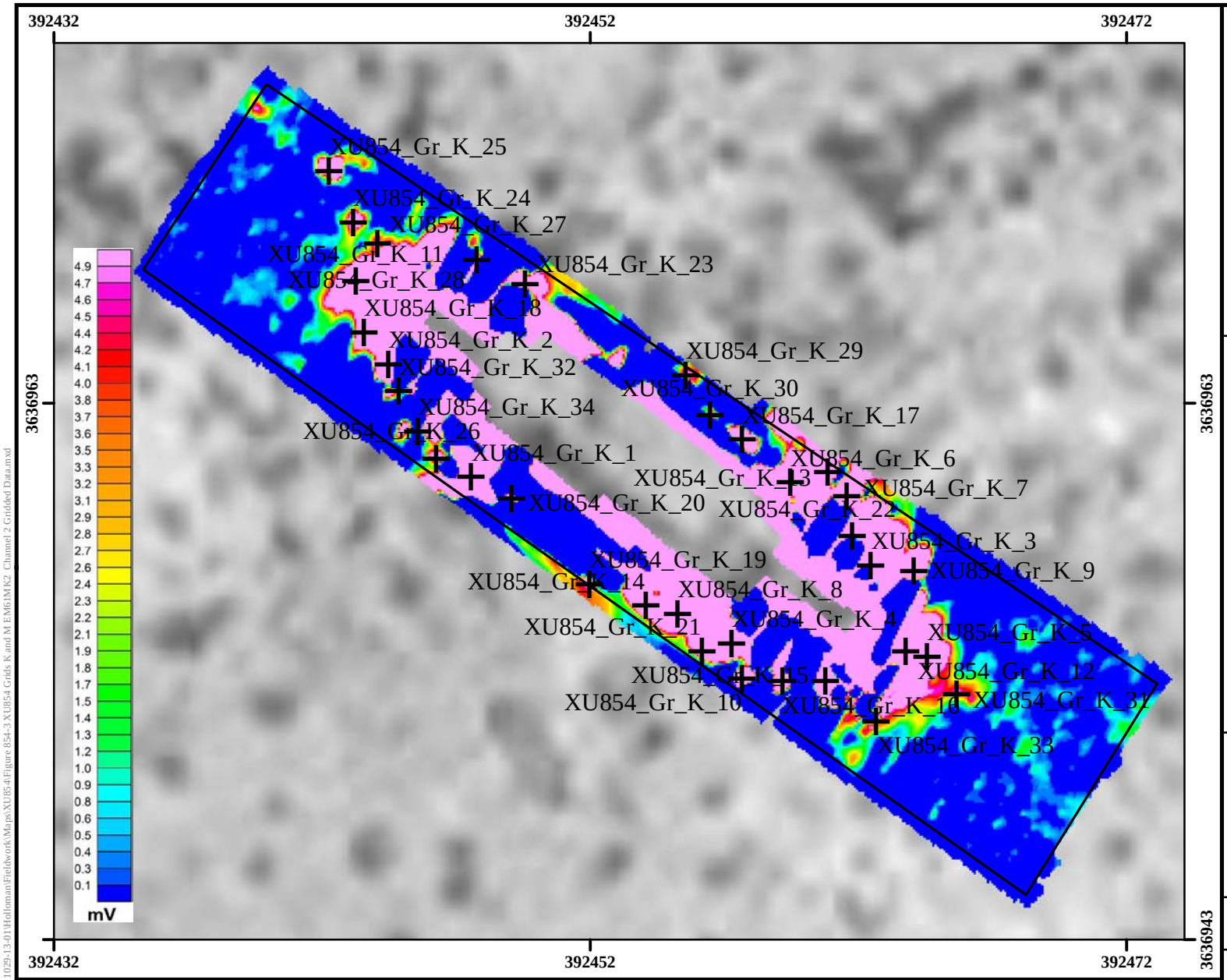
1 inch = 54 feet

0 8 16 Meters

0 27 54 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\XU854\Figure 854-2 XU854 Grids I and J EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 5 mV Threshold Intrusively Investigated
- Grid Boundary
- XU854 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 854-3

EM61-MK2 Channel 2 Gridded Data Grid K XU854

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

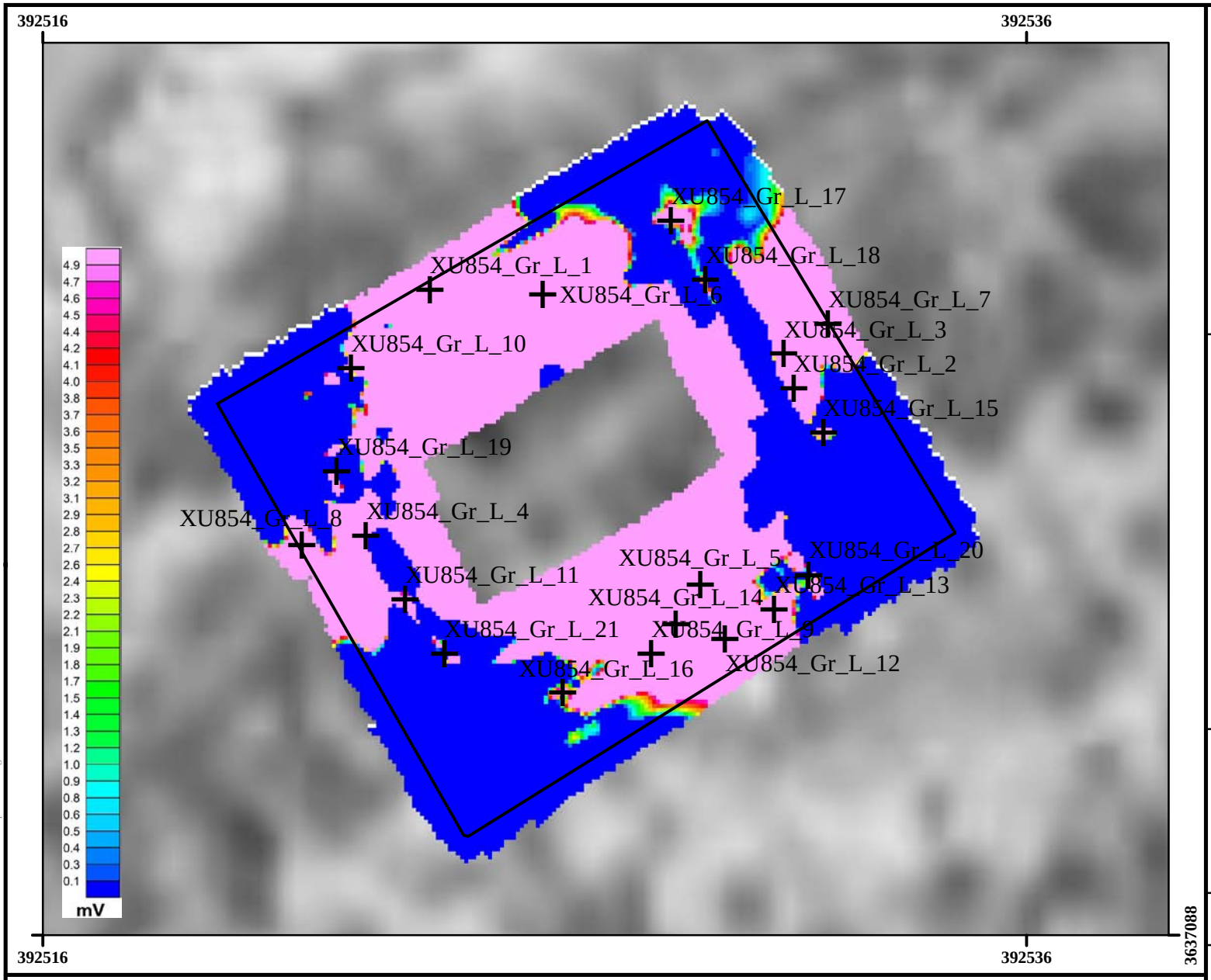
1 inch = 18 feet

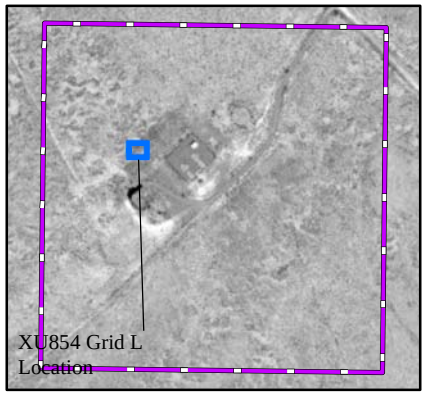
0 3 6 Meters

0 9 18 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\XU854\Figure 854-3 XU854 Grids K and M EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 5 mV Threshold Intrusively Investigated
- Grid Boundary
- XU854 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 854-4

EM61-MK2 Channel 2 Gridded Data Grid L XU854

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

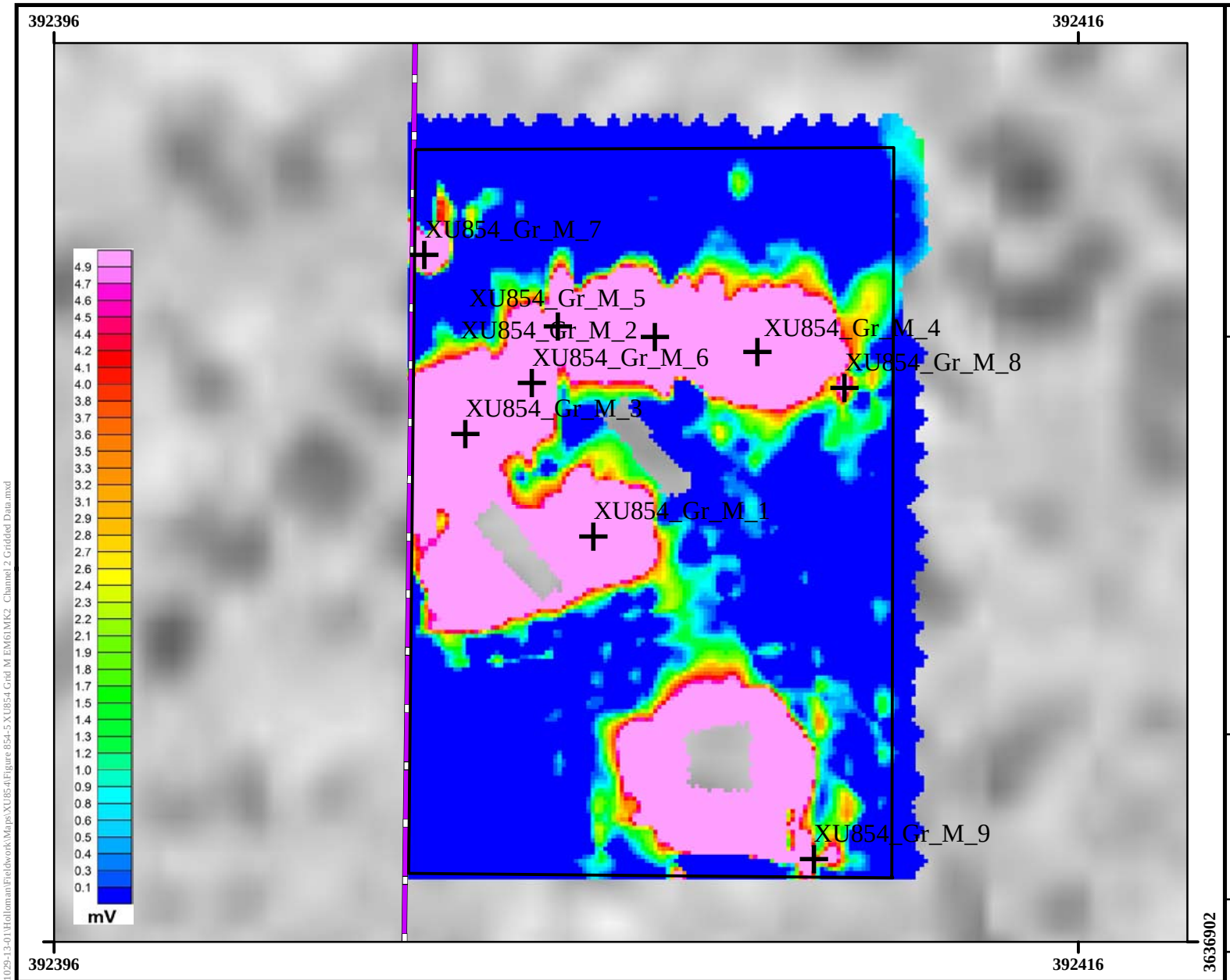
1 inch = 10 feet

0 2 4 Meters

0 5 10 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\XU854\Figure 854-4 XU854 Grid L EM61MK2 Channel 2 Gridded Data.mxd



Legend

- XU854 Grid Targets M.csv Event
- Grid Boundary
- XU854 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 854-5

EM61-MK2 Channel 2 Gridded Data Grid M XU854

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

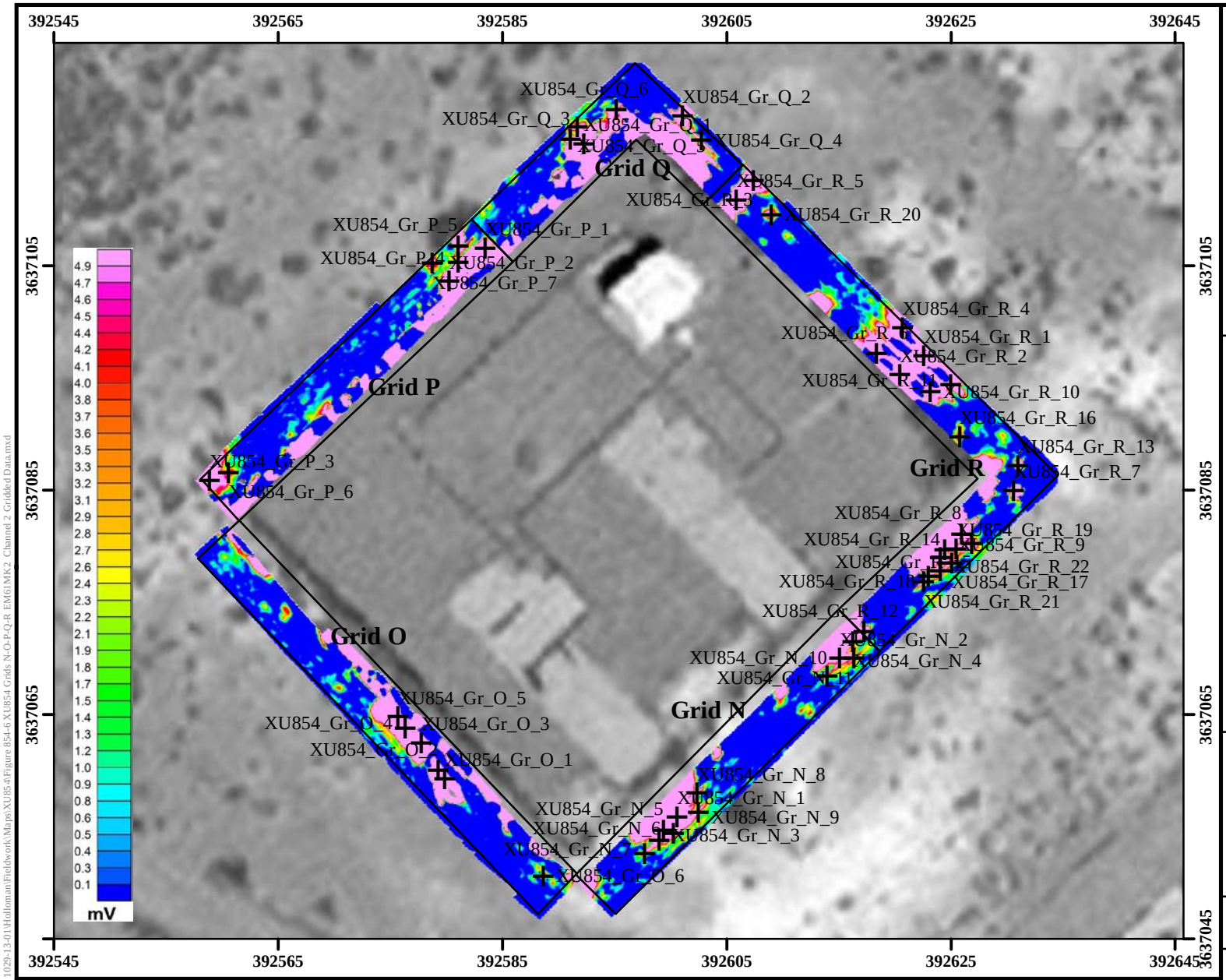
1 inch = 10 feet

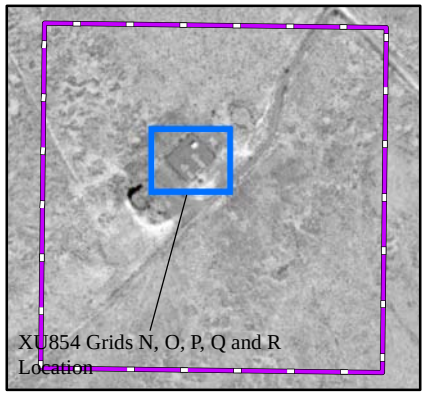
0 2 4 Meters

0 5 10 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\XU854\Figure 854-5 XU854 Grid M EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 5 mV Threshold Intrusively Investigated
- Grid Boundary
- XU854 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 854-6

EM61-MK2 Channel 2 Gridded Data Grids N, O, P, Q, R XU854

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

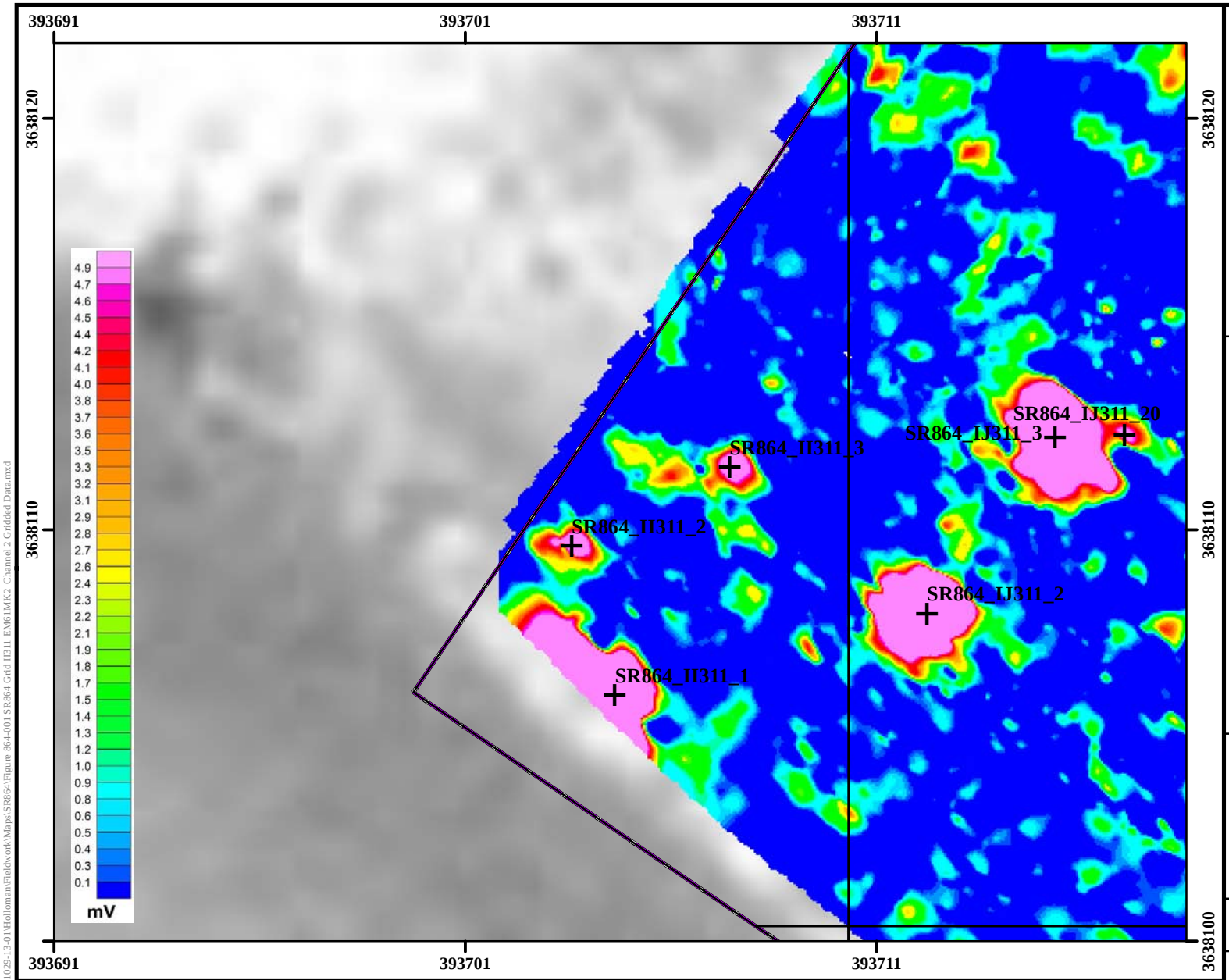
1 inch = 44 feet

0 7 14 Meters

0 22 44 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\XU854\Figure 854-6 XU854 Grids N-O-P-Q-R EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-1

EM61-MK2 Channel 2 Gridded Data Grid II311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

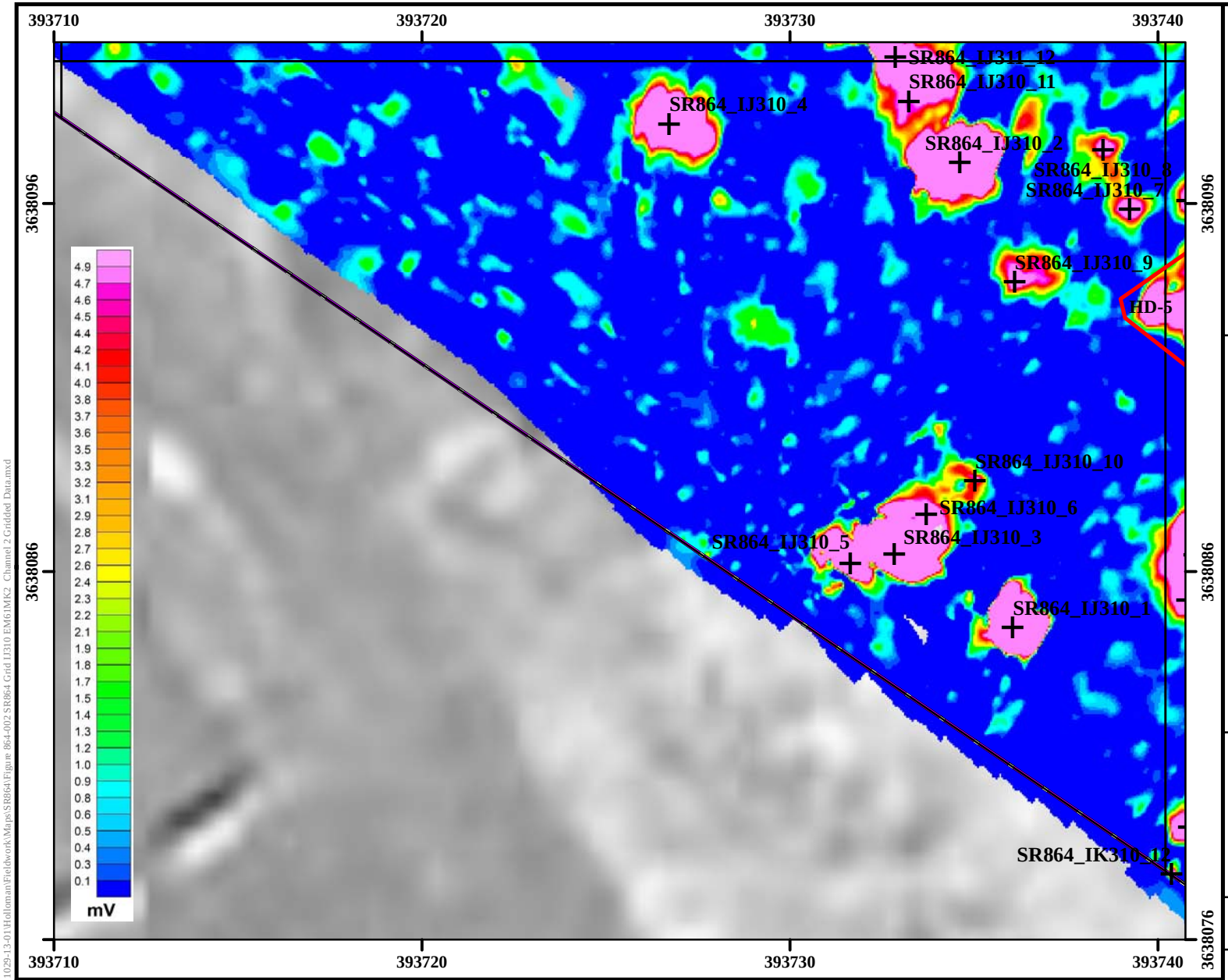
1 inch = 12 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-001 SR864 Grid II311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- High Anomaly Density Area
- Grid Boundary
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-2

EM61-MK2 Channel 2 Gridded Data Grid IJ310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

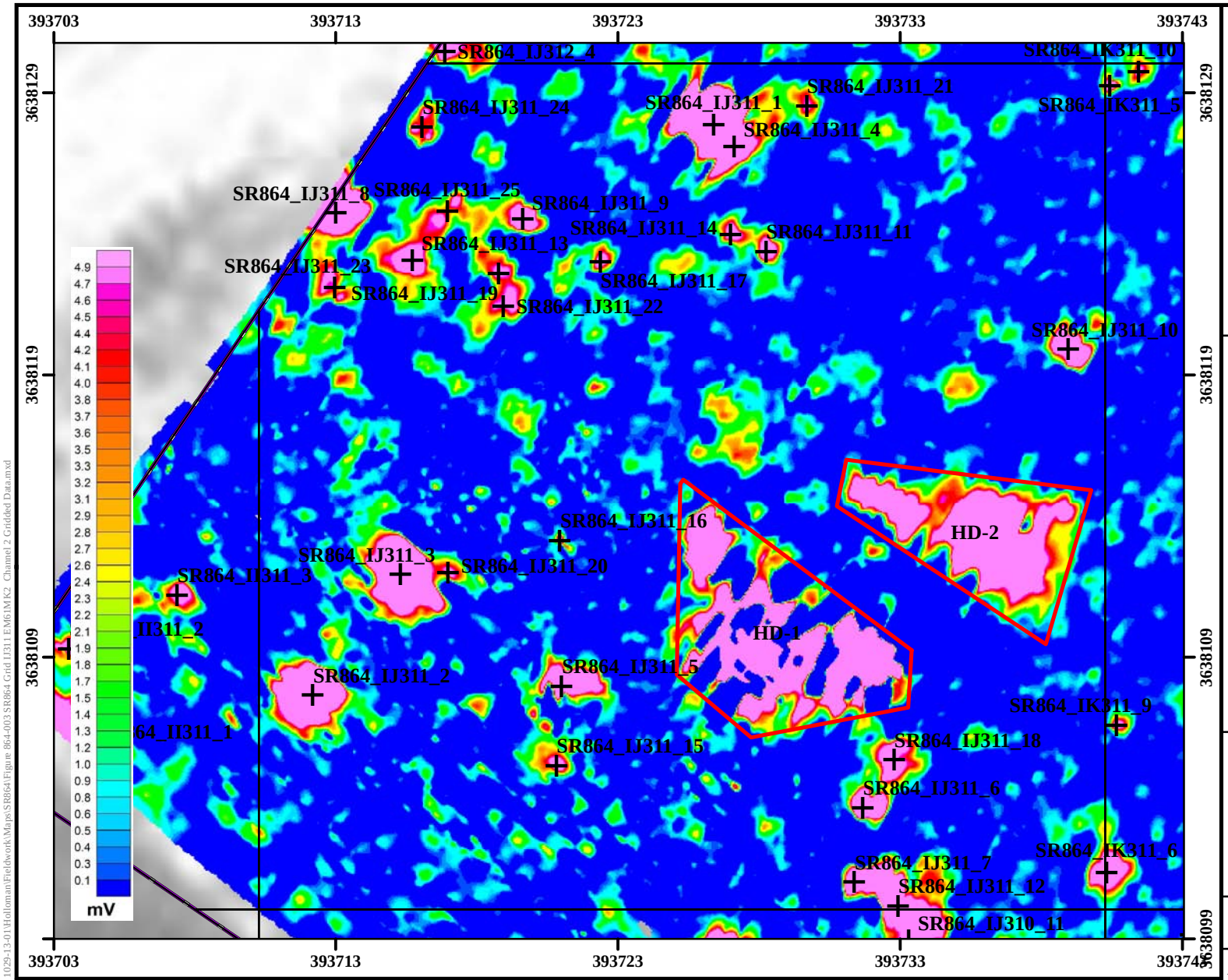
1 inch = 13 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-002 SR864 Grid IJ310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- High Anomaly Density Area
- Grid Boundary
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-3

EM61-MK2 Channel 2 Gridded Data Grid IJ311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

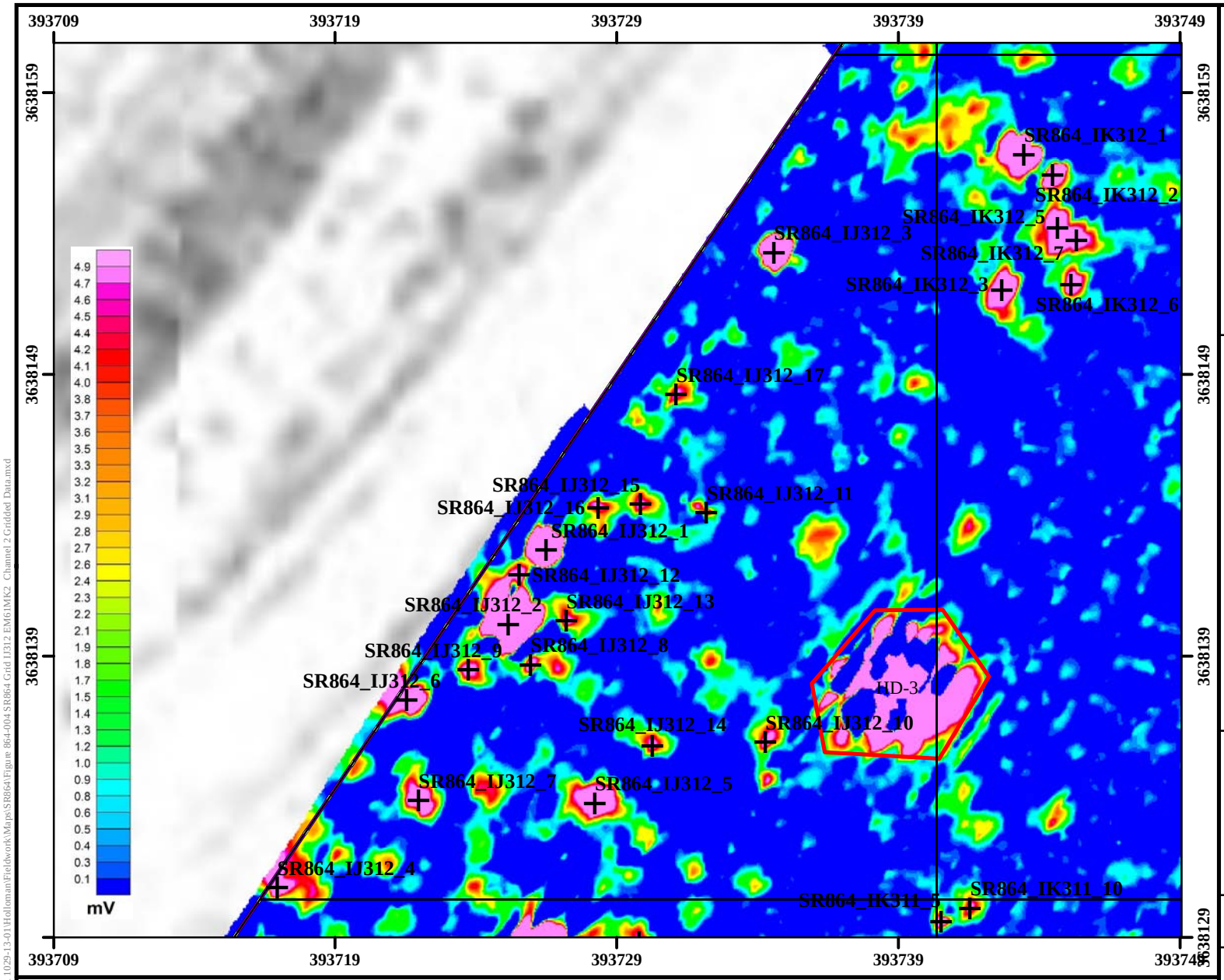
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-003 SR864 Grid IJ311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-4

EM61-MK2 Channel 2 Gridded Data Grid IJ312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

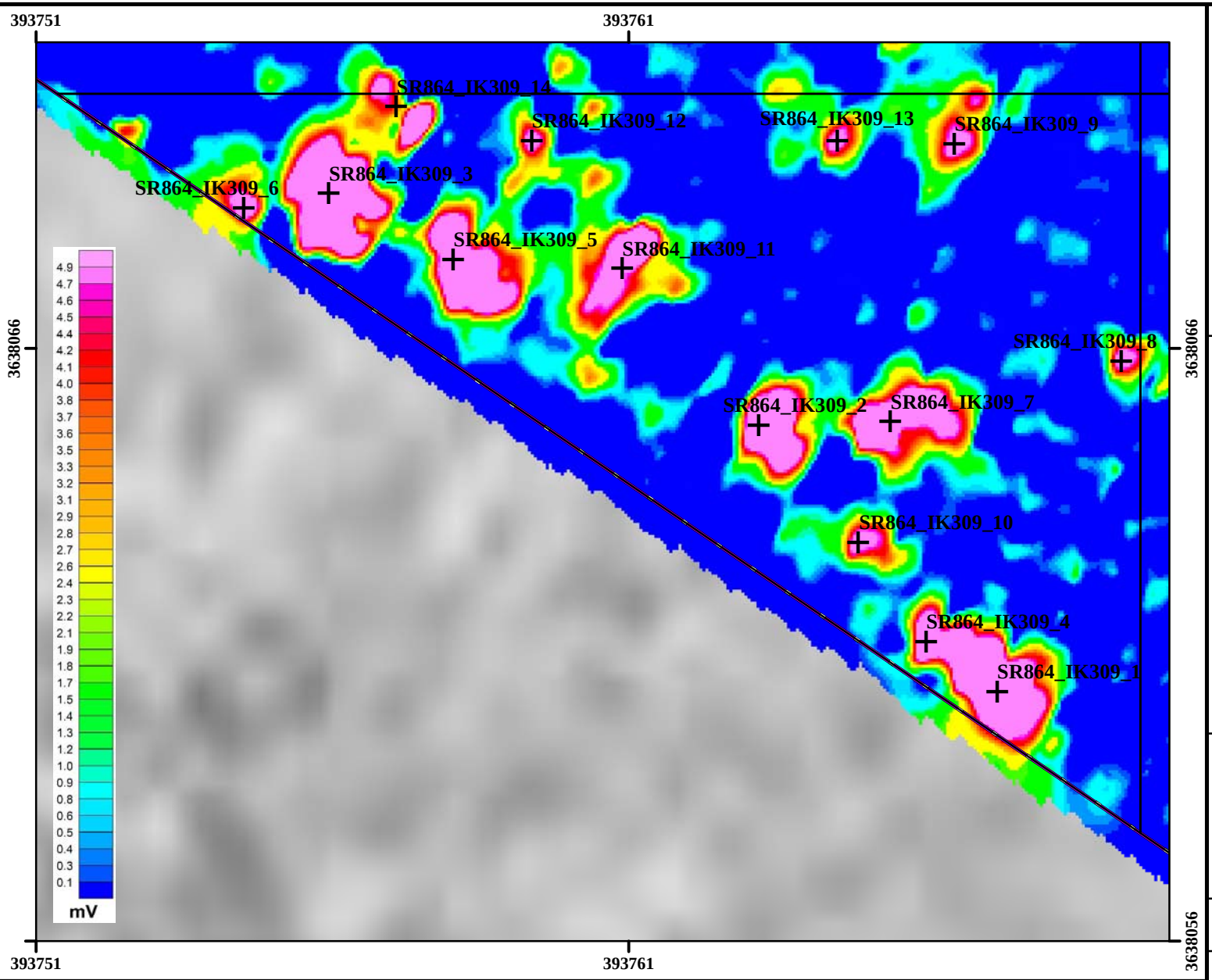
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-004 SR864 Grid IJ312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-5

EM61-MK2 Channel 2 Gridded Data Grid IK309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

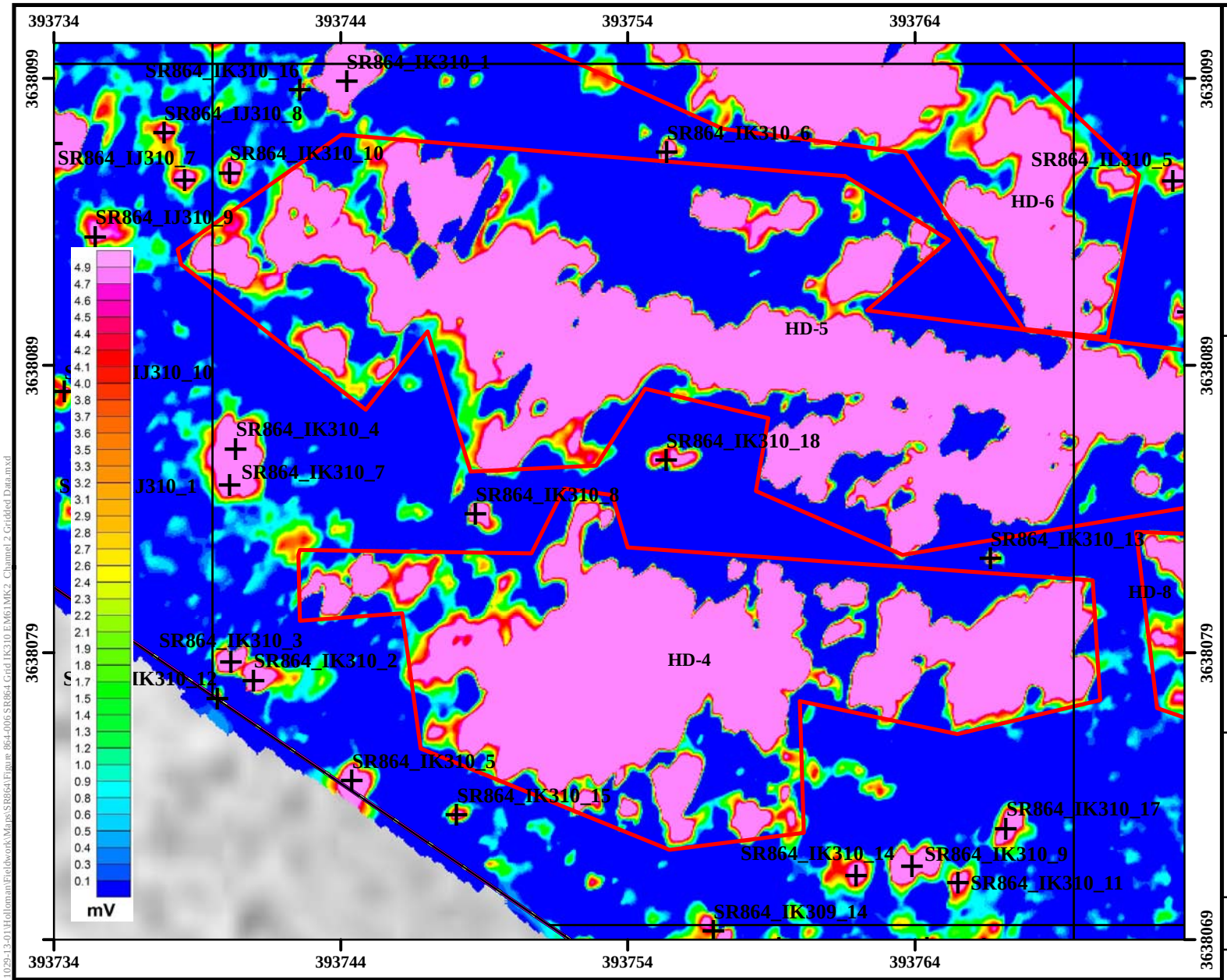
1 inch = 8 feet

0 2 4 Meters

0 7 14 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-005 SR864 Grid IK309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-6

EM61-MK2 Channel 2 Gridded Data Grid IK310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

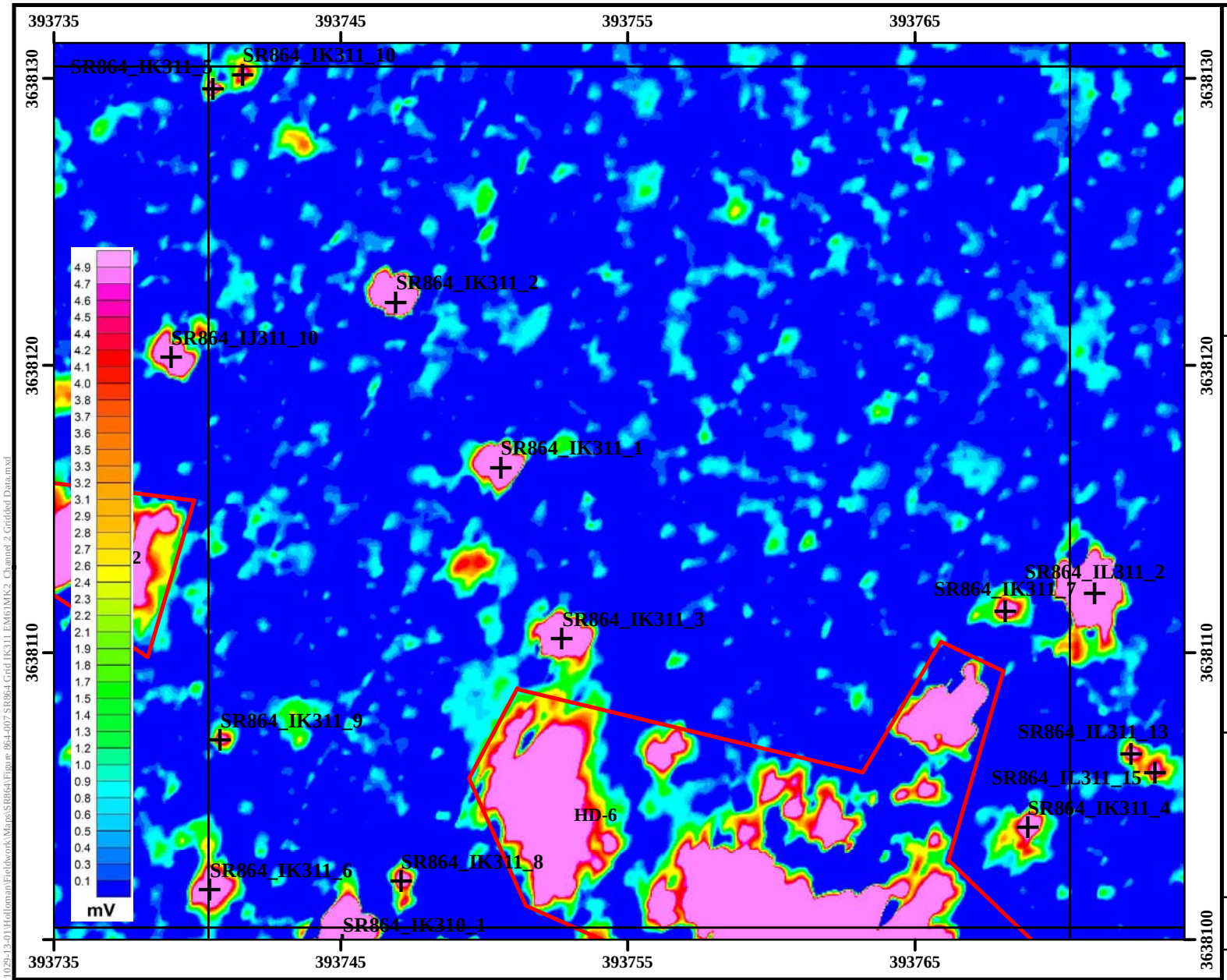
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-006 SR864 Grid IK310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-7

EM61-MK2 Channel 2 Gridded Data Grid IK311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

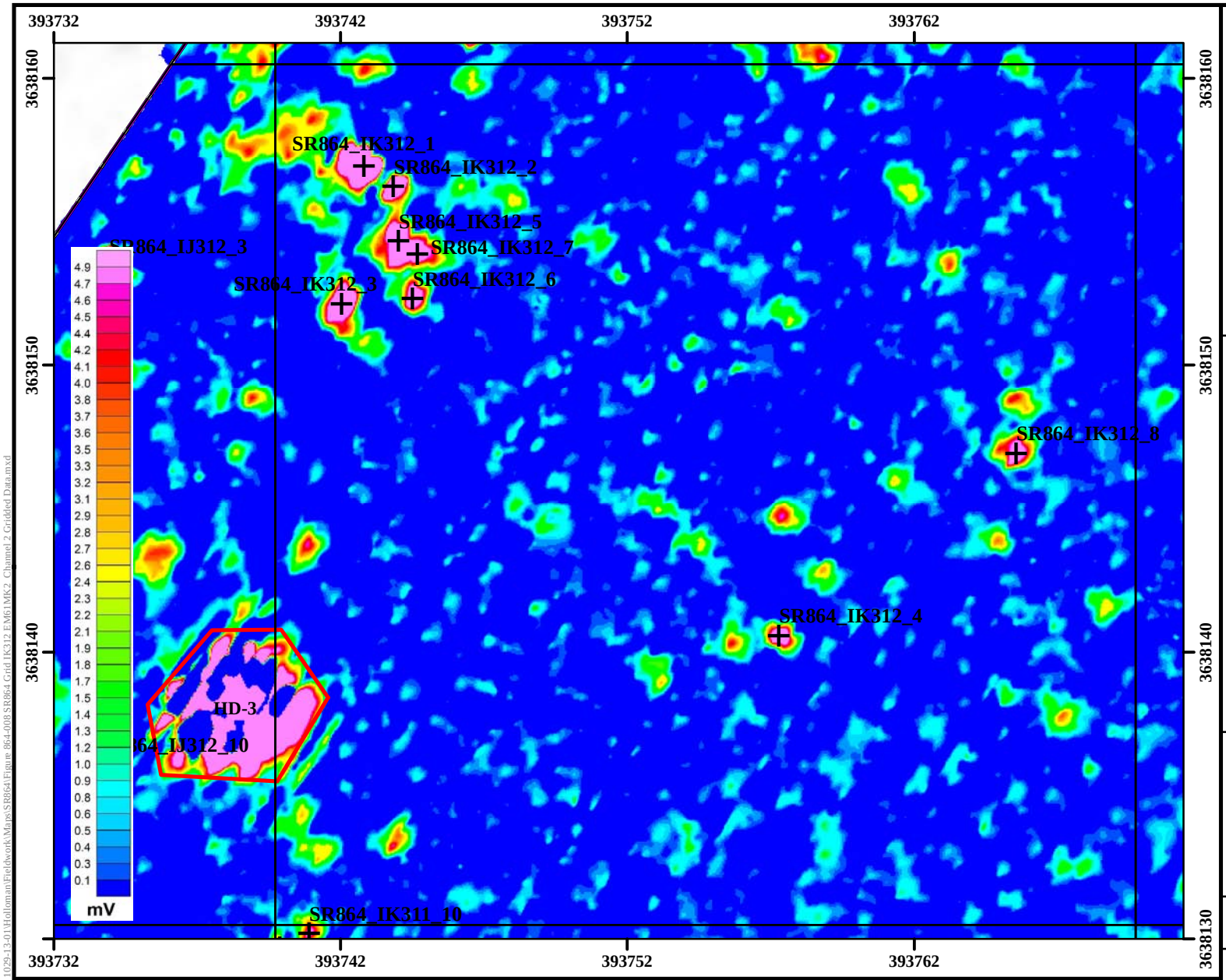
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-007 SR864 Grid IK311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-8

EM61-MK2 Channel 2 Gridded Data Grid IK312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

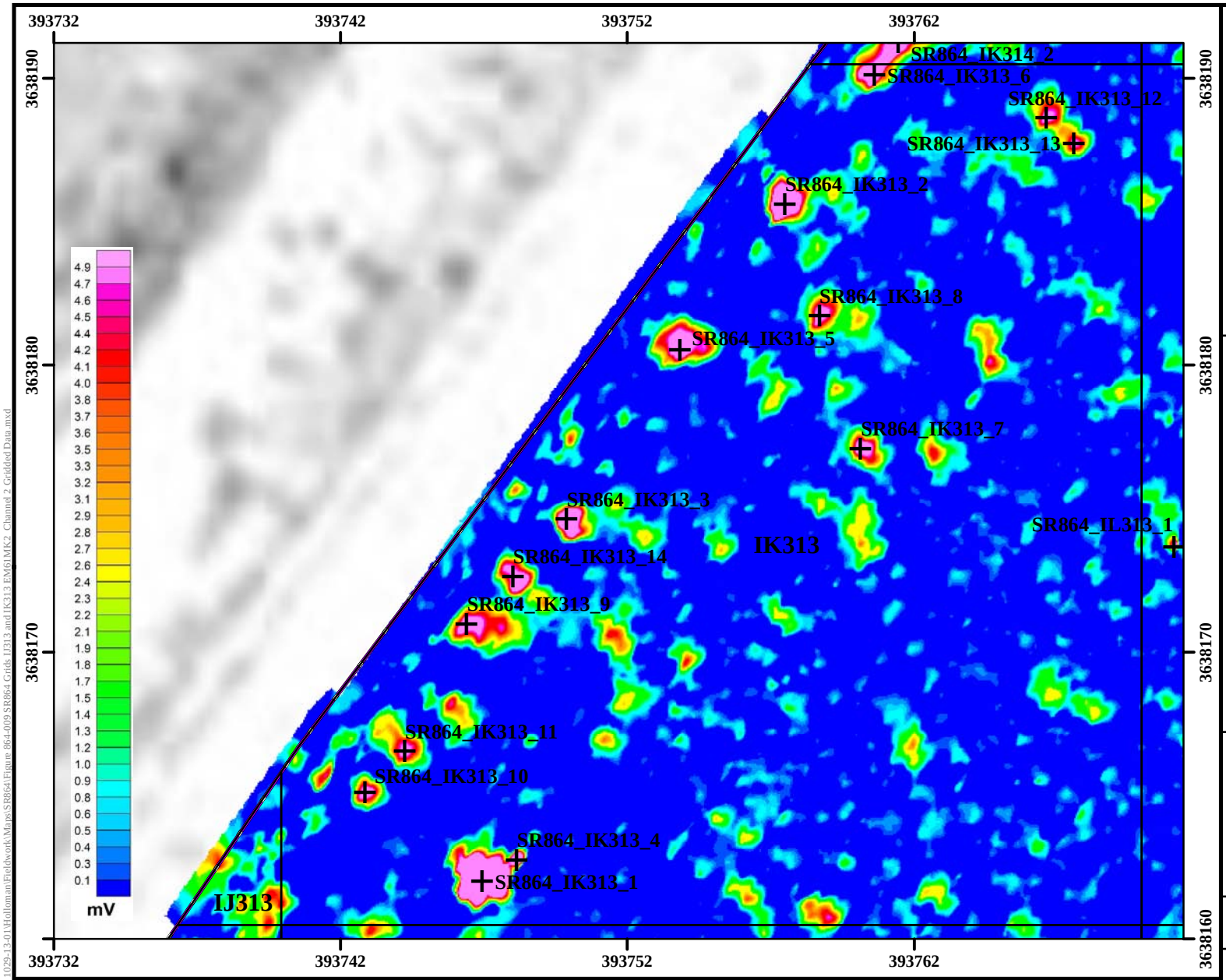
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-008 SR864 Grid IK312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-9

EM61-MK2 Channel 2 Gridded Data Grids IJ313, IK313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

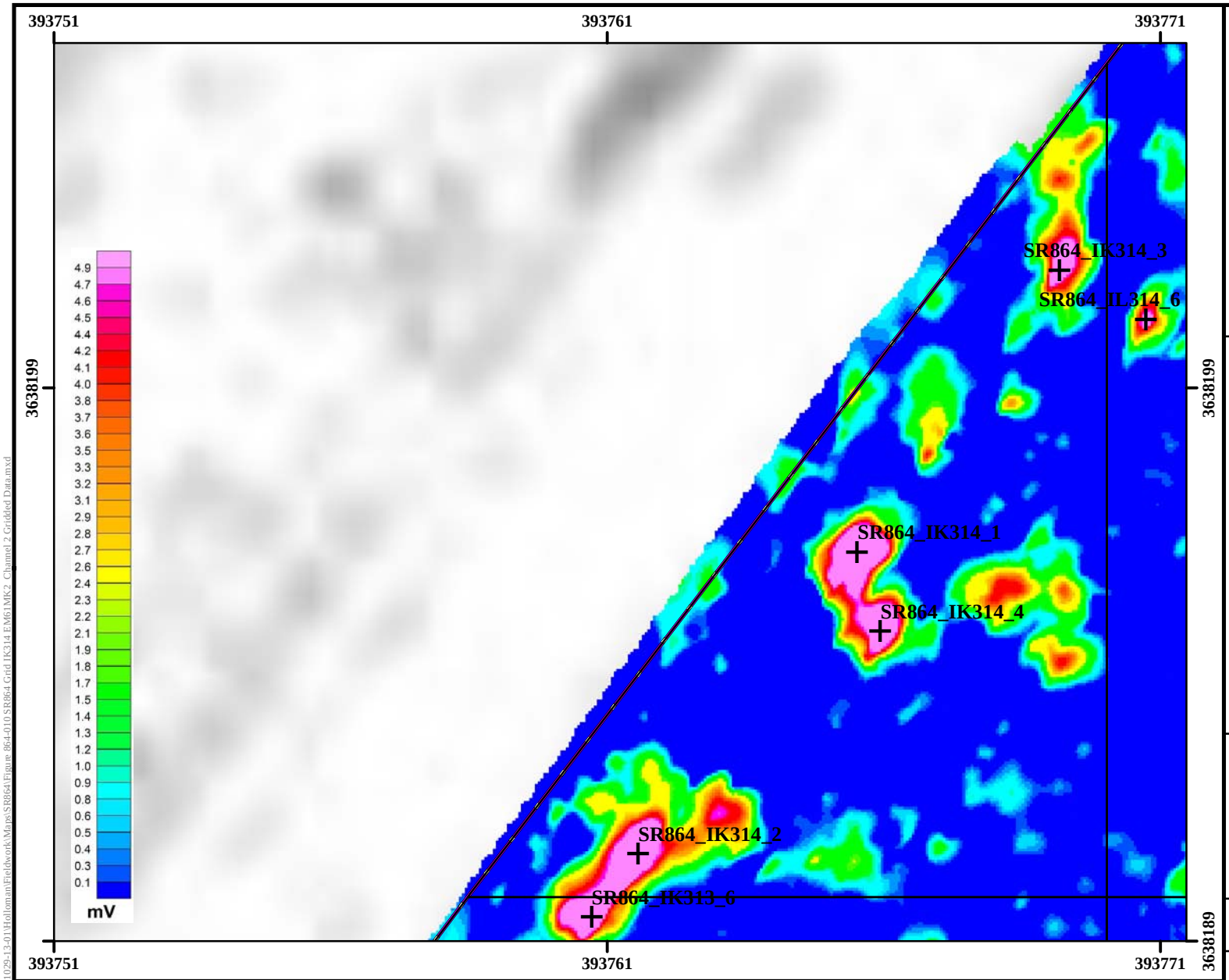
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-009 SR864 Grids IJ313 and IK313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-10

EM61-MK2 Channel 2 Gridded Data Grid IK314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

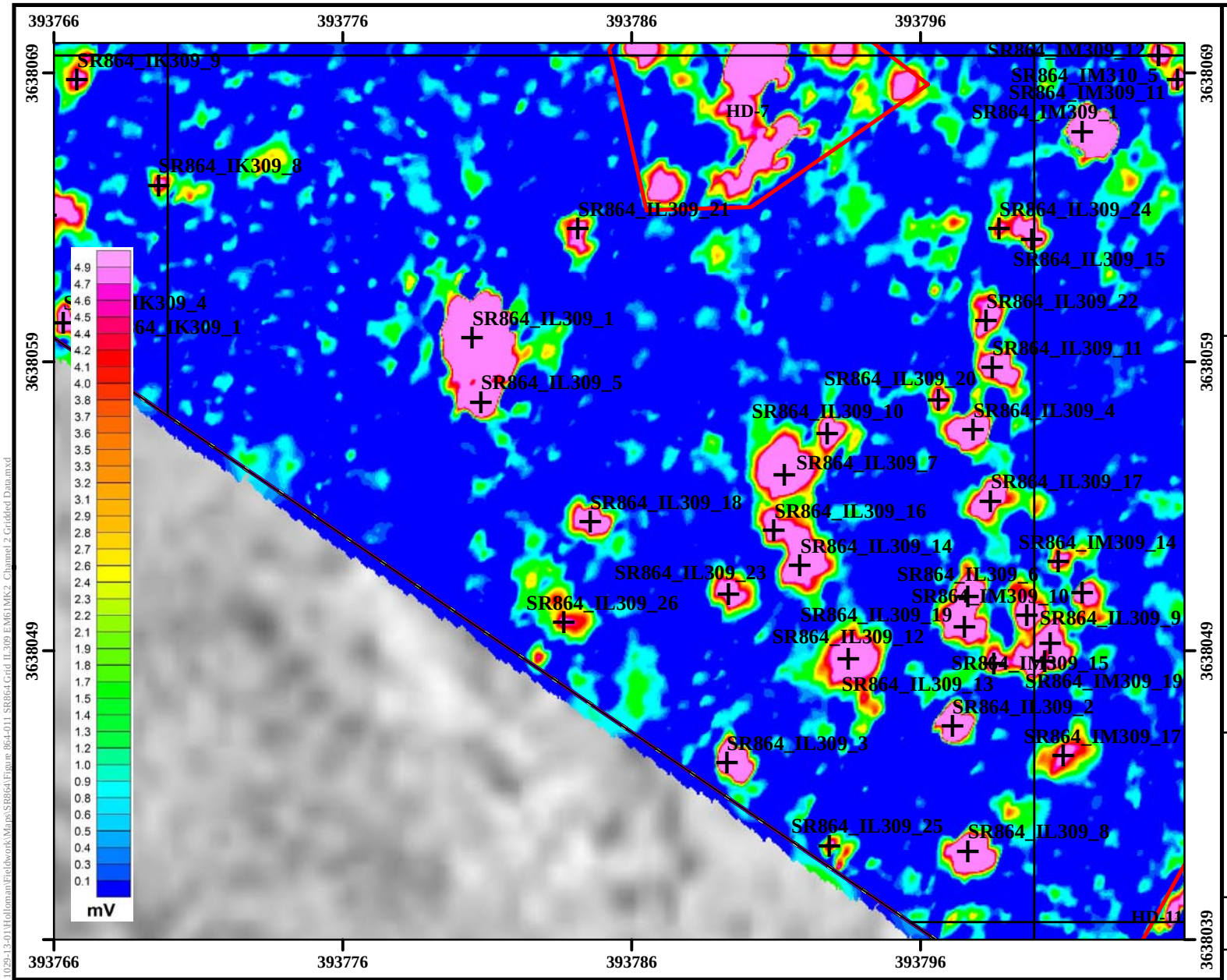
1 inch = 9 feet

0 2 4 Meters

0 7 14 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-010 SR864 Grid IK314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-11

EM61-MK2 Channel 2 Gridded Data Grid IL309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

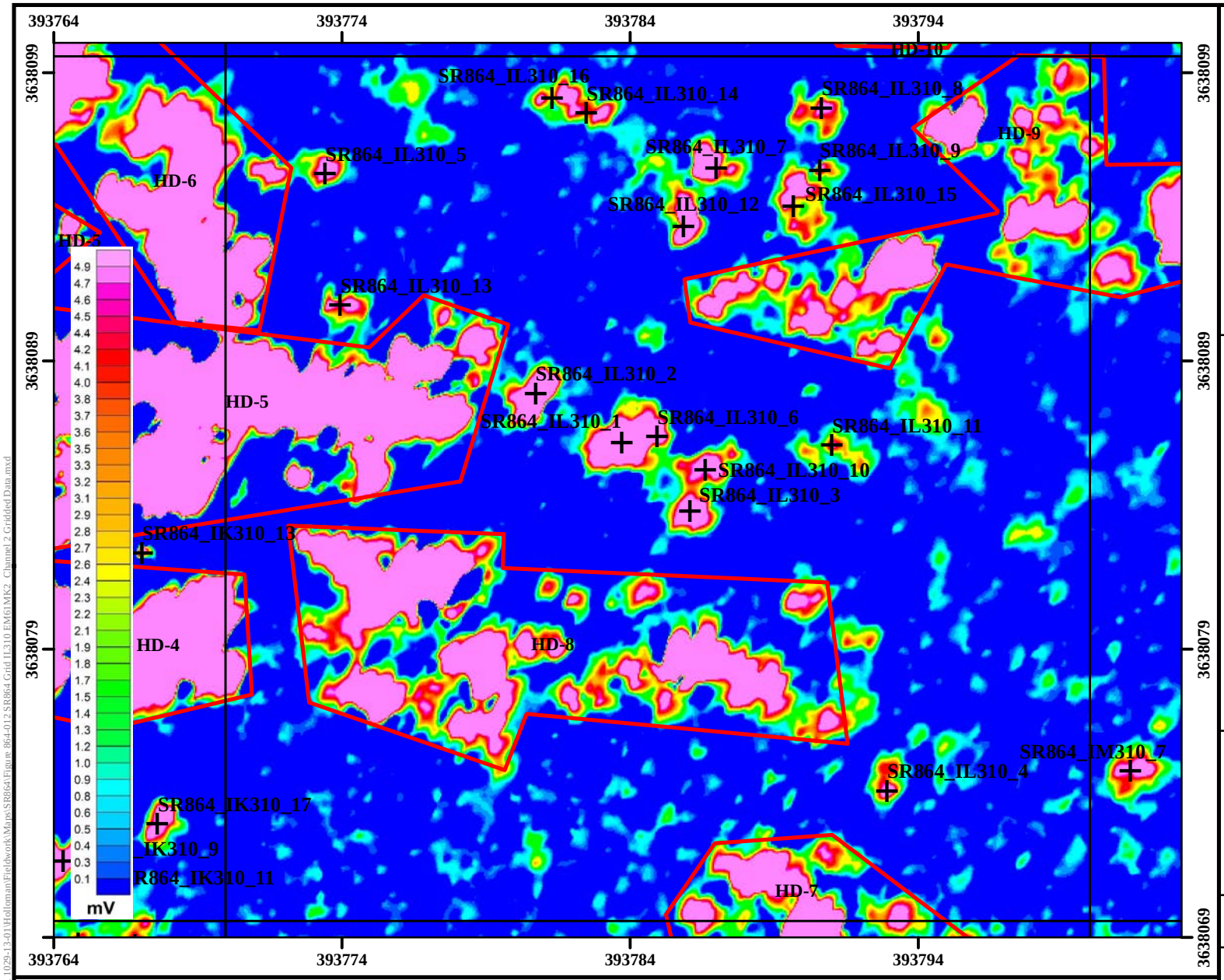
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-011 SR864 Grid IL309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-12

EM61-MK2 Channel 2 Gridded Data Grid IL310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

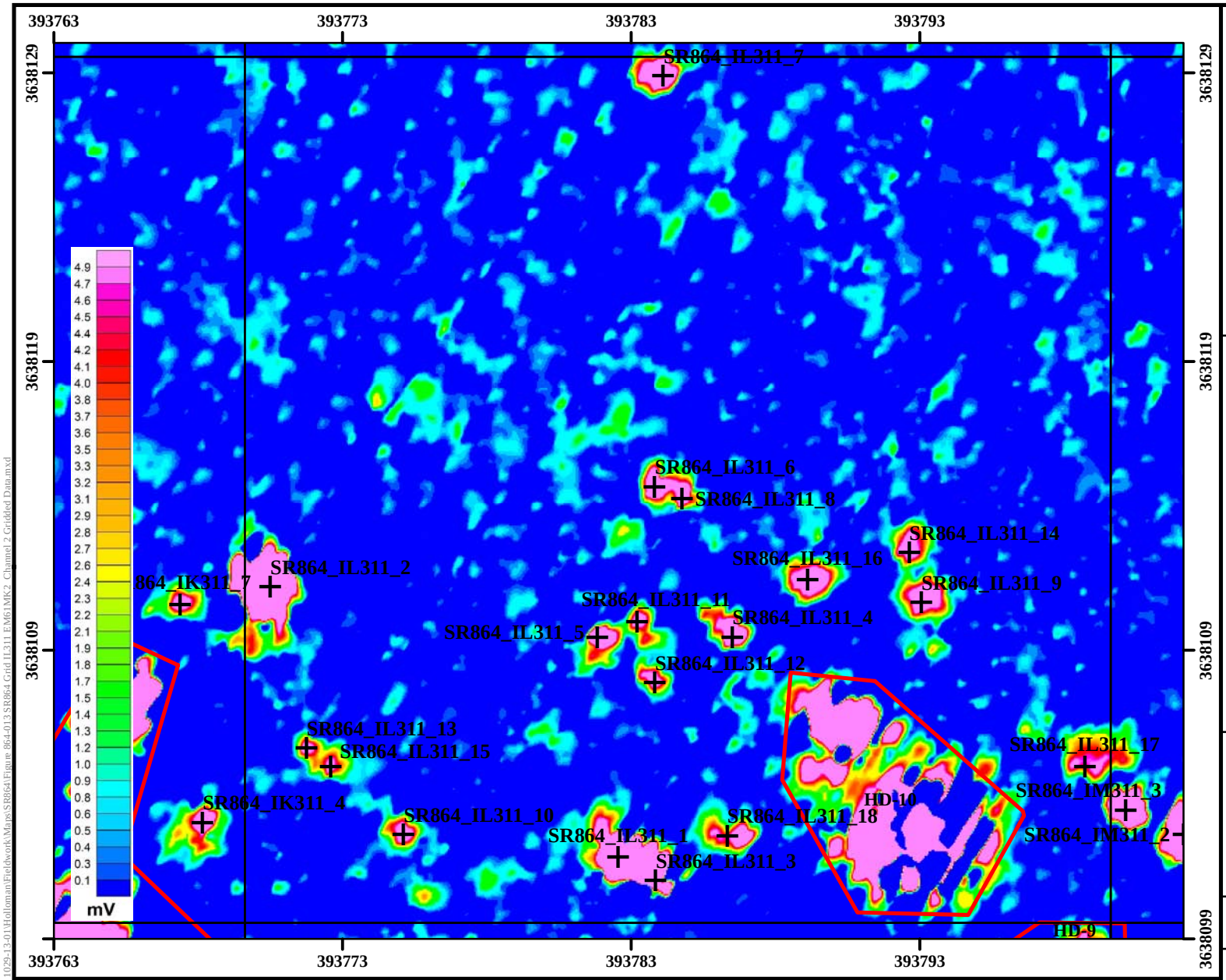
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-012 SR864 Grid IL310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-13

EM61-MK2 Channel 2 Gridded Data Grid IL311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

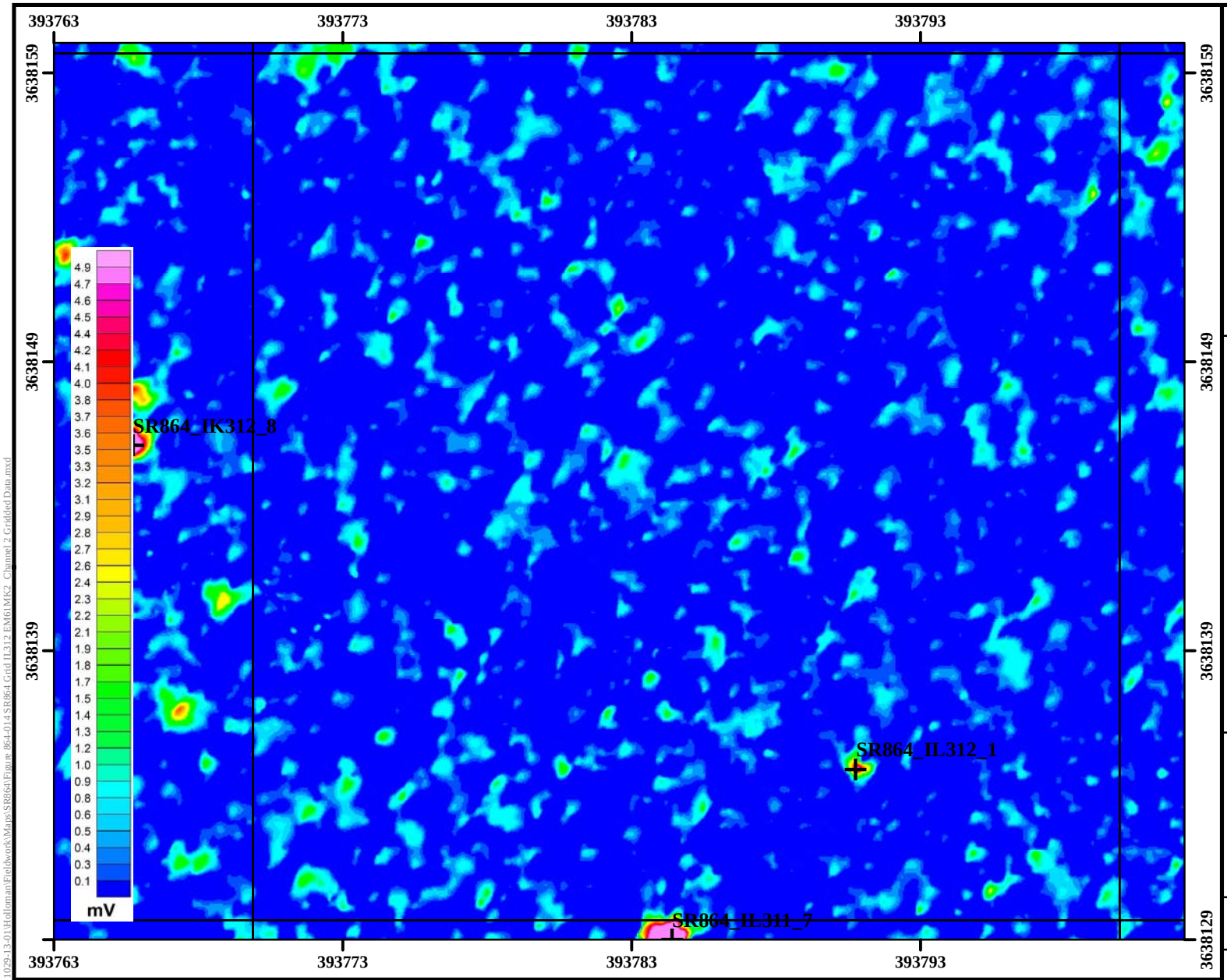
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-013 SR864 Grid IL311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-14

EM61-MK2 Channel 2 Gridded Data Grid IL312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

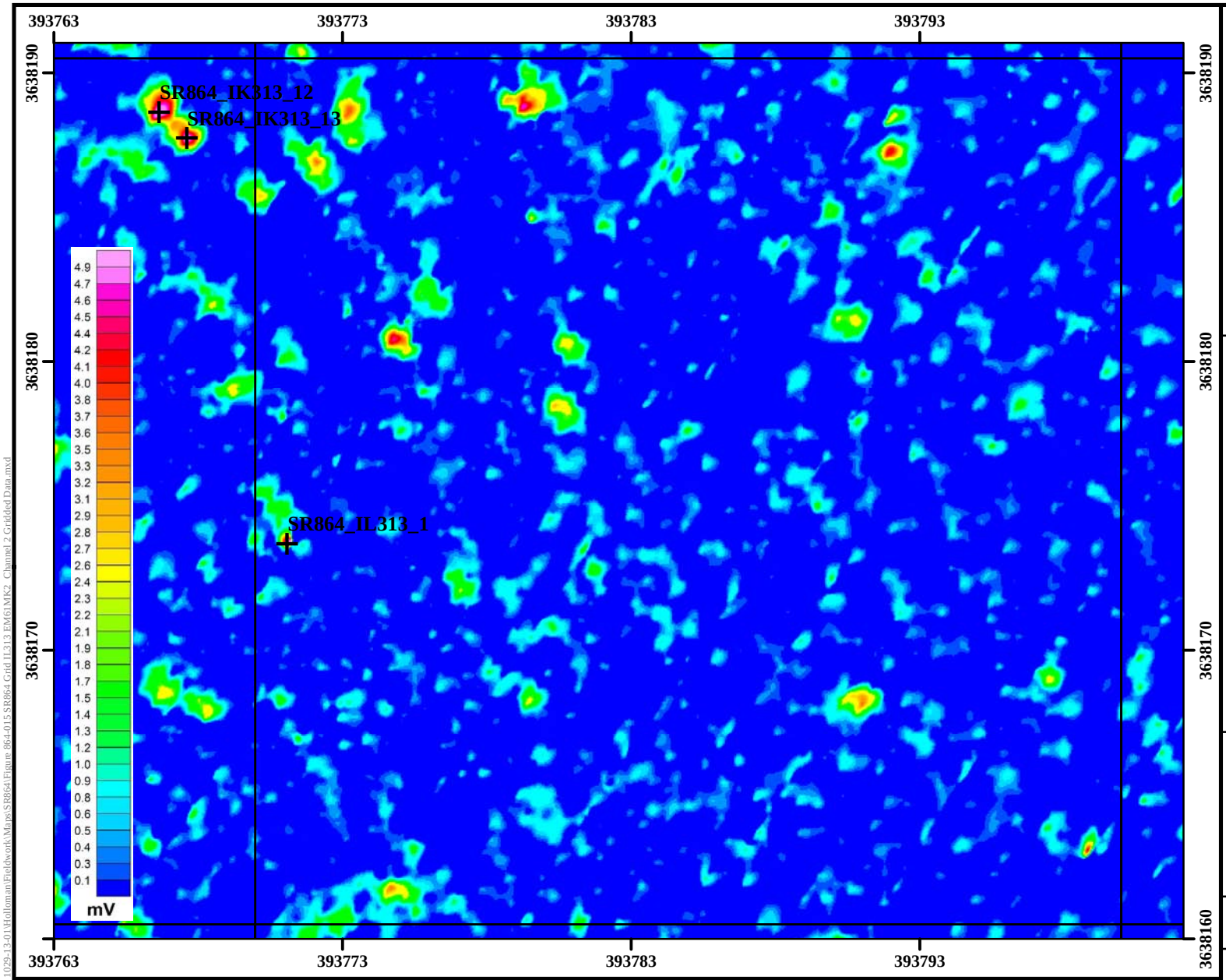
1 inch = 17 feet

0 3 6 Meters

0 15 30 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-014 SR864 Grid IL312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-15

EM61-MK2 Channel 2 Gridded Data Grid IL313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

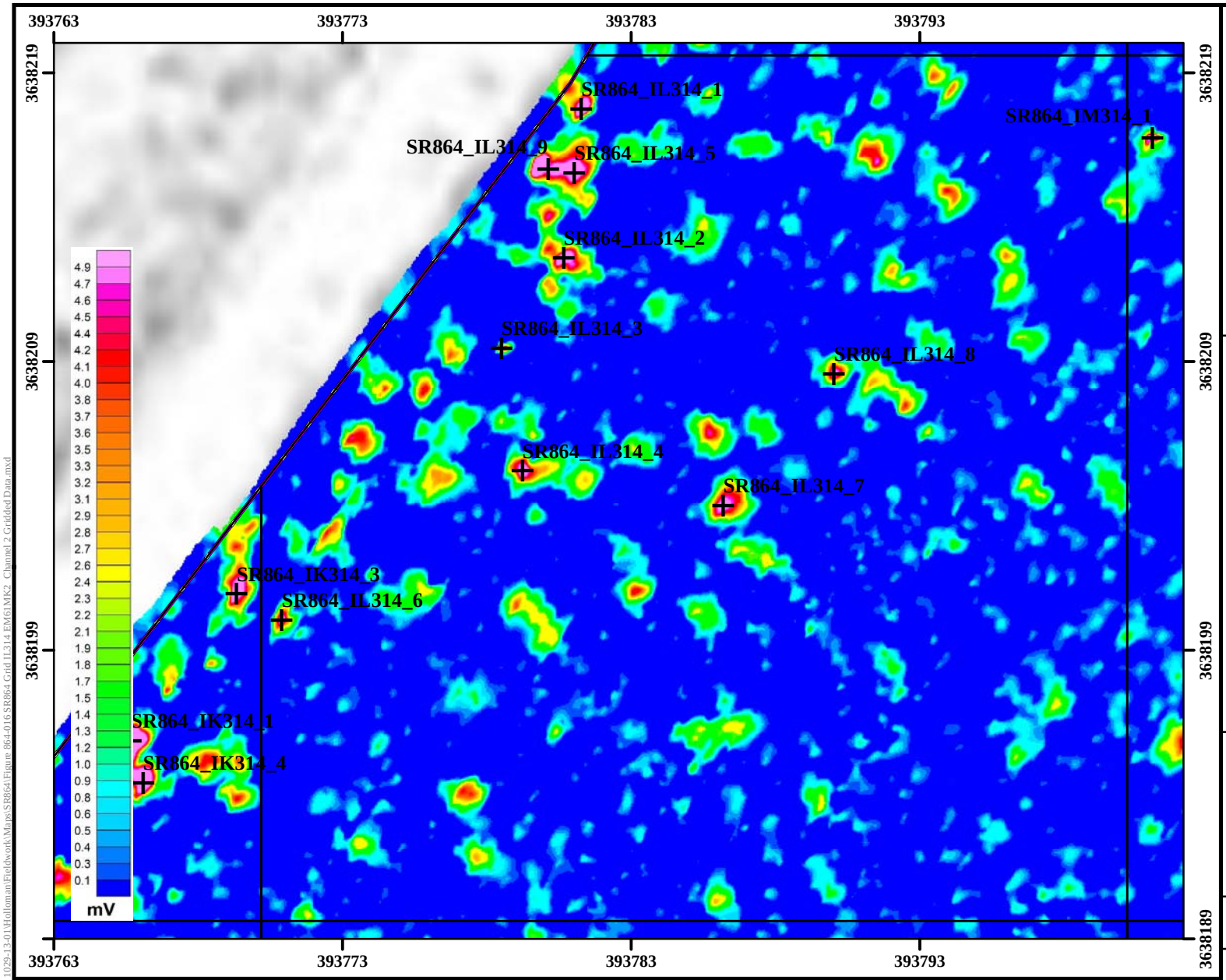
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-015 SR864 Grid IL313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-16

EM61-MK2 Channel 2 Gridded Data Grid IL314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

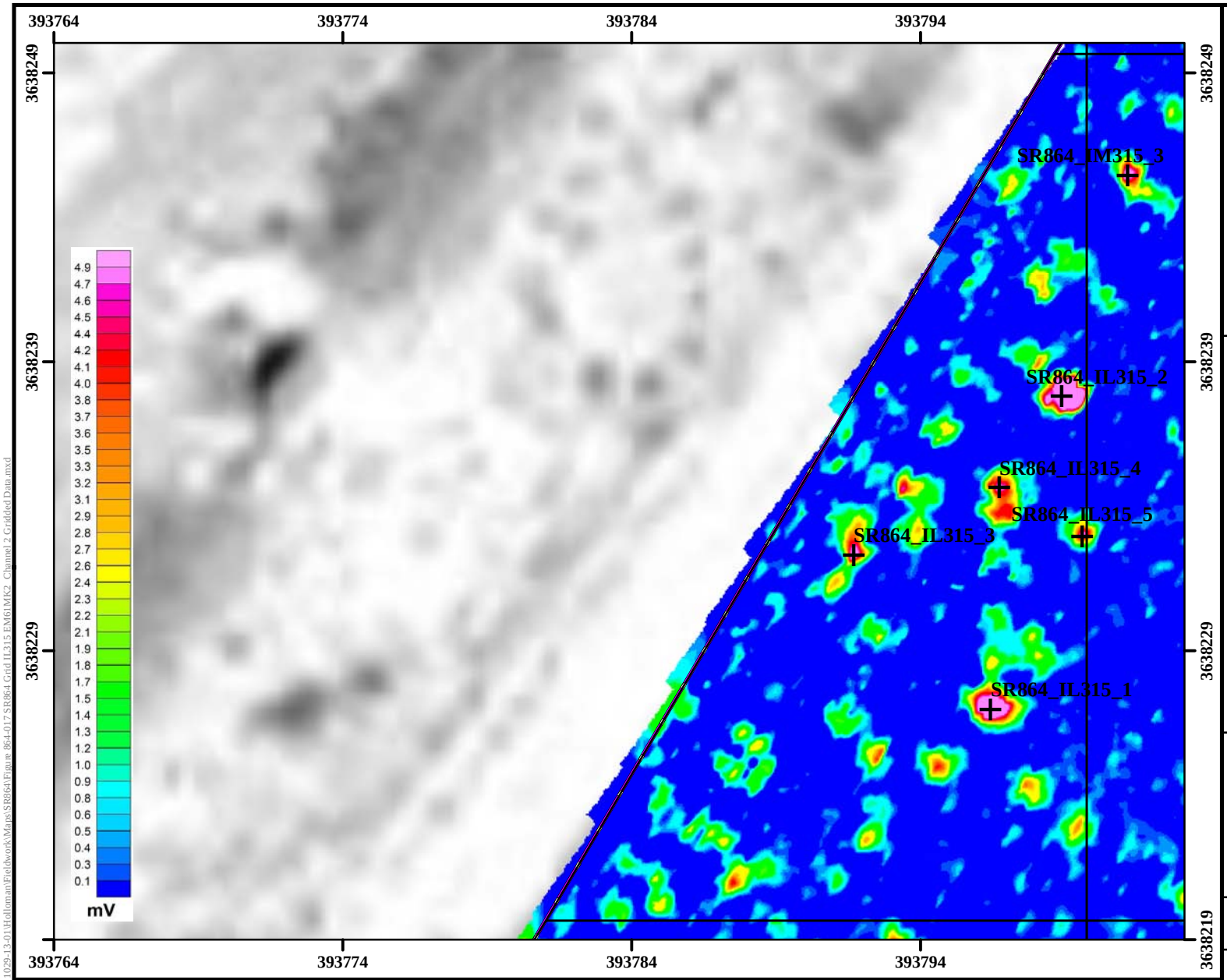
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-016 SR864 Grid IL314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-17

EM61-MK2 Channel 2 Gridded Data Grid IL315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

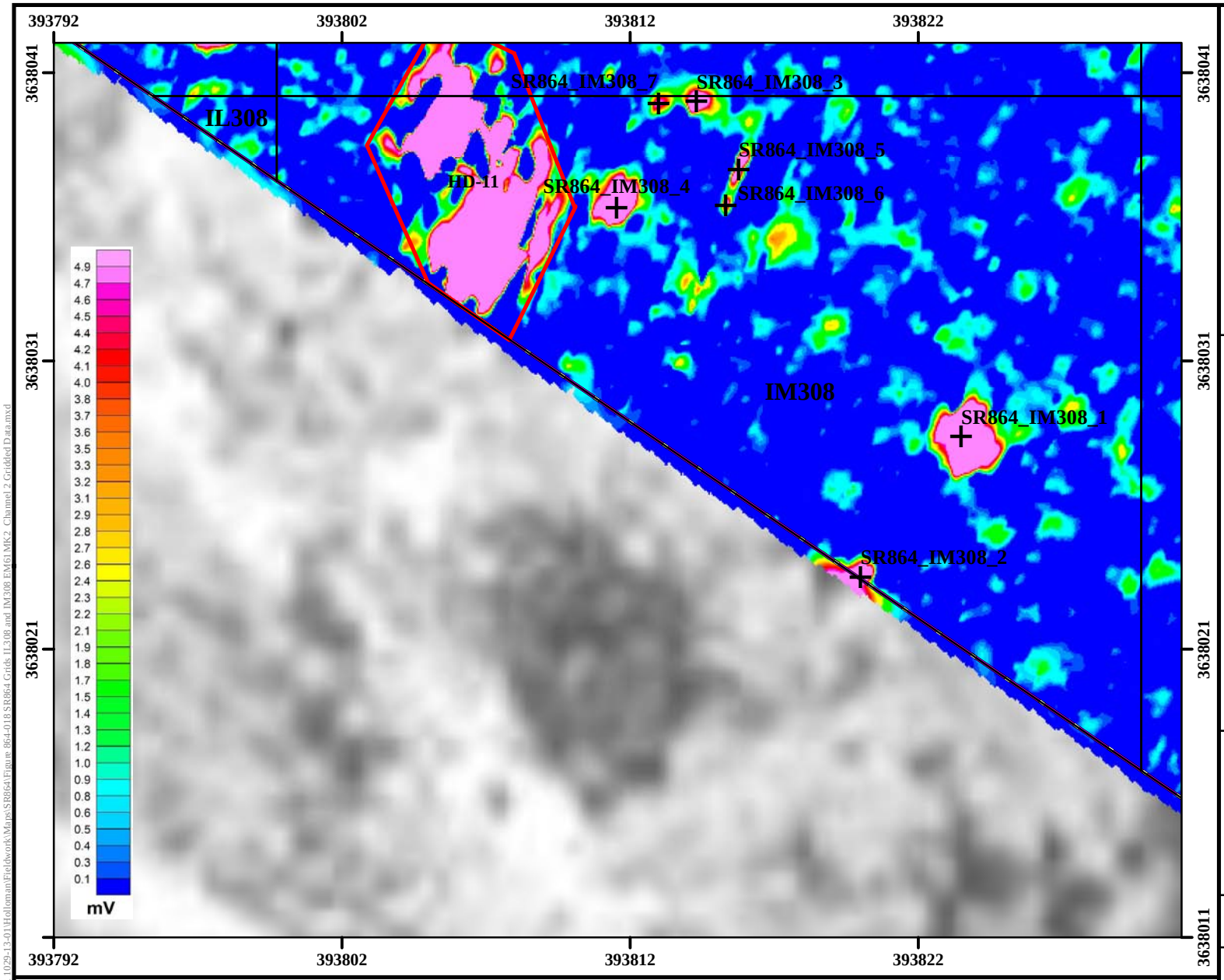
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-017 SR864 Grid IL315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-18

EM61-MK2 Channel 2 Gridded Data Grids IL308, IM308 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

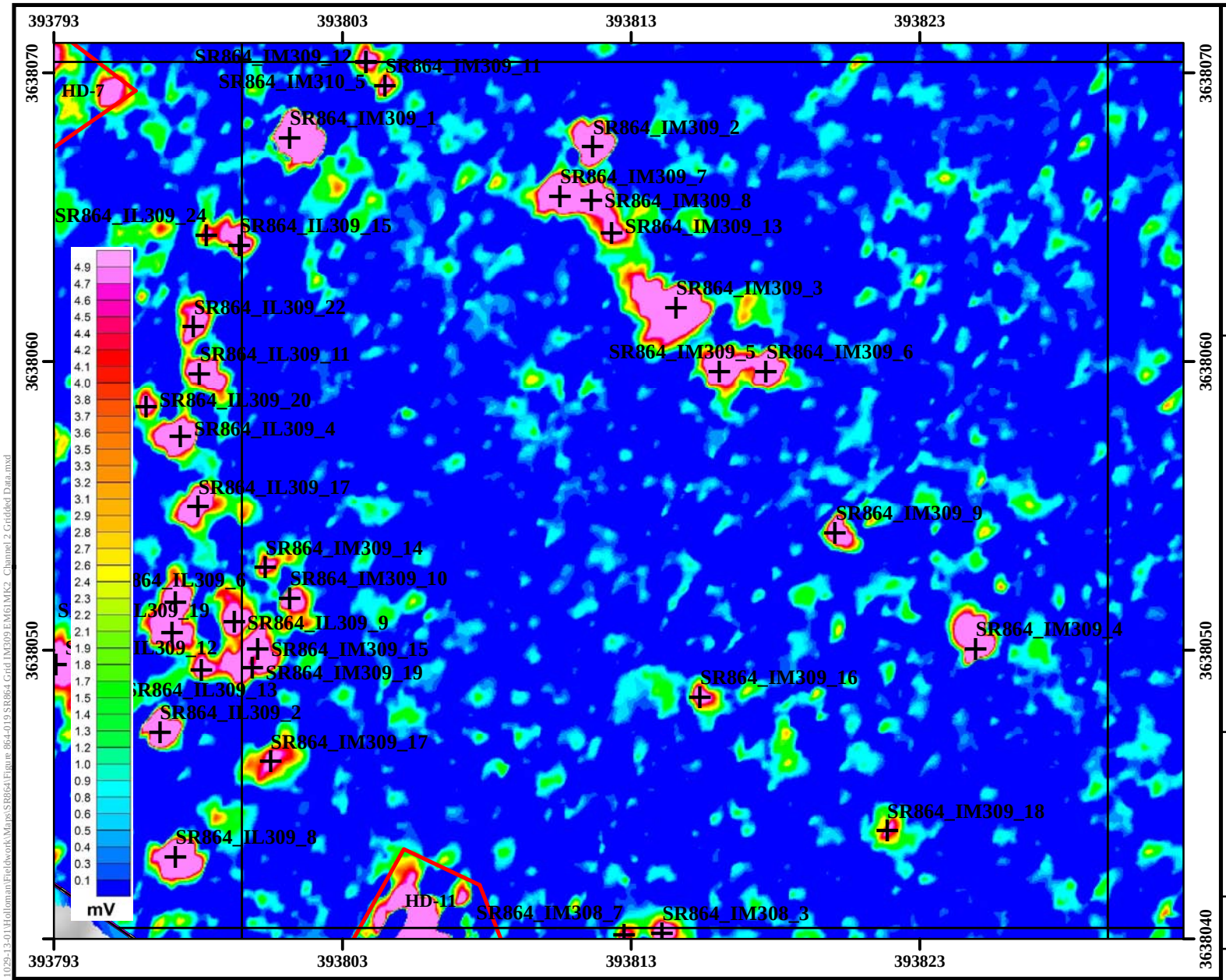
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-018 SR864 Grids IL308 and IM308 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-19

EM61-MK2 Channel 2 Gridded Data Grid IM309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

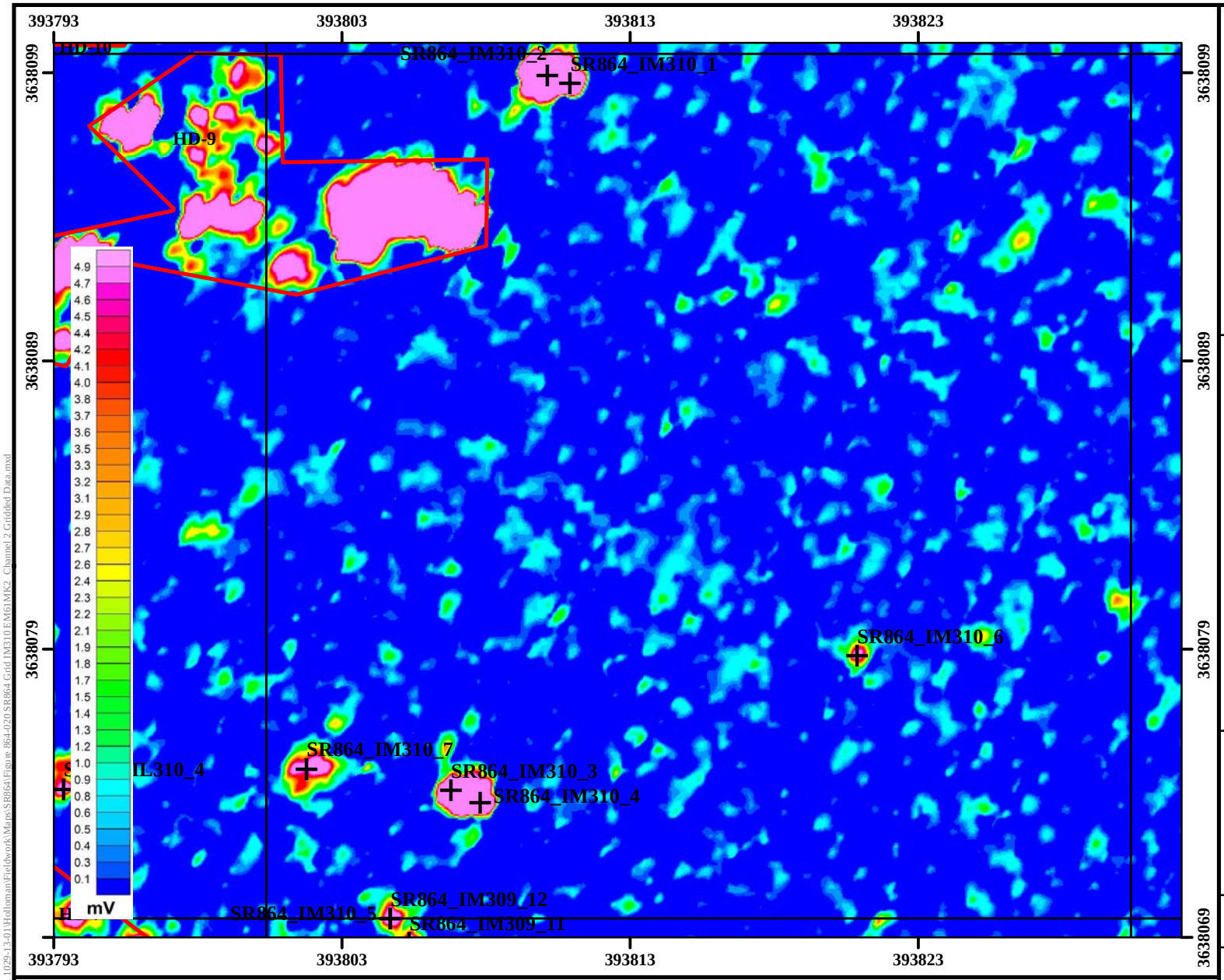
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-019 SR864 Grid IM309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-20

EM61-MK2 Channel 2 Gridded Data Grid IM310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

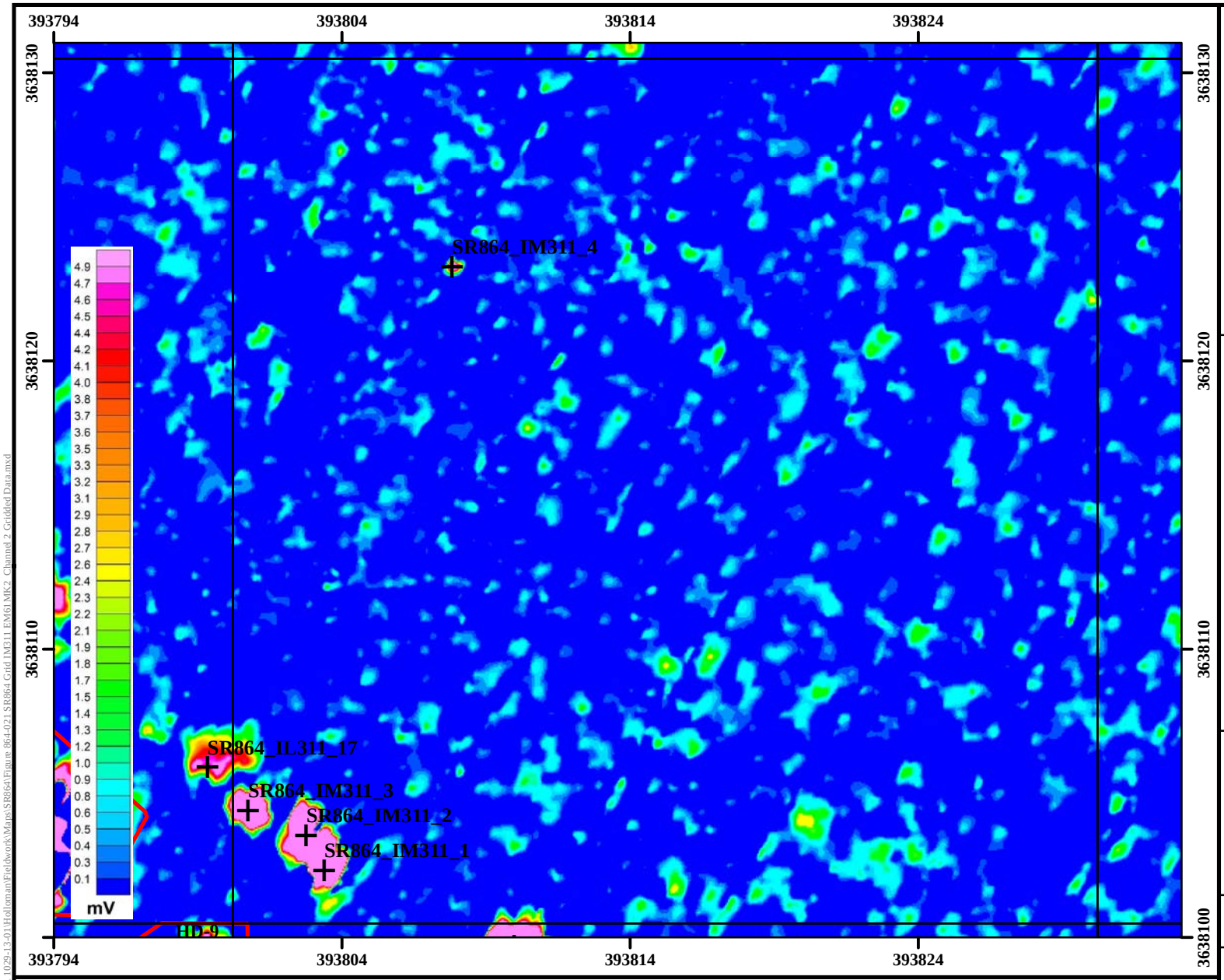
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-020 SR864 Grid IM310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-21

EM61-MK2 Channel 2 Gridded Data Grid IM311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

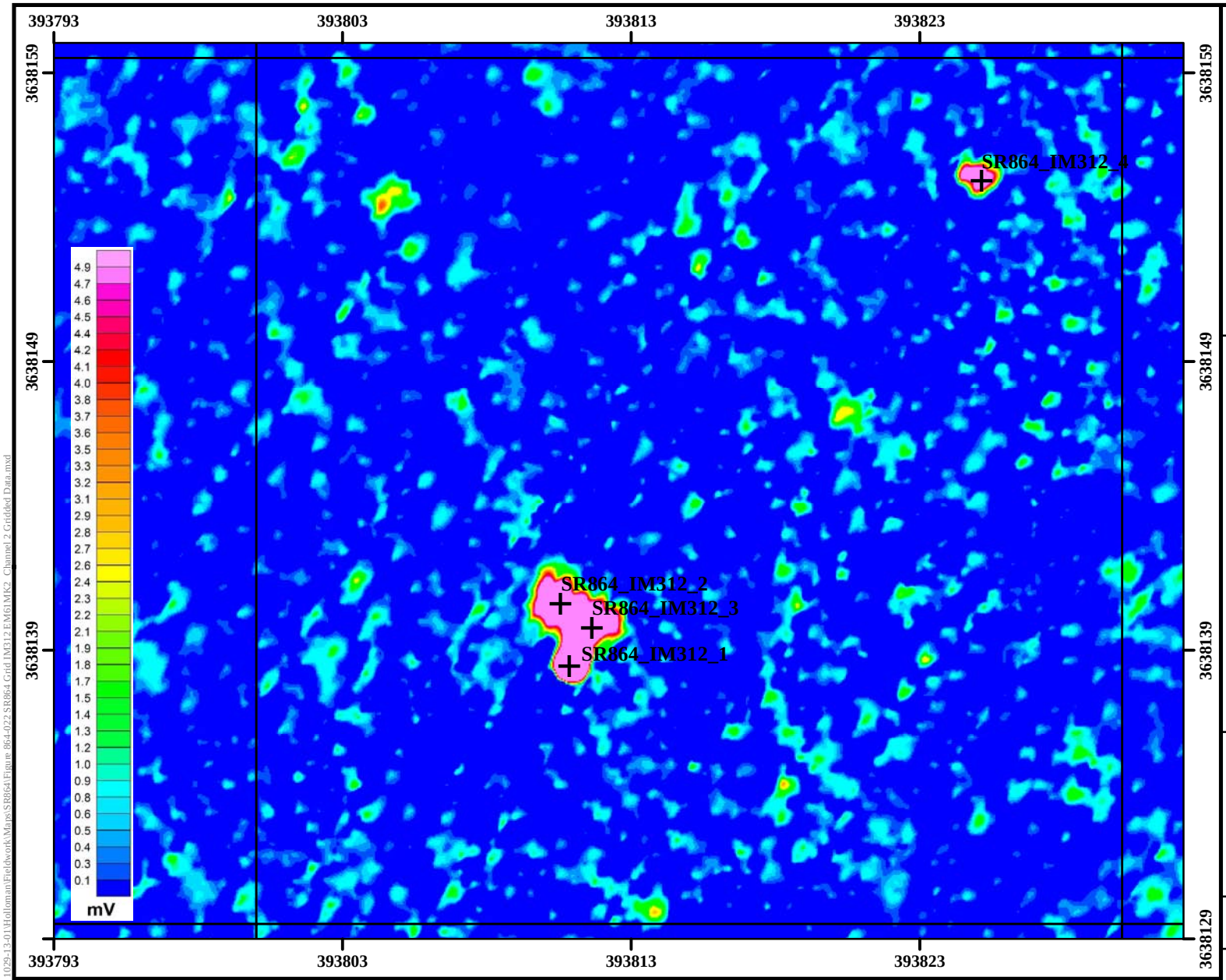
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-021 SR864 Grid IM311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-22

EM61-MK2 Channel 2 Gridded Data Grid IM312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

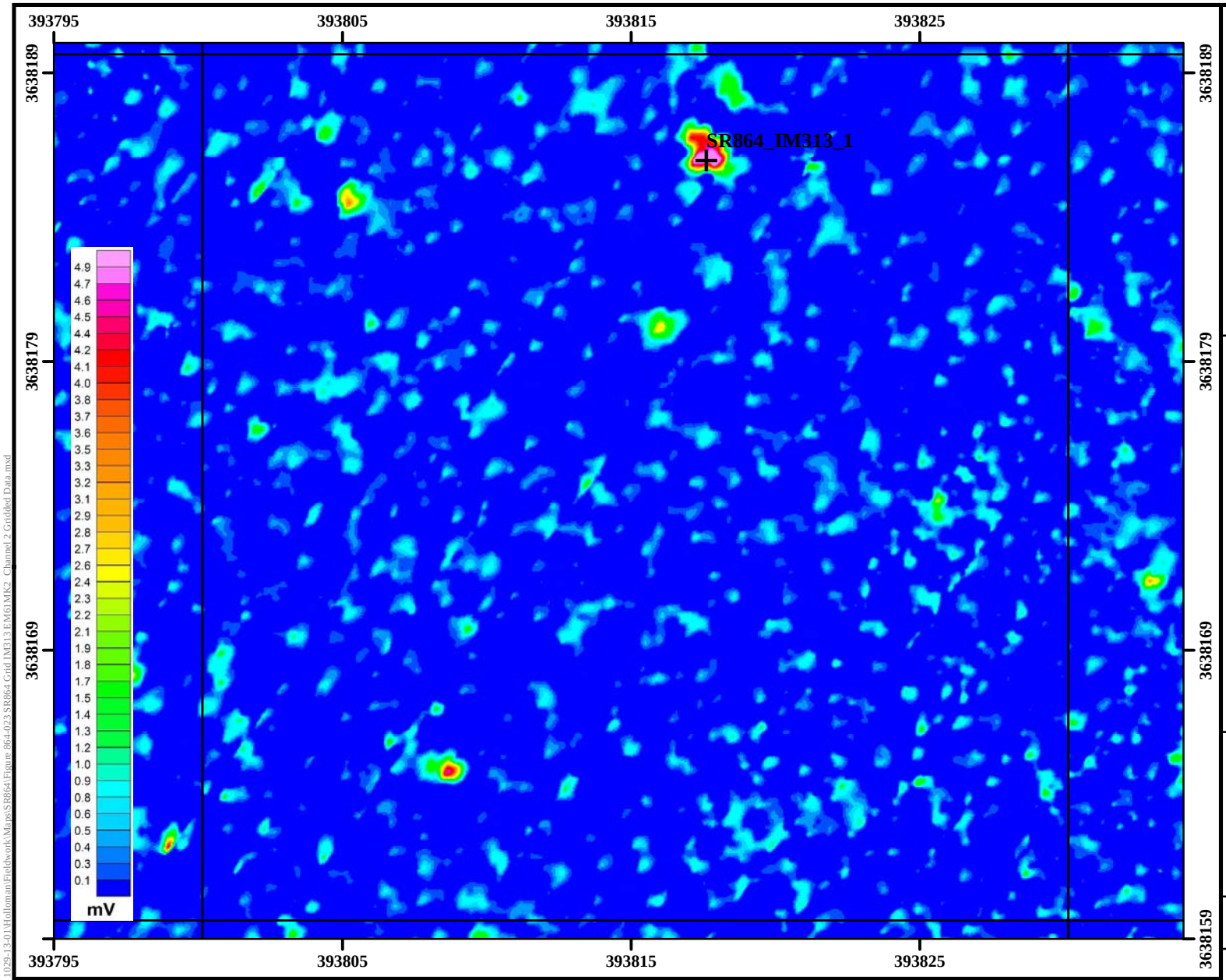
1 inch = 17 feet

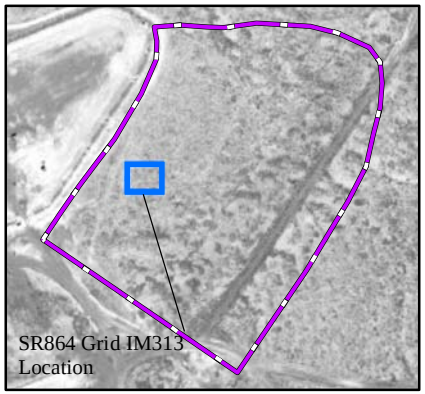
0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-022 SR864 Grid IM312 EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-23

EM61-MK2 Channel 2 Gridded Data Grid IM313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

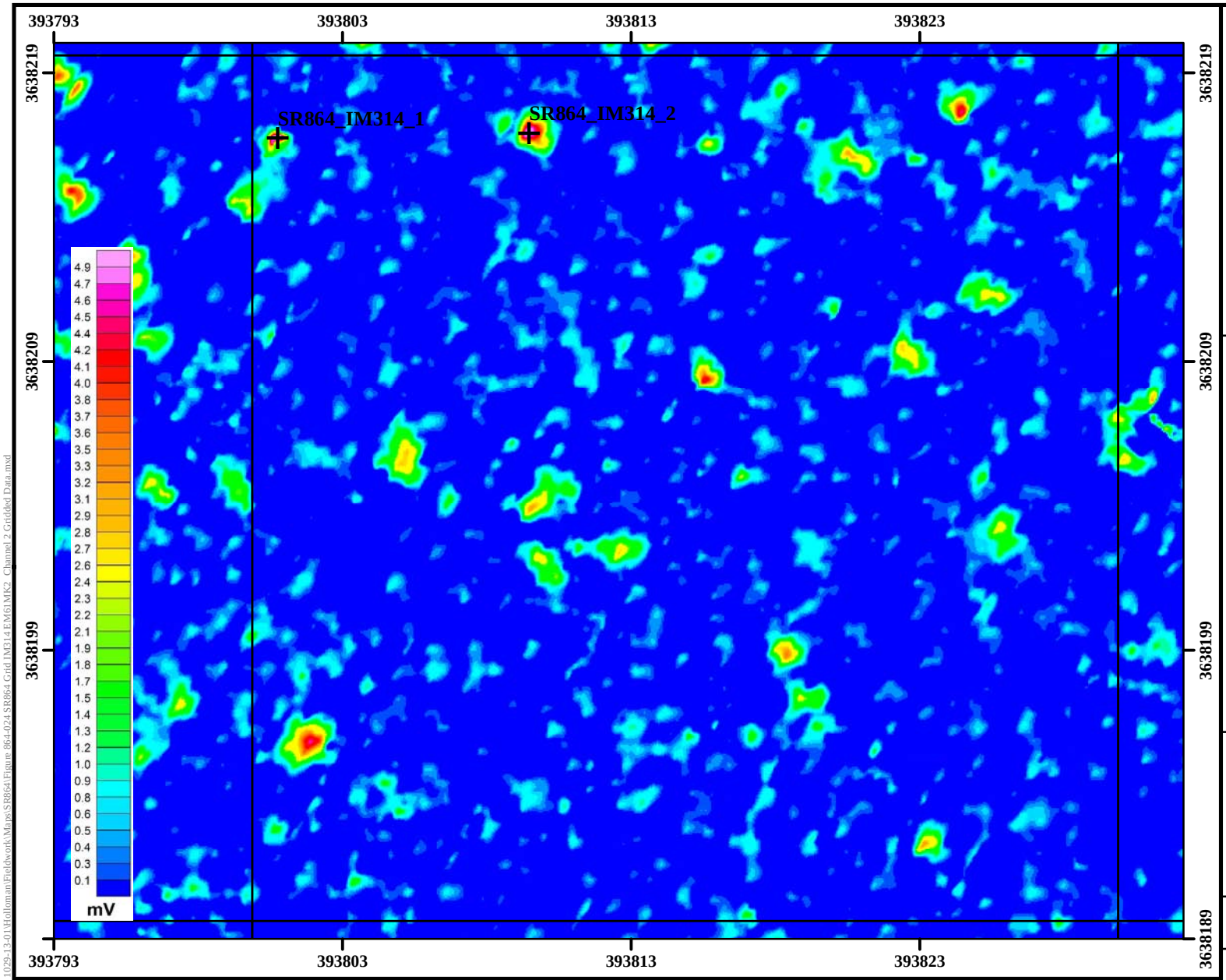
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-023 SR864 Grid IM313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-24

EM61-MK2 Channel 2 Gridded Data Grid IM314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

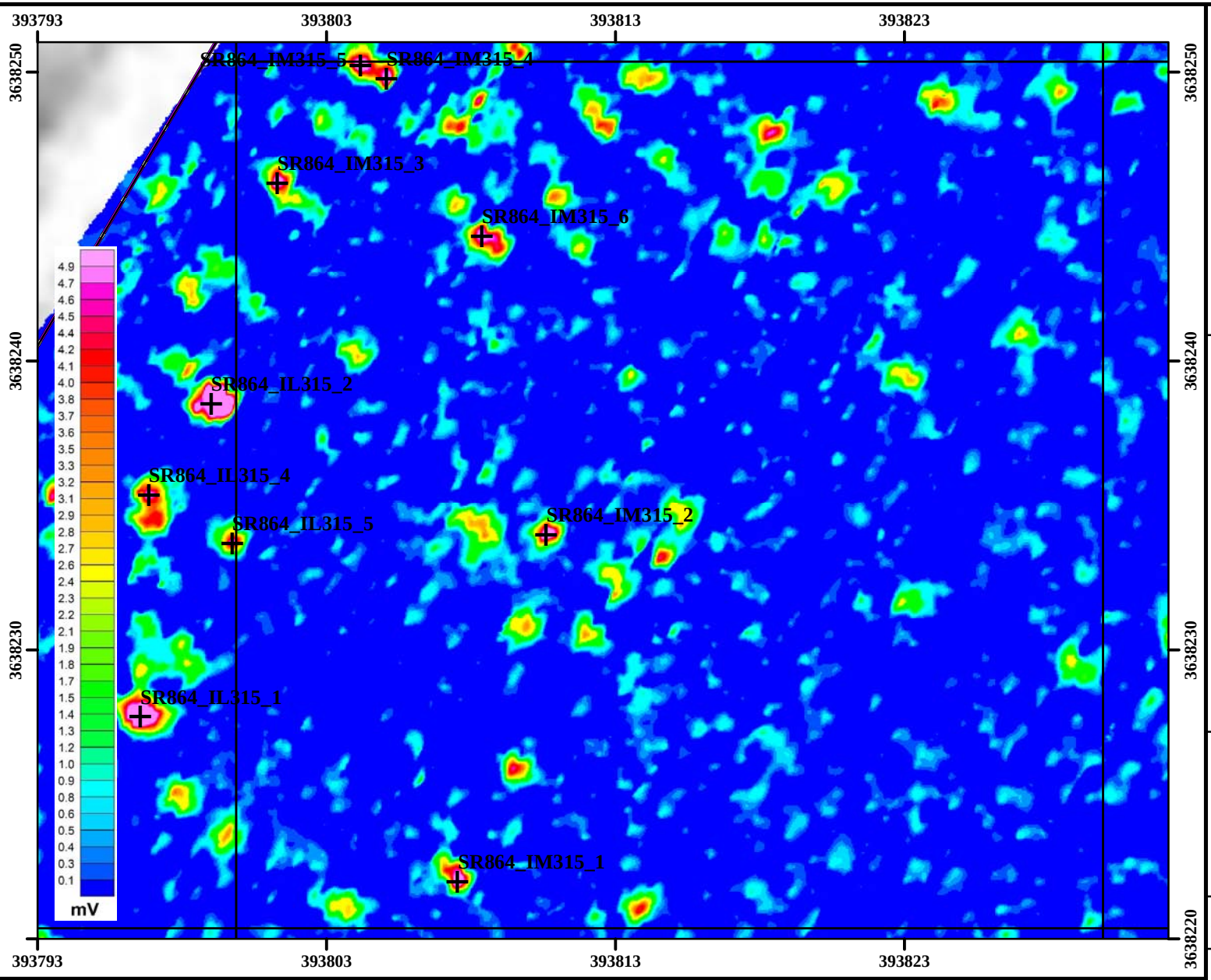
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-024 SR864 Grid IM314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-25

EM61-MK2 Channel 2 Gridded Data Grid IM315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

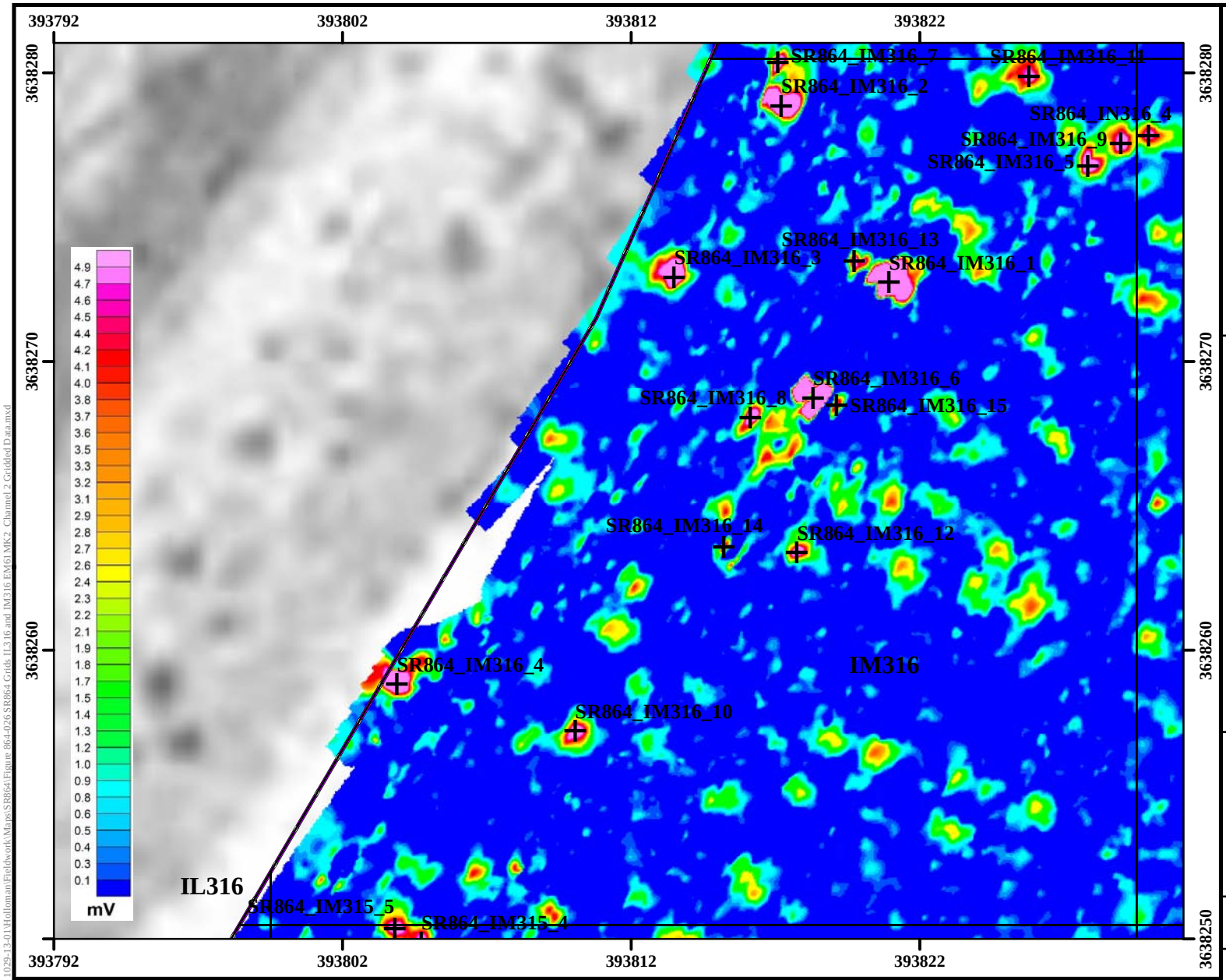
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-025 SR864 Grid IM315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-26

EM61-MK2 Channel 2 Gridded Data Grids IL316, IM316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

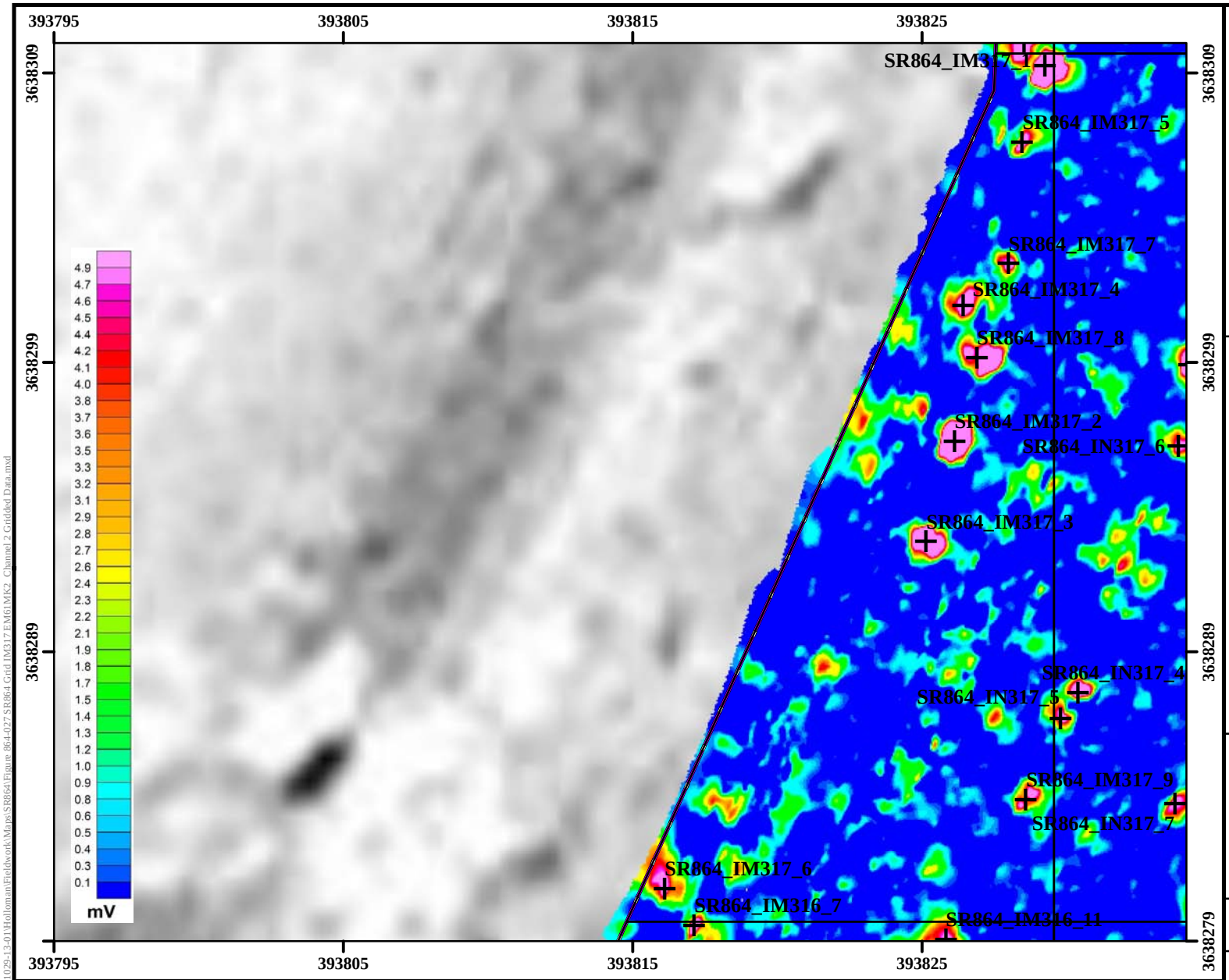
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-026 SR864 Grids IL316 and IM316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-27

EM61-MK2 Channel 2 Gridded Data Grid IM317 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

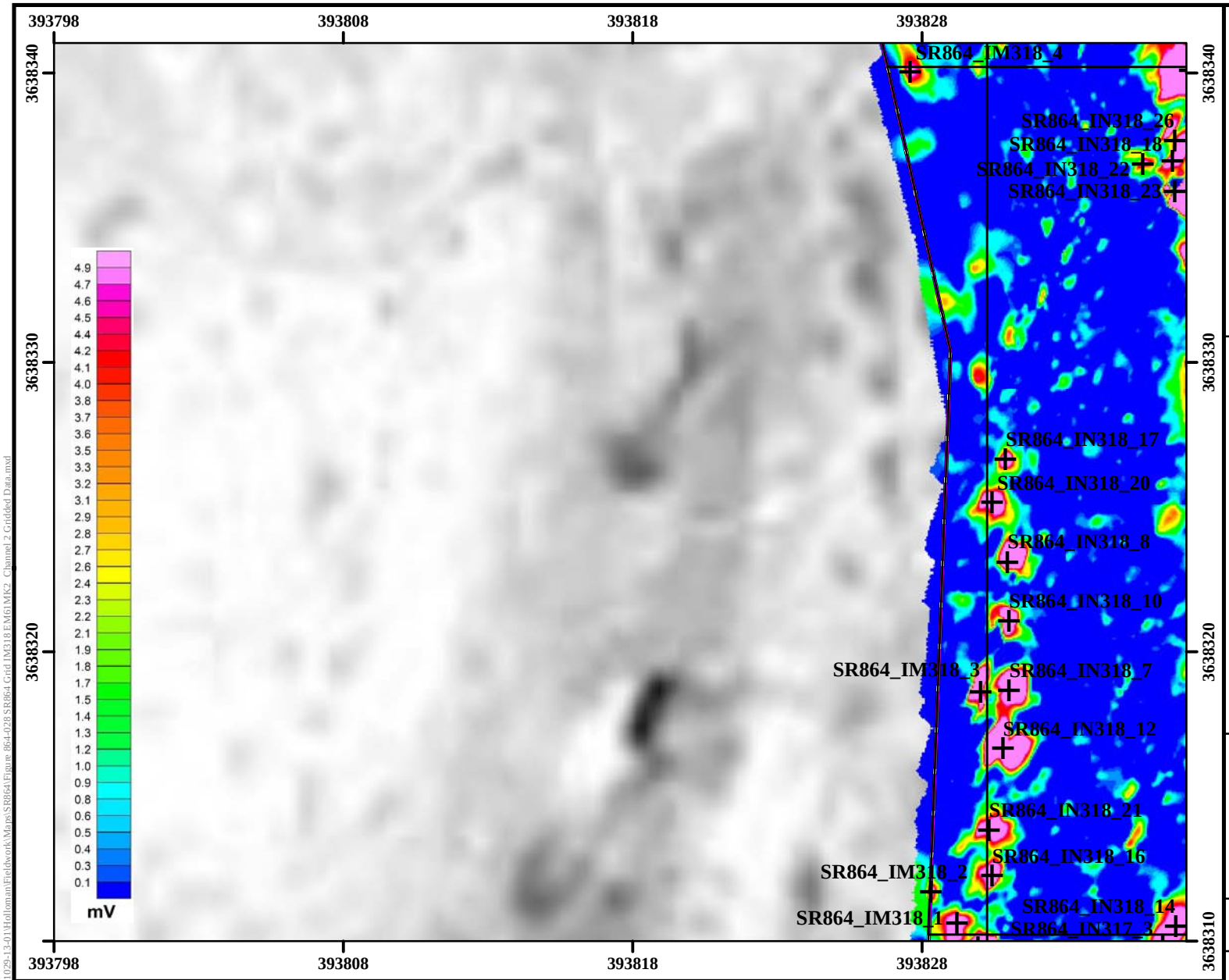
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-027 SR864 Grid IM317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-28

EM61-MK2 Channel 2 Gridded Data Grid IM318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

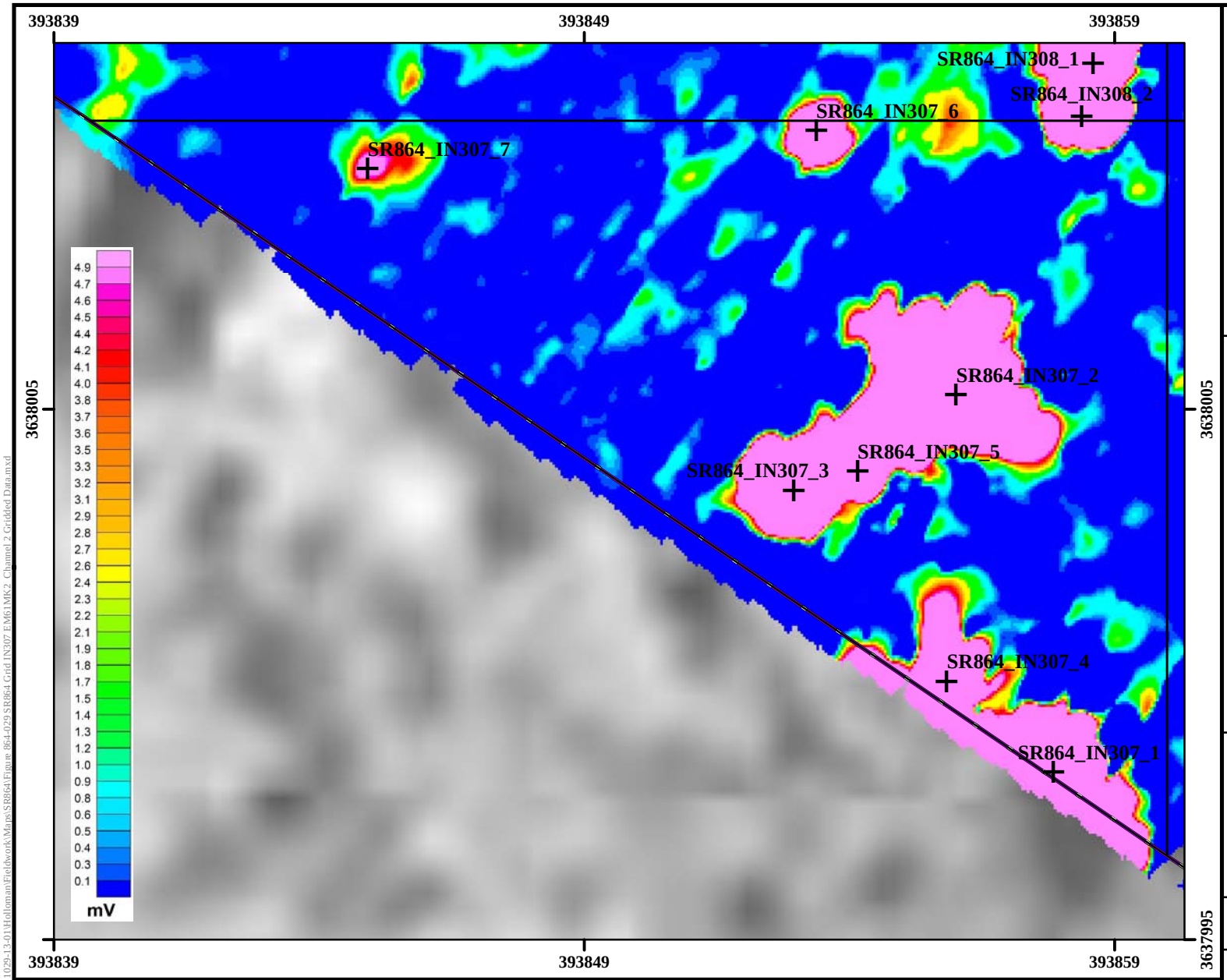
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-028 SR864 Grid IM318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-29

EM61-MK2 Channel 2 Gridded Data Grid IN307 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

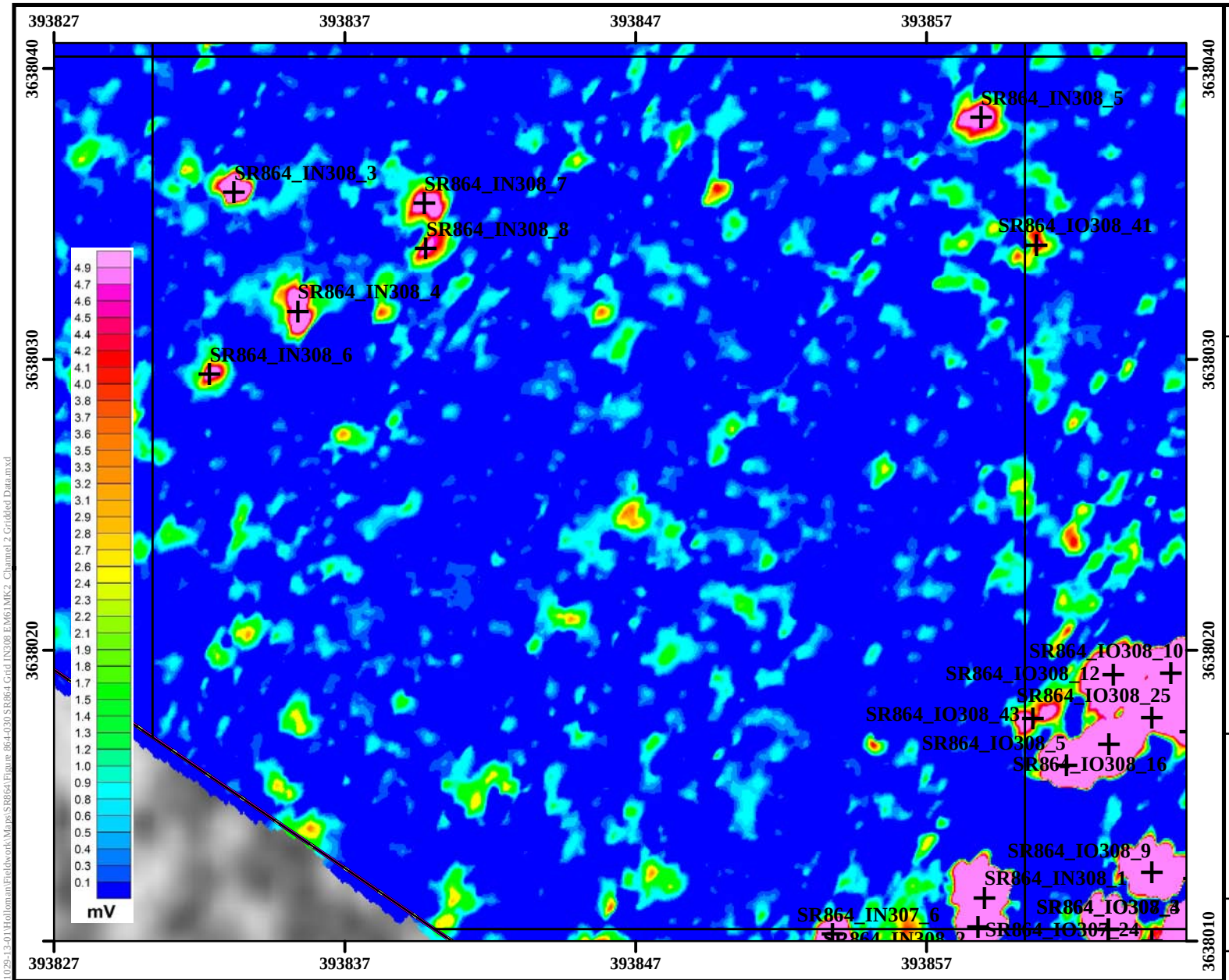
1 inch = 9 feet

0 2 4 Meters

0 7 14 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-029 SR864 Grid IN307 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-30

EM61-MK2 Channel 2 Gridded Data Grid IN308 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

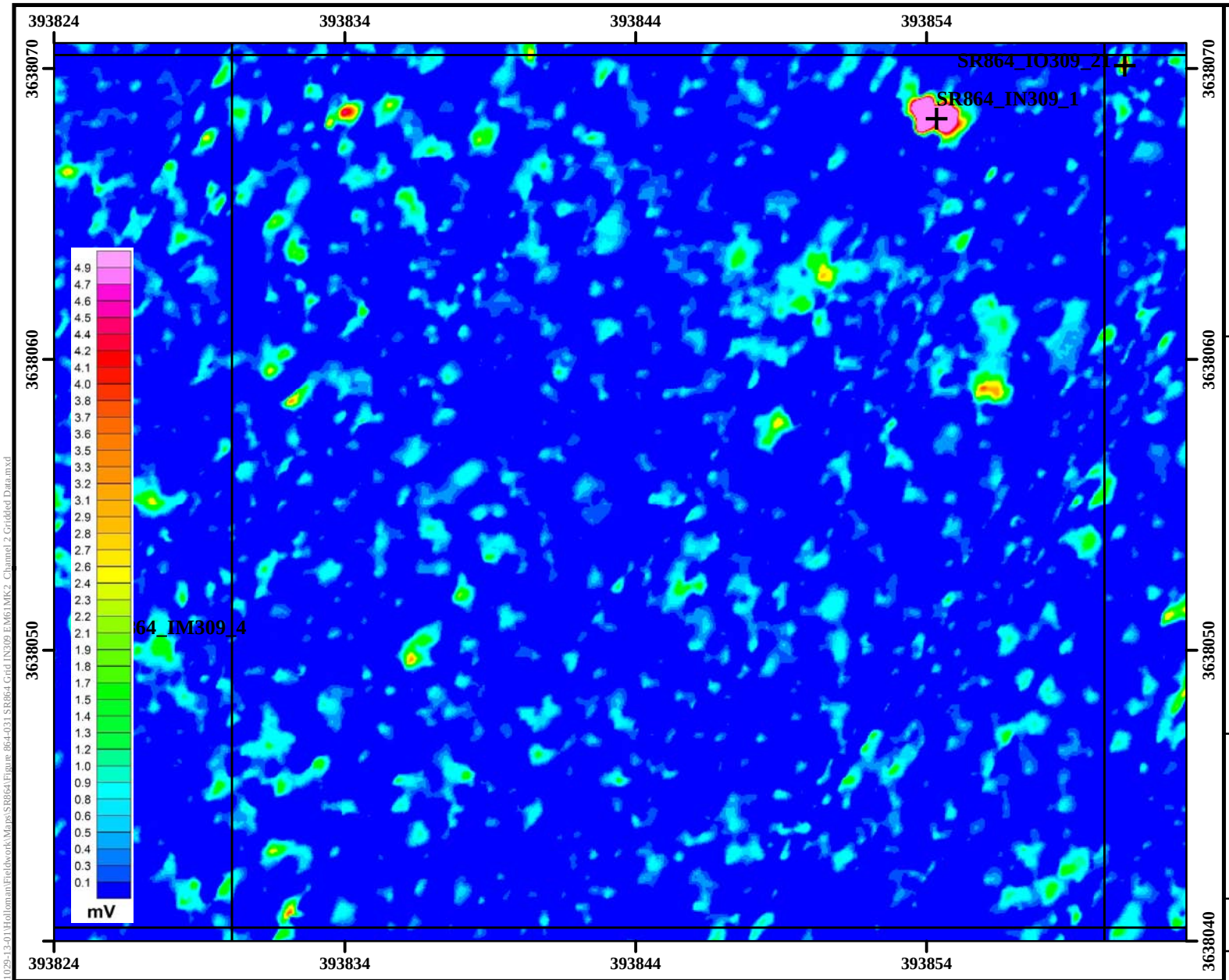
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\CH2MHILL\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-030 SR864 Grid IN308 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-31

EM61-MK2 Channel 2 Gridded Data Grid IN309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

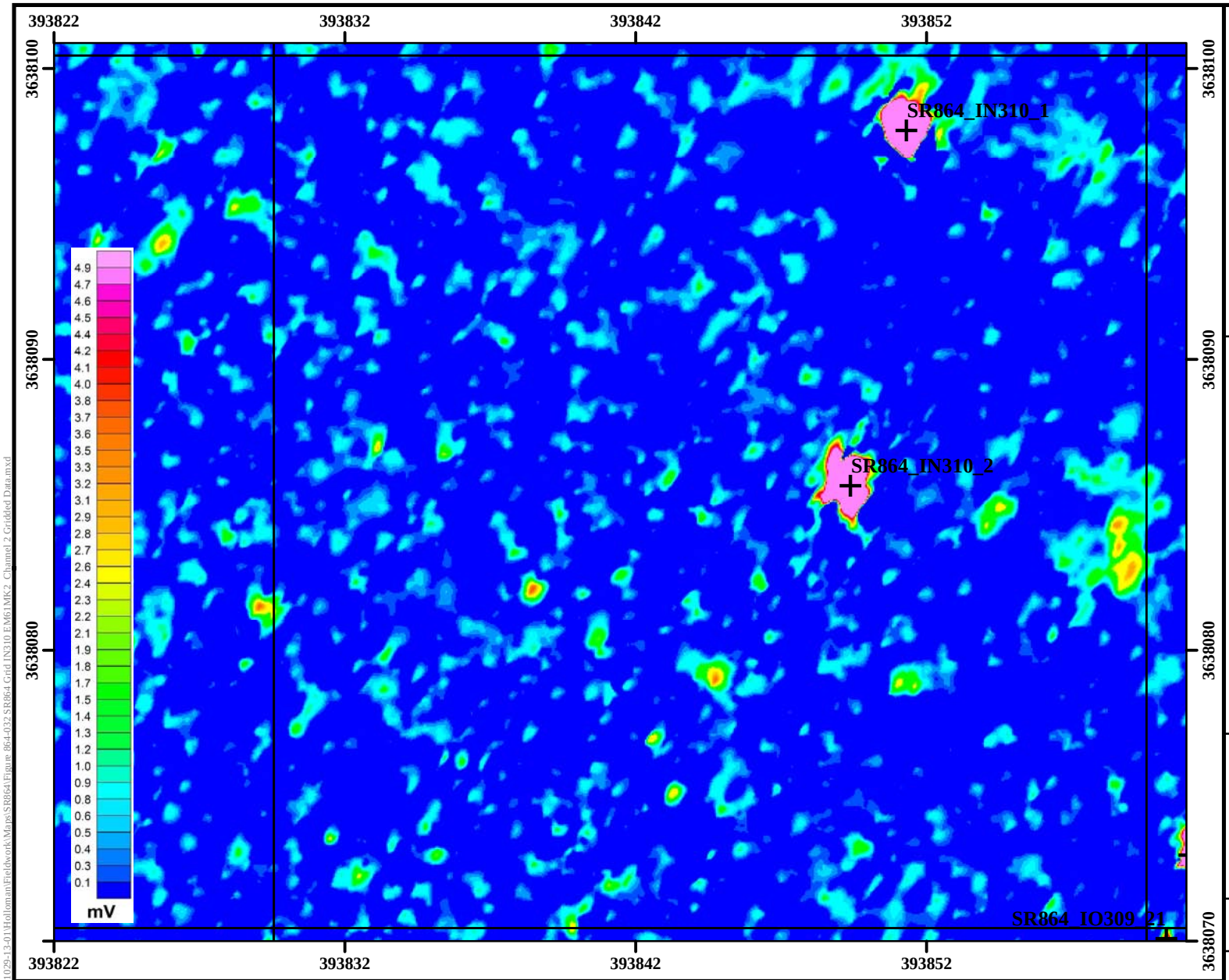
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-031 SR864 Grid IN309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-32

EM61-MK2 Channel 2 Gridded Data Grid IN310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

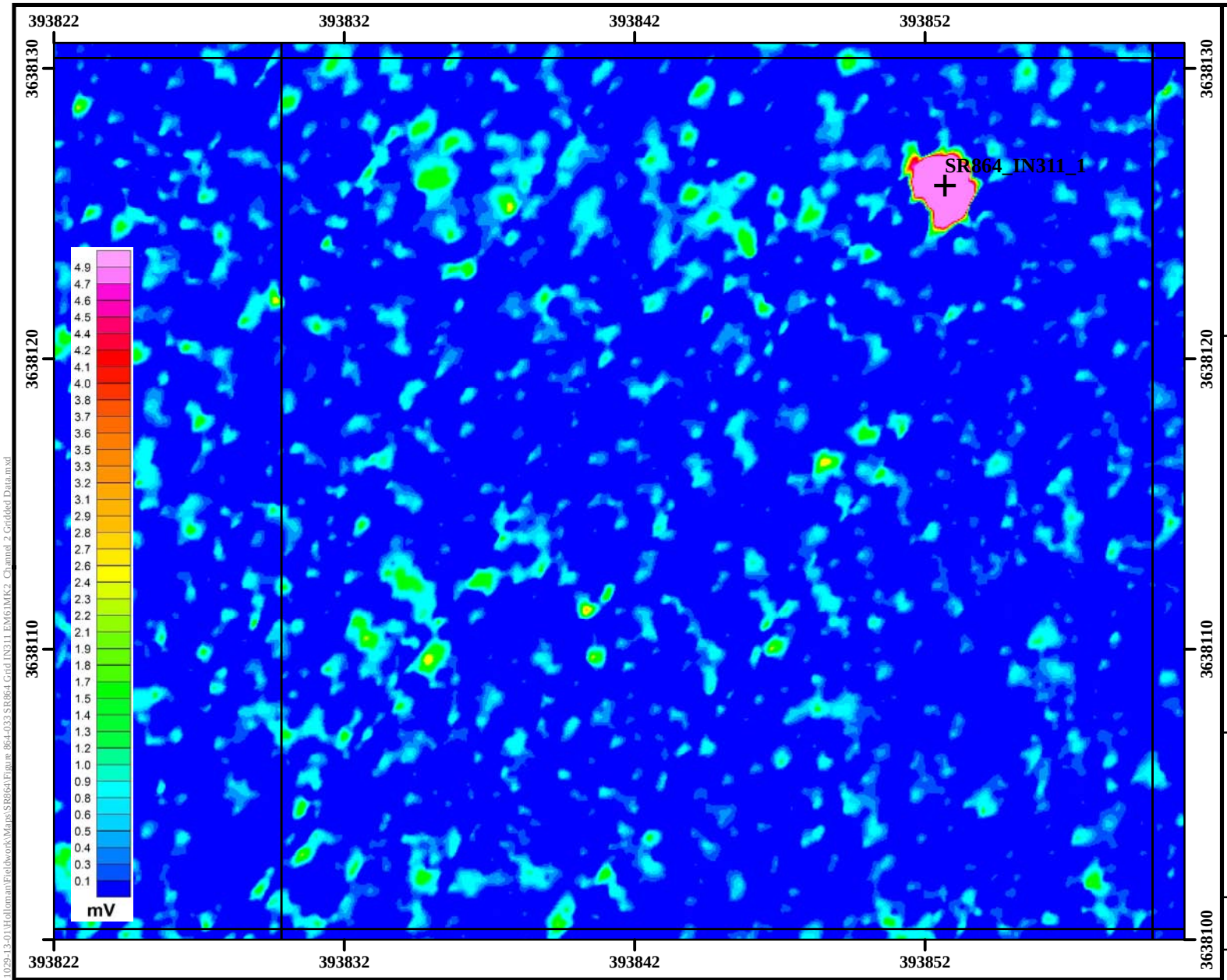
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-032 SR864 Grid IN310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-33

EM61-MK2 Channel 2 Gridded Data Grid IN311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

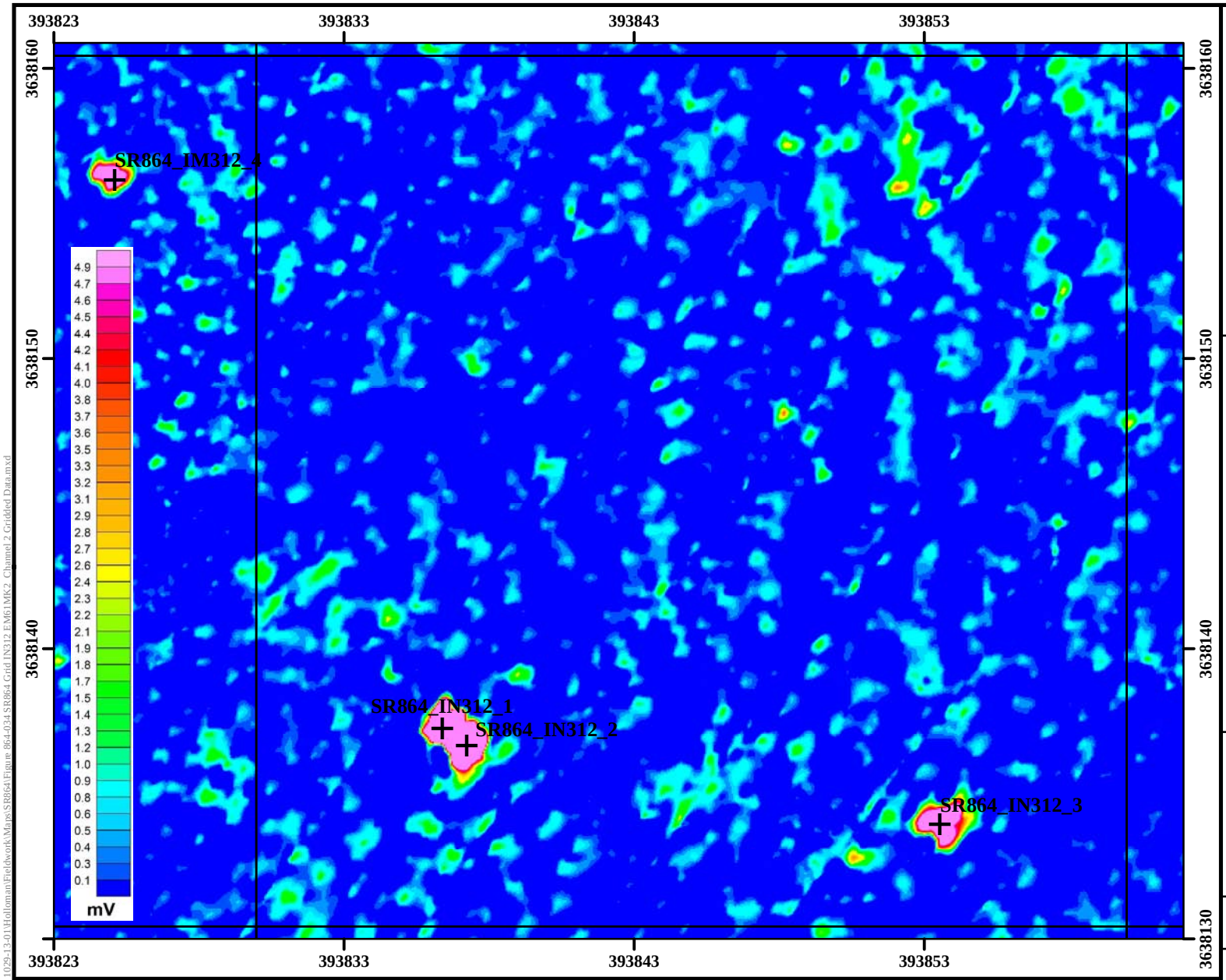
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-033 SR864 Grid IN311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-34

EM61-MK2 Channel 2 Gridded Data Grid IN312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

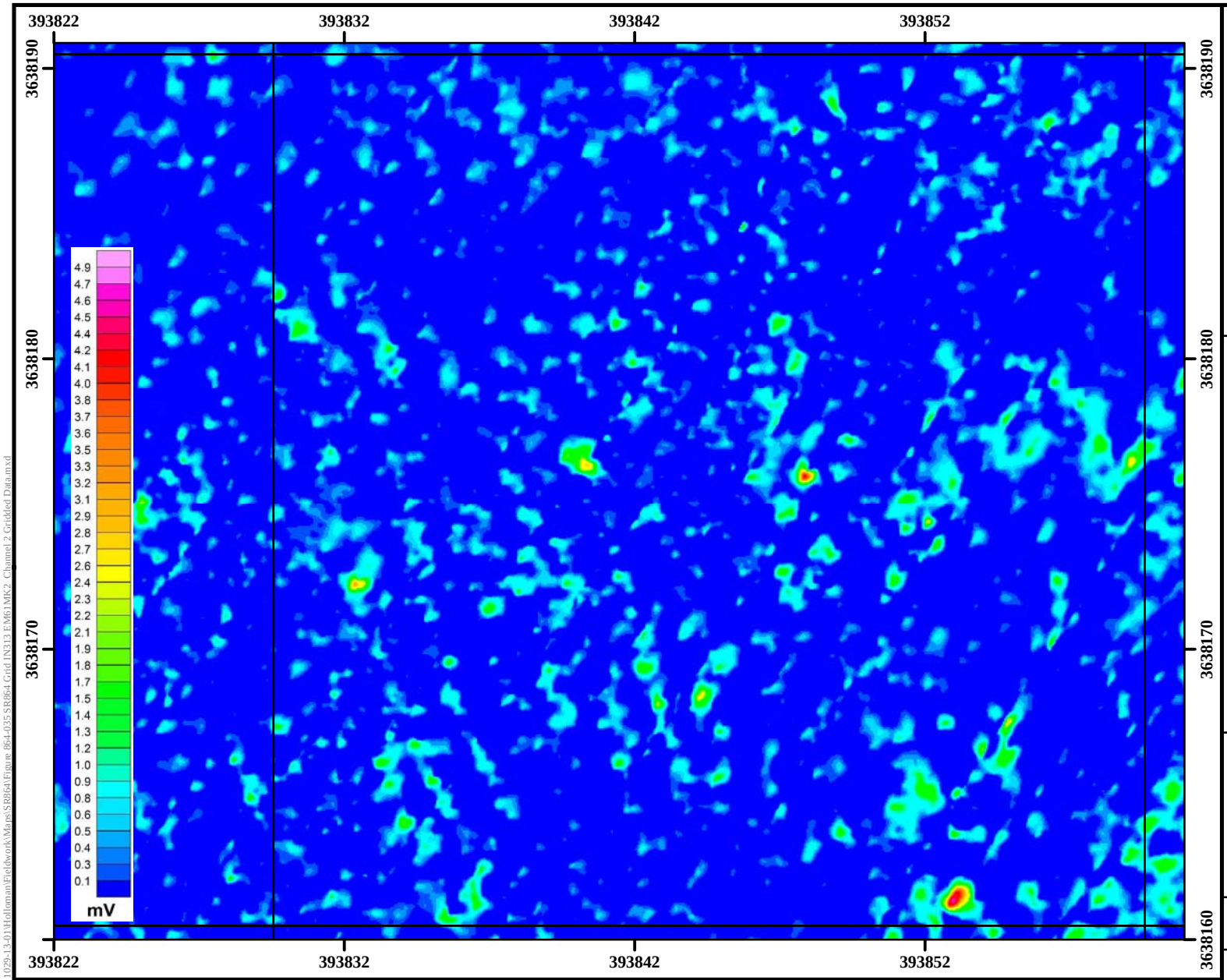
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-034 SR864 Grid IN312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-35

EM61-MK2 Channel 2 Gridded Data Grid IN313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

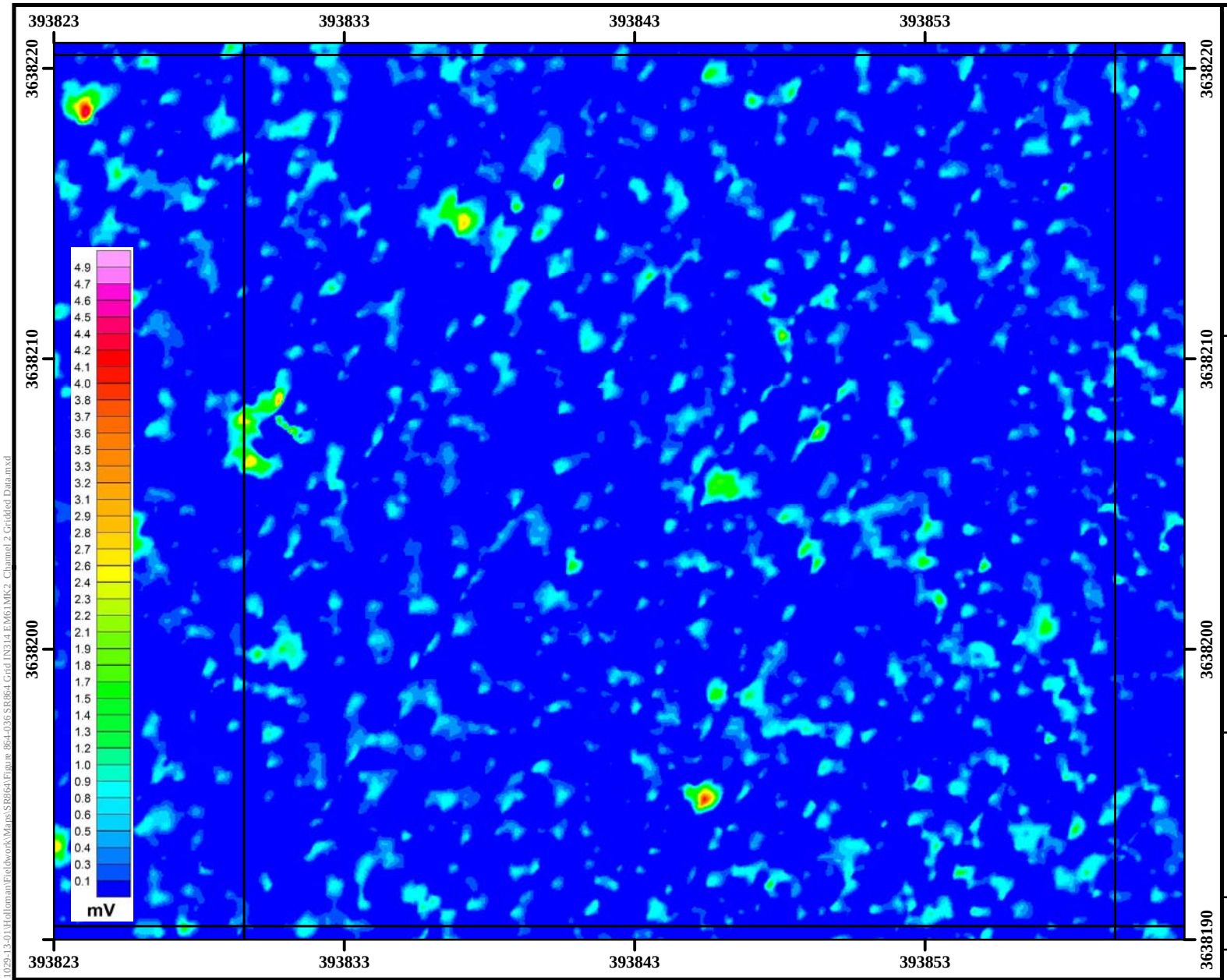
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-035 SR864 Grid IN313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-36

EM61-MK2 Channel 2 Gridded Data Grid IN314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

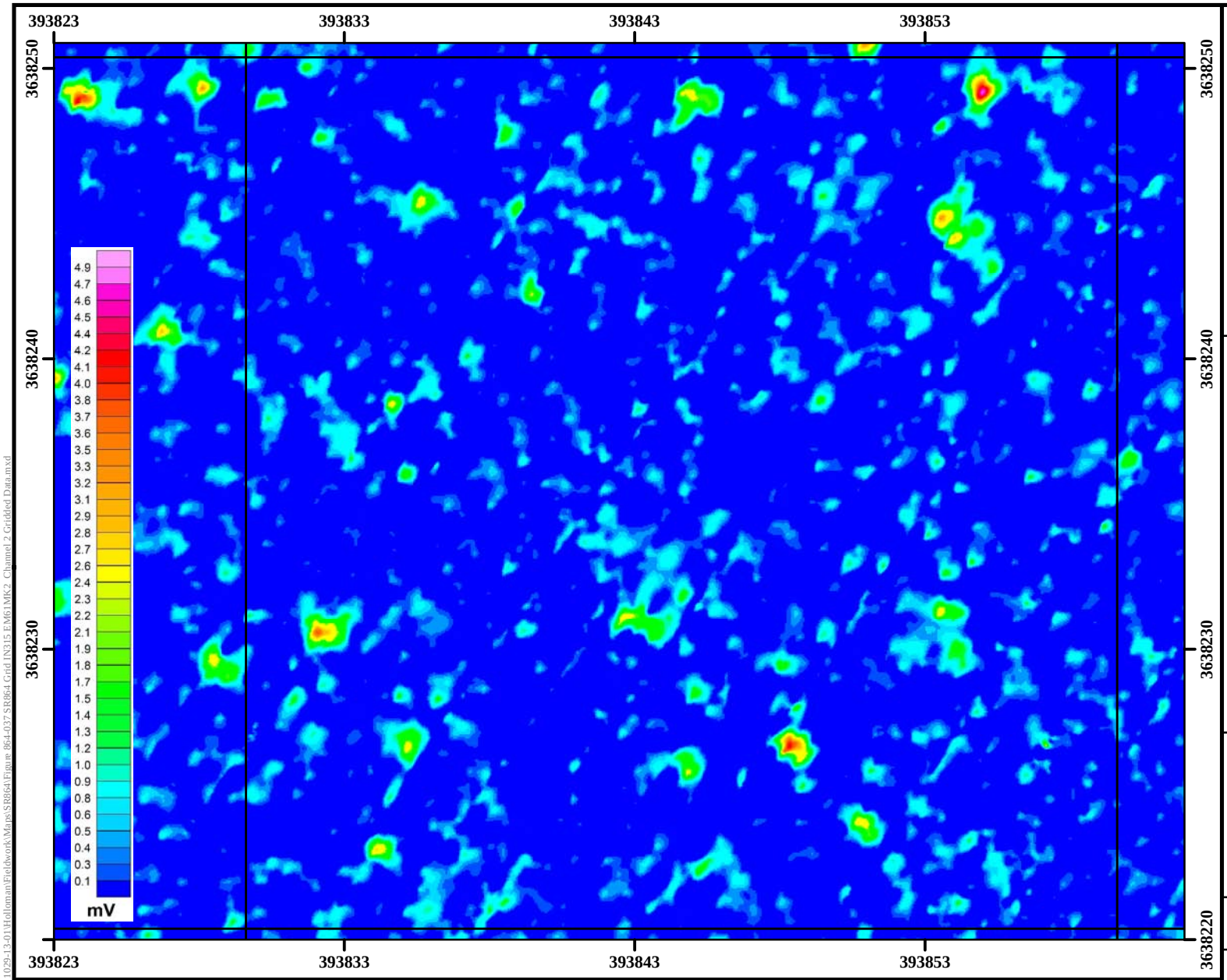
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-036 SR864 Grid IN314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-37

EM61-MK2 Channel 2 Gridded Data Grid IN315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

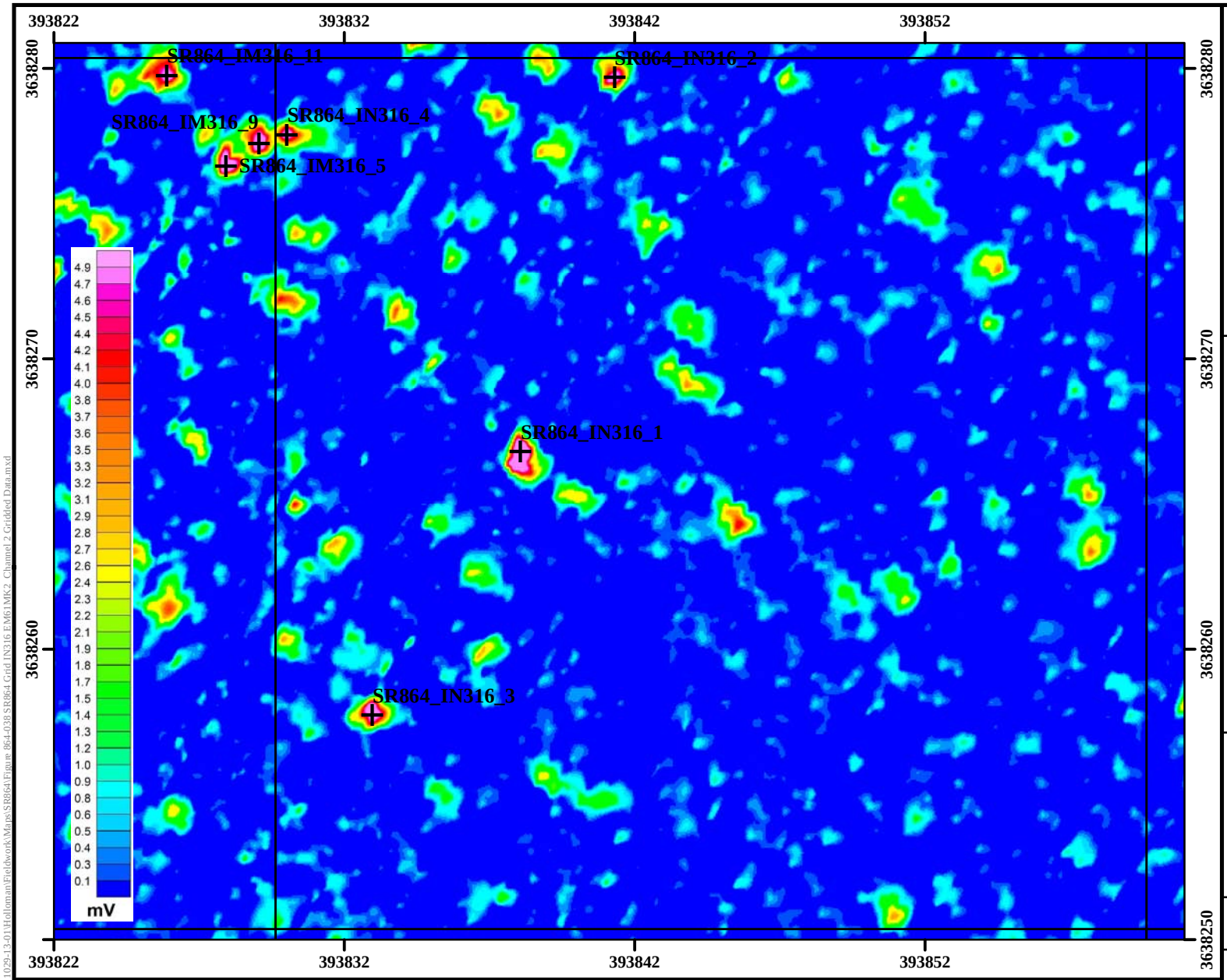
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-037 SR864 Grid IN315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-38

EM61-MK2 Channel 2 Gridded Data Grid IN316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

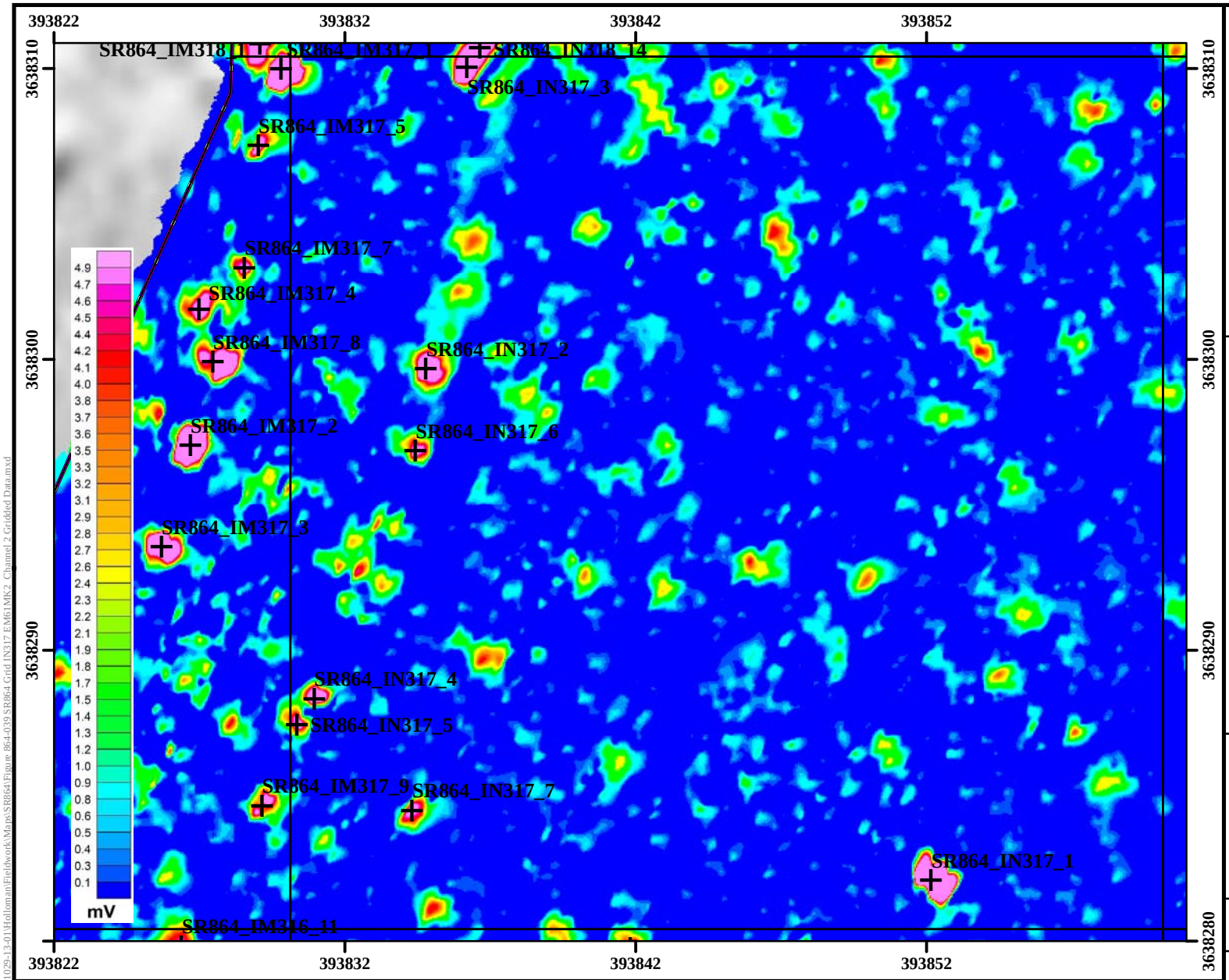
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-038 SR864 Grid IN316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-39

EM61-MK2 Channel 2 Gridded Data Grid IN317 SR864

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 17 feet

0 3 6 Meters

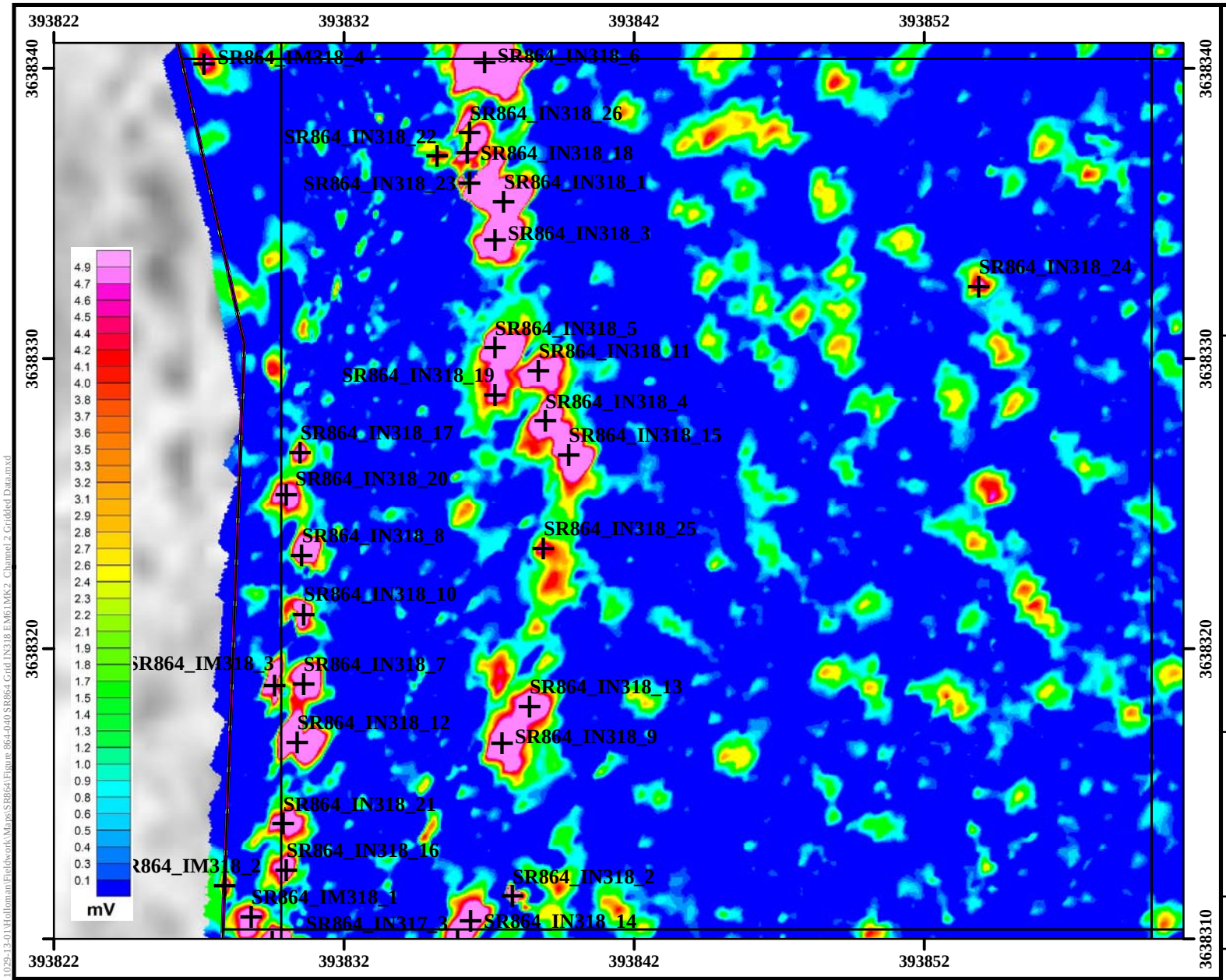
0 10 20 Feet

N W E S

FPM Remediations, Inc.

2015

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-039 SR864 Grid IN317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-40

EM61-MK2 Channel 2 Gridded Data Grid IN318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

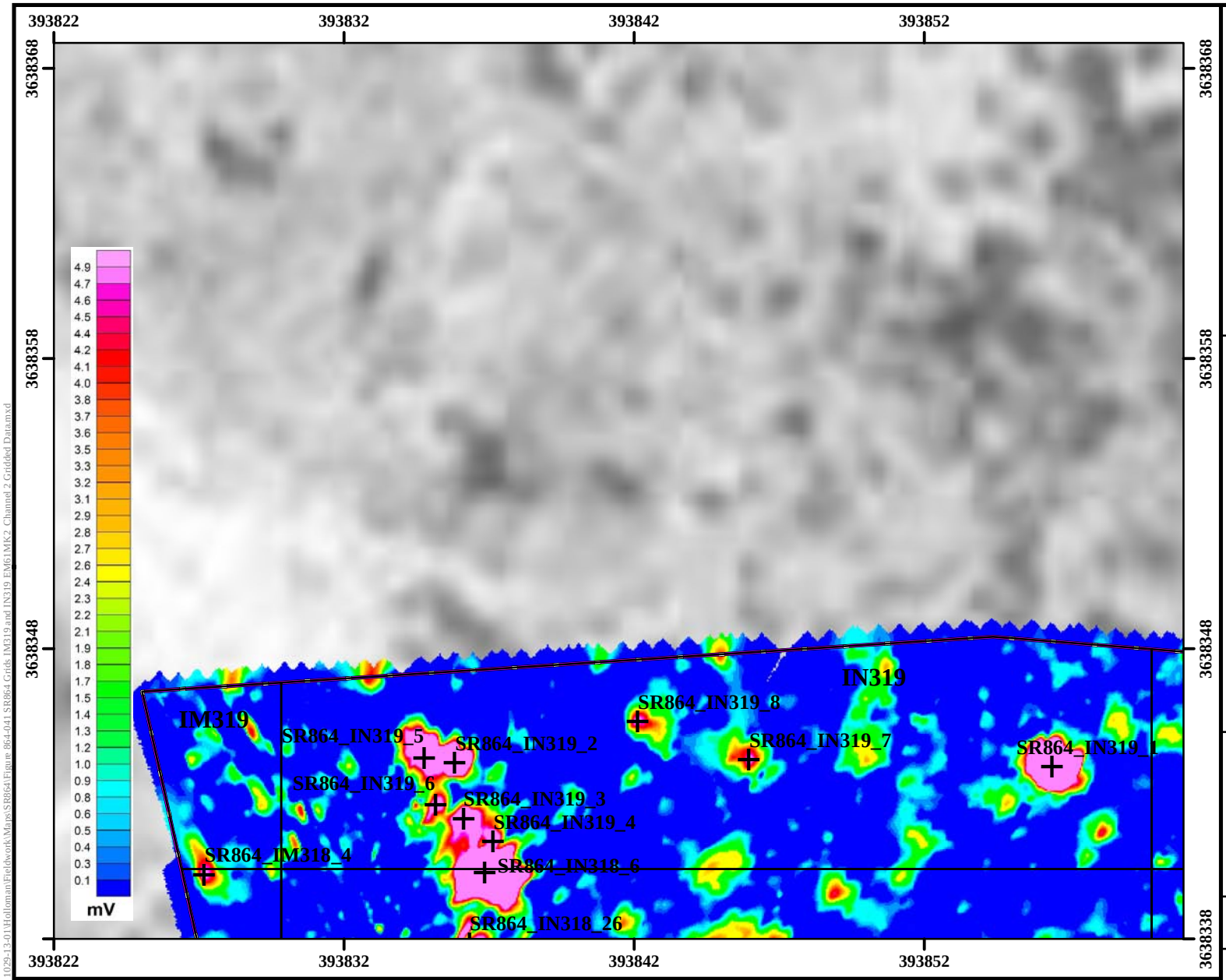
1 inch = 17 feet

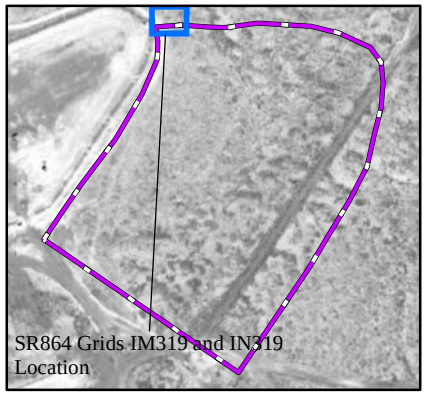
0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-040 SR864 Grid IN318 EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-41

EM61-MK2 Channel 2 Gridded Data Grids IM319, IN319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

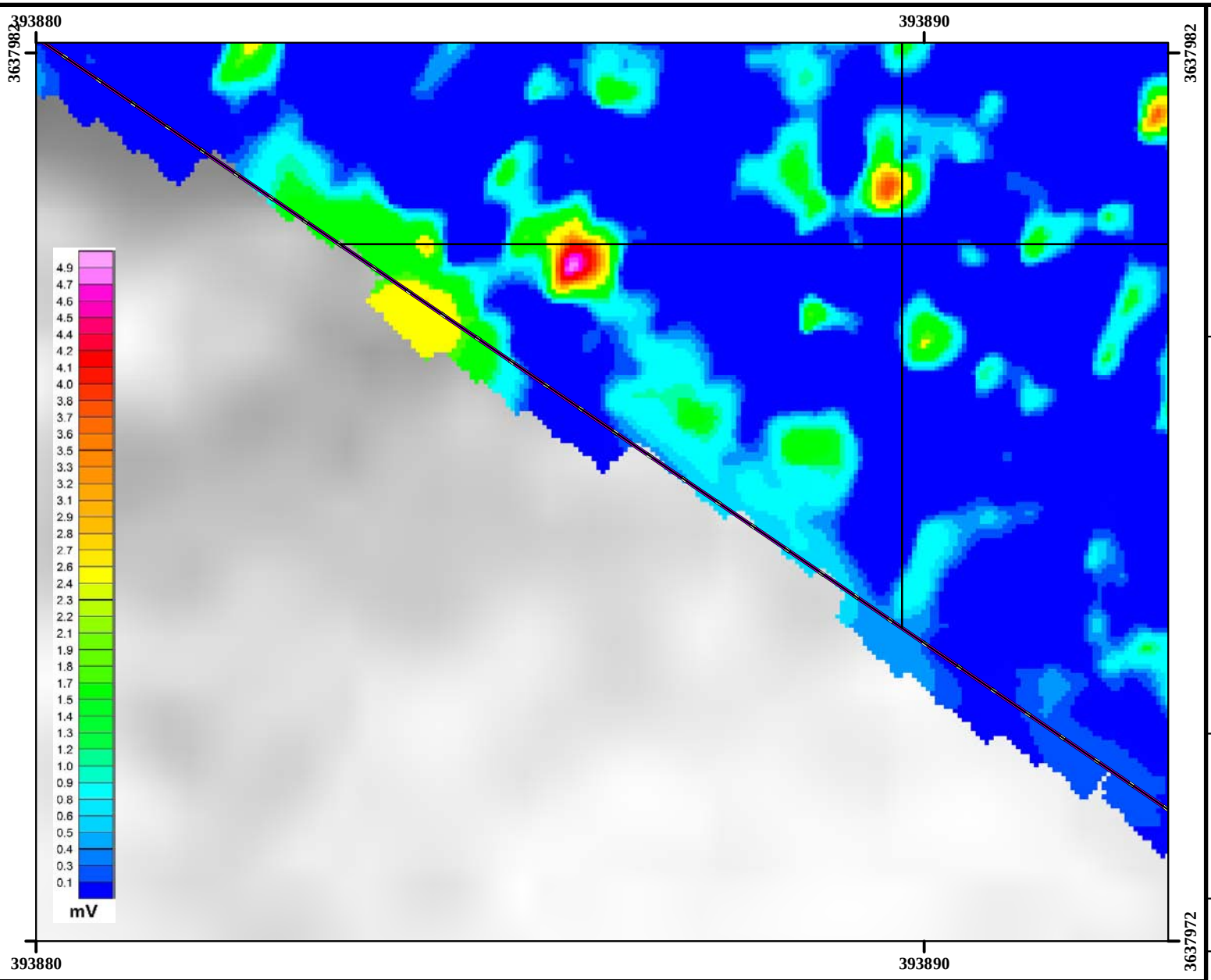
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects\GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-041 SR864 Grids IM319 and IN319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-42

EM61-MK2 Channel 2 Gridded Data Grid IO306 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

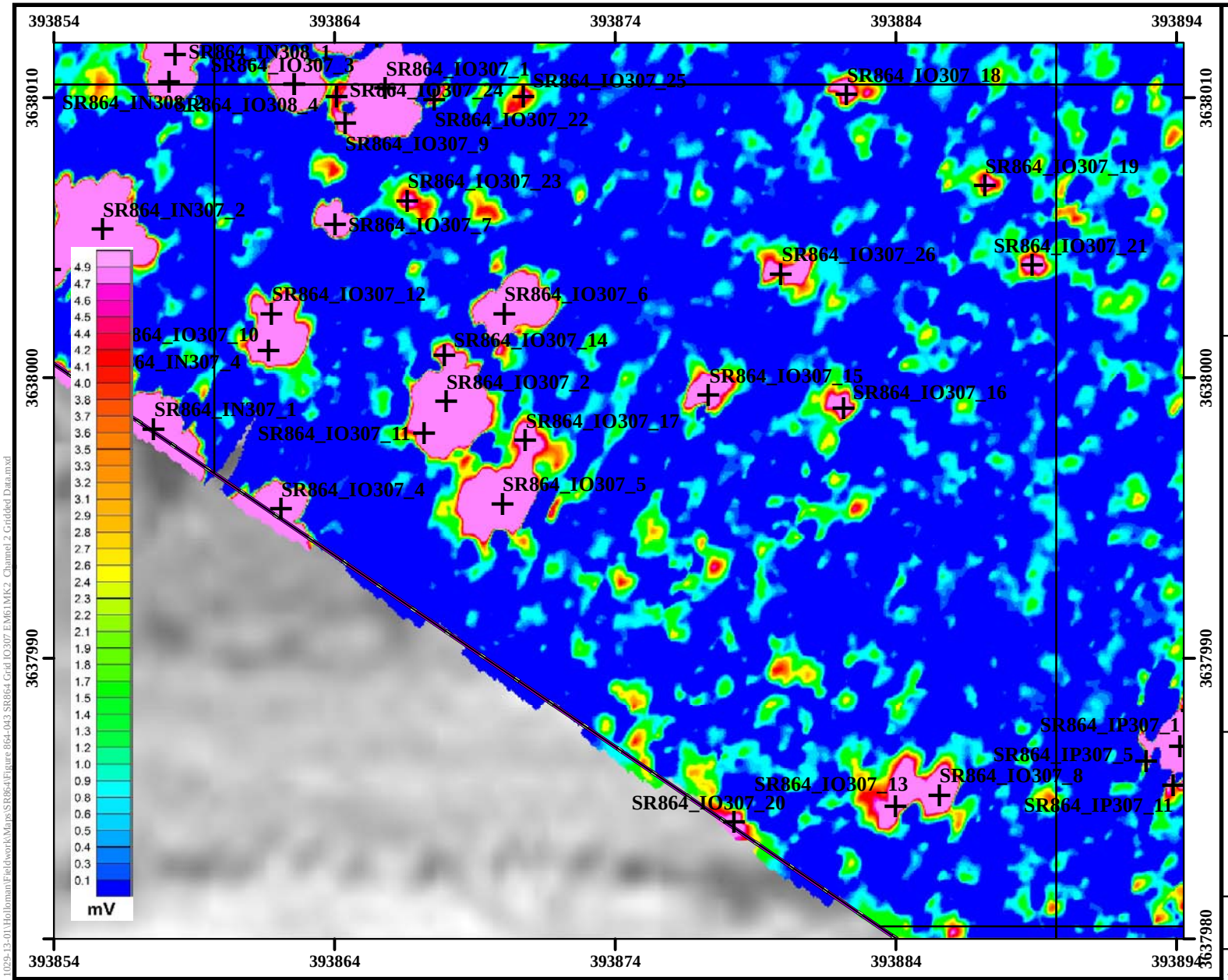
1 inch = 6 feet

0 1 2 Meters

0 3 6 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-042 SR864 Grid IO306 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-43

EM61-MK2 Channel 2 Gridded Data Grid IO307 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

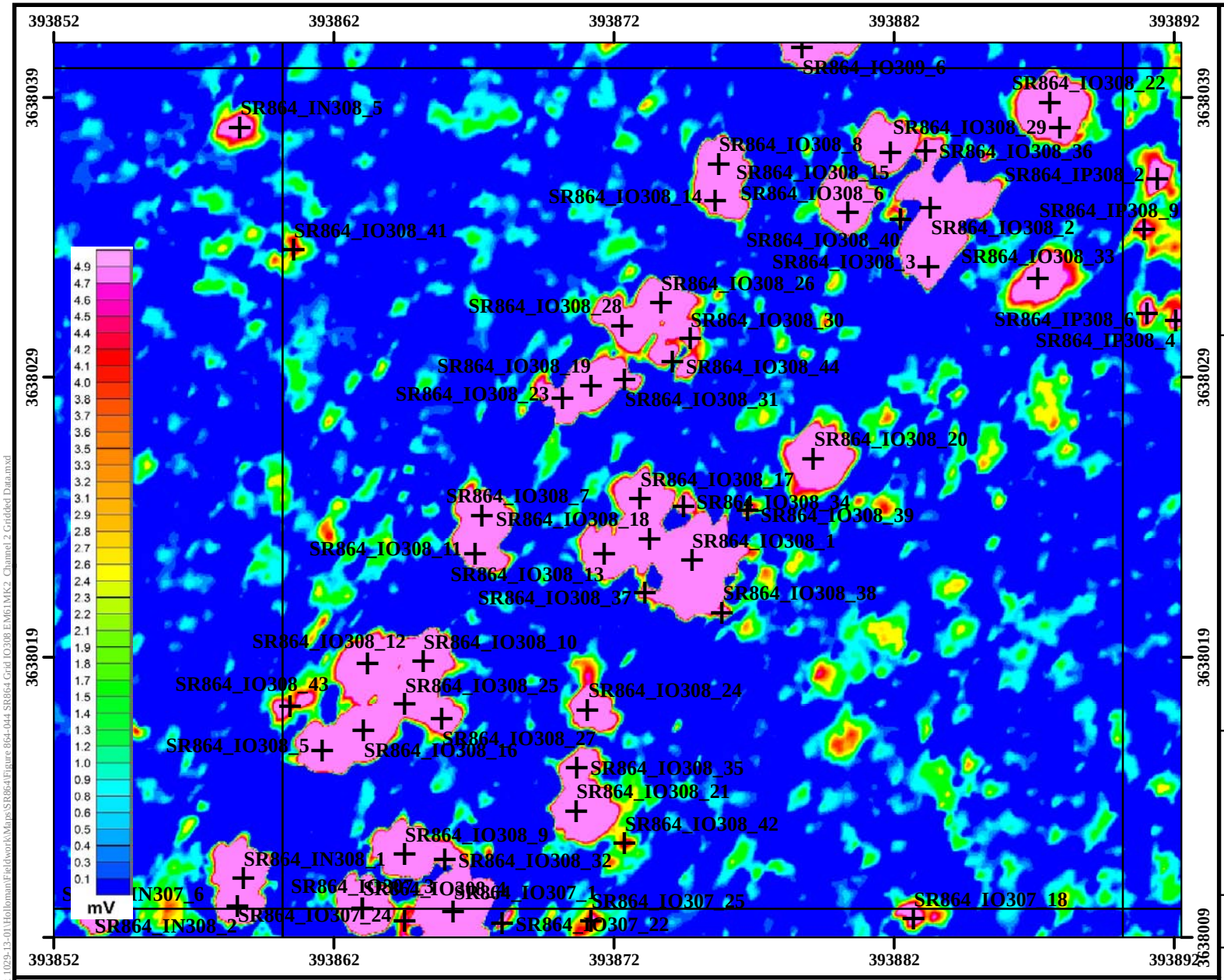
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-043 SR864 Grid IO307 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-44

EM61-MK2 Channel 2 Gridded Data Grid IO308 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

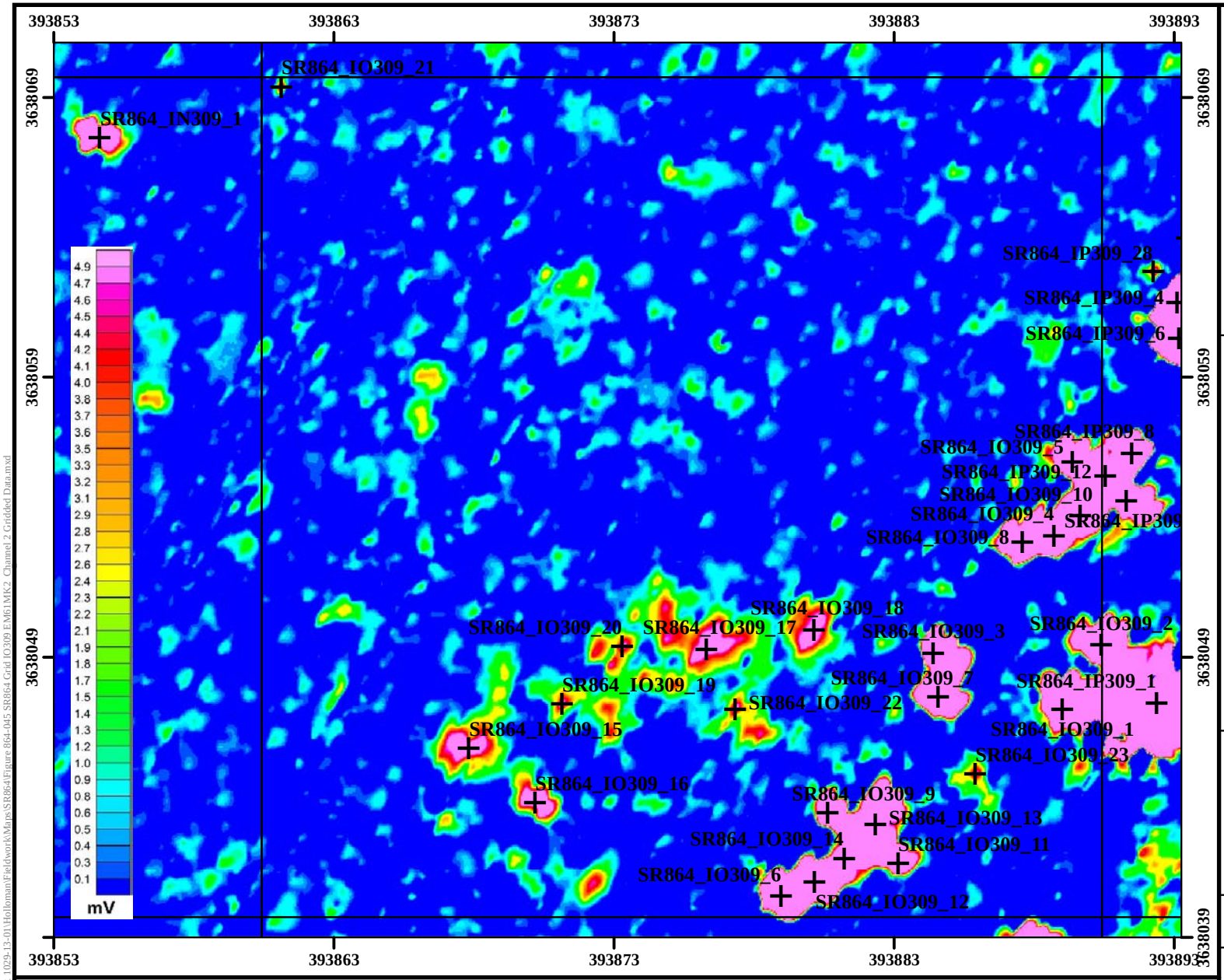
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-044 SR864 Grid IO308 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-45

EM61-MK2 Channel 2 Gridded Data Grid IO309 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

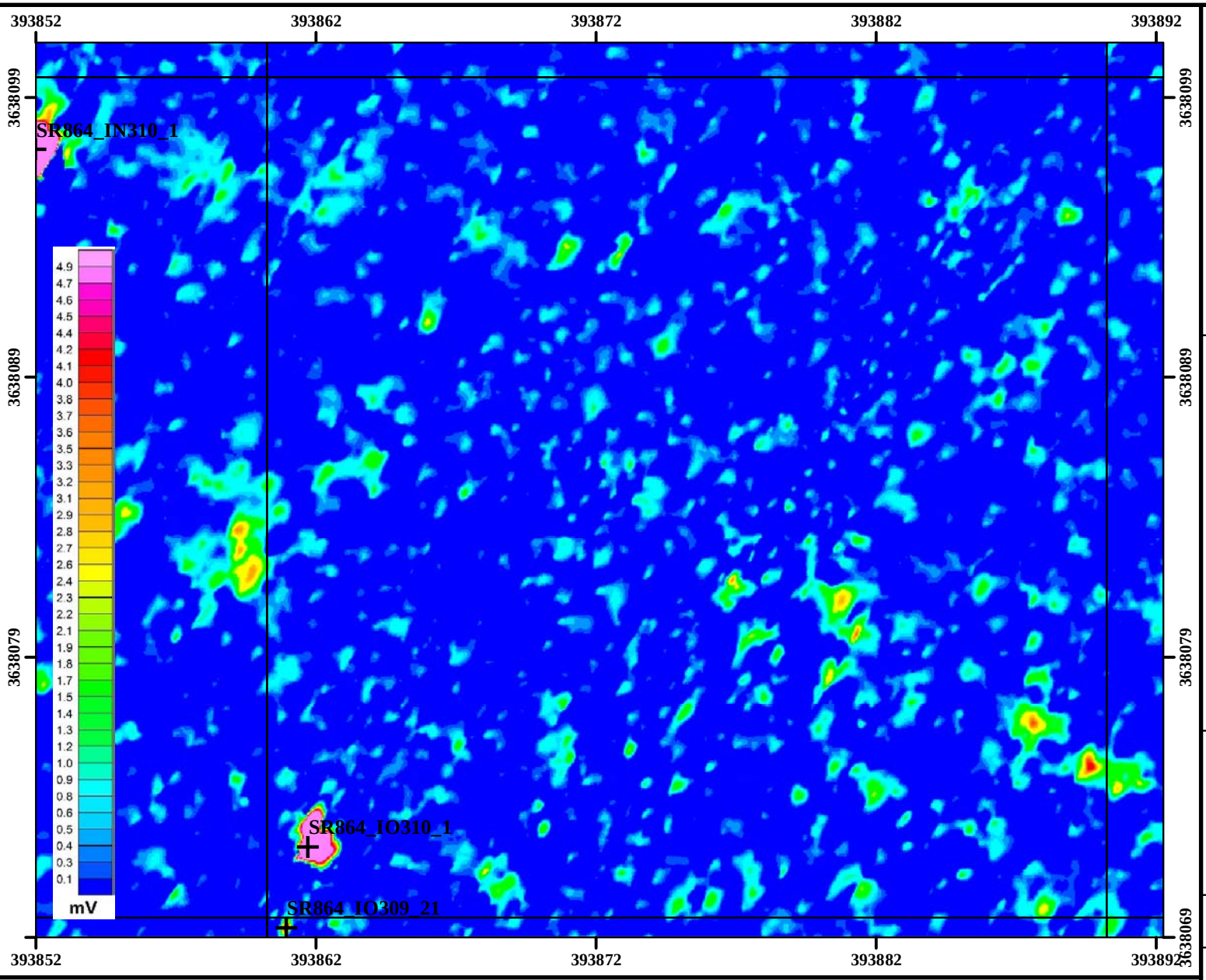
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-045 SR864 Grid IO309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-46

EM61-MK2 Channel 2 Gridded Data Grid IO310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

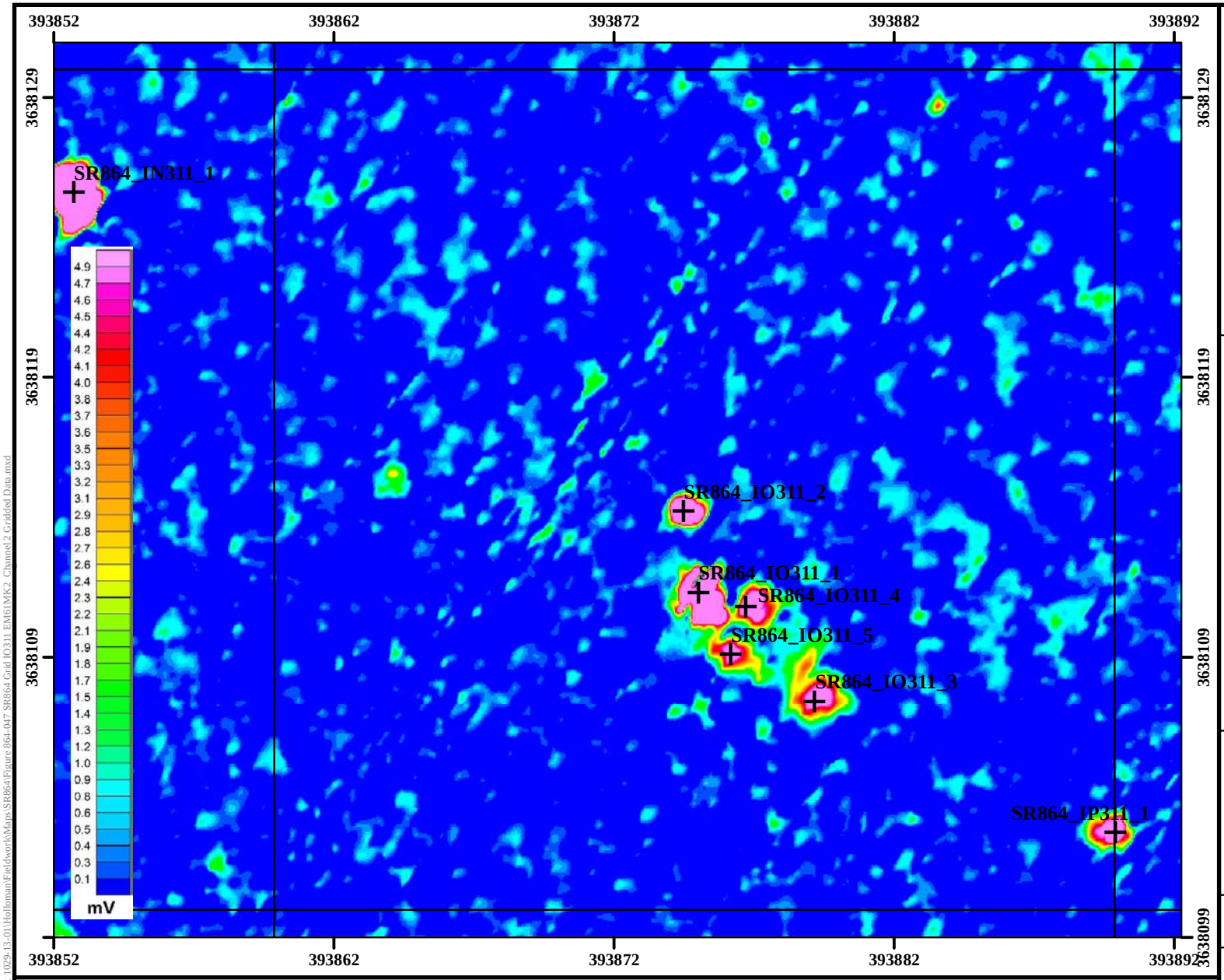
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-046 SR864 Grid IO310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-47

EM61-MK2 Channel 2 Gridded Data Grid IO311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

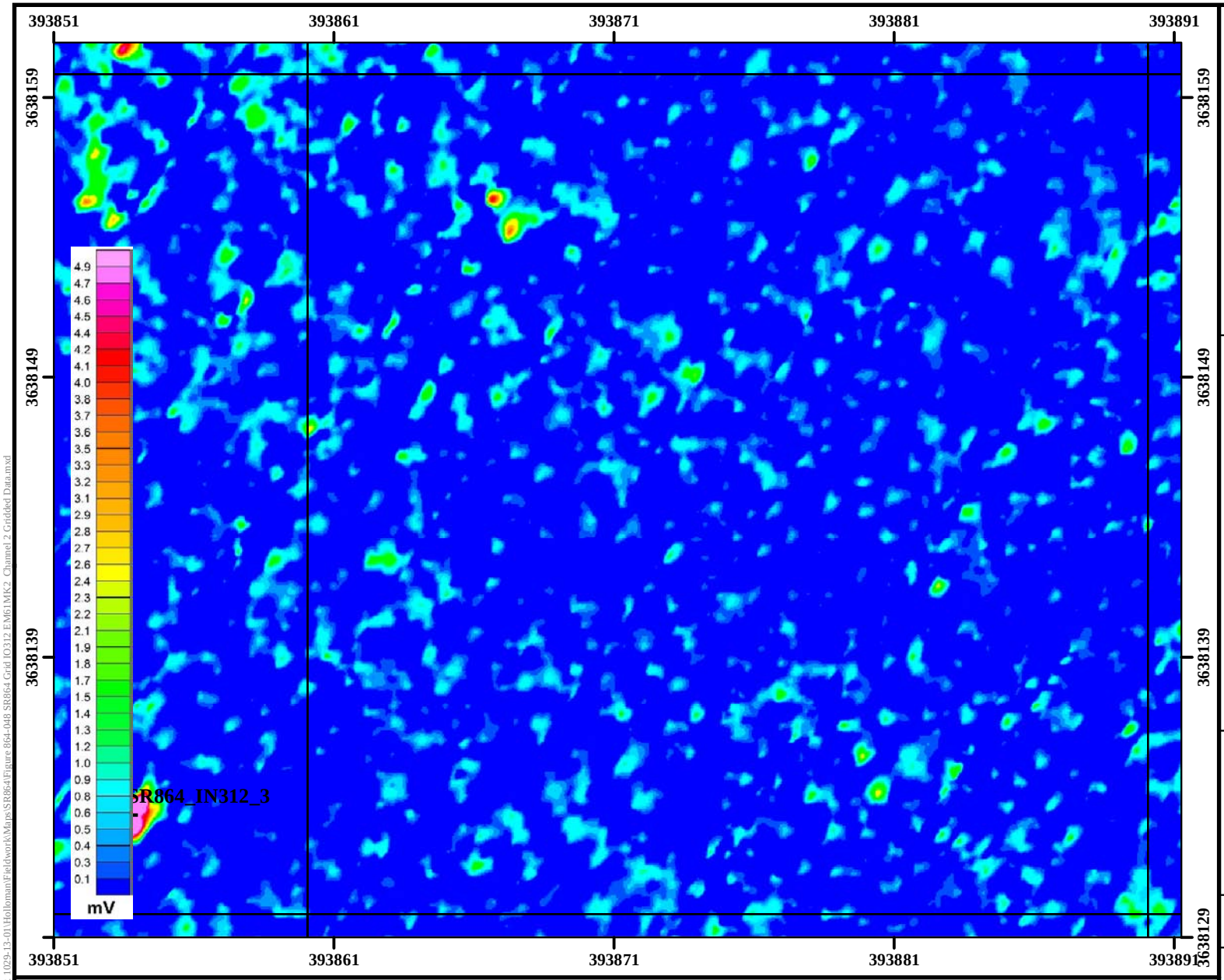
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-047 SR864 Grid IO311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-48

EM61-MK2 Channel 2 Gridded Data Grid IO312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

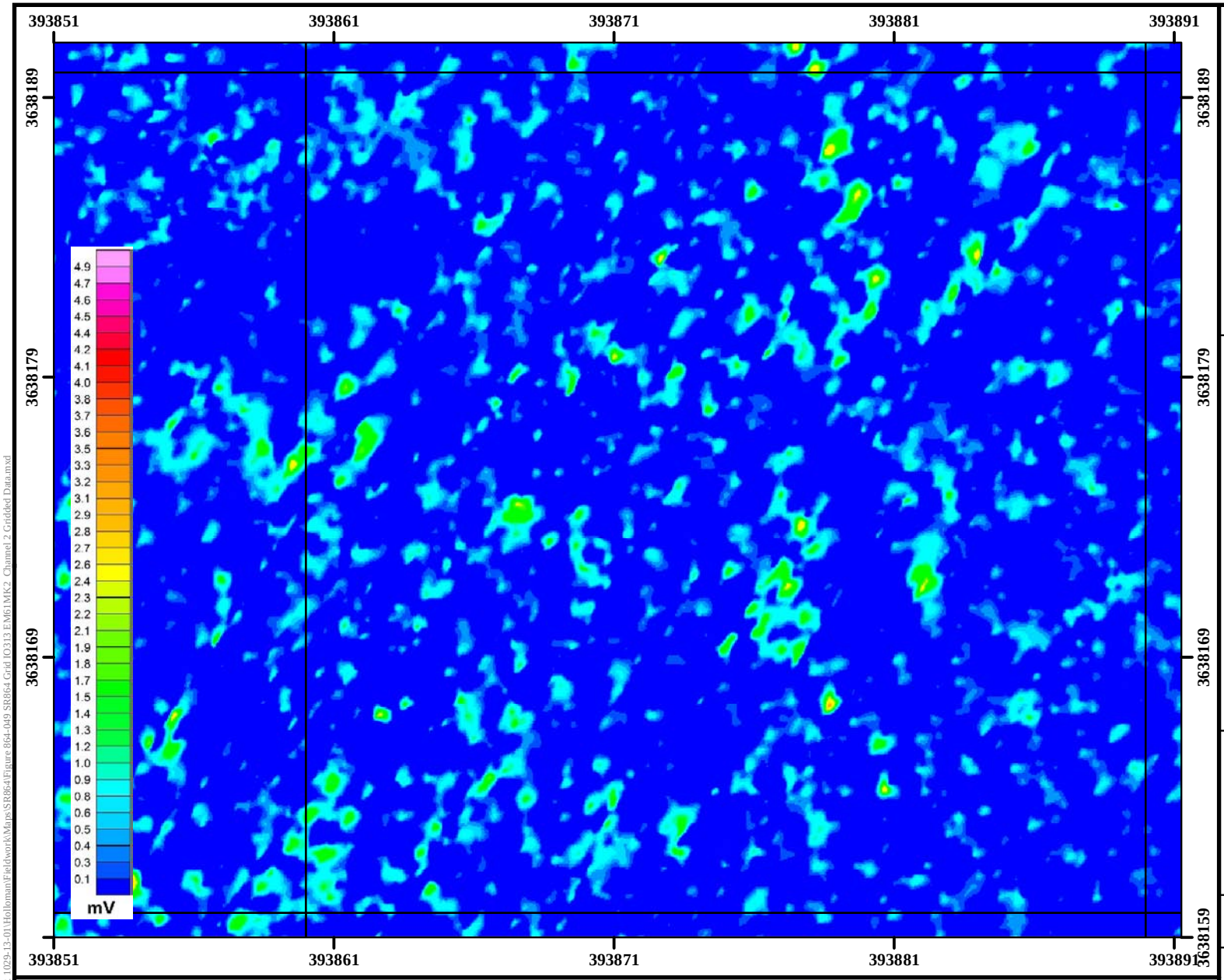
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-048 SR864 Grid IO312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-49

EM61-MK2 Channel 2 Gridded Data Grid IO313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

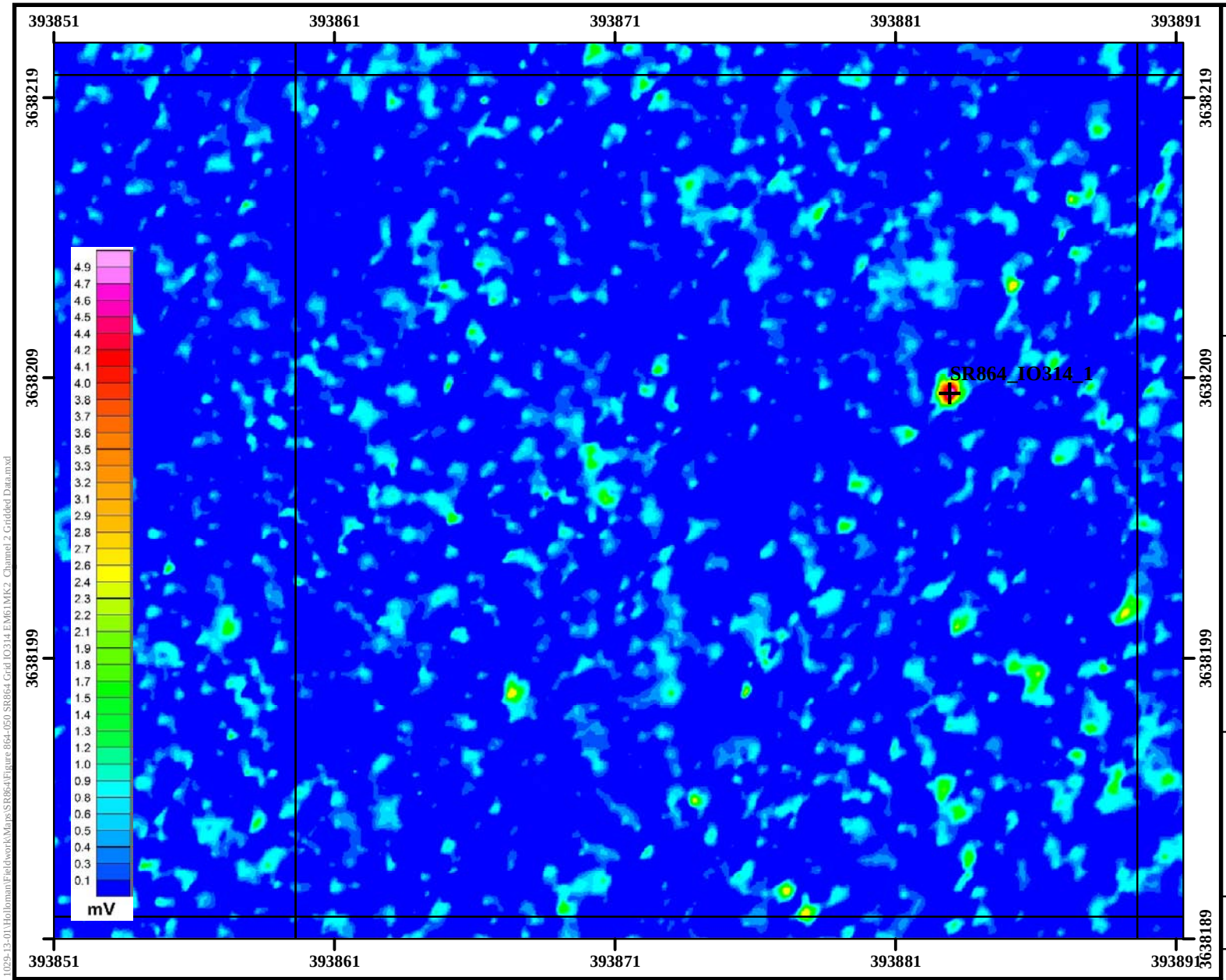
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-049 SR864 Grid IO313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-50

EM61-MK2 Channel 2 Gridded Data Grid IO314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

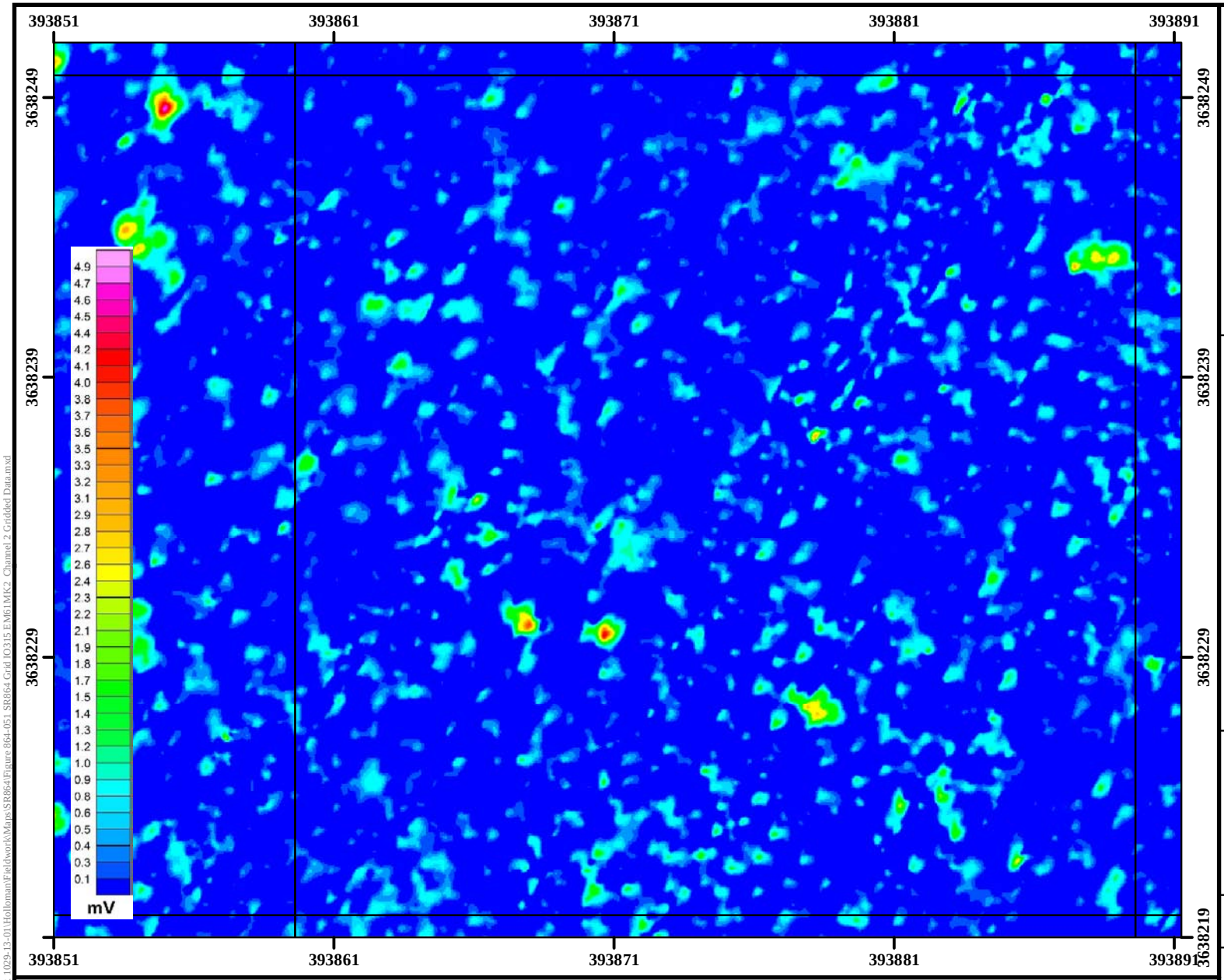
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-050 SR864 Grid IO314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-51

EM61-MK2 Channel 2 Gridded Data Grid IO315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

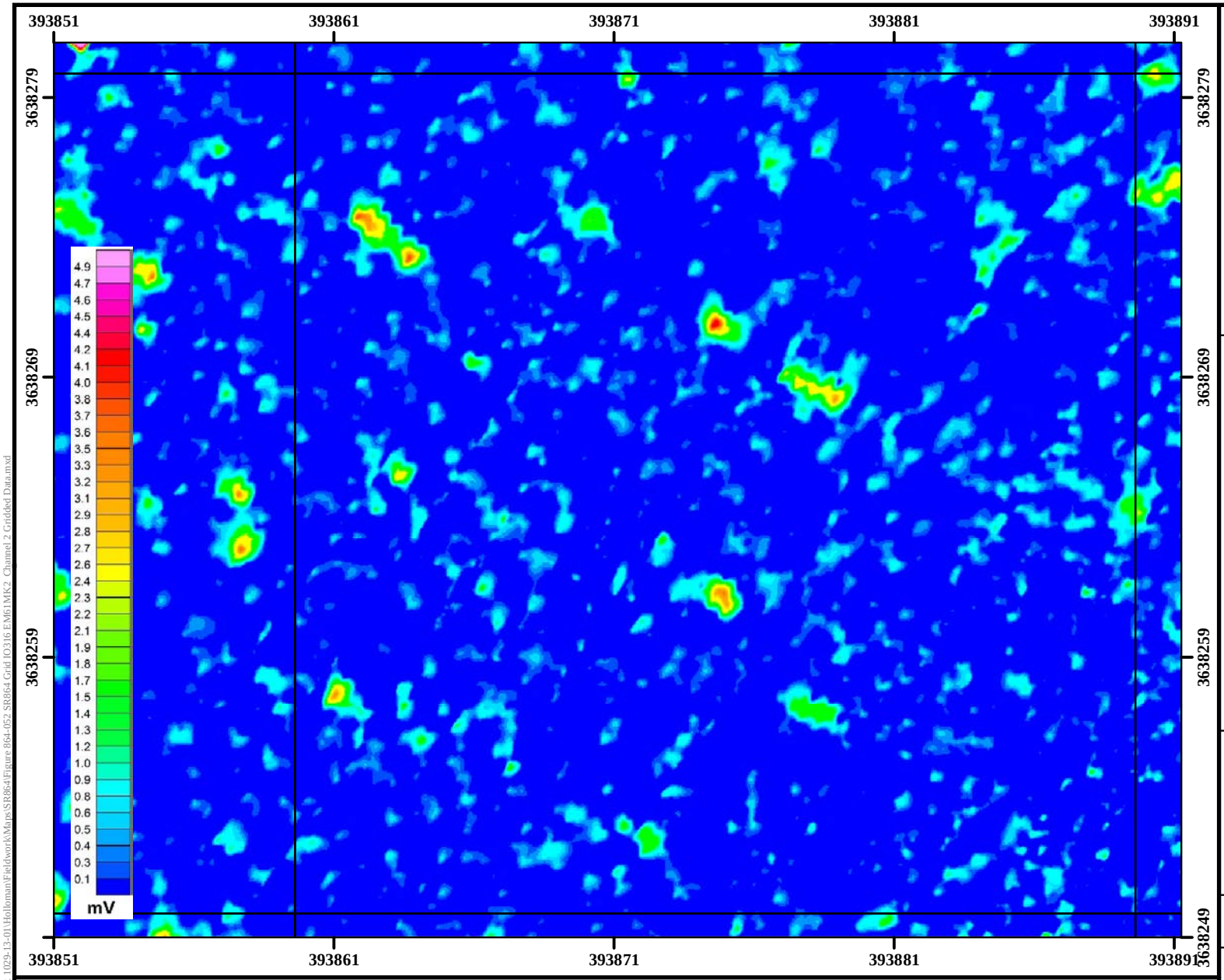
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-051 SR864 Grid IO315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-52

EM61-MK2 Channel 2 Gridded Data Grid IO316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

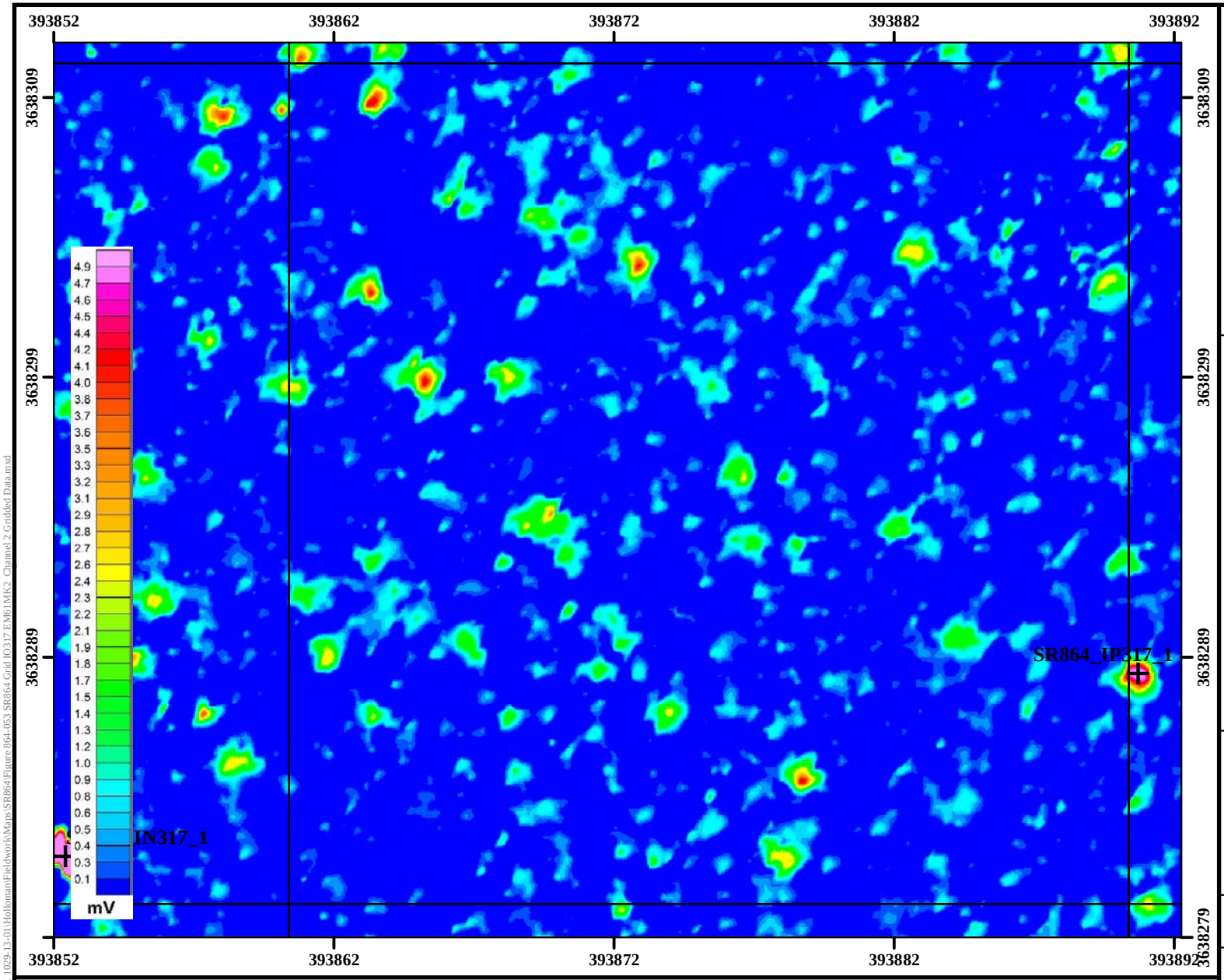
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-052 SR864 Grid IO316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-53

EM61-MK2 Channel 2 Gridded Data Grid IO317 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

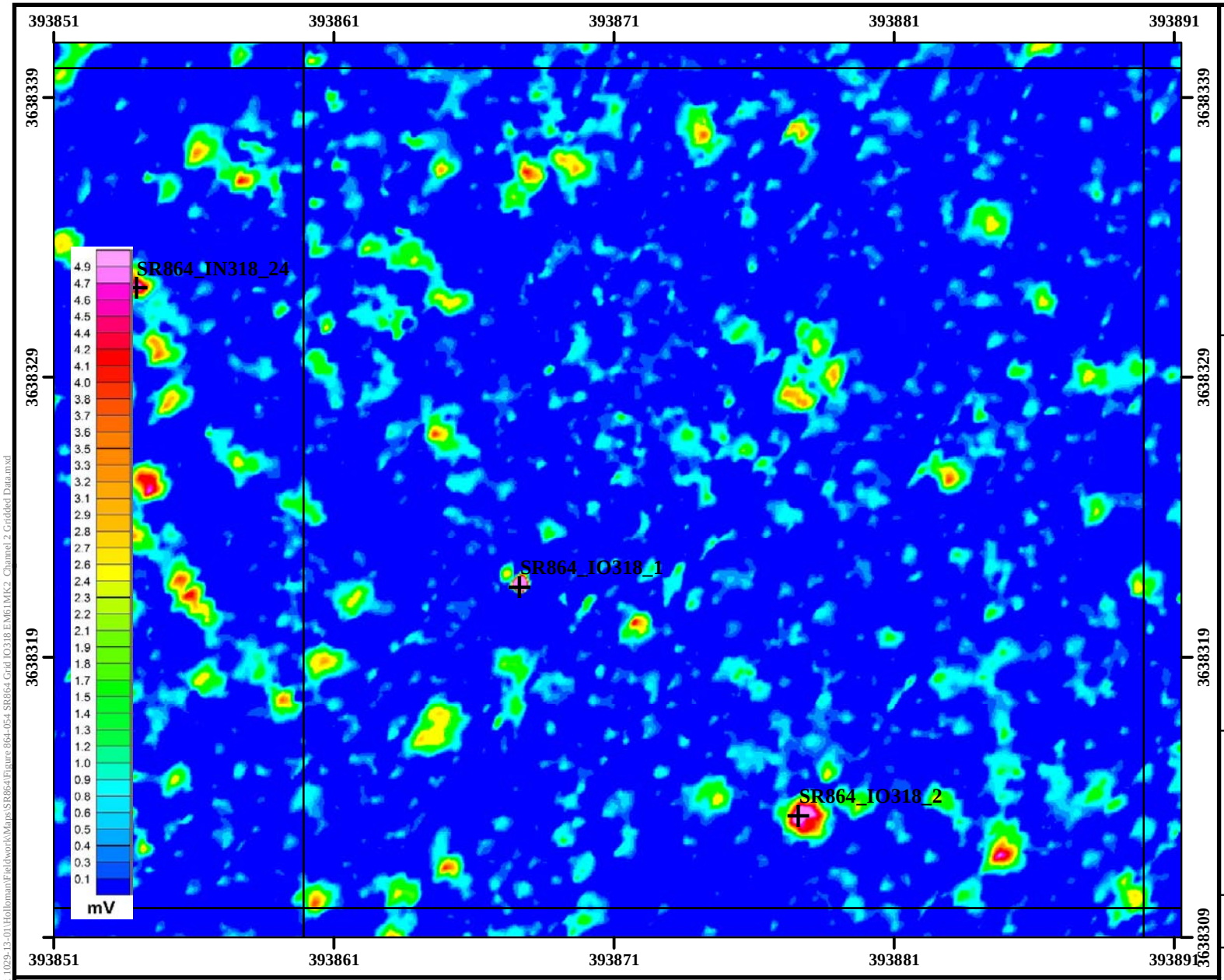
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-053 SR864 Grid IO317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-54

EM61-MK2 Channel 2 Gridded Data Grid IO318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

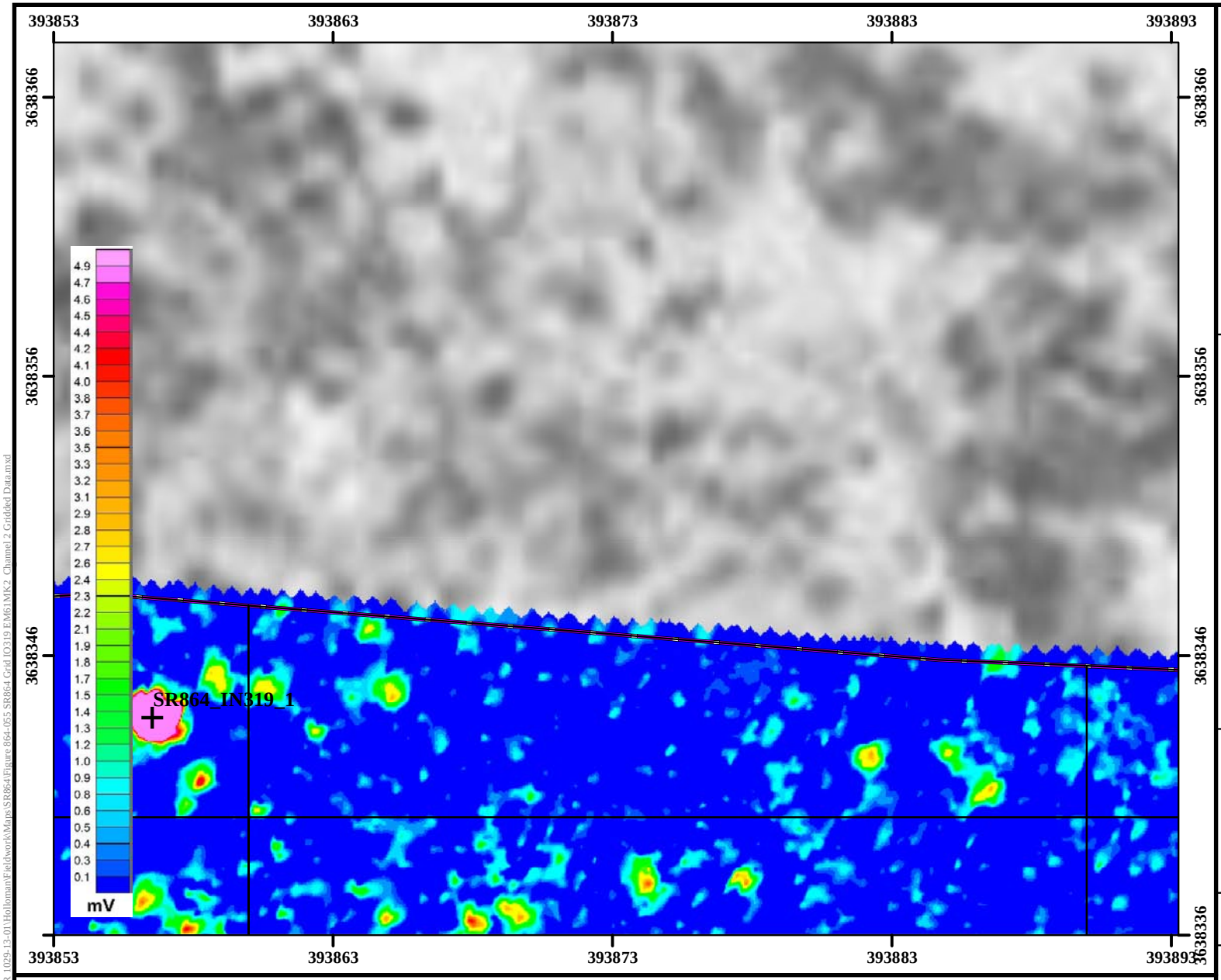
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-054 SR864 Grid IO318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-55

EM61-MK2 Channel 2 Gridded Data Grid IO319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

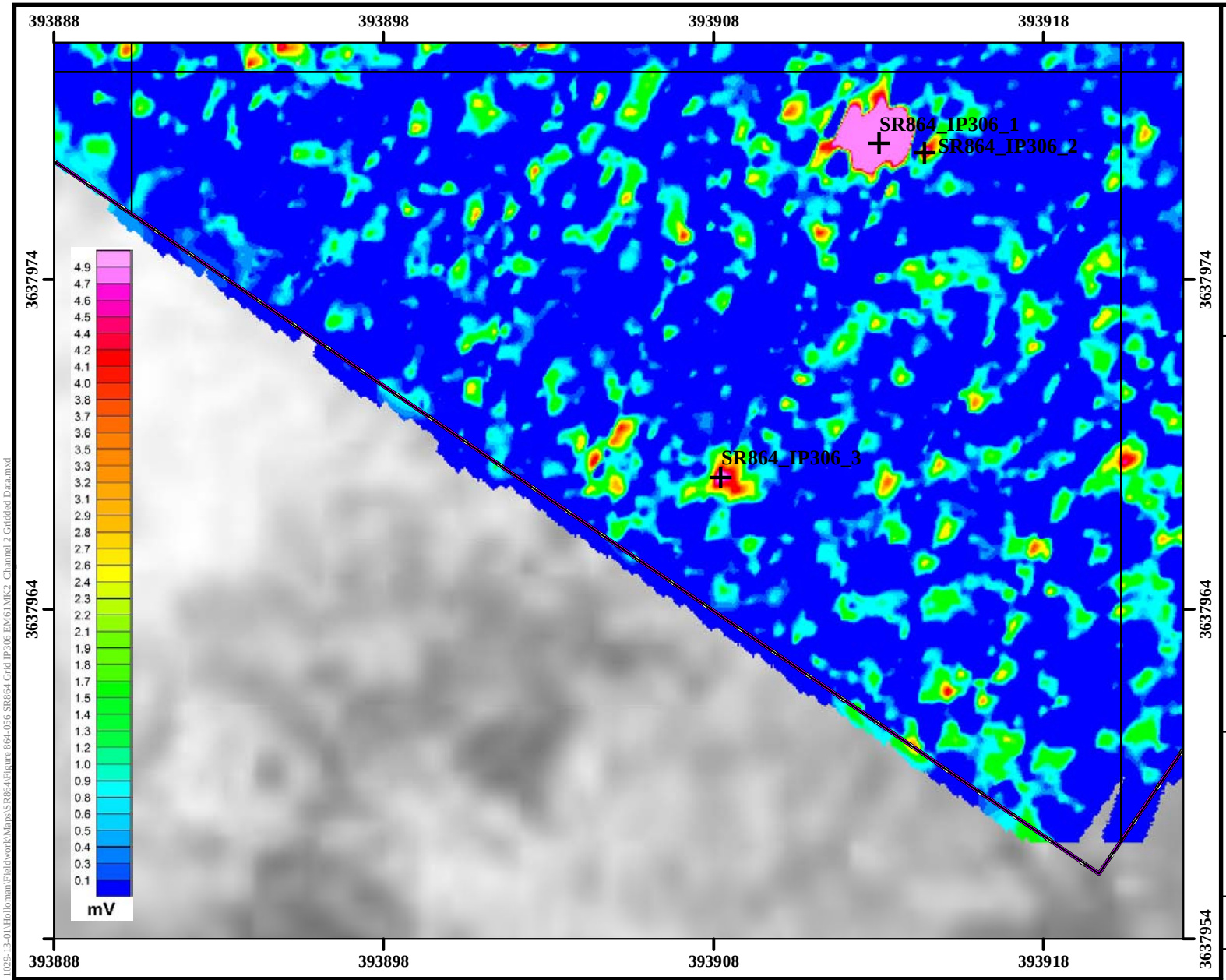
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-055 SR864 Grid IO319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-56

EM61-MK2 Channel 2 Gridded Data Grid IP306 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

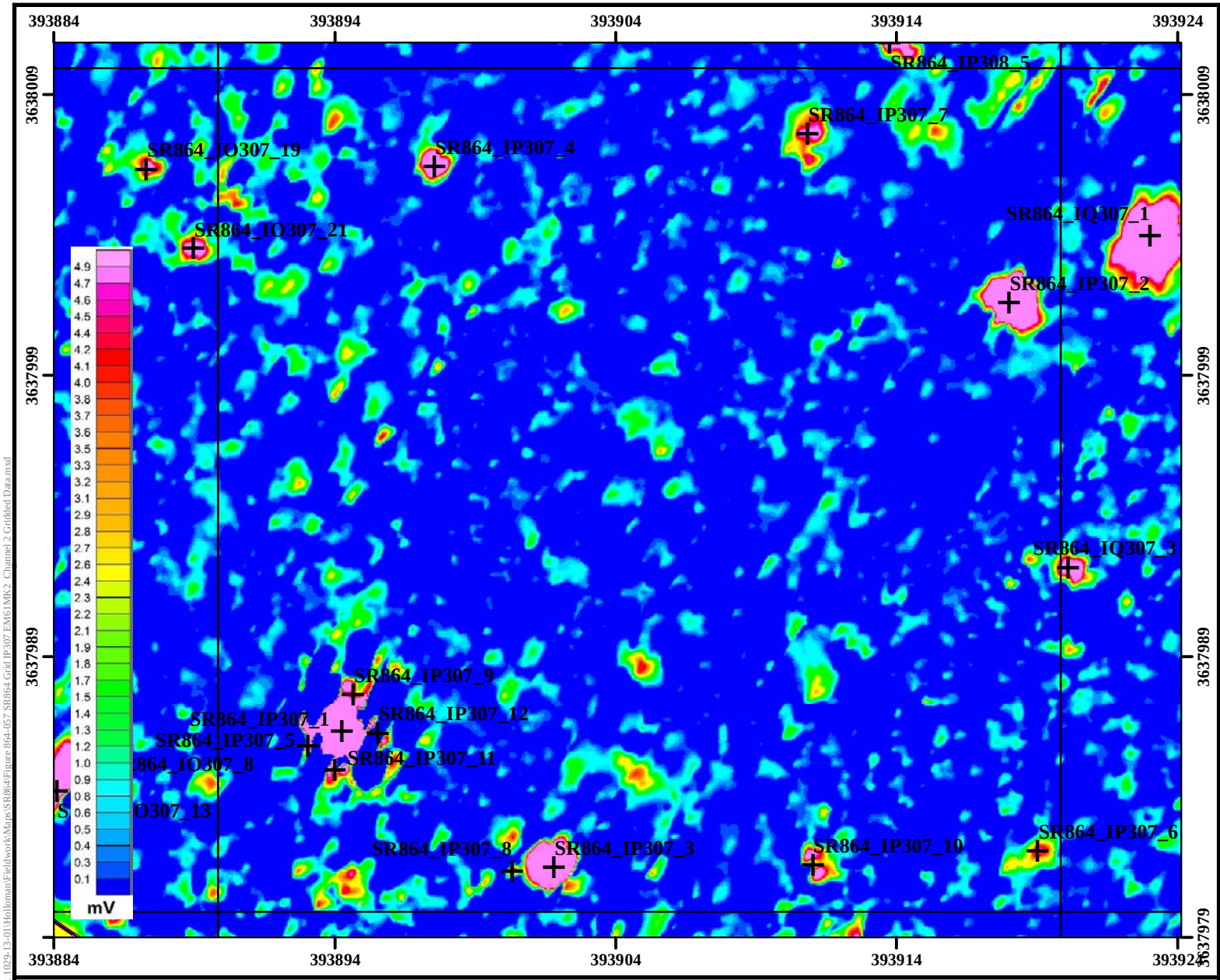
1 inch = 15 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-056 SR864 Grid IP306 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-57

EM61-MK2 Channel 2 Gridded Data Grid IP307 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

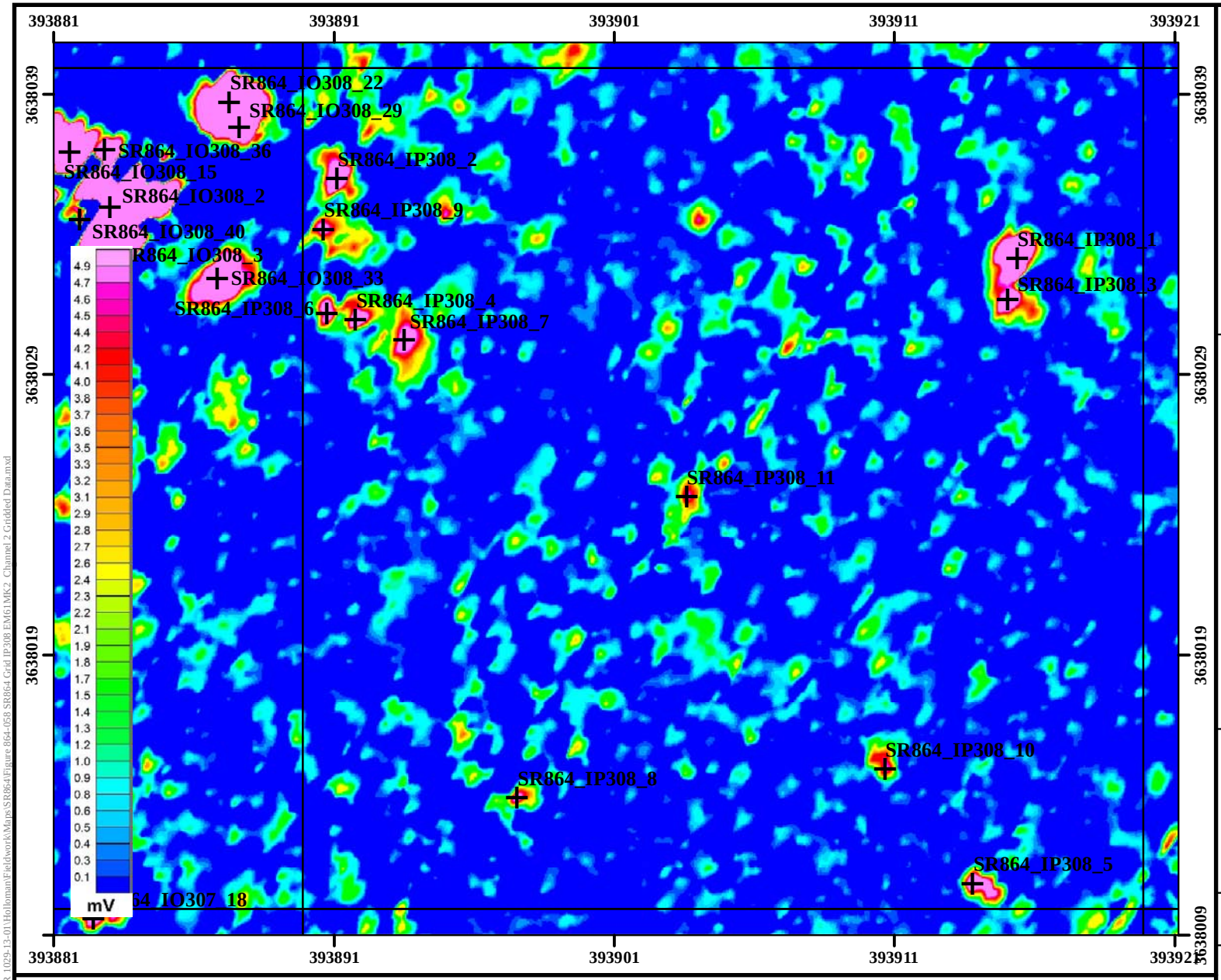
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-057 SR864 Grid IP307 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-58

EM61-MK2 Channel 2 Gridded Data Grid IP308 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

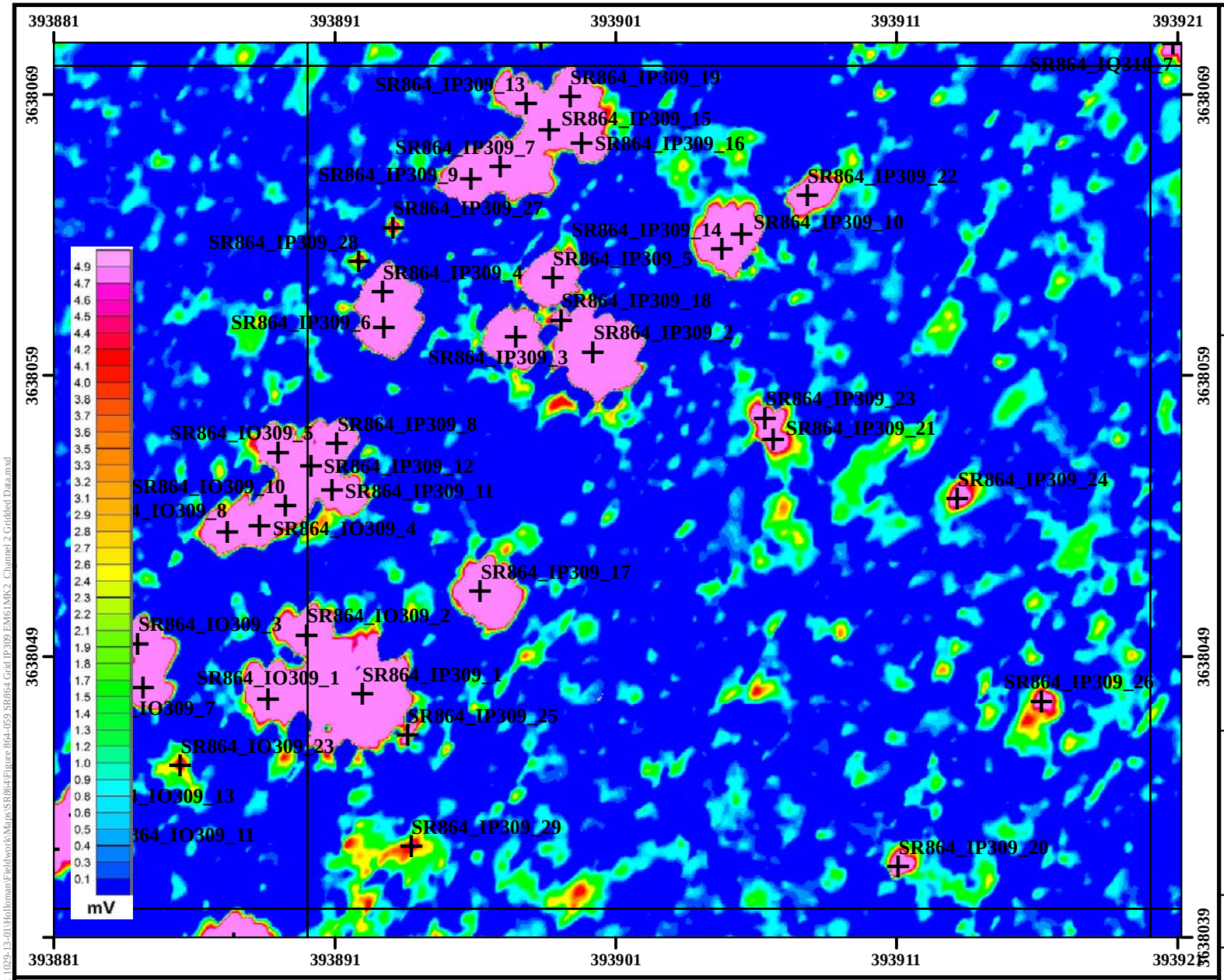
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-058 SR864 Grid IP308 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-59

EM61-MK2 Channel 2 Gridded Data Grid IP309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

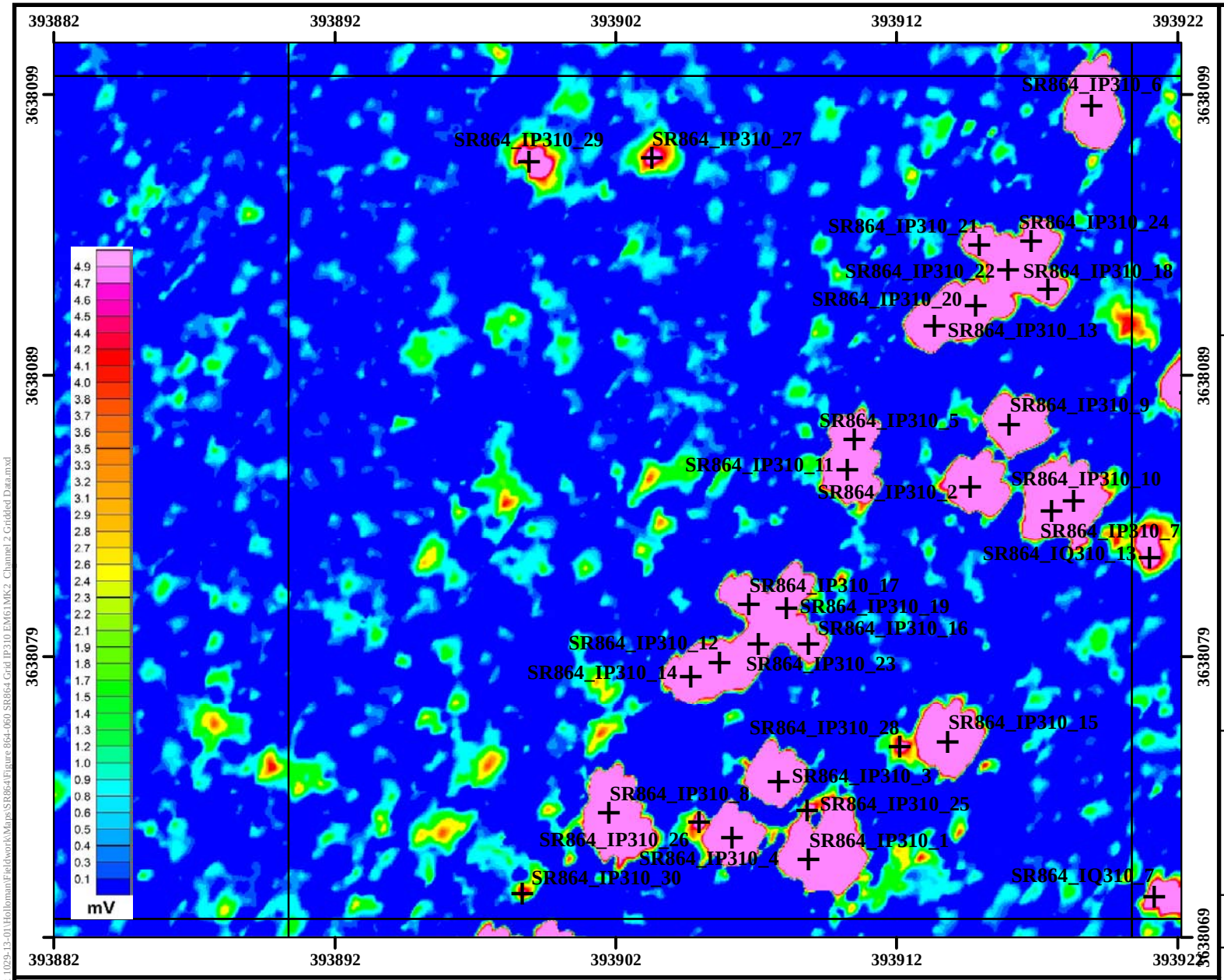
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-059 SR864 Grid IP309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-60

EM61-MK2 Channel 2 Gridded Data Grid IP310 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

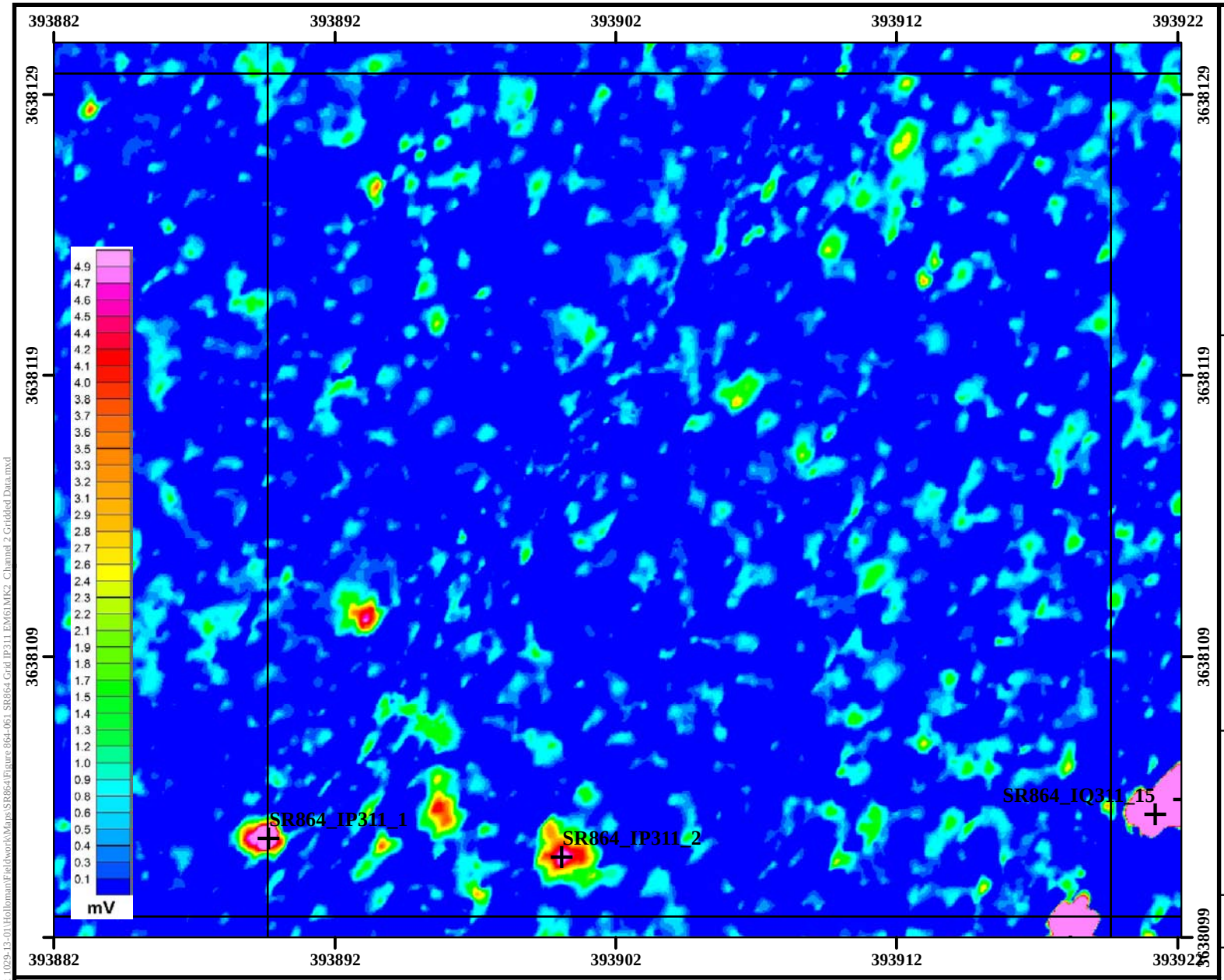
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-060 SR864 Grid IP310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-61

EM61-MK2 Channel 2 Gridded Data Grid IP311 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

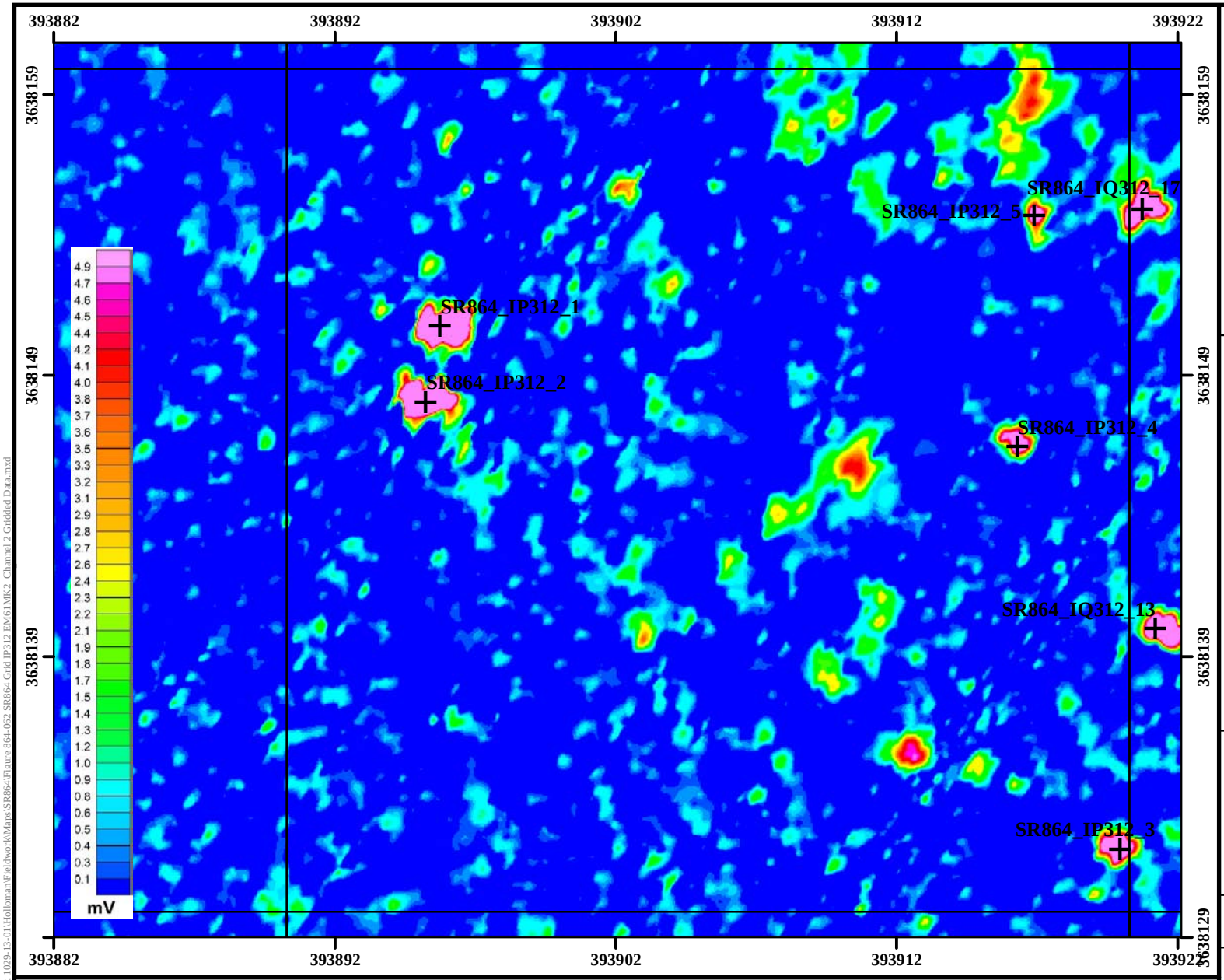
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-061 SR864 Grid IP311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-62

EM61-MK2 Channel 2 Gridded Data Grid IP312 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

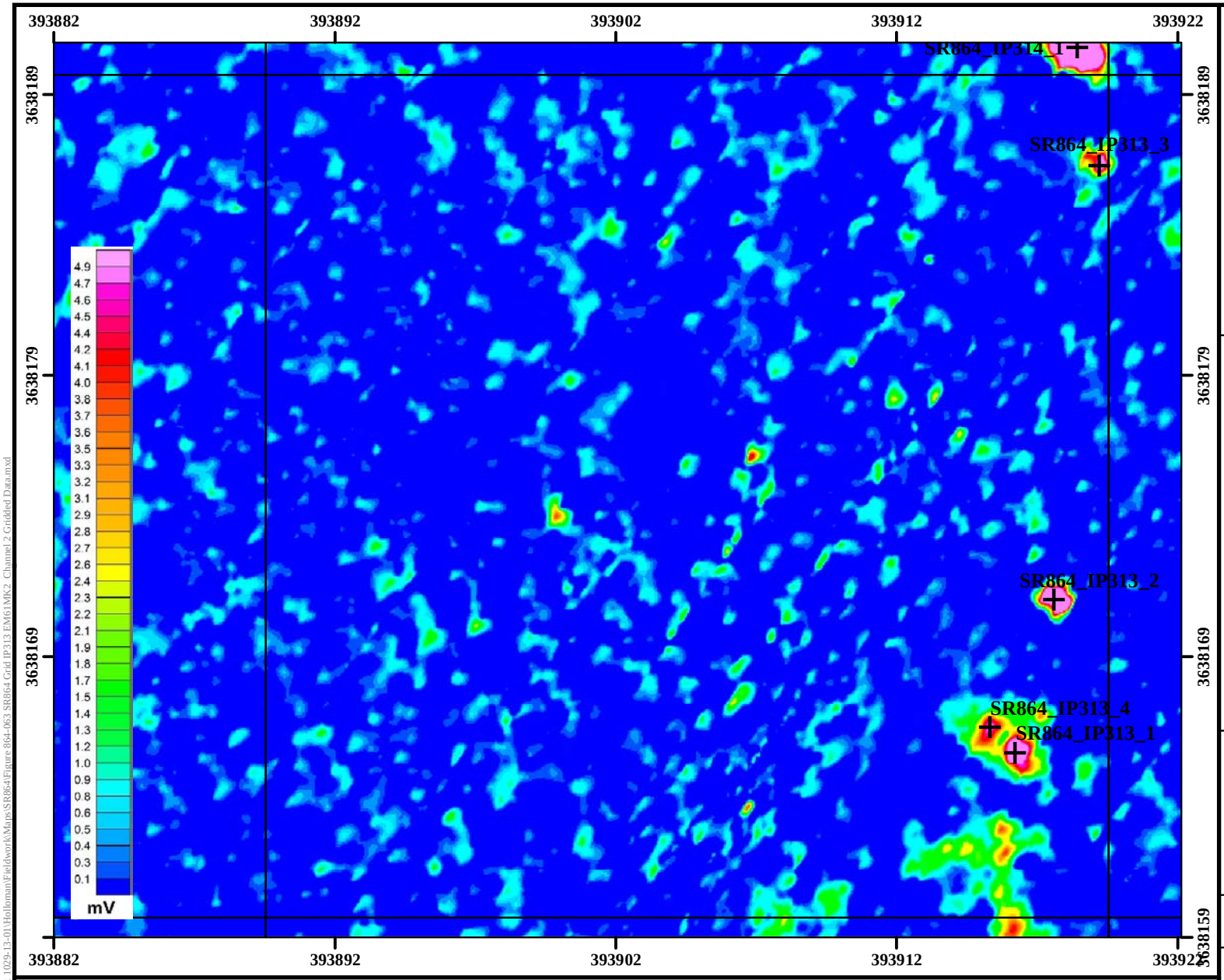
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-062 SR864 Grid IP312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-63

EM61-MK2 Channel 2 Gridded Data Grid IP313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

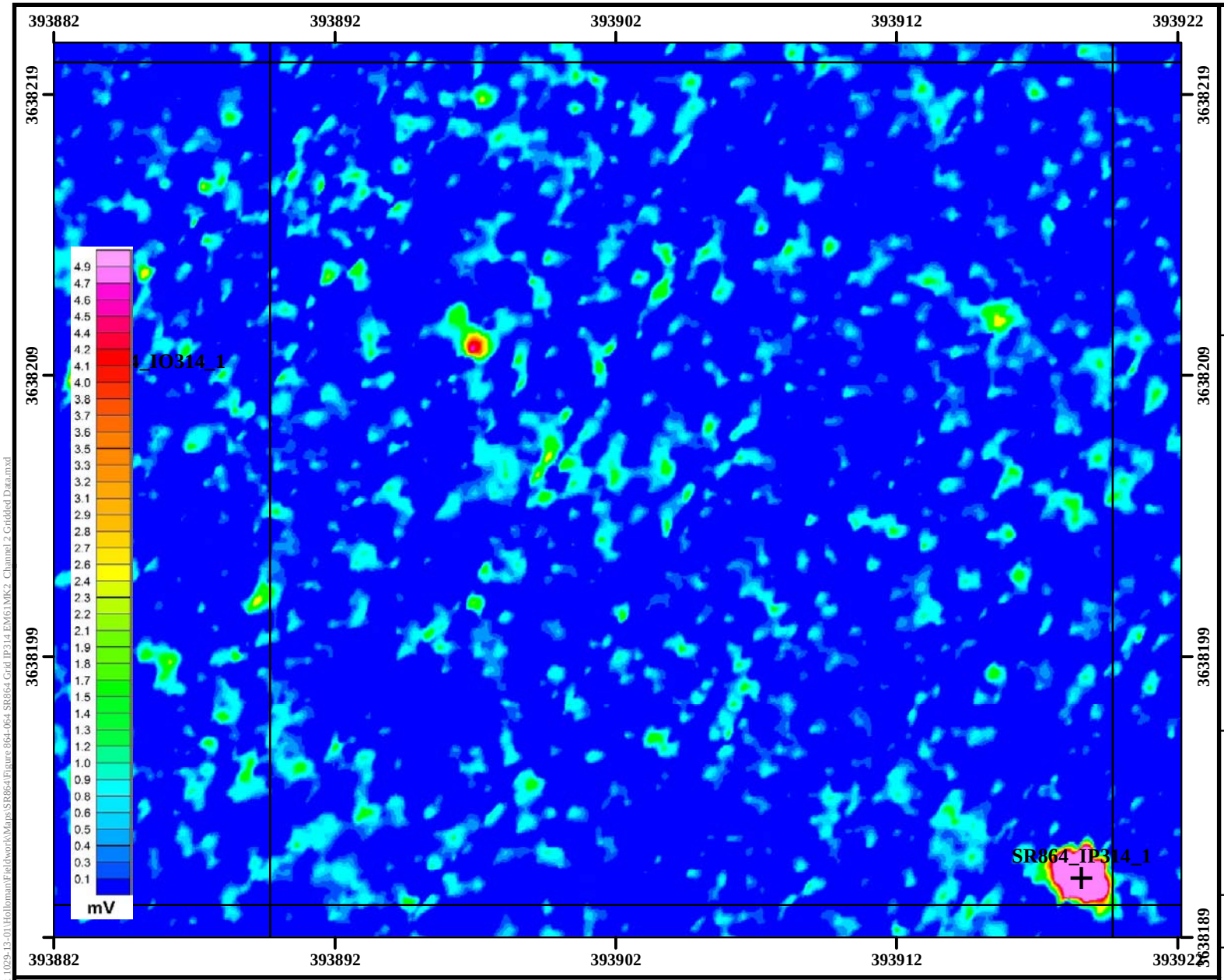
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-063 SR864 Grid IP313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-64

EM61-MK2 Channel 2 Gridded Data Grid IP314 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

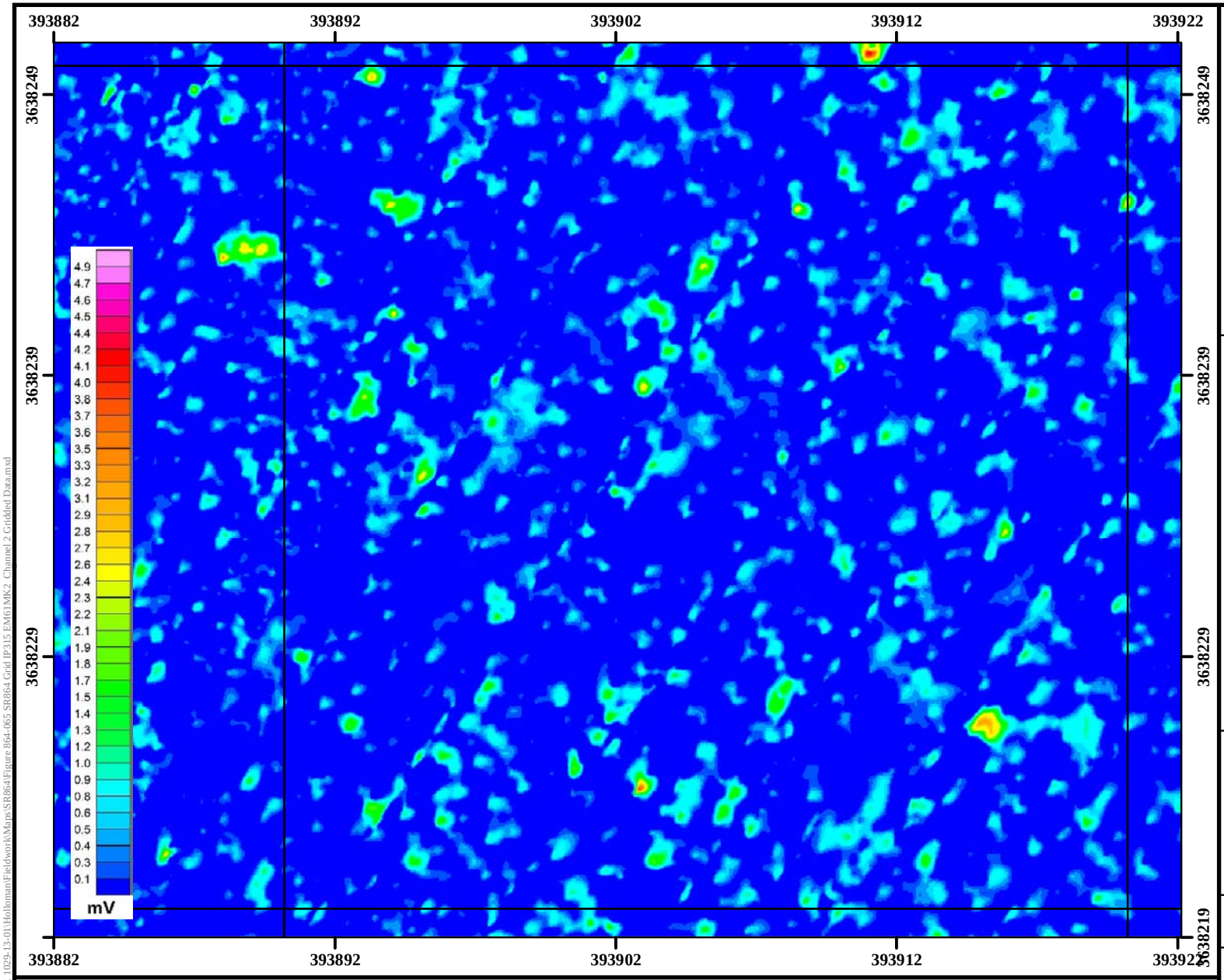
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-064 SR864 Grid IP314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-65

EM61-MK2 Channel 2 Gridded Data Grid IP315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

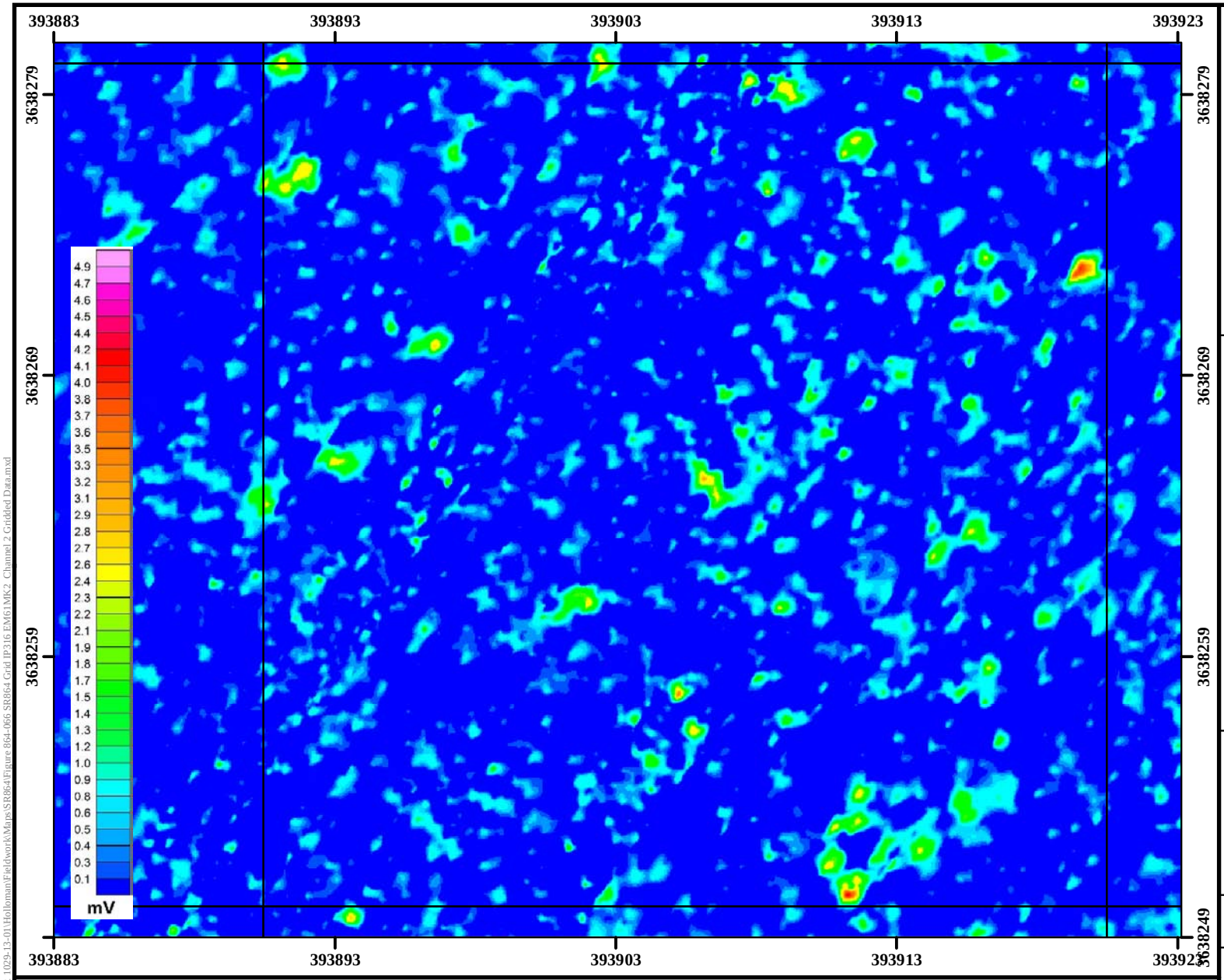
1 inch = 17 feet

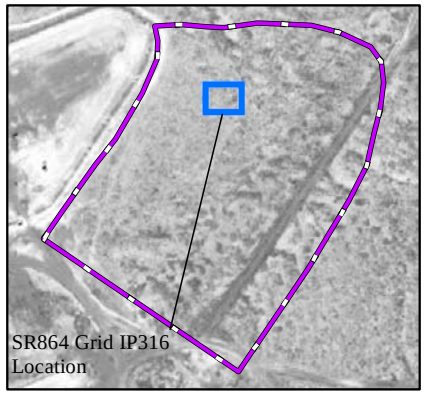
0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-065 SR864 Grid IP315 EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-66

EM61-MK2 Channel 2 Gridded Data Grid IP316 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

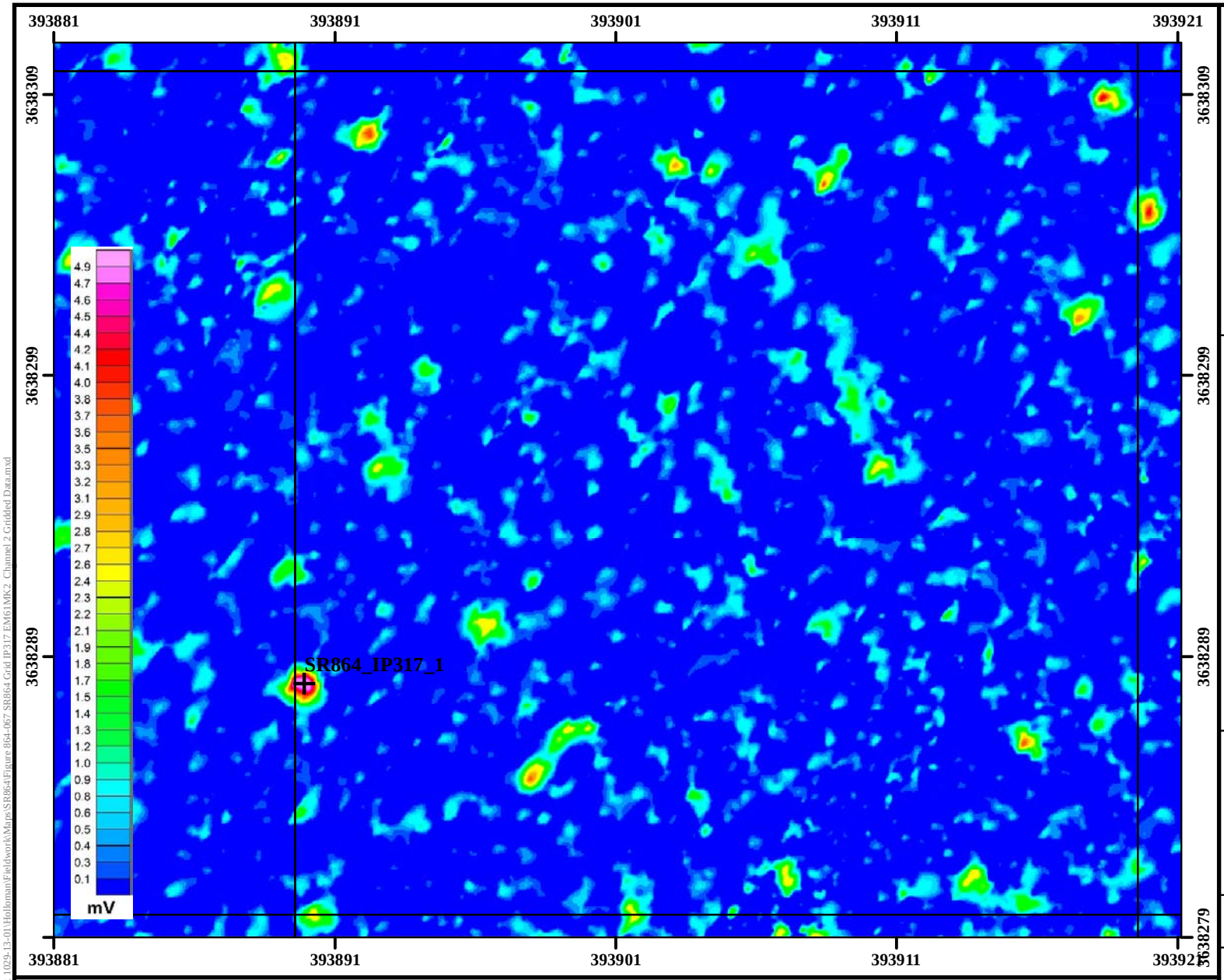
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-066 SR864 Grid IP316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-67

EM61-MK2 Channel 2 Gridded Data Grid IP317 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

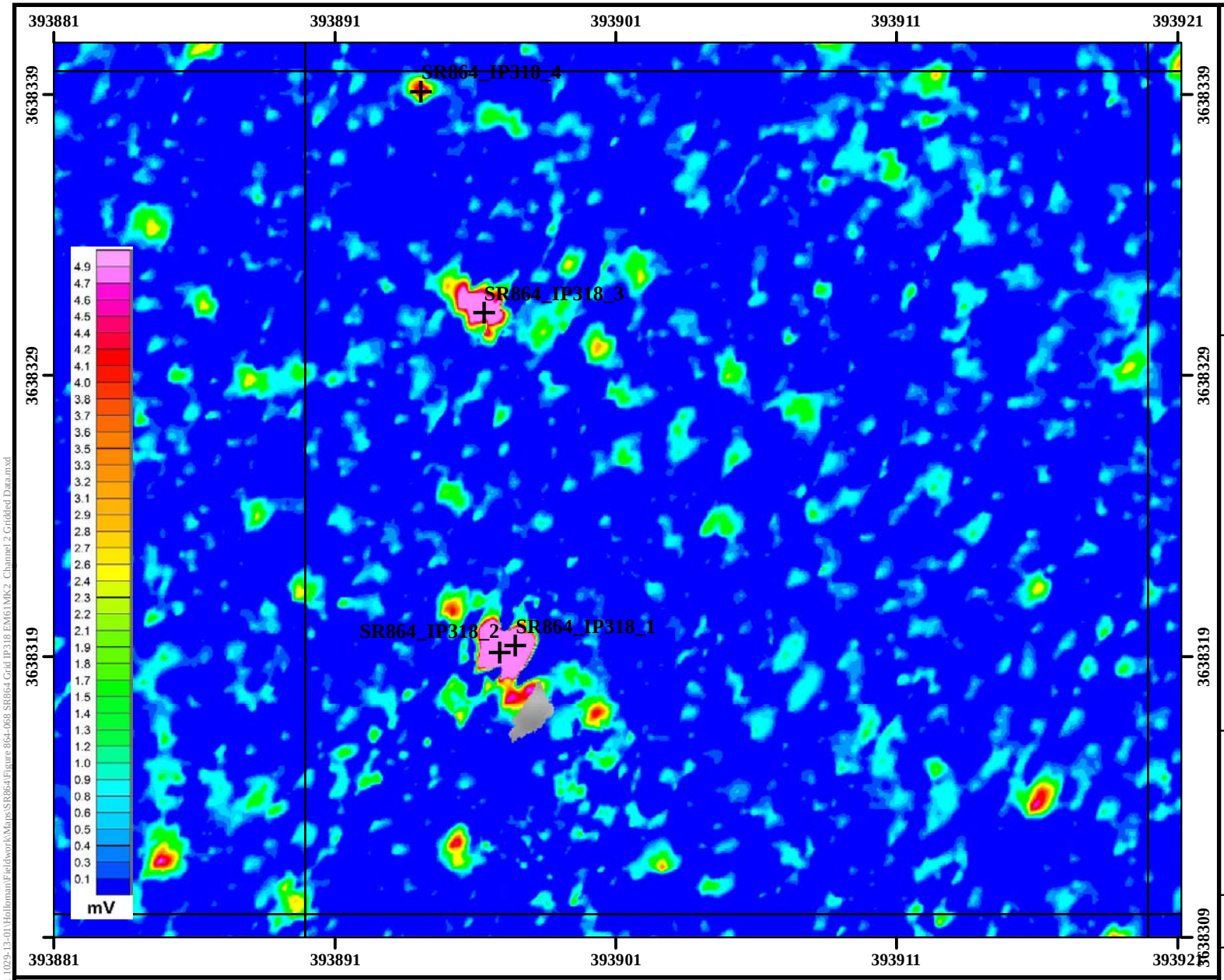
1 inch = 17 feet

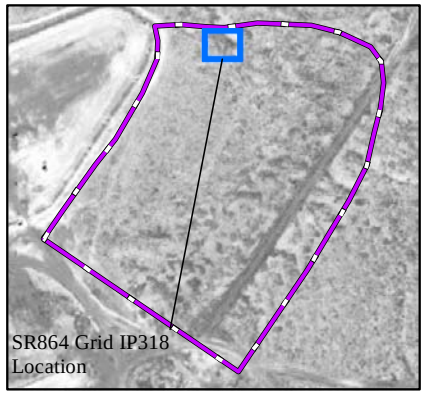
0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-067 SR864 Grid IP317 EM61MK2 Channel 2 Gridded Data.mxd





Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-68

EM61-MK2 Channel 2 Gridded Data Grid IP318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

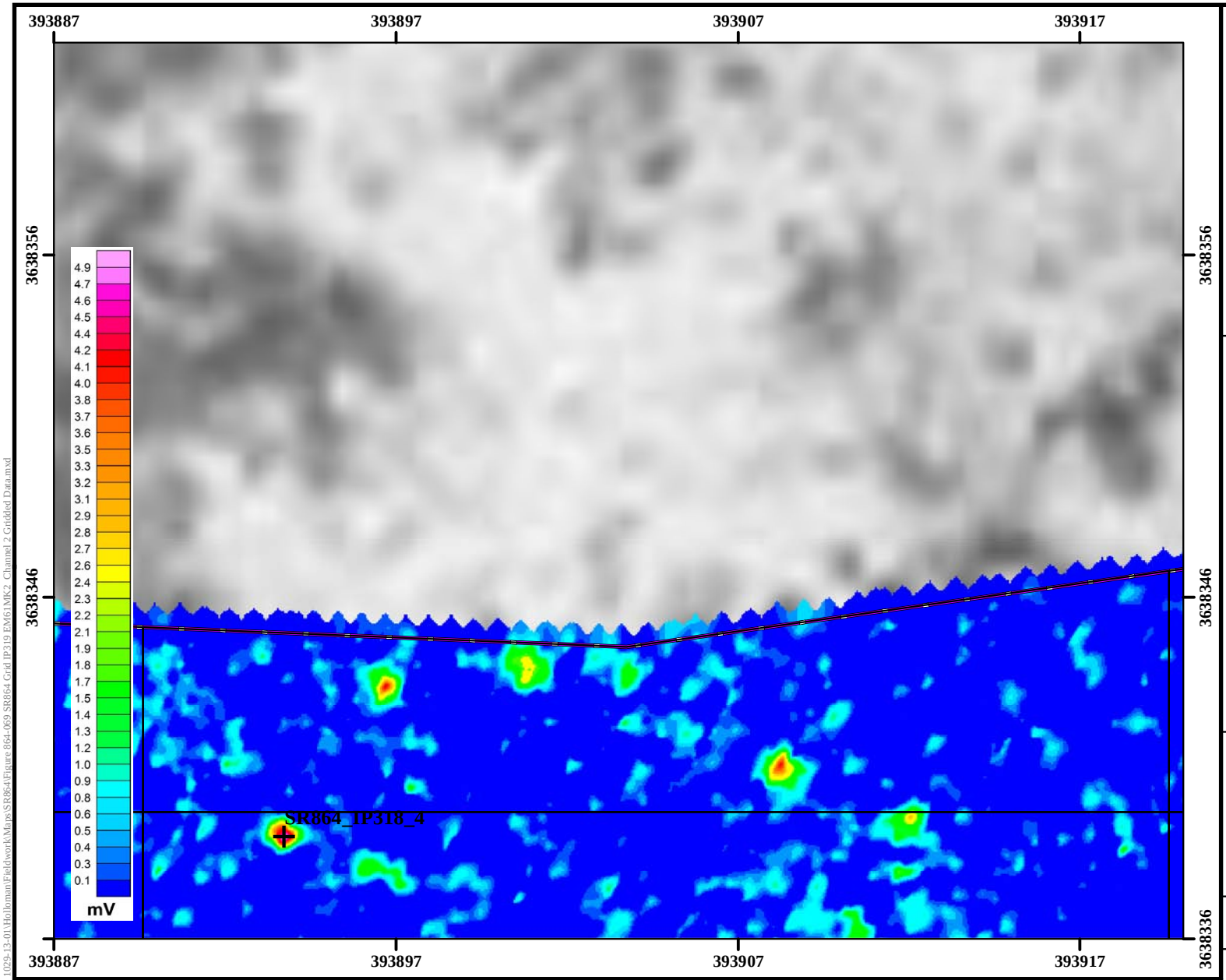
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-068 SR864 Grid IP318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-69

EM61-MK2 Channel 2 Gridded Data Grid IP319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

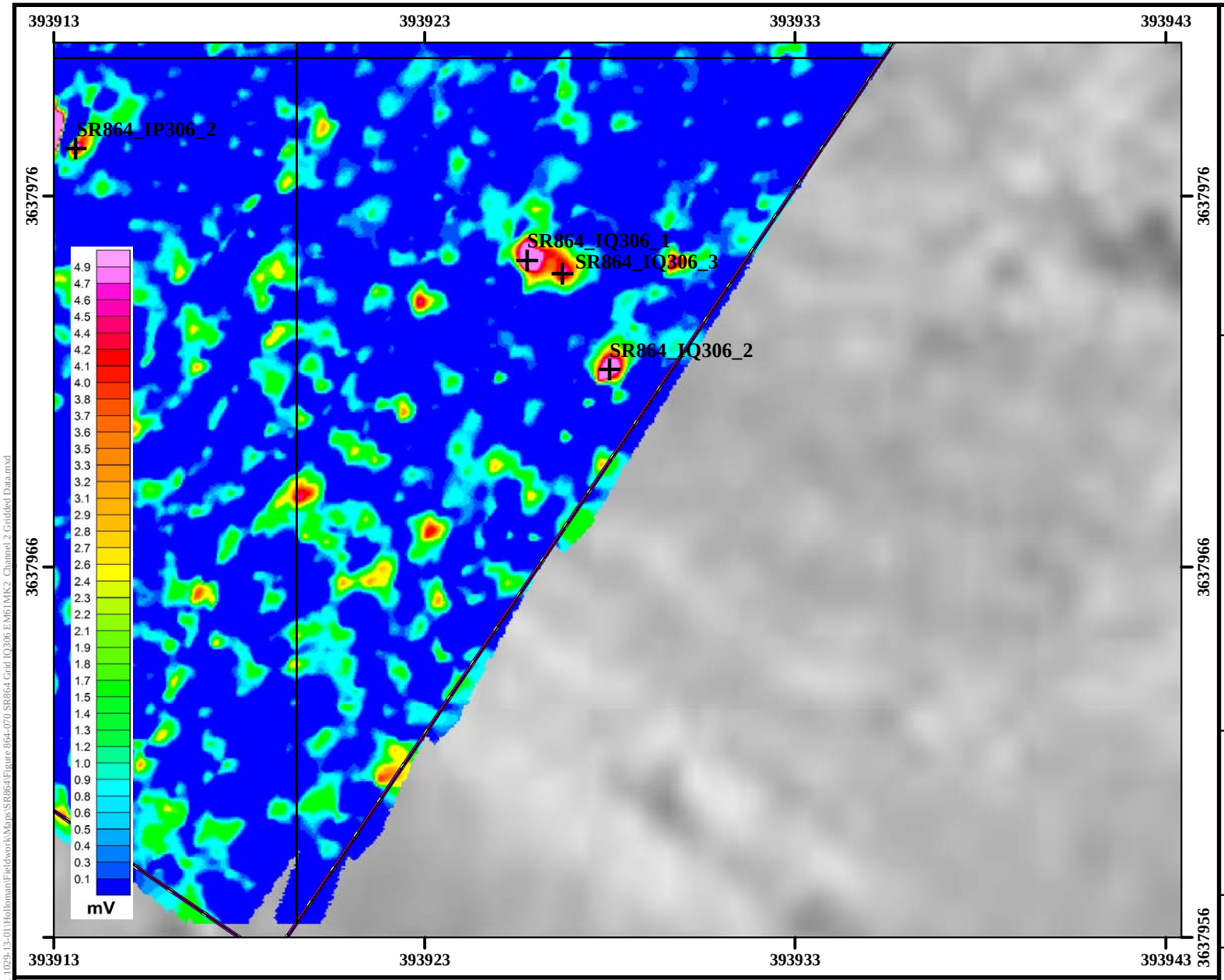
1 inch = 14 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-069 SR864 Grid IP319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-70

EM61-MK2 Channel 2 Gridded Data Grid IQ306 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

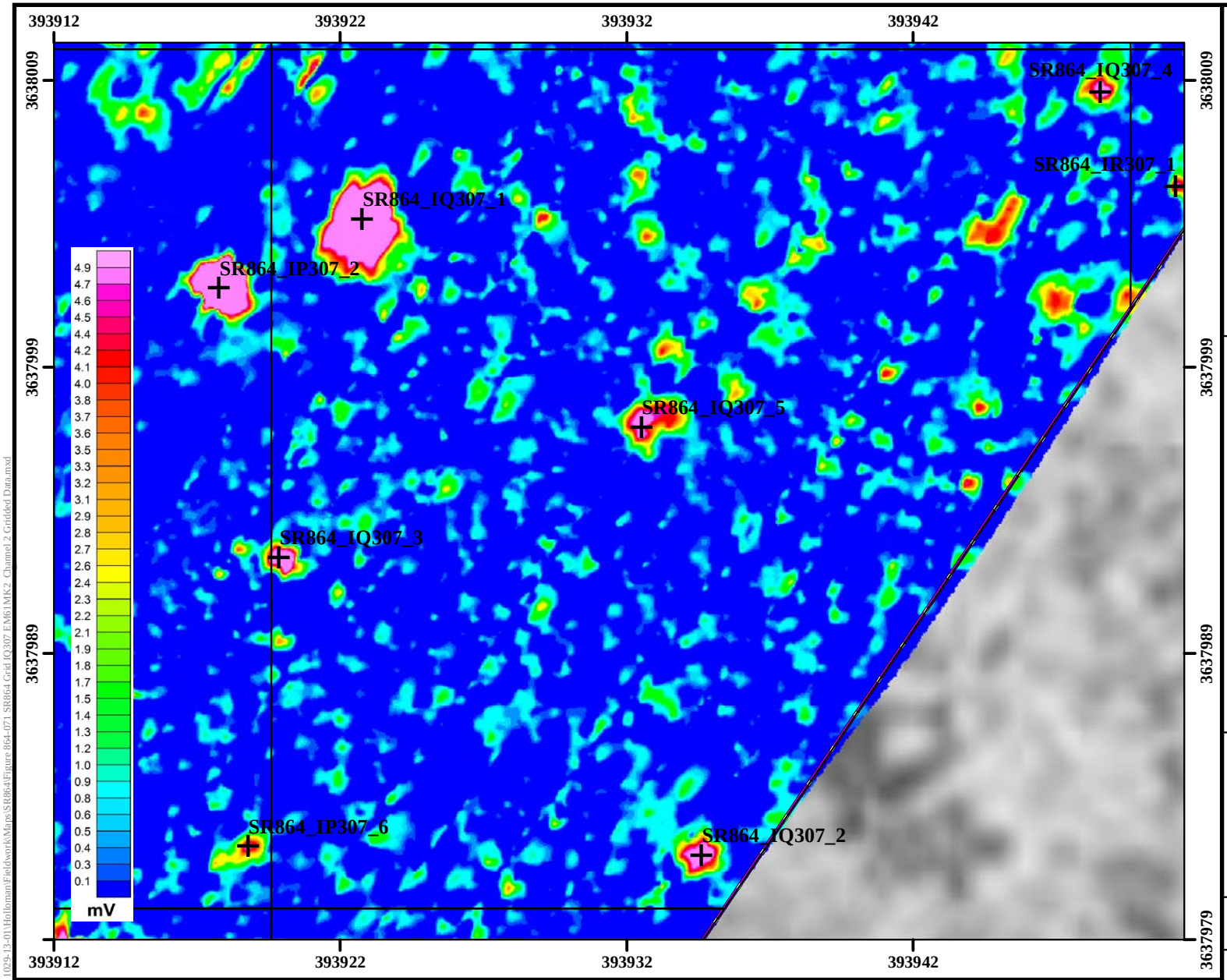
1 inch = 13 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-070 SR864 Grid IQ306 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-71

EM61-MK2 Channel 2 Gridded Data Grid IQ307 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

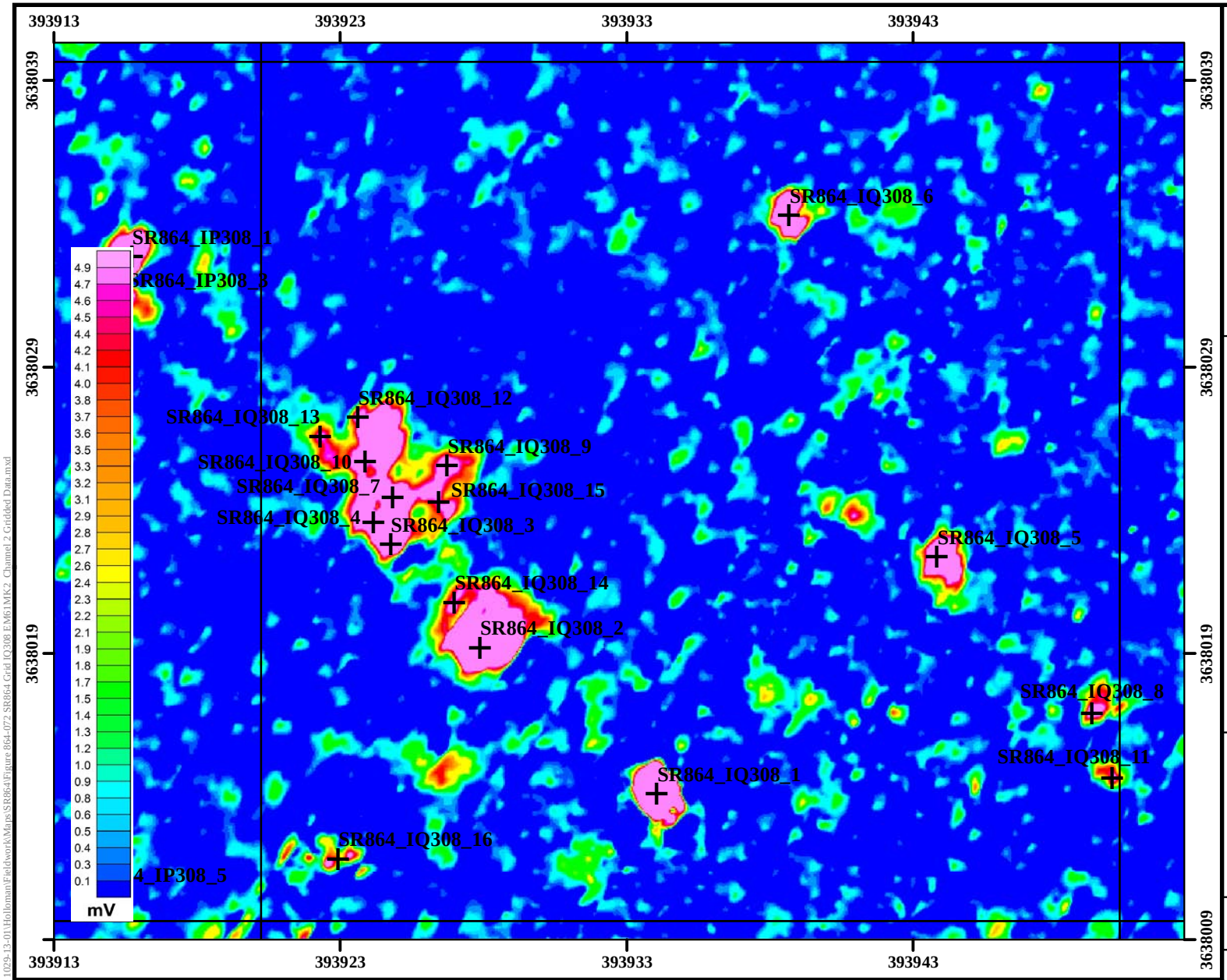
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-071 SR864 Grid IQ307 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-72

EM61-MK2 Channel 2 Gridded Data Grid IQ308 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

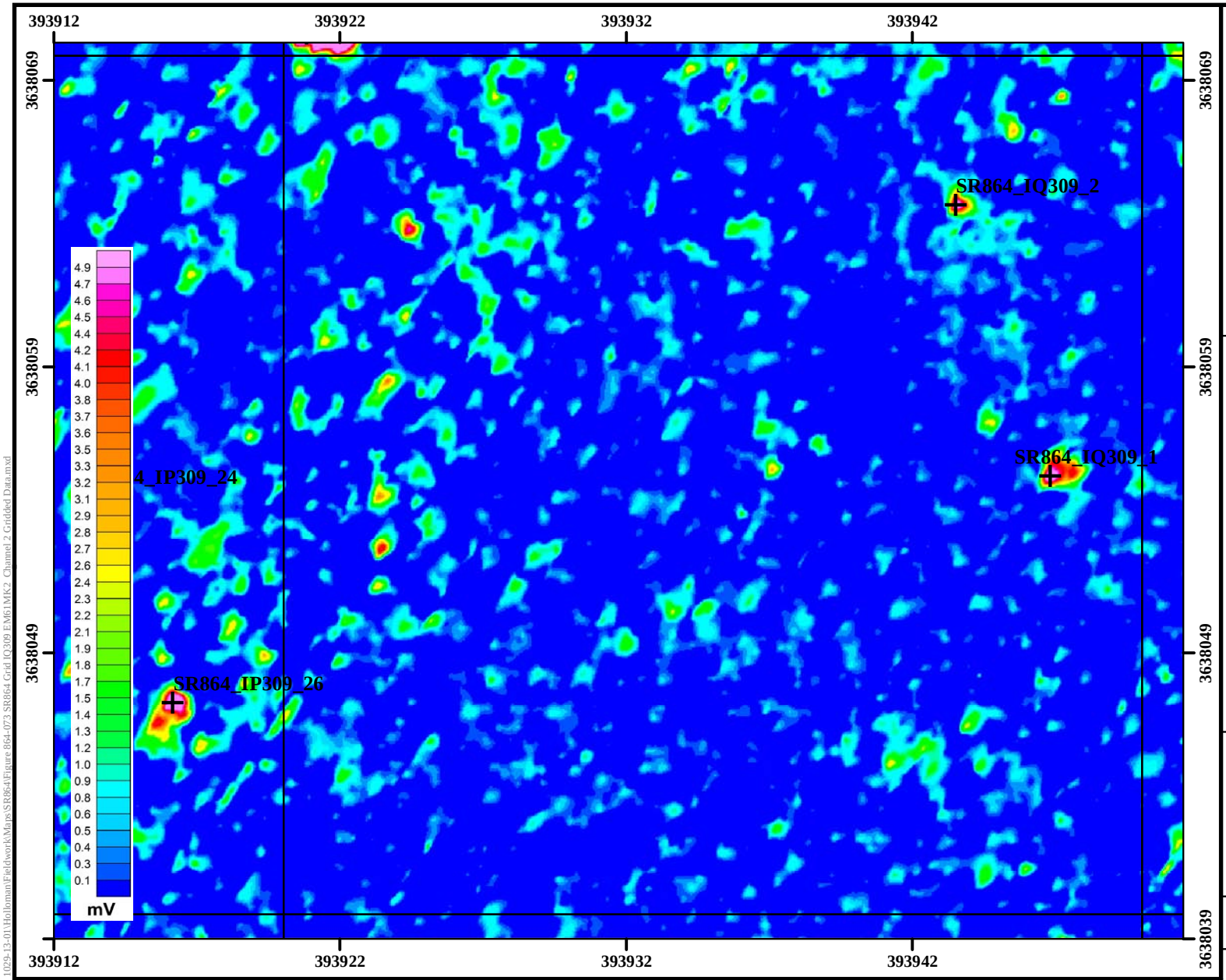
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-072 SR864 Grid IQ308 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-73

EM61-MK2 Channel 2 Gridded Data Grid IQ309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

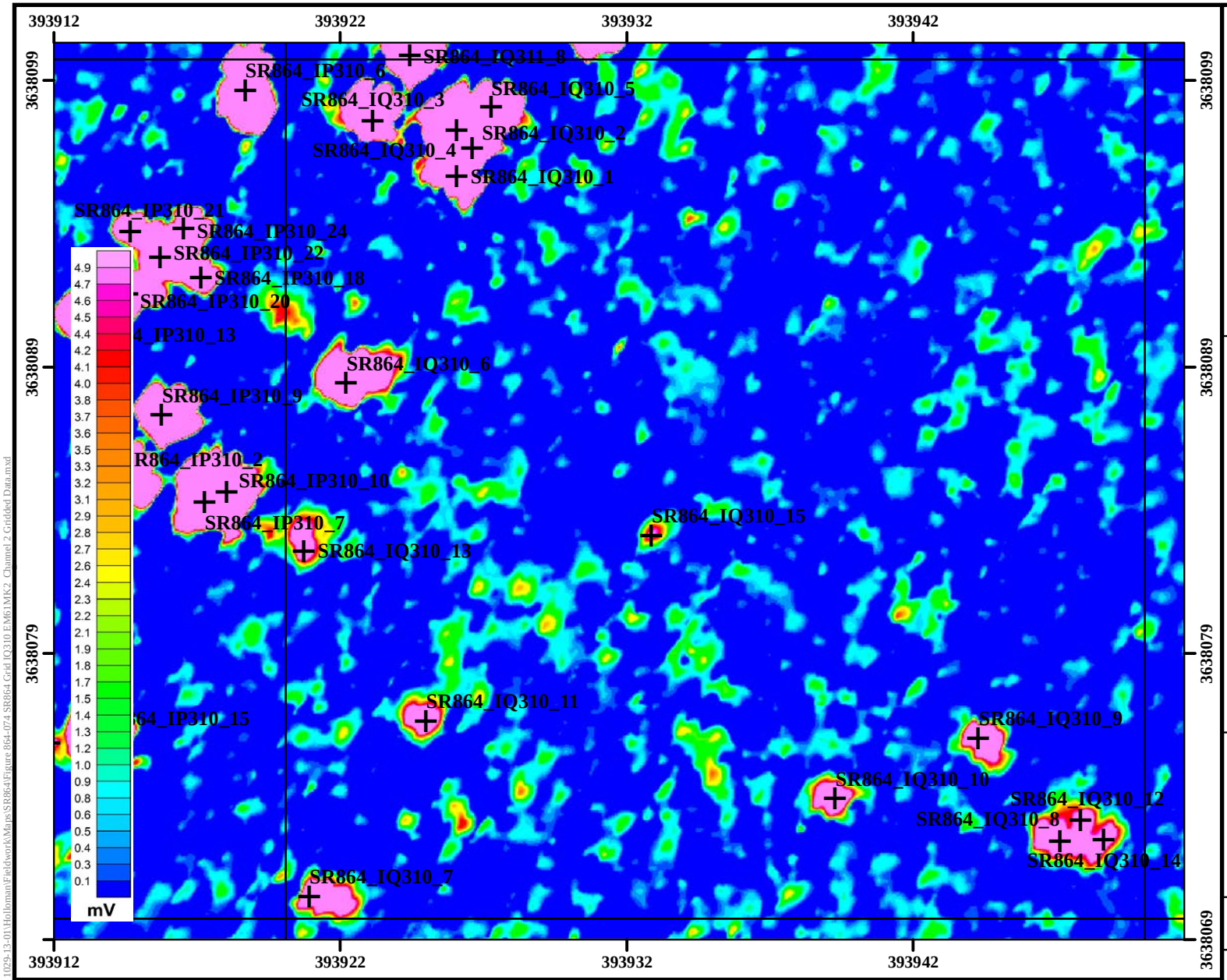
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-073 SR864 Grid IQ309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-74

EM61-MK2 Channel 2 Gridded Data Grid IQ310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

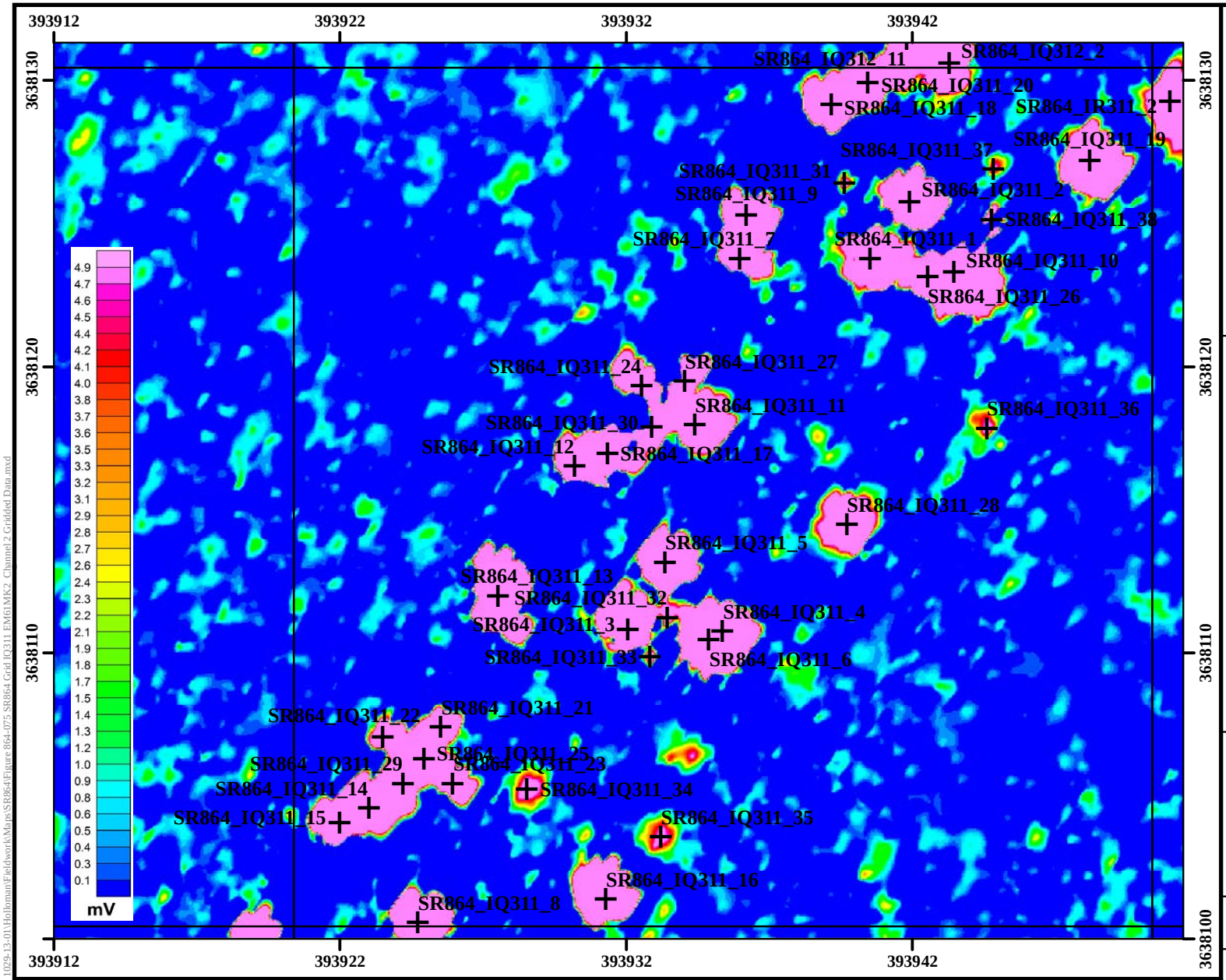
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-074 SR864 Grid IQ310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-75

EM61-MK2 Channel 2 Gridded Data Grid IQ311 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

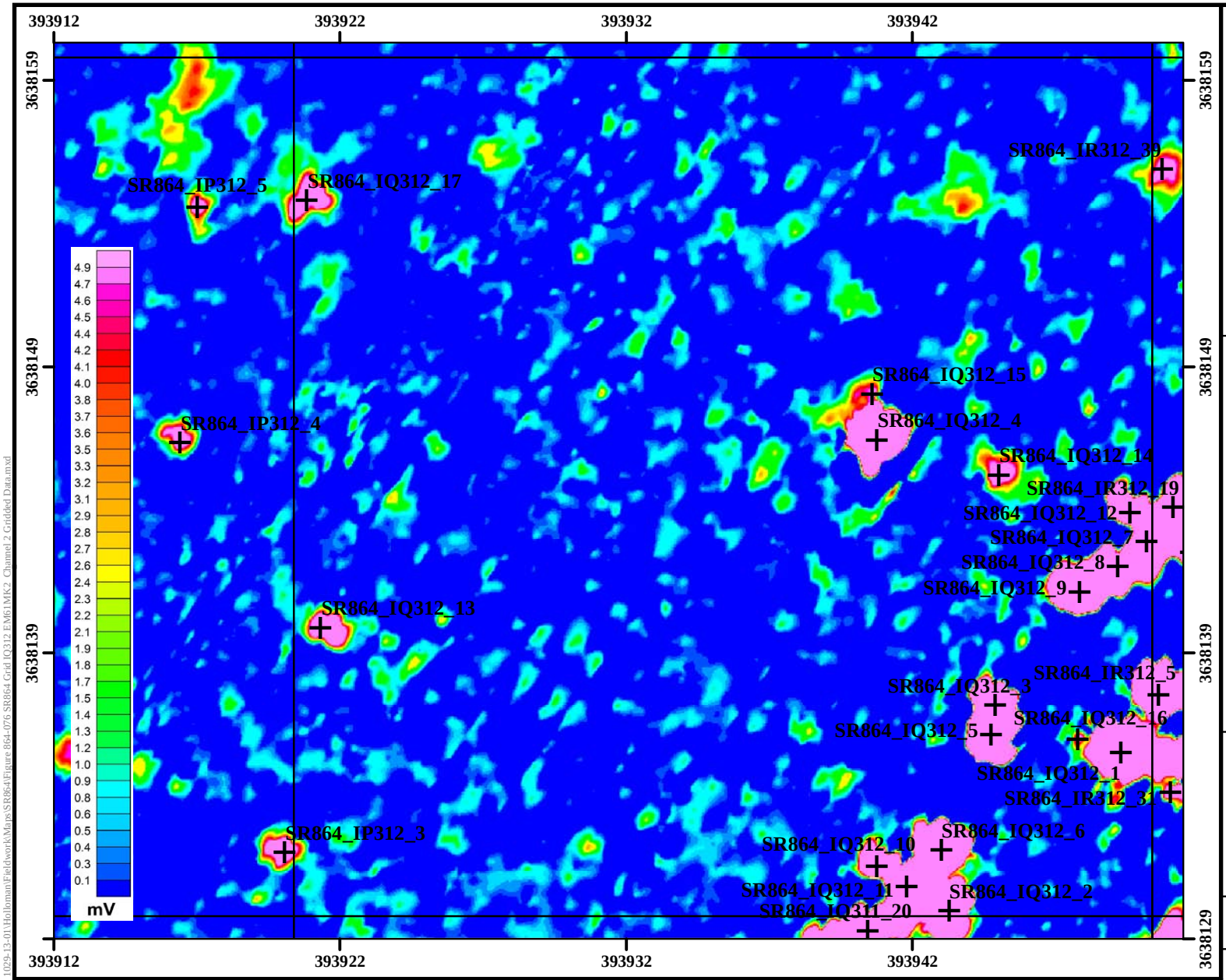
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-075 SR864 Grid IQ311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-76

EM61-MK2 Channel 2 Gridded Data Grid IQ312 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

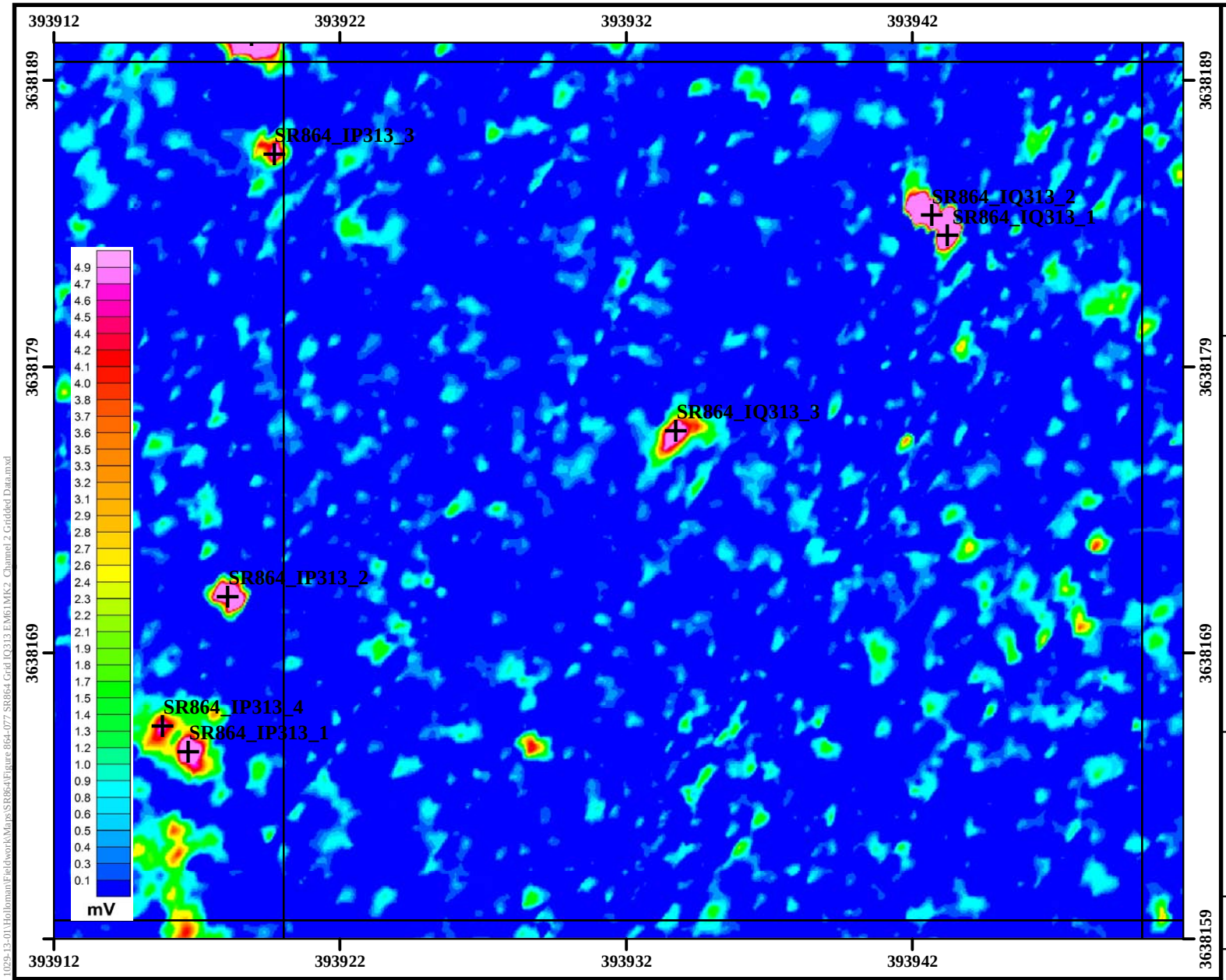
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-076 SR864 Grid IQ312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-77

EM61-MK2 Channel 2 Gridded Data Grid IQ313 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

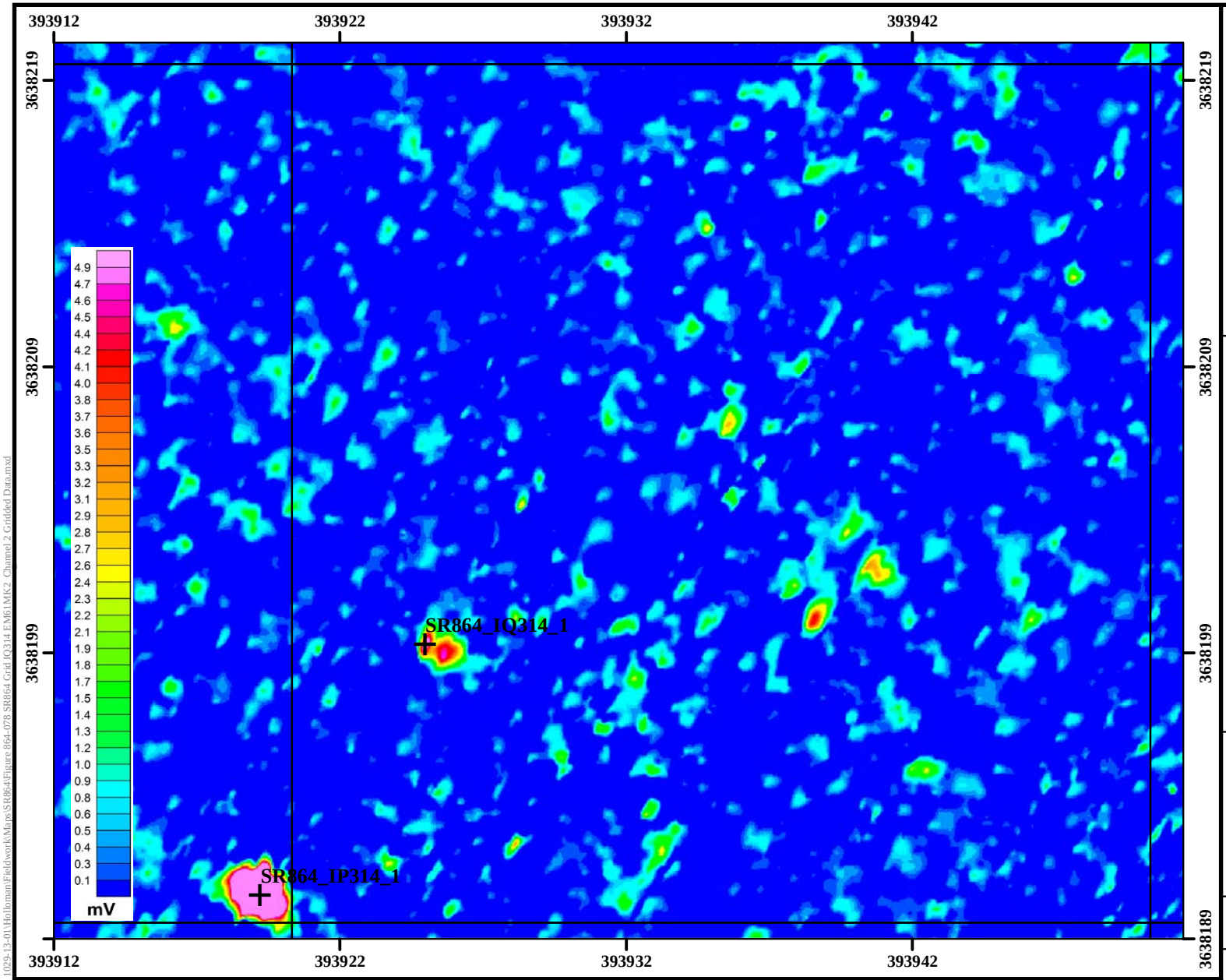
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-077 SR864 Grid IQ313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-78

EM61-MK2 Channel 2 Gridded Data Grid IQ314 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

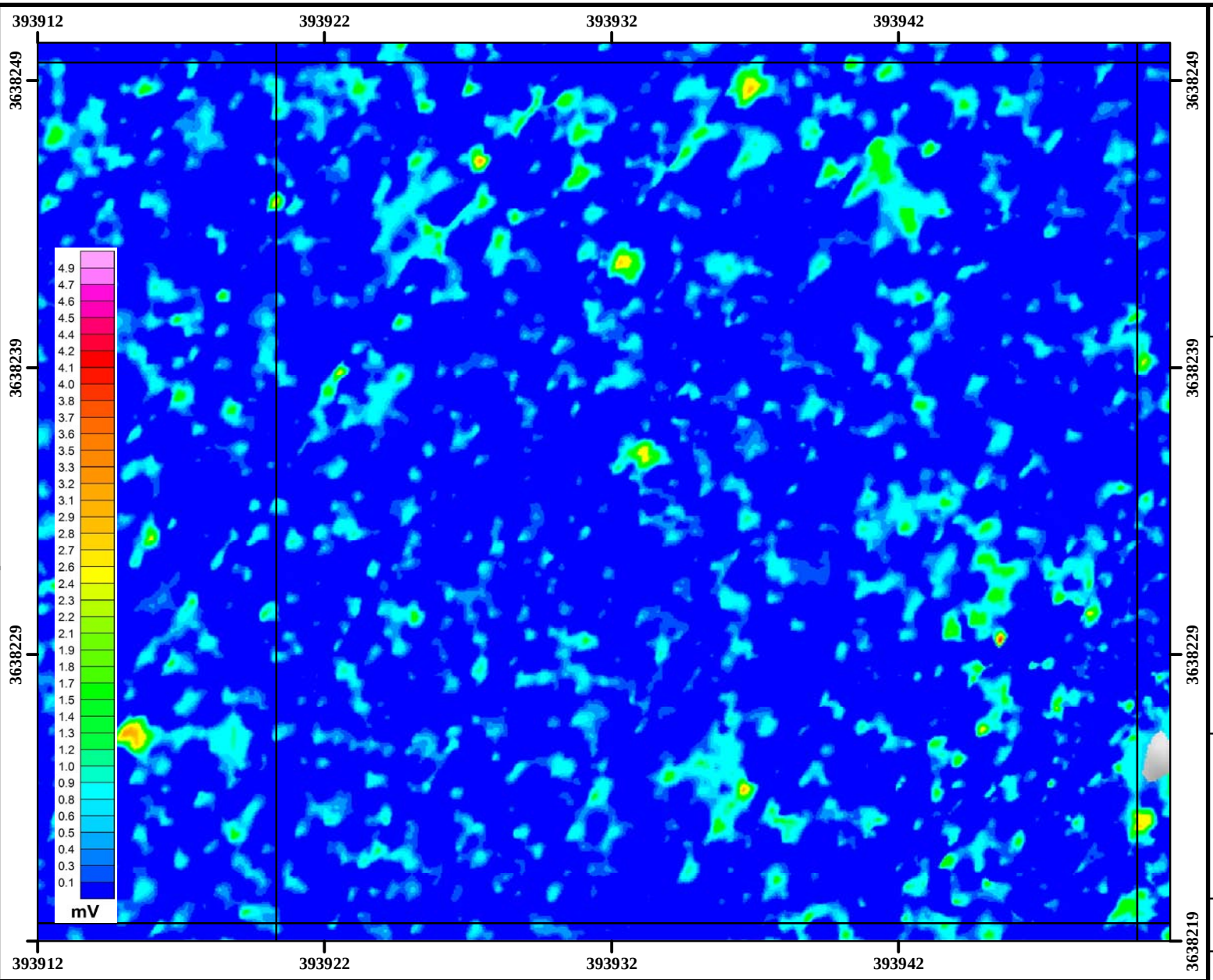
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-078 SR864 Grid IQ314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-79

EM61-MK2 Channel 2 Gridded Data Grid IQ315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

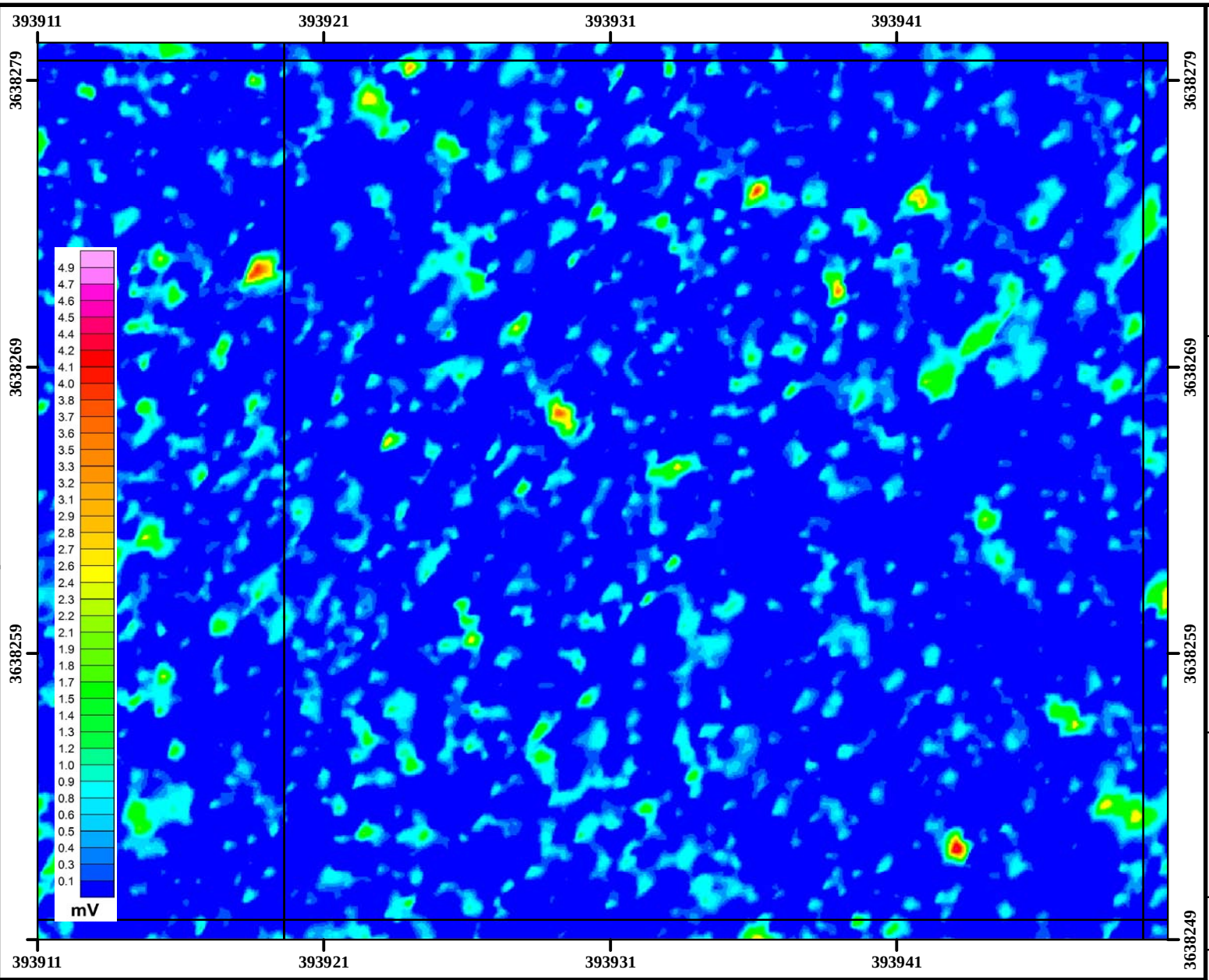
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-079 SR864 Grid IQ315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-80

EM61-MK2 Channel 2 Gridded Data Grid IQ316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

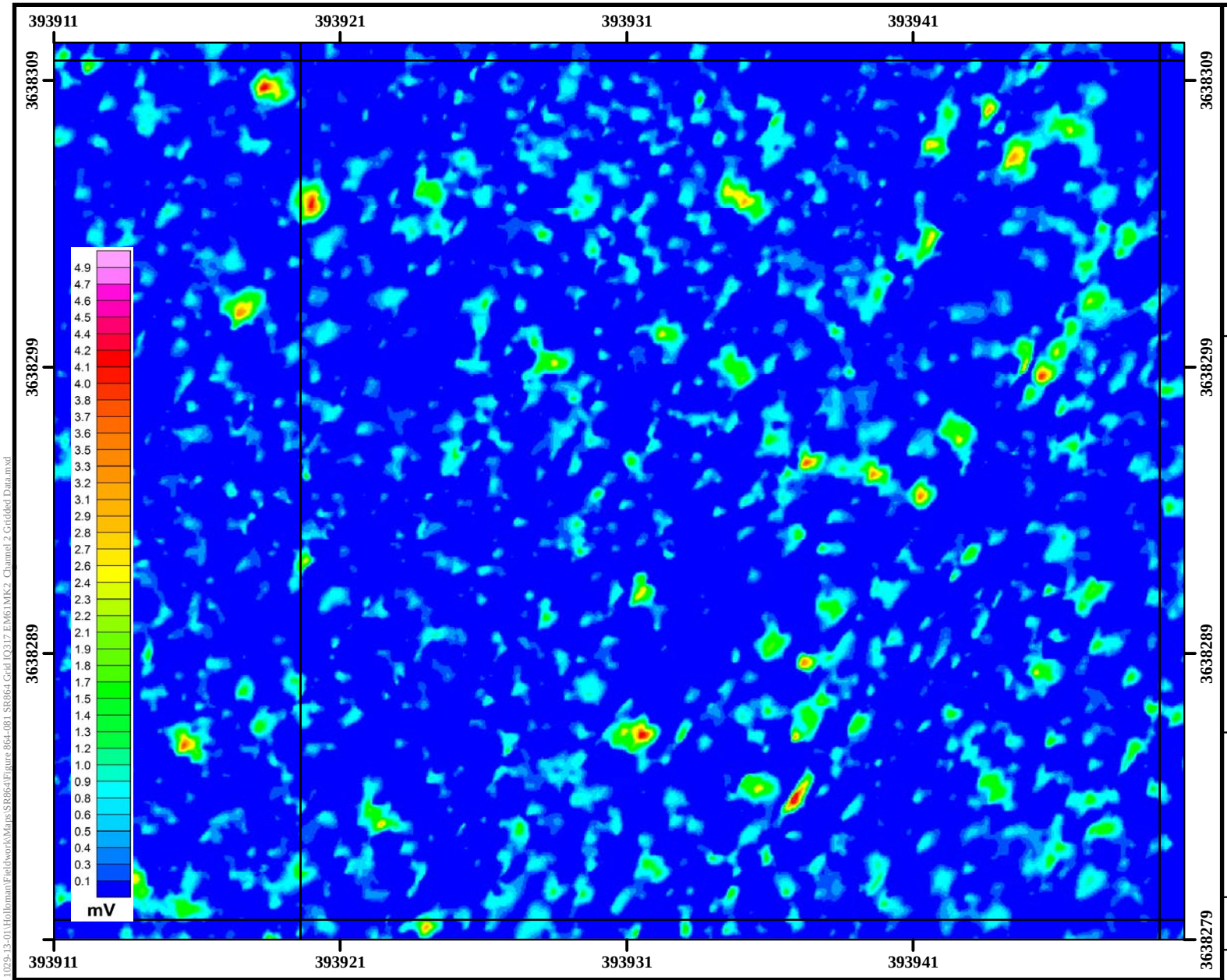
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-080 SR864 Grid IQ316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-81

EM61-MK2 Channel 2 Gridded Data Grid IQ317 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

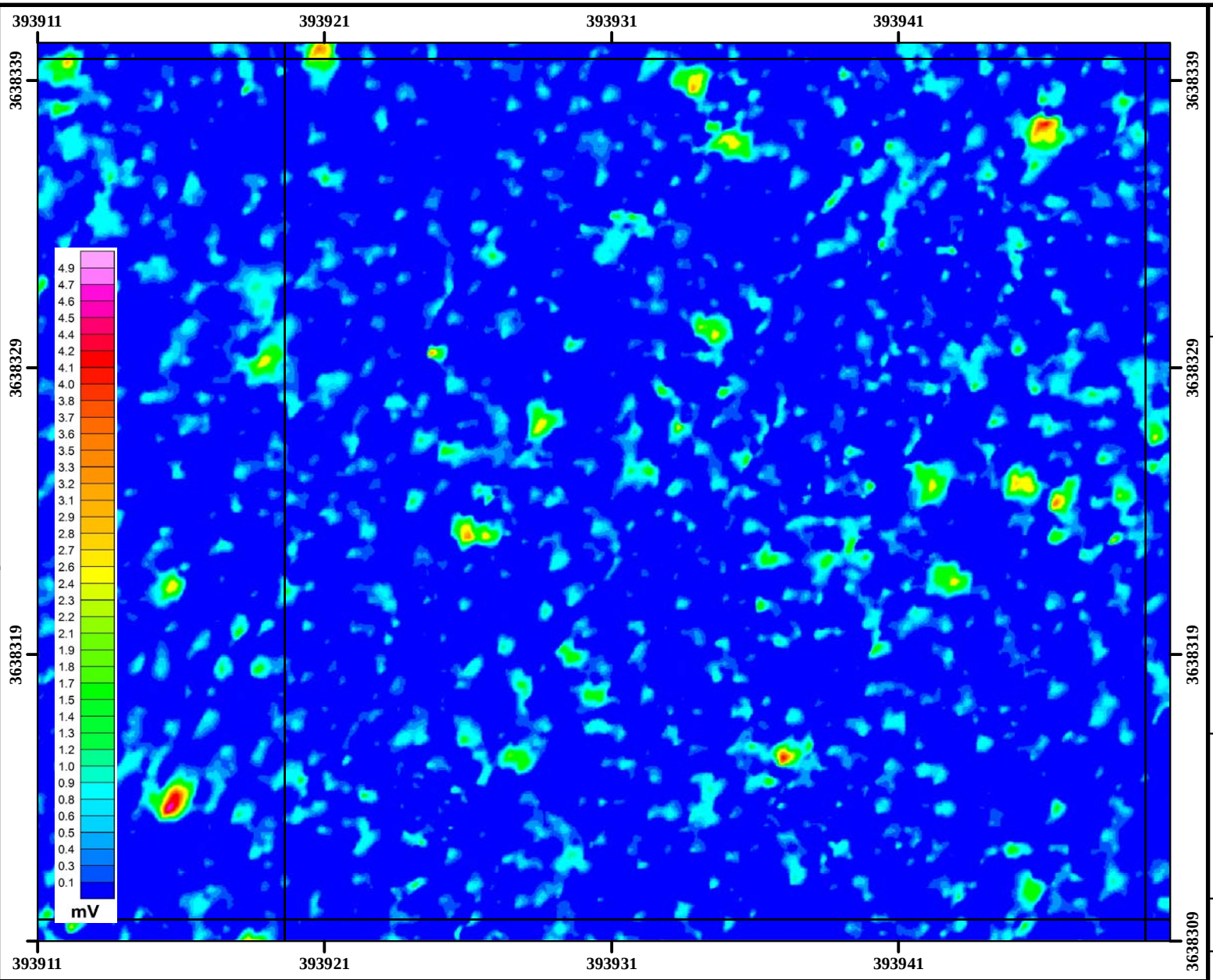
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-081 SR864 Grid IQ317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-82

EM61-MK2 Channel 2 Gridded Data Grid IQ318 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

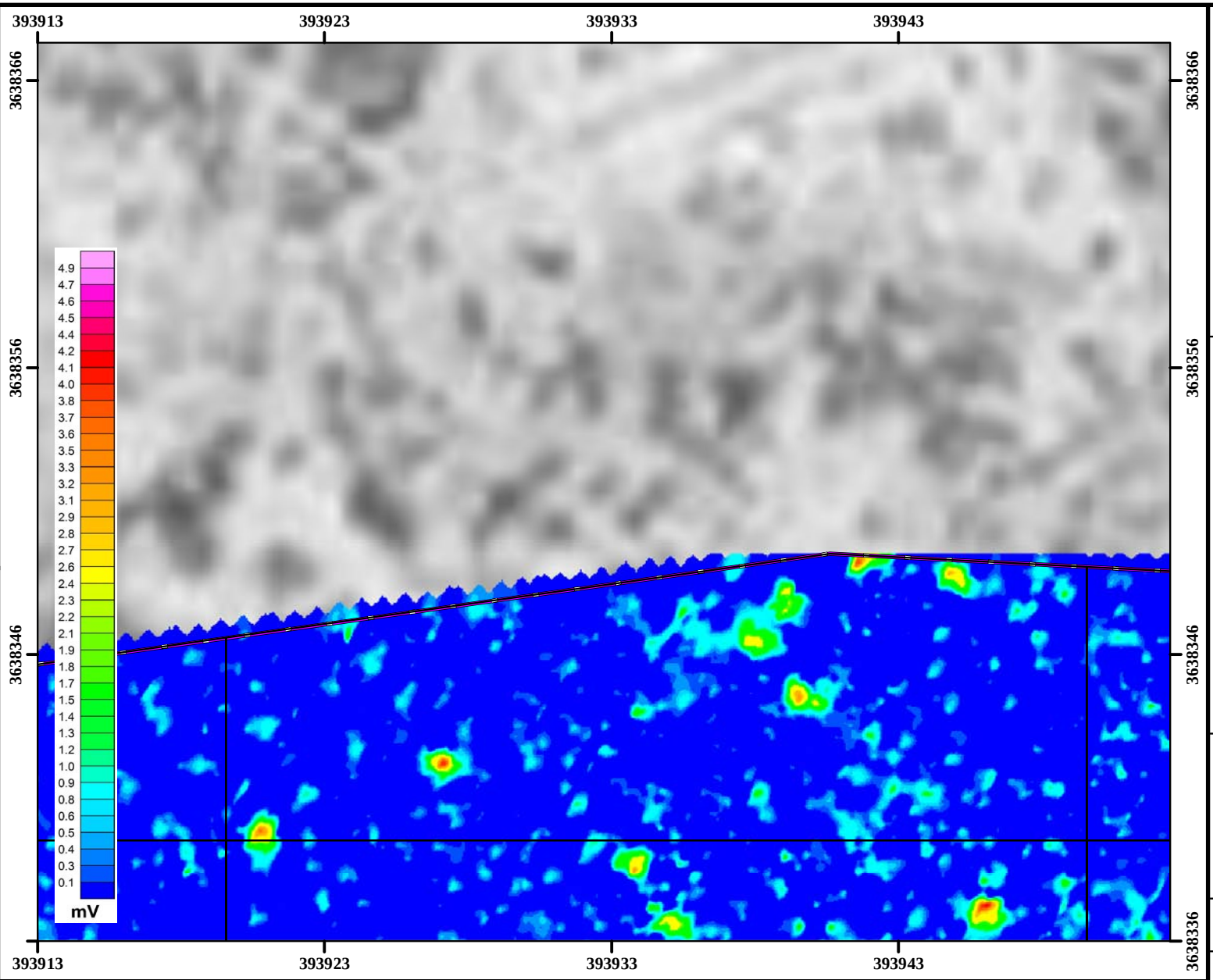
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-082 SR864 Grid IQ318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-83

EM61-MK2 Channel 2 Gridded Data Grid IQ319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

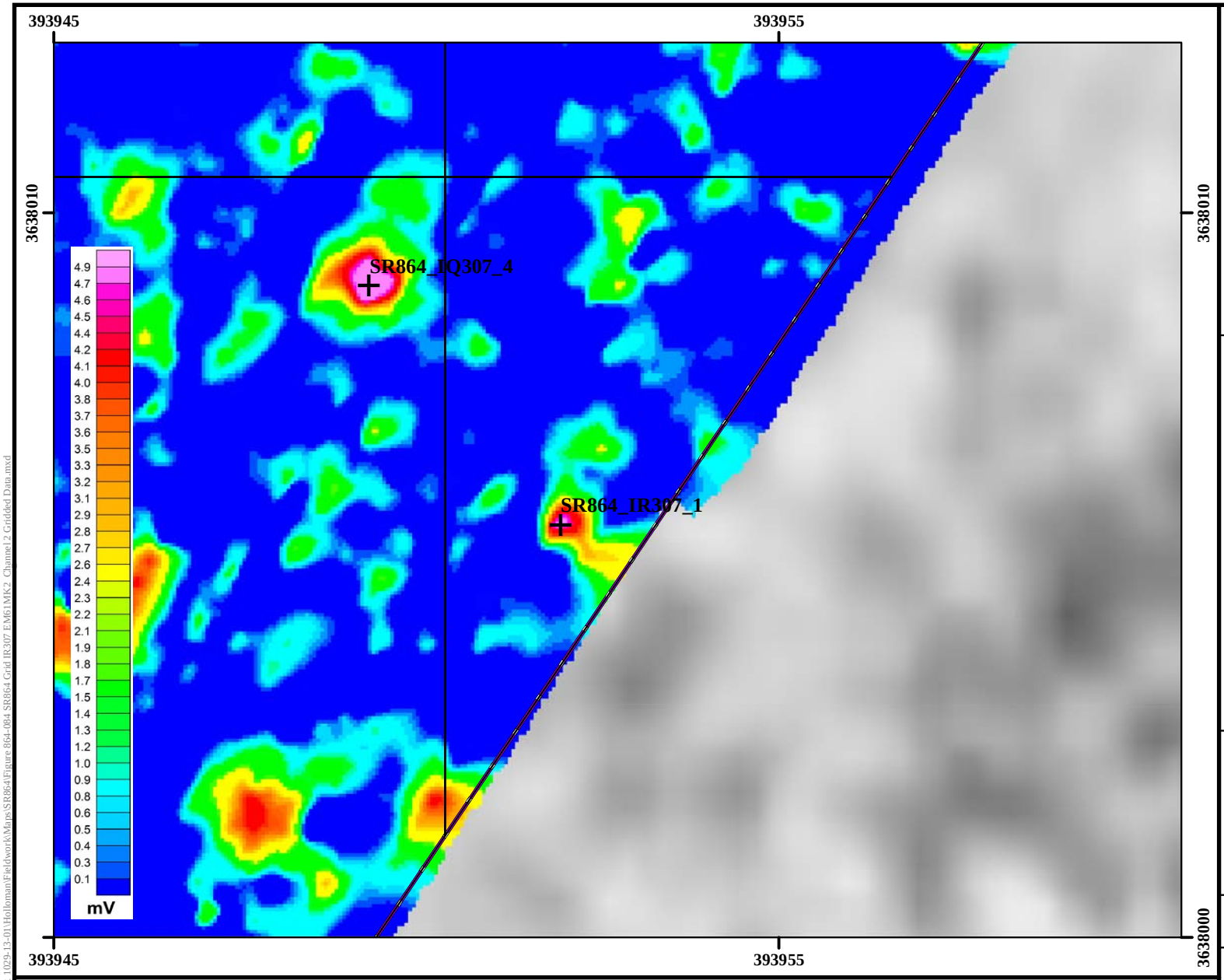
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-083 SR864 Grid IQ319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-84

EM61-MK2 Channel 2 Gridded Data Grid IR307 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

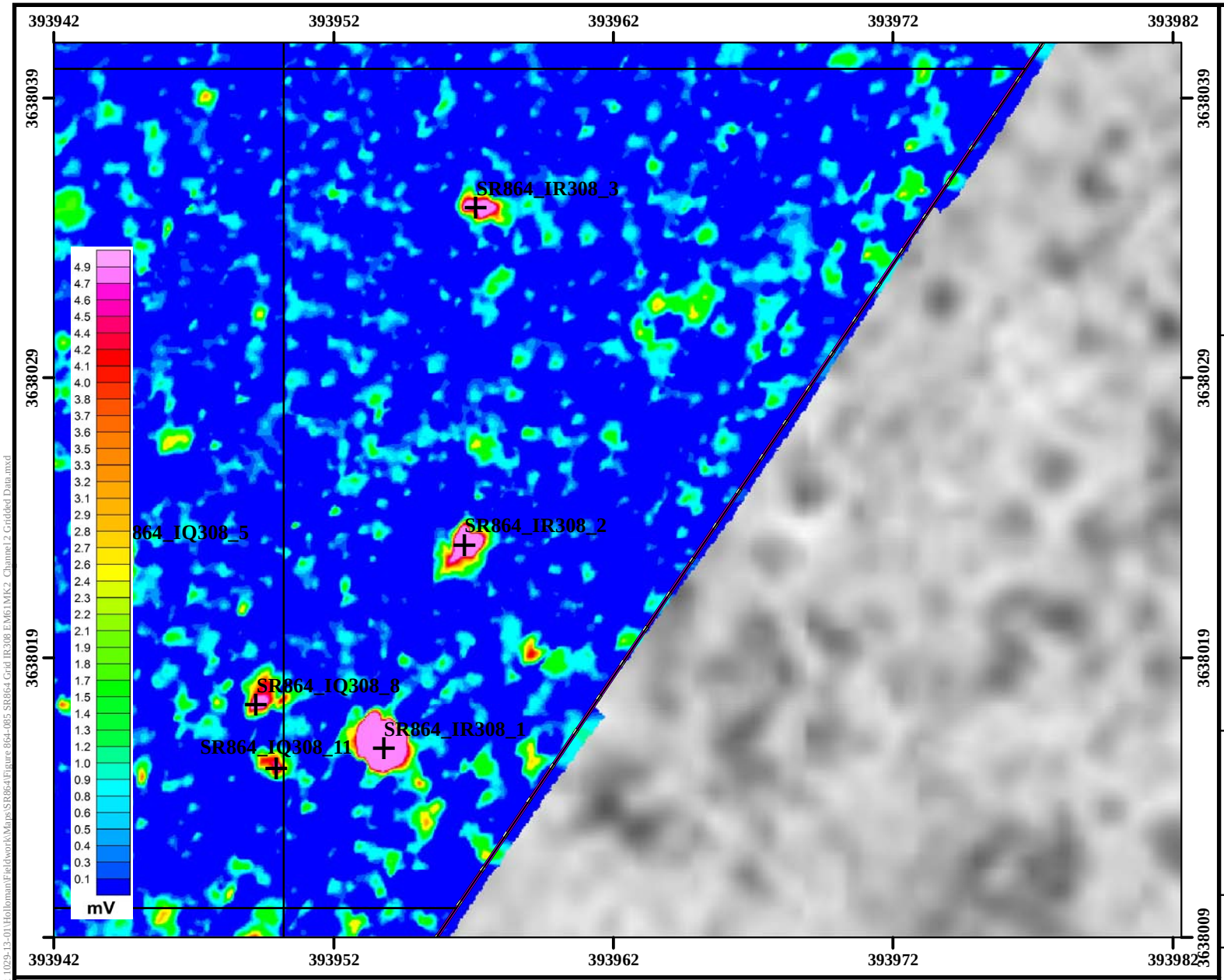
1 inch = 7 feet

0 1 2 Meters

0 4 8 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-084 SR864 Grid IR307 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-85

EM61-MK2 Channel 2 Gridded Data Grid IR308 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

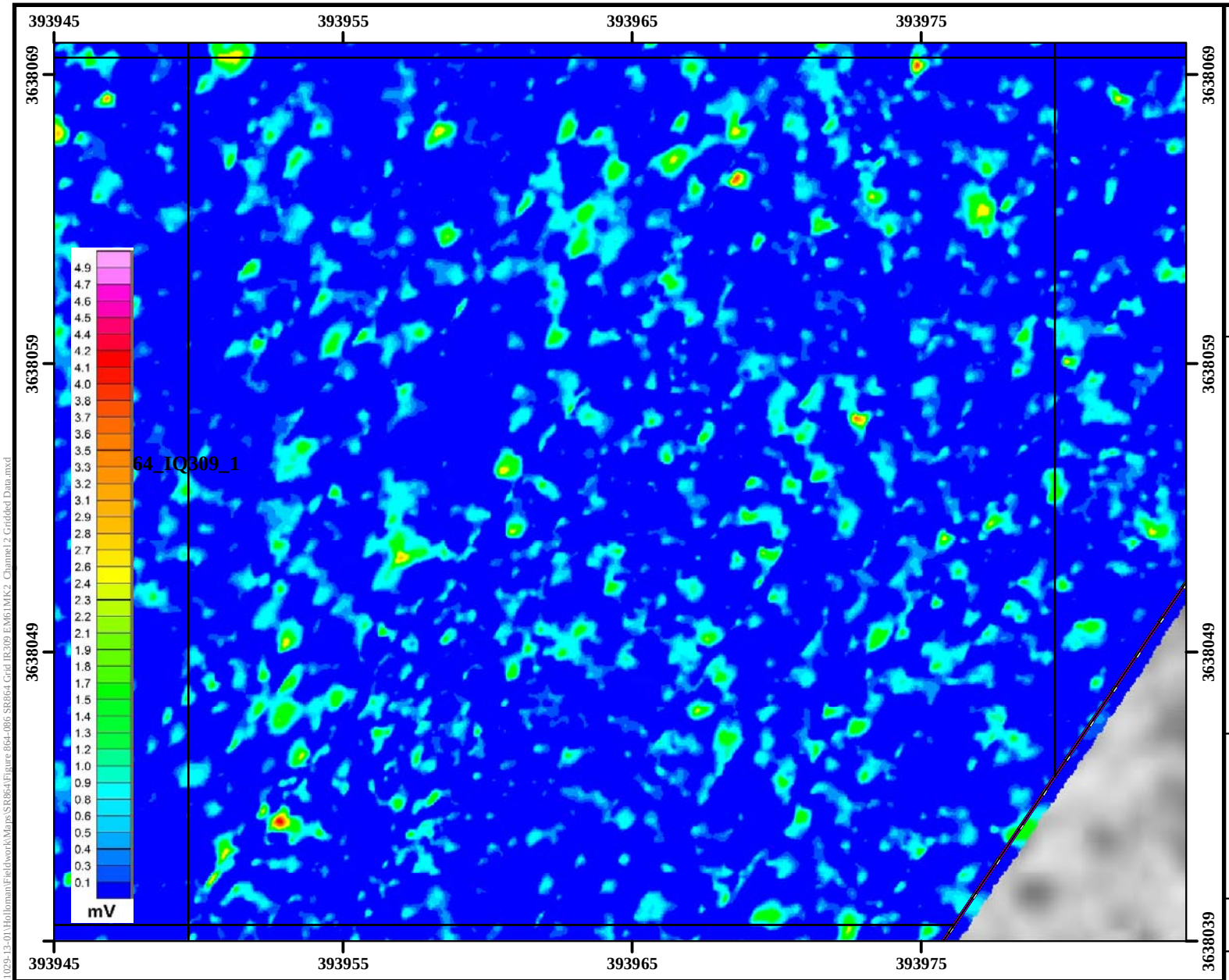
1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-085 SR864 Grid IR308 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-86

EM61-MK2 Channel 2 Gridded Data Grid IR309 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator — Horizontal Datum: North American 1983
False Easting: 500,000.0000 — False Northing: 0.0000
Central Meridian: -105.0000 — Scale Factor: 0.9996
Latitude Of Origin: 0.0000 — Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

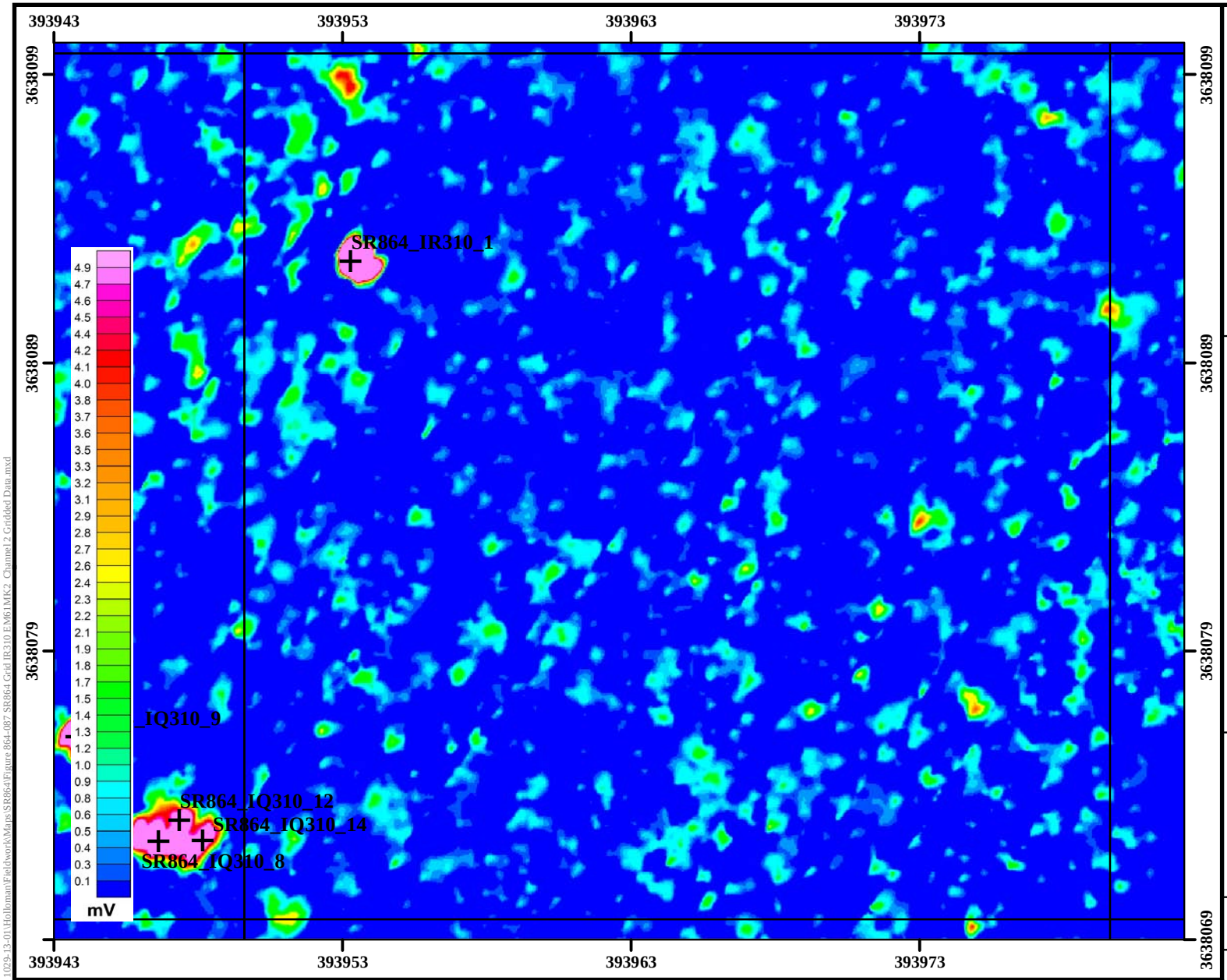
1 inch = 17 feet

0 5 10 Meters

0 15 30 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-086 SR864 Grid IR309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-87

EM61-MK2 Channel 2 Gridded Data Grid IR310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

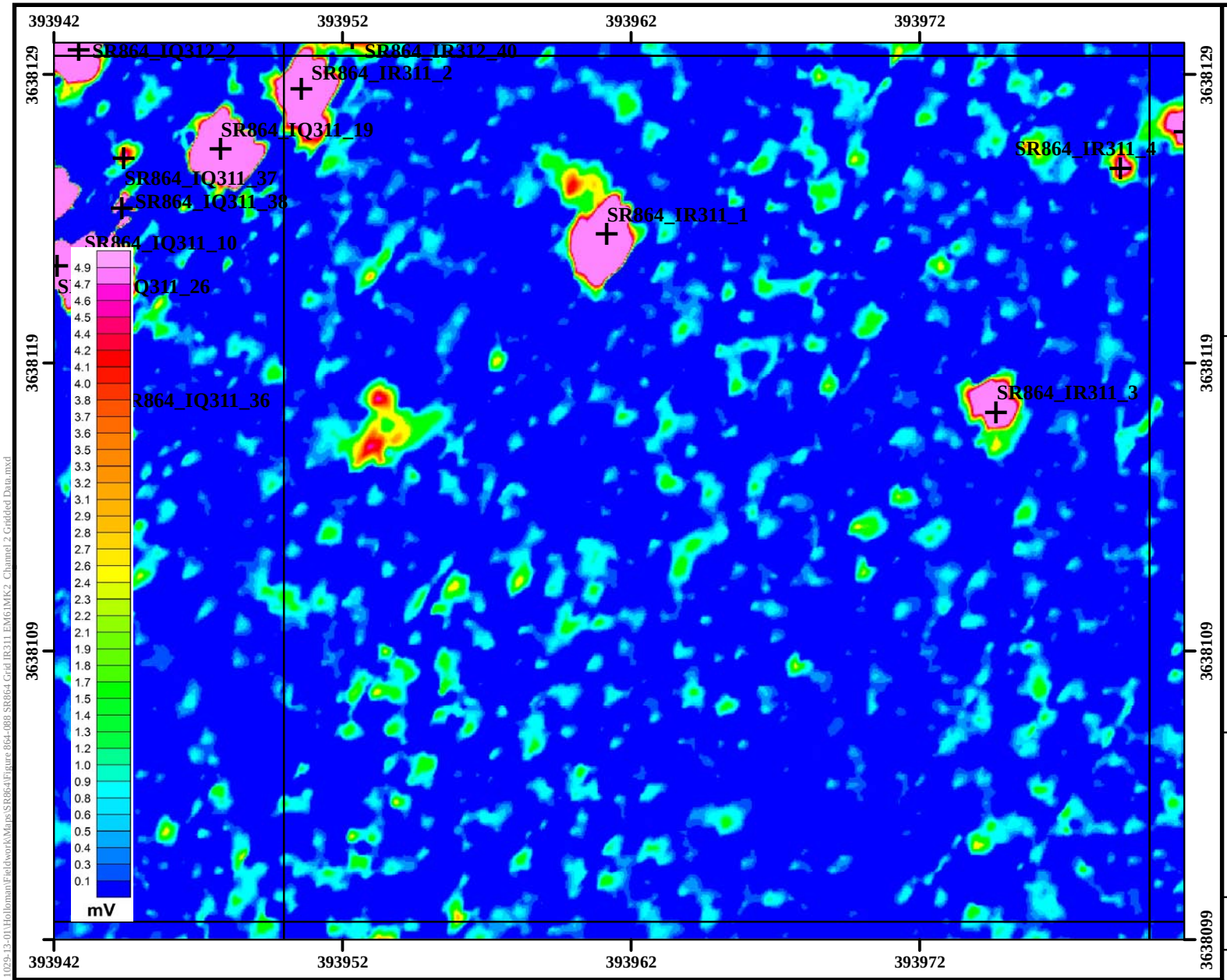
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-087 SR864 Grid IR310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-88

EM61-MK2 Channel 2 Gridded Data Grid IR311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

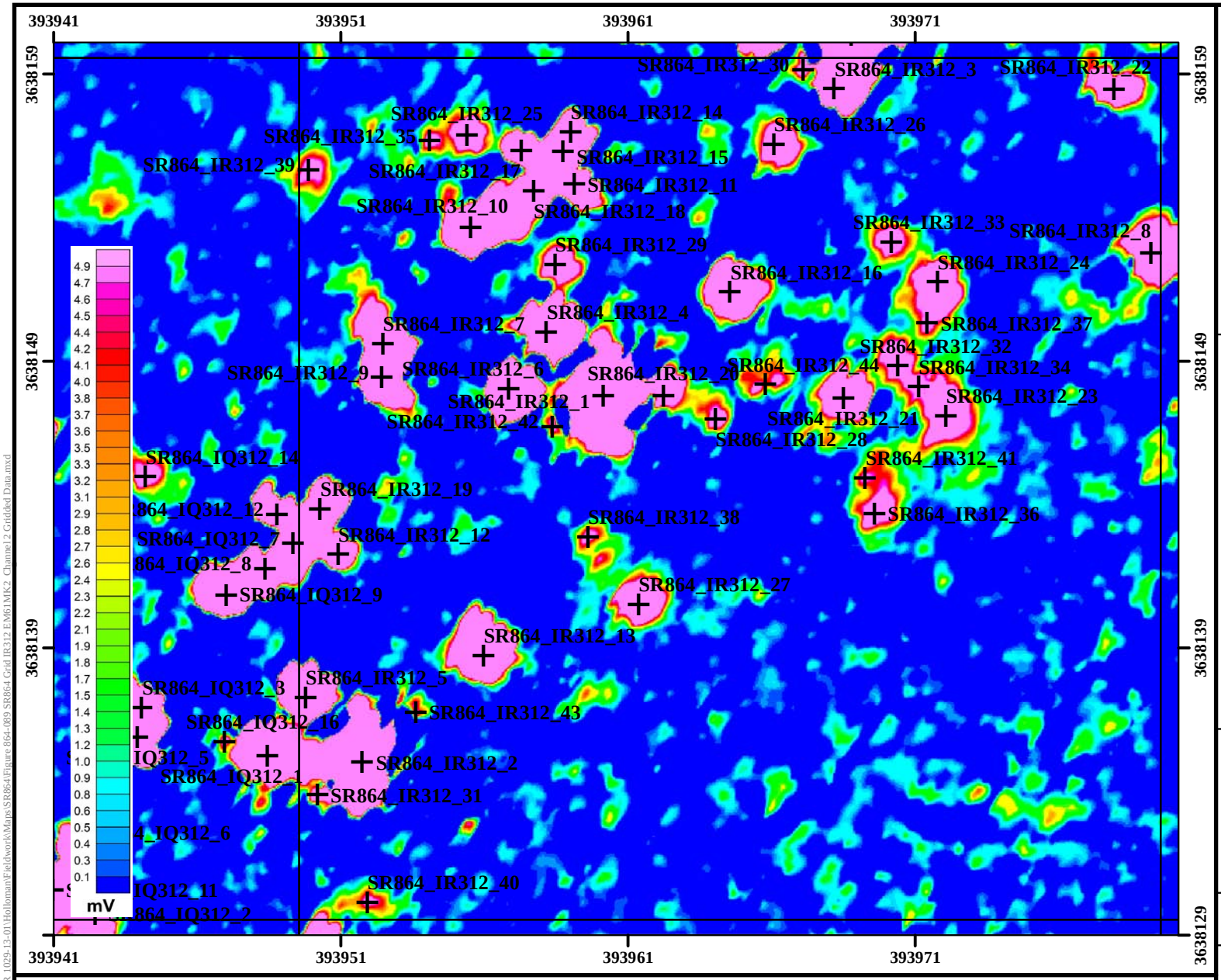
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-088 SR864 Grid IR311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-89

EM61-MK2 Channel 2 Gridded Data Grid IR312 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

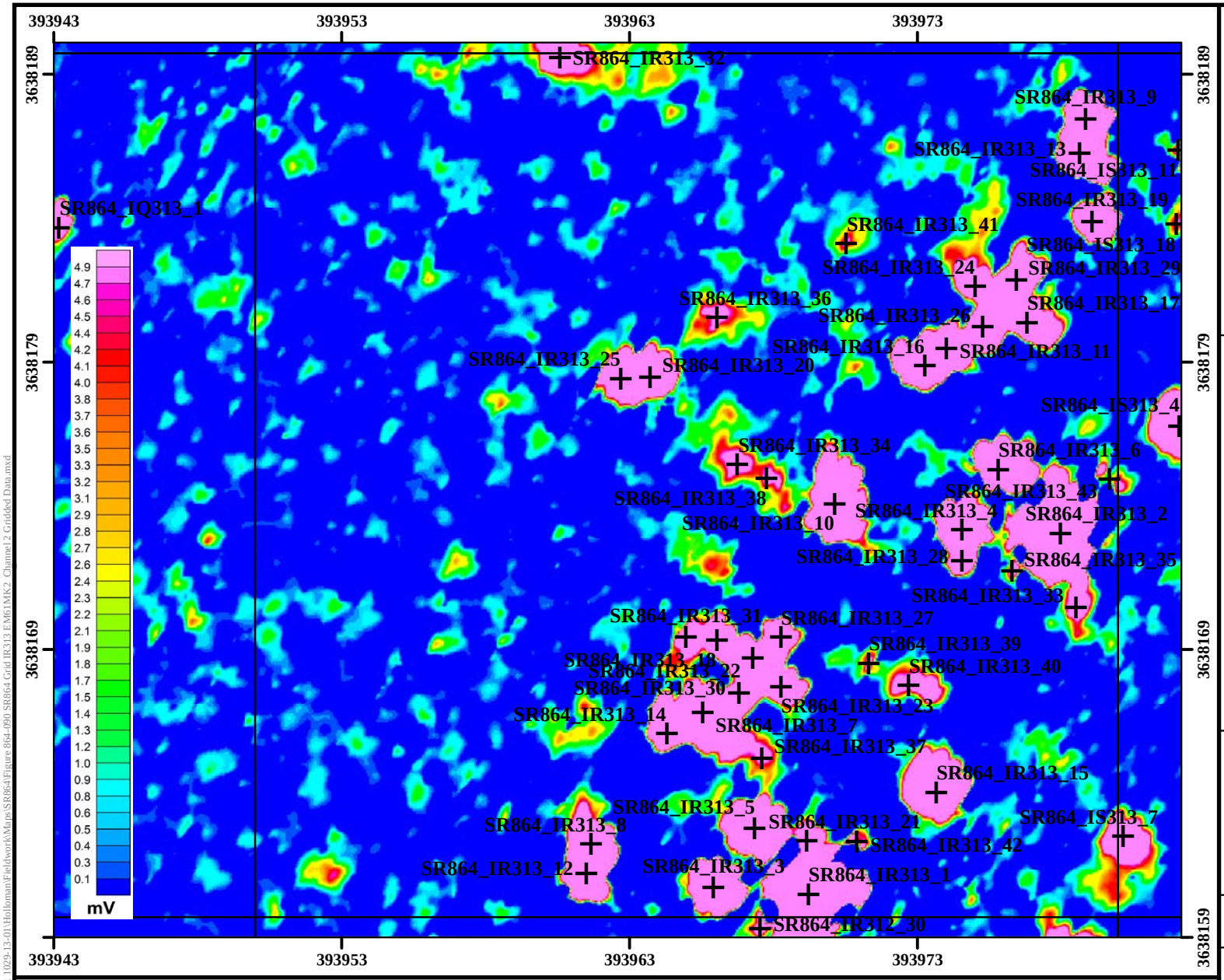
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-089 SR864 Grid IR312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-90

EM61-MK2 Channel 2 Gridded Data Grid IR313 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

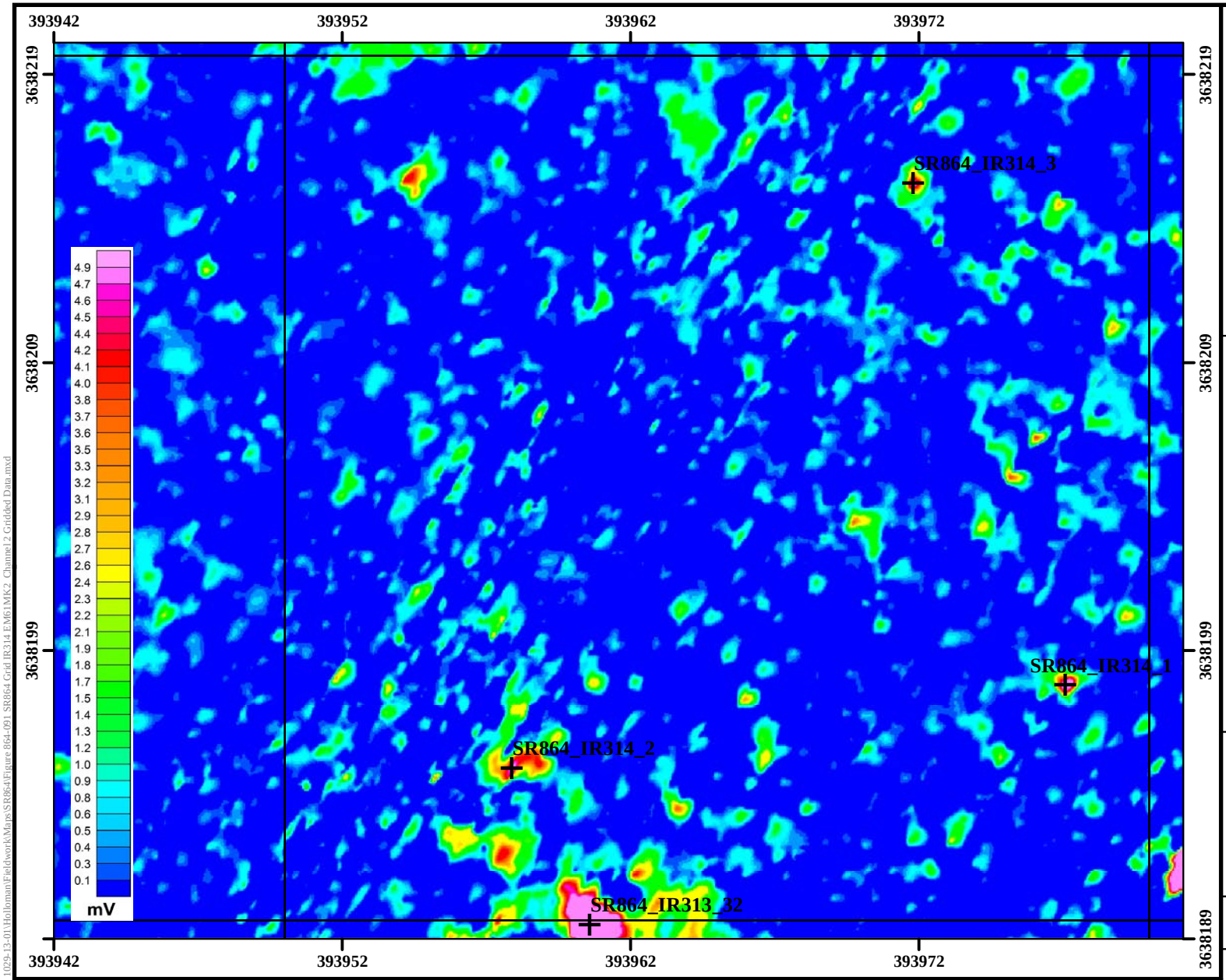
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-090 SR864 Grid IR313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-91

EM61-MK2 Channel 2 Gridded Data Grid IR314 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

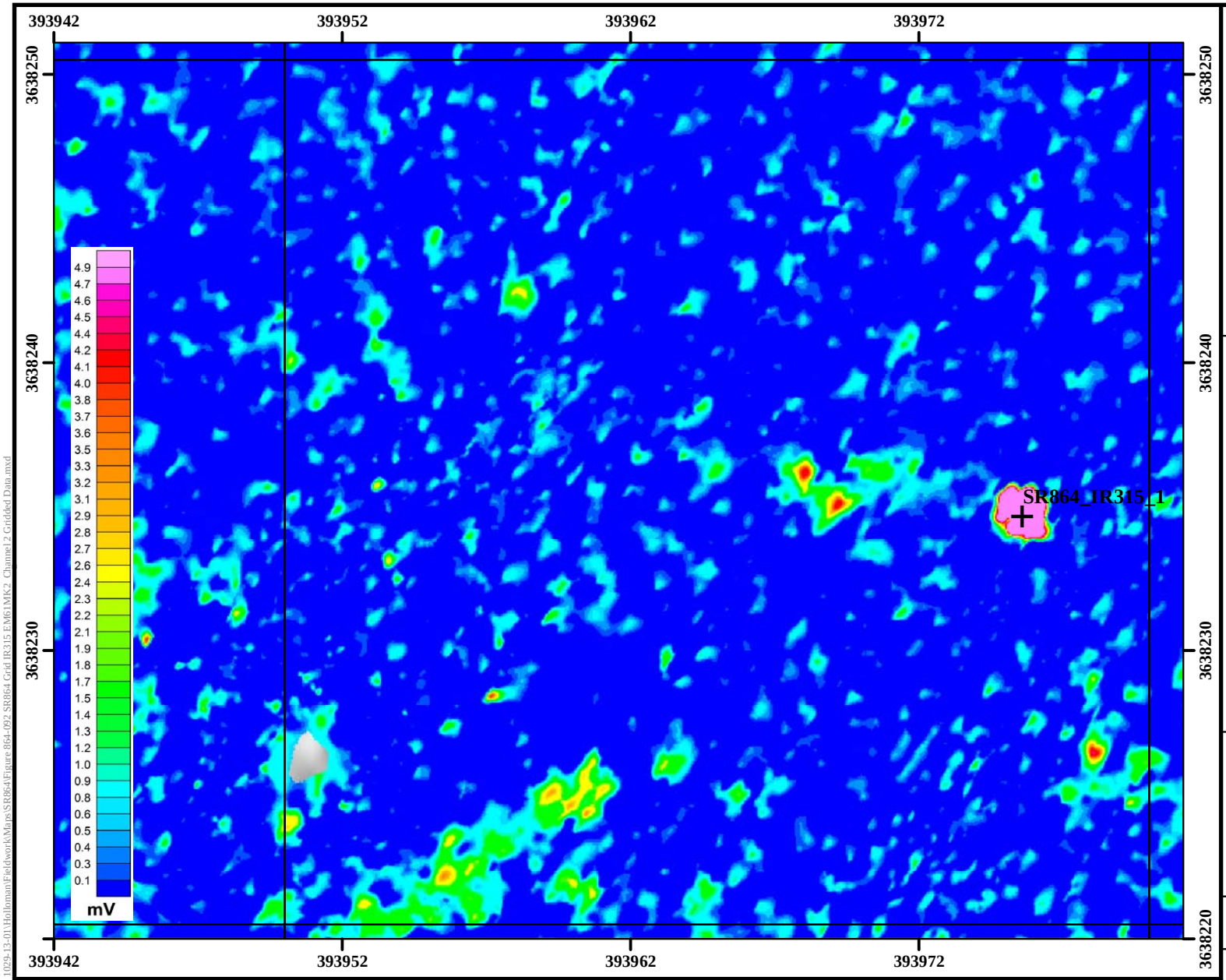
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-091 SR864 Grid IR314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-92

EM61-MK2 Channel 2 Gridded Data Grid IR315 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

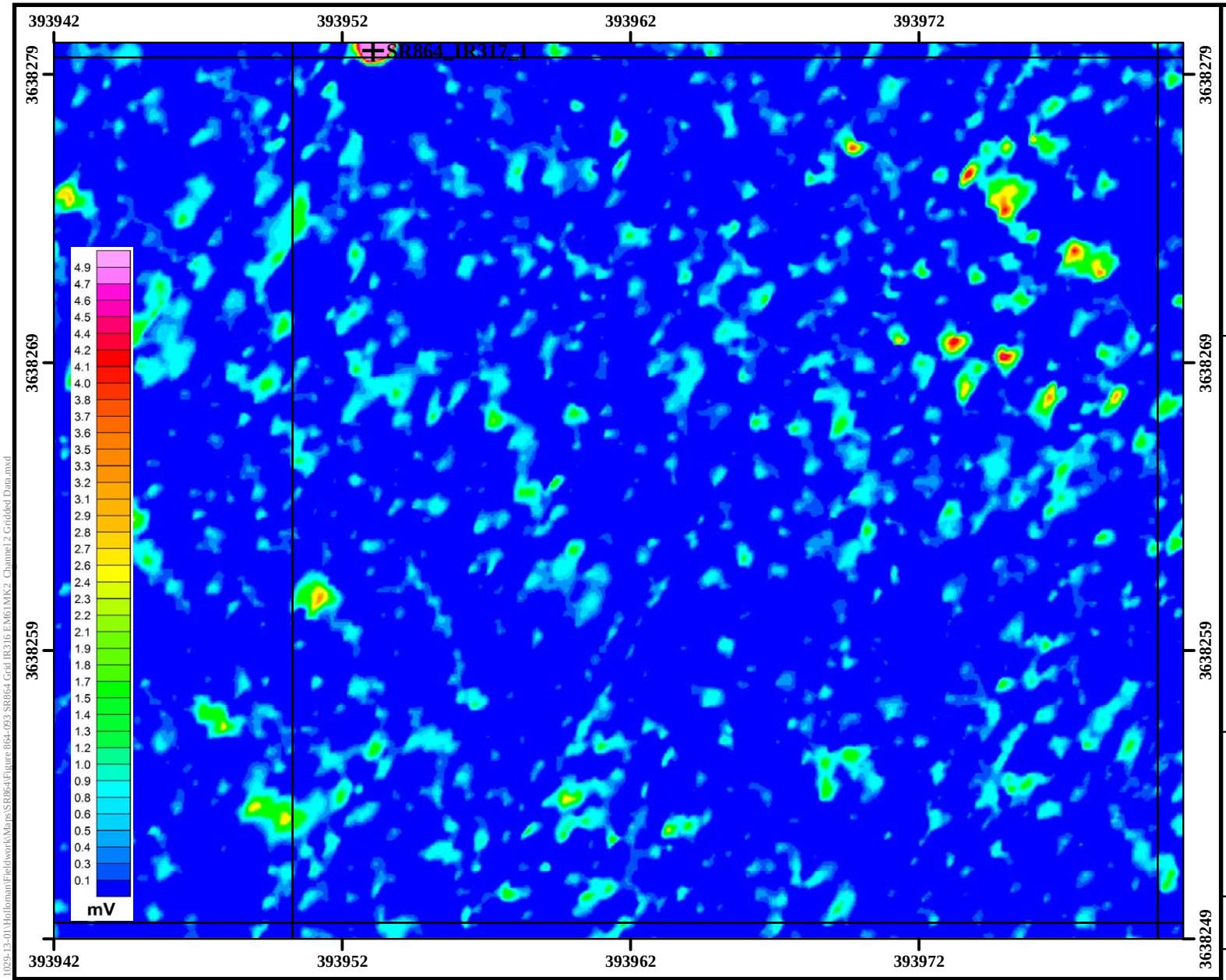
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-092 SR864 Grid IR315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-93

EM61-MK2 Channel 2 Gridded Data Grid IR316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

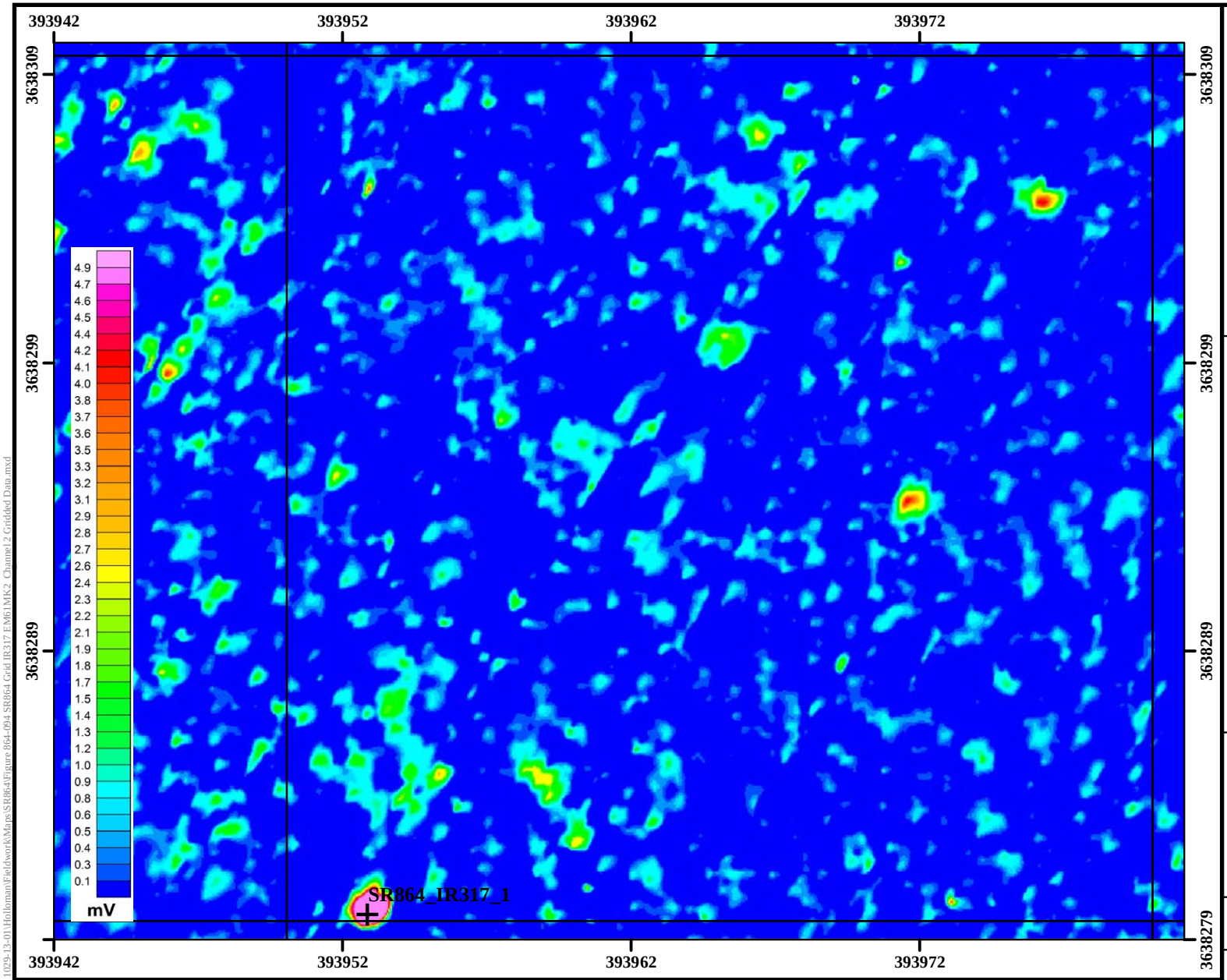
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-093 SR864 Grid IR316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-94

EM61-MK2 Channel 2 Gridded Data Grid IR317 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

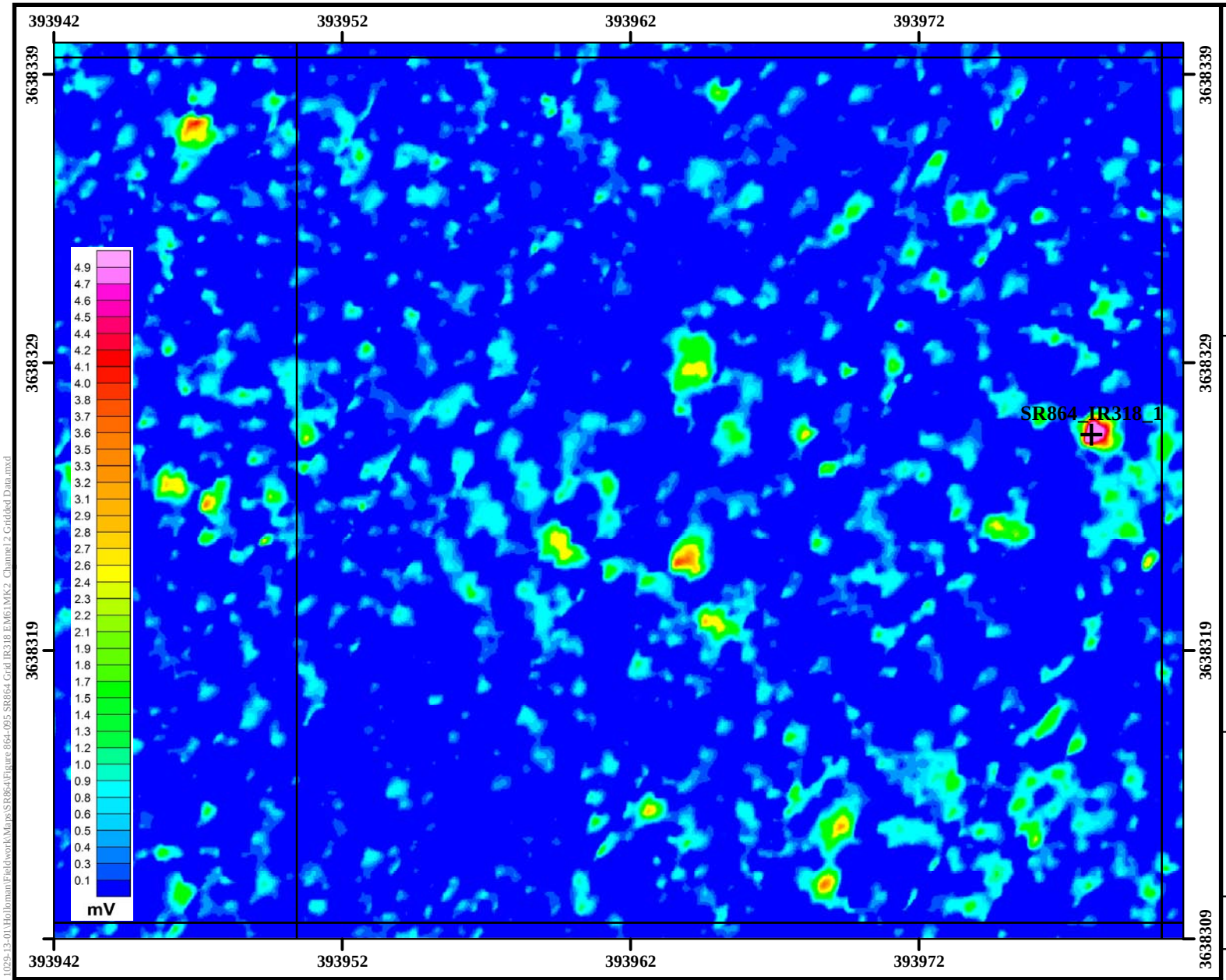
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-094 SR864 Grid IR317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-95

EM61-MK2 Channel 2 Gridded Data Grid IR318 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

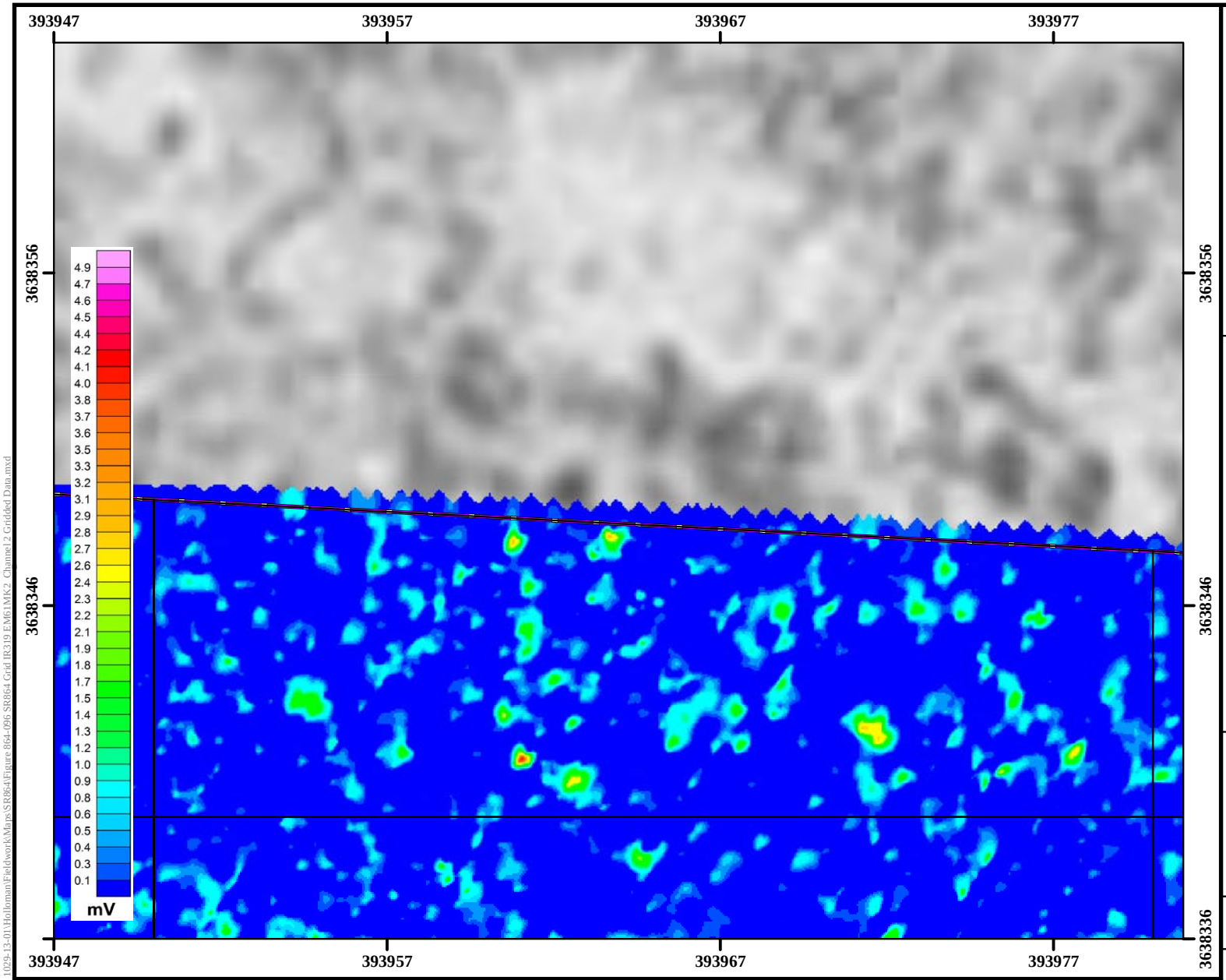
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-095 SR864 Grid IR318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-96

EM61-MK2 Channel 2 Gridded Data Grid IR319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

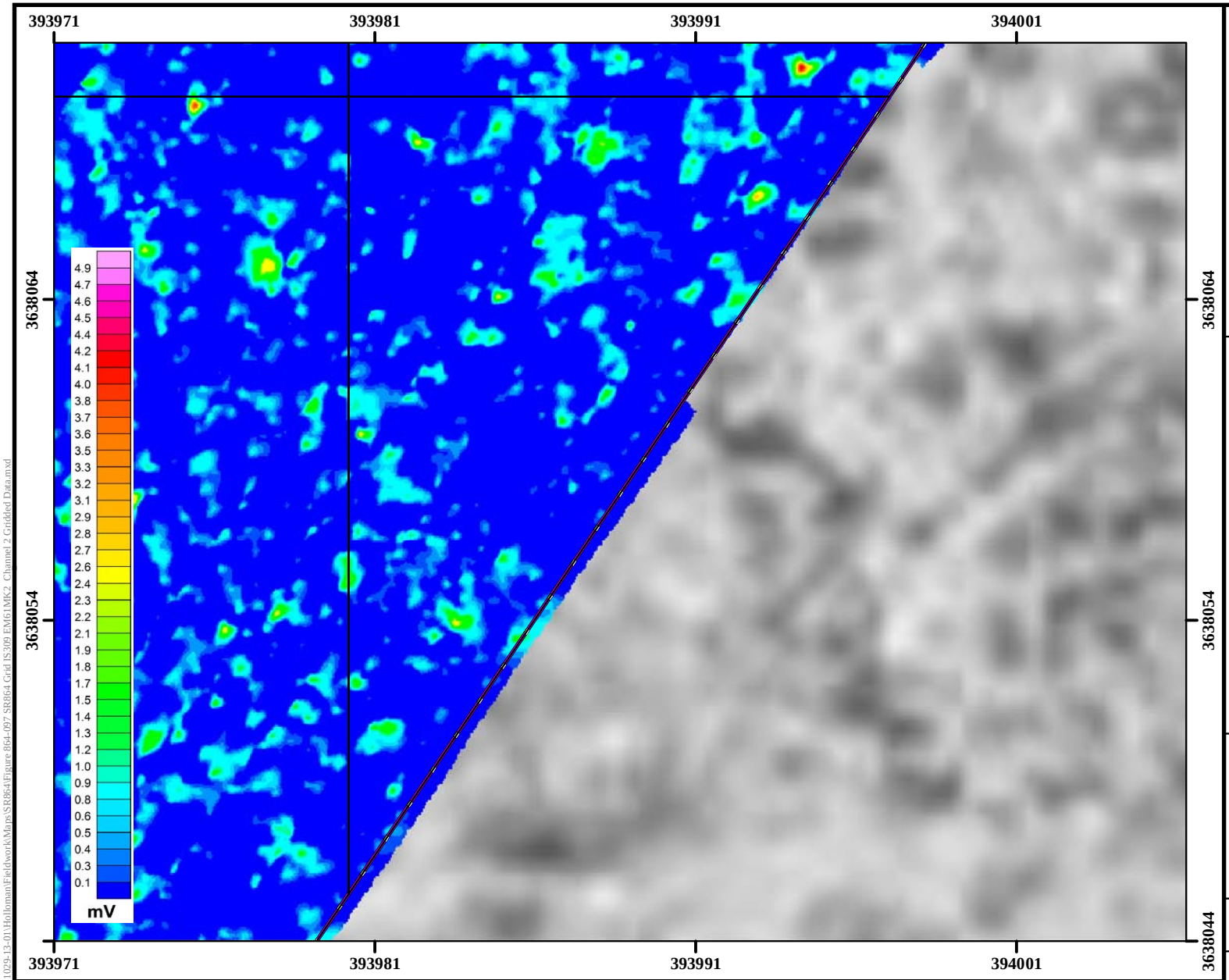
1 inch = 15 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-096 SR864 Grid IR319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-97

EM61-MK2 Channel 2 Gridded Data Grid IS309 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

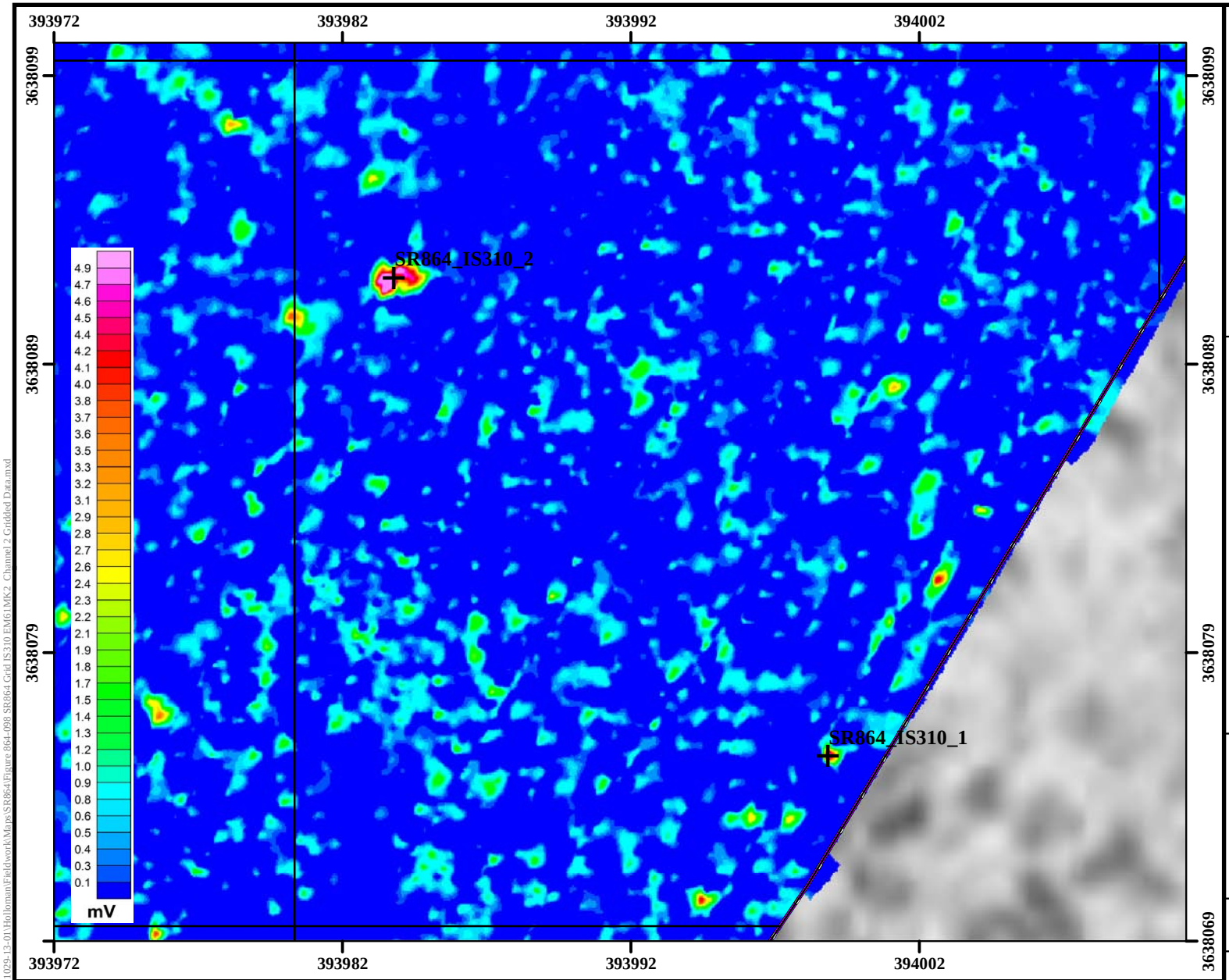
1 inch = 15 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-097 SR864 Grid IS309 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-98

EM61-MK2 Channel 2 Gridded Data Grid IS310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

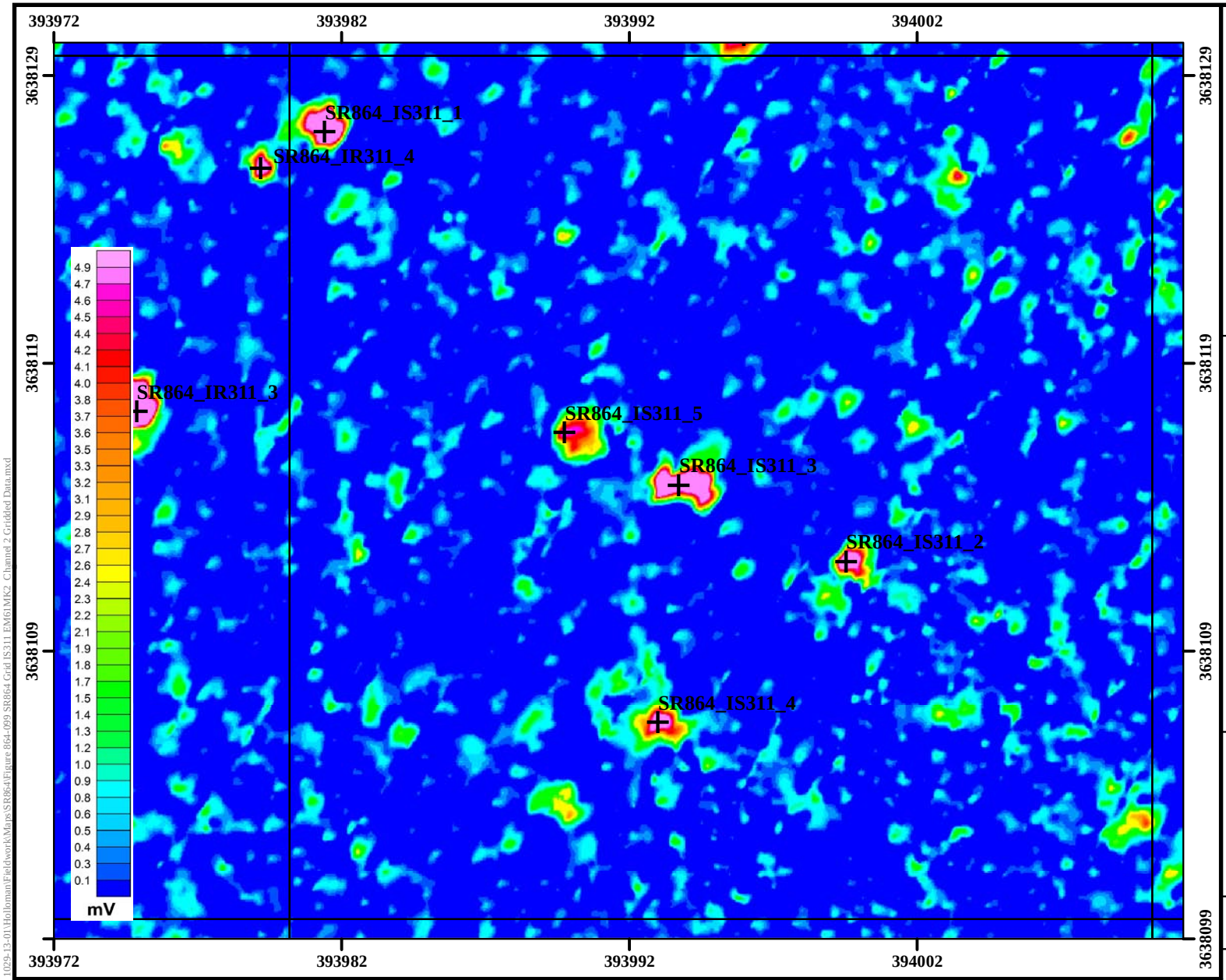
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-098 SR864 Grid IS310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-99

EM61-MK2 Channel 2 Gridded Data Grid IS311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

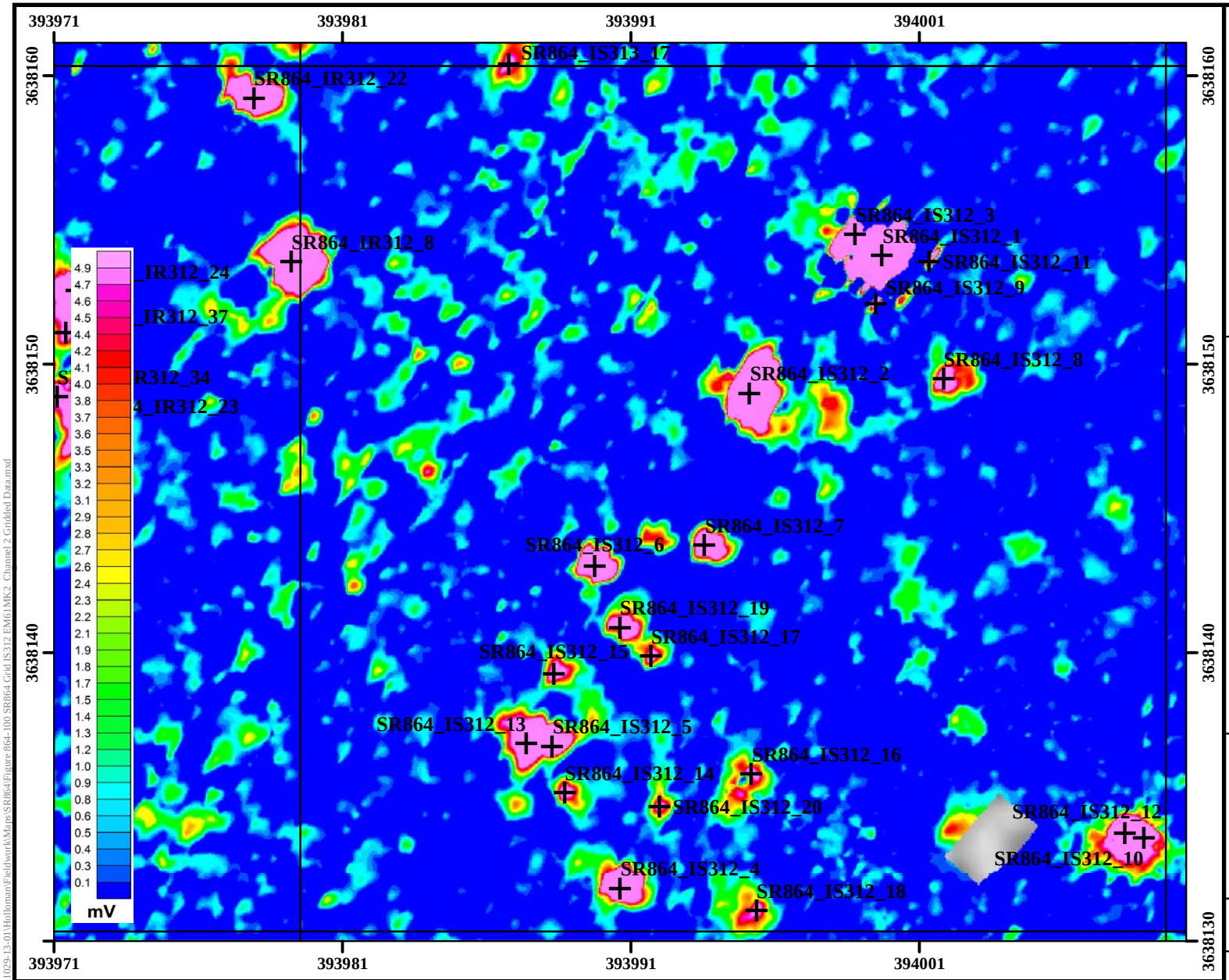
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-099 SR864 Grid IS311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-100

EM61-MK2 Channel 2 Gridded Data Grid IS312 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

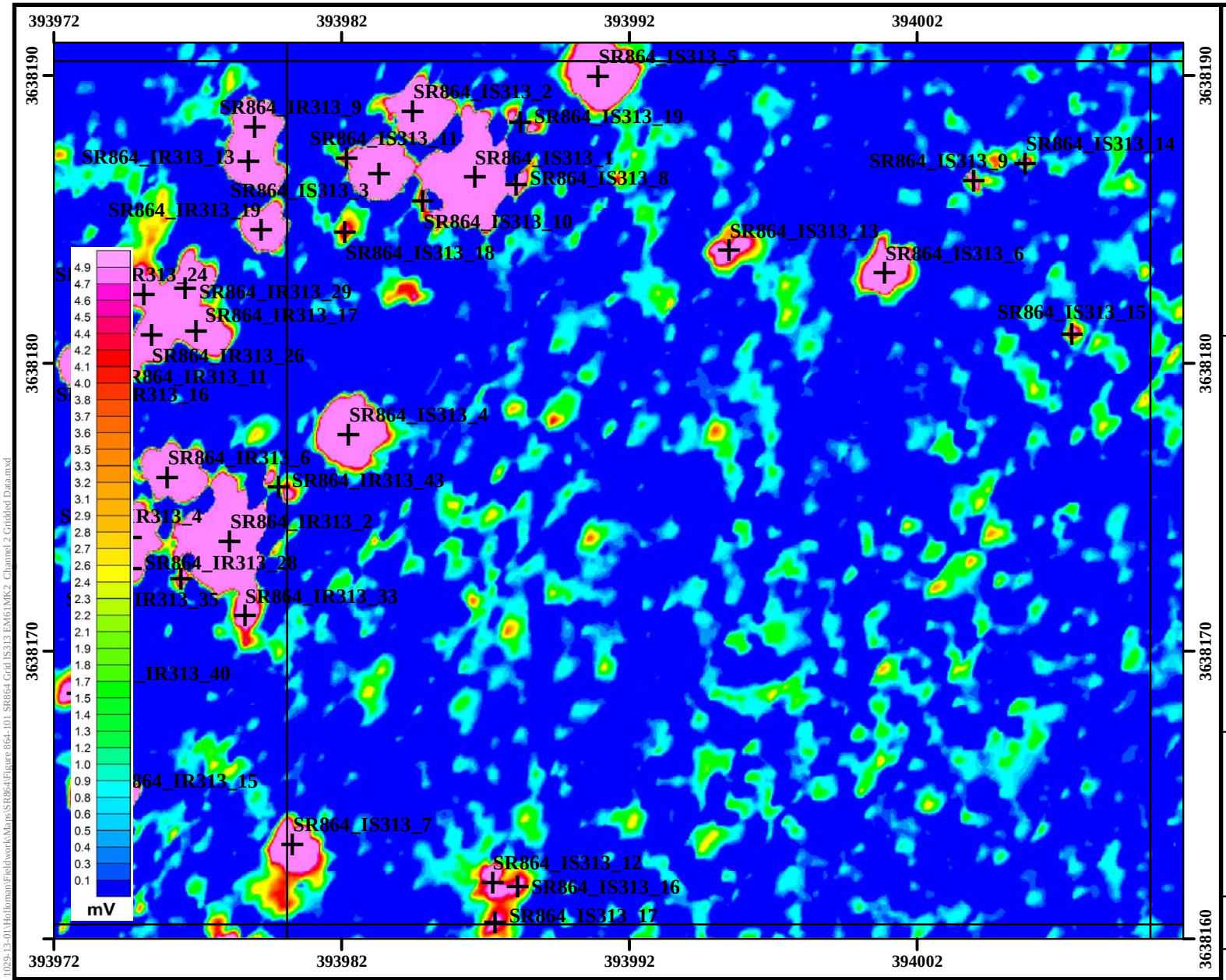
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-100 SR864 Grid IS312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-101

EM61-MK2 Channel 2 Gridded Data Grid IS313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

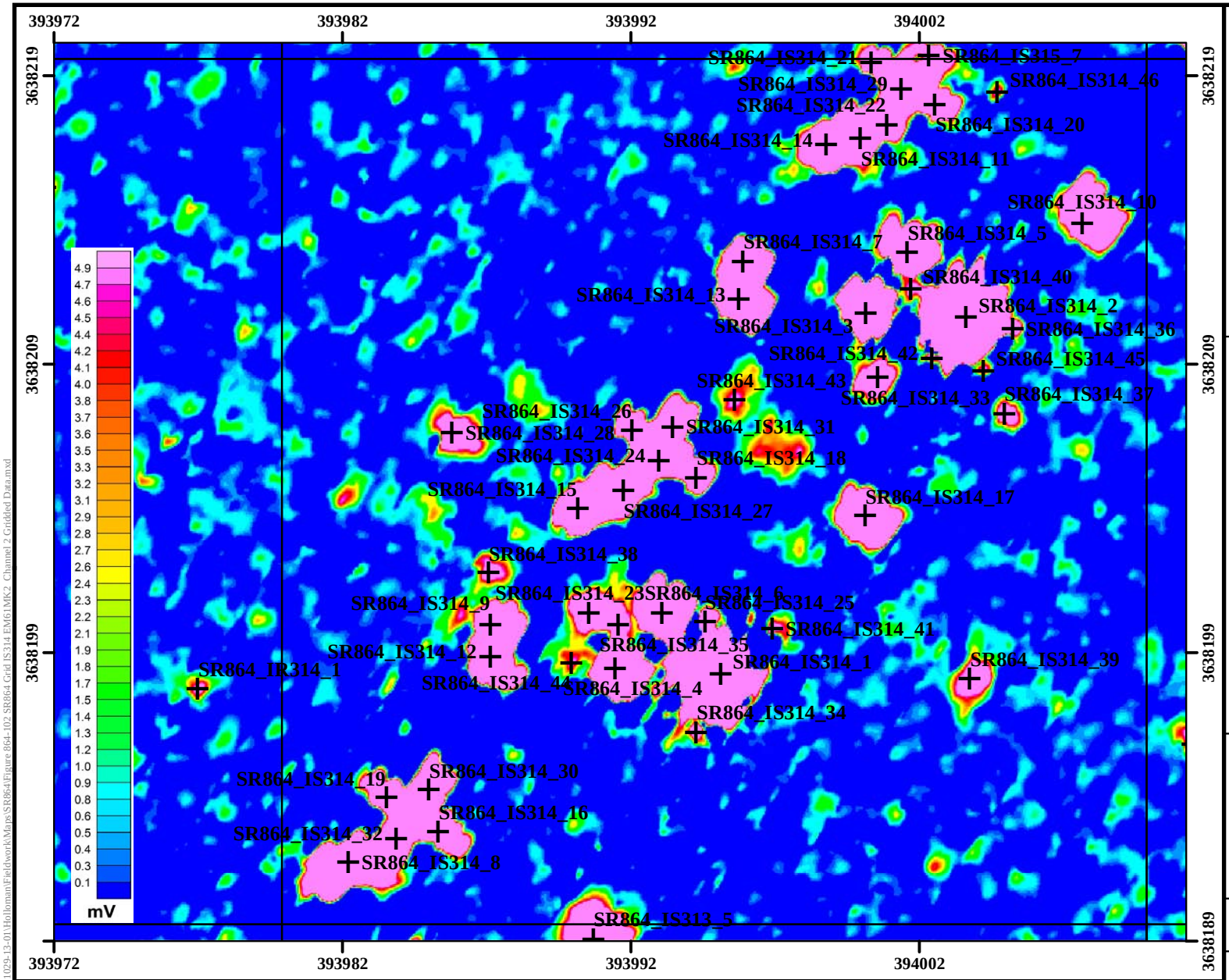
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-101 SR864 Grid IS313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-102

EM61-MK2 Channel 2 Gridded Data Grid IS314 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

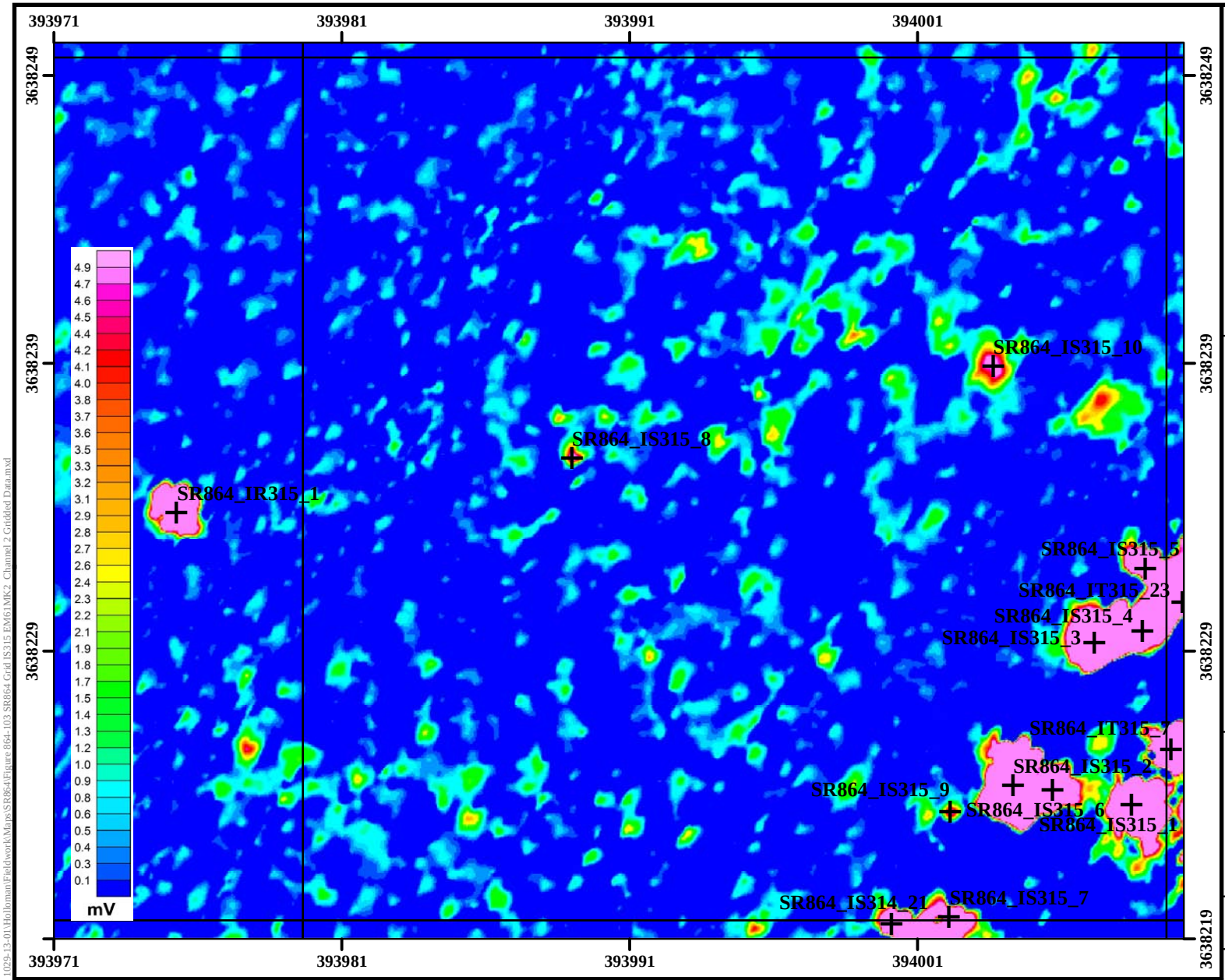
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-102 SR864 Grid IS314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-103

EM61-MK2 Channel 2 Gridded Data Grid IS315 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

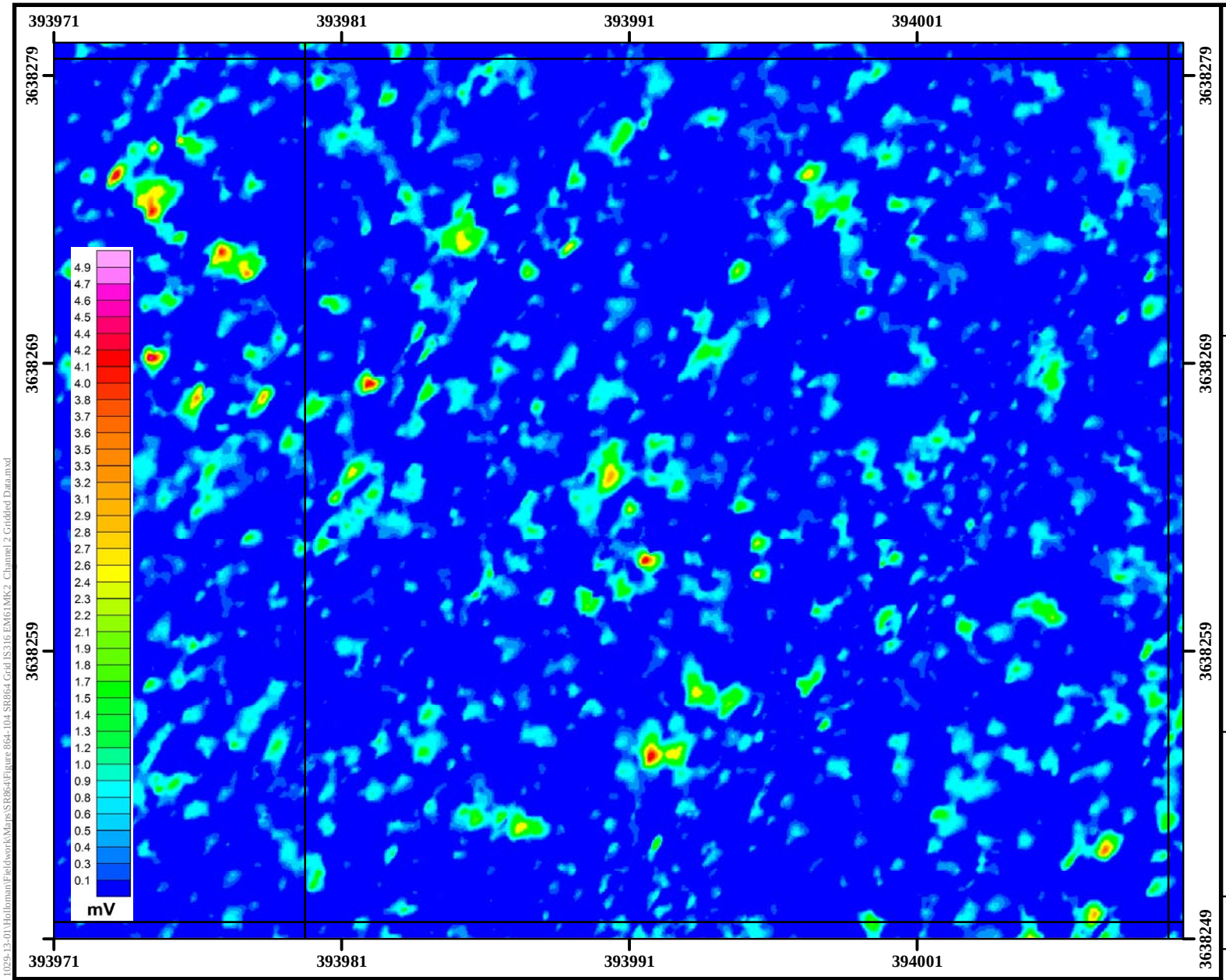
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-103 SR864 Grid IS315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-104

EM61-MK2 Channel 2 Gridded Data Grid IS316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

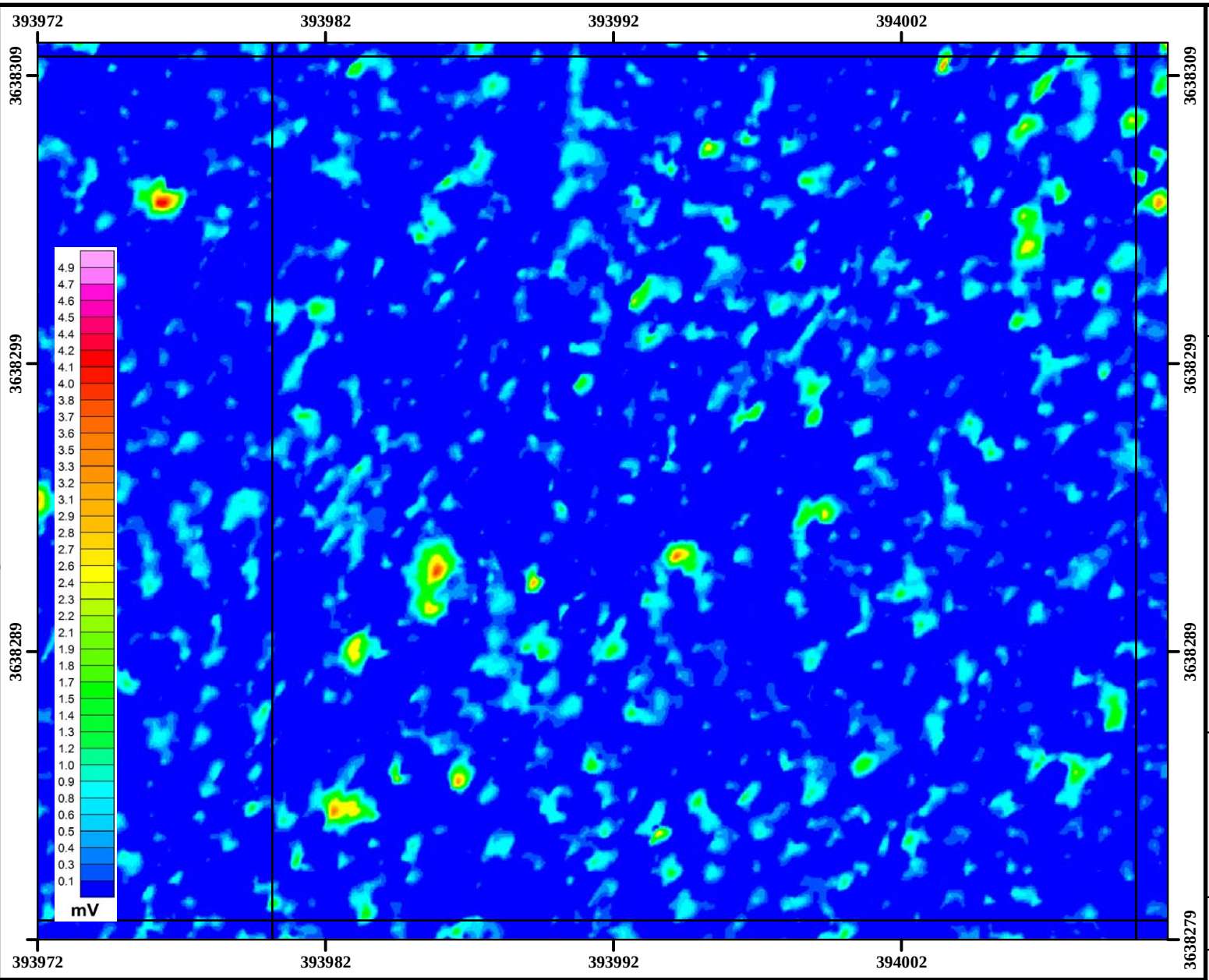
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-104 SR864 Grid IS316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-105

EM61-MK2 Channel 2 Gridded Data Grid IS317 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

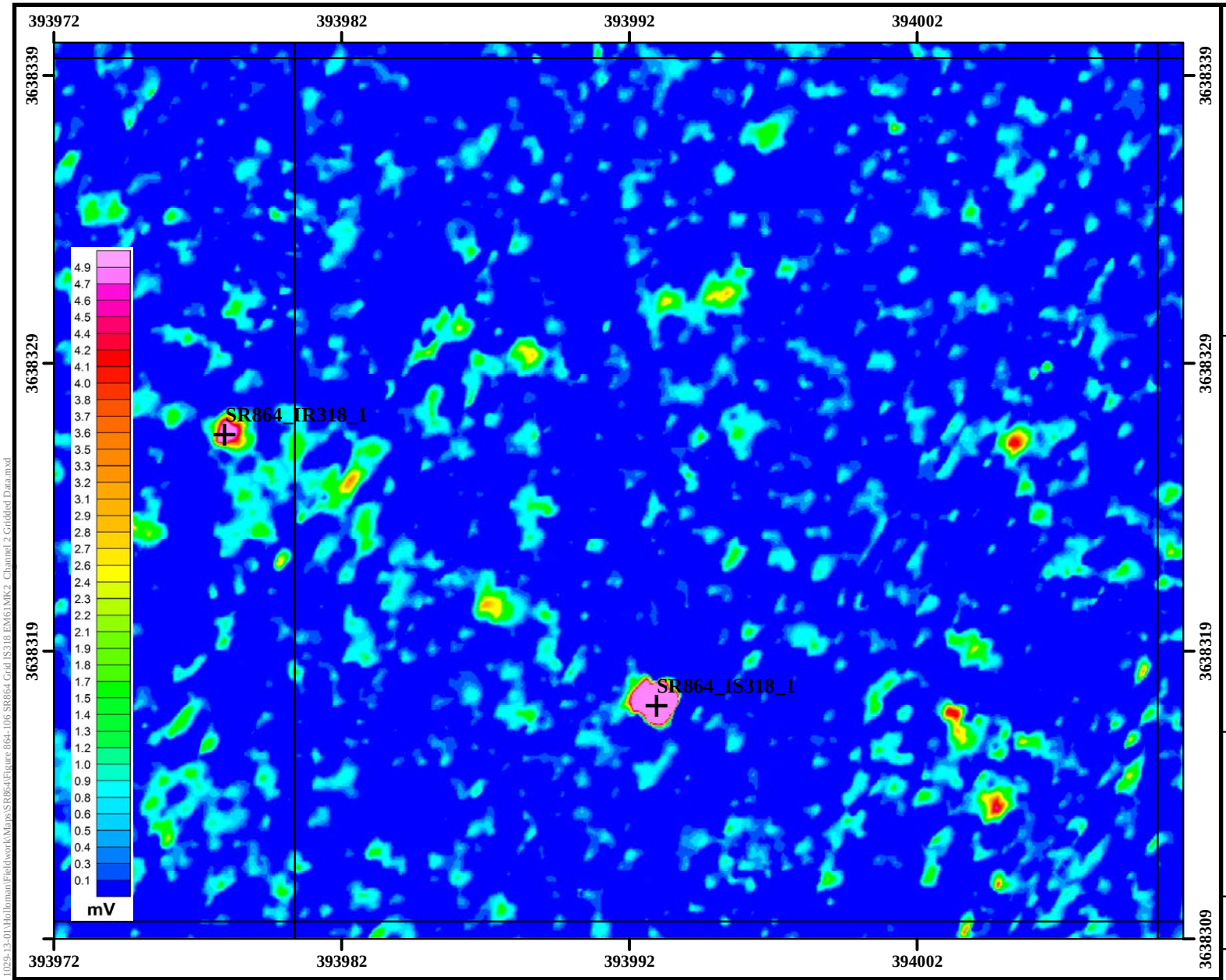
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-105 SR864 Grid IS317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-106

EM61-MK2 Channel 2 Gridded Data Grid IS318 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

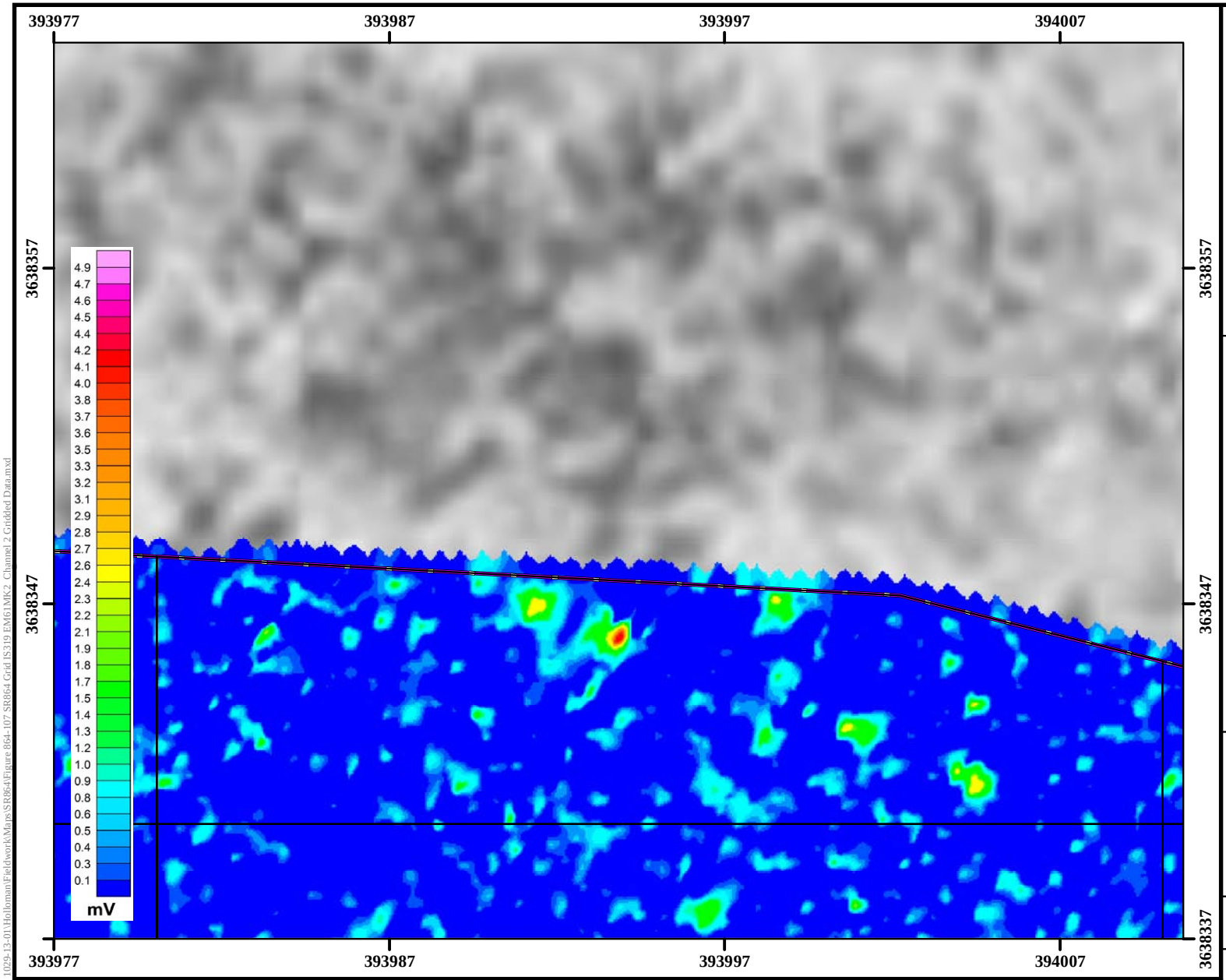
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-106 SR864 Grid IS318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-107

EM61-MK2 Channel 2 Gridded Data Grid IS319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

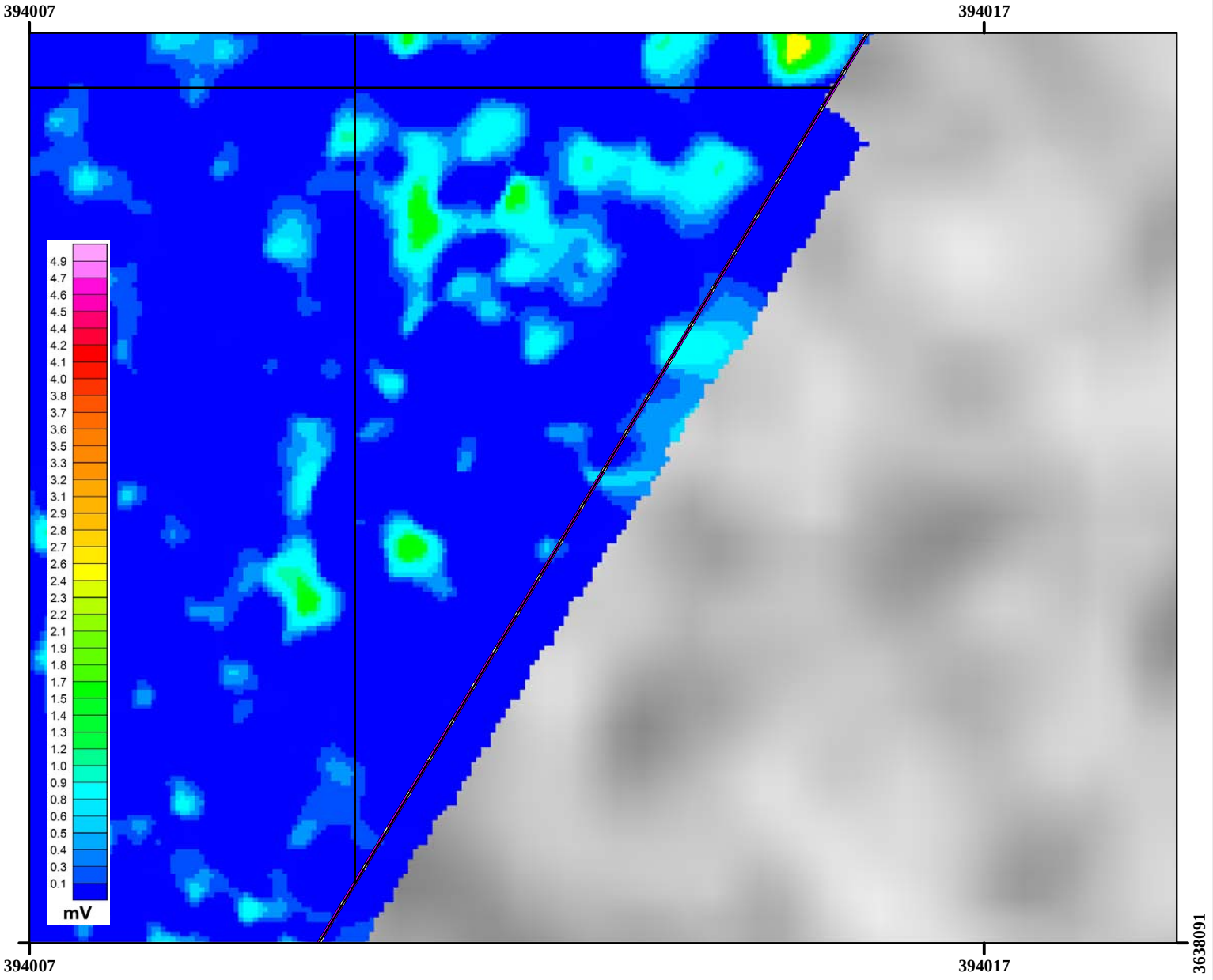
1 inch = 15 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-107 SR864 Grid IS319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-108

EM61-MK2 Channel 2 Gridded Data Grid IT310 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

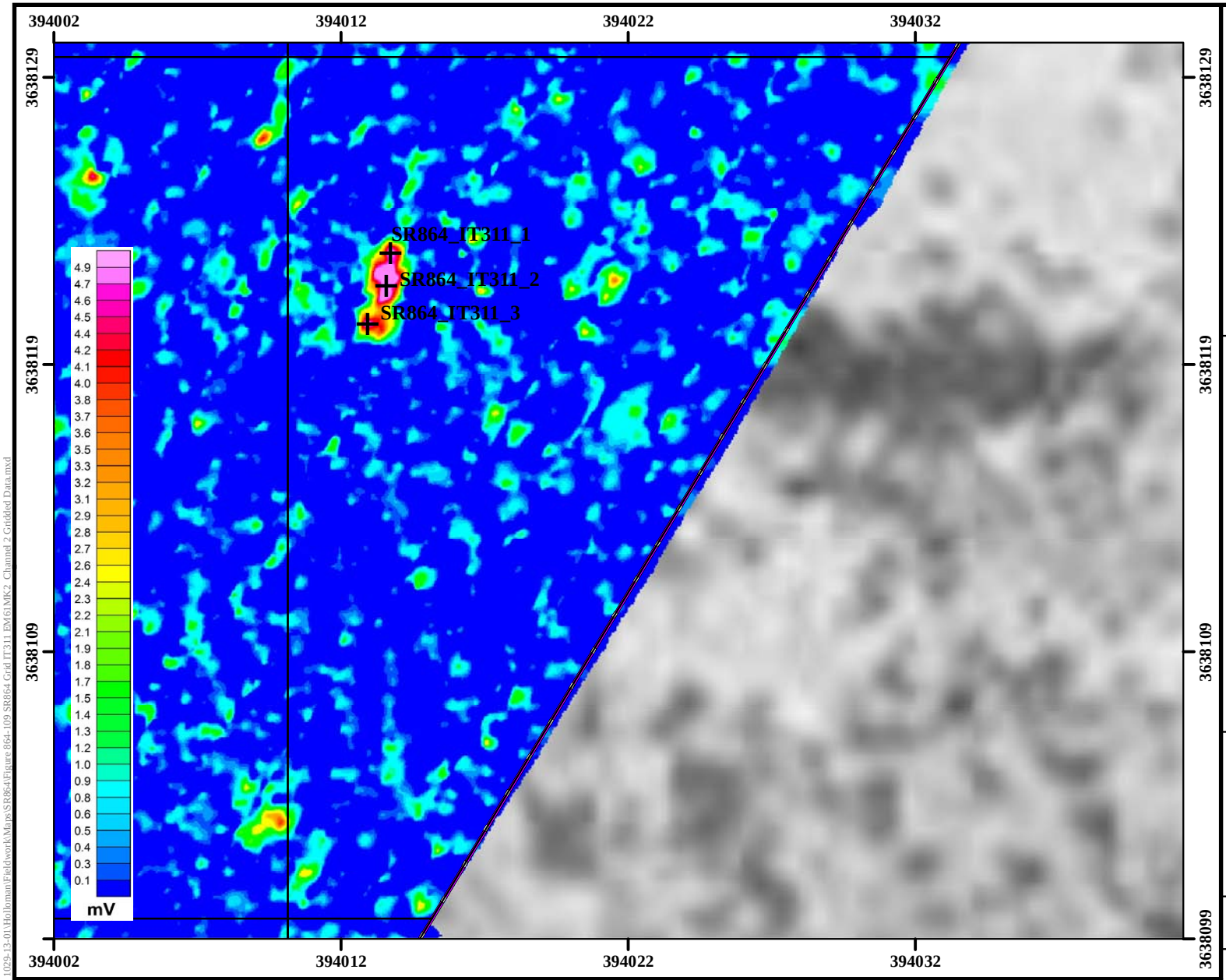
1 inch = 5 feet

0 1 2 Meters

0 3 6 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-108 SR864 Grid IT310 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-109

EM61-MK2 Channel 2 Gridded Data Grid IT311 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

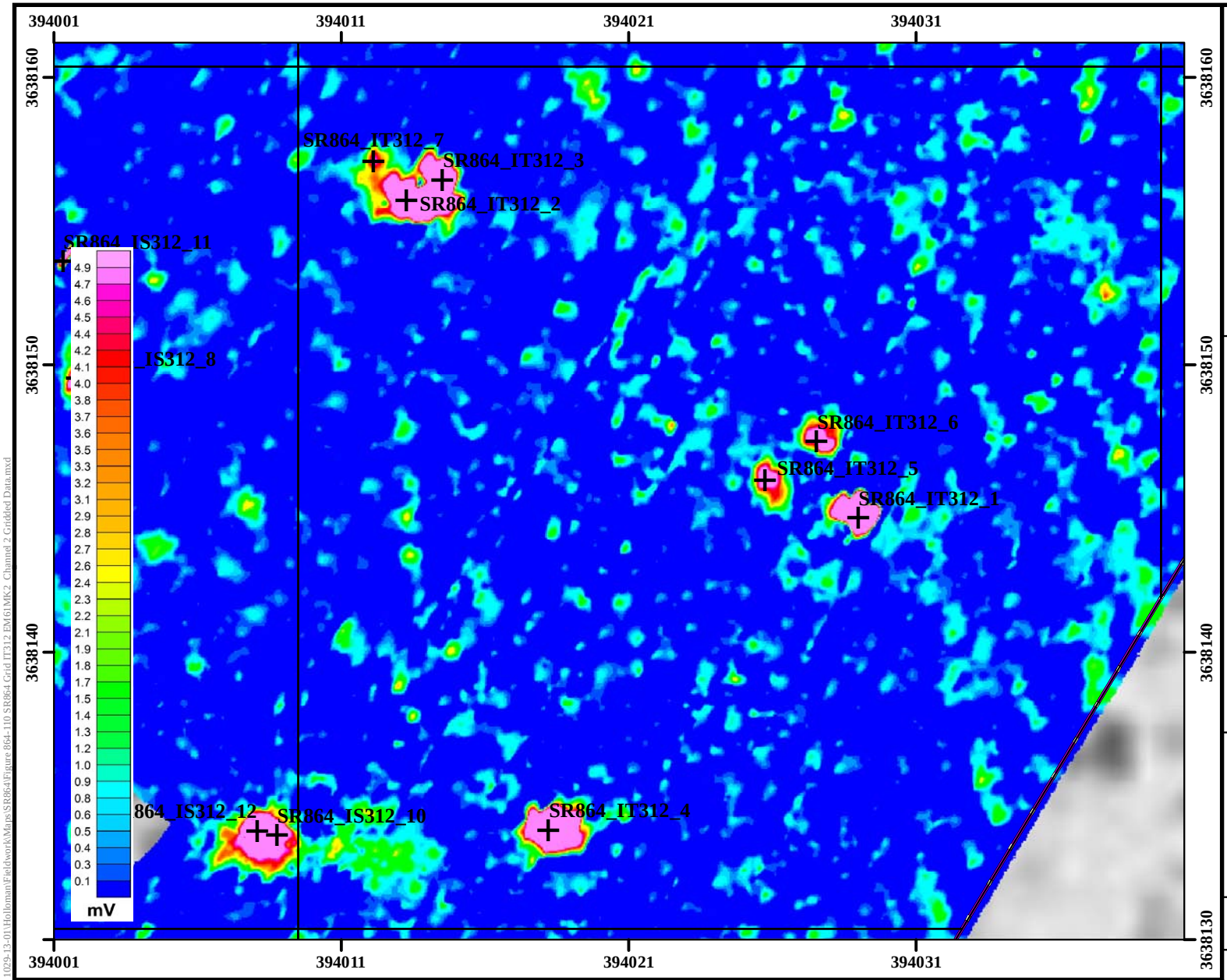
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-109 SR864 Grid IT311 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-110

EM61-MK2 Channel 2 Gridded Data Grid IT312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

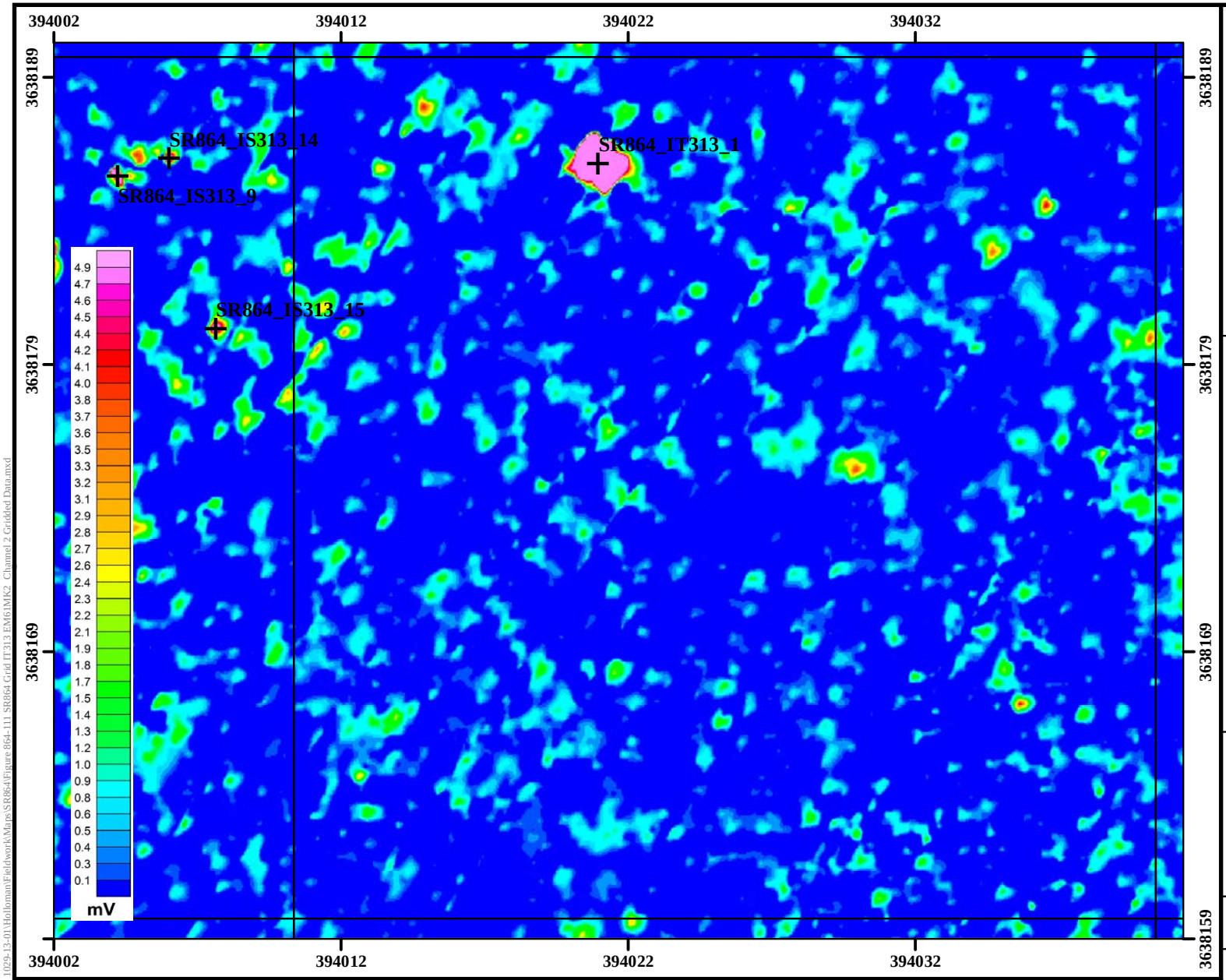
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-110 SR864 Grid IT312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-111

EM61-MK2 Channel 2 Gridded Data Grid IT313 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

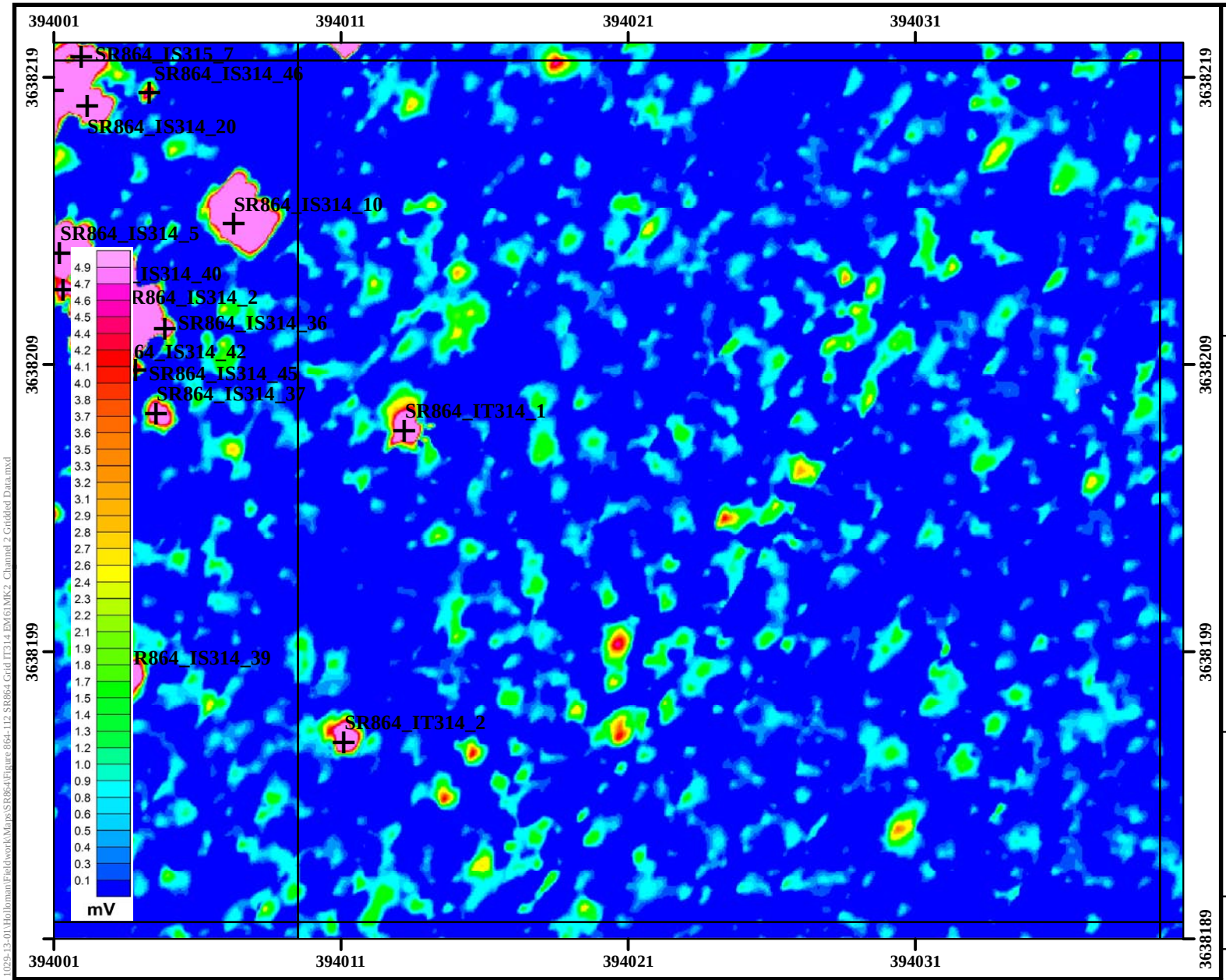
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-111 SR864 Grid IT313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-112

EM61-MK2 Channel 2 Gridded Data Grid IT314 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

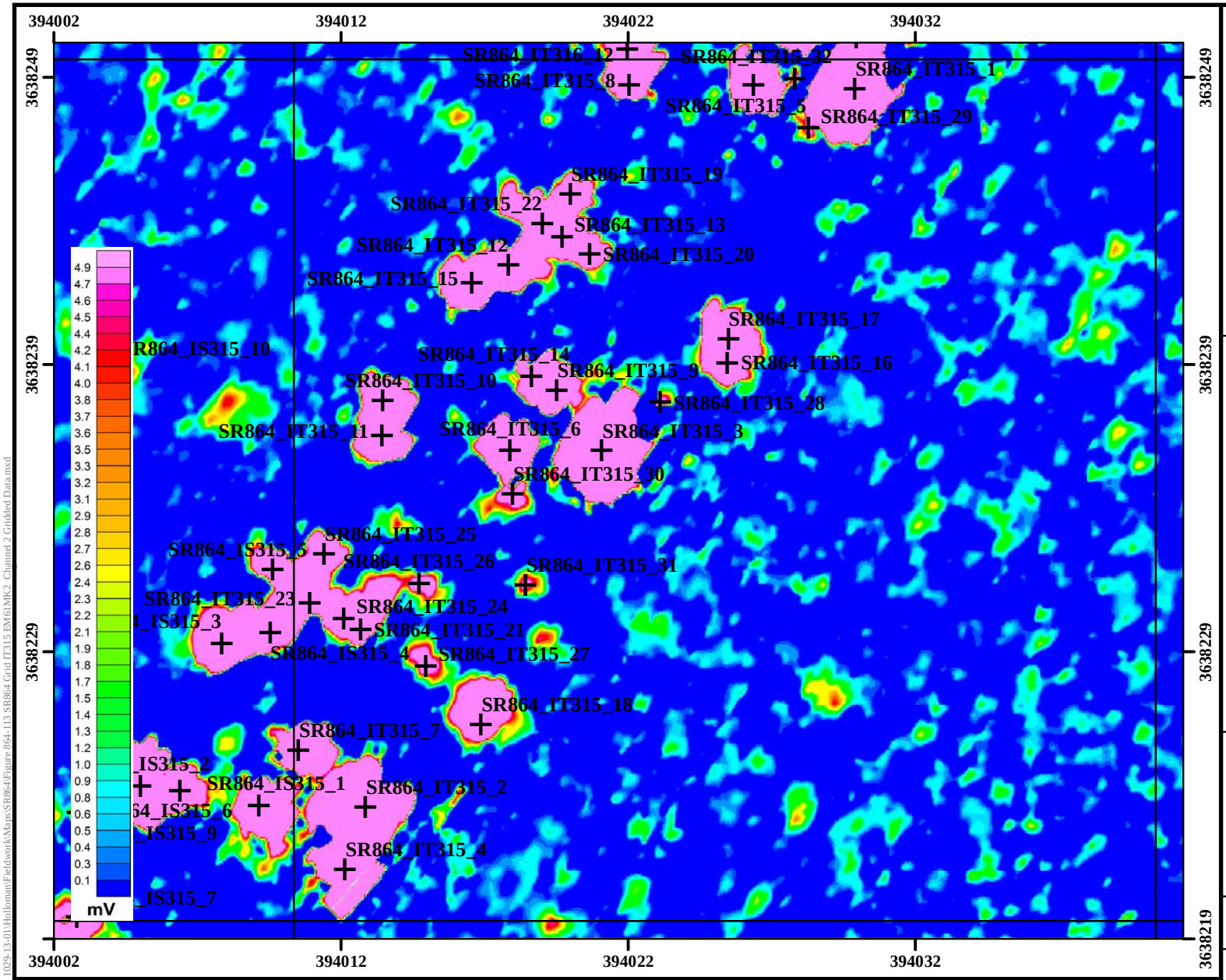
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-112 SR864 Grid IT314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-113

EM61-MK2 Channel 2 Gridded Data Grid IT315 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

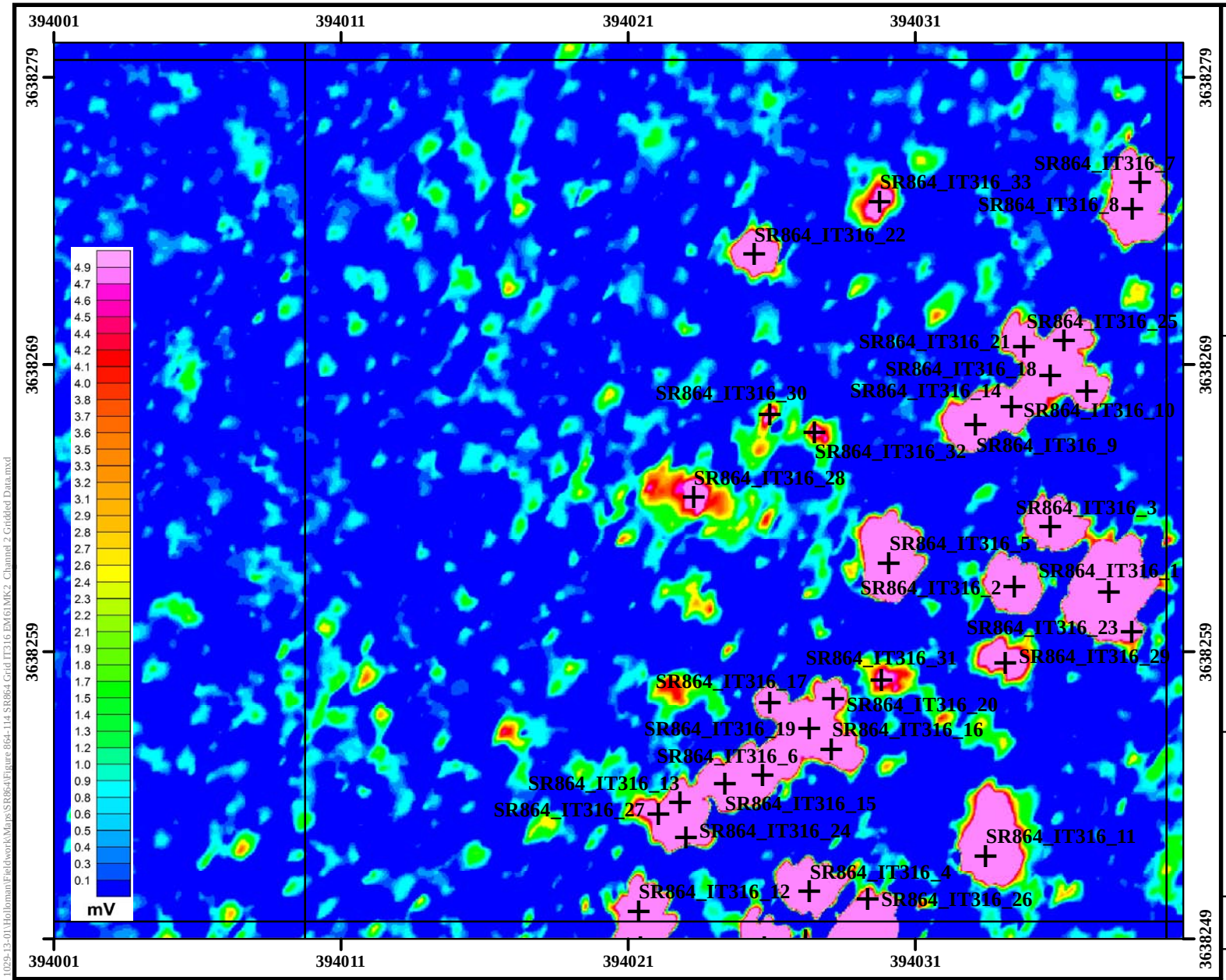
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-113 SR864 Grid IT315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-114

EM61-MK2 Channel 2 Gridded Data Grid IT316 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

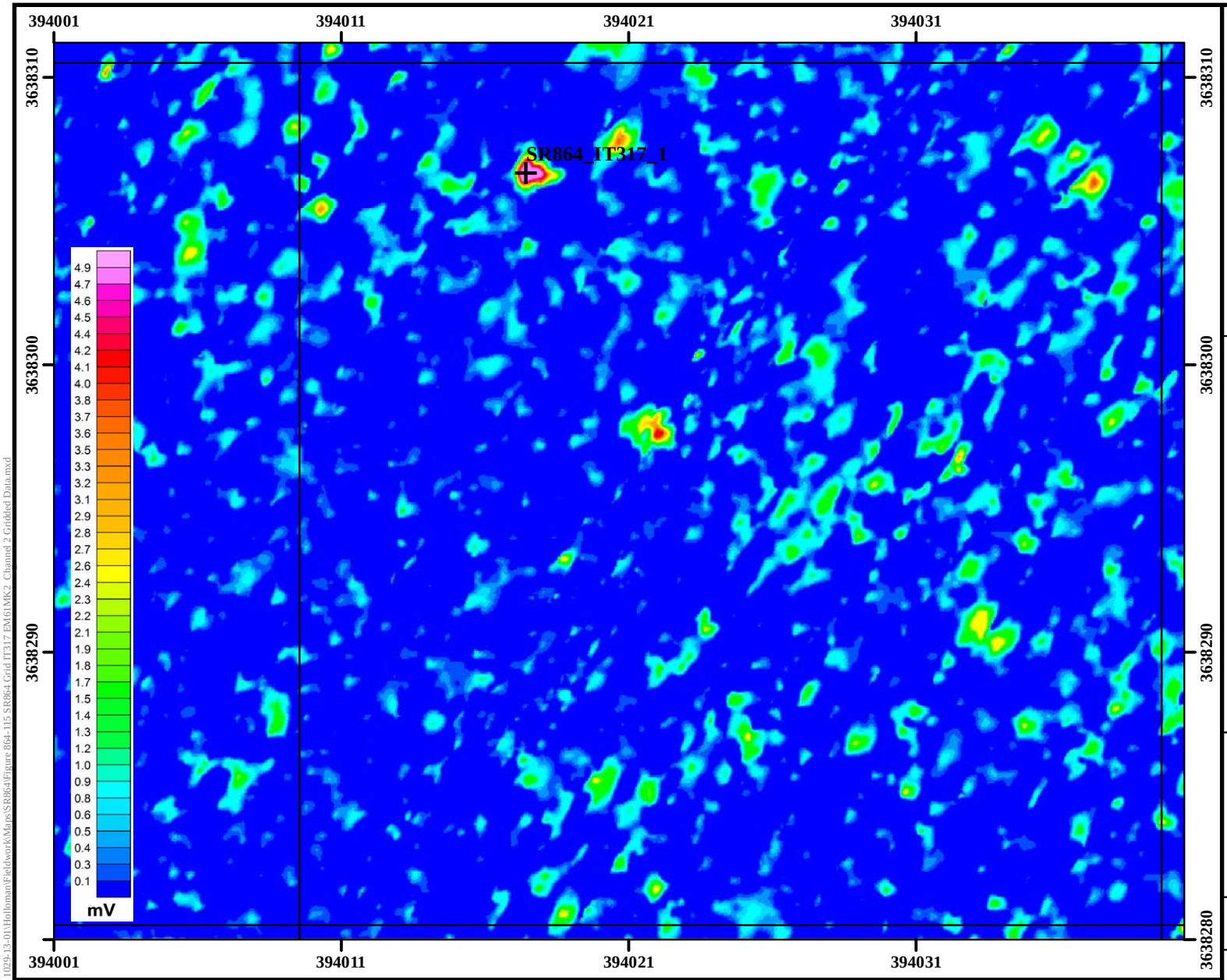
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-114 SR864 Grid IT316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-115

EM61-MK2 Channel 2 Gridded Data Grid IT317 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

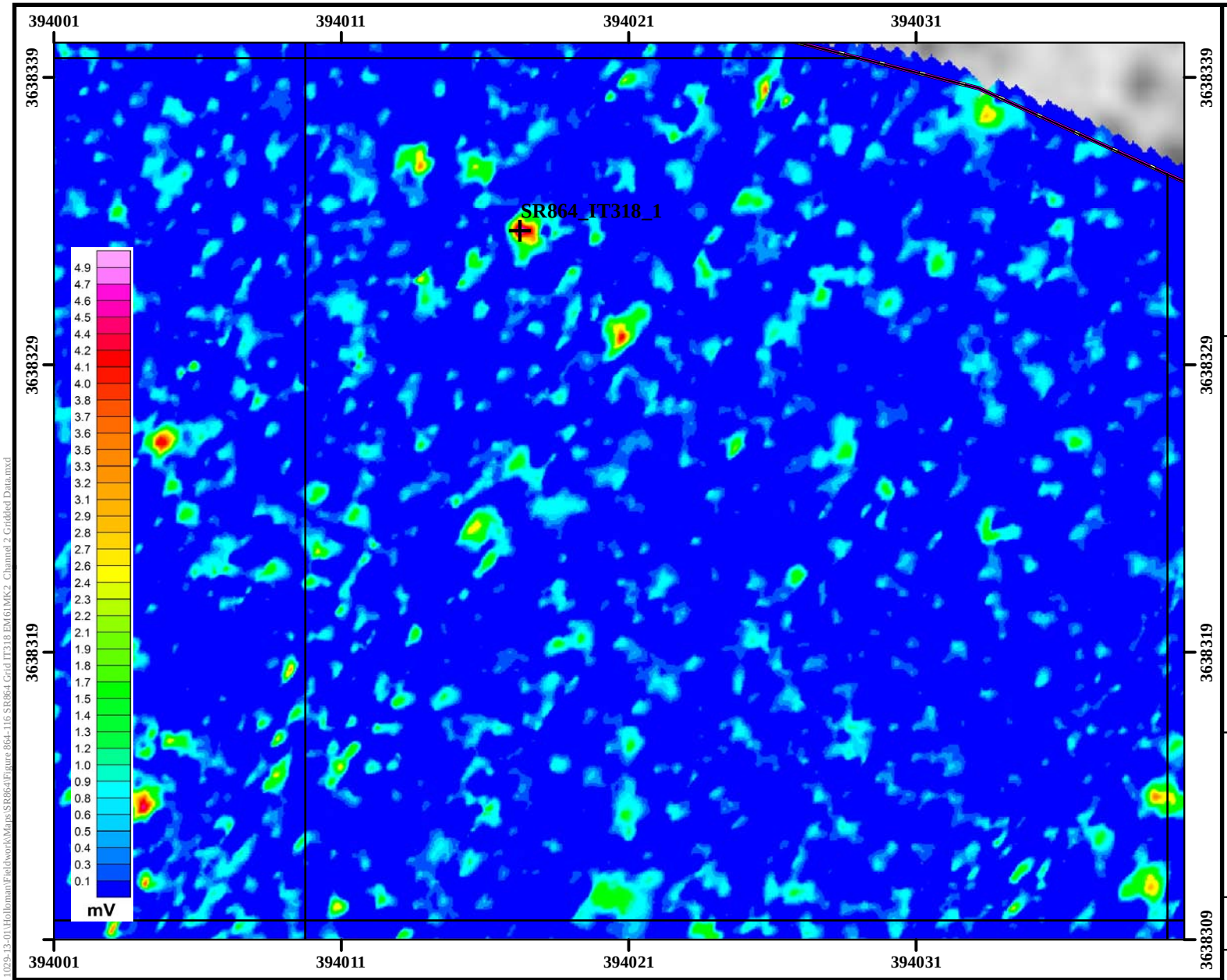
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-115 SR864 Grid IT317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-116

EM61-MK2 Channel 2 Gridded Data Grid IT318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

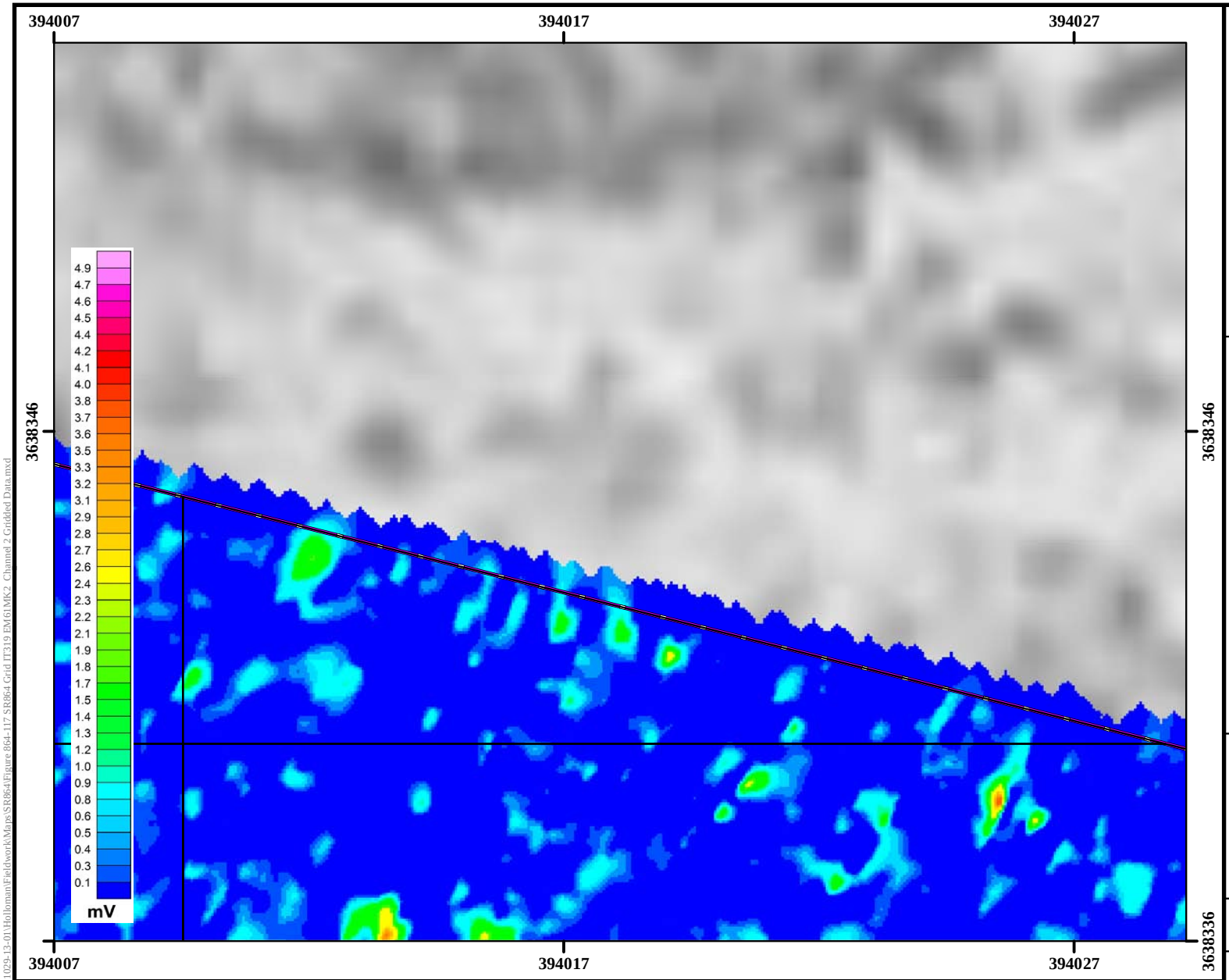
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-116 SR864 Grid IT318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-117

EM61-MK2 Channel 2 Gridded Data Grid IT319 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

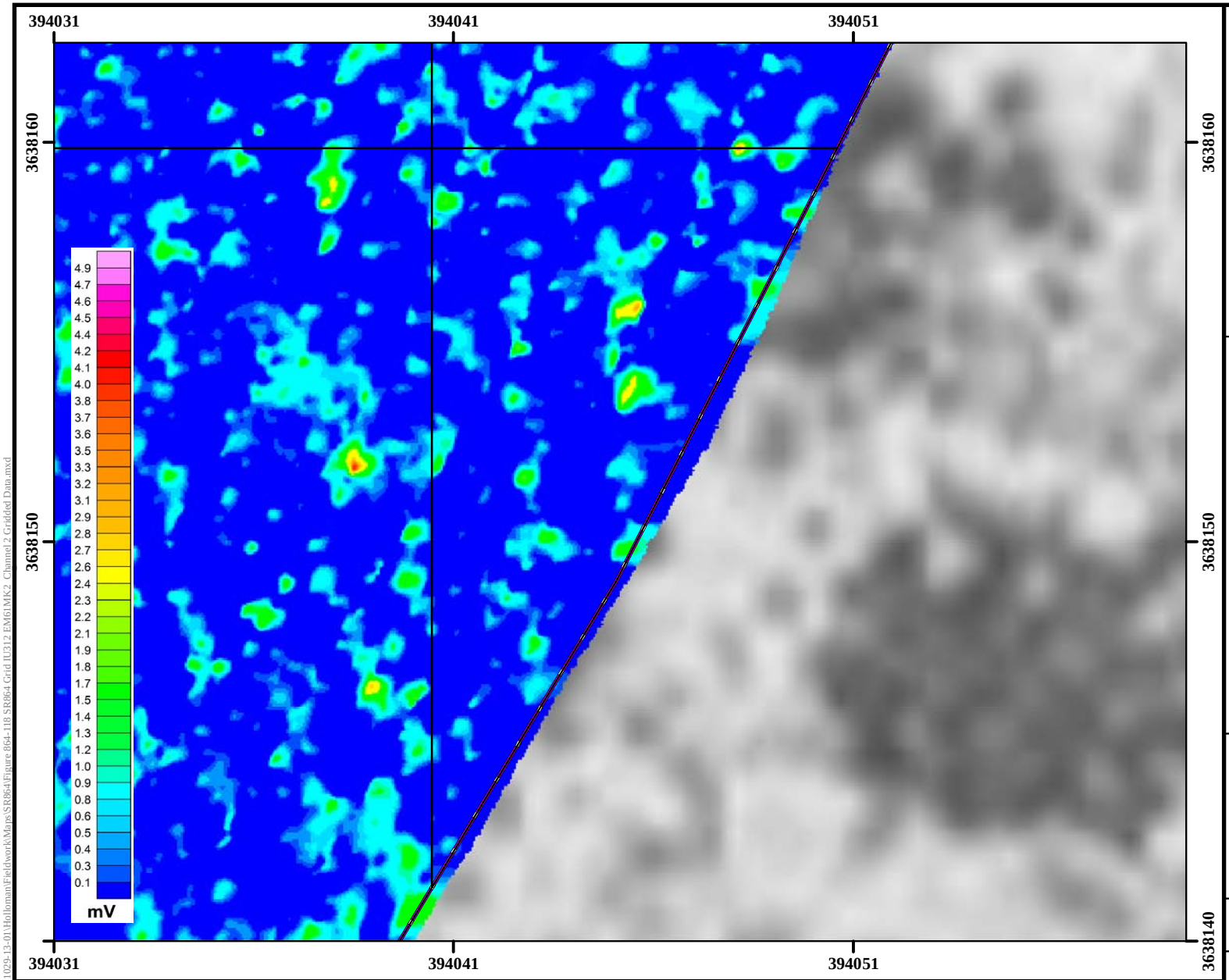
1 inch = 10 feet

0 2 4 Meters

0 7 14 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-117 SR864 Grid IT319 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-118

EM61-MK2 Channel 2 Gridded Data Grid IU312 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

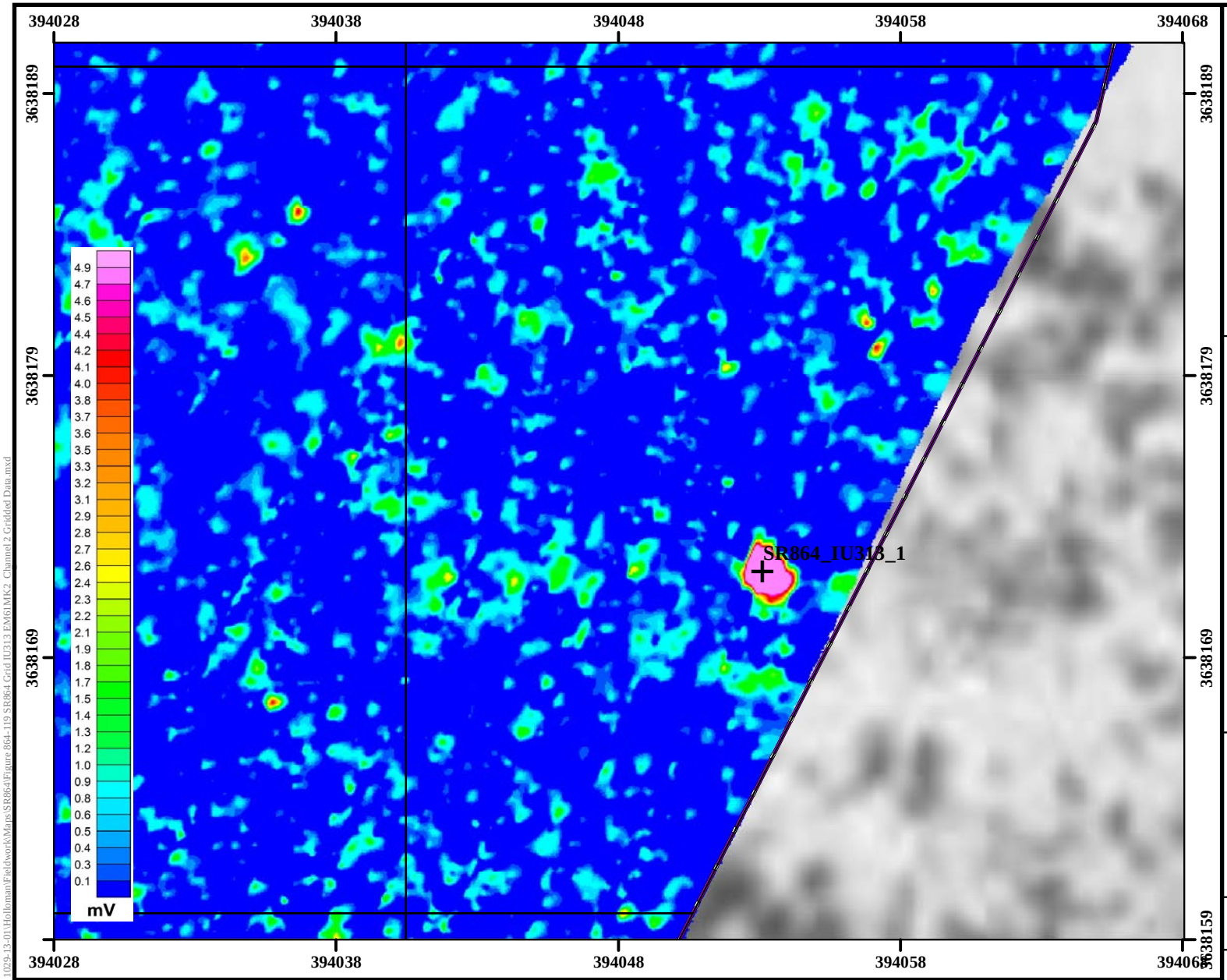
1 inch = 12 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-118 SR864 Grid IU312 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-119

EM61-MK2 Channel 2 Gridded Data Grid IU313 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

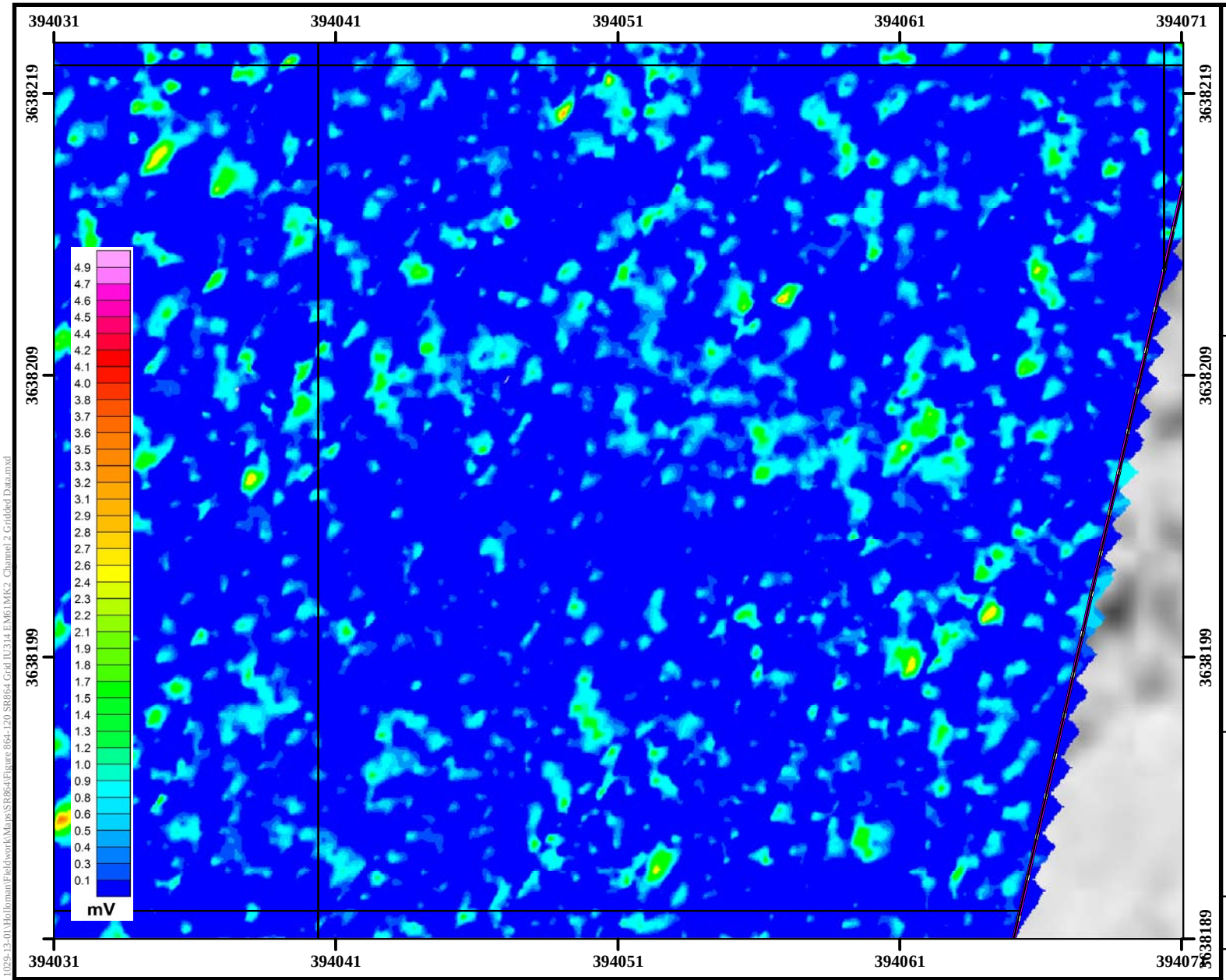
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-119 SR864 Grid IU313 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-120

EM61-MK2 Channel 2 Gridded Data Grid IU314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

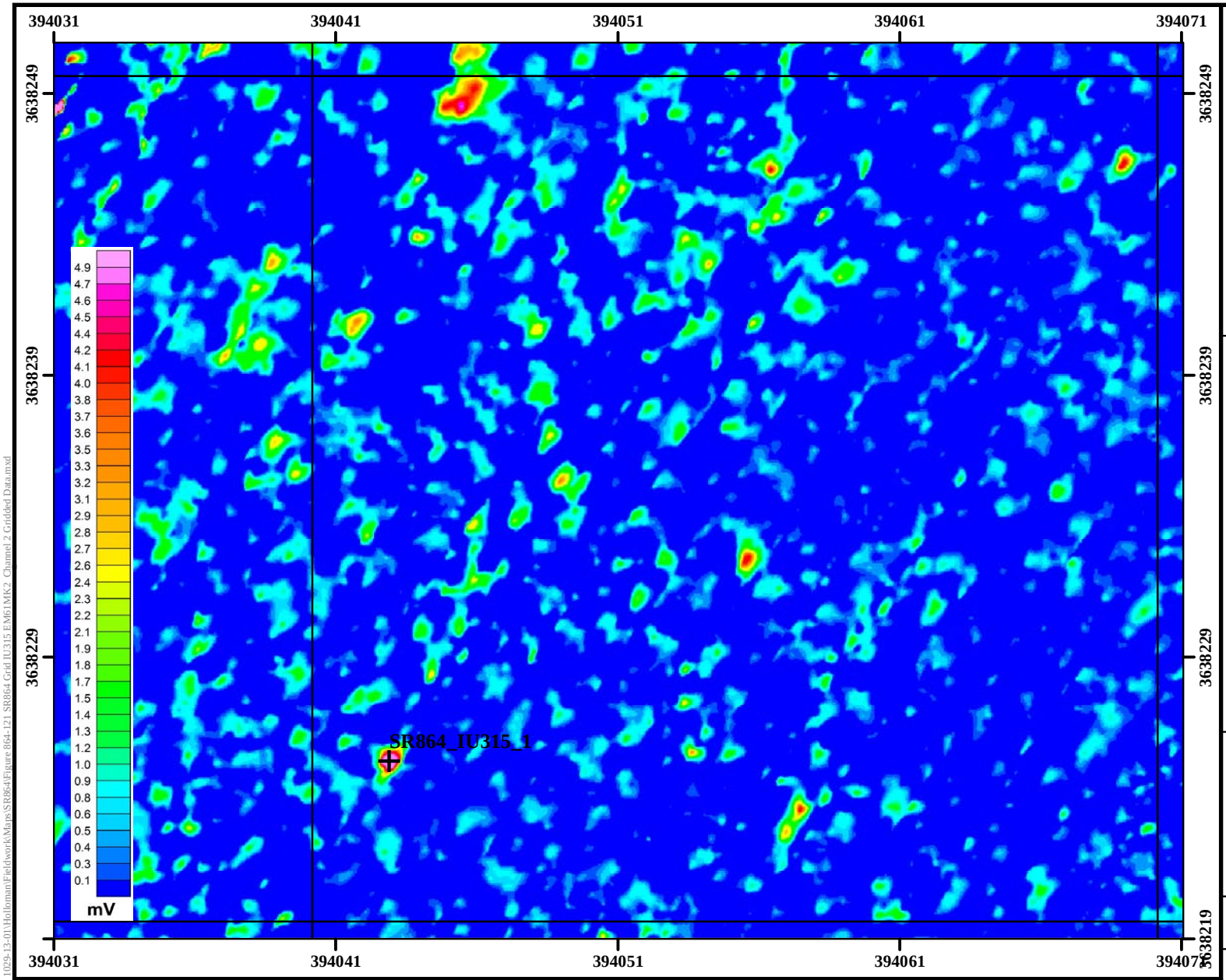
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-120 SR864 Grid IU314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-121

EM61-MK2 Channel 2 Gridded Data Grid IU315 SR864

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

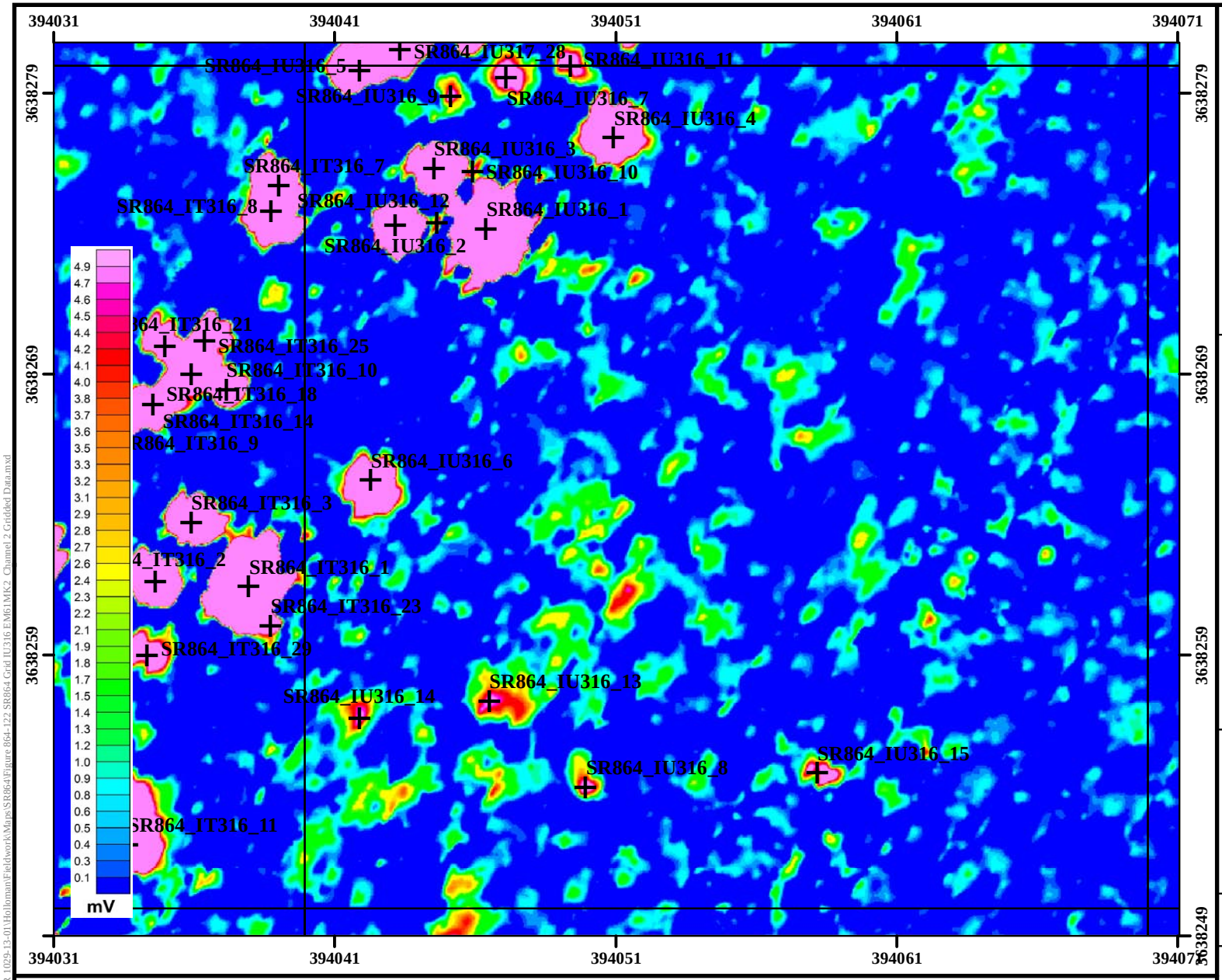
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-121 SR864 Grid IU315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-122

EM61-MK2 Channel 2 Gridded Data Grid IU316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

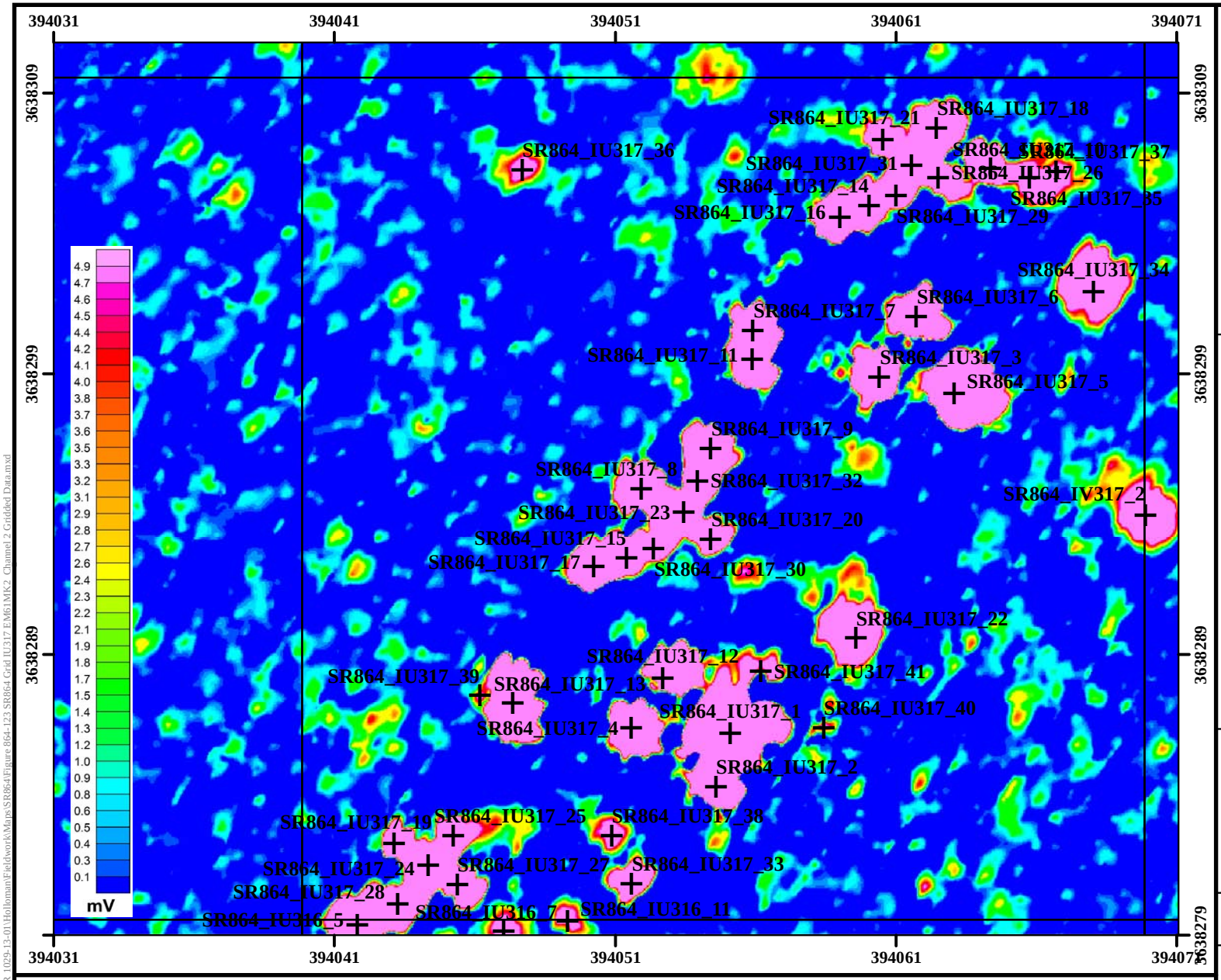
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-122 SR864 Grid IU316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-123

EM61-MK2 Channel 2 Gridded Data Grid IU317 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

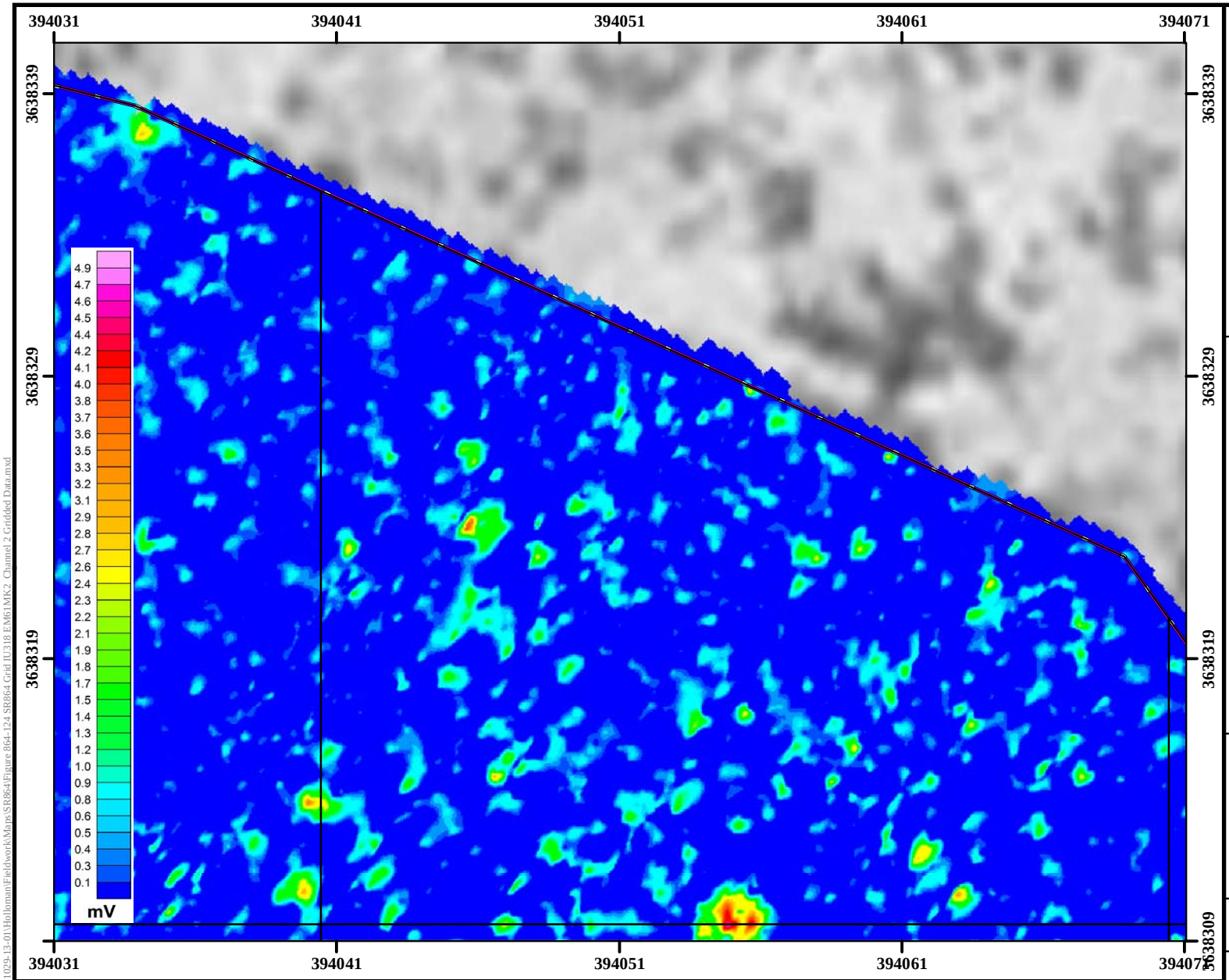
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-123 SR864 Grid IU317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-124

EM61-MK2 Channel 2 Gridded Data Grid IU318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

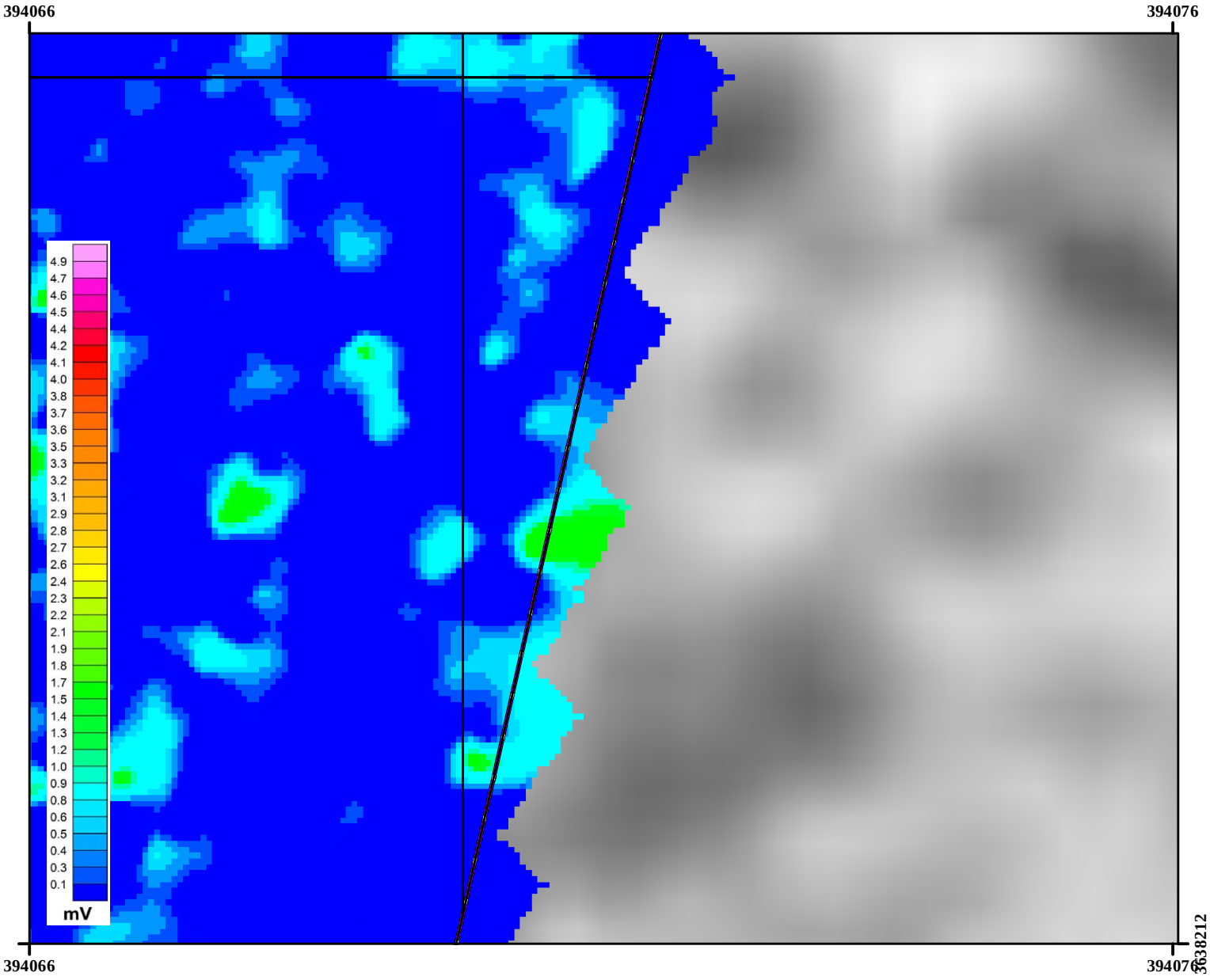
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-124 SR864 Grid IU318 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-125

EM61-MK2 Channel 2 Gridded Data Grid IV314 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

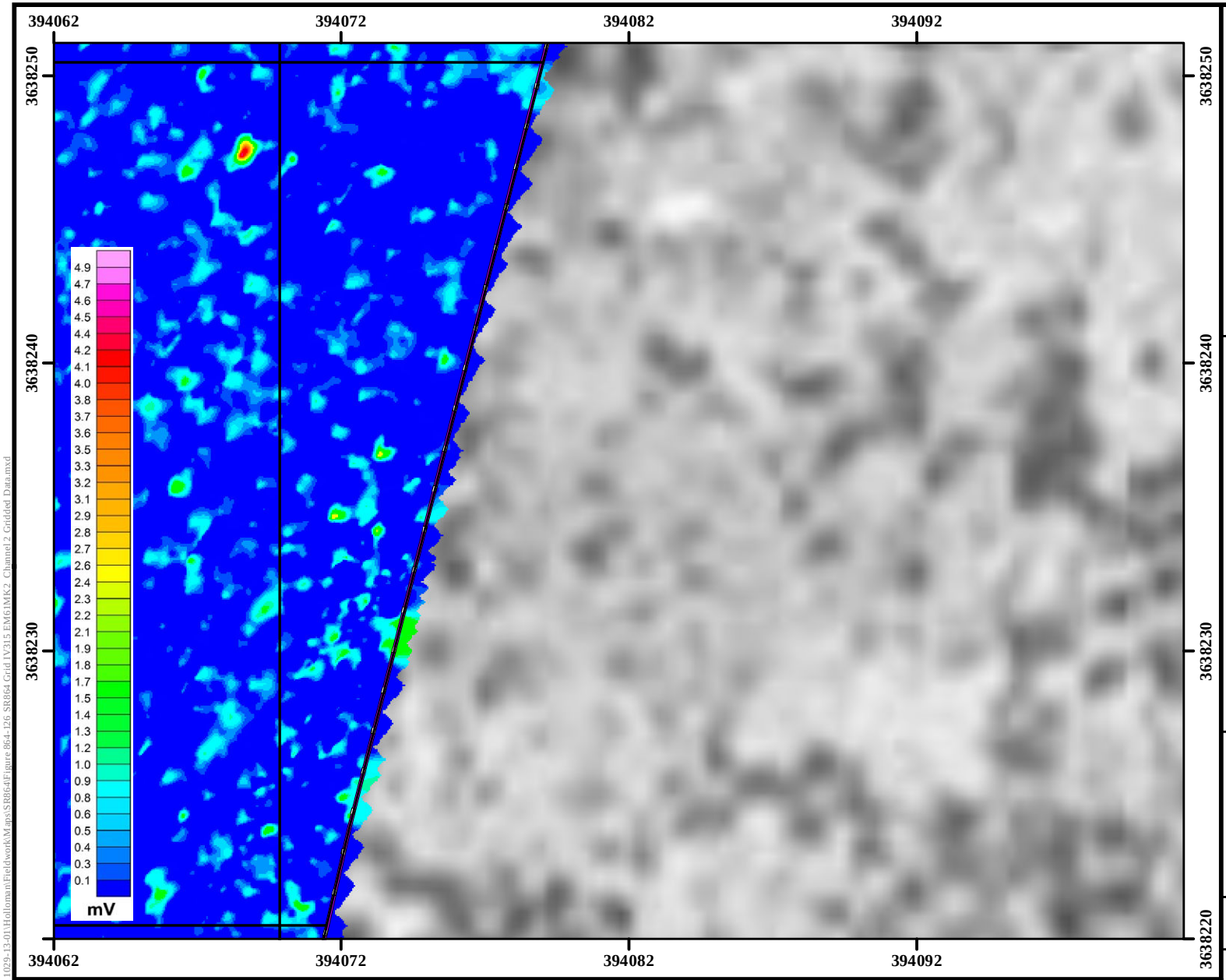
1 inch = 4 feet

0 0.5 1 Meters

0 2 4 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-125 SR864 Grid IV314 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-126

EM61-MK2 Channel 2 Gridded Data Grid IV315 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

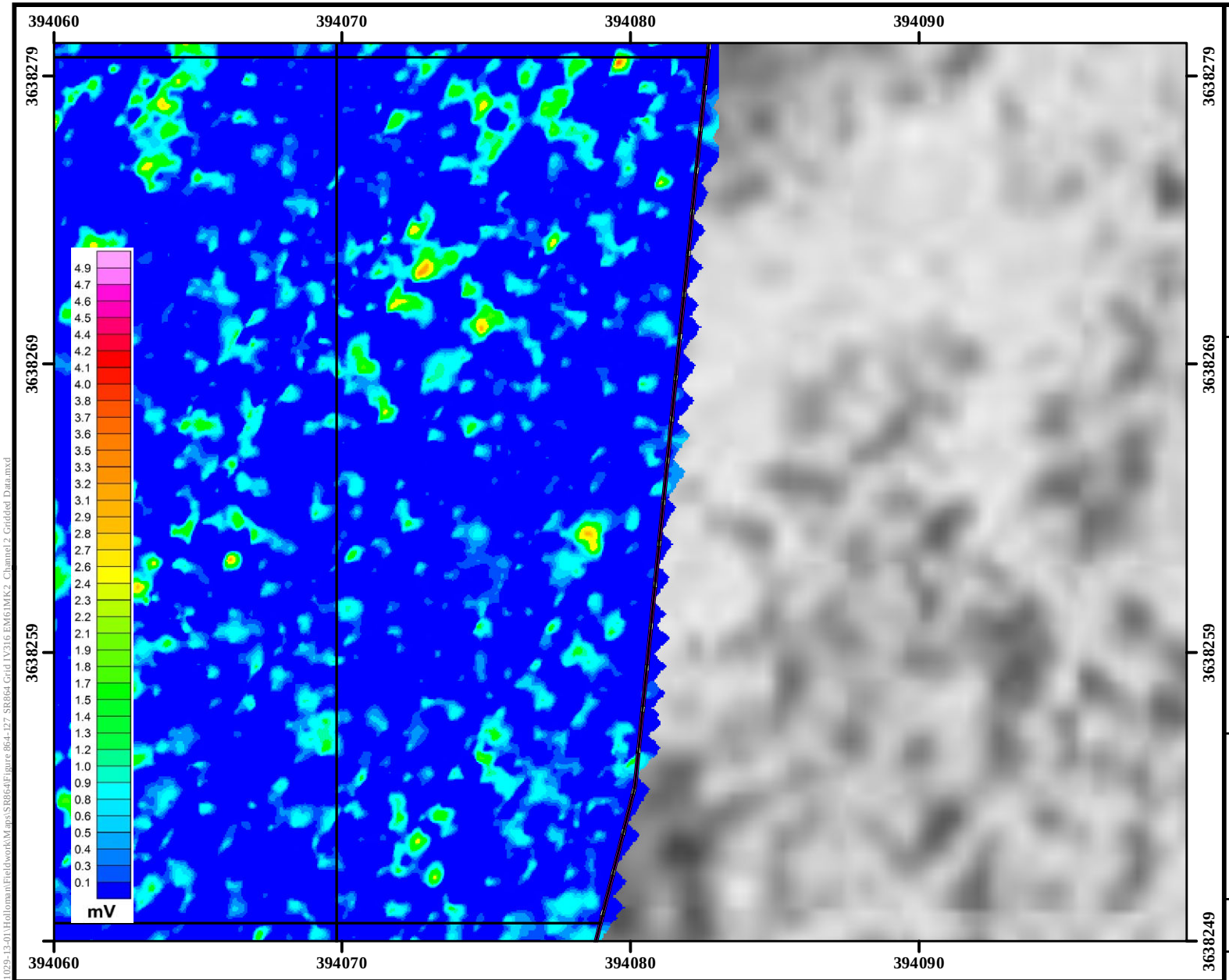
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-126 SR864 Grid IV315 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-127

EM61-MK2 Channel 2 Gridded Data Grid IV316 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

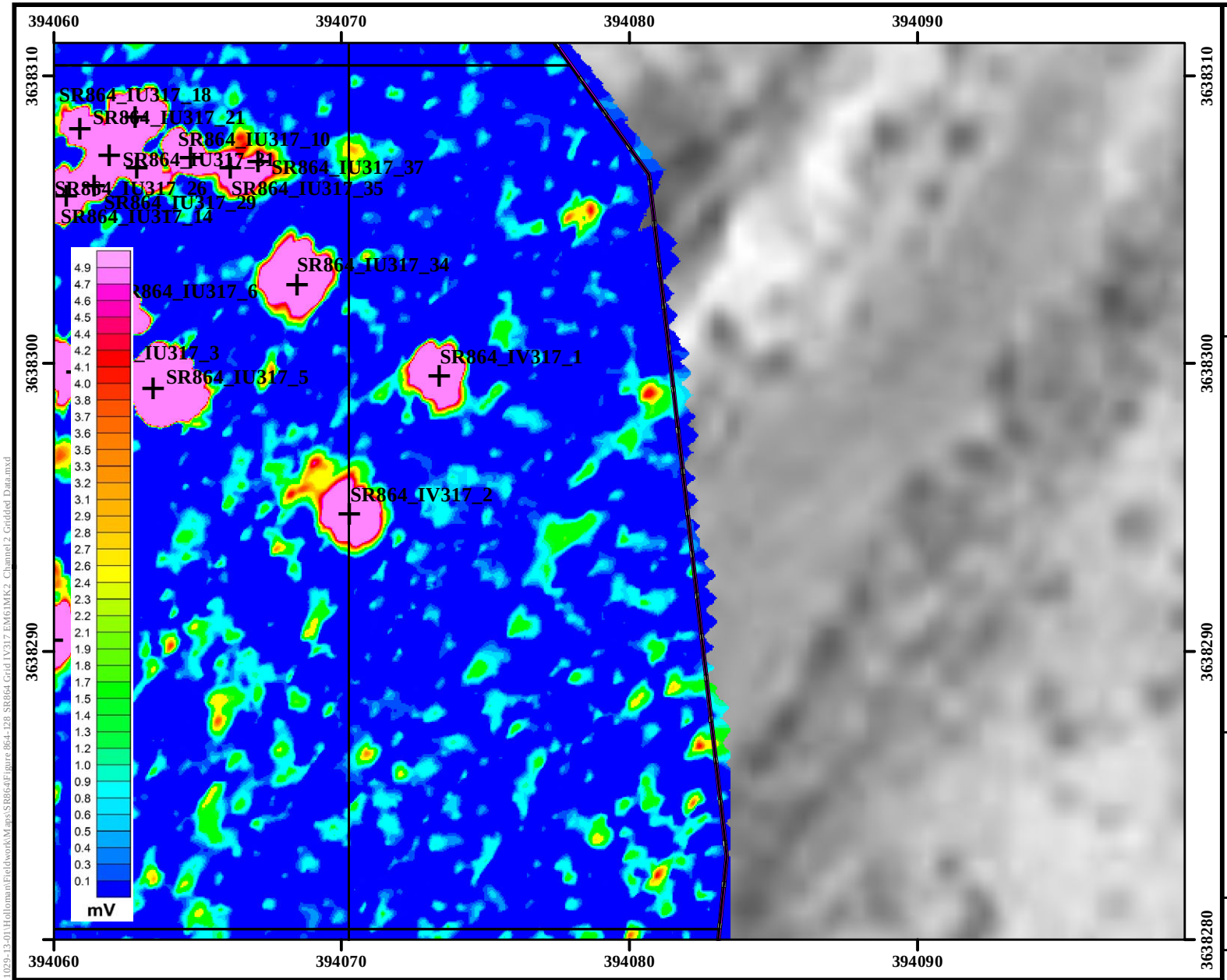
1 inch = 17 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-127 SR864 Grid IV316 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-128

EM61-MK2 Channel 2 Gridded Data Grid IV317 SR864

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 17 feet

0 3 6 Meters

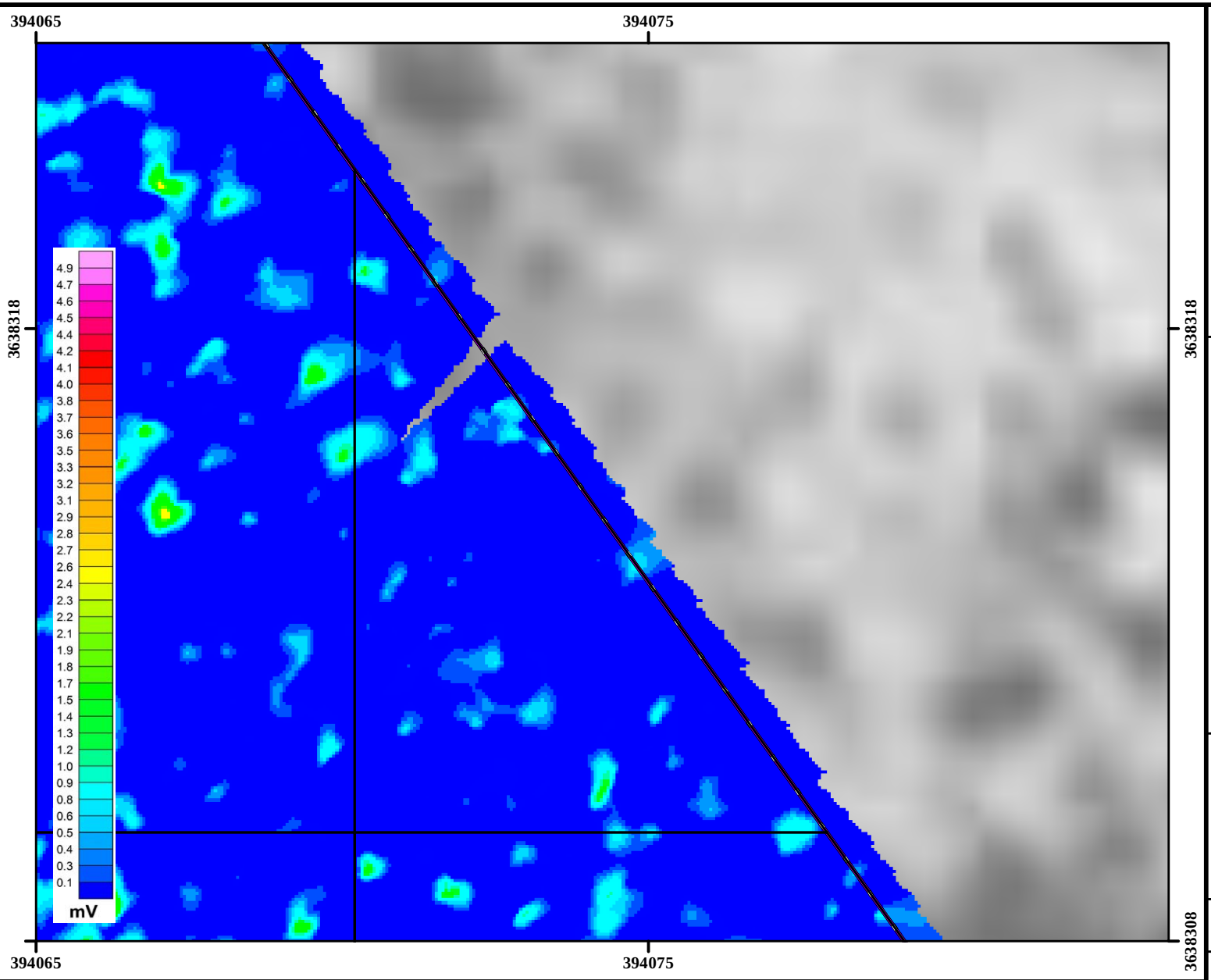
0 Feet

N W E S

FPM Remediations, Inc.

2015

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-128 SR864 Grid IV317 EM61MK2 Channel 2 Gridded Data.mxd



Legend

- DGM Anomalies Exceeding 7 mV Threshold Intrusively Investigated
- Grid Boundary
- High-Anomaly Density Area
- SR864 MRS
- EM61-MK2 Channel 2 Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 864-129

EM61-MK2 Channel 2 Gridded Data Grid IV318 SR864

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/10/2015

Appendix A contains the survey coordinates of the SR864 grids.

Coordinate System:NAD 1983 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 8 feet

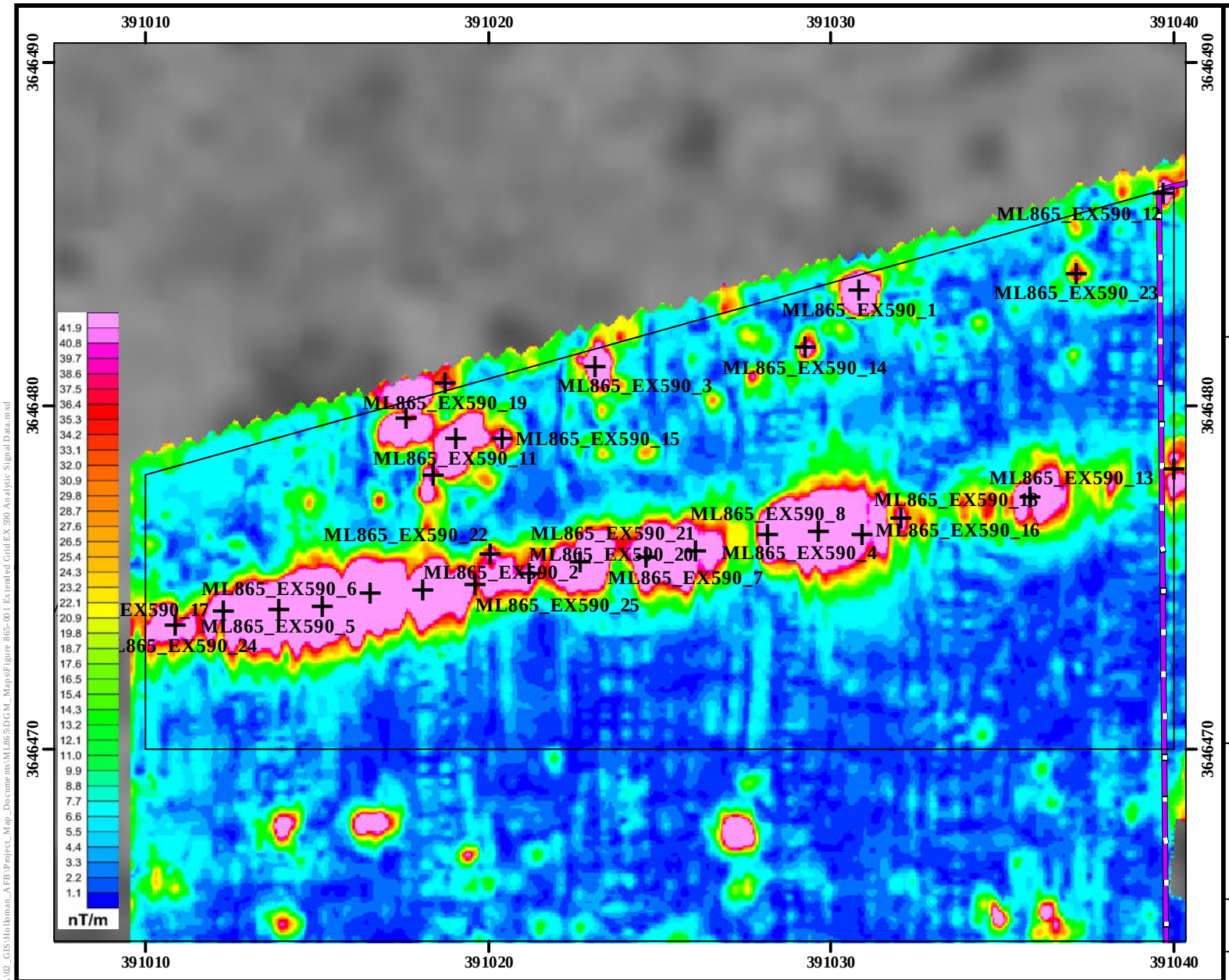
0 1 2 Meters

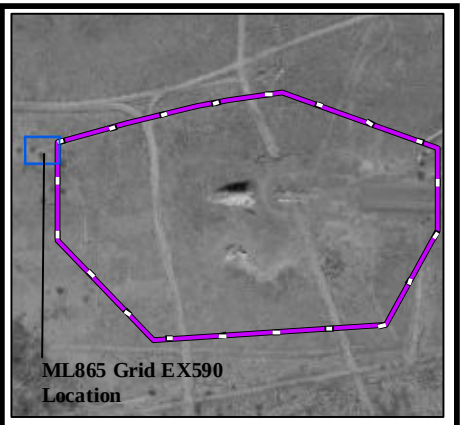
0 4 8 Feet

N W E S

Path: C:\Projects-GIS\NM-AZ PBR 1029-13-01\Holloman\Fieldwork\Maps\SR864\Figure 864-129_SR864 Grid IV318 EM61MK2_Channel 2 Gridded Data.mxd

This page is intentionally left blank





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-1

G-858 Analytic Signal
Extended Grid EX590 Outside
ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 2011 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 2011
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

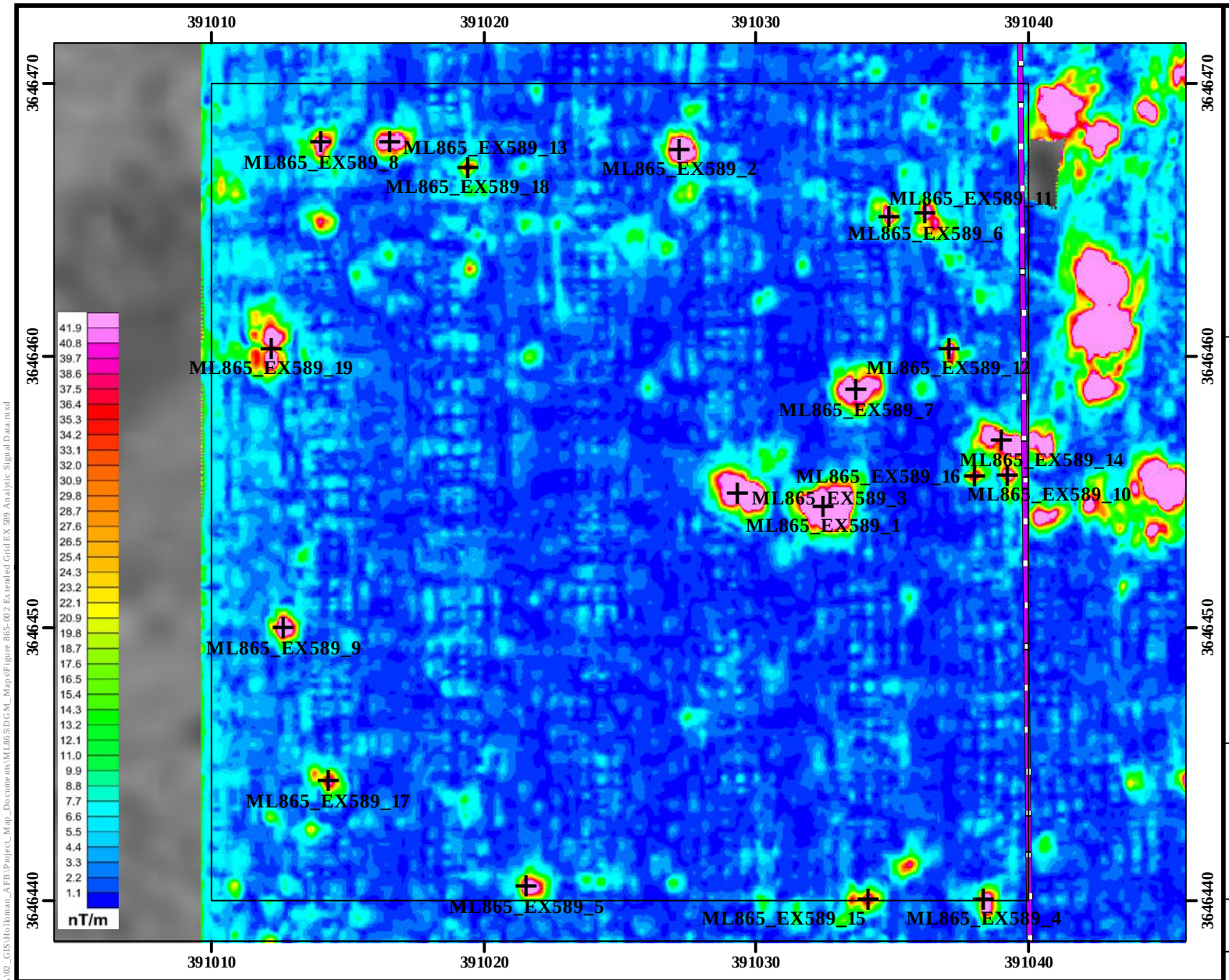
1 inch = 14 feet

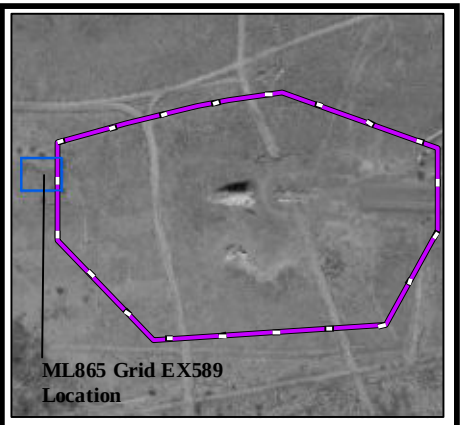
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-001 Extended Grid EX 590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-2

G-858 Analytic Signal
Extended Grid EX589 Outside
ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

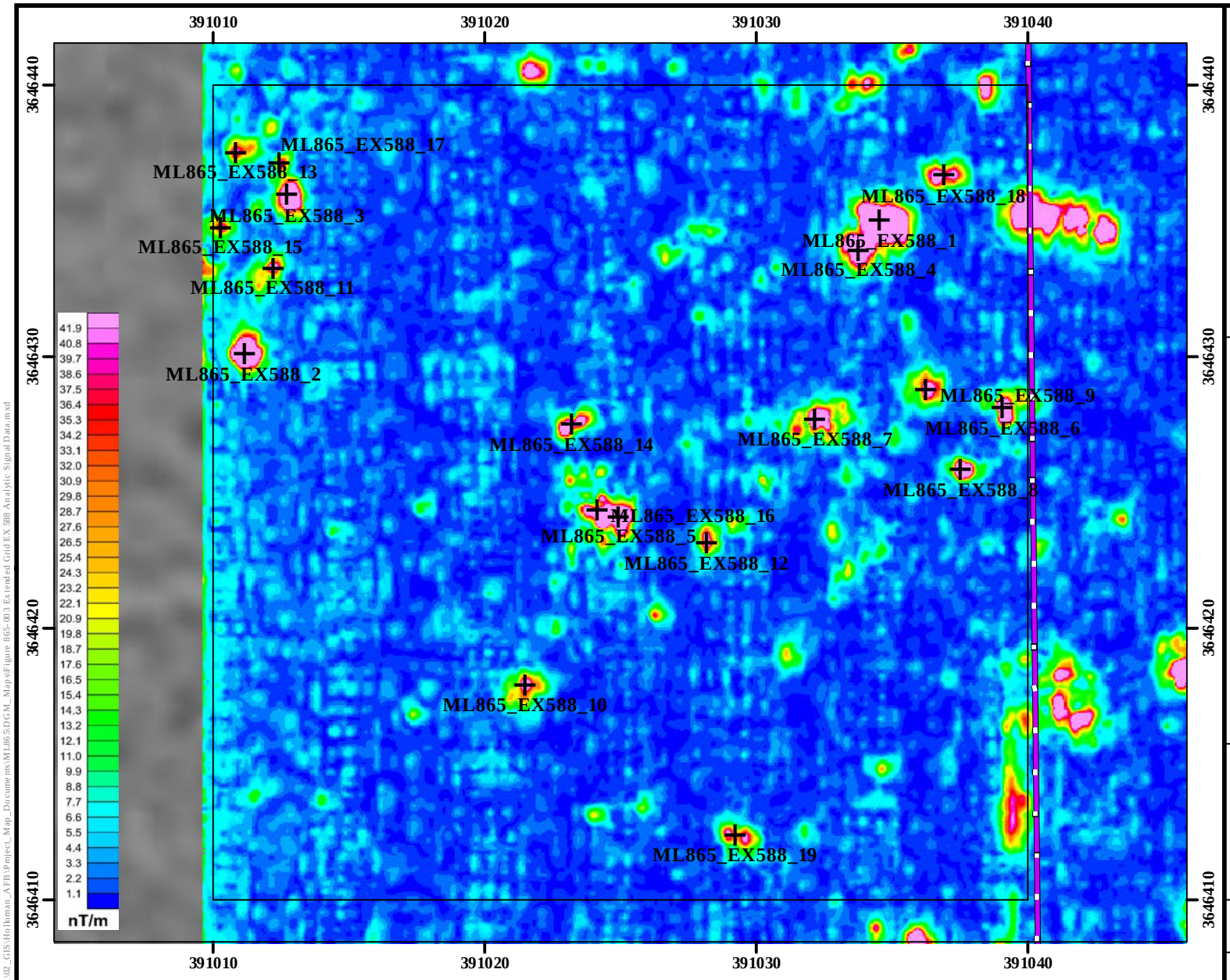
1 inch = 18 feet

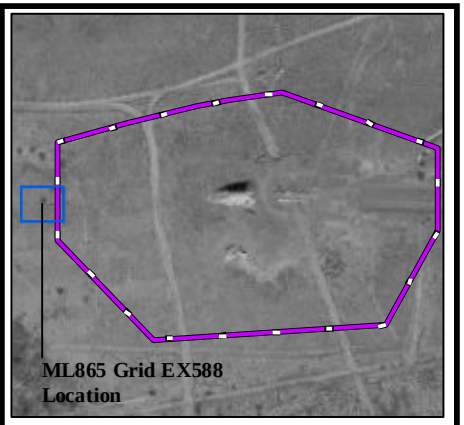
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sea1\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-002 Extended Grid EX 589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

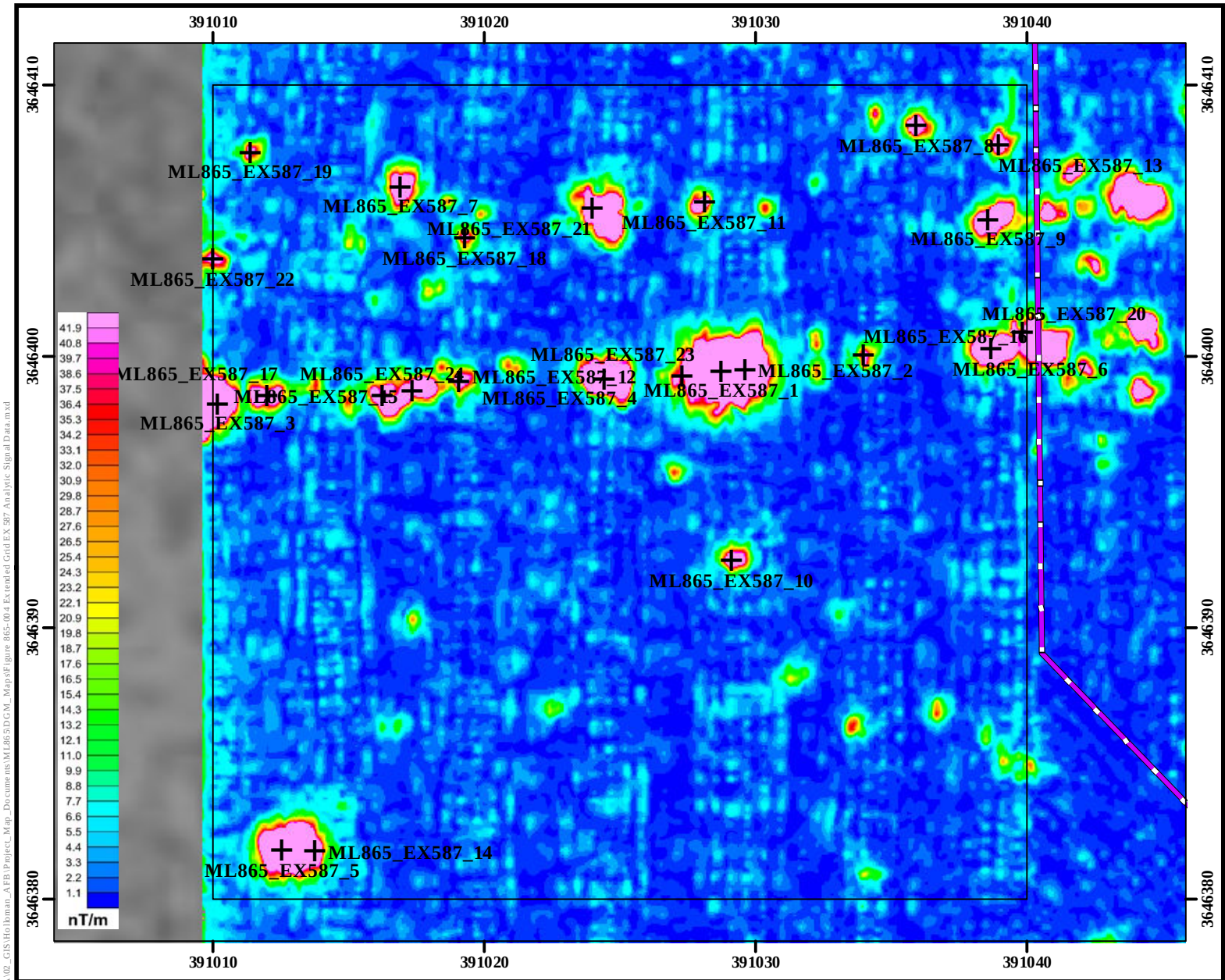
FIGURE 865-3

G-858 Analytic Signal
Extended Grid EX588 Outside
ML865 MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-003 Extended Grid EX 588 Analytic Signal Data.mxd



Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-4

G-858 Analytic Signal
Extended Grid EX587 Outside
ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

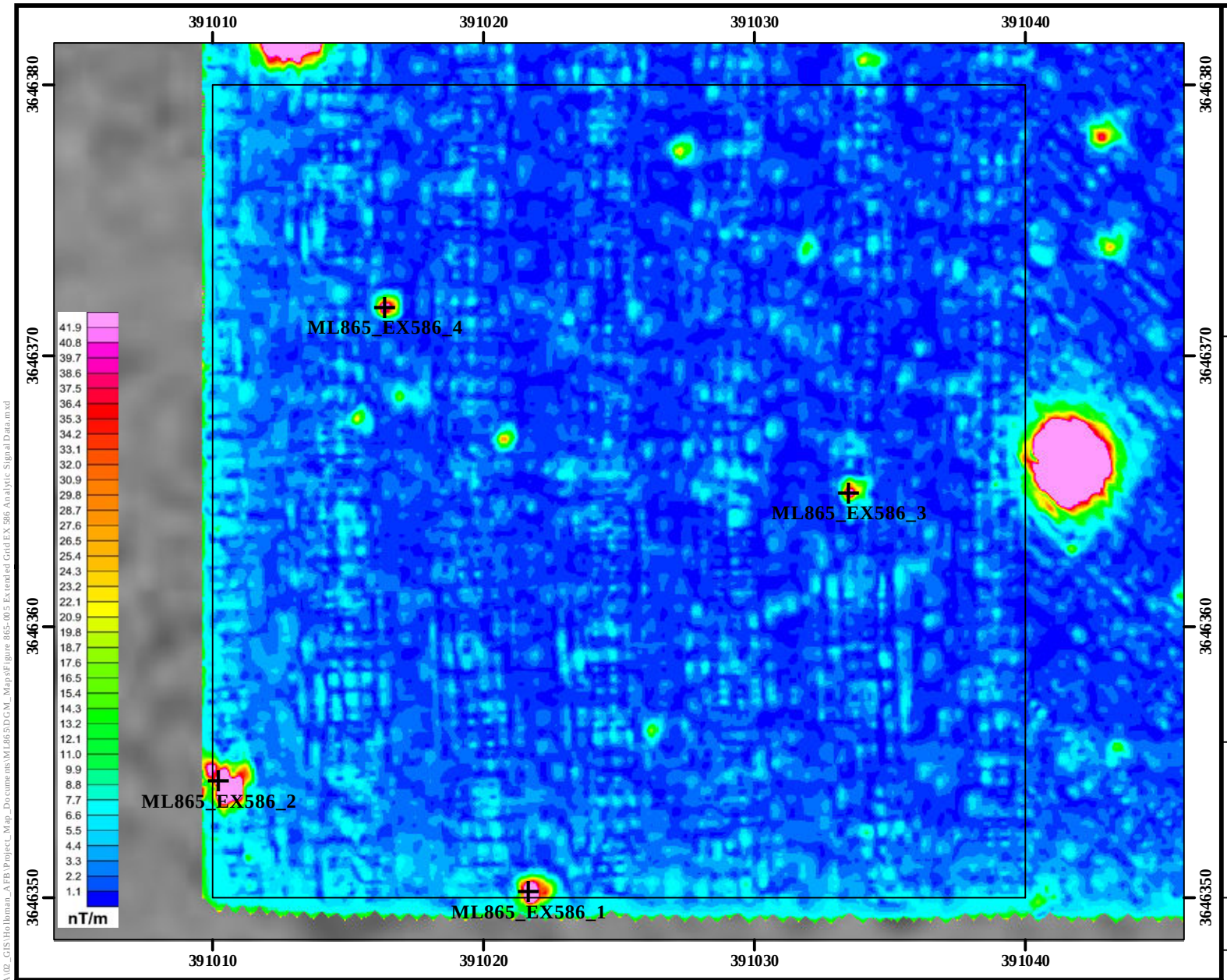
1 inch = 18 feet

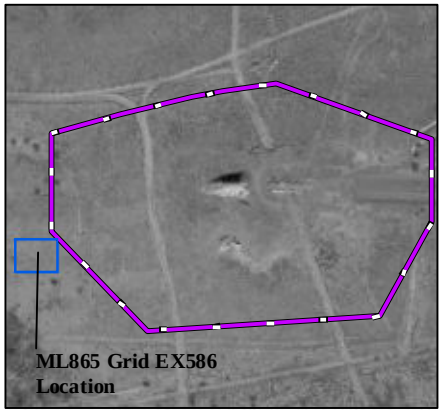
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sea\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-00.4 Extended Grid EX 587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

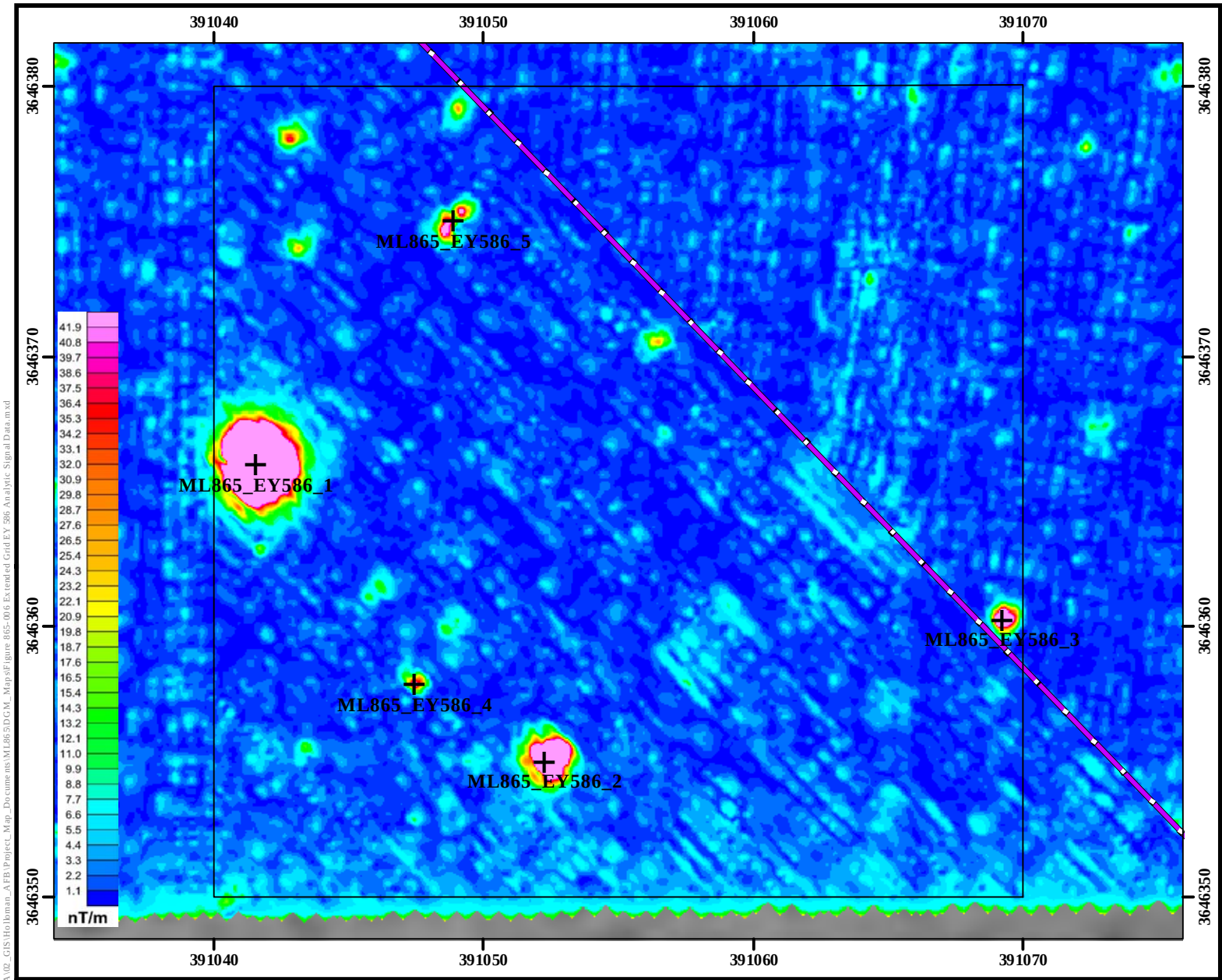
FIGURE 865-5

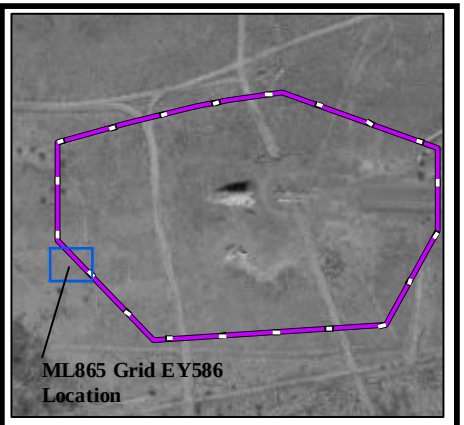
G-858 Analytic Signal
Extended Grid EX586 Outside
ML865 MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-005 Extended Grid EX 586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

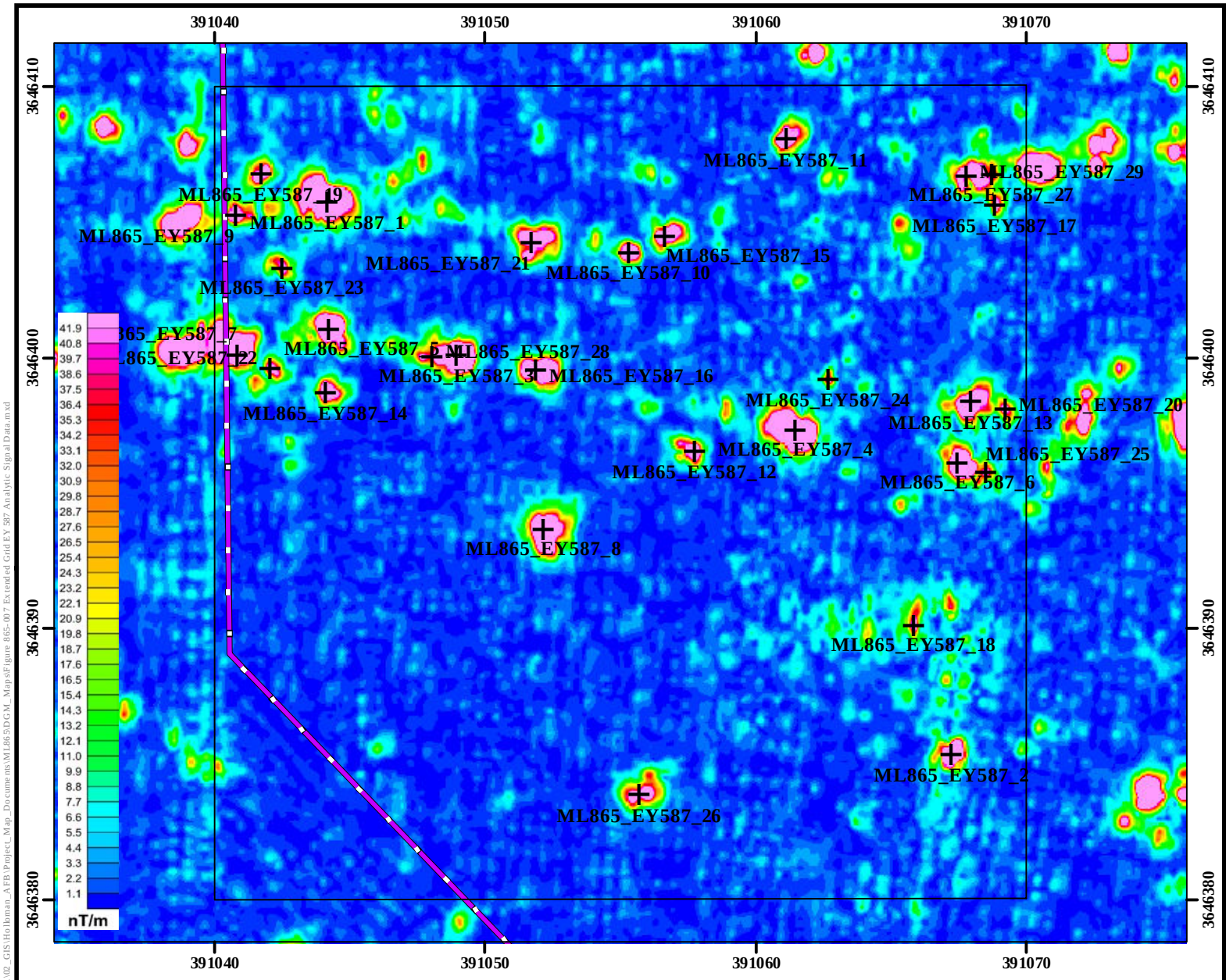
FIGURE 865-6

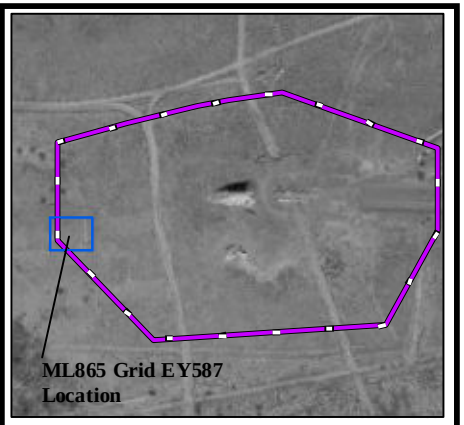
G-858 Analytic Signal
Extended Grid EY586 Outside
ML865 MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-06 Extended Grid EY 586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the extended ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: NAD 1983 CORS96
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

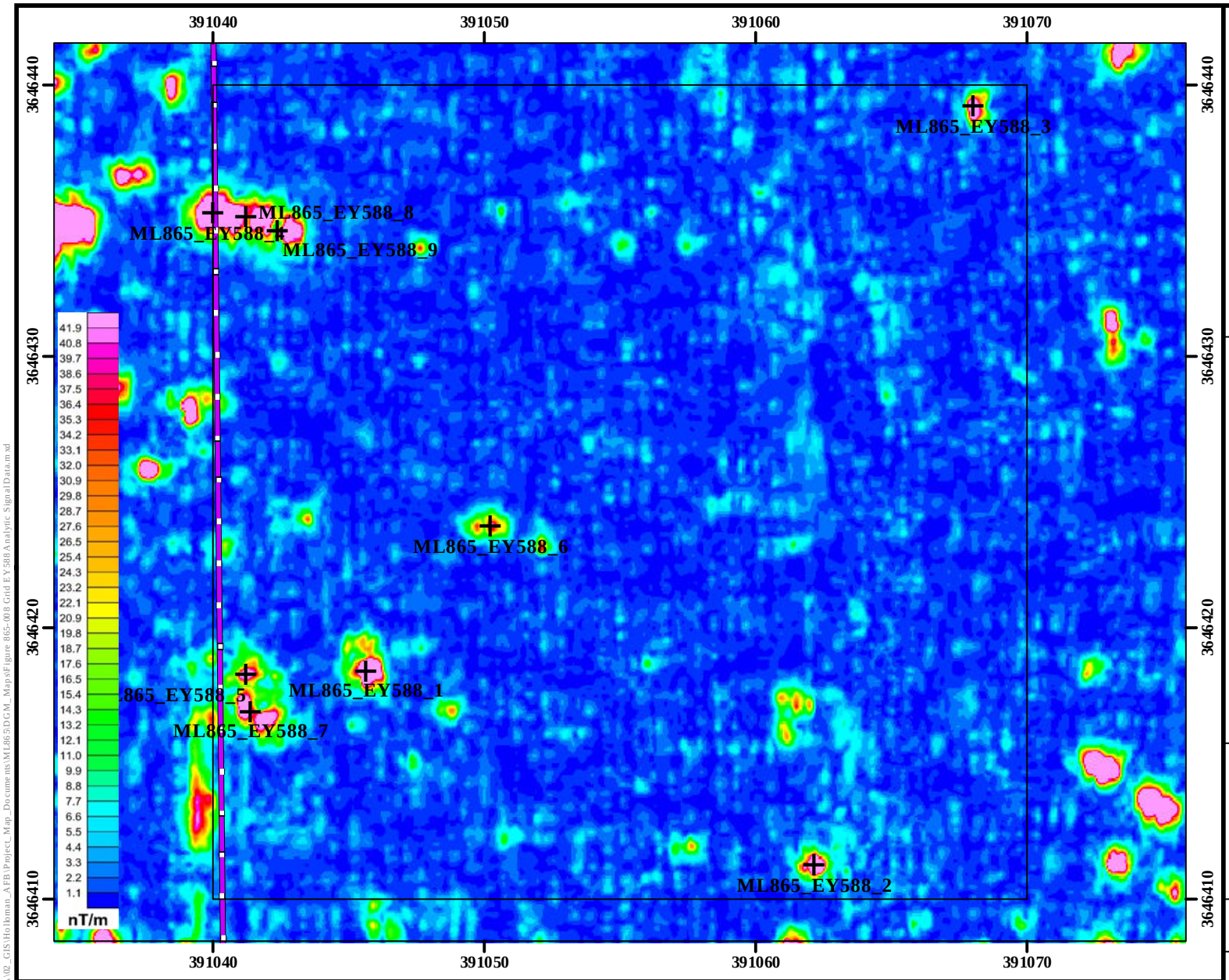
FIGURE 865-7

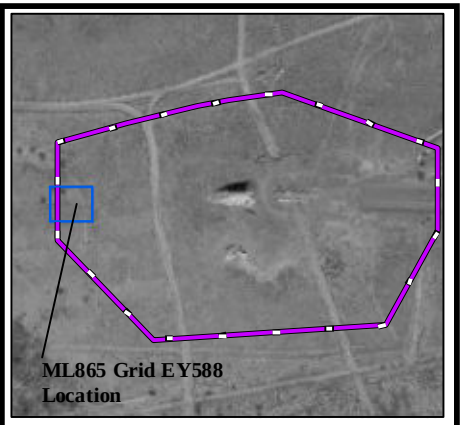
G-858 Analytic Signal
Extended Grid EY587
ML865 MRS

FPM Remediations, Inc.

2015

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-007 Extended Grid EY 587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-8

G-858 Analytic Signal
Grid EY588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

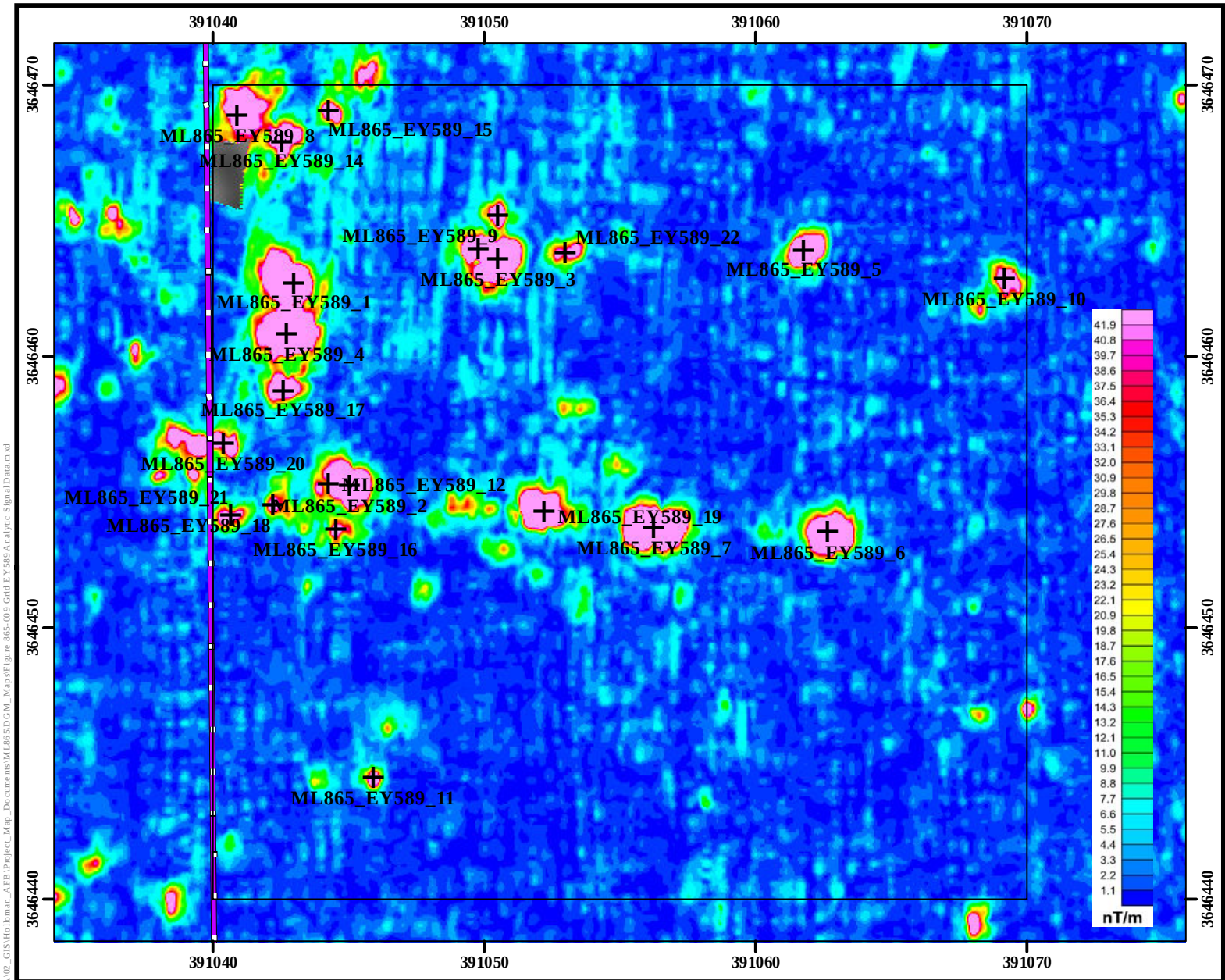
1 inch = 18 feet

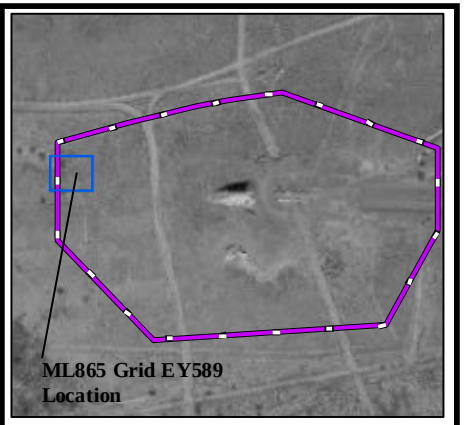
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-008 Grid EY588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-9

G-858 Analytic Signal
Grid EY589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

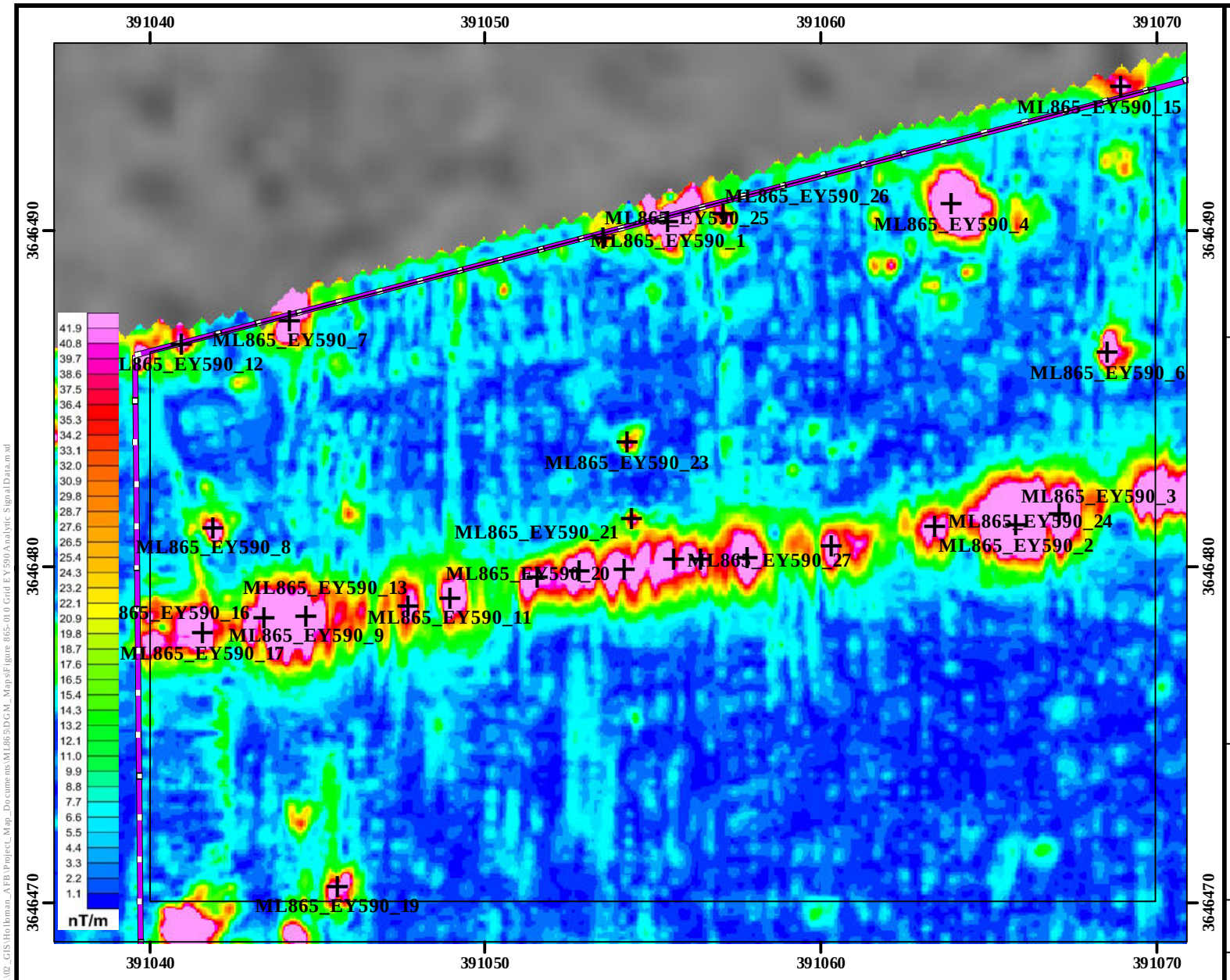
1 inch = 18 feet

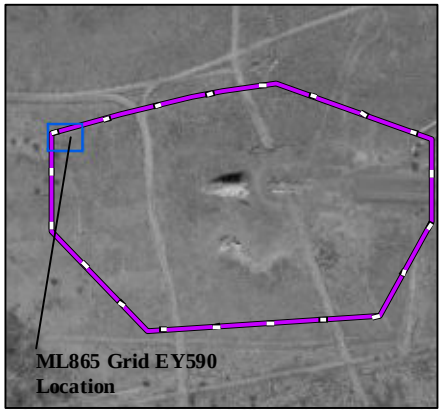
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-009 Grid EY589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-10

G-858 Analytic Signal
Grid EY590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

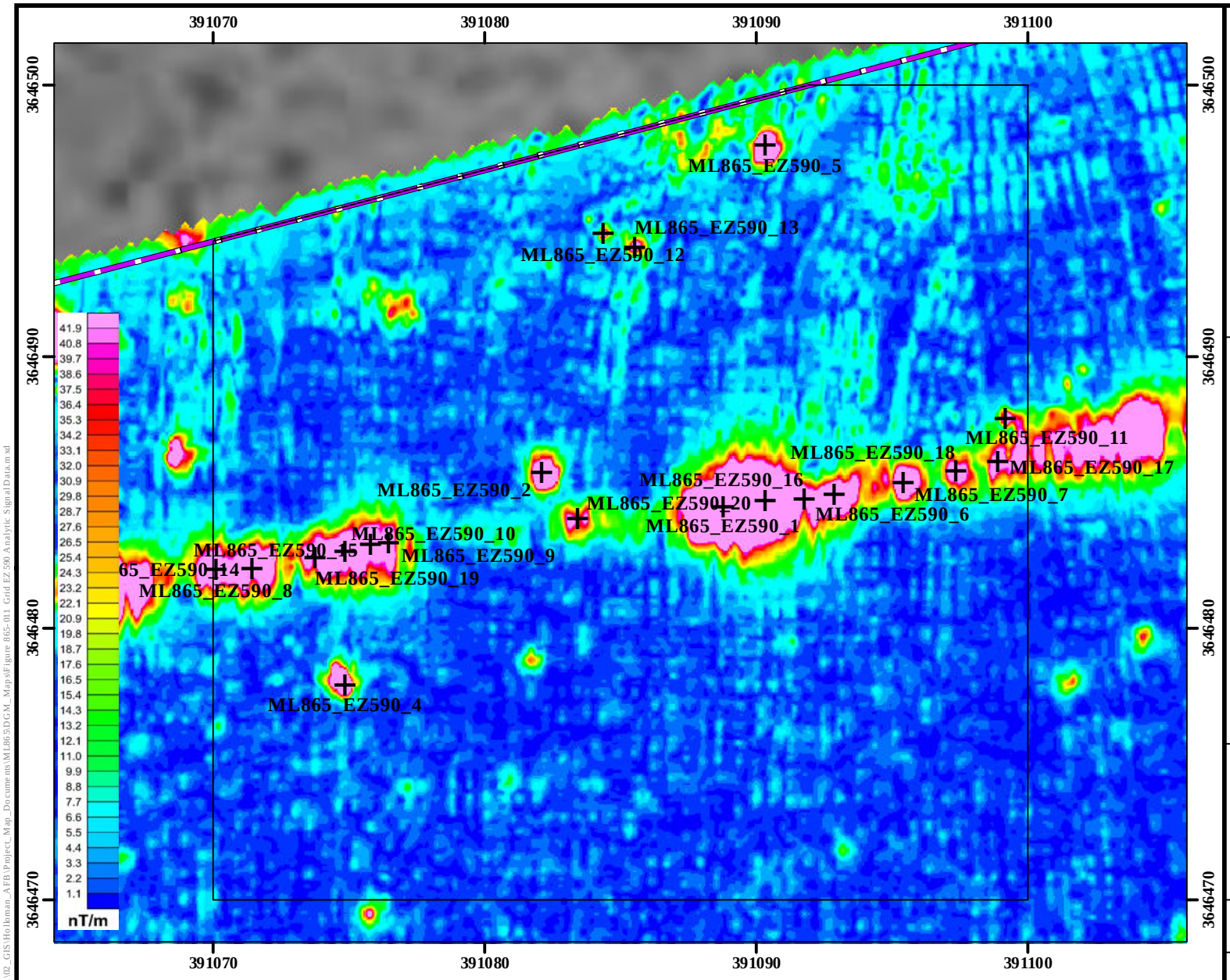
1 inch = 15 feet

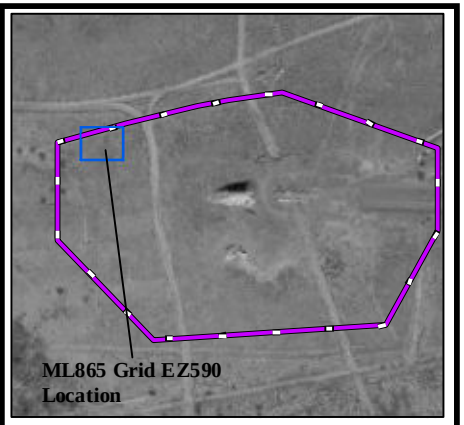
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-010 Grid EY590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-11

G-858 Analytic Signal
Grid EZ590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

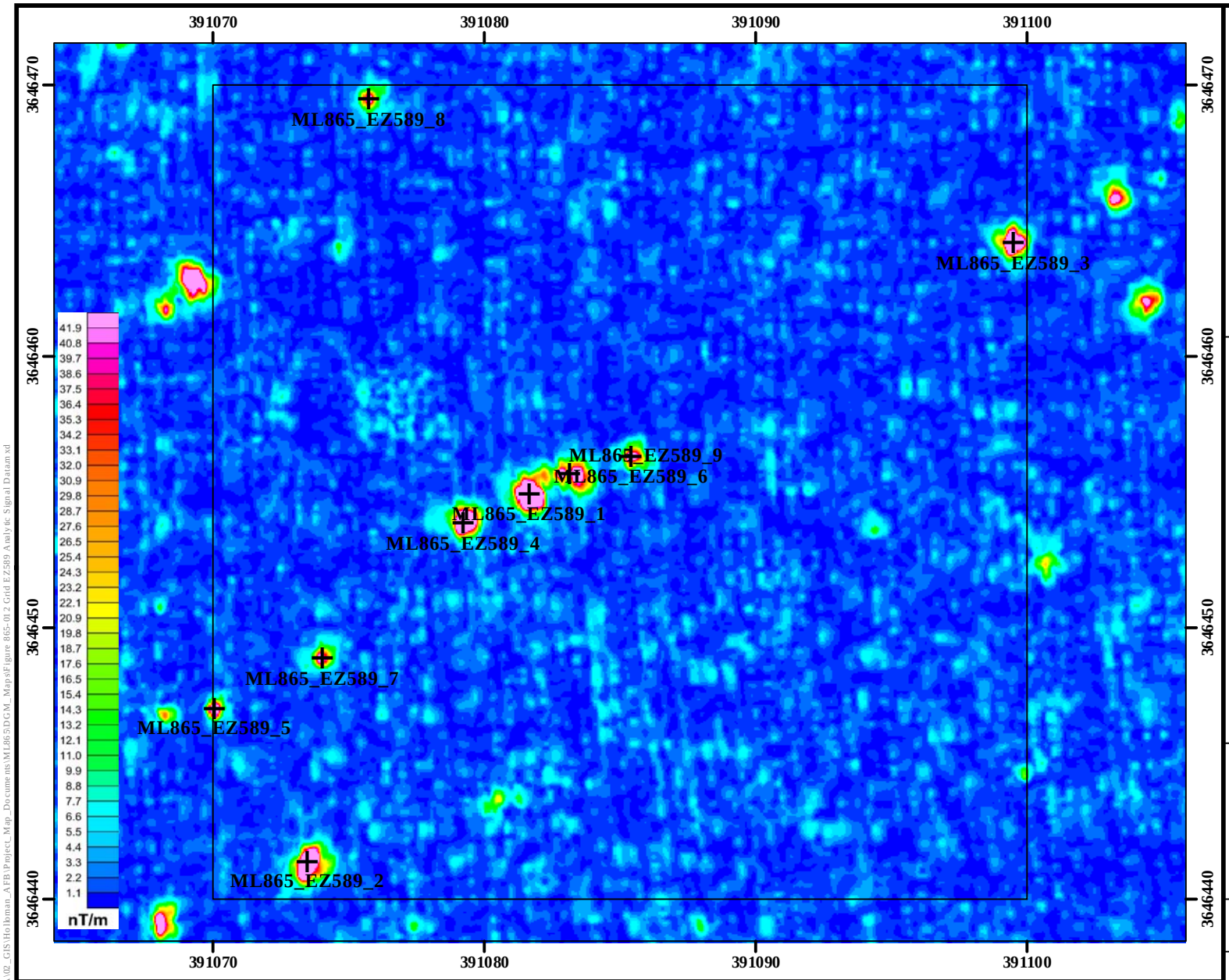
1 inch = 18 feet

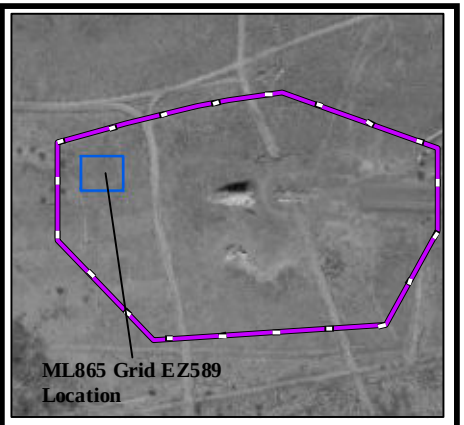
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-011 Grid EZ590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-12

G-858 Analytic Signal
Grid EZ589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

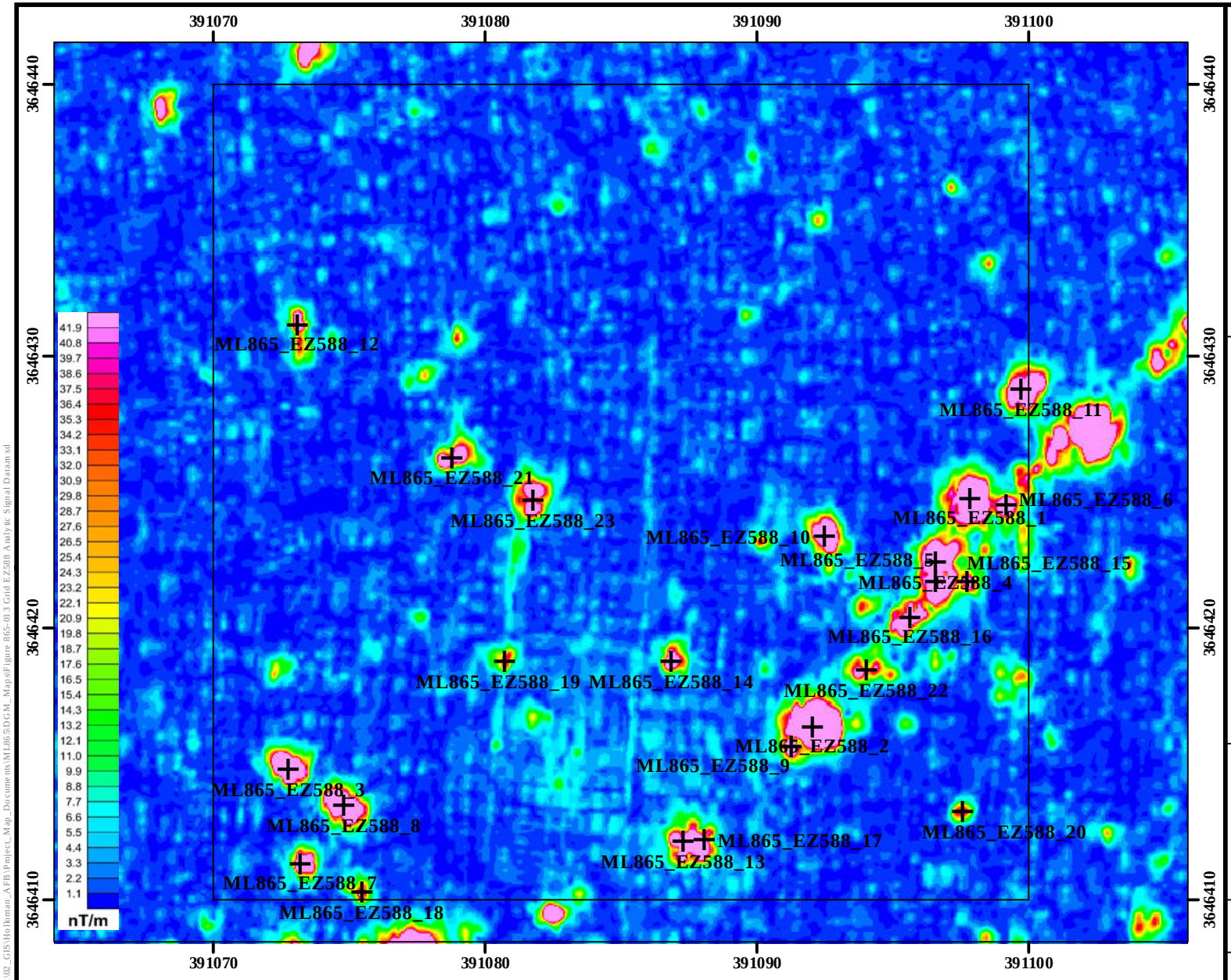
1 inch = 18 feet

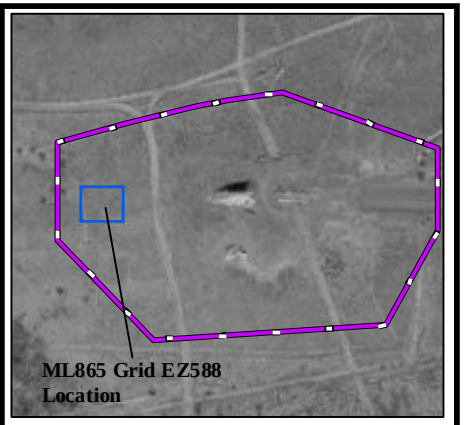
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-012 Grid EZ589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-13

G-858 Analytic Signal
Grid EZ588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

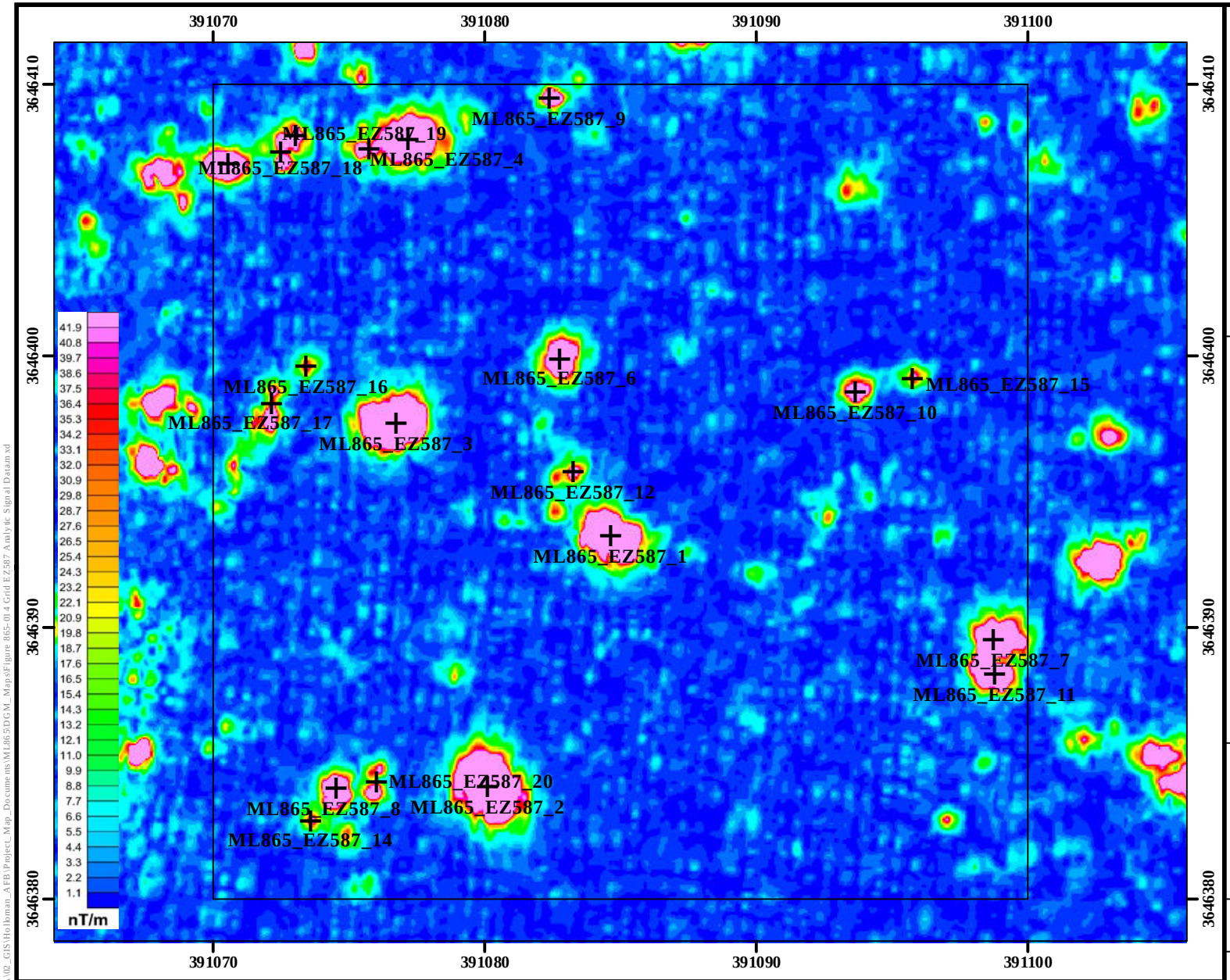
1 inch = 18 feet

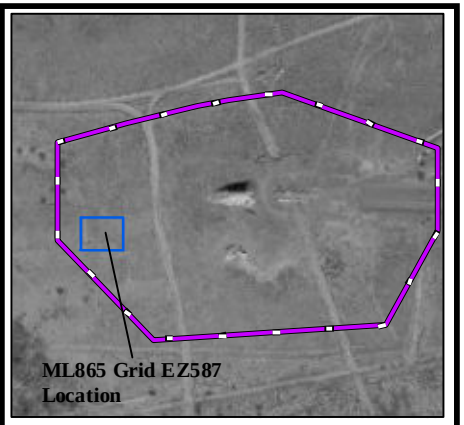
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-013 Grid EZ588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-14

G-858 Analytic Signal
Grid EZ587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

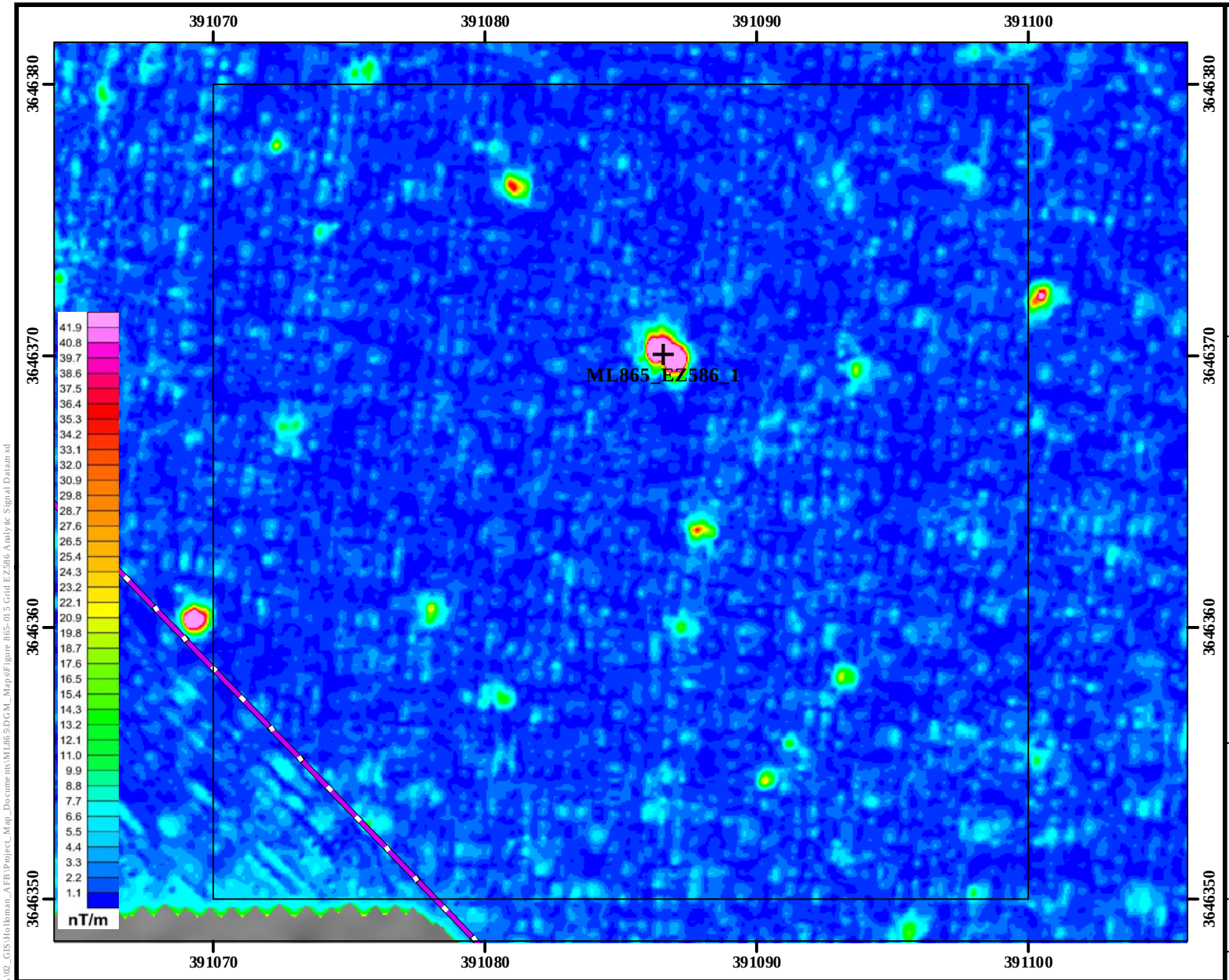
1 inch = 18 feet

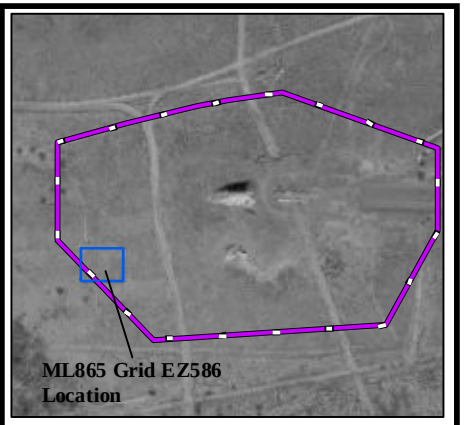
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-014 Grid EZ587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-15

G-858 Analytic Signal
Grid EZ586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

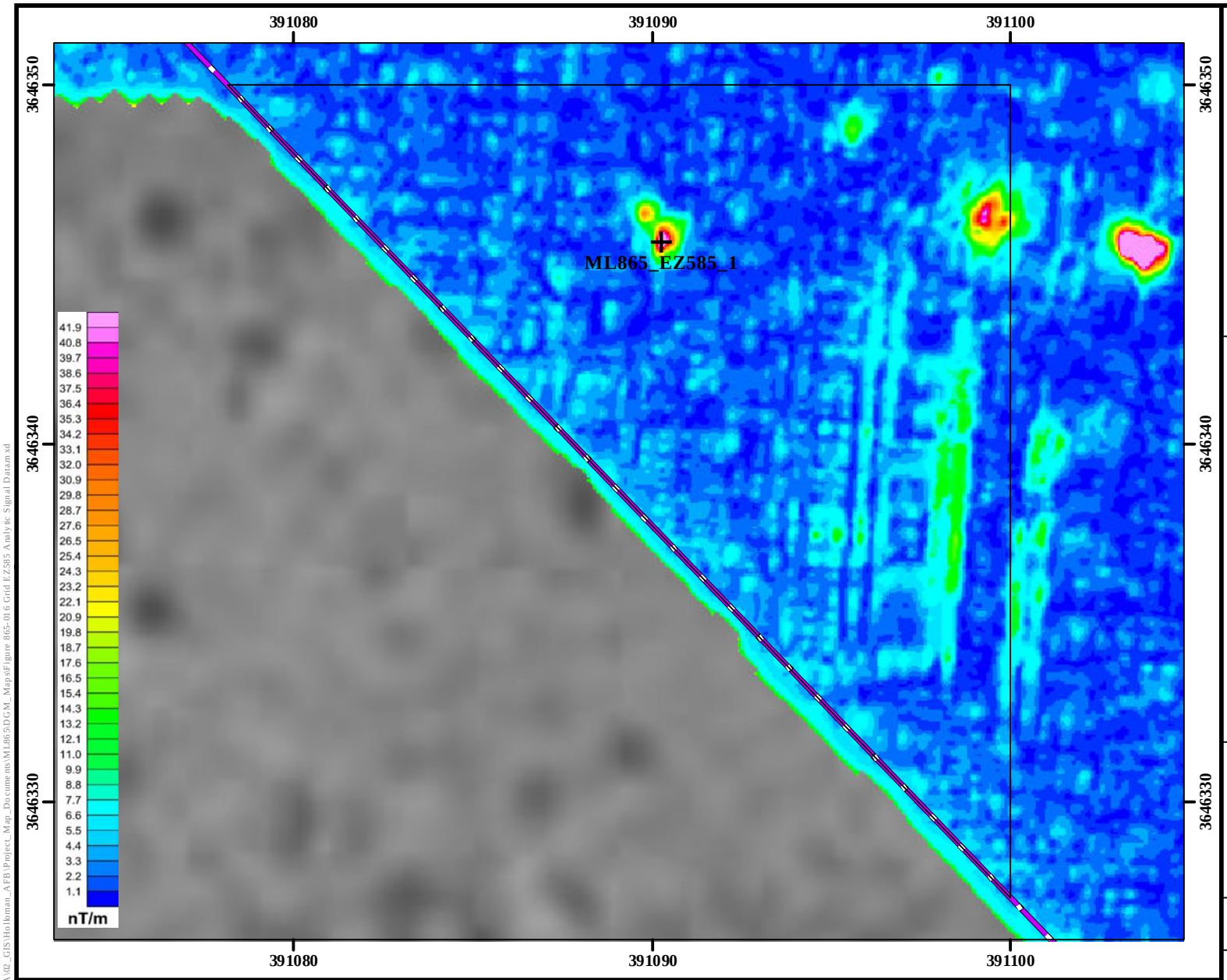
1 inch = 18 feet

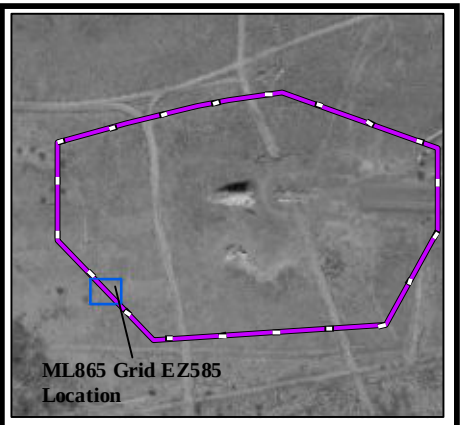
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-015 Grid EZ586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-16

G-858 Analytic Signal
Grid EZ585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

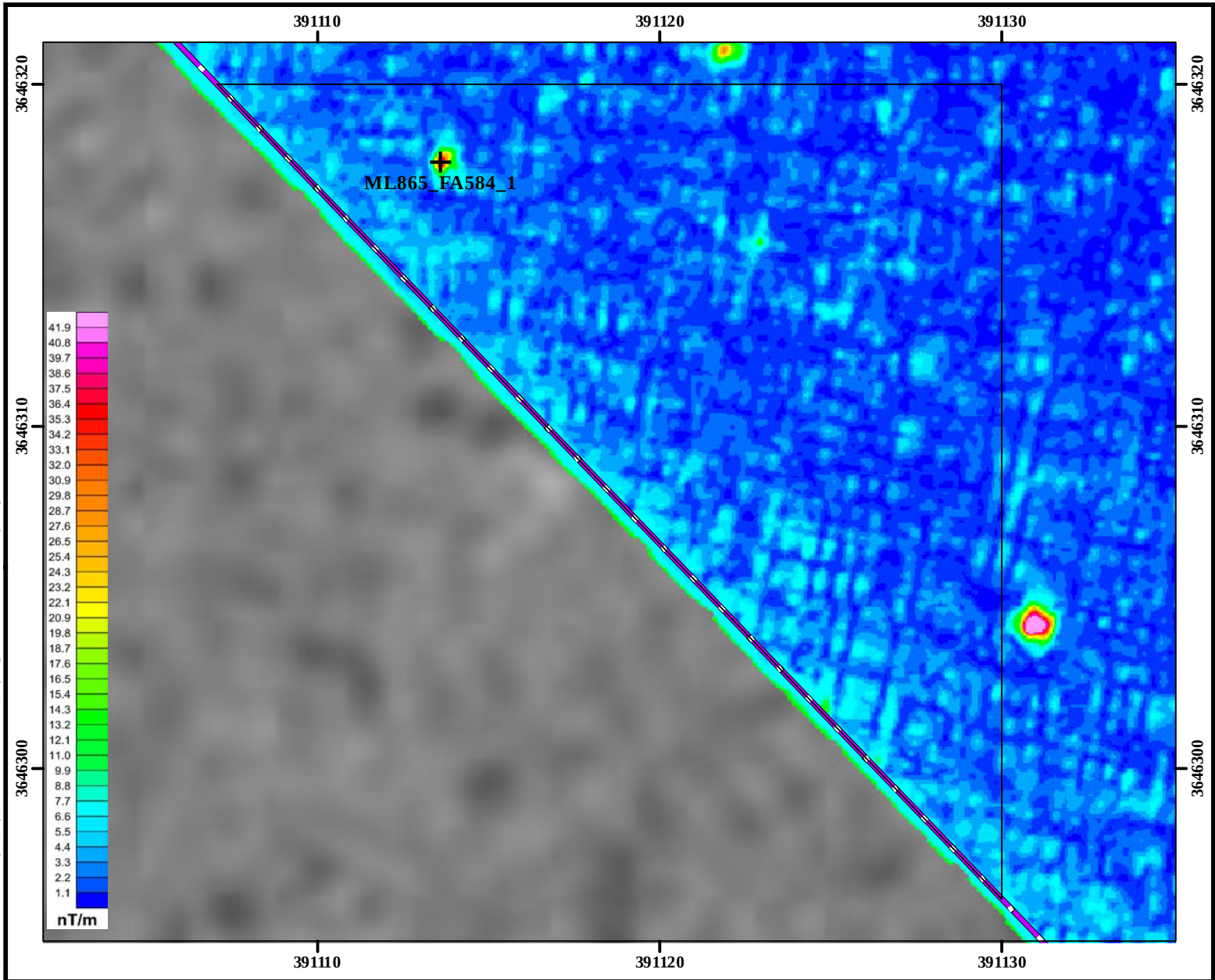
1 inch = 14 feet

0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sea1\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-016 Grid EZ585 Analytic Signal Data.mxd



Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-17

G-858 Analytic Signal
Grid FA584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

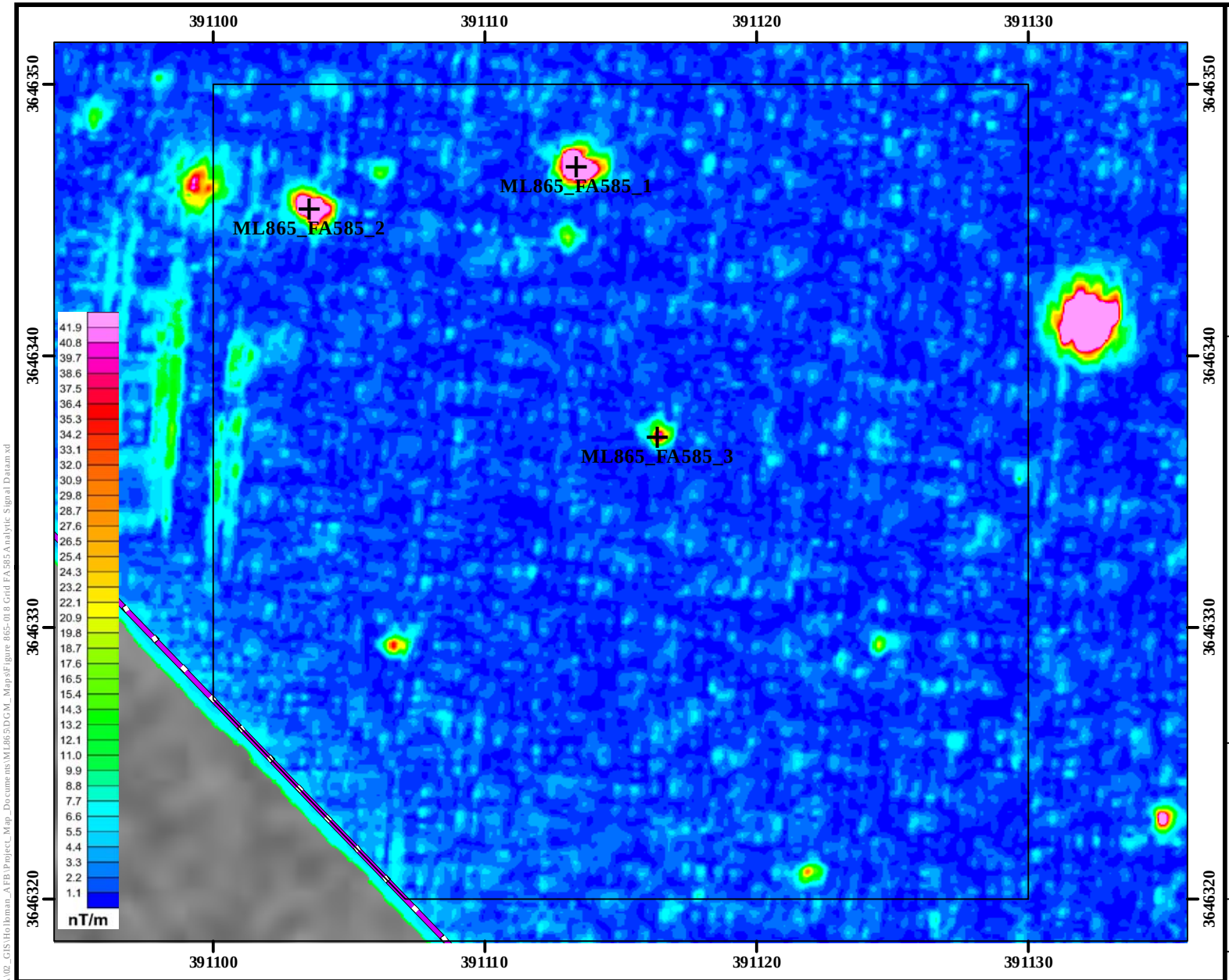
1 inch = 14 feet

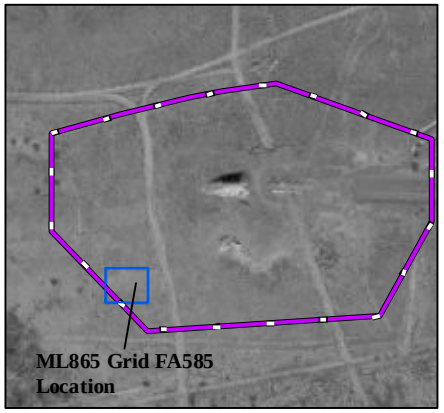
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-017 Grid FA584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-18

G-858 Analytic Signal
Grid FA585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

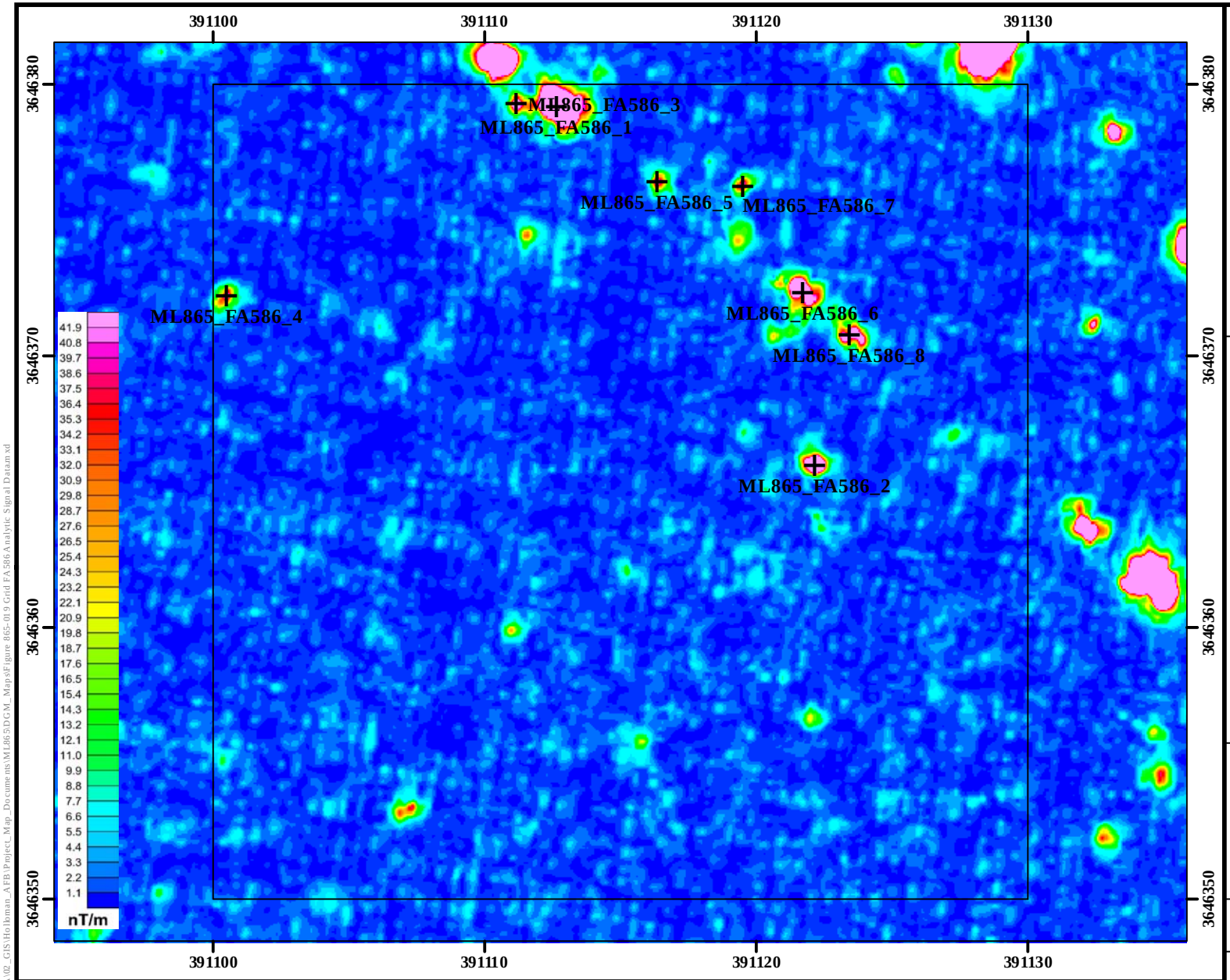
1 inch = 18 feet

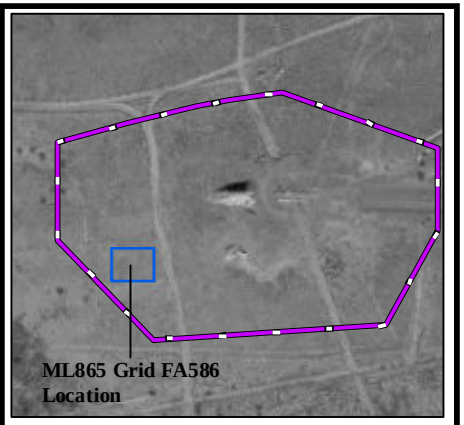
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-018 Grid FA585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

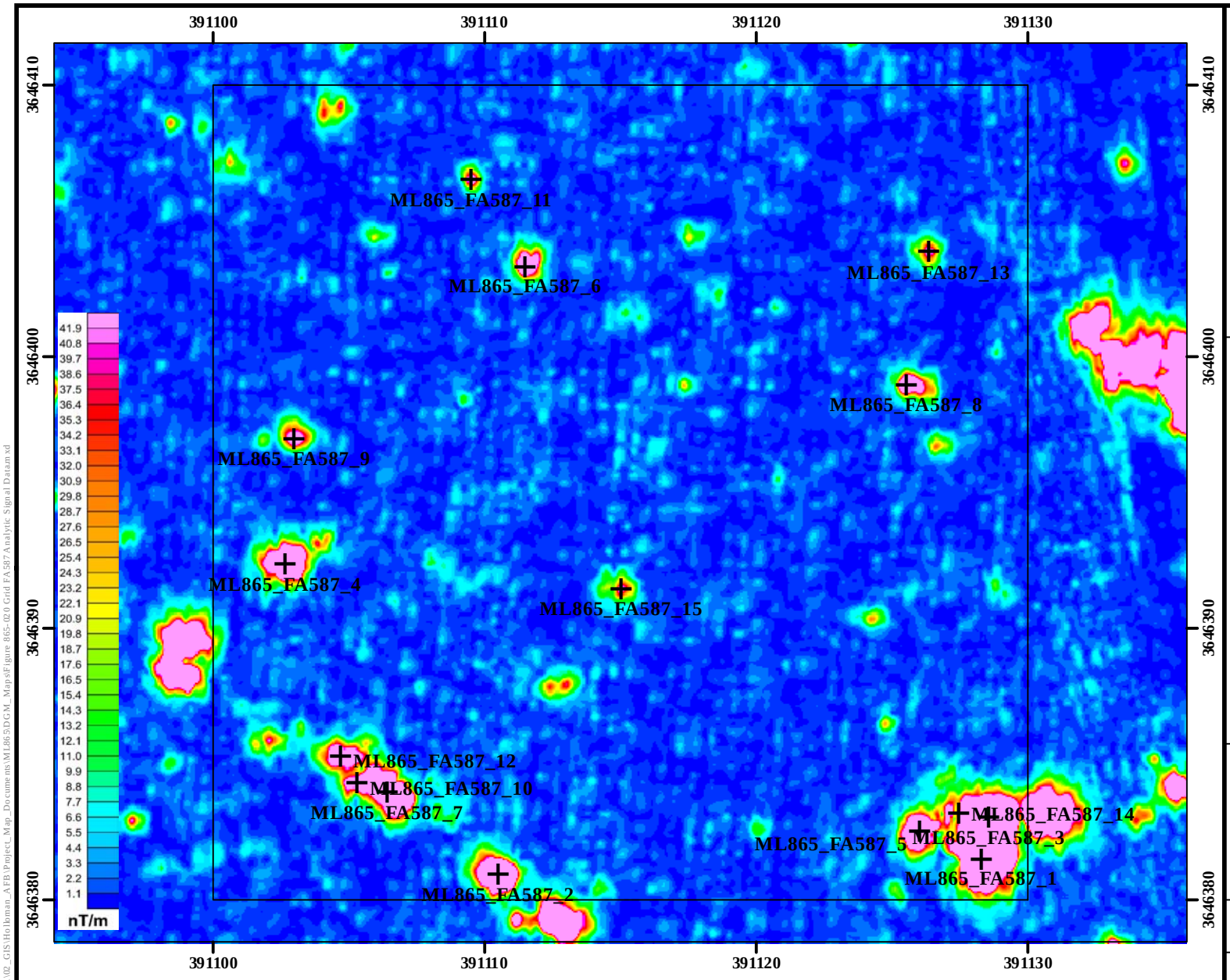
FIGURE 865-19

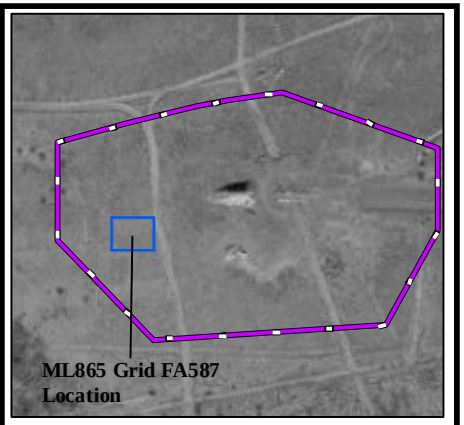
G-858 Analytic Signal
Grid FA586 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-019 Grid FA586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-20

G-858 Analytic Signal
Grid FA587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

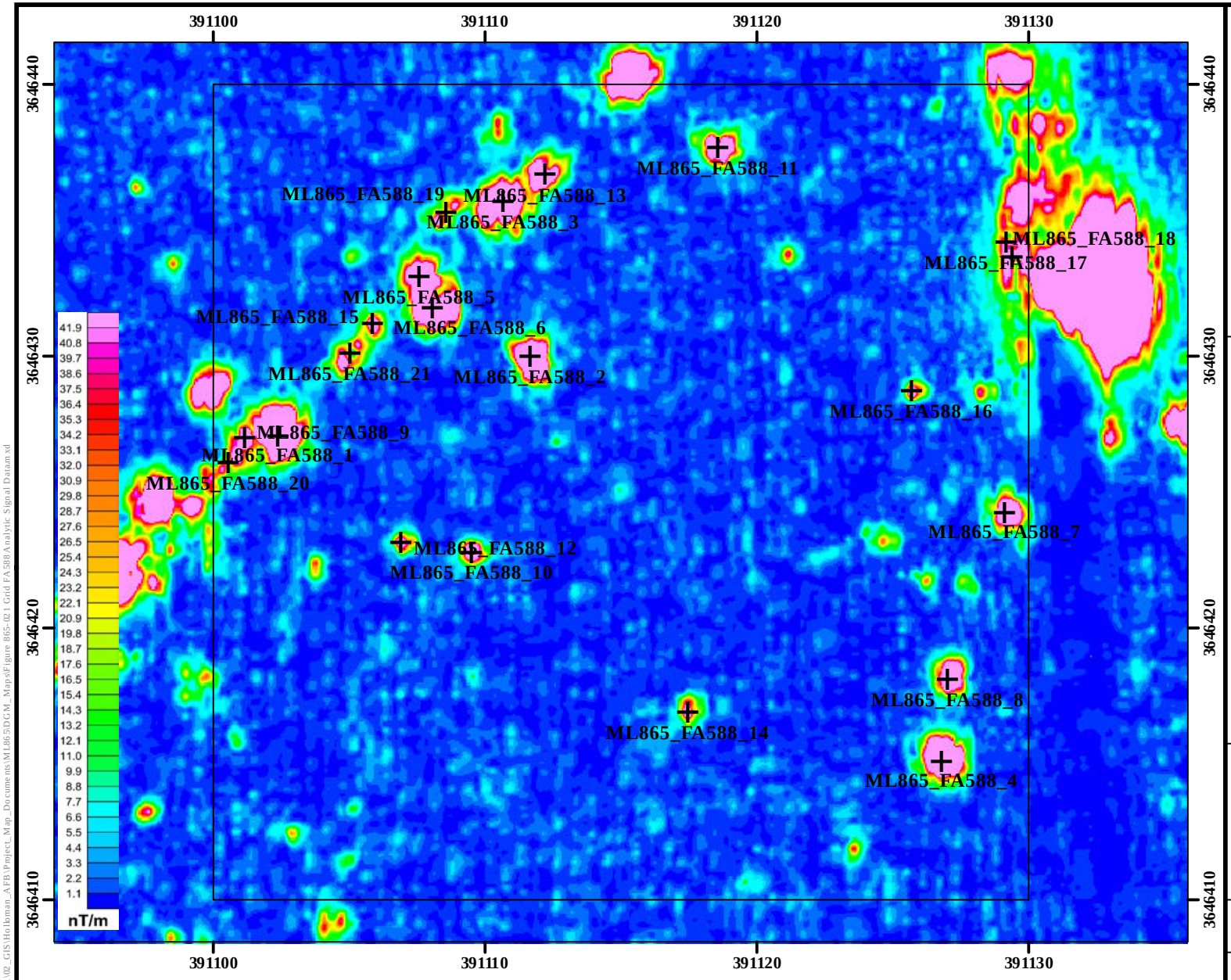
1 inch = 18 feet

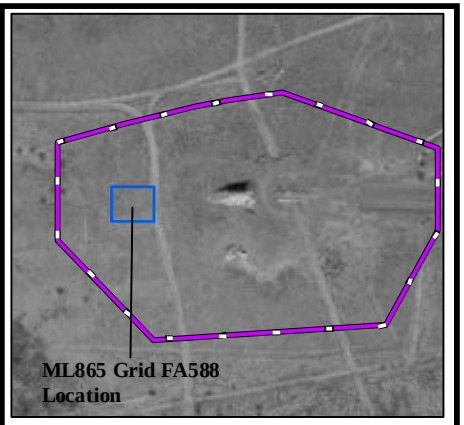
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-02\0 Grid FA587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

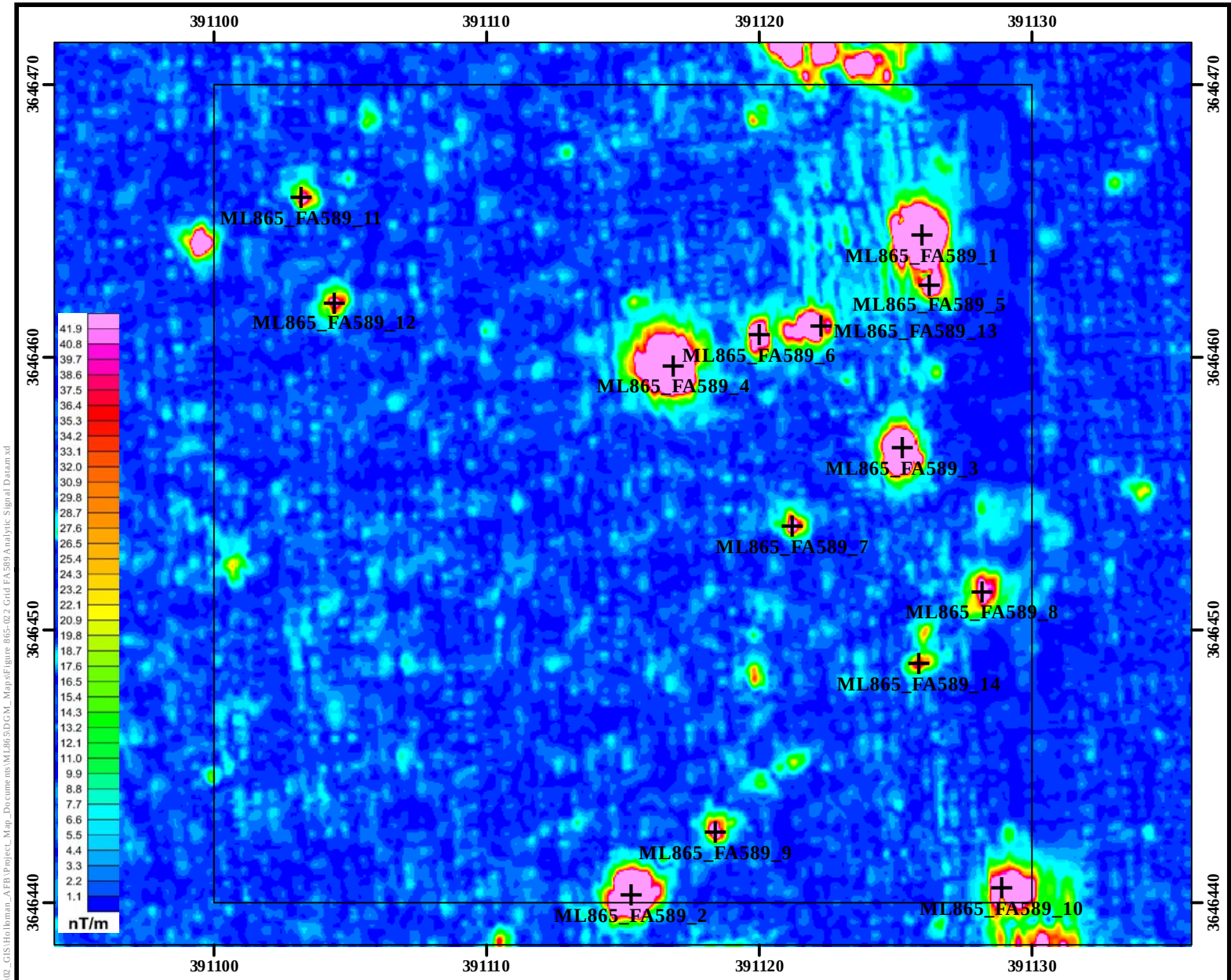
FIGURE 865-21

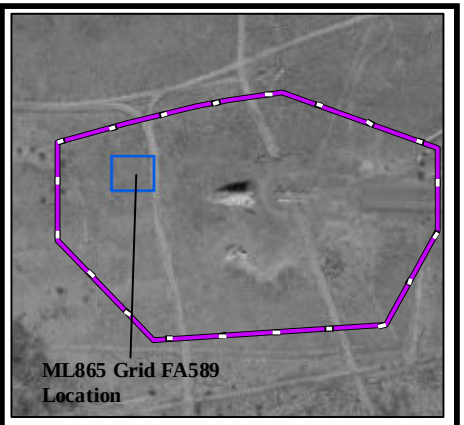
G-858 Analytic Signal
Grid FA588 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-021 Grid FA588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-22

G-858 Analytic Signal
Grid FA589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

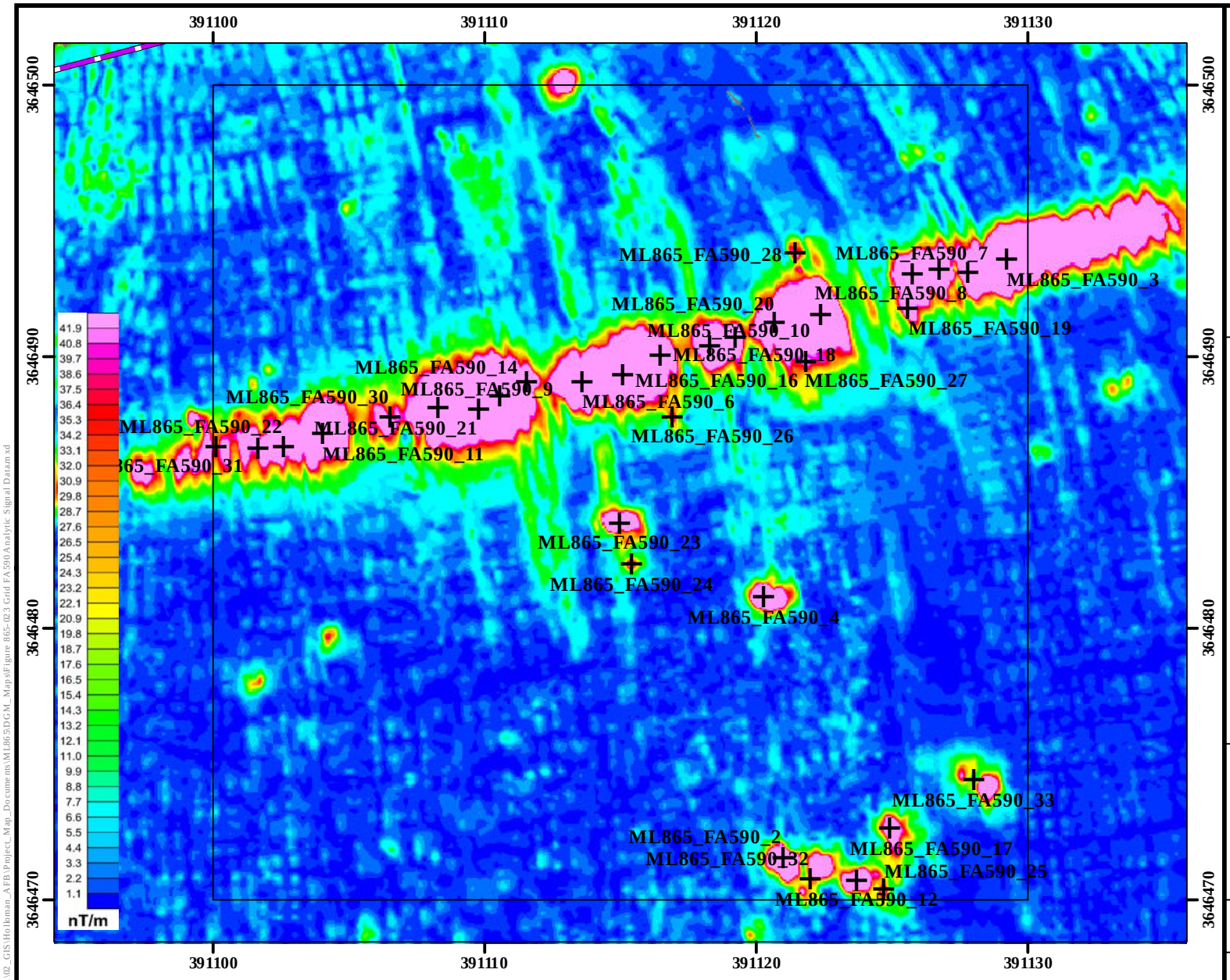
1 inch = 18 feet

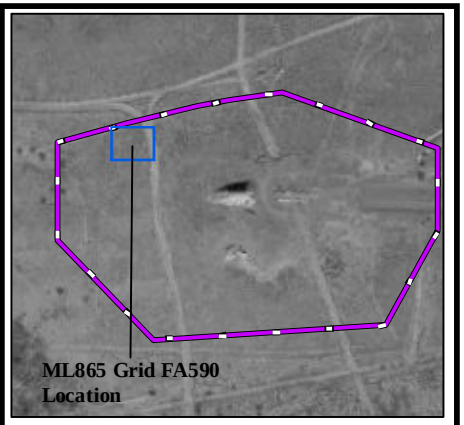
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-02 Grid FA589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-23

G-858 Analytic Signal
Grid FA590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

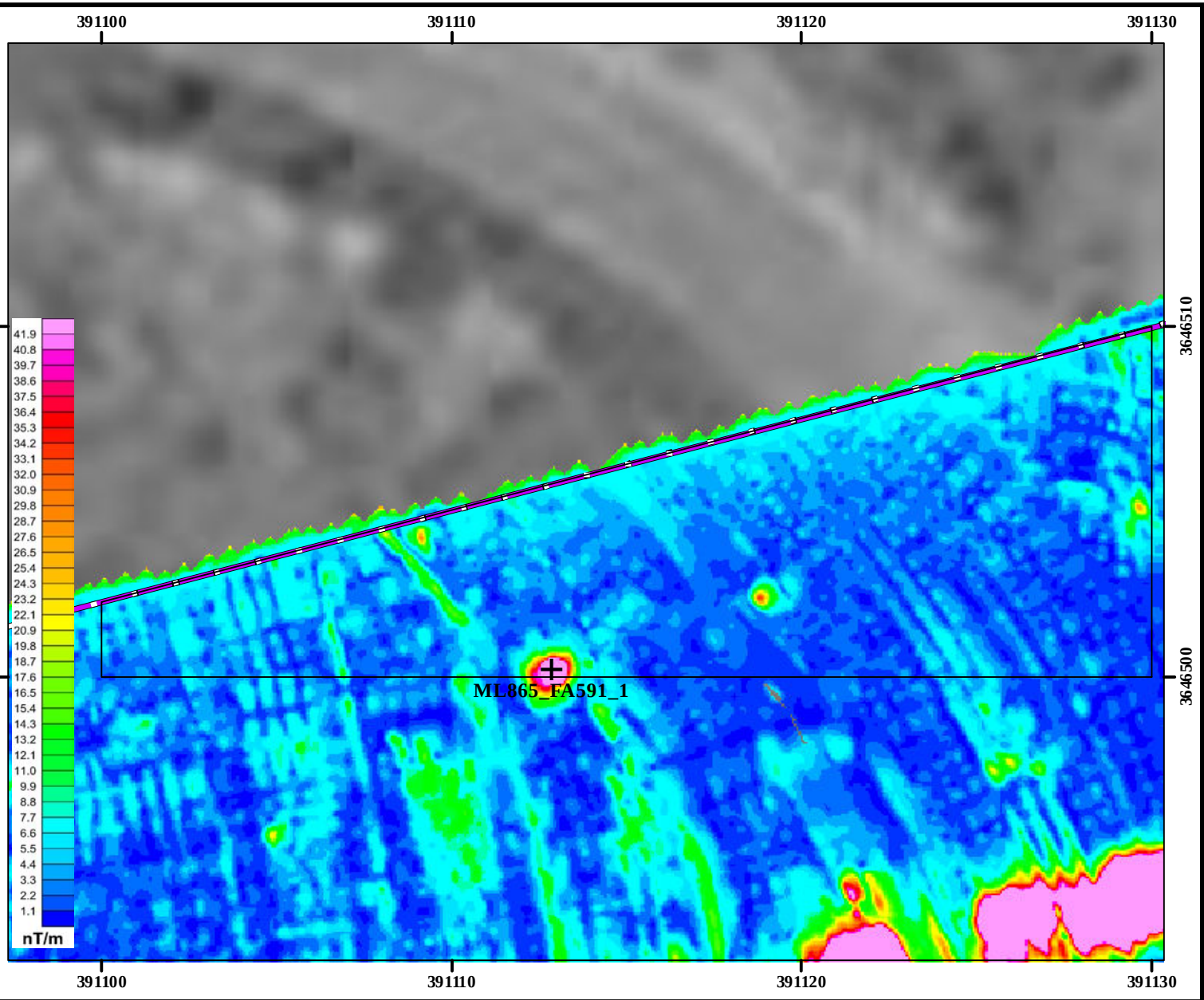
1 inch = 18 feet

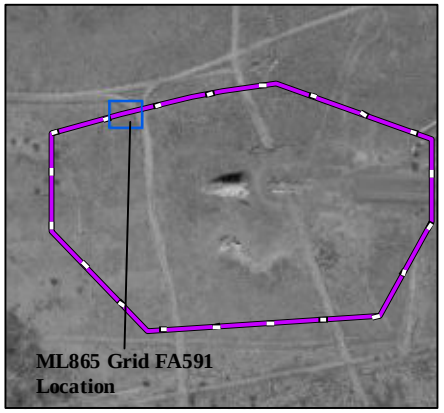
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-023 Grid FA590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-24

G-858 Analytic Signal
Grid FA591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

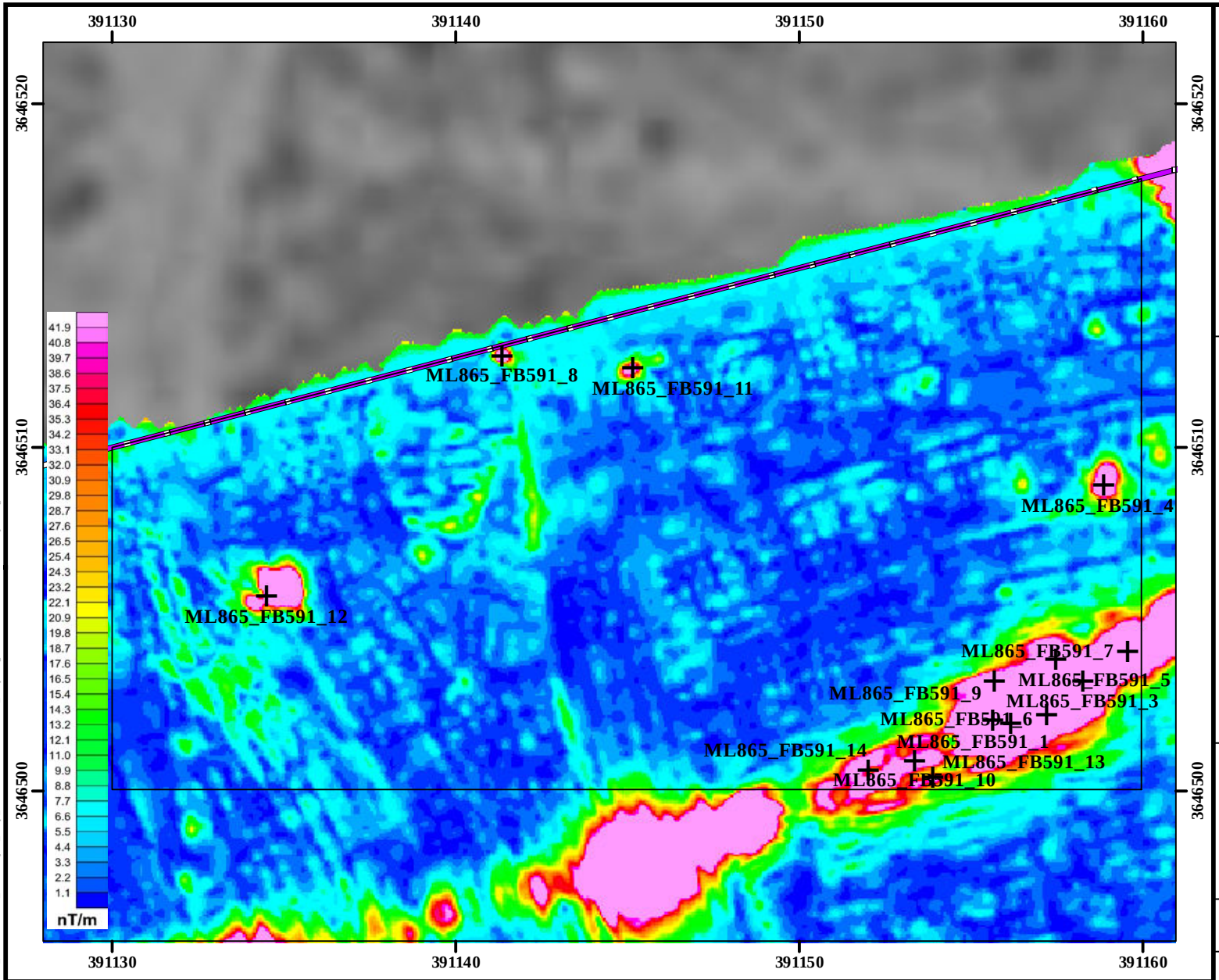
1 inch = 14 feet

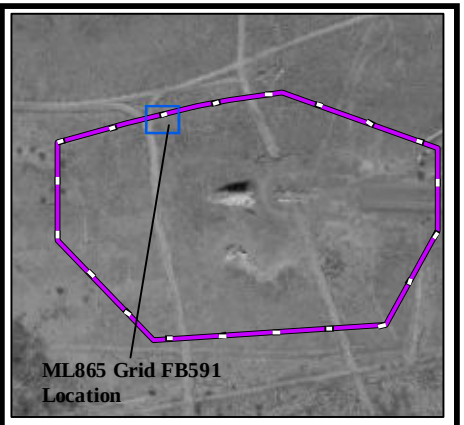
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-024 Grid FA591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-25

G-858 Analytic Signal
Grid FB591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

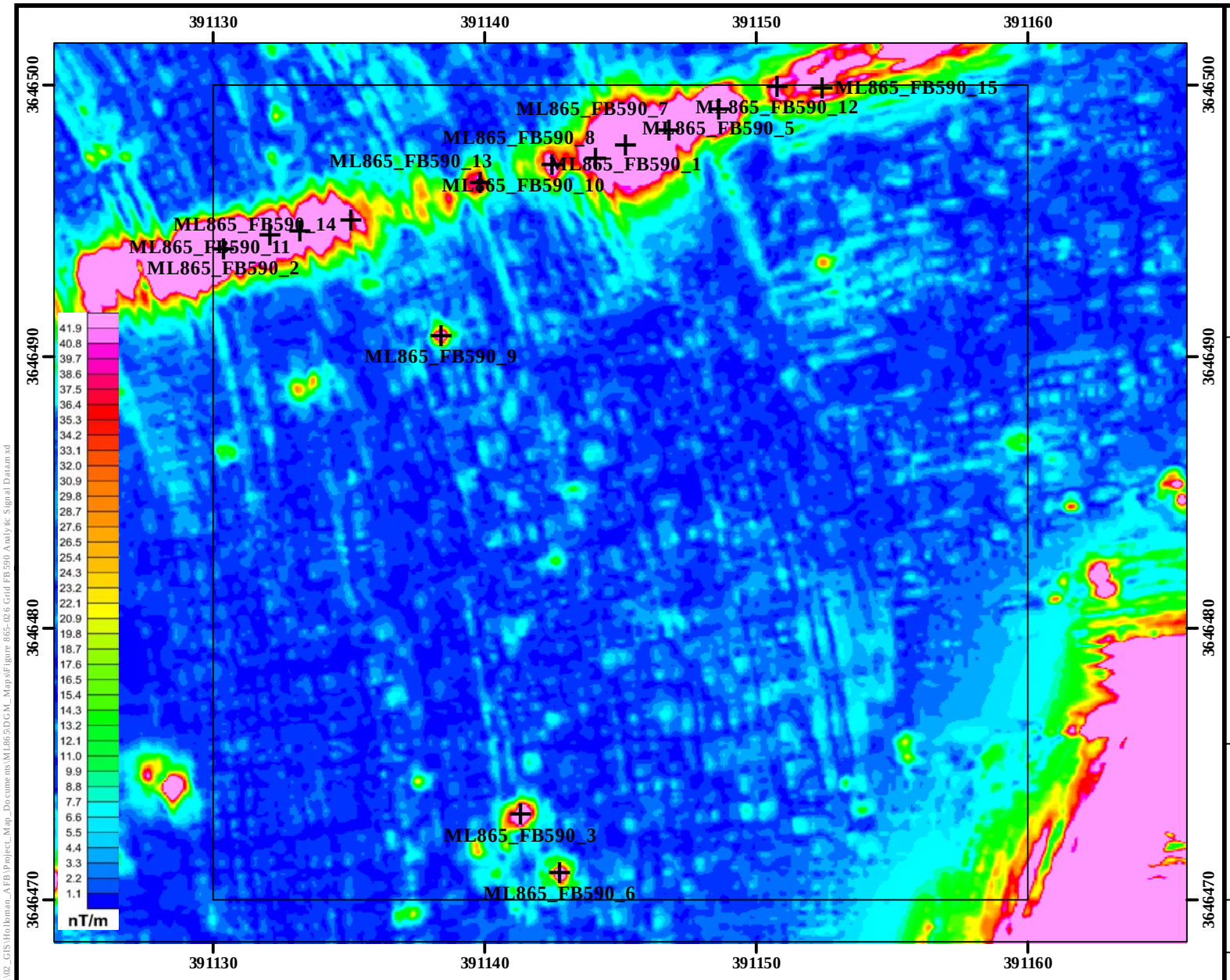
1 inch = 14 feet

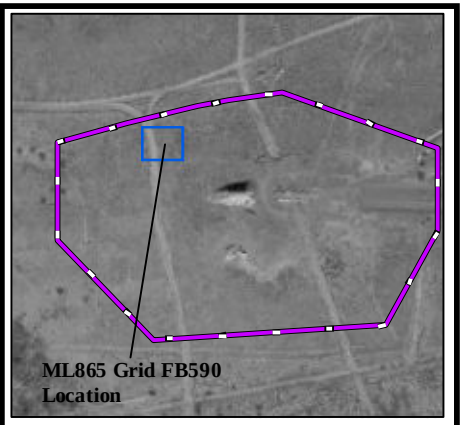
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-025 Grid FB591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-26

G-858 Analytic Signal
Grid FB590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

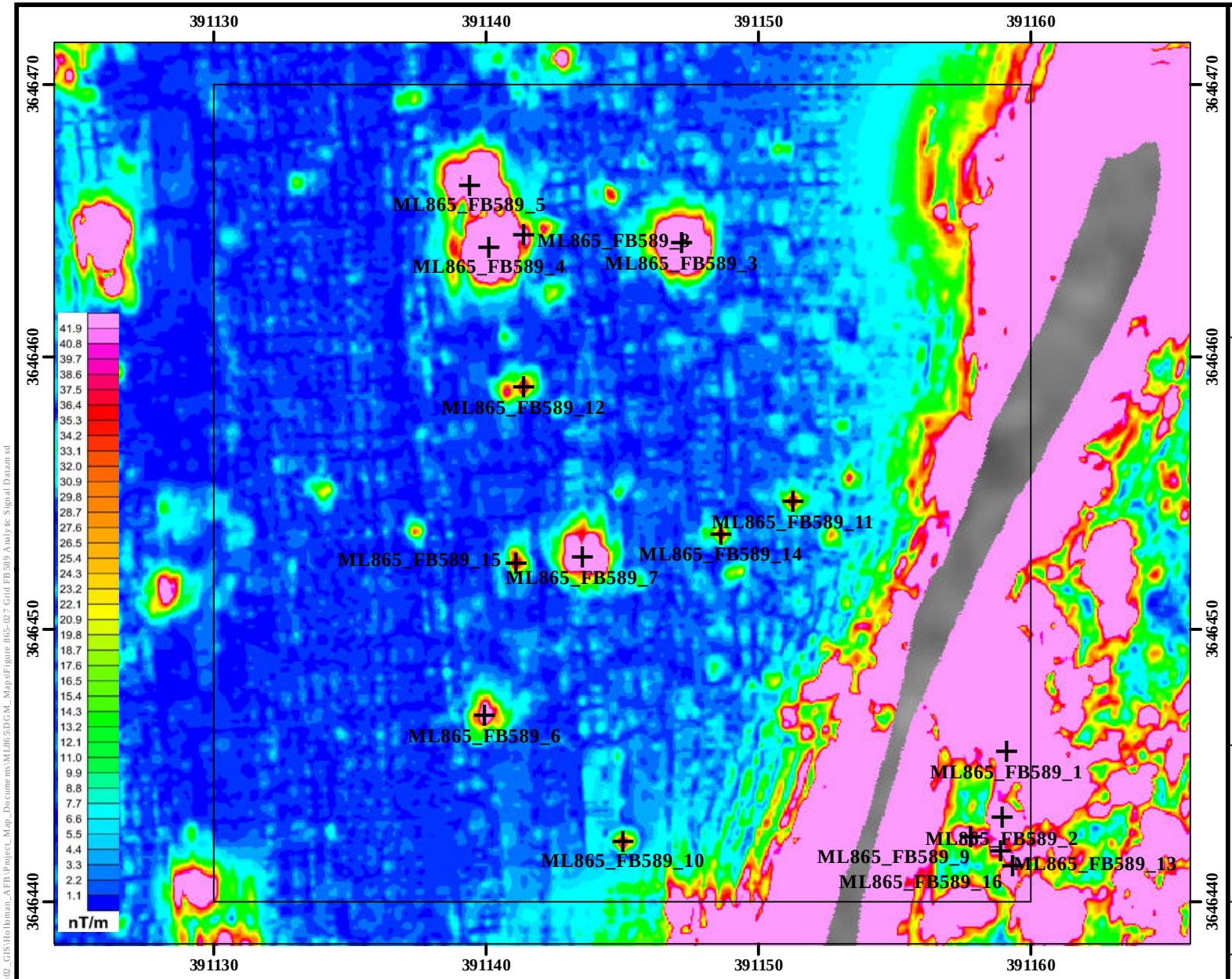
1 inch = 18 feet

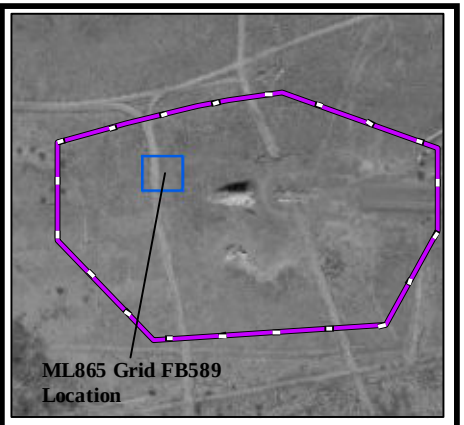
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-02\6 Grid FB590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-27

G-858 Analytic Signal
Grid FB589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

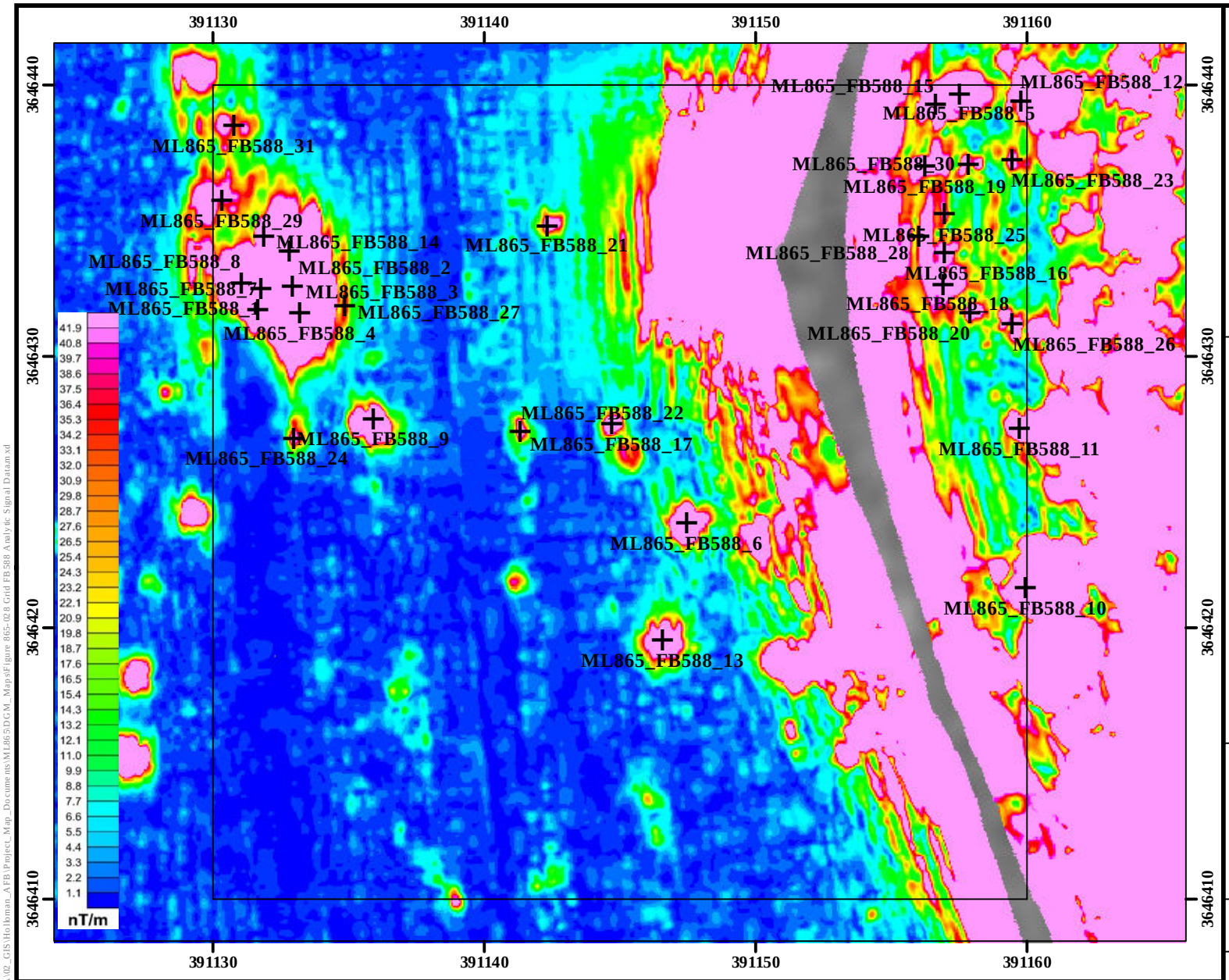
1 inch = 18 feet

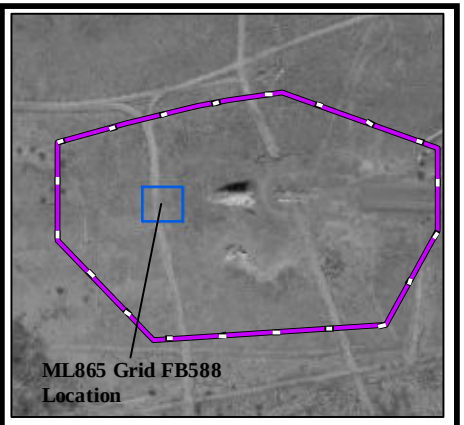
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-027 Grid FB589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-28

G-858 Analytic Signal
Grid FB588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

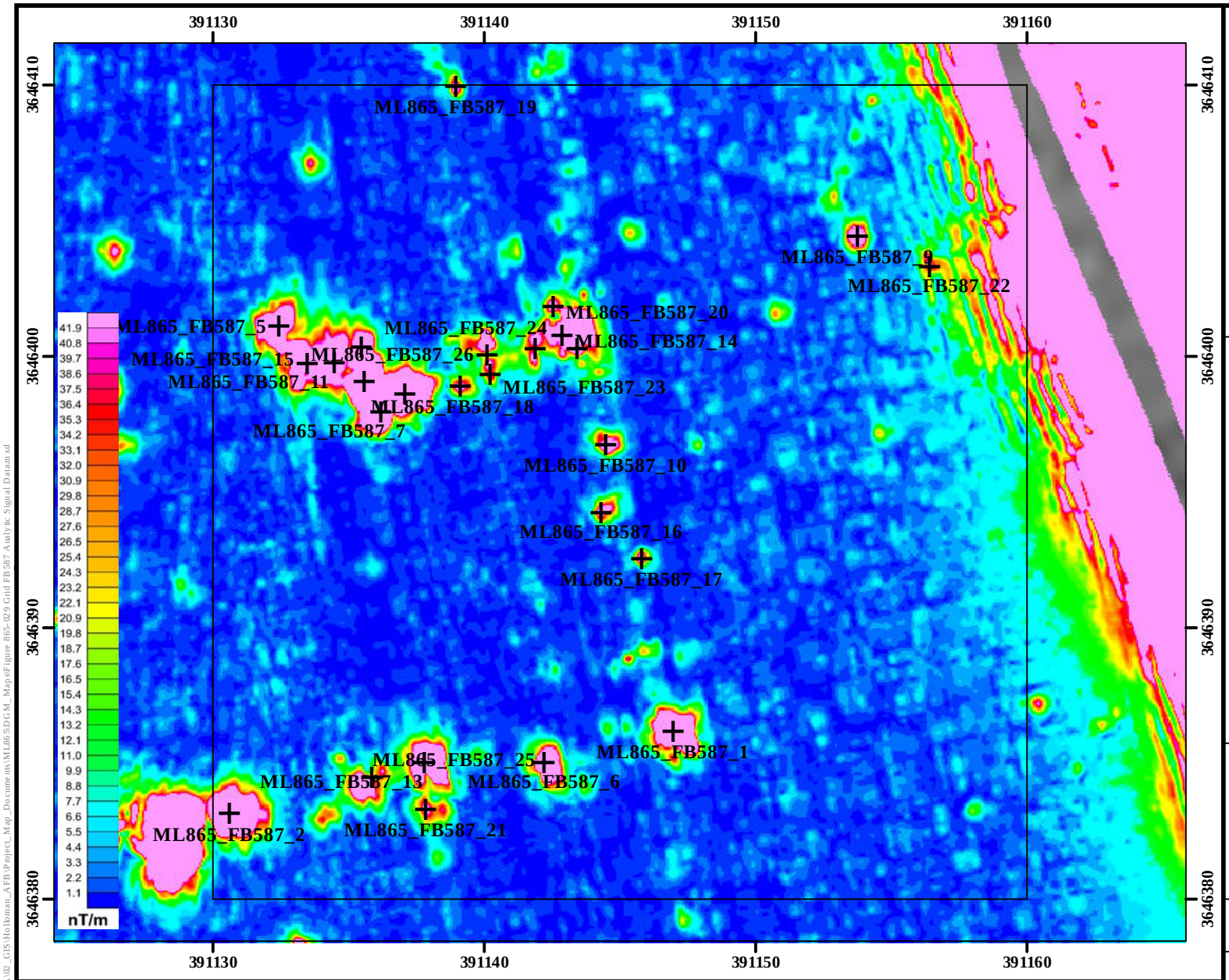
1 inch = 18 feet

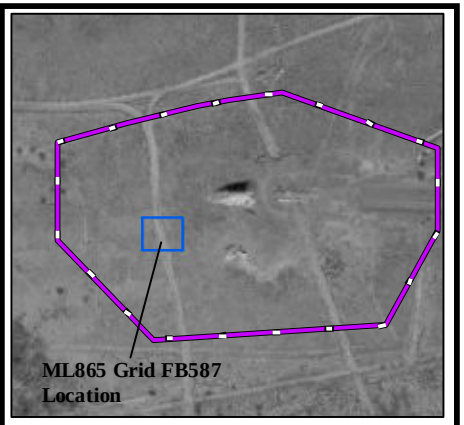
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-028 Grid FB588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-29

G-858 Analytic Signal
Grid FB587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

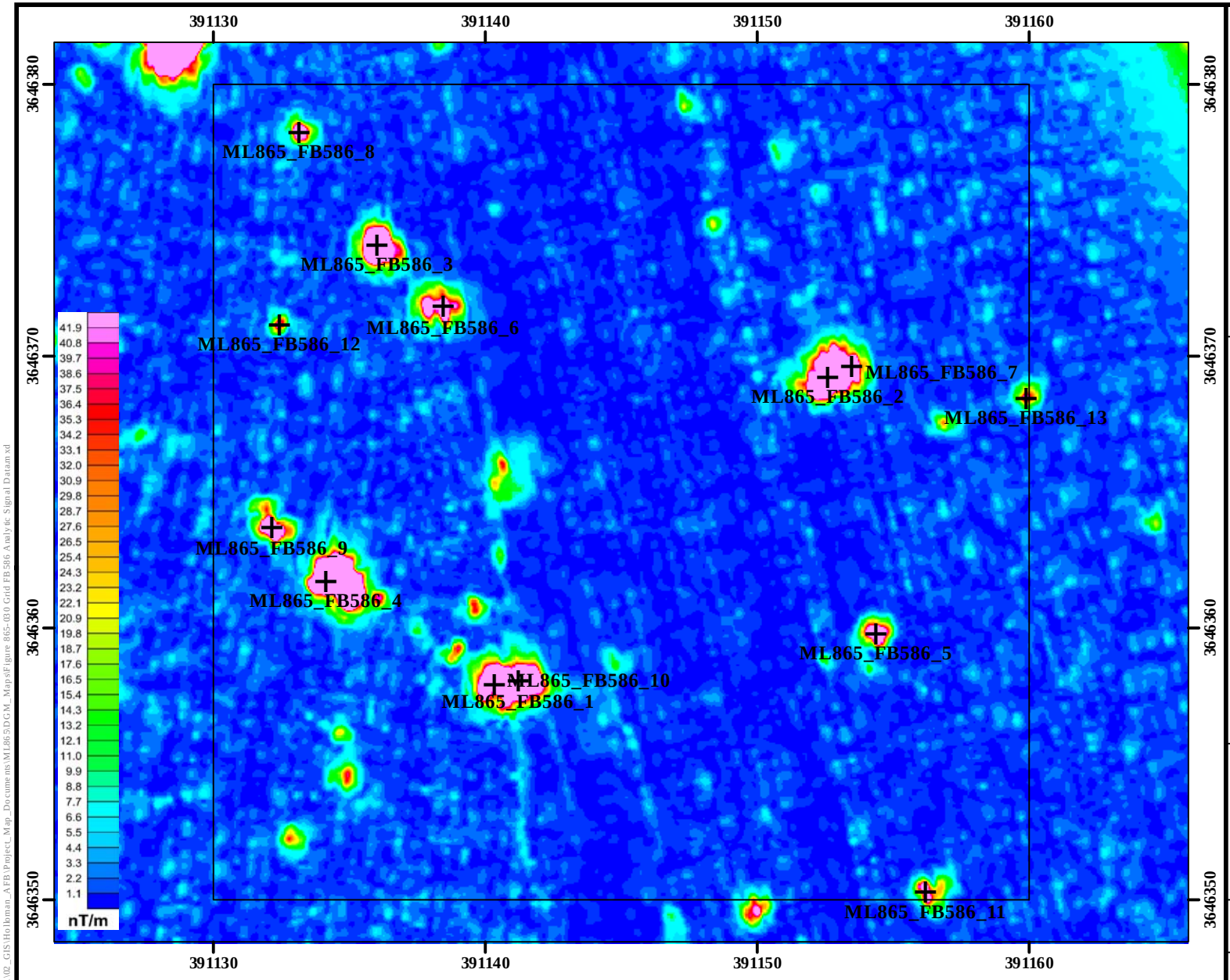
1 inch = 18 feet

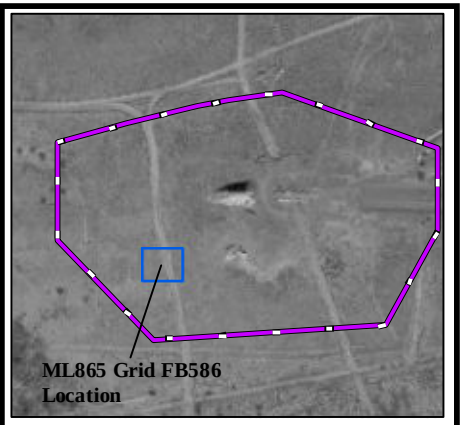
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-029 Grid FB587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-30

G-858 Analytic Signal
Grid FB586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

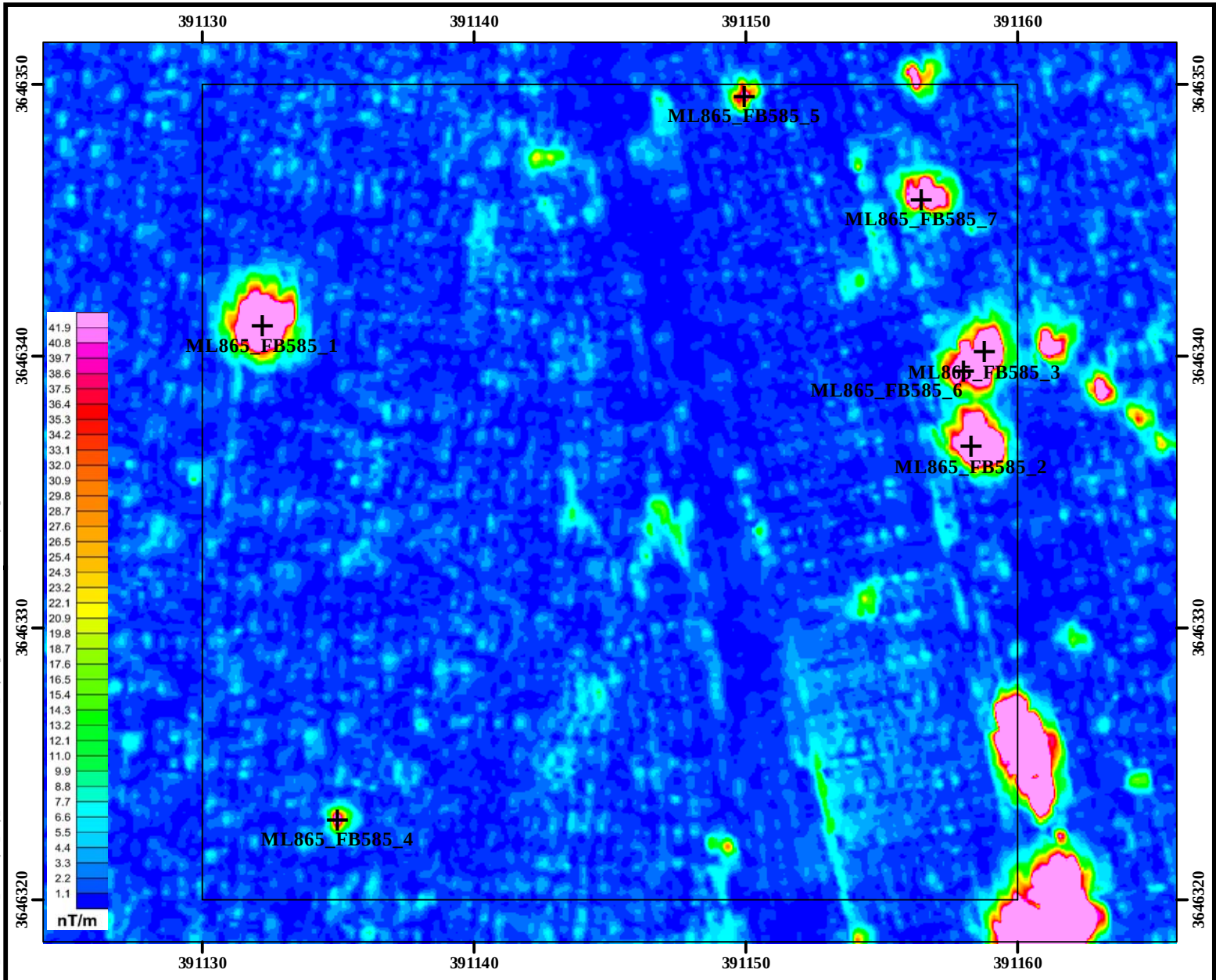
1 inch = 18 feet

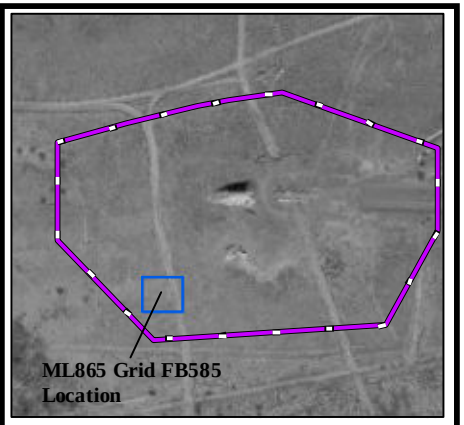
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sea\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-030 Grid FB586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-31

G-858 Analytic Signal
Grid FB585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

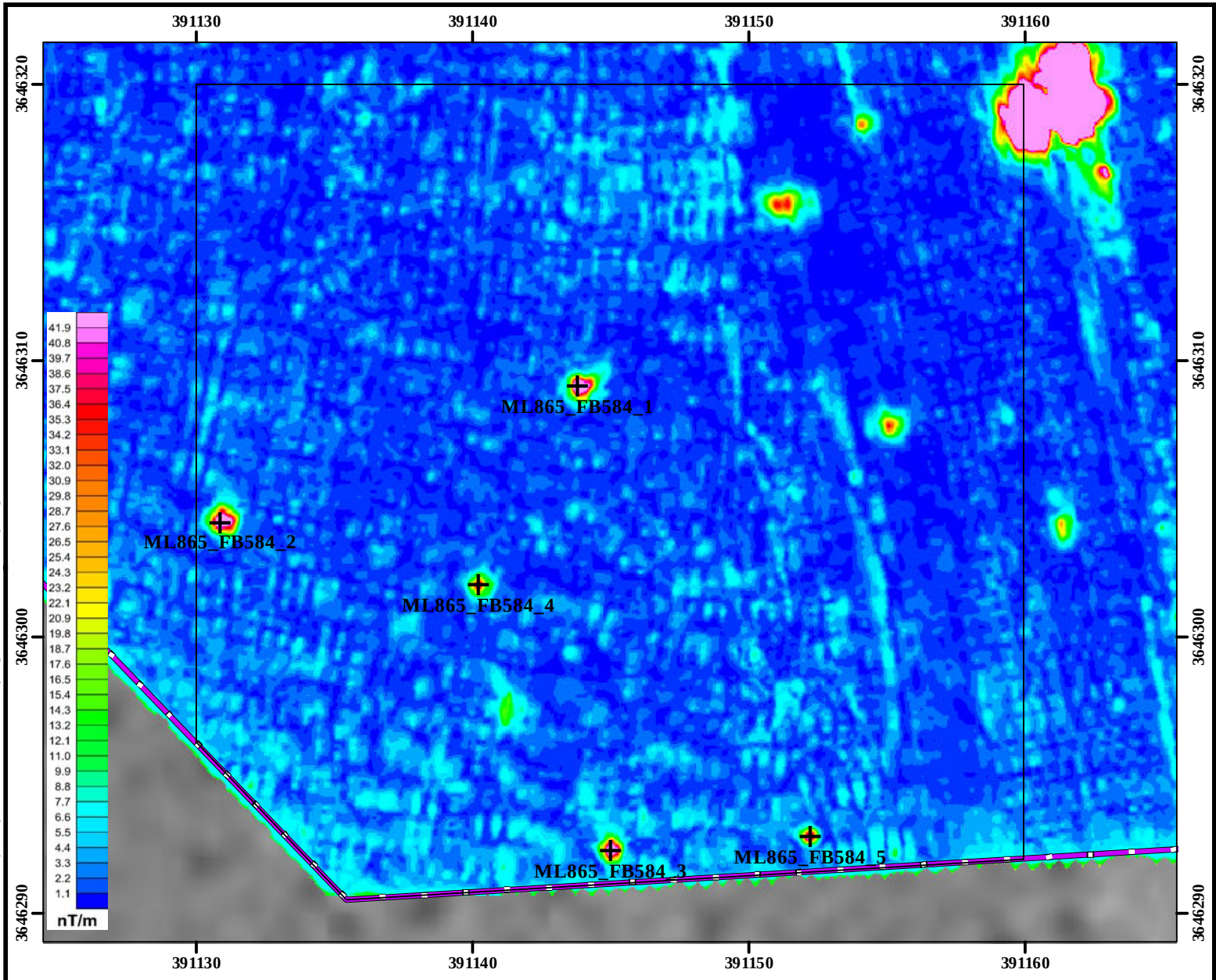
1 inch = 18 feet

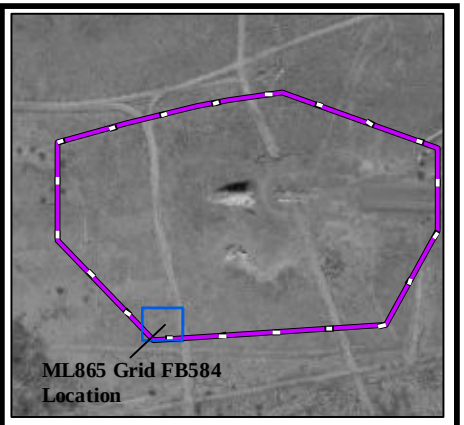
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-031 Grid FB585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-32

G-858 Analytic Signal
Grid FB584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

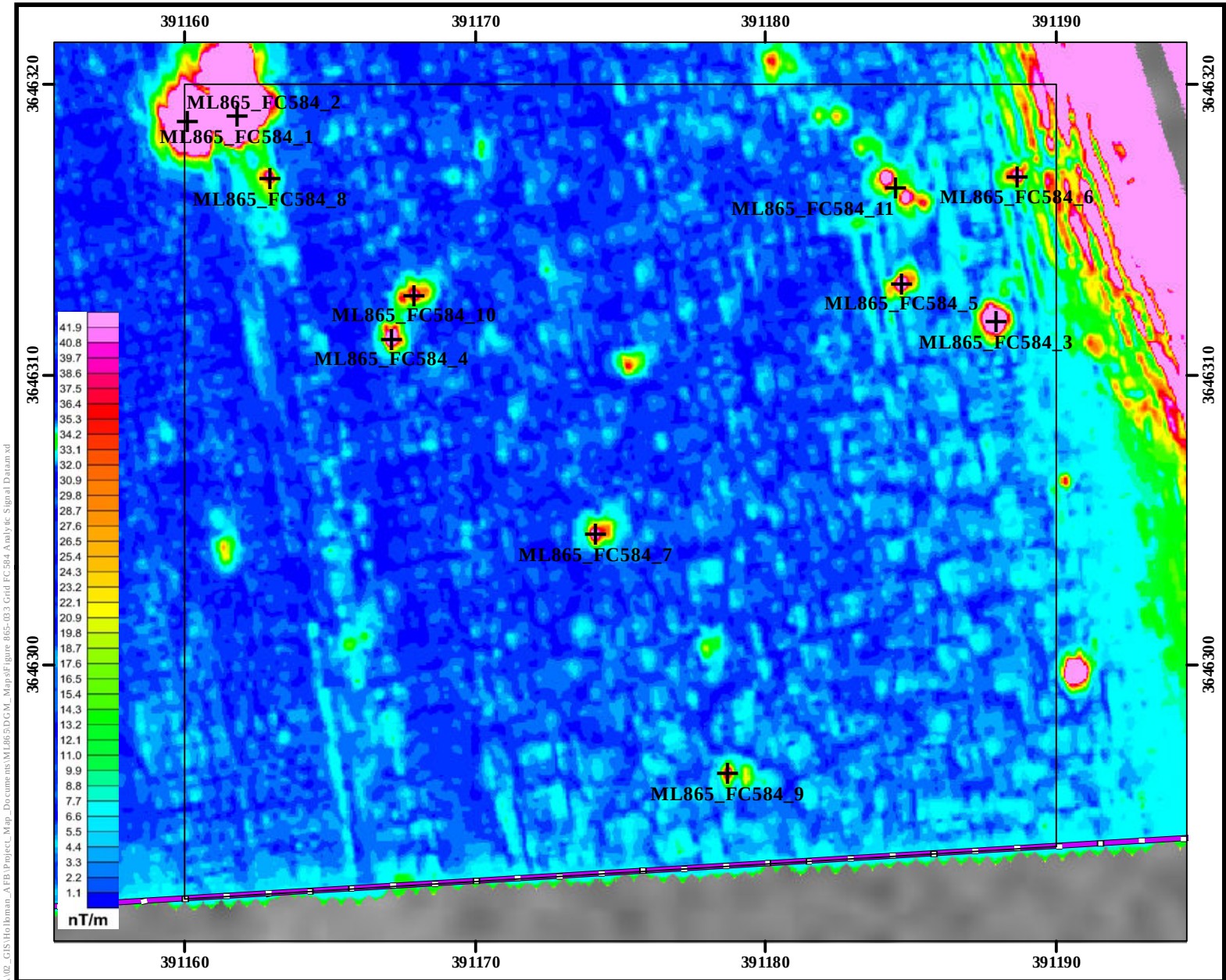
1 inch = 18 feet

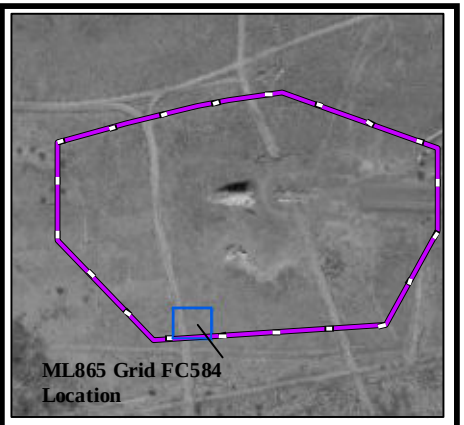
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-032 Grid FB584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-33

G-858 Analytic Signal
Grid FC584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

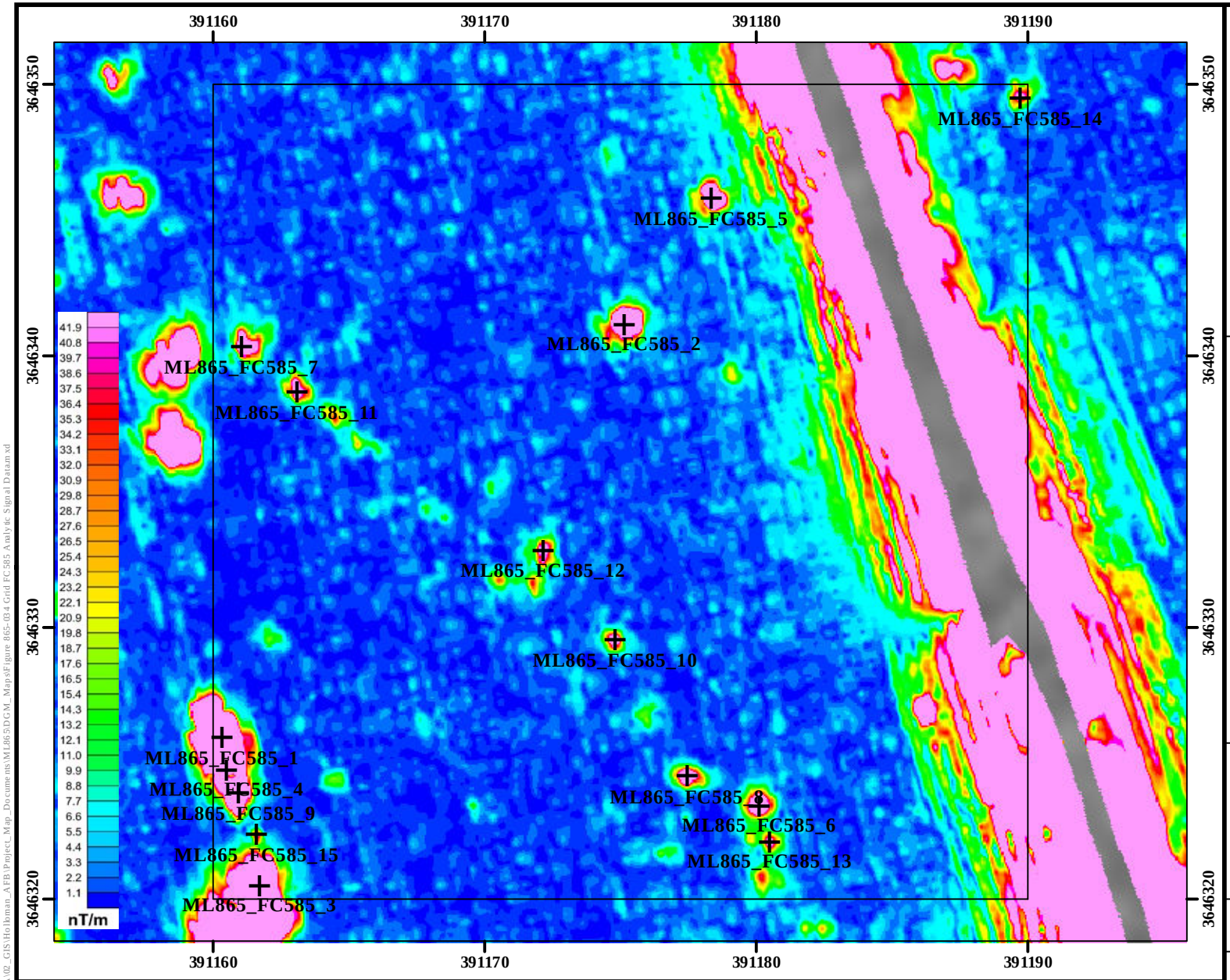
1 inch = 17 feet

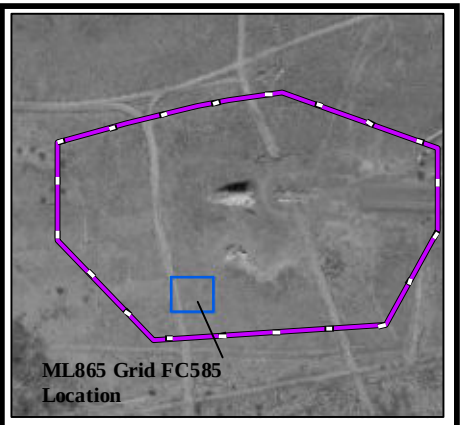
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-033 Grid FC584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-34

G-858 Analytic Signal
Grid FC585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

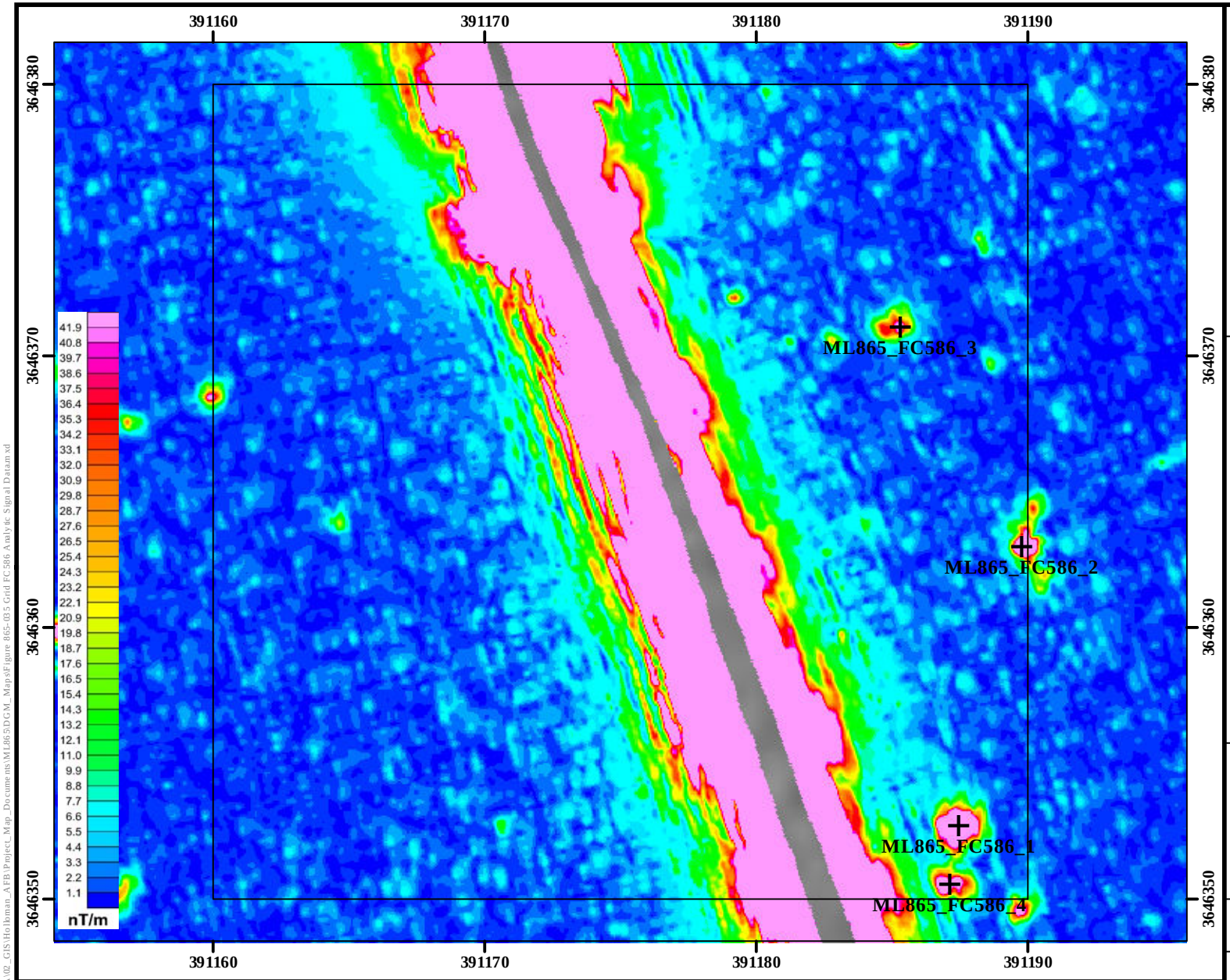
1 inch = 18 feet

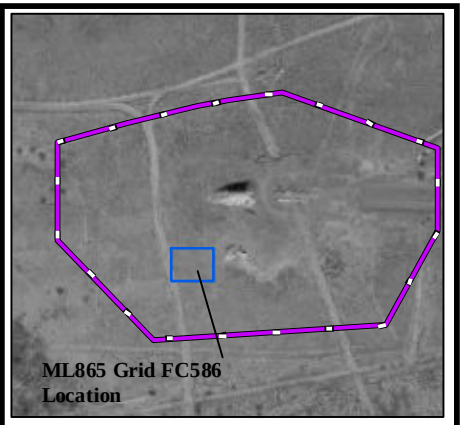
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-034 Grid FC585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-35

G-858 Analytic Signal
Grid FC586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

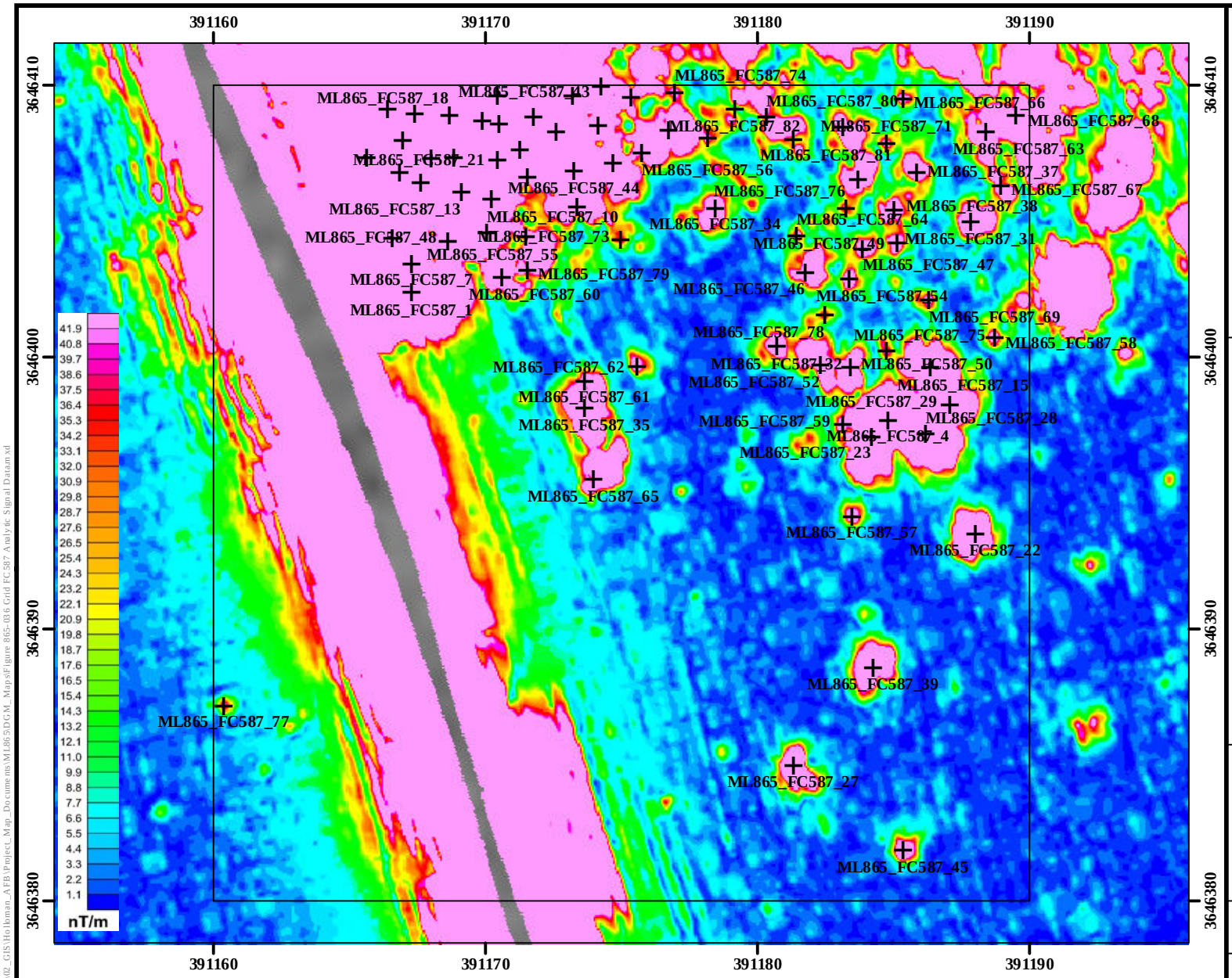
1 inch = 18 feet

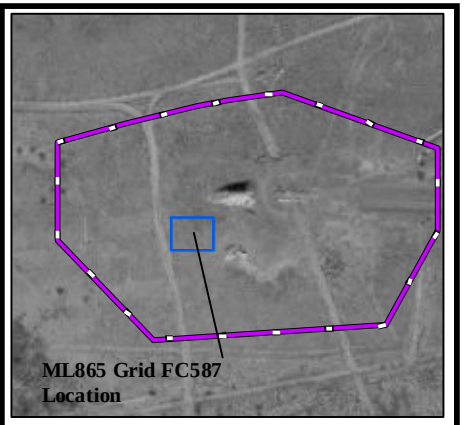
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-035 Grid FC586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-36

G-858 Analytic Signal
Grid FC587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

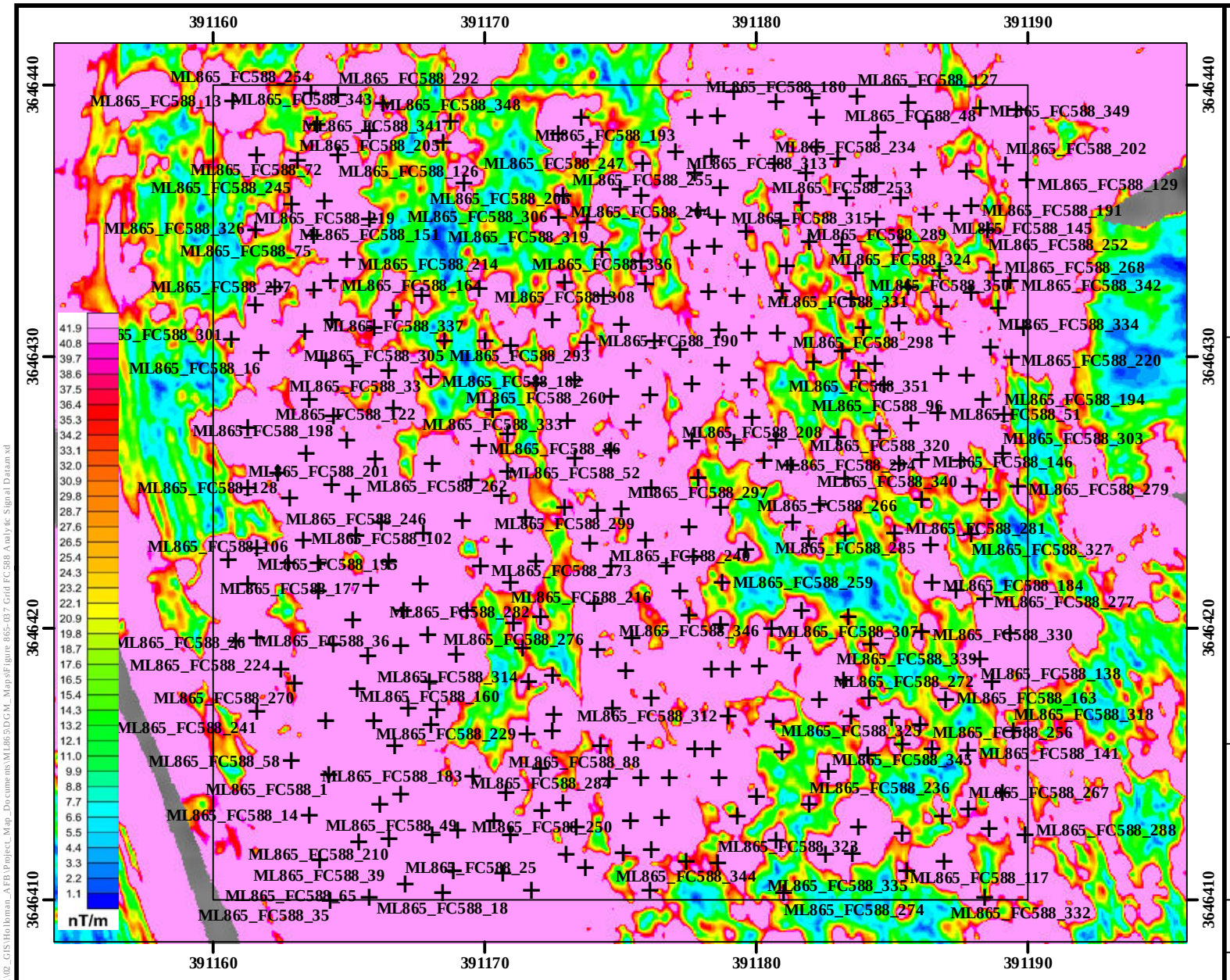
1 inch = 18 feet

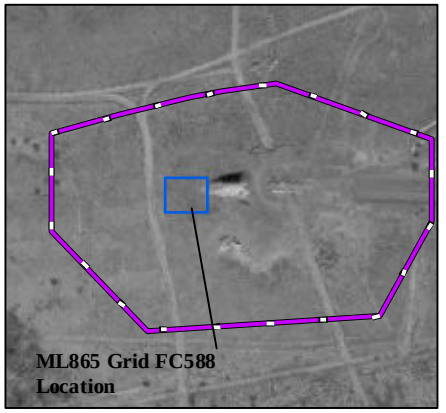
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-036 Grid FC587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

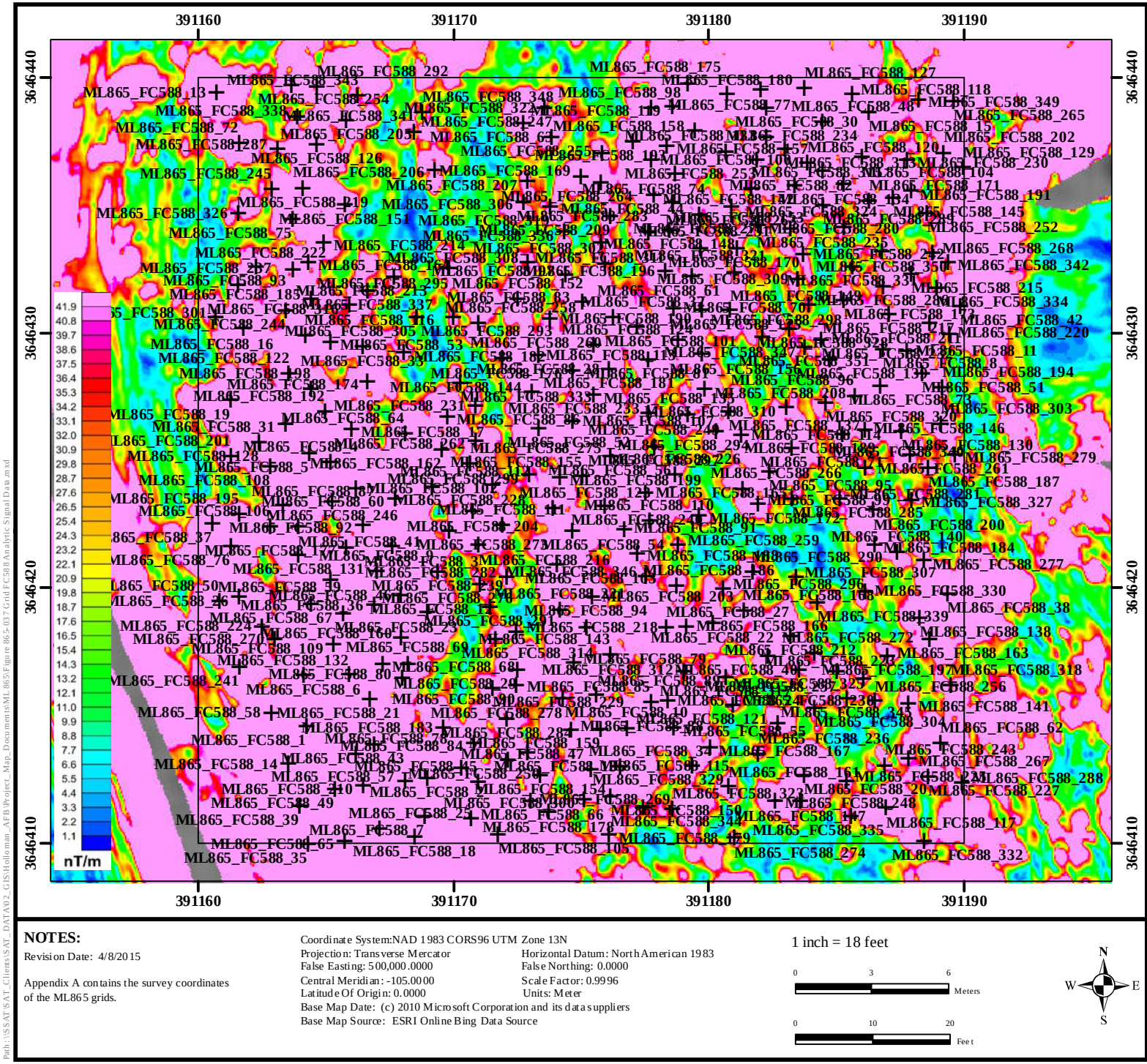
FIGURE 865-37

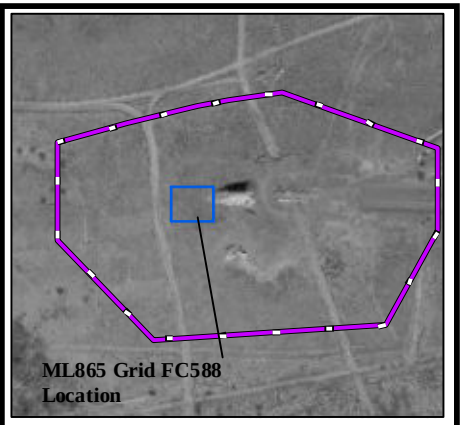
G-858 Analytic Signal
Grid FC588 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-037 Grid FC588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-37

G-858 Analytic Signal
Grid FC588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/8/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

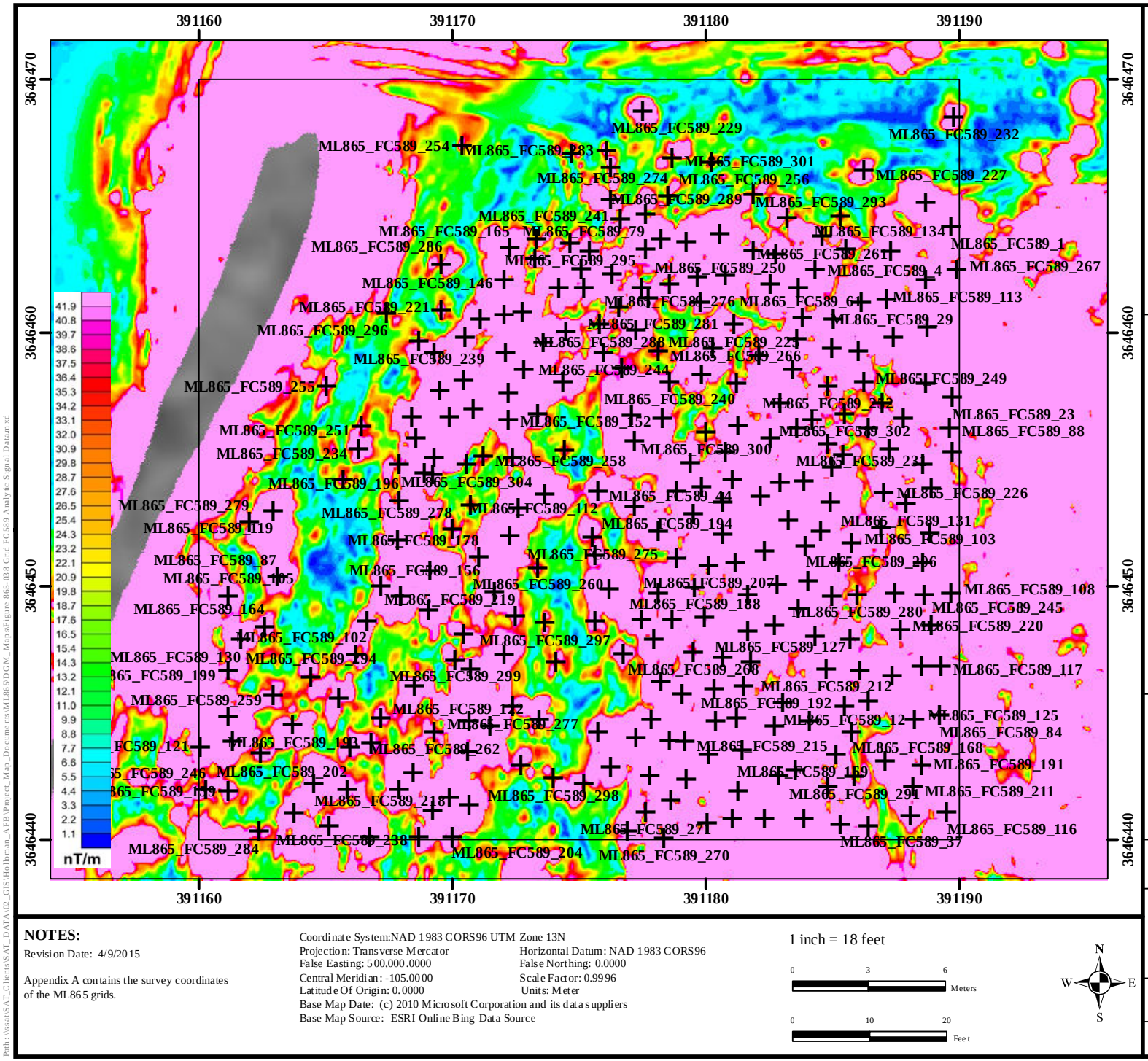
1 inch = 18 feet

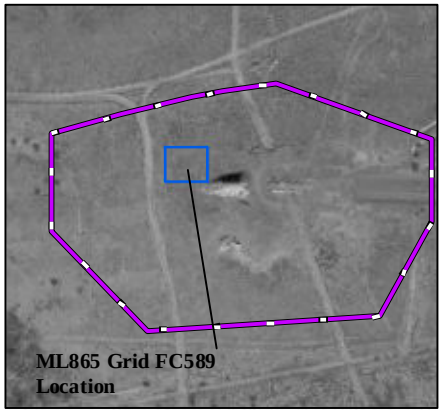
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\Figure 865-037 Grid FC588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-38

G-858 Analytic Signal
Grid FC589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

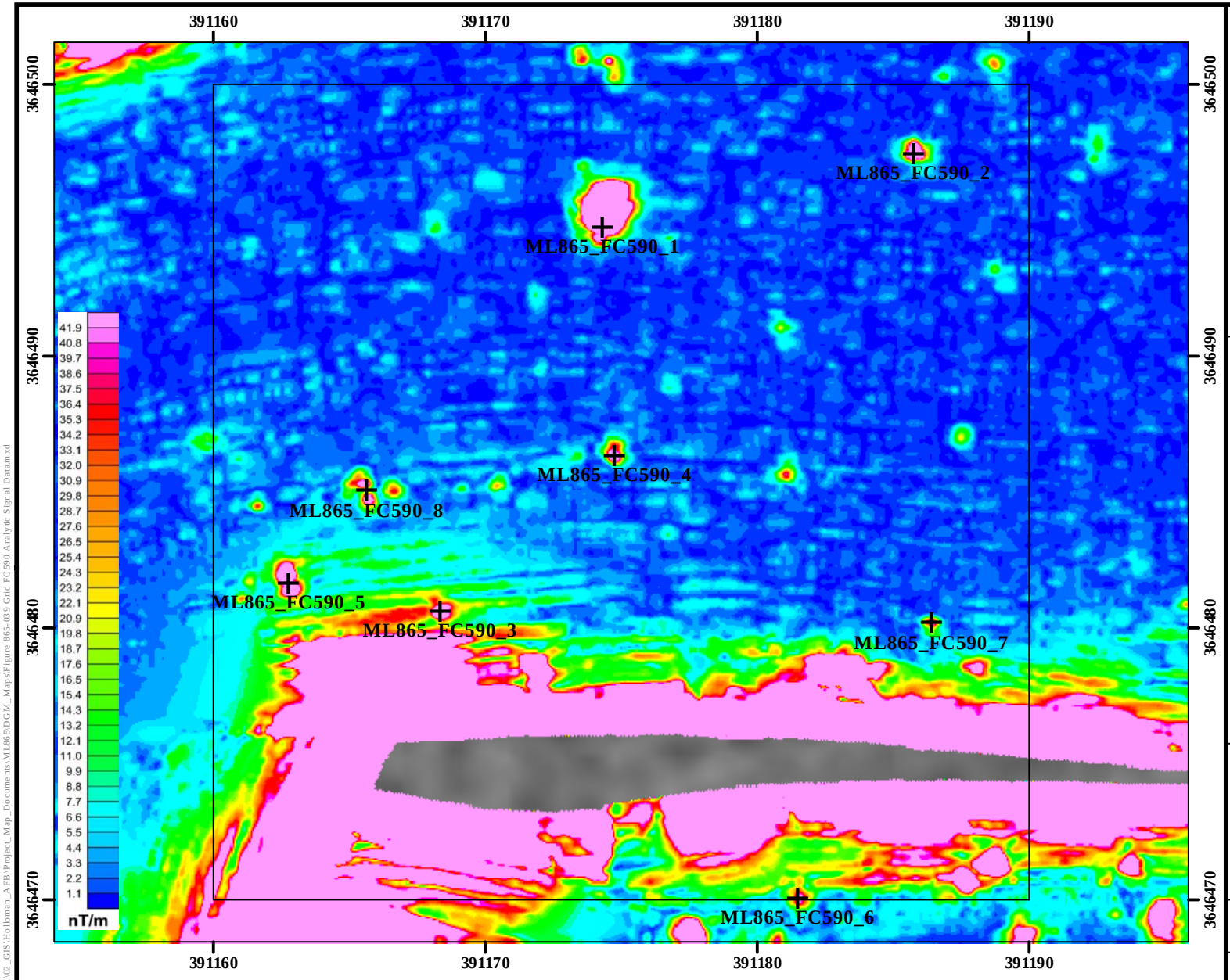
1 inch = 18 feet

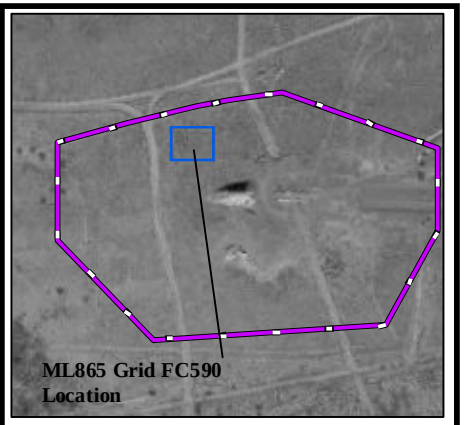
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-038 Grid FC589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-39

G-858 Analytic Signal
Grid FC590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

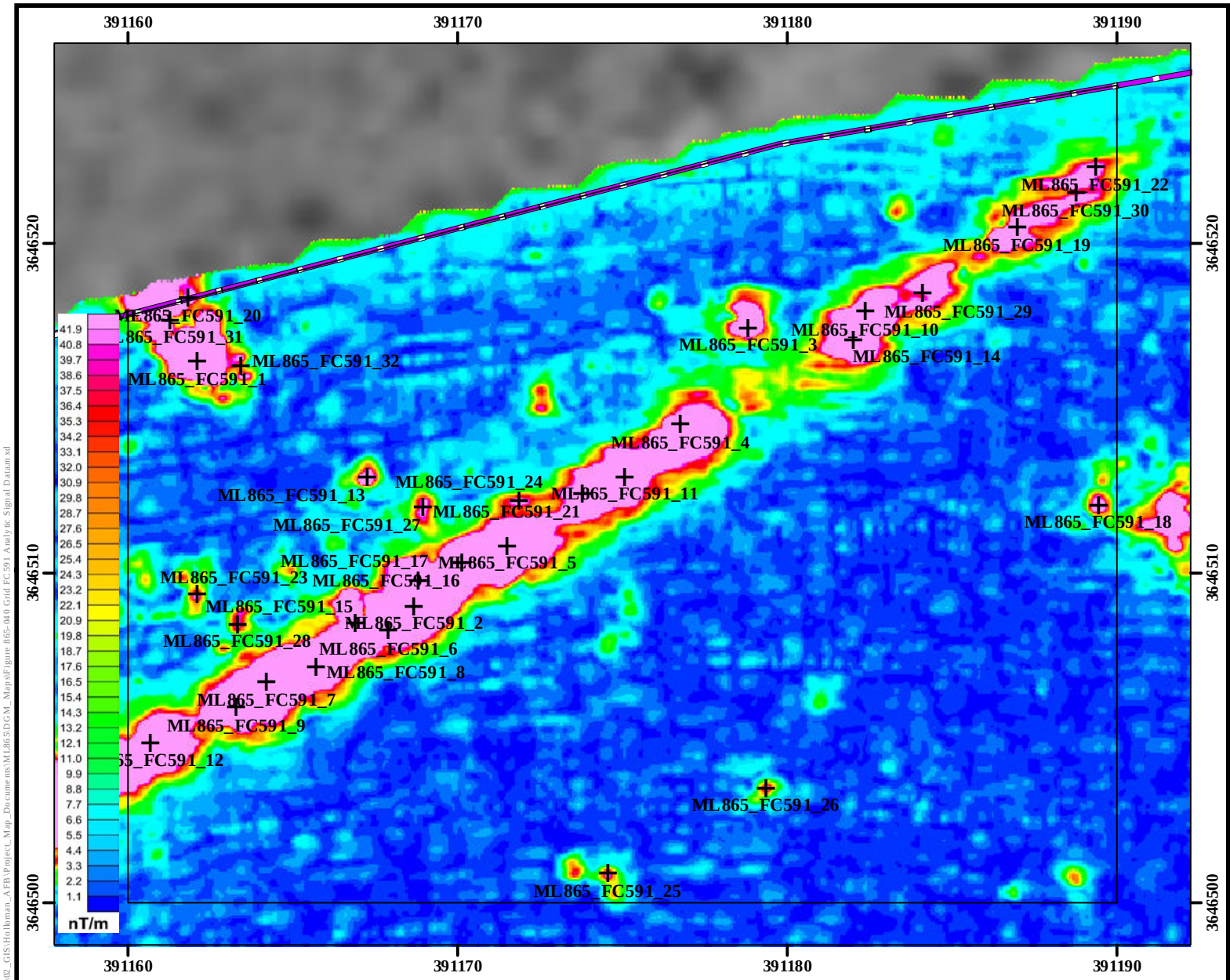
1 inch = 18 feet

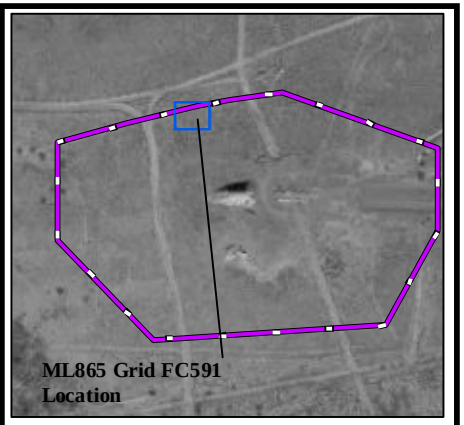
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-039 Grid FC590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 15 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

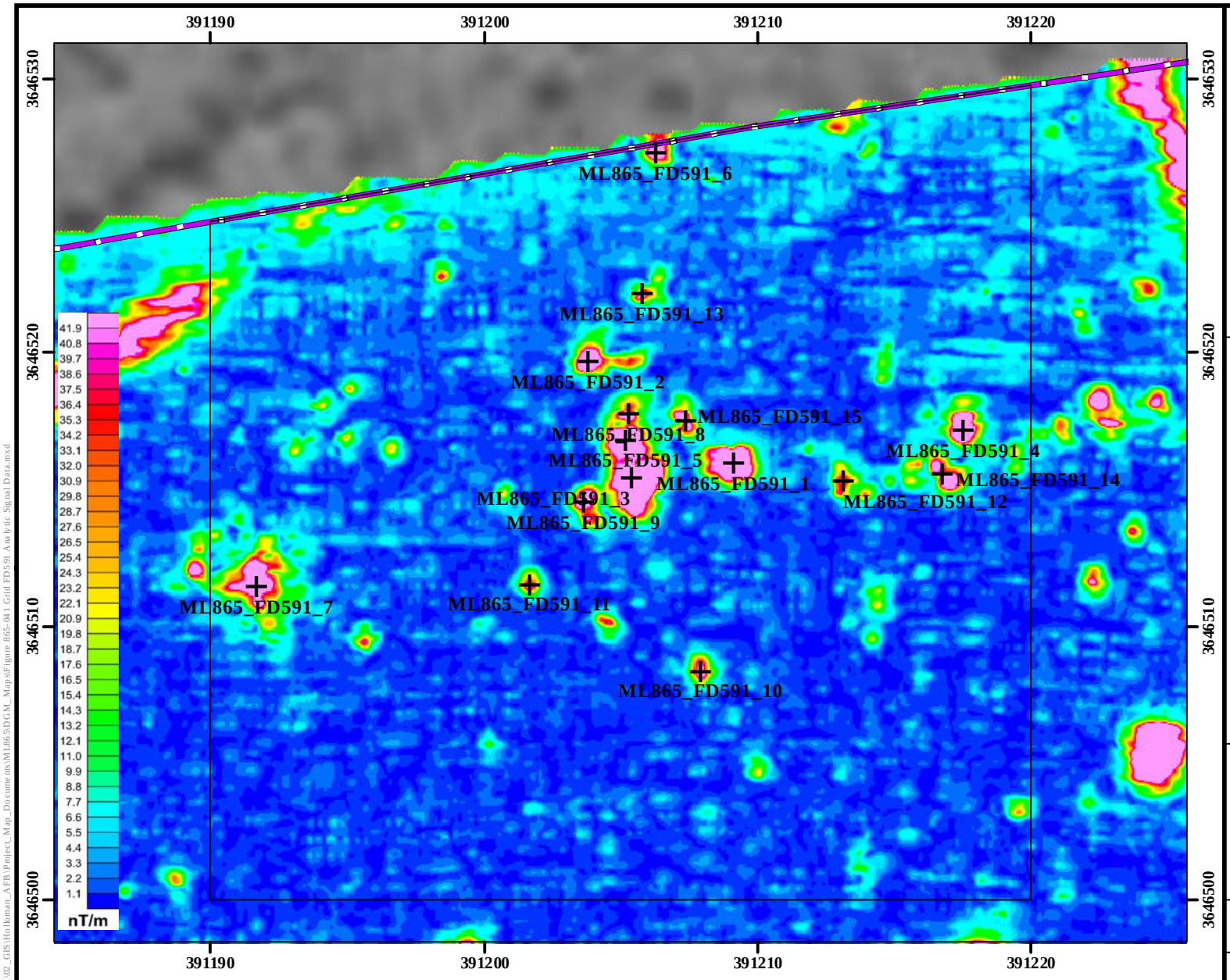
FIGURE 865-40

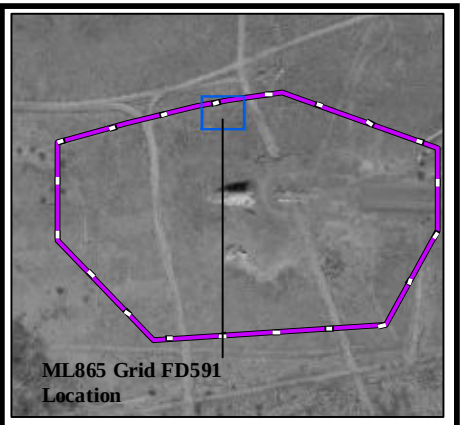
G-858 Analytic Signal
Grid FC591 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-040 Grid FC591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-41

G-858 Analytic Signal
Grid FD591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

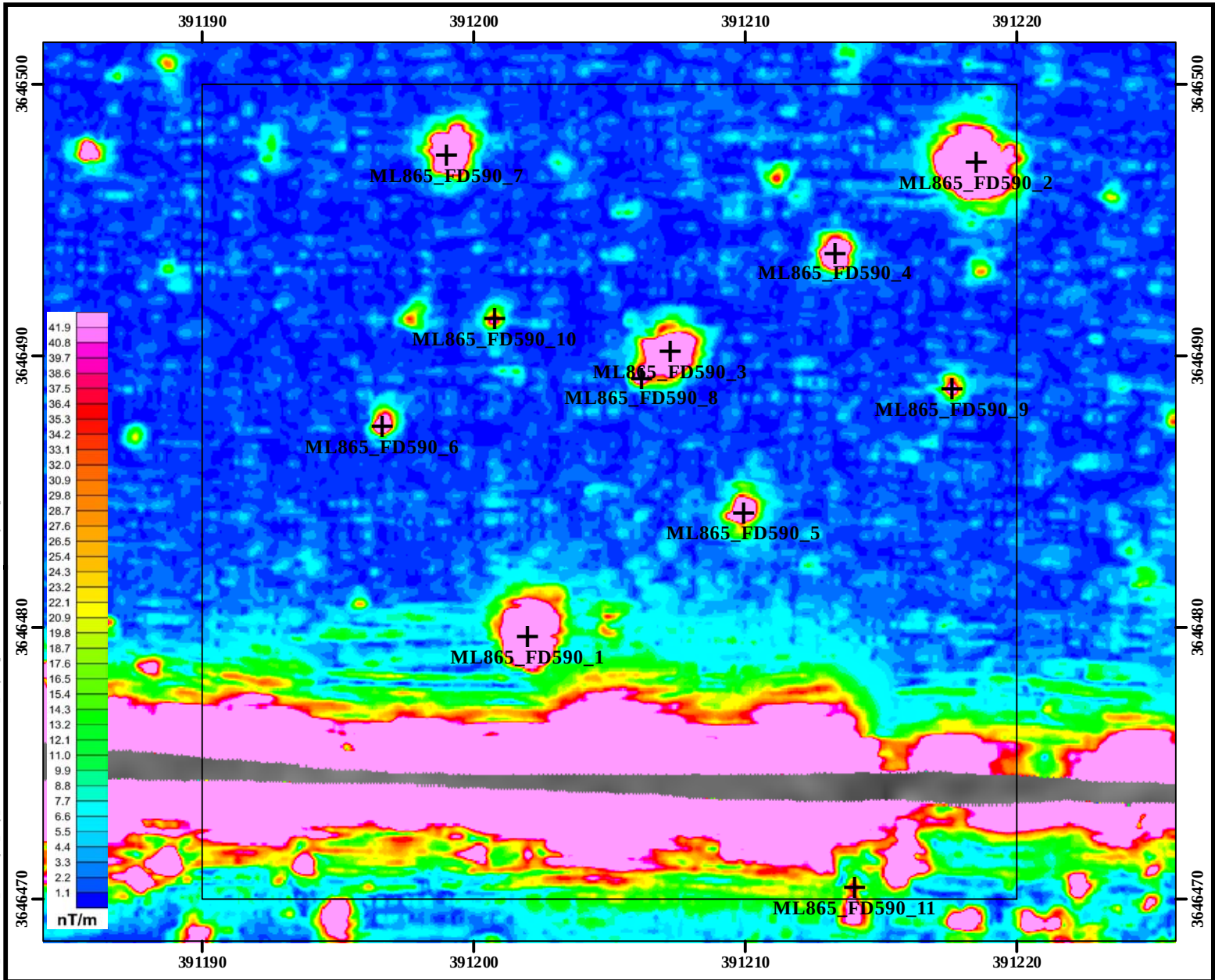
1 inch = 18 feet

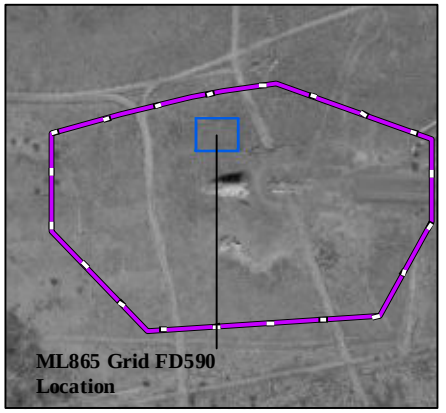
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-041 Grid FD591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-42

G-858 Analytic Signal
Grid FD590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

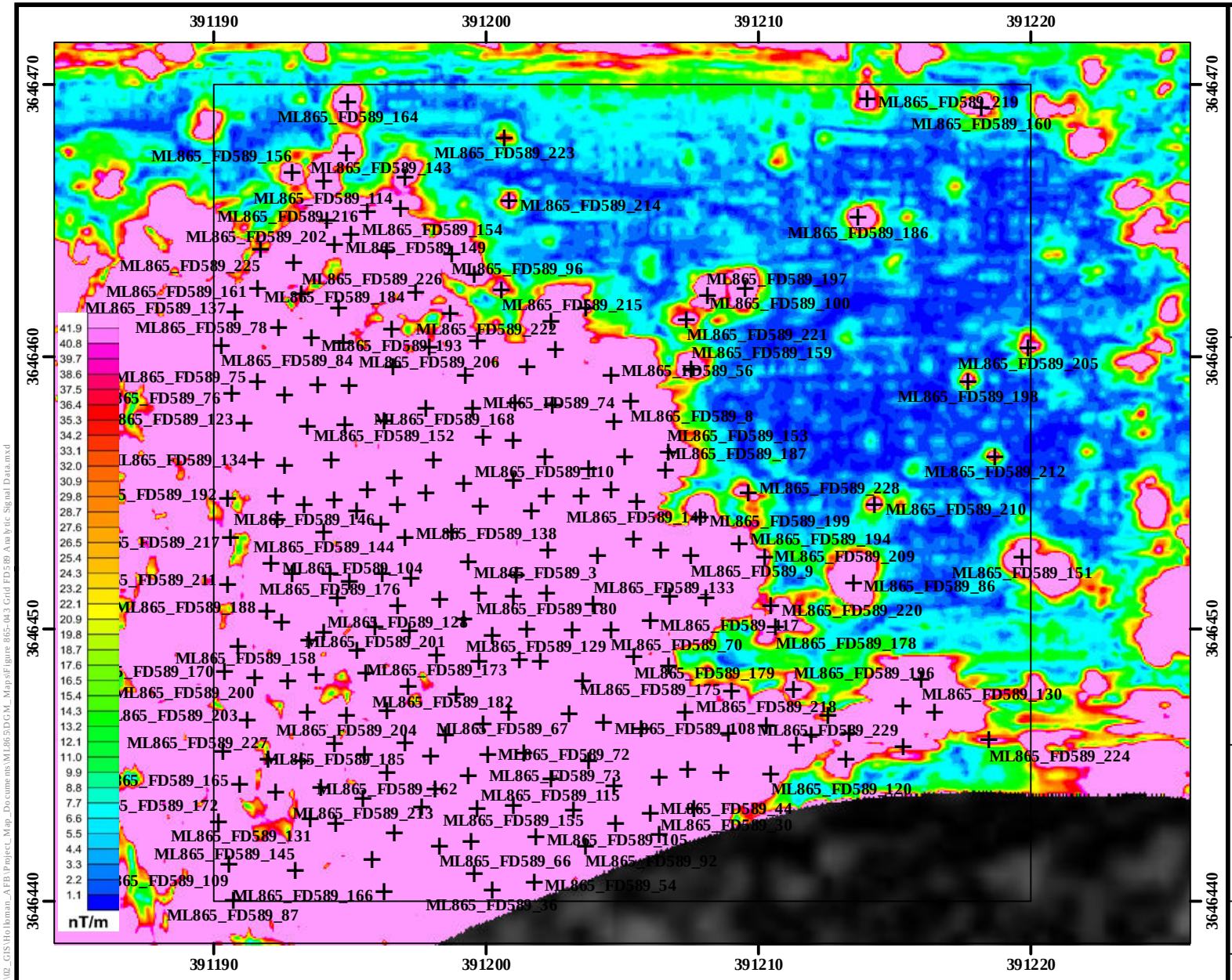
1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-042 Grid FD590 Analytic Signal Data.mxd



Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-43

G-858 Analytic Signal
Grid FD589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

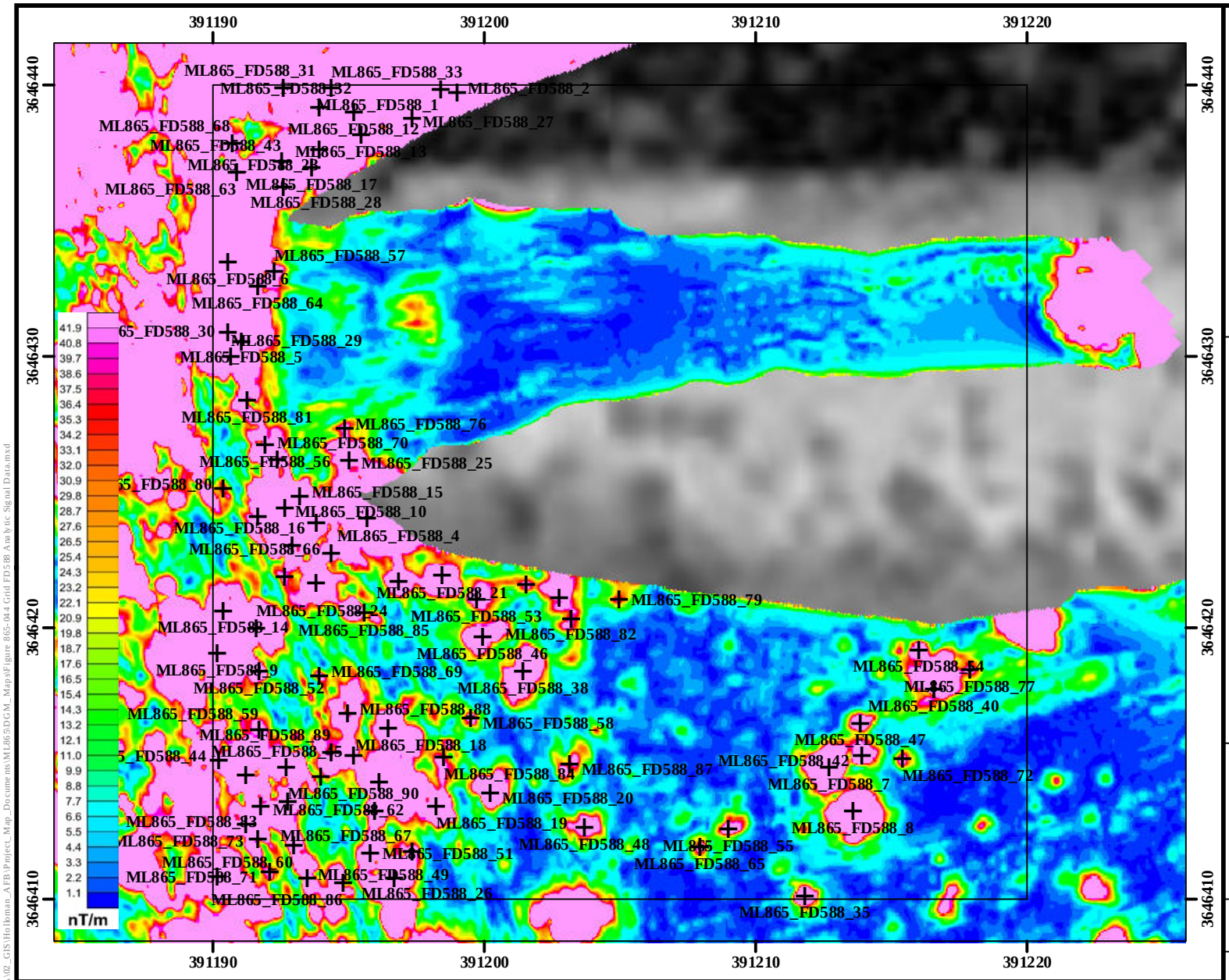
1 inch = 18 feet

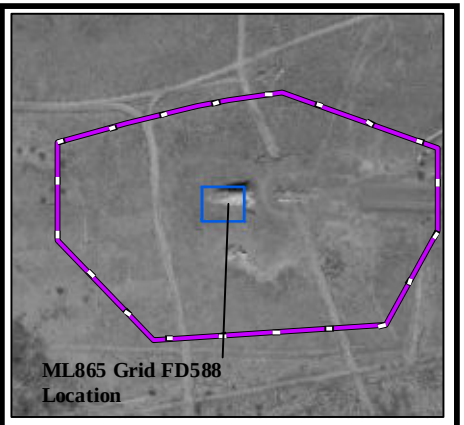
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-043 Grid FD589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-44

G-858 Analytic Signal
Grid FD588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

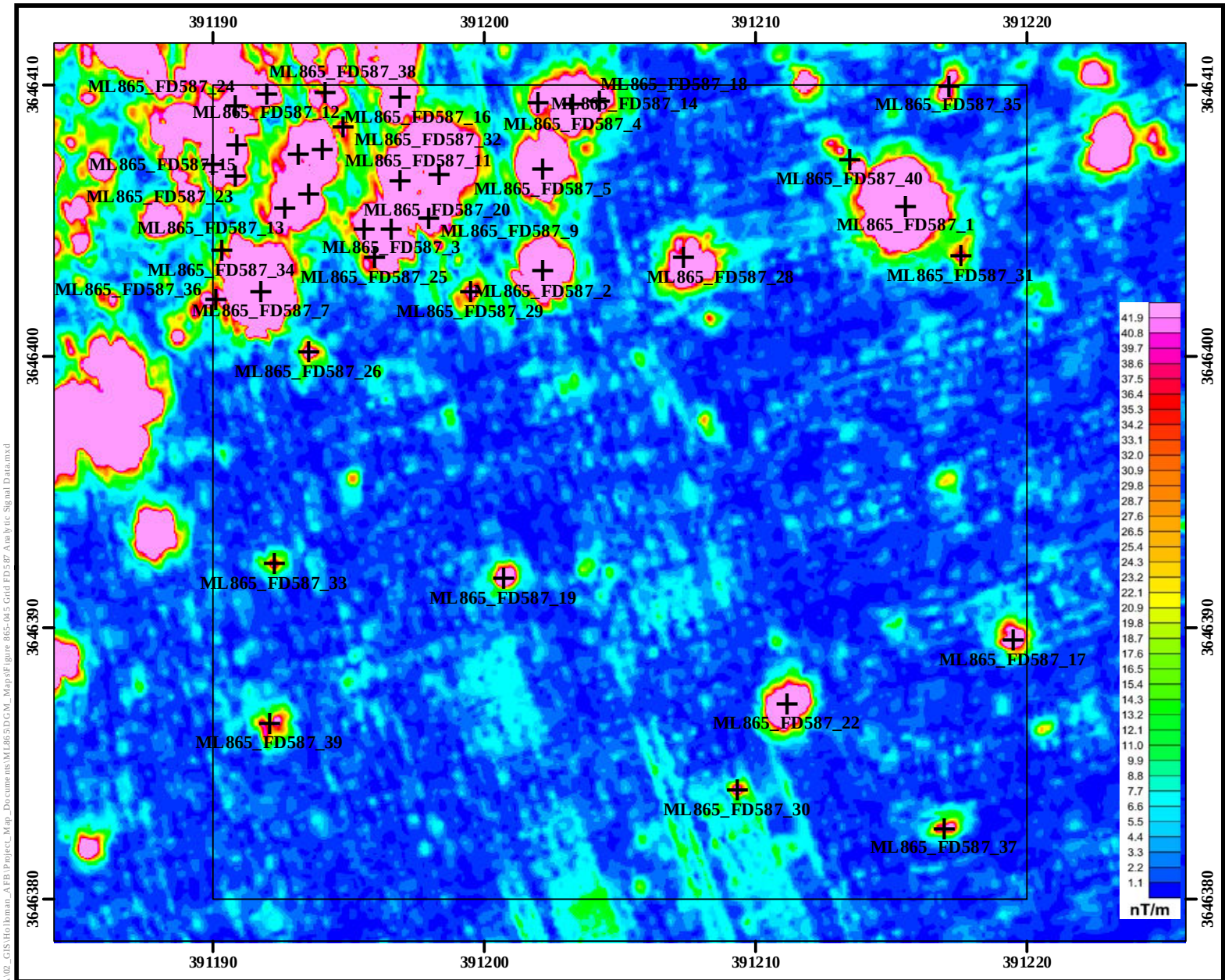
1 inch = 18 feet

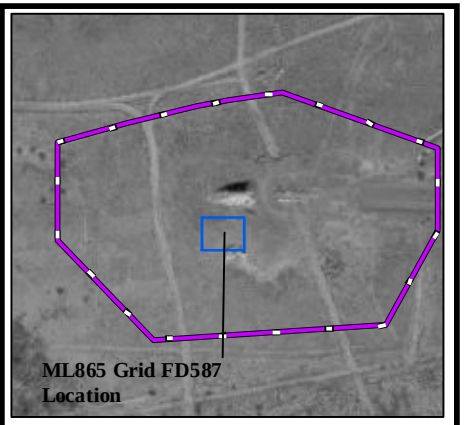
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-044 Grid FD588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-45

G-858 Analytic Signal
Grid FD587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

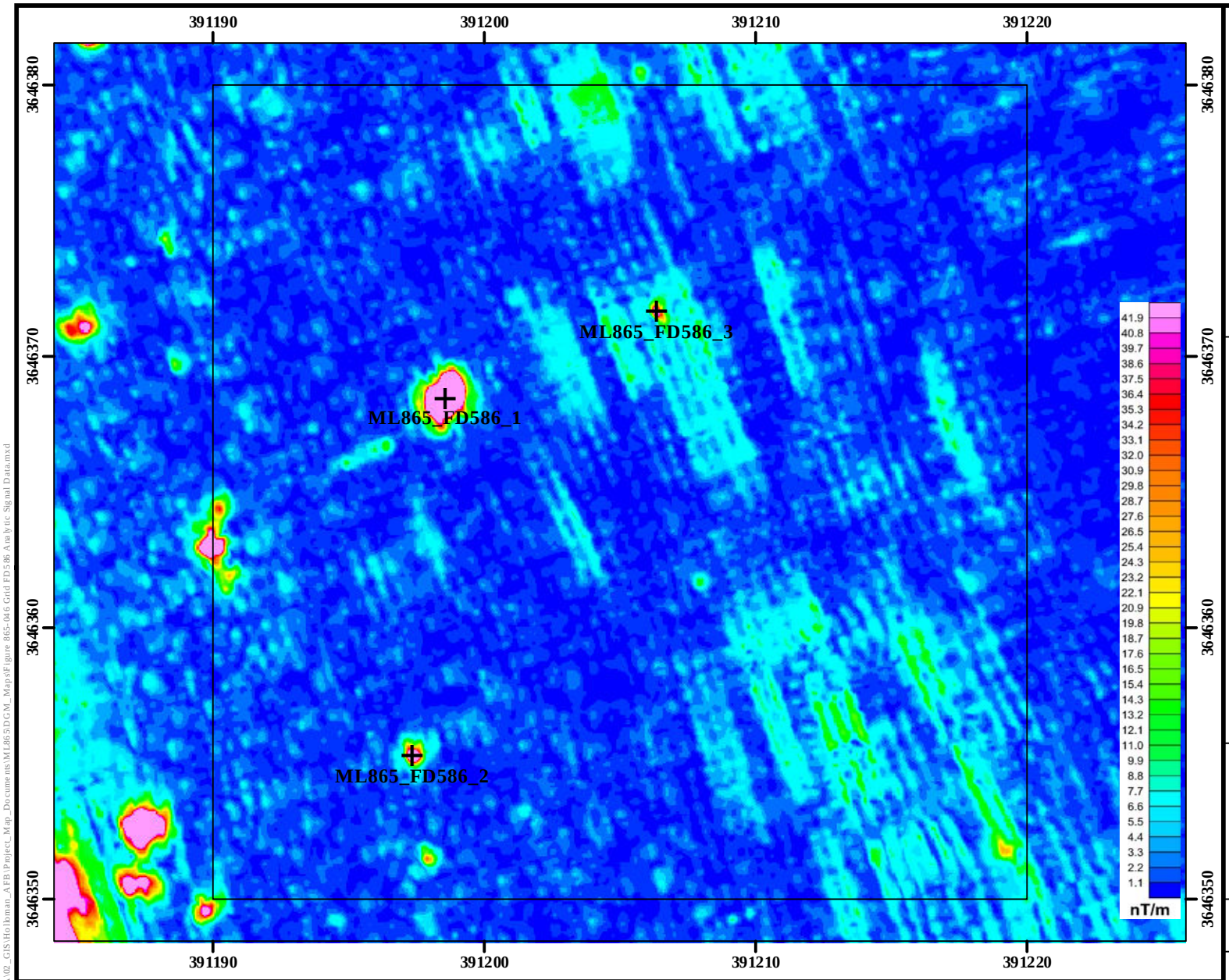
1 inch = 18 feet

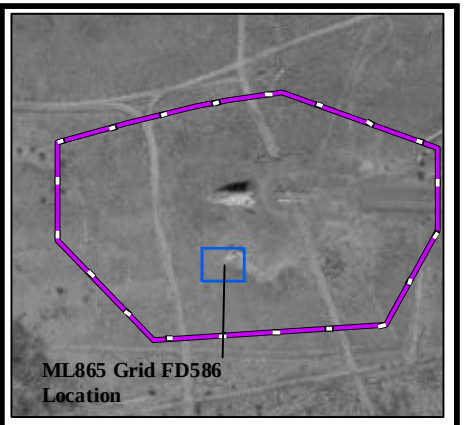
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-045 Grid FD587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

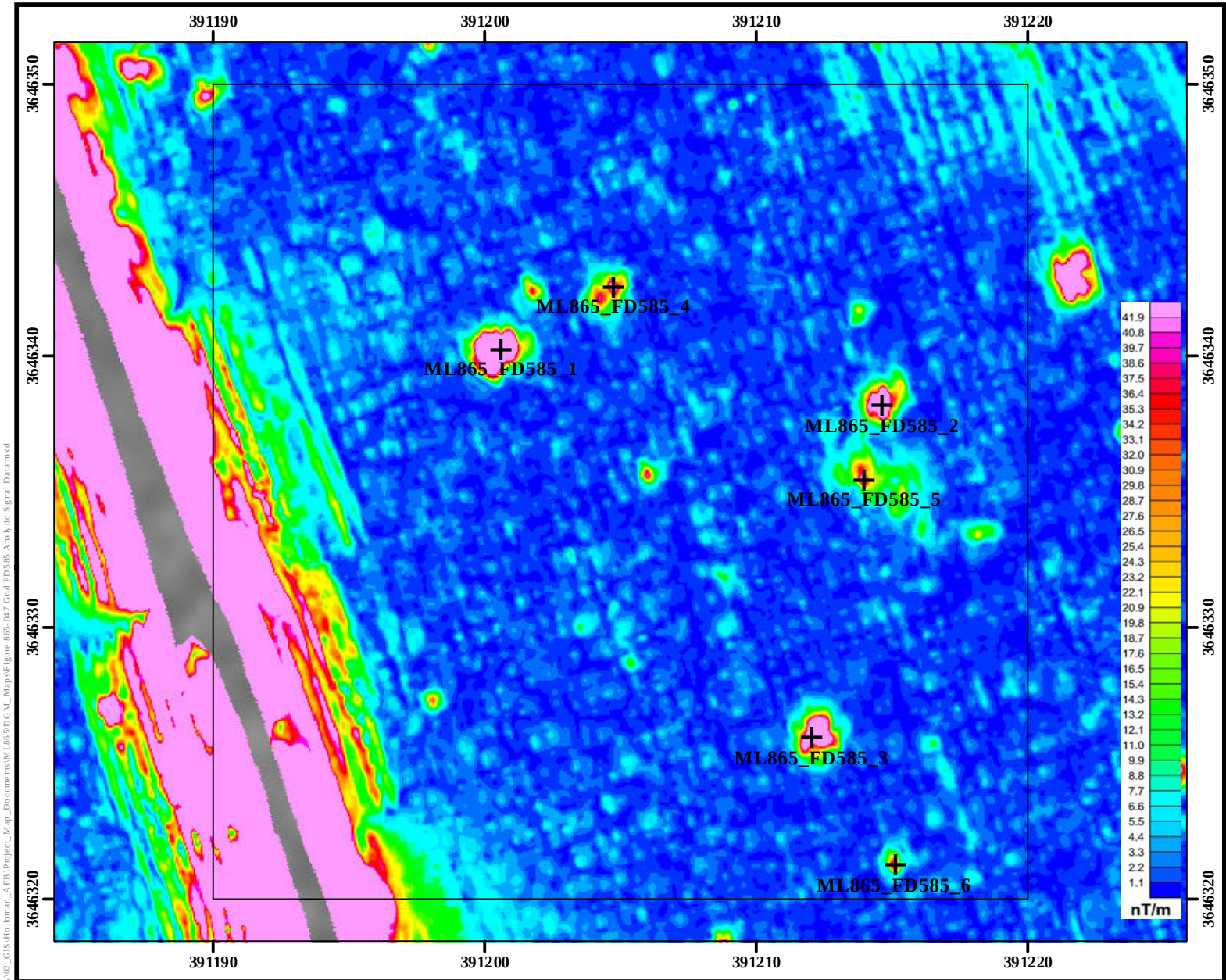
FIGURE 865-46

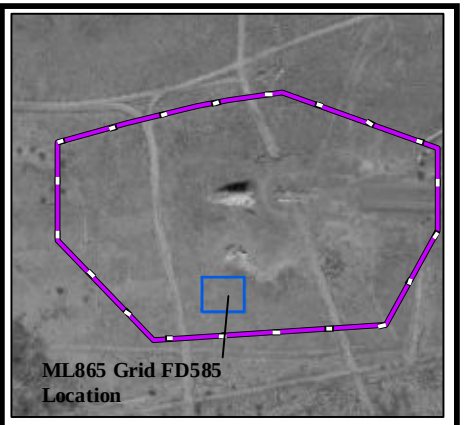
G-858 Analytic Signal
Grid FD586 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-046 Grid FD586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-47

G-858 Analytic Signal
Grid FD585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

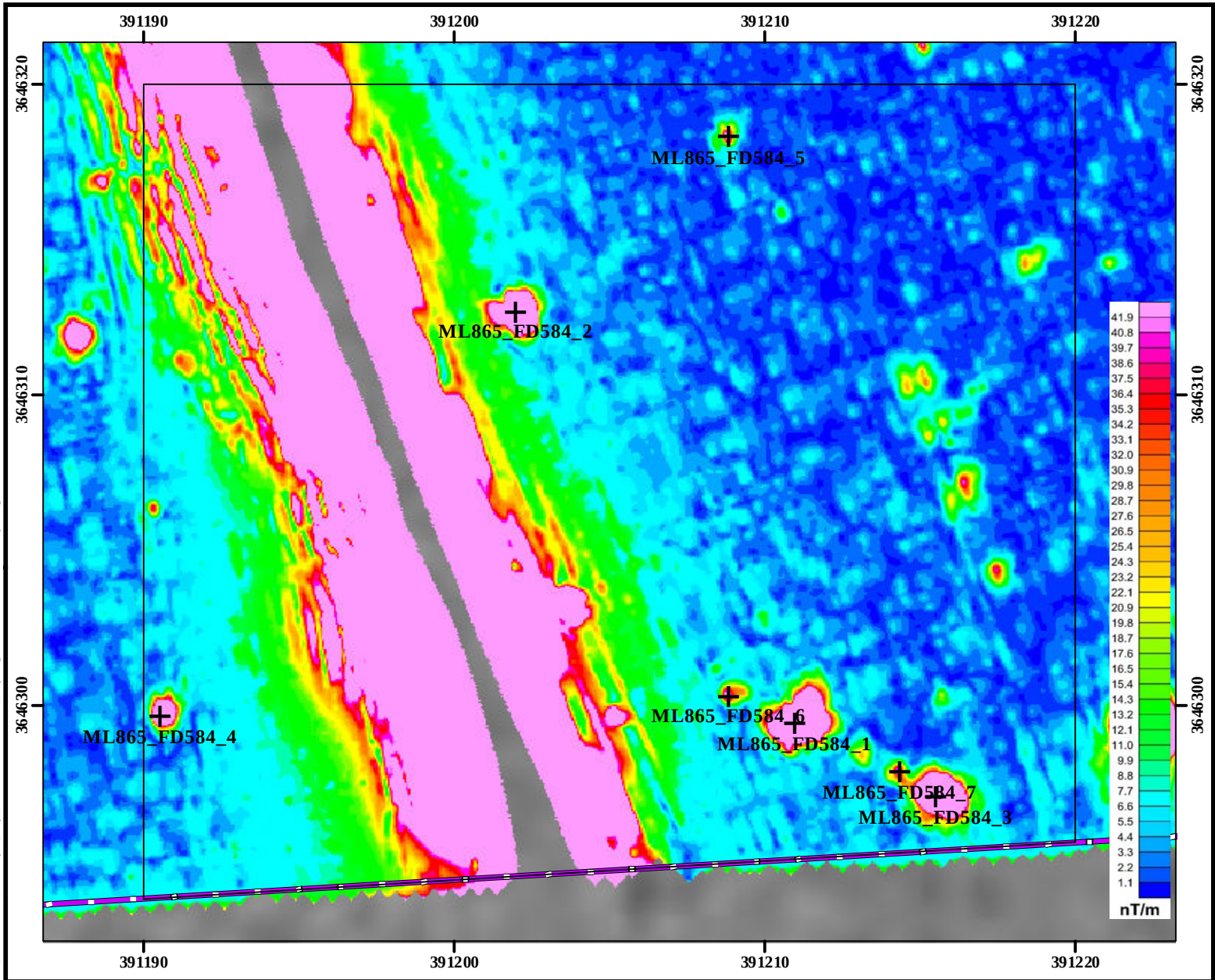
1 inch = 18 feet

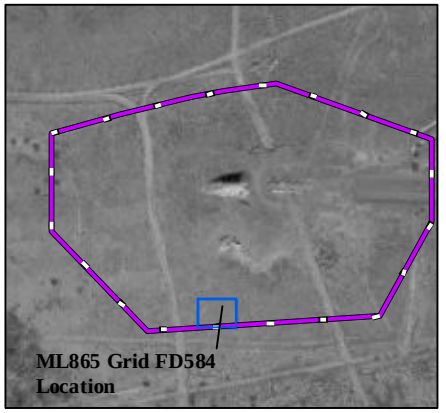
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-047 Grid FD585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-48

G-858 Analytic Signal
Grid FD584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

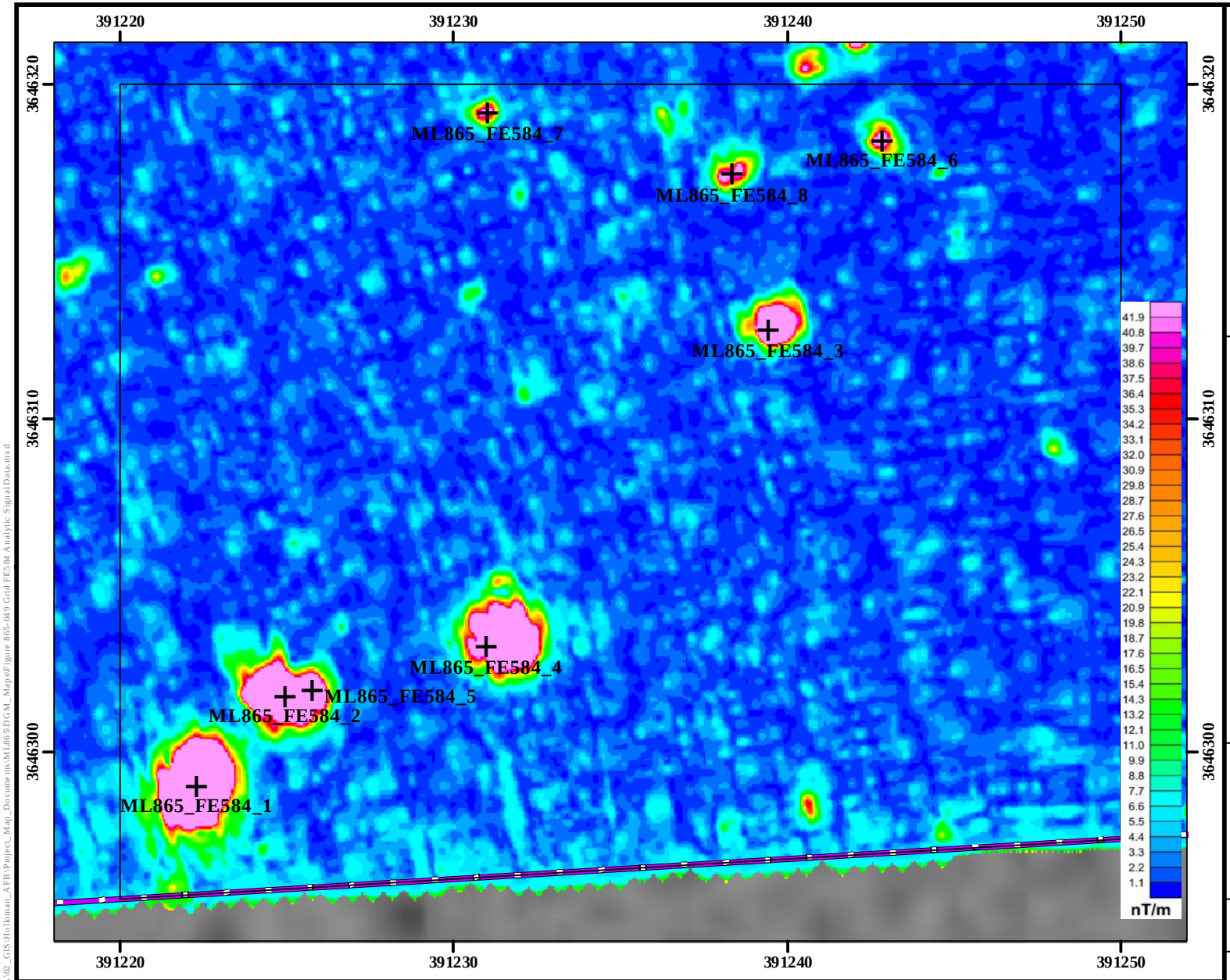
1 inch = 16 feet

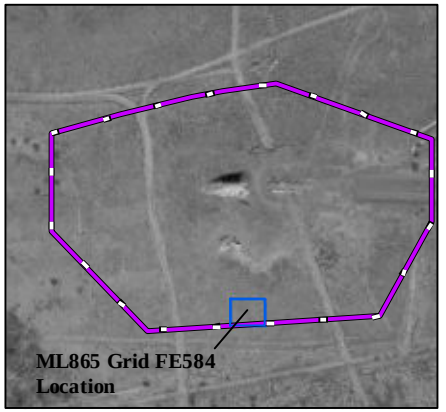
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-048 Grid FD584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-49

G-858 Analytic Signal
Grid FE584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

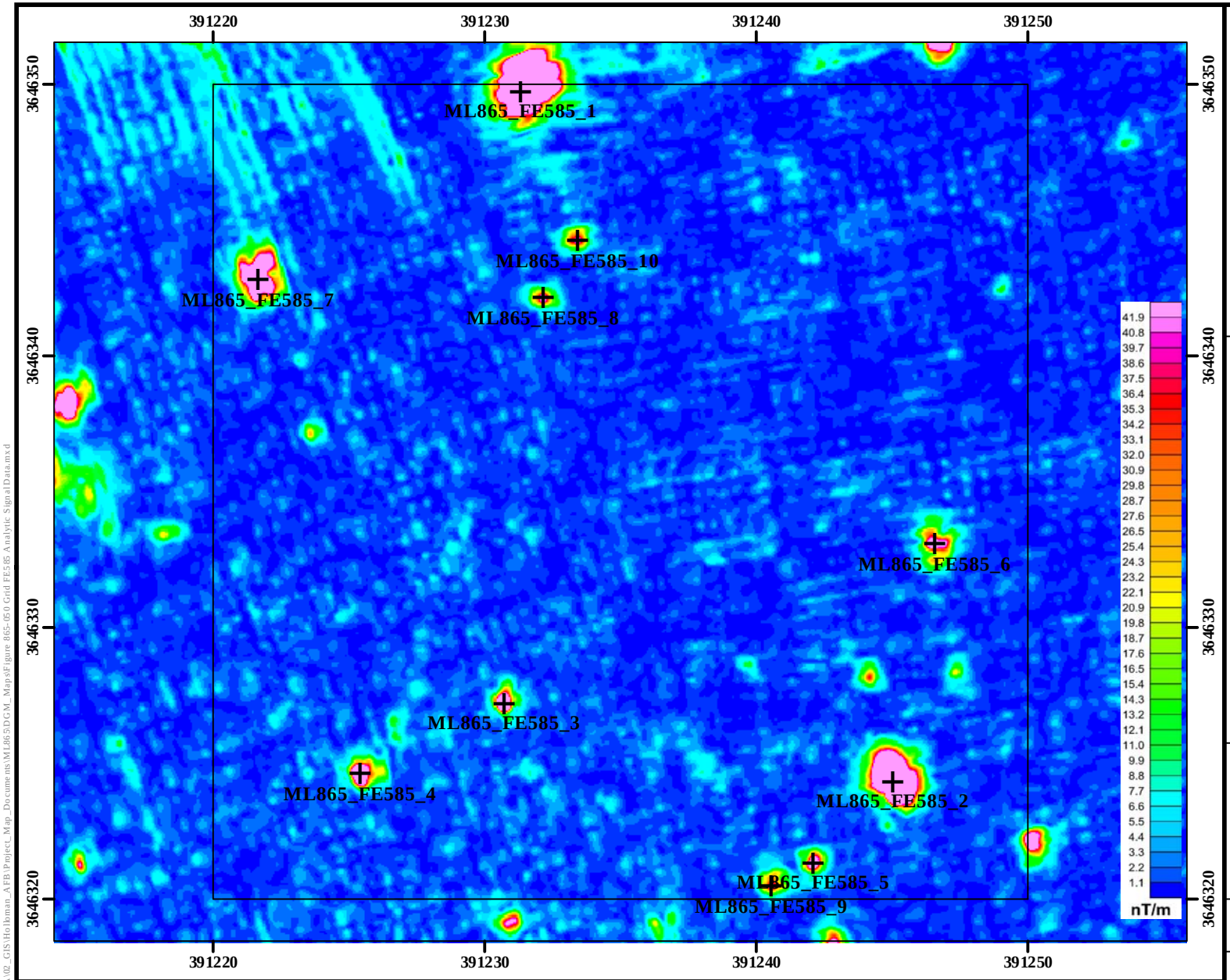
1 inch = 15 feet

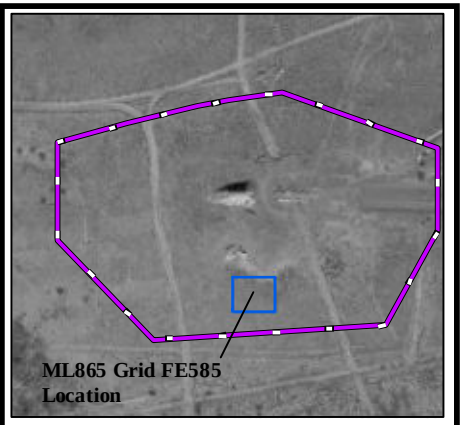
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-049 Grid FE584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-50

G-858 Analytic Signal
Grid FE585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

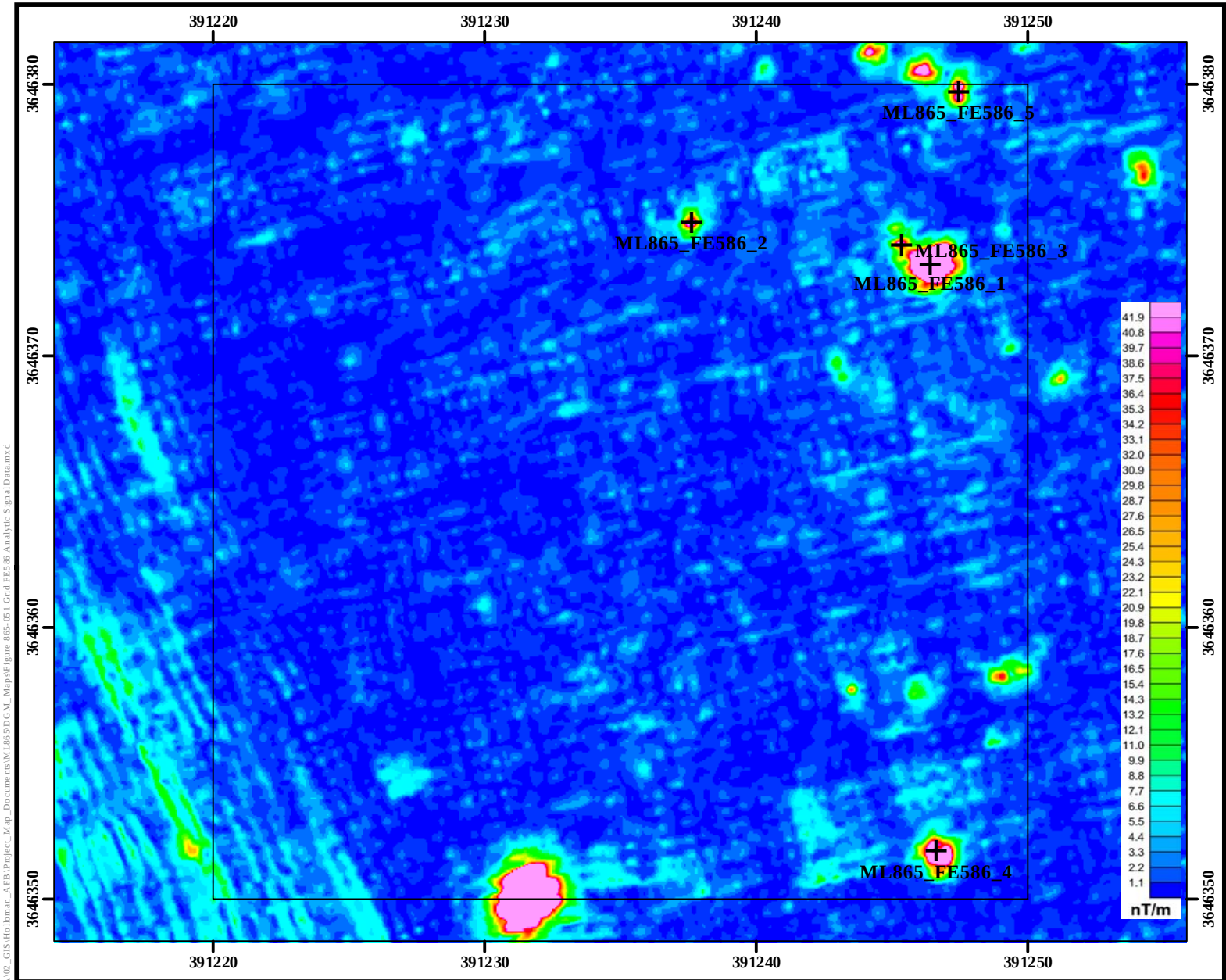
1 inch = 18 feet

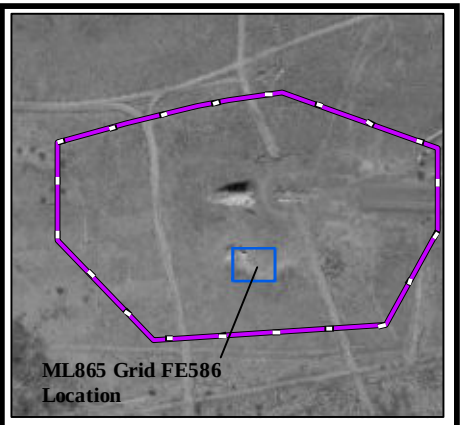
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-050 Grid FE585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-51

G-858 Analytic Signal
Grid FE586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

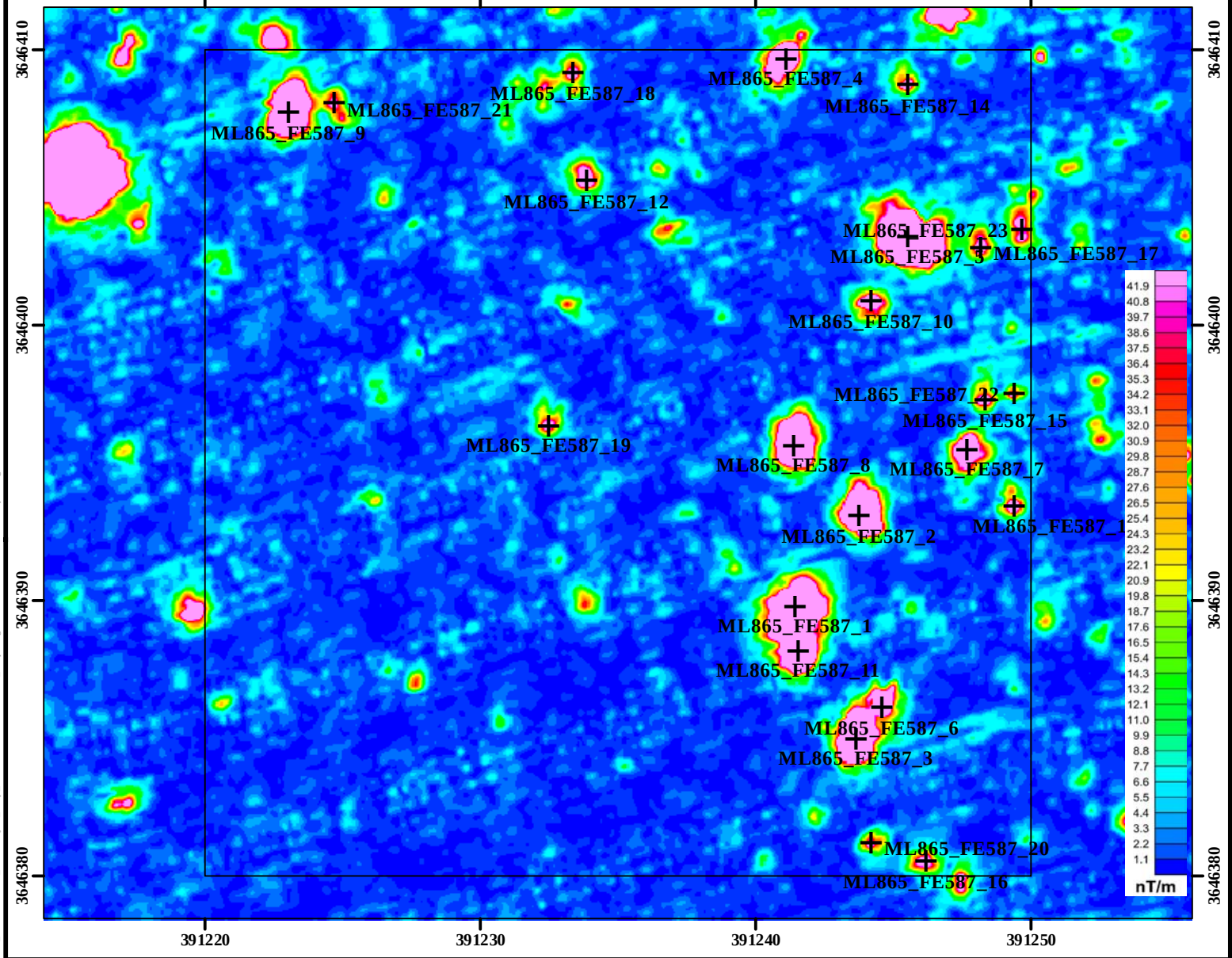
1 inch = 18 feet

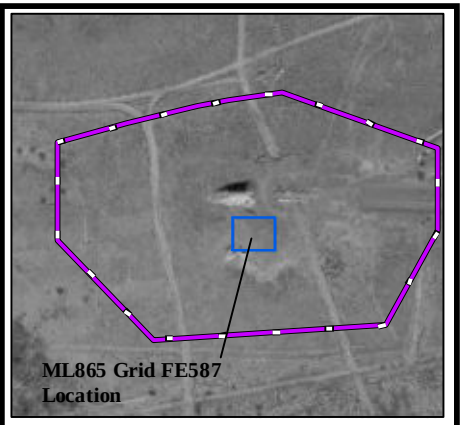
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-051 Grid FE586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-52

G-858 Analytic Signal
Grid FE587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

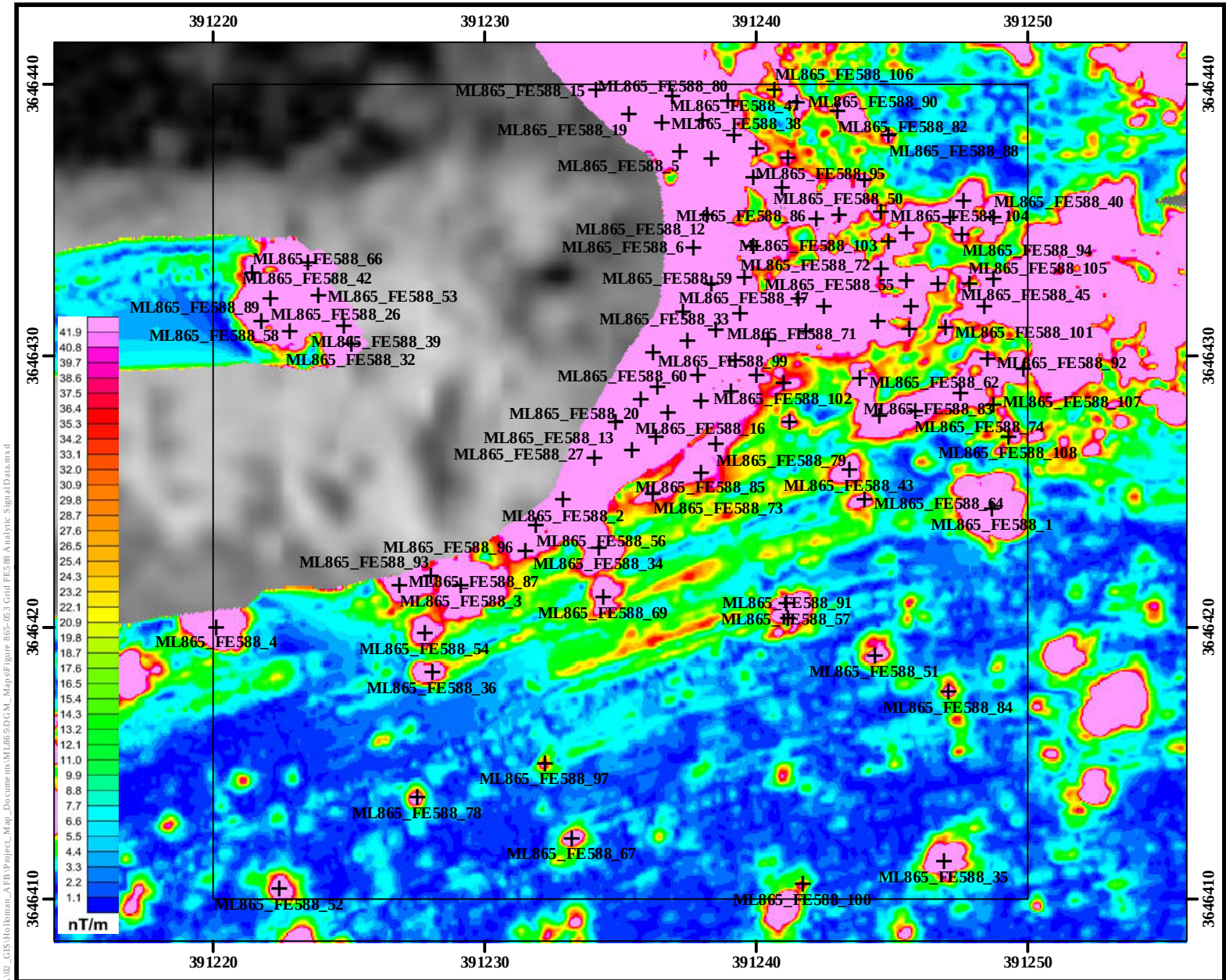
1 inch = 18 feet

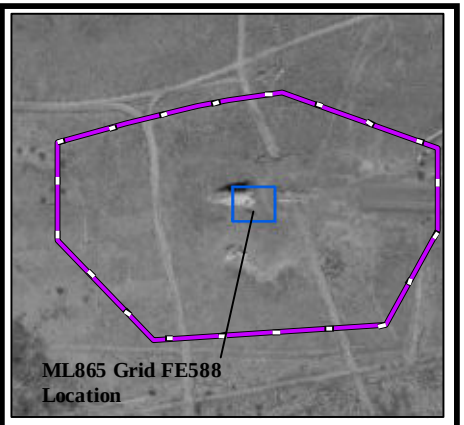
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-052 Grid FE587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-53

G-858 Analytic Signal
Grid FE588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

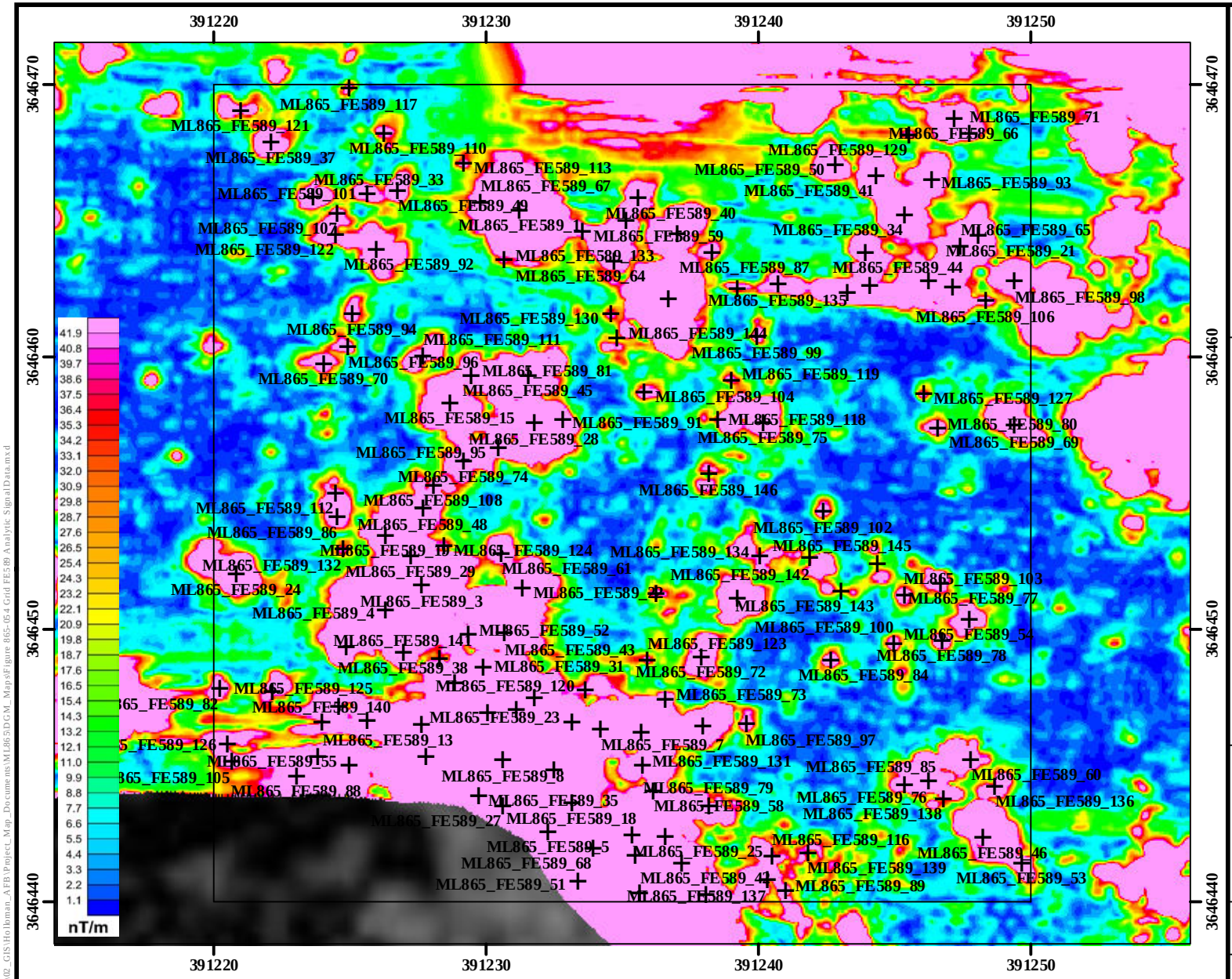
1 inch = 18 feet

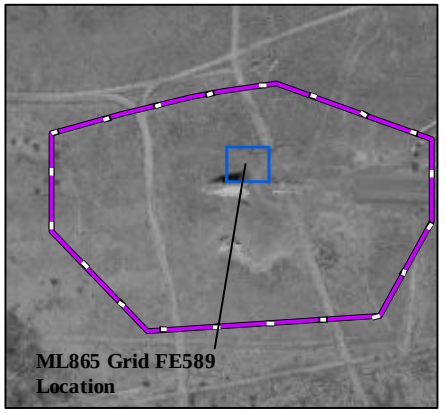
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-053 Grid FE588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation

New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-54

G-858 Analytic Signal
Grid FE589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

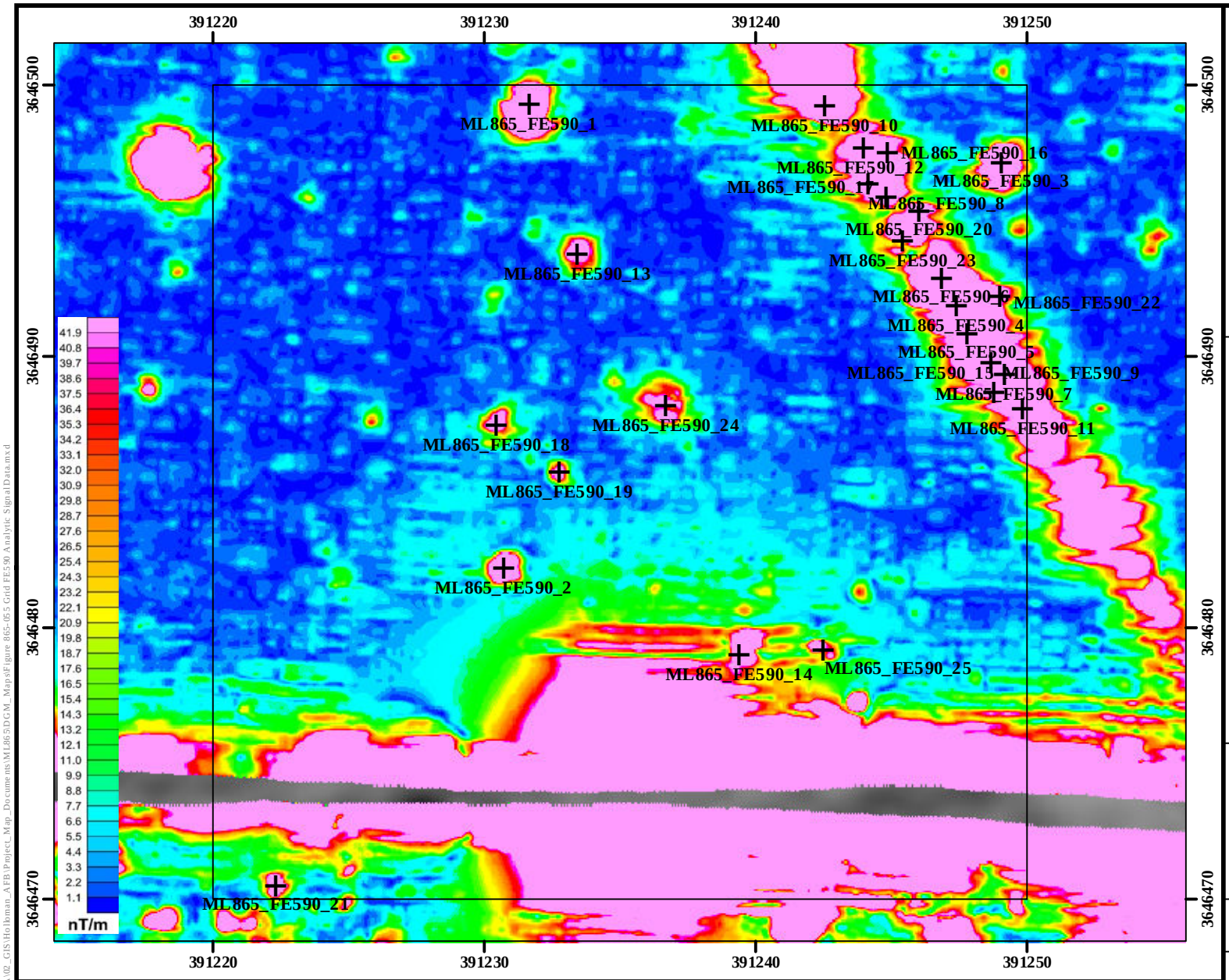
1 inch = 18 feet

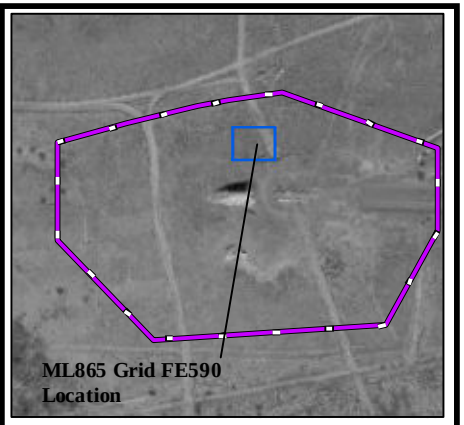
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-054 Grid FE589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-55

G-858 Analytic Signal
Grid FE590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

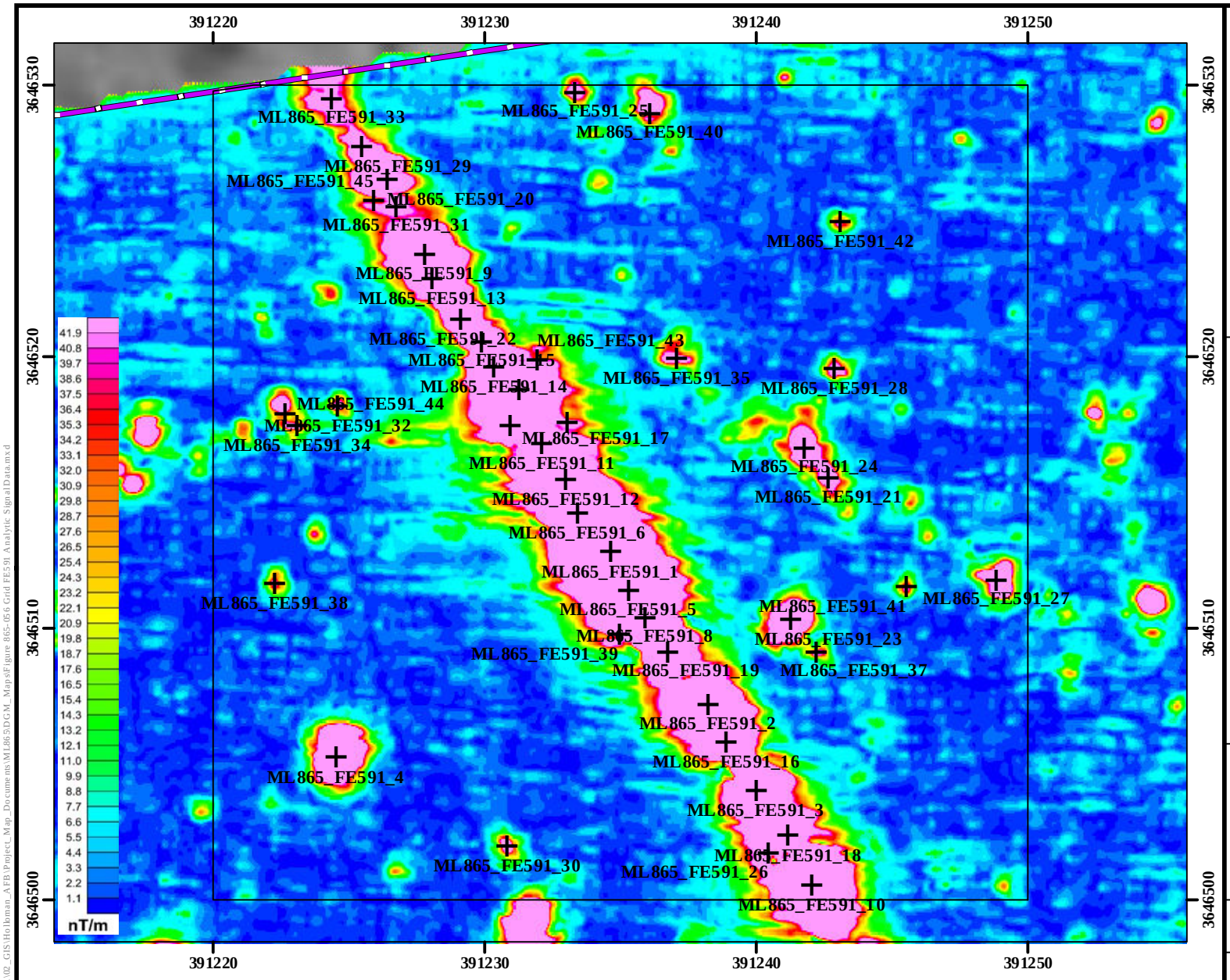
1 inch = 18 feet

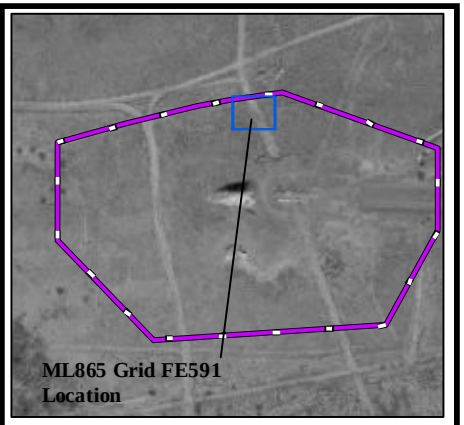
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-055 Grid FE590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

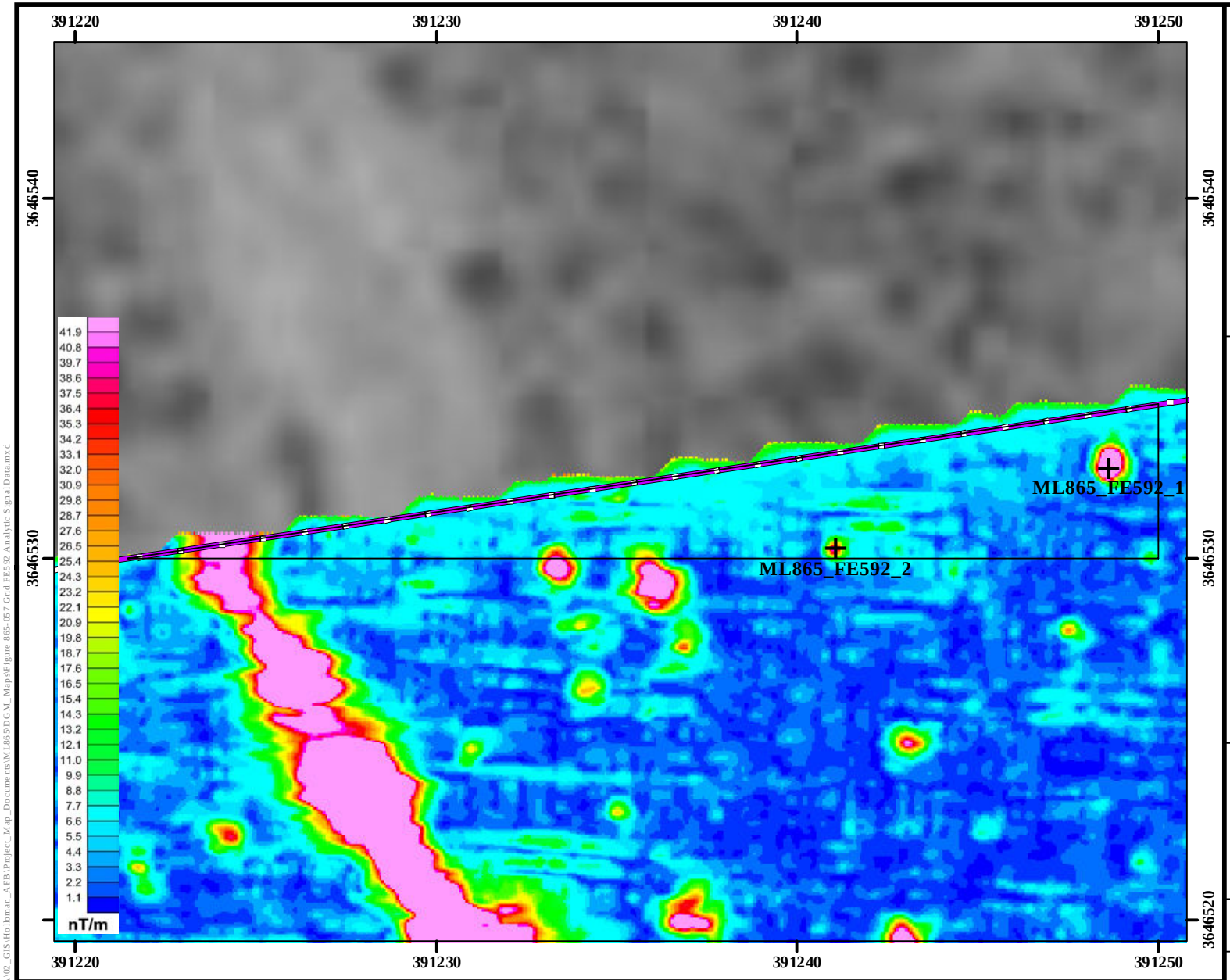
FIGURE 865-56

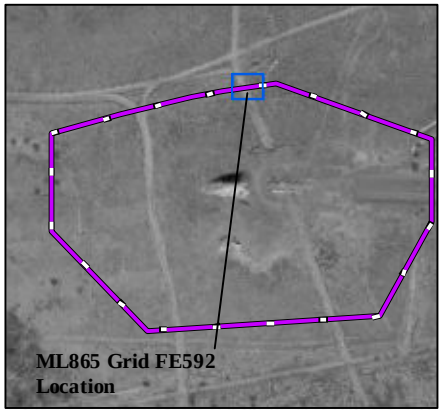
G-858 Analytic Signal
Grid FE591 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-056 Grid FE591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-57

G-858 Analytic Signal
Grid FE592 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

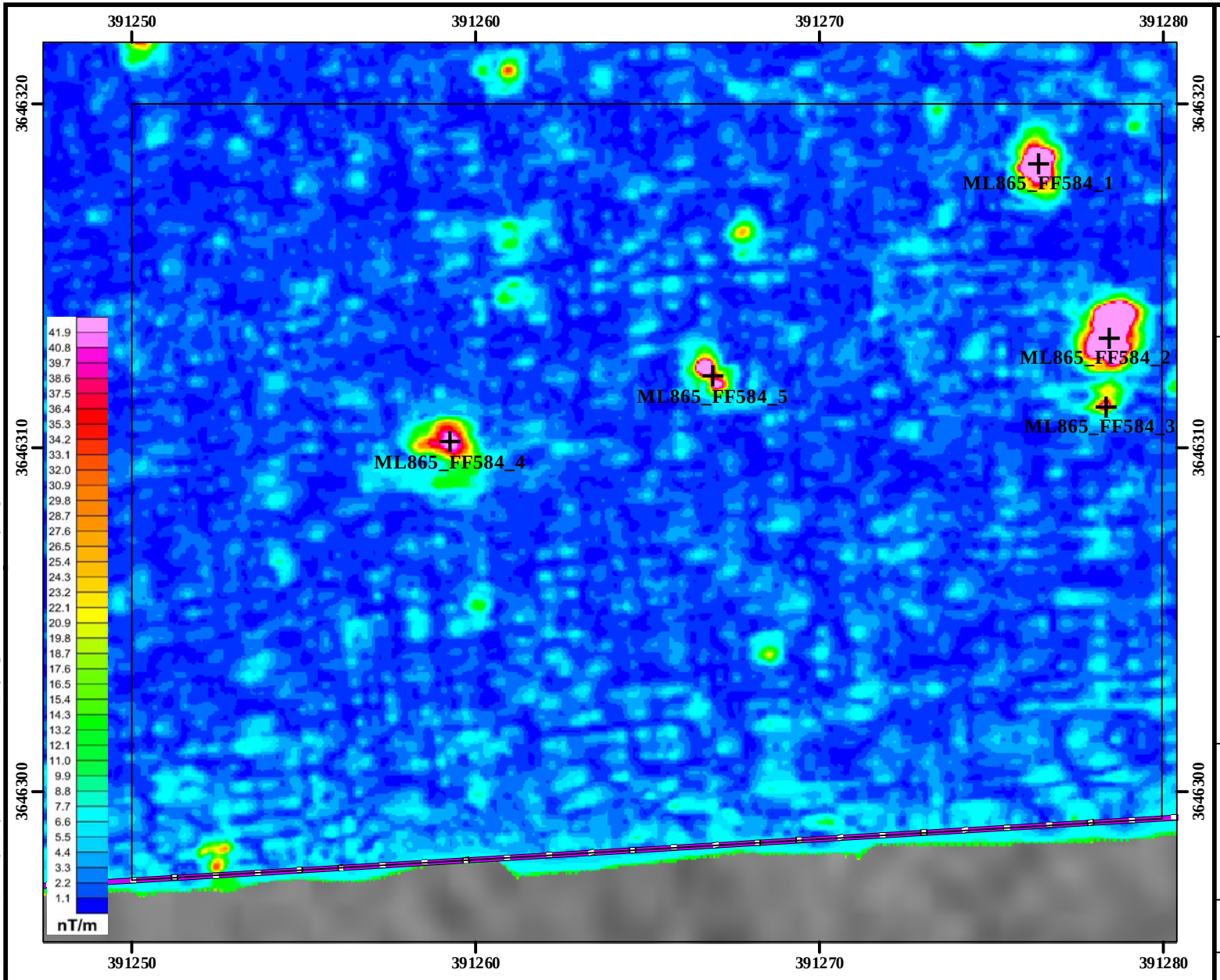
1 inch = 14 feet

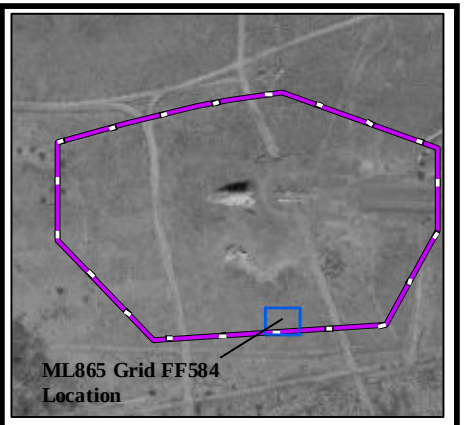
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-057 Grid FE592 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-58

G-858 Analytic Signal
Grid FF584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

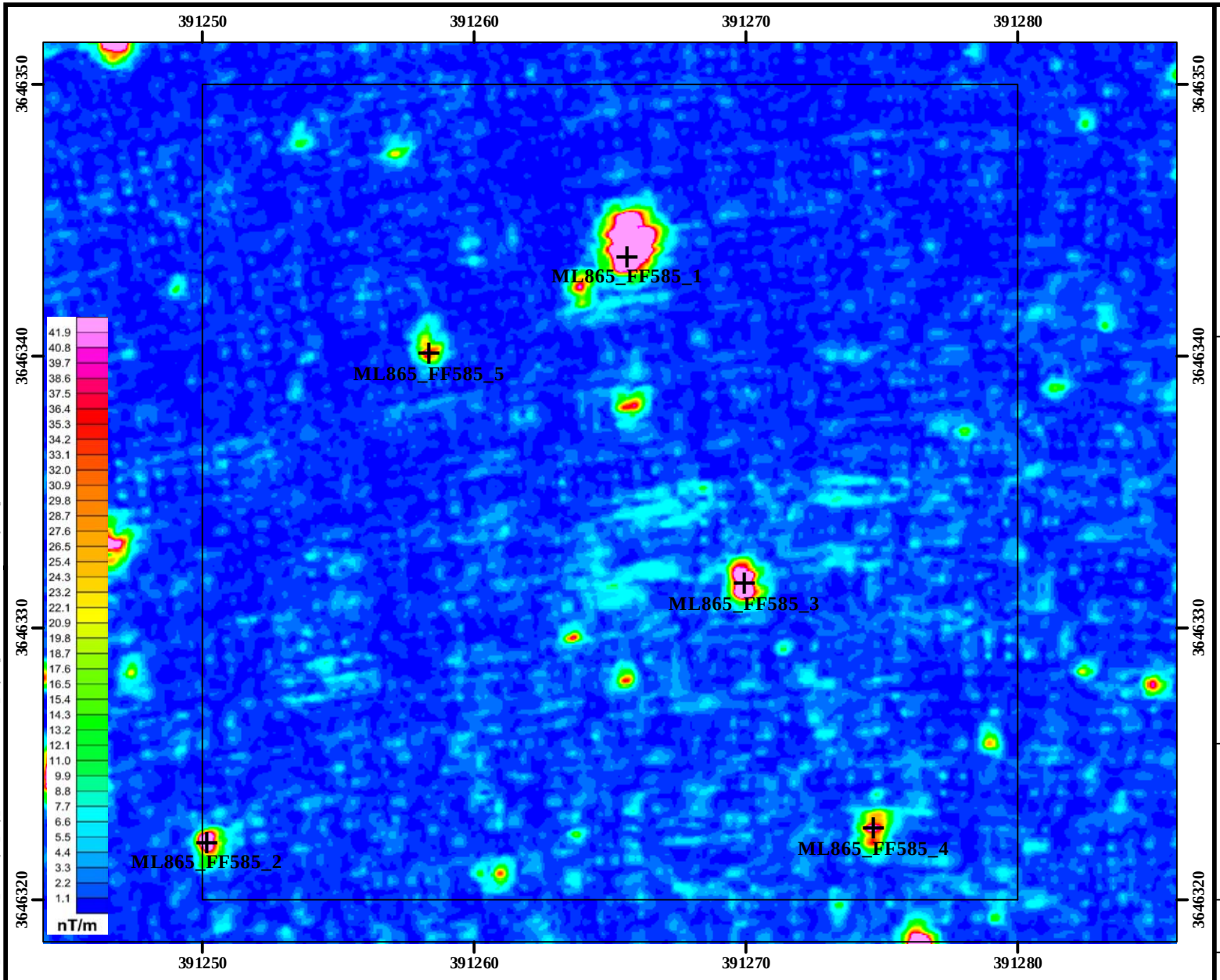
1 inch = 14 feet

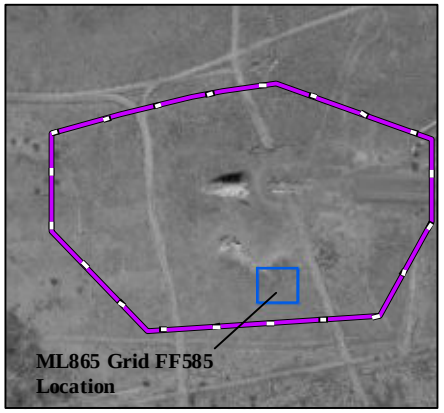
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-058 Grid FF584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-59

G-858 Analytic Signal
Grid FF585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

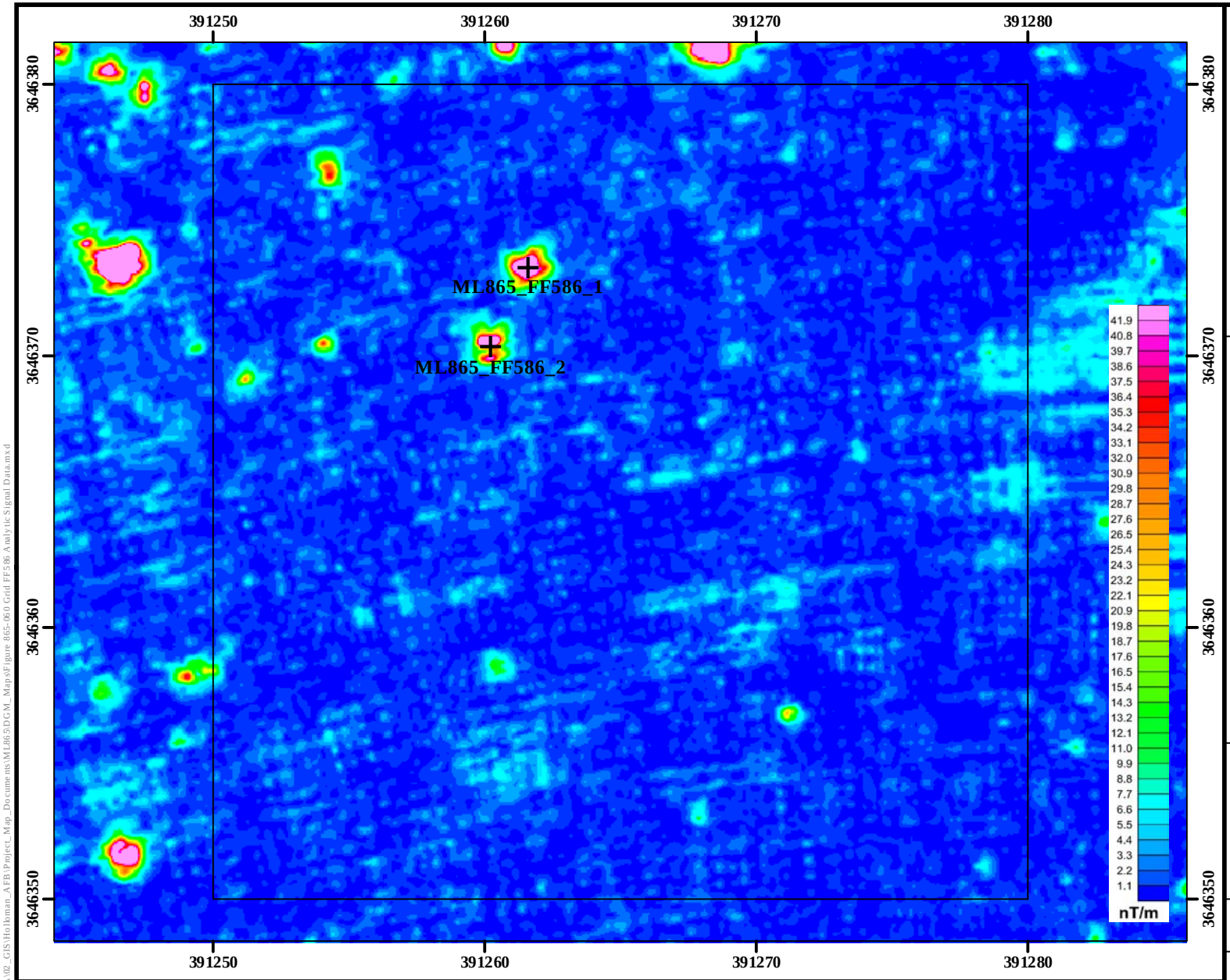
1 inch = 18 feet

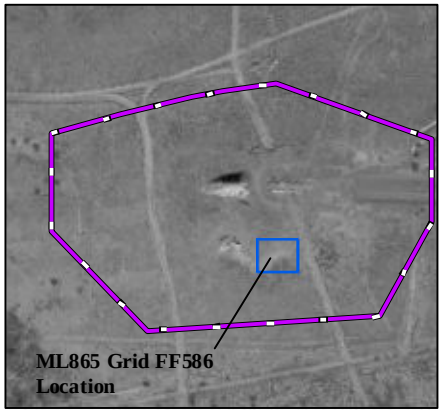
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-059 Grid FF585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-60

G-858 Analytic Signal
Grid FF586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

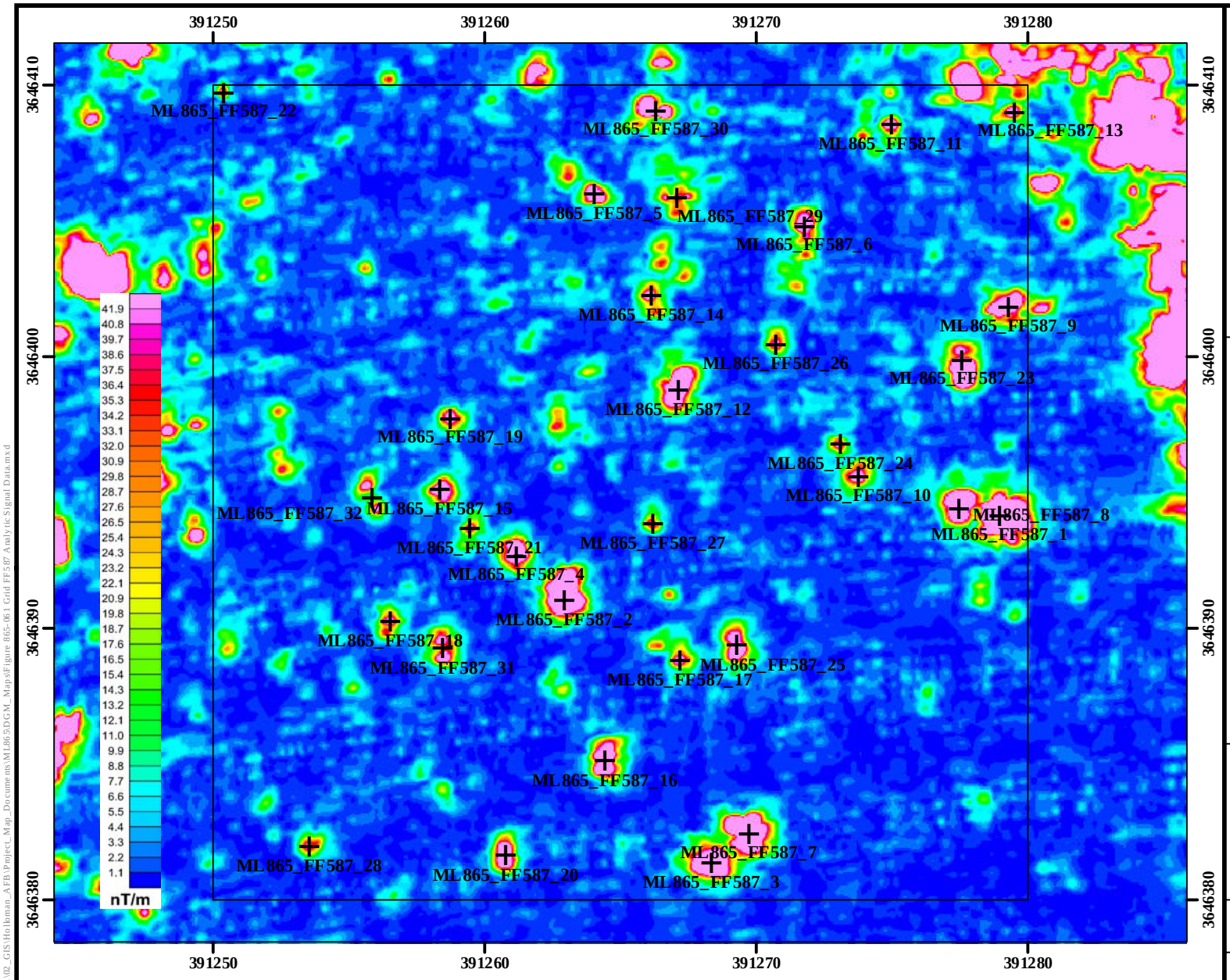
1 inch = 18 feet

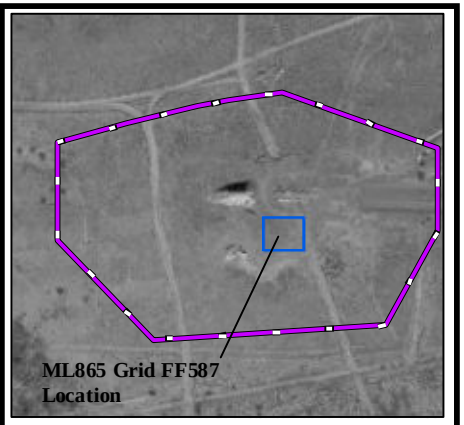
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-06.0 Grid FF586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-61

G-858 Analytic Signal
Grid FF587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

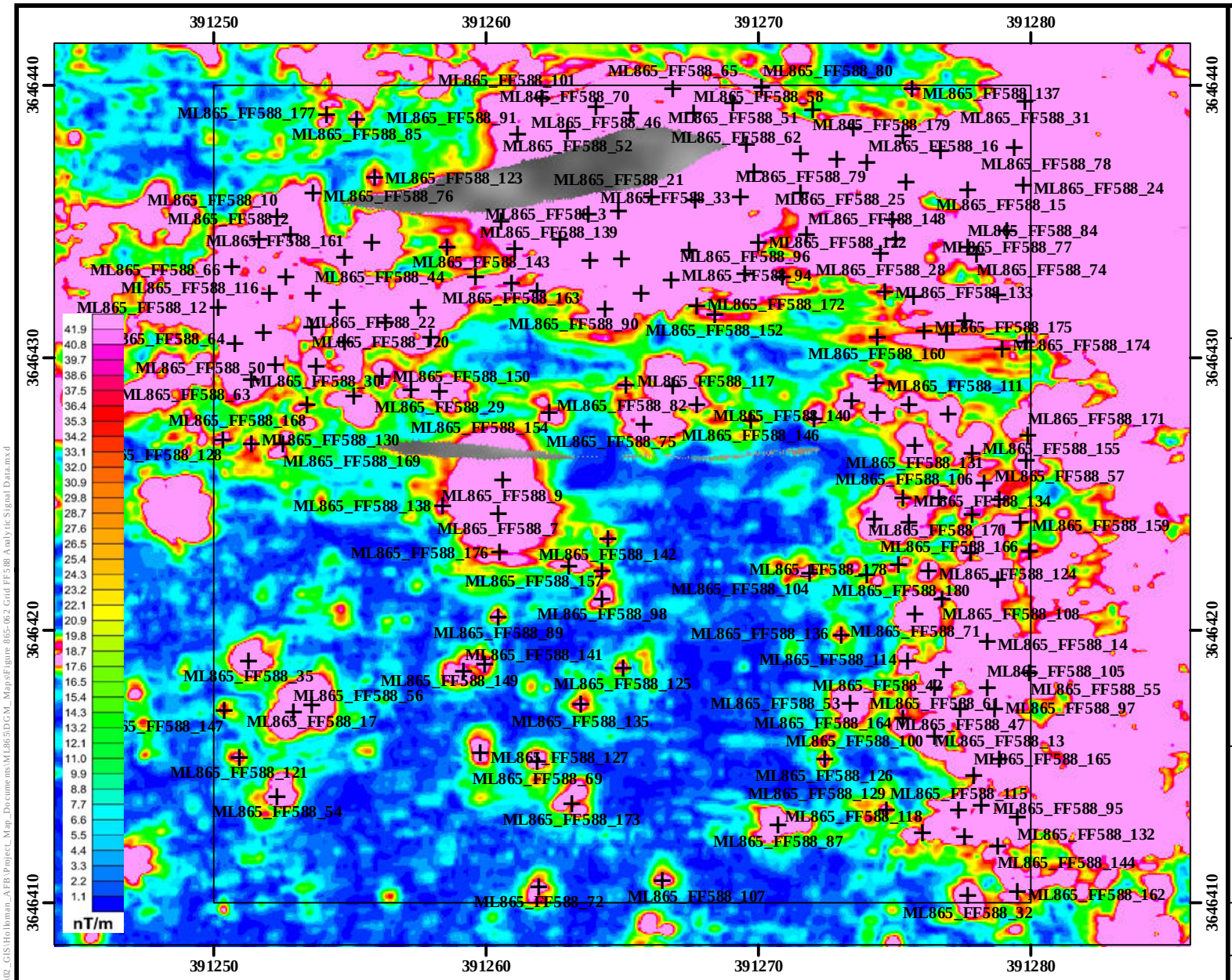
1 inch = 18 feet

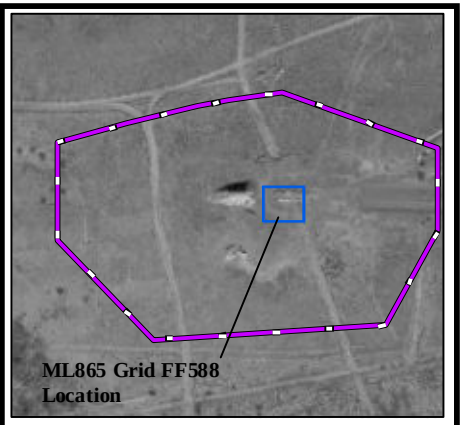
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-061 Grid FF587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-62

G-858 Analytic Signal
Grid FF588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

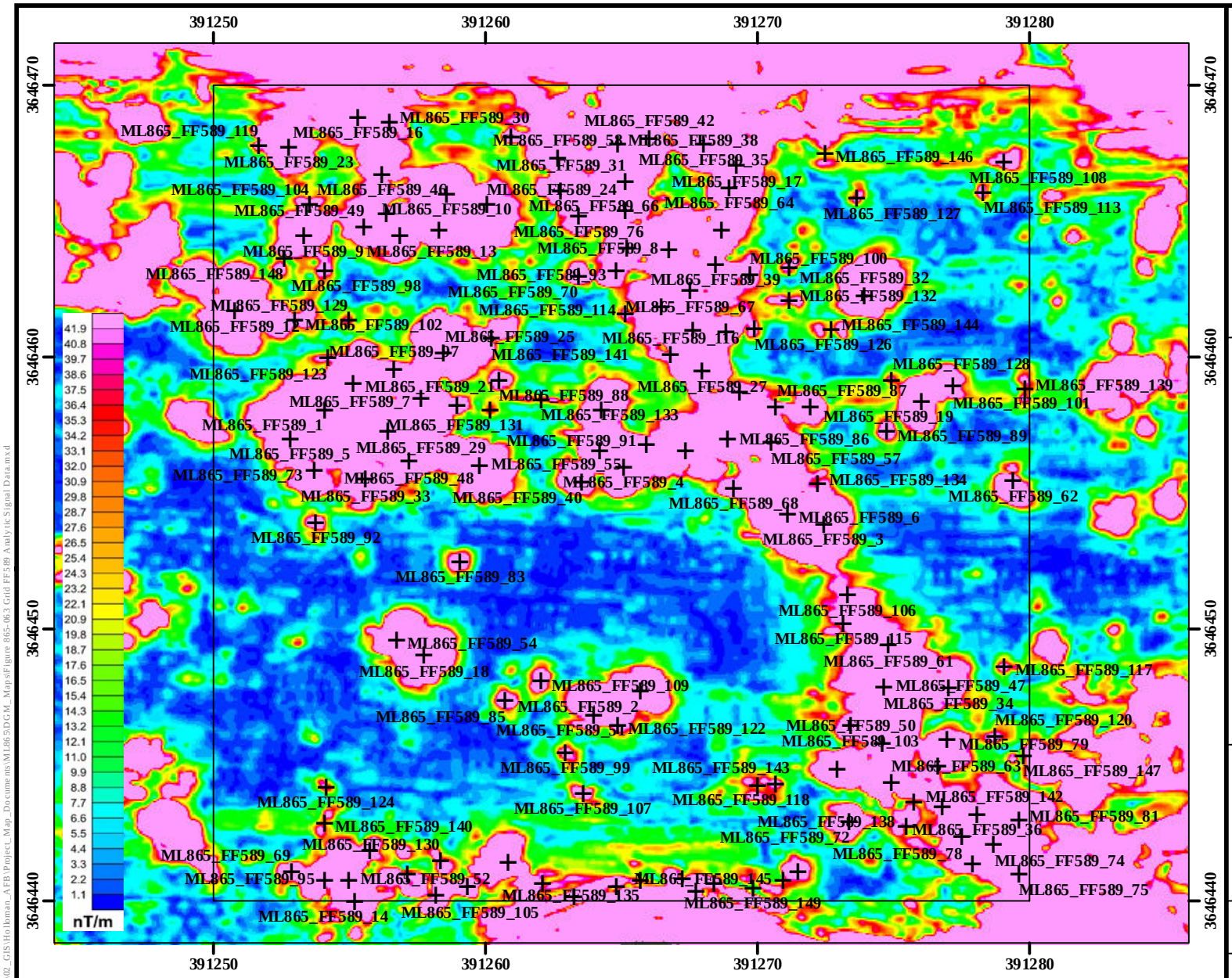
1 inch = 18 feet

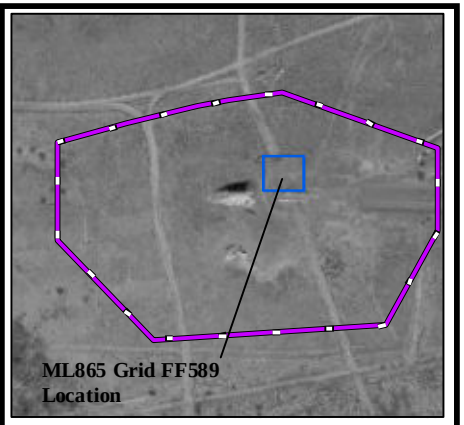
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-062 Grid FF588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-63

G-858 Analytic Signal
Grid FF589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

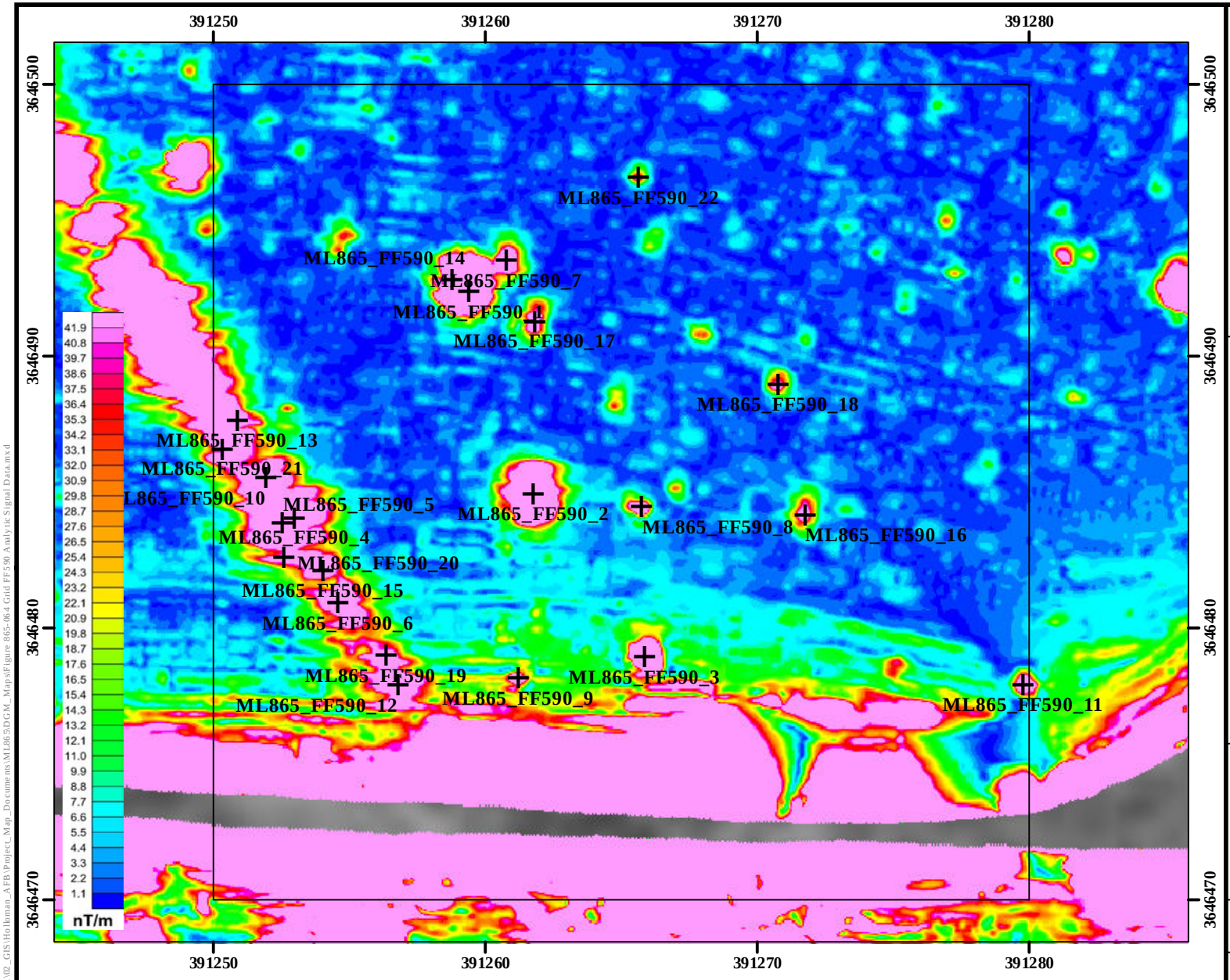
1 inch = 18 feet

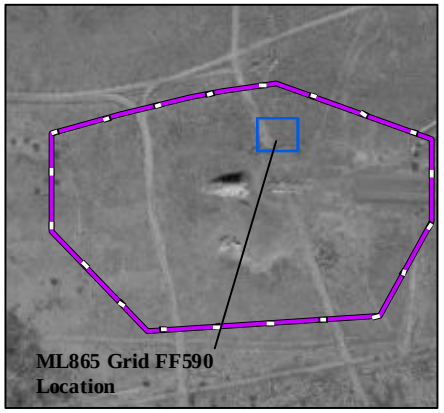
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-063 Grid FF589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-64

G-858 Analytic Signal
Grid FF590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

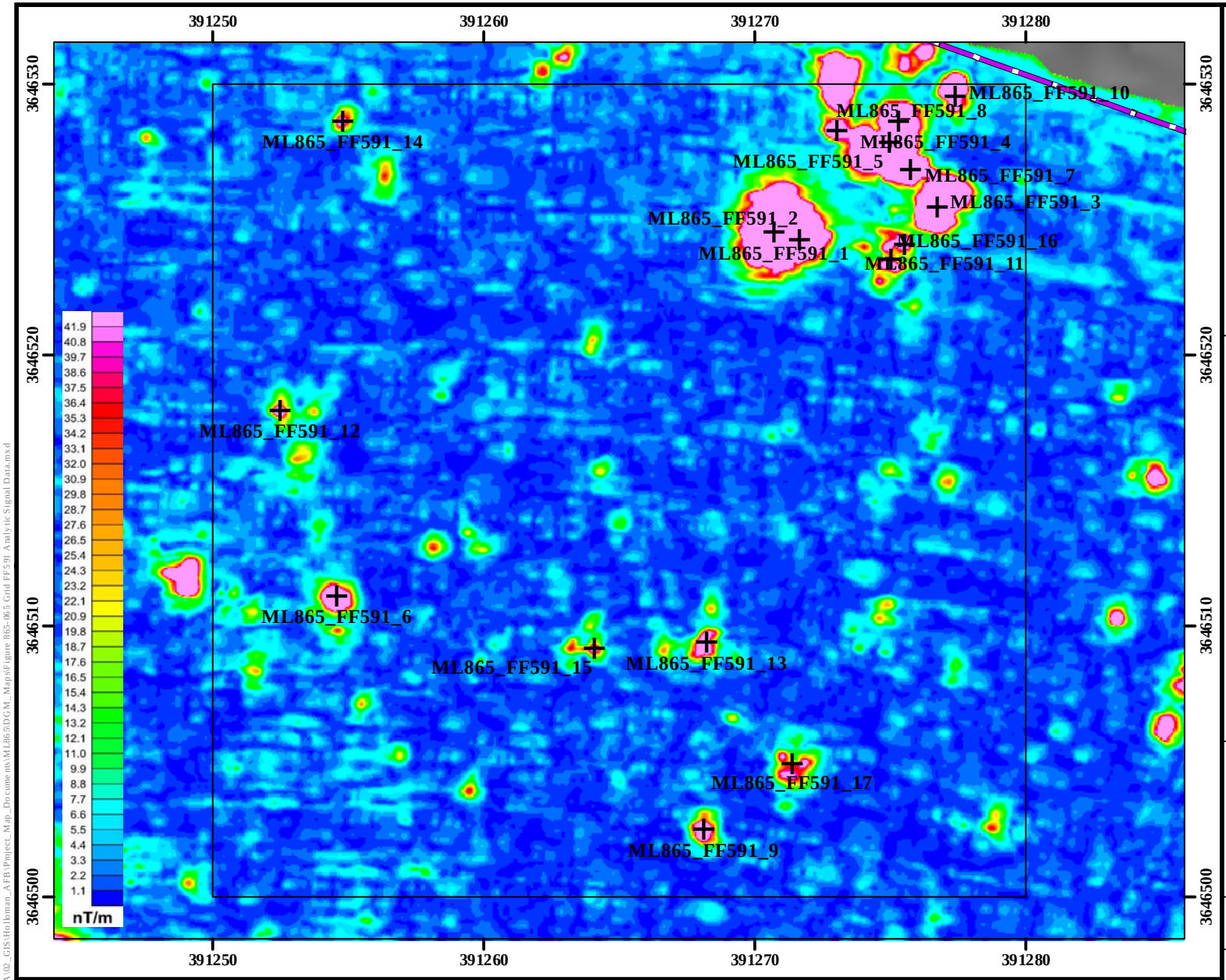
1 inch = 18 feet

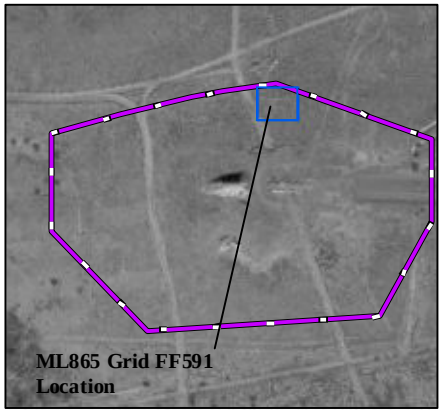
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-06.4 Grid FF590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-65

G-858 Analytic Signal
Grid FF591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

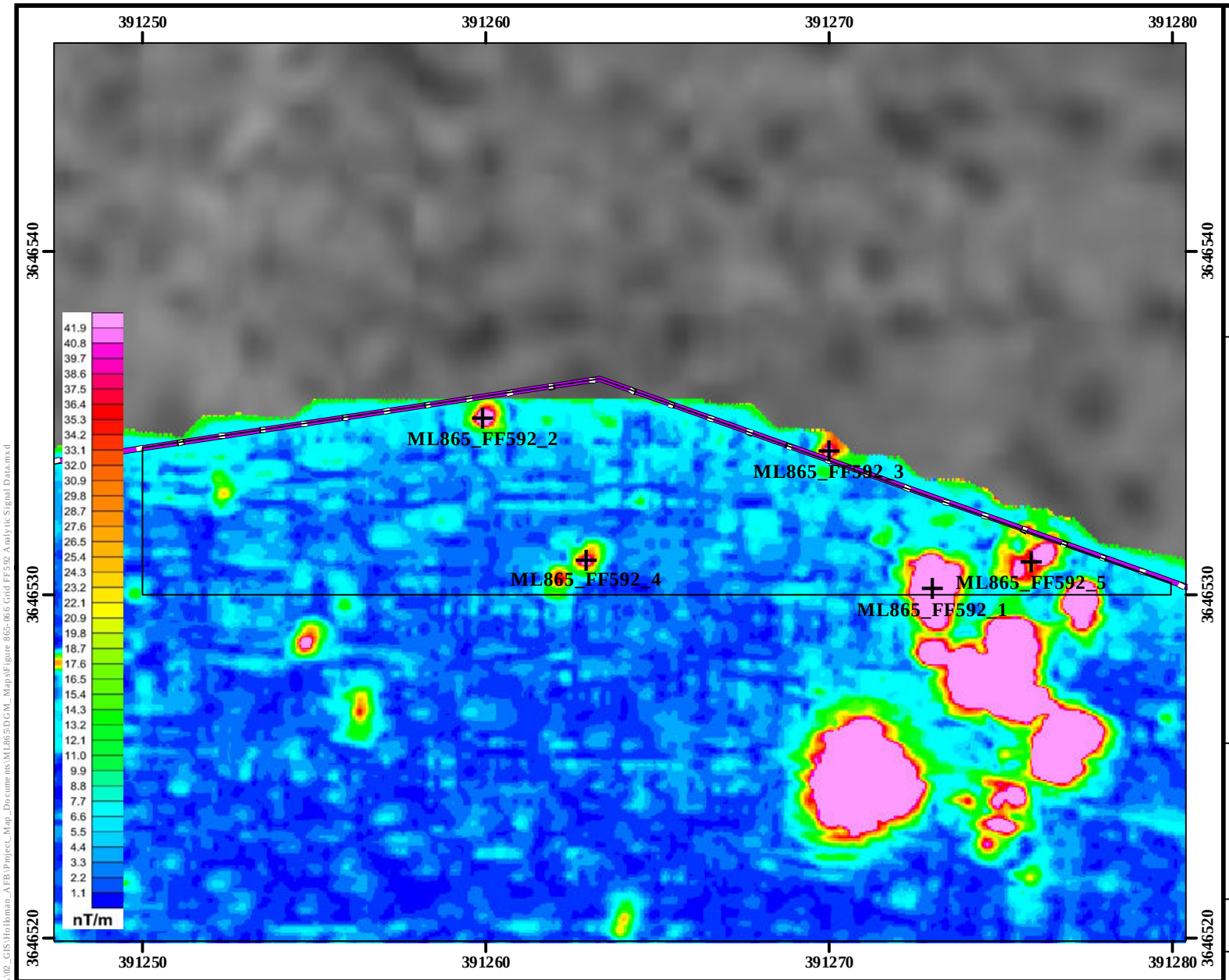
1 inch = 18 feet

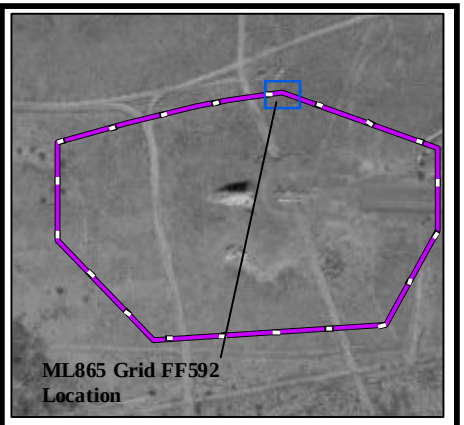
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-065 Grid FF591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-66

G-858 Analytic Signal
Grid FF592 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

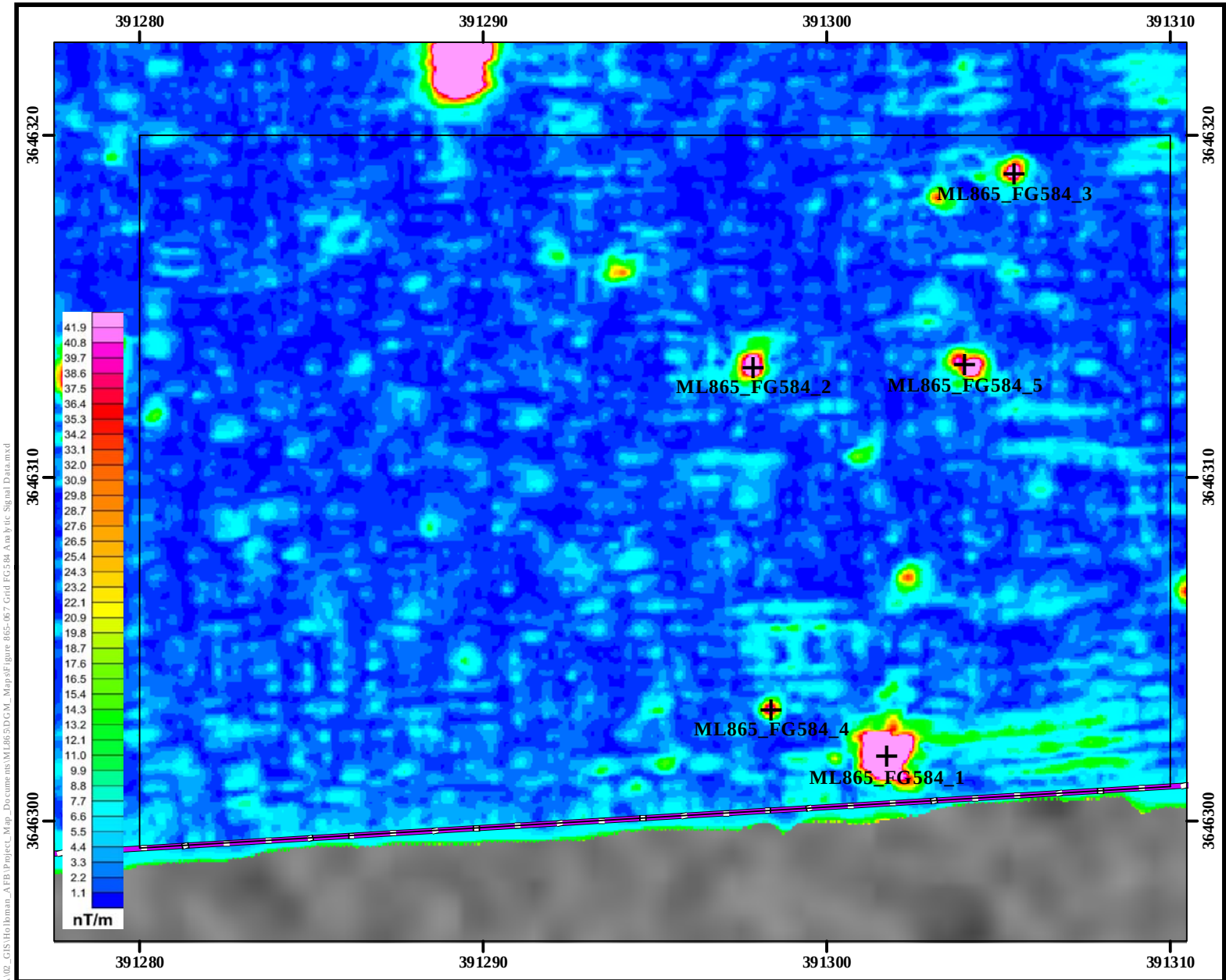
1 inch = 14 feet

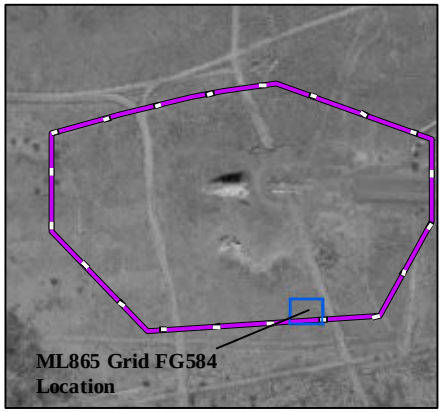
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-06 Grid FF592 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-67

G-858 Analytic Signal
Grid FG584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

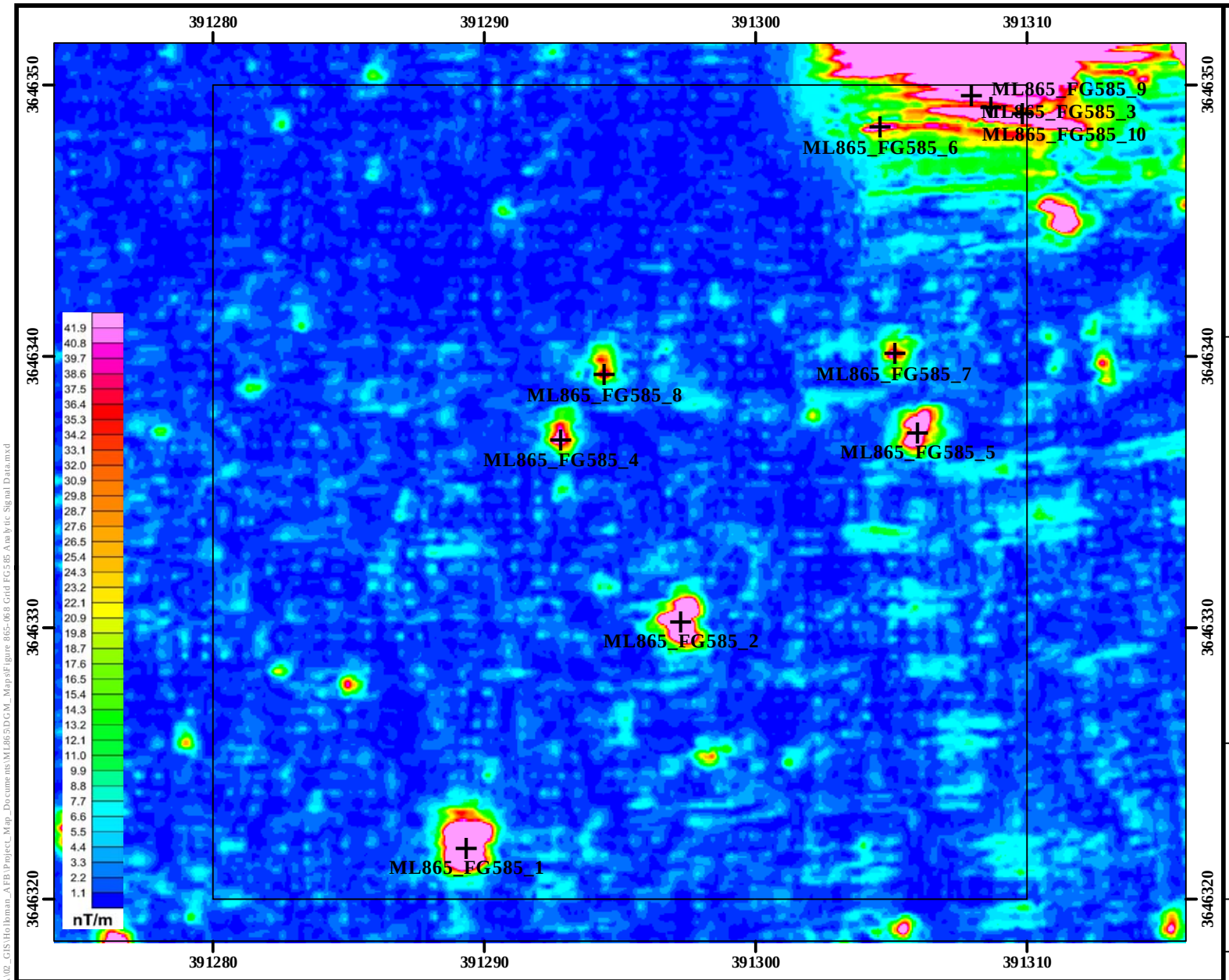
1 inch = 14 feet

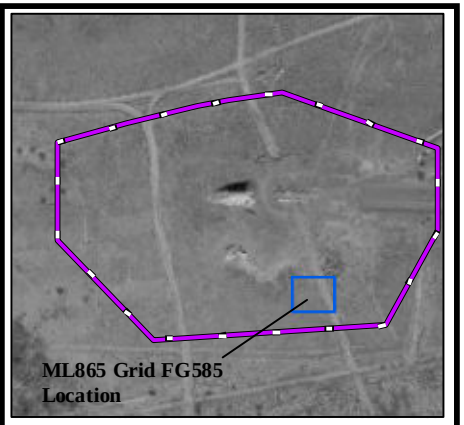
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-067 Grid FG584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

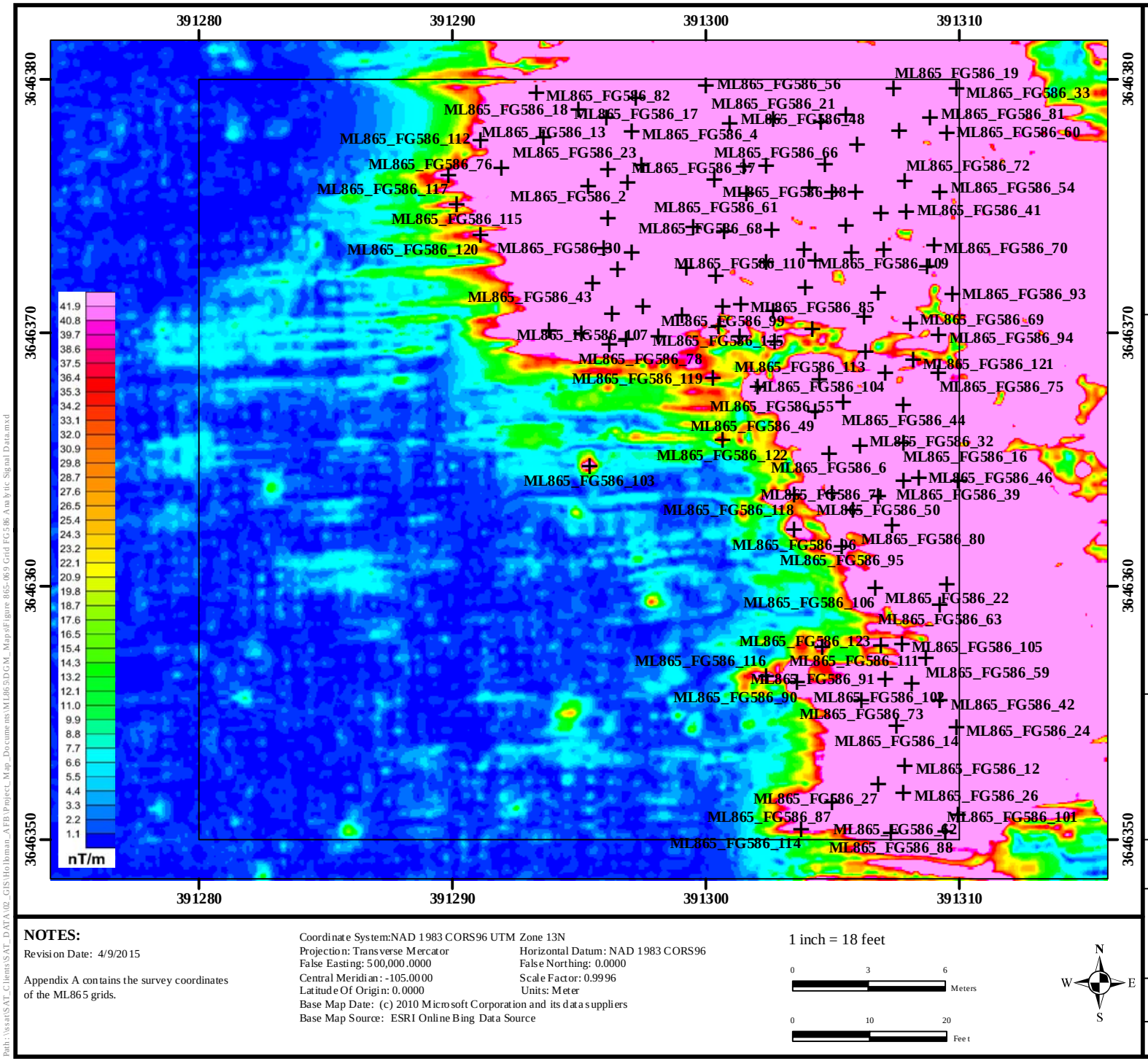
FIGURE 865-68

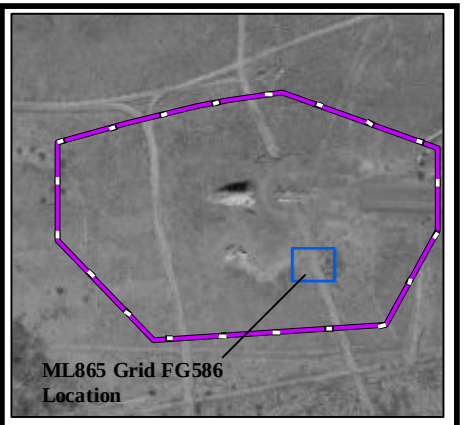
G-858 Analytic Signal
Grid FG585 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-06,8 Grid FG585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-69

G-858 Analytic Signal
Grid FG586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

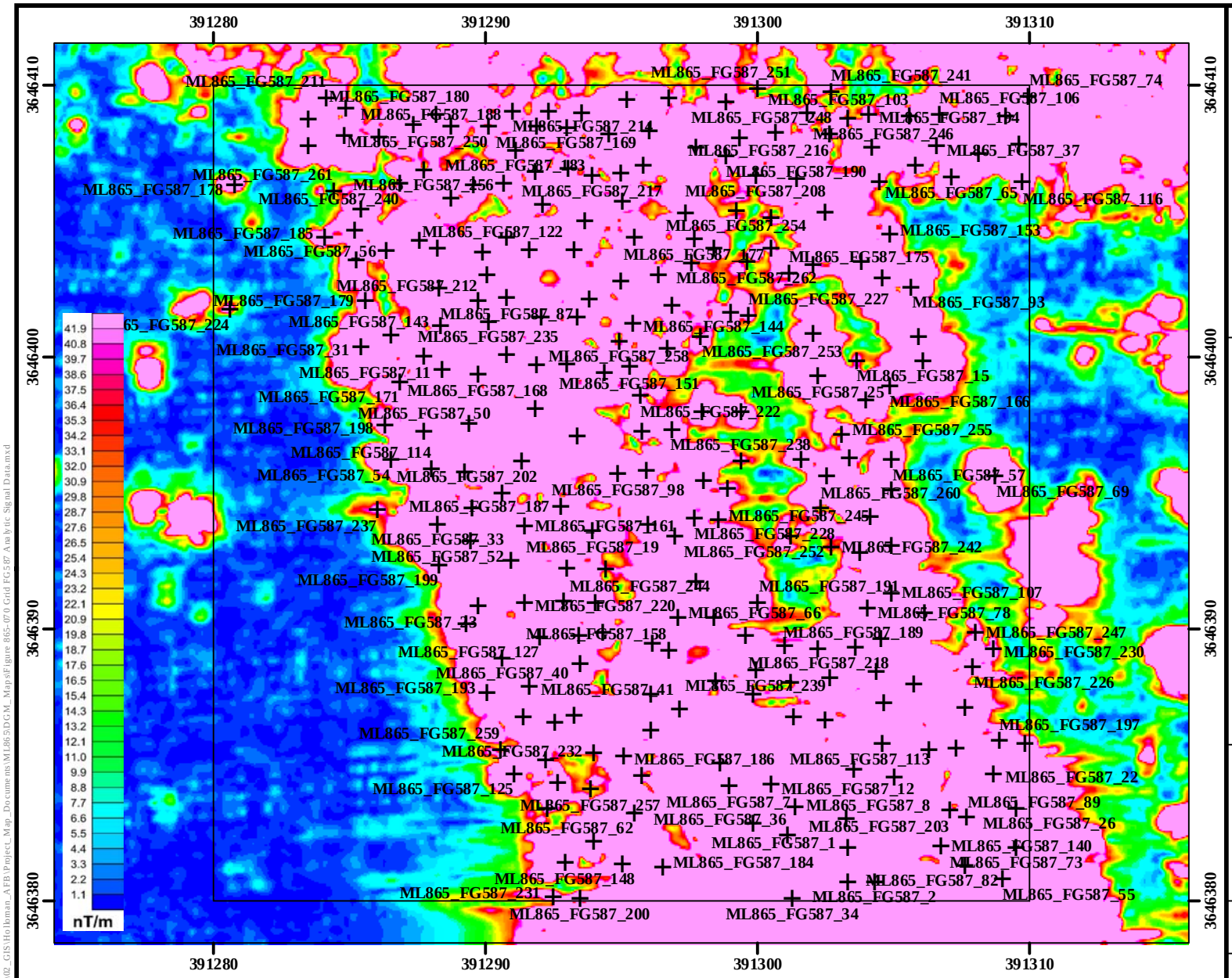
1 inch = 18 feet

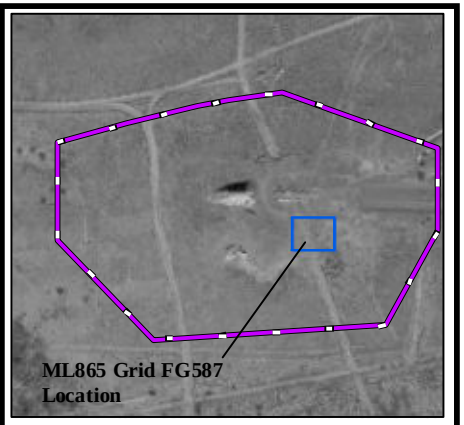
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-069 Grid FG586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-70

G-858 Analytic Signal
Grid FG587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

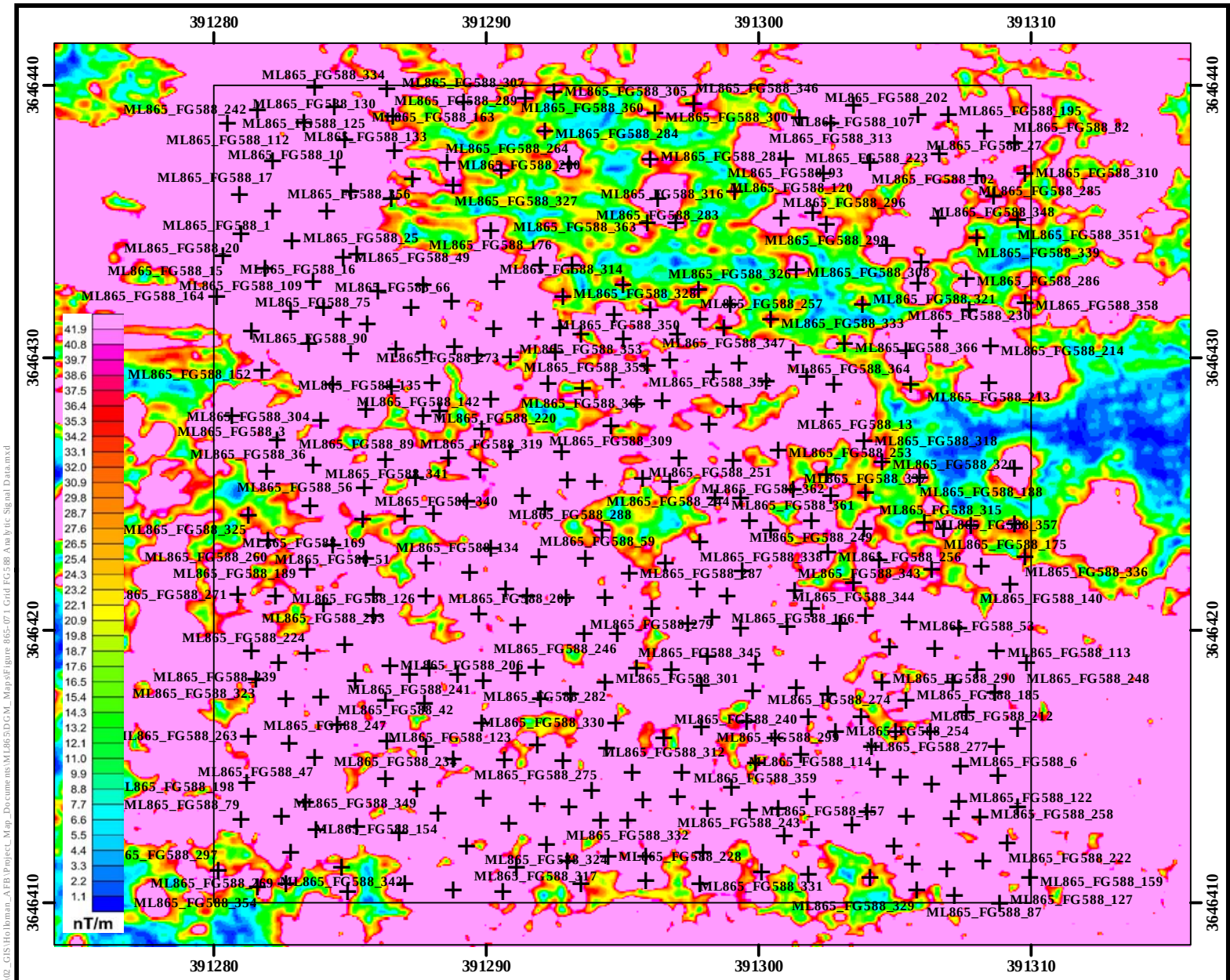
1 inch = 18 feet

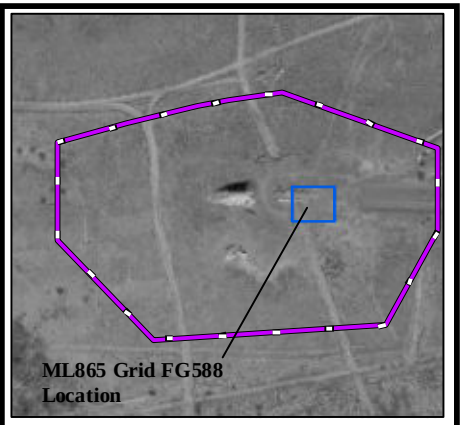
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-070 Grid FG587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-71

G-858 Analytic Signal
Grid FG588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

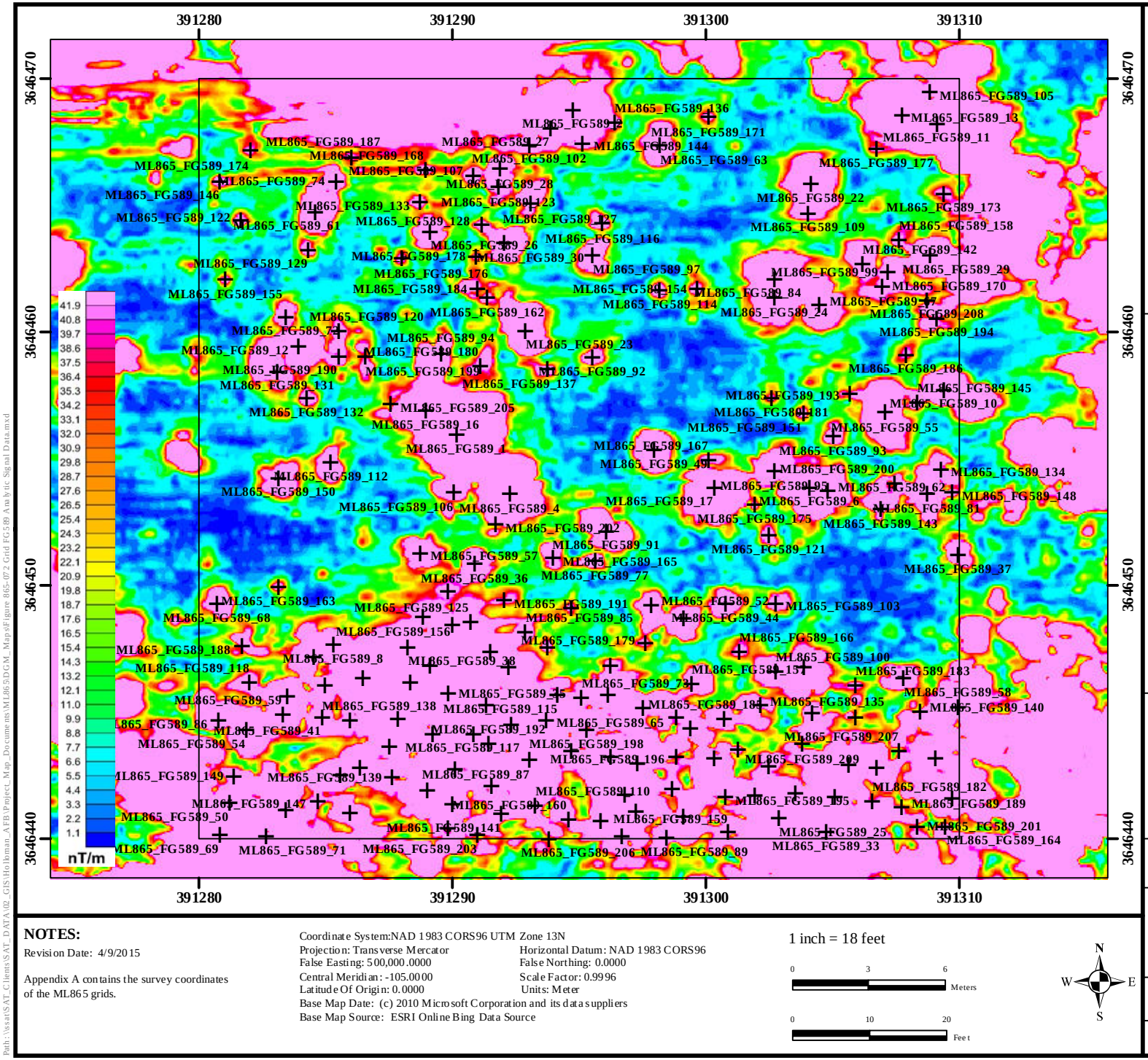
1 inch = 18 feet

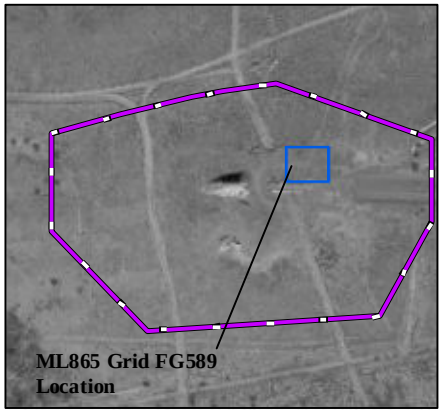
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-071 Grid FG588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-72

G-858 Analytic Signal
Grid FG589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

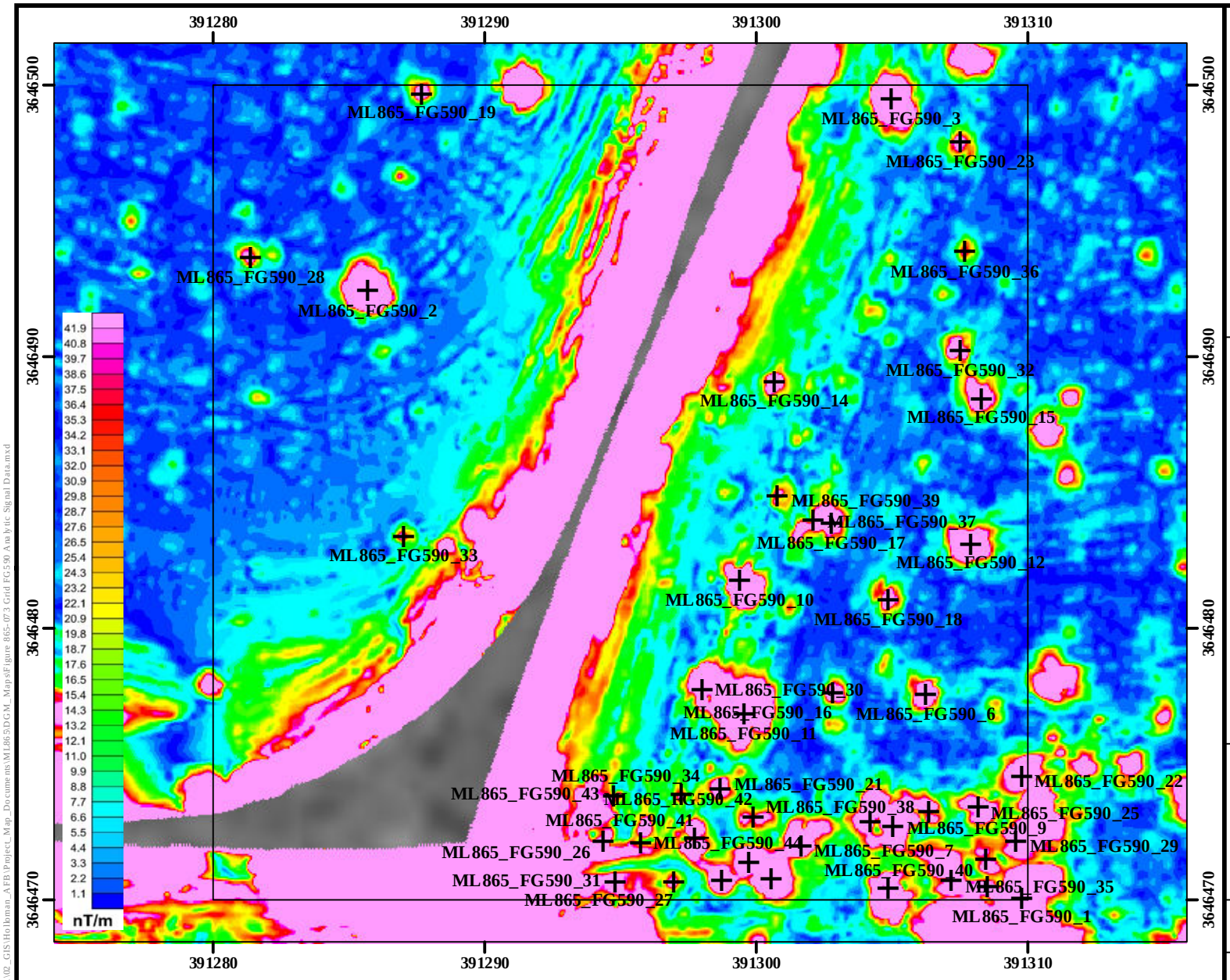
1 inch = 18 feet

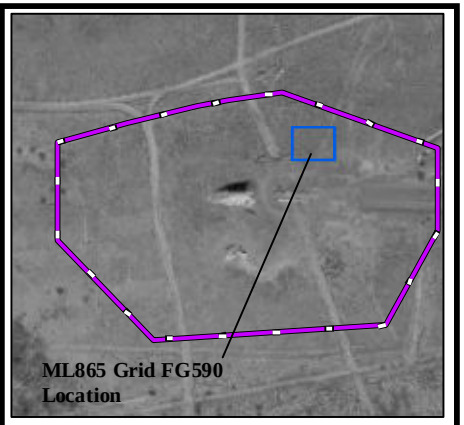
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-072 Grid FG589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-73

G-858 Analytic Signal
Grid FG590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

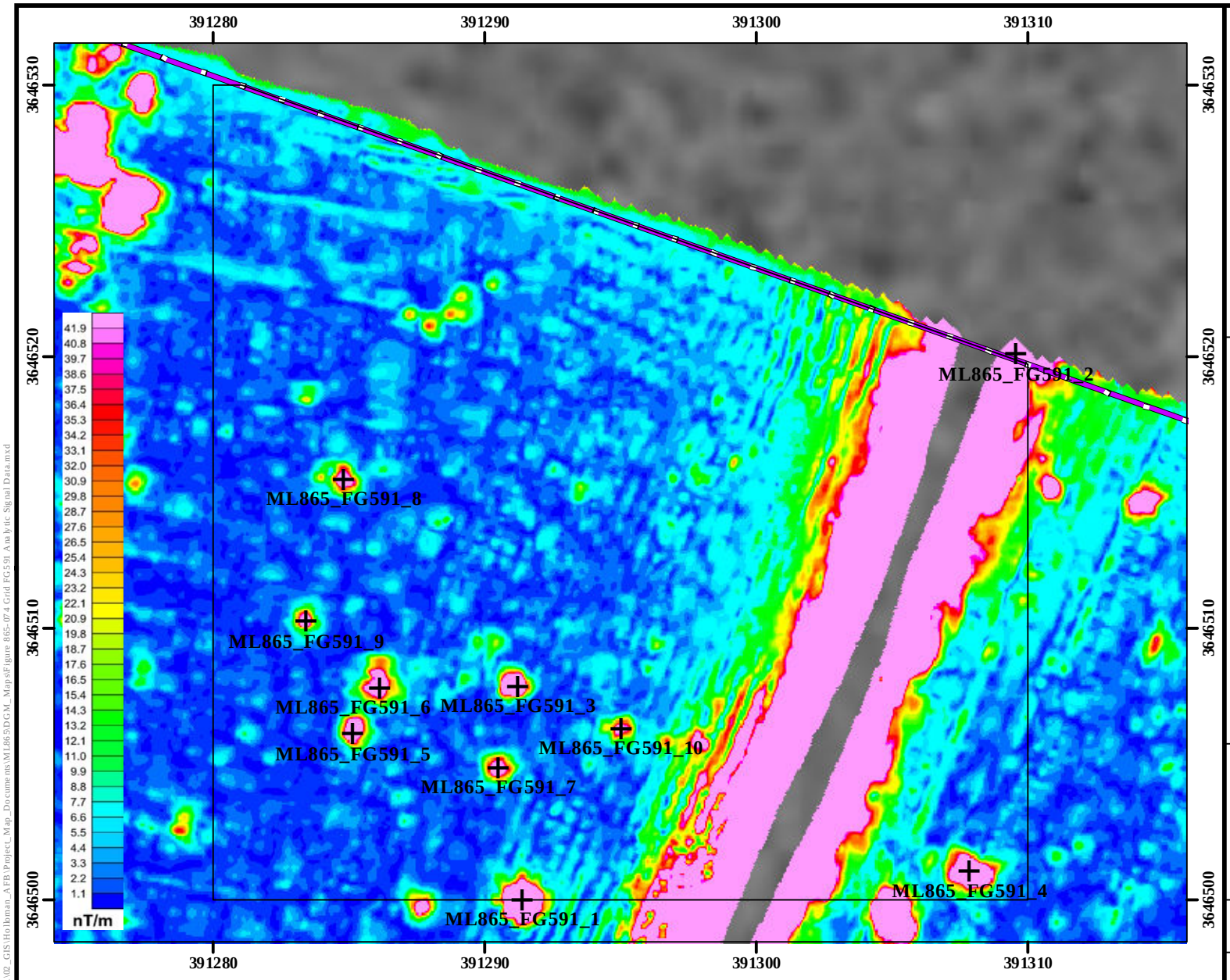
1 inch = 18 feet

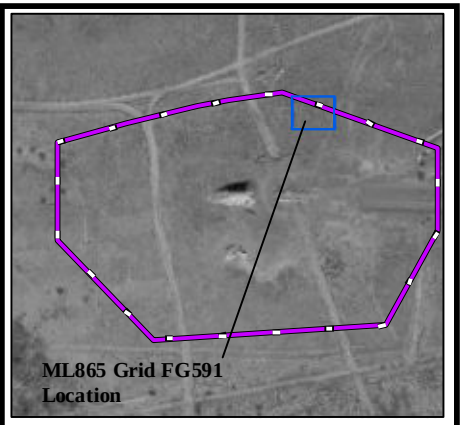
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-073 Grid FG590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-74

G-858 Analytic Signal
Grid FG591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

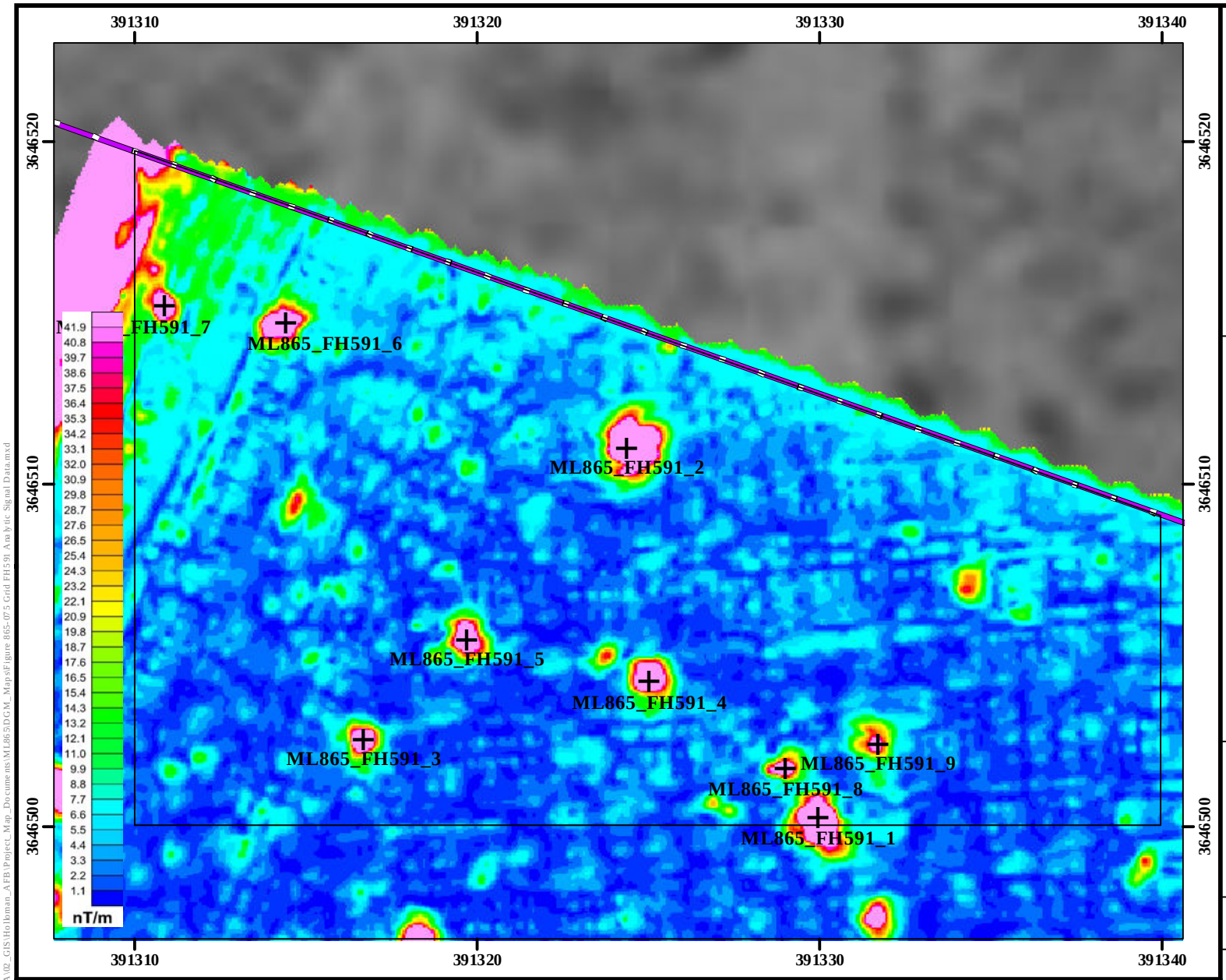
1 inch = 18 feet

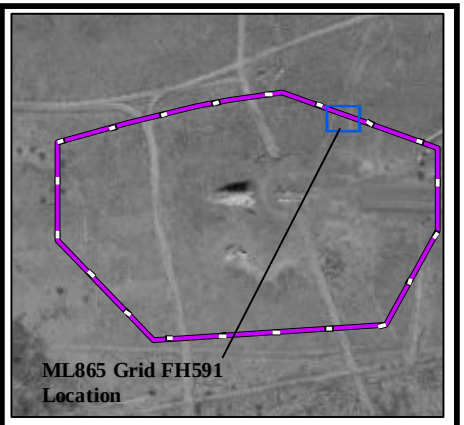
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-074 Grid FG591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-75

G-858 Analytic Signal
Grid FH591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: NAD 1983 CORS96
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

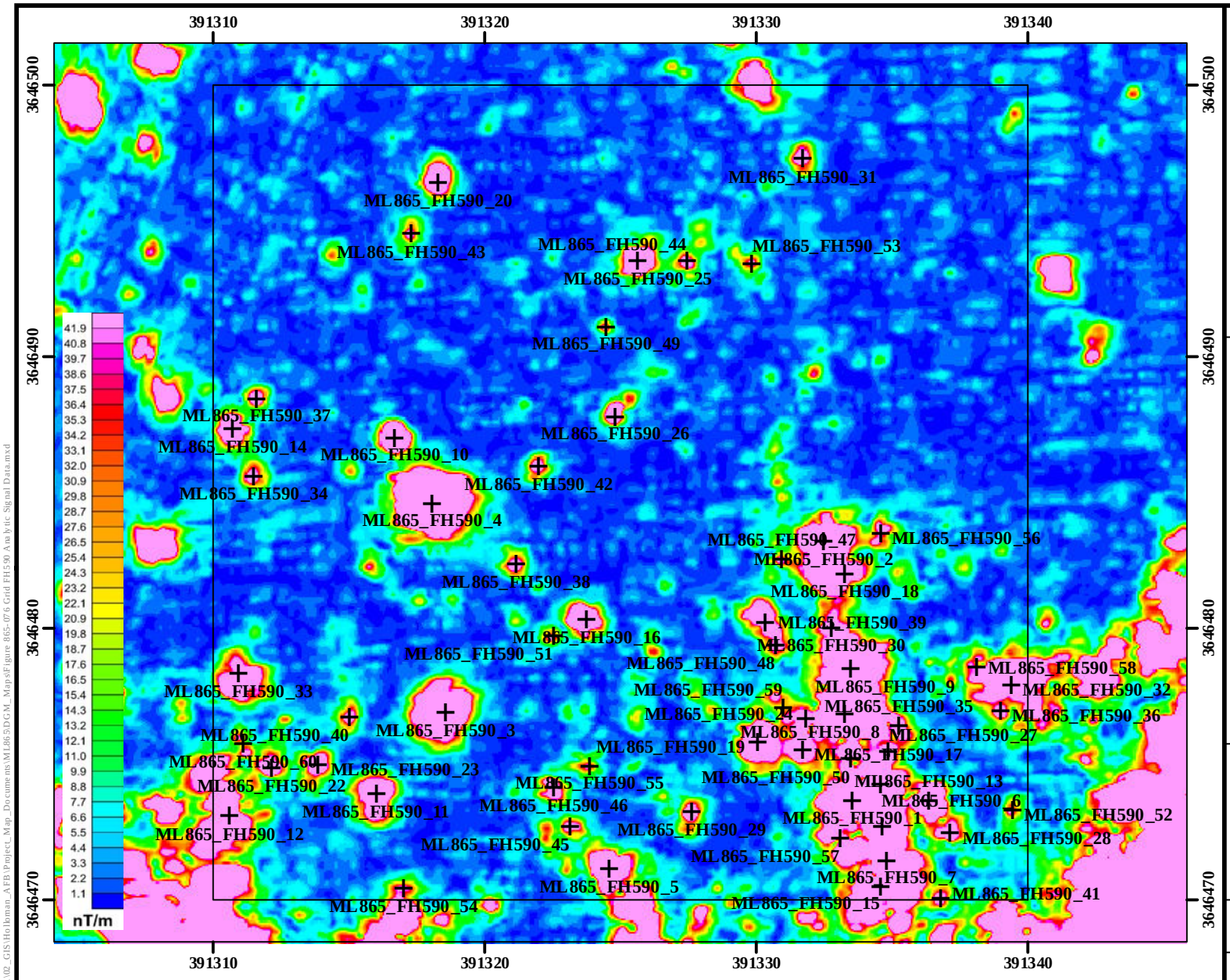
1 inch = 14 feet

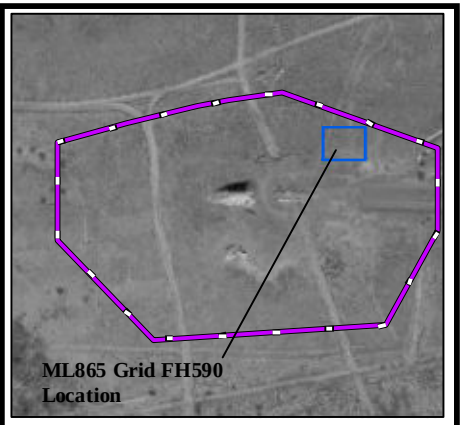
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-075 Grid FH591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-76

G-858 Analytic Signal
Grid FH590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

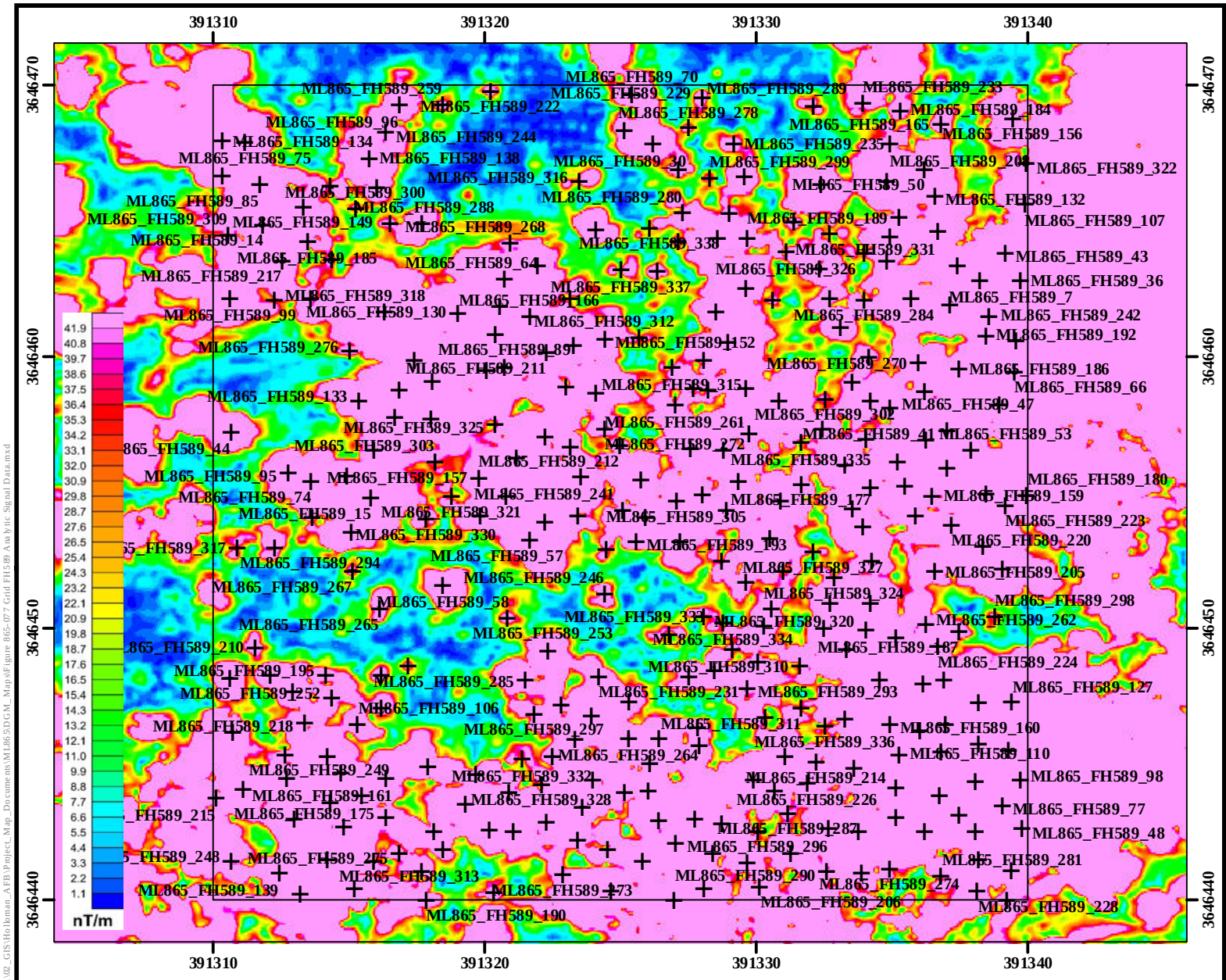
1 inch = 18 feet

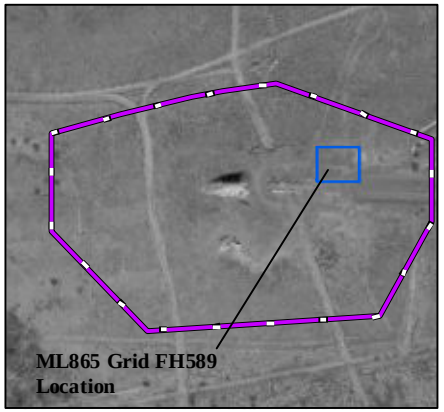
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-076 Grid FH590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-77

G-858 Analytic Signal
Grid FH589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

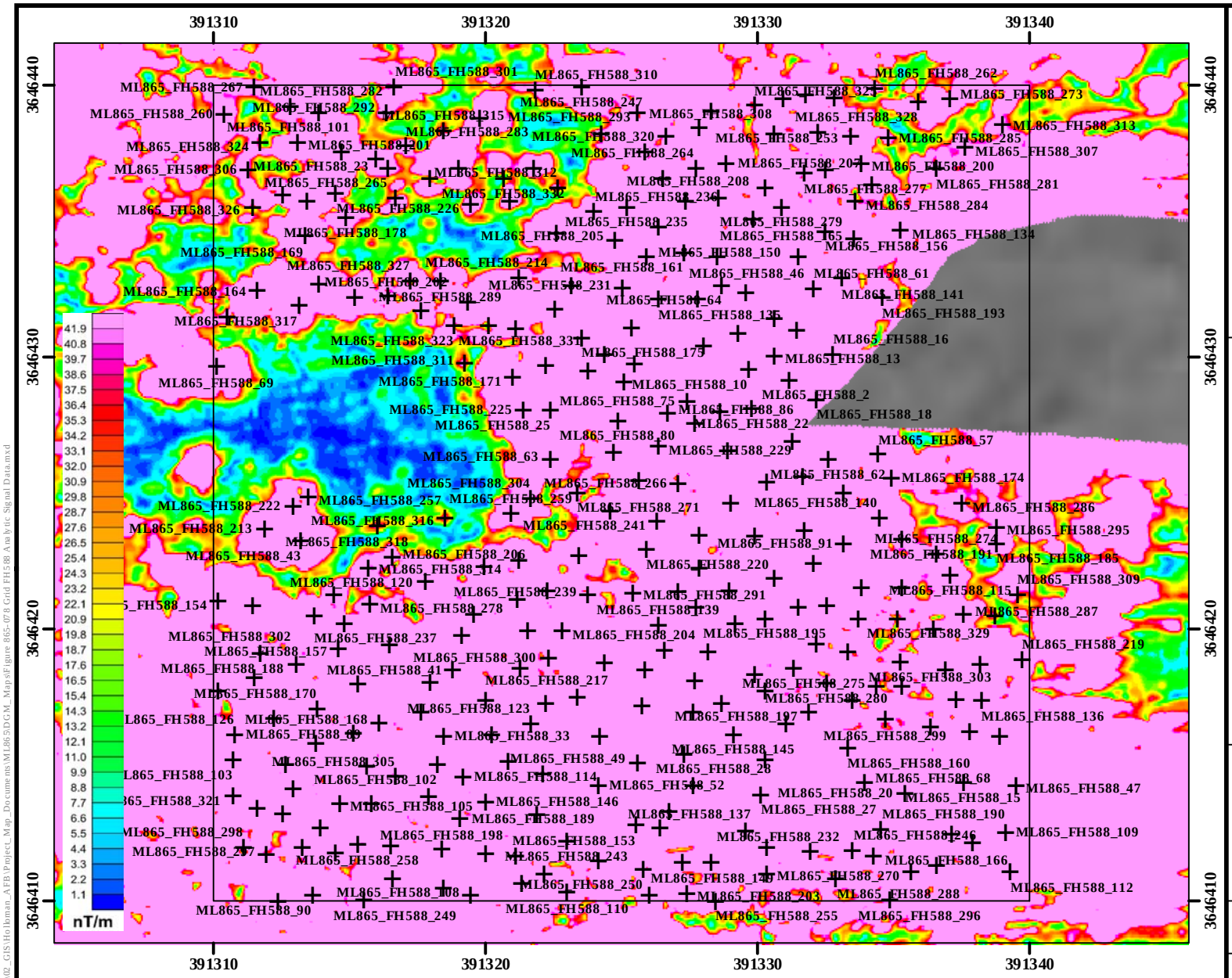
1 inch = 18 feet

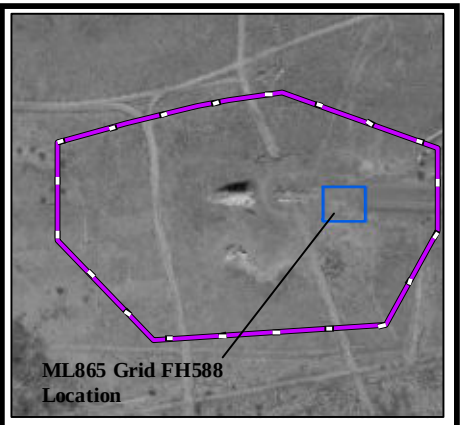
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-077 Grid FH589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-78

G-858 Analytic Signal
Grid FH588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

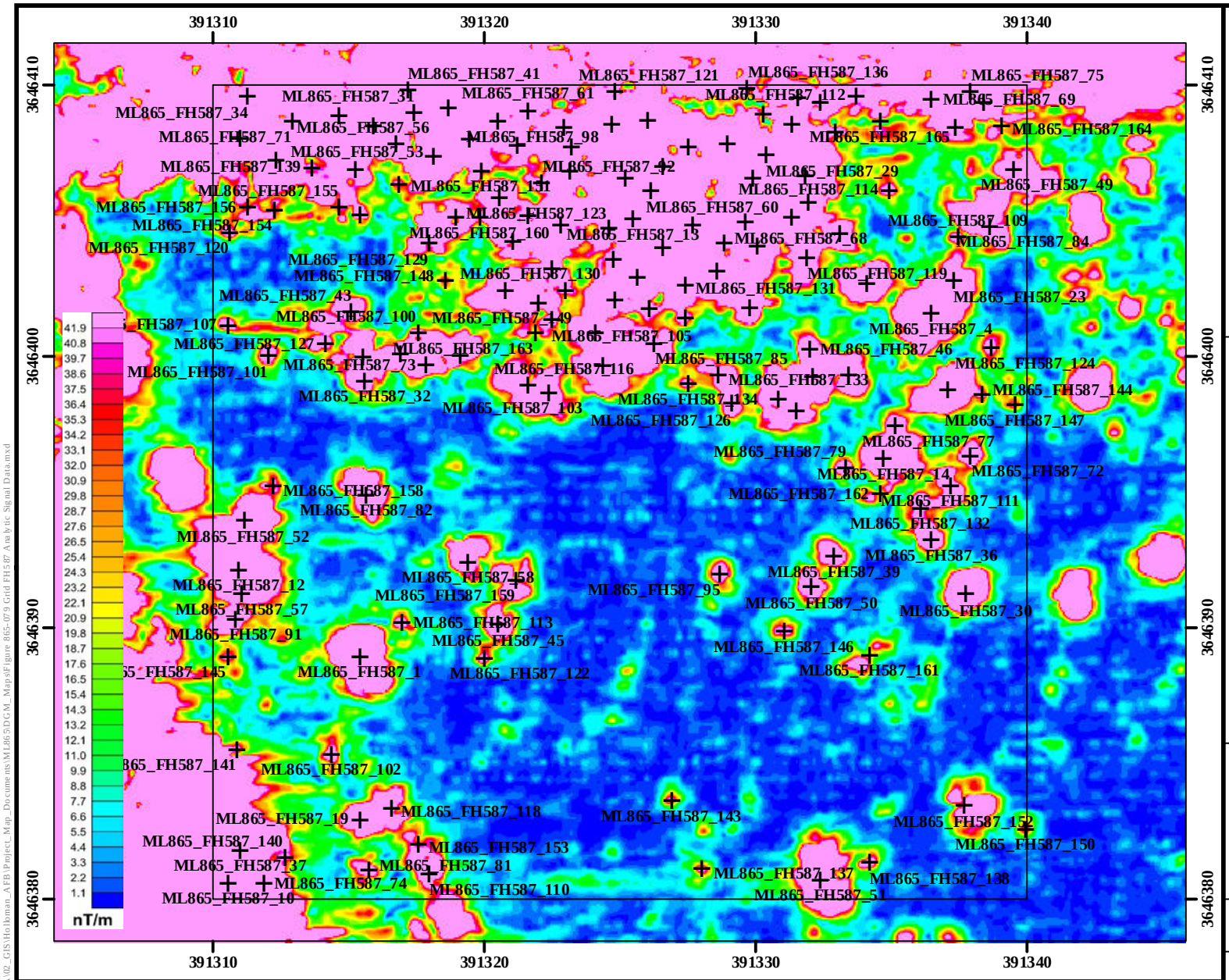
1 inch = 18 feet

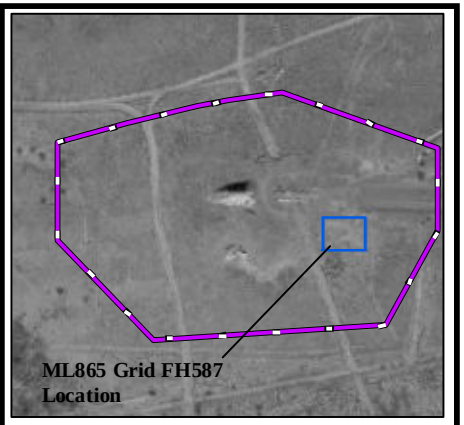
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-078 Grid FH588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

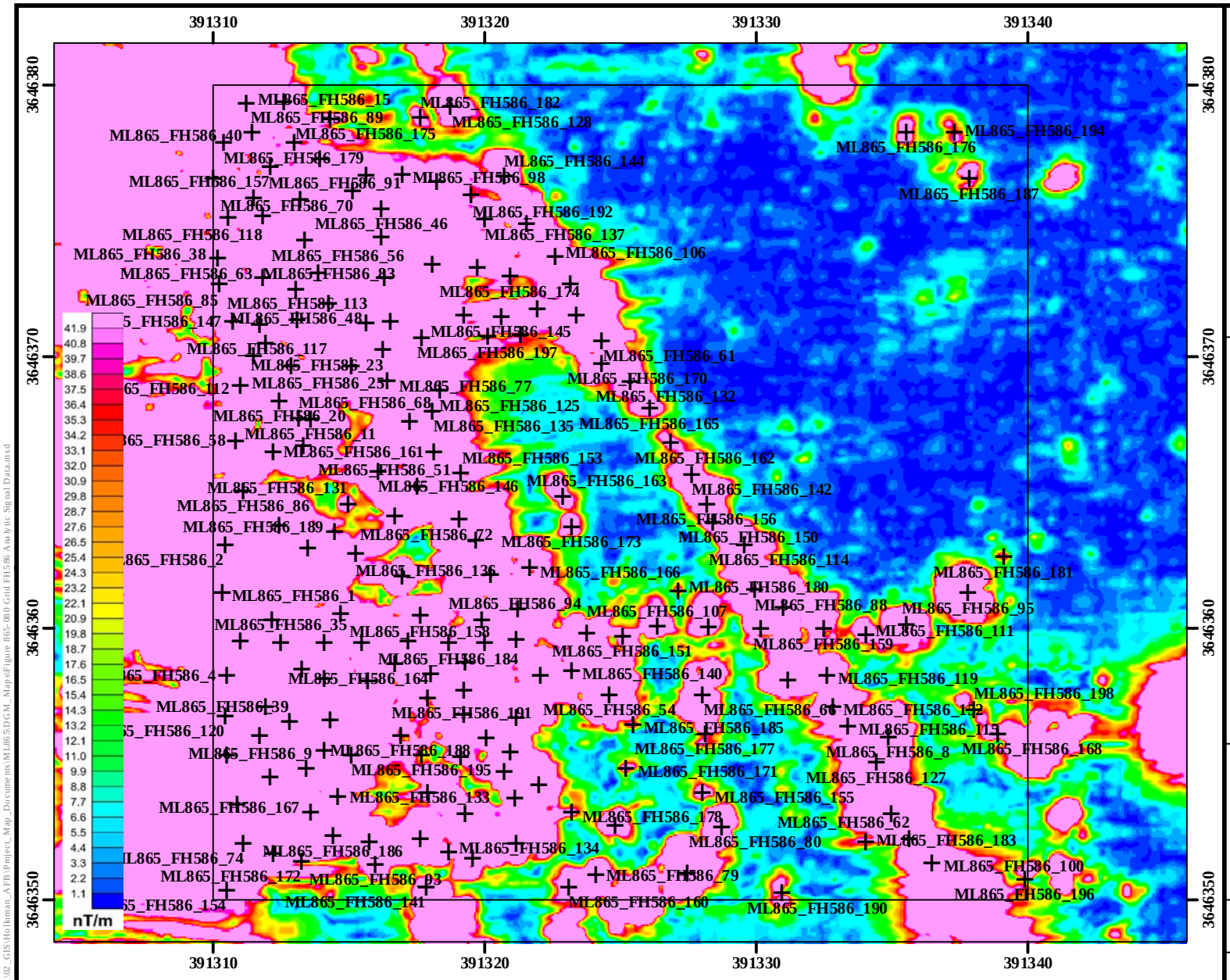
FIGURE 865-79

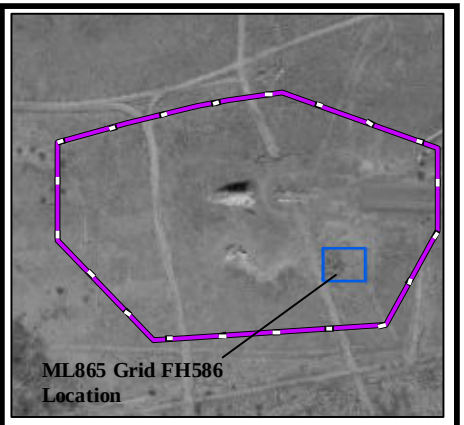
G-858 Analytic Signal
Grid FH587 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-079 Grid FH587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-80

G-858 Analytic Signal
Grid FH586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: NAD 1983 CORS96
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

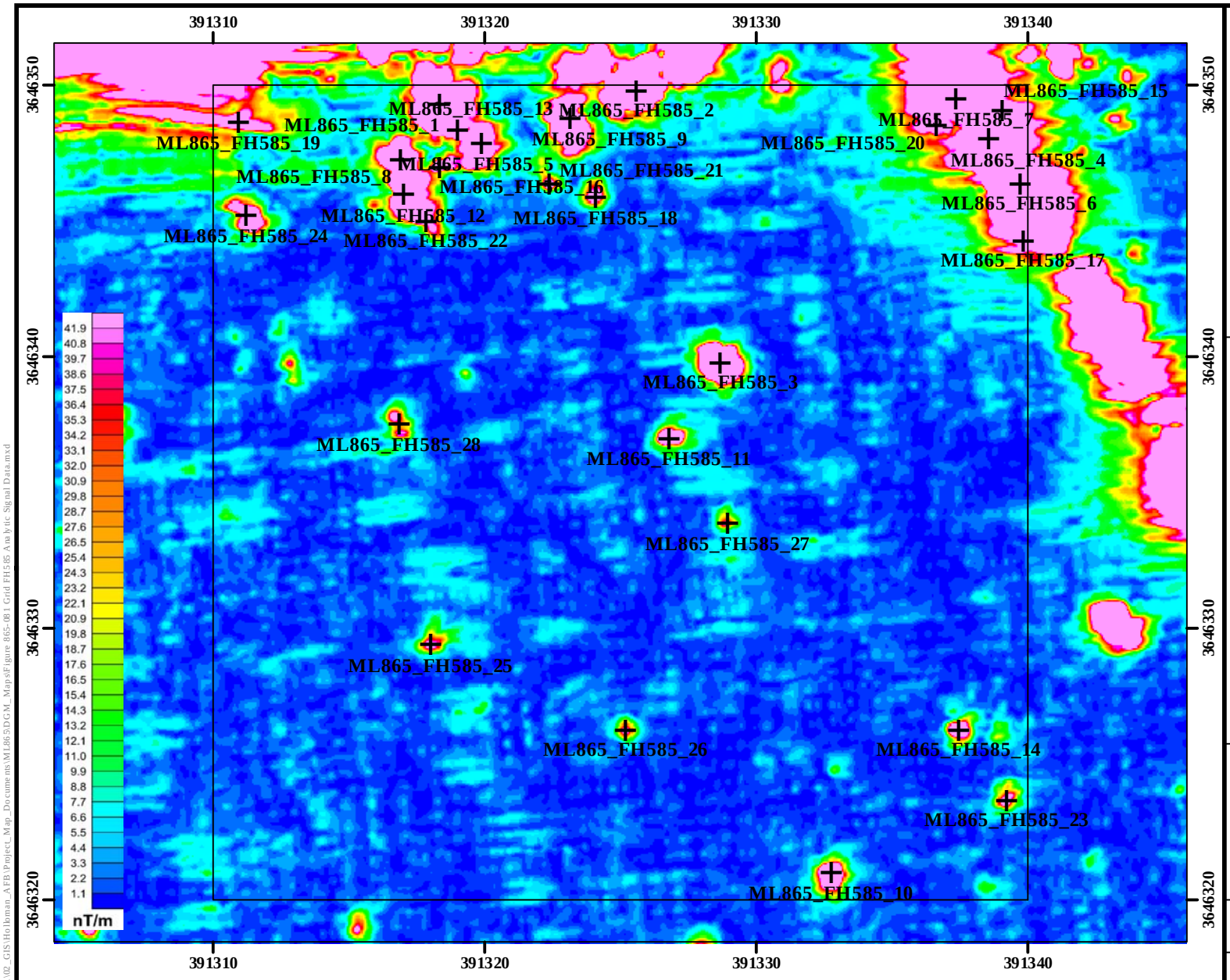
1 inch = 18 feet

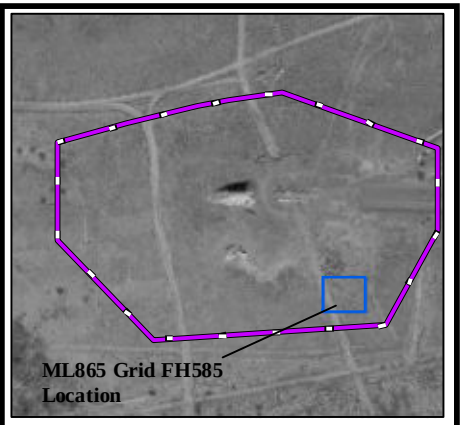
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-080 Grid FH586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-81

G-858 Analytic Signal
Grid FH585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

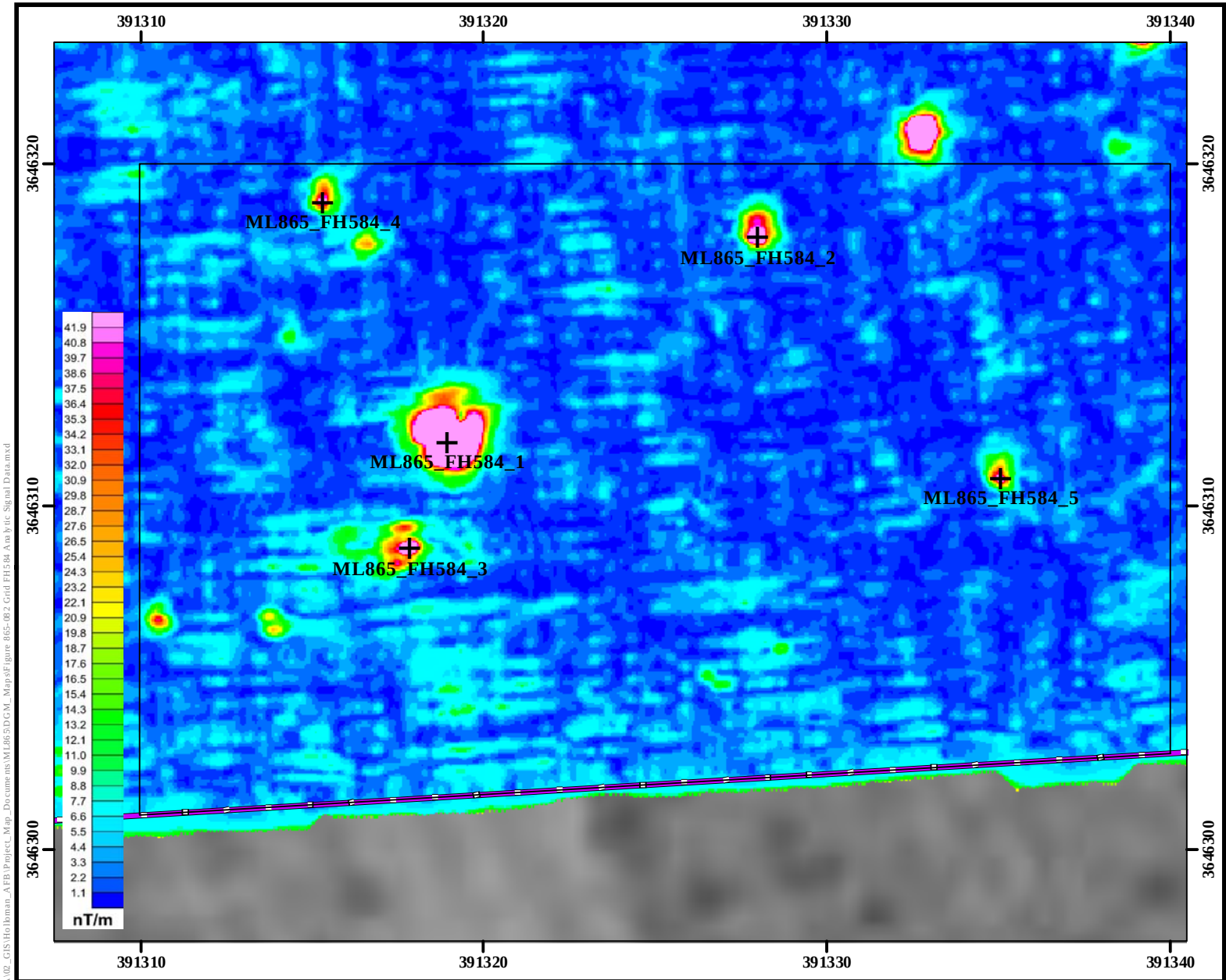
1 inch = 18 feet

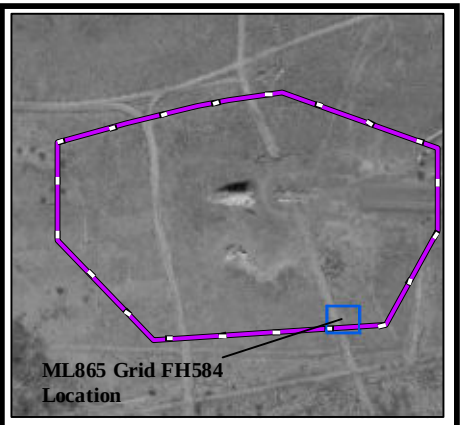
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sea1\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-081 Grid FH585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-82

G-858 Analytic Signal
Grid FH584 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

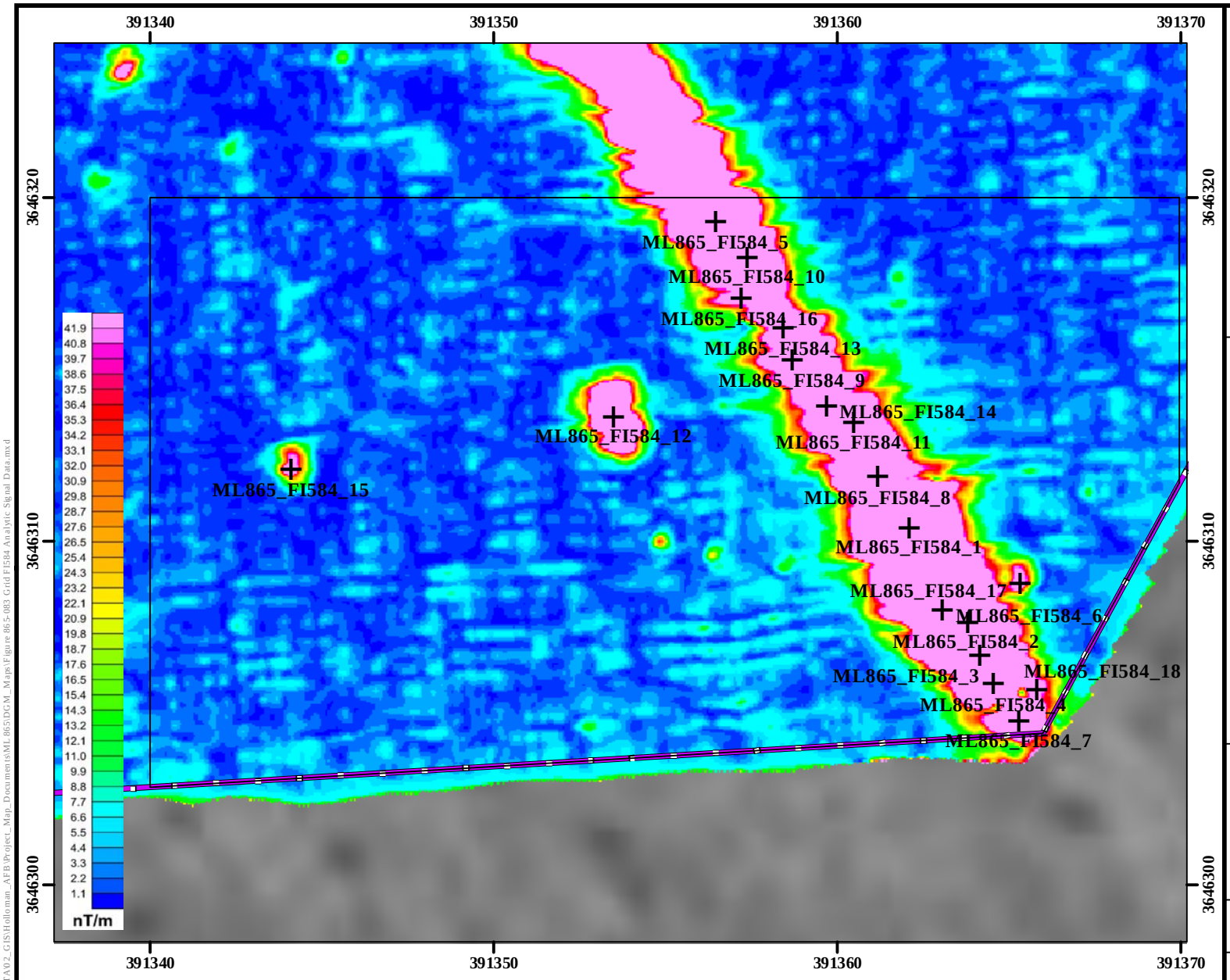
1 inch = 14 feet

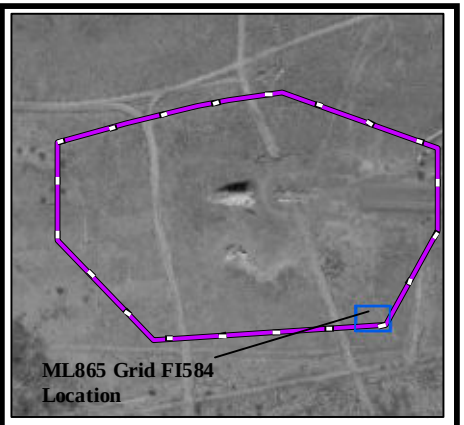
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-082 Grid FH584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 14 feet

0 1.5 3 Meters

0 5 10 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

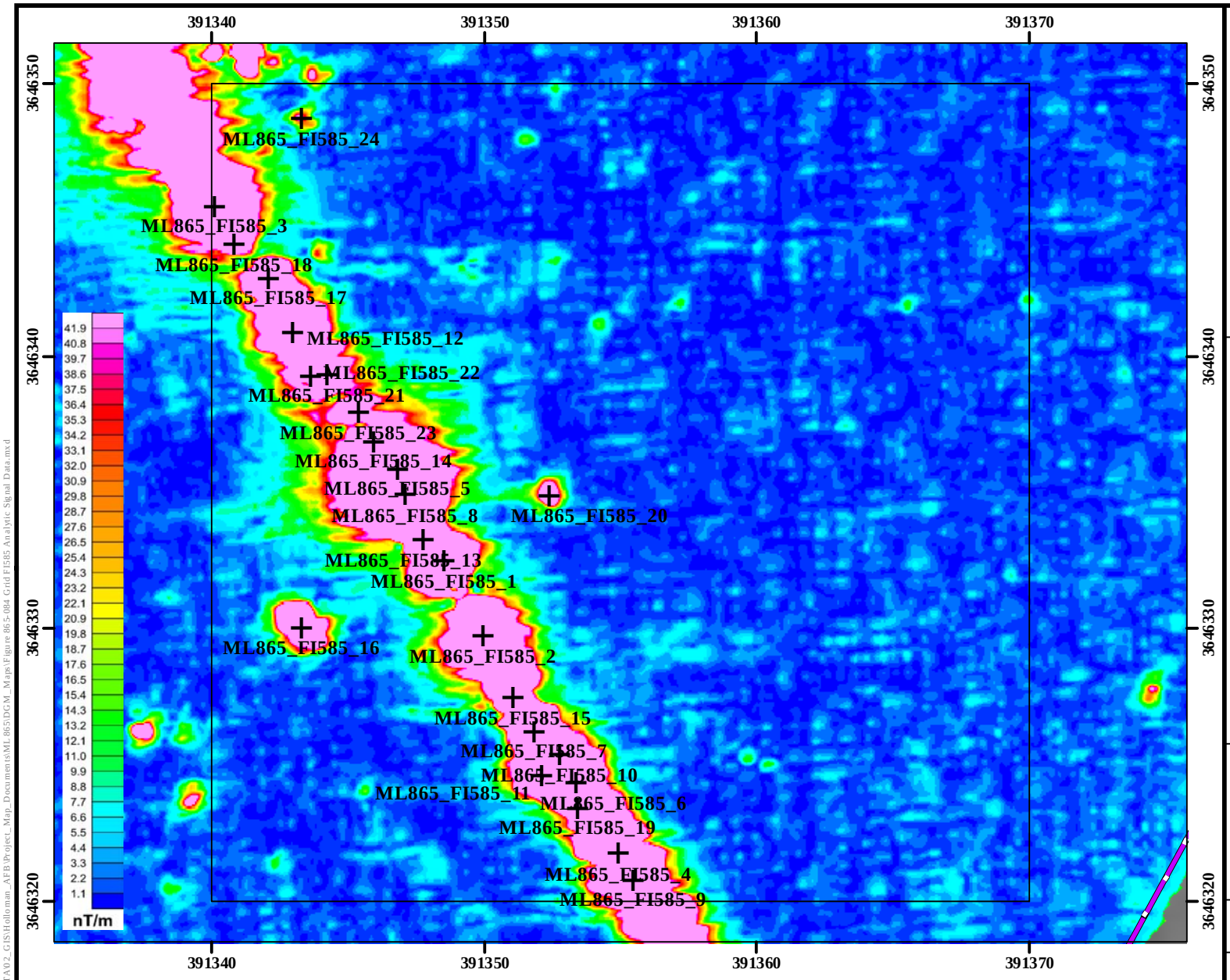
FIGURE 865-83

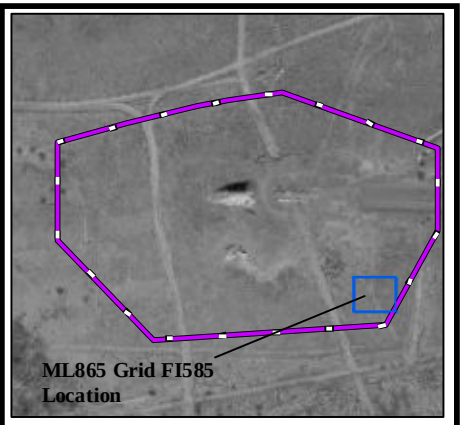
G-858 Analytic Signal
Grid FI584 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-083 Grid FI584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-84

G-858 Analytic Signal
Grid FI585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

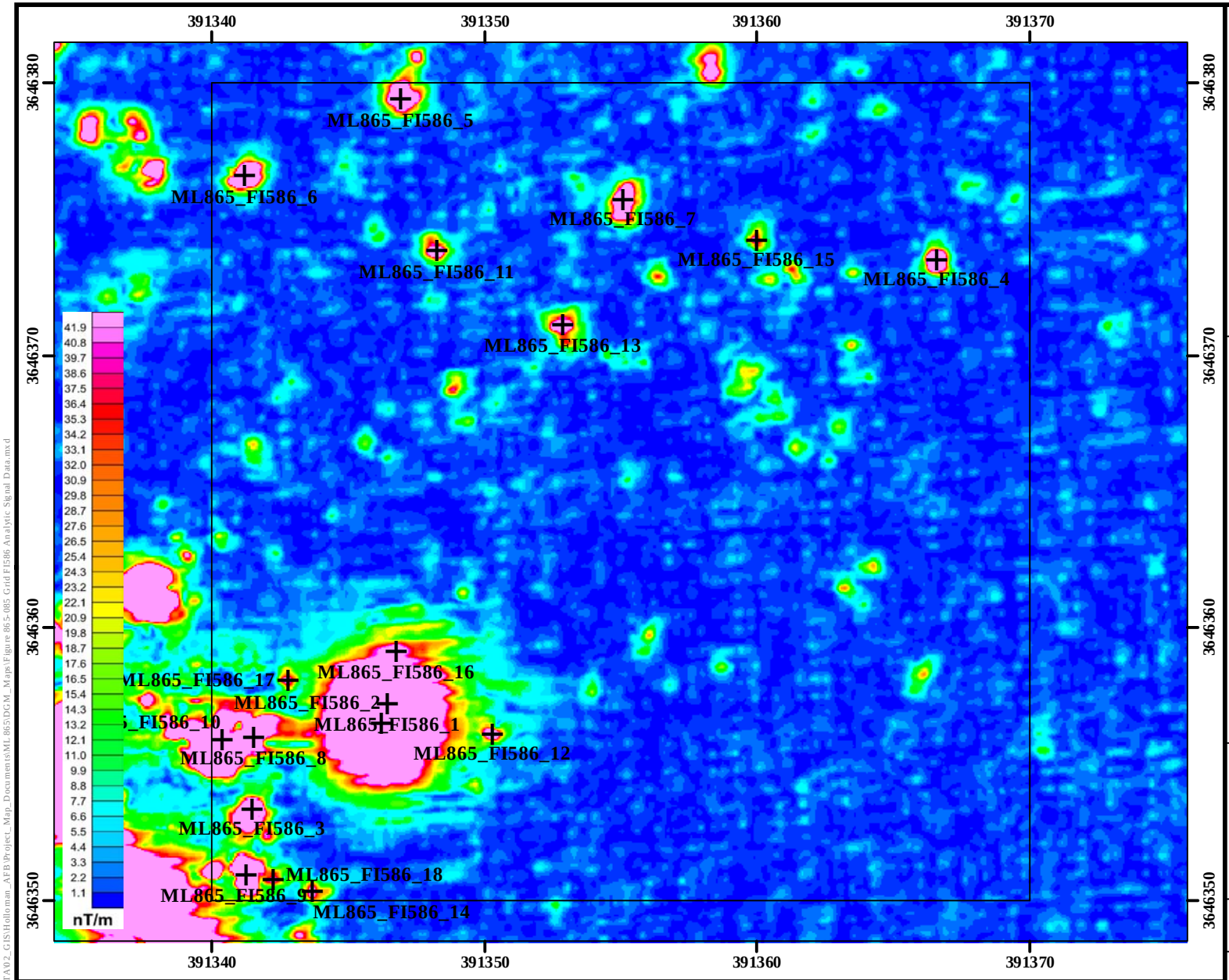
1 inch = 18 feet

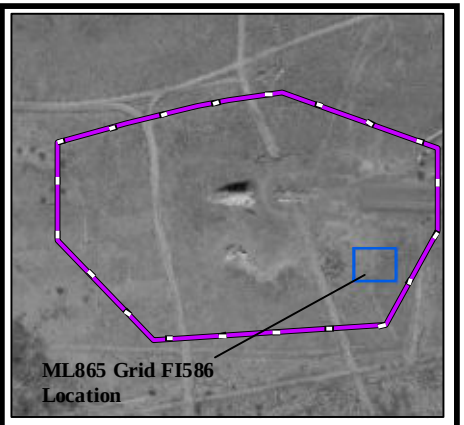
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-084 Grid FI585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-85

G-858 Analytic Signal
Grid FI586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

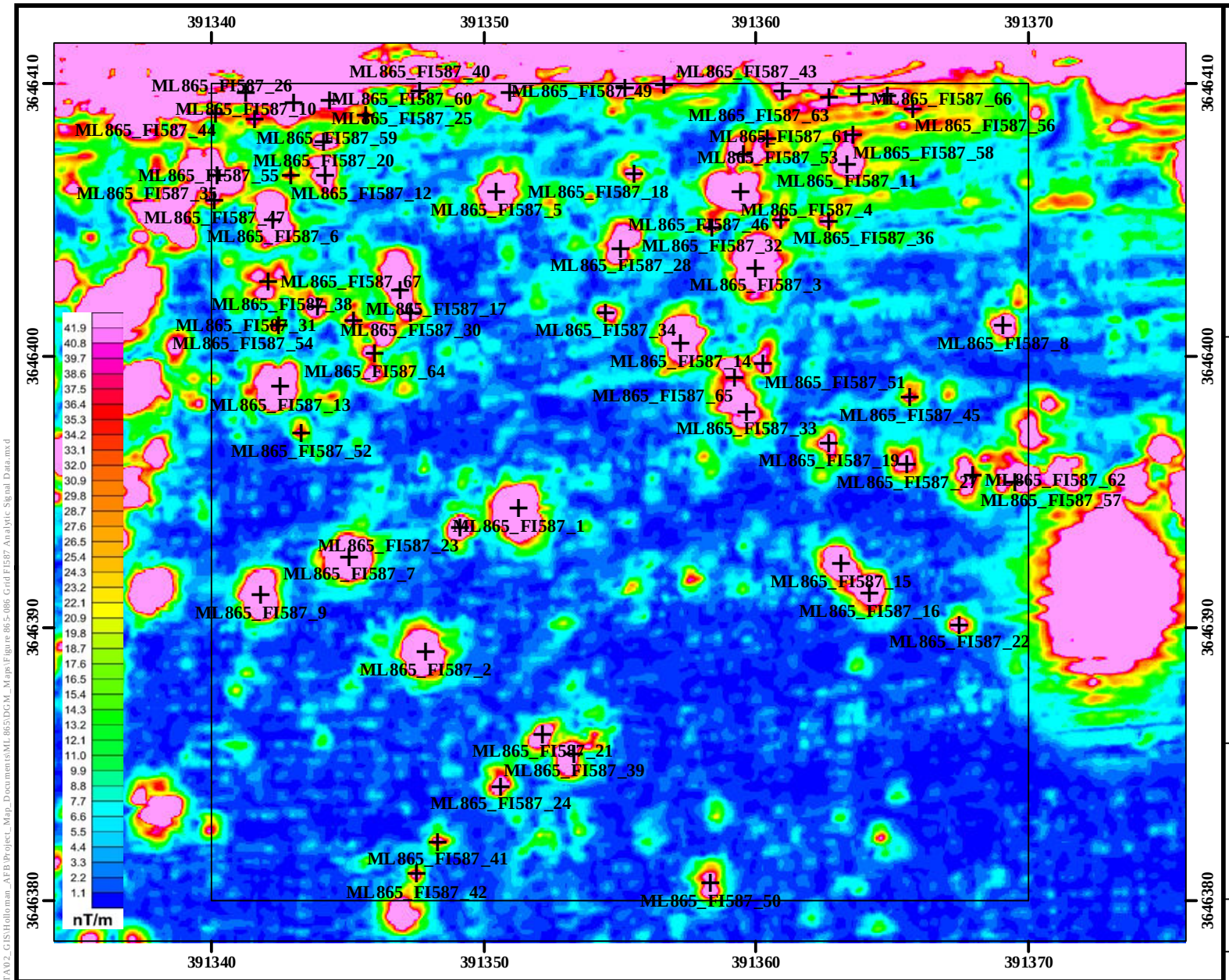
1 inch = 18 feet

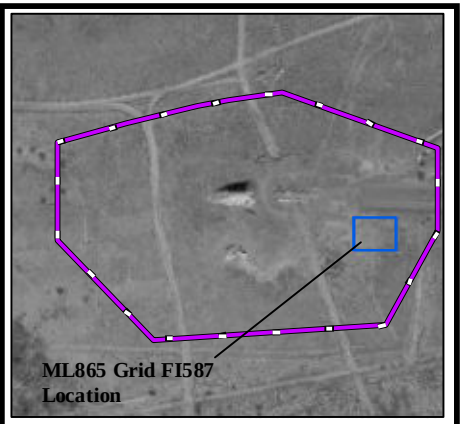
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-085 Grid FI586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 18 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

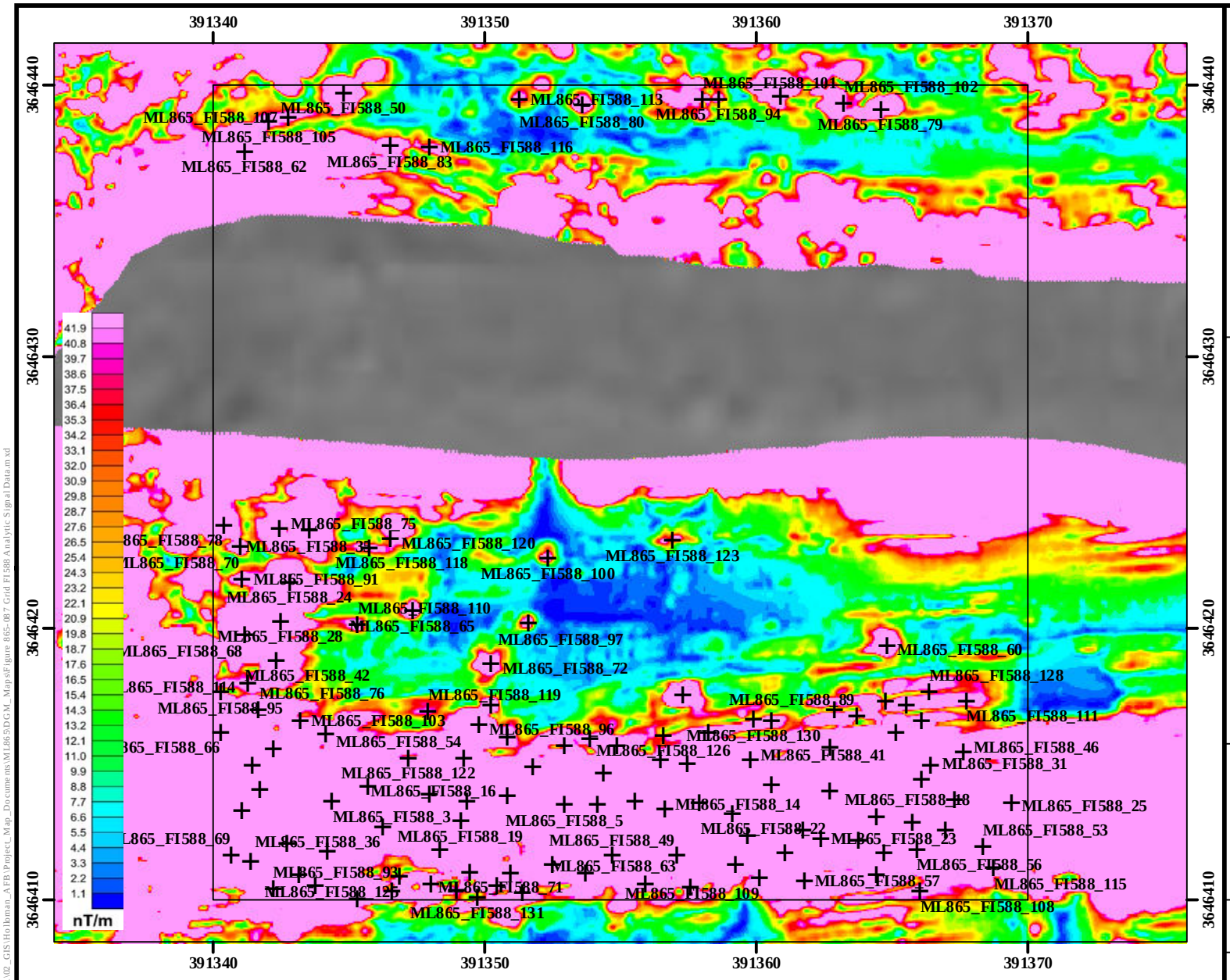
FIGURE 865-86

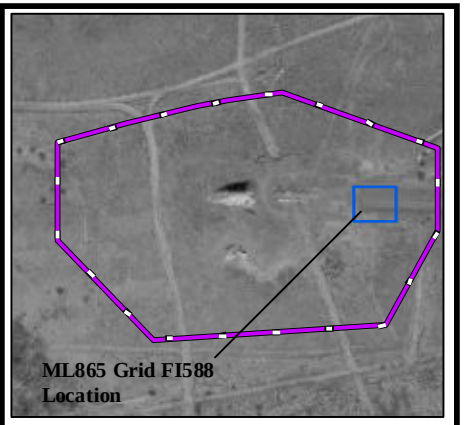
G-858 Analytic Signal
Grid FI587 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-086 Grid FI587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-87

G-858 Analytic Signal
Grid FI588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

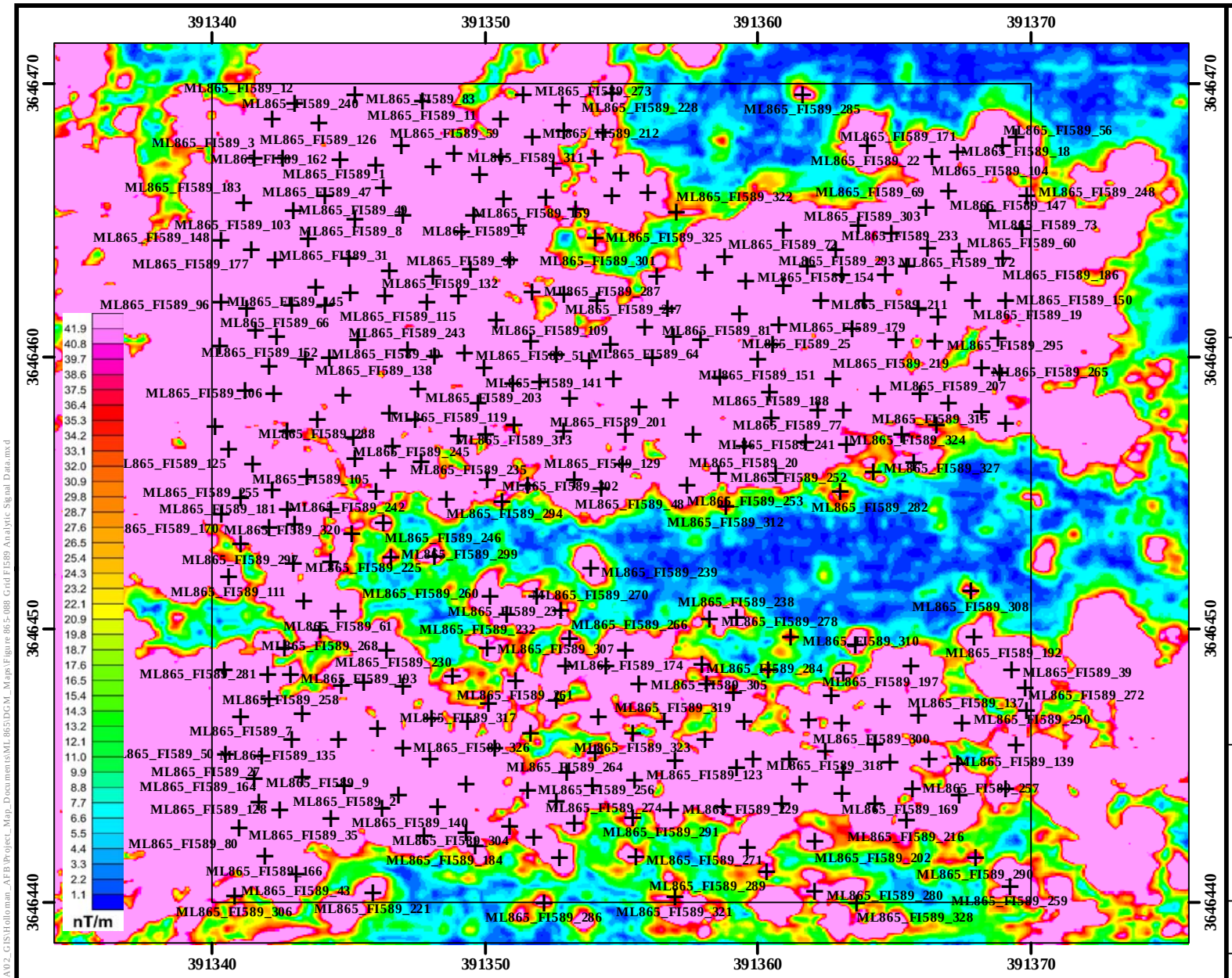
1 inch = 18 feet

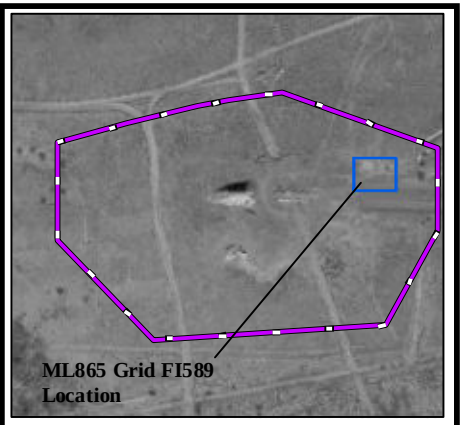
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-087 Grid FI588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-88

G-858 Analytic Signal
Grid FI589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

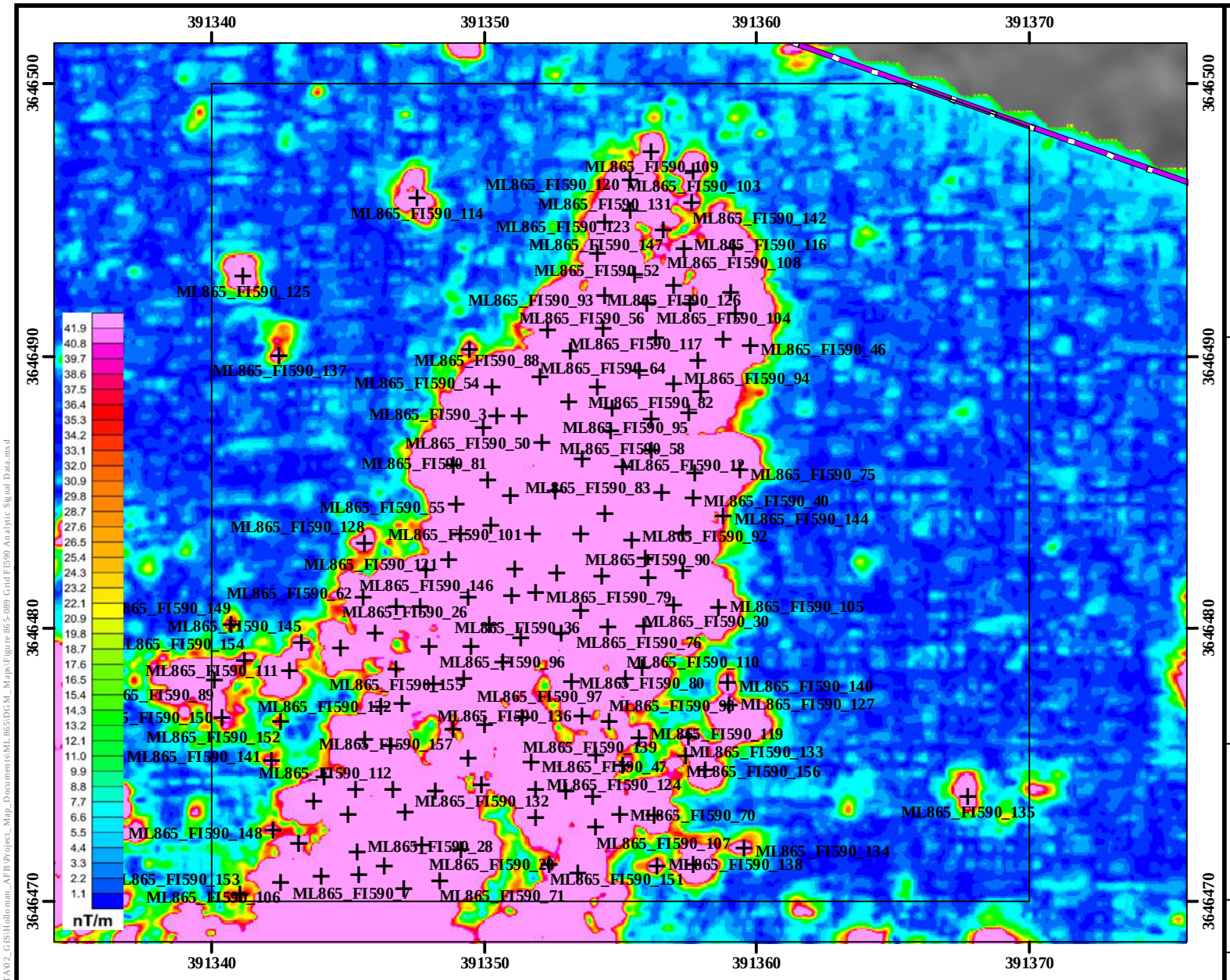
1 inch = 18 feet

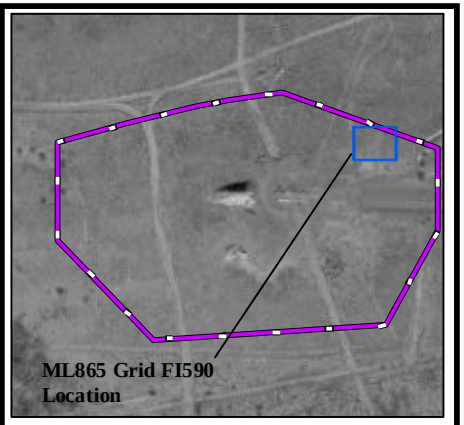
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-088 Grid FI589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-89

G-858 Analytic Signal
Grid FI590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

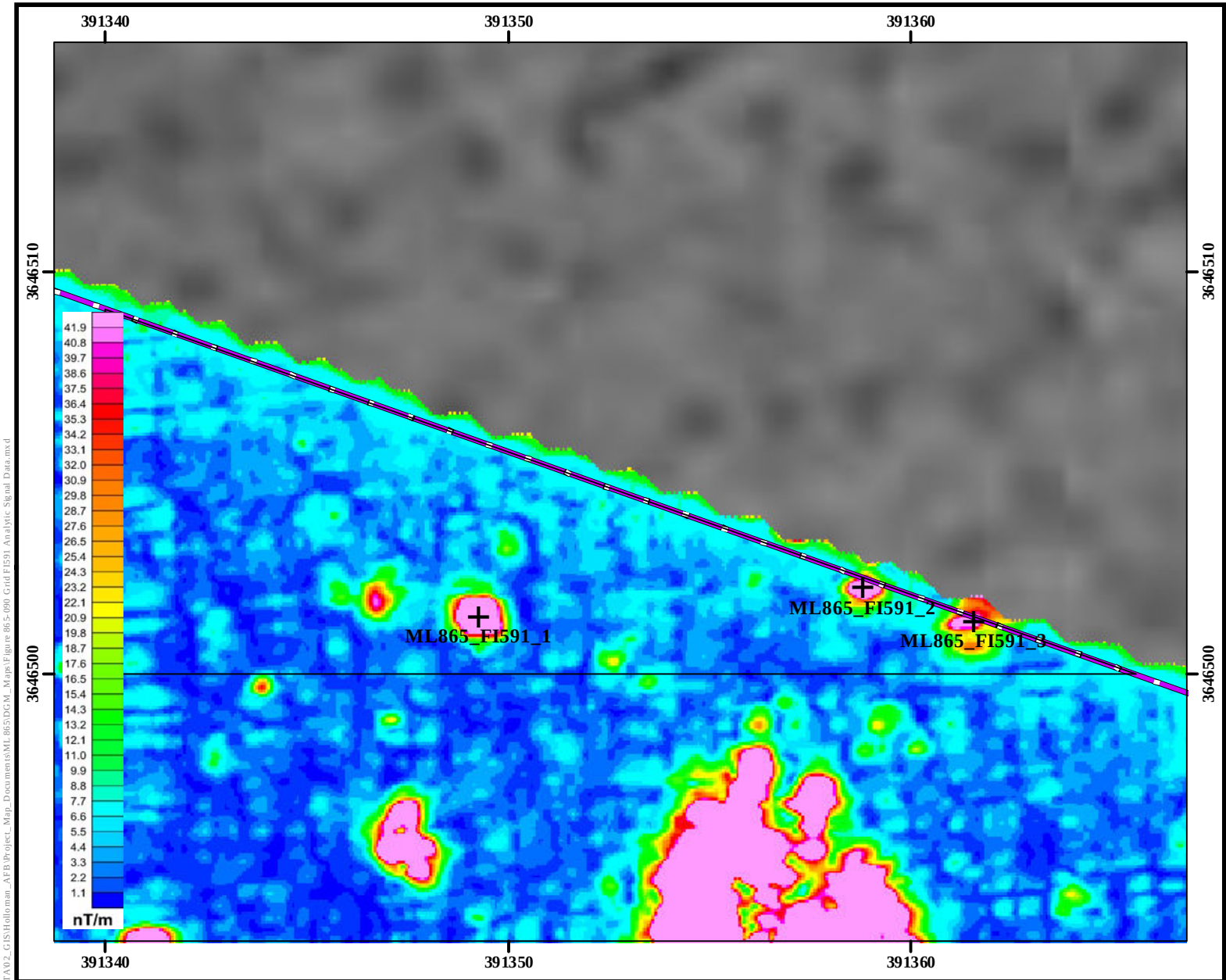
1 inch = 18 feet

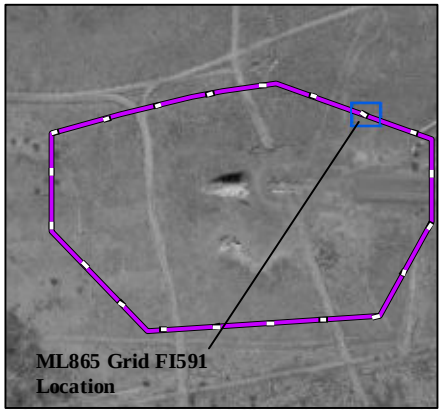
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-089 Grid FI590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-90

G-858 Analytic Signal
Grid FI591 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

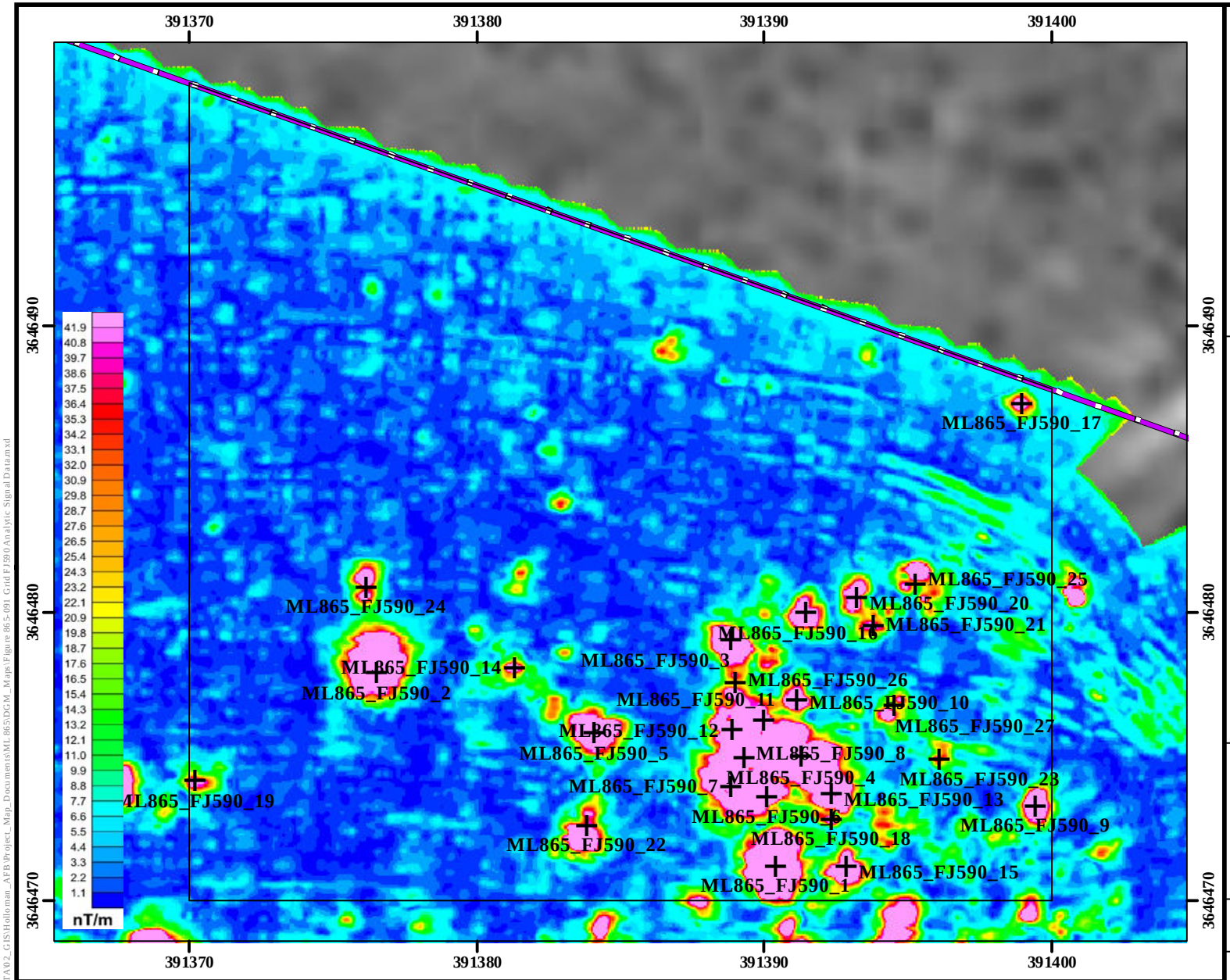
1 inch = 12 feet

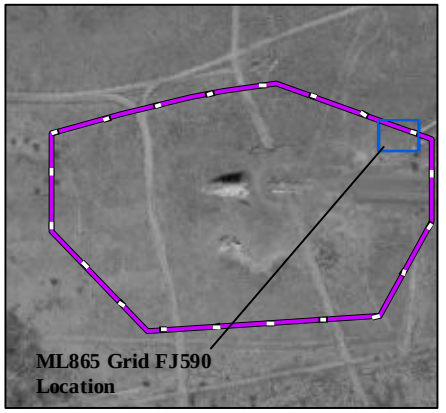
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-090 Grid FI591 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-91

G-858 Analytic Signal
Grid FJ590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

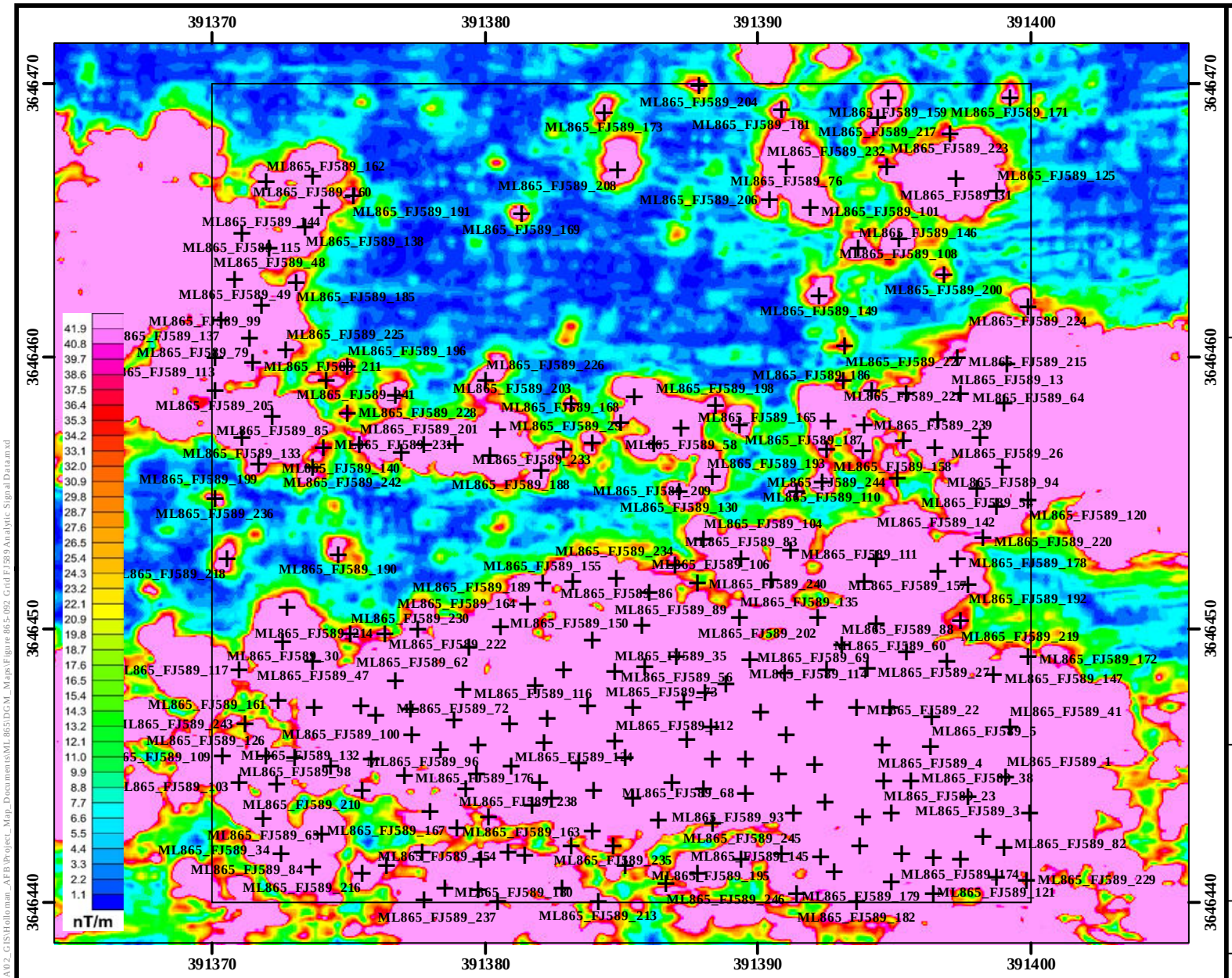
1 inch = 17 feet

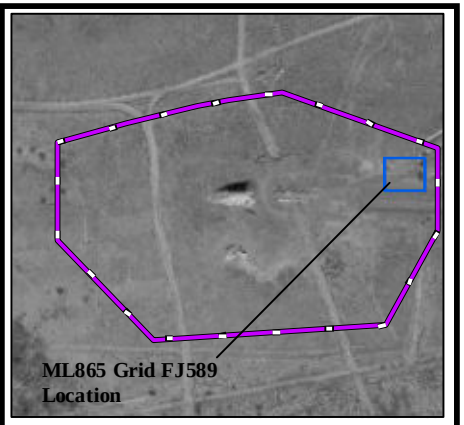
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-091 Grid FJ590 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-92

G-858 Analytic Signal
Grid FJ589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: North American 1983
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

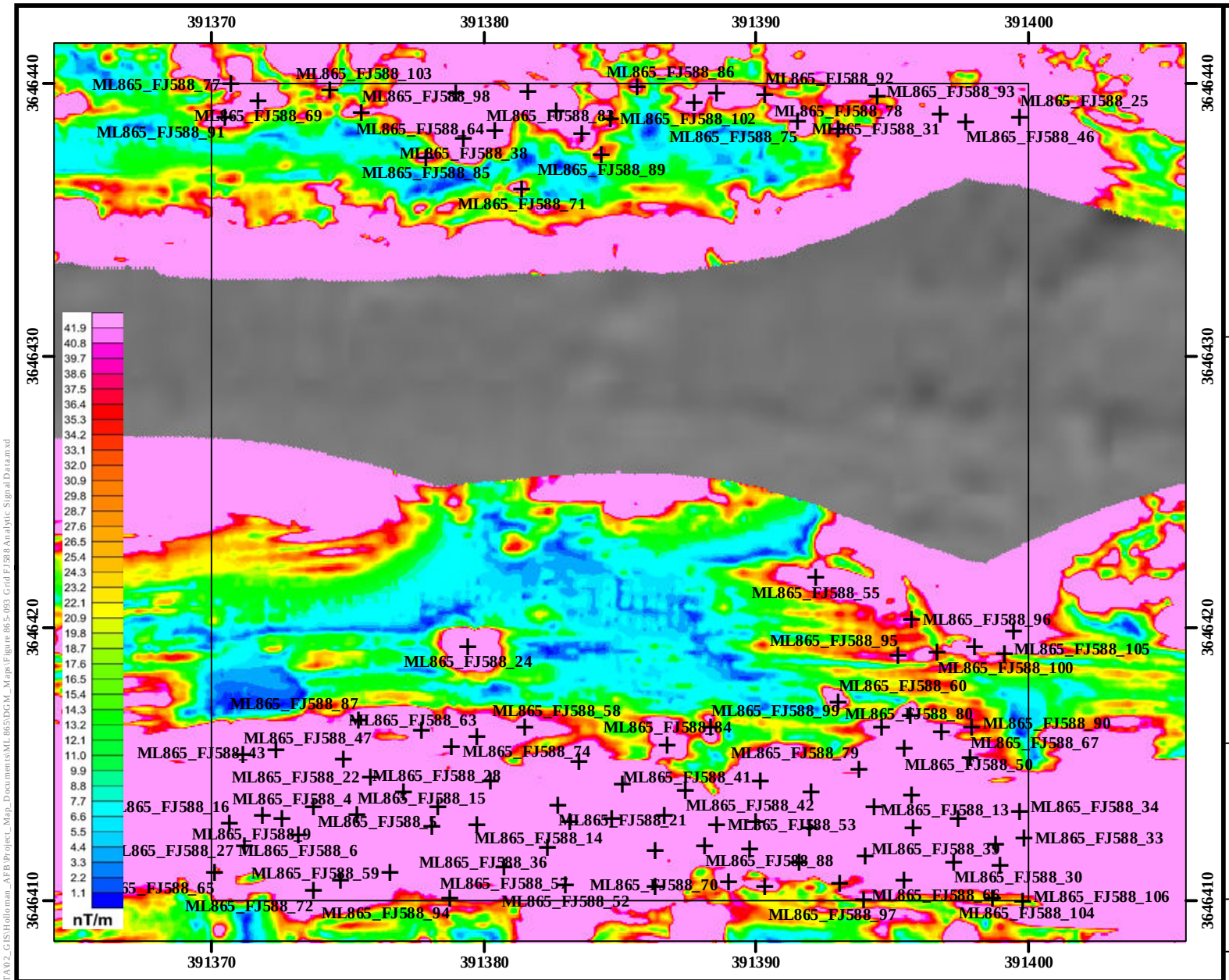
1 inch = 18 feet

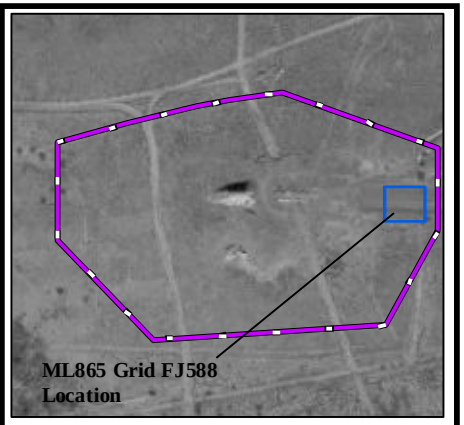
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-092 Grid FJ589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-93

G-858 Analytic Signal
Grid FJ588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

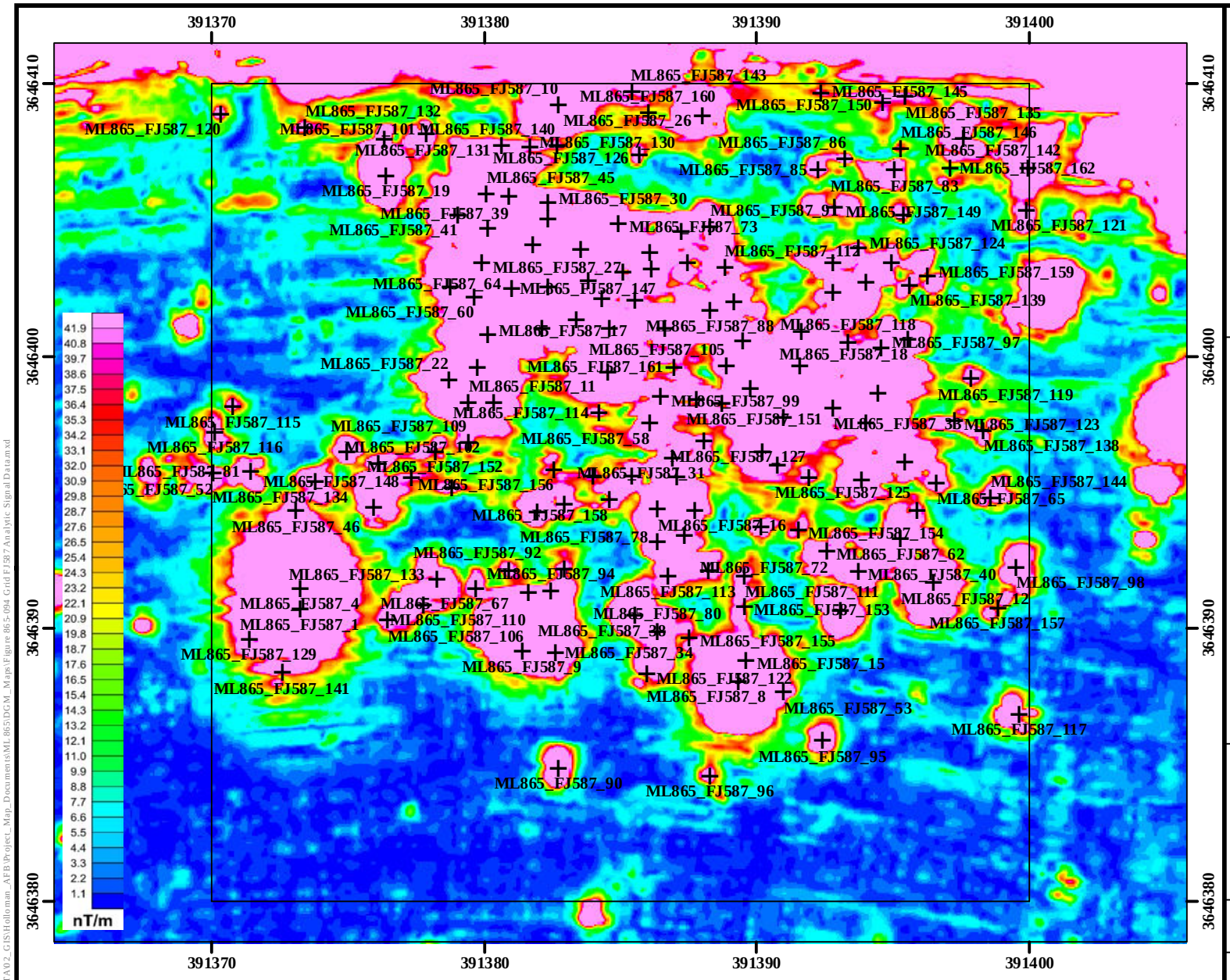
1 inch = 18 feet

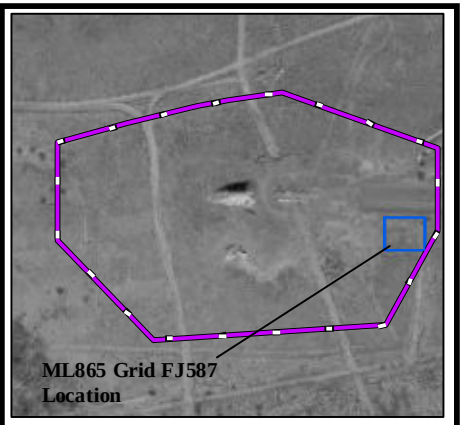
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-093 Grid FJ588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-94

G-858 Analytic Signal
Grid FJ587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
Horizontal Datum: North American 1983
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

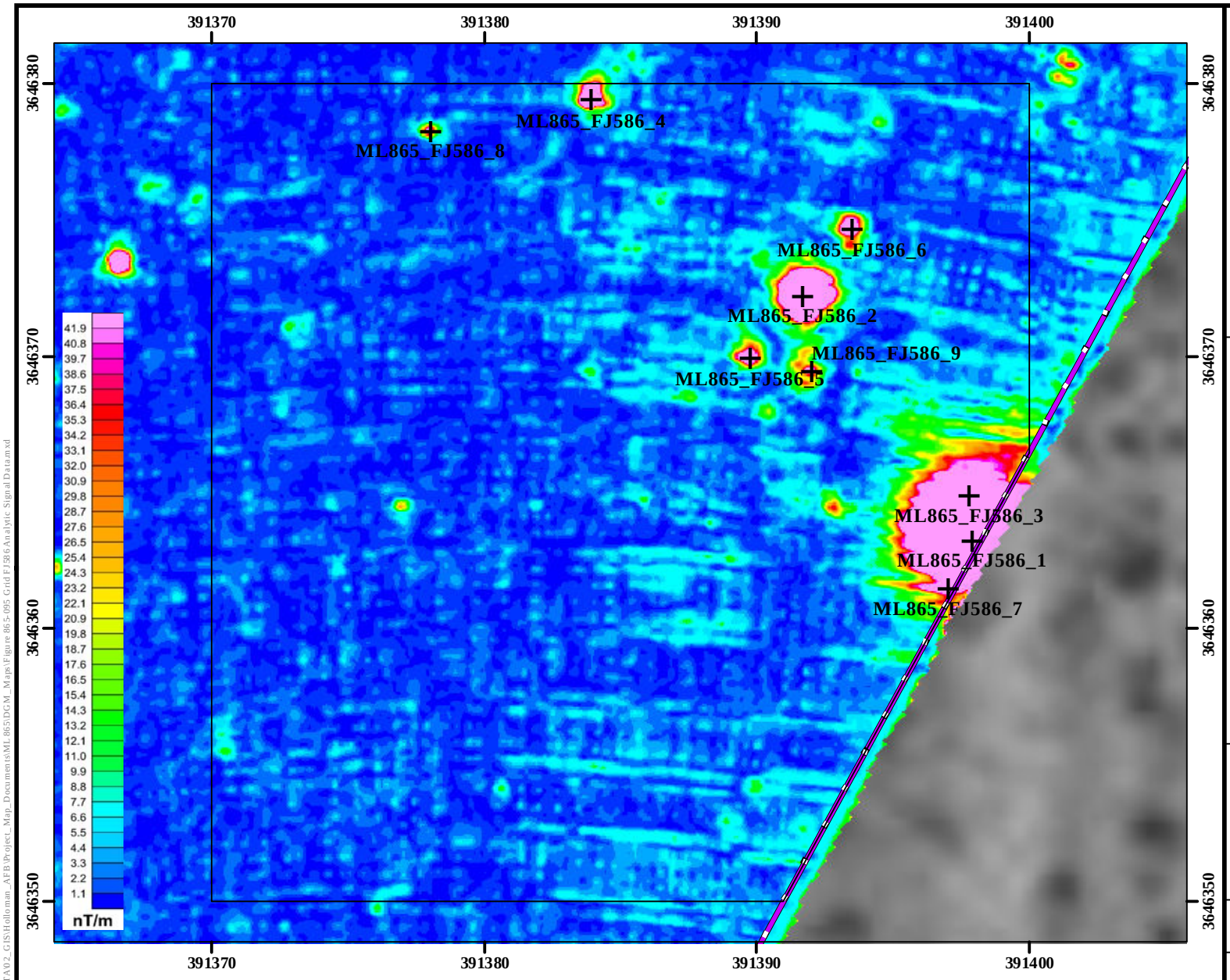
1 inch = 18 feet

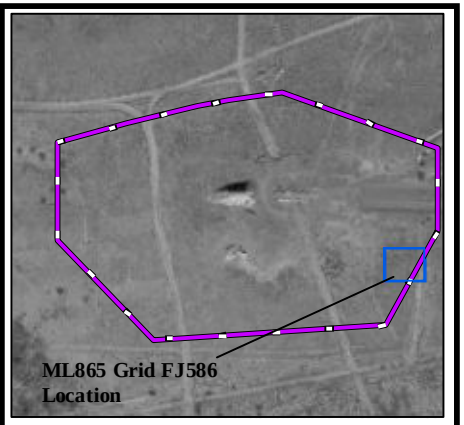
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-094 Grid FJ587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-95

G-858 Analytic Signal
Grid FJ586 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

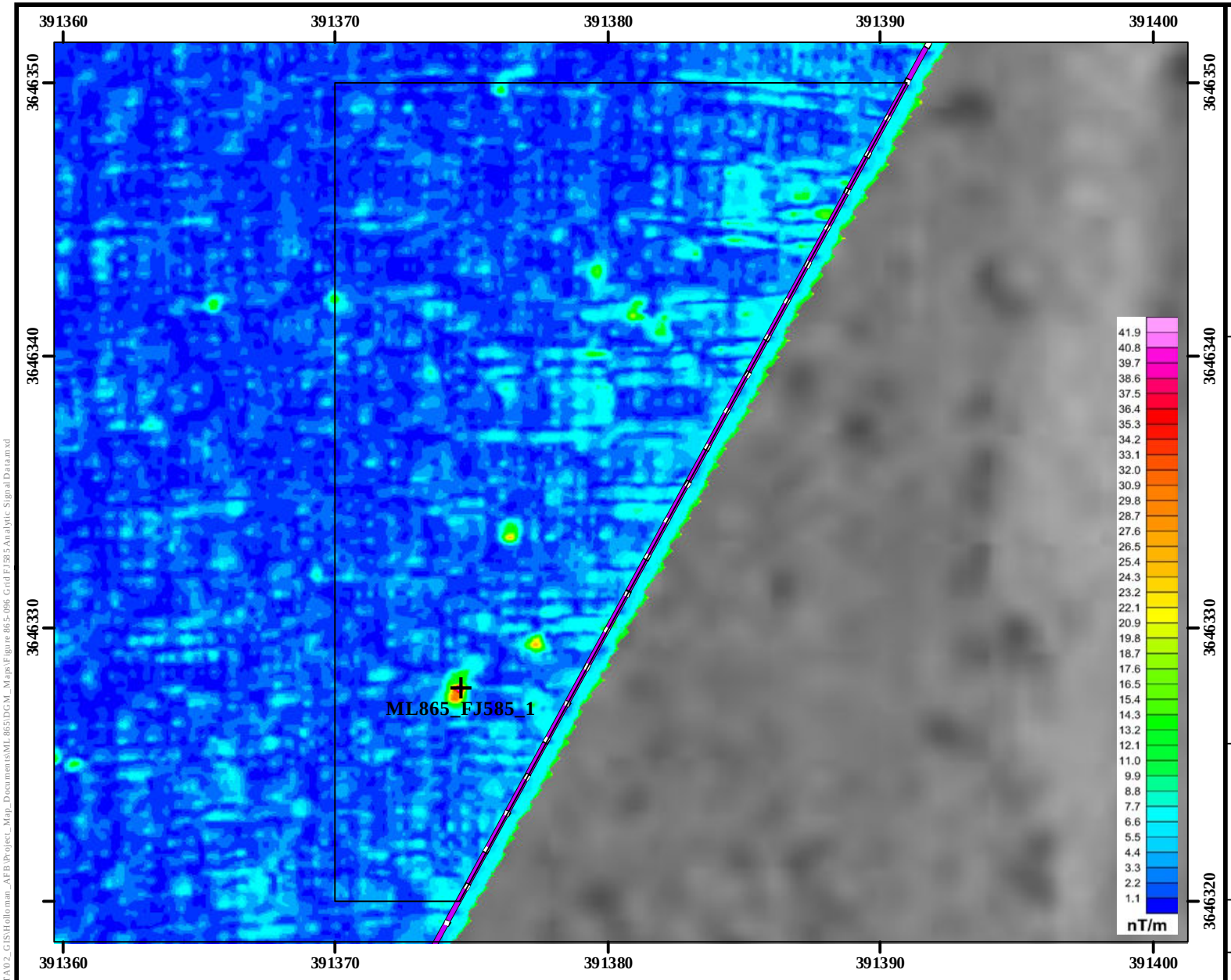
1 inch = 18 feet

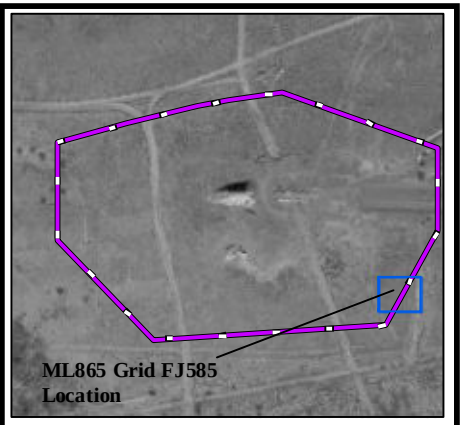
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-095 Grid FJ586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-96

G-858 Analytic Signal
Grid FJ585 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

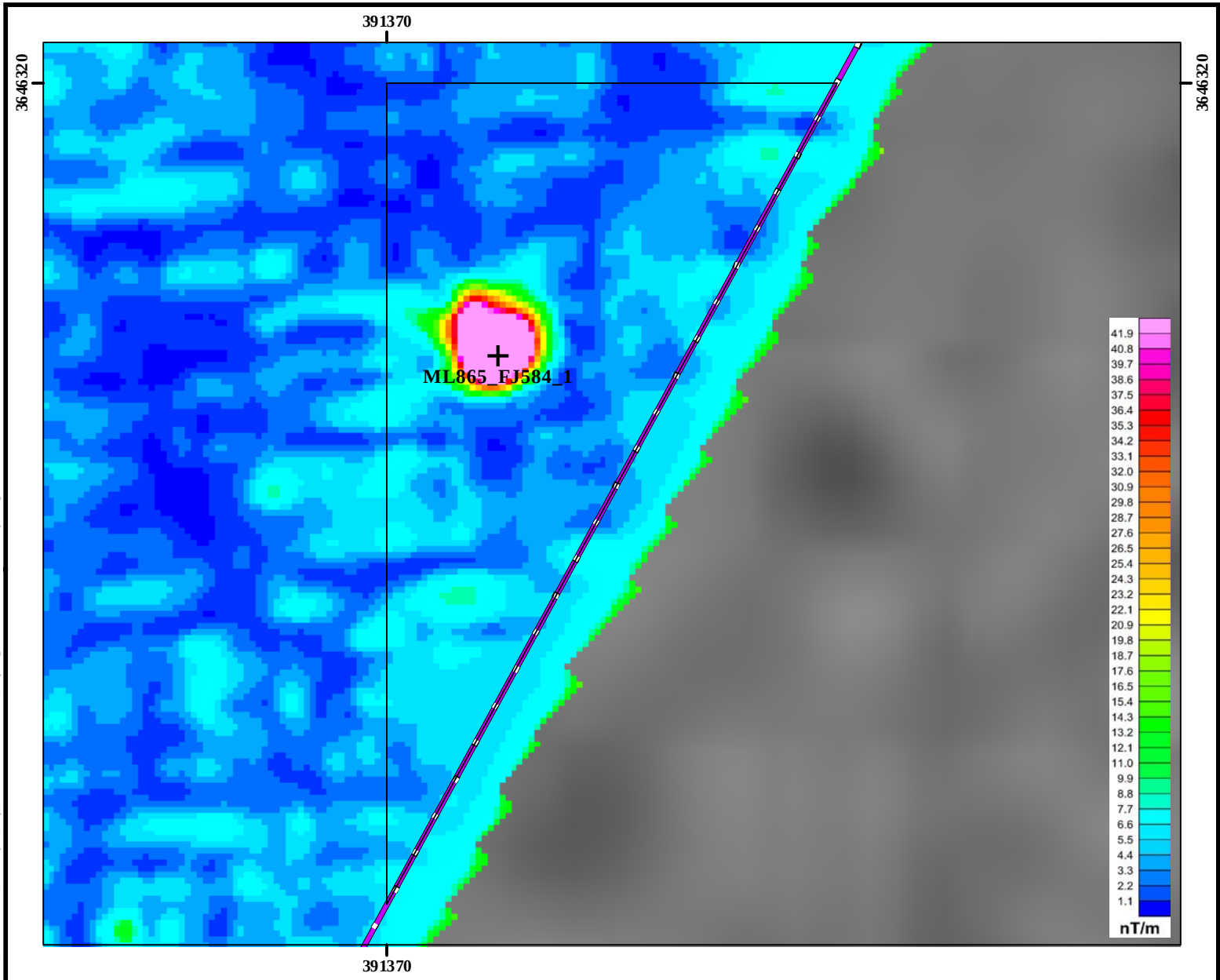
1 inch = 18 feet

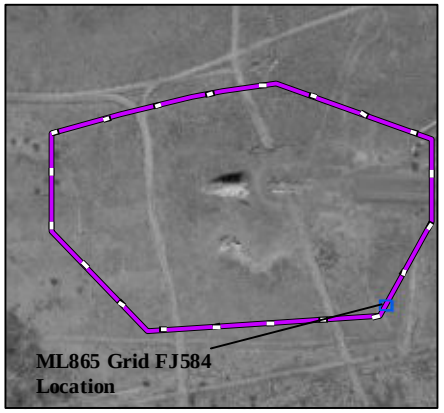
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-096 Grid FJ585 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 5 feet

0 0.75 1.5 Meters

0 2.5 5 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

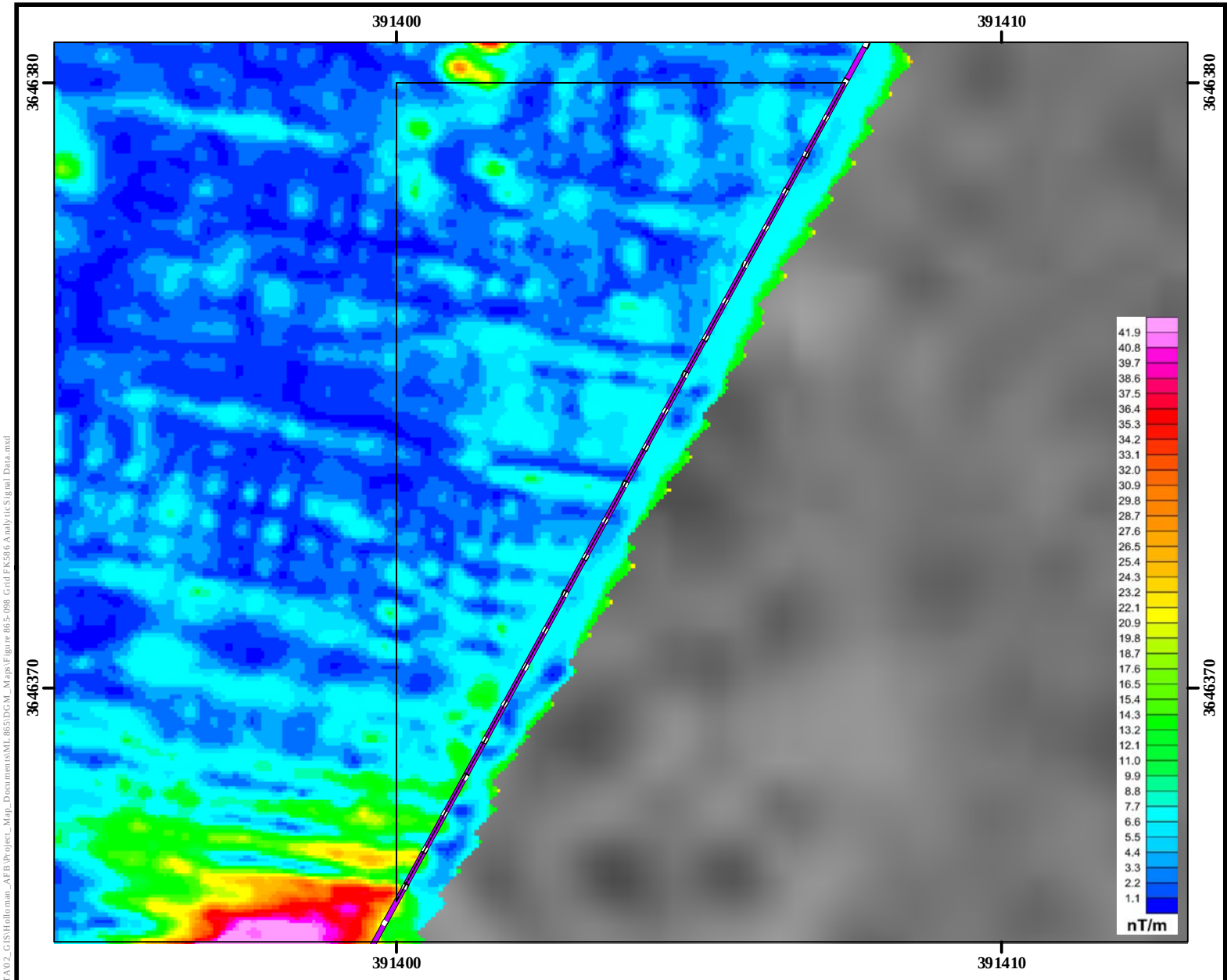
FIGURE 865-97

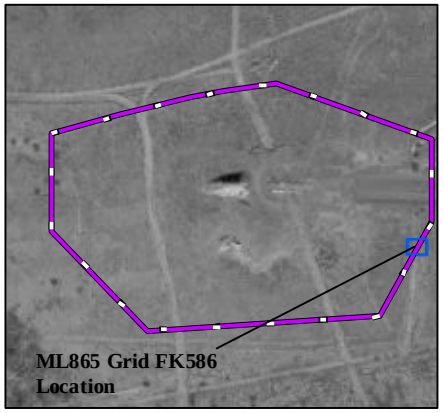
G-858 Analytic Signal
Grid FJ584 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-097 Grid FJ584 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 8 feet

0 1 2 Meters

0 3.5 7 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

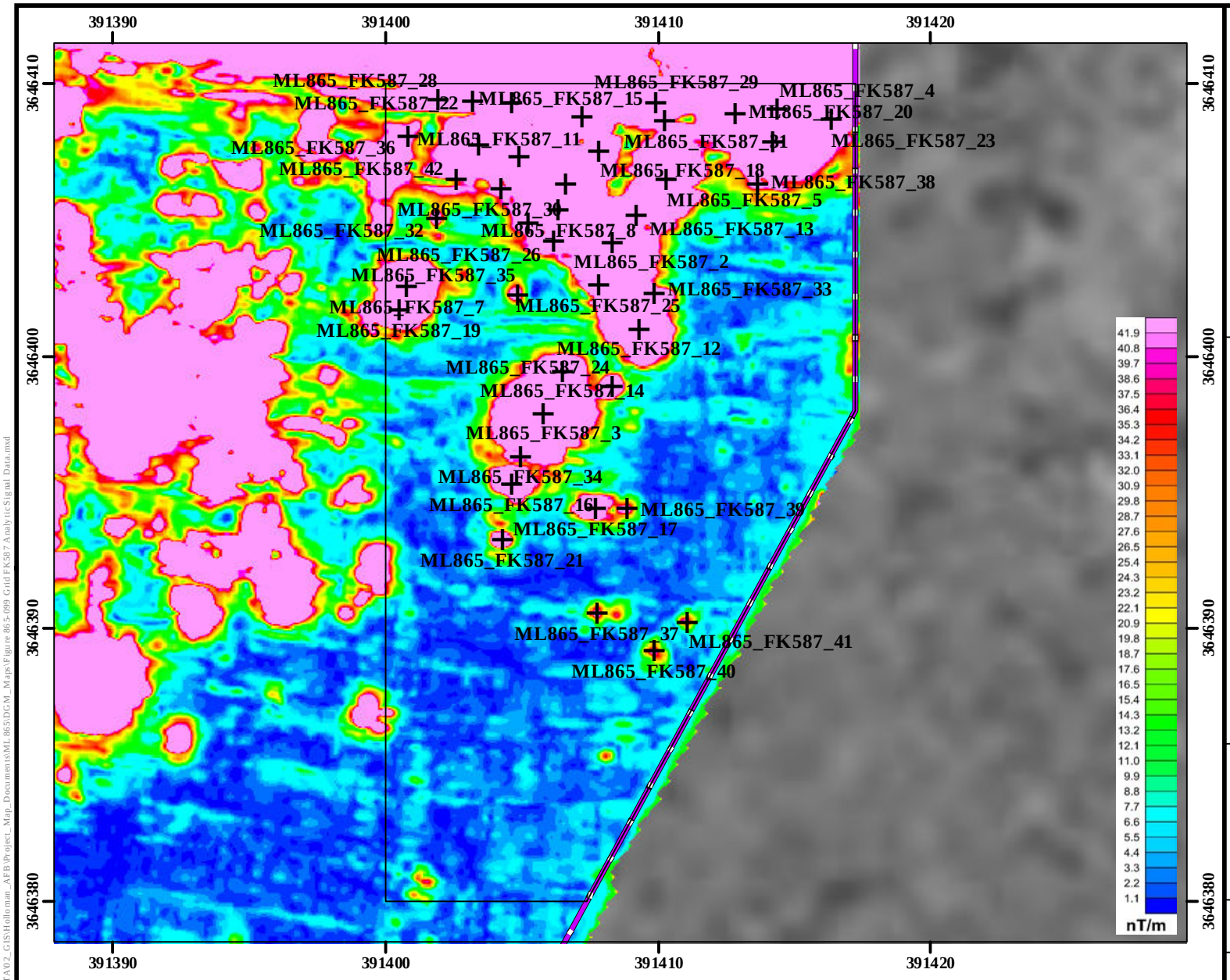
FIGURE 865-98

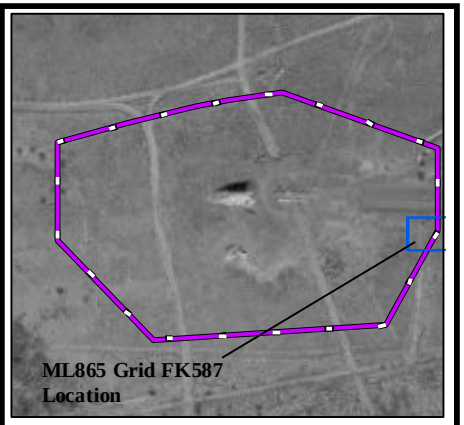
G-858 Analytic Signal
Grid FK586 ML865 MRS

FPM Remediations, Inc.

2015

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-098 Grid FK586 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-99

G-858 Analytic Signal
Grid FK587 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

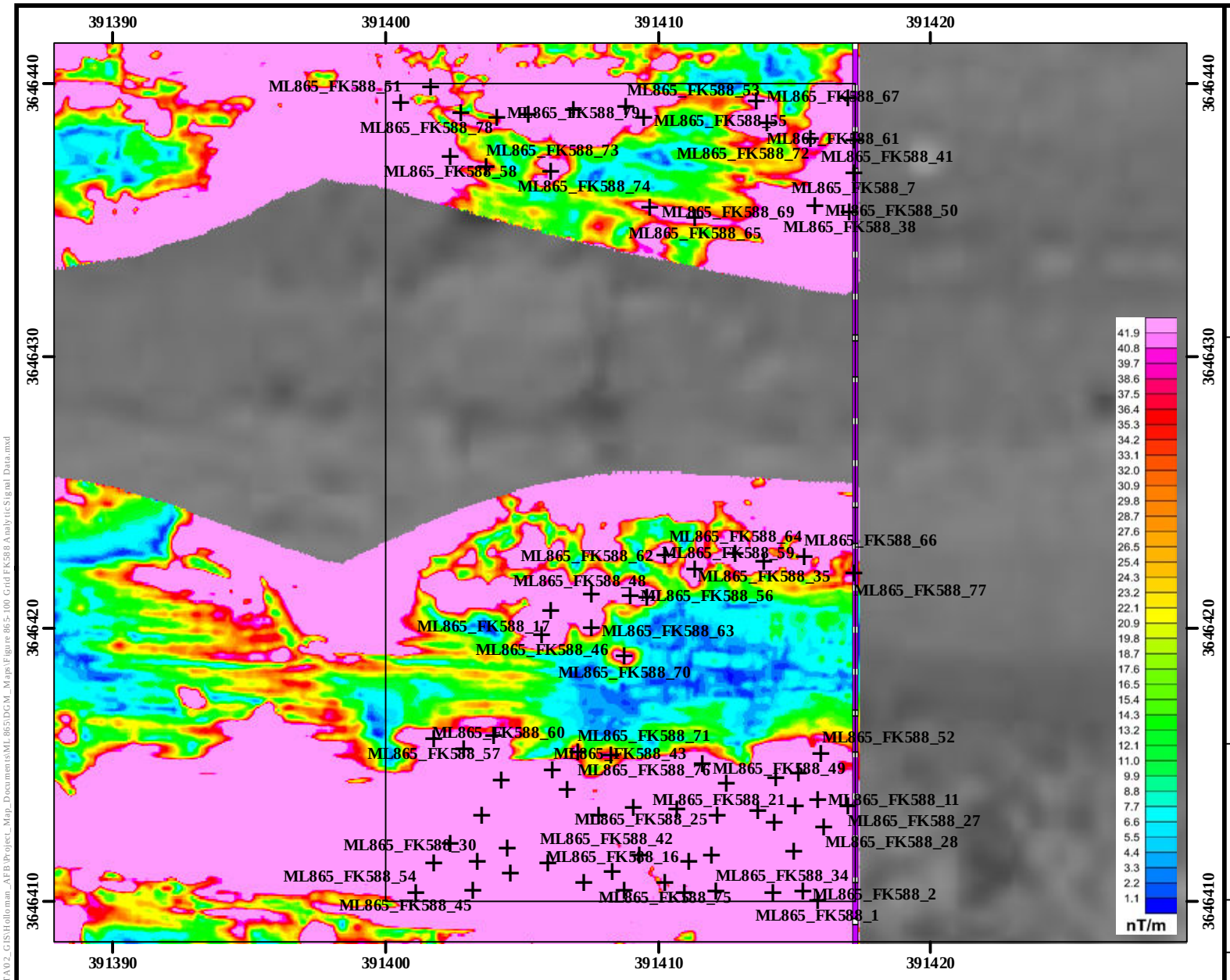
1 inch = 18 feet

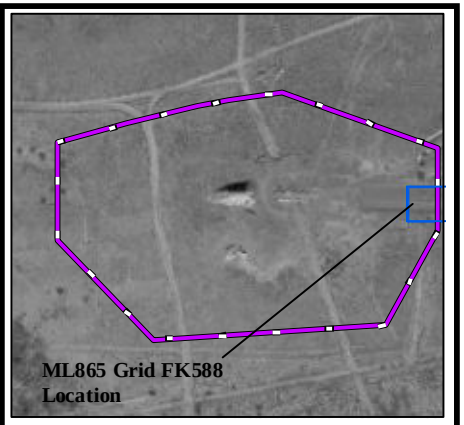
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-099 Grid FK587 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-100

G-858 Analytic Signal
Grid FK588 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

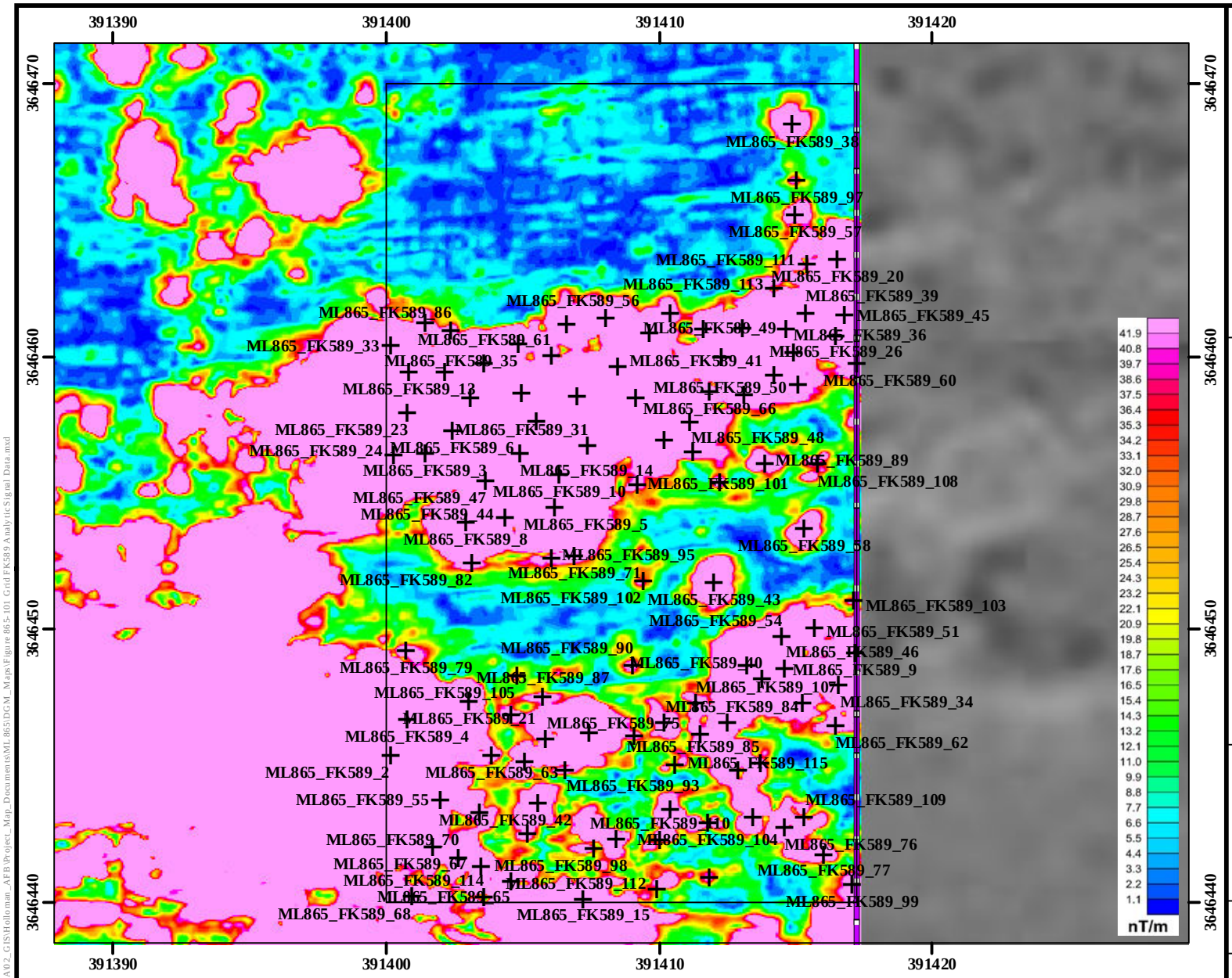
1 inch = 18 feet

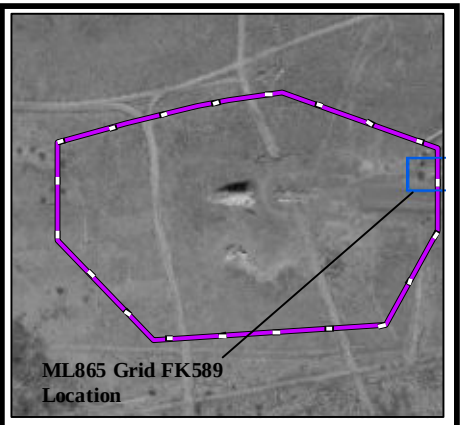
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-100 Grid FK588 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-101

G-858 Analytic Signal
Grid FK589 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

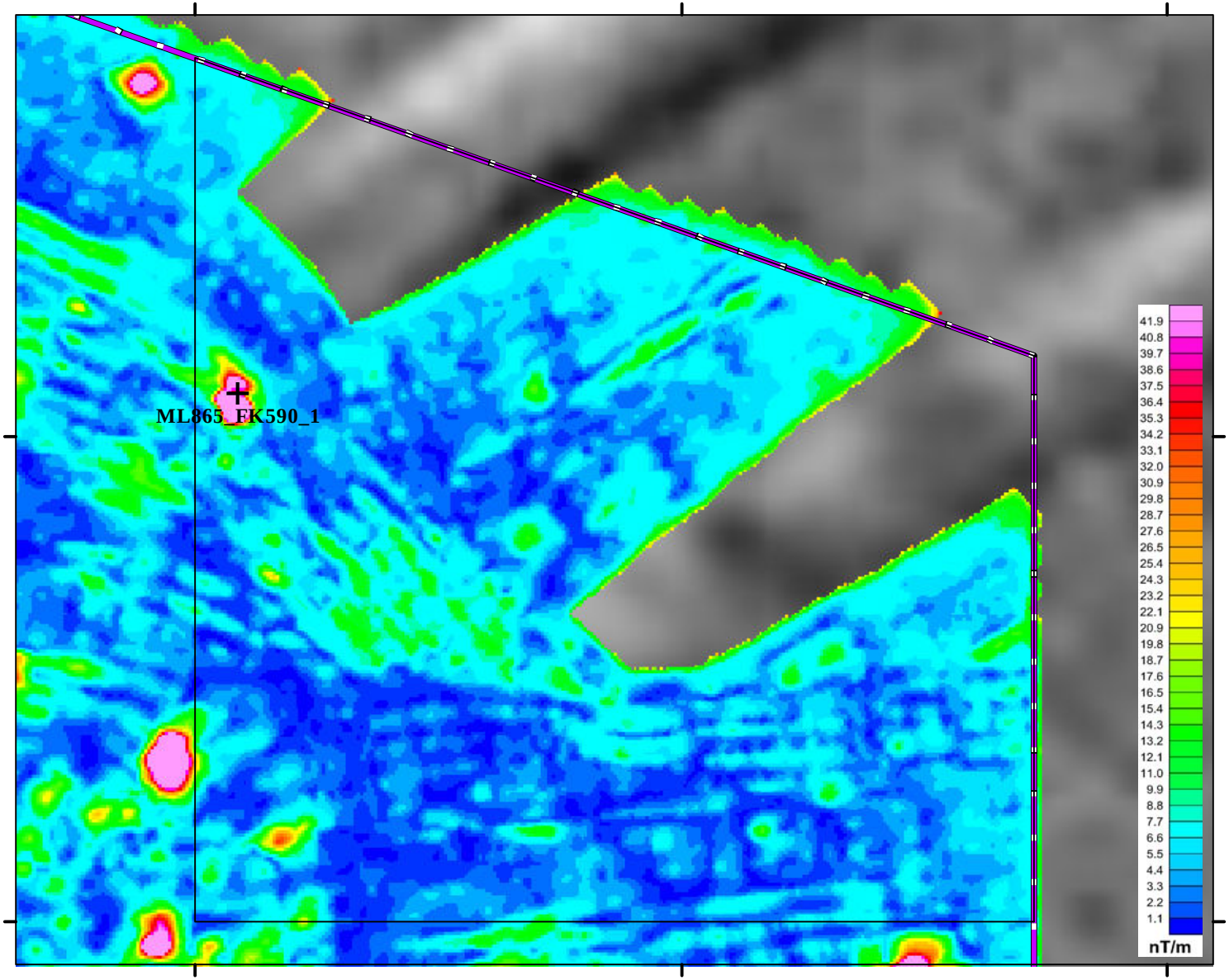
1 inch = 18 feet

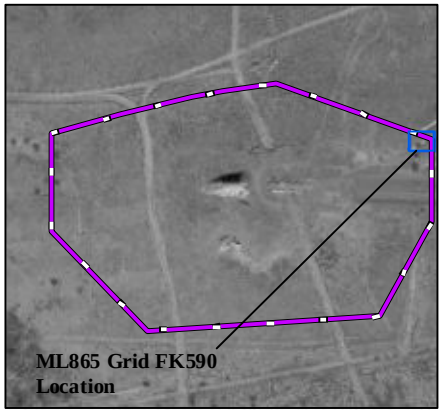
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML 865\DGM_Maps\Figure 865-101 Grid FK589 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 43 nT/m Threshold
- Grid Boundary
- ML865 MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 865-102

G-858 Analytic Signal
Grid FK590 ML865 MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the ML865 grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 11 feet

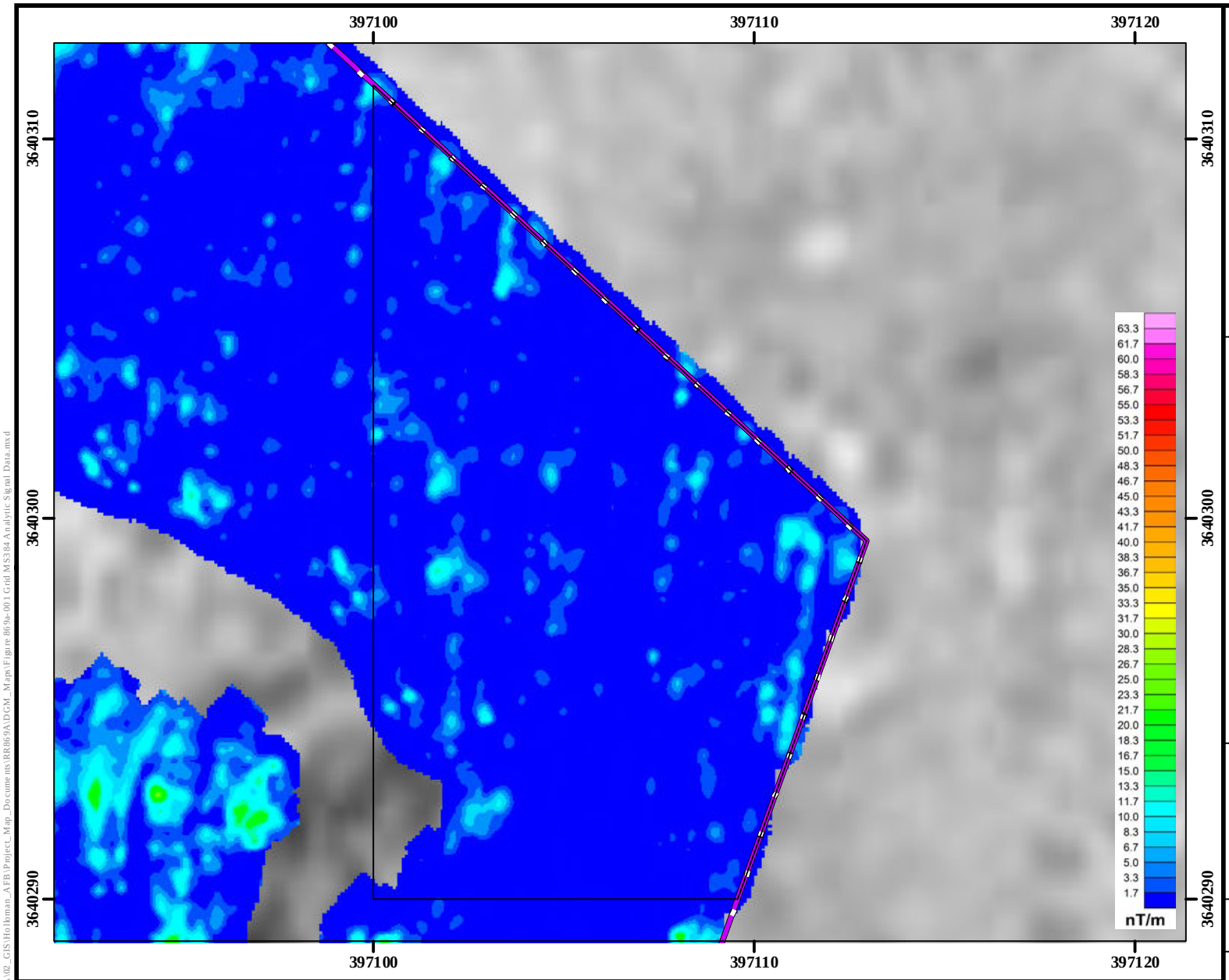
0 1.5 3 Meters

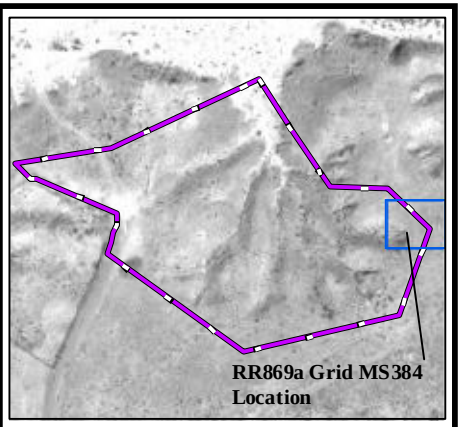
0 5 10 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\ML865\DGM_Maps\Figure 865-102 Grid FK590 Analytic Signal Data.mxd

This page is intentionally left blank





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-1

G-858 Analytic Signal
Grid MS384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

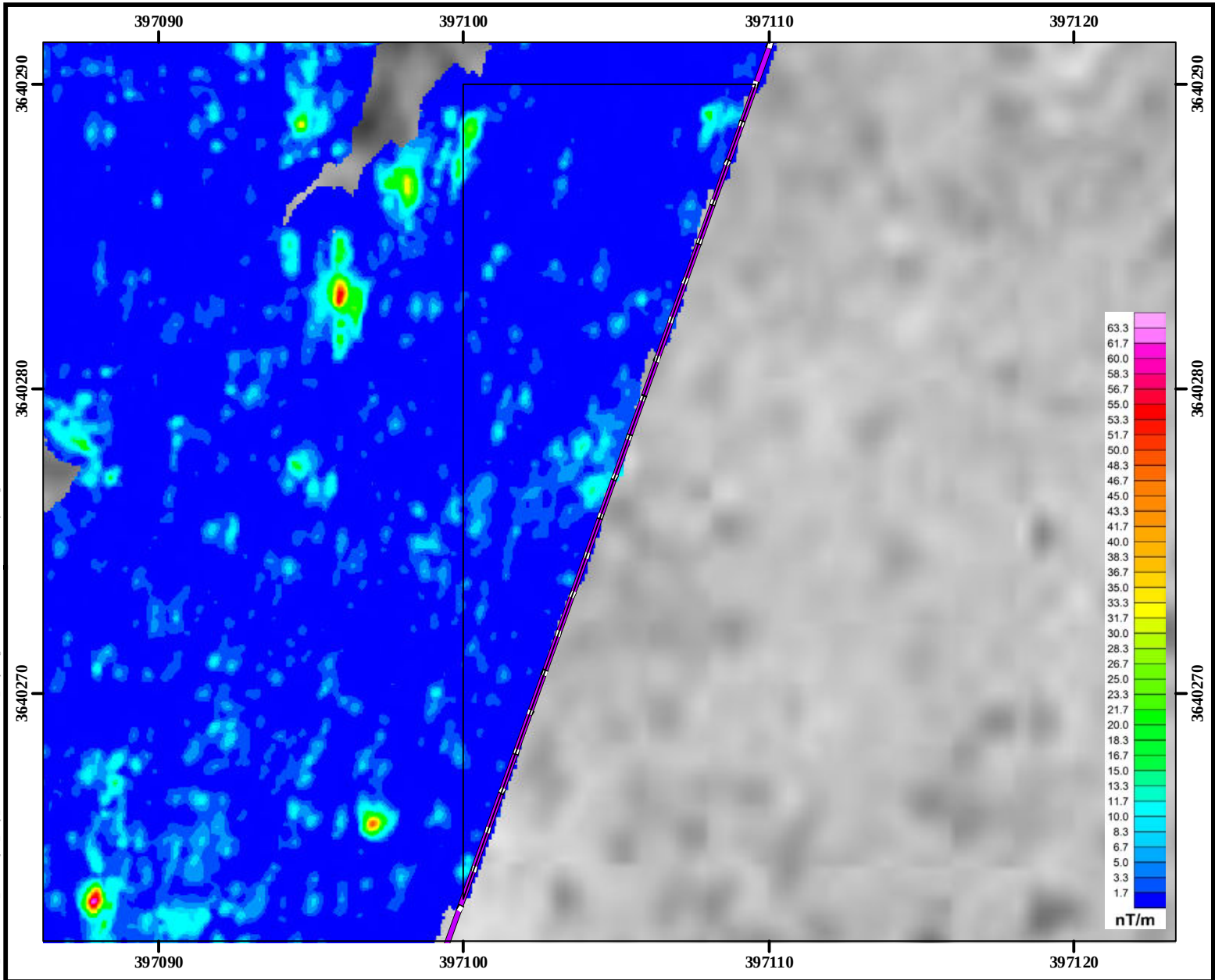
1 inch = 13 feet

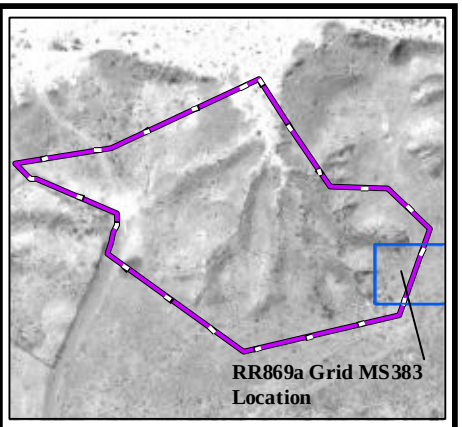
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-001 Grid MS384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-2

G-858 Analytic Signal
Grid MS383 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

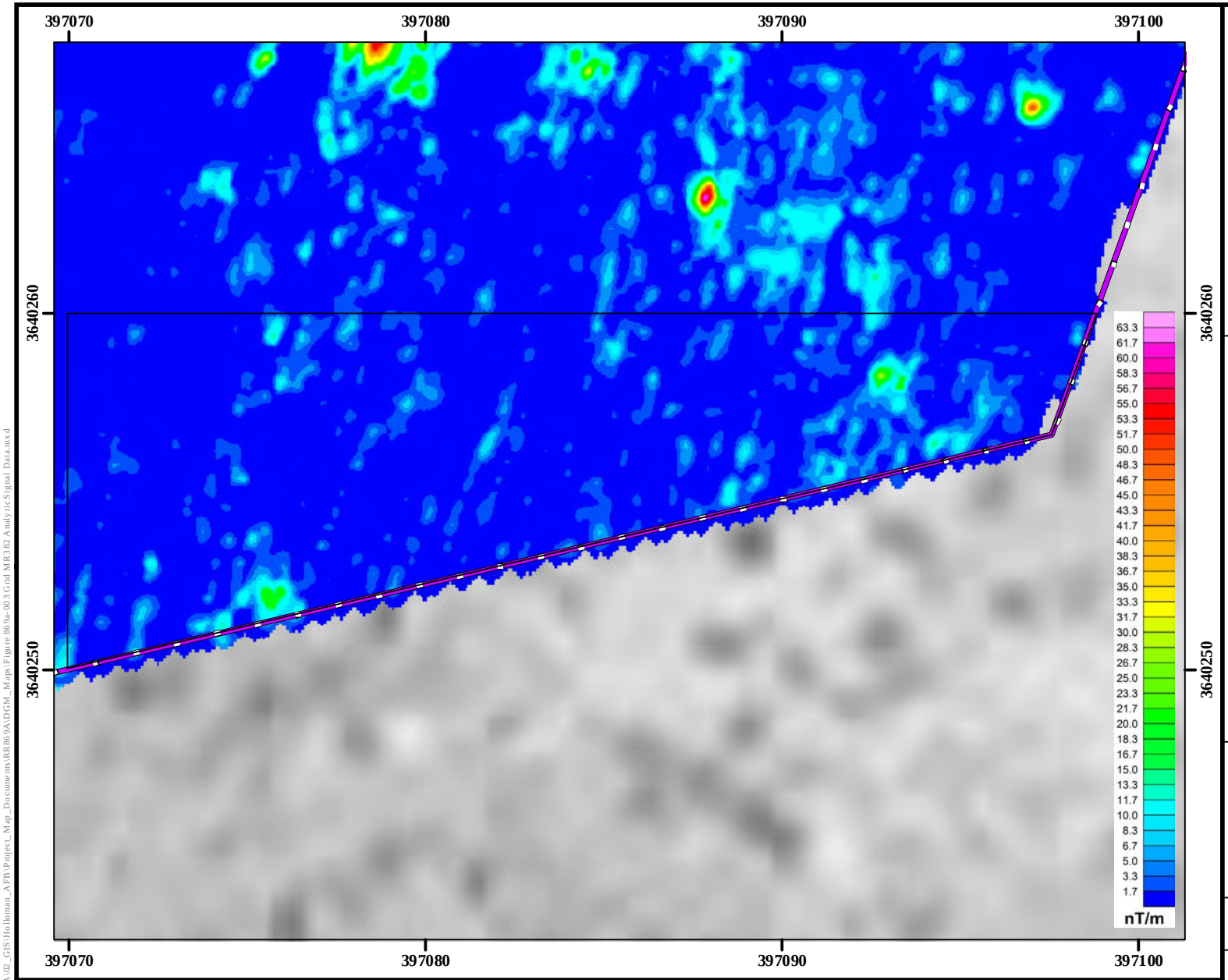
1 inch = 16 feet

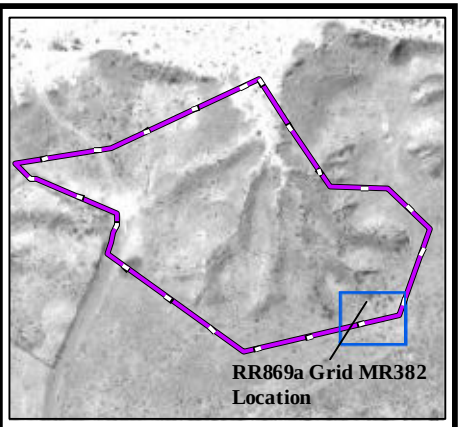
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-002 Grid MS383 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-3

G-858 Analytic Signal
Grid MR382 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

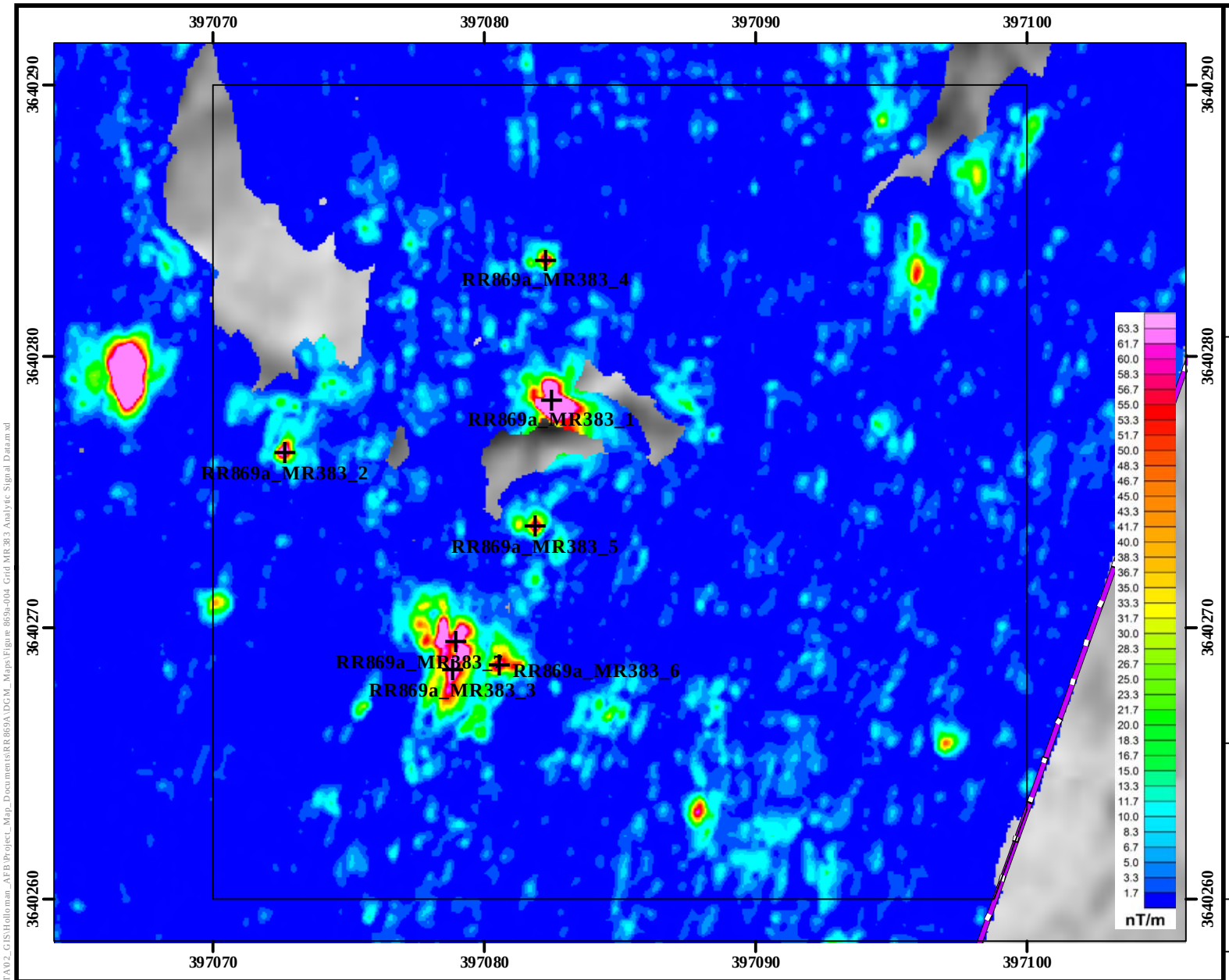
1 inch = 14 feet

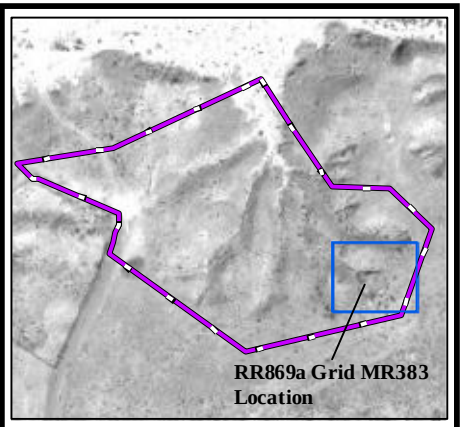
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-003 Grid MR382 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-4

G-858 Analytic Signal
Grid MR383 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

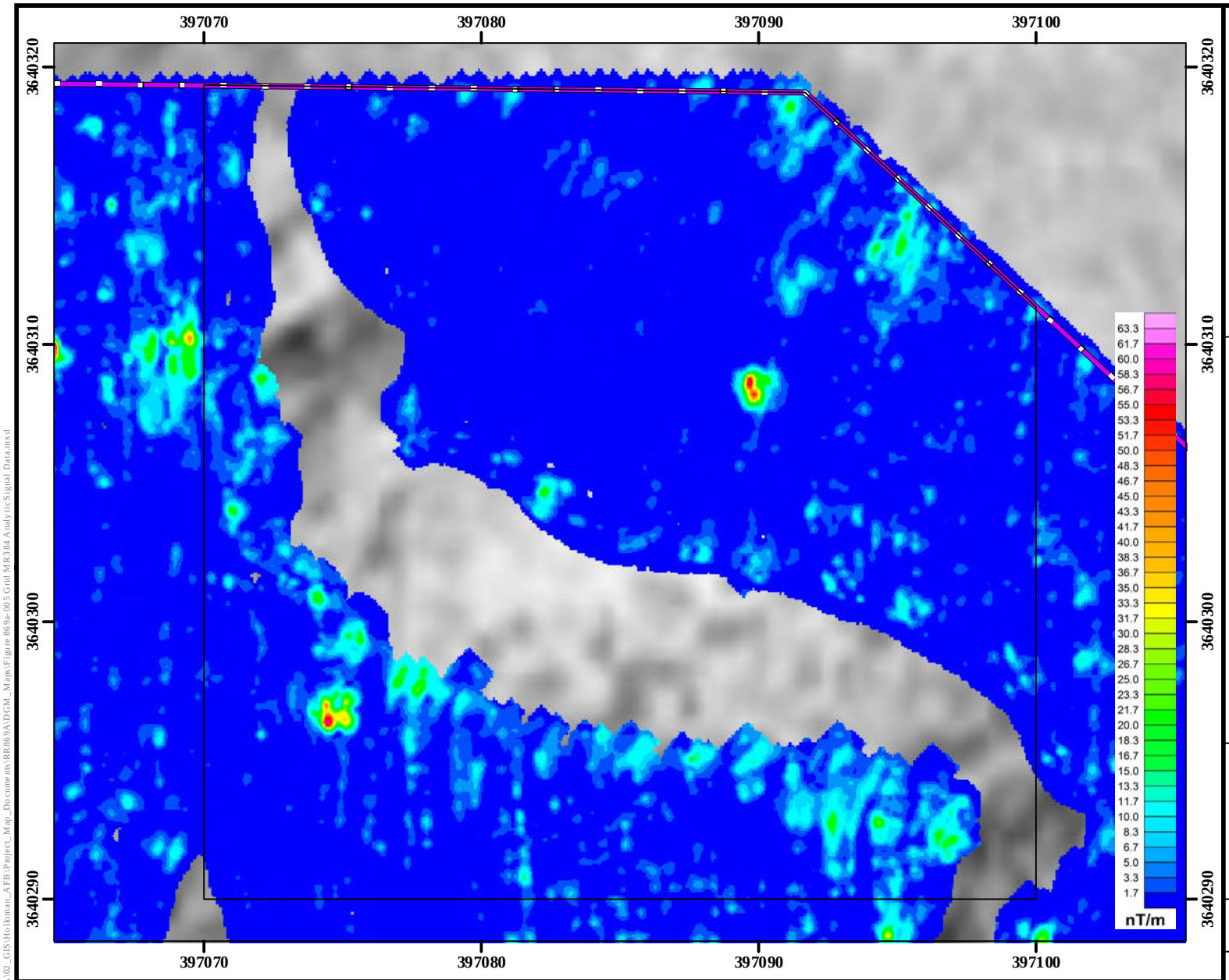
1 inch = 18 feet

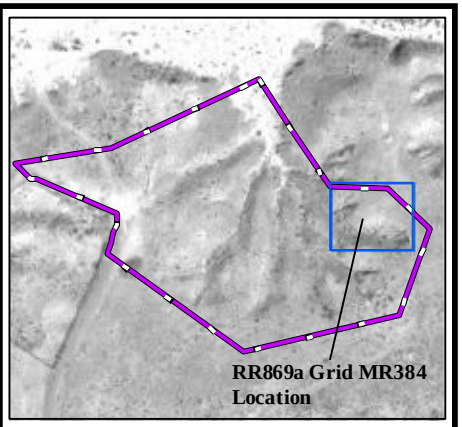
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\SSAT\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-004 Grid MR383 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-5

G-858 Analytic Signal
Grid MR384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

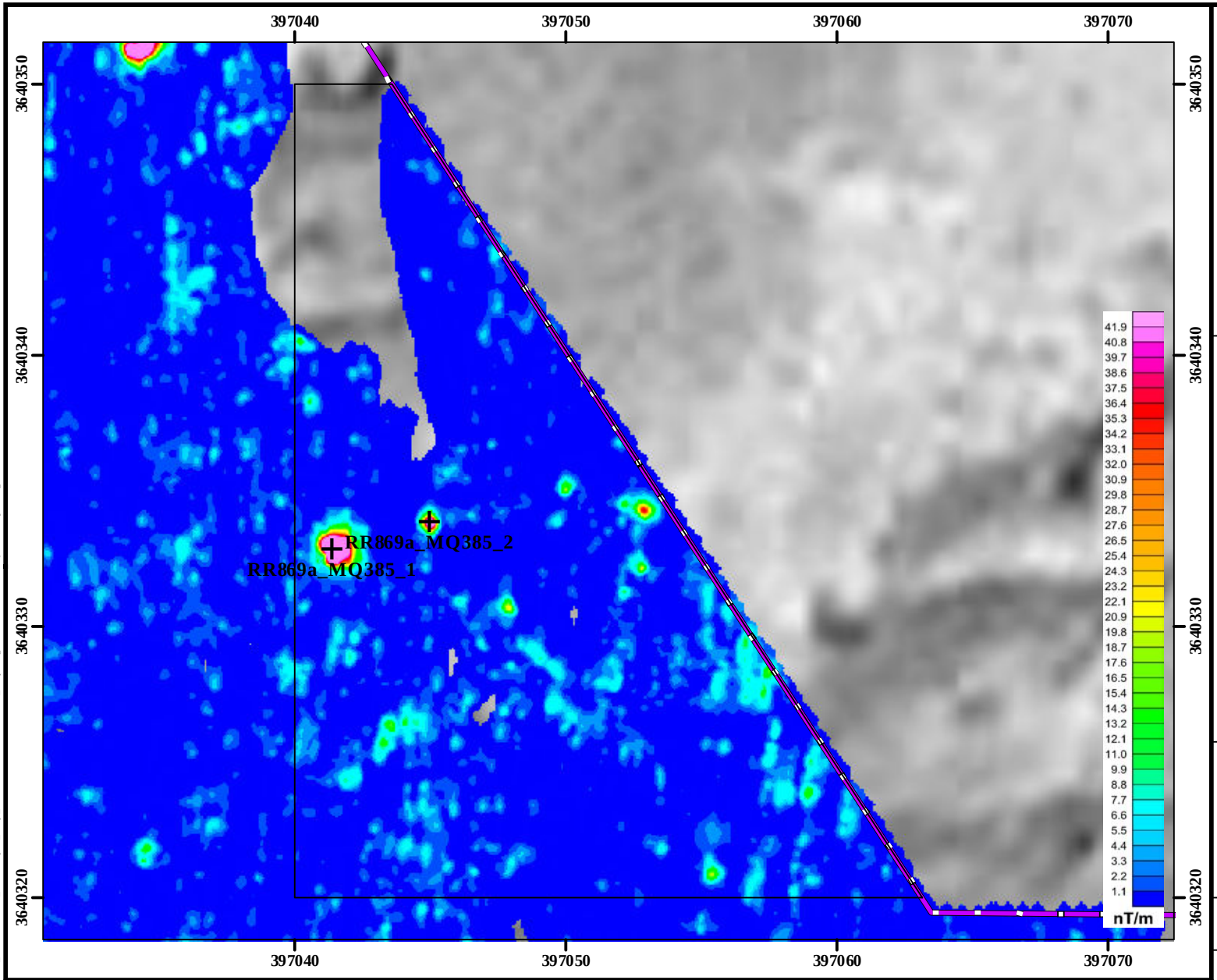
1 inch = 18 feet

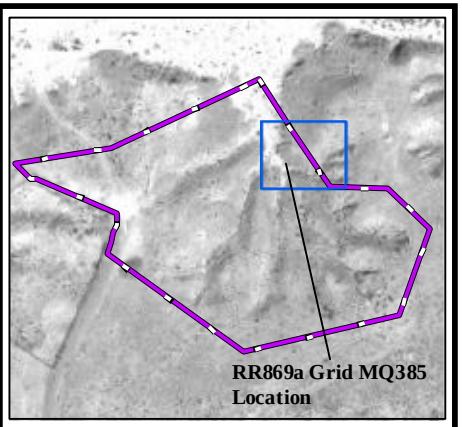
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-005 Grid MR384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-6

G-858 Analytic Signal
Grid MQ385 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

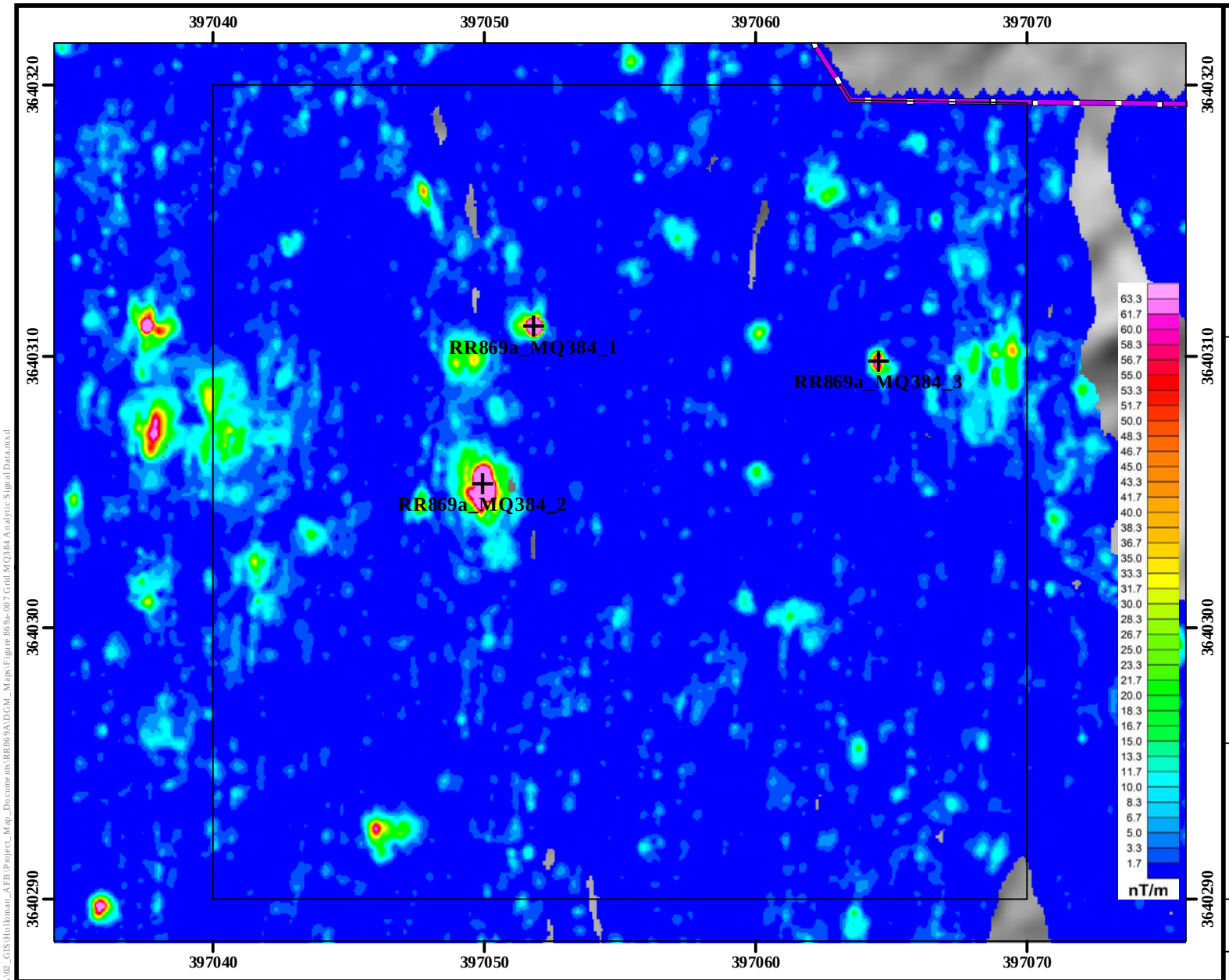
1 inch = 18 feet

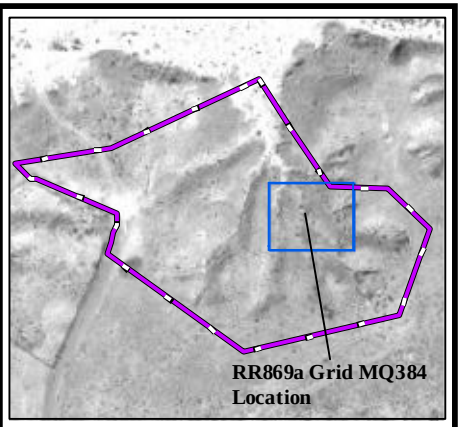
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-006 Grid MQ385 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-7

G-858 Analytic Signal
Grid MQ384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

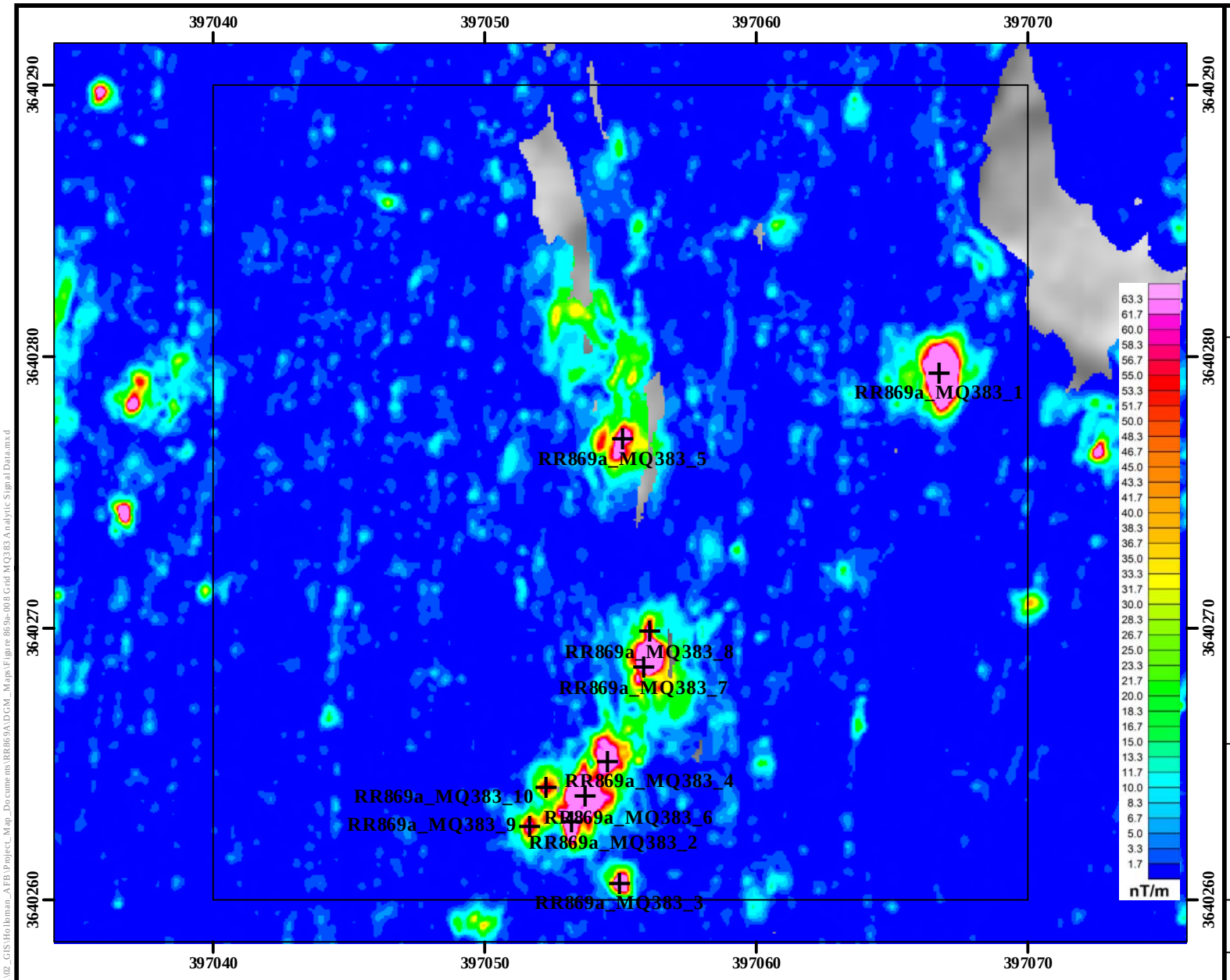
1 inch = 18 feet

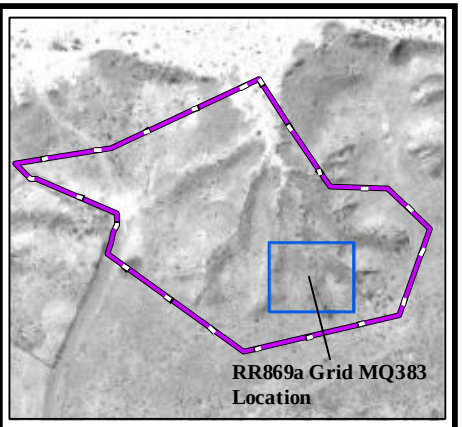
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-007 Grid MQ384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-8

G-858 Analytic Signal
Grid MQ383 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

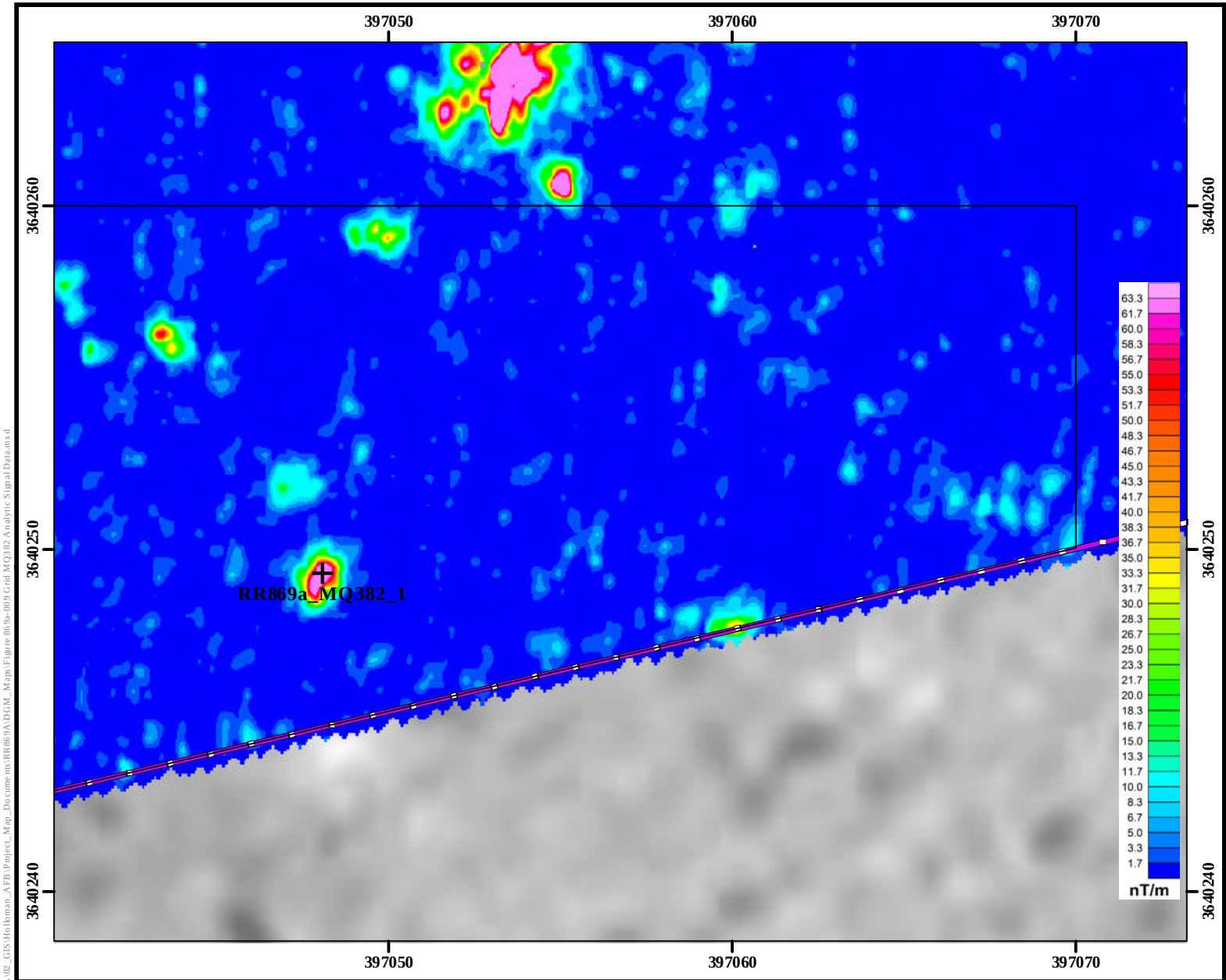
1 inch = 18 feet

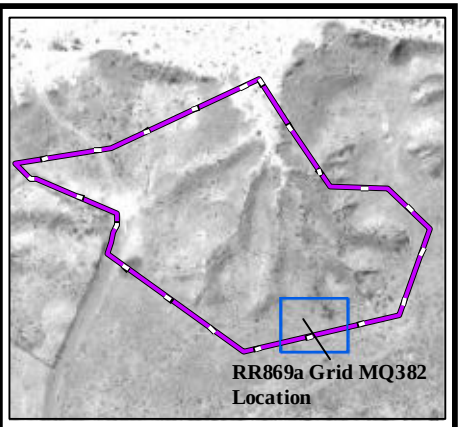
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-008 Grid MQ383 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-9

G-858 Analytic Signal
Grid MQ382 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

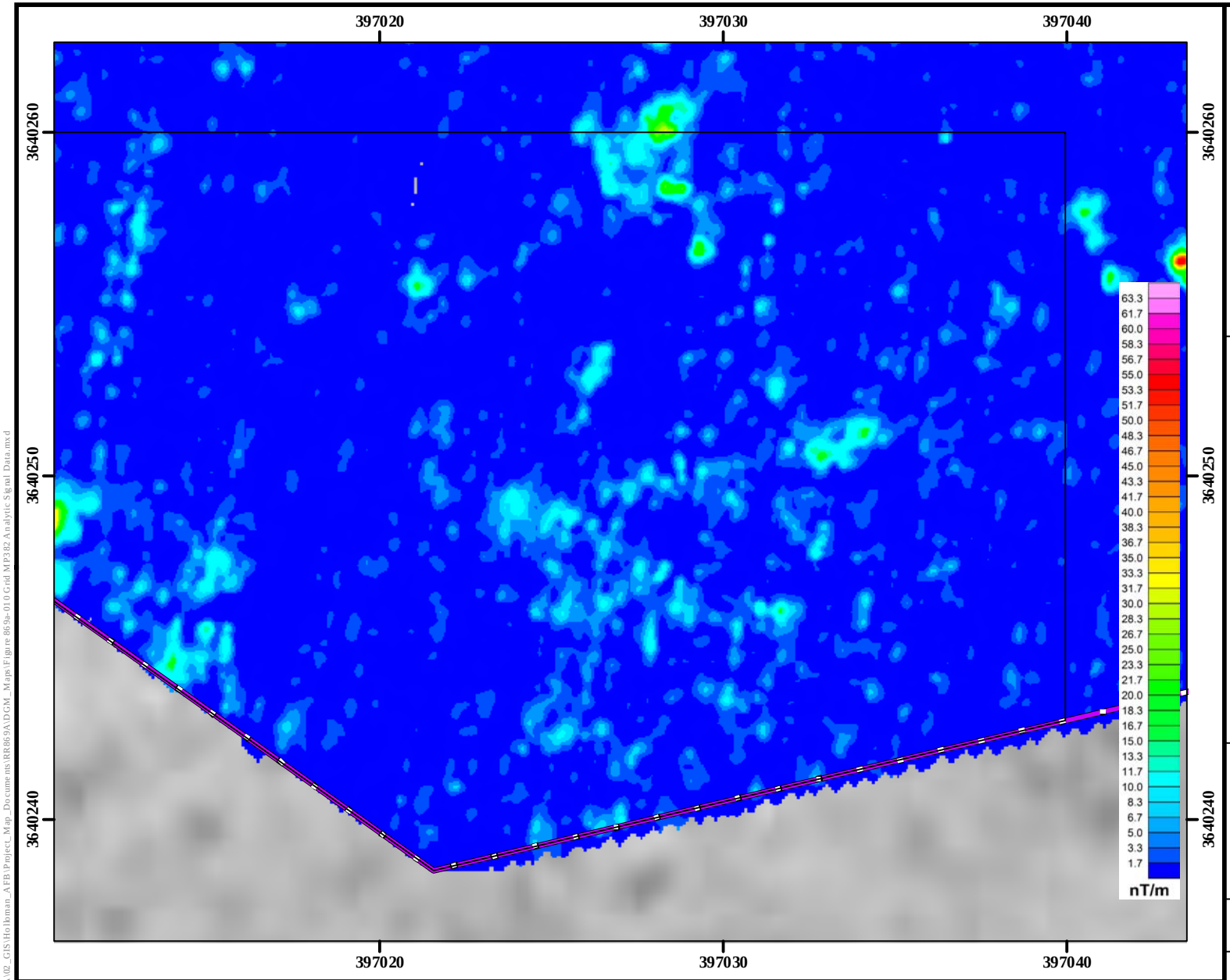
1 inch = 14 feet

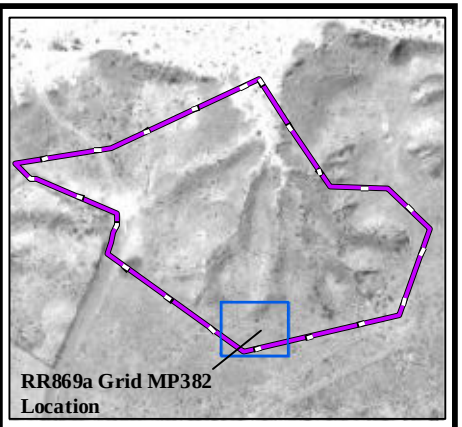
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-009 Grid MQ382 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-10

G-858 Analytic Signal
Grid MP382 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

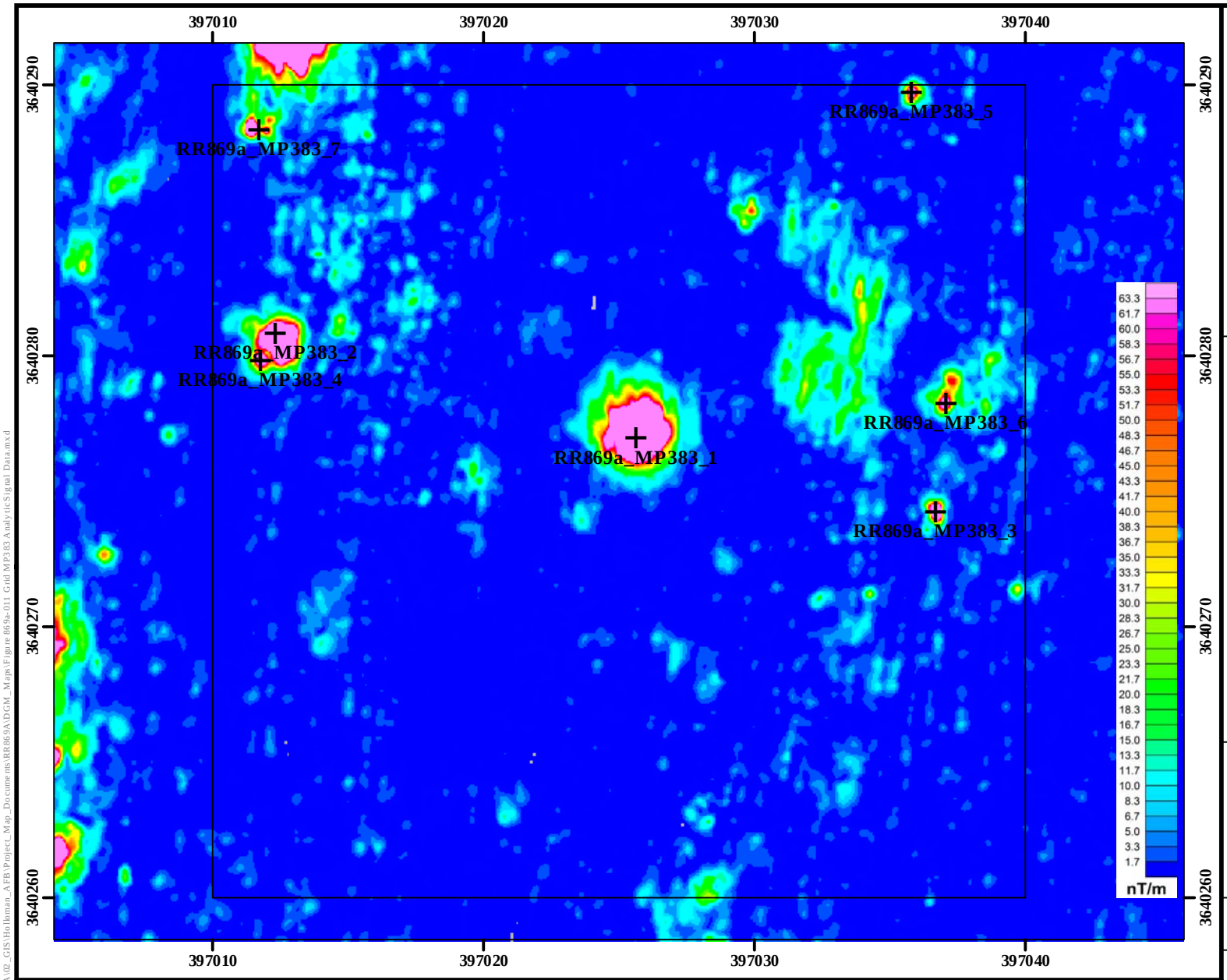
1 inch = 14 feet

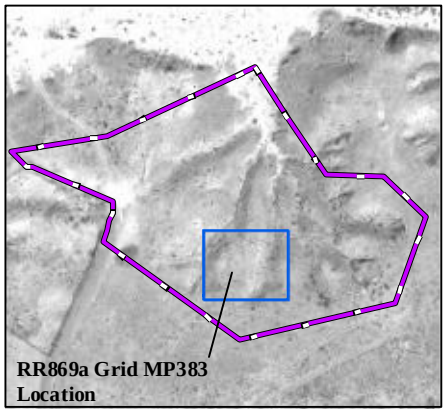
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-010 Grid MP382 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-11

G-858 Analytic Signal
Grid MP383 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

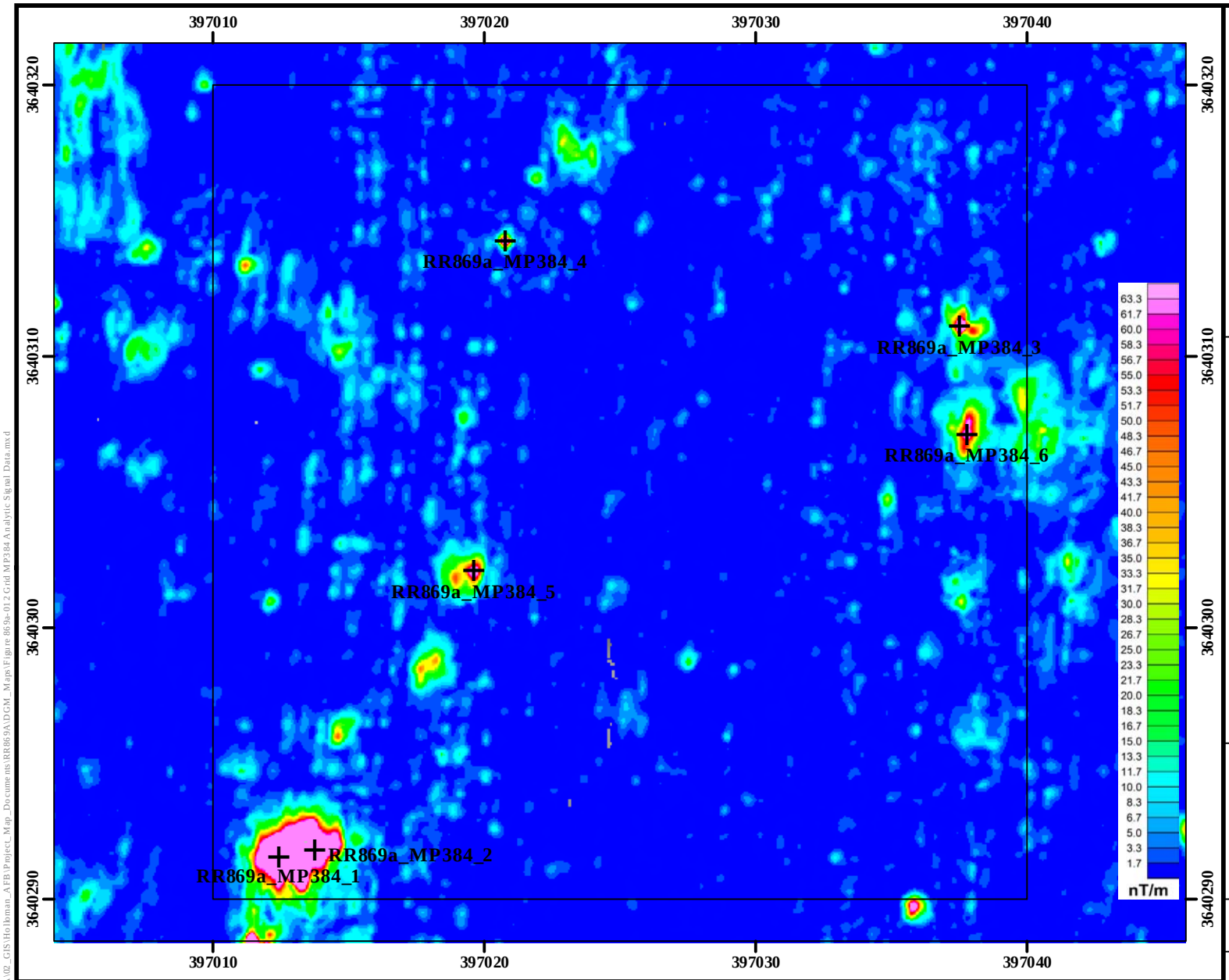
1 inch = 18 feet

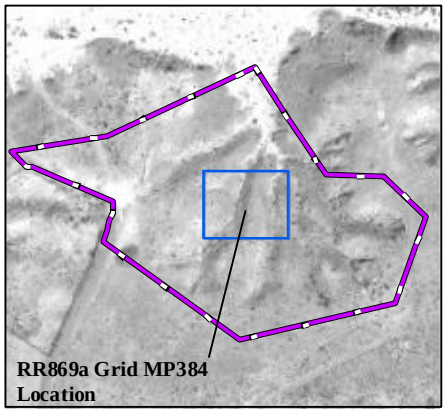
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-011 Grid MP383 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-12

G-858 Analytic Signal
Grid MP384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

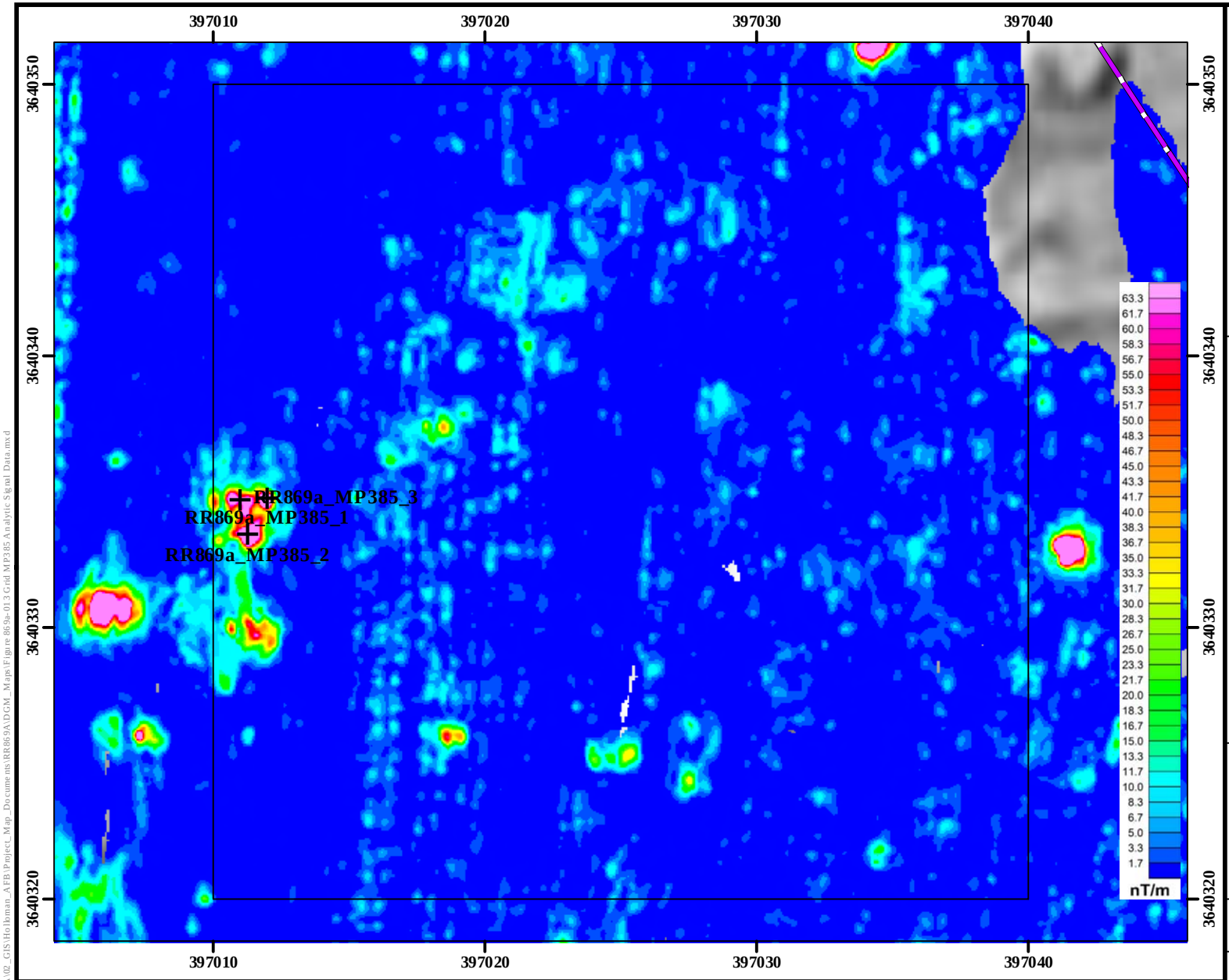
1 inch = 18 feet

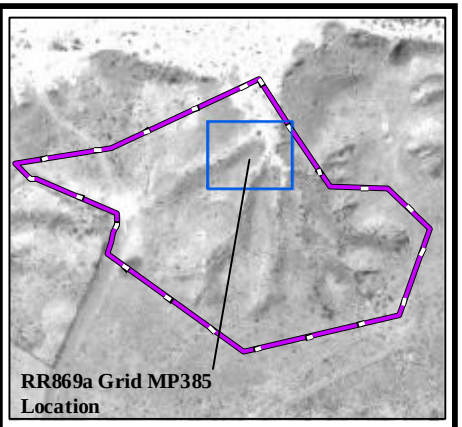
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-012 Grid MP384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-13

G-858 Analytic Signal
Grid MP385 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

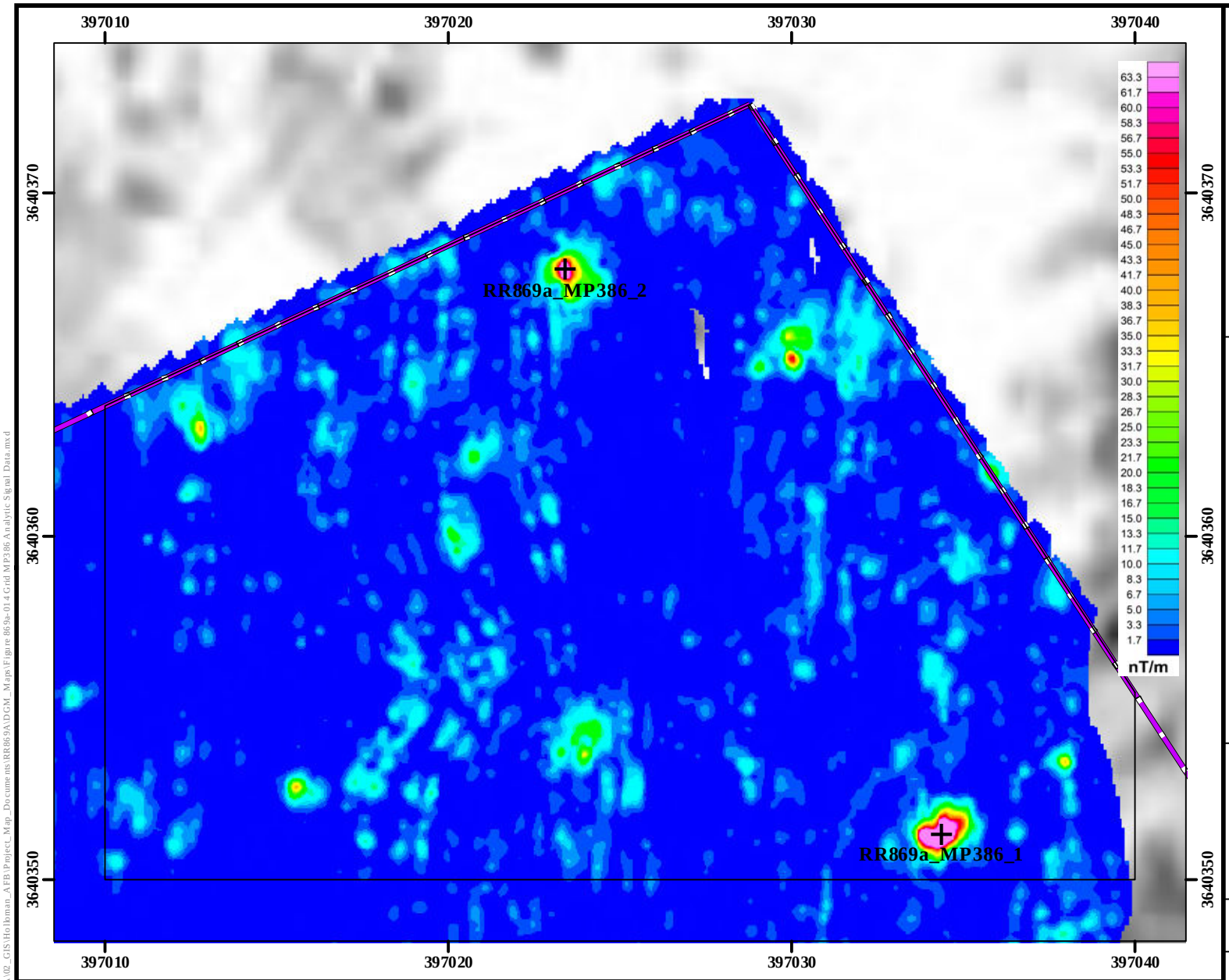
1 inch = 18 feet

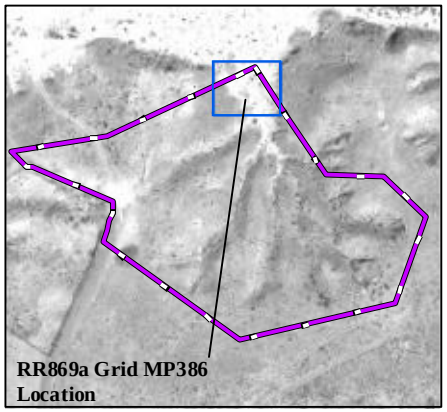
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-013 Grid MP385 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-14

G-858 Analytic Signal
Grid MP386 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

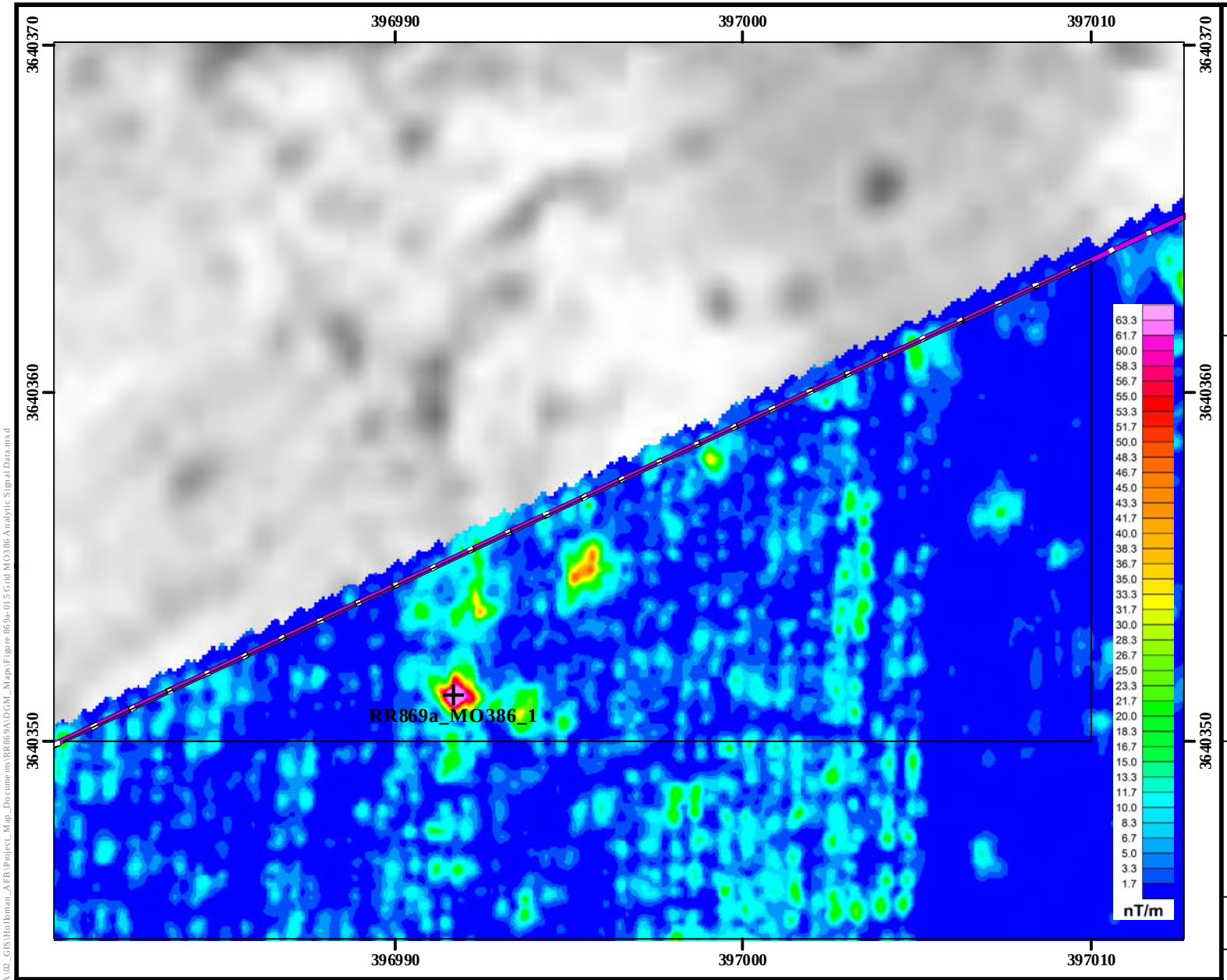
1 inch = 14 feet

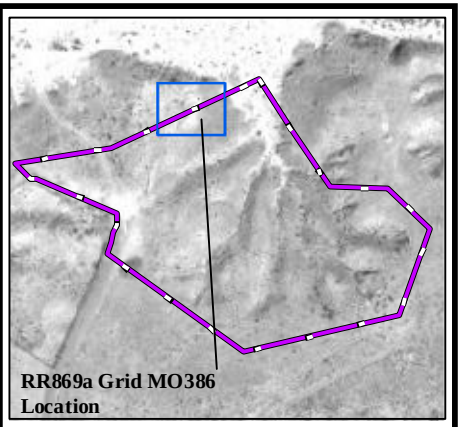
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-014 Grid MP386 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 14 feet

0 1.5 3 Meters

0 5 10 Feet

N W E S

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

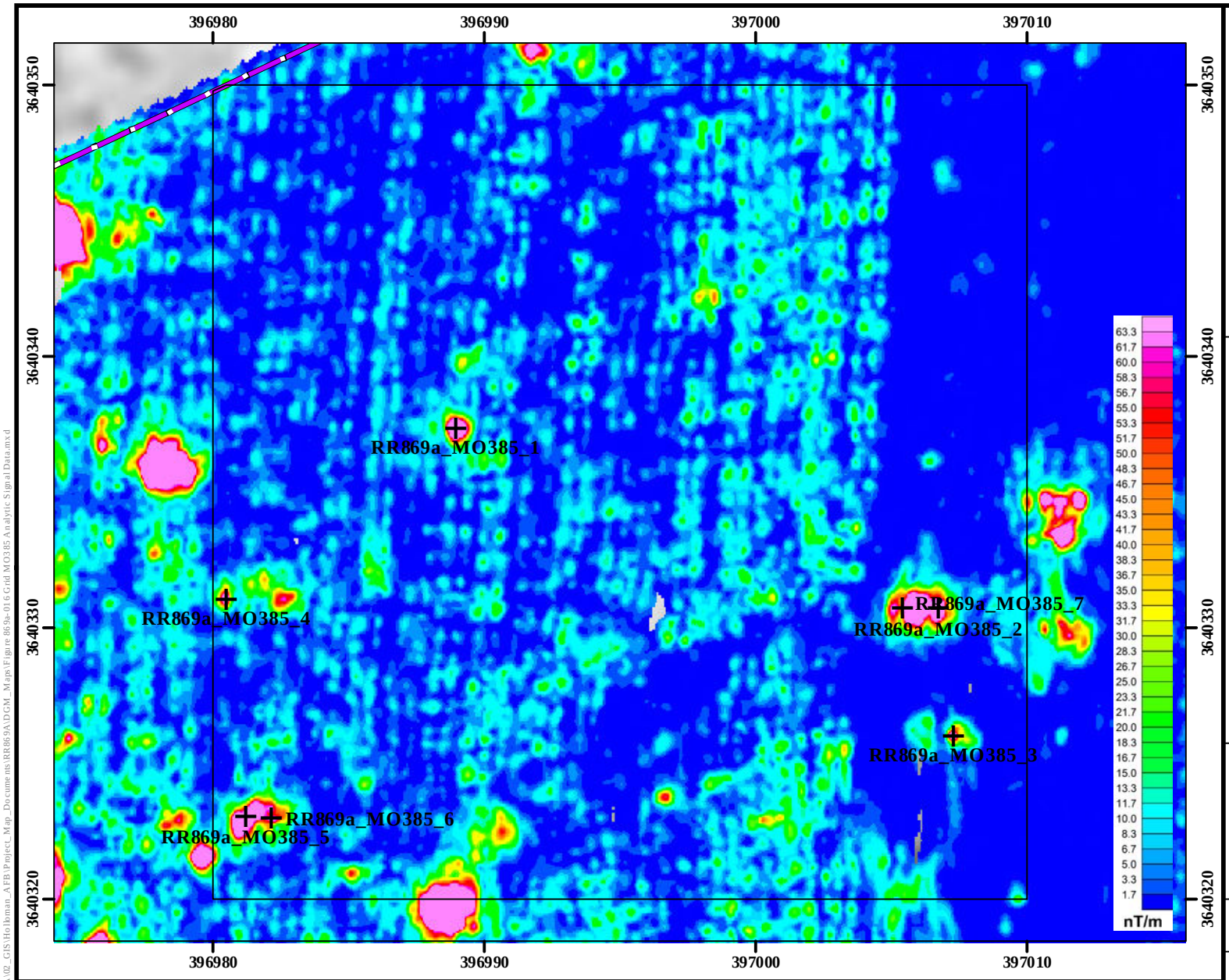
FIGURE 869a-15

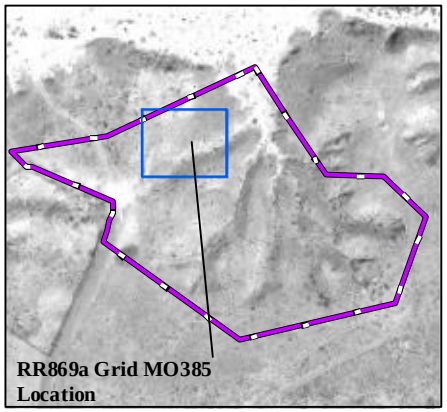
G-858 Analytic Signal
Grid MO386 RR869a MRS

FPM Remediations, Inc.

2015

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-015 Grid MO386 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-16

G-858 Analytic Signal
Grid MO385 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

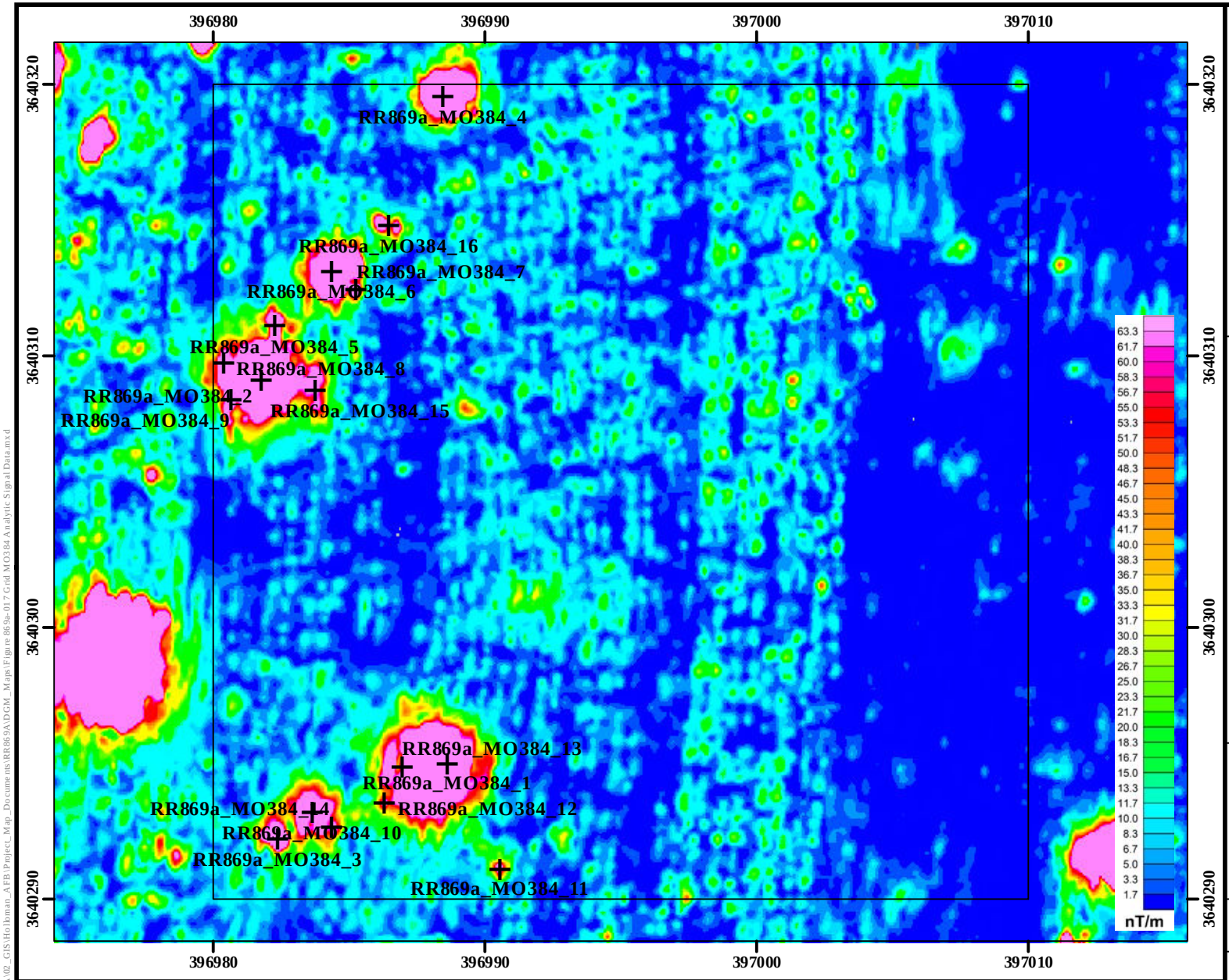
1 inch = 18 feet

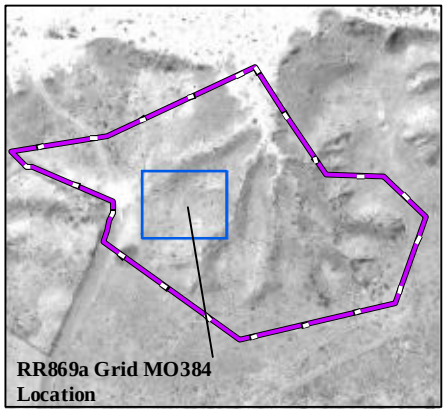
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-016 Grid MO385 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-17

G-858 Analytic Signal
Grid MO384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

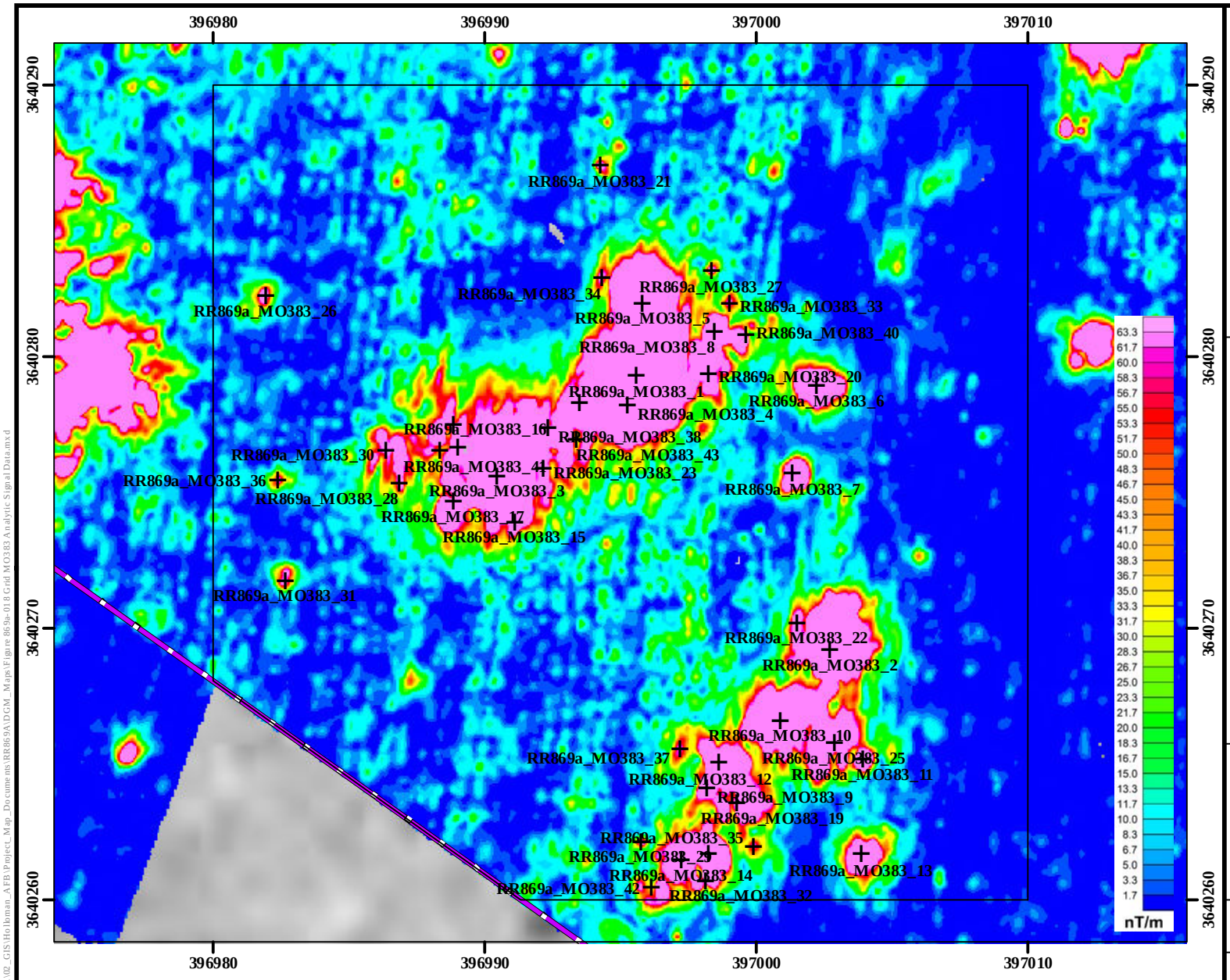
1 inch = 18 feet

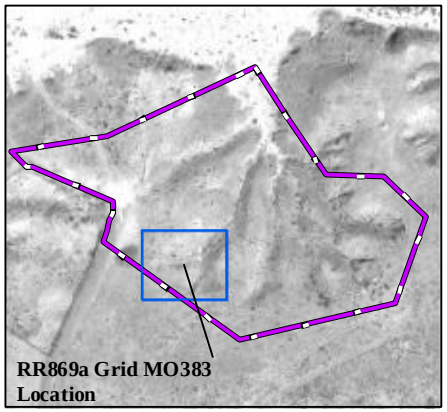
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-017 Grid MO384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-18

G-858 Analytic Signal
Grid MO383 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

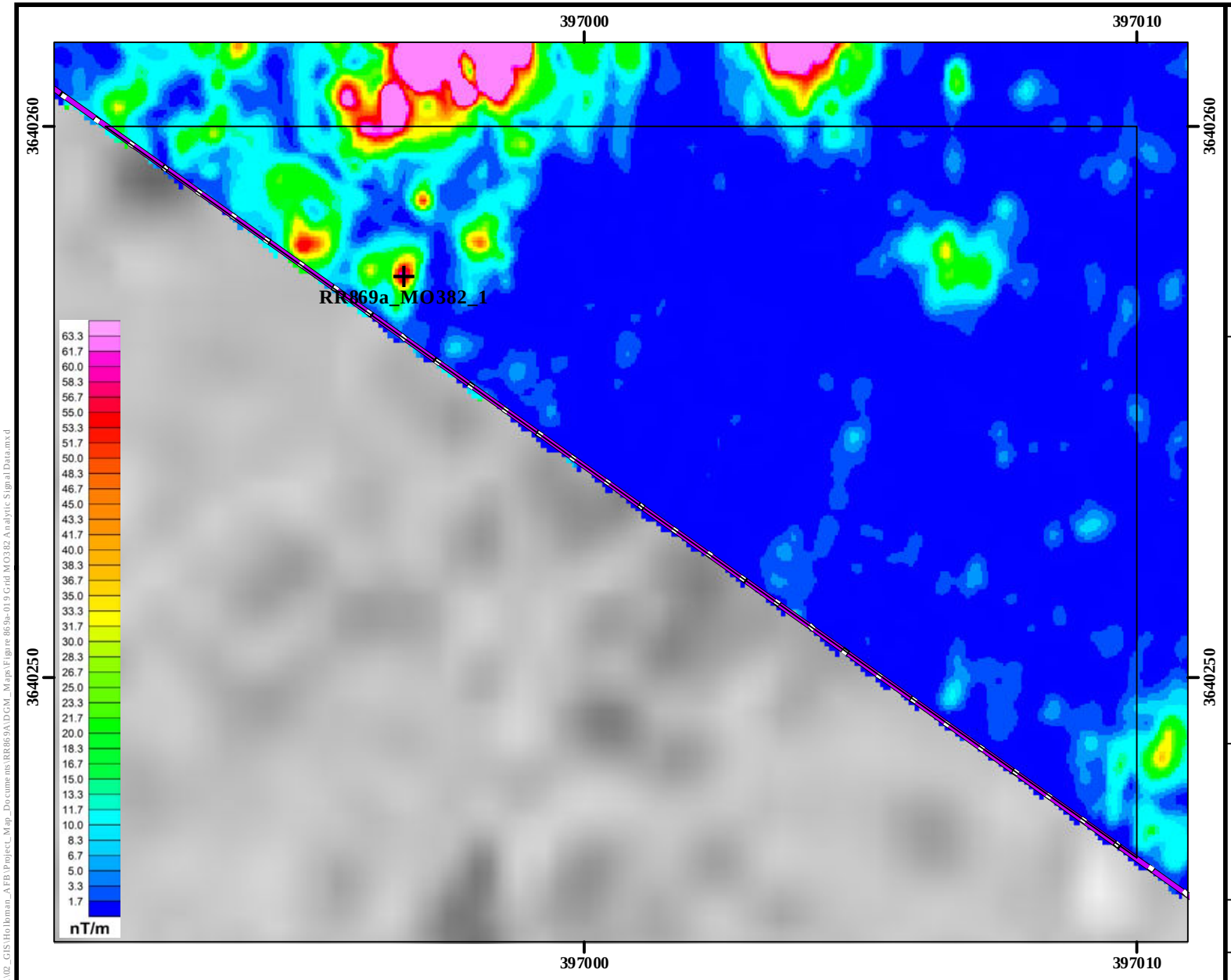
1 inch = 18 feet

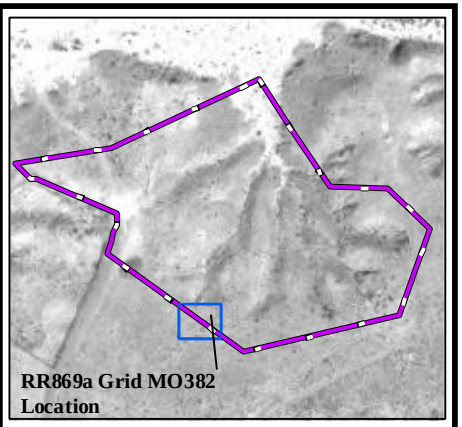
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-018 Grid MO383 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-19

G-858 Analytic Signal
Grid MO382 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

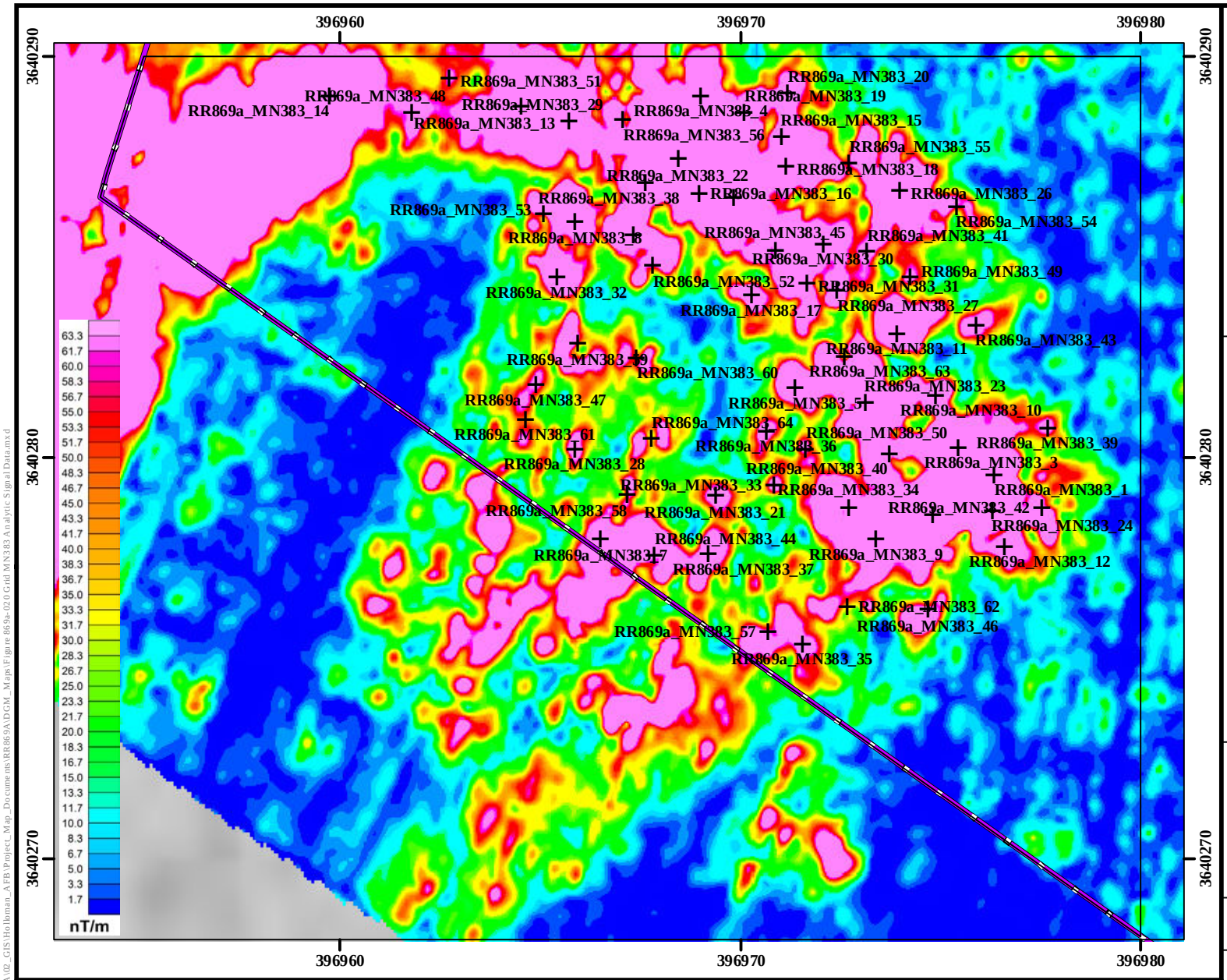
1 inch = 9 feet

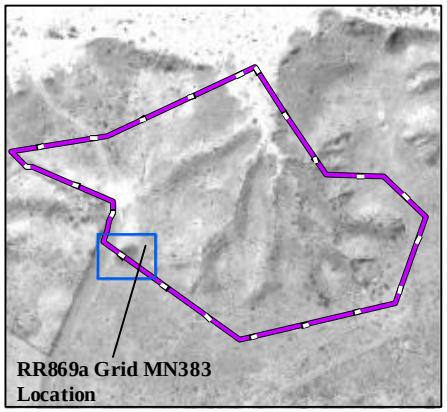
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-019 Grid MO382 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-20

G-858 Analytic Signal
Grid MN383 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

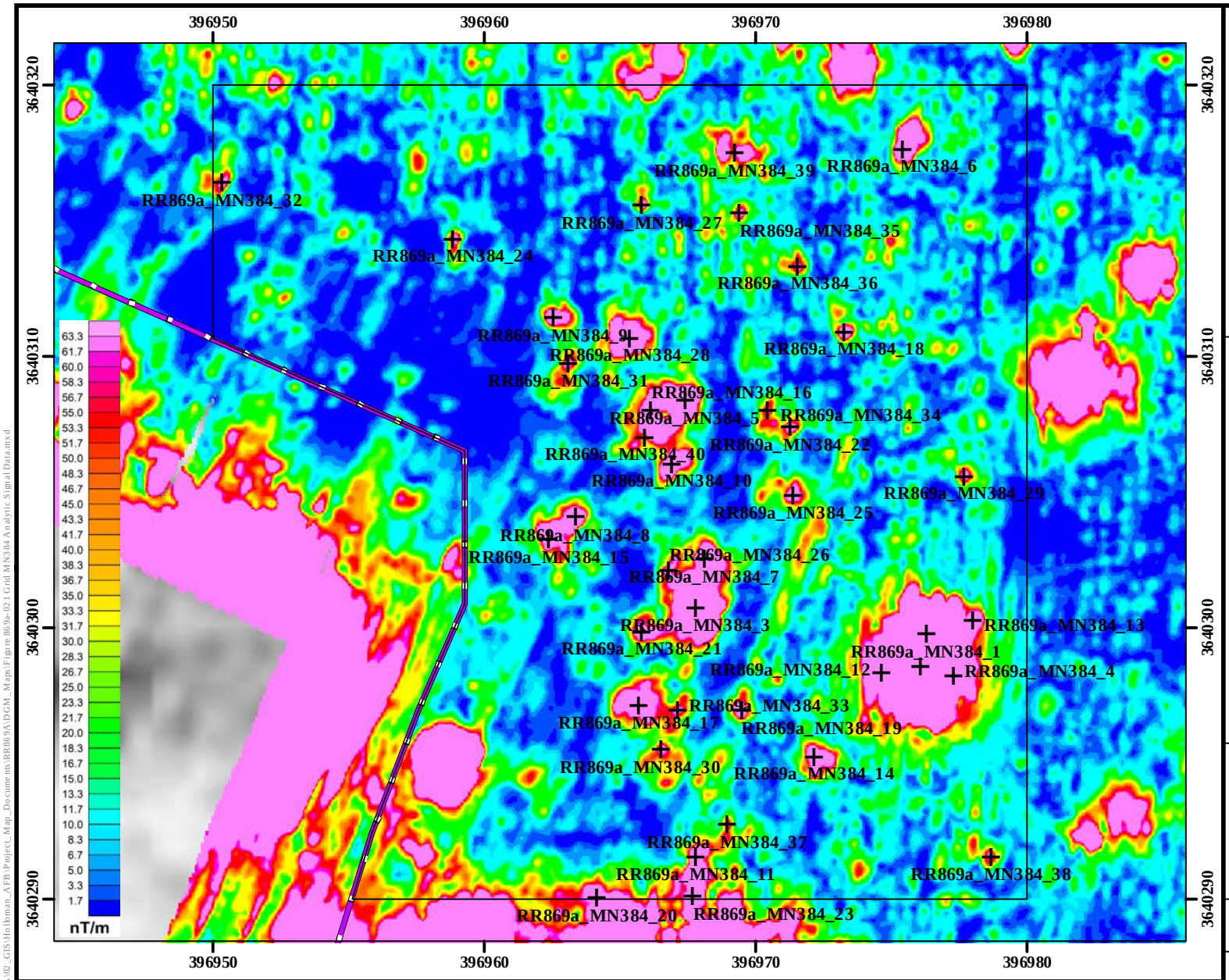
1 inch = 12 feet

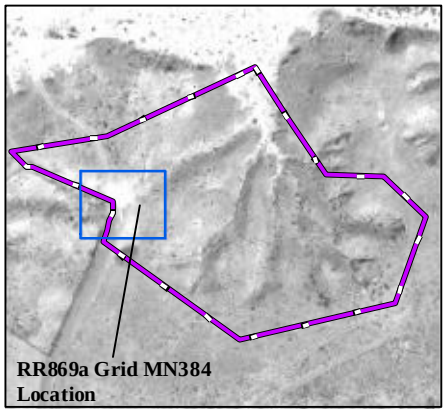
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-020 Grid MN383 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-21

G-858 Analytic Signal
Grid MN384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

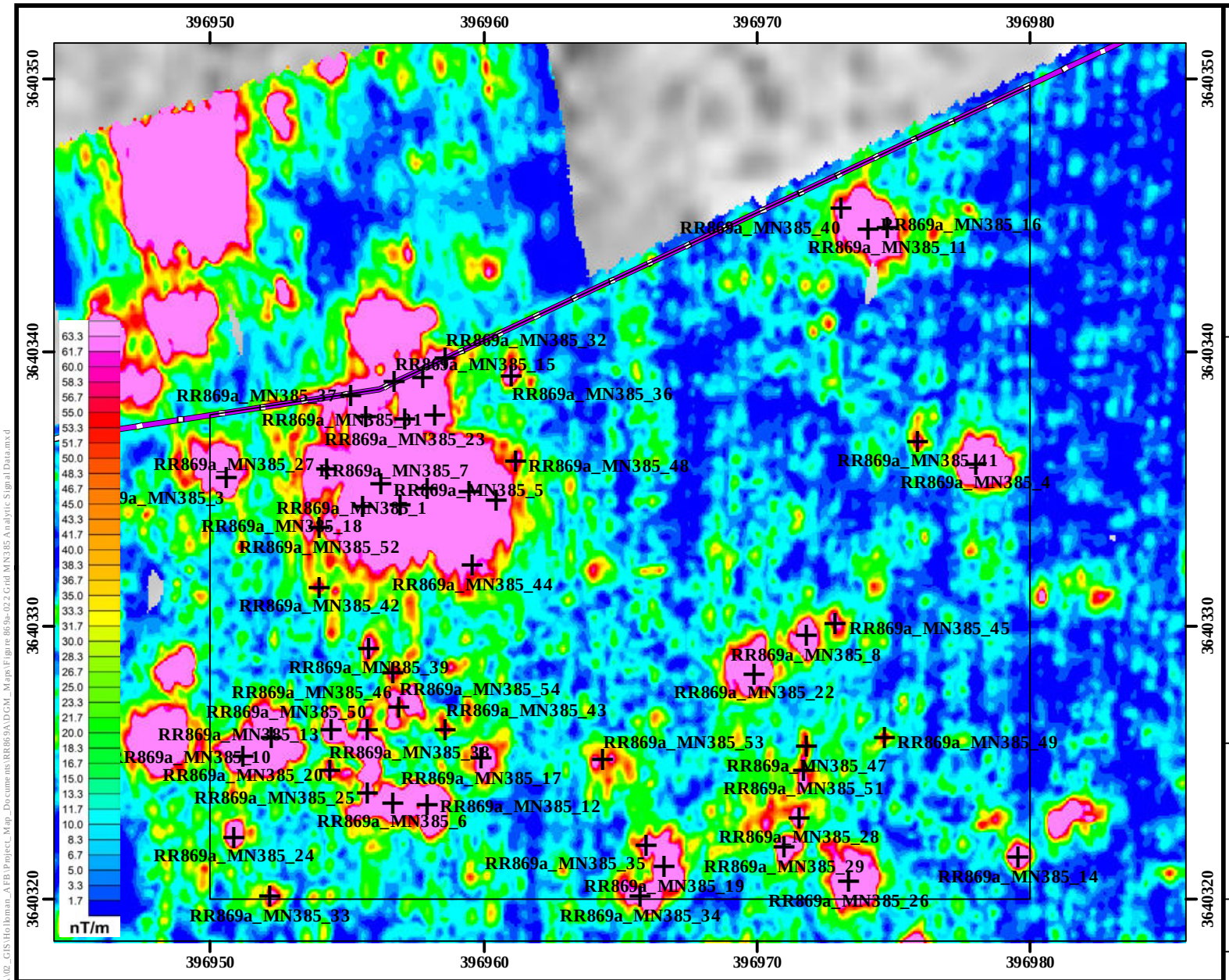
1 inch = 18 feet

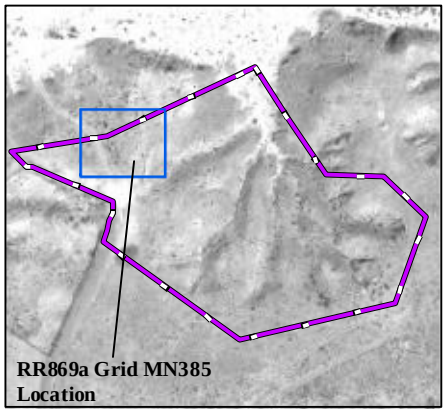
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-021 Grid MN384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-22

G-858 Analytic Signal
Grid MN385 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

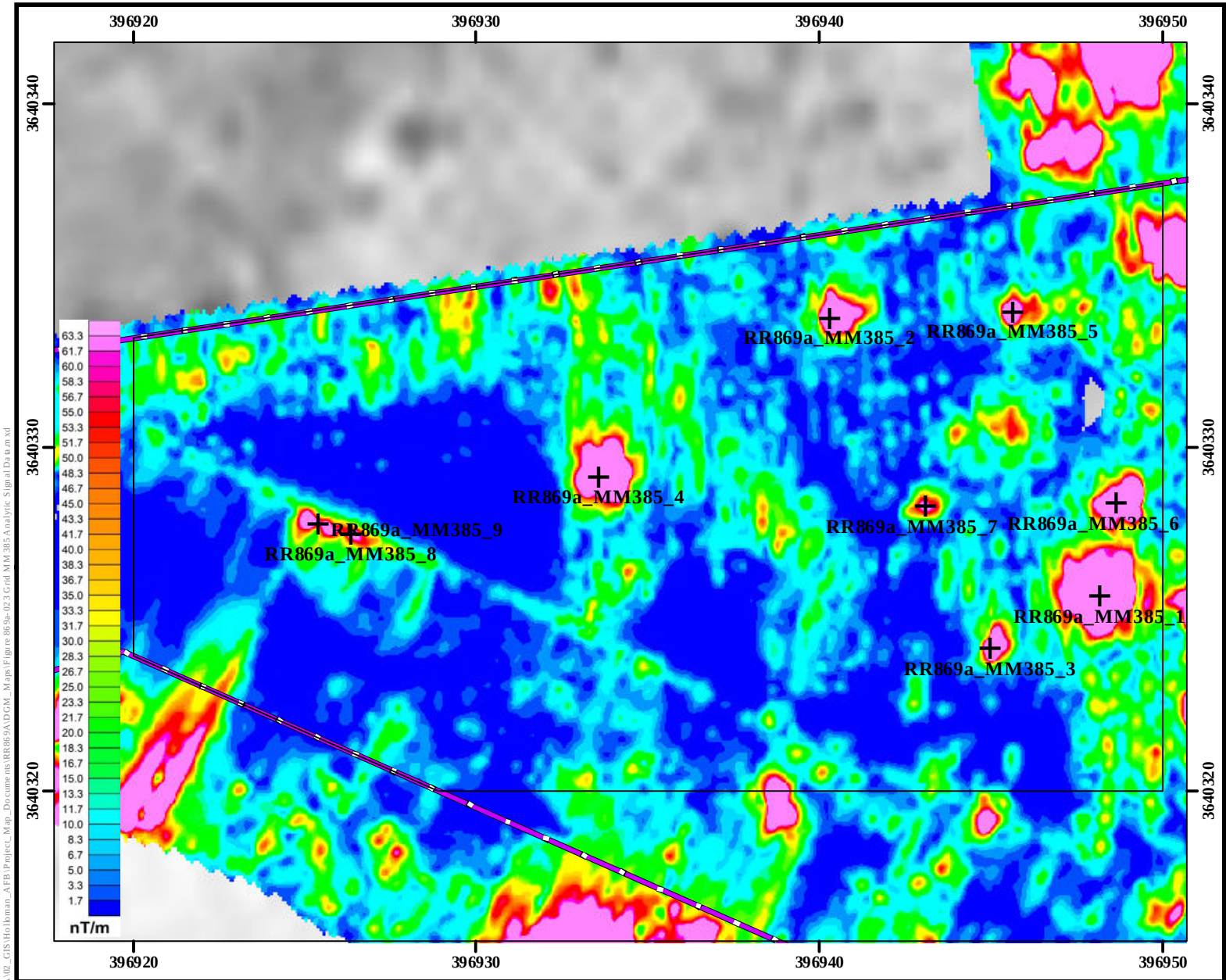
1 inch = 18 feet

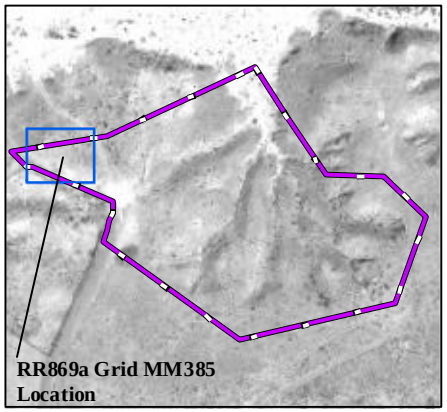
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-022 Grid MN385 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-23

G-858 Analytic Signal
Grid MM385 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

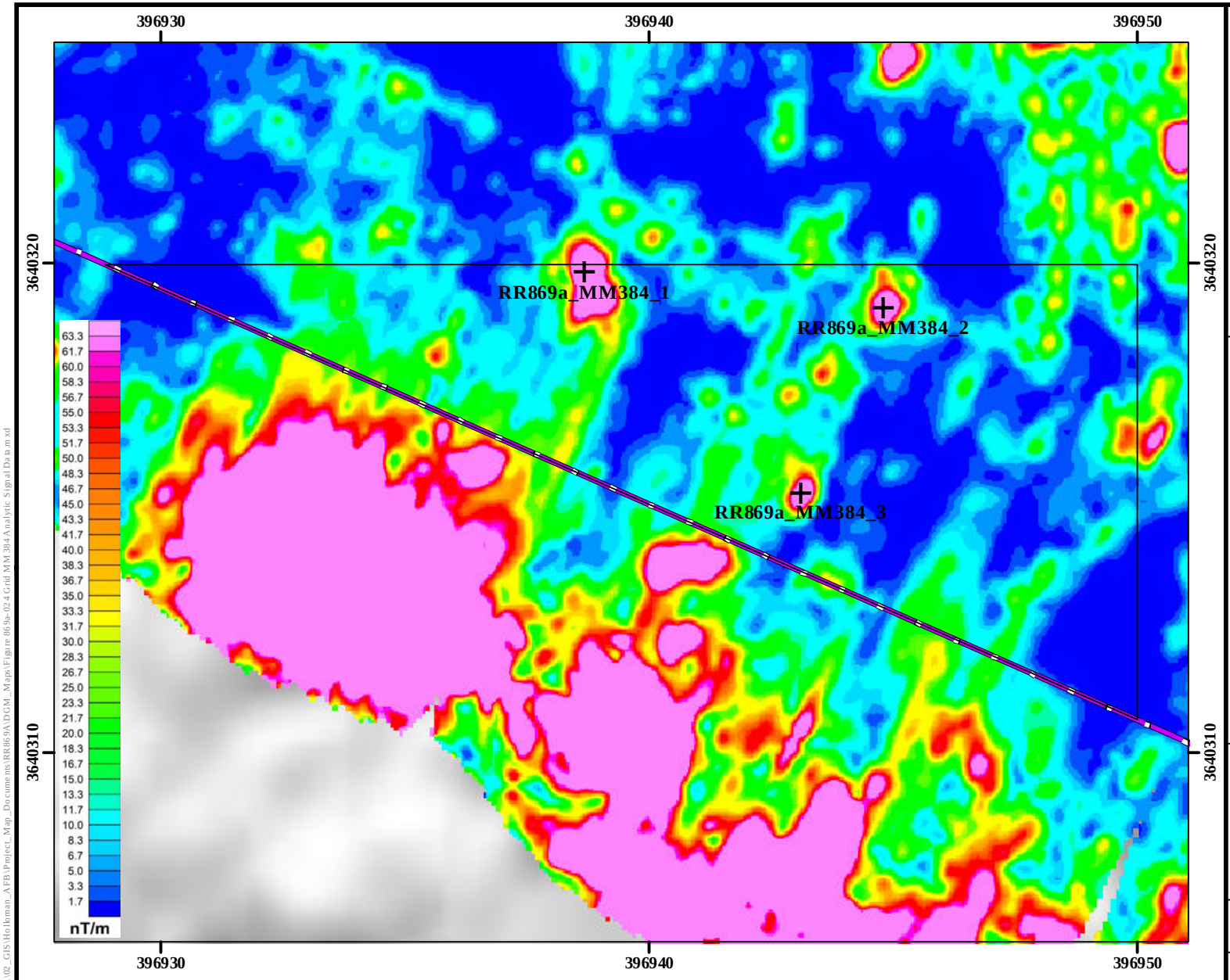
1 inch = 14 feet

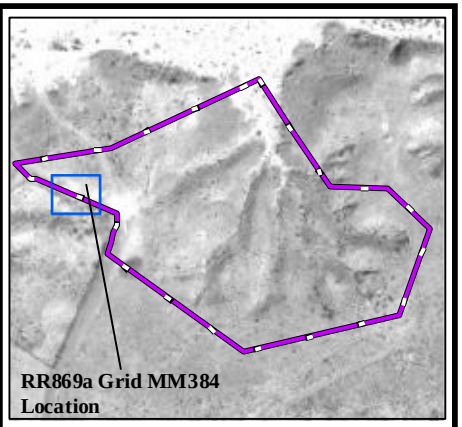
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-023 Grid MM385 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-24

G-858 Analytic Signal
Grid MM384 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

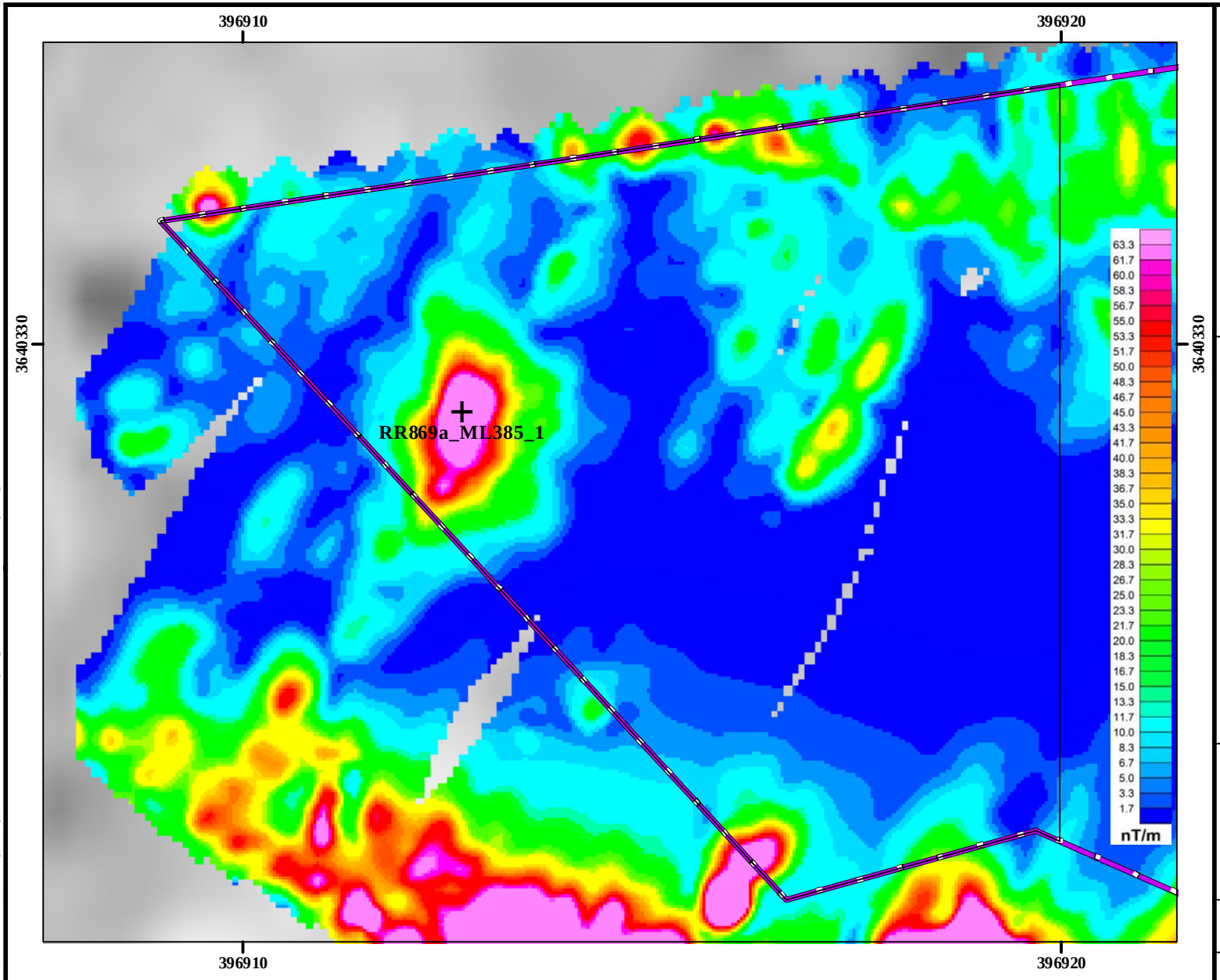
1 inch = 10 feet

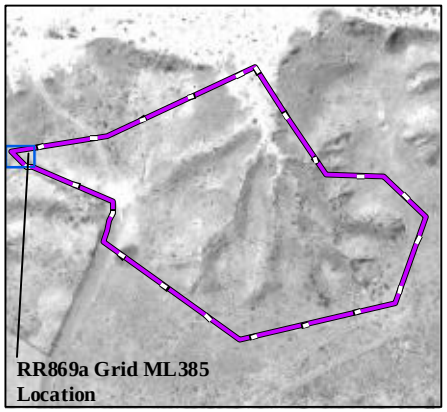
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-024 Grid MM384 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-25

G-858 Analytic Signal
Grid MM385 RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a grids

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

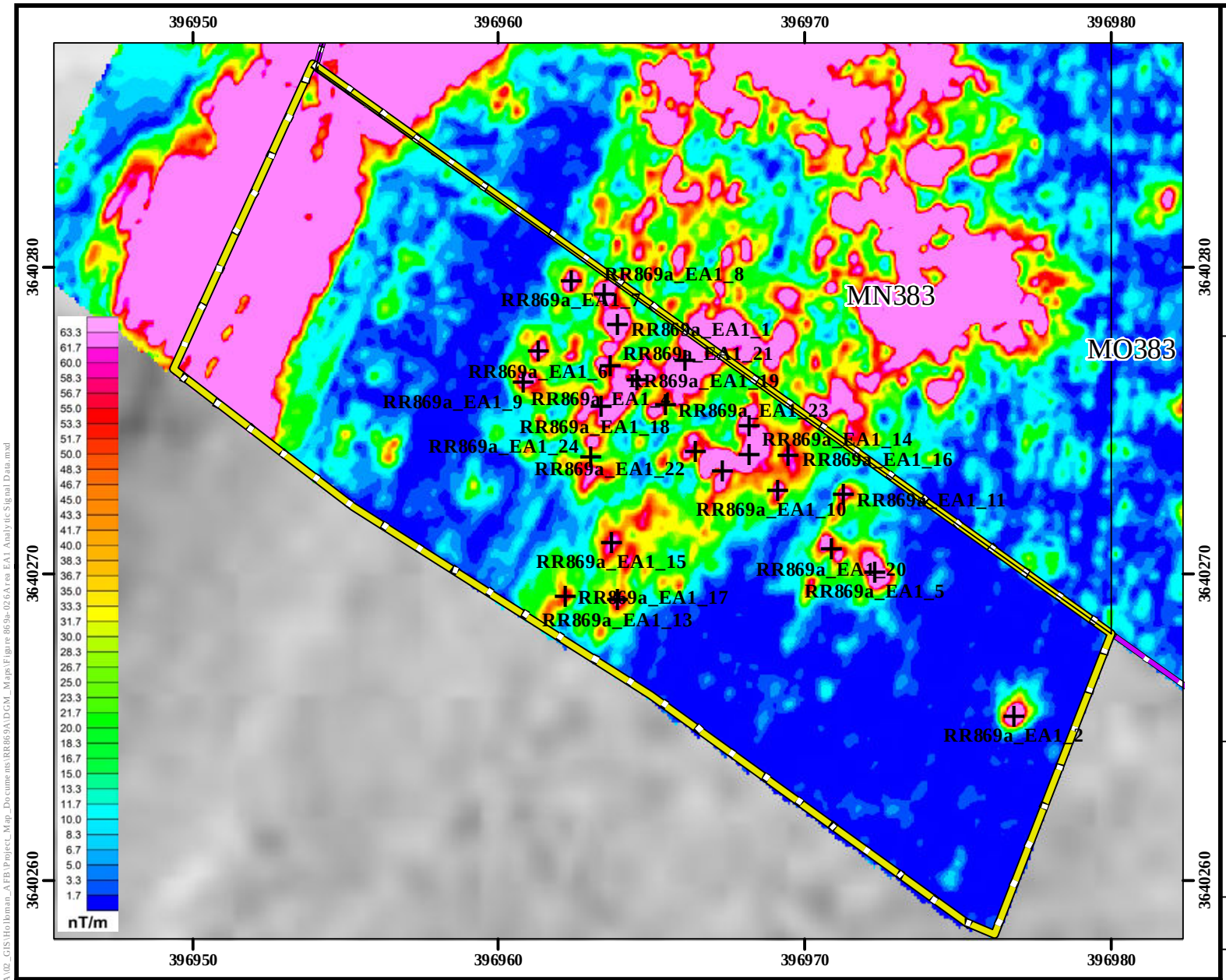
1 inch = 6 feet

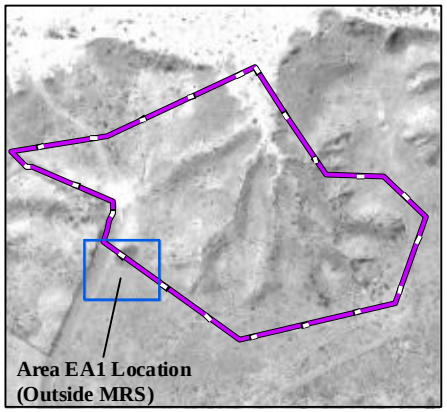
0 1 2 Meters

0 3 6 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-025 Grid ML385 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- Area EA1 Outside RR869a MRS (0.08 Acres)
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-26

G-858 Analytic Signal
Area EA1 Outside RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the Grids outside RR869a MRS.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

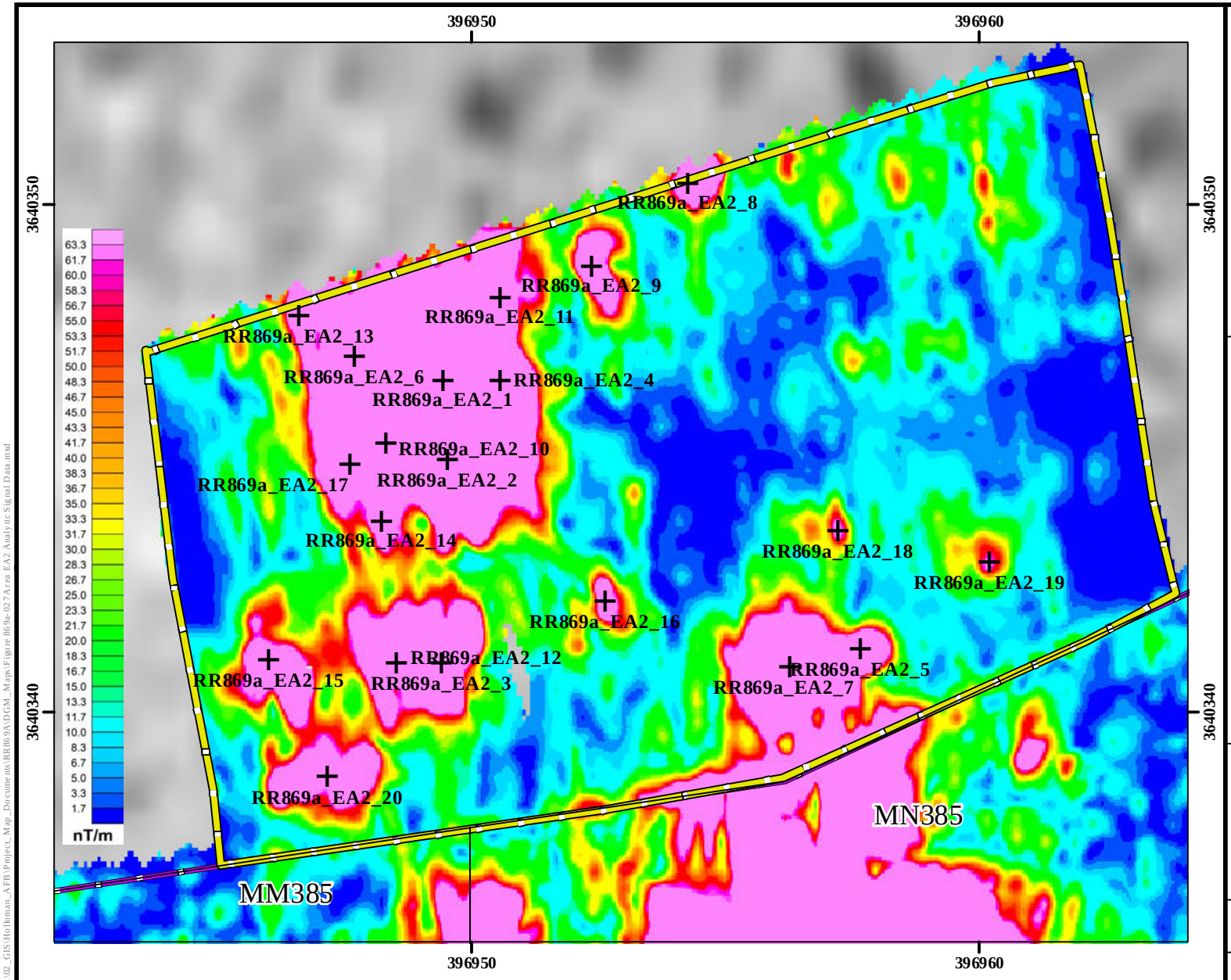
1 inch = 16 feet

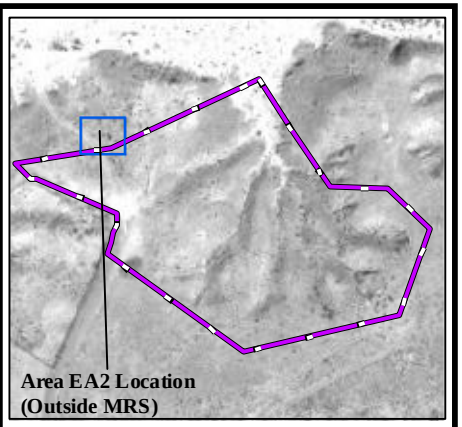
0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\seat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-026 Area EA1 Analytic Signal Data.mxd





Legend

- DGM Anomalies Exceeding 65 nT/m Threshold
- Grid Boundary
- RR869a MRS
- Area EA2 Outside RR869a MRS (0.05 Acres)
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-27

G-858 Analytic Signal
Area EA2 Outside RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the Grids outside RR869a MRS.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

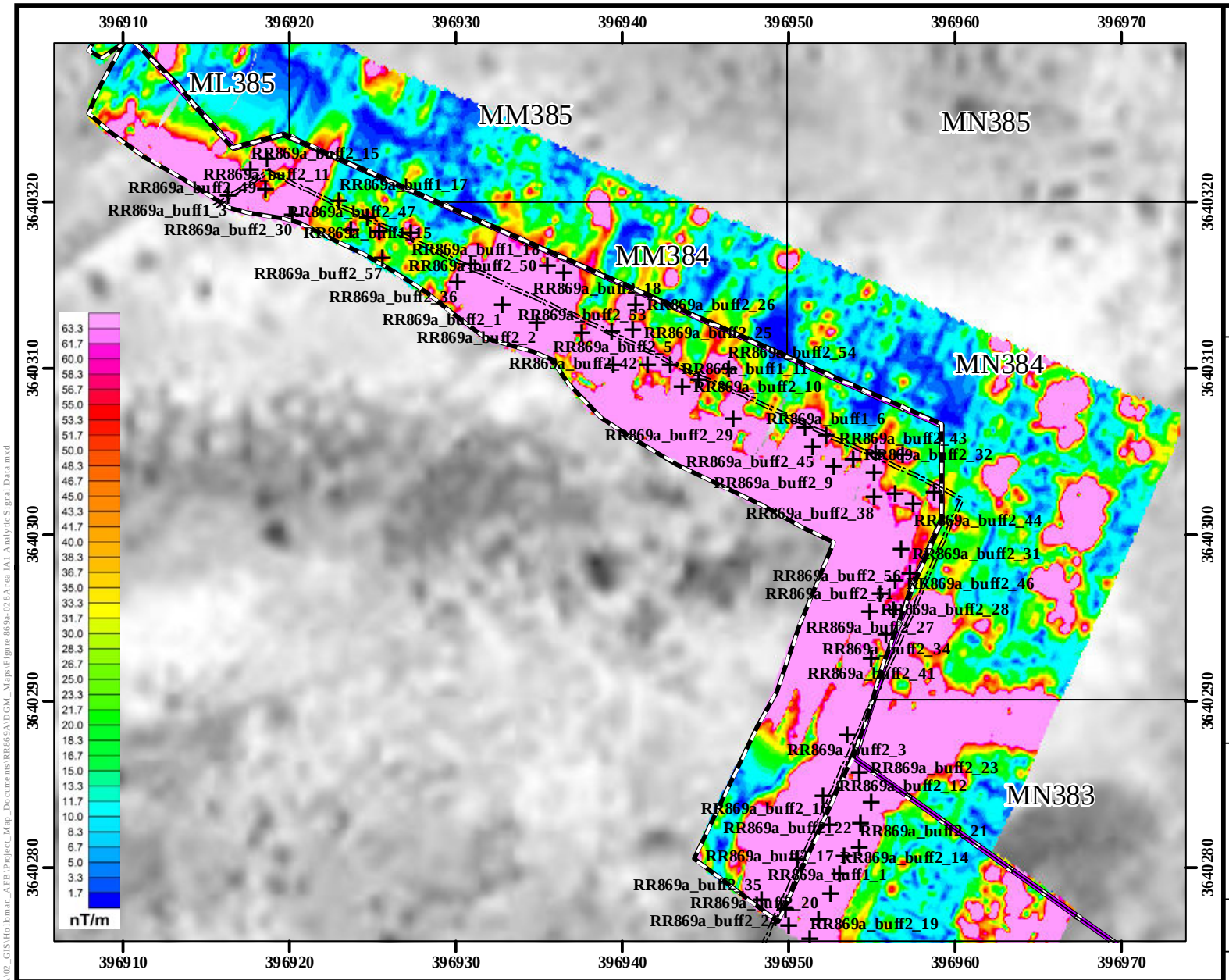
1 inch = 10 feet

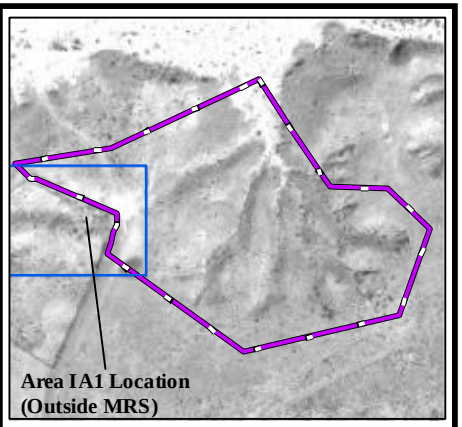
0 1.5 3 Meters

0 5 10 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-027 Area EA2 Analytic Signal Data.mxd





Legend

- Investigated DGM Target Anomalies Exceeding 30 nT/m Threshold
- Fenceline
- Grid Boundary
- RR869a MRS
- Fenceline Area Outside The RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-28

G-858 Analytic Signal
Fence Area IA1
Outside RR869a MRS

FPM Remediations, Inc.

2015

NOTES:

Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the Grids outside RR869a MRS.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

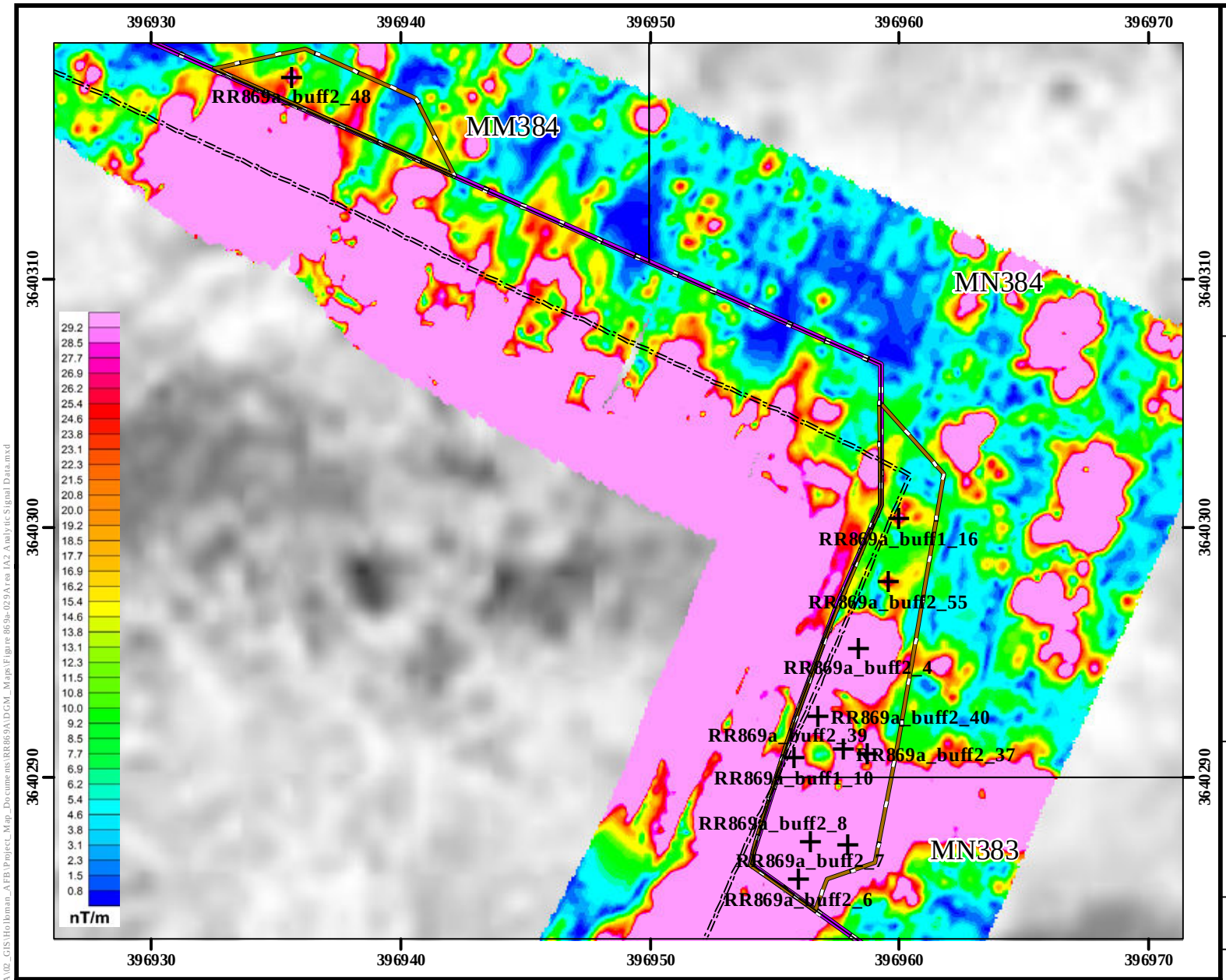
1 inch = 30 feet

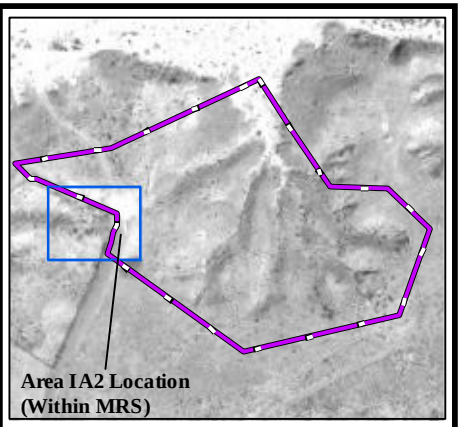
0 5 10 Meters

0 15 30 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-028 Area IA1 Analytic Signal Data.mxd





Legend

- Investigated DGM Target Anomalies Exceeding 30 nT/m Threshold
- Fenceline
- Grid Boundary
- RR869a MRS
- Area IA2 Within RR869a MRS
- G-858 Analytic Signal Data

Performance Based Remediation
New Mexico-Arizona
Holloman Air Force Base
Alamogordo, NM

AFCEC

FIGURE 869a-29

G-858 Analytic Signal
Fence Area IA2
Within RR869a MRS

FPM Remediations, Inc.

2015

NOTES:
Revision Date: 4/9/2015

Appendix A contains the survey coordinates of the RR869a MRS grids.

Coordinate System:NAD 1983 CORS96 UTM Zone 13N
Projection: Transverse Mercator
False Easting: 500,000.0000
Central Meridian: -105.0000
Latitude Of Origin: 0.0000
Horizontal Datum: NAD 1983 CORS96
False Northing: 0.0000
Scale Factor: 0.9996
Units: Meter
Base Map Date: (c) 2010 Microsoft Corporation and its data suppliers
Base Map Source: ESRI Online Bing Data Source

1 inch = 20 feet

0 3 6 Meters

0 10 20 Feet

N W E S

Path: \\sat\SAT_Clients\SAT_DATA\02_GIS\Holloman_AFB\Project_Map_Documents\RR869A\DGM_Maps\Figure 869a-029 Area IA2 Analytic Signal Data.mxd

This page is intentionally left blank

Appendix F

MEC and MDAS Disposition documentation

This page is intentionally left blank

Table of Contents

MEC discovery Form 12-16-2014
MDAS Certification DD Forms 1348-1A 1
MDAS Chains of Custody and Certificates of Destruction

This page is intentionally left blank

FPM Remediations, Inc.
MEC/MULTIPLE ANOMALY DISCOVERY FORM

UXO Supervisor: George Vaughn **Date:** 16 December 2014

Slope of Terrain (Check one box)	□	<10°	□	10° to 30°	□	>30°
Vegetation Cover (Check one box)	□	Cleared	□	Vegetated	□	Wetland
Inclination (Circle one)	0°	45°	90°	135°	180°	

Item Description/Justification/Comments

(2) M18, Smoke Grenade, Area SR864 – Grid IM315

Anomaly Type/Category (Check Appropriate Box)

□ UXO □ DMM □ Munitions Debris □ Practice Ordnance □ Inert Ordnance
□ Metal Waste □ Sub-surface Anomaly □ Other _____

Ordnance Positive Identification (If known, record below. Include fuze condition and disposition)

Quantity: 2	Ordnance Mark/Mod:	Nose Fuze Mark/Mod:	Tail Fuze Mark/Mod:
Ordnance Filler:	□ Explosive □ Propellant □ Pyrotechnic □ Other		N.E.W. 11.5oz of filler

Ordnance Category:

□ Bombs	□ Clusters/Dispensers	□ Grenades	□ Guided Missiles
□ Land Mines	□ Misc. Explosive Devices	□ Mortars	□ Underwater Ordnance
□ Rockets	□ Pyrotechnics and Flares	□ Projectiles	□ Small Arms

Fuzing Types

□ Piezo-Electric	□ Proximity (VT)	□ Impact	□ Base Detonating
□ All-ways Acting (PD)	□ Electric	□ Point Detonating	□ Influence
□ Mech Long Delay	□ Point-Initiating, Base-Detonating	□ Mechanical Time	□ Pressure
□ Powder Train Time Fuze (PTTF)	□ MT Superquick		

Status of MEC/UXO

□ Armed (fuzes sheared off) □ Unarmed

Physical Condition of MEC/UXO (Check all that apply)

□ Broken Open	□ Soil Staining	□ Filler Visible	□ Soil Sample Taken

FOR UXOSS USE

Disposition: (Clarify Under Remarks) □ Transport □ Leave In Place □ Other		Date:
Notifications To Installation By:	Initials: GHV	Date 16 Dec 2014
Storage Location: N/A		

Remarks: As required in the approved ESS, FPM will provide security for the MEC items until disposal is complete. Disposal operation is scheduled for 17 December 2014.

UXO – Ordnance fuzed, armed or otherwise prepared for action and fired or placed in such a manner that it constitutes a hazard
DMM – Ordnance that was disposed of by abandonment; may have been fuzed or armed, but was not employed
Inert – Same physical features as an ordnance item but does not and never did contain energetic material
Munitions Debris – Ordnance material that contained or was in contact with energetic material, which has been expended (e.g., fragments from projectile)

DD FORM 1348-1A, JUL 91 ISSUE RELEASE/RECEIPT DOCUMENT

DOC CENT	IDENT	RI FROM	M&S	UNIT	ISS	QUANTITY	SER	SUPPLEMENTARY ADDRESS	SIG	FUND	DISTRIBUTION	PROJECT	PRI	REQD	DEAT E	ADV	RI	Oi P	COND	MGT	UNIT PRICE DOLLARS	UNIT PRICE CTS	1. TOTAL PRICE DOLLARS	1. TOTAL PRICE CTS

2. SHIP FROM
FPM Remediations
Holloman AFB, (near Alamogordo, NM)
88330

3. SHIP TO
El Paso Iron & Metal, El Paso
Texas
79901

4. MARK FOR

5. DOC DATE	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
02/06/15				

10. QTY REC'D	11. UP	12. UNIT WEIGHT	13. UNIT CUBE	14. UFC	15. SL
9					

24 DOCUMENT NUMBER & SUFFIX (20-44)

Shipment: HAFB MDAS 0001

9 each 55 gallon steel drums
Seal numbers: 204801, 204802, 204803, 204804, 204805, 204806, 204807, 204808, 204809

16. FREIGHT CLASSIFICATION NOMENCLATURE

17. ITEM NOMENCLATURE
Material Documented As Safe (MDAS) from Holloman AFB RI

25. NATIONAL STOCK NO. & ADD (8-22)

NA

18. TY CONT	19. NO. CONT	20. TOTAL WEIGHT	21. TOTAL CUBE
	1		

22. RECEIVED BY	23. DATE RECEIVED
Fco R. Cometa V.	02-06-15

26. RIC (4-6) UI (23-24) QTY (25-29) CON CODE (71) DIST (75-56) UP (74-80)

"This certifies and verifies that the material listed has been 100% inspected and, to the best of our knowledge and belief, is inert and/or free of explosives or related material."

27. ADDITIONAL DATA

George Vaughn, Senior UXO Supervisor/Certifier, 318-617-1719
Date: 02/06/2015
FPM Remediations, 5811 University Heights Blvd. San Antonio, TX.

William R. Vanderford, UXO Safety & QC/Verifier, 210-218-4984
Date: 02/06/2015
FPM Remediations, 5811 University Heights Blvd. San Antonio, TX.

DD FORM 1348-1A, JUL 91 ISSUE RELEASE/RECEIPT DOCUMENT

DOCENT	IDENT	RI FROM	M&S	UNIT	ISS	QUANTITY	SUPPLEMENTARY ADDRESS	SER	SIG	FUND	DISTRIBUTION	PROJECT	RI	CD	DATE	ADV	RI	OP	COND	MGT	UNIT PRICE	DOLLARS	CTS

1. TOTAL PRICE

2. SHIP FROM
FPM Remediations
Holloman AFB, (near Alamogordo, NM)
88330

3. SHIP TO
Timberline Env. Svcs.
22709 Twain Harte,
Twain Harte, CA
95383

4. MARK FOR

24 DOCUMENT NUMBER & SUFFIX (20-44)

Shipment: HAFB MDAS 0002

3 each 55 gallon steel drums
Seal numbers: 204810, 204811, 204812

5. DOC DATE 02/12/15 | 6. NMFC | 7. FRT RATE | 8. TYPE CARGO | 9. PS

10. QTY REC'D 3 | 11. UP | 12. UNIT WEIGHT | 13. UNIT CUBE | 14. UFC | 15. SL

16. FREIGHT CLASSIFICATION NOMENCLATURE

17. ITEM NOMENCLATURE
Material Documented As Safe (MDAS) from Holloman AFB RI

25. NATIONAL STOCK NO. & ADD (8-22)

NA

18. TY CONT | 19. NO. CONT | 20. TOTAL WEIGHT | 21. TOTAL CUBE

22. RECEIVED BY: Todd Williams
X

23. DATE RECEIVED
02/12/15

26. RIC (4-6) UI (23-24) QTY (25-29) CON CODE (71) DIST (55-66) UP (74-80)

"This certifies and verifies that the material listed has been 100% inspected and, to the best of our knowledge and belief, is inert and/or free of explosives or related material."

1921 Total Wt

27. ADDITIONAL DATA

George Vaughn, Senior UXO Supervisor/Certifier, 318-617-1719
Date: 02/12/2015

William R. Vanderford, UXO Safety & QC/Verifier, 210-218-4984
Date: 02/12/2015

EL PASO
IRON & METAL CO.
1535 E. San Antonio Ave. El Paso, Texas 79901 (915) 532-6981

2/6/2015

To: CES/CEAN
550 Tabbosa Ave. Holloman AFB, NM. 88330-8458

On February 6, 2015, El Paso Iron and Metal 1, LTD received approx. 5,705 Lbs. of scrap metal links. The material was received through Holloman Military Base. The shipment was picked up and delivered by El Paso Iron and Metal, driver: Francisco Carrete, truck #108.

El Paso Iron & Metal 1, LTD. Assures that all of this material will subsequently be re-melted and recycled.

If you should have any further questions regarding this matter, please feel to contact me at (915)532-6981 ext.12.

Sincerely,
Jose A. Armijo, EPIM Sr. Buyer

DEMILITARIZATION CHAIN OF CUSTODY CERTIFICATION FOR NON-HAZARDOUS MATERIALS

Doc. Date: 2/6/2015

1 Releasing Generators (RG) Name and Mailing Address 49 CES/CEAN 550 Tabosa Ave , Holloman AFB, NM 88330-8458	1a RG's Phone No 575-572-6607	2 RG's Site Manager DeAnna Rothhaupt
3 Releasing Generators (RG) Project Name and Location Remedial Investigation Holloman AFB, NM	3a RG Project Phone No 318-617-1719	4 RG's SUCOS George Vaughn
5 Transportation Company El Paso Iron & Metal 1535 E San Antonio Ave , El Paso TX., 79901	5a Transporter Phone No	6 Transporter Name
7 Demil Processor El Paso Iron & Metal 1535 E San Antonio Ave , El Paso TX., 79901	7a Demil Processor Phone No 915-532-6981	8 Demil Processor Manager Jose Armijo

9. # Of Containers	10 Serial No.'s		11 Estimated Weight	Actual Weight
9	204801	204807	5511	
	204802	204808		
	204803	204809		
	204804			
	204805			
	204806			

12. Freight Classification Nomenclature

13. Item Nomenclature: Material Documented As Safe (MDAS) from Holloman AFB PBR RI

14 Material Released to the Transporter By RG's Site Manager

Print/Type Name	Signature	Time and Date
George Vaughn		6Feb 2015 / 1150

15 Received for Transport By (Receiving Company Verifies that Seals are Intact)

Print/Type Name	Signature	Time and Date
For R Gaeke V.	For R Gaeke V.	02-06-15

16 TCS Site Manager ACKNOWLEDGE THE RECEIPT OF MATERIAL (Receiving Company Verifies that Seals are Intact)

RECEIVED BY	# of Containers/Weight	Date
Jose Armijo	5,705 lbs.	02/06/15

17 Material Demilitarized

Certified By Print/Type Name	Signature	Date
Jose Olivas	Jose Olivas	2-06-15

18 Material Disposed in Accordance with DOD Guidelines

Certified By Print/Type Name	Receiving Facility	Date
Jose Armijo	EL Paso Iron and Metal	2/06/15

19 Documents sent to RG

Print/Type Name	Documents	Month/Day/Year
George Vaughn	1348-1A, Chain of Custody Certificate of Destruction	03/12/15

20. Discrepancies

8-12-04 Rev 3

This page is intentionally left blank

TIMBERLINE Environmental Services

Certificate of Destruction

Sealed Container Generating Contractor **FPM Remediation**

Generating Location **Holloman AFB**

Gross Weight **1,921 lbs**

[I certify that the items/assets/material received were demilitarized in accordance with guidelines contained in DoD 4160.21-M-1 and having been smelted are only identifiable by their basic content.]

COD# **31615** *Date* **03/16/2015**

Certifying Official **Terry Northcutt** *Title* **President**

Signature _____

TES Inc. 22709 Twain Harte Dr. Twain Harte, Ca. 209-586-1541 caoffice@timberlineenvsv.com

DEMILITARIZATION CHAIN OF CUSTODY CERTIFICATION FOR NON-HAZARDOUS MATERIALS

Doc. Date: 2/12/2015

1. Releasing Generators (RG) Name and Mailing Address	1a. RG's Phone No.	2. RG's Site Manager
49 CES/CEAN 550 Tabosa Ave., Holloman AFB, NM 88330-8458	575-572-6607	DeAnna Rothhaupt
3. Releasing Generators (RG) Project Name and Location	**3a. RG Project Phone No.**	**4. RG's SUXOS**
Remedial Investigation Holloman AFB, NM	318-617-1719	George Vaughn
5. Transportation Company	**5a. Transporter Phone No.**	**6. Transporter Name**
YRC Worldwide Inc. 10990 Roe Ave. Overland Park, KS. 66211	913-696-6100	YRC Worldwide Inc.
7. Demil Processor	**7a. Demil Processor Phone No.**	**8. Demil Processor Manager**
Timberline Environmental Services 22709 Twain Harte, Twain Harte, CA 95383	209-586-1541	Terry Northcutt

9. # Of Containers	10. Seal No.'s		11. Estimated Weight	Actual Weight
3	204810		1,750	1,921 lbs.
	204811			
	204812			

12. Freight Classification Nomenclature	13. Item Nomenclature
	Material Documented As Safe (MDAS) from Holloman AFB PBR RI

14. Material Released to the Transporter By RG's Site Manager

Print/Type Name	Signature	Time and Date
George Vaughn		2/12/2015

15. Received for Transport By (Receiving Signature Verifies that Seals are Intact)

Print/Type Name	Signature	Time and Date
Todd Williams		2/12/2015

16. TES Site Manager: I ACKNOWLEDGE THE RECEIPT OF MATERIAL (Receiving Signature Verifies that Seals are Intact)

RECEIVED BY:	# of Containers/Weight	Date
Jacob Mills		2/18/15

17. Material Demilitarized

sed By: Print/Type Name	Signature	Date
Jacob Mills		2/26/15

18. Material Recycled in Accordance with DOD Guidelines

ed By: Print/Type Name	Recycling Facility	Date
Terry Northcutt	TES, Inc.	2-26-15

19. Documents sent to RG

Print/Type Name	Documents	Month/Day/Year
Rebecca Lagarbo TES, Inc.	1348, Chain of Custody, COD	3, 16, 15

20. Discrepancies

8-12-04 Rev 3

YRC FREIGHT SHIPMENT STATUS CALL 1-800-610-6500

10/14/14

851-225421-2

851

YRC Freight tariffs are incorporated herein (copies available upon request). YRC Freight tariffs limit its liability. This shipment is subject to the terms and conditions of the Uniform Straight Bill of Lading as stated in the NMFC 100 series tariff.

Appendix G

Analytical Data and Review

This page is intentionally left blank

Table of Contents

Data Quality Evaluation_XU854_FA20579
Data Quality Evaluation_XU854_FA20723
Data Quality Evaluation_XU854_FA20794
Data Quality Evaluation_XU854_FA20820
Data Quality Evaluation_XU854_FA20881
Data Quality Evaluation_XU854_FA20937
Data Quality Evaluation_SR864_FA22032
Data Quality Evaluation_ML865_FA21555
Data Quality Evaluation_ML865_FA22032
Raw Lab Data (electronic copy only)

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
XU854 MISSILE TEST STAND AREA MRS

Date(s) Sampled: December 9, 2014
Report Date: December 29, 2014
Job No.: FA20579 (Accutest), FA20579X (Empirical Laboratories)

SAMPLE IDs

SOIL:
FA20579-1, 1412220-01 (XU854ISH06A)

FIELD DUPLICATES:
FA20579-4, 1412220-04 (XU854ISH06C) is a field duplicate sample for FA20579-1, 1412220-01 (XU854ISH06A).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batch OP54324: For explosives, the lab performed matrix spike and matrix spike duplicate samples for field sample FA20579-1 (XU854ISH06A).
Batches OP54351, GP25228: For perchlorate and nitrate, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch. It should be noted that the laboratory inadvertently did not use samples XU854ISH06S/D (FA20579-2 and -3) for MS/MSD analysis and were analyzed as normal samples. Since these are essentially duplicates of sample XU854ISH06A, but a field duplicate was already designated (XU854ISH06C), these results are not usable.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On December 9, 2014, one soil sample, one duplicate, and an MS/MSD were collected from Sites XU854 Missile Test Stand Area MRS, Holloman Air Force Base (AFB). The samples were analyzed for perchlorate by Method 6850, explosives by Method 8330B, and nitrate nitrogen by Method 9056A by Accutest Laboratories. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2(MOD).

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

PERCHLORATE

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

  The following table summarizes the RPDs/total differences of field duplicate sample set XU854ISH06A/ XU853ISH06C.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (µg/kg)	Field Dup Result (µg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
XU854ISH06A	XU854ISH06C	Perchlorate	12.5	11.2	1.8	11.0	None	RPD < 30%

  Corrective Action: No qualifiers were applied since the RPD was within control limits.

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

NITRATE

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

The following table summarizes the RPDs/total differences of field duplicate sample set XU854ISH06A/ XU853ISH06C.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
XU854ISH06A	XU854ISH06C	Nitrate	31.3	31.4	1.0	0.3	None	RPD < 30%

Corrective Action: No qualifiers were applied since the RPD was within control limits.

NITROCELLULOSE

- According to the case narrative, each field sample was analyzed outside of holding time due to analyst oversight.
  Corrective Action: The holding time was 28 days, while samples were analyzed 30 days after sample collection. Since this exceedance is within 2x the holding time, the results are considered usable, albeit estimated, and are flagged "J."

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

  The following table summarizes the RPDs/total differences of field duplicate sample set XU854ISH06A/ XU853ISH06C.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (µg/kg)	Field Dup Result (µg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
XU854ISH06A	XU854ISH06C	Nitrocellulose	1.55 J	1.38 J	4.00	0.17	None	RPD < 30%

Corrective Action: No qualifiers were applied since the total difference was within control limits.

The sample results included in Job No. FA20579/FA20579X are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA20579/FA20579X

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
Holding time	Nitrocellulose	E353.2(MOD)	J	XU854ISH06A, XU854ISH06S, XU854ISH06D, XU854ISH06C

Sample Summary

FPM Remediations

Job No: FA20579

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA20579-1	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06A
FA20579-2	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06S
FA20579-3	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06D
FA20579-4	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06C

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20579

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date** 12/29/2014 11:28:01

4 Samples were collected on 12/09/2014 and were received at Accutest on 12/10/2014 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of FA20579. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54351

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-3MSD, FA20723-3MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. For method performance in clean matix refer to Blank Spike.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54324

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20579-1MS, FA20579-1MSD, FA20723-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25228

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-1MSD, FA20723-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For method performance in clean matrix refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Svetlana Izosimova, QA Officer

Date: December 29, 2014

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06A		
Lab Sample ID:	FA20579-1	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9311.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.12 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12 5	1.8	0.89	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06A		
Lab Sample ID:	FA20579-1	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045288.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH06A		
Lab Sample ID:	FA20579-1	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.3	1.0	0.50	0.50	mg/kg	1	12/24/14 03:17	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: Q9312.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06S		
Lab Sample ID:	FA20579-2	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9312.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.04 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	15.6	1.9	0.96	0.53	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

DO NOT USE (just a duplicate of 20579-1)

cwt 3/6/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Raw Data: BB045291.D

Accutest Laboratories

Report of Analysis

4.2.4

Client Sample ID:	XU854ISH06S		
Lab Sample ID:	FA20579-2	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045291.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

DO NOT USE (Just a duplicate of FA20579-1)

CW 3/6/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06S		
Lab Sample ID:	FA20579-2	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.6	1.0	0.50	0.50	mg/kg	1	12/24/14 03:34	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

Do NOT USE (just a duplicate of 20579-1)

Cust. 3/16/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: Q9313.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06D		
Lab Sample ID:	FA20579-3	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9313.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.13 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.9	1.8	0.88	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

Do Not Use (Got a duplicate of 20579-1)

Ust 3/6/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06D		
Lab Sample ID:	FA20579-3	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045294.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

DO NOT USE (test a duplicate of 20579-1) ats 3/6/15

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06D		
Lab Sample ID:	FA20579-3	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.1	1.0	0.50	0.50	mg/kg	1	12/24/14 03:51	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

Do Not Use
(just a duplicate
of 20579-1)

Cust
3/6/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISH06C		
Lab Sample ID:	FA20579-4	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9314.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.10 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	11.2	1.8	0.91	0.50	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06C
Lab Sample ID: FA20579-4
Matrix: SO - Soil
Method: SW846 8330B SW846 8330B
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/09/14
Date Received: 12/10/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045295.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH06C		
Lab Sample ID:	FA20579-4	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.4	1.0	0.50	0.50	mg/kg	1	12/24/14 04:08	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412220

QC LEVEL: Level IV
Report Due: 1/8/2015
Client Sample Count: 4

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/9/2014	12/20/2014	1412220-01	XU854ISH06A	Solid	X
Client Sample	12/9/2014	12/20/2014	1412220-02	XU854ISH06S	Solid	X
Client Sample	12/9/2014	12/20/2014	1412220-03	XU854ISH06D	Solid	X
Client Sample	12/9/2014	12/20/2014	1412220-04	XU854ISH06C	Solid	X

1412220

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd. Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: FA20579X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20579X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 353.2
01 1X	XU854ISH06A		12/9/14	1:03:00 PM	MS	SO	1					1				X
02 2X	XU854ISH06S		12/9/14	1:03:00 PM	MS	SO	1					1				X
03 3X	XU854ISH06D		12/9/14	1:03:00 PM	MS	SO	1					1				X
04 4X	XU854ISH06C		12/9/14	1:03:00 PM	MS	SO	1					1				X

Turnaround Time (Business days)

- [ ] 10 Day (business)
- [ ] 5 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush TAT date available via Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical Labs

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

LAB USE ONLY

Sample Custody must be documented below each time samples change possession, including courier delivery.

1 Relinquished by Sampler:	Date Time: 12-19-14 17:00	Received By: 1	Relinquished By: 2	Date Time: 12/20/14 9:45	Received By: 2
3 Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5 Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

1412220 Data Package

Sample Delivery Group Case Narrative

Receipt Information:
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

The following issues were discovered with the COC and/or samples upon log-in:
1. The client IDs on the container did not match the IDs on the COC. The client was contacted and indicated the IDs on the container are project name on COC and Accutest sample number.

Changes to the Revision:
This is an original submittal of the final report package.

Analytical Information:
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:
The following were analyzed outside of the method recommended holding time:
Nitrocellulose for 1412220-01, -02, -03, and -04; note – the samples were analyzed 30 days after sampling with a 28 day recommended holding time due to an analyst oversight

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

***:** Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

ANALYSIS DATA SHEET

XU854ISH06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/09/14 13:03

SDG: 1412220
Project: Nitrocellulose
Laboratory ID: 1412220-01
Received: 12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.55	1.00	2.00	4.00	1	~~HH~~ J	E353.2MOD	5A05001	01/08/15 13:44

cwk
3/5/15

ANALYSIS DATA SHEET

XU854ISH06S

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/09/14 13:03

SDG: 1412220
Project: Nitrocellulose
Laboratory ID: 1412220-02
Received: 12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.32	1.00	2.00	4.00	1	~~H~~ J	E353.2MOD	5A05001	01/08/15 13:48

Do Not Use (just a duplicate of 1412220-01)
cmt
3/5/15

ANALYSIS DATA SHEET

XU854ISH06D

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/09/14 13:03

SDG: 1412220
Project: Nitrocellulose
Laboratory ID: 1412220-03
Received: 12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.40	1.00	2.00	4.00	1	~~H~~ J	E353.2MOD	5A05001	01/08/15 13:50

Do Not Use (just a duplicate of 1412220-01)

Cust 3/5/15

ANALYSIS DATA SHEET

XU854ISH06C

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/09/14 13:03

SDG: 1412220
Project: Nitrocellulose
Laboratory ID: 1412220-04
Received: 12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.38**	**1.00**	2.00	4.00	1	HJ	E353.2MOD	5A05001	01/08/15 13:51

1/5/15

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
XU854 MISSILE TEST STAND AREA MRS

Date(s) Sampled: December 11, 2014
Report Date: December 29, 2014
Job No.: FA20723 (Accutest), FA20723 (Empirical Laboratories)

SAMPLE IDs

SOIL:
FA20723-1, 1412221-01 (XU854ISH06Z1)
FA20723-2, 1412221-02 (XU854ISH06Z2)
FA20723-3, 1412221-03 (XU854ISH06Z3)

FIELD DUPLICATES:
There were no field duplicates collected in association with this analytical job.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batch OP54351: For perchlorate, the lab performed matrix spike and matrix spike duplicate samples for FA20723-3.
Batch GP25228: For nitrate, the lab performed matrix spike and matrix spike duplicate samples for FA20723-1.
Batch OP54324: For explosives, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On December 11, 2014, three soil samples were collected from Site XU854 Missile Test Stand Area MRS, Holloman Air Force Base (AFB). The samples were analyzed for perchlorate by Method 6850, explosives by Method 8330B, and nitrate nitrogen by Method 9056A by Accutest Laboratories. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2 (MOD).

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

PERCHLORATE

- It is noted the following analytes exceeded recovery limits in the MS/MSD samples (parent sample XU854ISH06Z3).

MS/MSD Spike Results Job Number/Spike Analytes	MS %Rec	MSD %Rec	QC Limits (%)	RPD	Flag Applied	Rationale
Accutest Job #FA20723: Parent sample XU854ISH06Z3						
Perchlorate	***44***	***55***	80-120	1	J	%Rec less than lower control limit

Corrective Action: For parent sample XU853ISC06Z3, a "J" flag was applied since the recovery was less than the lower control limit.

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

NITRATE

- It is noted the following analytes exceeded recovery limits in the MS/MSD samples (parent sample XU854ISH06Z1).

MS/MSD Spike Results Job Number/Spike Analytes	MS %Rec	MSD %Rec	QC Limits (%)	RPD	Flag Applied	Rationale
Accutest Job #FA20723: Parent sample XU854ISH06Z1						
Nitrate	***159***	***153***	90-110	2.6	J	%Rec greater than upper control limit

- **Corrective Action:** For parent sample XU854ISH06Z1, a "J" flag was applied since the recovery was greater than the upper control limit.

NITROCELLULOSE

- There were no quality control exceedances for the nitrocellulose analyses.

The sample results included in Job No. FA20723/FA20723X are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA20723/FA20723X

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
MS/MSD recovery within control limits	Nitrate	9056A	J	XU854ISH06Z1
MS/MSD recovery within control limits	Perchlorate	6850	J	XU854ISH06Z3

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20723

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA20723-1	12/11/14	10:02	MS	12/12/14	SO	Soil	XU854ISH0621
FA20723-2	12/11/14	11:36	MS	12/12/14	SO	Soil	XU854ISH0622
FA20723-3	12/11/14	13:40	MS	12/12/14	SO	Soil	XU854ISH0623

NVH
3/12/15

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL: 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20723 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPA REMEDIATIONS, INC.
Address: 581 HILLSBORO HEIGHTS, SUITE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: JUANA RANCENLIC E-mail: J.RANCENLIB FPA-RE
Phone: 210-495-7744 ext. 13 Fax #: 210-495-8544
Sampler(s) Name(s) (Printed): MIKE SAMPLE

Project Information

Project Name: NM-AZ 08R
Street: HOLLOMAN AFB
City: ALAMO GORDO State: NM
Project #: H29-13-01-J - YA85405
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Collection: Time	Sampled By	Matrix	Total # of Bottles	Container Information	833054	NC353.2	N03030GB	PERC6850	Matrix Codes
1	YA85405H06621	12/11	10:00	MS	Soil	1		X	X	X	X	
2	YA85405H06622	12/11	11:30	MS	Soil	1		X	X	X	X	
3	YA85405H06623	12/11	13:40	MS	Soil	1		X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

LAB USE ONLY

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Labtink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1	12/11 15:40	2	3 FPA 12-12-24	1030	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal In Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3.0

5.1 5

FA20723: Chain of Custody
Page 1 of 3

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20723

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date** 12/29/2014 11:34:17

3 Samples were collected on 12/11/2014 and were received at Accutest on 12/12/2014 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of FA20723. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54351

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-3MSD, FA20723-3MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. For method performance in clean matrix refer to Blank Spike.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54324

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20579-1MS, FA20579-1MSD, FA20723-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25228

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-1MSD, FA20723-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For metod performance in clean matrix refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Svetlana Izosimova, QA Officer

Date: December 29, 2014

Raw Data: Q9318.D

Accutest Laboratories

NVH 3/12/15

Report of Analysis

Client Sample ID:	XU854ISH0621		
Lab Sample ID:	FA20723-1	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9318.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.04 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	9.5	1.9	0.96	0.53	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value

LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

NVH 3/12/15

Report of Analysis

Client Sample ID:	XU854ISH0621		
Lab Sample ID:	FA20723-1	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045297.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

NVH 3/12/15

Report of Analysis

Client Sample ID:	XU854ISH0621		
Lab Sample ID:	FA20723-1	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

4.1
4

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	15.0 J	1.0	0.50	0.50	mg/kg	1	12/24/14 02:27	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

AH 3/4/15

LOQ = Limit of Quantitation
LOD = Limit of Detection

DL = Detection Limit

U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

NVH 3/12/15

Report of Analysis

4.2
4

Client Sample ID:	XU854ISH0622		
Lab Sample ID:	FA20723-2	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9319.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.20 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	5.9	1.7	0.83	0.46	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

NVH 3/12/15

Report of Analysis

4.2

4

Client Sample ID:	XU854ISH0622		
Lab Sample ID:	FA20723-2	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045296.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	105%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

NVH
3/12/15

Report of Analysis

Client Sample ID:	XU854ISH0622		
Lab Sample ID:	FA20723-2	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

4.2
4

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	27.6	1.0	0.50	0.50	mg/kg	1	12/24/14 02:44	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: Q9322.D

Accutest Laboratories

NVH 3/12/15

Report of Analysis

4.3
4

Client Sample ID:	XU854ISH0623		
Lab Sample ID:	FA20723-3	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
Method:	SW846 6850 SW846 6850	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9322.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.13 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.5 J	1.8	0.88	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

CWA 3/4/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

NVH 3/12/15

Report of Analysis

Client Sample ID:	XU854ISH0623		
Lab Sample ID:	FA20723-3	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045300.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Z NMH 3/12/15

Report of Analysis

Client Sample ID:	XU854ISH0623		
Lab Sample ID:	FA20723-3	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

4.3

4

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	35.6	1.0	0.50	0.50	mg/kg	1	12/24/14 03:00	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412221

QC LEVEL: Level IV
Report Due: 1/8/2015
Client Sample Count: 3

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/11/2014	12/20/2014	1412221-01	XU854ISH0621	Solid	X
Client Sample	12/11/2014	12/20/2014	1412221-02	XU854ISH0622	Solid	X
Client Sample	12/11/2014	12/20/2014	1412221-03	XU854ISH0623	Solid	X

3
2

NVH 3/12/15

1412221

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL 407-425-6700 FAX 407-425-0707
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: FA20723X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone #:

Project Information

Project Name: FA20723X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 353.2
1A	XU854ISH0621		12/11/14	10:02:00 AM	MS	SO	1					1				X
2A	XU854ISH0622		12/11/14	11:36:00 AM	MS	SO	1					1				X
3A	XU854ISH0623		12/11/14	1:40:00 PM	MS	SO	1					1				X

01 02 03

Z

NVH 3/12/15

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

LAB USE ONLY

Turnaround Time (Business days)

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

1 Relinquished by Sampler:	Date Time: 12-11-14 1700	Received By: 1	Relinquished By: 2	Date Time: 12/12/14 945	Received By: 2
3 Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5 Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ]

On Ice [ ] Cooler Temp.

9

1412221

Sample Delivery Group Case Narrative

Receipt Information:
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

The following issues were discovered with the COC and/or samples upon log-in:

1. The client IDs on the container did not match the IDs on the COC. The client was contacted and indicated the IDs on the container are project name on COC and Accutest sample number.

Changes to the Revision:
This is an original submittal of the final report package.

Analytical Information:
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:
No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

***:** Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

Z NVH 3/12/15

ANALYSIS DATA SHEET

XU854ISH0621

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412221-01
Sampled:	12/11/14 10:02	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.20	1.00	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:51

NVH
2 3/12/15

ANALYSIS DATA SHEET

XU854ISH0622

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/11/14 11:36

SDG: 1412221
Project: Nitrocellulose
Laboratory ID: 1412221-02
Received: 12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.03	1.00	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:54

Z NVH 3/12/15

ANALYSIS DATA SHEET

XU854ISH0623

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412221-03
Sampled:	12/11/14 13:40	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	2.95	1.00	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:56

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
XU854 MISSILE TEST STAND AREA MRS

Date(s) Sampled: December 15, 2014
Report Date: January 6, 2015
Job No.: FA20794 (Accutest), FA20794X (Empirical Laboratories)

SAMPLE IDs

SOIL:
FA20794-1, 1412230-01 (XU854ISG06A)
FA20794-2, 1412230-02 (XU854ISN06A)
FA20794-3, 1412230-03 (XU854ISO06A)
FA20794-4, 1412230-04 (XU854ISI06A)

FIELD DUPLICATES:
There were no field duplicates collected in association with this analytical job.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batches OP54473, OP54390, and GP25246: For perchlorate, explosives, and nitrate, the lab performed matrix spike and matrix spike duplicate samples for FA20794-1.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On December 15, 2014, four soil samples were collected from Site XU854 Missile Test Stand Area MRS, Holloman Air Force Base (AFB). The samples were analyzed for perchlorate by Method 6850, explosives by Method 8330B, and nitrate nitrogen by Method 9056A by Accutest Laboratories. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2(MOD).

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

PERCHLORATE

- It is noted the following analytes exceeded recovery limits in the MS/MSD samples (parent sample XU854ISG06A).

MS/MSD Spike Results Job Number/Spike Analytes	MS %Rec	MSD %Rec	QC Limits (%)	RPD	Flag Applied	Rationale
Accutest Job #FA20794: Parent sample XU854ISG06A						
Perchlorate	***33***	***41***	80-120	1	J	%Rec less than lower control limit

Corrective Action: For parent sample XU854ISG06A, a "J" flag was applied since the recovery was less than the lower control limit.

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

NITRATE

- It is noted the following analytes exceeded recovery limits in the MS/MSD samples (parent sample XU854ISG06A).

MS/MSD Spike Results Job Number/Spike Analytes	MS %Rec	MSD %Rec	QC Limits (%)	RPD	Flag Applied	Rationale
Accutest Job #FA20794: Parent sample XU854ISG06A						
Nitrate	***80.4***	***79.7***	90-110	0.7	J	%Rec less than the lower control limit

Corrective Action: For parent sample XU854ISG06A, a "J" flag was applied since the recovery was less than the lower control limit.

- The response of the instrument indicated the %D for second source calibration verifications and/or continuing calibration verifications outside QC limits for individual analytes. The following table summarizes the exceedances:

Type of Calibration Exceedance Affected Analytes	%D	Method QC Limit	Flag Applied	Rationale
Accutest Job #FA20794: Continuing Calibration Verification GN64657-CCV3				
Nitrate	***112***	±10	J	%D greater than upper control limit

Corrective Action: When the %D was greater than the upper control limit, the results are considered estimated (may be biased high) and "J" flags were deemed necessary. According

to laboratory correspondence, there were integration issues isolated to a specific analyst associated with only the quality control samples associated with nitrate. The laboratory has taken corrective measures to prevent future issues. All field samples in this SDG were associated with this CCV.

NITROCELLULOSE

- There were no quality control exceedances for the nitrocellulose analyses.

The sample results included in Job No. FA20794/FA20794X are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA20794/FA20794X

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
MS/MSD recovery within control limits	Nitrate	9056A	J	XU854ISG06A
CCV %D greater than upper control limit	Nitrate	SW9056A	J	XU854ISG06A, XU854ISN06A, XU854ISO06A, XU854ISI06A
MS/MSD recovery within control limits	Perchlorate	6850	J	XU854ISG06A

Sample Summary

FPM Remediations

Job No: FA20794

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA20794-1	12/15/14	10:13	MS	12/16/14	SO	Soil	XU854ISG06A
FA20794-2	12/15/14	11:14	MS	12/16/14	SO	Soil	XU854ISN06A
FA20794-3	12/15/14	12:14	MS	12/16/14	SO	Soil	XU854ISO06A
FA20794-4	12/15/14	14:16	MS	12/16/14	SO	Soil	XU854ISI06A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast

ACCUTEST LABORATORIES

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20794 PAGE 1 OF 1

Accutest Quote #	SKIFF#

Client / Reporting Information

Company Name	FPM REMEDIATIONS, INC
Address	5811 UNIVERSITY HEIGHTS
City	SAN ANTONIO
State	TX
Zip	78249
Project Contact	RYAN RAICEVIC
E-mail	r.raicevic@fpm-remediations.com
Phone #	210-495-7744 ext 13
Sampler(s) Name(s) (Printed)	MIKE SAMPLE

Project Information

Project Name	NM-AZ-PBR
Street	HOLLOMAN AFB
City	ALAMOGORDO
State	NM
Project #	1029-13-01-H-X08541O5
Fax #	210-495-8544
Client Purchase Order #	HOLLOMAN AFB

Analytical Information: 8330SL, NC353.2, NO30 300, PEAC 6850

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	Other	None	HCl	NaOH	HNO3	H2SO4	NaHSO4	DI Water	MeOH	8330SL	NC353.2	NO30 300	PEAC 6850	Lab Use Only
1	X0854ISG06A	12/15	1013	MS	Soil	1										X	X	X	X	
2	X0854ISN06A	12/15	1014	MS	Soil	1										X	X	X	X	
3	X0854ISO06A	12/15	1214	MS	Soil	1										X	X	X	X	
4	X0854ISI06A	12/15	1416	MS	Soil	1										X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

TURNAROUND TIME (Business Days) — Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	12/15 15:15	2 FP	3 FP 12-16-14	930	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.8

6.1

6

FA20794: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

April 8, 2015

Ms. Ivana Raicevic
FPM Remediations, Inc.
5811 University Heights Blvd., Suite 101
San Antonio, Texas 78249

RE: Accutest job FA21080 Reissue

Dear Ms. Raicevic,

During a recent Accutest Management initiated 3rd party data review, an issue was discovered with some Ion Chromatography (IC) data. .Some anions in associated Quality Control (QC) samples (Calibration Checks and/or Blank Spikes) were incorrectly or inconsistently integrated. These integration issues were isolated to a specific analyst. Accutest Southeast performed a comprehensive review of all IC data reported by this analyst. As a result of this review it was determined that some IC data for this job needed to be footnoted. Since only QC samples were impacted by these integration issues (no sample results changed), only the potential uncertainty associated with a reported result is impacted.

Anions analyzed by Ion Chromatography via EPA 300 or SW846 9056A have method specified quality control limits of 90-110%. Revised quality control data for the samples in question had a maximum recovery of 110.4% for Nitrate. Footnote applied to fractions 1 through 11.

The final report for job number FA21080 has been edited to reflect these changes.

Accutest apologizes for any inconvenience this may have caused and has taken corrective measures to prevent future issues. Please feel free to contact us if we can be of further assistance.

Sincerely,

Rick Watkins
Laboratory Director
Accutest Laboratories, SE

Norm Farmer
Technical Director
Accutest Laboratories, SE

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20794

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 3:32:23 PM

4 Sample(s) were collected on 12/15/2014 and were received at Accutest SE on 12/16/2014 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA20794. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54390

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MS, FA20794-1MSD, FA20820-2DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25246

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. % RPD was within control limits in MS/MSD.

FA20794-1, 2, 3, 4 for Nitrogen, Nitrate: Associated CCV above upper control limits

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Kim Benham, Client Services (signature on file)

Date: January 6, 2015

Narrative revised by:

Svetlana Izosimova, QA Officer

Date: April 03, 2015

Report of Analysis

Client Sample ID:	XU854ISG06A		
Lab Sample ID:	FA20794-1	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9514.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.29 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	13.1 J	1.6	0.78	0.43	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

Cwt 3/4/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISG06A		
Lab Sample ID:	FA20794-1	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045392.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	119%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISG06A		
Lab Sample ID:	FA20794-1	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	9.8 J	1.0	0.50	0.50	mg/kg	1	12/29/14 15:38	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

CMA
3/4/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result >= DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISN06A		
Lab Sample ID:	FA20794-2	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9517.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.26 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	10.1	1.6	0.79	0.41	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISN06A		
Lab Sample ID:	FA20794-2	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045395.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	127%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISN06A		
Lab Sample ID:	FA20794-2	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result		LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	9.1	J	1.0	0.50	0.50	mg/kg	1	12/29/14 15:54	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

CLK 4/13/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result >= DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISO06A		
Lab Sample ID:	FA20794-3	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9518.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.02 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.2	2.0	0.98	0.54	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISO06A		
Lab Sample ID:	FA20794-3	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045396.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	125%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISO06A		
Lab Sample ID:	FA20794-3	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	2.2 J	1.0	0.50	0.50	mg/kg	1	12/29/14 16:11	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

CLA
4/13/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result >= DL (MDL) but < LOQ

4.3
4

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISI06A		
Lab Sample ID:	FA20794-4	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9519.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.19 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	61.0	1.7	0.84	0.46	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISI06A		
Lab Sample ID:	FA20794-4	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045399.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	123%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISI06A		
Lab Sample ID:	FA20794-4	Date Sampled:	12/15/14
Matrix:	SO - Soil	Date Received:	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

4.4

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	3.8 J	1.0	0.50	0.50	mg/kg	1	12/29/14 16:28	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

WT 3/14/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result >= DL (MDL) but < LOQ

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
XU854 MISSILE TEST STAND AREA MRS

Date(s) Sampled: December 16, 2014
Report Date: January 6, 2015
Job No.: FA20820 (Accutest), FA20820X (Empirical Laboratories)

SAMPLE IDs

SOIL:
FA20820-1, 1412231-01 (XU854ISP06A)
FA20820-2, 1412231-02 (XU854ISQ06A)
FA20820-3, 1412231-03 (XU854ISR06A)
FA20820-4, 1412231-04 (XU854ISL06A)
FA20820-5, 1412231-05 (XU854ISJ06A)

FIELD DUPLICATES:
There were no field duplicates collected in association with this analytical job.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batches OP54773, OP54390, GP25246: For perchlorate, explosives, and nitrate, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On December 16, 2014, five soil samples were collected from Site XU854 Missile Test Stand Area MRS, Holloman Air Force Base (AFB). The samples were analyzed for perchlorate by Method 6850, explosives by Method 8330B, and nitrate nitrogen by Method 9056A by Accutest Laboratories. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2(MOD).

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

PERCHLORATE

- According to the case narrative, the following samples were analyzed at initial dilution:

Sample	Analyte	Dilution
XU854ISL06A	Perchlorate	1:5

The dilution results only are reported and are used in data verification as representing original results. .

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

NITRATE

- The response of the instrument indicated the %D for second source calibration verifications and/or continuing calibration verifications outside QC limits for individual analytes. The following table summarizes the exceedances:

Type of Calibration Exceedance Affected Analytes	%D	Method QC Limit	Flag Applied	Rationale
Accutest Job #FA20820: Continuing Calibration Verification GN64657-CCV3				
Nitrate	***112***	±10	J	%D greater than upper control limit

Corrective Action: When the %D was greater than the upper control limit, the results are considered estimated (may be biased high) and "J" flags were deemed necessary. According to laboratory correspondence, there were integration issues isolated to a specific analyst associated with only the quality control samples associated with nitrate. The laboratory has taken corrective measures to prevent future issues. All field samples in this SDG were associated with this CCV.

NITROCELLULOSE

- There were no quality control exceedances for the nitrocellulose analyses.

The sample results included in Job No. FA20820/FA20820X are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA20820/FA20820X

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
CCV %D greater than upper control limit	Nitrate	SW9056A	J	XU854ISP06A, XU854ISQ06A, XU854ISR06A, XU854ISL06A, XU854ISJ06A

Sample Summary

FPM Remediations

Job No: FA20820

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20820-1	12/16/14	08:21	MS	12/17/14	SO	Soil	XU854ISP06A
FA20820-2	12/16/14	09:07	MS	12/17/14	SO	Soil	XU854ISQ06A
FA20820-3	12/16/14	10:32	MS	12/17/14	SO	Soil	XU854ISR06A
FA20820-4	12/16/14	11:35	MS	12/17/14	SO	Soil	XU854ISL06A
FA20820-5	12/16/14	13:30	MS	12/17/14	SO	Soil	XU854ISJ06A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast

Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20820 | OF 1

Accutest Quote # | SKIFF #

Client / Reporting Information

Company Name: EPM REMEDIATIONS, INC.
Address: 5811 UNIVERSITY HEIGHTS STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: J. GINA RAICEVIC Email: J.RAICEVIC@EPM-ENVIRONMENTAL.COM
Phone: 210-495-7744 ext. 13
Sampler(s) Name(s) (Printed): MICHAEL SAGLE

Project Information

Project Name: NAA-AZ PBR
Street: HALLORAN AFB
City: MESA GORDO State: NM
Project #: 1829-[illegible]-01-#-[illegible]
Fax #: 210-495-8544
Client Purchase Order #: HALLORAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	Total # of Bottles	Others	Acetone	MEK	MIBK	MeOH	MeCl2	Benzene	Toluene	Ethylbenzene	Xylenes	8330 SL	NC 353.2	NO3O 3000	PERC 6850	Matrix Codes
1	XU854ISP06A	12/16	0812	GRAB	Soil	1											X	X	X	X	
2	XU854ISQ06A	12/16	0910	MS	Soil	1											X	X	X	X	
3	XU854ISR06A	12/16	1032	MS	Soil	1											X	X	X	X	
4	XU854ISL06A	12/16	1135	MS	Soil	1											X	X	X	X	
5	XU854ISJ06A	12/16	1334	MS	Soil	1											X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

LAB USE ONLY

TURNAROUND TIME (Business Days)

Approved By: / Rush Code: MKS

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDDS

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Michael Sagle	12/16 1430	2 FX	3 FX	12-17-11	4 J. Gayle (12/17) 10:00
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3-6

6.1 6

FA20820: Chain of Custody
Page 1 of 3

ACCUTEST.
LABORATORIES

April 8, 2015

Ms. Ivana Raicevic
FPM Remediations, Inc.
5811 University Heights Blvd., Suite 101
San Antonio, Texas 78249

RE: Accutest job FA20820 Reissue

Dear Ms. Raicevic,

During a recent Accutest Management initiated 3rd party data review, an issue was discovered with some Ion Chromatography (IC) data. Some anions in associated Quality Control (QC) samples (Calibration Checks and/or Blank Spikes) were incorrectly or inconsistently integrated. These integration issues were isolated to a specific analyst. Accutest Southeast performed a comprehensive review of all IC data reported by this analyst. As a result of this review it was determined that some IC data for this job needed to be footnoted. Since only QC samples were impacted by these integration issues (no sample results changed), only the potential uncertainty associated with a reported result is impacted.

Anions analyzed by Ion Chromatography via EPA 300 or SW846 9056A have method specified quality control limits of 90-110%. Revised quality control data for the samples in question had a maximum recovery of 112% for Nitrate. Footnote applied to fractions 1 through 5.

The final report for job number FA20820 has been edited to reflect these changes.

Accutest apologizes for any inconvenience this may have caused and has taken corrective measures to prevent future issues. Please feel free to contact us if we can be of further assistance.

Sincerely,

Rick Watkins
Laboratory Director
Accutest Laboratories, SE

Norm Farmer
Technical Director
Accutest Laboratories, SE

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20820

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 3:32:50 PM

5 Sample(s) were collected on 12/16/2014 and were received at Accutest SE on 12/17/2014 properly preserved, at 3.6 Deg. C and intact. These Samples received an Accutest job number of FA20820. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54390

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MS, FA20794-1MSD, FA20820-2DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25246

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. % RPD was within control limits in MS/MSD.

FA20794-1, 2, 3, 4 for Nitrogen, Nitrate: Associated CCV above upper control limits

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Kim Benham, Client Services (signature on file)

Date: January 6, 2015

Narrative revised by:

Svetlana Izosimova, QA Officer

Date: April 03, 2015

Report of Analysis

Client Sample ID:	XU854ISP06A		
Lab Sample ID:	FA20820-1	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9520.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.09 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	52.0	1.8	0.92	0.50	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISP06A		
Lab Sample ID:	FA20820-1	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045400.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	116%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISP06A		
Lab Sample ID:	FA20820-1	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	13.0 J	1.0	0.50	0.50	mg/kg	1	12/29/14 16:45	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

4/13/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	XU854ISQ06A		
Lab Sample ID:	FA20820-2	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9521.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.21 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	15.8	1.7	0.83	0.45	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISQ06A		
Lab Sample ID:	FA20820-2	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045401.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	117%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISQ06A		
Lab Sample ID:	FA20820-2	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

4.2.4

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	6.5 J	1.0	0.50	0.50	mg/kg	1	12/29/14 17:02	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

4/13/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISR06A		
Lab Sample ID:	FA20820-3	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9526.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.18 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	11.7	1.7	0.85	0.47	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISR06A		
Lab Sample ID:	FA20820-3	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045404.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	49 U	98	49	43	ug/kg	
121-82-4	RDX	49 U	98	49	39	ug/kg	
606-20-2	2,6-Dinitrotoluene	49 U	98	49	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	49 U	98	49	39	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	49 U	98	49	39	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	49 U	98	49	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	49 U	98	49	39	ug/kg	
55-63-0	Nitroglycerine	490 U	980	490	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	120%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISR06A		
Lab Sample ID:	FA20820-3	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	4.2 J	1.0	0.50	0.50	mg/kg	1	12/29/14 17:19	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

4/13/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISL06A		
Lab Sample ID:	FA20820-4	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9538.D	5	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.19 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	345	8.4	4.2	2.3	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISL06A		
Lab Sample ID:	FA20820-4	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045405.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	120%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISL06A		
Lab Sample ID:	FA20820-4	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	26.2 J	1.0	0.50	0.50	mg/kg	1	12/29/14 17:36	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

CMA
4/13/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISJ06A		
Lab Sample ID:	FA20820-5	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 6850 IN HOUSE	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9528.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.00 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	34.3	2.0	1.0	0.55	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISJ06A		
Lab Sample ID:	FA20820-5	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
Method:	SW846 8330B SW846 8330B	Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045406.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	124%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISJ06A		
Lab Sample ID:	FA20820-5	Date Sampled:	12/16/14
Matrix:	SO - Soil	Date Received:	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	7.9 J	1.0	0.50	0.50	mg/kg	1	12/29/14 18:27	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

CWA 4/13/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
XU854 MISSILE TEST STAND AREA MRS

Date(s) Sampled: December 17, 2014
Report Date: January 6, 2015
Job No.: FA20881 (Accutest), FA20881X (Empirical Laboratories)

SAMPLE IDs

SOIL:
FA20881-1, 1501006-01 (XU854ISK06A)
FA20881-3, 1501006-03 (XU854ISK06Z1)

FIELD DUPLICATES:
FA20881-2, 1501006-02 (XU854ISK06C) is a field duplicate sample for FA20881-1, 1501006-01 (XU854ISK06A).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batches OP54435, GP25263: For explosives and nitrate, the lab performed matrix spike and matrix spike duplicate samples for field sample FA20881-1 (XU854ISK06A).
Batch OP54473: For perchlorate, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On December 17, 2014, two soil samples and one duplicate were collected from Site XU854 Missile Test Stand Area MRS, Holloman Air Force Base (AFB). The samples were analyzed for perchlorate by Method 6850, explosives by Method 8330B, and nitrate nitrogen by Method 9056A by Accutest Laboratories. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2(MOD).

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

PERCHLORATE

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

  The following table summarizes the RPDs/total differences of field duplicate sample set XU854ISK06A/ XU854ISK06A.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (µg/kg)	Field Dup Result (µg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
XU854ISK06A	XU854ISK06C	Perchlorate	16.4	13.1	2.0	22.4	None	RPD < 30%

Corrective Action: No qualifiers were applied since the RPD was within control limits.

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

NITRATE

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

The following table summarizes the RPDs/total differences of field duplicate sample set XU854ISK06A/ XU854ISK06A.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
XU854ISK06A	XU854ISK06C	Nitrate	4.1	4.1	1.0	0	None	RPD < 30%

Corrective Action: No qualifiers were applied since the RPD was within control limits.

- It is noted the following analytes exceeded recovery limits in the MS/MSD samples (parent sample XU854ISK06A).

MS/MSD Spike Results Job Number/Spike Analytes	MS %Rec	MSD %Rec	QC Limits (%)	RPD	Flag Applied	Rationale
Accutest Job #FA20881: Parent sample XU854ISK06A						
Nitrate	***86.7***	***86.3***	90-110	0.8	J	%Rec less than the lower control limit

Corrective Action: For parent sample XU854ISK06A, a "J" flag was applied since the recovery was less than the lower control limit. The qualifier was also applied to field duplicate sample XU854ISK06C.

NITROCELLULOSE

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

The following table summarizes the RPDs/total differences of field duplicate sample set XU854ISK06A/ XU854ISK06A.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (µg/kg)	Field Dup Result (µg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
XU854ISK06A	XU854ISK06C	Nitrocellulose	1.46 J	1.30 J	4.00	0.16	None	Total difference < 2x LOQ

Corrective Action: No qualifiers were applied since the total difference was within control limits.

The sample results included in Job No. FA20881/FA20881X are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA20881/FA20881X

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
MS/MSD recovery within control limits	Nitrate	9056A	J	XU854ISK06A, XU854ISK06C

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20881

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time By	Received	Matrix Code	Matrix Type	Client Sample ID
FA20881-1	12/17/14	13:40 MS	12/18/14	SO	Soil	XU854ISK06A
FA20881-2	12/17/14	13:40 MS	12/18/14	SO	Soil	XU854ISK06C
FA20881-3	12/17/14	14:30 MS	12/18/14	SO	Soil	XU854ISK06Z1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20881 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM REMEDIATIONS, INC.
Address: 5811 UNIVERSITY HEIGHTS, STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: IVANA RAICEVIC E-mail: I.RAICEVIC@FPM-REMEDIATIONS.COM
Phone: 210-495-7744 ext 13
Sampler(s) Name(s) (Printed): MIKE SAMPLE

Project Information

Project Name: NM-AZ PBL
Street: HOLLOMAN AFB
City: ALAMOGORDO State: NM
Project #: 1029-13-01-11-Y0854:05
Fax #: 210-495-8544
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	Other	Anions	HCl	HNO3	NaOH	Hexane	Methanol	DI Water	MeOH	8330B SL	NC 353.2	NO3 3060	PBRC 6850
1	Y0854ISK06A	12/17	13:40	MB	Soil	1										X	X	X	X
2	Y0854ISK06C	12/17	13:40	MB	Soil	1										X	X	X	X
3	Y0854ISK06Z1	12/17	14:30	MB	Soil	1										X	X	X	X

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

LAB USE ONLY

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 6 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Labtink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1	12/17 15:15	2 FX	3 FX	12.18.14	4 Cooper (AIR) 10:00
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3.6

FA20881: Chain of Custody
Page 1 of 3

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20881

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 9:06:14 PM

3 Sample(s) were collected on 12/17/2014 and were received at Accutest SE on 12/18/2014 properly preserved, at 3.6 Deg. C and intact. These Samples received an Accutest job number of FA20881. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54435

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MS, FA20881-1MSD, FA20937-1DUP were used as the QC samples indicated.
FA20881-3: All hits confirmed by reanalysis on a dissimilar column.

FA20881-3: Confirmation run.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25263

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MSD, FA20881-1MS were used as the QC samples for Nitrogen, Nitrate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity. % RPD was within control limits in MS/MSD.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: January 6, 2015

Kim Benham, Client Services (signature on file)

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06A		
Lab Sample ID:	FA20881-1	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9529.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.00 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	16.4	2.0	1.0	0.55	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06A		
Lab Sample ID:	FA20881-1	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045466.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	122%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06A		
Lab Sample ID:	FA20881-1	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.1 J	1.0	0.50	0.50	mg/kg	1	01/03/15 14:51	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

cwt 3/5/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result >= DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06C		
Lab Sample ID:	FA20881-2	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9530.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.13 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	13.1	1.8	0.88	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06C
Lab Sample ID: FA20881-2
Matrix: SO - Soil
Method: SW846 8330B SW846 8330B
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/17/14
Date Received: 12/18/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045469.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	122%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06C		
Lab Sample ID:	FA20881-2	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.1 J	1.0	0.50	0.50	mg/kg	1	01/03/15 15:08	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

Cust 3/5/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z1
Lab Sample ID: FA20881-3
Matrix: SO - Soil
Method: SW846 6850 IN HOUSE
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/17/14
Date Received: 12/18/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9531.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.02 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	13.0	2.0	0.98	0.54	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06Z1		
Lab Sample ID:	FA20881-3	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	BB045470.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2 [c]	GG058051.D	1	01/05/15	KL	12/30/14	OP54435	GGG2338

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2	10.0 g	50.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	780	1000	500	250	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	121%	104%	69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) All hits confirmed by reanalysis on a dissimilar column.
(c) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06Z1		
Lab Sample ID:	FA20881-3	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	3.0	1.0	0.50	0.50	mg/kg	1	01/03/15 15:25	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1501006

QC LEVEL: Level IV
Report Due: 1/20/2015
Client Sample Count: 3

Sample Type	Sampled	Received	Lab ID	Client ID	Lab Matrix	Report Matrix	E353.2MOD
Client Sample	12/17/2014	1/6/2015	1501006-01	XU854ISK06A	Solid	Solid	X
Client Sample	12/17/2014	1/6/2015	1501006-02	XU854ISK06C	Solid	Solid	X
Client Sample	12/17/2014	1/6/2015	1501006-03	XU854ISK06Z1	Solid	Solid	X

1501006

CHAIN OF CUSTODY

ACCUTEST LABORATORIES
4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: FA20881X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando | State: FL | Zip: 32811
Project Contact: jeans | E-mail: jeans@accutest.com
Phone #: 407-425-6700 | Fax #:
Sampler(s) Name(s): MS | Phone:

Project Information

Project Name: FA20881X
Street:
City: | State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: | State: | Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISK06A		12/17/14	1:40:00 PM	MS	SO	1					1				X	
2X	XU854ISK06C		12/17/14	1:40:00 PM	MS	SO	1					1				X	
3X	XU854ISK08Z1		12/17/14	2:30:00 PM	MS	SO	1					1				X	

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Labiink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:
1	R Wilson	01-02-15 1700	1
2			2
3			3
4			4
5			5
6			6

Custody Seal #: [ ] Intact [ ] Not Intact | Preserved where applicable: [ ] | On Ice: [ ] | Cooler Temp.

1501006

Sample Delivery Group Case Narrative

Receipt Information:
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:
This is an original submittal of the final report package.

Analytical Information:
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:
No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

***:** Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

ANALYSIS DATA SHEET

XU854ISK06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501006-01
Sampled:	12/17/14 13:40	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.46	1.00	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:26

ANALYSIS DATA SHEET

XU854ISK06C

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/17/14 13:40

SDG: 1501006
Project: Nitrocellulose
Laboratory ID: 1501006-02
Received: 01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.30**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:28

ANALYSIS DATA SHEET

XU854ISK06Z1

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501006-03
Sampled:	12/17/14 14:30	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	6.48	1.00	2.00	4.00	1		E353.2MOD	5A07014	01/08/15 14:29

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids:

SDG: 1501006
Project: Nitrocellulose
Laboratory ID: 5A07014-BLK1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A07014	01/08/15 14:13

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
XU854 MISSILE TEST STAND AREA MRS

Date(s) Sampled: December 18, 2014
Report Date: January 6, 2015
Job No.: FA20937 (Accutest), FA20937X (Empirical Laboratories)

SAMPLE IDs

SOIL:
FA20937-1, 1501005-01 (XU854ISK06Z2)
FA20937-2, 1501005-02 (XU854ISK06Z3)
FA20937-3, 1501005-03 (XU854ISM06A)

FIELD DUPLICATES:
There were no field duplicates collected in association with this analytical job.

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batches OP54773, OP54435, GP25263: For perchlorate, explosives, and nitrate, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On December 18, 2014, three soil samples were collected from Site XU854 Missile Test Stand Area MRS, Holloman Air Force Base (AFB). The samples were analyzed for perchlorate by Method 6850, explosives by Method 8330B, and nitrate nitrogen by Method 9056A by Accutest Laboratories. The samples were also sent to Empirical Laboratories, LLC through Accutest for Nitrocellulose analysis by Method E353.2(MOD).

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), XU853 Missile Test Stand Area MRS and XU854 Able 51 Area MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

PERCHLORATE

- There were no quality control exceedances for the explosives analyses.

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

NITRATE

- There were no quality control exceedances for the nitrate analyses.

NITROCELLULOSE

- There were no quality control exceedances for the nitrocellulose analyses.

The sample results included in Job No. FA20937/FA20937X are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA20937/FA20937X

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
No exceedances encountered				

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20937

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA20937-1	12/18/14	09:00	MS	12/19/14	SO	Soil	XU854ISK06Z2
FA20937-2	12/18/14	10:07	MS	12/19/14	SO	Soil	XU854ISK06Z3
FA20937-3	12/18/14	11:06	MS	12/19/14	SO	Soil	XU854ISM06A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20937 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: PARAGON ENVIRONMENTAL, INC.
Address: 5811 UNIVERSITY HEIGHTS, STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: TAMARA RALEVIC E-mail: T.RALEVIC@PARAGON-ENVIRONMENTAL.COM
Phone#: 210-495-7744 ext 13
Fax #: 210-495-8544
Sampler(s) Name(s) (Printed): MIKE SAMPLE
Client Purchase Order #: HOLLOMAN AFB

Project Information

Project Name: NM-AZ PBR
Street: HOLLOMAN AFB
City: ALAMOGORDO State: NM
Project #: 1829-13-01-#-WU854.05

Analytical Information

Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	H2SO4	HNO3	NaOH/ZnAc	DI WATER	8330/SL	NC353.2	NO3O 300.0	PERC/8850	LAB USE ONLY
1	WU854ISK006Z2	12/8	0900	MS	SOIL	1								X	X	X	X	
2	WU854ISK006Z3	12/8	1057	MS	SOIL	1								X	X	X	X	
3	WU854ISM006A	12/8	1106	MS	SOIL	1								X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1	12/8 1145	2 FP	3 FF 12-9-20	1000	4
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3.0

5.1.5

FA20937: Chain of Custody
Page 1 of 3

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20937

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 9:05:14 PM

3 Sample(s) were collected on 12/18/2014 and were received at Accutest SE on 12/19/2014 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of FA20937. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits for MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54435

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MS, FA20881-1MSD, FA20937-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25263

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MSD, FA20881-1MS were used as the QC samples for Nitrogen, Nitrate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity. % RPD was within control limits for MS/MSD.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: January 6, 2015

Kim Benham, Client Services (signature on file)

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06Z2		
Lab Sample ID:	FA20937-1	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9532.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.03 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	18.6	1.9	0.97	0.53	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06Z2		
Lab Sample ID:	FA20937-1	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045475.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	121%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06Z2		
Lab Sample ID:	FA20937-1	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.5	1.0	0.50	0.50	mg/kg	1	01/03/15 15:42	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISK06Z3		
Lab Sample ID:	FA20937-2	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9533.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.00 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	15.7	2.0	1.0	0.55	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z3
Lab Sample ID: FA20937-2
Matrix: SO - Soil
Method: SW846 8330B SW846 8330B
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/18/14
Date Received: 12/19/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045471.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	122%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06Z3		
Lab Sample ID:	FA20937-2	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	3.4	1.0	0.50	0.50	mg/kg	1	01/03/15 15:59	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISM06A		
Lab Sample ID:	FA20937-3	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
Method:	SW846 6850 IN HOUSE	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9539.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.07 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	2.9	1.9	0.93	0.51	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISM06A		
Lab Sample ID:	FA20937-3	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
Method:	SW846 8330B SW846 8330B	**Percent Solids:**	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045472.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	113%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	XU854ISM06A		
Lab Sample ID:	FA20937-3	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.0	1.0	0.50	0.50	mg/kg	1	01/03/15 16:16	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1501005

QC LEVEL: Level IV
Report Due: 1/20/2015
Client Sample Count: 3

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/18/2014	1/6/2015	1501005-01	XU854ISK06Z2	Solid	X
Client Sample	12/18/2014	1/6/2015	1501005-02	XU854ISK06Z3	Solid	X
Client Sample	12/18/2014	1/6/2015	1501005-03	XU854ISM06A	Solid	X

~~1510~~ 1501005

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:

Accutest Quote #: | Accutest Job #: FA20937X

Client / Reporting Information	Project Information	Billing Information (if different from Report to)
Company Name: Accutest Laboratories	Project Name: FA20937X	
Street Address: 4405 Vineland Rd, Suite C-15	Street:	
City: Orlando State: FL Zip: 32811	City: State:	Company Name:
Project Contact: jeans E-mail: jeans@accutest.com	Project #:	Street Address:
Phone #: 407-425-6700 Fax #	Client Purchase Order #:	City: State: Zip:
Sampler(s) Name(s): MS Phone:	Project Manager:	Attention:

Requested Analysis (see TEST CODE sheet): Nitrocellulose 536.2

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1X	XU854ISK06Z2		12/18/14	9:00:00 AM	MS	SO	1					1				-01
2X	XU854ISK06Z3		12/18/14	10:07:00 AM	MS	SO	1					1				-02
3X	XU854ISM06A		12/18/14	11:06:00 AM	MS	SO	1					1				-03

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Labiink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions: Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time	Received By:	Relinquished By:	Date Time:	Received By:
1	01/02/15	1	2		2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp.
5		6					

1/6/15 0915

1501005

Sample Delivery Group Case Narrative

Receipt Information:
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:
This is an original submittal of the final report package.

Analytical Information:
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:
No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

***:** Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

ANALYSIS DATA SHEET

XU854ISK06Z2

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501005-01
Sampled:	12/18/14 09:00	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.75	1.00	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:16

ANALYSIS DATA SHEET

XU854ISK06Z3

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501005-02
Sampled:	12/18/14 10:07	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose		1.00	2.00	4.00	1	U	E353.2MOD	5A07014	01/08/15 14:23

ANALYSIS DATA SHEET

XU854ISM06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/18/14 11:06

SDG: 1501005
Project: Nitrocellulose
Laboratory ID: 1501005-03
Received: 01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	1.07	1.00	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:25

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
ML865/SR864

Date(s) Sampled: February 10, 2015
Report Date: February 25, 2015
Job No.: FA22032

SAMPLE IDs

SOIL:
FA22032-1 (ML865SOS10A1A)
FA22032-2 (SR864SOSDA2A)
FA22032-3 (SR864SOSG1A)
FA22032-4 (SR864SOSG2A)

FIELD DUPLICATES:
FA22032-5 (SR864SOSDA2C) is a field duplicate sample for FA22032-2 (SR864SOSDA2A).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batch OP55030: For explosives, the lab performed matrix spike and matrix spike duplicate samples for FA22032-1.
Batch MP28549: For the metals analytical batches, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch. It should be noted that the laboratory inadvertently did not use samples SR864SOSG1S or SR864SOSG2D (FA22032-6 and -7, respectively) for MS/MSD analysis and were analyzed as normal samples. Since these are essentially duplicates of samples SR864SOSG1A (FA22032-3) and SR864SOSG2A (FA22032-4), respectively, but a field duplicate was already designated (SR864SOSDA2C [FA22032-5]), these results are not usable.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On February 10, 2015, four soil samples, one duplicate, and MS/MSD samples were collected from Sites ML865/SR864, Holloman Air Force Base (AFB). The samples were analyzed for explosives by Method 8330A, and metals by Method 6010C by Accutest Laboratories.

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), ML865 Ballistics Rain Field MRS and SR864 Poorman Range MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times,

surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• **Notes**

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

METALS

- According to the case narrative, the following samples were analyzed at initial dilution:

Sample	Analyte	Dilution
ML865SOS10A1A	Antimony, Chromium, Lead, Zinc	1:10
SR864SOSDA2A	Antimony, Chromium, Lead, Zinc	1:5
SR864SOSG1A	Antimony, Chromium, Lead, Zinc	1:10
SR864SOSG2A	Antimony, Chromium, Lead, Zinc	1:5
SR864SOSDA2C	Antimony, Chromium, Lead, Zinc	1:5
SR864SOSG1S	Antimony, Chromium, Lead, Zinc	1:10
SR864SOSG2D	Antimony, Chromium, Lead, Zinc	1:10

  The dilution results only are reported and are used in data verification as representing original results.

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

  The following table summarizes the RPDs/total differences of field duplicate sample set SR854SOSDA2A/ SR864SOSDA2C.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
SR854SOSDA2A	SR854SOSDA2C	Aluminum	7,560	7,710	10	2.0	None	RPD < 30%

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
SR854SOSDA2A	SR854SOSDA2C	Chromium	8.5	8.7	2.5	0.2	None	Total difference < 2x LOQ
SR854SOSDA2A	SR854SOSDA2C	Copper	8.3	9.6	1.3	14.5	None	RPD < 30%
SR854SOSDA2A	SR854SOSDA2C	Iron	6,580	6,670	15	1.4	None	RPD < 30%
SR854SOSDA2A	SR854SOSDA2C	Lead	6.7	6.7	5.1	0	None	Total difference < 2x LOQ
SR854SOSDA2A	SR854SOSDA2C	Zinc	27.3	27.3	5.1	0	None	RPD < 30%

Corrective Action: No qualifiers were applied since the RPD or total difference was within control limits.

The sample results included in Job No. FA22032 are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA22032

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
No exceedances encountered				

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA22032

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA22032-1	02/10/15	08:30	RM	02/11/15	SO	Soil	ML865SOS10A1A
FA22032-2	02/10/15	09:00	RM	02/11/15	SO	Soil	SR864SOSDA2A
FA22032-3	02/10/15	09:10	RM	02/11/15	SO	Soil	SR864SOSG1A
FA22032-4	02/10/15	09:15	RM	02/11/15	SO	Soil	SR864SOSG2A
FA22032-5	02/10/15	09:25	RM	02/11/15	SO	Soil	SR864SOSDA2C
FA22032-6	02/10/15	09:30	RM	02/11/15	SO	Soil	SR864SOSG1S
FA22032-7	02/10/15	09:40	RM	02/11/15	SO	Soil	SR864SOSG2D

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-5700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA22032 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM Remediations, Inc.
Address: 5811 University Heights Blvd. Suite 101
City: San Antonio State: TX Zip: 78249
Project Contact: Wayne Reiser E-mail: wreiser@fpmremediations.com
Phone #: 210-495-7744, ext. 13
Sampler(s) Name(s) (Printed): Robert Martin

Project Information

Project Name: NM-AZ PBR
Street: Holloman AFB
City: Alamogordo State: NM
Project #: 1029-13-01-H-SR864205
Fax #: 210-495-9544
Client Purchase Order #: Holloman AFB

Analytical Information

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Waste; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	Total # of Bottles	Container Information	Metals	LC8330 EXP	Lab Use Only
1	ML865SOSDA1A	2/10	0850	RMW	Soil	1		X	X	
2	SR864SOSDA2A	2/10	0900	RMW	Soil	1		X	X	
3	SR864SOSG1A	2/10	0910	RMW	Soil	1		X	X	
4	SR864SOSG2A	2/10	0915	RMW	Soil	1		X	X	
5	SR864SOSDA2C	2/10	0925	RMW	Soil	1		X	X	
6	SR864SOSG1S	2/10	0930	RMW	Soil	1		X	X	
7	SR864SOSG2D	2/10	0940	RMW	Soil	1		X	X	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [ ] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Robert Martin	2/10 1545	2 CX	3 FF	021115 0930	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
6		8	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.8

5.1 5

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA22032

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 2/25/2015 2:42:32 PM

7 Sample(s) were collected on 02/10/2015 and were received at Accutest SE on 02/11/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA22032. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8330A

Matrix: SO **Batch ID:** OP55030

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22032-1MS, FA22032-1MSD were used as the QC samples indicated.

FA22032-1: Confirmation run.

FA22032-1: All hits confirmed by reanalysis on a dissimilar column.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28549

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22009-2DUP, FA22009-2MS, FA22009-2MSD, FA22009-2PS, FA22009-2SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Copper, Zinc are outside control limits for sample MP28549-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Copper are outside control limits for sample MP28549-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28549-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA22032-1 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Zinc: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28558

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22051-3DUP, FA22051-3MS, FA22051-3MSD, FA22051-3PS, FA22051-3SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Chromium, Copper, Iron, Zinc, Antimony are outside control limits for sample MP28558-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Copper, Zinc are outside control limits for sample MP28558-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28558-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.
MP28558-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

FA22032-6 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Zinc: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN65164

Sample(s) FA22032-1DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65196

Sample(s) FA22022-3DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65197

Sample(s) FA22022-6DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: February 25, 2015

Kim Benham, Client Services (signature on file)

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOS10A1A		
Lab Sample ID:	FA22032-1	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	BB046108.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2 [b]	GG058410.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

	Initial Weight	Final Volume
Run #1	2.32 g	20.0 ml
Run #2	2.32 g	20.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	170 U	170	170	170	ug/kg	
121-82-4	RDX	108	170	86	69	ug/kg	J
99-65-0	1,3-Dinitrobenzene	86 U	170	86	69	ug/kg	
606-20-2	2,6-Dinitrotoluene	86 U	170	86	70	ug/kg	
121-14-2	2,4-Dinitrotoluene	86 U	170	86	69	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	86 U	170	86	71	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	86 U	170	86	69	ug/kg	
98-95-3	Nitrobenzene	86 U	170	86	69	ug/kg	
88-72-2	o-Nitrotoluene	86 U	170	86	69	ug/kg	
99-08-1	m-Nitrotoluene	86 U	170	86	73	ug/kg	
99-99-0	p-Nitrotoluene	86 U	170	86	69	ug/kg	
479-45-8	Tetryl	86 U	170	86	69	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	86 U	170	86	69	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	86 U	170	86	69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%	108%	72-134%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOS10A1A		
Lab Sample ID:	FA22032-1	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	79.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4640	11	2.7	1.9	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.4 J	5.5	1.1	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.5	1.4	0.11	0.055	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	4330	16	2.7	0.93	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.3 J	11	2.2	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.1	11	2.7	1.6	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2A
Lab Sample ID: FA22032-2
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046111.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.40 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	83 U	170	83	67	ug/kg	
121-82-4	RDX	83 U	170	83	67	ug/kg	
99-65-0	1,3-Dinitrobenzene	83 U	170	83	67	ug/kg	
606-20-2	2,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
121-14-2	2,4-Dinitrotoluene	83 U	170	83	67	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	83 U	170	83	67	ug/kg	
98-95-3	Nitrobenzene	83 U	170	83	67	ug/kg	
88-72-2	o-Nitrotoluene	83 U	170	83	67	ug/kg	
99-08-1	m-Nitrotoluene	83 U	170	83	70	ug/kg	
99-99-0	p-Nitrotoluene	83 U	170	83	67	ug/kg	
479-45-8	Tetryl	83 U	170	83	67	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	83 U	170	83	67	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	83 U	170	83	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSDA2A		
Lab Sample ID:	FA22032-2	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	86.1
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7560	10	2.5	1.8	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.5	2.5	0.51	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	8.3	1.3	0.10	0.051	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6380	15	2.5	0.87	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046112.D

Accutest Laboratories

Report of Analysis

4.3.4

Client Sample ID:	SR864SOSG1A		
Lab Sample ID:	FA22032-3	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	82.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046112.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	98 U	200	98	78	ug/kg	
121-82-4	RDX	98 U	200	98	78	ug/kg	
99-65-0	1,3-Dinitrobenzene	98 U	200	98	78	ug/kg	
606-20-2	2,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
121-14-2	2,4-Dinitrotoluene	98 U	200	98	78	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	98 U	200	98	78	ug/kg	
98-95-3	Nitrobenzene	98 U	200	98	78	ug/kg	
88-72-2	o-Nitrotoluene	98 U	200	98	78	ug/kg	
99-08-1	m-Nitrotoluene	98 U	200	98	83	ug/kg	
99-99-0	p-Nitrotoluene	98 U	200	98	78	ug/kg	
479-45-8	Tetryl	98 U	200	98	78	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	98 U	200	98	78	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	98 U	200	98	78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	101%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG1A		
Lab Sample ID:	FA22032-3	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	82.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	6690	10	2.5	1.7	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	0.66 J	10	2.5	0.65	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.8	5.0	1.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.0	1.2	0.10	0.050	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	5570	15	2.5	0.85	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.2 J	10	2.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	21.1	10	2.5	1.5	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046114.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	SR864SOSG2A		
Lab Sample ID:	FA22032-4	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	86.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046114.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.16 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	74	ug/kg	
121-82-4	RDX	93 U	190	93	74	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	74	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	74	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	74	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	74	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	78	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	74	ug/kg	
479-45-8	Tetryl	93 U	190	93	74	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	74	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	74	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG2A		
Lab Sample ID:	FA22032-4	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	86.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	8670	11	2.8	1.9	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.4 U	5.5	1.4	0.36	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	10.0	2.8	0.55	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.9	1.4	0.11	0.055	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	7540	17	2.8	0.94	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	7.2	5.5	1.1	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	29.8	5.5	1.4	0.83	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2C
Lab Sample ID: FA22032-5
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046128.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.13 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	94 U	190	94	75	ug/kg	
121-82-4	RDX	94 U	190	94	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	94 U	190	94	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
121-14-2	2,4-Dinitrotoluene	94 U	190	94	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	94 U	190	94	75	ug/kg	
98-95-3	Nitrobenzene	94 U	190	94	75	ug/kg	
88-72-2	o-Nitrotoluene	94 U	190	94	75	ug/kg	
99-08-1	m-Nitrotoluene	94 U	190	94	79	ug/kg	
99-99-0	p-Nitrotoluene	94 U	190	94	75	ug/kg	
479-45-8	Tetryl	94 U	190	94	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	94 U	190	94	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	94 U	190	94	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	109%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSDA2C		
Lab Sample ID:	FA22032-5	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	86.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7710	10	2.5	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.7	2.5	0.51	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	9.6	1.3	0.10	0.051	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6670	15	2.5	0.86	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046129.D

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG1S
Lab Sample ID: FA22032-6
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 83.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046129.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.10 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	95 U	190	95	76	ug/kg	
121-82-4	RDX	95 U	190	95	76	ug/kg	
99-65-0	1,3-Dinitrobenzene	95 U	190	95	76	ug/kg	
606-20-2	2,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	95 U	190	95	76	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	95 U	190	95	76	ug/kg	
98-95-3	Nitrobenzene	95 U	190	95	76	ug/kg	
88-72-2	o-Nitrotoluene	95 U	190	95	76	ug/kg	
99-08-1	m-Nitrotoluene	95 U	190	95	81	ug/kg	
99-99-0	p-Nitrotoluene	95 U	190	95	76	ug/kg	
479-45-8	Tetryl	95 U	190	95	76	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	95 U	190	95	76	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	95 U	190	95	76	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

DO NOT USE (just a duplicate of 22032-3)

clk 3/6/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG1S		
Lab Sample ID:	FA22032-6	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	83.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7020	11	2.6	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.6 U	11	2.6	0.69	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.1	5.3	1.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.3	1.3	0.11	0.053	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6160	16	2.6	0.90	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.1 J	11	2.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	23.9	11	2.6	1.6	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

DO NOT USE (just a duplicate of 22032-3)
AMT 3/16/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046130.D

Accutest Laboratories

Report of Analysis

4.7
4

Client Sample ID:	SR864SOSG2D		
Lab Sample ID:	FA22032-7	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.5
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046130.D	1	02/21/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.14 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	75	ug/kg	
121-82-4	RDX	93 U	190	93	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	75	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	75	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	79	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	75	ug/kg	
479-45-8	Tetryl	93 U	190	93	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

DO NOT USE
(just a duplicate of 22032-4)

CWK 3/16/15

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG2D		
Lab Sample ID:	FA22032-7	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	79.5
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5390	11	2.9	2.0	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	11	2.9	0.74	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.6	5.7	1.1	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	15.1	1.4	0.11	0.057	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6350	17	2.9	0.97	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.6 J	11	2.3	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	17.8	11	2.9	1.7	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

Do NOT USE
(just a duplicate of 22032-4)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
ML865

Date(s) Sampled: January 16, 2015
Report Date: February 3, 2015
Job No.: FA21555

SAMPLE IDs

SOIL:
FA21555-1 (ML865SOFH588A)
FA21555-3 (ML865SOFI589A)
FA21555-5 (ML865SOFJ589A)
FA21555-6 (ML865SOFI590A)
FA21555-7 (ML865SOFB589A)
FA21555-9 (ML865SOFB588A)
FA21555-10 (ML865SOFA588A)
FA21555-11 (ML865SOFD589A)

FIELD DUPLICATES:
FA21555-8 (ML865SOFB589C) is a field duplicate sample for FA21555-7 (ML865SOFB589A).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batch OP54769: For explosives, the lab performed matrix spike and matrix spike duplicate samples for FA21555-1.
Batch MP28478: For the metals analytical batches, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch. It should be noted that the laboratory inadvertently did not use samples ML865SOFH588S or ML865SOFI589D (FA21555-2 and -4, respectively) for MS/MSD analysis and were analyzed as normal samples. Since these are essentially duplicates of samples ML865SOFH588A (FA21555-1) and ML865OFI589A (FA21555-3), respectively, but a field duplicate was already designated (ML865SOFB589C [FA21555-8]), these results are not usable.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On January 16, 2015, eight soil samples, one field duplicate, and MS/MSD samples were collected from Site ML865, Holloman Air Force Base (AFB). The samples were analyzed for explosives by Method 8330A, and metals by Method 6010C by Accutest Laboratories.

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), ML865 Ballistics Rain Field MRS and SR864 Poorman Range MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times, surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• Notes

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

METALS

- According to the case narrative, the following samples were analyzed at initial dilution:

Sample	Analyte	Dilution
ML865SOFH588A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFH588S	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFI589A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFI589D	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFJ589A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFI590A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFB589A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFB589C	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFB588A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFA588A	Antimony, Chromium, Lead, Zinc	1:10
ML865SOFD589A	Antimony, Chromium, Lead, Zinc	1:10

  The dilution results only are reported and are used in data verification as representing original results.

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample

must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

The following table summarizes the RPDs/total differences of field duplicate sample set ML865SOFB589A/ ML865OFB589C.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
ML865SOFB589A	ML865SOFB589C	Aluminum	4910	4070	11, 12	18.7	None	RPD < 30%
ML865SOFB589A	ML865SOFB589C	Chromium	5.6	4.6 J	5.6, 5.9	1.0	None	Total difference < 2x LOQ
ML865SOFB589A	ML865SOFB589C	Copper	6.5	5.8	1.4, 1.5	0.7	None	Total difference < 2x LOQ
ML865SOFB589A	ML865SOFB589C	Iron	4280	3580	17, 18	17.8	None	RPD < 30%
ML865SOFB589A	ML865SOFB589C	Lead	8.5 J	6.0 J	11, 12	2.5	None	Total difference < 2x LOQ
ML865SOFB589A	ML865SOFB589C	Zinc	20.3	15.4	11, 12	4.9	None	RPD < 30%

Corrective Action: "UJ" or "J" qualifiers, as appropriate, were applied to the results in the parent/field duplicate sample sets only for those analytes listed above.

- The sample results included in Job No. FA21555 are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA21555

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
No exceedances encountered				

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA21555

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-ML865.05

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA21555-1	01/16/15	11:30	RM	01/21/15	SO	Soil	ML865SOFH588A
FA21555-2	01/16/15	11:35	RM	01/21/15	SO	Soil	ML865SOFH588S
FA21555-3	01/16/15	12:00	RM	01/21/15	SO	Soil	ML865SOFI589A
FA21555-4	01/16/15	12:05	RM	01/21/15	SO	Soil	ML865SOFI589D
FA21555-5	01/16/15	12:25	RM	01/21/15	SO	Soil	ML865SOFJ589A
FA21555-6	01/16/15	12:40	RM	01/21/15	SO	Soil	ML865SOFI590A
FA21555-7	01/16/15	13:30	RM	01/21/15	SO	Soil	ML865SOFB589A
FA21555-8	01/16/15	13:35	RM	01/21/15	SO	Soil	ML865SOFB589C
FA21555-9	01/16/15	13:50	RM	01/21/15	SO	Soil	ML865SOFB588A
FA21555-10	01/16/15	14:00	RM	01/21/15	SO	Soil	ML865SOFA588A
FA21555-11	01/16/15	14:20	RM	01/21/15	SO	Soil	ML865SOFD589A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA21555 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM Remediations Inc.
Address: 5811 University Heights Blvd. Suite 101
City: San Antonio State: TX Zip: 78249
Project Contact: Svenn Raicevic E-mail: raicevic@fpm-remediations.com
Phone#: 210-495-7744 ext. 13 Fax #: 210-495-8544
Sampler(s) Name(s) (Printed): Robert Martin

Project Information

Project Name: NM-AZ PBR
Street: Holloman AFB
City: Alamogordo State: NM
Project # 1029-13-01-N-ML865:05
Client Purchase Order #: Holloman AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Sampled By	Matrix	Total # of Bottles	Container Information	Metals	LCB330 EXP	Matrix Codes
1	ML86590 FH588 A	1/16	1130	RSW	Soil	1		X	X	
2	ML86590 FH588 S	1/16	1135	RSW	Soil	1		X	X	
3	ML86590 FI589 A	1/16	1200	RSW	Soil	1		X	X	
4	ML86590 FI589 D	1/16	1205	RSW	Soil	1		X	X	
5	ML86590 FJ589 A	1/16	1225	RSW	Soil	1		X	X	
6	ML86590 FJ590 A	1/16	1240	RSW	Soil	1		X	X	
7	ML86590 FB589 A	1/16	1330	RSW	Soil	1		X	X	
8	ML86590 FB589 C	1/16	1335	RSW	Soil	1		X	X	
9	ML86590 FB588A	1/16	1350	RSW	Soil	1		X	X	
10	ML86590 FA588 A	1/16	1400	RSW	Soil	1		X	X	
11	ML86590 FD589A	1/16	1420	RSW	Soil	1		X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

LAB USE ONLY

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH — RSW
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or LabLink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Robert Martin	1/16/15 1430	2 FX	3 FX	01-21-15	4 J. Gore (ABA) 10:00
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2-8

FA21555: Chain of Custody
Page 1 of 3

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA21555

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 2/3/2015 3:46:40 PM

11 Sample(s) were collected on 01/16/2015 and were received at Accutest SE on 01/21/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA21555. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8330A

Matrix: SO **Batch ID:** OP54769

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA21555-1MS, FA21555-1MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28478

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA21510-1DUP, FA21510-1MS, FA21510-1MSD, FA21510-1PS, FA21510-1SDL were used as the QC samples for metals.

Matrix Spike /Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Aluminum, Chromium, Antimony, Zinc are outside control limits for sample MP28478-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Copper, Zinc, Aluminum, Chromium, Iron are outside control limits for sample MP28478-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28478-D1 for Zinc: RPD acceptable due to low duplicate and sample concentrations.

MP28478-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

MP28478-SD1 for Chromium: Serial dilution indicates possible matrix interference.

MP28478-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

MP28478-SD1 for Iron: Serial dilution indicates possible matrix interference.

MP28478-PS1 for Iron: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA21555-2 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-2 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-2 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-2 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-1 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-1 for Lead: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28478

FA21555-1 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-1 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Chromium: Elevated reporting limit(s) due to matrix interference.

Matrix: SO **Batch ID:** MP28497

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA21642-24DUP, FA21642-24MS, FA21642-24MSD, FA21642-24PS, FA21642-24SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Aluminum, Antimony, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Aluminum, Antimony, Chromium, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike/ Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

RPD(s) for Duplicate for Aluminum, Chromium, Iron, Lead, Antimony are outside control limits for sample MP28497-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Zinc, Aluminum, Chromium, Iron are outside control limits for sample MP28497-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28497-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

MP28497-SD1 for Iron: Serial dilution indicates possible matrix interference.

MP28497-SD1 for Chromium: Serial dilution indicates possible matrix interference.

MP28497-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

MP28497-PS1 for Iron: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP28497-PS1 for Zinc: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP28497-PS1 for Antimony: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP28497-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA21555-10 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-10 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-10 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-11 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-11 for Lead: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28497

FA21555-11 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-10 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-11 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Antimony: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN64940

Sample(s) FA21555-3DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Kim Benham, Client Services (signature on file)

Date: February 3, 2015

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
FA21555-1	GCSEMI	BB045933.D	3,4-Dinitrotoluene
FA21555-10	GCSEMI	BB045946.D	3,4-Dinitrotoluene
FA21555-11	GCSEMI	BB045947.D	3,4-Dinitrotoluene
FA21555-2	GCSEMI	BB045936.D	3,4-Dinitrotoluene
FA21555-3	GCSEMI	BB045937.D	3,4-Dinitrotoluene
FA21555-4	GCSEMI	BB045938.D	3,4-Dinitrotoluene
FA21555-5	GCSEMI	BB045939.D	3,4-Dinitrotoluene
FA21555-6	GCSEMI	BB045940.D	3,4-Dinitrotoluene
FA21555-7	GCSEMI	BB045943.D	3,4-Dinitrotoluene
FA21555-8	GCSEMI	BB045944.D	3,4-Dinitrotoluene
FA21555-9	GCSEMI	BB045945.D	3,4-Dinitrotoluene
GBB1235-CC1235	GCSEMI	BB045822.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1235-IC1235	GCSEMI	BB045814.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1235-IC1235	GCSEMI	BB045815.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, TNX

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
GBB1235-IC1235	GCSEMI	BB045816.D	2,4-Dinitrotoluene, HMX, PETN
GBB1235-IC1235	GCSEMI	BB045817.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1235-IC1235	GCSEMI	BB045819.D	PETN
GBB1235-IC1235	GCSEMI	BB045820.D	PETN
GBB1235-ICC1235	GCSEMI	BB045818.D	PETN
GBB1235-ICV1235	GCSEMI	BB045821.D	HMX, PETN
GBB1236-CC1235	GCSEMI	BB045835.D	m-Nitrotoluene, PETN
GBB1236-CC1235	GCSEMI	BB045843.D	PETN
GBB1236-ECC1235	GCSEMI	BB045846.D	Nitroglycerine, PETN
GBB1237-CC1235	GCSEMI	BB045848.D	PETN
GBB1237-CC1235	GCSEMI	BB045855.D	PETN
GBB1237-CC1235	GCSEMI	BB045867.D	PETN
GBB1237-CC1235	GCSEMI	BB045879.D	PETN
GBB1237-ECC1235	GCSEMI	BB045882.D	PETN
GBB1238-CC1235	GCSEMI	BB045885.D	m-Nitrotoluene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1238-CC1235	GCSEMI	BB045896.D	PETN
GBB1238-ECC1235	GCSEMI	BB045907.D	PETN
GBB1239-CC1235	GCSEMI	BB045920.D	PETN
GBB1239-CC1235	GCSEMI	BB045929.D	PETN
GBB1239-CC1235	GCSEMI	BB045941.D	PETN
GBB1239-ECC1235	GCSEMI	BB045948.D	PETN
GBB1240-CC1235	GCSEMI	BB045960.D	m-Nitrotoluene, PETN
OP54769-MB	GCSEMI	BB045932.D	3,4-Dinitrotoluene

37 Manual Integrations were found for FA21555

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFH588A		
Lab Sample ID:	FA21555-1	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	81.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045933.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.18 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	92 U	180	92	73	ug/kg	
121-82-4	RDX	92 U	180	92	73	ug/kg	
99-65-0	1,3-Dinitrobenzene	92 U	180	92	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	92 U	180	92	73	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	92 U	180	92	73	ug/kg	
98-95-3	Nitrobenzene	92 U	180	92	73	ug/kg	
88-72-2	o-Nitrotoluene	92 U	180	92	73	ug/kg	
99-08-1	m-Nitrotoluene	92 U	180	92	78	ug/kg	
99-99-0	p-Nitrotoluene	92 U	180	92	73	ug/kg	
479-45-8	Tetryl	92 U	180	92	73	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	92 U	180	92	73	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	92 U	180	92	73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ML865SOFH588A		
Lab Sample ID:	FA21555-1	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	81.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3590	12	2.9	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	12	2.9	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.2	5.8	1.2	0.58	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	15.9	1.4	0.12	0.058	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3570	17	2.9	1.4	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.8 J	12	2.3	0.93	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	42.2	12	2.9	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB045936.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFH588S		
Lab Sample ID:	FA21555-2	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	81.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045936.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.09 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	96 U	190	96	77	ug/kg	
121-82-4	RDX	96 U	190	96	77	ug/kg	
99-65-0	1,3-Dinitrobenzene	96 U	190	96	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	96 U	190	96	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	96 U	190	96	77	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	96 U	190	96	79	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	96 U	190	96	77	ug/kg	
98-95-3	Nitrobenzene	96 U	190	96	77	ug/kg	
88-72-2	o-Nitrotoluene	96 U	190	96	77	ug/kg	
99-08-1	m-Nitrotoluene	96 U	190	96	81	ug/kg	
99-99-0	p-Nitrotoluene	96 U	190	96	77	ug/kg	
479-45-8	Tetryl	96 U	190	96	77	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	96 U	190	96	77	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	96 U	190	96	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

DO NOT USE (just a duplicate of 21555-1)

cwt 3/6/15

U = Not detected LOD = Limit of Detection J = Indicates an estimated value

LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFH588S		
Lab Sample ID:	FA21555-2	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	81.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3460	11	2.7	1.7	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	1.1	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.7	5.4	1.1	0.54	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	19.7	1.3	0.11	0.054	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3310	16	2.7	1.3	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.6 J	11	2.2	0.86	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	34.5	11	2.7	1.6	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

DO NOT USE (just a duplicate of 21555-1)

cust 3/6/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFI589A		
Lab Sample ID:	FA21555-3	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	80.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045937.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.24 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	89 U	180	89	71	ug/kg	
121-82-4	RDX	89 U	180	89	71	ug/kg	
99-65-0	1,3-Dinitrobenzene	89 U	180	89	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	89 U	180	89	73	ug/kg	
121-14-2	2,4-Dinitrotoluene	89 U	180	89	71	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	89 U	180	89	73	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	89 U	180	89	71	ug/kg	
98-95-3	Nitrobenzene	89 U	180	89	71	ug/kg	
88-72-2	o-Nitrotoluene	89 U	180	89	71	ug/kg	
99-08-1	m-Nitrotoluene	89 U	180	89	76	ug/kg	
99-99-0	p-Nitrotoluene	89 U	180	89	71	ug/kg	
479-45-8	Tetryl	89 U	180	89	71	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	89 U	180	89	71	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	89 U	180	89	71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	112%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ML865SOFI589A		
Lab Sample ID:	FA21555-3	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	80.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4030	12	2.9	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	12	2.9	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.3 J	5.8	1.2	0.58	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.8	1.5	0.12	0.058	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3480	17	2.9	1.5	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.1 J	12	2.3	0.93	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	20.9	12	2.9	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result >= DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFI589D
Lab Sample ID: FA21555-4 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.9
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045938.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.18 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	92 U	180	92	73	ug/kg	
121-82-4	RDX	92 U	180	92	73	ug/kg	
99-65-0	1,3-Dinitrobenzene	92 U	180	92	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	92 U	180	92	73	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	92 U	180	92	73	ug/kg	
98-95-3	Nitrobenzene	92 U	180	92	73	ug/kg	
88-72-2	o-Nitrotoluene	92 U	180	92	73	ug/kg	
99-08-1	m-Nitrotoluene	92 U	180	92	78	ug/kg	
99-99-0	p-Nitrotoluene	92 U	180	92	73	ug/kg	
479-45-8	Tetryl	92 U	180	92	73	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	92 U	180	92	73	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	92 U	180	92	73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

DO NOT USE (just a duplicate of 21555-3)

Cal 3/4/15

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFI589D		
Lab Sample ID:	FA21555-4	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	79.9
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

4.4
4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3470	10	2.6	1.7	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.0 J	10	2.6	1.0	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.5 J	5.2	1.0	0.52	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	5.7	1.3	0.10	0.052	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2890	16	2.6	1.3	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.4 J	10	2.1	0.83	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.8	10	2.6	1.6	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

DO NOT USE
(just a duplicate of 21555-3)
Cust 3/16/15

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFJ589A		
Lab Sample ID:	FA21555-5	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.7
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045939.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.07 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	97 U	190	97	77	ug/kg	
121-82-4	RDX	97 U	190	97	77	ug/kg	
99-65-0	1,3-Dinitrobenzene	97 U	190	97	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	97 U	190	97	79	ug/kg	
121-14-2	2,4-Dinitrotoluene	97 U	190	97	77	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	97 U	190	97	79	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	97 U	190	97	77	ug/kg	
98-95-3	Nitrobenzene	97 U	190	97	77	ug/kg	
88-72-2	o-Nitrotoluene	97 U	190	97	77	ug/kg	
99-08-1	m-Nitrotoluene	97 U	190	97	82	ug/kg	
99-99-0	p-Nitrotoluene	97 U	190	97	77	ug/kg	
479-45-8	Tetryl	97 U	190	97	77	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	97 U	190	97	77	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	97 U	190	97	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFJ589A		
Lab Sample ID:	FA21555-5	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	79.7
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4180	12	3.0	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	3.0 U	12	3.0	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.9 J	6.0	1.2	0.60	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	21.9	1.5	0.12	0.060	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2400	18	3.0	1.5	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.6 J	12	2.4	0.96	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	18.7	12	3.0	1.8	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFI590A		
Lab Sample ID:	FA21555-6	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	80.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045940.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	100 U	200	100	80	ug/kg	
121-82-4	RDX	100 U	200	100	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	100 U	200	100	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	100 U	200	100	81	ug/kg	
121-14-2	2,4-Dinitrotoluene	100 U	200	100	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	100 U	200	100	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	100 U	200	100	80	ug/kg	
98-95-3	Nitrobenzene	100 U	200	100	80	ug/kg	
88-72-2	o-Nitrotoluene	100 U	200	100	80	ug/kg	
99-08-1	m-Nitrotoluene	100 U	200	100	84	ug/kg	
99-99-0	p-Nitrotoluene	100 U	200	100	80	ug/kg	
479-45-8	Tetryl	100 U	200	100	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	100 U	200	100	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	100 U	200	100	80	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ML865SOFI590A		
Lab Sample ID:	FA21555-6	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	80.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3830	11	2.8	1.8	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.8 U	11	2.8	1.1	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.4 J	5.7	1.1	0.57	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	10.2	1.4	0.11	0.057	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3360	17	2.8	1.4	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.0 J	11	2.3	0.91	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	18.7	11	2.8	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFB589A		
Lab Sample ID:	FA21555-7	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	81.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045943.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.20 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	91 U	180	91	73	ug/kg	
121-82-4	RDX	91 U	180	91	73	ug/kg	
99-65-0	1,3-Dinitrobenzene	91 U	180	91	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	91 U	180	91	74	ug/kg	
121-14-2	2,4-Dinitrotoluene	91 U	180	91	73	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	91 U	180	91	75	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	91 U	180	91	73	ug/kg	
98-95-3	Nitrobenzene	91 U	180	91	73	ug/kg	
88-72-2	o-Nitrotoluene	91 U	180	91	73	ug/kg	
99-08-1	m-Nitrotoluene	91 U	180	91	77	ug/kg	
99-99-0	p-Nitrotoluene	91 U	180	91	73	ug/kg	
479-45-8	Tetryl	91 U	180	91	73	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	91 U	180	91	73	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	91 U	180	91	73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFB589A		
Lab Sample ID:	FA21555-7	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	81.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4910	11	2.8	1.8	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.8 U	11	2.8	1.1	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	5.6	5.6	1.1	0.56	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.5	1.4	0.11	0.056	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	4280	17	2.8	1.4	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	8.5 J	11	2.3	0.90	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	20.3	11	2.8	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFB589C		
Lab Sample ID:	FA21555-8	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	81.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045944.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	98 U	200	98	78	ug/kg	
121-82-4	RDX	98 U	200	98	78	ug/kg	
99-65-0	1,3-Dinitrobenzene	98 U	200	98	78	ug/kg	
606-20-2	2,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
121-14-2	2,4-Dinitrotoluene	98 U	200	98	78	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	98 U	200	98	78	ug/kg	
98-95-3	Nitrobenzene	98 U	200	98	78	ug/kg	
88-72-2	o-Nitrotoluene	98 U	200	98	78	ug/kg	
99-08-1	m-Nitrotoluene	98 U	200	98	83	ug/kg	
99-99-0	p-Nitrotoluene	98 U	200	98	78	ug/kg	
479-45-8	Tetryl	98 U	200	98	78	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	98 U	200	98	78	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	98 U	200	98	78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFB589C		
Lab Sample ID:	FA21555-8	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	81.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4070	12	3.0	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	3.0 U	12	3.0	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.6 J	5.9	1.2	0.59	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	5.8	1.5	0.12	0.059	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2580	18	3.0	1.5	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.0 J	12	2.4	0.95	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.4	12	3.0	1.8	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFB588A		
Lab Sample ID:	FA21555-9	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	80.1
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045945.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.13 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	94 U	190	94	75	ug/kg	
121-82-4	RDX	94 U	190	94	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	94 U	190	94	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
121-14-2	2,4-Dinitrotoluene	94 U	190	94	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	94 U	190	94	75	ug/kg	
98-95-3	Nitrobenzene	94 U	190	94	75	ug/kg	
88-72-2	o-Nitrotoluene	94 U	190	94	75	ug/kg	
99-08-1	m-Nitrotoluene	94 U	190	94	79	ug/kg	
99-99-0	p-Nitrotoluene	94 U	190	94	75	ug/kg	
479-45-8	Tetryl	94 U	190	94	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	94 U	190	94	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	94 U	190	94	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	110%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFB588A		
Lab Sample ID:	FA21555-9	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	80.1
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3460	11	2.7	1.9	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	3.4 J	5.4	1.1	0.54	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	4.4	1.4	0.11	0.054	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2930	16	2.7	0.92	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.1 J	11	2.2	0.54	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	12.2	11	2.7	1.6	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12184
(2) Instrument QC Batch: MA12186
(3) Prep QC Batch: MP28497

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit
LOD = Limit of Detection

U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFA588A		
Lab Sample ID:	FA21555-10	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045946.D	1	02/03/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.08 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	96 U	190	96	77	ug/kg	
121-82-4	RDX	96 U	190	96	77	ug/kg	
99-65-0	1,3-Dinitrobenzene	96 U	190	96	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	96 U	190	96	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	96 U	190	96	77	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	96 U	190	96	79	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	96 U	190	96	77	ug/kg	
98-95-3	Nitrobenzene	96 U	190	96	77	ug/kg	
88-72-2	o-Nitrotoluene	96 U	190	96	77	ug/kg	
99-08-1	m-Nitrotoluene	96 U	190	96	81	ug/kg	
99-99-0	p-Nitrotoluene	96 U	190	96	77	ug/kg	
479-45-8	Tetryl	96 U	190	96	77	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	96 U	190	96	77	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	96 U	190	96	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	100%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ML865SOFA588A		
Lab Sample ID:	FA21555-10	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	79.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3110	11	2.8	2.0	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.8 U	11	2.8	0.73	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	3.1 J	5.6	1.1	0.56	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	4.6	1.4	0.11	0.056	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3050	17	2.8	0.96	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.5 J	11	2.2	0.56	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	11.7	11	2.8	1.7	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12184
(2) Instrument QC Batch: MA12186
(3) Prep QC Batch: MP28497

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFD589A		
Lab Sample ID:	FA21555-11	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	80.1
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045947.D	1	02/03/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.14 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	75	ug/kg	
121-82-4	RDX	93 U	190	93	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	75	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	75	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	79	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	75	ug/kg	
479-45-8	Tetryl	93 U	190	93	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	118%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ML865SOFD589A		
Lab Sample ID:	FA21555-11	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
		Percent Solids:	80.1
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4570	11	2.7	1.9	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 J	11	2.7	0.71	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.8 J	5.5	1.1	0.55	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.4	1.4	0.11	0.055	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2940	16	2.7	0.93	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.0 J	11	2.2	0.55	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	13.7	11	2.7	1.6	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12184
(2) Instrument QC Batch: MA12186
(3) Prep QC Batch: MP28497

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

This page is intentionally left blank

DATA QUALITY EVALUATION (DQE)
Holloman Air Force Base
ML865/SR864

Date(s) Sampled: February 10, 2015
Report Date: February 25, 2015
Job No.: FA22032

SAMPLE IDs

SOIL:
FA22032-1 (ML865SOS10A1A)
FA22032-2 (SR864SOSDA2A)
FA22032-3 (SR864SOSG1A)
FA22032-4 (SR864SOSG2A)

FIELD DUPLICATES:
FA22032-5 (SR864SOSDA2C) is a field duplicate sample for FA22032-2 (SR864SOSDA2A).

MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSD):
Batch OP55030: For explosives, the lab performed matrix spike and matrix spike duplicate samples for FA22032-1.
Batch MP28549: For the metals analytical batches, the laboratory used internal quality control samples. Since these samples were not requested FPM in the chain-of-custody, no action was taken for the MS/MSD criterion. Also, since the matrix of these samples may or may not be the same as field samples, no flagging was deemed appropriate for field samples in the same batch. It should be noted that the laboratory inadvertently did not use samples SR864SOSG1S or SR864SOSG2D (FA22032-6 and -7, respectively) for MS/MSD analysis and were analyzed as normal samples. Since these are essentially duplicates of samples SR864SOSG1A (FA22032-3) and SR864SOSG2A (FA22032-4), respectively, but a field duplicate was already designated (SR864SOSDA2C [FA22032-5]), these results are not usable.

BLANKS:
There were no blanks collected in association with this laboratory job.

OVERVIEW:
On February 10, 2015, four soil samples, one duplicate, and MS/MSD samples were collected from Sites ML865/SR864, Holloman Air Force Base (AFB). The samples were analyzed for explosives by Method 8330A, and metals by Method 6010C by Accutest Laboratories.

The samples were assessed based on the criteria specified in the Uniform Federal Policy *Quality Assurance Project Plan (UFP-QAPP), ML865 Ballistics Rain Field MRS and SR864 Poorman Range MRS, Holloman AFB, NM* (FPM, 2014), in conjunction with the Air Force Center for Engineering and the DoD Quality Systems Manual (QSM) Version 4.2, October 2010, and internal laboratory quality control (QC) criteria. Parameters evaluated included holding times,

surrogates, laboratory control samples, initial and continuing calibration blanks, method blanks, field blanks, MS/MSD analysis, and initial and continuing calibration.

Table I presents the QC requirements and the criteria, the analytes that failed the criteria, result and analysis flags, and the data to which the flags are applied. Special notes applicable to specific quality control requirements are summarized below.

SUMMARY

• **Notes**

EXPLOSIVES

- There were no quality control exceedances for the explosives analyses.

METALS

- According to the case narrative, the following samples were analyzed at initial dilution:

Sample	Analyte	Dilution
ML865SOS10A1A	Antimony, Chromium, Lead, Zinc	1:10
SR864SOSDA2A	Antimony, Chromium, Lead, Zinc	1:5
SR864SOSG1A	Antimony, Chromium, Lead, Zinc	1:10
SR864SOSG2A	Antimony, Chromium, Lead, Zinc	1:5
SR864SOSDA2C	Antimony, Chromium, Lead, Zinc	1:5
SR864SOSG1S	Antimony, Chromium, Lead, Zinc	1:10
SR864SOSG2D	Antimony, Chromium, Lead, Zinc	1:10

  The dilution results only are reported and are used in data verification as representing original results.

- Field duplicate samples, which are collected at the same location and at the same time using identical collection, handling, and analytical procedures, are used to assess precision of the sample collection process. The QAPP requires qualification of data for field duplicates criterion if the duplicate samples contain detected compounds with concentrations above 5x the LOQ and the relative percent differences (RPDs) between the duplicate sample results exceed RPD control limits (30% for soil samples). If either the parent or the duplicate sample is less than 5x the LOQ, then the difference between the parent and duplicate sample must be less than 2x the LOQ. "J" flags for detects and "UJ" flags for non-detects are required per the QAPP for any exceedances.

  The following table summarizes the RPDs/total differences of field duplicate sample set SR854SOSDA2A/ SR864SOSDA2C.

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
SR854SOSDA2A	SR854SOSDA2C	Aluminum	7,560	7,710	10	2.0	None	RPD < 30%

Sample ID, Normal	Sample ID, Field Duplicate	Analyte	Normal Result (mg/kg)	Field Dup Result (mg/kg)	LOQ	RPD or ±difference	Flag Applied	Rationale
SR854SOSDA2A	SR854SOSDA2C	Chromium	8.5	8.7	2.5	0.2	None	Total difference < 2x LOQ
SR854SOSDA2A	SR854SOSDA2C	Copper	8.3	9.6	1.3	14.5	None	RPD < 30%
SR854SOSDA2A	SR854SOSDA2C	Iron	6,580	6,670	15	1.4	None	RPD < 30%
SR854SOSDA2A	SR854SOSDA2C	Lead	6.7	6.7	5.1	0	None	Total difference < 2x LOQ
SR854SOSDA2A	SR854SOSDA2C	Zinc	27.3	27.3	5.1	0	None	RPD < 30%

Corrective Action: No qualifiers were applied since the RPD or total difference was within control limits.

The sample results included in Job No. FA22032 are deemed 100% complete and acceptable for their intended use.

TABLE I

TABLE I
SUMMARY OF ANALYTES FAILING CRITERIA
SAMPLE DELIVERY GROUP NUMBER FA22032

QC Requirement & Criteria	Analytes Failing Criteria	Analytical Method	Result/Analysis Flags	Result Flag Applied to (Specific Analytes in)
No exceedances encountered				

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA22032

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA22032-1	02/10/15	08:30	RM	02/11/15	SO	Soil	ML865SOS10A1A
FA22032-2	02/10/15	09:00	RM	02/11/15	SO	Soil	SR864SOSDA2A
FA22032-3	02/10/15	09:10	RM	02/11/15	SO	Soil	SR864SOSG1A
FA22032-4	02/10/15	09:15	RM	02/11/15	SO	Soil	SR864SOSG2A
FA22032-5	02/10/15	09:25	RM	02/11/15	SO	Soil	SR864SOSDA2C
FA22032-6	02/10/15	09:30	RM	02/11/15	SO	Soil	SR864SOSG1S
FA22032-7	02/10/15	09:40	RM	02/11/15	SO	Soil	SR864SOSG2D

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-5700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA22032 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM Remediations, Inc.
Address: 5811 University Heights Blvd. Suite 101
City: San Antonio State: TX Zip: 78249
Project Contact: Wayne Reiser E-mail: wreiser@fpmremediations.com
Phone #: 210-495-7744, ext. 13
Sampler(s) Name(s) (Printed): Robert Martin

Project Information

Project Name: NM-AZ PBR
Street: Holloman AFB
City: Alamogordo State: NM
Project #: 1029-13-01-H-SR864205
Fax #: 210-495-9544
Client Purchase Order #: Holloman AFB

Analytical Information

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Waste; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Time	Sampled By	Matrix	Total # of Bottles	Container Information	Metals	LC8330 EXP	Lab Use Only
1	ML865SOSDA1A	2/10	0850	RMW	Soil	1		X	X	
2	SR864SOSDA2A	2/10	0900	RMW	Soil	1		X	X	
3	SR864SOSG1A	2/10	0910	RMW	Soil	1		X	X	
4	SR864SOSG2A	2/10	0915	RMW	Soil	1		X	X	
5	SR864SOSDA2C	2/10	0925	RMW	Soil	1		X	X	
6	SR864SOSG1S	2/10	0930	RMW	Soil	1		X	X	
7	SR864SOSG2D	2/10	0940	RMW	Soil	1		X	X	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [ ] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Robert Martin	2/10 1545	2 CX	3 FF	021115 0930	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
6		8	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.8

5.1 5

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA22032

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 2/25/2015 2:42:32 PM

7 Sample(s) were collected on 02/10/2015 and were received at Accutest SE on 02/11/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA22032. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8330A

Matrix: SO **Batch ID:** OP55030

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22032-1MS, FA22032-1MSD were used as the QC samples indicated.

FA22032-1: Confirmation run.

FA22032-1: All hits confirmed by reanalysis on a dissimilar column.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28549

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22009-2DUP, FA22009-2MS, FA22009-2MSD, FA22009-2PS, FA22009-2SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Copper, Zinc are outside control limits for sample MP28549-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Copper are outside control limits for sample MP28549-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28549-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA22032-1 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Zinc: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28558

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22051-3DUP, FA22051-3MS, FA22051-3MSD, FA22051-3PS, FA22051-3SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Chromium, Copper, Iron, Zinc, Antimony are outside control limits for sample MP28558-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Copper, Zinc are outside control limits for sample MP28558-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28558-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.
MP28558-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

FA22032-6 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Zinc: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN65164

Sample(s) FA22032-1DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65196

Sample(s) FA22022-3DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65197

Sample(s) FA22022-6DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Date: February 25, 2015

Kim Benham, Client Services (signature on file)

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOS10A1A		
Lab Sample ID:	FA22032-1	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	BB046108.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2 [b]	GG058410.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

	Initial Weight	Final Volume
Run #1	2.32 g	20.0 ml
Run #2	2.32 g	20.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	170 U	170	170	170	ug/kg	
121-82-4	RDX	108	170	86	69	ug/kg	J
99-65-0	1,3-Dinitrobenzene	86 U	170	86	69	ug/kg	
606-20-2	2,6-Dinitrotoluene	86 U	170	86	70	ug/kg	
121-14-2	2,4-Dinitrotoluene	86 U	170	86	69	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	86 U	170	86	71	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	86 U	170	86	69	ug/kg	
98-95-3	Nitrobenzene	86 U	170	86	69	ug/kg	
88-72-2	o-Nitrotoluene	86 U	170	86	69	ug/kg	
99-08-1	m-Nitrotoluene	86 U	170	86	73	ug/kg	
99-99-0	p-Nitrotoluene	86 U	170	86	69	ug/kg	
479-45-8	Tetryl	86 U	170	86	69	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	86 U	170	86	69	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	86 U	170	86	69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%	108%	72-134%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOS10A1A		
Lab Sample ID:	FA22032-1	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	79.4
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4640	11	2.7	1.9	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.4 J	5.5	1.1	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.5	1.4	0.11	0.055	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	4330	16	2.7	0.93	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.3 J	11	2.2	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.1	11	2.7	1.6	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2A
Lab Sample ID: FA22032-2
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046111.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.40 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	83 U	170	83	67	ug/kg	
121-82-4	RDX	83 U	170	83	67	ug/kg	
99-65-0	1,3-Dinitrobenzene	83 U	170	83	67	ug/kg	
606-20-2	2,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
121-14-2	2,4-Dinitrotoluene	83 U	170	83	67	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	83 U	170	83	67	ug/kg	
98-95-3	Nitrobenzene	83 U	170	83	67	ug/kg	
88-72-2	o-Nitrotoluene	83 U	170	83	67	ug/kg	
99-08-1	m-Nitrotoluene	83 U	170	83	70	ug/kg	
99-99-0	p-Nitrotoluene	83 U	170	83	67	ug/kg	
479-45-8	Tetryl	83 U	170	83	67	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	83 U	170	83	67	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	83 U	170	83	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSDA2A		
Lab Sample ID:	FA22032-2	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	86.1
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7560	10	2.5	1.8	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.5	2.5	0.51	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	8.3	1.3	0.10	0.051	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6380	15	2.5	0.87	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046112.D

Accutest Laboratories

Report of Analysis

4.3.4

Client Sample ID:	SR864SOSG1A		
Lab Sample ID:	FA22032-3	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	82.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046112.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	98 U	200	98	78	ug/kg	
121-82-4	RDX	98 U	200	98	78	ug/kg	
99-65-0	1,3-Dinitrobenzene	98 U	200	98	78	ug/kg	
606-20-2	2,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
121-14-2	2,4-Dinitrotoluene	98 U	200	98	78	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	98 U	200	98	78	ug/kg	
98-95-3	Nitrobenzene	98 U	200	98	78	ug/kg	
88-72-2	o-Nitrotoluene	98 U	200	98	78	ug/kg	
99-08-1	m-Nitrotoluene	98 U	200	98	83	ug/kg	
99-99-0	p-Nitrotoluene	98 U	200	98	78	ug/kg	
479-45-8	Tetryl	98 U	200	98	78	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	98 U	200	98	78	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	98 U	200	98	78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	101%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG1A		
Lab Sample ID:	FA22032-3	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	82.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	6690	10	2.5	1.7	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	0.66 J	10	2.5	0.65	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.8	5.0	1.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.0	1.2	0.10	0.050	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	5570	15	2.5	0.85	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.2 J	10	2.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	21.1	10	2.5	1.5	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046114.D

Accutest Laboratories

Report of Analysis

Client Sample ID:	SR864SOSG2A		
Lab Sample ID:	FA22032-4	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	86.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046114.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.16 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	74	ug/kg	
121-82-4	RDX	93 U	190	93	74	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	74	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	74	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	74	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	74	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	78	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	74	ug/kg	
479-45-8	Tetryl	93 U	190	93	74	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	74	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	74	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG2A		
Lab Sample ID:	FA22032-4	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	86.0
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	8670	11	2.8	1.9	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.4 U	5.5	1.4	0.36	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	10.0	2.8	0.55	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.9	1.4	0.11	0.055	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	7540	17	2.8	0.94	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	7.2	5.5	1.1	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	29.8	5.5	1.4	0.83	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2C
Lab Sample ID: FA22032-5
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046128.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.13 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	94 U	190	94	75	ug/kg	
121-82-4	RDX	94 U	190	94	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	94 U	190	94	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
121-14-2	2,4-Dinitrotoluene	94 U	190	94	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	94 U	190	94	75	ug/kg	
98-95-3	Nitrobenzene	94 U	190	94	75	ug/kg	
88-72-2	o-Nitrotoluene	94 U	190	94	75	ug/kg	
99-08-1	m-Nitrotoluene	94 U	190	94	79	ug/kg	
99-99-0	p-Nitrotoluene	94 U	190	94	75	ug/kg	
479-45-8	Tetryl	94 U	190	94	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	94 U	190	94	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	94 U	190	94	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	109%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSDA2C		
Lab Sample ID:	FA22032-5	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	86.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7710	10	2.5	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.7	2.5	0.51	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	9.6	1.3	0.10	0.051	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6670	15	2.5	0.86	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046129.D

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG1S
Lab Sample ID: FA22032-6
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 83.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046129.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.10 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	95 U	190	95	76	ug/kg	
121-82-4	RDX	95 U	190	95	76	ug/kg	
99-65-0	1,3-Dinitrobenzene	95 U	190	95	76	ug/kg	
606-20-2	2,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	95 U	190	95	76	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	95 U	190	95	76	ug/kg	
98-95-3	Nitrobenzene	95 U	190	95	76	ug/kg	
88-72-2	o-Nitrotoluene	95 U	190	95	76	ug/kg	
99-08-1	m-Nitrotoluene	95 U	190	95	81	ug/kg	
99-99-0	p-Nitrotoluene	95 U	190	95	76	ug/kg	
479-45-8	Tetryl	95 U	190	95	76	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	95 U	190	95	76	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	95 U	190	95	76	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

DO NOT USE (just a duplicate of 22032-3)

clk 3/6/15

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG1S		
Lab Sample ID:	FA22032-6	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	83.8
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7020	11	2.6	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.6 U	11	2.6	0.69	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.1	5.3	1.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.3	1.3	0.11	0.053	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6160	16	2.6	0.90	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.1 J	11	2.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	23.9	11	2.6	1.6	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

DO NOT USE (just a duplicate of 22032-3)
AMT 3/16/15

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Raw Data: BB046130.D

Accutest Laboratories

Report of Analysis

4.7
4

Client Sample ID:	SR864SOSG2D		
Lab Sample ID:	FA22032-7	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.5
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046130.D	1	02/21/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.14 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	75	ug/kg	
121-82-4	RDX	93 U	190	93	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	75	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	75	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	79	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	75	ug/kg	
479-45-8	Tetryl	93 U	190	93	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

DO NOT USE
(just a duplicate of 22032-4)

CWK 3/16/15

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SR864SOSG2D		
Lab Sample ID:	FA22032-7	**Date Sampled:**	02/10/15
Matrix:	SO - Soil	**Date Received:**	02/11/15
		Percent Solids:	79.5
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5390	11	2.9	2.0	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	11	2.9	0.74	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.6	5.7	1.1	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	15.1	1.4	0.11	0.057	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6350	17	2.9	0.97	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.6 J	11	2.3	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	17.8	11	2.9	1.7	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

Do NOT USE
(just a duplicate of 22032-4)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

This page is intentionally left blank

Southeast
ACCUTEST LABORATORIES

02/25/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA22032

Sampling Date: 02/10/15

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **431**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10

Table of Contents

Section 1: Sample Summary 4
Section 2: Case Narrative/Conformance Summary 5
Section 3: Summary of Hits 9
Section 4: Sample Results 11
4.1: FA22032-1: ML865SOS10A1A 12
4.2: FA22032-2: SR864SOSDA2A 14
4.3: FA22032-3: SR864SOSG1A 16
4.4: FA22032-4: SR864SOSG2A 18
4.5: FA22032-5: SR864SOSDA2C 20
4.6: FA22032-6: SR864SOSG1S 22
4.7: FA22032-7: SR864SOSG2D 24
Section 5: Misc. Forms 26
5.1: Chain of Custody 27
5.2: QC Evaluation: DOD QSM5 Limits 30
Section 6: GC Semi-volatiles - QC Data Summaries 34
6.1: Method Blank Summary 35
6.2: Blank Spike Summary 37
6.3: Matrix Spike/Matrix Spike Duplicate Summary 38
6.4: Surrogate Recovery Summaries 39
6.5: GC Surrogate Retention Time Summaries 40
6.6: Initial and Continuing Calibration Summaries 43
Section 7: GC Semi-volatiles - Raw Data 63
7.1: Samples 64
7.2: Method Blanks 88
7.3: Blank Spikes 94
7.4: Matrix Spike/Matrix Spike Duplicates 97
7.5: Initial and Continuing Calibarations 103
7.6: Instrument Run Logs 169
7.7: Prep Logs 175
Section 8: Metals Analysis - QC Data Summaries 176
8.1: Inst QC MA12213: Al,Sb,Cr,Cu,Fe,Pb,Zn 177
8.2: Inst QC MA12216: Sb,Cr,Pb,Zn 193
8.3: Inst QC MA12218: Al,Sb,Cr,Cu,Fe,Pb,Zn 213
8.4: Inst QC MA12220: Sb,Cr,Pb,Zn 229
8.5: Prep QC MP28549: Al,Sb,Cr,Cu,Fe,Pb,Zn 249
8.6: Prep QC MP28558: Al,Sb,Cr,Cu,Fe,Pb,Zn 255
8.7: IDL and Linear Range Summaries 261
Section 9: Metals Analysis - Raw Data 265
9.1: Raw Data MA12213 266
9.2: Raw Data MA12216 299
9.3: Raw Data MA12218 344
9.4: Raw Data MA12220 378

Table of Contents

9.5: Prep Logs 427
Section 10: General Chemistry - QC Data Summaries 429
10.1: Percent Solids Raw Data Summary 430

Sample Summary

FPM Remediations

Job No: FA22032

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA22032-1	02/10/15	08:30	RM	02/11/15	SO	Soil	ML865SOS10A1A
FA22032-2	02/10/15	09:00	RM	02/11/15	SO	Soil	SR864SOSDA2A
FA22032-3	02/10/15	09:10	RM	02/11/15	SO	Soil	SR864SOSG1A
FA22032-4	02/10/15	09:15	RM	02/11/15	SO	Soil	SR864SOSG2A
FA22032-5	02/10/15	09:25	RM	02/11/15	SO	Soil	SR864SOSDA2C
FA22032-6	02/10/15	09:30	RM	02/11/15	SO	Soil	SR864SOSG1S
FA22032-7	02/10/15	09:40	RM	02/11/15	SO	Soil	SR864SOSG2D

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA22032

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 2/25/2015 2:42:32 PM

7 Sample(s) were collected on 02/10/2015 and were received at Accutest SE on 02/11/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA22032. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8330A

Matrix: SO **Batch ID:** OP55030

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22032-1MS, FA22032-1MSD were used as the QC samples indicated.

FA22032-1: Confirmation run.

FA22032-1: All hits confirmed by reanalysis on a dissimilar column.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28549

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22009-2DUP, FA22009-2MS, FA22009-2MSD, FA22009-2PS, FA22009-2SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Copper, Zinc are outside control limits for sample MP28549-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Copper are outside control limits for sample MP28549-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28549-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA22032-1 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Zinc: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28558

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22051-3DUP, FA22051-3MS, FA22051-3MSD, FA22051-3PS, FA22051-3SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Chromium, Copper, Iron, Zinc, Antimony are outside control limits for sample MP28558-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Copper, Zinc are outside control limits for sample MP28558-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28558-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.
MP28558-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

FA22032-6 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Zinc: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN65164

Sample(s) FA22032-1DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65196

Sample(s) FA22022-3DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65197

Sample(s) FA22022-6DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Date: February 25, 2015

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA22032-1	GCSEMI	BB046108.D	3,4-Dinitrotoluene, RDX
FA22032-2	GCSEMI	BB046111.D	3,4-Dinitrotoluene
FA22032-3	GCSEMI	BB046112.D	3,4-Dinitrotoluene
FA22032-4	GCSEMI	BB046114.D	3,4-Dinitrotoluene
FA22032-6	GCSEMI	BB046129.D	3,4-Dinitrotoluene
FA22032-7	GCSEMI	BB046130.D	3,4-Dinitrotoluene
GBB1235-CC1235	GCSEMI	BB045822.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene,
GBB1235-IC1235	GCSEMI	BB045814.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX,
GBB1235-IC1235	GCSEMI	BB045815.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, TNX
GBB1235-IC1235	GCSEMI	BB045816.D	2,4-Dinitrotoluene, HMX, PETN
GBB1235-IC1235	GCSEMI	BB045817.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1235-IC1235	GCSEMI	BB045819.D	PETN
GBB1235-IC1235	GCSEMI	BB045820.D	PETN
GBB1235-ICC1235	GCSEMI	BB045818.D	PETN
GBB1235-ICV1235	GCSEMI	BB045821.D	HMX, PETN
GBB1236-CC1235	GCSEMI	BB045835.D	m-Nitrotoluene, PETN
GBB1236-CC1235	GCSEMI	BB045843.D	PETN
GBB1236-ECC1235	GCSEMI	BB045846.D	Nitroglycerine, PETN
GBB1237-CC1235	GCSEMI	BB045848.D	PETN
GBB1237-CC1235	GCSEMI	BB045855.D	PETN
GBB1237-CC1235	GCSEMI	BB045867.D	PETN
GBB1237-CC1235	GCSEMI	BB045879.D	PETN
GBB1237-ECC1235	GCSEMI	BB045882.D	PETN
GBB1238-CC1235	GCSEMI	BB045885.D	m-Nitrotoluene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1238-CC1235	GCSEMI	BB045896.D	PETN
GBB1238-ECC1235	GCSEMI	BB045907.D	PETN
GBB1239-CC1235	GCSEMI	BB045920.D	PETN
GBB1239-CC1235	GCSEMI	BB045929.D	PETN
GBB1239-CC1235	GCSEMI	BB045941.D	PETN
GBB1239-ECC1235	GCSEMI	BB045948.D	PETN
GBB1240-CC1235	GCSEMI	BB045960.D	m-Nitrotoluene, PETN
GBB1240-ECC1235	GCSEMI	BB045969.D	PETN
GBB1241-CC1235	GCSEMI	BB045971.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1241-CC1235	GCSEMI	BB045982.D	PETN
GBB1241-CC1235	GCSEMI	BB045993.D	PETN
GBB1241-ECC1235	GCSEMI	BB046002.D	PETN
GBB1242-CC1235	GCSEMI	BB046004.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1242-ECC1235	GCSEMI	BB046008.D	PETN
GBB1243-CC1235	GCSEMI	BB046010.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN, TNX
GBB1243-CC1235	GCSEMI	BB046021.D	PETN
GBB1243-ECC1235	GCSEMI	BB046033.D	PETN

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
GBB1244-CC1235	GCSEMI	BB046043.D	PETN
GBB1244-CC1235	GCSEMI	BB046054.D	PETN
GBB1244-ECC1235	GCSEMI	BB046064.D	PETN
GBB1245-ECC1235	GCSEMI	BB046069.D	m-Nitrotoluene, PETN
GBB1246-CC1235	GCSEMI	BB046071.D	2,6-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1246-CC1235	GCSEMI	BB046082.D	PETN
GBB1246-ECC1235	GCSEMI	BB046094.D	PETN
GBB1247-ECC1235	GCSEMI	BB046102.D	PETN
GBB1248-CC1235	GCSEMI	BB046115.D	PETN
GBB1248-CC1235	GCSEMI	BB046126.D	PETN
GBB1248-ECC1235	GCSEMI	BB046131.D	PETN
GGG2344-CC2344	GCSEMI	GG058138.D	3,4-Dinitrotoluene, 3,5-Dinitroaniline, DNX, HMX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, TNX
GGG2344-IC2344	GCSEMI	GG058130.D	2,6-Dinitrotoluene, DNX, HMX, Nitroglycerine, p-Nitrotoluene, PETN
GGG2344-IC2344	GCSEMI	GG058131.D	DNX, HMX, Nitroglycerine, PETN, RDX,
GGG2344-IC2344	GCSEMI	GG058132.D	3,4-Dinitrotoluene, DNX, HMX, Nitroglycerine, PETN, TNX
GGG2344-IC2344	GCSEMI	GG058133.D	DNX, HMX, PETN, TNX
GGG2344-IC2344	GCSEMI	GG058135.D	PETN
GGG2344-IC2344	GCSEMI	GG058136.D	PETN
GGG2344-ICC2344	GCSEMI	GG058134.D	PETN
GGG2344-ICV2344	GCSEMI	GG058137.D	PETN
GGG2345-CC2344	GCSEMI	GG058151.D	PETN
GGG2345-CC2344	GCSEMI	GG058162.D	PETN
GGG2345-CC2344	GCSEMI	GG058172.D	PETN
GGG2345-ECC2344	GCSEMI	GG058175.D	PETN
GGG2346-CC2344	GCSEMI	GG058177.D	PETN
GGG2346-ECC2344	GCSEMI	GG058187.D	PETN
GGG2348-CC2344	GCSEMI	GG058196.D	PETN
GGG2348-CC2344	GCSEMI	GG058207.D	PETN
GGG2348-CC2344	GCSEMI	GG058219.D	PETN
GGG2348-ECC2344	GCSEMI	GG058228.D	PETN
GGG2349-CC2344	GCSEMI	GG058230.D	PETN
GGG2349-CC2344	GCSEMI	GG058241.D	PETN
GGG2349-CC2344	GCSEMI	GG058253.D	PETN
GGG2349-ECC2344	GCSEMI	GG058261.D	PETN
GGG2350-CC2344	GCSEMI	GG058263.D	PETN
GGG2350-CC2344	GCSEMI	GG058273.D	PETN
GGG2350-ECC2344	GCSEMI	GG058278.D	PETN
GGG2351-CC2344	GCSEMI	GG058280.D	PETN
GGG2351-CC2344	GCSEMI	GG058284.D	PETN
GGG2351-ECC2344	GCSEMI	GG058296.D	PETN
GGG2352-CC2344	GCSEMI	GG058298.D	PETN
GGG2352-ECC2344	GCSEMI	GG058306.D	PETN
GGG2353-CC2344	GCSEMI	GG058308.D	PETN
GGG2353-ECC2344	GCSEMI	GG058318.D	PETN
GGG2361-CC2344	GCSEMI	GG058408.D	PETN, RDX
GGG2361-ECC2344	GCSEMI	GG058412.D	PETN
GGG2362-CC2344	GCSEMI	GG058415.D	PETN
GGG2362-ECC2344	GCSEMI	GG058425.D	PETN
OP55030-BS	GCSEMI	BB046106.D	RDX
OP55030-MB	GCSEMI	BB046107.D	3,4-Dinitrotoluene
OP55030-MB	GCSEMI	GG058409.D	3,4-Dinitrotoluene
OP55030-MS	GCSEMI	BB046109.D	HMX

93 Manual Integrations were found for FA22032

Summary of Hits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA22032-1	**ML865SOS10A1A**					
RDX [a]		108 J	170	86	ug/kg	SW846 8330A
Aluminum		4640	11	2.7	mg/kg	SW846 6010C
Chromium [b]		4.4 J	5.5	1.1	mg/kg	SW846 6010C
Copper		6.5	1.4	0.11	mg/kg	SW846 6010C
Iron		4330	16	2.7	mg/kg	SW846 6010C
Lead [b]		3.3 J	11	2.2	mg/kg	SW846 6010C
Zinc [b]		15.1	11	2.7	mg/kg	SW846 6010C
FA22032-2	**SR864SOSDA2A**					
Aluminum		7560	10	2.5	mg/kg	SW846 6010C
Chromium [b]		8.5	2.5	0.51	mg/kg	SW846 6010C
Copper		8.3	1.3	0.10	mg/kg	SW846 6010C
Iron		6580	15	2.5	mg/kg	SW846 6010C
Lead [b]		6.7	5.1	1.0	mg/kg	SW846 6010C
Zinc [b]		27.3	5.1	1.3	mg/kg	SW846 6010C
FA22032-3	**SR864SOSG1A**					
Aluminum		6690	10	2.5	mg/kg	SW846 6010C
Antimony [b]		0.66 J	10	2.5	mg/kg	SW846 6010C
Chromium [b]		6.8	5.0	1.0	mg/kg	SW846 6010C
Copper		7.0	1.2	0.10	mg/kg	SW846 6010C
Iron		5570	15	2.5	mg/kg	SW846 6010C
Lead [b]		4.2 J	10	2.0	mg/kg	SW846 6010C
Zinc [b]		21.1	10	2.5	mg/kg	SW846 6010C
FA22032-4	**SR864SOSG2A**					
Aluminum		8670	11	2.8	mg/kg	SW846 6010C
Chromium [b]		10.0	2.8	0.55	mg/kg	SW846 6010C
Copper		7.9	1.4	0.11	mg/kg	SW846 6010C
Iron		7540	17	2.8	mg/kg	SW846 6010C
Lead [b]		7.2	5.5	1.1	mg/kg	SW846 6010C
Zinc [b]		29.8	5.5	1.4	mg/kg	SW846 6010C
FA22032-5	**SR864SOSDA2C**					
Aluminum		7710	10	2.5	mg/kg	SW846 6010C
Chromium [b]		8.7	2.5	0.51	mg/kg	SW846 6010C
Copper		9.6	1.3	0.10	mg/kg	SW846 6010C
Iron		6670	15	2.5	mg/kg	SW846 6010C
Lead [b]		6.7	5.1	1.0	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Zinc [b]		27.3	5.1	1.3	mg/kg	SW846 6010C
FA22032-6	**SR864SOSG1S**					
Aluminum		7020	11	2.6	mg/kg	SW846 6010C
Chromium [b]		8.1	5.3	1.1	mg/kg	SW846 6010C
Copper		7.3	1.3	0.11	mg/kg	SW846 6010C
Iron		6160	16	2.6	mg/kg	SW846 6010C
Lead [b]		5.1 J	11	2.1	mg/kg	SW846 6010C
Zinc [b]		23.9	11	2.6	mg/kg	SW846 6010C
FA22032-7	**SR864SOSG2D**					
Aluminum		5390	11	2.9	mg/kg	SW846 6010C
Chromium [b]		6.6	5.7	1.1	mg/kg	SW846 6010C
Copper		15.1	1.4	0.11	mg/kg	SW846 6010C
Iron		6350	17	2.9	mg/kg	SW846 6010C
Lead [b]		4.6 J	11	2.3	mg/kg	SW846 6010C
Zinc [b]		17.8	11	2.9	mg/kg	SW846 6010C

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Elevated reporting limit(s) due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOS10A1A
Lab Sample ID: FA22032-1 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	BB046108.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2 [b]	GG058410.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

	Initial Weight	Final Volume
Run #1	2.32 g	20.0 ml
Run #2	2.32 g	20.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	170 U	170	170	170	ug/kg	
121-82-4	RDX	108	170	86	69	ug/kg	J
99-65-0	1,3-Dinitrobenzene	86 U	170	86	69	ug/kg	
606-20-2	2,6-Dinitrotoluene	86 U	170	86	70	ug/kg	
121-14-2	2,4-Dinitrotoluene	86 U	170	86	69	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	86 U	170	86	71	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	86 U	170	86	69	ug/kg	
98-95-3	Nitrobenzene	86 U	170	86	69	ug/kg	
88-72-2	o-Nitrotoluene	86 U	170	86	69	ug/kg	
99-08-1	m-Nitrotoluene	86 U	170	86	73	ug/kg	
99-99-0	p-Nitrotoluene	86 U	170	86	69	ug/kg	
479-45-8	Tetryl	86 U	170	86	69	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	86 U	170	86	69	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	86 U	170	86	69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%	108%	72-134%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOS10A1A
Lab Sample ID: FA22032-1
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 79.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4640	11	2.7	1.9	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.4 J	5.5	1.1	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.5	1.4	0.11	0.055	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	4330	16	2.7	0.93	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.3 J	11	2.2	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.1	11	2.7	1.6	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2A
Lab Sample ID: FA22032-2 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 86.1
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046111.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.40 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	83 U	170	83	67	ug/kg	
121-82-4	RDX	83 U	170	83	67	ug/kg	
99-65-0	1,3-Dinitrobenzene	83 U	170	83	67	ug/kg	
606-20-2	2,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
121-14-2	2,4-Dinitrotoluene	83 U	170	83	67	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	83 U	170	83	67	ug/kg	
98-95-3	Nitrobenzene	83 U	170	83	67	ug/kg	
88-72-2	o-Nitrotoluene	83 U	170	83	67	ug/kg	
99-08-1	m-Nitrotoluene	83 U	170	83	70	ug/kg	
99-99-0	p-Nitrotoluene	83 U	170	83	67	ug/kg	
479-45-8	Tetryl	83 U	170	83	67	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	83 U	170	83	67	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	83 U	170	83	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSDA2A
Lab Sample ID: FA22032-2
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.1

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7560	10	2.5	1.8	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.5	2.5	0.51	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	8.3	1.3	0.10	0.051	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6580	15	2.5	0.87	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG1A
Lab Sample ID: FA22032-3 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 82.8
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046112.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	98 U	200	98	78	ug/kg	
121-82-4	RDX	98 U	200	98	78	ug/kg	
99-65-0	1,3-Dinitrobenzene	98 U	200	98	78	ug/kg	
606-20-2	2,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
121-14-2	2,4-Dinitrotoluene	98 U	200	98	78	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	98 U	200	98	78	ug/kg	
98-95-3	Nitrobenzene	98 U	200	98	78	ug/kg	
88-72-2	o-Nitrotoluene	98 U	200	98	78	ug/kg	
99-08-1	m-Nitrotoluene	98 U	200	98	83	ug/kg	
99-99-0	p-Nitrotoluene	98 U	200	98	78	ug/kg	
479-45-8	Tetryl	98 U	200	98	78	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	98 U	200	98	78	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	98 U	200	98	78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG1A
Lab Sample ID: FA22032-3
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 82.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	6690	10	2.5	1.7	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	0.66 J	10	2.5	0.65	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.8	5.0	1.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.0	1.2	0.10	0.050	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	5570	15	2.5	0.85	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.2 J	10	2.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	21.1	10	2.5	1.5	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG2A
Lab Sample ID: FA22032-4 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 86.0
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046114.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.16 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	74	ug/kg	
121-82-4	RDX	93 U	190	93	74	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	74	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	74	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	74	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	74	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	78	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	74	ug/kg	
479-45-8	Tetryl	93 U	190	93	74	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	74	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	74	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG2A
Lab Sample ID: FA22032-4
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.0

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	8670	11	2.8	1.9	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.4 U	5.5	1.4	0.36	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	10.0	2.8	0.55	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.9	1.4	0.11	0.055	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	7540	17	2.8	0.94	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	7.2	5.5	1.1	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	29.8	5.5	1.4	0.83	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2C
Lab Sample ID: FA22032-5 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 86.8
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046128.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.13 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	94 U	190	94	75	ug/kg	
121-82-4	RDX	94 U	190	94	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	94 U	190	94	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
121-14-2	2,4-Dinitrotoluene	94 U	190	94	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	94 U	190	94	75	ug/kg	
98-95-3	Nitrobenzene	94 U	190	94	75	ug/kg	
88-72-2	o-Nitrotoluene	94 U	190	94	75	ug/kg	
99-08-1	m-Nitrotoluene	94 U	190	94	79	ug/kg	
99-99-0	p-Nitrotoluene	94 U	190	94	75	ug/kg	
479-45-8	Tetryl	94 U	190	94	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	94 U	190	94	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	94 U	190	94	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	109%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSDA2C
Lab Sample ID: FA22032-5
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7710	10	2.5	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.7	2.5	0.51	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	9.6	1.3	0.10	0.051	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6670	15	2.5	0.86	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG1S
Lab Sample ID: FA22032-6 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 83.8
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046129.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.10 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	95 U	190	95	76	ug/kg	
121-82-4	RDX	95 U	190	95	76	ug/kg	
99-65-0	1,3-Dinitrobenzene	95 U	190	95	76	ug/kg	
606-20-2	2,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	95 U	190	95	76	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	95 U	190	95	76	ug/kg	
98-95-3	Nitrobenzene	95 U	190	95	76	ug/kg	
88-72-2	o-Nitrotoluene	95 U	190	95	76	ug/kg	
99-08-1	m-Nitrotoluene	95 U	190	95	81	ug/kg	
99-99-0	p-Nitrotoluene	95 U	190	95	76	ug/kg	
479-45-8	Tetryl	95 U	190	95	76	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	95 U	190	95	76	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	95 U	190	95	76	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG1S
Lab Sample ID: FA22032-6
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 83.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7020	11	2.6	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.6 U	11	2.6	0.69	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.1	5.3	1.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.3	1.3	0.11	0.053	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6160	16	2.6	0.90	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.1 J	11	2.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	23.9	11	2.6	1.6	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG2D
Lab Sample ID: FA22032-7 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.5
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046130.D	1	02/21/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.14 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	75	ug/kg	
121-82-4	RDX	93 U	190	93	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	75	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	75	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	79	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	75	ug/kg	
479-45-8	Tetryl	93 U	190	93	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG2D
Lab Sample ID: FA22032-7
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 79.5

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5390	11	2.9	2.0	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	11	2.9	0.74	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.6	5.7	1.1	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	15.1	1.4	0.11	0.057	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6350	17	2.9	0.97	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.6 J	11	2.3	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	17.8	11	2.9	1.7	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA22032 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM Remediations, Inc.
Address: 5811 University Heights Blvd. Suite 101
City: San Antonio State: TX Zip: 78249
Project Contact: Ivana Ruivivar E-mail: i.ruivivar@fpm-remediations.com
Phone#: 210-495-7744, ext. 13
Sampler(s) Name(s) (Printed): Robert Martin

Project Information

Project Name: NM-AZ PBR
Street: Holloman AFB
City: Alamogordo State: NM
Project #: 1029-13-01-H-SR864205
Fax #: 210-495-9544
Client Purchase Order #: Holloman AFB

Analytical Information

Metals
LC8330 Exp

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Collection DATE	Collection TIME	Sampled By:	Matrix	Total # of Bottles	Container Information								Metals	LC8330 Exp	LAB USE ONLY
							OTHER	NONE	HCl	NaOH	ENCB	H2SO4	NaOH+ZnAc	DI WATER	MEOH		
1	ML86550SDA1A	2/10	0830	RMM	Soil	1									X	X	
2	SR86450SDA2A	2/10	0900	RMM	Soil	1									X	X	
3	SR86450SG1A	2/10	0910	RMM	Soil	1									X	X	
4	SR86450SG2A	2/10	0915	RMM	Soil	1									X	X	
5	SR86450SDA2C	2/10	0925	RMM	Soil	1									X	X	
6	SR86450SG1S	2/10	0930	RMM	Soil	1									X	X	
7	SR86450SG2D	2/10	0940	RMM	Soil	1									X	X	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- 10 Days Standard
- 7 Day RUSH
- 5 Day RUSH
- 3 Day EMERGENCY
- 2 Day EMERGENCY
- 1 Day EMERGENCY
- OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- COMMERCIAL "A" (RESULTS ONLY)
- COMMERCIAL "B" (RESULTS PLUS QC)
- REDT1 (EPA LEVEL 3)
- FULT1 (EPA LEVEL 4)
- EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Robert Martin	2/10 1545	2 EX	3 FE 021115	930	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.8

5.1.5

FA22032: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA22032 CLIENT: FPM PROJECT: NM-A2 PBR

DATE/TIME RECEIVED: 02-11-15 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8650 0185 4431

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR -0.2
- [ ] OBSERVED TEMPS: 3.0
- [ ] CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE RW 02-11-15 REVIEWER SIGNATURE/DATE 2-11-15

NF 10/14 receipt confirmation 102914.xls

5.1 5

FA22032: Chain of Custody
Page 2 of 3

FA22032: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP55030	SW846 8330A						
OP55030-BS	2691-41-0	HMX	BSP	REC	105	%	77-122
OP55030-BS	121-82-4	RDX	BSP	REC	97	%	82-124
OP55030-BS	99-65-0	1,3-Dinitrobenzene	BSP	REC	91	%	84-124
OP55030-BS	606-20-2	2,6-Dinitrotoluene	BSP	REC	104	%	86-119
OP55030-BS	121-14-2	2,4-Dinitrotoluene	BSP	REC	102	%	82-123
OP55030-BS	35572-78-2	2-amino-4,6-Dinitrotoluene	BSP	REC	107	%	87-121
OP55030-BS	19406-51-0	4-amino-2,6-Dinitrotoluene	BSP	REC	106	%	84-124
OP55030-BS	98-95-3	Nitrobenzene	BSP	REC	104	%	80-128
OP55030-BS	88-72-2	o-Nitrotoluene	BSP	REC	100	%	84-120
OP55030-BS	99-08-1	m-Nitrotoluene	BSP	REC	104	%	79-127
OP55030-BS	99-99-0	p-Nitrotoluene	BSP	REC	98	%	83-122
OP55030-BS	479-45-8	Tetryl	BSP	REC	107	%	66-138
OP55030-BS	99-35-4	1,3,5-Trinitrobenzene	BSP	REC	103	%	81-123
OP55030-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	94	%	75-125
OP55030-MS	2691-41-0	HMX	MS	REC	103	%	77-122
OP55030-MS	121-82-4	RDX	MS	REC	90	%	82-124
OP55030-MS	99-65-0	1,3-Dinitrobenzene	MS	REC	91	%	84-124
OP55030-MS	606-20-2	2,6-Dinitrotoluene	MS	REC	105	%	86-119
OP55030-MS	121-14-2	2,4-Dinitrotoluene	MS	REC	102	%	82-123
OP55030-MS	35572-78-2	2-amino-4,6-Dinitrotoluene	MS	REC	107	%	87-121
OP55030-MS	19406-51-0	4-amino-2,6-Dinitrotoluene	MS	REC	106	%	84-124
OP55030-MS	98-95-3	Nitrobenzene	MS	REC	105	%	80-128
OP55030-MS	88-72-2	o-Nitrotoluene	MS	REC	101	%	84-120
OP55030-MS	99-08-1	m-Nitrotoluene	MS	REC	105	%	79-127
OP55030-MS	99-99-0	p-Nitrotoluene	MS	REC	99	%	83-122
OP55030-MS	479-45-8	Tetryl	MS	REC	103	%	66-138
OP55030-MS	99-35-4	1,3,5-Trinitrobenzene	MS	REC	103	%	81-123
OP55030-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	94	%	75-125
OP55030-MSD	2691-41-0	HMX	MSD	REC	109	%	77-122
OP55030-MSD	2691-41-0	HMX	MSD	RPD	7	%	30
OP55030-MSD	121-82-4	RDX	MSD	REC	90	%	82-124
OP55030-MSD	121-82-4	RDX	MSD	RPD	2	%	30
OP55030-MSD	99-65-0	1,3-Dinitrobenzene	MSD	REC	93	%	84-124
OP55030-MSD	99-65-0	1,3-Dinitrobenzene	MSD	RPD	4	%	30
OP55030-MSD	606-20-2	2,6-Dinitrotoluene	MSD	REC	111	%	86-119
OP55030-MSD	606-20-2	2,6-Dinitrotoluene	MSD	RPD	8	%	30
OP55030-MSD	121-14-2	2,4-Dinitrotoluene	MSD	REC	107	%	82-123
OP55030-MSD	121-14-2	2,4-Dinitrotoluene	MSD	RPD	6	%	30
OP55030-MSD	35572-78-2	2-amino-4,6-Dinitrotoluene	MSD	REC	109	%	87-121
OP55030-MSD	35572-78-2	2-amino-4,6-Dinitrotoluene	MSD	RPD	3	%	30
OP55030-MSD	19406-51-0	4-amino-2,6-Dinitrotoluene	MSD	REC	109	%	84-124
OP55030-MSD	19406-51-0	4-amino-2,6-Dinitrotoluene	MSD	RPD	5	%	30

* Sample used for QC is not from job FA22032

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP55030-MSD	98-95-3	Nitrobenzene	MSD	REC	106	%	80-128
OP55030-MSD	98-95-3	Nitrobenzene	MSD	RPD	2	%	30
OP55030-MSD	88-72-2	o-Nitrotoluene	MSD	REC	104	%	84-120
OP55030-MSD	88-72-2	o-Nitrotoluene	MSD	RPD	4	%	30
OP55030-MSD	99-08-1	m-Nitrotoluene	MSD	REC	108	%	79-127
OP55030-MSD	99-08-1	m-Nitrotoluene	MSD	RPD	4	%	30
OP55030-MSD	99-99-0	p-Nitrotoluene	MSD	REC	100	%	83-122
OP55030-MSD	99-99-0	p-Nitrotoluene	MSD	RPD	3	%	30
OP55030-MSD	479-45-8	Tetryl	MSD	REC	106	%	66-138
OP55030-MSD	479-45-8	Tetryl	MSD	RPD	4	%	30
OP55030-MSD	99-35-4	1,3,5-Trinitrobenzene	MSD	REC	105	%	81-123
OP55030-MSD	99-35-4	1,3,5-Trinitrobenzene	MSD	RPD	4	%	30
OP55030-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	96	%	75-125
OP55030-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	4	%	30
MP28549	SW846 6010C						
MP28549-B1	7429-90-5	Aluminum	BSP	REC	104.4	%	74-119
MP28549-B1	7440-36-0	Antimony	BSP	REC	98.8	%	79-114
MP28549-B1	7440-47-3	Chromium	BSP	REC	107	%	85-113
MP28549-B1	7440-50-8	Copper	BSP	REC	106.4	%	81-117
MP28549-B1	7439-89-6	Iron	BSP	REC	105.4	%	81-118
MP28549-B1	7439-92-1	Lead	BSP	REC	100	%	81-112
MP28549-B1	7440-66-6	Zinc	BSP	REC	103.6	%	82-113
MP28549-S1*	7429-90-5	Aluminum	MS	REC	81.5	%	74-119
MP28549-S1*	7440-36-0	Antimony	MS	REC	40.9 [a]	%	79-114
MP28549-S1*	7440-47-3	Chromium	MS	REC	96.5	%	85-113
MP28549-S1*	7440-50-8	Copper	MS	REC	103.6	%	81-117
MP28549-S1*	7439-89-6	Iron	MS	REC	101	%	81-118
MP28549-S1*	7439-92-1	Lead	MS	REC	98.4	%	81-112
MP28549-S1*	7440-66-6	Zinc	MS	REC	95.4	%	82-113
MP28549-S2*	7429-90-5	Aluminum	MSD	REC	87.2	%	74-119
MP28549-S2*	7429-90-5	Aluminum	MSD	RPD	2.6	%	20
MP28549-S2*	7440-36-0	Antimony	MSD	REC	42.9 [a]	%	79-114
MP28549-S2*	7440-36-0	Antimony	MSD	RPD	15.7	%	20
MP28549-S2*	7440-47-3	Chromium	MSD	REC	98.7	%	85-113
MP28549-S2*	7440-47-3	Chromium	MSD	RPD	6.3	%	20
MP28549-S2*	7440-50-8	Copper	MSD	REC	104.7	%	81-117
MP28549-S2*	7440-50-8	Copper	MSD	RPD	11.7	%	20
MP28549-S2*	7439-89-6	Iron	MSD	REC	100.5	%	81-118
MP28549-S2*	7439-89-6	Iron	MSD	RPD	8.3	%	20
MP28549-S2*	7439-92-1	Lead	MSD	REC	98.3	%	81-112
MP28549-S2*	7439-92-1	Lead	MSD	RPD	9.2	%	20
MP28549-S2*	7440-66-6	Zinc	MSD	REC	95.2	%	82-113
MP28549-S2*	7440-66-6	Zinc	MSD	RPD	10.7	%	20

* Sample used for QC is not from job FA22032

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP28549-D1*	7429-90-5	Aluminum	DUP	RPD	1.6	%	20
MP28549-D1*	7440-36-0	Antimony	DUP	RPD	0	%	20
MP28549-D1*	7440-47-3	Chromium	DUP	RPD	.9	%	20
MP28549-D1*	7440-50-8	Copper	DUP	RPD	25 [b]	%	20
MP28549-D1*	7439-89-6	Iron	DUP	RPD	3.8	%	20
MP28549-D1*	7439-92-1	Lead	DUP	RPD	4.2	%	20
MP28549-D1*	7440-66-6	Zinc	DUP	RPD	200 [b]	%	20
MP28558	SW846 6010C						
MP28558-B1	7429-90-5	Aluminum	BSP	REC	104.4	%	74-119
MP28558-B1	7440-36-0	Antimony	BSP	REC	98.8	%	79-114
MP28558-B1	7440-47-3	Chromium	BSP	REC	106	%	85-113
MP28558-B1	7440-50-8	Copper	BSP	REC	104	%	81-117
MP28558-B1	7439-89-6	Iron	BSP	REC	105.4	%	81-118
MP28558-B1	7439-92-1	Lead	BSP	REC	98.4	%	81-112
MP28558-B1	7440-66-6	Zinc	BSP	REC	102.8	%	82-113
MP28558-S1*	7429-90-5	Aluminum	MS	REC	116.2	%	74-119
MP28558-S1*	7440-36-0	Antimony	MS	REC	35.8 [a]	%	79-114
MP28558-S1*	7440-47-3	Chromium	MS	REC	103.1	%	85-113
MP28558-S1*	7440-50-8	Copper	MS	REC	101.4	%	81-117
MP28558-S1*	7439-89-6	Iron	MS	REC	19 [a]	%	81-118
MP28558-S1*	7439-92-1	Lead	MS	REC	95.5	%	81-112
MP28558-S1*	7440-66-6	Zinc	MS	REC	95.9	%	82-113
MP28558-S2*	7429-90-5	Aluminum	MSD	REC	93.2	%	74-119
MP28558-S2*	7429-90-5	Aluminum	MSD	RPD	4	%	20
MP28558-S2*	7440-36-0	Antimony	MSD	REC	39.4 [a]	%	79-114
MP28558-S2*	7440-36-0	Antimony	MSD	RPD	12.6	%	20
MP28558-S2*	7440-47-3	Chromium	MSD	REC	99.7	%	85-113
MP28558-S2*	7440-47-3	Chromium	MSD	RPD	0	%	20
MP28558-S2*	7440-50-8	Copper	MSD	REC	101.6	%	81-117
MP28558-S2*	7440-50-8	Copper	MSD	RPD	3.4	%	20
MP28558-S2*	7439-89-6	Iron	MSD	REC	21.7 [a]	%	81-118
MP28558-S2*	7439-89-6	Iron	MSD	RPD	2.2	%	20
MP28558-S2*	7439-92-1	Lead	MSD	REC	94.5	%	81-112
MP28558-S2*	7439-92-1	Lead	MSD	RPD	2	%	20
MP28558-S2*	7440-66-6	Zinc	MSD	REC	95.8	%	82-113
MP28558-S2*	7440-66-6	Zinc	MSD	RPD	3	%	20
MP28558-D1*	7429-90-5	Aluminum	DUP	RPD	7.1	%	20
MP28558-D1*	7440-36-0	Antimony	DUP	RPD	96.3 [b]	%	20
MP28558-D1*	7440-47-3	Chromium	DUP	RPD	23.5 [c]	%	20
MP28558-D1*	7440-50-8	Copper	DUP	RPD	165.8 [c]	%	20
MP28558-D1*	7439-89-6	Iron	DUP	RPD	37.2 [c]	%	20
MP28558-D1*	7439-92-1	Lead	DUP	RPD	5	%	20
MP28558-D1*	7440-66-6	Zinc	DUP	RPD	82.8 [c]	%	20

* Sample used for QC is not from job FA22032

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) RPD acceptable due to low duplicate and sample concentrations.
(c) High RPD due to possible sample non-homogeneity.

* Sample used for QC is not from job FA22032

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-MB	BB046107.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	200	80	ug/kg	
121-82-4	RDX	ND	200	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	ND	200	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	82	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	200	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	200	80	ug/kg	
98-95-3	Nitrobenzene	ND	200	80	ug/kg	
88-72-2	o-Nitrotoluene	ND	200	80	ug/kg	
99-08-1	m-Nitrotoluene	ND	200	85	ug/kg	
99-99-0	p-Nitrotoluene	ND	200	80	ug/kg	
479-45-8	Tetryl	ND	200	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	ND	200	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	200	80	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	105%	72-134%

Method Blank Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-MB	GG058409.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	200	80	ug/kg	
121-82-4	RDX	ND	200	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	ND	200	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	82	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	200	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	200	80	ug/kg	
98-95-3	Nitrobenzene	ND	200	80	ug/kg	
88-72-2	o-Nitrotoluene	ND	200	80	ug/kg	
99-08-1	m-Nitrotoluene	ND	200	85	ug/kg	
99-99-0	p-Nitrotoluene	ND	200	80	ug/kg	
479-45-8	Tetryl	ND	200	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	ND	200	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	200	80	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	109%	72-134%

Blank Spike Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-BS	BB046106.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	5000	5270	105	64-159
121-82-4	RDX	5000	4840	97	78-120
99-65-0	1,3-Dinitrobenzene	5000	4570	91	80-125
606-20-2	2,6-Dinitrotoluene	5000	5180	104	75-143
121-14-2	2,4-Dinitrotoluene	5000	5120	102	80-130
35572-78-2	2-amino-4,6-Dinitrotoluene	5000	5330	107	79-122
19406-51-0	4-amino-2,6-Dinitrotoluene	5000	5290	106	76-124
98-95-3	Nitrobenzene	5000	5220	104	77-139
88-72-2	o-Nitrotoluene	5000	5020	100	84-126
99-08-1	m-Nitrotoluene	5000	5210	104	84-129
99-99-0	p-Nitrotoluene	5000	4910	98	83-132
479-45-8	Tetryl	5000	5360	107	63-135
99-35-4	1,3,5-Trinitrobenzene	5000	5140	103	81-133
118-96-7	2,4,6-Trinitrotoluene	5000	4720	94	69-124

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	100%	72-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-MS	BB046109.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
OP55030-MSD	BB046110.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
FA22032-1 [a]	BB046108.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
FA22032-1 [b]	GG058410.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	FA22032-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	170 U		4780	4950	103	4850	5290	109	7	64-159/17
121-82-4	RDX	108	J	4780	4410	90	4850	4500	90	2	78-120/16
99-65-0	1,3-Dinitrobenzene	170 U		4780	4350	91	4850	4510	93	4	80-125/15
606-20-2	2,6-Dinitrotoluene	170 U		4780	5010	105	4850	5410	111	8	75-143/22
121-14-2	2,4-Dinitrotoluene	170 U		4780	4890	102	4850	5180	107	6	80-130/20
35572-78-2	2-amino-4,6-Dinitrotoluene	170 U		4780	5110	107	4850	5280	109	3	79-122/20
19406-51-0	4-amino-2,6-Dinitrotoluene	170 U		4780	5060	106	4850	5310	109	5	76-124/23
98-95-3	Nitrobenzene	170 U		4780	5020	105	4850	5130	106	2	77-139/17
88-72-2	o-Nitrotoluene	170 U		4780	4840	101	4850	5060	104	4	84-126/21
99-08-1	m-Nitrotoluene	170 U		4780	5030	105	4850	5240	108	4	84-129/21
99-99-0	p-Nitrotoluene	170 U		4780	4720	99	4850	4870	100	3	83-132/25
479-45-8	Tetryl	170 U		4780	4950	103	4850	5130	106	4	63-135/25
99-35-4	1,3,5-Trinitrobenzene	170 U		4780	4910	103	4850	5110	105	4	81-133/19
118-96-7	2,4,6-Trinitrotoluene	170 U		4780	4500	94	4850	4670	96	4	69-124/18

CAS No.	Surrogate Recoveries	MS	MSD	FA22032-1	FA22032-1	Limits
610-39-9	3,4-Dinitrotoluene	101%	102%	106%	108%	72-134%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA22032-1	GG058410.D	108
FA22032-1	BB046108.D	106
FA22032-2	BB046111.D	107
FA22032-3	BB046112.D	104
FA22032-4	BB046114.D	107
FA22032-5	BB046128.D	109
FA22032-6	BB046129.D	107
FA22032-7	BB046130.D	104
OP55030-BS	BB046106.D	100
OP55030-MB	BB046107.D	105
OP55030-MB	GG058409.D	109
OP55030-MS	BB046109.D	101
OP55030-MSD	BB046110.D	102

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	72-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1248-CC1235	**Injection Date:**	02/20/15
Lab File ID:	BB046104.D	**Injection Time:**	13:16
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] **RT**
Check Std	11.18

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
OP55030-BS	BB046106.D	02/20/15	14:06	11.21
OP55030-MB	BB046107.D	02/20/15	14:31	11.22
FA22032-1	BB046108.D	02/20/15	14:56	11.24
OP55030-MS	BB046109.D	02/20/15	15:21	11.24
OP55030-MSD	BB046110.D	02/20/15	15:46	11.24
FA22032-2	BB046111.D	02/20/15	16:11	11.24
FA22032-3	BB046112.D	02/20/15	16:36	11.24
ZZZZZZ	BB046113.D	02/20/15	17:01	11.25
FA22032-4	BB046114.D	02/20/15	17:26	11.24

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1248-CC1235	**Injection Date:**	02/20/15
Lab File ID:	BB046126.D	**Injection Time:**	22:25
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	11.21	11.21

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA22032-5	BB046128.D	02/20/15	23:15		11.20
FA22032-6	BB046129.D	02/20/15	23:40		11.19
FA22032-7	BB046130.D	02/21/15	00:05		11.19
GBB1248-ECC1238	BB046131.D	02/21/15	00:30	11.19	11.19

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GGG2361-CC2344	**Injection Date:**	02/23/15
Lab File ID:	GG058408.D	**Injection Time:**	10:22
Instrument ID:	GCGG	**Method:**	SW846 8330A

	S1 [a] **RT**	**S1** [b] **RT**
Check Std	16.34	16.34

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**	**S1** [b] **RT**
OP55030-MB	GG058409.D	02/23/15	11:02		16.31
FA22032-1	GG058410.D	02/23/15	11:34		16.33
ZZZZZZ	GG058411.D	02/23/15	12:06		16.33
GGG2361-ECC2344	GG058412.D	02/23/15	12:42	16.34	16.34

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICC1235
Lab FileID: BB045818.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Initial Calibration

Calibration Files
20 =BB045814.D 50 =BB045815.D 100 =BB045816.D 200 =BB045817.D
500 =BB045818.D 1000=BB045819.D 2000=BB045820.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.070	3.275	3.420	3.229	3.160	3.152	3.271	3.225	E3	3.49
2)	HMX	1.843	1.499	1.516	1.645	1.591	1.550	1.627	1.610	E3	7.22
3)	DNX	2.867	2.618	2.870	2.755	2.713	2.693	2.820	2.762	E3	3.43
4)	MNX	2.627	2.684	2.508	2.428	2.364	2.327	2.443	2.483	E3	5.33
5)	RDX	2.040	2.072	1.814	1.896	1.790	1.753	1.838	1.886	E3	6.60
6)	1,3,5-Trinitroben	4.263	4.171	4.099	4.076	3.940	3.925	4.083	4.080	E3	2.93
7)	1,3-Dinitrobenzen	5.676	5.476	5.497	5.233	5.119	5.122	5.291	5.345	E3	3.94
8)	3,5-Dinitroanilin	5.015	4.519	4.801	4.435	4.273	4.384	4.507	4.562	E3	5.65
9)	Nitrobenzene	2.736	3.629	3.077	2.939	2.997	3.029	3.063	3.067	E3	8.92
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	2.533	2.951	2.847	2.657	2.581	2.590	2.786	2.706	E3	5.80
12)	2,4,6-Trinitrotol	3.672	3.814	3.618	3.555	3.532	3.618	3.763	3.653	E3	2.85
13)	2-Amino-4,6-Dinit	2.552	3.316	2.944	2.980	3.024	3.132	3.281	3.033	E3	8.45
14)	4-Amino-2,6-Dinit	1.741	2.041	2.037	2.095	2.173	2.270	2.387	2.106	E3	9.74
15)S	3,4-Dinitrotoluen	2.389	2.541	2.235	2.095	2.036	2.093	2.170	2.223	E3	8.21
16)	2,4-Dinitrotoluen	4.109	4.720	4.937	4.585	4.576	4.632	4.774	4.619	E3	5.58
17)	2,6-Dinitrotoluen	2.235	2.518	2.691	2.646	2.567	2.636	2.700	2.570	E3	6.28
18)	o-Nitrotoluene	2.239	2.334	2.370	2.291	2.248	2.252	2.260	2.285	E3	2.17
19)	p-Nitrotoluene	3.908	3.692	3.593	3.493	3.503	3.509	3.545	3.606	E3	4.16
20)	m-Nitrotoluene	3.655	3.142	3.192	3.130	3.136	3.138	3.164	3.222	E3	5.96
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	5.130	5.086	5.148	4.922	4.828	4.809	4.989	4.987	E3	2.80
2)	HMX	4.749	4.161	4.204	4.539	4.469	4.251	4.447	4.403	E3	4.78
3)	DNX	5.133	5.013	5.025	4.485	4.411	4.269	4.485	4.689	E3	7.56
4)	MNX	3.635	3.825	3.797	3.770	3.654	3.610	3.787	3.725	E3	2.39
5)	RDX	3.353	3.086	3.134	2.973	2.838	2.810	2.942	3.019	E3	6.25
6)	1,3,5-Trinitroben	7.890	7.835	7.829	7.813	7.591	7.637	7.946	7.792	E3	1.67
7)	1,3-Dinitrobenzen	3.623	3.548	3.616	3.572	3.483	3.529	3.629	3.571	E3	1.53
8)	3,5-Dinitroanilin	7.959	7.717	7.652	7.463	7.289	7.279	7.562	7.560	E3	3.21
9)	Nitrobenzene	2.762	3.229	3.045	2.904	2.911	2.956	2.973	2.969	E3	4.84
10)	Nitroglycerin	1.243	1.278	1.254	1.228	1.222	1.225	1.279	1.247	E3	1.92
11)	Tetryl	4.175	4.586	4.380	4.244	4.179	4.190	4.543	4.328	E3	4.08
12)	2,4,6-Trinitrotol	3.675	4.464	4.332	4.165	4.151	4.290	4.520	4.228	E3	6.63
13)	2-Amino-4,6-Dinit	4.308	4.728	4.489	4.419	4.399	4.598	4.939	4.554	E3	4.81
14)	4-Amino-2,6-Dinit	3.230	3.120	3.714	4.009	4.242	4.468	4.814	3.942	E3	15.93
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9987										
	Response Ratio = 0.00000 + 4712.50791 *A										
15)S	3,4-Dinitrotoluen	2.354	2.818	3.204	3.310	3.549	3.597	3.826	3.237	E3	15.63
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9992										
	Response Ratio = 0.00000 + 3764.18145 *A										
16)	2,4-Dinitrotoluen	2.613	2.678	2.774	2.933	3.047	3.017	3.152	2.888	E3	7.01
17)	2,6-Dinitrotoluen	3.431	2.825	3.254	3.396	3.336	3.397	3.550	3.313	E3	7.04

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICC1235
Lab FileID: BB045818.D

18)	o-Nitrotoluene	2.494	3.233	3.033	3.063	3.020	3.041	3.184	3.010	E3	8.03
19)	p-Nitrotoluene	3.232	2.824	2.822	2.870	2.834	2.929	3.025	2.934	E3	5.12
20)	m-Nitrotoluene	3.694	3.661	3.432	3.533	3.571	3.649	3.769	3.615	E3	3.10
21)	PETN	1.463	1.477	1.451	1.415	1.410	1.396	1.449	1.437	E3	2.10

(#) = Out of Range

8330B_0107.M Fri Jan 23 14:49:15 2015

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICV1235
Lab FileID: BB045821.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	529.286	-5.9	108	0.00	1.08- 1.68
2	HMX	500.000	573.328	-14.7	116	0.00	1.19- 1.79
3	DNX	500.000	537.360	-7.5	109	0.00	1.46- 2.06
4	MNX	500.000	509.783	-2.0	107	0.00	2.04- 2.64
5	RDX	500.000	491.716	1.7	104	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	500.000	520.053	-4.0	108	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	457.959	8.4	96	0.00	5.51- 6.31
8	3,5-Dinitroaniline	500.000	468.838	6.2	100	0.00	5.96- 6.76
9	Nitrobenzene	500.000	524.094	-4.8	107	0.00	7.12- 7.92
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	451.877	9.6	95	0.00	9.14- 9.94
12	2,4,6-Trinitrotoluene	500.000	463.147	7.4	96	0.00	9.56-10.36
13	2-Amino-4,6-Dinitrotol	500.000	541.123	-8.2	109	0.00	10.03-10.83
14	4-Amino-2,6-Dinitrotol	500.000	555.255	-11.1	108	0.00	10.52-11.32
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	525.910	-5.2	106	0.00	11.49-12.29
17	2,6-Dinitrotoluene	500.000	547.381	-9.5	110	0.00	11.89-12.69
18	o-Nitrotoluene	500.000	515.628	-3.1	105	0.00	14.10-14.98
19	p-Nitrotoluene	500.000	502.087	-0.4	103	0.00	14.36-15.36
20	m-Nitrotoluene	500.000	543.666	-8.7	112	0.00	14.90-15.90
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	519.029	-3.8	107	0.00	1.08- 1.68
2	HMX	500.000	565.918	-13.2	112	0.00	1.19- 1.79
3	DNX	500.000	499.130	0.2	106	0.00	1.46- 2.06
4	MNX	500.000	520.625	-4.1	106	0.00	2.04- 2.64
5	RDX	500.000	497.299	0.5	106	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	500.000	526.624	-5.3	108	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	469.936	6.0	96	0.00	5.51- 6.31
8	3,5-Dinitroaniline	500.000	482.526	3.5	100	0.00	5.96- 6.76
9	Nitrobenzene	500.000	530.075	-6.0	108	0.00	7.12- 7.92
10	Nitroglycerin	2500.000	2533.654	-1.3	103	0.00	8.67- 9.67
11	Tetryl	500.000	457.633	8.5	95	0.00	9.14- 9.94
12	2,4,6-Trinitrotoluene	500.000	496.730	0.7	101	0.00	9.56-10.36
13	2-Amino-4,6-Dinitrotol	500.000	546.801	-9.4	113	0.00	10.03-10.83

	----------	Amount	Calc.	%Drift			----------
14	4-Amino-2,6-Dinitrotol	500.000	495.904	0.8	110	0.00	10.52-11.32
15 S	3,4-Dinitrotoluene		----------NA----------				

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICV1235
Lab FileID: BB045821.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	500.000	534.743	-6.9	101	0.00	11.50-12.30
17	2,6-Dinitrotoluene	500.000	537.287	-7.5	107	0.00	11.89-12.69
18	o-Nitrotoluene	500.000	534.800	-7.0	107	0.00	13.98-14.98
19	p-Nitrotoluene	500.000	500.973	-0.2	104	0.00	14.36-15.36
20	m-Nitrotoluene	500.000	562.797	-12.6	114	0.00	14.90-15.90
21	PETN	2500.000	2629.624	-5.2	107	0.00	16.32-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045818.D 8330B_0107.M Fri Jan 23 14:49:38 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046104.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1A.ch
Acq On : 20-Feb-2015, 13:16:39 Operator: KISMETL
Sample : cc1235-500 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	500.090	-0.0	102	0.00	1.07- 1.67
2	HMX	500.000	492.230	1.6	100	0.00	1.19- 1.79
3	DNX	500.000	499.774	0.0	102	0.00	1.45- 2.05
4	MNX	500.000	485.564	2.9	102	0.00	2.02- 2.62
5	RDX	500.000	480.769	3.8	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	500.000	487.815	2.4	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	500.000	483.974	3.2	101	-0.01	5.48- 6.28
8	3,5-Dinitroaniline	500.000	462.712	7.5	99	0.00	5.92- 6.72
9	Nitrobenzene	500.000	493.410	1.3	101	-0.02	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	503.808	-0.8	106	-0.02	9.06- 9.86
12	2,4,6-Trinitrotoluene	500.000	501.136	-0.2	104	-0.02	9.49-10.29
13	2-Amino-4,6-Dinitrotol	500.000	526.398	-5.3	106	-0.02	9.94-10.74
14	4-Amino-2,6-Dinitrotol	500.000	542.231	-8.4	105	-0.02	10.42-11.22
15 S	3,4-Dinitrotoluene	500.000	484.502	3.1	106	-0.03	10.80-11.60
16	2,4-Dinitrotoluene	500.000	515.623	-3.1	104	-0.02	11.41-12.21
17	2,6-Dinitrotoluene	500.000	526.891	-5.4	106	-0.03	11.82-12.62
18	o-Nitrotoluene	500.000	499.668	0.1	102	-0.02	14.05-14.92
19	p-Nitrotoluene	500.000	494.061	1.2	102	-0.02	14.31-15.31
20	m-Nitrotoluene	500.000	489.846	2.0	101	-0.02	14.85-15.85
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	493.980	1.2	102	0.00	1.07- 1.67
2	HMX	500.000	499.754	0.0	98	0.00	1.19- 1.79
3	DNX	500.000	473.088	5.4	101	0.00	1.45- 2.05
4	MNX	500.000	498.102	0.4	102	0.00	2.02- 2.62
5	RDX	500.000	474.362	5.1	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	500.000	501.238	-0.2	103	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	500.000	511.383	-2.3	105	-0.01	5.48- 6.28
8	3,5-Dinitroaniline	500.000	486.501	2.7	101	0.00	5.92- 6.72
9	Nitrobenzene	500.000	538.153	-7.6	110	-0.02	7.08- 7.88
10	Nitroglycerin	2500.000	2493.571	0.3	102	-0.02	8.61- 9.61
11	Tetryl	500.000	505.941	-1.2	105	-0.02	9.06- 9.86
12	2,4,6-Trinitrotoluene	500.000	501.978	-0.4	102	-0.02	9.49-10.29
13	2-Amino-4,6-Dinitrotol	500.000	506.292	-1.3	105	-0.02	9.94-10.74

		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	466.670	6.7	104	-0.03	10.42-11.22
15 S	3,4-Dinitrotoluene	500.000	473.680	5.3	100	-0.03	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046104.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	500.000	538.045	-7.6	102	-0.03	11.42-12.22
17	2,6-Dinitrotoluene	500.000	522.850	-4.6	104	-0.02	11.82-12.62
18	o-Nitrotoluene	500.000	524.776	-5.0	105	-0.02	13.92-14.92
19	p-Nitrotoluene	500.000	506.617	-1.3	105	-0.02	14.31-15.31
20	m-Nitrotoluene	500.000	511.836	-2.4	104	-0.02	14.85-15.85
21	PETN	2500.000	2406.016	3.8	98	0.00	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045818.D 8330B_0107.M Mon Feb 23 10:27:19 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046115.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1A.ch
Acq On : 20-Feb-2015, 17:51:12 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	988.282	1.2	101	0.00	1.07- 1.67
2	HMX	1000.000	979.282	2.1	102	0.00	1.19- 1.79
3	DNX	1000.000	995.501	0.4	102	0.00	1.45- 2.05
4	MNX	1000.000	950.775	4.9	101	0.00	2.02- 2.62
5	RDX	1000.000	940.500	5.9	101	0.01	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	970.710	2.9	101	0.02	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	952.525	4.7	99	0.02	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	913.640	8.6	95	0.02	5.92- 6.72
9	Nitrobenzene	1000.000	974.862	2.5	99	0.02	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	988.713	1.1	103	0.04	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	983.218	1.7	99	0.03	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1039.652	-4.0	101	0.04	9.94-10.74
14	4-Amino-2,6-Dinitrotol	1000.000	1084.330	-8.4	101	0.04	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	937.434	6.3	100	0.04	10.80-11.60
16	2,4-Dinitrotoluene	1000.000	1001.507	-0.2	100	0.04	11.41-12.21
17	2,6-Dinitrotoluene	1000.000	1017.939	-1.8	99	0.03	11.82-12.62
18	o-Nitrotoluene	1000.000	978.209	2.2	99	0.02	14.05-14.92
19	p-Nitrotoluene	1000.000	968.447	3.2	100	0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	964.590	3.5	99	0.02	14.85-15.85
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	1000.000	972.868	2.7	101	0.00	1.07- 1.67
2	HMX	1000.000	986.912	1.3	102	0.00	1.19- 1.79
3	DNX	1000.000	933.693	6.6	103	0.00	1.45- 2.05
4	MNX	1000.000	985.147	1.5	102	0.00	2.02- 2.62
5	RDX	1000.000	940.741	5.9	101	0.01	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	987.404	1.3	101	0.02	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	966.302	3.4	98	0.02	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	920.733	7.9	96	0.02	5.92- 6.72
9	Nitrobenzene	1000.000	984.576	1.5	99	0.02	7.08- 7.88
10	Nitroglycerin	5000.000	4855.779	2.9	99	0.03	8.61- 9.61
11	Tetryl	1000.000	993.037	0.7	103	0.04	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	997.994	0.2	98	0.03	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1018.166	-1.8	101	0.04	9.94-10.74
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	954.970	4.5	101	0.04	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	951.260	4.9	100	0.04	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046115.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1050.663	-5.1	101	0.04	11.42-12.22
17	2,6-Dinitrotoluene	1000.000	1025.304	-2.5	100	0.03	11.82-12.62
18	o-Nitrotoluene	1000.000	1015.494	-1.5	101	0.02	13.92-14.92
19	p-Nitrotoluene	1000.000	999.263	0.1	100	0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	1001.240	-0.1	99	0.02	14.85-15.85
21	PETN	5000.000	4737.932	5.2	98	0.02	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Mon Feb 23 10:32:17 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046126.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1A.ch
Acq On : 20-Feb-2015, 22:25:47 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	986.161	1.4	101	0.00	1.07- 1.67
2	HMX	1000.000	971.279	2.9	101	0.00	1.19- 1.79
3	DNX	1000.000	989.364	1.1	101	0.00	1.45- 2.05
4	MNX	1000.000	952.215	4.8	102	0.00	2.02- 2.62
5	RDX	1000.000	945.046	5.5	102	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	977.812	2.2	102	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	954.931	4.5	100	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	910.004	9.0	95	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	990.775	0.9	100	0.00	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	993.527	0.6	104	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	987.464	1.3	100	0.00	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1043.133	-4.3	101	0.00	9.94-10.74
14	4-Amino-2,6-Dinitrotol	1000.000	1088.880	-8.9	101	0.00	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	935.991	6.4	99	0.00	10.80-11.60
16	2,4-Dinitrotoluene	1000.000	1003.519	-0.4	100	0.00	11.41-12.21
17	2,6-Dinitrotoluene	1000.000	1018.175	-1.8	99	0.00	11.82-12.62
18	o-Nitrotoluene	1000.000	986.286	1.4	100	0.00	14.05-14.92
19	p-Nitrotoluene	1000.000	971.481	2.9	100	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	972.056	2.8	100	0.00	14.85-15.85
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	960.556	3.9	100	0.00	1.07- 1.67
2	HMX	1000.000	961.325	3.9	100	0.00	1.19- 1.79
3	DNX	1000.000	912.227	8.8	100	0.00	1.45- 2.05
4	MNX	1000.000	976.536	2.3	101	0.00	2.02- 2.62
5	RDX	1000.000	941.161	5.9	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	986.387	1.4	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	987.844	1.2	100	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	942.830	5.7	98	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	1018.885	-1.9	102	0.00	7.08- 7.88
10	Nitroglycerin	5000.000	4894.551	2.1	100	0.00	8.61- 9.61
11	Tetryl	1000.000	1001.982	-0.2	103	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	1011.958	-1.2	100	0.00	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1029.923	-3.0	102	0.00	9.94-10.74

		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	965.738	3.4	102	0.00	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	953.550	4.6	100	0.00	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046126.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1054.594	-5.5	101	0.00	11.42-12.22
17	2,6-Dinitrotoluene	1000.000	1023.137	-2.3	100	0.00	11.82-12.62
18	o-Nitrotoluene	1000.000	1020.123	-2.0	101	0.00	13.92-14.92
19	p-Nitrotoluene	1000.000	1006.715	-0.7	101	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	1024.853	-2.5	102	0.00	14.85-15.85
21	PETN	5000.000	4621.850	7.6	95	0.00	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Mon Feb 23 10:32:18 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-ECC1235
Lab FileID: BB046131.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1A.ch
Acq On : 21-Feb-2015, 00:30:32 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	988.734	1.1	101	0.00	1.07- 1.67
2	HMX	1000.000	979.203	2.1	102	0.00	1.19- 1.79
3	DNX	1000.000	992.636	0.7	102	0.00	1.45- 2.05
4	MNX	1000.000	953.143	4.7	102	0.00	2.02- 2.62
5	RDX	1000.000	938.661	6.1	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	974.249	2.6	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	963.445	3.7	101	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	921.747	7.8	96	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	998.537	0.1	101	0.00	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	999.159	0.1	104	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	991.083	0.9	100	-0.01	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1046.998	-4.7	101	-0.01	9.94-10.74
14	4-Amino-2,6-Dinitrotol	1000.000	1076.564	-7.7	100	-0.01	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	944.502	5.5	100	-0.01	10.80-11.60
16	2,4-Dinitrotoluene	1000.000	999.951	0.0	100	-0.01	11.41-12.21
17	2,6-Dinitrotoluene	1000.000	1023.893	-2.4	100	-0.01	11.82-12.62
18	o-Nitrotoluene	1000.000	983.440	1.7	100	0.00	14.05-14.92
19	p-Nitrotoluene	1000.000	969.901	3.0	100	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	965.547	3.4	99	0.00	14.85-15.85
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	969.716	3.0	101	0.00	1.07- 1.67
2	HMX	1000.000	989.140	1.1	102	0.00	1.19- 1.79
3	DNX	1000.000	930.992	6.9	102	0.00	1.45- 2.05
4	MNX	1000.000	985.368	1.5	102	0.00	2.02- 2.62
5	RDX	1000.000	950.059	5.0	102	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	988.045	1.2	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	979.113	2.1	99	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	945.870	5.4	98	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	982.902	1.7	99	0.00	7.08- 7.88
10	Nitroglycerin	5000.000	4880.516	2.4	99	0.00	8.61- 9.61
11	Tetryl	1000.000	1001.514	-0.2	103	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	1004.640	-0.5	99	-0.01	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1019.520	-2.0	101	0.00	9.94-10.74

		---------- Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	947.430	5.3	100	-0.02	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	947.555	5.2	99	-0.01	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-ECC1235
Lab FileID: BB046131.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1028.372	-2.8	98	-0.01	11.42-12.22
17	2,6-Dinitrotoluene	1000.000	1027.734	-2.8	100	0.00	11.82-12.62
18	o-Nitrotoluene	1000.000	982.654	1.7	97	0.00	13.92-14.92
19	p-Nitrotoluene	1000.000	981.948	1.8	98	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	1078.325	-7.8	107	0.00	14.85-15.85
21	PETN	5000.000	4710.088	5.8	97	0.00	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Mon Feb 23 10:32:19 2015

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICC2344
Lab FileID: GG058134.D

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Initial Calibration

Calibration Files
20 =GG058130.D 50 =GG058131.D 100 =GG058132.D 200 =GG058133.D
500 =GG058134.D 1000=GG058135.D 2000=GG058136.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.013	0.966	0.936	0.925	0.909	0.894	0.927	0.939	E4	4.24
2)	HMX	3.546	3.190	3.306	3.203	3.143	3.063	3.153	3.229	E3	4.88
3)	DNX	7.686	7.992	8.195	7.869	7.982	7.904	8.223	7.979	E3	2.35
4)	MNX	6.627	6.446	6.551	6.411	6.233	6.182	6.463	6.416	E3	2.50
5)	1,3,5-Trinitroben	1.059	1.059	1.072	1.055	1.021	1.014	1.062	1.049	E4	2.12
6)	RDX	4.928	4.444	5.234	4.924	4.680	4.635	4.853	4.814	E3	5.30
7)	1,3-Dinitrobenzen	1.568	1.404	1.425	1.424	1.366	1.366	1.412	1.424	E4	4.79
8)	Nitrobenzene	9.244	9.131	9.108	9.163	8.872	8.894	9.059	9.067	E3	1.52
9)	2,4,6-Trinitrotol	1.036	0.965	0.956	0.973	0.934	0.933	0.973	0.967	E4	3.58
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	7.203	6.901	7.100	7.316	6.818	6.821	7.353	7.073	E3	3.23
12)S	3,4-Dinitrotoluen	6.775	5.823	5.705	5.742	5.373	5.447	5.618	5.783	E3	8.05
13)	2,6-Dinitrotoluen	9.511	6.805	7.211	7.270	6.835	6.932	7.108	7.382	E3	12.95
14)	2,4-Dinitrotoluen	1.420	1.306	1.330	1.344	1.258	1.273	1.315	1.321	E4	4.01
15)	o-Nitrotoluene	1.821	1.836	1.881	1.854	1.762	1.766	1.827	1.821	E4	2.39
16)	3,5-Dinitroanilin	1.821	1.836	1.881	1.854	1.762	1.766	1.827	1.821	E4	2.39
17)	p-Nitrotoluene	6.293	5.237	5.212	5.247	4.865	4.917	5.010	5.254	E3	9.21
18)	4-Amino-2,6-Dinit	6.958	6.837	7.203	7.143	6.639	6.681	6.958	6.917	E3	3.10
19)	m-Nitrotoluene	6.255	6.471	6.399	6.298	5.929	5.996	6.120	6.210	E3	3.26
20)	2-Amino-4,6-Dinit	9.307	9.622	9.585	9.464	9.069	9.097	9.485	9.376	E3	2.39
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.504	1.406	1.412	1.397	1.342	1.333	1.420	1.402	E4	4.04
2)	HMX	1.503	1.205	1.093	1.033	1.045	0.945	1.025	1.121	E4	16.58

---- Linear regr., Force(0,0) ---- Coefficient = 0.9982
Response Ratio = 0.00000 + 10114.95296 *A

3)	DNX	1.670	1.440	1.386	1.298	1.350	1.297	1.318	1.394	E4	9.47
4)	MNX	0.877	0.900	0.938	0.977	0.963	0.969	1.012	0.948	E4	4.92
5)	1,3,5-Trinitroben	1.755	1.787	1.848	1.845	1.813	1.808	1.897	1.822	E4	2.55
6)	RDX	8.200	8.407	9.469	8.901	8.878	8.958	9.382	8.885	E3	5.22
7)	1,3-Dinitrobenzen	1.206	1.094	1.057	1.064	1.024	1.032	1.070	1.078	E4	5.68
8)	Nitrobenzene	8.754	8.618	8.633	8.300	8.176	8.280	8.413	8.453	E3	2.57
9)	2,4,6-Trinitrotol	1.261	1.345	1.298	1.308	1.239	1.249	1.302	1.286	E4	2.94
10)	Nitroglycerin	3.543	3.431	3.615	3.582	3.361	3.406	3.535	3.496	E3	2.76
11)	Tetryl	1.303	1.228	1.244	1.312	1.200	1.215	1.317	1.260	E4	3.93
12)S	3,4-Dinitrotoluen	1.149	1.111	1.096	1.150	1.065	1.087	1.125	1.112	E4	2.85
13)	2,6-Dinitrotoluen	1.033	0.988	1.013	1.050	0.998	1.019	1.049	1.021	E4	2.36
14)	2,4-Dinitrotoluen	9.339	9.432	9.693	9.796	9.060	9.172	9.590	9.440	E3	2.87
15)	o-Nitrotoluene	2.976	3.071	3.053	2.962	2.869	2.838	2.957	2.961	E4	2.90
16)	3,5-Dinitroanilin	2.976	3.071	3.053	2.962	2.869	2.838	2.957	2.961	E4	2.90
17)	p-Nitrotoluene	7.329	9.553	8.279	8.348	8.021	7.930	8.169	8.233	E3	8.17
18)	4-Amino-2,6-Dinit	1.231	1.670	1.513	1.388	1.385	1.354	1.418	1.423	E4	9.67
19)	m-Nitrotoluene	1.069	1.246	1.216	1.030	1.027	1.012	1.048	1.093	E4	8.84
20)	2-Amino-4,6-Dinit	1.378	1.352	1.334	1.364	1.313	1.329	1.379	1.350	E4	1.88

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICC2344
Lab FileID: GG058134.D

```
21)  PETN              1.986 3.185 3.491 3.453 3.533 3.603 3.769 3.288 E3  18.26
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 3722.92772 *A

--------------------------------------------------------------------------------
(#) = Out of Range

          8330_RPB2.M        Mon Jan 26 10:17:03 2015
```

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICV2344
Lab FileID: GG058137.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0123RPB2\GG058137.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0123RPB2\GG058137.D\dad1A.ch
Acq On : 23-Jan-2015, 15:00:38 Operator: kismetl
Sample : icv2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	511.391	-2.3	106	-0.01	5.13- 6.13
2	HMX	500.000	546.012	-9.2	112	0.00	5.67- 6.67
3	DNX	500.000	540.209	-8.0	108	-0.02	5.85- 6.85
4	MNX	500.000	516.193	-3.2	106	-0.02	7.21- 8.21
5	1,3,5-Trinitrobenzene	500.000	520.818	-4.2	107	-0.01	8.15- 9.15
6	RDX	500.000	512.005	-2.4	105	-0.03	8.70- 9.70
7	1,3-Dinitrobenzene	500.000	460.751	7.8	96	-0.02	10.80-11.80
8	Nitrobenzene	500.000	525.347	-5.1	107	-0.02	11.83-12.83
9	2,4,6-Trinitrotoluene	500.000	437.679	12.5	91	-0.02	12.87-13.87
10	Nitroglycerin	----------NA----------					
11	Tetryl	500.000	460.091	8.0	95	-0.02	14.60-15.60
12 S	3,4-Dinitrotoluene	----------NA----------					
13	2,6-Dinitrotoluene	500.000	522.720	-4.5	113	-0.02	16.18-17.18
14	2,4-Dinitrotoluene	500.000	503.053	-0.6	106	-0.02	16.99-17.99
15	o-Nitrotoluene	500.000	495.883	0.8	103	-0.03	18.58-19.58
16	3,5-Dinitroaniline	500.000	495.883	0.8	103	-0.03	18.58-19.58
17	p-Nitrotoluene	500.000	494.691	1.1	107	0.00	20.13-21.13
18	4-Amino-2,6-Dinitrotol	500.000	502.069	-0.4	105	-0.03	20.67-21.67
19	m-Nitrotoluene	500.000	535.933	-7.2	112	0.00	21.70-22.70
20	2-Amino-4,6-Dinitrotol	500.000	513.305	-2.7	106	-0.03	23.34-24.34
21	PETN	----------NA----------					

***** Signal #2 *****

1	TNX	500.000	510.269	-2.1	107	-0.01	5.13- 6.13
	---------- Amount	Calc.	%Drift	----------			
2	HMX	500.000	575.360	-15.1#	111	-0.01	5.67- 6.67
	---------- Amount	Calc.	%Drift	----------			
3	DNX	500.000	498.200	0.4	103	-0.02	5.85- 6.85
4	MNX	500.000	535.821	-7.2	105	-0.02	7.21- 8.21
5	1,3,5-Trinitrobenzene	500.000	533.767	-6.8	107	-0.01	8.15- 9.15
6	RDX	500.000	529.100	-5.8	106	-0.03	8.70- 9.70
7	1,3-Dinitrobenzene	500.000	456.291	8.7	96	-0.03	10.80-11.80
8	Nitrobenzene	500.000	528.854	-5.8	109	-0.03	11.83-12.83
9	2,4,6-Trinitrotoluene	500.000	447.996	10.4	93	-0.02	12.87-13.87
10	Nitroglycerin	2500.000	2522.228	-0.9	105	-0.02	13.74-14.74
11	Tetryl	500.000	480.949	3.8	101	-0.02	14.60-15.60
12 S	3,4-Dinitrotoluene	----------NA----------					
13	2,6-Dinitrotoluene	500.000	593.333	-18.7#	121	-0.02	16.18-17.18

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICV2344
Lab FileID: GG058137.D

14	2,4-Dinitrotoluene	500.000	516.613	-3.3	108	-0.02	16.99-17.99
15	o-Nitrotoluene	500.000	497.991	0.4	103	-0.03	18.57-19.57
16	3,5-Dinitroaniline	500.000	497.991	0.4	103	-0.03	18.57-19.57
17	p-Nitrotoluene	500.000	515.249	-3.0	106	0.00	20.13-21.13
18	4-Amino-2,6-Dinitrotol	500.000	513.409	-2.7	105	-0.03	20.67-21.67
19	m-Nitrotoluene	500.000	542.230	-8.4	115	0.00	21.70-22.70
20	2-Amino-4,6-Dinitrotol	500.000	514.778	-3.0	106	-0.03	23.34-24.34

		Amount	Calc.	%Drift			
21	PETN	2500.000	2525.198	-1.0	106	0.00	25.27-26.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG058134.D 8330_RPB2.M Mon Jan 26 10:17:28 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-CC2344
Lab FileID: GG058408.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0223RPB2\GG058408.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058408.D\dad1A.ch
Acq On : 23-Feb-2015, 10:22:02 Operator: kismetl
Sample : cc2344-500 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	484.675	3.1	100	0.00	5.13- 6.13
2	HMX	500.000	462.241	7.6	95	0.00	5.70- 6.70
3	DNX	500.000	513.372	-2.7	103	0.00	5.87- 6.87
4	MNX	500.000	490.117	2.0	101	0.00	7.22- 8.22
5	1,3,5-Trinitrobenzene	500.000	498.071	0.4	102	0.00	8.15- 9.15
6	RDX	500.000	483.832	3.2	100	0.01	8.72- 9.72
7	1,3-Dinitrobenzene	500.000	494.130	1.2	103	0.02	10.81-11.81
8	Nitrobenzene	500.000	481.968	3.6	99	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	500.000	496.840	0.6	103	0.02	12.87-13.87
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	500.000	480.233	4.0	100	0.02	14.63-15.63
12 S	3,4-Dinitrotoluene	500.000	472.933	5.4	102	0.03	15.80-16.80
13	2,6-Dinitrotoluene	500.000	482.711	3.5	104	0.02	16.22-17.22
14	2,4-Dinitrotoluene	500.000	493.517	1.3	104	0.02	17.03-18.03
15	o-Nitrotoluene	500.000	479.423	4.1	99	0.00	18.61-19.61
16	3,5-Dinitroaniline	500.000	479.423	4.1	99	0.00	18.61-19.61
17	p-Nitrotoluene	500.000	461.188	7.8	100	0.01	20.17-21.17
18	4-Amino-2,6-Dinitrotol	500.000	505.550	-1.1	105	0.02	20.76-21.76
19	m-Nitrotoluene	500.000	474.874	5.0	99	0.00	21.75-22.75
20	2-Amino-4,6-Dinitrotol	500.000	498.004	0.4	103	0.00	23.44-24.44
21	PETN	----------	NA	----------			

***** Signal #2 *****

1	TNX	500.000	489.947	2.0	102	0.00	5.13- 6.13
	----------	Amount	Calc.	%Drift	----------		
2	HMX	500.000	522.819	-4.6	101	0.00	5.70- 6.70
	----------	Amount	Calc.	%Drift	----------		
3	DNX	500.000	522.835	-4.6	108	0.00	5.87- 6.87
4	MNX	500.000	523.136	-4.6	103	0.00	7.22- 8.22
5	1,3,5-Trinitrobenzene	500.000	509.871	-2.0	102	0.00	8.15- 9.15
6	RDX	500.000	503.823	-0.8	101	0.01	8.72- 9.72
7	1,3-Dinitrobenzene	500.000	497.776	0.4	105	0.02	10.81-11.81
8	Nitrobenzene	500.000	496.371	0.7	103	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	500.000	509.821	-2.0	106	0.02	12.87-13.87
10	Nitroglycerin	2500.000	2542.910	-1.7	106	0.02	13.76-14.76
11	Tetryl	500.000	516.005	-3.2	108	0.01	14.64-15.64
12 S	3,4-Dinitrotoluene	500.000	532.108	-6.4	111	0.03	15.80-16.80
13	2,6-Dinitrotoluene	500.000	543.147	-8.6	111	0.01	16.22-17.22

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-CC2344
Lab FileID: GG058408.D

14	2,4-Dinitrotoluene	500.000	528.169	-5.6	110	0.02	17.03-18.03
15	o-Nitrotoluene	500.000	490.901	1.8	101	0.00	18.60-19.60
16	3,5-Dinitroaniline	500.000	490.901	1.8	101	0.00	18.60-19.60
17	p-Nitrotoluene	500.000	475.048	5.0	98	0.01	20.17-21.17
18	4-Amino-2,6-Dinitrotol	500.000	490.510	1.9	101	0.02	20.76-21.76
19	m-Nitrotoluene	500.000	447.045	10.6	95	0.00	21.74-22.74
20	2-Amino-4,6-Dinitrotol	500.000	490.556	1.9	101	0.00	23.44-24.44

		Amount	Calc.	%Drift			
21	PETN	2500.000	2416.493	3.3	102	0.00	25.35-26.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG058134.D 8330_RPB2.M Tue Feb 24 09:31:22 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-ECC2344
Lab FileID: GG058412.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0223RPB2\GG058412.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058412.D\dad1A.ch
Acq On : 23-Feb-2015, 12:42:53 Operator: kismetl
Sample : ecc2344-1000 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	950.734	4.9	100	0.01	5.13- 6.13
2	HMX	1000.000	896.548	10.3	95	0.01	5.70- 6.70
3	DNX	1000.000	1016.840	-1.7	103	0.00	5.87- 6.87
4	MNX	1000.000	972.676	2.7	101	0.02	7.22- 8.22
5	1,3,5-Trinitrobenzene	1000.000	985.097	1.5	102	0.00	8.15- 9.15
6	RDX	1000.000	970.379	3.0	101	0.02	8.72- 9.72
7	1,3-Dinitrobenzene	1000.000	965.973	3.4	101	0.02	10.81-11.81
8	Nitrobenzene	1000.000	991.231	0.9	101	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	1000.000	980.454	2.0	102	0.02	12.87-13.87
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	992.527	0.7	103	0.02	14.63-15.63
12 S	3,4-Dinitrotoluene	1000.000	927.230	7.3	98	0.04	15.80-16.80
13	2,6-Dinitrotoluene	1000.000	944.785	5.5	101	0.02	16.22-17.22
14	2,4-Dinitrotoluene	1000.000	965.485	3.5	100	0.02	17.03-18.03
15	o-Nitrotoluene	1000.000	947.470	5.3	98	0.00	18.61-19.61
16	3,5-Dinitroaniline	1000.000	947.470	5.3	98	0.00	18.61-19.61
17	p-Nitrotoluene	1000.000	937.639	6.2	100	0.00	20.17-21.17
18	4-Amino-2,6-Dinitrotol	1000.000	968.348	3.2	100	0.00	20.76-21.76
19	m-Nitrotoluene	1000.000	971.031	2.9	101	0.00	21.75-22.75
20	2-Amino-4,6-Dinitrotol	1000.000	978.769	2.1	101	0.00	23.44-24.44
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	970.399	3.0	102	0.01	5.13- 6.13
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	972.554	2.7	104	0.01	5.70- 6.70
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	999.604	0.0	107	0.00	5.87- 6.87
4	MNX	1000.000	1013.019	-1.3	99	0.02	7.22- 8.22
5	1,3,5-Trinitrobenzene	1000.000	1012.462	-1.2	102	0.00	8.15- 9.15
6	RDX	1000.000	1007.632	-0.8	100	0.02	8.72- 9.72
7	1,3-Dinitrobenzene	1000.000	967.705	3.2	101	0.02	10.81-11.81
8	Nitrobenzene	1000.000	991.921	0.8	101	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	1000.000	976.330	2.4	101	0.02	12.87-13.87
10	Nitroglycerin	5000.000	4872.114	2.6	100	0.03	13.76-14.76
11	Tetryl	1000.000	993.668	0.6	103	0.02	14.64-15.64
12 S	3,4-Dinitrotoluene	1000.000	975.861	2.4	100	0.04	15.80-16.80
13	2,6-Dinitrotoluene	1000.000	998.994	0.1	100	0.02	16.22-17.22

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-ECC2344
Lab FileID: GG058412.D

		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	991.859	0.8	102	0.02	17.03-18.03
15	o-Nitrotoluene	1000.000	952.878	4.7	99	0.00	18.60-19.60
16	3,5-Dinitroaniline	1000.000	952.878	4.7	99	0.00	18.60-19.60
17	p-Nitrotoluene	1000.000	1005.059	-0.5	104	0.00	20.17-21.17
18	4-Amino-2,6-Dinitrotol	1000.000	976.094	2.4	103	0.00	20.76-21.76
19	m-Nitrotoluene	1000.000	971.470	2.9	105	0.00	21.74-22.74
20	2-Amino-4,6-Dinitrotol	1000.000	976.761	2.3	99	0.00	23.44-24.44
		Amount	Calc.	%Drift			
21	PETN	5000.000	4682.444	6.4	97	0.00	25.35-26.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG058135.D 8330_RPB2.M Tue Feb 24 09:31:49 2015

6.6.10

6

Southeast

ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1A.ch
Acq On : 20-Feb-2015, 14:56:35 Operator: KISMETL
Sample : FA22032-1 Inst : G1315B
Misc : OP55030,GBB1248,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:57 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.23	1179840	2031023	530.821m	539.566m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.16%	107.91%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.92	2.91	23625	44761	12.525m	14.825m
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

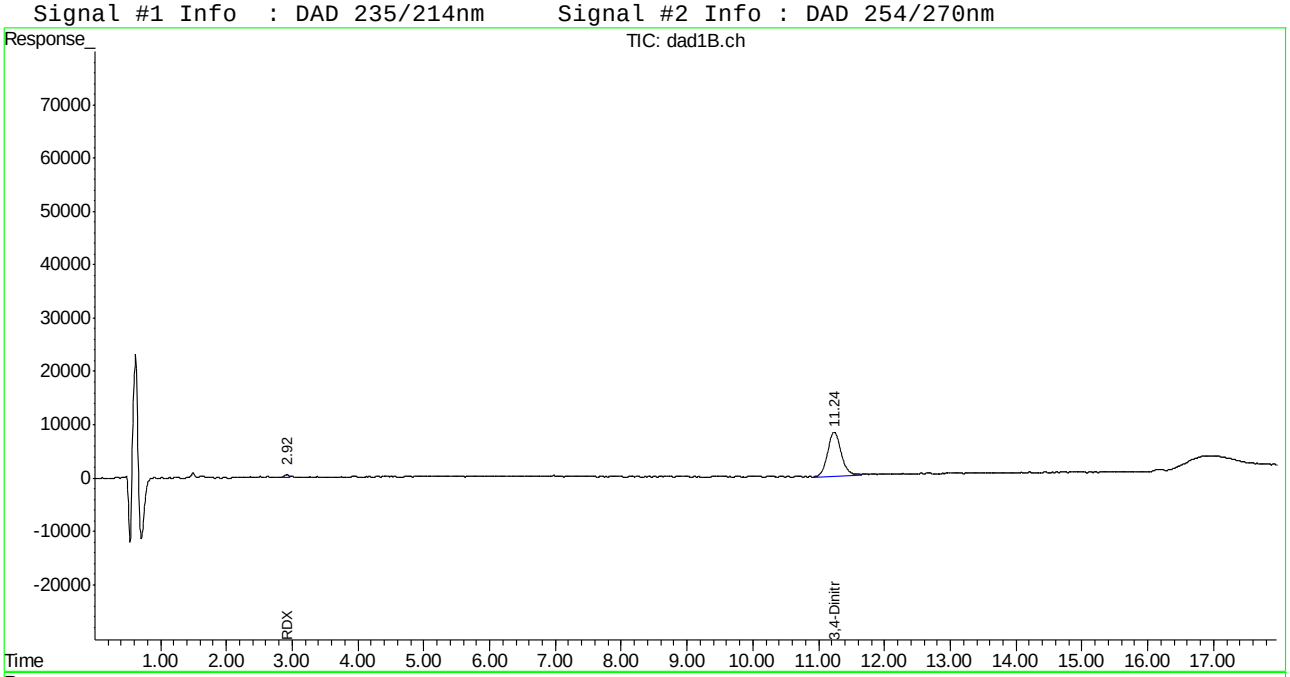
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046108.D 8330B_0107.M Wed Feb 25 10:57:27 2015 Page 1

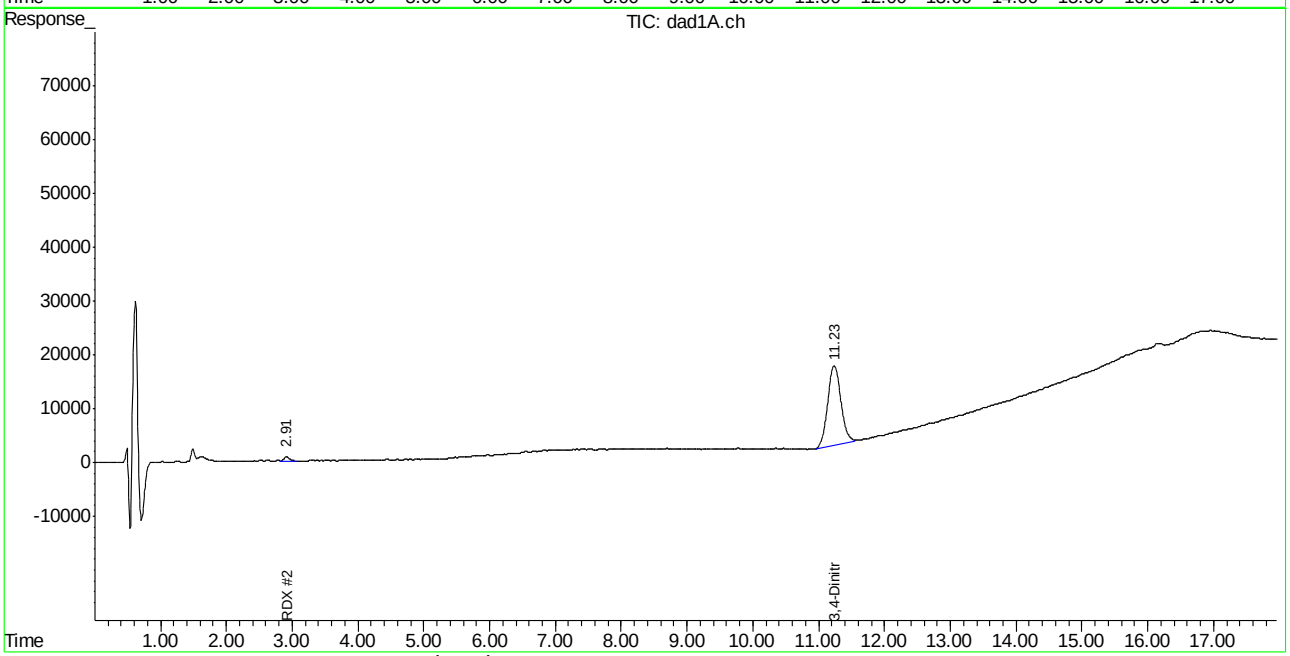
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1A.ch
Acq On : 20-Feb-2015, 14:56:35 Operator: KISMETL
Sample : FA22032-1 Inst : G1315B
Misc : OP55030,GBB1248,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 25 10:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





BB046108.D 8330B_0107.M Wed Feb 25 10:57:27 2015 Page 2

Manual Integration Approval Summary

Sample Number: FA22032-1
Lab FileID: BB046108.D
Injection Time: 02/20/15 14:56
Method: SW846 8330A
Analyst approved: 02/25/15 11:01 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	2	2.91	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.23	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058410.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0223RPB2\GG058410.D\dad1A.ch
Acq On : 23-Feb-2015, 11:34:44 Operator: kismetl
Sample : FA22032-1cf Inst : G1315B
Misc : OP55030,GGG2361,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:47 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.33	16.33	3124511	6086081	540.251	547.320
	Spiked Amount 500.000	Range 72 - 145		Recovery =		108.05%	109.46%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
6)	RDX	9.23	9.26	59741	97636	12.410	10.989m
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

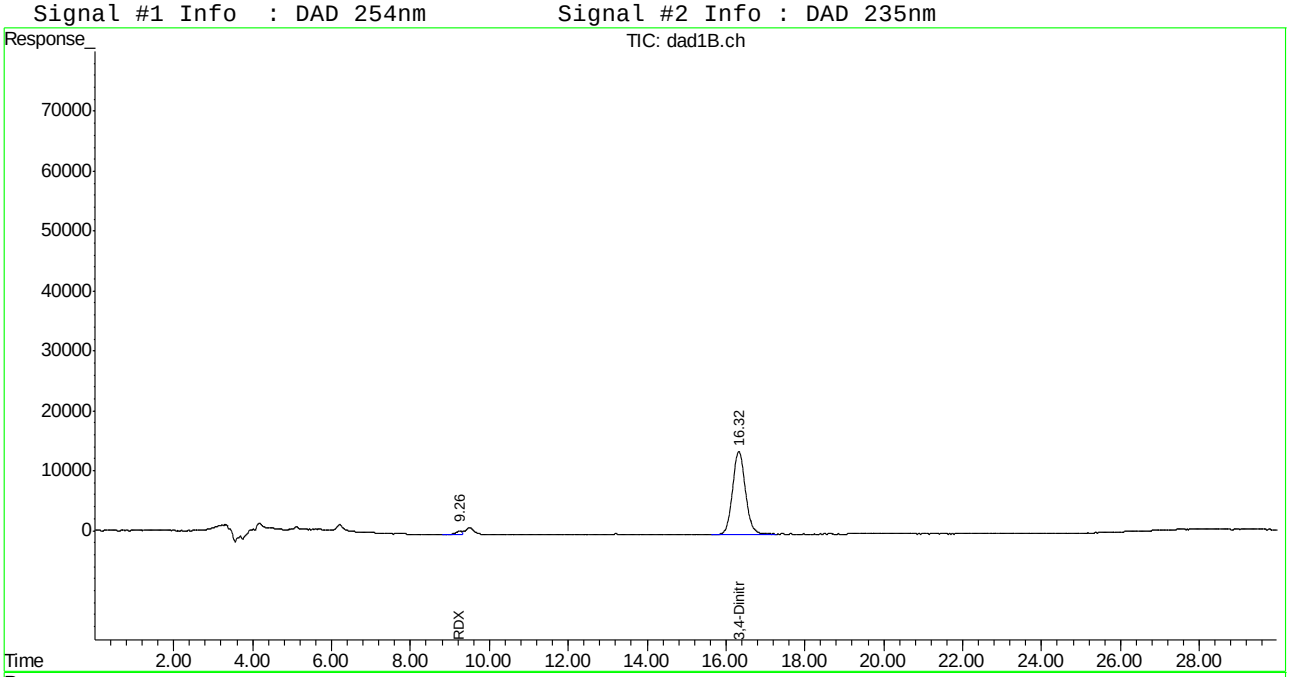
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058410.D 8330RPB.M Wed Feb 25 10:31:27 2015 Page 1

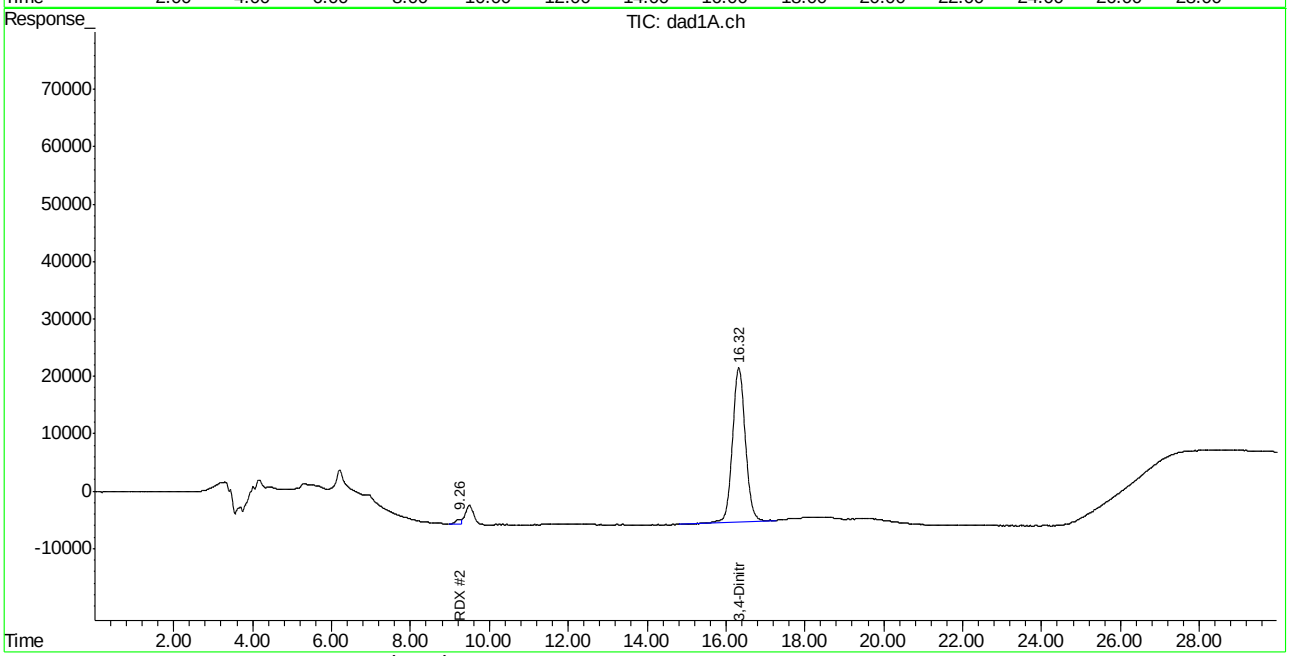
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058410.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0223RPB2\GG058410.D\dad1A.ch
Acq On : 23-Feb-2015, 11:34:44 Operator: kismetl
Sample : FA22032-1cf Inst : G1315B
Misc : OP55030,GGG2361,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:17 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: FA22032-1
Lab FileID: GG058410.D
Injection Time: 02/23/15 11:34
Method: SW846 8330A
Analyst approved: 02/25/15 11:01 Kismet Lugo
Supervisor approved: 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	2	9.26	Missed peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1A.ch
Acq On : 20-Feb-2015, 16:11:25 Operator: KISMETL
Sample : FA22032-2 Inst : G1315B
Misc : OP55030,GBB1248,2.40,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:00 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1191074	2053346	535.875m	545.496
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.18%	109.10%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	9.12	0	83012	N.D. d	66.570m
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

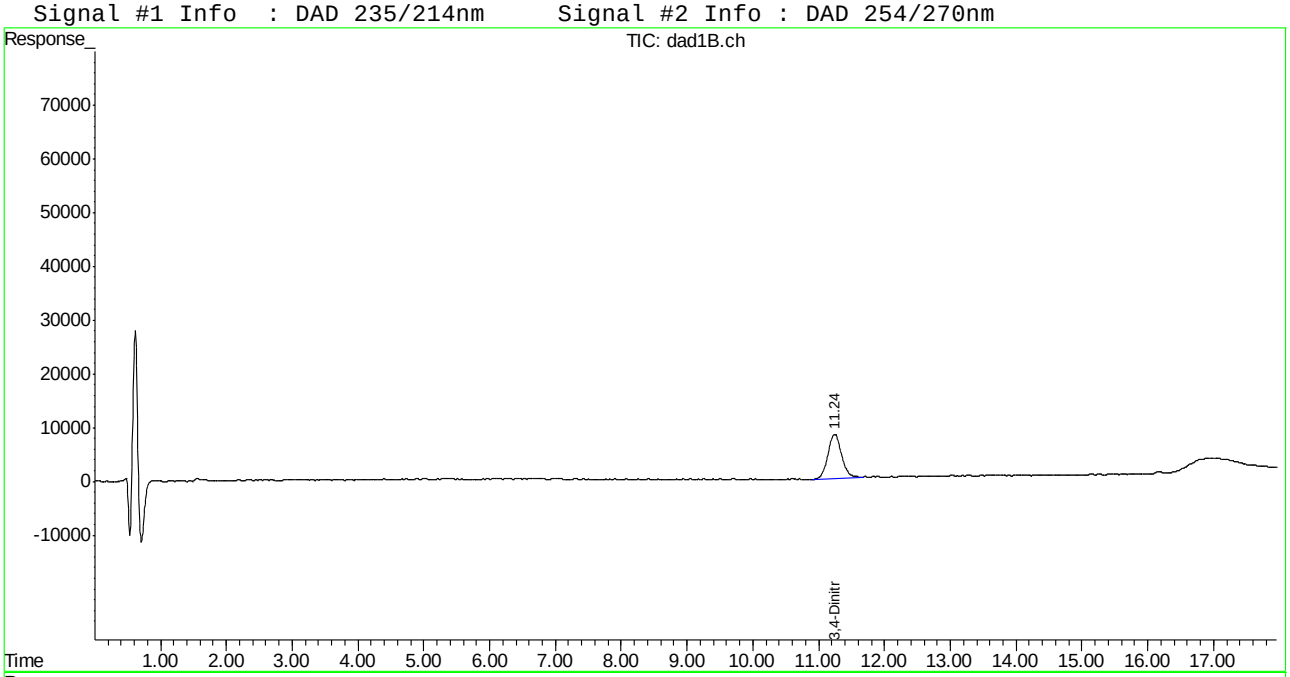
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046111.D 8330B_0107.M Mon Feb 23 10:33:48 2015

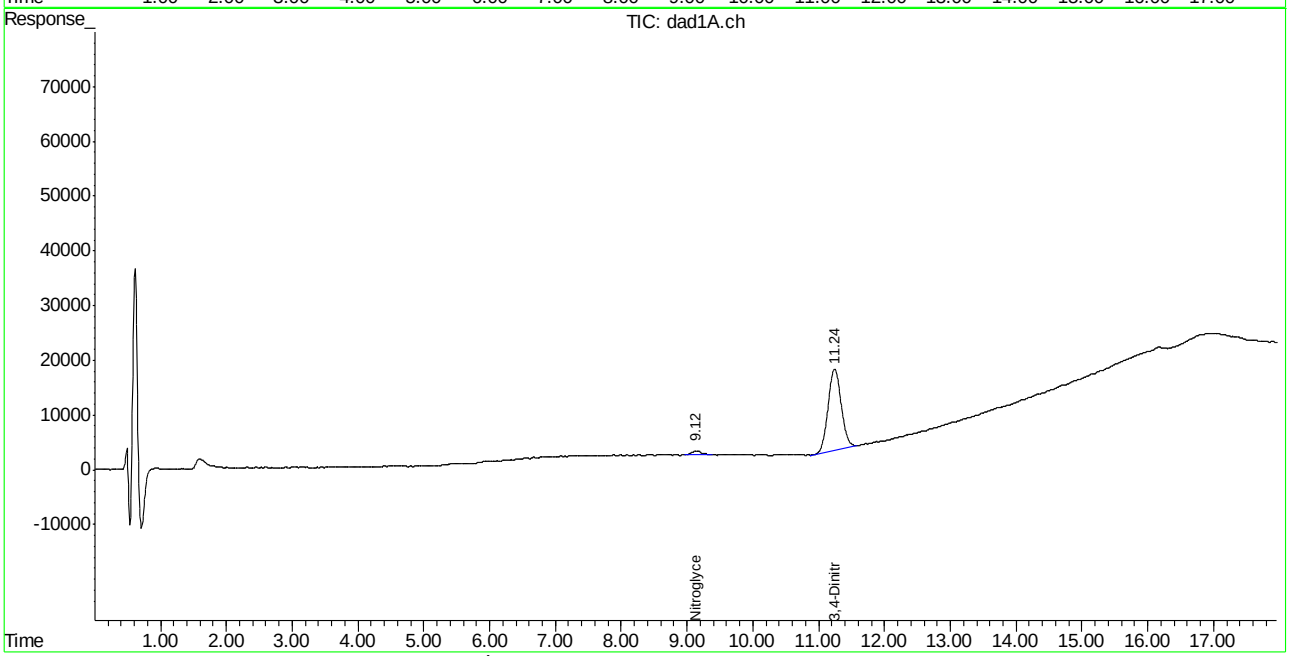
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1A.ch
Acq On : 20-Feb-2015, 16:11:25 Operator: KISMETL
Sample : FA22032-2 Inst : G1315B
Misc : OP55030,GBB1248,2.40,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:48 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA22032-2
Lab FileID: BB046111.D
Injection Time: 02/20/15 16:11
Method: SW846 8330A
Analyst approved: 02/23/15 14:42 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitroglycerine	55-63-0	2	9.12	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1A.ch
Acq On : 20-Feb-2015, 16:36:23 Operator: KISMETL
Sample : FA22032-3 Inst : G1315B
Misc : OP55030,GBB1248,2.04,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:01 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1152620	2036963	518.574m	541.144m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		103.71%	108.23%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

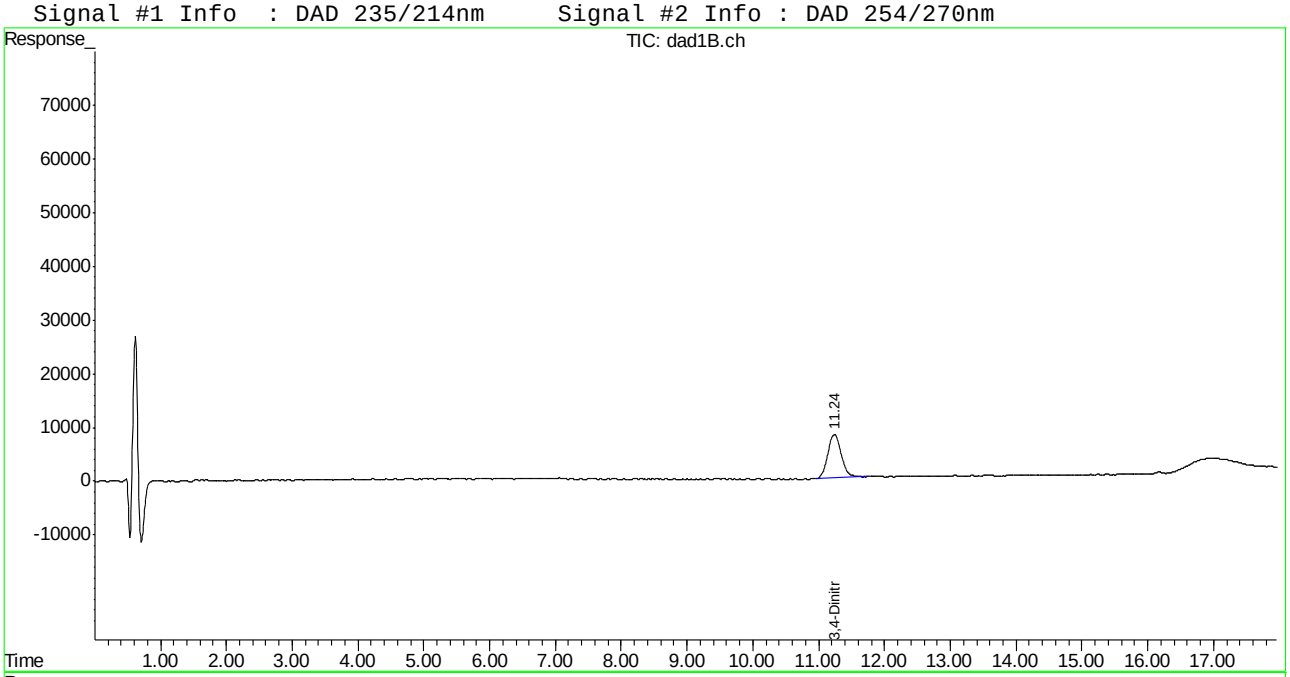
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046112.D 8330B_0107.M Mon Feb 23 10:33:49 2015 Page 1

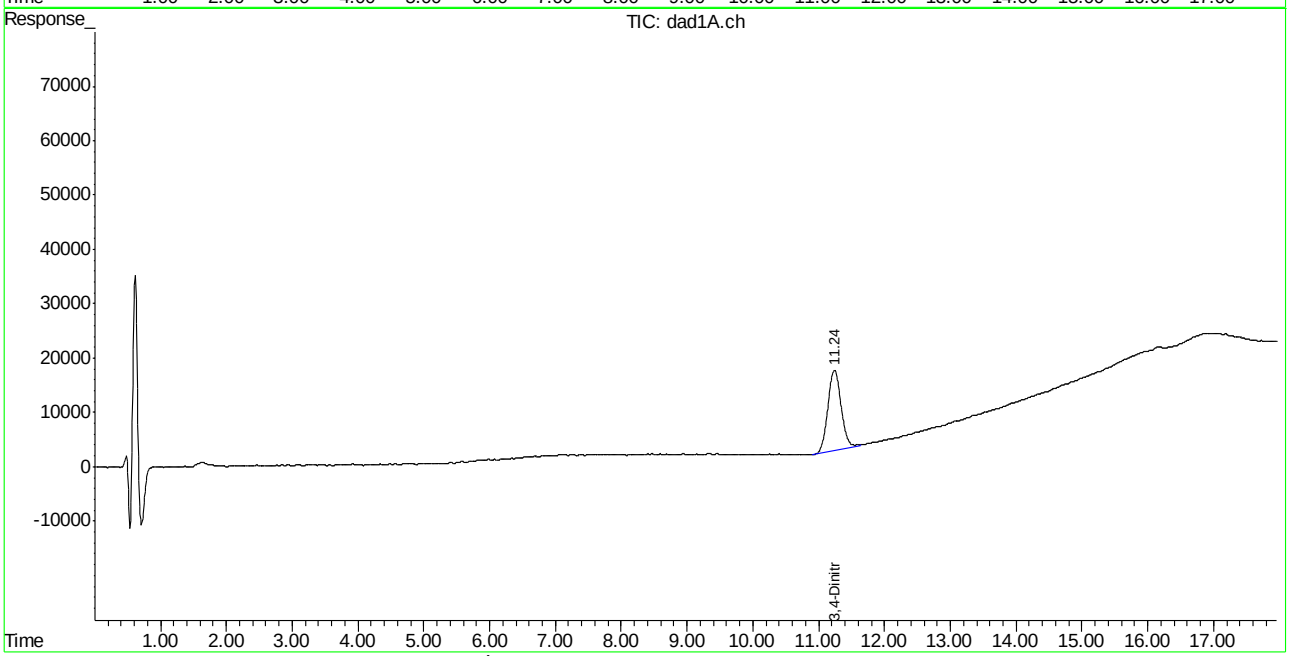
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1A.ch
Acq On : 20-Feb-2015, 16:36:23 Operator: KISMETL
Sample : FA22032-3 Inst : G1315B
Misc : OP55030,GBB1248,2.04,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:49 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA22032-3	**Method:**	SW846 8330A
Lab FileID:	BB046112.D	**Analyst approved:**	02/23/15 14:42 Kismet Lugo
Injection Time:	02/20/15 16:36	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1A.ch
Acq On : 20-Feb-2015, 17:26:15 Operator: KISMETL
Sample : FA22032-4 Inst : G1315B
Misc : OP55030,GBB1248,2.16,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:03 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1192257	2056890	536.407m	546.438
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.28%	109.29%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

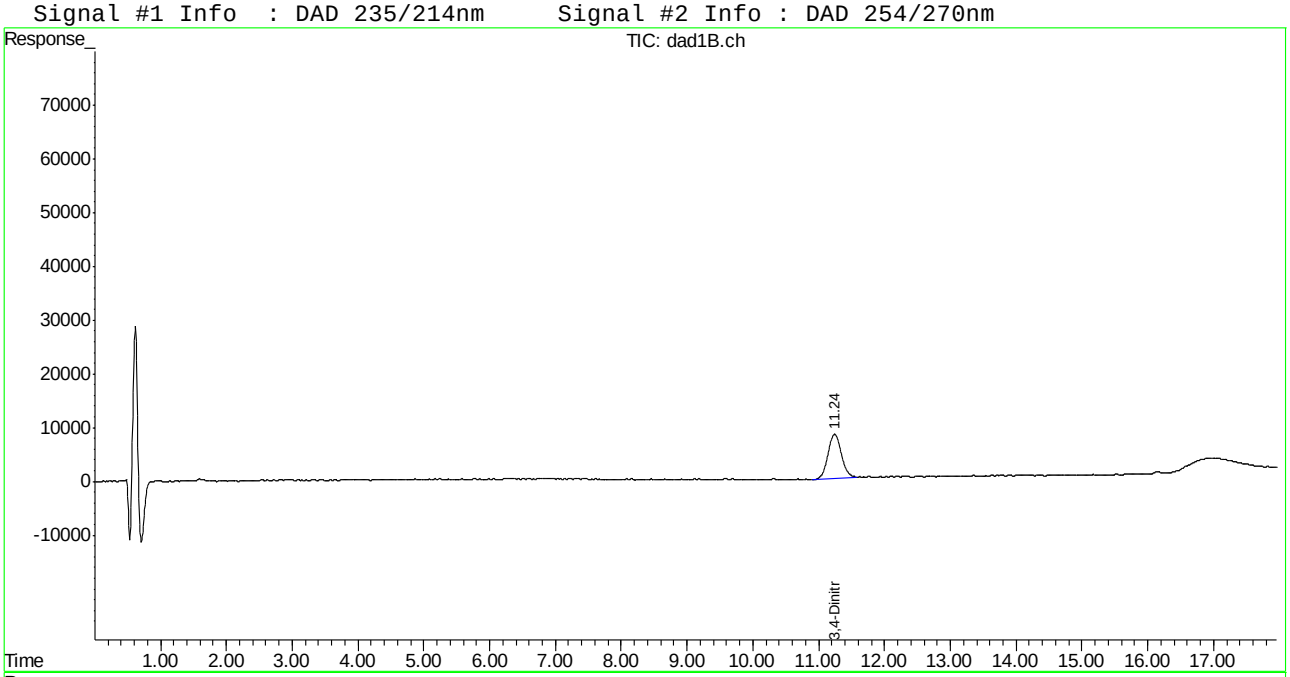
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046114.D 8330B_0107.M Mon Feb 23 10:33:51 2015 Page 1

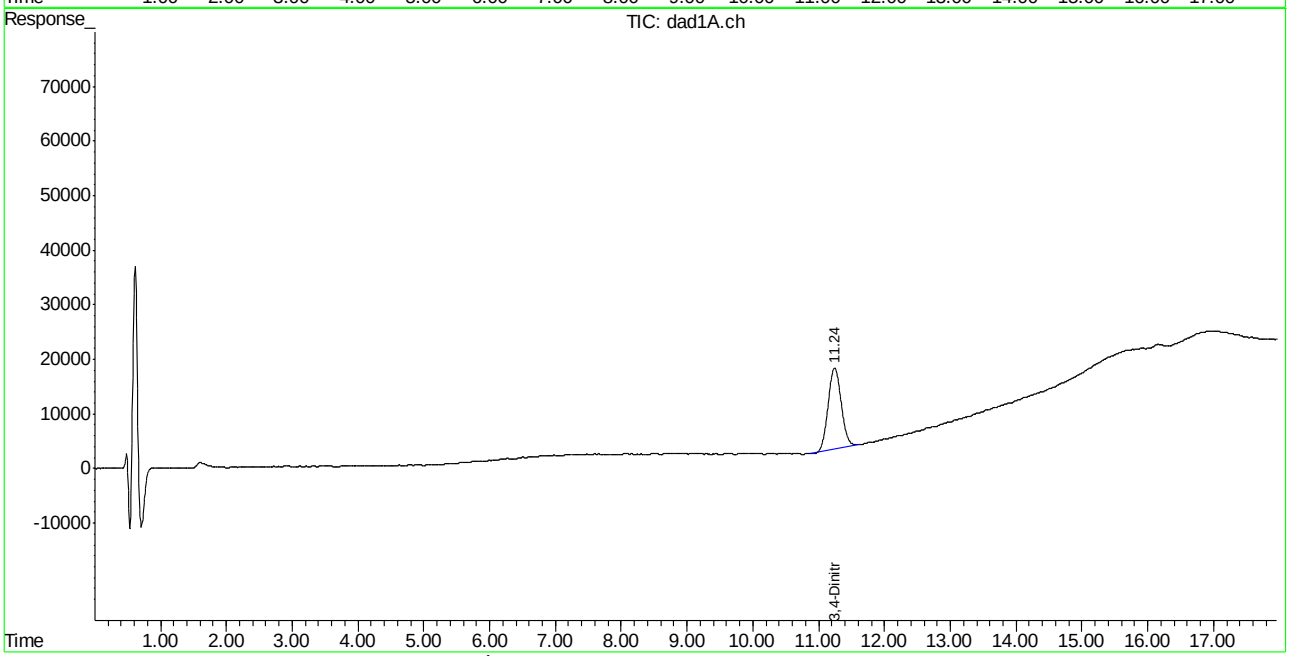
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1A.ch
Acq On : 20-Feb-2015, 17:26:15 Operator: KISMETL
Sample : FA22032-4 Inst : G1315B
Misc : OP55030,GBB1248,2.16,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:51 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA22032-4	**Method:**	SW846 8330A
Lab FileID:	BB046114.D	**Analyst approved:**	02/23/15 14:42 Kismet Lugo
Injection Time:	02/20/15 17:26	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1A.ch
Acq On : 20-Feb-2015, 23:15:39 Operator: KISMETL
Sample : FA22032-5 Inst : G1315B
Misc : OP55030,GBB1248,2.13,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:17 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.20	11.20	1208519	2084487	543.724	553.769m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	108.74%	110.75%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	9.12	0	782482	N.D. d	627.494
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

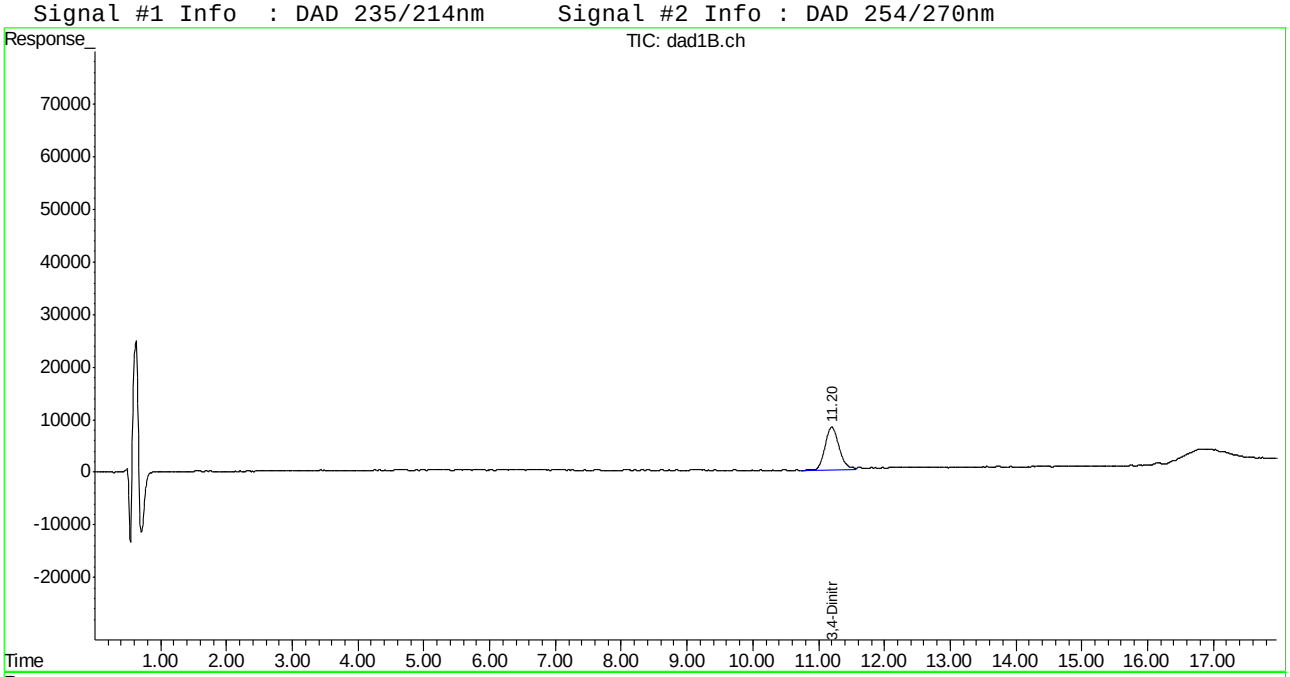
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046128.D 8330B_0107.M Mon Feb 23 10:34:05 2015 Page 1

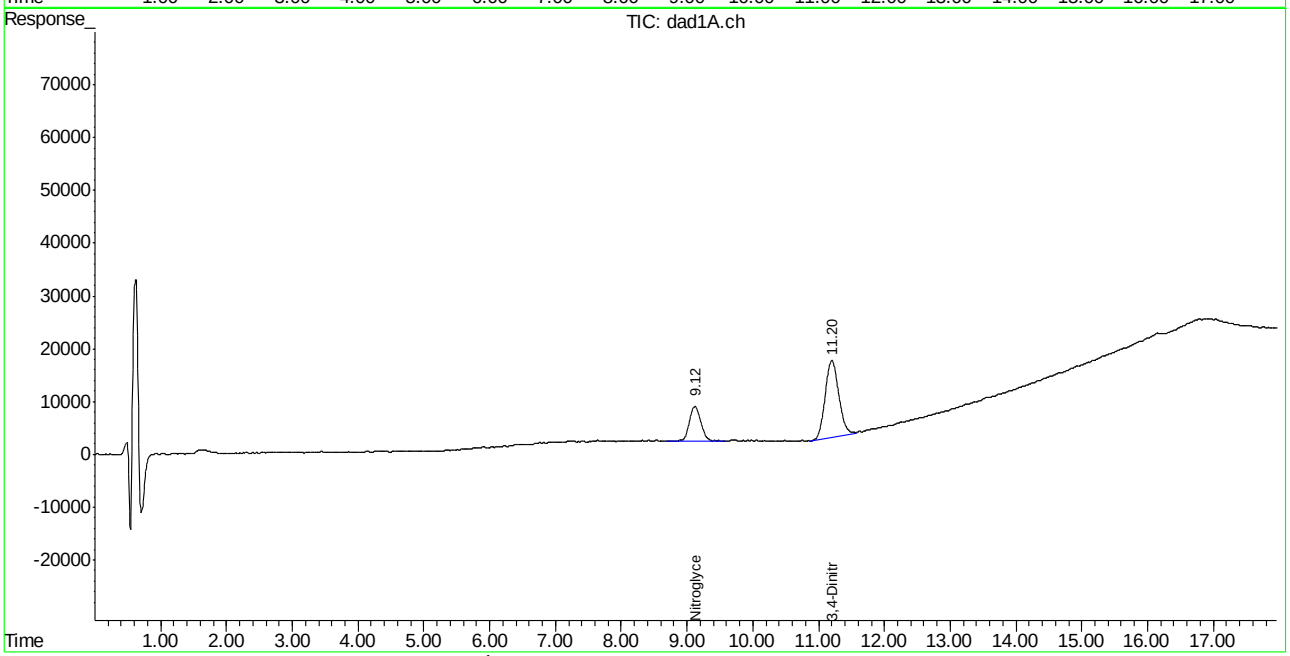
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1A.ch
Acq On : 20-Feb-2015, 23:15:39 Operator: KISMETL
Sample : FA22032-5 Inst : G1315B
Misc : OP55030,GBB1248,2.13,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:52 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA22032-5	**Method:**	SW846 8330A
Lab FileID:	BB046128.D	**Analyst approved:**	02/23/15 14:42 Kismet Lugo
Injection Time:	02/20/15 23:15	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.20	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1A.ch
Acq On : 20-Feb-2015, 23:40:35 Operator: KISMETL
Sample : FA22032-6 Inst : G1315B
Misc : OP55030,GBB1248,2.10,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:18 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.19	11.20	1184214	2026462	532.788m	538.354
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.56%	107.67%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

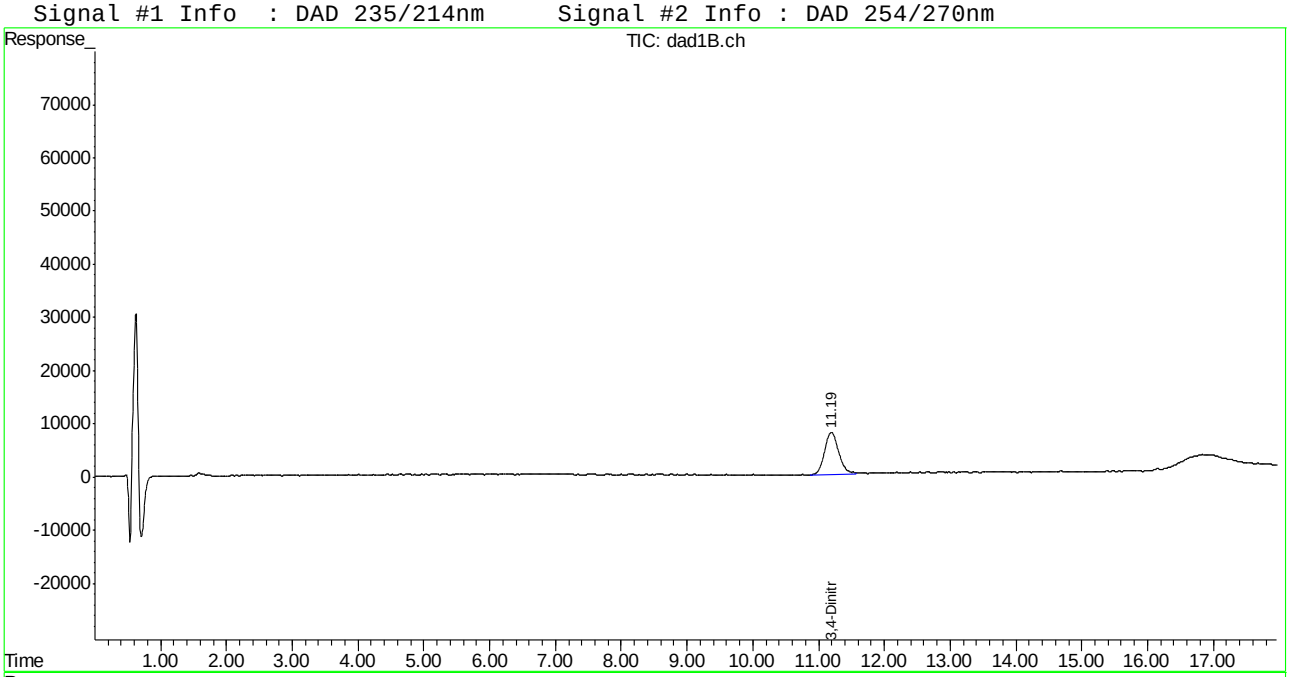
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046129.D 8330B_0107.M Mon Feb 23 10:34:06 2015 Page 1

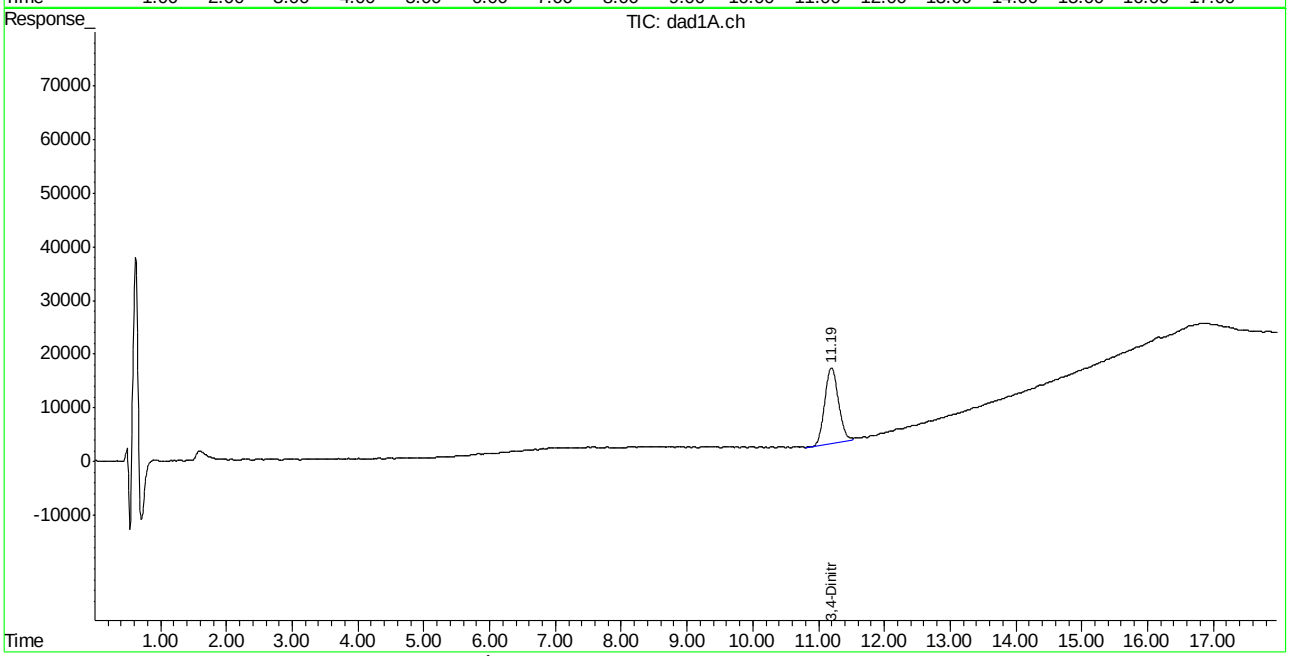
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1A.ch
Acq On : 20-Feb-2015, 23:40:35 Operator: KISMETL
Sample : FA22032-6 Inst : G1315B
Misc : OP55030,GBB1248,2.10,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:53 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES
FA22032

Manual Integration Approval Summary

Sample Number: FA22032-6
Lab FileID: BB046129.D
Injection Time: 02/20/15 23:40
Method: SW846 8330A
Analyst approved: 02/23/15 14:42 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.19	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1A.ch
Acq On : 21-Feb-2015, 00:05:35 Operator: KISMETL
Sample : FA22032-7 Inst : G1315B
Misc : OP55030,GBB1248,2.14,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:19 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.19	11.19	1154222	2014639	519.295m	535.213m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		103.86%	107.04%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

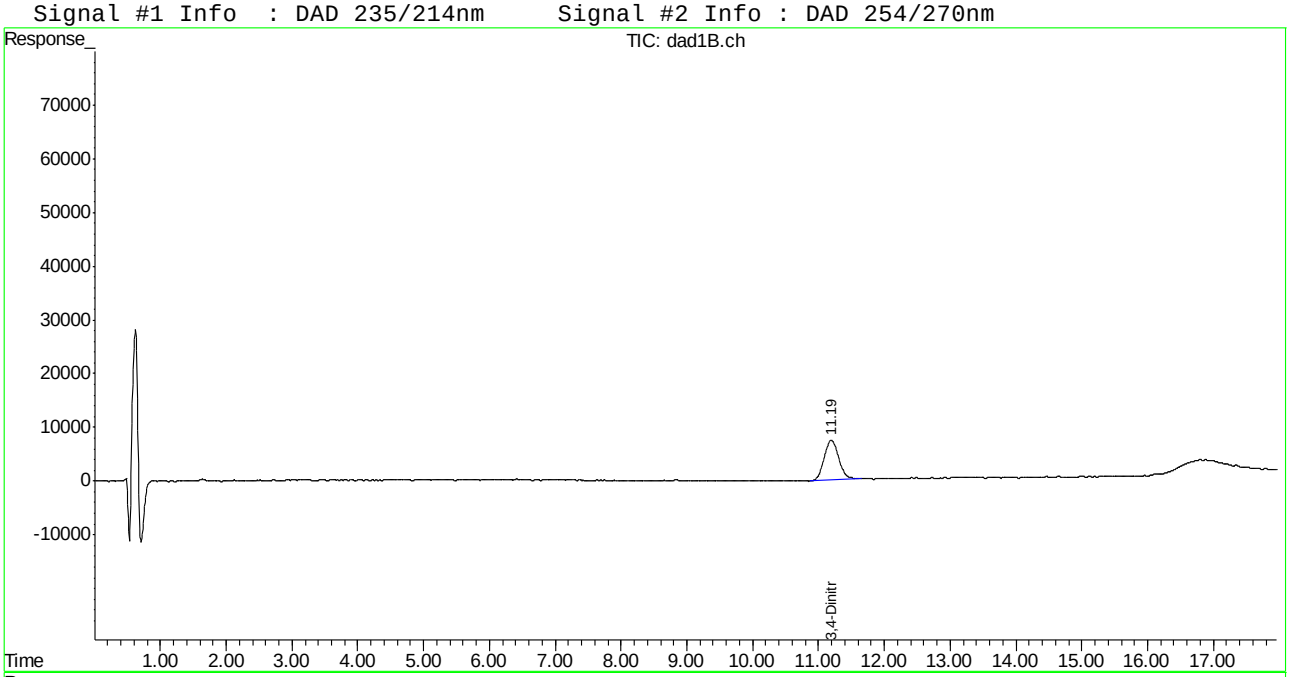
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046130.D 8330B_0107.M Mon Feb 23 10:34:07 2015 Page 1

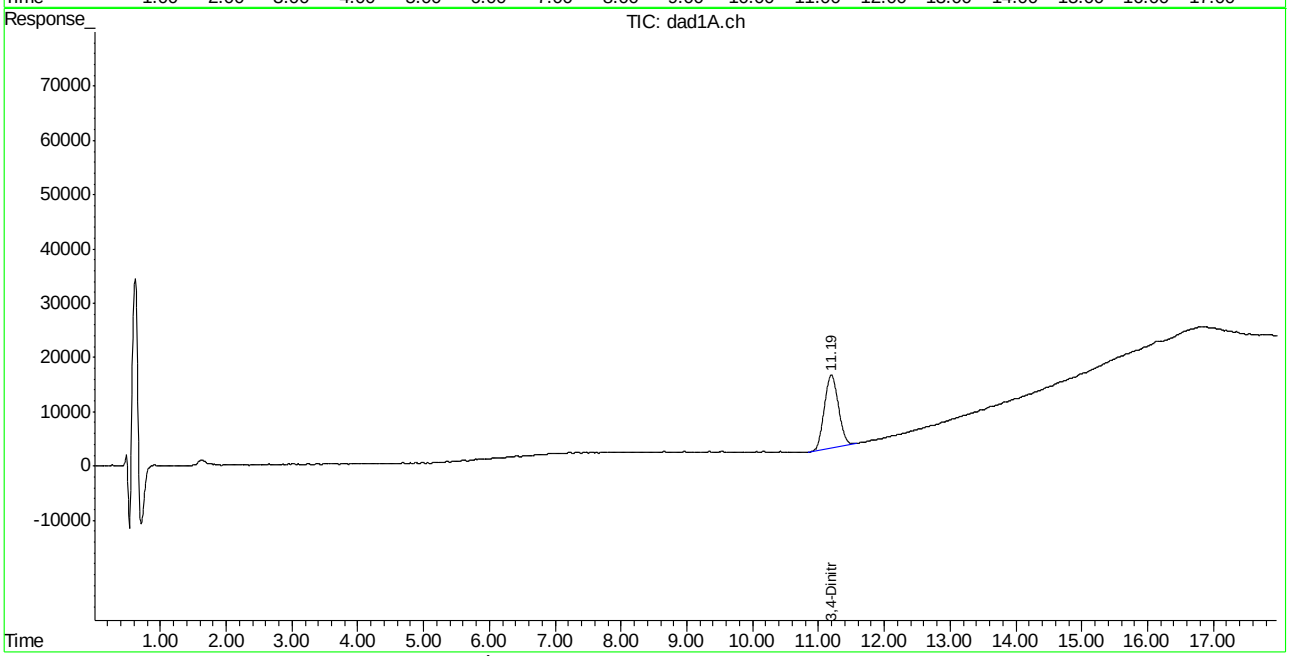
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1A.ch
Acq On : 21-Feb-2015, 00:05:35 Operator: KISMETL
Sample : FA22032-7 Inst : G1315B
Misc : OP55030,GBB1248,2.14,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:54 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: FA22032-7
Lab FileID: BB046130.D
Injection Time: 02/21/15 00:05
Method: SW846 8330A
Analyst approved: 02/23/15 14:42 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.19	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.19	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1A.ch
Acq On : 20-Feb-2015, 14:31:34 Operator: KISMETL
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.22	11.23	1165180	2058758	524.225m	546.934m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		104.85%	109.39%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

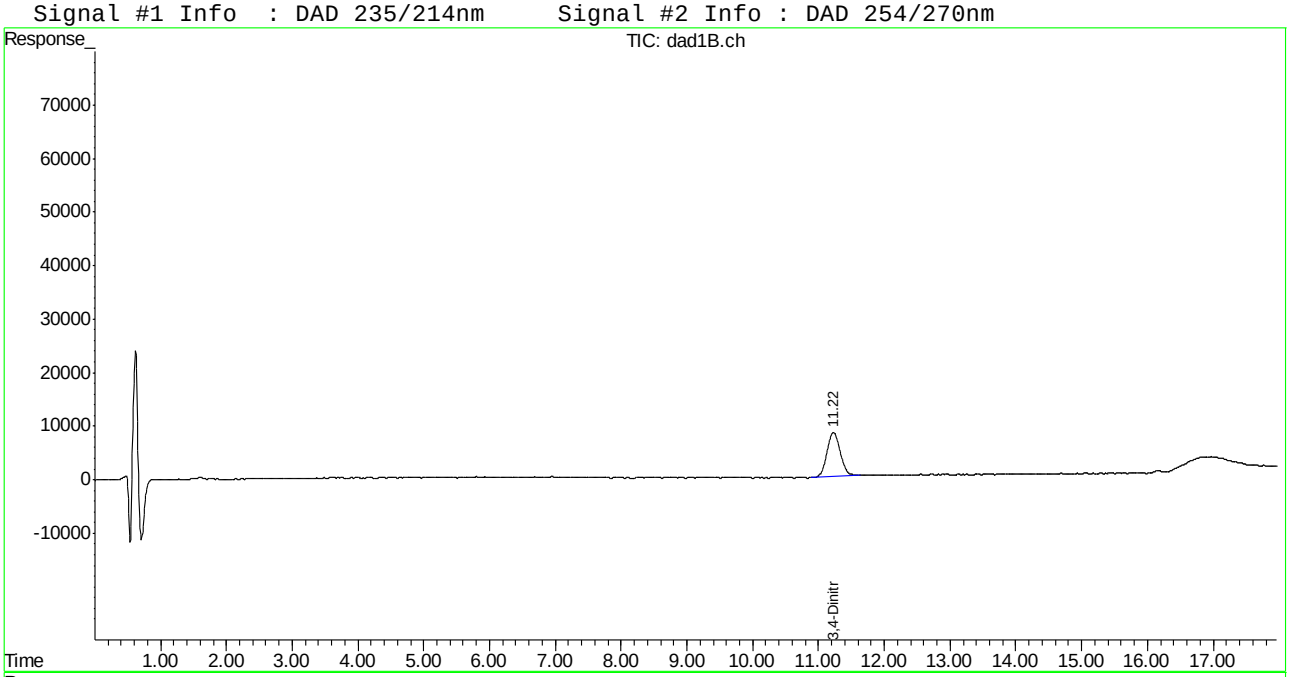
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046107.D 8330B_0107.M Mon Feb 23 10:33:44 2015 Page 1

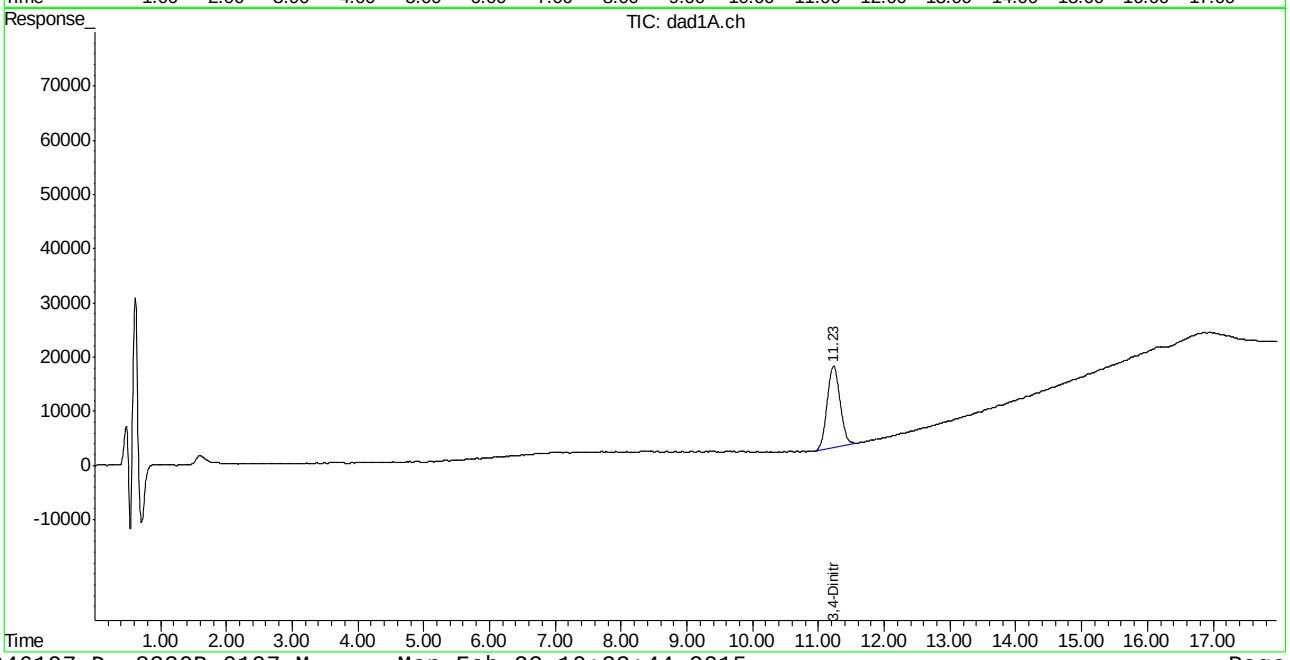
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1A.ch
Acq On : 20-Feb-2015, 14:31:34 Operator: KISMETL
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:48 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP55030-MB
Lab FileID: BB046107.D
Injection Time: 02/20/15 14:31
Method: SW846 8330A
Analyst approved: 02/23/15 14:39 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.22	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.23	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058409.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0223RPB2\GG058409.D\dad1A.ch
Acq On : 23-Feb-2015, 11:02:41 Operator: kismetl
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:46 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.31	16.31	3149593	6147169	544.587	552.814m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	108.92%	110.56%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
6)	RDX	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

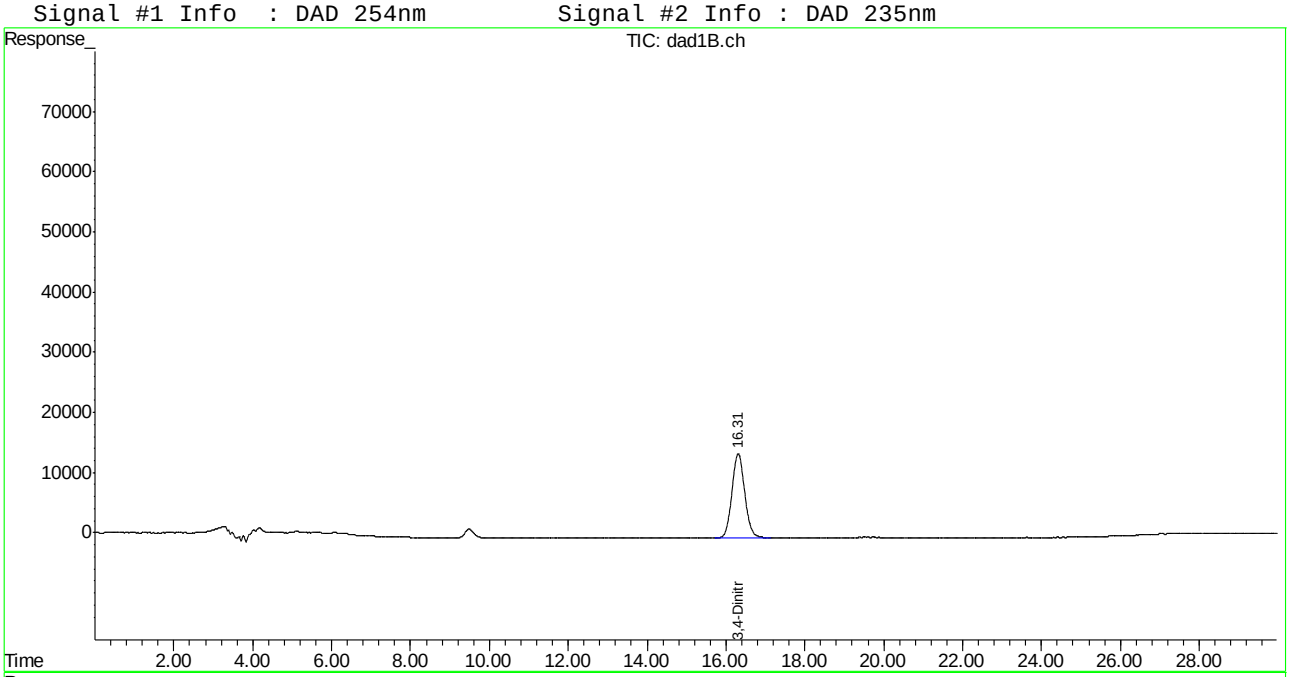
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058409.D 8330RPB.M Wed Feb 25 10:31:26 2015 Page 1

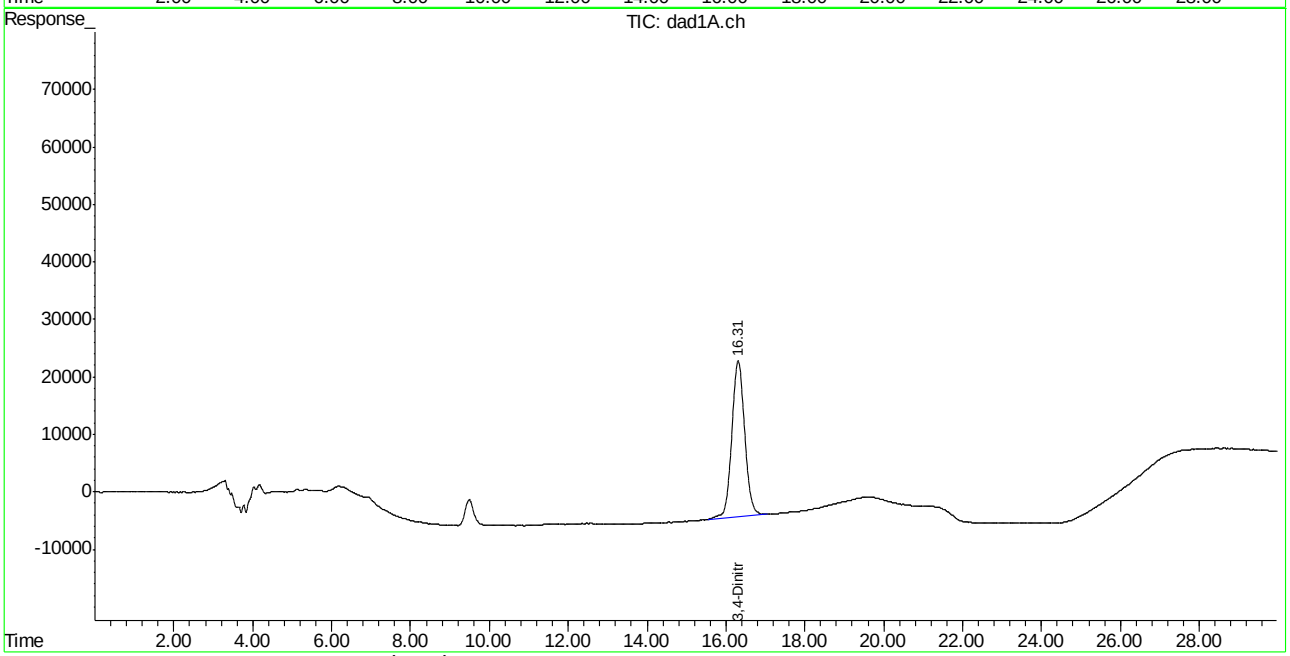
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058409.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0223RPB2\GG058409.D\dad1A.ch
Acq On : 23-Feb-2015, 11:02:41 Operator: kismetl
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:15 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: OP55030-MB
Lab FileID: GG058409.D
Injection Time: 02/23/15 11:02
Method: SW846 8330A
Analyst approved: 02/25/15 10:45 Kismet Lugo
Supervisor approved: 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	16.31	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1A.ch
Acq On : 20-Feb-2015, 14:06:35 Operator: KISMETL
Sample : op55030-bs Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:55 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.21	11.22	1106495	1874429	497.822	497.965
	Spiked Amount 500.000	Range 72 - 134		Recovery =		99.56%	99.59%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	848133	2369885	526.768	538.283
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.90	2.91	912421	1497005	483.744m	495.822
6)	1,3,5-Trinitrobe	4.61	4.61	2096738	4081545	513.965	523.836
7)	1,3-Dinitrobenze	5.88	5.88	2440378	1719404	456.589	481.452
8)	3,5-Dinitroanili	6.32	6.31	1989277	3347059	436.052	442.719m
9)	Nitrobenzene	7.47	7.47	1601696	1541534	522.208	519.294m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.47	9.47	1451324	2234616	536.300	516.302
12)	2,4,6-Trinitroto	9.90	9.90	1725193	2026963	472.246	479.391
13)	2-Amino-4,6-Dini	10.35	10.35	1617044	2316587	533.190	508.640
14)	4-Amino-2,6-Dini	10.83	10.83	1114140	2160796	528.951	458.524
16)	2,4-Dinitrotolue	11.82	11.83	2365682	1524216	512.163	527.838
17)	2,6-Dinitrotolue	12.23	12.23	1330774	1742872	517.728	526.095
18)	o-Nitrotoluene	14.42	14.42	1147096	1568616	502.040	521.200m
19)	p-Nitrotoluene	14.81	14.81	1769107	1461091	490.568	498.053
20)	m-Nitrotoluene	15.35	15.35	1679891	1992022	521.348	550.977
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

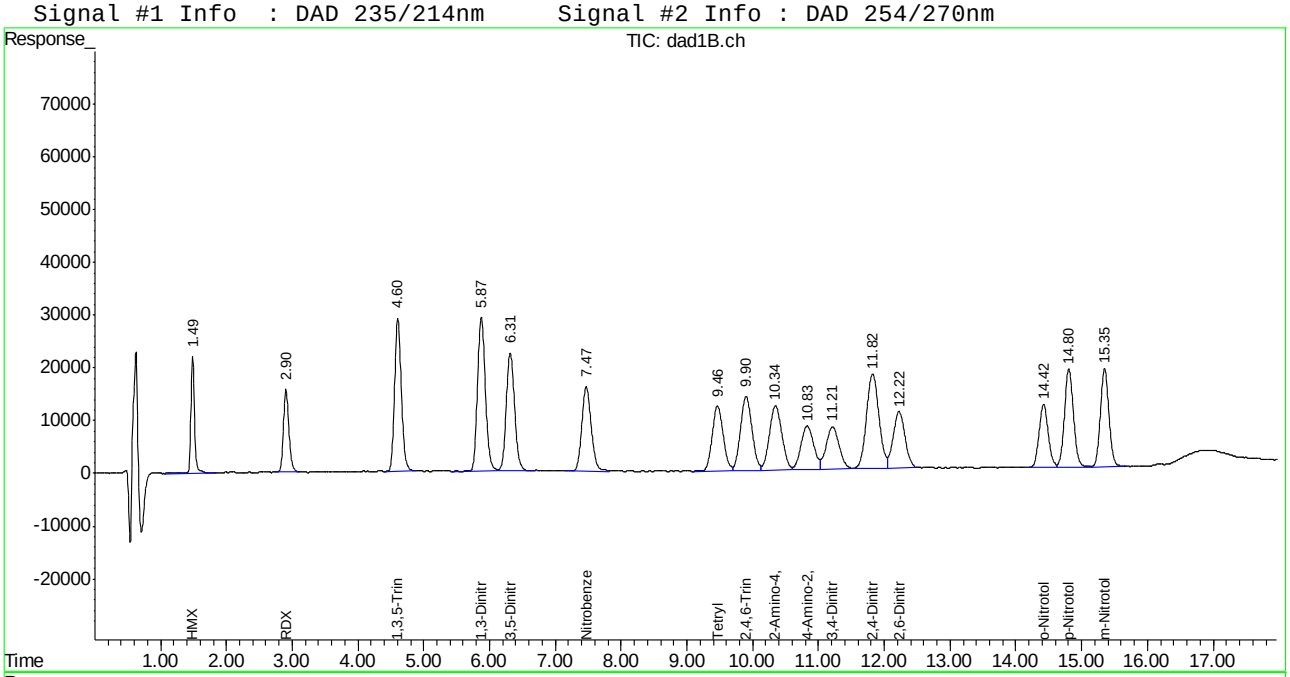
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046106.D 8330B_0107.M Mon Feb 23 10:33:43 2015

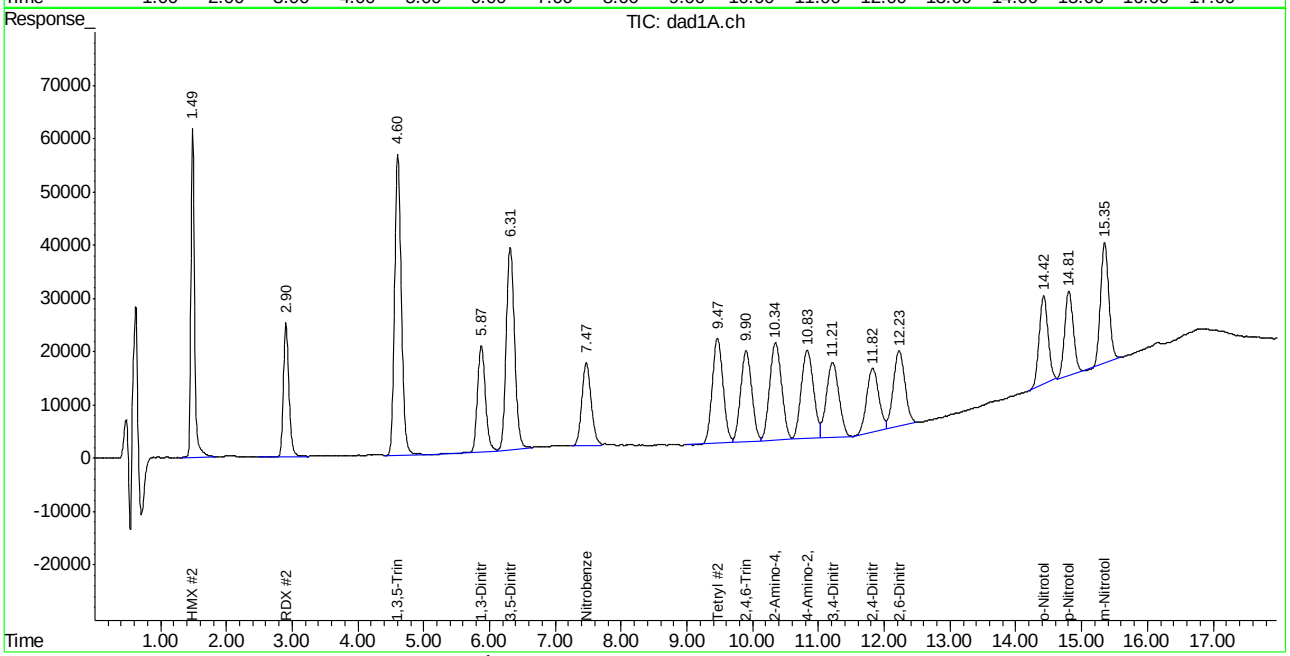
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1A.ch
Acq On : 20-Feb-2015, 14:06:35 Operator: KISMETL
Sample : op55030-bs Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:47 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: OP55030-BS
Lab FileID: BB046106.D
Injection Time: 02/20/15 14:06
Method: SW846 8330A
Analyst approved: 02/23/15 14:39 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	1	2.90	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.42	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1A.ch
Acq On : 20-Feb-2015, 15:21:31 Operator: KISMETL
Sample : op55030-ms Inst : G1315B
Misc : OP55030,GBB1248,2.09,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:58 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1123090	1916930	505.288	509.256
	Spiked Amount 500.000	Range 72 - 134		Recovery =		101.06%	101.85%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	833561	2449410	517.718m	556.345
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.91	2.91	868585	1377032	460.503	456.086
6)	1,3,5-Trinitrobe	4.61	4.61	2092868	4039017	513.017	518.378
7)	1,3-Dinitrobenze	5.89	5.89	2428948	1649423	454.450	461.857
8)	3,5-Dinitroanili	6.33	6.32	1948457	3298746	427.104	436.329m
9)	Nitrobenzene	7.48	7.48	1610131	1546115	524.958	520.838m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.48	9.49	1400707	2176023	517.596	502.765
12)	2,4,6-Trinitroto	9.92	9.92	1719273	2013773	470.625	476.271
13)	2-Amino-4,6-Dini	10.37	10.37	1619350	2318454	533.951	509.050
14)	4-Amino-2,6-Dini	10.85	10.85	1113227	2144934	528.517	455.158
16)	2,4-Dinitrotolue	11.84	11.85	2362140	1521374	511.396	526.854
17)	2,6-Dinitrotolue	12.25	12.25	1346007	1749140	523.654	527.987
18)	o-Nitrotoluene	14.44	14.44	1156166	1583782	506.009	526.239m
19)	p-Nitrotoluene	14.82	14.82	1777541	1465878	492.906	499.685
20)	m-Nitrotoluene	15.36	15.37	1692435	1945365	525.241	538.072
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

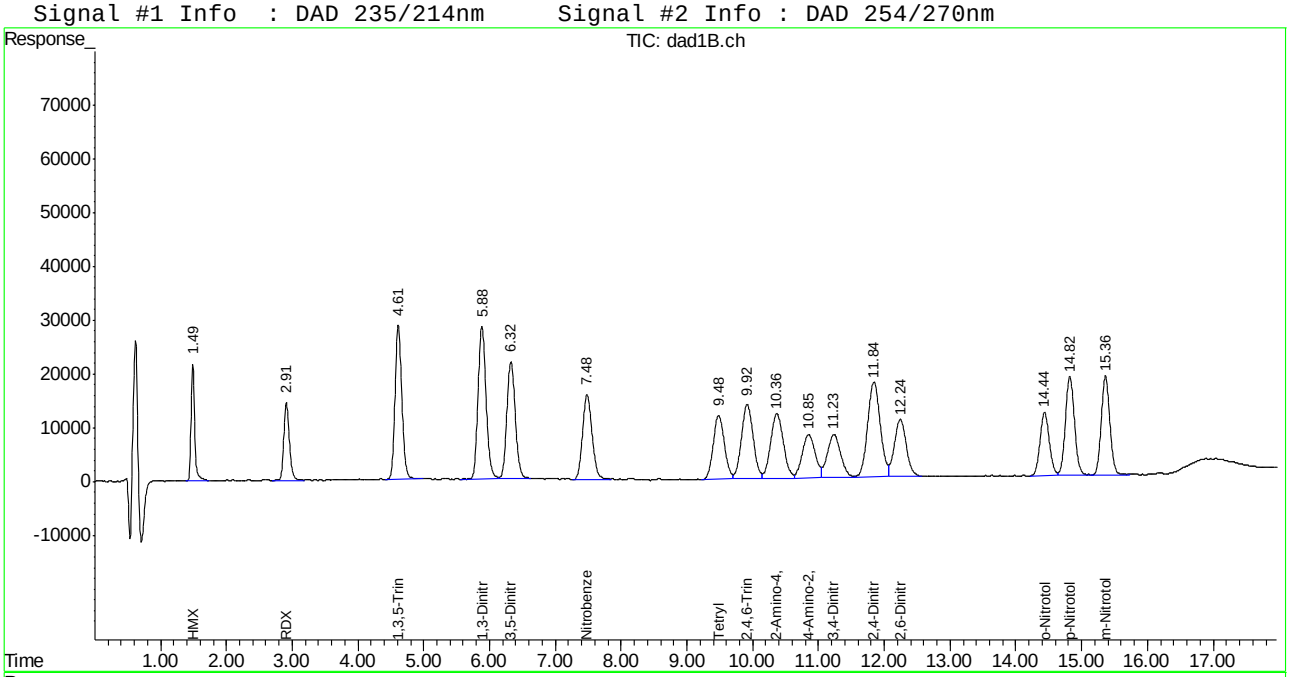
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046109.D 8330B_0107.M Mon Feb 23 10:33:46 2015

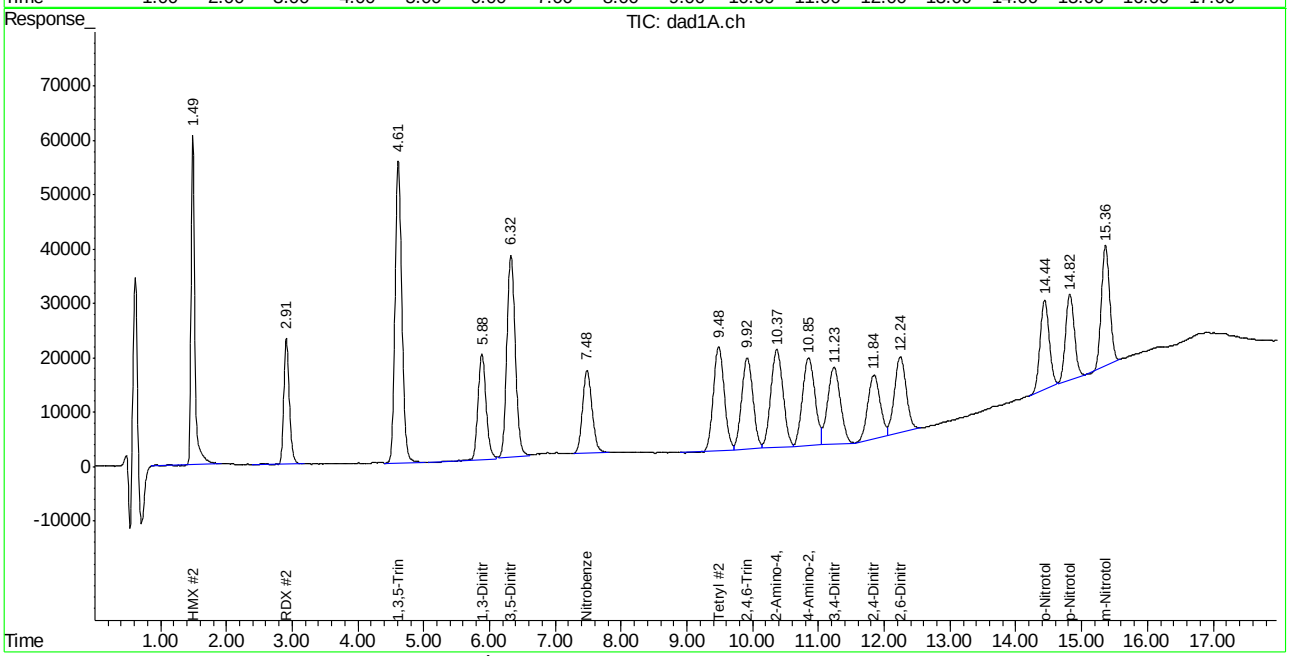
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1A.ch
Acq On : 20-Feb-2015, 15:21:31 Operator: KISMETL
Sample : op55030-ms Inst : G1315B
Misc : OP55030,GBB1248,2.09,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:58 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP55030-MS
Lab FileID: BB046109.D
Injection Time: 02/20/15 15:21
Method: SW846 8330A
Analyst approved: 02/25/15 11:02 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.32	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.48	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.44	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1A.ch
Acq On : 20-Feb-2015, 15:46:27 Operator: KISMETL
Sample : op55030-msd Inst : G1315B
Misc : OP55030,GBB1248,2.06,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:59 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1138759	1867064	512.338	496.008
	Spiked Amount 500.000	Range 72 - 134		Recovery =		102.47%	99.20%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	876608	2427963	544.454	551.474
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.91	2.91	874705	1410118	463.748	467.044m
6)	1,3,5-Trinitrobe	4.62	4.62	2147082	4104570	526.306	526.791
7)	1,3-Dinitrobenze	5.89	5.89	2482528	1664310	464.475	466.025
8)	3,5-Dinitroanili	6.33	6.33	2001621	3369953	438.758	445.747m
9)	Nitrobenzene	7.49	7.48	1620848	1559766	528.452	525.436m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.49	9.49	1430538	2296327	528.619	530.560
12)	2,4,6-Trinitroto	9.92	9.92	1756357	2081513	480.777	492.292
13)	2-Amino-4,6-Dini	10.37	10.37	1650071	2374713	544.080	521.402
14)	4-Amino-2,6-Dini	10.86	10.85	1151159	2201547	546.526	467.171
16)	2,4-Dinitrotolue	11.85	11.85	2462959	1557969	533.223	539.527
17)	2,6-Dinitrotolue	12.24	12.25	1433112	1784885	557.542	538.777
18)	o-Nitrotoluene	14.44	14.44	1190517	1576120	521.044	523.694m
19)	p-Nitrotoluene	14.82	14.83	1808281	1498523	501.431	510.813
20)	m-Nitrotoluene	15.37	15.37	1737885	1999265	539.347	552.980
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

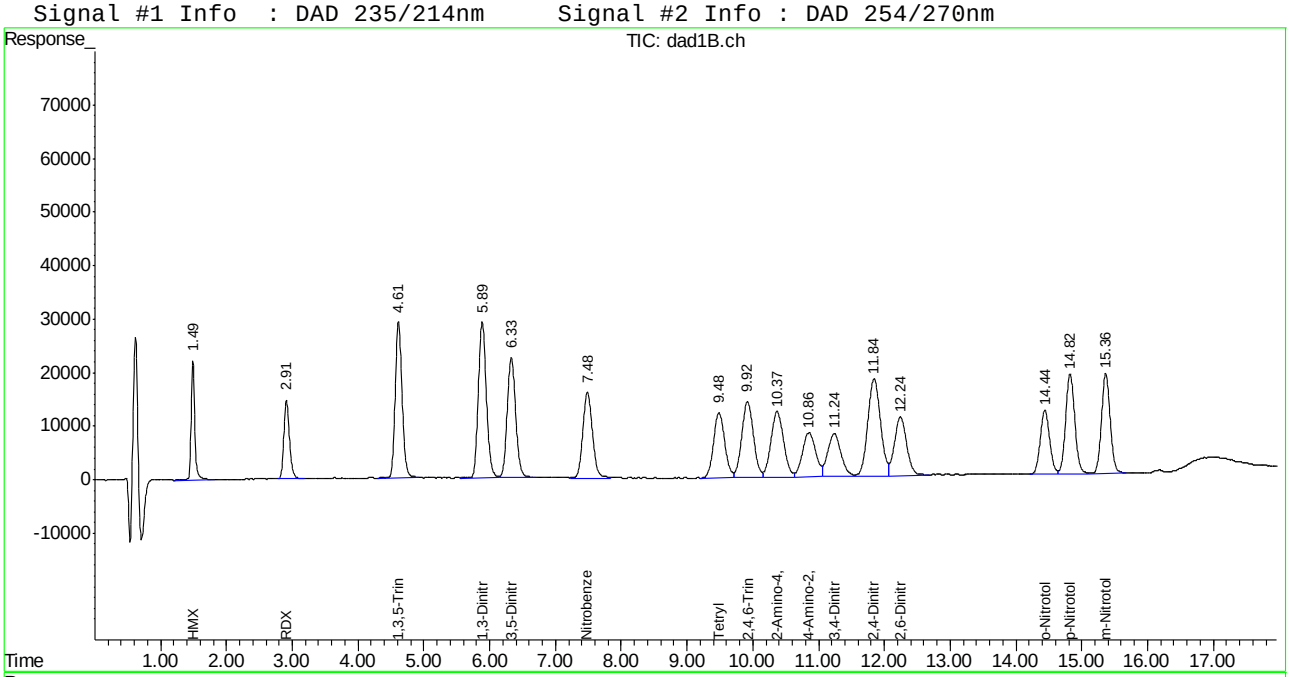
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046110.D 8330B_0107.M Mon Feb 23 10:33:47 2015 Page 1

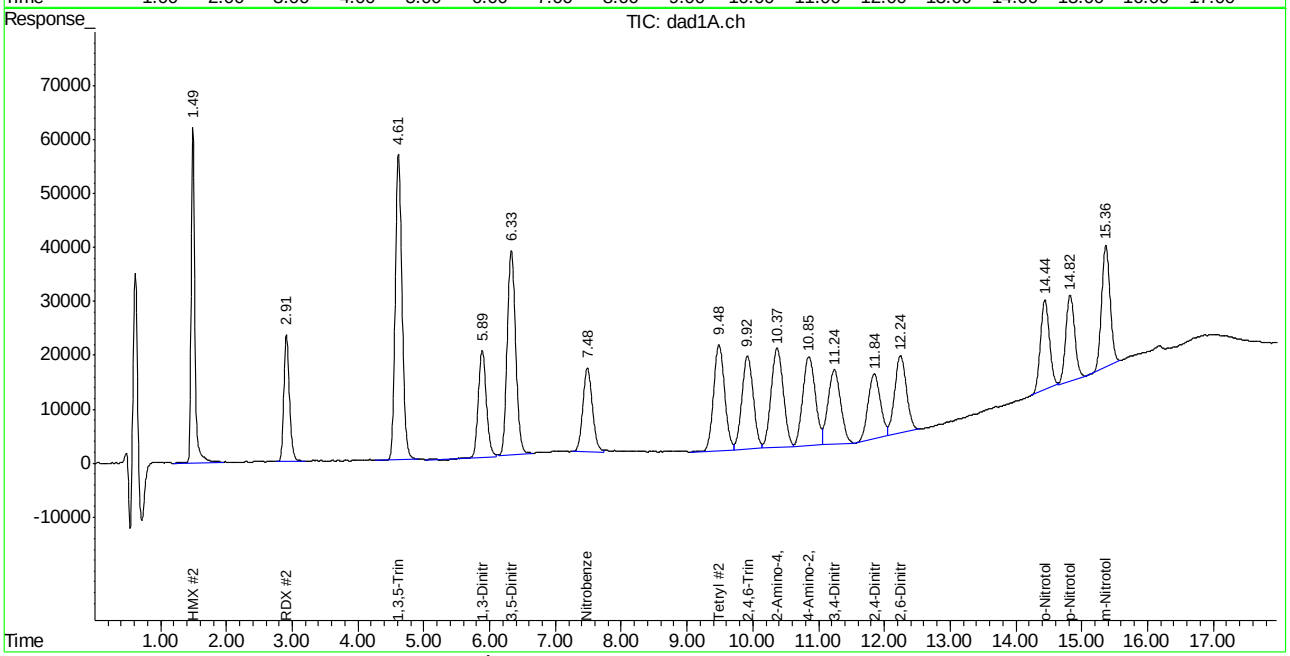
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1A.ch
Acq On : 20-Feb-2015, 15:46:27 Operator: KISMETL
Sample : op55030-msd Inst : G1315B
Misc : OP55030,GBB1248,2.06,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP55030-MSD
Lab FileID: BB046110.D
Injection Time: 02/20/15 15:46
Method: SW846 8330A
Analyst approved: 02/25/15 11:02 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	2	2.91	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.33	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.48	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.44	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1A.ch
Acq On : 23-Jan-2015, 08:15:29 Operator: KISMETL
Sample : ic1235-20 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:39 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.28	11.28	47776	47072	21.093m	14.351m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.22%#	2.87%#
	Target Compounds						
1)	TNX	1.38	1.38	61405	102591	19.261m	21.746m
2)	HMX	1.50	1.50	36865	94986	22.597	21.087
3)	DNX	1.75	1.75	57337	102668	19.420m	21.934m
4)	MNX	2.33	2.34	52533	72696	20.782m	19.520
5)	RDX	2.94	2.93	40810	67053	21.221m	22.724m
6)	1,3,5-Trinitrobe	4.63	4.63	85269	157803	20.989m	19.884m
7)	1,3-Dinitrobenze	5.91	5.92	113524	72452	21.801m	19.519m
8)	3,5-Dinitroanili	6.35	6.36	100297	159178	21.621m	19.632m
9)	Nitrobenzene	7.51	7.51	54710	55238	17.106	17.696m
10)	Nitroglycerin	0.00	9.17	0	124338	N.D.	104.809m#
11)	Tetryl	9.53	9.53	50655	83490	17.608m	17.705m
12)	2,4,6-Trinitroto	9.95	9.97	73440	73501	20.779m	18.151m
13)	2-Amino-4,6-Dini	10.45	10.45	51038	86163	16.652m	20.346m
14)	4-Amino-2,6-Dini	10.90	10.92	34830	64599	16.127m	14.945m
16)	2,4-Dinitrotolue	11.87	11.94	82175	52269	18.130m	20.624m
17)	2,6-Dinitrotolue	12.26	12.29	44703	68629	16.861m	21.770m
18)	o-Nitrotoluene	14.49	14.56	44783	49876	20.061m	16.201m
19)	p-Nitrotoluene	14.88	14.89	78161	64632	22.105m	22.937m
20)	m-Nitrotoluene	15.39	15.42	73102	73881	22.980m	20.184m
21)	PETN	0.00	16.91	0	146280	N.D. d	99.091m

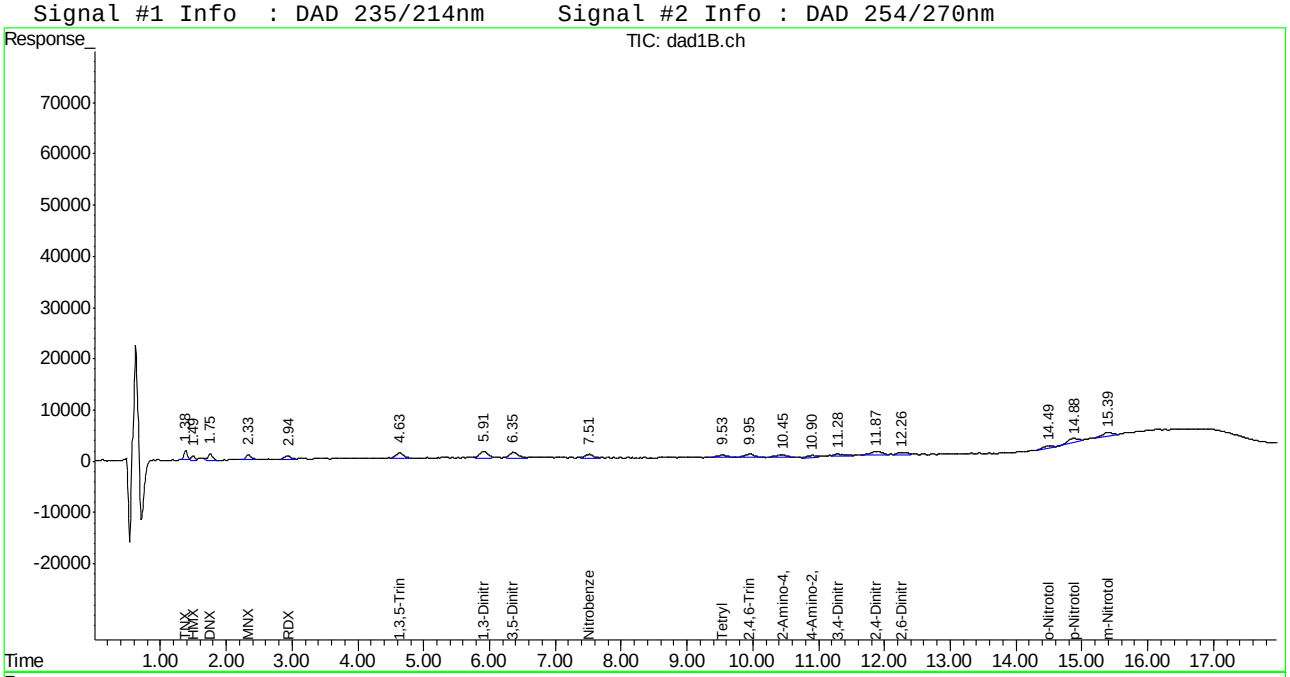
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045814.D 8330B_0107.M Fri Jan 23 14:50:20 2015 Page 1

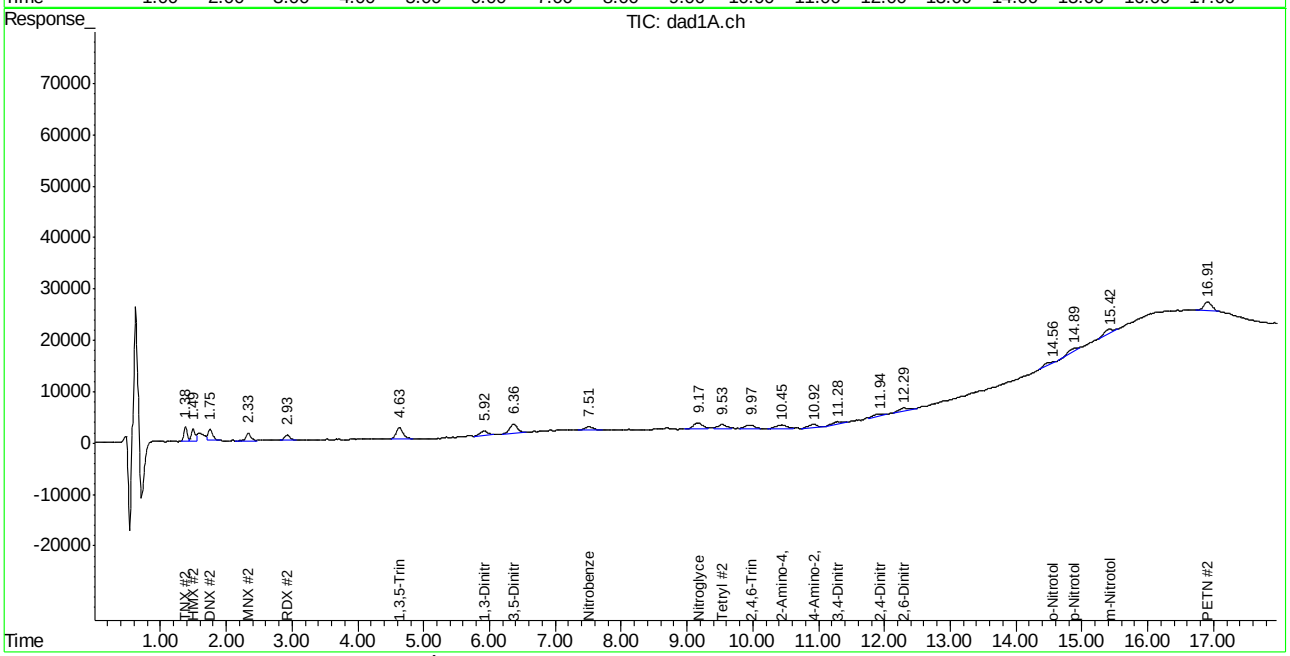
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1A.ch
Acq On : 23-Jan-2015, 08:15:29 Operator: KISMETL
Sample : ic1235-20 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045814.D
Injection Time: 01/23/15 08:15
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.38	Poorly defined baseline
TNX		2	1.38	Poorly defined baseline
DNX		1	1.75	Poorly defined baseline
DNX		2	1.75	Poorly defined baseline
MNX		1	2.33	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
RDX	121-82-4	1	2.94	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.63	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.63	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.91	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.17	Poorly defined baseline
Tetryl	479-45-8	1	9.53	Poorly defined baseline
Tetryl	479-45-8	2	9.53	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.95	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.97	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.45	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.45	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.90	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.92	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.28	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.87	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.94	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.26	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.49	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.56	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.88	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.89	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.42	Poorly defined baseline
PETN	78-11-5	2	16.91	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1A.ch
Acq On : 23-Jan-2015, 08:40:25 Operator: KISMETL
Sample : ic1235-50 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:40 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	127054	140895	56.095m	42.843m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	11.22%#	8.57%#
	Target Compounds						
1)	TNX	1.38	1.38	163728	254307	51.358m	53.905m
2)	HMX	1.49	1.49	74960	208056	45.947	46.189m
3)	DNX	1.76	1.76	130915	250671	44.341	53.553
4)	MNX	2.33	2.33	134204	191257	53.091m	51.356m
5)	RDX	2.93	2.93	103584	154295	53.864m	52.290m
6)	1,3,5-Trinitrobe	4.63	4.63	208536	391762	51.331	49.364m
7)	1,3-Dinitrobenze	5.91	5.91	273809	177376	52.582	47.786m
8)	3,5-Dinitroanili	6.36	6.36	225926	385855	48.703	47.590
9)	Nitrobenzene	7.52	7.51	181473	161452	56.739	51.723
10)	Nitroglycerin	0.00	9.17	0	319397	N.D.	269.231m#
11)	Tetryl	9.54	9.53	147528	229292	51.282	48.625
12)	2,4,6-Trinitroto	9.96	9.95	190689	223195	53.954	55.118
13)	2-Amino-4,6-Dini	10.45	10.44	165810	236408	54.098	55.687
14)	4-Amino-2,6-Dini	10.90	10.90	102040	155981	47.246m	36.086m
16)	2,4-Dinitrotolue	11.89	11.90	236012	133893	52.069m	52.831m
17)	2,6-Dinitrotolue	12.28	12.29	125905	141246	47.489m	44.806m
18)	o-Nitrotoluene	14.47	14.48	116724	161640	52.286m	52.504m
19)	p-Nitrotoluene	14.86	14.87	184619	141194	52.213m	50.048
20)	m-Nitrotoluene	15.39	15.40	157080	183046	49.379m	50.007m
21)	PETN	0.00	16.92	0	369167	N.D.	250.077m#

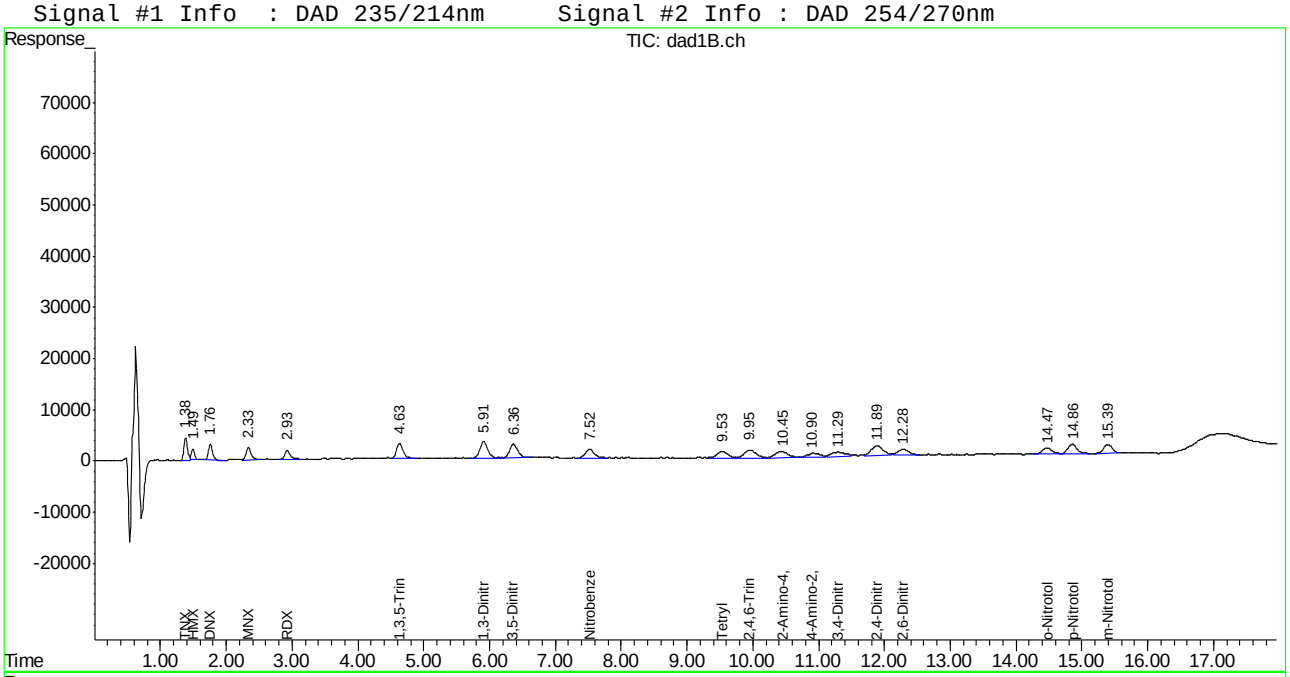
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045815.D 8330B_0107.M Fri Jan 23 14:50:21 2015 Page 1

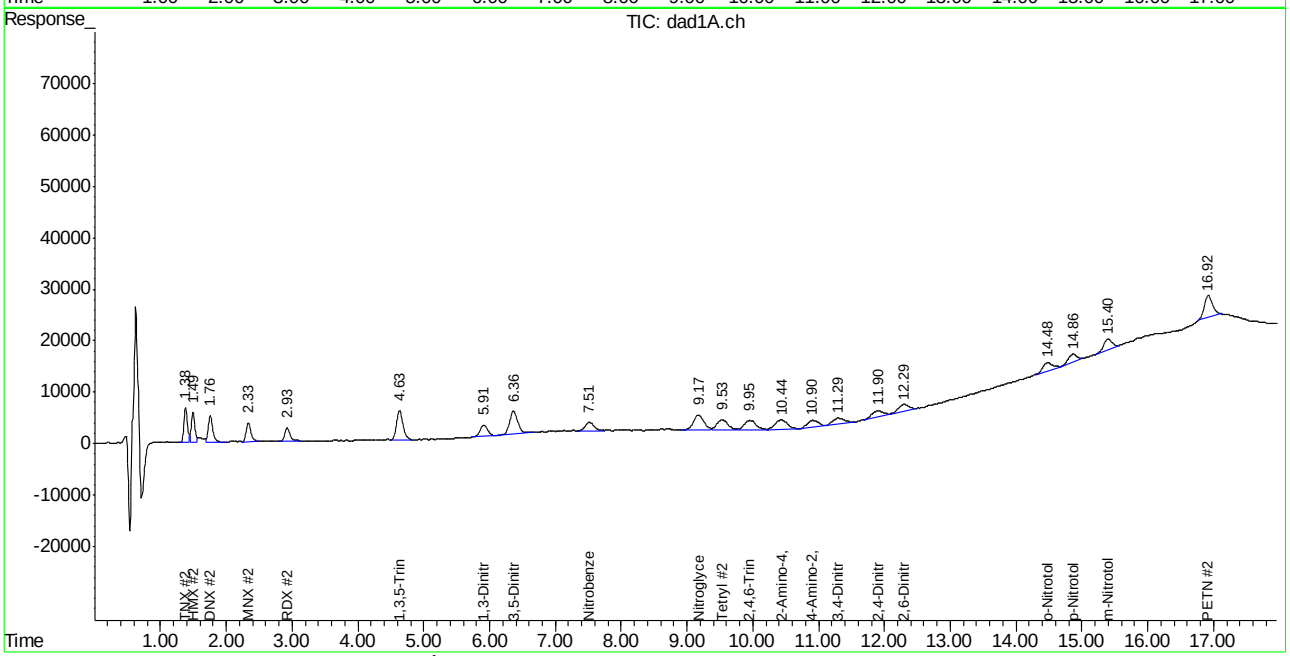
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1A.ch
Acq On : 23-Jan-2015, 08:40:25 Operator: KISMETL
Sample : ic1235-50 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:27 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045815.D
Injection Time: 01/23/15 08:40
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.38	Poorly defined baseline
TNX		2	1.38	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
MNX		1	2.33	Poorly defined baseline
MNX		2	2.33	Poorly defined baseline
RDX	121-82-4	1	2.93	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.63	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.91	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.17	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.90	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.90	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.29	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.29	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.90	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.28	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.48	Missed peak
p-Nitrotoluene	99-99-0	1	14.86	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.40	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1A.ch
Acq On : 23-Jan-2015, 09:05:23 Operator: KISMETL
Sample : ic1235-100 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:41 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.28	11.29	223517	320429	98.683	96.954
Spiked Amount	500.000	Range 70 - 136		Recovery =		19.74%#	19.39%#
	Target Compounds						
1)	TNX	1.38	1.38	342000	514829	107.279	109.128m
2)	HMX	1.49	1.49	151558	420408	92.900m	93.331m
3)	DNX	1.76	1.76	286960	502499	97.194	107.352
4)	MNX	2.34	2.34	250814	379692	99.222	101.953
5)	RDX	2.93	2.93	181404	313393	94.331	106.207
6)	1,3,5-Trinitrobe	4.64	4.64	409860	782856	100.886	98.644
7)	1,3-Dinitrobenze	5.91	5.91	549723	361578	105.569	97.410m
8)	3,5-Dinitroanili	6.37	6.36	480128	765245	103.501	94.382m
9)	Nitrobenzene	7.52	7.52	307709	304528	96.207	97.560m
10)	Nitroglycerin	0.00	9.17	0	627033	N.D. d	528.548
11)	Tetryl	9.54	9.54	284681	437982	98.958	92.881
12)	2,4,6-Trinitroto	9.96	9.96	361844	433219	102.382	106.984
13)	2-Amino-4,6-Dini	10.43	10.43	294424	448887	96.061	105.376
14)	4-Amino-2,6-Dini	10.92	10.91	203665	371394	94.301	85.922
16)	2,4-Dinitrotolue	11.89	11.89	493701	277438	108.921m	109.472m
17)	2,6-Dinitrotolue	12.29	12.30	269119	325412	101.506	103.227
18)	o-Nitrotoluene	14.48	14.47	236955	303268	106.144	98.508m
19)	p-Nitrotoluene	14.86	14.86	359271	282150	101.606	99.796
20)	m-Nitrotoluene	15.39	15.40	319240	343176	100.354	93.753
21)	PETN	0.00	16.92	0	725413	N.D.	491.402m#

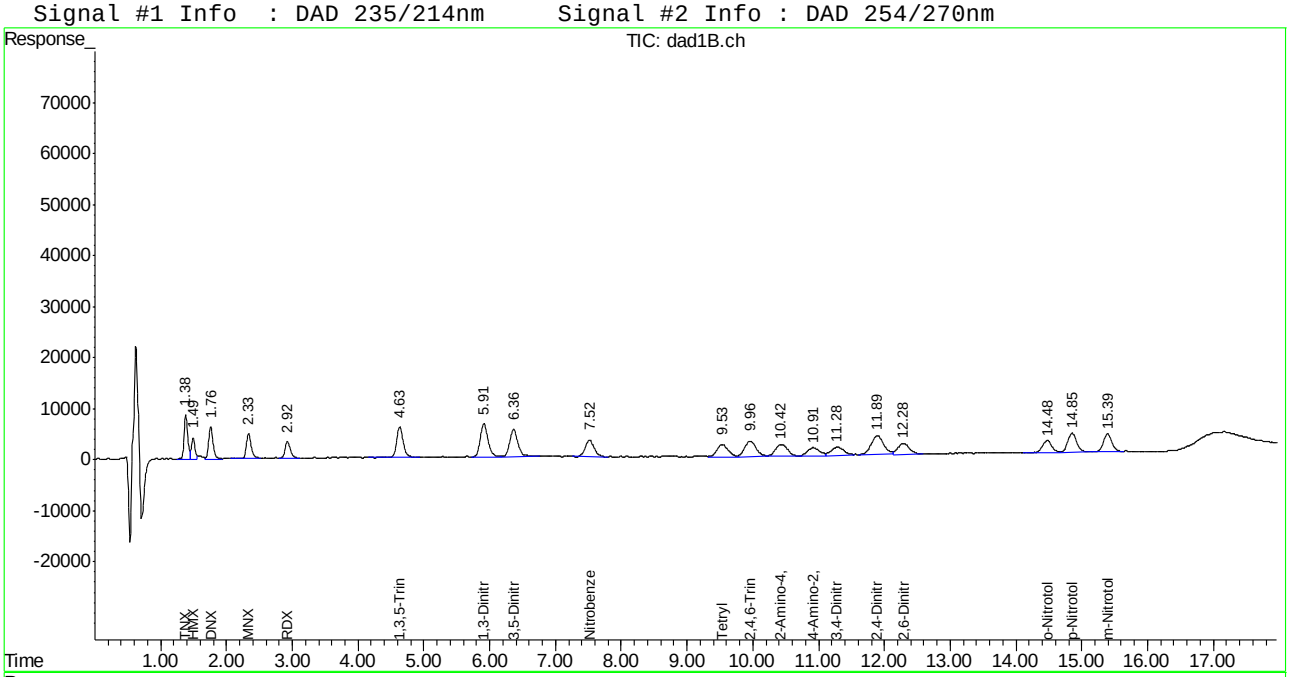
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045816.D 8330B_0107.M Fri Jan 23 14:50:22 2015 Page 1

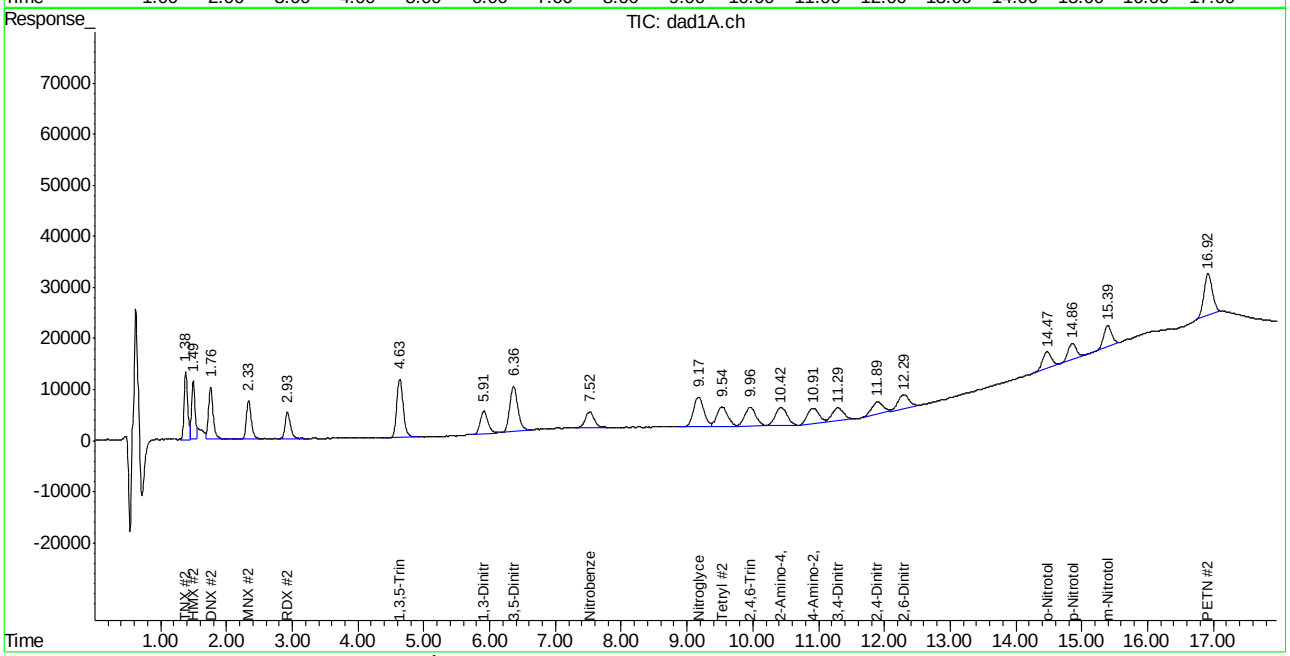
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1A.ch
Acq On : 23-Jan-2015, 09:05:23 Operator: KISMETL
Sample : ic1235-100 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:29 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045816.D
Injection Time: 01/23/15 09:05
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	1.38	Poorly defined baseline
HMX	2691-41-0	1	1.49	Overlapping peak
HMX	2691-41-0	2	1.49	Overlapping peak
1,3-Dinitrobenzene	99-65-0	2	5.91	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.52	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.89	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Missed peak
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1A.ch
Acq On : 23-Jan-2015, 09:30:20 Operator: KISMETL
Sample : ic1235-200 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:42 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.30	419047	662047	185.009m	198.484
	Spiked Amount 500.000	Range 70 - 136		Recovery =		37.00%#	39.70%#
	Target Compounds						
1)	TNX	1.38	1.38	645817	984396	202.580	208.661
2)	HMX	1.50	1.50	328914	907718	201.612	201.514
3)	DNX	1.76	1.76	550912	897084	186.595	191.650
4)	MNX	2.34	2.34	485670	753900	192.131	202.434
5)	RDX	2.93	2.93	379186	594539	197.178	201.486
6)	1,3,5-Trinitrobe	4.64	4.64	815197	1562512	200.659	196.886
7)	1,3-Dinitrobenze	5.92	5.92	1046565	714362	200.983	192.451m
8)	3,5-Dinitroanili	6.37	6.37	887026	1492668	191.215	184.100m
9)	Nitrobenzene	7.52	7.52	587897	580779	183.810	186.061m
10)	Nitroglycerin	0.00	9.18	0	1228177	N.D.	1035.273 #
11)	Tetryl	9.54	9.54	531459	848775	184.741	179.997
12)	2,4,6-Trinitroto	9.96	9.97	710966	833064	201.164	205.726
13)	2-Amino-4,6-Dini	10.44	10.44	595950	883848	194.439	206.057
14)	4-Amino-2,6-Dini	10.93	10.93	418976	801733	193.994	185.482
16)	2,4-Dinitrotolue	11.90	11.90	916943	586608	202.297m	231.465m
17)	2,6-Dinitrotolue	12.29	12.30	529195	679283	199.602m	215.482
18)	o-Nitrotoluene	14.47	14.48	458184	612611	205.243m	198.990m
19)	p-Nitrotoluene	14.85	14.86	698685	574070	197.596m	202.154
20)	m-Nitrotoluene	15.39	15.40	625916	706517	196.759m	193.015
21)	PETN	0.00	16.92	0	1414697	N.D.	958.331m#

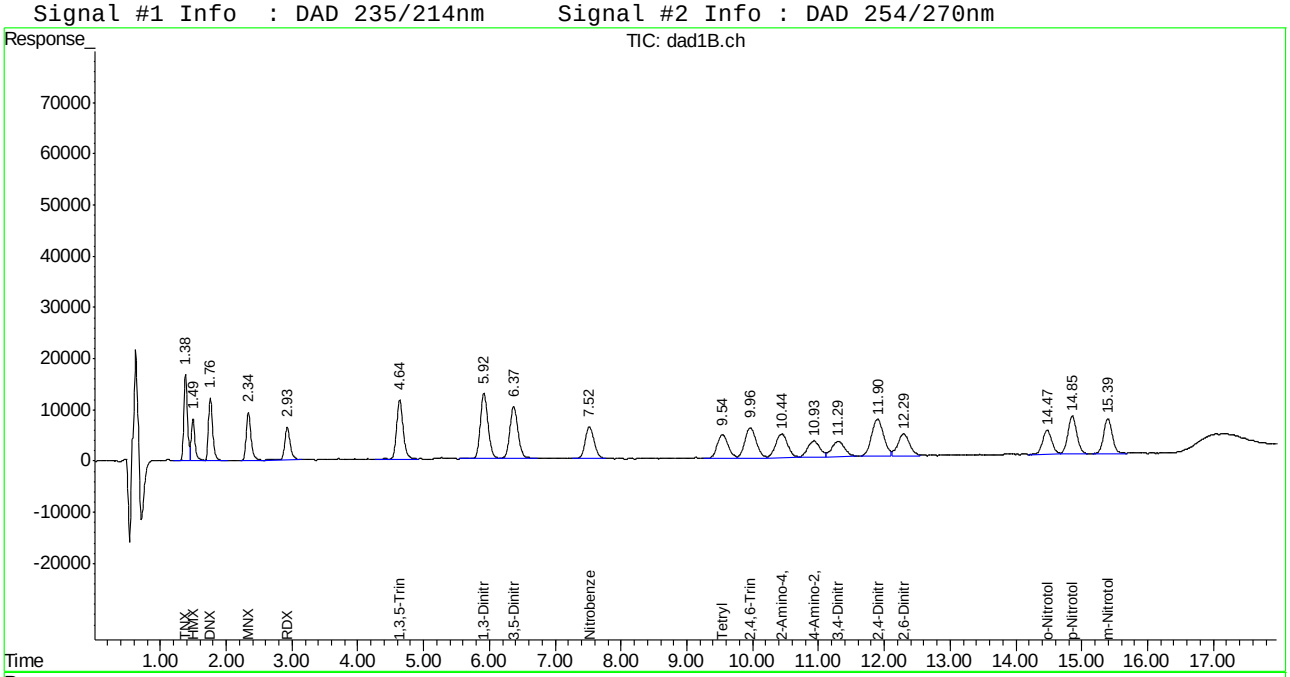
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045817.D 8330B_0107.M Fri Jan 23 14:50:23 2015 Page 1

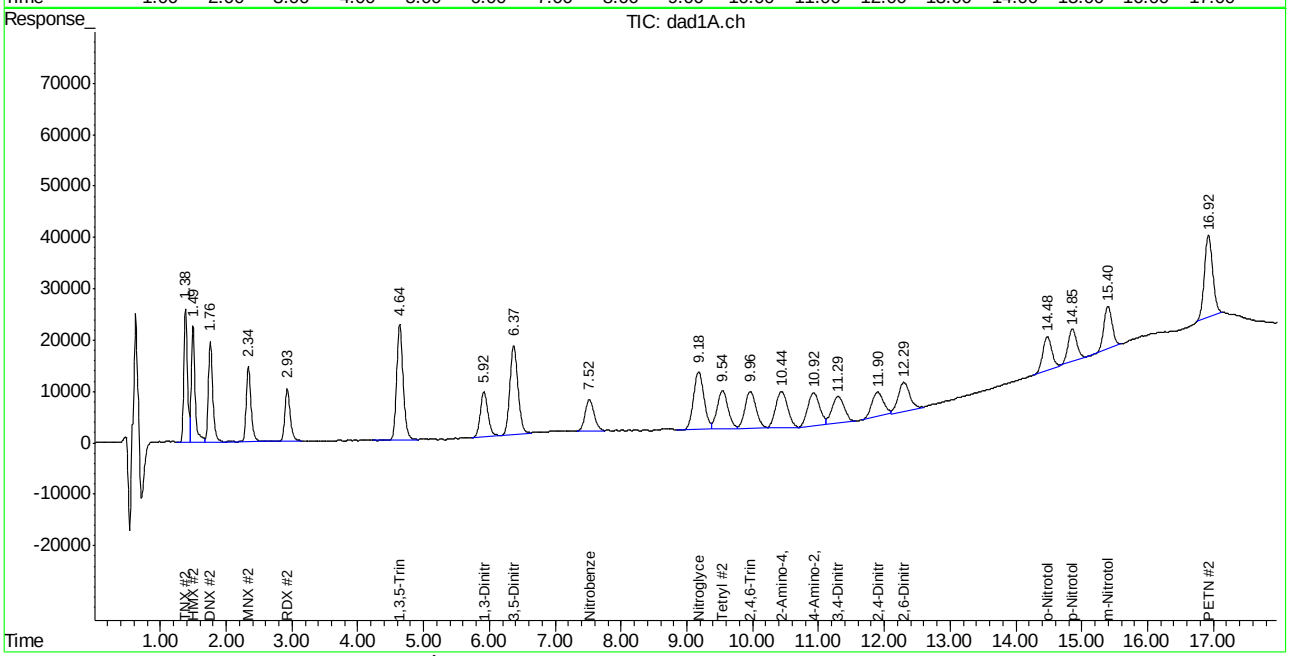
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1A.ch
Acq On : 23-Jan-2015, 09:30:20 Operator: KISMETL
Sample : ic1235-200 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:31 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045817.D
Injection Time: 01/23/15 09:30
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.37	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.52	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.29	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.90	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.90	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.48	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.85	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1A.ch
Acq On : 23-Jan-2015, 09:55:16 Operator: KISMETL
Sample : icc1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:43 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	1017850	1774675	449.381	517.180
	Spiked Amount 500.000	Range 70 - 136		Recovery =		89.88%	103.44%
	Target Compounds						
1)	TNX	1.38	1.38	1579981	2414118	495.609	511.718
2)	HMX	1.49	1.49	795478	2234251	487.599	496.005
3)	DNX	1.76	1.76	1356349	2205261	459.397	471.126
4)	MNX	2.34	2.34	1181790	1826964	467.516	490.567
5)	RDX	2.93	2.93	894778	1419161	465.288	480.947
6)	1,3,5-Trinitrobe	4.64	4.64	1969901	3795702	484.886	478.280
7)	1,3-Dinitrobenze	5.91	5.91	2559287	1741625	491.487	469.200
8)	3,5-Dinitroanili	6.37	6.37	2136678	3644710	460.601	449.525
9)	Nitrobenzene	7.52	7.52	1498292	1455731	468.451	466.364
10)	Nitroglycerin	0.00	9.18	0	3055086	N.D. d	2575.236
11)	Tetryl	9.54	9.54	1290324	2089632	448.530	443.141
12)	2,4,6-Trinitroto	9.96	9.96	1766223	2075678	499.742	512.591
13)	2-Amino-4,6-Dini	10.43	10.43	1511769	2199677	493.239	502.648
14)	4-Amino-2,6-Dini	10.92	10.92	1086430	2121041	503.039	490.706
16)	2,4-Dinitrotolue	11.89	11.89	2287858	1523372	504.749	601.094
17)	2,6-Dinitrotolue	12.29	12.29	1283271	1667968	484.025	529.112
18)	o-Nitrotoluene	14.47	14.47	1123944	1509912	503.470	490.453m
19)	p-Nitrotoluene	14.86	14.86	1751347	1417064	495.302	492.846
20)	m-Nitrotoluene	15.40	15.40	1567788	1785271	492.839	487.723
21)	PETN	0.00	16.92	0	3525351	N.D. d	2388.109m

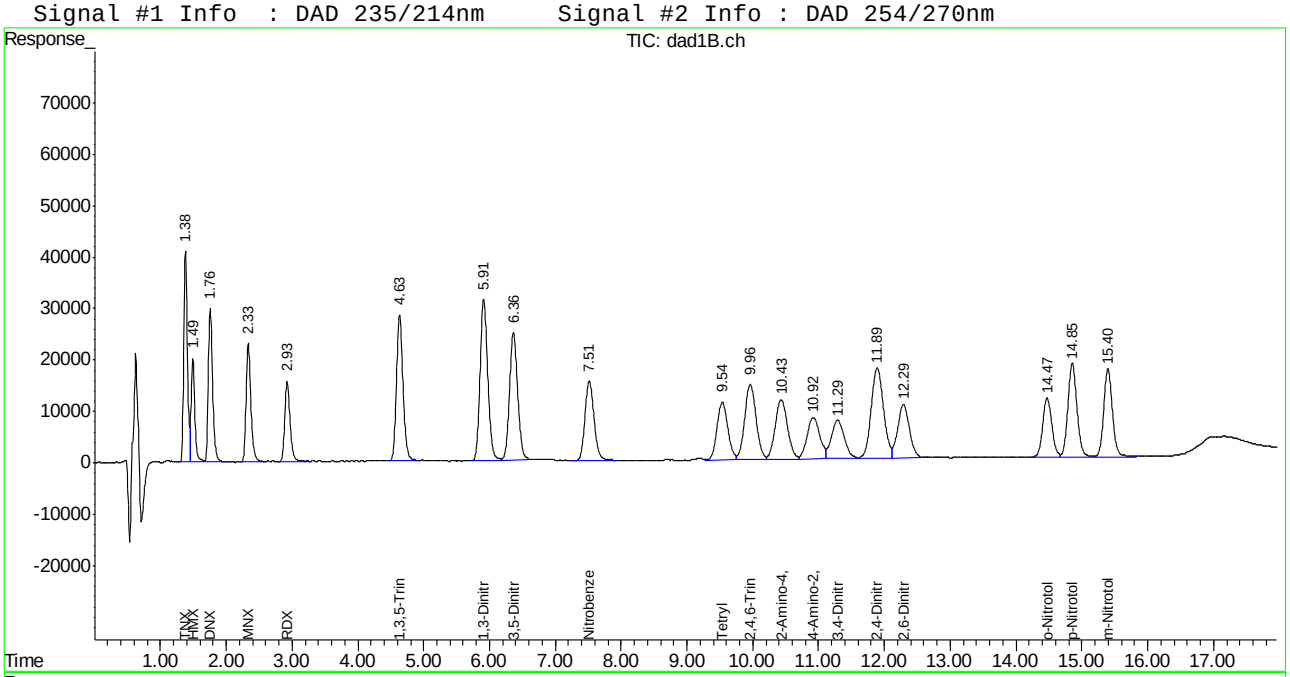
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045818.D 8330B_0107.M Fri Jan 23 14:50:24 2015 Page 1

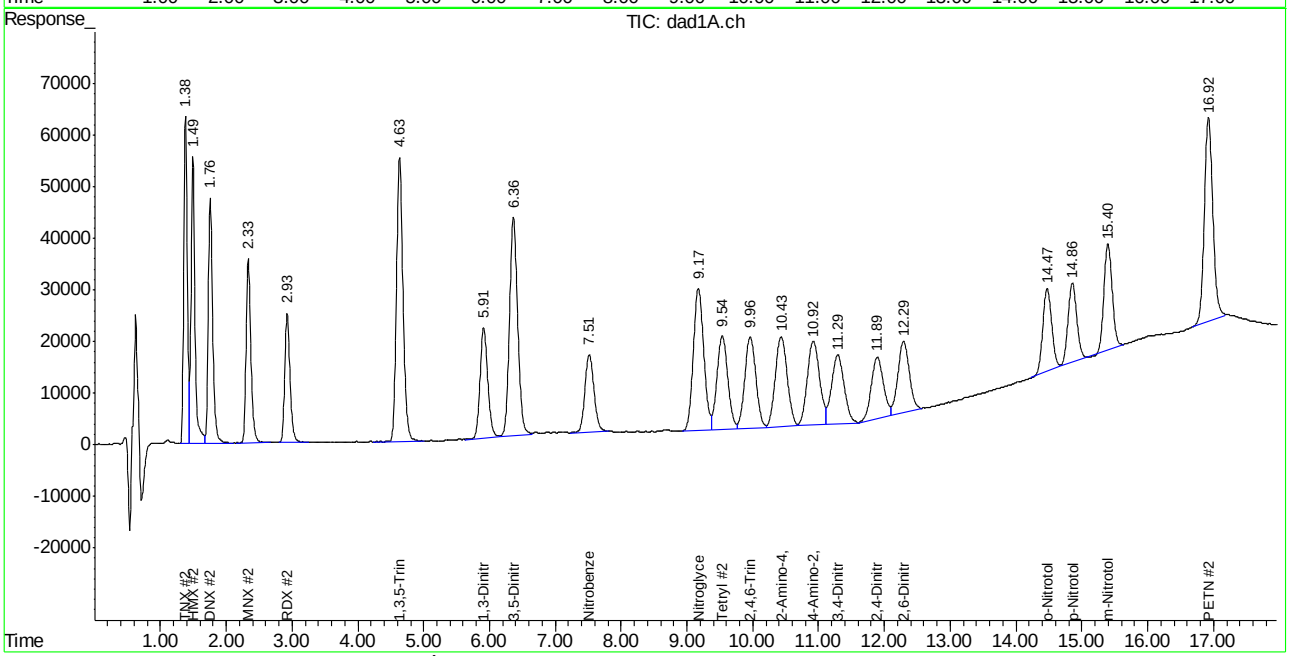
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1A.ch
Acq On : 23-Jan-2015, 09:55:16 Operator: KISMETL
Sample : icc1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:32 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-ICC1235 **Method:** SW846 8330A
Lab FileID: BB045818.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 09:55 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1A.ch
Acq On : 23-Jan-2015, 10:20:12 Operator: KISMETL
Sample : ic1235-1000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:44 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.30	2093074	3597419	924.093	1005.321
	Spiked Amount 500.000	Range 70 - 136		Recovery =		184.82%#	201.06%#
	Target Compounds						
1)	TNX	1.38	1.38	3151820	4809440	988.665	1019.451
2)	HMX	1.49	1.50	1549694	4250596	949.905	943.635
3)	DNX	1.76	1.76	2692893	4268569	912.086	911.925
4)	MNX	2.34	2.34	2326982	3609530	920.554	969.213
5)	RDX	2.93	2.93	1753066	2809601	911.602	952.161
6)	1,3,5-Trinitrobe	4.63	4.64	3924810	7637435	966.081	962.361
7)	1,3-Dinitrobenze	5.91	5.91	5121609	3529154	983.557	950.765
8)	3,5-Dinitroanili	6.37	6.36	4383626	7278881	944.974	897.750m
9)	Nitrobenzene	7.52	7.51	3028770	2955506	946.964	946.838m
10)	Nitroglycerin	0.00	9.17	0	6125686	N.D. d	5163.551
11)	Tetryl	9.54	9.54	2589682	4190433	900.200	888.650
12)	2,4,6-Trinitroto	9.97	9.97	3617711	4289718	1023.609	1059.350
13)	2-Amino-4,6-Dini	10.43	10.43	3132395	4598167	1021.995	1015.848
14)	4-Amino-2,6-Dini	10.92	10.92	2270320	4467902	1051.203	1033.655
16)	2,4-Dinitrotolue	11.89	11.90	4632178	3016536	1021.955	1190.269
17)	2,6-Dinitrotolue	12.29	12.29	2636335	3396797	994.374	1077.531
18)	o-Nitrotoluene	14.48	14.47	2252092	3040803	1008.823	987.721m
19)	p-Nitrotoluene	14.86	14.86	3509463	2929185	992.518	997.381
20)	m-Nitrotoluene	15.40	15.40	3137505	3649217	986.285	996.940
21)	PETN	0.00	16.92	0	6978906	N.D. d	4727.583m

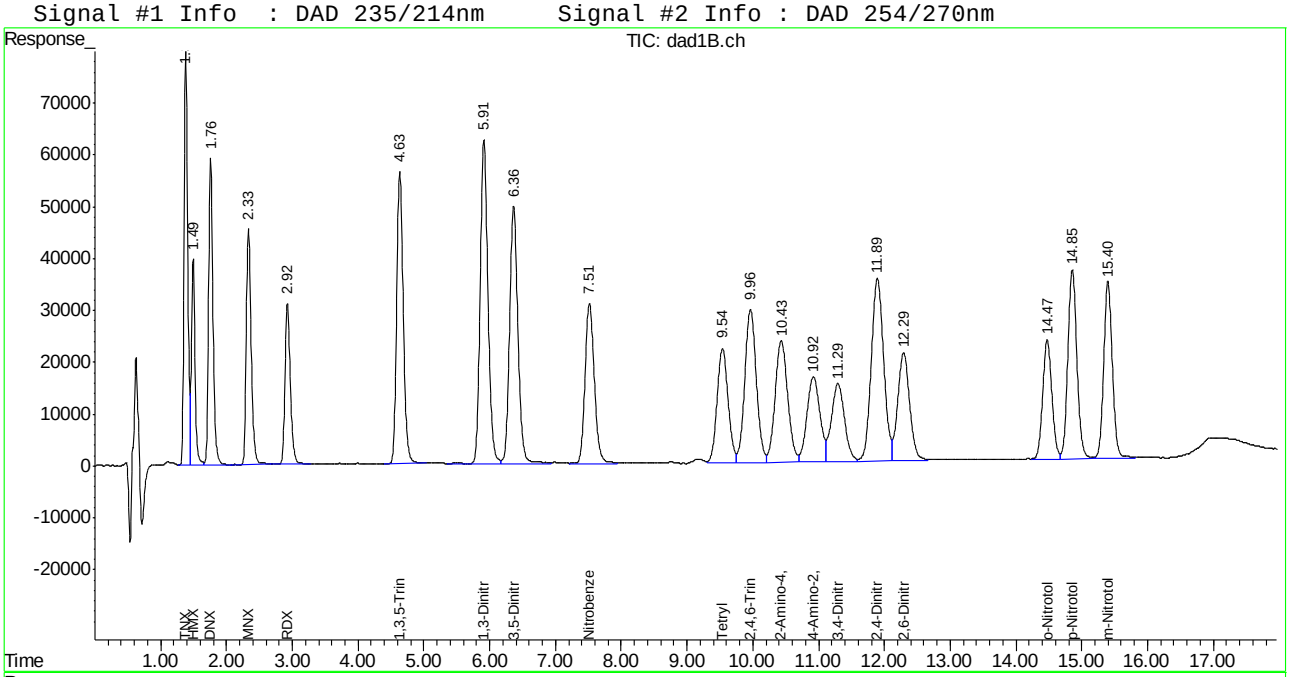
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045819.D 8330B_0107.M Fri Jan 23 14:50:25 2015 Page 1

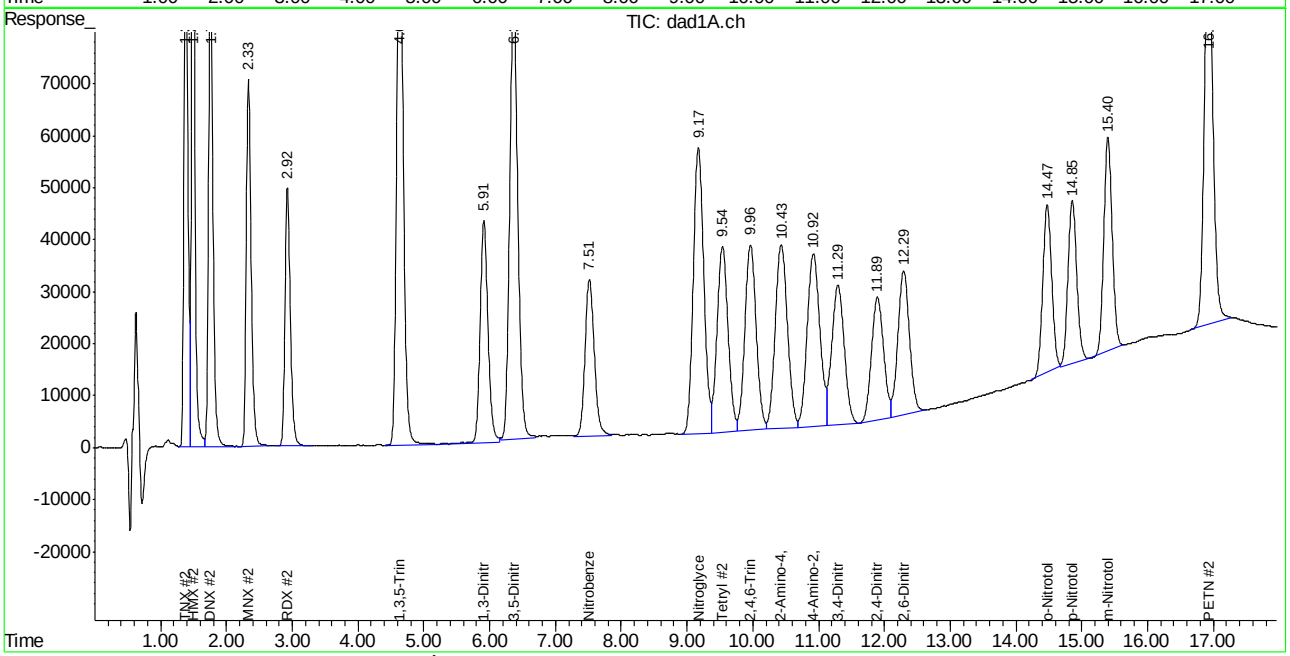
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1A.ch
Acq On : 23-Jan-2015, 10:20:12 Operator: KISMETL
Sample : ic1235-1000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:33 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1235-IC1235 **Method:** SW846 8330A
Lab FileID: BB045819.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 10:20 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

BB045820.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1A.ch
Acq On : 23-Jan-2015, 10:45:07 Operator: KISMETL
Sample : ic1235-2000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:45 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	4339319	7651941	1915.812	1976.832
	Spiked Amount 500.000	Range 70 - 136		Recovery =		383.16%#	395.37%#
	Target Compounds						
1)	TNX	1.38	1.38	6541013	9977549	2051.789	2114.929
2)	HMX	1.49	1.49	3254466	8893092	1994.867	1974.272
3)	DNX	1.76	1.76	5640488	8970353	1910.441	1916.401
4)	MNX	2.34	2.34	4885390	7573854	1932.659	2033.694
5)	RDX	2.93	2.93	3676805	5883122	1911.954	1993.762
6)	1,3,5-Trinitrobe	4.63	4.63	8166660	15892279	2010.201	2002.519
7)	1,3-Dinitrobenze	5.91	5.91	10582042	7257799	2032.183	1955.275
8)	3,5-Dinitroanili	6.36	6.36	9014679	15123011	1943.285	1865.215m
9)	Nitrobenzene	7.51	7.51	6126452	5945040	1915.474	1904.577m
10)	Nitroglycerin	0.00	9.17	0	12785798	N.D. d	10777.588
11)	Tetryl	9.54	9.54	5571011	9086155	1936.540	1926.867
12)	2,4,6-Trinitroto	9.97	9.97	7525920	9039833	2129.413	2232.397
13)	2-Amino-4,6-Dini	10.43	10.43	6562744	9878743	2141.202	2046.107
14)	4-Amino-2,6-Dini	10.92	10.92	4774526	9627480	2210.701	2227.331
16)	2,4-Dinitrotolue	11.89	11.89	9548837	6303219	2106.673	2487.132
17)	2,6-Dinitrotolue	12.29	12.29	5399207	7100603	2036.476	2252.452
18)	o-Nitrotoluene	14.48	14.47	4519998	6368740	2024.729	2068.708m
19)	p-Nitrotoluene	14.86	14.86	7089919	6049141	2005.113	1978.949
20)	m-Nitrotoluene	15.40	15.40	6327401	7538005	1989.039	2059.328
21)	PETN	0.00	16.92	0	14488827	N.D. d	9814.881m

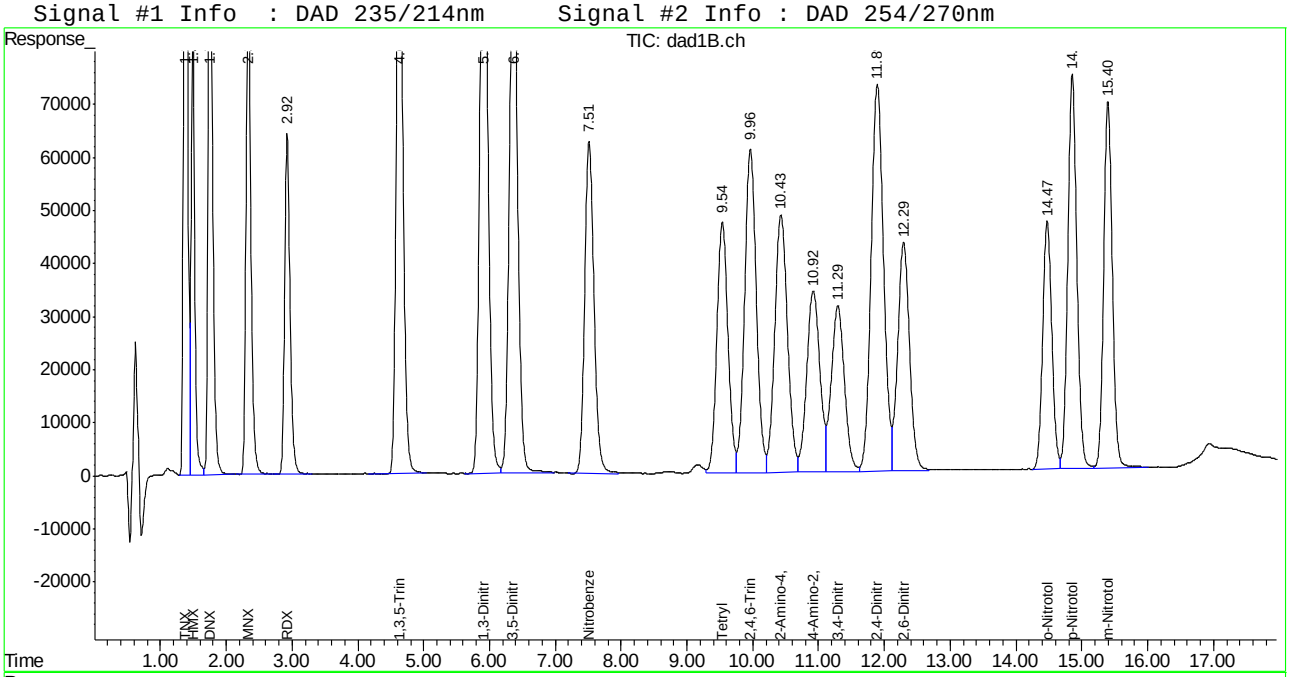
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045820.D 8330B_0107.M Fri Jan 23 14:50:26 2015 Page 1

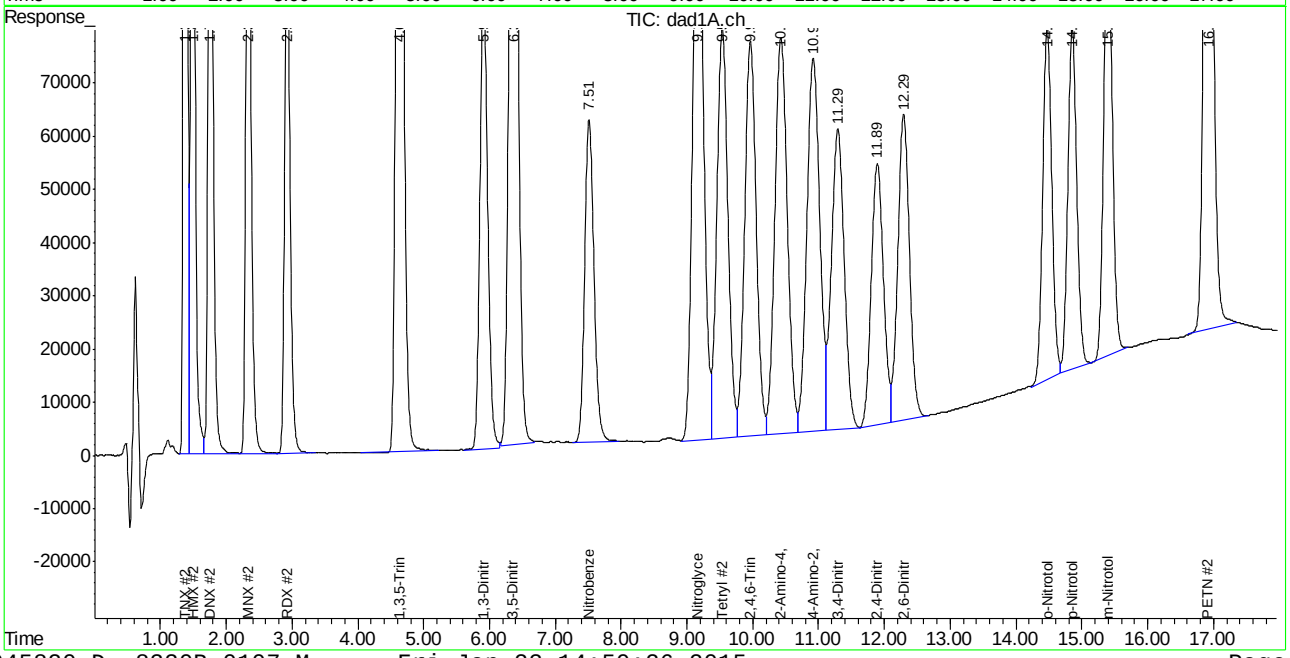
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1A.ch
Acq On : 23-Jan-2015, 10:45:07 Operator: KISMETL
Sample : ic1235-2000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:34 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045820.D
Injection Time: 01/23/15 10:45
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:38:07 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.38	1.38	1707035	2588651	529.286	519.029
2)	HMX	1.49	1.49	923099	2491555	573.328m	565.918m
3)	DNX	1.76	1.75	1484274	2340316	537.360	499.130
4)	MNX	2.33	2.33	1265753	1939459	509.783	520.625
5)	RDX	2.92	2.92	927458	1501464	491.716	497.299
6)	1,3,5-Trinitrobe	4.63	4.63	2121574	4103269	520.053	526.624
7)	1,3-Dinitrobenze	5.91	5.91	2447703	1678277	457.959	469.936
8)	3,5-Dinitroanili	6.36	6.36	2138846	3648010	468.838	482.526m
9)	Nitrobenzene	7.51	7.51	1607482	1573535	524.094	530.075m
10)	Nitroglycerin	0.00	9.18	0	3159453	N.D. d	2533.654
11)	Tetryl	9.54	9.54	1222859	1980687	451.877	457.633
12)	2,4,6-Trinitroto	9.96	9.96	1691954	2100276	463.147	496.730
13)	2-Amino-4,6-Dini	10.43	10.43	1641103	2490389	541.123	546.801
14)	4-Amino-2,6-Dini	10.92	10.91	1169545	2336951	555.255	495.904
16)	2,4-Dinitrotolue	11.89	11.89	2429182	1544153	525.910	534.743
17)	2,6-Dinitrotolue	12.29	12.29	1406995	1779950	547.381	537.287
18)	o-Nitrotoluene	14.47	14.47	1178143	1609545	515.628	534.800m
19)	p-Nitrotoluene	14.86	14.86	1810650	1469658	502.087	500.973
20)	m-Nitrotoluene	15.40	15.39	1751802	2034758	543.666	562.797m
21)	PETN	0.00	16.92	0	3779066	N.D. d	2629.624m

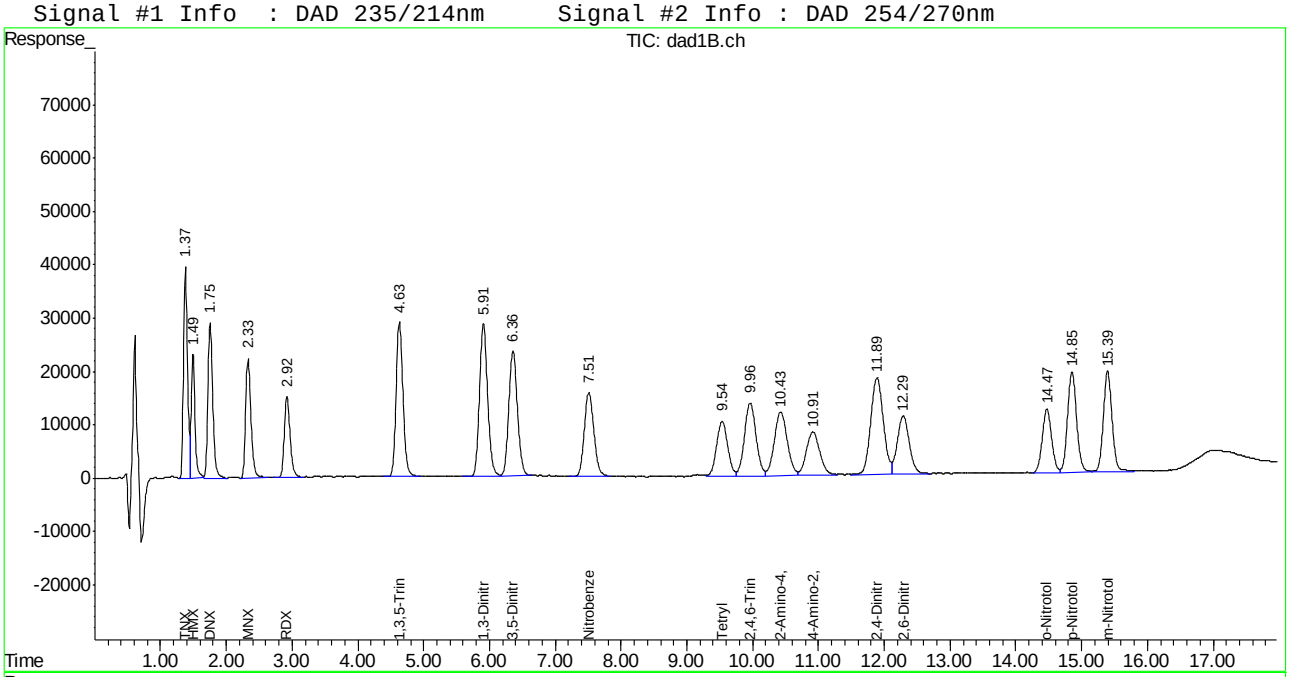
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045821.D 8330B_0107.M Fri Jan 23 14:50:27 2015 Page 1

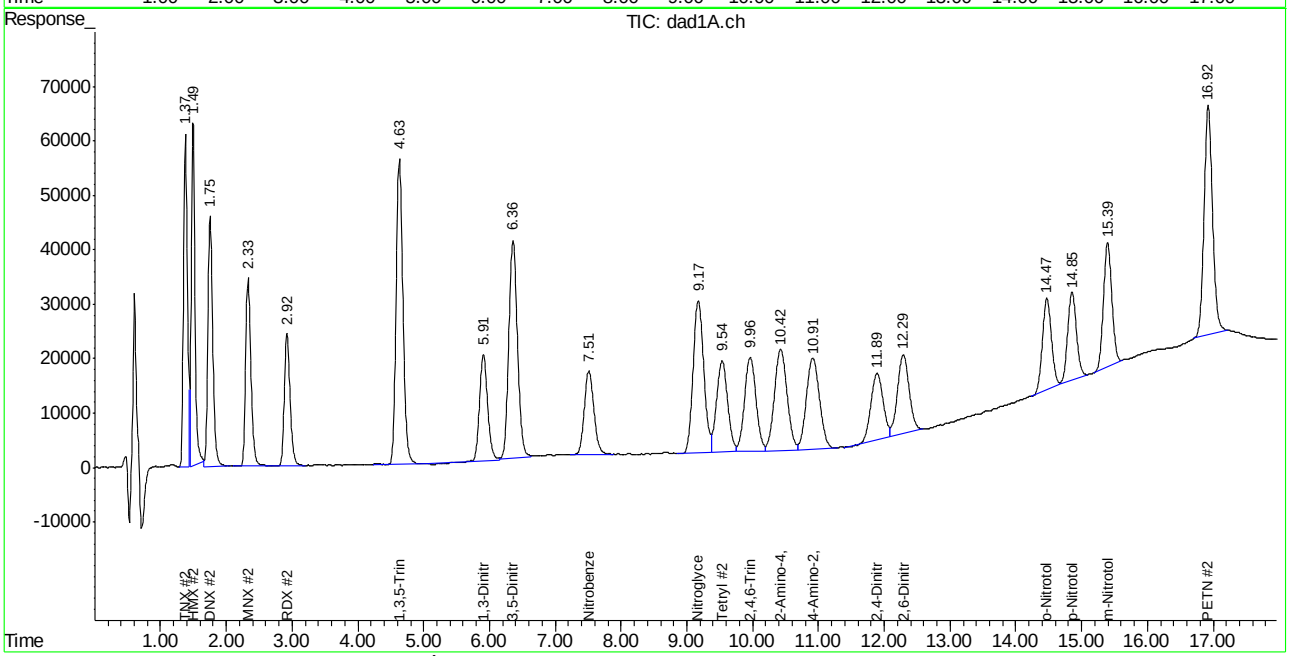
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:39 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-ICV1235 **Method:** SW846 8330A
Lab FileID: BB045821.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 11:10 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.39	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1A.ch
Acq On : 20-Feb-2015, 13:16:39 Operator: KISMETL
Sample : cc1235-500 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:53 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.18	11.18	1076890	1783017	484.502	473.680
	Spiked Amount 500.000	Range 72 - 134		Recovery =		96.90%	94.74%
	Target Compounds						
1)	TNX	1.37	1.37	1612874	2463723	500.090	493.980
2)	HMX	1.48	1.48	792524	2200256	492.230	499.754
3)	DNX	1.75	1.75	1380457	2218208	499.774	473.088
4)	MNX	2.32	2.32	1205620	1855554	485.564	498.102
5)	RDX	2.90	2.90	906810	1432212	480.769	474.362
6)	1,3,5-Trinitrobe	4.60	4.60	1990058	3905466	487.815	501.238
7)	1,3-Dinitrobenze	5.87	5.87	2586744	1826294	483.974	511.383
8)	3,5-Dinitroanili	6.31	6.31	2110901	3678059	462.712	486.501
9)	Nitrobenzene	7.46	7.46	1513367	1597516	493.410	538.153
10)	Nitroglycerin	0.00	9.10	0	3109470	N.D. d	2493.571
11)	Tetryl	9.44	9.44	1363395	2189772	503.808	505.941
12)	2,4,6-Trinitroto	9.87	9.87	1830733	2122465	501.136	501.978
13)	2-Amino-4,6-Dini	10.32	10.32	1596444	2305892	526.398	506.292
14)	4-Amino-2,6-Dini	10.80	10.80	1142112	2199188	542.231	466.670
16)	2,4-Dinitrotolue	11.79	11.79	2381666	1553688	515.623	538.045
17)	2,6-Dinitrotolue	12.19	12.19	1354327	1732121	526.891	522.850
18)	o-Nitrotoluene	14.40	14.40	1141676	1579376	499.668	524.776m
19)	p-Nitrotoluene	14.79	14.79	1781704	1486215	494.061	506.617
20)	m-Nitrotoluene	15.33	15.33	1578384	1850510	489.846	511.836
21)	PETN	0.00	16.86	0	3457717	N.D. d	2406.016

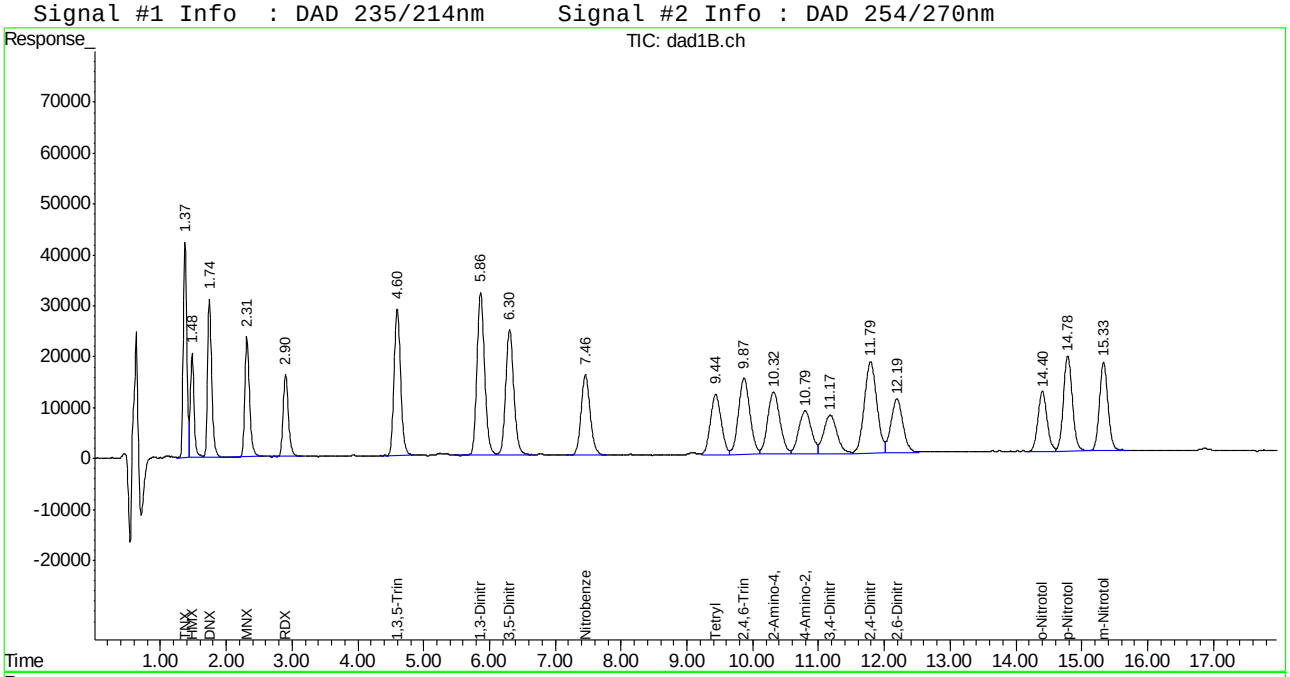
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046104.D 8330B_0107.M Mon Feb 23 10:33:41 2015 Page 1

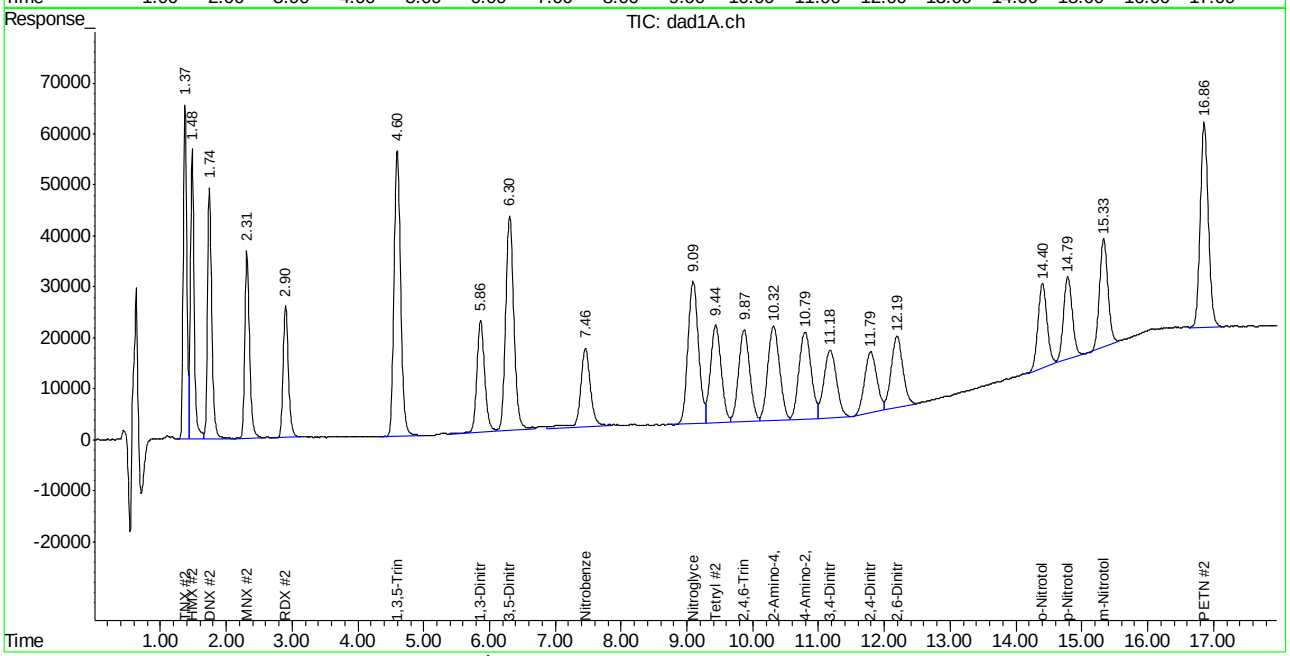
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1A.ch
Acq On : 20-Feb-2015, 13:16:39 Operator: KISMETL
Sample : cc1235-500 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:38 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	GBB1248-CC1235	**Method:**	SW846 8330A
Lab FileID:	BB046104.D	**Analyst approved:**	02/23/15 14:38 Kismet Lugo
Injection Time:	02/20/15 13:16	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.40	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1A.ch
Acq On : 20-Feb-2015, 17:51:12 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:04 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.25	11.25	2083608	3580717	937.434	951.260
Spiked Amount	500.000	Range	72 - 134	Recovery	=	187.49%#	190.25%#
	Target Compounds						
1)	TNX	1.38	1.38	3187372	4852170	988.282	972.868
2)	HMX	1.49	1.49	1576713	4345057	979.282	986.912
3)	DNX	1.76	1.76	2749735	4377887	995.501	933.693
4)	MNX	2.33	2.33	2360704	3669920	950.775	985.147
5)	RDX	2.92	2.92	1773939	2840324	940.500	940.741
6)	1,3,5-Trinitrobe	4.62	4.62	3960043	7693500	970.710	987.404
7)	1,3-Dinitrobenze	5.90	5.90	5091060	3450942	952.525	966.302
8)	3,5-Dinitroanili	6.34	6.34	4168040	6960960	913.640	920.733
9)	Nitrobenzene	7.49	7.49	2990060	2922730	974.862	984.576
10)	Nitroglycerin	0.00	9.14	0	6055131	N.D. d	4855.779
11)	Tetryl	9.49	9.49	2675636	4297980	988.713	993.037
12)	2,4,6-Trinitroto	9.92	9.92	3591860	4219726	983.218	997.994
13)	2-Amino-4,6-Dini	10.38	10.38	3153026	4637210	1039.652	1018.166
14)	4-Amino-2,6-Dini	10.86	10.86	2283947	4500303	1084.330	954.970
16)	2,4-Dinitrotolue	11.85	11.85	4625969	3033954	1001.507	1050.663
17)	2,6-Dinitrotolue	12.25	12.25	2616524	3396673	1017.939	1025.304
18)	o-Nitrotoluene	14.45	14.44	2235080	3056253	978.209	1015.494m
19)	p-Nitrotoluene	14.83	14.83	3492457	2931443	968.447	999.263
20)	m-Nitrotoluene	15.37	15.37	3108106	3619919	964.590	1001.240
21)	PETN	0.00	16.89	0	6808943	N.D. d	4737.932m

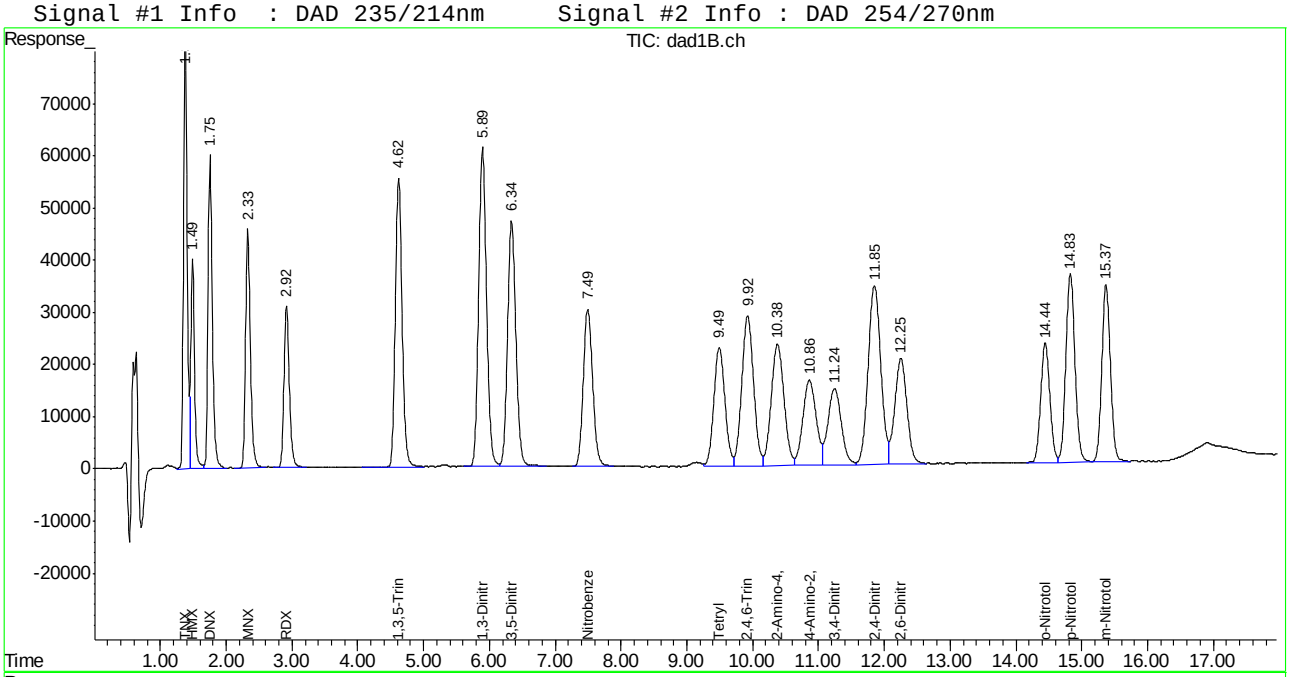
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046115.D 8330B_0107.M Mon Feb 23 10:33:52 2015 Page 1

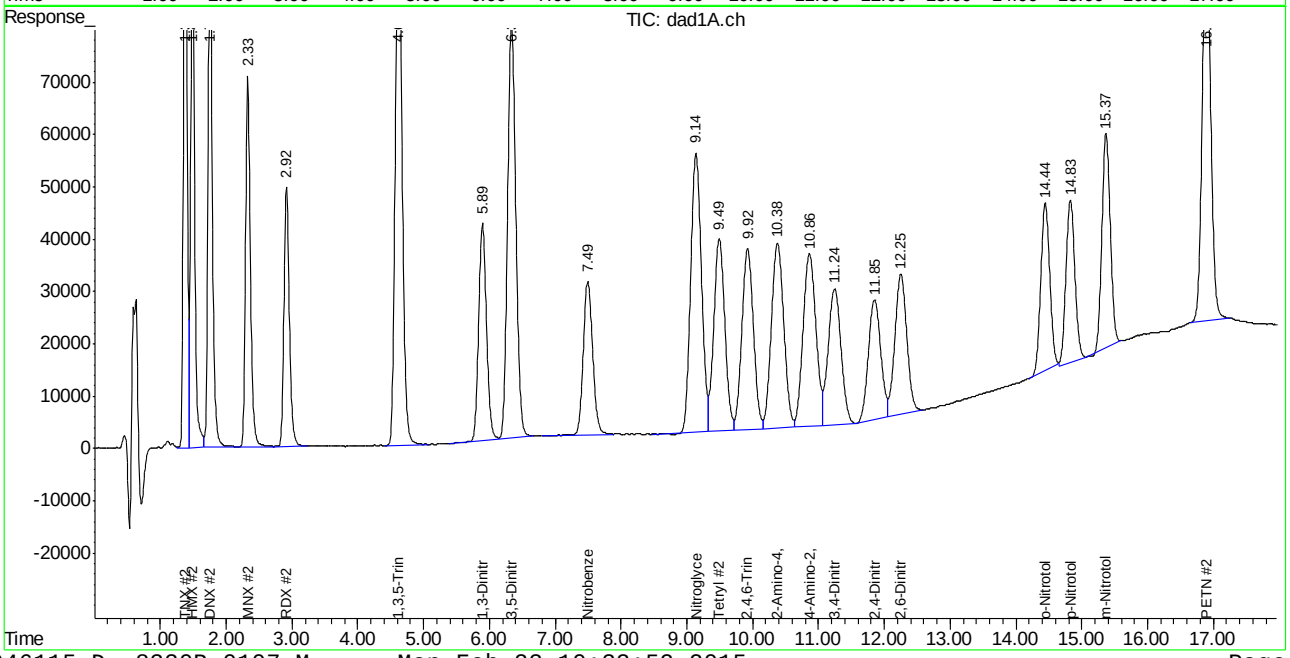
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1A.ch
Acq On : 20-Feb-2015, 17:51:12 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:40 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1248-CC1235 **Method:** SW846 8330A
Lab FileID: BB046115.D **Analyst approved:** 02/23/15 14:38 Kismet Lugo
Injection Time: 02/20/15 17:51 **Supervisor approved:** 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.44	Poorly defined baseline
PETN	78-11-5	2	16.89	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1A.ch
Acq On : 20-Feb-2015, 22:25:47 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:15 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.21	11.21	2080399	3589337	935.991	953.550
Spiked Amount	500.000	Range	72 - 134	Recovery	=	187.20%#	190.71%#
	Target Compounds						
1)	TNX	1.38	1.38	3180534	4790763	986.161	960.556
2)	HMX	1.49	1.49	1563827	4232404	971.279	961.325
3)	DNX	1.75	1.75	2732783	4277237	989.364	912.227
4)	MNX	2.32	2.32	2364278	3637843	952.215	976.536
5)	RDX	2.91	2.91	1782513	2841591	945.046	941.161
6)	1,3,5-Trinitrobe	4.61	4.61	3989016	7685578	977.812	986.387
7)	1,3-Dinitrobenze	5.88	5.88	5103919	3527874	954.931	987.844
8)	3,5-Dinitroanili	6.32	6.32	4151452	7128017	910.004	942.830
9)	Nitrobenzene	7.48	7.48	3038868	3024576	990.775	1018.885
10)	Nitroglycerin	0.00	9.12	0	6103479	N.D. d	4894.551
11)	Tetryl	9.46	9.46	2688664	4336694	993.527	1001.982
12)	2,4,6-Trinitroto	9.89	9.89	3607371	4278766	987.464	1011.958
13)	2-Amino-4,6-Dini	10.34	10.34	3163584	4690754	1043.133	1029.923
14)	4-Amino-2,6-Dini	10.82	10.82	2293531	4551047	1088.880	965.738
16)	2,4-Dinitrotolue	11.82	11.82	4635259	3045304	1003.519	1054.594
17)	2,6-Dinitrotolue	12.22	12.22	2617129	3389495	1018.175	1023.137
18)	o-Nitrotoluene	14.43	14.42	2253534	3070185	986.286	1020.123m
19)	p-Nitrotoluene	14.81	14.81	3503396	2953304	971.481	1006.715
20)	m-Nitrotoluene	15.35	15.35	3132164	3705292	972.056	1024.853
21)	PETN	0.00	16.87	0	6642121	N.D. d	4621.850m

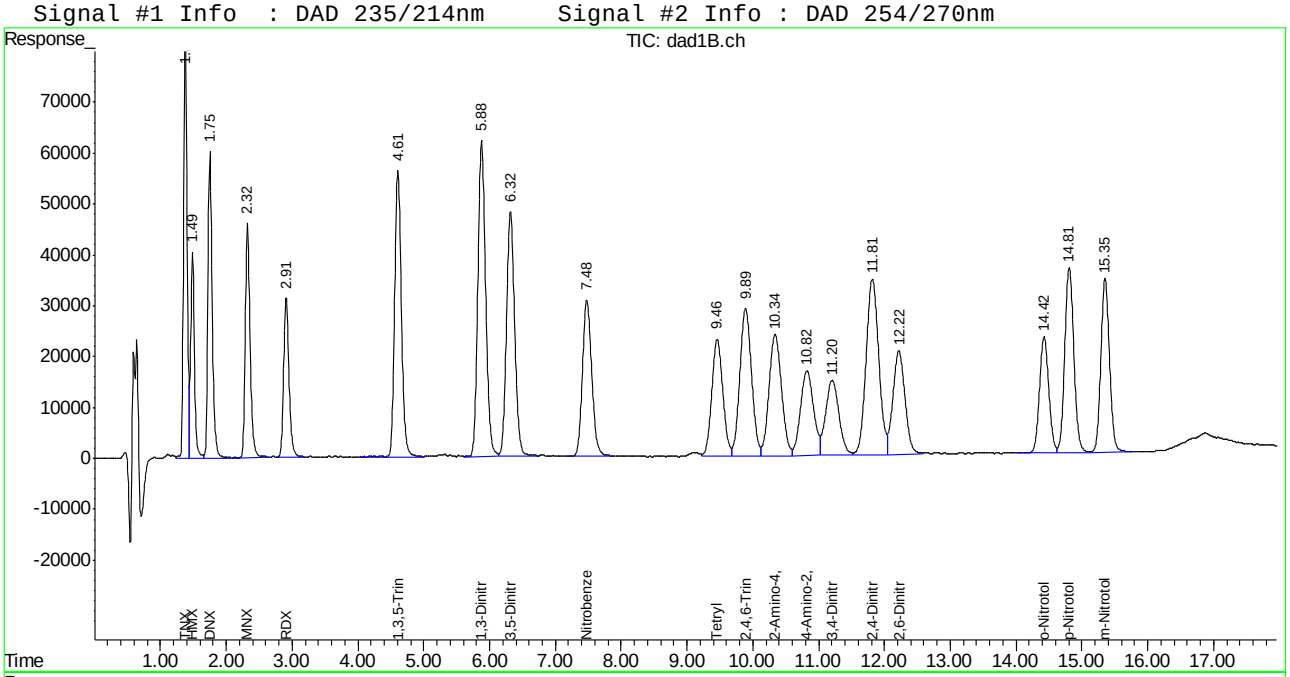
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046126.D 8330B_0107.M Mon Feb 23 10:34:03 2015 Page 1

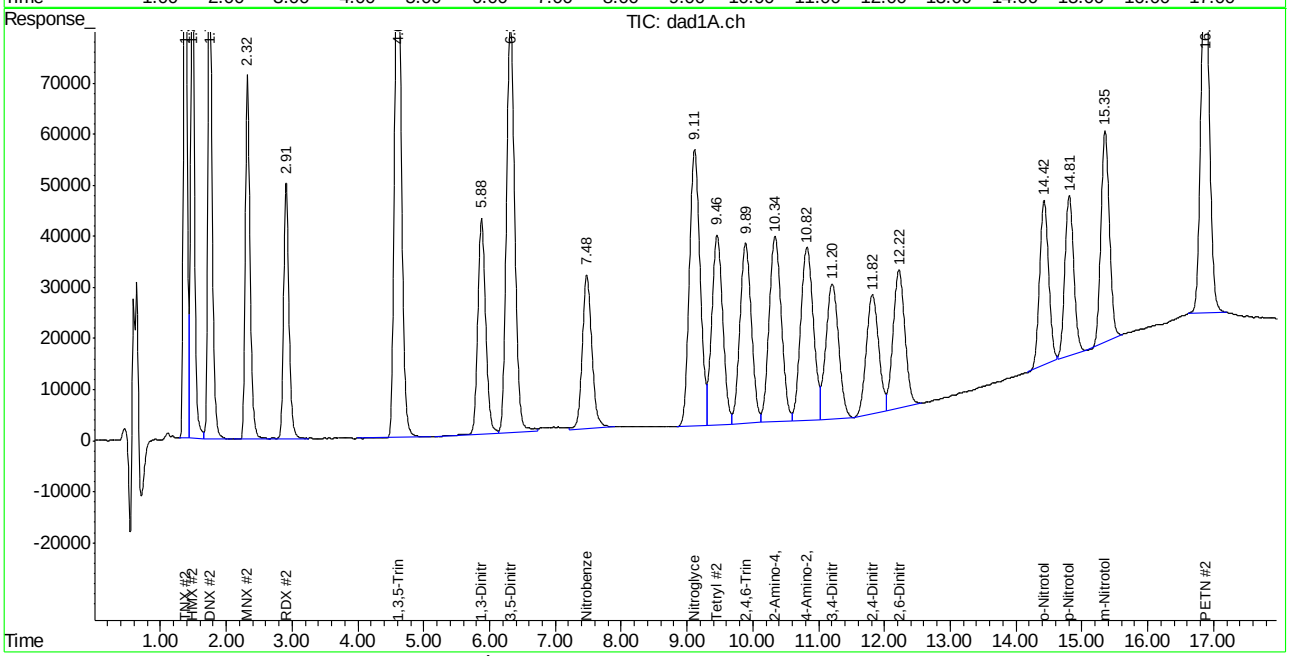
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1A.ch
Acq On : 20-Feb-2015, 22:25:47 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:43 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1248-CC1235 **Method:** SW846 8330A
Lab FileID: BB046126.D **Analyst approved:** 02/23/15 14:38 Kismet Lugo
Injection Time: 02/20/15 22:25 **Supervisor approved:** 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.42	Poorly defined baseline
PETN	78-11-5	2	16.87	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1A.ch
Acq On : 21-Feb-2015, 00:30:32 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:20 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.19	11.19	2099316	3566768	944.502	947.555
	Spiked Amount 500.000	Range 72 - 134		Recovery =		188.90%#	189.51%#
	Target Compounds						
1)	TNX	1.38	1.38	3188831	4836452	988.734	969.716
2)	HMX	1.48	1.49	1576585	4354866	979.203	989.140
3)	DNX	1.75	1.75	2741819	4365220	992.636	930.992
4)	MNX	2.32	2.32	2366582	3670742	953.143	985.368
5)	RDX	2.91	2.91	1770470	2868457	938.661	950.059
6)	1,3,5-Trinitrobe	4.60	4.60	3974479	7698491	974.249	988.045
7)	1,3-Dinitrobenze	5.87	5.87	5149423	3496692	963.445	979.113
8)	3,5-Dinitroanili	6.31	6.31	4205025	7151001	921.747	945.870
9)	Nitrobenzene	7.48	7.47	3062674	2917759	998.537	982.902m
10)	Nitroglycerin	0.00	9.11	0	6085978	N.D. d	4880.516
11)	Tetryl	9.45	9.45	2703903	4334668	999.159	1001.514
12)	2,4,6-Trinitroto	9.88	9.88	3620591	4247827	991.083	1004.640
13)	2-Amino-4,6-Dini	10.33	10.33	3175306	4643377	1046.998	1019.520
14)	4-Amino-2,6-Dini	10.81	10.81	2267589	4464774	1076.564	947.430
16)	2,4-Dinitrotolue	11.80	11.81	4618781	2969586	999.951	1028.372
17)	2,6-Dinitrotolue	12.21	12.21	2631827	3404725	1023.893	1027.734
18)	o-Nitrotoluene	14.42	14.42	2247031	2957417	983.440	982.654m
19)	p-Nitrotoluene	14.80	14.80	3497699	2880650	969.901	981.948m
20)	m-Nitrotoluene	15.35	15.34	3111192	3898616	965.547	1078.325m
21)	PETN	0.00	16.86	0	6768929	N.D. d	4710.088m

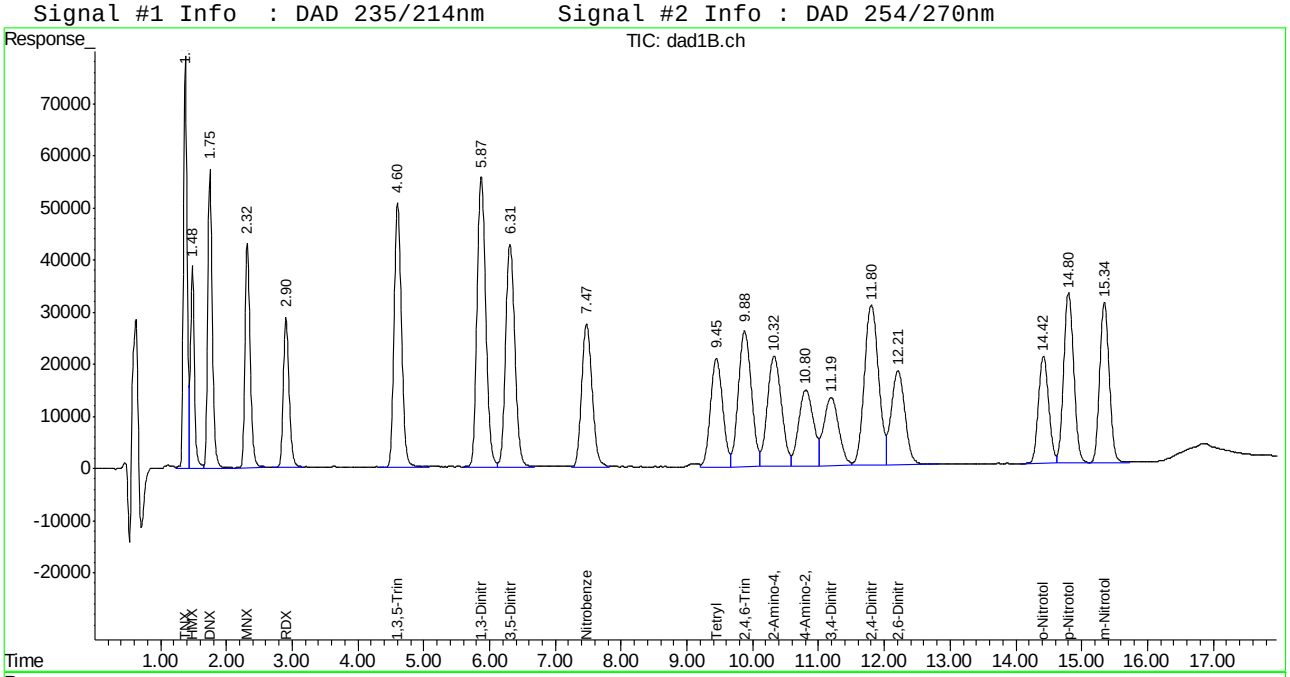
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046131.D 8330B_0107.M Mon Feb 23 10:34:08 2015 Page 1

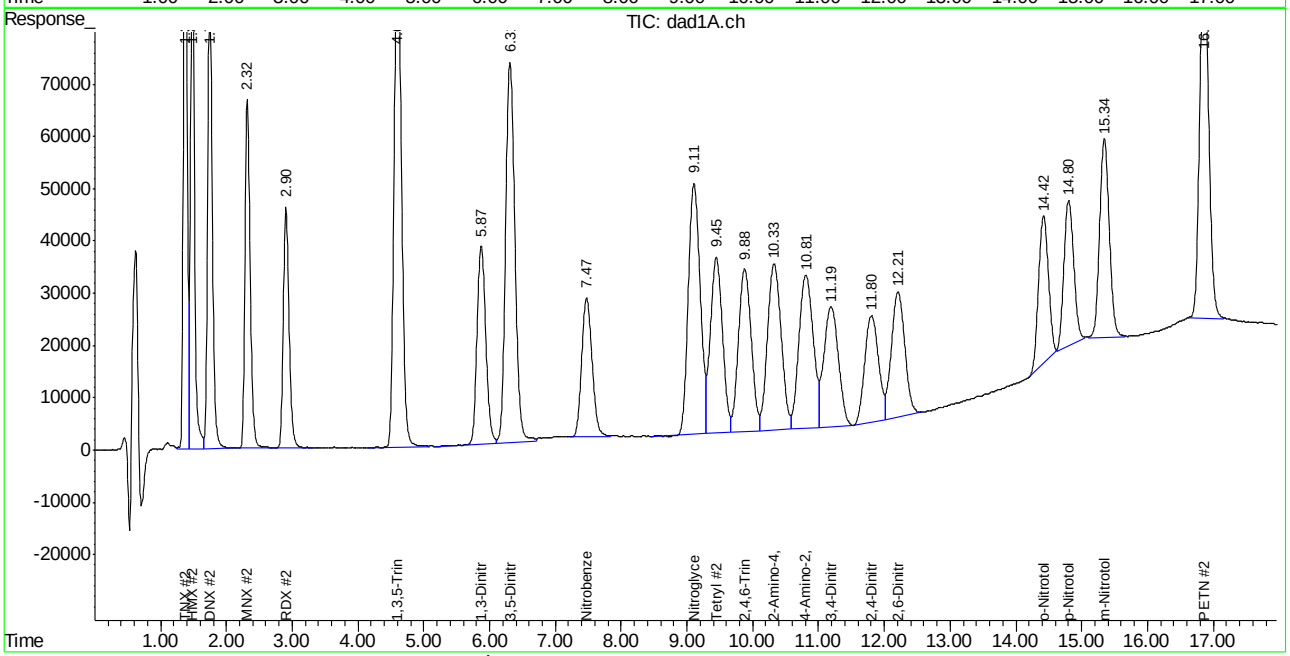
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1A.ch
Acq On : 21-Feb-2015, 00:30:32 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES
FA22032

Manual Integration Approval Summary

Sample Number: GBB1248-ECC1235 **Method:** SW846 8330A
Lab FileID: BB046131.D **Analyst approved:** 02/23/15 14:38 Kismet Lugo
Injection Time: 02/21/15 00:30 **Supervisor approved:** 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitrobenzene	98-95-3	2	7.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.42	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.80	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.34	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058130.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0123RPB2\GG058130.D\dad1A.ch
Acq On : 23-Jan-2015, 11:05:35 Operator: kismetl
Sample : ic2344-20 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:32 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.26	16.26	135504	229764	23.666	20.538
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.73%#	4.11%#
	Target Compounds						
1)	TNX	5.63	5.63	202622	300782	22.048	21.418m
2)	HMX	6.17	6.17	70919	300598	22.484m	29.147m
3)	DNX	6.35	6.35	153711	333915	19.280m	24.612m
4)	MNX	7.71	7.71	132547	175318	21.006	18.999m
5)	1,3,5-Trinitrobe	8.65	8.65	211785	351038	20.488	19.389
6)	RDX	9.21	9.20	98556	164005	20.902	18.675
7)	1,3-Dinitrobenze	11.31	11.32	313525	241268	22.597	22.422
8)	Nitrobenzene	12.33	12.33	184875	175089	20.522	21.048m
9)	2,4,6-Trinitroto	13.37	13.38	207176	252168	21.338	19.960m
10)	Nitroglycerin	0.00	14.24	0	354252	N.D.	103.159m#
11)	Tetryl	15.09	15.10	144068	260546	19.012	19.097
13)	2,6-Dinitrotolue	16.71	16.70	190220	206531	27.304m	20.381
14)	2,4-Dinitrotolue	17.50	17.50	283923	186787	21.783	19.754m
15)	o-Nitrotoluene	19.13	19.11	364262	595156	19.761	20.099
16)	3,5-Dinitroanili	19.13	19.11	364262	595156	19.761	20.099
17)	p-Nitrotoluene	20.67	20.67	125860	146589	25.306m	18.289m
18)	4-Amino-2,6-Dini	21.22	21.21	139151	246285	20.649	17.232m
19)	m-Nitrotoluene	22.21	22.24	125093	213892	20.417	20.260m
20)	2-Amino-4,6-Dini	23.90	23.90	186138	275536	20.669	21.006
21)	PETN	0.00	25.78	0	198599	N.D.	167.478m#

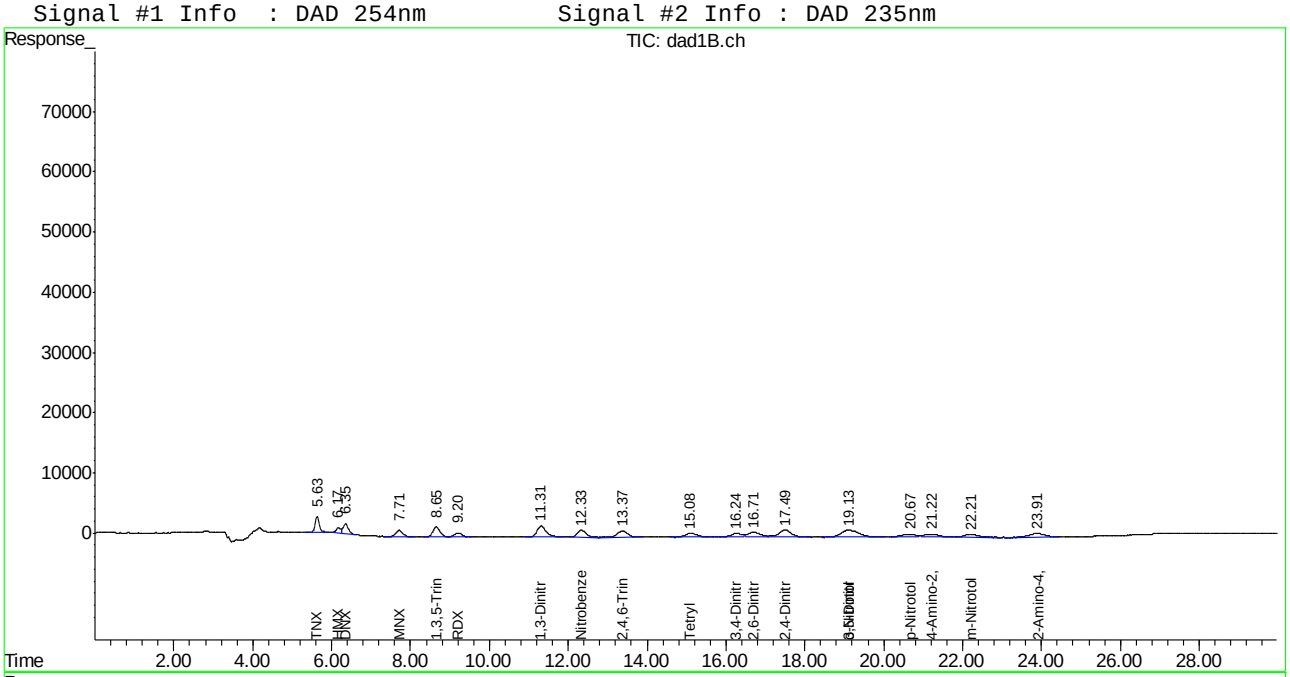
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058130.D 8330_RPB2.M Mon Jan 26 10:24:04 2015 Page 1

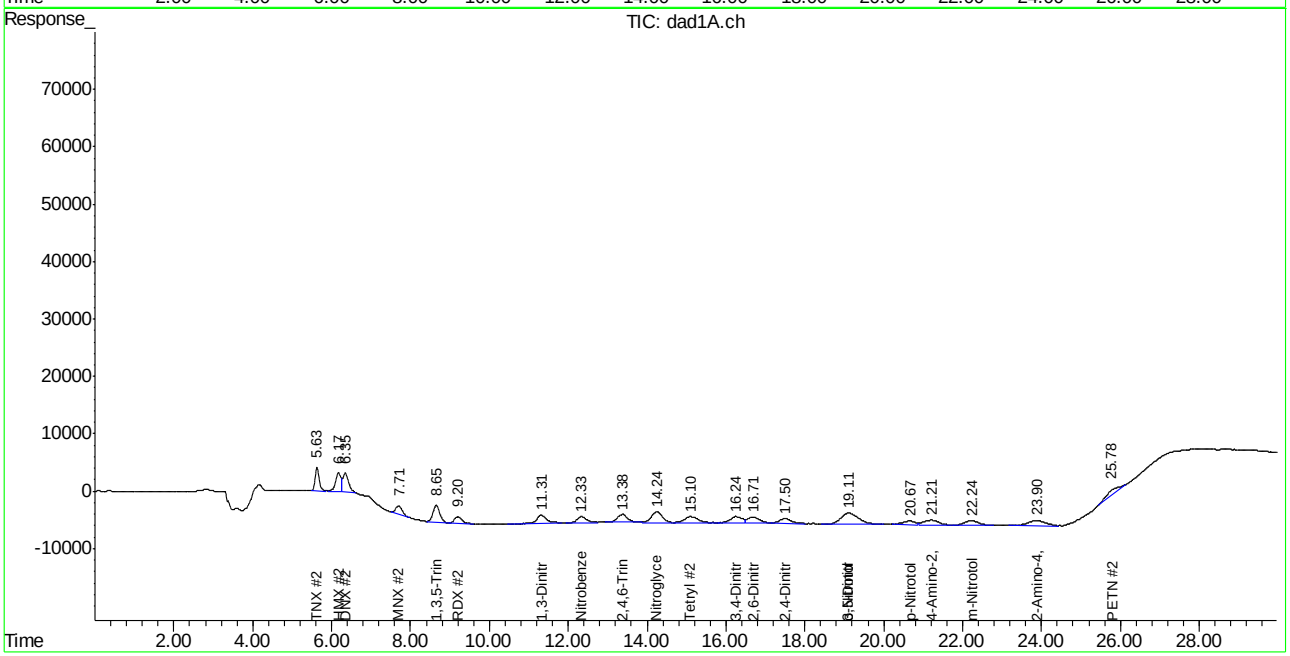
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058130.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0123RPB2\GG058130.D\dad1A.ch
Acq On : 23-Jan-2015, 11:05:35 Operator: kismetl
Sample : ic2344-20 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:07 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058130.D
Injection Time: 01/23/15 11:05
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.17	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		1	6.35	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
MNX		2	7.71	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.33	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.38	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.24	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	16.71	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.50	Missed peak
p-Nitrotoluene	99-99-0	1	20.67	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.67	Missed peak
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	22.24	Missed peak
PETN	78-11-5	2	25.78	Missed peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058131.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0123RPB2\GG058131.D\dad1A.ch
Acq On : 23-Jan-2015, 11:37:38 Operator: kismetl
Sample : ic2344-50 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:33 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.28	16.28	291169	555661	50.852	49.668
Spiked Amount	500.000	Range	70 - 136	Recovery	=	10.17%#	9.93%#
	Target Compounds						
1)	TNX	5.63	5.63	483150	702979	52.573m	50.057m
2)	HMX	6.18	6.18	159513	602466	50.571m	58.416m
3)	DNX	6.36	6.36	399600	719887	50.122m	53.061m
4)	MNX	7.72	7.72	322282	450196	51.075	48.787m
5)	1,3,5-Trinitrobe	8.66	8.66	529530	893312	51.226	49.340
6)	RDX	9.22	9.22	222198	420374	47.124m	47.868m
7)	1,3-Dinitrobenze	11.32	11.33	701918	547243	50.591	50.858
8)	Nitrobenzene	12.35	12.35	456572	430879	50.681	51.797
9)	2,4,6-Trinitroto	13.39	13.38	482585	672338	49.704	53.219
10)	Nitroglycerin	0.00	14.25	0	857676	N.D.	249.758m#
11)	Tetryl	15.12	15.12	345073	613953	45.537	45.001
13)	2,6-Dinitrotolue	16.71	16.71	340261	493951	48.841	48.743
14)	2,4-Dinitrotolue	17.51	17.51	652805	471606	50.083	49.877
15)	o-Nitrotoluene	19.14	19.13	917855	1535333	49.792	51.848
16)	3,5-Dinitroanili	19.14	19.13	917855	1535333	49.792	51.848
17)	p-Nitrotoluene	20.66	20.65	261851	477650	52.649	59.592m
18)	4-Amino-2,6-Dini	21.22	21.23	341838	835200	50.727	58.437m
19)	m-Nitrotoluene	22.24	22.22	323563	622926	52.810	59.003m
20)	2-Amino-4,6-Dini	23.88	23.89	481120	675824	53.425	51.523
21)	PETN	0.00	25.85	0	796148	N.D. d	671.390m

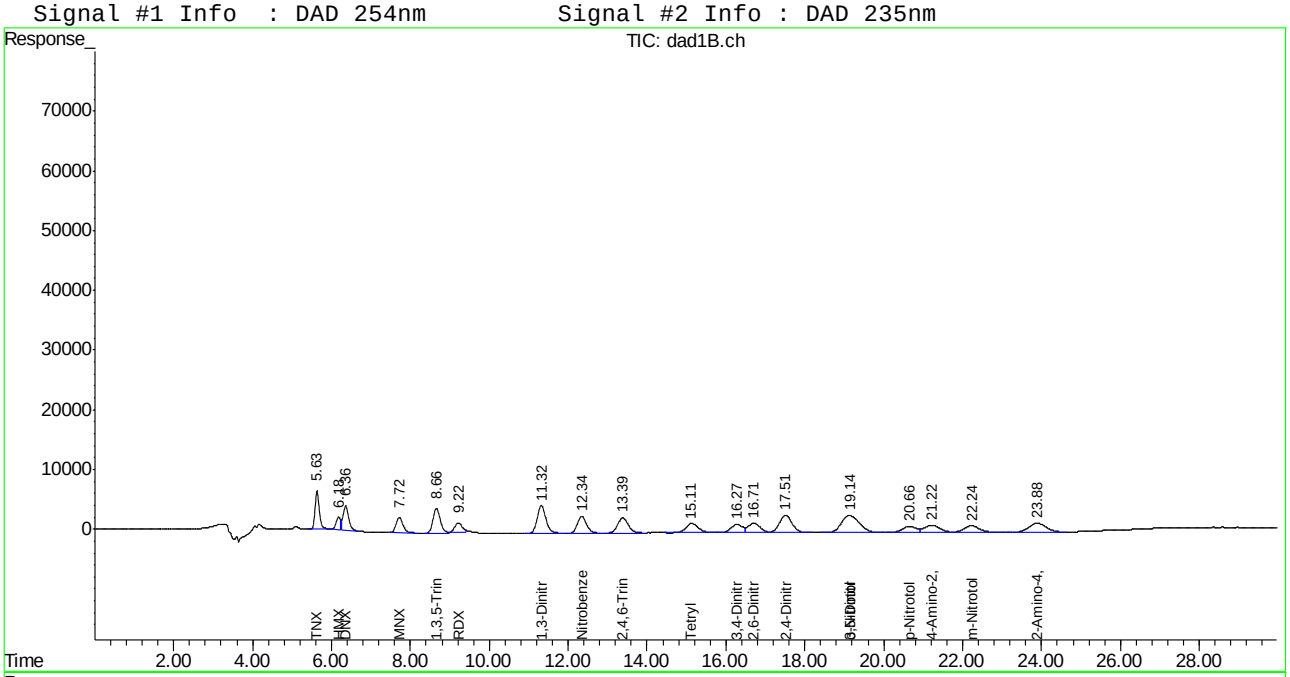
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058131.D 8330_RPB2.M Mon Jan 26 10:24:05 2015 Page 1

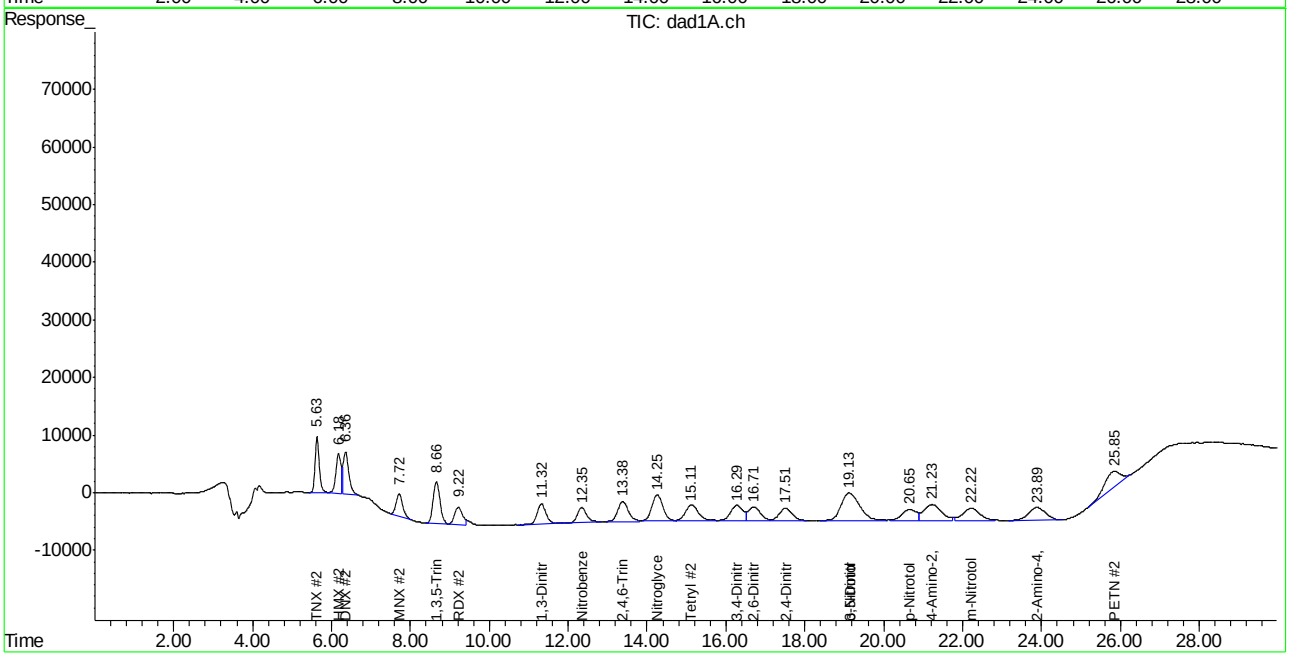
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058131.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0123RPB2\GG058131.D\dad1A.ch
Acq On : 23-Jan-2015, 11:37:38 Operator: kismetl
Sample : ic2344-50 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:12 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058131.D
Injection Time: 01/23/15 11:37
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.63	Poorly defined baseline
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.18	Poorly defined baseline
HMX	2691-41-0	2	6.18	Poorly defined baseline
DNX		1	6.36	Poorly defined baseline
DNX		2	6.36	Poorly defined baseline
MNX		2	7.72	Poorly defined baseline
RDX	121-82-4	1	9.22	Overlapping peak
RDX	121-82-4	2	9.22	Overlapping peak
Nitroglycerine	55-63-0	2	14.25	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.65	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.23	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	22.22	Poorly defined baseline
PETN	78-11-5	2	25.85	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058132.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0123RPB2\GG058132.D\dad1A.ch
Acq On : 23-Jan-2015, 12:09:40 Operator: kismetl
Sample : ic2344-100 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:34 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.26	16.26	570491	1096428	99.636	98.004m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	19.93%#	19.60%#
	Target Compounds						
1)	TNX	5.63	5.63	936410	1412492	101.893m	100.580m
2)	HMX	6.17	6.17	330607	1093228	104.814m	106.002m
3)	DNX	6.36	6.35	819461	1386484	102.786m	102.194m
4)	MNX	7.71	7.71	655134	937729	103.825	101.620m
5)	1,3,5-Trinitrobe	8.66	8.66	1072182	1848390	103.722	102.093
6)	RDX	9.21	9.20	523410	946913	111.005	107.826
7)	1,3-Dinitrobenze	11.31	11.31	1424812	1056926	102.694	98.225
8)	Nitrobenzene	12.34	12.33	910836	863273	101.106	103.775m
9)	2,4,6-Trinitroto	13.37	13.37	956177	1298486	98.482	102.782m
10)	Nitroglycerin	0.00	14.25	0	1807626	N.D.	526.387m#
11)	Tetryl	15.12	15.11	710035	1243727	93.698	91.162m
13)	2,6-Dinitrotolue	16.69	16.69	721087	1012997	103.505	99.963m
14)	2,4-Dinitrotolue	17.50	17.49	1330049	969303	102.042	102.513m
15)	o-Nitrotoluene	19.10	19.09	1880593	3052609	102.019	103.087
16)	3,5-Dinitroanili	19.10	19.09	1880593	3052609	102.019	103.087
17)	p-Nitrotoluene	20.63	20.63	521161	827851	104.787	103.284
18)	4-Amino-2,6-Dini	21.19	21.19	720332	1513130	106.894	105.871
19)	m-Nitrotoluene	22.20	22.20	639927	1215711	104.444	115.151
20)	2-Amino-4,6-Dini	23.86	23.86	958538	1334497	106.438	101.739
21)	PETN	0.00	25.79	0	1745446	N.D. d	1471.931m

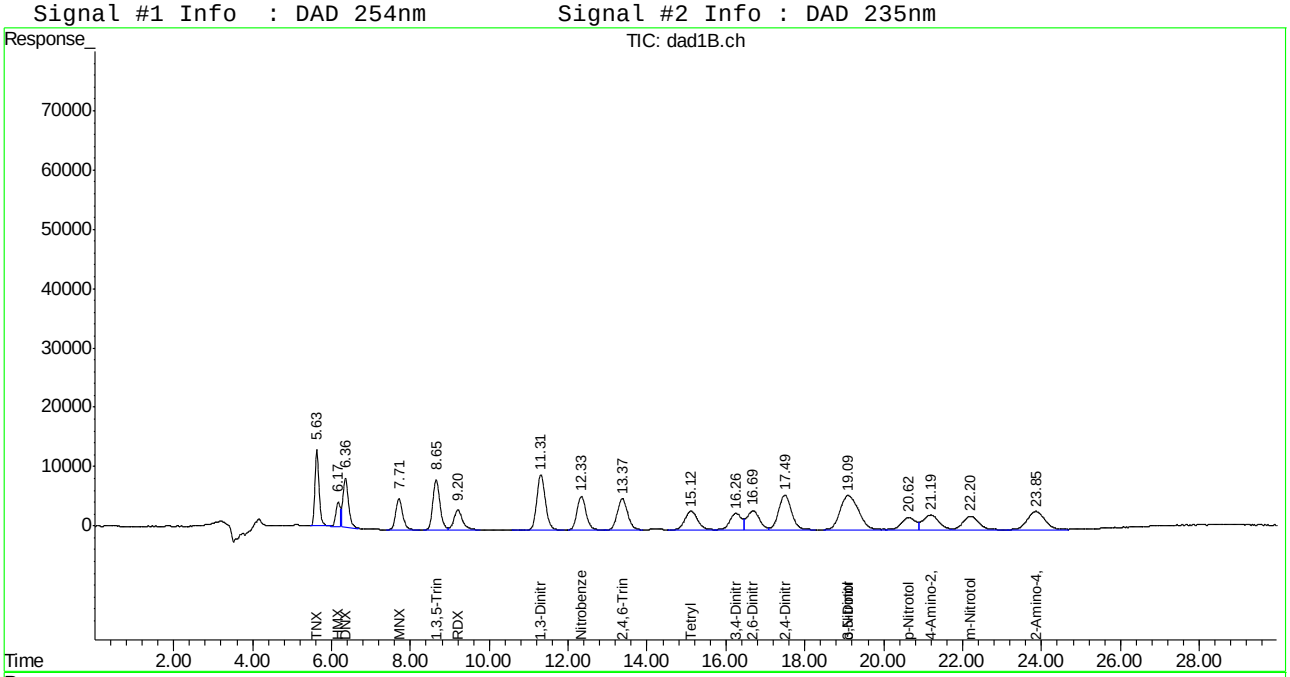
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058132.D 8330_RPB2.M Mon Jan 26 10:24:06 2015 Page 1

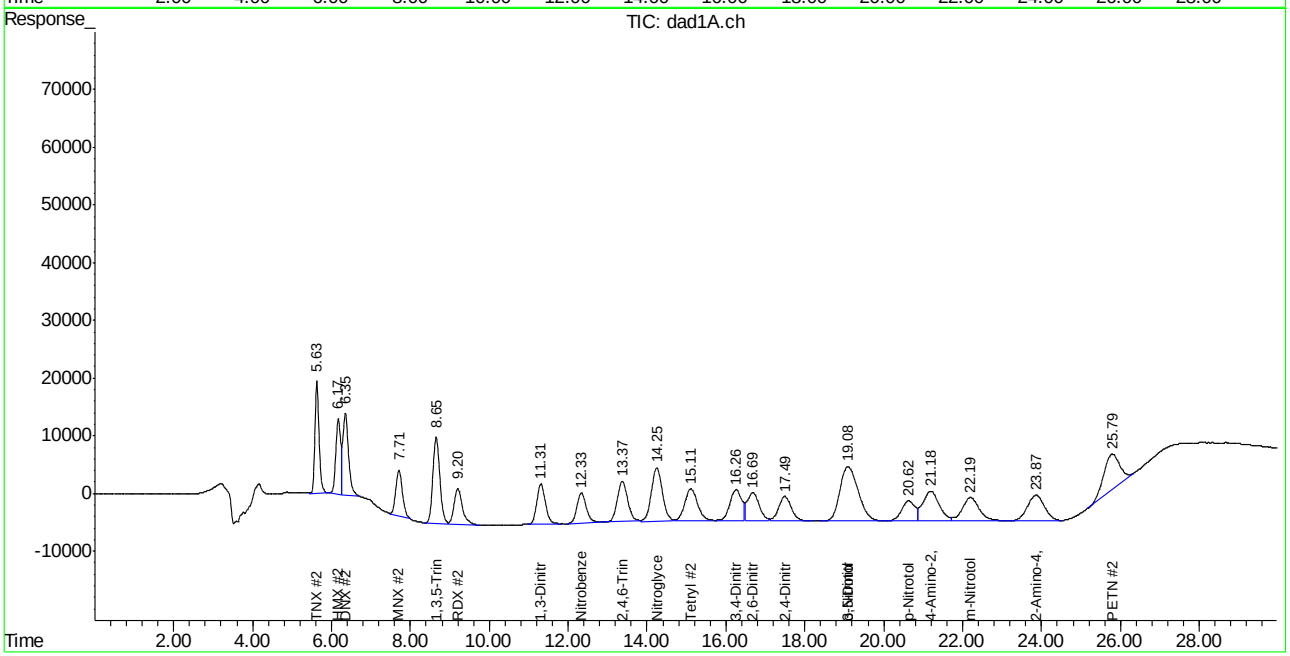
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058132.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0123RPB2\GG058132.D\dad1A.ch
Acq On : 23-Jan-2015, 12:09:40 Operator: kismetl
Sample : ic2344-100 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:16 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058132.D
Injection Time: 01/23/15 12:09
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.63	Poorly defined baseline
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.17	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
DNX		1	6.36	Poorly defined baseline
MNX		2	7.71	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.33	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.37	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.25	Poorly defined baseline
Tetryl	479-45-8	2	15.11	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.26	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.69	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.49	Poorly defined baseline
PETN	78-11-5	2	25.79	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058133.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0123RPB2\GG058133.D\dad1A.ch
Acq On : 23-Jan-2015, 12:41:45 Operator: kismetl
Sample : ic2344-200 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:35 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.26	16.25	1148438	2299678	200.574	205.557
Spiked Amount	500.000	Range	70 - 136	Recovery	=	40.11%#	41.11%#
	Target Compounds						
1)	TNX	5.63	5.63	1849359	2793346	201.233m	198.906m
2)	HMX	6.17	6.17	640643	2065990	203.107m	200.323m
3)	DNX	6.35	6.35	1573846	2595464	197.409m	191.305m
4)	MNX	7.71	7.71	1282288	1953152	203.215	211.659m
5)	1,3,5-Trinitrobe	8.66	8.66	2110036	3690543	204.123	203.840
6)	RDX	9.20	9.20	984814	1780116	208.859	202.703
7)	1,3-Dinitrobenze	11.30	11.30	2848919	2127739	205.337	197.740
8)	Nitrobenzene	12.33	12.33	1832558	1659932	203.420	199.543
9)	2,4,6-Trinitroto	13.37	13.37	1945601	2615720	200.389	207.049
10)	Nitroglycerin	0.00	14.24	0	3581991	N.D. d	1043.087
11)	Tetryl	15.11	15.11	1463289	2623789	193.099	192.318
13)	2,6-Dinitrotolue	16.69	16.69	1454046	2100872	208.715	207.315
14)	2,4-Dinitrotolue	17.50	17.50	2687153	1959256	206.159	207.209
15)	o-Nitrotoluene	19.10	19.09	3707826	5924848	201.144	200.083
16)	3,5-Dinitroanili	19.10	19.09	3707826	5924848	201.144	200.083
17)	p-Nitrotoluene	20.64	20.64	1049325	1669549	210.982	208.296
18)	4-Amino-2,6-Dini	21.19	21.19	1428679	2775065	212.010	194.166
19)	m-Nitrotoluene	22.21	22.21	1259687	2059648	205.597	195.088
20)	2-Amino-4,6-Dini	23.86	23.86	1892708	2727177	210.170	207.914
21)	PETN	0.00	25.79	0	3453440	N.D. d	2912.278m

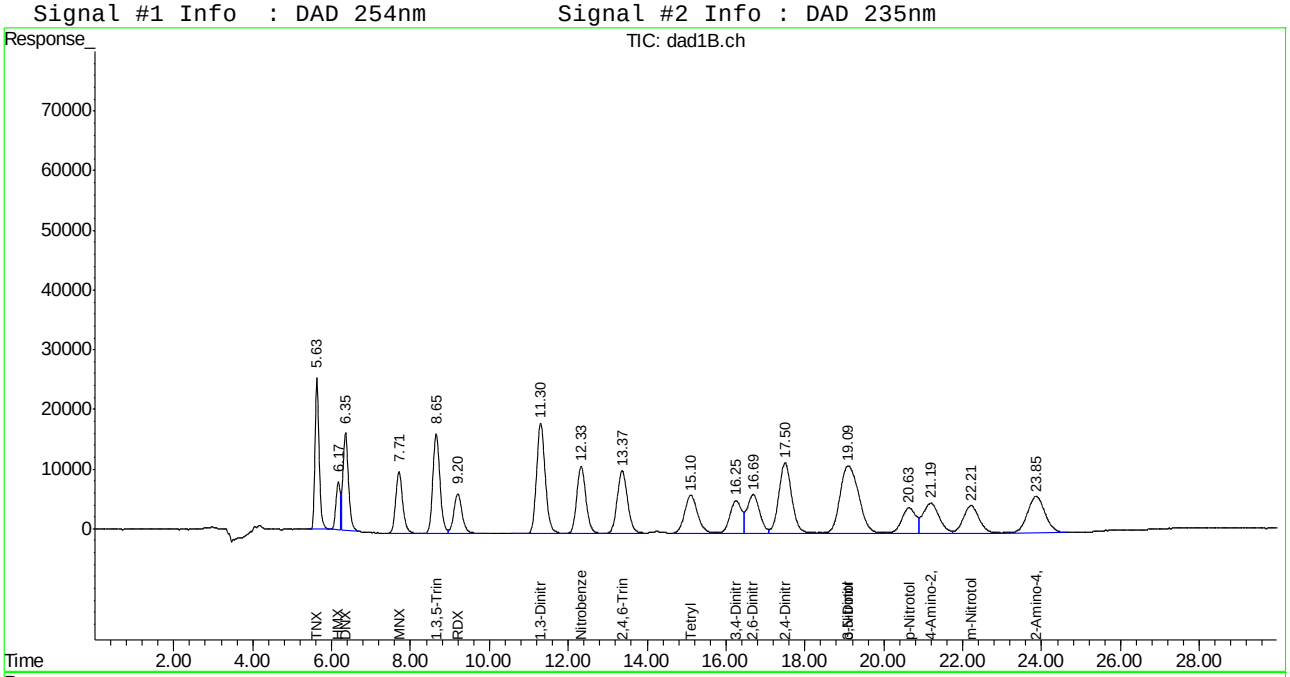
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058133.D 8330_RPB2.M Mon Jan 26 10:24:07 2015 Page 1

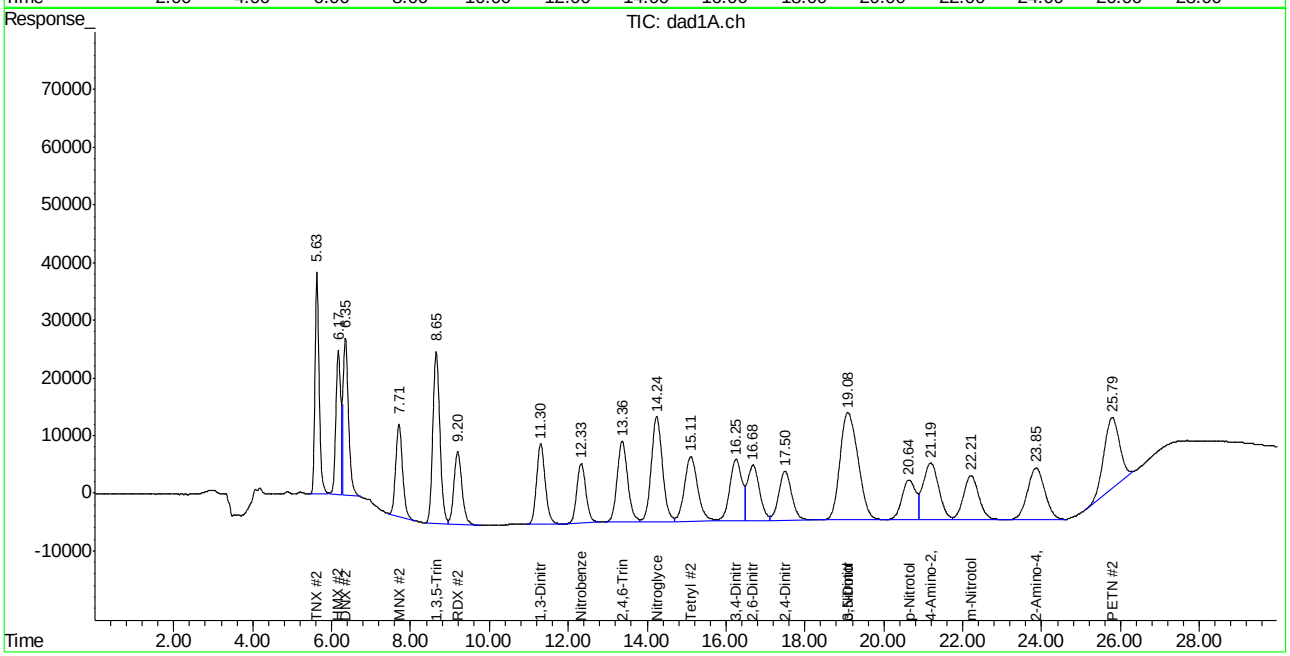
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058133.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0123RPB2\GG058133.D\dad1A.ch
Acq On : 23-Jan-2015, 12:41:45 Operator: kismetl
Sample : ic2344-200 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:18 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058133.D
Injection Time: 01/23/15 12:41
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.63	Poorly defined baseline
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.17	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		1	6.35	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
MNX		2	7.71	Poorly defined baseline
PETN	78-11-5	2	25.79	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058134.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0123RPB2\GG058134.D\dad1A.ch
Acq On : 23-Jan-2015, 13:24:24 Operator: kismetl
Sample : icc2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:36 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.24	16.24	2686715	5325586	469.233	476.028
	Spiked Amount 500.000	Range 70 - 136		Recovery =		93.85%	95.21%
	Target Compounds						
1)	TNX	5.63	5.62	4546151	6712200	494.677	477.957m
2)	HMX	6.17	6.17	1571336	5223120	498.169	506.446
3)	DNX	6.35	6.35	3990939	6748031	500.586	497.380m
4)	MNX	7.70	7.70	3116272	4816601	493.862	521.964
5)	1,3,5-Trinitrobe	8.65	8.65	5105824	9063347	493.933	500.598
6)	RDX	9.19	9.19	2340007	4439130	496.269	505.487
7)	1,3-Dinitrobenze	11.30	11.30	6829886	5121619	492.267	475.975
8)	Nitrobenzene	12.32	12.32	4435753	4087994	492.383	491.424
9)	2,4,6-Trinitroto	13.36	13.36	4668876	6193358	480.874	490.239
10)	Nitroglycerin	0.00	14.23	0	8403103	N.D. d	2447.010
11)	Tetryl	15.09	15.09	3409154	5999575	449.880	439.756
13)	2,6-Dinitrotolue	16.67	16.67	3417724	4988598	490.582	492.276
14)	2,4-Dinitrotolue	17.47	17.47	6289685	4529979	482.547	479.087
15)	o-Nitrotoluene	19.06	19.05	8808523	14343730	477.850	484.390
16)	3,5-Dinitroanili	19.06	19.05	8808523	14343730	477.850	484.390
17)	p-Nitrotoluene	20.61	20.61	2432744	4010295	489.138	500.331
18)	4-Amino-2,6-Dini	21.15	21.15	3319341	6926699	492.577	484.648
19)	m-Nitrotoluene	22.18	22.18	2964735	5134605	483.882	486.346
20)	2-Amino-4,6-Dini	23.82	23.82	4534623	6564422	503.533	500.458
21)	PETN	0.00	25.76	0	8832484	N.D. d	7448.416m

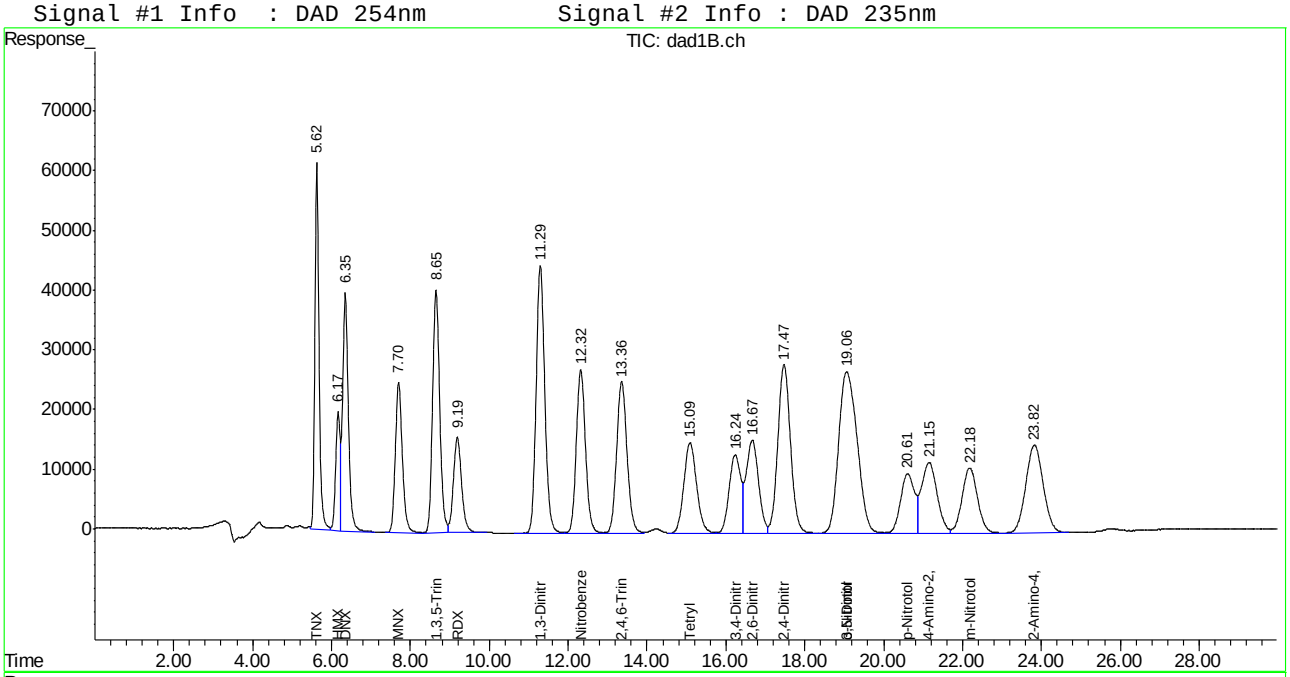
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

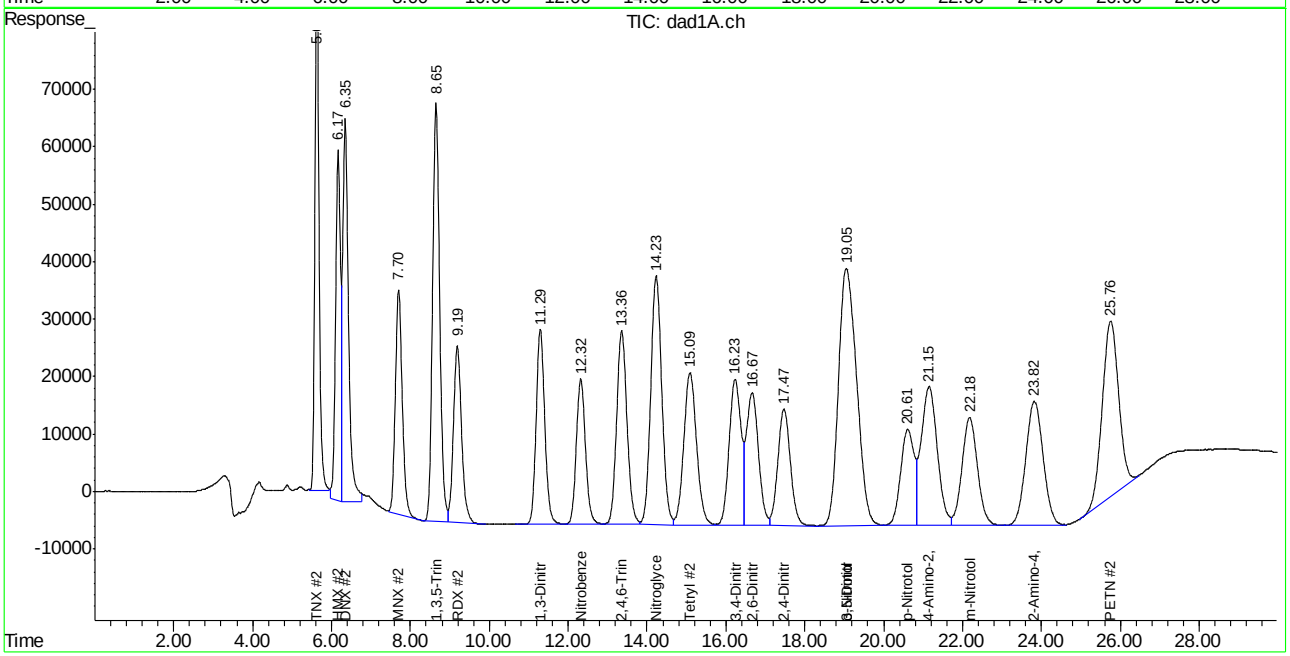
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058134.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0123RPB2\GG058134.D\dad1A.ch
Acq On : 23-Jan-2015, 13:24:24 Operator: kismetl
Sample : icc2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:22 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-ICC2344 **Method:** SW846 8330A
Lab FileID: GG058134.D **Analyst approved:** 01/26/15 10:28 Kismet Lugo
Injection Time: 01/23/15 13:24 **Supervisor approved:** 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.62	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
PETN	78-11-5	2	25.76	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058135.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0123RPB2\GG058135.D\dad1A.ch
Acq On : 23-Jan-2015, 13:56:28 Operator: kismetl
Sample : ic2344-1000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:46:07 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.25	16.25	5447323	10870955	951.372	971.702
	Spiked Amount 500.000	Range 70 - 136		Recovery =		190.27%#	194.34%#
	Target Compounds						
1)	TNX	5.63	5.63	8941708	13326461	972.968	948.940m
2)	HMX	6.17	6.17	3063429	9453062	971.216	916.591m
3)	DNX	6.36	6.35	7903726	12966594	991.370	955.735m
4)	MNX	7.71	7.71	6181895	9686833	979.698	1049.740
5)	1,3,5-Trinitrobe	8.65	8.65	10136065	18084780	980.555	998.880
6)	RDX	9.20	9.20	4634686	8957707	982.924	1020.021
7)	1,3-Dinitrobenze	11.30	11.30	13661621	10316998	984.667	958.805
8)	Nitrobenzene	12.33	12.33	8893612	8279653	987.220	995.310
9)	2,4,6-Trinitroto	13.37	13.37	9328101	12491616	960.755	988.782
10)	Nitroglycerin	0.00	14.24	0	17031236	N.D. d	4959.550
11)	Tetryl	15.10	15.10	6820887	12149351	900.100	890.521
13)	2,6-Dinitrotolue	16.68	16.68	6932374	10185100	995.077	1005.069
14)	2,4-Dinitrotolue	17.49	17.49	12734075	9171832	976.963	970.006
15)	o-Nitrotoluene	19.08	19.07	17662635	28382845	958.172	958.493
16)	3,5-Dinitroanili	19.08	19.07	17662635	28382845	958.172	958.493
17)	p-Nitrotoluene	20.63	20.63	4917478	7929714	988.729	989.325
18)	4-Amino-2,6-Dini	21.17	21.17	6680908	13541075	991.420	947.444
19)	m-Nitrotoluene	22.20	22.20	5996418	10120530	978.690	958.609
20)	2-Amino-4,6-Dini	23.83	23.83	9097215	13286577	1010.172	1012.941
21)	PETN	0.00	25.76	0	18013024	N.D. d	15190.345m

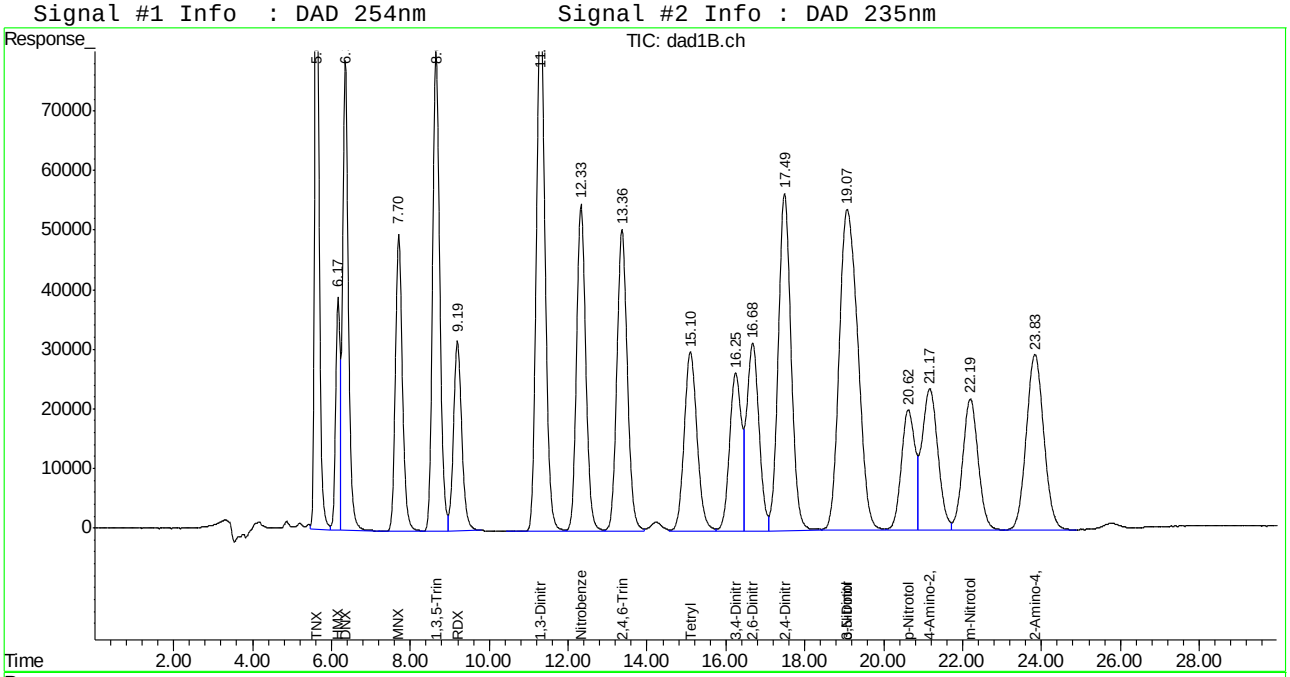
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058135.D 8330_RPB2.M Mon Jan 26 10:24:09 2015 Page 1

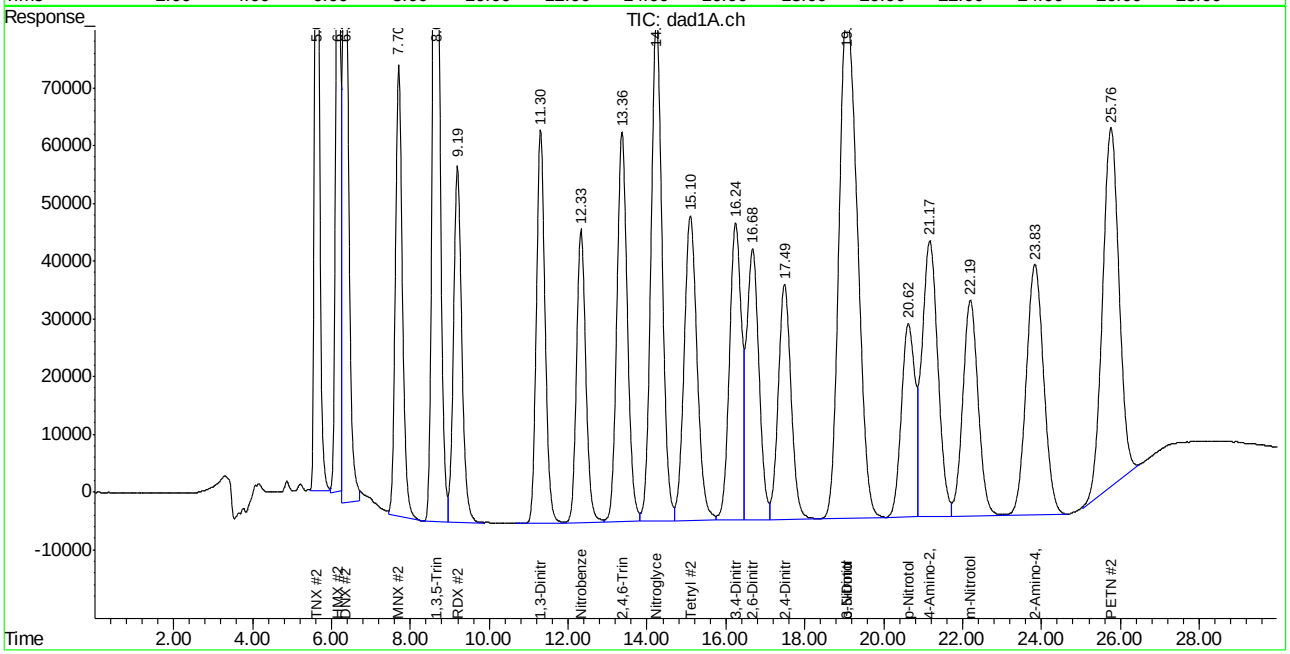
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058135.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0123RPB2\GG058135.D\dad1A.ch
Acq On : 23-Jan-2015, 13:56:28 Operator: kismetl
Sample : ic2344-1000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:47 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2344-IC2344 **Method:** SW846 8330A
Lab FileID: GG058135.D **Analyst approved:** 01/26/15 10:28 Kismet Lugo
Injection Time: 01/23/15 13:56 **Supervisor approved:** 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
PETN	78-11-5	2	25.76	Poorly defined baseline

GG058136.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058136.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\0123RPB2\GG058136.D\dad1A.ch
Acq On : 23-Jan-2015, 14:28:33 Operator: kismetl
Sample : ic2344-2000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:59:27 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.25	16.25	11235431	22504438	1962.261	2011.563
	Spiked Amount 500.000	Range 70 - 136		Recovery =		392.45%#	402.31%#
	Target Compounds						
1)	TNX	5.63	5.63	18538143	28401035	2017.179	2022.358
2)	HMX	6.17	6.17	6306668	20507653	1999.437	1988.470
3)	DNX	6.35	6.35	16446519	26358406	2062.898	1942.811m
4)	MNX	7.70	7.70	12925741	20237500	2048.452	2193.093
5)	1,3,5-Trinitrobe	8.65	8.65	21243881	37947946	2055.116	2095.986
6)	RDX	9.19	9.19	9706148	18763982	2058.480	2136.669
7)	1,3-Dinitrobenze	11.30	11.30	28248357	21400459	2036.012	1988.842
8)	Nitrobenzene	12.32	12.32	18118734	16826656	2011.239	2022.759
9)	2,4,6-Trinitroto	13.36	13.36	19451571	26030814	2003.430	2060.486
10)	Nitroglycerin	0.00	14.24	0	35347929	N.D. d	10293.430
11)	Tetryl	15.10	15.10	14706625	26340921	1940.721	1930.732
13)	2,6-Dinitrotolue	16.68	16.68	14215978	20978272	2040.571	2070.143
14)	2,4-Dinitrotolue	17.49	17.49	26296006	19179393	2017.440	2028.398
15)	o-Nitrotoluene	19.07	19.06	36531658	59146736	1981.790	1997.394
16)	3,5-Dinitroanili	19.07	19.06	36531658	59146736	1981.790	1997.394
17)	p-Nitrotoluene	20.63	20.63	10019454	16338952	2014.554	2038.476
18)	4-Amino-2,6-Dini	21.16	21.17	13915867	28362926	2065.059	1984.501
19)	m-Nitrotoluene	22.20	22.20	12240229	20954284	1997.757	1984.775
20)	2-Amino-4,6-Dini	23.83	23.83	18970837	27571441	2106.558	2101.988
21)	PETN	0.00	25.77	0	37686645	N.D. d	31781.069m

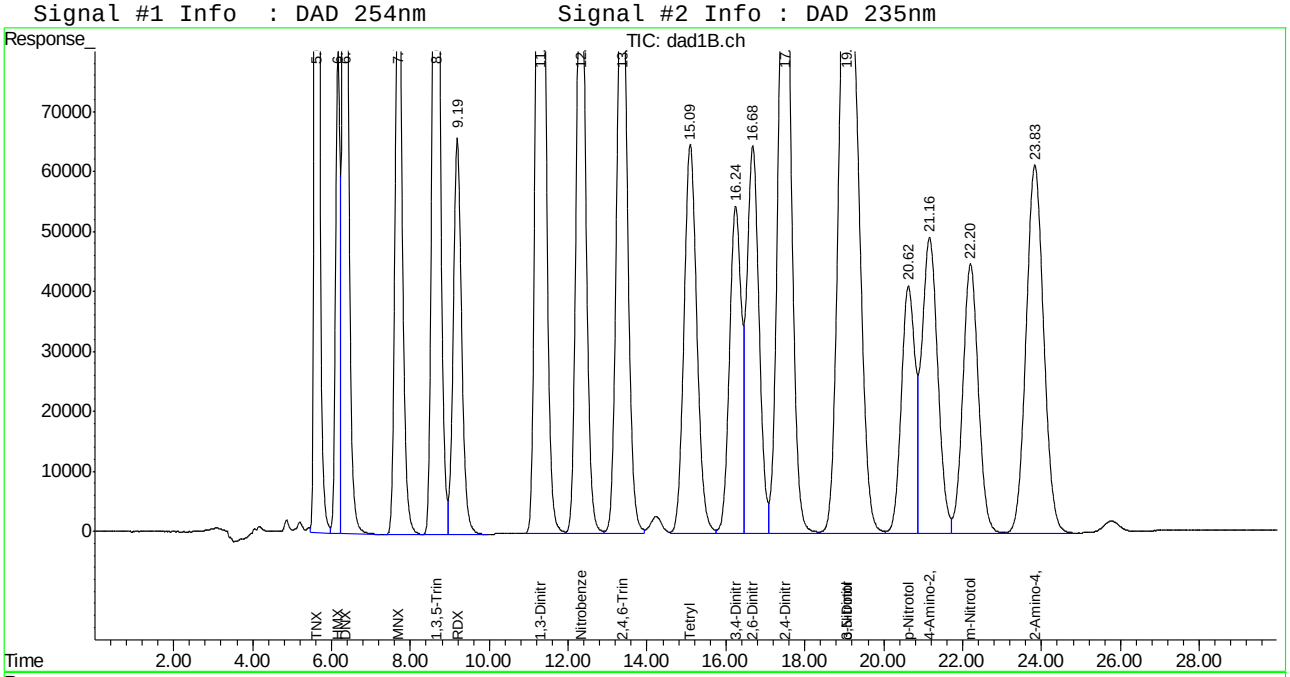
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058136.D 8330_RPB2.M Mon Jan 26 10:24:10 2015 Page 1

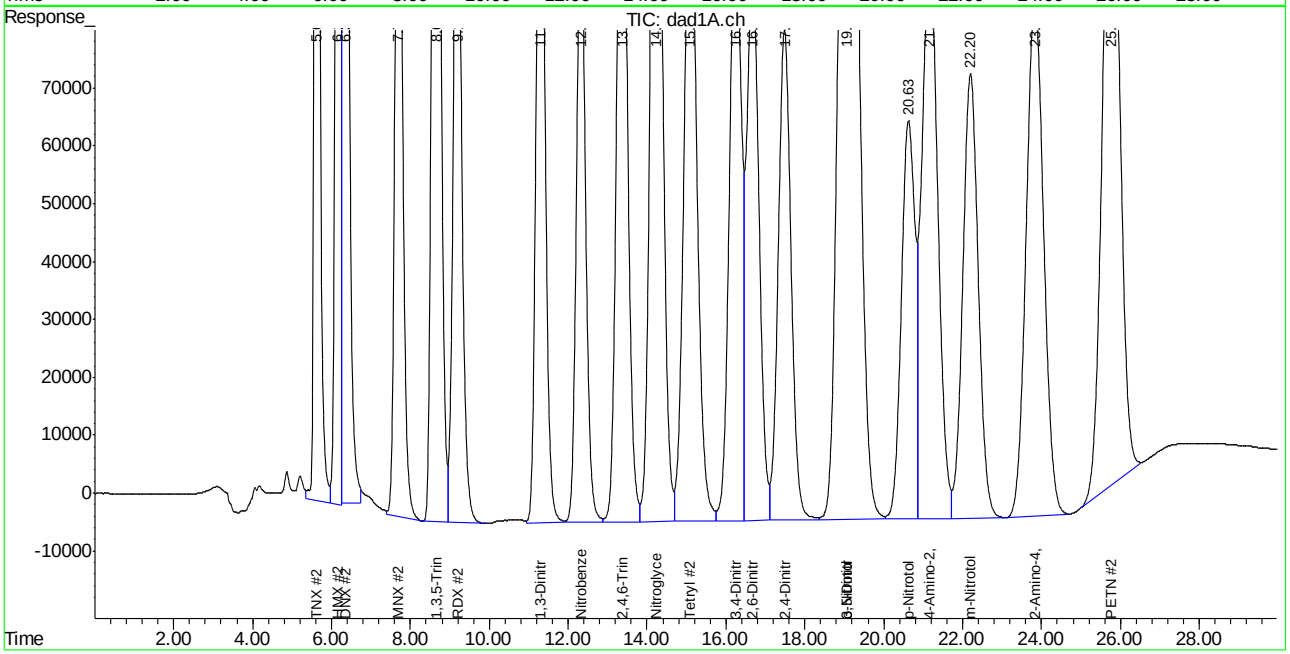
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058136.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\0123RPB2\GG058136.D\dad1A.ch
Acq On : 23-Jan-2015, 14:28:33 Operator: kismetl
Sample : ic2344-2000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 15:00 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058136.D
Injection Time: 01/23/15 14:28
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	6.35	Poorly defined baseline
PETN	78-11-5	2	25.77	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058137.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0123RPB2\GG058137.D\dad1A.ch
Acq On : 23-Jan-2015, 15:00:38 Operator: kismetl
Sample : icv2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 26 09:33:40 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.62	5.61	4800362	7154094	511.391	510.269m
2)	HMX	6.16	6.16	1763222	5819736	546.012	575.360m
3)	DNX	6.34	6.33	4310117	6944726	540.209	498.200m
4)	MNX	7.68	7.68	3311977	5078940	516.193	535.821
5)	1,3,5-Trinitrobe	8.64	8.64	5462753	9725256	520.818	533.767
6)	RDX	9.17	9.17	2464771	4701082	512.005	529.100
7)	1,3-Dinitrobenze	11.28	11.28	6559314	4919909	460.751	456.291
8)	Nitrobenzene	12.30	12.30	4763461	4470580	525.347	528.854
9)	2,4,6-Trinitroto	13.35	13.35	4232479	5760743	437.679	447.996
10)	Nitroglycerin	0.00	14.22	0	8817979	N.D. d	2522.228
11)	Tetryl	15.08	15.08	3254432	6058686	460.091	480.949
13)	2,6-Dinitrotolue	16.66	16.66	3858649	6059741	522.720	593.333
14)	2,4-Dinitrotolue	17.47	17.47	6643888	4876989	503.053	516.613
15)	o-Nitrotoluene	19.05	19.04	9029382	14744681	495.883	497.991
16)	3,5-Dinitroanili	19.05	19.04	9029382	14744681	495.883	497.991
17)	p-Nitrotoluene	20.62	20.62	2599311	4241861	494.691	515.249
18)	4-Amino-2,6-Dini	21.14	21.15	3472778	7305131	502.069	513.409
19)	m-Nitrotoluene	22.19	22.19	3328115	5923892	535.933	542.230
20)	2-Amino-4,6-Dini	23.81	23.81	4812604	6947682	513.305	514.778
21)	PETN	0.00	25.78	0	9401129	N.D. d	2525.198m

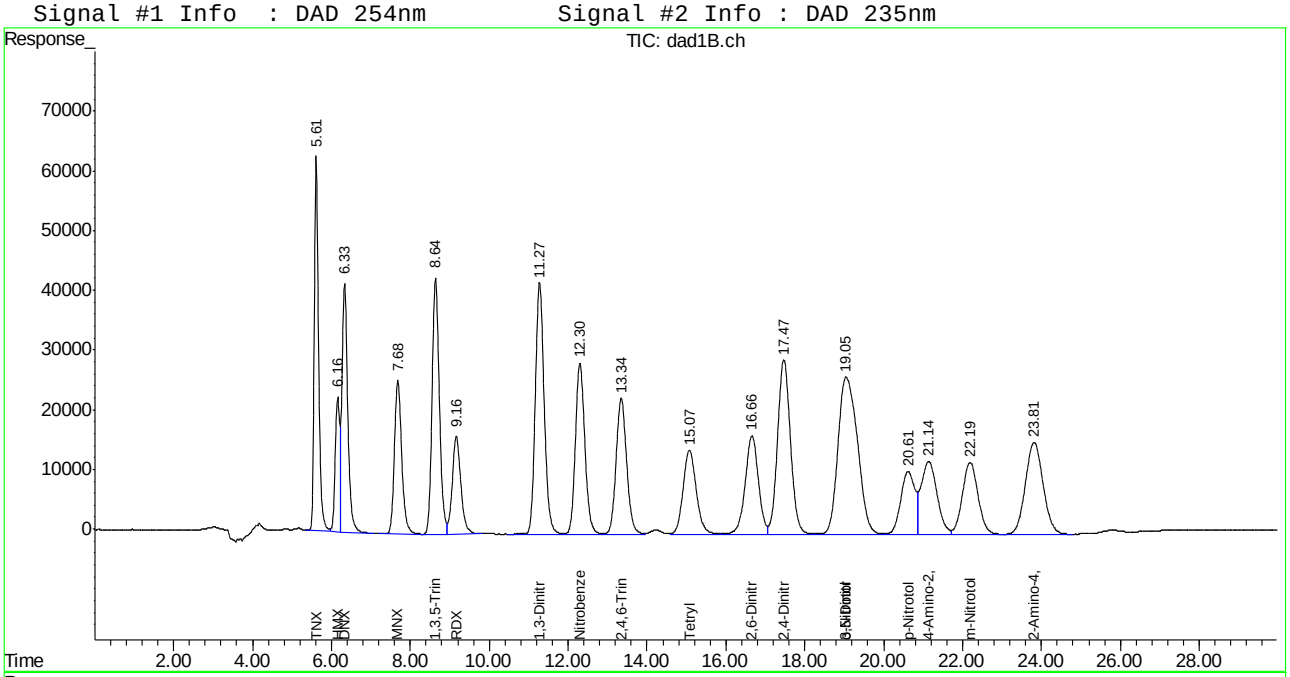
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

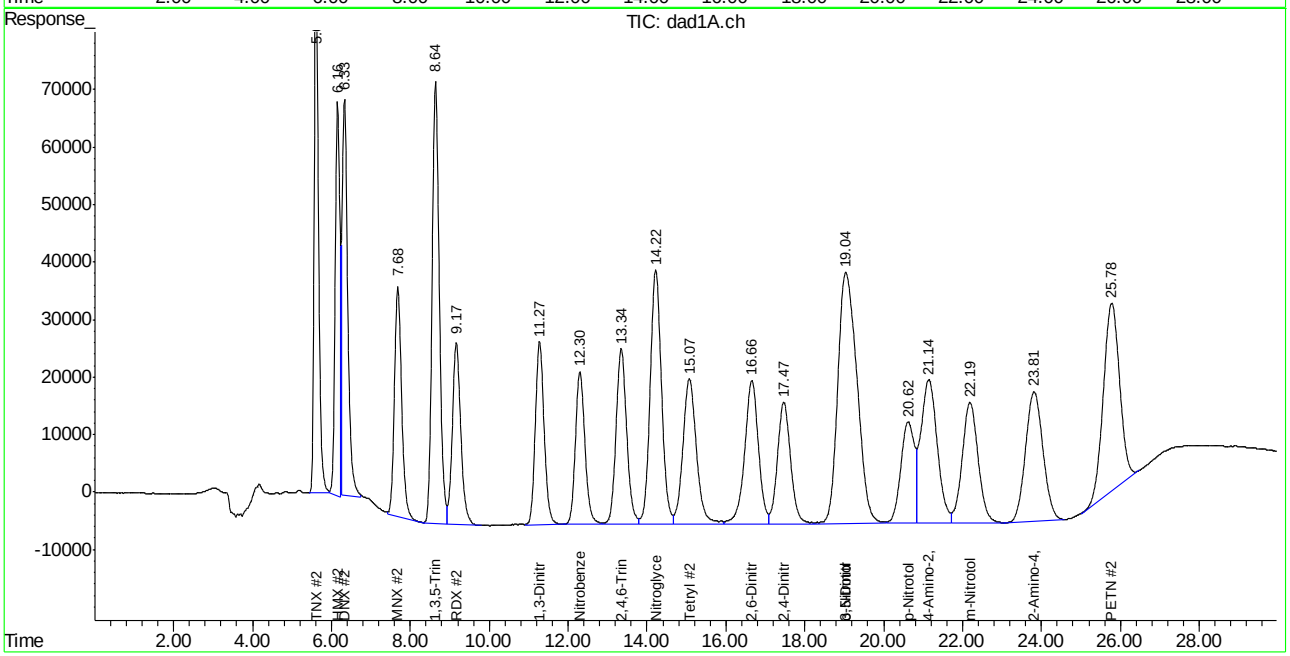
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058137.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0123RPB2\GG058137.D\dad1A.ch
Acq On : 23-Jan-2015, 15:00:38 Operator: kismetl
Sample : icv2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 26 9:36 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-ICV2344 **Method:** SW846 8330A
Lab FileID: GG058137.D **Analyst approved:** 01/26/15 10:28 Kismet Lugo
Injection Time: 01/23/15 15:00 **Supervisor approved:** 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.61	Poorly defined baseline
HMX	2691-41-0	2	6.16	Poorly defined baseline
DNX		2	6.33	Poorly defined baseline
PETN	78-11-5	2	25.78	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058408.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058408.D\dad1A.ch
Acq On : 23-Feb-2015, 10:22:02 Operator: kismetl
Sample : cc2344-500 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:45 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.34	16.34	2735187	5916919	472.933	532.108
	Spiked Amount 500.000	Range 72 - 145		Recovery =		94.59%	106.42%
	Target Compounds						
1)	TNX	5.64	5.64	4549576	6869183	484.675	489.947m
2)	HMX	6.21	6.21	1492701	5288287	462.241	522.819
3)	DNX	6.38	6.38	4095999	7288138	513.372	522.835
4)	MNX	7.73	7.73	3144670	4958710	490.117	523.136
5)	1,3,5-Trinitrobe	8.65	8.65	5224160	9289860	498.071	509.871
6)	RDX	9.23	9.23	2329144	4476493	483.832m	503.823m
7)	1,3-Dinitrobenze	11.33	11.33	7034500	5367213	494.130	497.776
8)	Nitrobenzene	12.34	12.35	4370133	4195991	481.968	496.371
9)	2,4,6-Trinitroto	13.39	13.39	4804575	6555742	496.840	509.821
10)	Nitroglycerin	0.00	14.28	0	8890284	N.D. d	2542.910
11)	Tetryl	15.15	15.15	3396908	6500300	480.233	516.005
13)	2,6-Dinitrotolue	16.74	16.73	3563311	5547186	482.711	543.147
14)	2,4-Dinitrotolue	17.55	17.55	6517949	4986086	493.517	528.169m
15)	o-Nitrotoluene	19.12	19.11	8729657	14534759	479.423	490.901
16)	3,5-Dinitroanili	19.12	19.11	8729657	14534759	479.423	490.901
17)	p-Nitrotoluene	20.68	20.68	2423273	3910900	461.188	475.048
18)	4-Amino-2,6-Dini	21.27	21.27	3496859	6979318	505.550	490.510
19)	m-Nitrotoluene	22.25	22.25	2948945	4883993	474.874	447.045
20)	2-Amino-4,6-Dini	23.94	23.94	4669149	6620769	498.004	490.556
21)	PETN	0.00	25.86	0	8996428	N.D. d	2416.493m

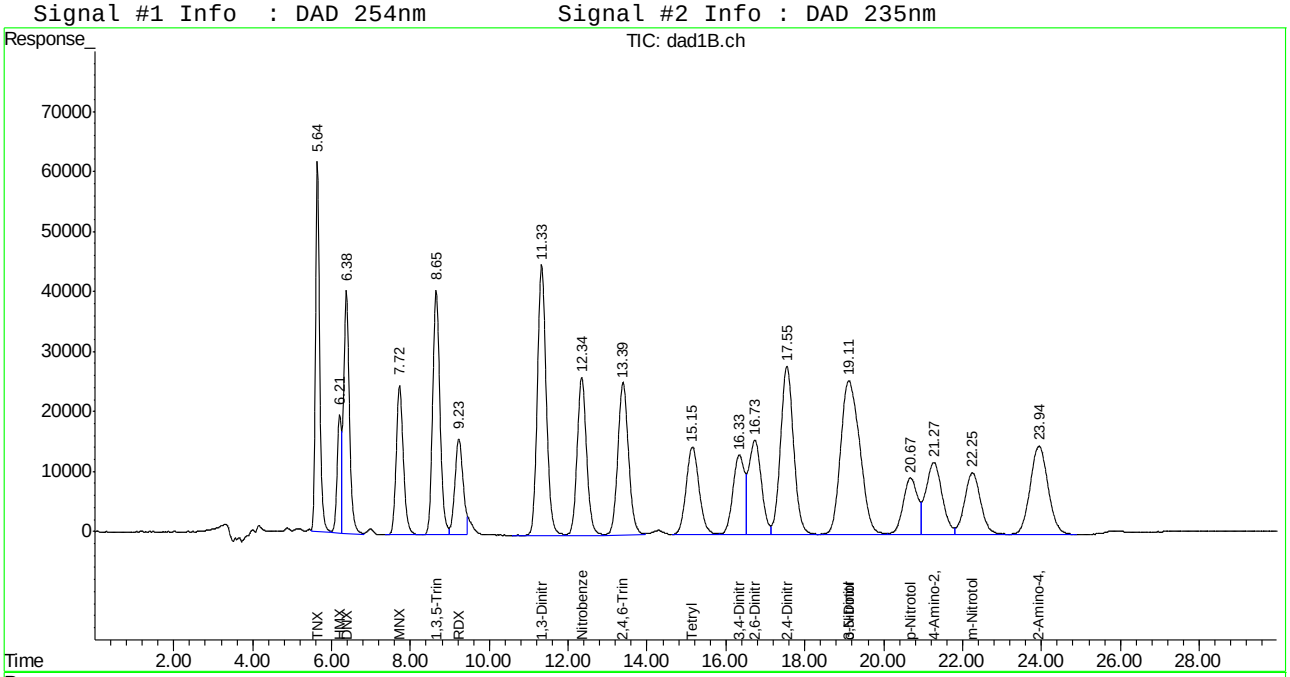
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058408.D 8330RPB.M Wed Feb 25 10:31:25 2015 Page 1

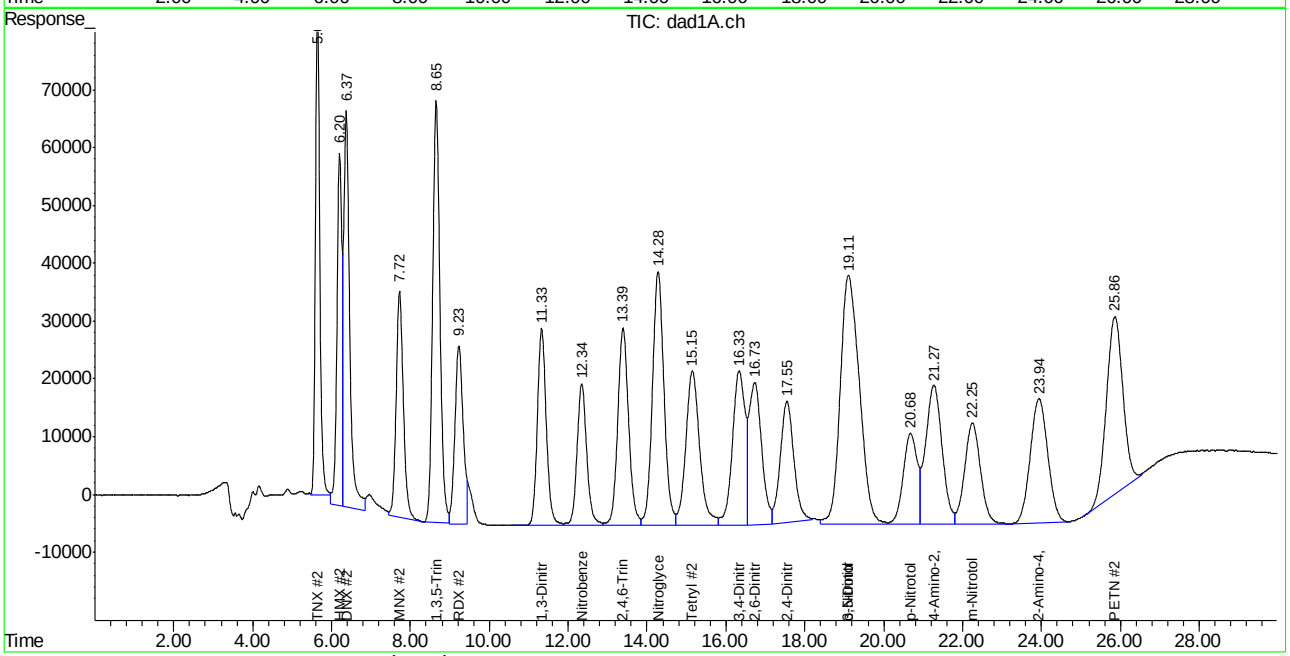
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058408.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058408.D\dad1A.ch
Acq On : 23-Feb-2015, 10:22:02 Operator: kismetl
Sample : cc2344-500 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:07 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2361-CC2344 **Method:** SW846 8330A
Lab FileID: GG058408.D **Analyst approved:** 02/25/15 10:45 Kismet Lugo
Injection Time: 02/23/15 10:22 **Supervisor approved:** 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.64	Poorly defined baseline
RDX	121-82-4	1	9.23	Overlapping peak
RDX	121-82-4	2	9.23	Overlapping peak
2,4-Dinitrotoluene	121-14-2	2	17.55	Poorly defined baseline
PETN	78-11-5	2	25.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058412.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058412.D\dad1A.ch
Acq On : 23-Feb-2015, 12:42:53 Operator: kismetl
Sample : ecc2344-1000 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:49 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.34	16.34	5362587	10851362	927.230	975.861
Spiked Amount	500.000	Range	72 - 145	Recovery	=	185.45%#	195.17%#
	Target Compounds						
1)	TNX	5.65	5.65	8924411	13605232	950.734	970.399
2)	HMX	6.21	6.21	2895200	9837335	896.548	972.554
3)	DNX	6.38	6.38	8112971	13934123	1016.840	999.604
4)	MNX	7.74	7.74	6240840	9602216	972.676	1013.019
5)	1,3,5-Trinitrobe	8.66	8.66	10332472	18447078	985.097	1012.462
6)	RDX	9.24	9.24	4671360	8952871	970.379	1007.632
7)	1,3-Dinitrobenze	11.33	11.33	13751724	10434173	965.973	967.705
8)	Nitrobenzene	12.34	12.34	8987754	8385045	991.231	991.921
9)	2,4,6-Trinitroto	13.39	13.39	9481262	12554537	980.454	976.330
10)	Nitroglycerin	0.00	14.29	0	17033431	N.D. d	4872.114
11)	Tetryl	15.16	15.16	7020595	12517599	992.527	993.668
13)	2,6-Dinitrotolue	16.74	16.73	6974279	10202778	944.785	998.994
14)	2,4-Dinitrotolue	17.54	17.54	12751287	9363467	965.485	991.859
15)	o-Nitrotoluene	19.11	19.10	17252188	28213161	947.470	952.878
16)	3,5-Dinitroanili	19.11	19.10	17252188	28213161	947.470	952.878
17)	p-Nitrotoluene	20.67	20.67	4926749	8274285	937.639	1005.059
18)	4-Amino-2,6-Dini	21.26	21.27	6697999	13888530	968.348	976.094
19)	m-Nitrotoluene	22.25	22.25	6030054	10613355	971.031	971.470
20)	2-Amino-4,6-Dini	23.94	23.94	9176668	13182821	978.769	976.761
21)	PETN	0.00	25.84	0	17432400	N.D. d	4682.444m

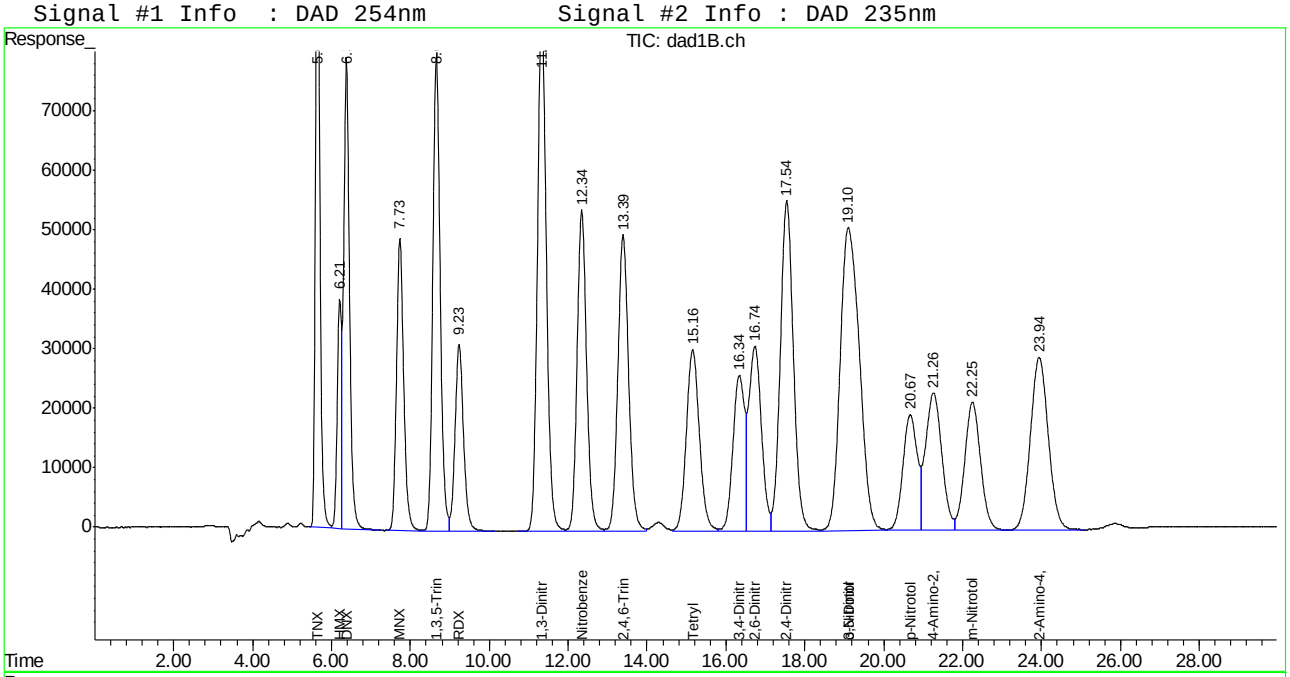
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058412.D 8330RPB.M Wed Feb 25 10:31:29 2015 Page 1

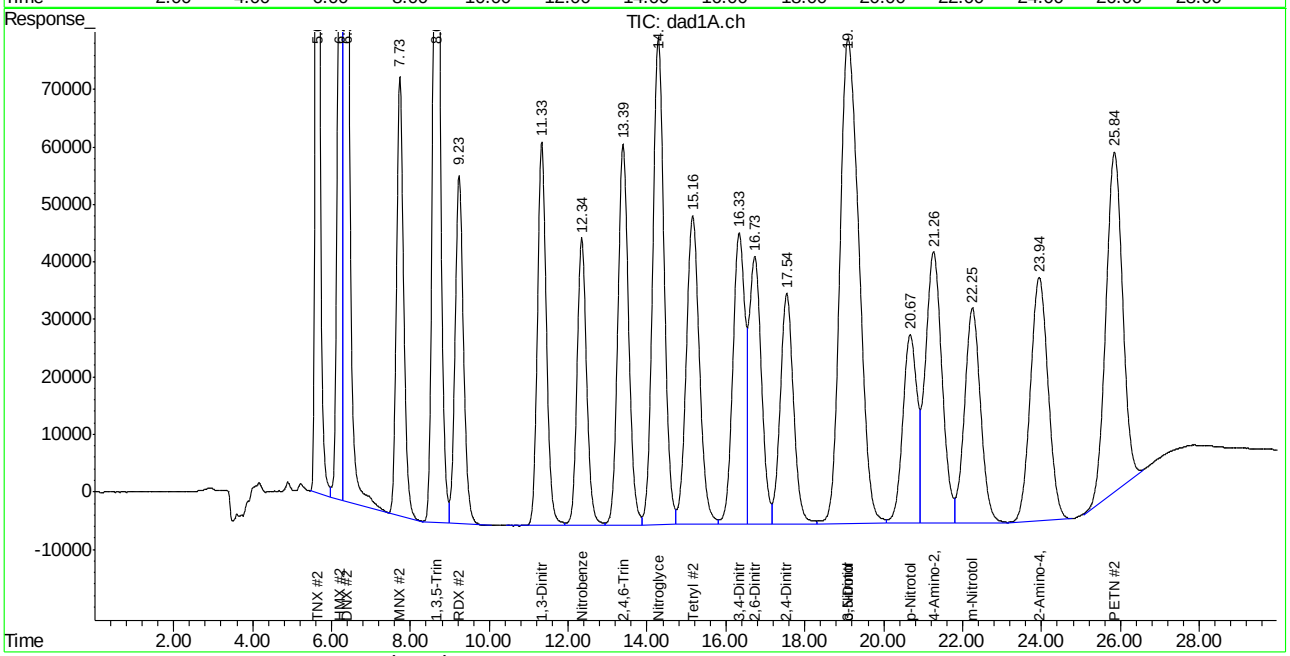
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058412.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058412.D\dad1A.ch
Acq On : 23-Feb-2015, 12:42:53 Operator: kismetl
Sample : ecc2344-1000 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:13 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2361-ECC2344 **Method:** SW846 8330A
Lab FileID: GG058412.D **Analyst approved:** 02/25/15 10:45 Kismet Lugo
Injection Time: 02/23/15 12:42 **Supervisor approved:** 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	25.84	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330-0107 M
CALIB. DATE:	01/07/15
RUN BATCH: GBB	1235

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	254

JL 01/23/15

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045812	1	solvent	8330	—	—		ND
BB 13	2	~~cc 1235-500~~ cc 1235-1000		LC509	1:1	PDB	Pass
BB 14	3	ic 1235-20			50+450 or 50+450	PDB	✓
BB 15	4	ic 1235-50			10+390	PDB oMP52	✓
BB 16	5	ic 1235-100			20+475	HMX or PDB oMP52	✓
BB 17	6	ic 1235-200			50+450	PDB	✓
BB 18	7	icc 1235-500			1:4	PDB	✓
BB 19	8	ic 1235-1000			1:1	PDB	✓
BB 20	9	ic 1235-2000			1x	PDB	✓ Pass
BB 21	10	icv 1235-500		LC497 E4944 LC498 E5029 *		PDB	✓ Pass
BB 22	3	cc 1235-20		LC509	50+450 or 50+450	PDB	✓ Pass 4AJ52
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

* LC 497 25ml
LC 510 25ml + 920
E 4944 10ml
E 5029 20ml

Analyst's Signature: Kimit Lyo

ACCUTEST LABORATORIES SE

DATE:	02/20/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330_0107M
CALIB. DATE:	01/23/15
RUN BATCH: GBB	1248

ANALYST:	TC
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	270

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 046103	1	solvent	8330	—	—		ND
BB 04	2	cc1235-500		LC511	1:4	PDB	Pass
BB 05	4	test		—	10+390		✓ RM
BB 06	5	OP55030-bs		OP55030	1x	PDB	✓
BB 07	6	OP55030-MB				PDB	ND
BB 08	7	FA22032-1				PDB	✓
BB 09	8	OP55030-MS				PDB	✓
BB 10	9	OP55030-MSD				PDB	✓
BB 11	10	FA22032-2				PDB	✓ POSS NG
BB 12	11	FA22032-3				PDB	ND
BB 13	12	FA21585-18				PDB	✓
BB 14	13	FA22032-4				PDB	ND
BB 15	3	cc1235-1000		LC511	1:1	PDB	Pass
BB 16	1	ccb		—	—		ND
BB 17	14	FA21417-1		OP55030	1x	PDB	✓
BB 18	15	FA21417-1				PDB	✓
BB 19	16	FA21417-1				PDB	✓
BB 20	17	FA21417-1				PDB	✓
BB 21	18	FA21417-1				PDB	✓
BB 22	19	FA21417-1				PDB	✓

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	02/20/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 B
PROC. METHOD:	8330-0107.M
CALIB. DATE:	01/23/15
RUN BATCH: GBB	1248

ANALYST:	KL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	270

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 046123	20	FA 21417-1	8330	OP54030	1x	PDB	✓
BB 24	21	mdl check				PDB	✓
BB 25	22	rl check				PDB	✓
BB 26	3	CC1235-1000		LC511	1:1	PDB	Pass
BB 27	1	cal		—	—		ND
BB 28	23	FA 22035-5		OP54030	1x	PDB	✓ poss NG
BB 29	24	FA 22035-6				PDB	ND
BB 30	25	FA 22035-7				PDB	ND
BB 31	26	ccc 1235-1000		LC511	1:1	PDB	Pass
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

KL 02/23/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyp

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	01/23/15
RUN BATCH: GGG	2344

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	120

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058128	1	solvent	8330	—	—		ND
GG 29	2	CC2342-1000		LC509	1:1		PETNT
GG 30	3	iC 2344-20			50+450 BF 50+450	BDB 2,4 PN 4A MN PETN MP SL	✓
GG 31	4	iC 2344-50			10+390	RDX OP PDB	✓
GG 32	5	iC 2344-100			25+475	PDB	✓
GG 33	6	iC 2344-200			50+450	PDB	✓
GG 34	7	ICC 2344-500	↓		1:4	PDB	✓
GG 35	8	iC 2344-1000			1:1	PDB	✓
GG 36	9	iC 2344-2000		↓	1x	PDB	✓
GG 37	10	ICV 2344-500		LC497 E4944 LC510 E5029 *		PDB	Pam 2,6 ↑ SL HMX ↑ SL
GG 38	3	CC2344-20		LC509	50+450 BF 50+450	PDB	PETN ↓ HMX-DN ↑ SL
GG 39	11	OP54641-MB		OP54641	1x		ND
GG 40	12	C39975-1A Ct					ND let DNC
GG 41	13	C39975-3ACt					ND let DNC
GG 42	14	C39975-4ACt					ND let, PETN DNC
GG 43	15	C39990-1ACt					ND RDX let 3rd MN (1x) PETN primary
GG 44	16	C39990-2ACt			↓		ND NB let, PETN
GG 45	17	C39990-2ACt			1:4		ND
GG 46	18	C39990-3ACt			1x		ND let PETN
GG 47	19	C39990-3ACt	↓	↓	1:4		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PIL Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: Kimmit Lye

* LC497 25ml, LC510 25ml, E4944 4ml } +920 ** C37975-1A-4A, C37990-1A-4A

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	01/23/15
RUN BATCH: GGG	2344

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	120

JL 01/26/15

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058148	20	~~C37990-4Act~~	8330	OP54641	1X		ND 1,3, 4t, PETN DWC
GG 49	21	ccc2344-1000	↓	LC509	1:1	PDD	Pass
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

JL 01/26/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

Analyst's Signature: Kristi Lyo

ACCUTEST LABORATORIES SE

DATE:	02/23/15
COLUMN TYPE:	Bond RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	01/23/15
RUN BATCH: GGG	2361

ANALYST:	MC
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	190

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058407	1	solvent	8330	—	—		ND
GG 08	2	cc2344-500		LC511	1:4	RDX08, PDB	Pass
GG 09	4	op55030-mb		op55030	1x	PDB	ND
GG 10	5	FA22032-1ct				RDX MP 52	✓ HMX[18]
GG 11	6	FA21585-18ct				PDB RDX08 SUMOP52	✓ MI for ON
GG 12	2	ccc2344-1000		LC511	1:1	PDB	Pass
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

MC 02/24/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE **EXP SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B or Method (circle)

Date/Time: 02/19/15 1430 Started {mm/dd/yy 24:00}
MB 03/20/15

Therm. ID: 90752772 Corr. Factor (±℃): -1
Bath Temp. (High) ℃: 13 / 11 {obs/corr}

Date/Time: 02/20/15 1000 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): UB 1
Shaker Table ID (8330B): _____

Batch#: OP55030 Ext. By: MB Vialed By: MB Balance ID: ADUPRO 5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 55030 MB	X	2.00	0.5 ml		20 ml	
OP 55030 BS	X	2.00		0.5 ml		
FA22032-1	1	2.32				
-2	1	2.40				
-3	1	2.04				
-4	1	2.16				
-5	1	2.13				
-6	1	2.10				
-7	1	2.14				
MDL 1	X	2.00	40 ml	20+20 16 ml		FA21417-1
2	X					-2
3	X					-3
4	X					FA21418-1
5	X					
6	X					
7	X					
MDL VER. 1	X		20 ml	10+10 8 ml		
RL VER.	X		80 ml	40+40 32 ml		
FA21585-1B	1	2.00	0.5 ml			
				20		
			MB 02/19/15			
FA22032-1 MS	1	2.09	0.5 ml	0.5 ml	20 ml	
-1 MSD	1	2.06	↓	↓	↓	
DUP						
TRP						

Comments: ES092 100 ppm 08/13/15 8332 MDL SPIKE

Surr. ID: ES036I Conc: 20 ppm Exp. Date: 06/23/15 Inj. By: MB Ver. By MB

Spk.1 ID: ES04a Conc: 20 ppm Exp. Date: 06/05/15 Inj. By: MB Ver. By MB

Spk.2 ID: ES02a Conc: 25 ppm Exp. Date: 06/11/15 Inj. By: MB Ver. By MB

Acetonitrile Lot # 066640 Methanol Lot # / Water Lot# 076032 HPLC

Syringe Filter Lot# 130925007 Reagent # CS1 Reagent # /

MB 03/20/15

Relinquished By: [signature] Date: 02/20/15

Accepted By: [signature] Date: 2/20/15

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:58	MA12213-STD1	1		STDA
10:02	MA12213-STD2	1		STDB
10:05	MA12213-STD3	1		STDC
10:08	MA12213-STD4	1		STDD
10:13	MA12213-HSTD1	1		
10:20	MA12213-ICV1	1		
10:31	MA12213-ICB1	1		
10:35	MA12213-CRIA1	1		
10:41	MA12213-ICSA1	1		
10:48	MA12213-ICSAB1	1		
10:54	MA12213-CCV1	1		
11:03	MA12213-CCB1	1		
11:07	ZZZZZZ	1		
11:12	ZZZZZZ	1		
11:16	ZZZZZZ	1		
11:20	MP28546-MB1	1		
11:25	MP28546-B1	1		
11:29	FA22044-1	1		(sample used for QC only; not part of login FA22032)
11:33	MP28546-D1	1		
11:38	MP28546-SD1	5		
11:42	MP28546-PS1	1		
11:47	MP28546-S1	1		
11:51	MA12213-CCV2	1		
11:55	MA12213-CCB2	1		
11:59	MP28546-S2	1		
12:04	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:21	ZZZZZZ	1		
12:26	ZZZZZZ	1		
12:30	ZZZZZZ	1		
12:34	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:39	ZZZZZZ	1		
12:43	MA12213-CCV3	1		
12:47	MA12213-CCB3	1		
12:52	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:18	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:36	MA12213-CCV4	1		
13:40	MA12213-CCB4	1		
14:04	MA12213-CCV5	1		
14:11	MA12213-CCB5	1		
14:50	MP28549-MB1	1		
14:55	MP28549-B1	1		
14:59	MA12213-CCV6	1		
15:03	MA12213-CCB6	1		
15:08	FA22009-2	1		(sample used for QC only; not part of login FA22032)
15:12	MP28549-D1	1		
15:16	MP28549-SD1	5		
15:21	MP28549-PS1	1		
15:25	MP28549-S1	1		
15:29	MP28549-S2	1		
15:34	ZZZZZZ	1		
15:38	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:51	MA12213-CCV7	1		
15:55	MA12213-CCB7	1		
16:00	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:04	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:13	ZZZZZZ	1		
16:18	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:26	ZZZZZZ	5		
16:31	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	MA12213-CCV8	1		
16:48	MA12213-CCB8	1		
16:53	ZZZZZZ	1		
16:57	ZZZZZZ	1		
17:02	FA22032-1	1		
17:06	FA22032-2	1		
17:11	FA22032-3	1		
---------->	Last reportable sample/prep for job FA22032			
17:16	MA12213-CRIA2	1		
17:20	MA12213-ICSA2	1		
17:25	MA12213-ICSAB2	1		
17:29	MA12213-CCV9	1		
17:33	MA12213-CCB9	1		
---------->	Last reportable CCB for job FA22032			

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:58	MA12213-STD1	6755	58753	5106	3504
10:02	MA12213-STD2	6648	57961	5103	3282
10:05	MA12213-STD3	6361	55930	5027	2994
10:08	MA12213-STD4	6113	54422	5117	2775
10:13	MA12213-HSTD1	6116	55000	4950	2782
10:20	MA12213-ICV1	6256	55411	4993	2965
10:31	MA12213-ICB1	6549 R	58178 R	5122 R	3458 R
10:35	MA12213-CRIA1	6487	56745	5056	3326
10:41	MA12213-ICSA1	5793	49651	4860	2649
10:48	MA12213-ICSAB1	5720	49660	4741	2591
10:54	MA12213-CCV1	6215	55186	5031	2969
11:03	MA12213-CCB1	6478	57685	5019	3466
11:07	ZZZZZZ	6216	55336	5034	3172
11:12	ZZZZZZ	6242	54960	5045	3185
11:16	ZZZZZZ	6109	54937	4906	3067
11:20	MP28546-MB1	6520	57998	4957	3409
11:25	MP28546-B1	6318	55635	4912	3083
11:29	FA22044-1	6480	57314	4987	3313
11:33	MP28546-D1	6447	57029	4970	3308
11:38	MP28546-SD1	6502	57725	4997	3394
11:42	MP28546-PS1	6448	56509	4990	3235
11:47	MP28546-S1	6316	55427	4973	3065
11:51	MA12213-CCV2	6251	55026	4902	2956
11:55	MA12213-CCB2	6603	57949	4926	3437
11:59	MP28546-S2	6390	55332	4889	3059
12:04	ZZZZZZ	6584	58271	4901	3403
12:08	ZZZZZZ	6608	58783	4992	3440
12:12	ZZZZZZ	6609	58638	4978	3437
12:17	ZZZZZZ	6628	58786	5028	3447
12:21	ZZZZZZ	6666	58917	4949	3441
12:26	ZZZZZZ	6679	58799	4892	3441
12:30	ZZZZZZ	6731	59215	4943	3455
12:34	ZZZZZZ	6736	59439	4979	3458

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:39	ZZZZZZ	6736	59429	5003	3468
12:43	MA12213-CCV3	6379	55750	4951	2985
12:47	MA12213-CCB3	6678	58747	4980	3462
12:52	ZZZZZZ	6771	59188	4891	3454
12:56	ZZZZZZ	6624	58080	4938	3324
13:01	ZZZZZZ	7185	62828	5324	3335
13:05	ZZZZZZ	9635 !	83753 !	7168 !	3275
13:09	ZZZZZZ	7855	68338	5892	3220
13:14	ZZZZZZ	6724	59352	4990	3393
13:18	ZZZZZZ	6610	57286	4875	3217
13:23	ZZZZZZ	6749	59136	4907	3444
13:27	ZZZZZZ	6767	59341	4912	3459
13:36	MA12213-CCV4	6417	55685	4876	2964
13:40	MA12213-CCB4	6763	58898	4883	3454
14:04	MA12213-CCV5	6453	56137	4827	2975
14:11	MA12213-CCB5	6754	58960	4938	3479
14:50	MP28549-MB1	6923	60629	4984	3527
14:55	MP28549-B1	6639	57678	4874	3145
14:59	MA12213-CCV6	6549	56541	4827	2998
15:03	MA12213-CCB6	6876	59898	4878	3487
15:08	FA22009-2	7098	60121	5025	3298
15:12	MP28549-D1	7073	60428	5104	3299
15:16	MP28549-SD1	6946	59658	4961	3440
15:21	MP28549-PS1	7049	60365	5066	3215
15:25	MP28549-S1	7035	59121	5045	3094
15:29	MP28549-S2	7005	58615	5053	3097
15:34	ZZZZZZ	7069	60429	5138	3284
15:38	ZZZZZZ	7003	60052	5064	3285
15:42	ZZZZZZ	7126	60163	5054	3245
15:47	ZZZZZZ	6983	61056	4992	3446
15:51	MA12213-CCV7	6560	56610	4789	3006
15:55	MA12213-CCB7	6900	60772	4947	3496
16:00	ZZZZZZ	6945	60790	4924	3500

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:04	ZZZZZZ	6979	60941	4979	3522
16:09	ZZZZZZ	6978	60899	4986	3527
16:13	ZZZZZZ	7077	61073	5061	3397
16:18	ZZZZZZ	7184	60974	5118	3406
16:22	ZZZZZZ	6943	60603	4940	3482
16:26	ZZZZZZ	8613 !	72985 !	6143	3304
16:31	ZZZZZZ	7022	60452	4999	3352
16:35	ZZZZZZ	6993	60379	4921	3367
16:39	ZZZZZZ	6675	56879	4904	2843
16:44	MA12213-CCV8	6590	56882	4711	3003
16:48	MA12213-CCB8	6912	59883	4753	3482
16:53	ZZZZZZ	8562 !	72939 !	6287	2844
16:57	ZZZZZZ	6985	60812	4917	3440
17:02	FA22032-1	5856	50546	4695	2295
17:06	FA22032-2	6868	59962	5484	2426
17:11	FA22032-3	6420	55306	5073	2333
17:16	MA12213-CRIA2	6826	59554	4774	3365
17:20	MA12213-ICSA2	6157	51659	4440	2673
17:25	MA12213-ICSAB2	6184	51759	4452	2649
17:29	MA12213-CCV9	6568	57270	4662	2989
17:33	MA12213-CCB9	6933	59640	4678	3487

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12213 Units: ug/l

Time: / Sample ID:			10:31 ICB1		11:03 CCB1		11:55 CCB2		12:47 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	4.1	<200	7.8	<200	15.7	<200	17.4	<200
Antimony	6.0	1	0.0	<6.0	0.10	<6.0	0.80	<6.0	1.4	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.10	<10	0.10	<10	0.20	<10	0.30	<10
Cobalt	50	.2	anr							
Copper	25	1	0.10	<25	0.40	<25	0.0	<25	0.40	<25
Iron	300	17	-4.9	<300	18.7	<300	24.7	<300	28.3	<300
Lead	5.0	1	-0.30	<5.0	0.20	<5.0	0.40	<5.0	0.70	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.0	<20	0.0	<20	0.10	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12213 Units: ug/l

Time: / Sample ID:			13:40 CCB4		14:11 CCB5		15:03 CCB6		15:55 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	19.9	<200	12.7	<200	9.1	<200	19.1	<200
Antimony	6.0	1	1.5	<6.0	1.1	<6.0	2.2	<6.0	0.80	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.90	<10	-0.10	<10	0.20	<10	0.20	<10
Cobalt	50	.2	anr							
Copper	25	1	0.40	<25	0.10	<25	0.10	<25	0.10	<25
Iron	300	17	26.8	<300	22.6	<300	30.7	<300	25.7	<300
Lead	5.0	1	1.1	<5.0	0.20	<5.0	0.80	<5.0	0.20	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.70	<20	0.0	<20	0.30	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12213 Units: ug/l

Time:			16:48		17:33	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	9.2	<200	22.4	<200
Antimony	6.0	1	0.0	<6.0	0.60	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2	anr			
Cadmium	5.0	.2	anr			
Calcium	1000	50	anr			
Chromium	10	1	-0.10	<10	0.20	<10
Cobalt	50	.2	anr			
Copper	25	1	0.10	<25	0.20	<25
Iron	300	17	26.6	<300	34.5	<300
Lead	5.0	1	0.20	<5.0	0.20	<5.0
Magnesium	5000	35	anr			
Manganese	15	.5	anr			
Molybdenum	50	.3				
Nickel	40	.4	anr			
Potassium	10000	200	anr			
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	0.50	<20	0.70	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		10:20			10:54			11:51	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41400	103.5	40000	40200	100.5	40000	40300	100.8
Antimony	2000	1980	99.0	2000	2060	103.0	2000	2020	101.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1960	98.0	2000	2030	101.5	2000	2040	102.0
Cobalt	anr								
Copper	2000	1930	96.5	2000	2010	100.5	2000	2000	100.0
Iron	40000	41200	103.0	40000	40800	102.0	40000	40800	102.0
Lead	2000	1960	98.0	2000	2010	100.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2030	101.5	2000	2080	104.0	2000	2080	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		12:43			13:36			14:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41400	103.5	40000	41800	104.5	40000	40300	100.8
Antimony	2000	2020	101.0	2000	1980	99.0	2000	1990	99.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2050	102.5	2000	2050	102.5	2000	2000	100.0
Cobalt	anr								
Copper	2000	2060	103.0	2000	2060	103.0	2000	2000	100.0
Iron	40000	41300	103.3	40000	41400	103.5	40000	40700	101.8
Lead	2000	2010	100.5	2000	2000	100.0	2000	1970	98.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2020	101.0	2000	1980	99.0	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		14:59			15:51			16:44	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	40000	100.0	40000	40900	102.3	40000	41200	103.0
Antimony	2000	1950	97.5	2000	1960	98.0	2000	1940	97.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1990	99.5	2000	2000	100.0	2000	1990	99.5
Cobalt	anr								
Copper	2000	1990	99.5	2000	2020	101.0	2000	2020	101.0
Iron	40000	40200	100.5	40000	40800	102.0	40000	40700	101.8
Lead	2000	1950	97.5	2000	1950	97.5	2000	1940	97.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1960	98.0	2000	1950	97.5	2000	1920	96.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		17:29	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Aluminum	40000	41400	103.5
Antimony	2000	1950	97.5
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	1970	98.5
Cobalt	anr		
Copper	2000	2030	101.5
Iron	40000	40200	100.5
Lead	2000	1950	97.5
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	1910	95.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12213 Units: ug/l

Time:		10:13	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	80000	79700	99.6
Antimony	4000	3960	99.0
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3890	97.3
Cobalt	anr		
Copper	4000	3880	97.0
Iron	80000	78700	98.4
Lead	4000	3990	99.8
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3970	99.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12213 Units: ug/l

Time:			10:35		17:16	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	216	108.0	233	116.5
Antimony	10	5.0	5.3	106.0	3.6	72.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.6	106.0	9.6	96.0
Cobalt	100	50	anr			
Copper	50	25	26.8	107.2	25.6	102.4
Iron	600	300	323	107.7	356	118.7
Lead	10	5.0	4.6	92.0	3.9	78.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50				
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	23.2	116.0	20.9	104.5

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12213 Units: ug/l

Time:			10:41		10:48		17:20		17:25	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	500000	100.0	508000	101.6	506000	101.2	512000	102.4
Antimony		1000	0.10		1070	107.0	-3.1		992	99.2
Arsenic		1000	-0.80		1080	108.0	-0.30		992	99.2
Barium		500	0.80		517	103.4	0.30		547	109.4
Beryllium		500	-0.20		515	103.0	-0.30		487	97.4
Cadmium		1000	0.0		951	95.1	-2.2		876	87.6
Calcium	500000	500000	492000	98.4	484000	96.8	464000	92.8	454000	90.8
Chromium		500	0.10		497	99.4	-0.20		478	95.6
Cobalt		500	0.0		486	97.2	-1.6		463	92.6
Copper		500	0.0		542	108.4	0.80		553	110.6
Iron	200000	200000	188000	94.0	184000	92.0	181000	90.5	180000	90.0
Lead		1000	-0.10		970	97.0	-4.3		919	91.9
Magnesium	500000	500000	485000	97.0	482000	96.4	490000	98.0	490000	98.0
Manganese		500	0.0		524	104.8	-0.60		484	96.8
Molybdenum		1000	0.0		934	93.4	1.1		898	89.8
Nickel		1000	0.0		993	99.3	-0.10		897	89.7
Potassium			632		287		268		127	
Selenium		1000	-0.30		1030	103.0	-0.10		978	97.8
Silver		1000	0.20		1040	104.0	-0.40		1030	103.0
Sodium			337		214		137		90.8	
Strontium		1000	0.20		1030	103.0	0.20		985	98.5
Thallium		1000	-0.10		988	98.8	-2.6		930	93.0
Tin		1000	1.2		946	94.6	0.90		916	91.6
Titanium		1000	0.10		1030	103.0	0.60		954	95.4
Vanadium		500	0.0		487	97.4	0.70		452	90.4
Zinc		1000	-1.1		990	99.0	-2.2		882	88.2

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:28	MA12216-STD1	1		STDA
09:36	MA12216-STD2	1		STDB
09:39	MA12216-STD3	1		STDC
09:42	MA12216-STD4	1		STDD
09:46	MA12216-HSTD1	1		
09:53	MA12216-ICV1	1		
10:00	MA12216-ICB1	1		
10:08	MA12216-CRIA1	1		
10:15	MA12216-CCV1	1		
10:21	MA12216-CCB1	1		
10:44	MA12216-CCV2	1		
10:50	MA12216-CCB2	1		
10:55	MA12216-ICSA1	1		
11:01	MA12216-ICSAB1	1		
11:06	MA12216-CCV3	1		
11:12	MA12216-CCB3	1		
12:54	MA12216-CCV4	1		
13:00	MA12216-CCB4	1		
13:04	ZZZZZZ	10		
13:08	ZZZZZZ	2		
13:12	ZZZZZZ	2		
13:16	FA22032-1	10		
13:20	FA22032-2	5		
13:24	FA22032-3	10		
---------->	Last reportable sample/prep for job FA22032			
13:28	MP28551-MB1	1		
13:33	MP28551-B1	1		
13:37	FA22049-1	1		(sample used for QC only; not part of login FA22032)
13:41	MP28551-D1	1		
13:45	MA12216-CCV5	1		
13:49	MA12216-CCB5	1		
13:53	MP28551-SD1	5		
13:57	MP28551-PS1	1		
14:01	MP28551-S1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:05	MP28551-S2	1		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	MA12216-CCV6	1		
14:38	MA12216-CCB6	1		
14:42	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:54	ZZZZZZ	25		
14:59	ZZZZZZ	1		
15:03	ZZZZZZ	10		
15:07	ZZZZZZ	1		
15:11	ZZZZZZ	10		
15:15	ZZZZZZ	20		
15:19	ZZZZZZ	100		
15:24	MA12216-CCV7	1		
15:27	MA12216-CCB7	1		
15:36	ZZZZZZ	20		
15:44	MP28553-MB1	1		
15:49	MP28553-B1	1		
15:53	FA22018-2	1		(sample used for QC only; not part of login FA22032)
15:57	MP28553-D1	1		
16:01	MP28553-SD1	5		
16:05	MP28553-S1	1		
16:09	MP28553-S2	1		
16:13	MA12216-CCV8	1		
16:17	MA12216-CCB8	1		
16:21	FA22018-1	1		(sample used for QC only; not part of login FA22032)
16:25	MP28553-D2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:30	MP28553-MB2	1		
16:34	MP28553-B2	1		
16:38	MP28552-MB1	1		
16:42	MP28552-B1	1		
16:46	FA21977-1L	1		(sample used for QC only; not part of login FA22032)
16:50	MP28552-D1	1		
16:54	MP28552-SD1	5		
16:59	MP28552-S1	1		
17:03	MA12216-CCV9	1		
17:07	MA12216-CCB9	1		
17:11	MP28552-S2	1		
17:15	MP28552-MB2	1		
17:19	MP28552-B2	1		
17:23	MP28554-MB1	1		
17:27	MP28554-B1	1		
17:31	FA22073-13	1		(sample used for QC only; not part of login FA22032)
17:35	MP28554-D1	1		
17:40	MP28554-SD1	5		
17:44	MP28554-PS1	1		
17:48	MP28554-S1	1		
17:52	MA12216-CCV10	1		
17:56	MA12216-CCB10	1		
18:00	MP28554-S2	1		
18:04	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:12	ZZZZZZ	1		
18:16	ZZZZZZ	1		
18:21	ZZZZZZ	2		
18:25	ZZZZZZ	1		
18:29	ZZZZZZ	1		
18:33	ZZZZZZ	1		
18:37	ZZZZZZ	1		
18:41	MA12216-CCV11	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:45	MA12216-CCB11	1		
18:50	ZZZZZZ	1		
18:54	ZZZZZZ	1		
18:58	ZZZZZZ	1		
19:02	ZZZZZZ	1		
19:06	ZZZZZZ	1		
19:10	ZZZZZZ	1		
19:19	ZZZZZZ	1		
19:23	MA12216-CRIA2	1		
19:27	MA12216-ICSA2	1		
19:31	MA12216-CCV12	1		
19:35	MA12216-CCB12	1		
19:39	MA12216-ICSAB2	1		
19:43	MA12216-CCV13	1		
19:47	MA12216-CCB13	1		

----------> Last reportable CCB for job FA22032
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:28	MA12216-STD1	4879	31798	2295	1677
09:36	MA12216-STD2	4719	31655	2353	1650
09:39	MA12216-STD3	4703	31696	2407	1647
09:42	MA12216-STD4	4353	30173	2308	1522
09:46	MA12216-HSTD1	4465	31338	2382	1564
09:53	MA12216-ICV1	4563	32261	2422	1632
10:00	MA12216-ICB1	4626 R	33404 R	2478 R	1666 R
10:08	MA12216-CRIA1	4538	33068	2453	1655
10:15	MA12216-CCV1	4376	32329	2455	1602
10:21	MA12216-CCB1	4610	34273	2521	1686
10:44	MA12216-CCV2	4316	32375	2475	1594
10:50	MA12216-CCB2	4532	33760	2522	1674
10:55	MA12216-ICSA1	3928	28845	2352	1486
11:01	MA12216-ICSAB1	4037	29199	2371	1503
11:06	MA12216-CCV3	4566	33212	2515	1661
11:12	MA12216-CCB3	4632	33622	2467	1680
12:54	MA12216-CCV4	4409	29856	2177	1559
13:00	MA12216-CCB4	4458	29947	2152	1576
13:04	ZZZZZZ	5385	36136	2623	1691
13:08	ZZZZZZ	4410	29300	2194	1531
13:12	ZZZZZZ	5169	34401	2606	1564
13:16	FA22032-1	4470	29858	2175	1577
13:20	FA22032-2	4531	30308	2255	1545
13:24	FA22032-3	4512	30198	2200	1583
13:28	MP28551-MB1	4490	30498	2152	1577
13:33	MP28551-B1	4528	30371	2186	1599
13:37	FA22049-1	4583	31050	2200	1621
13:41	MP28551-D1	4565	30840	2176	1619
13:45	MA12216-CCV5	4460	30371	2188	1571
13:49	MA12216-CCB5	4555	31328	2214	1608
13:53	MP28551-SD1	4572	30892	2167	1611
13:57	MP28551-PS1	4544	30660	2140	1603
14:01	MP28551-S1	4457	29570	2132	1569

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:05	MP28551-S2	4483	29477	2122	1574
14:09	ZZZZZZ	4558	30014	2146	1605
14:13	ZZZZZZ	4624	30478	2144	1622
14:17	ZZZZZZ	4655	30714	2179	1641
14:22	ZZZZZZ	4586	30366	2131	1611
14:26	ZZZZZZ	4704	31667	2207	1653
14:30	ZZZZZZ	4717	32036	2276	1652
14:34	MA12216-CCV6	4531	30540	2184	1599
14:38	MA12216-CCB6	4752	32156	2245	1667
14:42	ZZZZZZ	4744	32179	2263	1657
14:46	ZZZZZZ	4731	32065	2247	1670
14:50	ZZZZZZ	4523	30730	2137	1601
14:54	ZZZZZZ	4471	30213	2108	1583
14:59	ZZZZZZ	4521	29754	2125	1595
15:03	ZZZZZZ	4611	30375	2163	1626
15:07	ZZZZZZ	4553	30024	2116	1594
15:11	ZZZZZZ	4766	31779	2224	1672
15:15	ZZZZZZ	4853	32101	2233	1708
15:19	ZZZZZZ	4856	32135	2240	1699
15:24	MA12216-CCV7	4459	29698	2124	1564
15:27	MA12216-CCB7	4639	30878	2154	1622
15:36	ZZZZZZ	4584	30128	2119	1607
15:44	MP28553-MB1	4605	30722	2121	1602
15:49	MP28553-B1	4533	29744	2116	1593
15:53	FA22018-2	4541	29569	2083	1581
15:57	MP28553-D1	4518	29417	2098	1575
16:01	MP28553-SD1	4691	31056	2150	1644
16:05	MP28553-S1	4492	29529	2119	1573
16:09	MP28553-S2	4488	29484	2096	1570
16:13	MA12216-CCV8	4467	29793	2100	1565
16:17	MA12216-CCB8	4579	30527	2109	1602
16:21	FA22018-1	4551	30175	2110	1592
16:25	MP28553-D2	4504	29552	2066	1567

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:30	MP28553-MB2	4603	29803	2095	1609
16:34	MP28553-B2	4540	29523	2086	1580
16:38	MP28552-MB1	4640	31073	2119	1615
16:42	MP28552-B1	4501	29631	2080	1576
16:46	FA21977-1L	4591	30651	2119	1604
16:50	MP28552-D1	4660	30922	2145	1624
16:54	MP28552-SD1	4629	31057	2124	1621
16:59	MP28552-S1	4578	30531	2123	1610
17:03	MA12216-CCV9	4385	29108	2069	1544
17:07	MA12216-CCB9	4663	31167	2133	1635
17:11	MP28552-S2	4545	29923	2120	1596
17:15	MP28552-MB2	4755	31688	2161	1671
17:19	MP28552-B2	4530	30277	2105	1592
17:23	MP28554-MB1	4827	32298	2179	1687
17:27	MP28554-B1	4673	30910	2144	1639
17:31	FA22073-13	4430	29654	2026	1566
17:35	MP28554-D1	4505	29848	2056	1592
17:40	MP28554-SD1	4603	30400	2091	1623
17:44	MP28554-PS1	4502	29615	2062	1583
17:48	MP28554-S1	4433	29082	2062	1557
17:52	MA12216-CCV10	4456	29610	2053	1564
17:56	MA12216-CCB10	4627	31117	2093	1623
18:00	MP28554-S2	4476	29912	2124	1583
18:04	ZZZZZZ	4624	31164	2120	1619
18:08	ZZZZZZ	4545	30869	2088	1607
18:12	ZZZZZZ	4550	30121	2064	1602
18:16	ZZZZZZ	4583	30183	2059	1621
18:21	ZZZZZZ	4582	29978	2039	1615
18:25	ZZZZZZ	4655	30750	2087	1626
18:29	ZZZZZZ	4771	31142	2142	1686
18:33	ZZZZZZ	4567	30259	2103	1611
18:37	ZZZZZZ	4570	30397	2074	1621
18:41	MA12216-CCV11	4418	31336	2116	1554

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:45	MA12216-CCB11	4623	30825	2062	1624
18:50	ZZZZZZ	4612	30661	2103	1629
18:54	ZZZZZZ	4553	30617	2073	1613
18:58	ZZZZZZ	4645	31475	2101	1642
19:02	ZZZZZZ	4585	30913	2103	1619
19:06	ZZZZZZ	4597	30941	2082	1624
19:10	ZZZZZZ	4560	30514	2039	1602
19:19	ZZZZZZ	4585	30298	2075	1617
19:23	MA12216-CRIA2	4648	30750	2085	1639
19:27	MA12216-ICSA2	4252	27738	2063	1542
19:31	MA12216-CCV12	4617	30379	2097	1629
19:35	MA12216-CCB12	4614	30556	2049	1622
19:39	MA12216-ICSAB2	4043	26519	1950	1455
19:43	MA12216-CCV13	4494	29875	2044	1586
19:47	MA12216-CCB13	4613	30707	2037	1624

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time: / Sample ID:			10:00 ICB1		10:21 CCB1		10:50 CCB2		11:12 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	-1.7	<6.0	-0.50	<6.0	0.60	<6.0	1.8	<6.0
Arsenic	10	1.3	anr							
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	-0.30	<10	0.30	<10	0.50	<10	0.20	<10
Cobalt	50	.2								
Copper	25	1								
Iron	300	17	anr							
Lead	5.0	1	-1.4	<5.0	-0.10	<5.0	1.5	<5.0	0.30	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7								
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-0.20	<20	0.30	<20	0.60	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time: / Sample ID:			13:00 CCB4		13:49 CCB5		14:38 CCB6		15:27 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	2.3	<6.0	2.1	<6.0	2.1	<6.0	0.90	<6.0
Arsenic	10	1.3	anr							
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	-0.20	<10	0.20	<10	-0.10	<10	-0.10	<10
Cobalt	50	.2								
Copper	25	1								
Iron	300	17	anr							
Lead	5.0	1	0.30	<5.0	0.80	<5.0	0.0	<5.0	0.30	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7								
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	0.40	<20	0.50	<20	0.40	<20	0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time: / Sample ID:			16:17 CCB8		17:07 CCB9		17:56 CCB10		18:45 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	1.6	<6.0	1.7	<6.0	1.4	<6.0	1.1	<6.0
Arsenic	10	1.3	anr							
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	0.30	<10	0.10	<10	0.0	<10	-0.10	<10
Cobalt	50	.2								
Copper	25	1								
Iron	300	17	anr							
Lead	5.0	1	-0.30	<5.0	-0.50	<5.0	-0.10	<5.0	0.60	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7								
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	0.30	<20	0.60	<20	0.80	<20	1.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time:			19:35		19:47	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14				
Antimony	6.0	1	1.1	<6.0	0.60	<6.0
Arsenic	10	1.3	anr			
Barium	200	1				
Beryllium	4.0	.2				
Cadmium	5.0	.2	anr			
Calcium	1000	50				
Chromium	10	1	-0.20	<10	-0.20	<10
Cobalt	50	.2				
Copper	25	1				
Iron	300	17	anr			
Lead	5.0	1	-0.50	<5.0	-0.30	<5.0
Magnesium	5000	35				
Manganese	15	.5				
Molybdenum	50	.3				
Nickel	40	.4				
Potassium	10000	200				
Selenium	10	2.4	anr			
Silver	10	.7				
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1				
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5				
Zinc	20	3	0.70	<20	0.80	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		09:53			10:15			10:44	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1940	97.0	2000	2070	103.5	2000	1970	98.5
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	1830	91.5	2000	1830	91.5	2000	2070	103.5
Cobalt									
Copper									
Iron	anr								
Lead	2000	1890	94.5	2000	1920	96.0	2000	1980	99.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	1930	96.5	2000	2000	100.0	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		11:06			12:54			13:45	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1850	92.5	2000	1960	98.0	2000	1940	97.0
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2050	102.5	2000	2020	101.0	2000	1990	99.5
Cobalt									
Copper									
Iron	anr								
Lead	2000	1910	95.5	2000	1970	98.5	2000	1960	98.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	1910	95.5	2000	1980	99.0	2000	1970	98.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		14:34			15:24			16:13	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1930	96.5	2000	1960	98.0	2000	1960	98.0
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2000	100.0	2000	2070	103.5	2000	2070	103.5
Cobalt									
Copper									
Iron	anr								
Lead	2000	1940	97.0	2000	1990	99.5	2000	2000	100.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	1960	98.0	2000	1990	99.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		17:03			17:52			18:41	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1990	99.5	2000	1960	98.0	2000	1980	99.0
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2110	105.5	2000	2090	104.5	2000	1940	97.0
Cobalt									
Copper									
Iron	anr								
Lead	2000	2020	101.0	2000	2000	100.0	2000	2010	100.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2030	101.5	2000	2000	100.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		19:31			19:43	
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	2000	1880	94.0	2000	1950	97.5
Arsenic	anr					
Barium						
Beryllium						
Cadmium	anr					
Calcium						
Chromium	2000	2020	101.0	2000	2050	102.5
Cobalt						
Copper						
Iron	anr					
Lead	2000	1900	95.0	2000	1960	98.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver						
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	2000	1920	96.0	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12216 Units: ug/l

Time:		09:46	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	3970	99.3
Arsenic	anr		
Barium			
Beryllium			
Cadmium	anr		
Calcium			
Chromium	4000	3810	95.3
Cobalt			
Copper			
Iron	anr		
Lead	4000	3910	97.8
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver			
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc	4000	3880	97.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12216 Units: ug/l

Time:			10:08		19:23	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0	4.2	84.0	5.6	112.0
Arsenic	20	10	anr			
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	8.9	89.0	10.3	103.0
Cobalt	100	50				
Copper	50	25				
Iron	600	300	anr			
Lead	10	5.0	3.6	72.0	4.1	82.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10				
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20	20.8	104.0	21.0	105.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12216 Units: ug/l

Time:			10:55		11:01		19:27		19:39	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	519000	103.8	518000	103.6	484000	96.8	518000	103.6
Antimony		1000	0.10		1070	107.0	0.20		1090	109.0
Arsenic		1000	-1.3		1040	104.0	-0.30		1070	107.0
Barium		500	-0.20		517	103.4	-0.20		525	105.0
Beryllium		500	0.0		518	103.6	0.10		513	102.6
Cadmium		1000	0.0		964	96.4	-1.3		976	97.6
Calcium	500000	500000	496000	99.2	488000	97.6	464000	92.8	488000	97.6
Chromium		500	-0.40		524	104.8	-0.60		520	104.0
Cobalt		500	0.70		504	100.8	0.60		511	102.2
Copper		500	0.0		579	115.8	-2.9		572	114.4
Iron	200000	200000	190000	95.0	184000	92.0	172000	86.0	181000	90.5
Lead		1000	-0.20		977	97.7	-5.9		978	97.8
Magnesium	500000	500000	498000	99.6	484000	96.8	455000	91.0	478000	95.6
Manganese		500	0.40		520	104.0	0.30		522	104.4
Molybdenum		1000	0.0		952	95.2	0.0		965	96.5
Nickel		1000	-0.20		994	99.4	0.90		1010	101.0
Potassium			231		238		83.2		18.2	
Selenium		1000	0.10		1020	102.0	2.3		1040	104.0
Silver		1000	0.80		1020	102.0	0.20		1010	101.0
Sodium			197		197		146		100	
Strontium		1000	0.10		1030	103.0	0.10		1040	104.0
Thallium		1000	-1.8		1010	101.0	0.40		1020	102.0
Tin		1000	0.50		966	96.6	1.1		994	99.4
Titanium		1000	0.10		1050	105.0	0.20		1040	104.0
Vanadium		500	-0.10		502	100.4	0.40		503	100.6
Zinc		1000	0.30		978	97.8	0.0		994	99.4

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:04	MA12218-STD1	1		STDA
10:08	MA12218-STD2	1		STDB
10:11	MA12218-STD3	1		STDC
10:15	MA12218-STD4	1		STDD
10:18	MA12218-HSTD1	1		
10:25	MA12218-ICV1	1		
10:31	MA12218-ICB1	1		
10:36	MA12218-CRIA1	1		
10:43	MA12218-ICSA1	1		
10:50	MA12218-ICSAB1	1		
10:58	MA12218-CCV1	1		
11:03	MA12218-CCB1	1		
11:31	MA12218-CCV2	1		
11:37	MA12218-CCB2	1		
11:42	ZZZZZZ	25		
11:47	ZZZZZZ	1		
11:51	ZZZZZZ	2		
11:55	MP28556-MB1	1		
12:00	MP28556-B1	1		
12:04	FA22100-1	1		(sample used for QC only; not part of login FA22032)
12:08	MP28556-D1	1		
12:13	MP28556-SD1	5		
12:17	MP28556-PS1	1		
12:22	MP28556-S1	1		
12:26	MA12218-CCV3	1		
12:30	MA12218-CCB3	1		
12:34	MP28556-S2	1		
12:39	ZZZZZZ	1		
12:43	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:00	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:05	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:18	MA12218-CCV4	1		
13:22	MA12218-CCB4	1		
13:27	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:57	ZZZZZZ	1		
14:01	ZZZZZZ	1		
14:07	MP28556-MB2A	1		
14:11	MA12218-CCV5	1		
14:15	MA12218-CCB5	1		
14:40	MA12218-CCV6	1		
14:49	MA12218-CCB6	1		
14:53	MP28558-MB1	1		
14:57	MP28558-B1	1		
15:01	FA22051-3	1		(sample used for QC only; not part of login FA22032)
15:06	MP28558-D1	1		
15:10	MP28558-SD1	5		
15:14	MP28558-PS1	1		
15:19	MP28558-S1	1		
15:23	MP28558-S2	1		
15:27	ZZZZZZ	1		
15:31	ZZZZZZ	1		
15:36	MA12218-CCV7	1		
15:40	MA12218-CCB7	1		
15:44	ZZZZZZ	1		
15:49	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:53	ZZZZZZ	1		
15:58	ZZZZZZ	1		
16:02	ZZZZZZ	1		
16:06	ZZZZZZ	1		
16:11	FA22032-4	1		
16:16	FA22032-5	1		
16:20	FA22032-6	1		
16:25	FA22032-7	1		
---------->	Last reportable sample/prep for job FA22032			
16:30	MA12218-CCV8	1		
16:34	MA12218-CCB8	1		
16:38	ZZZZZZ	1		
16:43	ZZZZZZ	1		
16:47	ZZZZZZ	1		
16:51	ZZZZZZ	1		
16:56	ZZZZZZ	1		
17:00	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:09	MA12218-CRIA2	1		
17:13	MA12218-ICSA2	1		
17:18	MA12218-ICSAB2	1		
17:22	MA12218-CCV9	1		
17:26	MA12218-CCB9	1		
---------->	Last reportable CCB for job FA22032			
17:31	MA12218-CCV10	1		
17:35	MA12218-CCB10	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:04	MA12218-STD1	6350	54517	4242	3148
10:08	MA12218-STD2	6251	53046	4182	2991
10:11	MA12218-STD3	6059	51937	4183	2740
10:15	MA12218-STD4	5880	51014	4159	2563
10:18	MA12218-HSTD1	5844	50621	4145	2554
10:25	MA12218-ICV1	5981	51385	4163	2725
10:31	MA12218-ICB1	6115 R	52840 R	4100 R	3090 R
10:36	MA12218-CRIA1	6136	52270	4152	3021
10:43	MA12218-ICSA1	5620	47051	4045	2460
10:50	MA12218-ICSAB1	5488	46708	3922	2378
10:58	MA12218-CCV1	5870	49829	4031	2685
11:03	MA12218-CCB1	6233	53399	4185	3135
11:31	MA12218-CCV2	6112	52117	4170	2758
11:37	MA12218-CCB2	6260	53049	4083	3114
11:42	ZZZZZZ	6117	51408	4045	2890
11:47	ZZZZZZ	6134	52368	4169	2867
11:51	ZZZZZZ	5926	50809	4003	2768
11:55	MP28556-MB1	6274	53639	3997	3081
12:00	MP28556-B1	6309	53531	4168	2918
12:04	FA22100-1	6118	52035	4095	2898
12:08	MP28556-D1	6106	51929	4074	2892
12:13	MP28556-SD1	6236	52795	3987	3030
12:17	MP28556-PS1	6134	51974	4104	2857
12:22	MP28556-S1	6114	51792	4141	2772
12:26	MA12218-CCV3	6144	51907	4025	2740
12:30	MA12218-CCB3	6355	53993	4039	3116
12:34	MP28556-S2	6088	51243	4029	2750
12:39	ZZZZZZ	6318	53873	4022	3041
12:43	ZZZZZZ	6326	53681	4099	3008
12:47	ZZZZZZ	6282	53199	3981	3022
12:52	ZZZZZZ	6326	53407	3998	3036
12:56	ZZZZZZ	6355	53543	4003	3058
13:00	ZZZZZZ	6297	53456	4001	3043

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:05	ZZZZZZ	6195	52925	4015	2977
13:09	ZZZZZZ	6119	52186	3926	2922
13:14	ZZZZZZ	6151	52214	4041	2828
13:18	MA12218-CCV4	6118	51578	4017	2701
13:22	MA12218-CCB4	6386	54060	4065	3127
13:27	ZZZZZZ	6113	51778	4000	2905
13:31	ZZZZZZ	6105	51503	3915	2837
13:35	ZZZZZZ	6146	51992	3953	2896
13:40	ZZZZZZ	5986	50580	3919	2744
13:44	ZZZZZZ	6037	51153	4047	2768
13:48	ZZZZZZ	5993	50415	3905	2752
13:53	ZZZZZZ	6086	51000	3882	2750
13:57	ZZZZZZ	5974	50220	3874	2693
14:01	ZZZZZZ	6329	53669	3971	3079
14:07	MP28556-MB2A	6264	53383	3962	3029
14:11	MA12218-CCV5	6097	51216	3864	2679
14:15	MA12218-CCB5	6350	53198	3921	3075
14:40	MA12218-CCV6	6139	51284	3935	2695
14:49	MA12218-CCB6	6312	53065	3934	3051
14:53	MP28558-MB1	6383	53841	3972	3080
14:57	MP28558-B1	6171	51791	3906	2779
15:01	FA22051-3	6417	53212	4017	2868
15:06	MP28558-D1	6407	53418	4119	2836
15:10	MP28558-SD1	6458	53528	3987	3010
15:14	MP28558-PS1	6391	52686	3962	2803
15:19	MP28558-S1	6448	52290	4015	2720
15:23	MP28558-S2	6392	52139	4005	2706
15:27	ZZZZZZ	7149	59186	4502	2764
15:31	ZZZZZZ	6524	54003	3960	2956
15:36	MA12218-CCV7	6170	50733	3839	2684
15:40	MA12218-CCB7	6409	53333	3927	3080
15:44	ZZZZZZ	6471	54071	3926	2999
15:49	ZZZZZZ	6559	54156	3999	2931

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:53	ZZZZZZ	6476	54207	4005	2994
15:58	ZZZZZZ	6462	53879	3920	3018
16:02	ZZZZZZ	6496	53915	3910	3021
16:06	ZZZZZZ	5517	46464	3842	2003
16:11	FA22032-4	6458	53195	4364	2194
16:16	FA22032-5	6358	52936	4294	2156
16:20	FA22032-6	6005	50234	4047	2114
16:25	FA22032-7	5628	47400	3857	2097
16:30	MA12218-CCV8	6141	50754	3768	2664
16:34	MA12218-CCB8	6380	52904	3764	3043
16:38	ZZZZZZ	6452	53975	3883	3056
16:43	ZZZZZZ	6395	53722	3900	3026
16:47	ZZZZZZ	6376	53604	3822	3000
16:51	ZZZZZZ	6405	53760	3840	3032
16:56	ZZZZZZ	6298	52689	3829	2974
17:00	ZZZZZZ	6483	54360	3954	2996
17:04	ZZZZZZ	7743 !	62812	4675	2654
17:09	MA12218-CRIA2	6338	53152	3768	2966
17:13	MA12218-ICSA2	5709	46384	3634	2370
17:18	MA12218-ICSAB2	5677	46088	3590	2328
17:22	MA12218-CCV9	6182	51089	3779	2670
17:26	MA12218-CCB9	6385	53311	3778	3040
17:31	MA12218-CCV10	6168	51061	3738	2662
17:35	MA12218-CCB10	6355	52835	3722	3020

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12218 Units: ug/l

Time: / Sample ID:			10:31 ICB1		11:03 CCB1		11:37 CCB2		12:30 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	-0.90	<200	-7.0	<200	15.1	<200	4.9	<200
Antimony	6.0	1	-0.50	<6.0	-0.70	<6.0	-0.90	<6.0	-0.10	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	-0.30	<10	0.0	<10	-0.10	<10	0.30	<10
Cobalt	50	.2	anr							
Copper	25	1	0.30	<25	0.30	<25	-0.40	<25	-0.70	<25
Iron	300	17	-17	<300	-6.0	<300	20.9	<300	30.7	<300
Lead	5.0	1	-0.80	<5.0	-1.3	<5.0	0.10	<5.0	-0.30	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-1.2	<20	-0.90	<20	-0.10	<20	0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12218 Units: ug/l

Time: / Sample ID:			13:22 CCB4		14:15 CCB5		14:49 CCB6		15:40 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	8.9	<200	25.5	<200	14.9	<200	9.6	<200
Antimony	6.0	1	-0.20	<6.0	1.4	<6.0	1.2	<6.0	0.90	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.40	<10	0.60	<10	1.0	<10	0.70	<10
Cobalt	50	.2	anr							
Copper	25	1	-0.30	<25	-0.10	<25	0.80	<25	0.50	<25
Iron	300	17	28.7	<300	36.4	<300	25.6	<300	33.0	<300
Lead	5.0	1	-0.40	<5.0	0.90	<5.0	0.90	<5.0	0.70	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.30	<20	1.0	<20	0.90	<20	0.80	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12218 Units: ug/l

Time: / Sample ID:			16:34 CCB8		17:26 CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	7.3	<200	37.9	<200
Antimony	6.0	1	1.6	<6.0	0.0	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2	anr			
Cadmium	5.0	.2	anr			
Calcium	1000	50	anr			
Chromium	10	1	1.1	<10	0.70	<10
Cobalt	50	.2	anr			
Copper	25	1	0.80	<25	0.30	<25
Iron	300	17	38.3	<300	44.5	<300
Lead	5.0	1	1.3	<5.0	0.30	<5.0
Magnesium	5000	35	anr			
Manganese	15	.5	anr			
Molybdenum	50	.3	anr			
Nickel	40	.4	anr			
Potassium	10000	200	anr			
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	1.4	<20	1.1	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		10:25			10:58			11:31	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41200	103.0	40000	41600	104.0	40000	39700	99.3
Antimony	2000	1970	98.5	2000	2100	105.0	2000	2000	100.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1990	99.5	2000	2130	106.5	2000	2000	100.0
Cobalt	anr								
Copper	2000	1940	97.0	2000	2080	104.0	2000	1980	99.0
Iron	40000	41400	103.5	40000	42200	105.5	40000	40300	100.8
Lead	2000	1970	98.5	2000	2070	103.5	2000	1980	99.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2040	102.0	2000	2160	108.0	2000	2020	101.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		12:26			13:18			14:11	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41000	102.5	40000	42200	105.5	40000	42600	106.5
Antimony	2000	1990	99.5	2000	2010	100.5	2000	1980	99.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2020	101.0	2000	2060	103.0	2000	2060	103.0
Cobalt	anr								
Copper	2000	2030	101.5	2000	2090	104.5	2000	2090	104.5
Iron	40000	41100	102.8	40000	42000	105.0	40000	42200	105.5
Lead	2000	2000	100.0	2000	2030	101.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2000	100.0	2000	1990	99.5	2000	1970	98.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		14:40			15:36			16:30	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41000	102.5	40000	41800	104.5	40000	41700	104.3
Antimony	2000	2060	103.0	2000	2020	101.0	2000	2010	100.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2080	104.0	2000	2090	104.5	2000	2070	103.5
Cobalt	anr								
Copper	2000	2060	103.0	2000	2080	104.0	2000	2070	103.5
Iron	40000	41800	104.5	40000	42000	105.0	40000	41000	102.5
Lead	2000	2030	101.5	2000	2020	101.0	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2080	104.0	2000	2040	102.0	2000	2020	101.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		17:22	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Aluminum	40000	41700	104.3
Antimony	2000	2010	100.5
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	2060	103.0
Cobalt	anr		
Copper	2000	2080	104.0
Iron	40000	40800	102.0
Lead	2000	2000	100.0
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12218 Units: ug/l

Time:		10:18	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	80000	79100	98.9
Antimony	4000	3990	99.8
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3950	98.8
Cobalt	anr		
Copper	4000	3950	98.8
Iron	80000	78500	98.1
Lead	4000	4030	100.8
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3980	99.5

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12218 Units: ug/l

Time:			10:36		17:09	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	199	99.5	238	119.0
Antimony	10	5.0	4.2	84.0	4.4	88.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.5	105.0	10.8	108.0
Cobalt	100	50	anr			
Copper	50	25	27.1	108.4	26.9	107.6
Iron	600	300	286	95.3	355	118.3
Lead	10	5.0	4.5	90.0	5.5	110.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.6	108.0	21.6	108.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12218 Units: ug/l

Time:			10:43		10:50		17:13		17:18	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	508000	101.6	511000	102.2	513000	102.6	523000	104.6
Antimony		1000	0.0		1080	108.0	-0.50		1030	103.0
Arsenic		1000	0.0		1090	109.0	1.5		1030	103.0
Barium		500	0.0		527	105.4	1.0		544	108.8
Beryllium		500	-0.60		525	105.0	-0.10		507	101.4
Cadmium		1000	0.0		965	96.5	-0.50		920	92.0
Calcium	500000	500000	495000	99.0	499000	99.8	479000	95.8	474000	94.8
Chromium		500	0.0		505	101.0	0.60		498	99.6
Cobalt		500	0.0		493	98.6	1.1		482	96.4
Copper		500	-1.3		553	110.6	0.0		560	112.0
Iron	200000	200000	190000	95.0	188000	94.0	185000	92.5	184000	92.0
Lead		1000	0.0		999	99.9	-1.0		966	96.6
Magnesium	500000	500000	489000	97.8	491000	98.2	489000	97.8	492000	98.4
Manganese		500	-0.40		526	105.2	-0.50		505	101.0
Molybdenum		1000	0.0		950	95.0	11.2		936	93.6
Nickel		1000	0.0		1010	101.0	1.7		948	94.8
Potassium			123		177		255		158	
Selenium		1000	0.90		1050	105.0	1.7		996	99.6
Silver		1000	0.10		1060	106.0	-0.60		1050	105.0
Sodium			159		163		171		116	
Strontium		1000	-0.30		1040	104.0	0.20		1020	102.0
Thallium		1000	-1.1		1000	100.0	-3.1		967	96.7
Tin		1000	-0.60		960	96.0	1.3		948	94.8
Titanium		1000	-1.3		1040	104.0	1.5		996	99.6
Vanadium		500	0.10		496	99.2	1.1		475	95.0
Zinc		1000	-3.0		1010	101.0	-1.6		938	93.8

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:38	MA12220-STD1	1		STDA
09:41	MA12220-STD2	1		STDB
09:48	MA12220-STD3	1		STDD
09:54	MA12220-STD4	1		STDC
09:58	MA12220-HSTD1	1		
10:04	MA12220-ICV1	1		
10:10	MA12220-ICB1	1		
10:14	MA12220-CRIA1	1		
10:24	MA12220-ICSA1	1		
10:31	MA12220-ICSAB1	1		
10:35	MA12220-CCV1	1		
10:44	MA12220-CCB1	1		
10:48	MP28555-MB1	1		
10:52	MP28555-B1	1		
10:56	FA21871-1	1		(sample used for QC only; not part of login FA22032)
11:00	MP28555-D1	1		
11:04	MP28555-SD1	5		
11:09	MP28555-S1	1		
11:12	MP28555-S2	1		
11:16	ZZZZZZ	1		
11:21	ZZZZZZ	1		
11:25	ZZZZZZ	1		
11:29	MA12220-CCV2	1		
11:33	MA12220-CCB2	1		
11:37	MP28556-S1	2		
11:41	MP28556-S2	2		
11:45	ZZZZZZ	10		
11:49	FA22032-4	5		
11:53	FA22032-5	5		
12:05	FA22032-6	10		
12:09	FA22032-7	10		
---------->	Last reportable sample/prep for job FA22032			
12:13	MP28559-MB1	1		
12:17	MP28559-B1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:26	MA12220-CCV3	1		
12:32	MA12220-CCB3	1		
12:55	MA12220-CCV4	1		
13:06	MA12220-CCB4	1		
13:10	FA22140-1	1		(sample used for QC only; not part of login FA22032)
13:14	MP28559-D1	1		
13:18	MP28559-SD1	5		
13:23	MP28559-PS1	1		
13:27	MP28559-S1	1		
13:31	MP28559-S2	1		
13:35	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:47	ZZZZZZ	4		
13:51	MA12220-CCV5	1		
14:00	MA12220-CCB5	1		
14:05	ZZZZZZ	10		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:22	ZZZZZZ	4		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:47	MA12220-CCV6	1		
14:51	MA12220-CCB6	1		
14:55	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:36	MA12220-CCV7	1		
15:40	MA12220-CCB7	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:05	MP28563-MB1	1		
16:09	MP28563-B1	1		
16:13	FA22014-2L	1		(sample used for QC only; not part of login FA22032)
16:17	MP28563-D1	1		
16:21	MP28563-SD1	5		
16:25	MA12220-CCV8	1		
16:29	MA12220-CCB8	1		
16:33	MP28563-S1	1		
16:37	MP28563-S2	1		
16:42	FA22014-1L	1		(sample used for QC only; not part of login FA22032)
16:46	ZZZZZZ	1		
16:50	ZZZZZZ	1		
16:54	ZZZZZZ	1		
16:58	ZZZZZZ	1		
17:02	ZZZZZZ	1		
17:06	ZZZZZZ	1		
17:11	ZZZZZZ	1		
17:15	MA12220-CCV9	1		
17:19	MA12220-CCB9	1		
17:23	ZZZZZZ	1		
17:27	MP28563-D2	1		
17:31	MP28563-MB2	1		
17:35	MP28563-B2	1		
17:40	MP28563-MB3	1		
17:44	MP28563-B3	1		
17:48	MP28561-MB1	1		
17:52	MP28561-B1	1		
17:56	FA22095-4	1		(sample used for QC only; not part of login FA22032)
18:00	MP28561-D1	1		
18:04	MA12220-CCV10	1		
18:08	MA12220-CCB10	1		
18:12	MP28561-SD1	5		
18:16	MP28561-PS1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:20	MP28561-S1	1		
18:24	MP28561-S2	1		
18:28	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:36	ZZZZZZ	1		
18:40	ZZZZZZ	1		
18:45	ZZZZZZ	1		
18:49	ZZZZZZ	1		
18:53	MA12220-CCV11	1		
18:57	MA12220-CCB11	1		
19:01	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:13	ZZZZZZ	1		
19:17	ZZZZZZ	1		
19:25	ZZZZZZ	1		
19:34	ZZZZZZ	1		
19:42	MA12220-CCV12	1		
19:46	MA12220-CCB12	1		
19:50	ZZZZZZ	1		
19:54	ZZZZZZ	1		
19:58	ZZZZZZ	1		
20:02	MA12220-CRIA2	1		
20:06	MA12220-ICSA2	1		
20:10	MA12220-ICSAB2	1		
20:15	MA12220-CCV13	1		
20:19	MA12220-CCB13	1		

----------> Last reportable CCB for job FA22032
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:38	MA12220-STD1	4993	34221	4305	1706
09:41	MA12220-STD2	4866	33359	4218	1678
09:48	MA12220-STD3	4563	31706	4245	1557
09:54	MA12220-STD4	4723	32413	4211	1615
09:58	MA12220-HSTD1	4558	31574	4191	1560
10:04	MA12220-ICV1	4746	31835	4157	1624
10:10	MA12220-ICB1	4910 R	33961 R	4259 R	1691 R
10:14	MA12220-CRIA1	4903	33677	4260	1690
10:24	MA12220-ICSA1	4373	29511	4073	1539
10:31	MA12220-ICSAB1	4343	29109	4099	1526
10:35	MA12220-CCV1	4692	32103	4157	1613
10:44	MA12220-CCB1	4893	33763	4207	1688
10:48	MP28555-MB1	4880	33185	4154	1672
10:52	MP28555-B1	4771	32353	4199	1630
10:56	FA21871-1	4815	32304	4169	1640
11:00	MP28555-D1	4830	32022	4185	1644
11:04	MP28555-SD1	4923	32842	4211	1677
11:09	MP28555-S1	4761	31690	4142	1613
11:12	MP28555-S2	4751	31495	4136	1610
11:16	ZZZZZZ	4857	32117	4167	1646
11:21	ZZZZZZ	4792	32239	4180	1639
11:25	ZZZZZZ	4814	32782	4231	1652
11:29	MA12220-CCV2	4664	31915	4178	1611
11:33	MA12220-CCB2	4854	33434	4232	1675
11:37	MP28556-S1	4810	32610	4224	1655
11:41	MP28556-S2	4592	32272	4188	1537
11:45	ZZZZZZ	4768	31492	4121	1616
11:49	FA22032-4	4814	31735	4241	1594
11:53	FA22032-5	4797	32131	4297	1588
12:05	FA22032-6	4784	31614	4125	1617
12:09	FA22032-7	4792	31324	4065	1621
12:13	MP28559-MB1	4898	32857	4113	1662
12:17	MP28559-B1	4796	31633	4083	1637

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:26	MA12220-CCV3	4688	31048	3968	1592
12:32	MA12220-CCB3	4883	32586	4059	1669
12:55	MA12220-CCV4	4662	30719	3950	1583
13:06	MA12220-CCB4	4870	32043	4003	1656
13:10	FA22140-1	4778	30736	4008	1614
13:14	MP28559-D1	4774	30728	4017	1606
13:18	MP28559-SD1	4898	31808	4023	1655
13:23	MP28559-PS1	4759	30360	3939	1599
13:27	MP28559-S1	4692	29591	3920	1565
13:31	MP28559-S2	4673	29933	3918	1566
13:35	ZZZZZZ	4891	31840	4027	1658
13:39	ZZZZZZ	4896	31575	3966	1651
13:43	ZZZZZZ	4907	31748	3964	1648
13:47	ZZZZZZ	4801	30780	3866	1616
13:51	MA12220-CCV5	4684	30053	3859	1576
14:00	MA12220-CCB5	4884	31363	3880	1639
14:05	ZZZZZZ	4860	31034	3923	1624
14:09	ZZZZZZ	4880	31079	3948	1639
14:13	ZZZZZZ	4895	30862	3926	1640
14:18	ZZZZZZ	4726	29709	3837	1577
14:22	ZZZZZZ	4940	31336	3920	1657
14:26	ZZZZZZ	4852	30901	3911	1629
14:30	ZZZZZZ	4923	30837	3894	1641
14:34	ZZZZZZ	4871	30420	3826	1618
14:43	ZZZZZZ	4811	30376	3855	1610
14:47	MA12220-CCV6	4787	30223	3841	1606
14:51	MA12220-CCB6	4996	31352	3849	1662
14:55	ZZZZZZ	4905	30655	3816	1634
14:59	ZZZZZZ	4795	30146	3824	1610
15:03	ZZZZZZ	4892	30931	3817	1645
15:11	ZZZZZZ	4879	30792	3818	1631
15:36	MA12220-CCV7	4781	30643	3882	1613
15:40	MA12220-CCB7	4953	32301	3961	1670

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:05	MP28563-MB1	4982	31833	3926	1654
16:09	MP28563-B1	4865	30159	3864	1626
16:13	FA22014-2L	4940	30242	3830	1638
16:17	MP28563-D1	4928	30613	3862	1640
16:21	MP28563-SD1	5004	31125	3837	1668
16:25	MA12220-CCV8	4794	29782	3820	1609
16:29	MA12220-CCB8	4995	30812	3827	1664
16:33	MP28563-S1	4827	29813	3814	1601
16:37	MP28563-S2	4848	29981	3822	1610
16:42	FA22014-1L	4895	30052	3793	1630
16:46	ZZZZZZ	4922	29954	3824	1634
16:50	ZZZZZZ	4910	30368	3795	1632
16:54	ZZZZZZ	4932	30280	3806	1639
16:58	ZZZZZZ	4921	30015	3793	1634
17:02	ZZZZZZ	4939	30133	3783	1640
17:06	ZZZZZZ	4945	30274	3779	1636
17:11	ZZZZZZ	4922	30252	3791	1629
17:15	MA12220-CCV9	4809	29824	3744	1610
17:19	MA12220-CCB9	4995	31008	3799	1673
17:23	ZZZZZZ	4961	31323	3850	1656
17:27	MP28563-D2	4899	30322	3759	1631
17:31	MP28563-MB2	4926	30180	3802	1636
17:35	MP28563-B2	4839	29274	3747	1606
17:40	MP28563-MB3	4986	31152	3814	1654
17:44	MP28563-B3	4859	30411	3783	1628
17:48	MP28561-MB1	4987	31331	3902	1660
17:52	MP28561-B1	4866	30085	3779	1620
17:56	FA22095-4	5016	31340	3932	1695
18:00	MP28561-D1	4987	31206	3956	1687
18:04	MA12220-CCV10	4818	29852	3728	1617
18:08	MA12220-CCB10	5062	31459	3805	1694
18:12	MP28561-SD1	5035	31329	3849	1695
18:16	MP28561-PS1	4989	30956	3929	1674

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:20	MP28561-S1	4895	29785	3832	1636
18:24	MP28561-S2	4867	29700	3820	1628
18:28	ZZZZZZ	4973	30654	3893	1675
18:32	ZZZZZZ	5082	31357	4001	1697
18:36	ZZZZZZ	5062	31469	4002	1690
18:40	ZZZZZZ	5068	32106	3925	1675
18:45	ZZZZZZ	4734	30626	3811	1553
18:49	ZZZZZZ	5067	31775	3915	1685
18:53	MA12220-CCV11	4803	30241	3737	1617
18:57	MA12220-CCB11	4996	31439	3780	1679
19:01	ZZZZZZ	6734 !	41886	5292	1690
19:09	ZZZZZZ	4983	31238	3901	1678
19:13	ZZZZZZ	5169	32093	4049	1673
19:17	ZZZZZZ	5013	31240	3906	1679
19:25	ZZZZZZ	4990	31540	3931	1681
19:34	ZZZZZZ	5074	31934	3992	1680
19:42	MA12220-CCV12	4853	30578	3729	1629
19:46	MA12220-CCB12	5001	31541	3779	1684
19:50	ZZZZZZ	5031	31634	3957	1677
19:54	ZZZZZZ	5089	31896	3992	1684
19:58	ZZZZZZ	5022	31830	3967	1674
20:02	MA12220-CRIA2	4995	31692	3821	1688
20:06	MA12220-ICSA2	4424	27656	3597	1534
20:10	MA12220-ICSAB2	4413	27285	3591	1522
20:15	MA12220-CCV13	4776	29991	3676	1610
20:19	MA12220-CCB13	4958	31612	3763	1677

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time: / Sample ID:			10:10 ICB1		10:44 CCB1		11:33 CCB2		12:32 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	1.1	<6.0	0.0	<6.0	0.80	<6.0	0.20	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.0	<10	0.20	<10	0.20	<10	0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.40	<5.0	0.30	<5.0	0.20	<5.0	0.10	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.10	<20	0.40	<20	0.50	<20	0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time: / Sample ID:			13:06 CCB4		14:00 CCB5		14:51 CCB6		15:40 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	0.90	<6.0	1.1	<6.0	1.6	<6.0	1.8	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.10	<10	-0.30	<10	0.10	<10	0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.30	<5.0	0.30	<5.0	-0.40	<5.0	0.10	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.60	<20	-0.20	<20	-0.10	<20	-0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time: / Sample ID:			16:29 CCB8		17:19 CCB9		18:08 CCB10		18:57 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	2.8	<6.0	2.4	<6.0	2.5	<6.0	1.5	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	-0.10	<10	0.30	<10	0.10	<10	0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.10	<5.0	-0.10	<5.0	-0.60	<5.0	0.0	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.20	<20	0.30	<20	0.30	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time:			19:46		20:19	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	anr			
Antimony	6.0	1	1.8	<6.0	1.7	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2	anr			
Cadmium	5.0	.2	anr			
Calcium	1000	50	anr			
Chromium	10	1	0.0	<10	0.10	<10
Cobalt	50	.2	anr			
Copper	25	1	anr			
Iron	300	17	anr			
Lead	5.0	1	0.90	<5.0	-1.0	<5.0
Magnesium	5000	35	anr			
Manganese	15	.5	anr			
Molybdenum	50	.3	anr			
Nickel	40	.4	anr			
Potassium	10000	200	anr			
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	0.20	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		10:04			10:35			11:29	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1920	96.0	2000	2030	101.5	2000	2060	103.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2010	100.5	2000	2070	103.5	2000	2090	104.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	2020	101.0	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1970	98.5	2000	2050	102.5	2000	2090	104.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		12:26			12:55			13:51	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1930	96.5	2000	1970	98.5	2000	1950	97.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2070	103.5	2000	2010	100.5	2000	2080	104.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1990	99.5	2000	1980	99.0	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2000	100.0	2000	1990	99.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		14:47			15:36			16:25	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1900	95.0	2000	1920	96.0	2000	1910	95.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2090	104.5	2000	2050	102.5	2000	2140	107.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1970	98.5	2000	1970	98.5	2000	1970	98.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1970	98.5	2000	1970	98.5	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		17:15			18:04			18:53	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1900	95.0	2000	1900	95.0	2000	1900	95.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2140	107.0	2000	2130	106.5	2000	2100	105.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1980	99.0	2000	1980	99.0	2000	1980	99.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1980	99.0	2000	1990	99.5	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		19:42			20:15	
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	2000	1890	94.5	2000	1940	97.0
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	2000	2070	103.5	2000	2130	106.5
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	2000	1970	98.5	2000	1990	99.5
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	2000	1970	98.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12220 Units: ug/l

Time:		09:58	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	3990	99.8
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3940	98.5
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3950	98.8
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3930	98.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12220 Units: ug/l

Time:			10:14		20:02	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	4.5	90.0	4.9	98.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.2	102.0	10.9	109.0
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	4.1	82.0	4.4	88.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.0	105.0	21.5	107.5

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12220 Units: ug/l

Time:			10:24		10:31		20:06		20:10	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	491000	98.2	500000	100.0	514000	102.8	523000	104.6
Antimony		1000	0.10		1090	109.0	0.80		1070	107.0
Arsenic		1000	0.50		1070	107.0	1.5		1050	105.0
Barium		500	0.10		508	101.6	0.40		516	103.2
Beryllium		500	-0.10		506	101.2	0.0		512	102.4
Cadmium		1000	0.0		965	96.5	-0.90		972	97.2
Calcium	500000	500000	472000	94.4	472000	94.4	487000	97.4	487000	97.4
Chromium		500	0.0		503	100.6	-0.20		531	106.2
Cobalt		500	0.70		506	101.2	0.90		508	101.6
Copper		500	-1.3		561	112.2	-2.9		571	114.2
Iron	200000	200000	182000	91.0	180000	90.0	184000	92.0	182000	91.0
Lead		1000	-0.10		967	96.7	-4.6		979	97.9
Magnesium	500000	500000	479000	95.8	476000	95.2	480000	96.0	479000	95.8
Manganese		500	0.20		512	102.4	0.10		524	104.8
Molybdenum		1000	0.0		962	96.2	2.8		958	95.8
Nickel		1000	0.80		1010	101.0	1.1		999	99.9
Potassium			219		97.0		202		72.8	
Selenium		1000	0.0		1040	104.0	1.9		1020	102.0
Silver		1000	0.50		992	99.2	0.40		1010	101.0
Sodium			169		134		142		105	
Strontium		1000	0.0		1000	100.0	0.10		1040	104.0
Thallium		1000	0.80		1000	100.0	-0.20		1000	100.0
Tin		1000	-0.30		995	99.5	0.60		970	97.0
Titanium		1000	-1.2		1020	102.0	0.20		1050	105.0
Vanadium		500	0.30		495	99.0	0.40		502	100.4
Zinc		1000	0.0		983	98.3	-0.20		992	99.2

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/12/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8	0.24	<10
Antimony	1.0	.05	.065	-0.035	<1.0
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	-0.0050	<0.50
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	-0.020	<1.3
Iron	15	.85	.85	0.81	<15
Lead	1.0	.05	.05	-0.030	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.050	<1.0

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			02/12/15					02/12/15	
Metal	FA22009-2 Original	DUP	RPD	QC Limits	FA22009-2 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	7370	7490	1.6	0-20	7370	8510	1400	81.5	80-120
Antimony	0.0	0.0	NC	0-20	0.0	10.6	25.9	40.9N(b)	80-120
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	11.6	11.7	0.9	0-20	11.6	21.6	10.4	96.5	80-120
Cobalt									
Copper	0.28	0.36	25.0 (a)	0-20	0.28	13.7	13	103.6	80-120
Iron	380	366	3.8	0-20	380	1740	1350	101.0	80-120
Lead	4.7	4.9	4.2	0-20	4.7	30.2	25.9	98.4	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	0.0	0.20	200.0(a)	0-20	0.0	24.7	25.9	95.4	80-120

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/12/15

Metal	FA22009-2 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	7370	8730	1560	87.2	2.6	20
Antimony	0.0	12.4	28.9	42.9N(a)	15.7	20
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	11.6	23.0	11.6	98.7	6.3	20
Cobalt						
Copper	0.28	15.4	14.4	104.7	11.7	20
Iron	380	1890	1500	100.5	8.3	20
Lead	4.7	33.1	28.9	98.3	9.2	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	0.0	27.5	28.9	95.2	10.7	20

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 02/12/15

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1410	1350	104.4	80-120
Antimony	24.7	25	98.8	80-120
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	10.7	10	107.0	80-120
Cobalt				
Copper	13.3	12.5	106.4	80-120
Iron	1370	1300	105.4	80-120
Lead	25.0	25	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	25.9	25	103.6	80-120

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/12/15

Metal	FA22009-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	126000	130000	2.8	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	198	206	3.7	0-10
Cobalt				
Copper	4.80	6.60	37.5 (a)	0-10
Iron	6510	6600	1.3	0-10
Lead	80.4	81.9	1.9	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	0.00	0.00	NC	0-10

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/12/15

Metal	Sample ml	Final ml	FA22009-2 Raw	FA22009-2 Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10	126400	123872	121000	0.2	125	2500	-114.9*a	80-120
Antimony	9.8	10			93.9	0.2	5	100	93.9	80-120
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium	9.8	10	198.3	194.334	239	0.2	2.5	50	89.3	80-120
Cobalt										
Copper	9.8	10	4.8	4.704	105.4	0.2	5	100	100.7	80-120
Iron	9.8	10	6514	6383.72	8971	0.2	150	3000	86.2	80-120
Lead	9.8	10	80.4	78.792	128.1	0.2	2.5	50	98.6	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10			243	0.2	12.5	250	97.2	80-120

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/16/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8	0.48	<10
Antimony	1.0	.05	.065	-0.0050	<1.0
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	0.030	<0.50
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	0.0	<1.3
Iron	15	.85	.85	1.2	<15
Lead	1.0	.05	.05	-0.020	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.075	<1.0

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			02/16/15					02/16/15	
Metal	FA22051-3 Original	DUP	RPD	QC Limits	FA22051-3 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	4680	4360	7.1	0-20	4680	6080	1200	116.2	80-120
Antimony	0.22	0.077	96.3 (a)	0-20	0.22	8.2	22.3	35.8N(c)	80-120
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	3.0	3.8	23.5*(b)	0-20	3.0	12.2	8.92	103.1	80-120
Cobalt									
Copper	0.29	3.1	165.8*(b	0-20	0.29	11.6	11.2	101.4	80-120
Iron	1620	2360	37.2*(b)	0-20	1620	1840	1160	19.0N(c)	80-120
Lead	3.9	4.1	5.0	0-20	3.9	25.2	22.3	95.5	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	1.7	4.1	82.8*(b)	0-20	1.7	23.1	22.3	95.9	80-120

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) High RPD due to possible sample non-homogeneity.
(c) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/16/15

Metal	FA22051-3 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	4680	5840	1250	93.2	4.0	20
Antimony	0.22	9.3	23.1	39.4N(a)	12.6	20
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	3.0	12.2	9.22	99.7	0.0	20
Cobalt						
Copper	0.29	12.0	11.5	101.6	3.4	20
Iron	1620	1880	1200	21.7N(a)	2.2	20
Lead	3.9	25.7	23.1	94.5	2.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	1.7	23.8	23.1	95.8	3.0	20

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 02/16/15

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1410	1350	104.4	80-120
Antimony	24.7	25	98.8	80-120
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	10.6	10	106.0	80-120
Cobalt				
Copper	13.0	12.5	104.0	80-120
Iron	1370	1300	105.4	80-120
Lead	24.6	25	98.4	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	25.7	25	102.8	80-120

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/16/15

Metal	FA22051-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum	98800	102000	2.9	0-10
Antimony	4.60	0.00	100.0(a)	0-10
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	63.5	65.5	3.1	0-10
Cobalt				
Copper	6.20	7.50	21.0 (a)	0-10
Iron	34200	35100	2.6	0-10
Lead	82.7	85.1	2.9	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	36.2	43.6	20.4 (a)	0-10

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/16/15

Metal	Sample ml	Final ml	FA22051-3 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10	98830	96853.4	98800	0.2	125	2500	77.9*(a)	80-120
Antimony	9.8	10	4.6	4.508	98	0.2	5	100	93.5	80-120
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium	9.8	10	63.5	62.23	113.1	0.2	2.5	50	101.7	80-120
Cobalt										
Copper	9.8	10	6.2	6.076	110.2	0.2	5	100	104.1	80-120
Iron	9.8	10	34180	33496.4	35990	0.2	150	3000	83.1	80-120
Lead	9.8	10	82.7	81.046	129.7	0.2	2.5	50	97.3	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	36.2	35.476	283.3	0.2	12.5	250	99.1	80-120

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12213,MA12218

Instrument Detection Limits

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12216,MA12220

Instrument Linear Ranges

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA12213,MA12218

Instrument Linear Ranges

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA12216,MA12220

Southeast ACCUTEST LABORATORIES

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/12/2015 9:58:23 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0009	-.0004	-.0004	-.0015	.0007	.0026	-.0012	-.0004	-.0001
Stddev	.0002	.0005	.0002	.0017	.0001	.0007	.0002	.0002	.0001
%RSD	26.21	132.7	38.09	113.7	12.72	25.68	18.23	42.93	81.18
#1	.0007	.0000	-.0002	-.0024	.0007	.0019	-.0014	-.0002	.0000
#2	.0012	-.0010	-.0005	-.0026	.0008	.0033	-.0012	-.0006	-.0002
#3	.0008	-.0001	-.0004	.0005	.0006	.0027	-.0010	-.0005	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0057	.0017	-.0036	.0000	.0004	.0034	-.0101	-.0002	.0001
Stddev	.0001	.0001	.0036	.0004	.0000	.0004	.0012	.0001	.0007
%RSD	2.118	7.550	99.75	1125.	9.415	10.41	11.48	52.97	536.7
#1	.0056	.0018	.0004	.0002	.0003	.0037	-.0094	-.0003	.0002
#2	.0058	.0016	-.0063	-.0005	.0004	.0034	-.0114	-.0001	-.0006
#3	.0058	.0017	-.0048	.0004	.0004	.0030	-.0094	-.0003	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0006	-.0004	.0043	.0008	.0002	.0028	-.0015	-.0006	.0020
Stddev	.0001	.0000	.0000	.0000	.0013	.0001	.0002	.0001	.0001
%RSD	16.44	12.61	1.151	6.098	694.6	2.205	16.61	19.65	4.902
#1	.0006	-.0003	.0043	.0007	-.0005	.0028	-.0017	-.0005	.0019
#2	.0005	-.0004	.0043	.0008	.0017	.0027	-.0012	-.0007	.0020
#3	.0007	-.0004	.0044	.0007	-.0006	.0028	-.0015	-.0006	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3503.9	6755.1	58753.	5106.1
Stddev	16.6	28.1	567.	37.9
%RSD	.47250	.41652	.96504	.74234
#1	3491.0	6734.3	59406.	5143.8
#2	3498.1	6744.0	58470.	5068.0
#3	3522.6	6787.2	58384.	5106.6

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/12/2015 10:02:05 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0295	1.440	.0912	3.642	3.404	1.864	2.442	1.213	.2173	.3164
Stddev	.0001	.003	.0001	.008	.009	.005	.003	.001	.0005	.0006
%RSD	.3321	.2181	.1071	.2151	.2504	.2660	.1374	.1134	.2270	.1881
#1	.0296	1.436	.0912	3.651	3.408	1.859	2.440	1.212	.2169	.3160
#2	.0295	1.440	.0911	3.637	3.394	1.865	2.440	1.213	.2178	.3170
#3	.0294	1.443	.0913	3.638	3.410	1.869	2.446	1.214	.2170	.3160

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.522	.6588	.2031	1.319	.5229	2.408	.7544	.4089	.1156	.0657
Stddev	.008	.0046	.0021	.002	.0004	.005	.0018	.0009	.0004	.0001
%RSD	.5473	.6971	1.009	.1513	.0674	.2301	.2374	.2153	.3260	.1327
#1	1.518	.6543	.2013	1.318	.5226	2.405	.7524	.4087	.1153	.0656
#2	1.516	.6586	.2026	1.321	.5233	2.405	.7558	.4098	.1154	.0658
#3	1.532	.6635	.2053	1.317	.5228	2.415	.7549	.4081	.1160	.0658

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1382	.2095	5.940	.8372	.1526	.2645	1.422
Stddev	.0002	.0002	.015	.0024	.0006	.0005	.003
%RSD	.1704	.1114	.2459	.2891	.4140	.2046	.1998
#1	.1382	.2094	5.923	.8347	.1522	.2639	1.420
#2	.1379	.2094	5.948	.8395	.1523	.2646	1.421
#3	.1384	.2098	5.949	.8373	.1533	.2650	1.425

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3282.1	6647.7	57961.	5102.7
Stddev	10.6	10.6	146.	44.1
%RSD	.32233	.15891	.25251	.86463
#1	3284.4	6652.1	57851.	5153.2
#2	3270.6	6635.7	57905.	5083.6
#3	3291.4	6655.4	58127.	5071.4

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/12/2015 10:05:36 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1145	5.612	.3719	14.28	13.38	7.266	9.650	4.763	.8462	1.229
Stddev	.0003	.014	.0004	.04	.04	.029	.020	.010	.0024	.001
%RSD	.2482	.2440	.1059	.2492	.2644	.3943	.2033	.2052	.2866	.0650
#1	.1141	5.617	.3716	14.26	13.39	7.288	9.630	4.752	.8467	1.228
#2	.1146	5.623	.3724	14.32	13.41	7.276	9.649	4.764	.8435	1.230
#3	.1146	5.597	.3718	14.26	13.34	7.234	9.670	4.772	.8483	1.230

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.821	2.643	.7908	5.182	2.068	9.513	2.957	1.660	.4630	.2666
Stddev	.027	.011	.0065	.014	.006	.012	.006	.008	.0013	.0006
%RSD	.4601	.3996	.8279	.2765	.2918	.1224	.1962	.4997	.2704	.2347
#1	5.828	2.650	.7933	5.184	2.062	9.521	2.954	1.654	.4617	.2660
#2	5.844	2.648	.7957	5.167	2.069	9.519	2.954	1.656	.4631	.2666
#3	5.792	2.631	.7834	5.196	2.074	9.500	2.964	1.670	.4642	.2672

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7901	.8129	23.78	3.337	.6205	1.042	5.553
Stddev	.0010	.0011	.04	.007	.0016	.003	.012
%RSD	.1304	.1347	.1691	.2103	.2590	.2857	.2161
#1	.7892	.8117	23.82	3.339	.6203	1.044	5.544
#2	.7900	.8133	23.79	3.330	.6191	1.039	5.548
#3	.7912	.8138	23.74	3.343	.6222	1.043	5.566

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2993.7	6360.5	55930.	5026.8
Stddev	12.2	12.1	141.	18.6
%RSD	.40881	.18989	.25257	.36950
#1	3004.9	6374.1	56073.	5017.8
#2	2995.7	6356.8	55927.	5014.5
#3	2980.6	6350.8	55790.	5048.2

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/12/2015 10:08:56 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2262	10.84	.7473	27.54	25.83	14.11	18.92	9.365	1.663	2.430
Stddev	.0004	.31	.0011	.69	.68	.39	.02	.010	.005	.003
%RSD	.1622	2.873	.1481	2.508	2.620	2.792	.1051	.1085	.3295	.1251
#1	.2262	10.53	.7460	26.85	25.14	13.70	18.90	9.354	1.658	2.428
#2	.2259	10.85	.7478	27.52	25.88	14.14	18.93	9.370	1.664	2.429
#3	.2266	11.15	.7480	28.23	26.49	14.48	18.94	9.372	1.669	2.434

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.95	5.131	1.510	9.939	4.099	18.26	5.818	3.378	.9323	.5340
Stddev	.31	.129	.043	.038	.004	.45	.011	.007	.0012	.0016
%RSD	2.845	2.520	2.867	.3814	.1106	2.492	.1926	.1974	.1280	.3057
#1	10.64	5.005	1.465	9.917	4.094	17.79	5.805	3.377	.9309	.5322
#2	10.97	5.126	1.515	9.917	4.100	18.27	5.824	3.371	.9331	.5350
#3	11.26	5.263	1.551	9.983	4.103	18.70	5.826	3.385	.9327	.5350

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.890	1.588	45.68	6.454	1.245	2.122	10.92
Stddev	.002	.000	1.18	.047	.004	.008	.02
%RSD	.1083	.0112	2.578	.7227	.3368	.3952	.2284
#1	1.888	1.587	44.48	6.405	1.243	2.113	10.90
#2	1.892	1.588	45.73	6.459	1.241	2.122	10.92
#3	1.891	1.588	46.83	6.497	1.249	2.130	10.95

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2775.0	6113.2	54422.	5117.2
Stddev	1.8	7.2	267.	164.6
%RSD	.06575	.11736	.49072	3.2168
#1	2774.5	6121.3	54622.	5277.1
#2	2777.0	6107.6	54526.	5126.2
#3	2773.5	6110.8	54119.	4948.3

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/12/2015 10:13:56 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4910	79.70	3.954	3.979	3.978	79.53	3.948	3.941	3.885	3.880
Stddev	.0066	.26	.004	.015	.006	.11	.011	.014	.070	.065
%RSD	1.346	.3204	.0926	.3672	.1421	.1438	.2838	.3462	1.808	1.664
#1	.4962	79.60	3.950	3.978	3.974	79.53	3.941	3.934	3.951	3.936
#2	.4836	79.50	3.955	3.965	3.976	79.41	3.941	3.931	3.811	3.809
#3	.4933	79.99	3.957	3.994	3.985	79.64	3.960	3.956	3.893	3.894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.65	79.21	79.27	3.895	3.942	78.07	3.952	3.987	3.956	3.923
Stddev	.20	.18	.28	.072	.012	.15	.015	.012	.016	.012
%RSD	.2480	.2261	.3472	1.854	.3149	.1896	.3760	.2951	.3948	.2973
#1	78.59	79.17	79.21	3.967	3.935	78.01	3.943	3.974	3.946	3.918
#2	78.49	79.04	79.04	3.822	3.934	77.97	3.945	3.989	3.949	3.916
#3	78.87	79.40	79.57	3.897	3.956	78.24	3.970	3.997	3.974	3.937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.328	3.936	3.971	3.869	3.983	3.918	3.967
Stddev	.017	.009	.002	.071	.018	.070	.010
%RSD	.3905	.2345	.0367	1.837	.4639	1.775	.2464
#1	4.319	3.931	3.969	3.933	3.962	3.983	3.960
#2	4.317	3.931	3.970	3.793	3.988	3.845	3.963
#3	4.348	3.947	3.972	3.881	3.998	3.926	3.978
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/12/2015 10:13:56 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2782.4	6116.0	55000.	4949.9
Stddev	11.3	27.2	967.	53.9
%RSD	.40687	.44406	1.7585	1.0882
#1	2791.8	6129.1	54113.	4933.6
#2	2785.5	6134.0	56031.	5010.1
#3	2769.8	6084.7	54856.	4906.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/12/2015 10:20:04 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	41.41	1.991	2.097	2.021	42.34	1.974	2.006	1.964	1.926
Stddev	.0009	.96	.018	.047	.041	.89	.017	.016	.012	.014
%RSD	.3535	2.323	.8978	2.217	2.004	2.094	.8470	.8085	.6212	.7244
#1	.2478	41.77	1.995	2.107	2.034	42.64	1.980	2.012	1.952	1.913
#2	.2483	42.15	1.971	2.138	2.054	43.05	1.955	1.988	1.963	1.925
#3	.2495	40.32	2.006	2.047	1.976	41.35	1.986	2.018	1.977	1.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.23	42.06	40.80	2.028	1.901	41.75	2.054	1.960	1.978	1.983
Stddev	.91	.83	.90	.012	.016	.96	.017	.016	.018	.013
%RSD	2.204	1.967	2.197	.5926	.8164	2.301	.8182	.8384	.8992	.6458
#1	41.50	42.24	41.06	2.018	1.906	42.09	2.058	1.962	1.977	1.981
#2	41.98	42.79	41.54	2.025	1.883	42.49	2.035	1.943	1.960	1.971
#3	40.22	41.16	39.80	2.042	1.912	40.66	2.068	1.975	1.996	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0214	2.041	1.985	1.966	2.041	1.879	2.030
Stddev	.0006	.016	.046	.012	.014	.010	.017
%RSD	2.584	.7994	2.304	.5875	.6667	.5133	.8367
#1	.0220	2.048	2.000	1.957	2.043	1.871	2.038
#2	.0210	2.023	2.021	1.963	2.026	1.877	2.011
#3	.0211	2.053	1.933	1.979	2.053	1.890	2.042
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/12/2015 10:20:04 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2965.1	6256.2	55411.	4992.7
Stddev	20.9	43.3	240.	97.5
%RSD	.70579	.69151	.43394	1.9527
#1	2961.5	6242.7	55481.	4958.2
#2	2987.5	6304.5	55608.	4917.1
#3	2946.1	6221.2	55143.	5102.7

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/12/2015 10:31:22 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0041	.0001	.0002	.0000	.0022	.0001	.0000	.0001	.0001
Stddev	.000	.0084	.0003	.0002	.000	.0003	.0000	.000	.0002	.0002
%RSD	787.1	204.3	290.0	88.14	2030.	11.63	12.26	385.5	106.3	280.7
#1	-.0004	.0136	-.0002	.0003	.0000	.0024	.0001	-.0001	.0003	.0002
#2	.0002	-.0024	.0001	.0003	.0000	.0019	.0001	.0000	.0001	.0000
#3	.0001	.0012	.0005	.0000	.0000	.0022	.0001	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0049	.0665	-.0012	.0001	-.0005	.0221	.0001	-.0003	.0000	.0015
Stddev	.0036	.0526	.0139	.0000	.0002	.0035	.0000	.0006	.0011	.0012
%RSD	72.67	79.22	1123.	5.939	37.99	15.73	39.99	202.7	6241.	79.51
#1	-.0041	.1246	.0109	.0001	-.0003	.0190	.0000	.0002	.0000	.0006
#2	-.0088	.0219	.0017	.0001	-.0005	.0259	.0001	-.0009	-.0011	.0029
#3	-.0018	.0529	-.0164	.0001	-.0008	.0215	.0001	-.0002	.0011	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0000	.0001	.0007	.0000	.0000
Stddev	.0004	.0003	.0001	.0001	.0008	.0002	.0001
%RSD	1052.	1550.	153.5	142.7	120.9	3842.	104.8
#1	.0005	-.0003	.0000	.0001	.0008	.0002	.0000
#2	-.0003	.0003	.0001	.0002	.0014	-.0001	.0001
#3	-.0001	.0000	.0000	.0000	-.0002	-.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/12/2015 10:31:22 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3457.8	6548.5	58178.	5122.3
Stddev	8.5	13.5	224.	151.9
%RSD	.24647	.20570	.38532	2.9650
#1	3460.5	6563.4	58150.	5069.0
#2	3464.6	6544.9	57969.	5004.2
#3	3448.2	6537.2	58415.	5293.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/12/2015 10:35:20 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0103	.2163	.0095	.2077	.0052	1.073	.0053	.0536	.0106	.0268
Stddev	.0005	.0051	.0001	.0006	.0000	.005	.0000	.0003	.0000	.0003
%RSD	4.375	2.377	1.528	.2844	.9022	.4585	.8414	.4905	.0658	1.125
#1	.0108	.2221	.0096	.2073	.0053	1.069	.0053	.0533	.0106	.0270
#2	.0101	.2124	.0093	.2075	.0052	1.079	.0053	.0537	.0106	.0265
#3	.0100	.2143	.0096	.2084	.0052	1.071	.0053	.0538	.0106	.0270
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3228	10.61	5.195	.0166	.0476	10.65	.0440	.0046	.0053	.0107
Stddev	.0027	.05	.056	.0000	.0002	.04	.0003	.0003	.0007	.0011
%RSD	.8359	.4512	1.071	.1297	.5098	.4222	.5976	5.983	13.23	10.58
#1	.3240	10.58	5.133	.0166	.0474	10.60	.0437	.0046	.0059	.0103
#2	.3197	10.58	5.210	.0166	.0479	10.65	.0441	.0044	.0055	.0120
#3	.3247	10.66	5.241	.0166	.0476	10.69	.0442	.0049	.0046	.0099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0621	.0529	.0106	.0101	.0111	.0507	.0232
Stddev	.0001	.0004	.0001	.0001	.0002	.0001	.0001
%RSD	.2064	.7988	.8487	.7507	2.163	.2891	.3585
#1	.0620	.0525	.0106	.0101	.0114	.0506	.0231
#2	.0622	.0533	.0105	.0101	.0111	.0509	.0232
#3	.0621	.0530	.0106	.0100	.0109	.0506	.0233
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/12/2015 10:35:20 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3325.5	6487.3	56745.	5055.6
Stddev	15.0	25.2	81.	32.3
%RSD	.45251	.38781	.14296	.63933
#1	3342.0	6516.3	56713.	5053.3
#2	3322.0	6472.0	56685.	5089.0
#3	3312.5	6473.5	56838.	5024.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/12/2015 10:41:01 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	500.3	-.0008	.0008	-.0002	491.9	.0000	.0000	.0001
Stddev	.0001	10.8	.0013	.0002	.0000	15.1	.0004	.0014	.0002
%RSD	28.67	2.167	163.1	31.17	26.70	3.073	934.0	3081.	170.1
#1	.0001	507.2	.0000	.0006	-.0002	507.9	-.0003	.0017	.0003
#2	.0003	487.8	-.0001	.0011	-.0001	477.8	.0005	-.0009	-.0001
#3	.0003	506.0	-.0022	.0007	-.0002	489.9	-.0001	-.0007	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	187.5	.6324	484.7	.0000	.0000	.3370	.0000	-.0001
Stddev	.000	4.9	.0205	12.9	.0000	.000	.0158	.0004	.0027
%RSD	898.3	2.616	3.248	2.665	149.3	6613.	4.690	3536.	2080.
#1	.0003	190.9	.6561	494.4	.0000	.0005	.3188	.0002	-.0015
#2	-.0004	181.9	.6188	470.0	.0001	-.0002	.3451	-.0004	.0030
#3	.0000	189.7	.6225	489.6	.0000	-.0003	.3472	.0003	-.0019
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0003	.0859	F.0012	.0002	.0001	-.0001	.0000	-.0011
Stddev	.0003	.0020	.0012	.0005	.0001	.0002	.0018	.0004	.0003
%RSD	572.6	627.7	1.400	40.24	34.03	421.8	1534.	5985.	26.10
#1	-.0002	-.0018	.0863	.0007	.0001	.0003	.0008	-.0002	-.0014
#2	.0004	-.0012	.0868	.0017	.0002	-.0002	-.0022	.0005	-.0008
#3	-.0001	.0020	.0845	.0012	.0002	.0000	.0011	-.0002	-.0012
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/12/2015 10:41:01 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2648.5	5792.5	49651.	4859.6
Stddev	19.8	49.8	303.	109.1
%RSD	.74843	.86027	.61036	2.2453
#1	2641.2	5767.9	49478.	4778.4
#2	2633.4	5759.8	50001.	4983.7
#3	2670.9	5849.9	49474.	4816.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/12/2015 10:48:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.042	508.1	1.076	.5170	.5152	483.6	.9505	.4862	.4968	.5422
Stddev	.003	7.2	.003	.0109	.0108	14.7	.0016	.0007	.0035	.0021
%RSD	.3124	1.414	.2308	2.115	2.089	3.043	.1697	.1531	.7038	.3941
#1	1.040	515.7	1.077	.5213	.5182	496.0	.9522	.4864	.4934	.5401
#2	1.040	506.9	1.078	.5252	.5242	487.5	.9501	.4867	.5004	.5420
#3	1.046	501.5	1.073	.5046	.5033	467.3	.9490	.4853	.4967	.5444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.3	.2865	482.2	.5237	.9343	.2137	.9930	.9697	1.072	1.030
Stddev	3.7	.0207	9.8	.0020	.0011	.0076	.0017	.0020	.002	.004
%RSD	2.020	7.208	2.027	.3763	.1203	3.552	.1687	.2108	.1662	.3529
#1	185.9	.2961	486.7	.5230	.9348	.2107	.9943	.9715	1.074	1.034
#2	187.0	.2628	489.0	.5260	.9350	.2080	.9936	.9702	1.073	1.029
#3	180.1	.3007	471.0	.5222	.9330	.2223	.9911	.9675	1.070	1.027
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0399	.9459	1.034	1.030	.9878	.4867	.9903
Stddev	.0010	.0030	.020	.002	.0047	.0020	.0019
%RSD	2.433	.3178	1.974	.2250	.4802	.4179	.1893
#1	.0409	.9477	1.040	1.027	.9826	.4854	.9924
#2	.0390	.9475	1.051	1.032	.9919	.4891	.9898
#3	.0398	.9424	1.011	1.030	.9889	.4857	.9888
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/12/2015 10:48:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.8	5720.4	49660.	4740.6
Stddev	5.4	6.4	168.	62.8
%RSD	.20785	.11115	.33826	1.3243
#1	2596.9	5715.8	49660.	4700.7
#2	2586.7	5717.6	49492.	4708.1
#3	2588.7	5727.6	49828.	4813.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 10:54:57 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2528	40.24	2.058	2.016	2.039	40.65	2.068	2.050	2.030	2.008
Stddev	.0022	.84	.015	.039	.035	.70	.010	.010	.017	.015
%RSD	.8809	2.077	.7259	1.936	1.736	1.721	.4847	.4673	.8407	.7648
#1	.2503	40.52	2.074	2.022	2.050	40.90	2.079	2.060	2.013	1.991
#2	.2534	40.91	2.056	2.051	2.067	41.20	2.066	2.048	2.029	2.009
#3	.2547	39.31	2.045	1.974	1.999	39.86	2.060	2.041	2.047	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.82	41.28	39.77	2.095	2.040	41.13	2.081	2.005	2.062	2.051
Stddev	.79	.75	.69	.015	.009	.75	.012	.009	.014	.008
%RSD	1.926	1.808	1.745	.7256	.4438	1.824	.5667	.4501	.6534	.4101
#1	40.99	41.43	39.93	2.080	2.049	41.33	2.094	2.012	2.074	2.060
#2	41.51	41.94	40.37	2.096	2.041	41.76	2.080	2.008	2.065	2.052
#3	39.97	40.47	39.01	2.111	2.031	40.30	2.070	1.995	2.047	2.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.873	2.048	2.082	2.087	2.047	2.014	2.083
Stddev	.011	.010	.040	.018	.009	.017	.011
%RSD	.5772	.4694	1.932	.8401	.4220	.8622	.5490
#1	1.882	2.058	2.093	2.070	2.055	2.000	2.096
#2	1.875	2.048	2.115	2.087	2.049	2.009	2.079
#3	1.861	2.039	2.037	2.105	2.038	2.033	2.074
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 10:54:57 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2969.2	6215.0	55186.	5031.0
Stddev	10.2	19.1	323.	89.2
%RSD	.34382	.30729	.58482	1.7735
#1	2960.8	6199.0	55493.	5012.7
#2	2966.4	6209.8	55215.	4952.3
#3	2980.6	6236.2	54850.	5127.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:03:29 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0078	.0000	.0001	.0000	.0065	.0001	-.0001	.0001
Stddev	.0005	.0065	.000	.0002	.0001	.0041	.0001	.0001	.0001
%RSD	125.0	84.12	11200.	160.6	1562.	63.19	48.27	155.3	128.0
#1	.0009	.0050	-.0003	.0001	.0000	.0068	.0001	.0000	.0001
#2	-.0001	.0030	.0004	.0002	.0001	.0022	.0002	.0000	.0002
#3	.0004	.0153	-.0001	-.0001	-.0001	.0104	.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0187	.1089	-.0058	.0001	F.0025	.0419	.0000	.0002
Stddev	.0002	.0054	.0200	.0303	.0000	.0014	.0261	.000	.0005
%RSD	64.57	29.02	18.38	524.7	35.74	56.40	62.39	132.1	305.3
#1	.0001	.0238	.0961	-.0331	.0001	.0040	.0181	.0000	.0003
#2	.0006	.0194	.0985	.0268	.0000	.0022	.0377	-.0001	-.0004
#3	.0004	.0130	.1319	-.0111	.0001	.0013	.0699	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0011	.0001	.0000	.0001	.0009	.0015	-.0001	.0000
Stddev	.0004	.0011	.0002	.000	.0001	.0002	.0010	.0001	.0001
%RSD	436.8	107.2	182.3	311.1	115.4	18.39	70.73	124.5	342.8
#1	.0002	.0023	.0003	.0001	.0002	.0010	.0003	.0000	.0001
#2	-.0004	.0006	.0000	-.0001	.0000	.0009	.0023	-.0001	.0000
#3	.0004	.0002	.0000	-.0001	.0001	.0007	.0017	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:03:29 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3466.4	6477.8	57685.	5019.2
Stddev	15.2	32.7	321.	10.7
%RSD	.43844	.50547	.55674	.21292
#1	3464.8	6462.7	57909.	5015.2
#2	3482.3	6515.3	57830.	5011.1
#3	3452.0	6455.3	57317.	5031.3

Zoom In Zoom Out

Sample Name: FA21941-2 Acquired: 2/12/2015 11:07:47 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.1359	-.0008	.0234	-.0001	72.57	.0000	.0000	.0010	.0004
Stddev	.0006	.0075	.0006	.0004	.0000	.28	.000	.000	.0002	.0002
%RSD	213.2	5.531	78.15	1.520	77.06	.3832	219.9	570.1	22.97	62.75
#1	-.0003	.1428	-.0001	.0238	.0000	72.87	.0000	.0000	.0010	.0006
#2	.0003	.1279	-.0012	.0233	.0000	72.32	-.0001	.0001	.0013	.0004
#3	.0008	.1370	-.0011	.0231	-.0001	72.53	.0000	-.0002	.0008	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1739	4.159	6.638	.0093	-.0007	17.86	.0004	-.0002	.0010	.0027
Stddev	.0009	.028	.024	.0000	.0003	.05	.0000	.0006	.0006	.0022
%RSD	.5257	.6633	.3547	.2602	44.03	.2997	11.42	371.4	63.81	78.90
#1	.1746	4.189	6.661	.0093	-.0003	17.92	.0004	-.0008	.0007	.0005
#2	.1729	4.135	6.614	.0093	-.0008	17.81	.0005	.0003	.0006	.0028
#3	.1743	4.153	6.639	.0093	-.0008	17.86	.0004	.0000	.0018	.0048

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.9605	.0004	.2708	.0022	.0004	.0017	.0114
Stddev	.0026	.0003	.0009	.0000	.0011	.0002	.0000
%RSD	.2754	89.67	.3434	.3017	258.1	10.64	.1461
#1	.9581	.0007	.2717	.0022	.0013	.0019	.0114
#2	.9633	.0000	.2698	.0022	.0009	.0015	.0114
#3	.9601	.0004	.2708	.0023	-.0009	.0016	.0114

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3172.1	6216.0	55336.	5034.1
Stddev	5.3	7.8	144.	16.0
%RSD	.16630	.12477	.26023	.31728
#1	3166.6	6223.5	55201.	5015.8
#2	3177.1	6208.0	55320.	5044.7
#3	3172.4	6216.6	55488.	5042.0

Zoom In Zoom Out

Sample Name: FA21941-5 Acquired: 2/12/2015 11:12:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.1303	.0175	.0328	-.0002	72.16	.0001	.0002	.0009	.0008
Stddev	.0001	.0087	.0010	.0002	.0000	.25	.0001	.0000	.0003	.0005
%RSD	70.36	6.671	5.879	.6788	14.86	.3530	146.4	23.71	28.55	65.89
#1	.0003	.1230	.0183	.0329	-.0002	72.36	.0001	.0001	.0008	.0013
#2	.0000	.1279	.0179	.0326	-.0002	71.87	.0000	.0002	.0007	.0006
#3	.0001	.1399	.0163	.0330	-.0001	72.24	.0000	.0002	.0012	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.550	4.544	8.803	.0121	.0025	20.95	.0002	-.0001	.0003	.0024
Stddev	.008	.053	.021	.0000	.0002	.08	.0001	.0002	.0017	.0016
%RSD	.2189	1.162	.2335	.3406	8.341	.3589	24.28	314.4	496.0	68.55
#1	3.558	4.605	8.783	.0121	.0027	20.94	.0002	-.0001	-.0008	.0040
#2	3.544	4.509	8.824	.0121	.0024	20.88	.0002	-.0003	-.0005	.0008
#3	3.546	4.517	8.802	.0120	.0023	21.03	.0003	.0002	.0023	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.185	-.0001	.2985	.0014	-.0007	.0020	.0004
Stddev	.018	.0001	.0003	.0001	.0008	.0001	.0000
%RSD	1.545	82.47	.0994	4.321	110.8	6.152	9.594
#1	1.197	.0000	.2987	.0014	-.0014	.0021	.0005
#2	1.195	-.0001	.2987	.0014	.0001	.0020	.0004
#3	1.164	-.0002	.2982	.0015	-.0008	.0019	.0004

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3184.7	6241.6	54960.	5045.0
Stddev	31.9	66.1	109.	22.2
%RSD	1.0009	1.0587	.19792	.44092
#1	3168.4	6205.8	55046.	5064.0
#2	3164.3	6201.1	54838.	5050.6
#3	3221.5	6317.9	54995.	5020.6

Zoom In Zoom Out

Sample Name: FA21941-6 Acquired: 2/12/2015 11:16:31 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.1442	-.0012	.0290	-.0002	131.0	-.0001	.0000	.0011	.0026
Stddev	.0004	.0126	.0005	.0007	.0000	.7	.0000	.0000	.0002	.0007
%RSD	340.2	8.750	39.86	2.349	8.530	.5468	87.33	2683.	20.47	27.49
#1	.0004	.1477	-.0007	.0284	-.0002	130.2	-.0001	.0000	.0009	.0030
#2	-.0004	.1547	-.0016	.0297	-.0002	131.3	.0000	-.0001	.0013	.0030
#3	.0004	.1302	-.0013	.0288	-.0002	131.6	-.0001	.0000	.0010	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1819	5.991	14.95	.0333	-.0021	22.48	.0003	-.0001	.0011	.0022
Stddev	.0021	.050	.12	.0014	.0000	.11	.0001	.0007	.0003	.0010
%RSD	1.167	.8305	.8029	4.148	1.687	.4685	34.46	651.9	27.40	45.93
#1	.1802	5.938	14.82	.0340	-.0022	22.36	.0004	-.0007	.0010	.0030
#2	.1812	6.036	14.99	.0342	-.0021	22.50	.0004	.0007	.0014	.0011
#3	.1843	6.000	15.05	.0317	-.0022	22.57	.0002	-.0003	.0008	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.649	-.0002	.4461	.0025	-.0002	.0013	.0021
Stddev	.032	.0004	.0020	.0002	.0006	.0002	.0001
%RSD	1.211	261.9	.4399	6.515	372.9	18.35	3.173
#1	2.679	-.0002	.4439	.0026	-.0002	.0015	.0022
#2	2.615	-.0005	.4470	.0026	-.0008	.0014	.0021
#3	2.652	.0003	.4476	.0023	.0004	.0010	.0021

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3067.0	6109.4	54937.	4905.7
Stddev	20.2	48.7	1934.	48.9
%RSD	.65934	.79672	3.5203	.99756
#1	3045.7	6067.0	53867.	4960.3
#2	3086.0	6162.5	53774.	4865.8
#3	3069.2	6098.7	57169.	4891.0

Zoom In Zoom Out

Sample Name: MP28546-MB1 Acquired: 2/12/2015 11:20:53 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0004	-.0014	.0000	.0000	.0625	-.0001	-.0002	-.0001	-.0001
Stddev	.0001	.0076	.0007	.0001	.000	.0025	.0000	.0001	.0001	.0001
%RSD	40.70	1941.	48.57	234.0	177.0	3.983	63.69	74.54	137.5	119.3
#1	.0004	.0091	-.0007	.0000	.0000	.0596	-.0001	.0000	.0000	.0000
#2	.0002	-.0027	-.0020	.0000	.0000	.0642	.0000	-.0002	.0000	-.0003
#3	.0003	-.0052	-.0014	.0001	-.0001	.0636	-.0001	-.0003	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0038	.0550	-.0073	.0000	-.0024	.0644	-.0001	.0002	.0000	.0010
Stddev	.0036	.0145	.0127	.0000	.0001	.0091	.0002	.0005	.000	.0018
%RSD	95.26	26.32	173.8	58.46	2.674	14.11	305.0	226.6	5183.	174.5
#1	-.0001	.0618	.0055	.0001	-.0025	.0741	.0001	.0009	.0001	-.0001
#2	-.0040	.0384	-.0198	.0000	-.0024	.0631	-.0003	.0000	.0003	.0031
#3	-.0073	.0649	-.0076	.0000	-.0024	.0560	.0000	-.0002	-.0005	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226	-.0001	.0001	-.0007	-.0003	-.0002	.0004
Stddev	.0002	.0003	.0000	.0001	.0015	.0002	.0001
%RSD	1.072	237.6	20.02	7.748	476.4	81.21	13.45
#1	.0229	.0002	.0001	-.0007	-.0018	-.0002	.0004
#2	.0224	-.0003	.0002	-.0007	-.0003	.0000	.0003
#3	.0225	-.0003	.0002	-.0008	.0012	-.0003	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28546-MB1 Acquired: 2/12/2015 11:20:53 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3409.0	6520.3	57998.	4957.4
Stddev	4.7	9.2	266.	28.9
%RSD	.13874	.14079	.45860	.58215
#1	3414.3	6521.1	57853.	4975.2
#2	3405.1	6510.8	58305.	4972.8
#3	3407.6	6529.1	57836.	4924.1

Zoom In Zoom Out

Sample Name: MP28546-B1 Acquired: 2/12/2015 11:25:21 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0519	29.42	2.132	2.197	.0558	27.23	.0538	.5429	.2225	.2716
Stddev	.0007	.10	.001	.009	.0001	.05	.0001	.0007	.0009	.0010
%RSD	1.286	.3513	.0516	.4326	.2462	.1966	.2515	.1336	.4070	.3595
#1	.0511	29.47	2.131	2.200	.0560	27.25	.0537	.5423	.2221	.2706
#2	.0524	29.30	2.132	2.186	.0557	27.17	.0539	.5437	.2218	.2716
#3	.0521	29.49	2.133	2.204	.0558	27.28	.0537	.5427	.2235	.2726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.44	27.45	26.95	.5559	.5244	27.56	.5552	.5176	.5297	2.104
Stddev	.06	.05	.17	.0004	.0007	.05	.0011	.0026	.0009	.001
%RSD	.2131	.1996	.6239	.0728	.1262	.1829	.1999	.5088	.1638	.0399
#1	28.45	27.38	27.14	.5557	.5236	27.54	.5541	.5166	.5288	2.105
#2	28.37	27.47	26.81	.5557	.5248	27.51	.5563	.5206	.5305	2.103
#3	28.49	27.49	26.92	.5564	.5248	27.61	.5552	.5156	.5299	2.104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0270	.5549	.5474	.5453	2.089	.5196	.5473
Stddev	.0001	.0006	.0013	.0002	.008	.0008	.0028
%RSD	.3556	.1090	.2406	.0308	.3957	.1634	.5195
#1	.0271	.5542	.5480	.5453	2.082	.5187	.5454
#2	.0271	.5552	.5459	.5454	2.098	.5199	.5506
#3	.0269	.5552	.5483	.5451	2.088	.5203	.5459
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28546-B1 Acquired: 2/12/2015 11:25:21 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3083.3	6317.8	55635.	4911.7
Stddev	5.0	9.3	51.	16.9
%RSD	.16338	.14713	.09218	.34385
#1	3089.1	6328.2	55661.	4898.4
#2	3080.0	6315.3	55667.	4930.7
#3	3080.9	6310.1	55575.	4906.0

Zoom In Zoom Out

Sample Name: FA22044-1 Acquired: 2/12/2015 11:29:33 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2116	.0001	.0130	.0000	.7917	.0000	.0002	.0012	.0000
Stddev	.0001	.0121	.0008	.0003	.000	.0069	.000	.0001	.0001	.0002
%RSD	63.53	5.695	1275.	1.972	444.2	.8689	79.39	48.18	4.775	404.7
#1	.0001	.2173	.0009	.0127	.0000	.7861	.0000	.0003	.0012	-.0001
#2	.0001	.2198	.0000	.0132	-.0001	.7994	.0000	.0001	.0013	.0000
#3	.0002	.1978	-.0007	.0131	.0001	.7896	-.0001	.0002	.0013	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5278	1.163	.8122	.0019	-.0019	16.54	.0003	-.0001	.0002	.0029
Stddev	.0094	.092	.0684	.0000	.0002	.22	.0002	.0001	.0009	.0007
%RSD	1.786	7.945	8.420	.9232	8.494	1.309	82.33	106.4	389.0	25.73
#1	.5218	1.086	.7822	.0019	-.0017	16.50	.0005	-.0002	-.0004	.0030
#2	.5387	1.266	.8905	.0019	-.0020	16.77	.0002	-.0001	.0012	.0036
#3	.5229	1.138	.7640	.0019	-.0020	16.34	.0001	.0000	-.0002	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.166	-.0001	.0158	.0055	.0027	.0020	.0071
Stddev	.004	.0001	.0002	.0004	.0008	.0003	.0001
%RSD	.1207	113.4	1.484	7.787	30.95	15.07	1.265
#1	3.164	.0000	.0157	.0056	.0037	.0022	.0072
#2	3.165	-.0002	.0161	.0058	.0026	.0022	.0071
#3	3.171	-.0001	.0156	.0050	.0020	.0017	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3313.2	6479.7	57314.	4986.6
Stddev	3.8	14.7	130.	71.2
%RSD	.11546	.22744	.22629	1.4270
#1	3314.6	6481.9	57222.	4981.5
#2	3316.1	6493.2	57257.	4918.2
#3	3308.8	6464.0	57462.	5060.3

Zoom In Zoom Out

Sample Name: MP28546-D1 Acquired: 2/12/2015 11:33:57 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1880	-.0008	.0117	-.0001	.7767	-.0001	.0000	.0015	-.0002
Stddev	.0002	.0051	.0005	.0003	.0001	.0084	.0000	.0001	.0001	.0002
%RSD	301.8	2.720	62.93	2.986	53.25	1.080	42.72	202.4	4.572	97.24
#1	-.0003	.1859	-.0013	.0119	-.0001	.7708	-.0001	.0000	.0015	-.0001
#2	.0000	.1938	-.0003	.0118	-.0001	.7863	.0000	.0002	.0015	.0000
#3	.0001	.1842	-.0009	.0113	-.0002	.7729	-.0001	.0000	.0014	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.5132	1.096	.8095	.0017	-.0023	16.64	.0000	-.0003	.0001	.0007
Stddev	.0030	.055	.0147	.0000	.0001	.11	.0001	.0002	.0007	.0017
%RSD	.5864	4.970	1.818	2.018	2.778	.6617	348.1	49.32	632.4	240.4
#1	.5099	1.034	.7993	.0016	-.0023	16.53	.0002	-.0005	.0007	.0023
#2	.5140	1.122	.8264	.0017	-.0022	16.75	.0000	-.0004	.0002	.0010
#3	.5158	1.133	.8030	.0017	-.0023	16.66	-.0001	-.0001	-.0006	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.194	-.0001	.0157	.0041	.0007	.0018	.0093
Stddev	.002	.0002	.0000	.0002	.0004	.0001	.0001
%RSD	.0622	221.8	.2402	4.126	51.66	6.849	.9054
#1	3.195	-.0002	.0157	.0039	.0007	.0017	.0092
#2	3.191	.0001	.0157	.0042	.0011	.0017	.0093
#3	3.195	-.0002	.0157	.0042	.0004	.0019	.0093

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3308.3	6447.1	57029.	4969.7
Stddev	3.4	11.8	282.	41.0
%RSD	.10362	.18306	.49470	.82462
#1	3311.9	6444.0	57331.	5011.0
#2	3305.1	6460.2	56985.	4929.0
#3	3307.8	6437.2	56772.	4969.2

Zoom In Zoom Out

Sample Name: MP28546-SD1 Acquired: 2/12/2015 11:38:23 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0021	.1965	-.0012	.0120	-.0010	1.040	-.0003	.0000	.0014	.0003
Stddev	.0017	.0475	.0019	.0008	.0002	.014	.0001	.000	.0020	.0017
%RSD	78.73	24.17	163.3	6.752	23.67	1.372	21.37	1107.	138.8	540.7
#1	.0029	.1964	-.0030	.0124	-.0009	1.028	-.0002	-.0001	-.0009	-.0006
#2	.0033	.2440	.0009	.0125	-.0008	1.036	-.0003	.0002	.0024	.0022
#3	.0002	.1490	-.0014	.0110	-.0012	1.056	-.0003	-.0001	.0028	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.4707	1.320	.7265	.0015	-.0141	16.40	.0003	-.0003	-.0036	.0039
Stddev	.0159	.123	.0686	.0001	.0004	.05	.0009	.0034	.0036	.0046
%RSD	3.377	9.314	9.436	9.169	2.770	.2979	275.5	1083.	101.5	116.7
#1	.4679	1.187	.7736	.0014	-.0139	16.45	-.0002	-.0006	-.0046	.0090
#2	.4878	1.344	.7581	.0015	-.0146	16.36	.0014	.0032	.0005	.0026
#3	.4564	1.430	.6479	.0017	-.0139	16.38	-.0002	-.0035	-.0066	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.127	-.0018	.0147	.0002	.0001	.0002	.0079
Stddev	.014	.0006	.0003	.0004	.0057	.0003	.0004
%RSD	.4336	30.76	1.924	178.6	4138.	140.0	5.379
#1	3.141	-.0019	.0150	.0005	-.0032	.0005	.0083
#2	3.114	-.0024	.0145	-.0003	-.0030	.0003	.0075
#3	3.126	-.0013	.0145	.0005	.0067	-.0001	.0079

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3393.5	6501.6	57725.	4997.1
Stddev	5.0	6.6	240.	13.6
%RSD	.14845	.10107	.41627	.27139
#1	3387.9	6494.6	57627.	4983.3
#2	3395.1	6507.6	57549.	4997.7
#3	3397.6	6502.7	57998.	5010.4

Zoom In Zoom Out

Sample Name: MP28546-PS1 Acquired: 2/12/2015 11:42:50 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0529	2.875	.1080	.2855	.0551	6.180	.0556	.0555	.0573	.1081
Stddev	.0005	.027	.0017	.0003	.0003	.018	.0008	.0008	.0005	.0003
%RSD	.8944	.9402	1.554	.0925	.5219	.2967	1.384	1.435	.8734	.2336
#1	.0526	2.859	.1060	.2852	.0554	6.195	.0547	.0545	.0568	.1080
#2	.0534	2.906	.1089	.2858	.0552	6.186	.0561	.0560	.0573	.1079
#3	.0525	2.860	.1090	.2855	.0548	6.160	.0560	.0559	.0578	.1084

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.679	11.68	5.829	.0593	.1052	27.09	.1144	.0512	.1069	.1057
Stddev	.014	.06	.073	.0003	.0018	.03	.0013	.0013	.0021	.0014
%RSD	.3905	.5332	1.259	.4996	1.711	.1287	1.164	2.539	1.959	1.294
#1	3.685	11.74	5.806	.0592	.1032	27.11	.1128	.0497	.1045	.1051
#2	3.689	11.69	5.911	.0591	.1067	27.12	.1152	.0518	.1078	.1048
#3	3.663	11.62	5.770	.0596	.1056	27.06	.1151	.0521	.1084	.1073

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.151	.0538	.0694	.1152	.1050	.0549	.2856
Stddev	.044	.0012	.0001	.0004	.0024	.0004	.0042
%RSD	1.387	2.208	.1847	.3286	2.270	.6875	1.458
#1	3.100	.0524	.0692	.1155	.1024	.0545	.2809
#2	3.176	.0544	.0695	.1148	.1070	.0552	.2889
#3	3.176	.0545	.0693	.1153	.1058	.0548	.2870

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3235.1	6447.6	56509.	4989.9
Stddev	55.7	89.6	212.	19.8
%RSD	1.7208	1.3892	.37459	.39644
#1	3299.0	6550.5	56659.	5002.6
#2	3196.8	6387.1	56602.	4967.1
#3	3209.7	6405.2	56267.	4999.9

Zoom In Zoom Out

Sample Name: MP28546-S1 Acquired: 2/12/2015 11:47:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0502	29.14	2.138	2.165	.0551	27.92	.0537	.5370	.2221	.2679
Stddev	.0009	.11	.003	.005	.0002	.19	.0002	.0005	.0006	.0012
%RSD	1.775	.3884	.1505	.2498	.3785	.6672	.2802	.0870	.2621	.4484
#1	.0511	29.17	2.139	2.170	.0554	28.05	.0538	.5373	.2225	.2680
#2	.0501	29.01	2.135	2.165	.0550	27.70	.0535	.5365	.2214	.2666
#3	.0494	29.23	2.141	2.160	.0550	28.00	.0538	.5373	.2223	.2690

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	28.66	28.56	27.25	.5575	.5207	43.71	.5548	.5185	.5284	2.038
Stddev	.11	.15	.16	.0007	.0008	.19	.0006	.0001	.0008	.003
%RSD	.3681	.5149	.5873	.1343	.1618	.4447	.1170	.0232	.1591	.1284
#1	28.71	28.61	27.41	.5578	.5214	43.77	.5548	.5186	.5291	2.041
#2	28.54	28.40	27.09	.5566	.5198	43.50	.5541	.5185	.5275	2.036
#3	28.73	28.68	27.24	.5580	.5210	43.88	.5554	.5184	.5286	2.037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.240	.5487	.5614	.5549	2.085	.5234	.5562
Stddev	.004	.0011	.0014	.0017	.006	.0033	.0019
%RSD	.1152	.2065	.2538	.2978	.2750	.6239	.3426
#1	3.245	.5499	.5625	.5559	2.090	.5260	.5557
#2	3.238	.5476	.5598	.5530	2.079	.5197	.5546
#3	3.239	.5485	.5619	.5557	2.085	.5244	.5583

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3064.7	6316.3	55427.	4972.5
Stddev	1.6	11.1	173.	36.4
%RSD	.05326	.17561	.31178	.73213
#1	3066.6	6323.0	55583.	4956.3
#2	3063.8	6322.4	55455.	5014.2
#3	3063.7	6303.5	55241.	4946.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 11:51:17 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2540	40.33	2.027	2.009	2.035	40.68	2.062	2.045	2.039	1.997
Stddev	.0012	.08	.009	.006	.004	.10	.007	.005	.007	.001
%RSD	.4690	.1874	.4540	.3007	.2213	.2494	.3249	.2391	.3354	.0639
#1	.2547	40.28	2.033	2.009	2.031	40.59	2.063	2.045	2.036	1.996
#2	.2547	40.30	2.032	2.002	2.036	40.66	2.069	2.050	2.047	1.998
#3	.2526	40.42	2.016	2.014	2.040	40.79	2.055	2.040	2.036	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.79	41.30	40.27	2.104	2.030	40.79	2.066	2.007	2.024	2.019
Stddev	.11	.06	.11	.006	.006	.08	.009	.006	.009	.006
%RSD	.2744	.1378	.2822	.2992	.2872	.2035	.4095	.2821	.4526	.3144
#1	40.70	41.31	40.22	2.104	2.027	40.82	2.067	2.010	2.028	2.014
#2	40.76	41.35	40.19	2.110	2.036	40.86	2.074	2.010	2.030	2.026
#3	40.91	41.24	40.40	2.098	2.026	40.70	2.057	2.000	2.014	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.843	2.054	2.067	2.088	2.046	2.009	2.077
Stddev	.006	.006	.001	.005	.004	.008	.010
%RSD	.3533	.2795	.0260	.2253	.2196	.3992	.4742
#1	1.847	2.053	2.068	2.085	2.050	2.005	2.078
#2	1.846	2.060	2.067	2.094	2.048	2.019	2.086
#3	1.835	2.049	2.066	2.086	2.041	2.004	2.066
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 11:51:17 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2955.8	6250.9	55026.	4902.4
Stddev	8.1	23.4	256.	28.5
%RSD	.27539	.37379	.46485	.58210
#1	2953.7	6256.3	54963.	4933.7
#2	2948.9	6225.3	54808.	4877.7
#3	2964.8	6271.1	55308.	4896.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:55:27 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0157	.0005	.0002	.0003	.0076	.0002	.0002	.0002
Stddev	.0003	.0053	.0005	.0002	.0001	.0011	.0000	.0000	.0002
%RSD	107.0	33.98	106.8	80.33	32.47	14.53	16.20	21.96	113.6
#1	.0004	.0211	.0010	.0003	.0003	.0068	.0002	.0002	.0004
#2	.0006	.0157	-.0001	.0003	.0002	.0072	.0002	.0001	-.0001
#3	-.0001	.0104	.0005	.0000	.0002	.0089	.0002	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0247	.1727	-.0161	.0003	F.0027	.0610	.0002	.0004
Stddev	.0003	.0045	.0227	.0176	.0000	.0017	.0038	.0002	.0006
%RSD	980.0	18.38	13.17	108.8	13.69	62.90	6.299	65.63	158.4
#1	.0003	.0286	.1829	-.0363	.0003	.0045	.0650	.0001	-.0003
#2	-.0003	.0257	.1885	-.0042	.0003	.0026	.0607	.0004	.0007
#3	.0001	.0197	.1466	-.0080	.0002	.0011	.0573	.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0013	.0008	.0002	.0002	.0015	F.0023	-.0001	.0001
Stddev	.0007	.0008	.0004	.0003	.0000	.0002	.0009	.0001	.0000
%RSD	93.20	57.25	55.38	169.2	15.07	12.37	41.27	159.8	18.07
#1	.0015	.0005	.0012	.0005	.0002	.0016	.0032	-.0002	.0001
#2	.0008	.0018	.0008	-.0001	.0003	.0015	.0013	-.0001	.0002
#3	.0000	.0017	.0003	.0001	.0002	.0013	.0023	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:55:27 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3436.6	6603.0	57949.	4926.0
Stddev	18.2	49.0	213.	7.9
%RSD	.53043	.74243	.36678	.16016
#1	3415.8	6546.5	57818.	4935.1
#2	3449.6	6632.8	57835.	4921.4
#3	3444.5	6629.8	58194.	4921.5

Zoom In Zoom Out

Sample Name: MP28546-S2 Acquired: 2/12/2015 11:59:55 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0515	29.88	2.101	2.226	.0558	27.89	.0531	.5357	.2237	.2713
Stddev	.0005	.14	.009	.009	.0004	.09	.0001	.0011	.0008	.0008
%RSD	1.062	.4726	.4476	.3885	.6716	.3126	.2814	.1961	.3370	.3101
#1	.0516	29.93	2.103	2.229	.0563	27.94	.0531	.5367	.2244	.2719
#2	.0509	29.98	2.110	2.233	.0555	27.94	.0532	.5358	.2229	.2704
#3	.0520	29.72	2.091	2.216	.0558	27.79	.0529	.5346	.2238	.2718

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	29.03	28.60	28.18	.5522	.5228	44.03	.5430	.5172	.5209	2.024
Stddev	.10	.15	.18	.0017	.0017	.14	.0020	.0026	.0026	.006
%RSD	.3445	.5180	.6431	.3121	.3178	.3082	.3693	.5032	.4952	.2745
#1	29.07	28.64	28.08	.5542	.5242	44.07	.5443	.5143	.5238	2.030
#2	29.11	28.73	28.39	.5510	.5233	44.13	.5441	.5181	.5189	2.024
#3	28.92	28.44	28.08	.5515	.5210	43.87	.5407	.5192	.5200	2.019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.189	.5511	.5619	.5493	2.073	.5198	.5433
Stddev	.007	.0023	.0036	.0011	.005	.0016	.0023
%RSD	.2349	.4122	.6328	.2066	.2479	.3084	.4226
#1	3.197	.5537	.5629	.5506	2.076	.5215	.5437
#2	3.188	.5493	.5649	.5487	2.067	.5184	.5454
#3	3.182	.5503	.5580	.5486	2.075	.5194	.5409

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3059.0	6390.3	55332.	4888.7
Stddev	4.2	21.5	189.	8.0
%RSD	.13843	.33688	.34210	.16345
#1	3063.8	6382.4	55149.	4888.0
#2	3056.2	6373.8	55527.	4881.1
#3	3056.9	6414.6	55320.	4897.0

Zoom In Zoom Out

Sample Name: FA22006-1 Acquired: 2/12/2015 12:04:06 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0329	-.0004	.0030	.0000	.1371	.0000	.0001	.0006	.0000
Stddev	.0002	.0039	.0004	.0001	.000	.0018	.0001	.0002	.0002	.0002
%RSD	651.1	11.90	99.12	3.436	300.6	1.282	1303.	210.9	40.06	928.7
#1	-.0002	.0290	.0001	.0029	-.0002	.1351	.0000	.0003	.0003	-.0001
#2	.0003	.0327	-.0006	.0031	.0000	.1385	.0000	.0001	.0008	.0002
#3	.0000	.0368	-.0006	.0030	.0000	.1377	-.0001	-.0001	.0006	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0242	.4627	.0433	.0040	-.0019	.4371	.0005	.0004	.0012	.0034
Stddev	.0015	.0485	.0067	.0000	.0002	.0066	.0002	.0010	.0011	.0008
%RSD	6.174	10.47	15.46	.1193	10.31	1.509	42.40	224.4	89.92	23.61
#1	.0225	.4834	.0363	.0040	-.0017	.4320	.0006	-.0005	.0023	.0038
#2	.0248	.4973	.0497	.0040	-.0018	.4347	.0007	.0014	.0014	.0025
#3	.0254	.4073	.0438	.0040	-.0021	.4445	.0003	.0005	.0000	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3941	.0002	.0008	.0005	.0036	.0005	.0267
Stddev	.0006	.0003	.0001	.0002	.0013	.0002	.0005
%RSD	.1497	147.9	15.95	36.87	36.46	45.36	1.799
#1	.3945	.0004	.0008	.0007	.0047	.0004	.0272
#2	.3934	.0004	.0008	.0006	.0040	.0003	.0265
#3	.3944	-.0002	.0010	.0003	.0021	.0007	.0263

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3403.4	6583.5	58271.	4900.8
Stddev	3.6	15.7	62.	56.4
%RSD	.10678	.23778	.10633	1.1499
#1	3399.2	6575.4	58342.	4930.4
#2	3405.4	6601.6	58234.	4835.9
#3	3405.6	6573.6	58236.	4936.3

Zoom In Zoom Out

Sample Name: FA22006-2 Acquired: 2/12/2015 12:08:32 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0105	-.0011	.0025	-.0001	.1365	.0000	.0000	.0007	-.0001
Stddev	.0003	.0064	.0004	.0002	.0001	.0035	.0000	.000	.0002	.0001
%RSD	152.5	60.53	37.01	8.407	61.55	2.577	54.12	502.9	34.02	205.5
#1	-.0001	.0121	-.0007	.0028	-.0002	.1401	.0000	.0000	.0007	.0000
#2	.0005	.0159	-.0015	.0025	-.0001	.1362	.0000	.0000	.0004	.0000
#3	.0003	.0035	-.0011	.0024	.0000	.1331	.0000	.0000	.0008	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0014	.3544	.0372	.0044	-.0024	.1581	.0008	.0003	.0009	.0033
Stddev	.0033	.0075	.0261	.0000	.0001	.0189	.0000	.0004	.0003	.0014
%RSD	234.6	2.107	69.95	.0844	2.483	11.97	5.895	126.2	36.61	41.98
#1	.0007	.3495	.0317	.0044	-.0023	.1534	.0008	.0007	.0005	.0045
#2	-.0015	.3630	.0144	.0044	-.0024	.1790	.0008	-.0001	.0009	.0035
#3	.0050	.3508	.0656	.0044	-.0024	.1420	.0008	.0004	.0011	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3818	-.0003	.0008	-.0007	.0006	.0001	.0290
Stddev	.0009	.0003	.0000	.0001	.0008	.0001	.0001
%RSD	.2282	81.20	2.578	16.26	128.5	115.1	.3071
#1	.3808	-.0001	.0008	-.0007	.0001	.0002	.0290
#2	.3823	-.0006	.0008	-.0007	.0015	.0000	.0290
#3	.3822	-.0003	.0008	-.0005	.0002	.0000	.0289

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.4	6608.3	58783.	4992.3
Stddev	3.0	13.1	147.	42.8
%RSD	.08818	.19892	.25073	.85719
#1	3443.6	6614.5	58822.	4960.9
#2	3439.8	6617.1	58907.	5041.0
#3	3437.6	6593.2	58620.	4974.9

Zoom In Zoom Out

Sample Name: FA22006-3 Acquired: 2/12/2015 12:12:57 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0232	.2961	.0042	-.0002	.1517	-.0001	.0000	.0005	-.0003
Stddev	.0001	.0031	.0009	.0002	.0000	.0031	.0000	.000	.0001	.0001
%RSD	86.98	13.56	.3125	3.622	25.36	2.075	64.41	559.4	26.38	36.91
#1	-.0002	.0263	.2958	.0044	-.0002	.1499	.0000	.0000	.0006	-.0002
#2	-.0001	.0233	.2971	.0041	-.0001	.1499	.0000	-.0001	.0003	-.0003
#3	.0000	.0200	.2953	.0041	-.0002	.1554	-.0001	.0001	.0006	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0076	.3365	.0685	.0064	-.0026	.1606	.0011	.0002	.0005	.0029
Stddev	.0014	.0517	.0052	.0000	.0001	.0084	.0003	.0007	.0005	.0011
%RSD	18.64	15.35	7.662	.5020	4.599	5.231	28.23	423.3	101.9	37.47
#1	.0082	.3624	.0704	.0064	-.0024	.1614	.0013	-.0003	.0009	.0016
#2	.0060	.2770	.0725	.0064	-.0026	.1518	.0007	-.0002	.0000	.0034
#3	.0086	.3700	.0625	.0064	-.0027	.1685	.0012	.0009	.0005	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3887	-.0005	.0008	-.0007	.0001	-.0002	.0274
Stddev	.0009	.0001	.0001	.0001	.0009	.0001	.0001
%RSD	.2194	11.32	12.11	9.340	1180.	40.83	.2416
#1	.3889	-.0006	.0007	-.0008	.0006	-.0003	.0274
#2	.3894	-.0006	.0009	-.0007	-.0009	-.0002	.0275
#3	.3878	-.0005	.0009	-.0008	.0005	-.0001	.0273

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3436.8	6608.7	58638.	4978.3
Stddev	6.6	8.3	161.	43.1
%RSD	.19136	.12625	.27520	.86483
#1	3431.3	6603.6	58496.	5020.6
#2	3444.1	6604.1	58604.	4934.5
#3	3435.0	6618.3	58813.	4979.7

Zoom In Zoom Out

Sample Name: FA22006-4 Acquired: 2/12/2015 12:17:21 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0266	.3323	.0043	-.0002	.1810	.0000	.0000	.0004	-.0001
Stddev	.0002	.0148	.0016	.0001	.0000	.0027	.000	.0001	.0001	.0002
%RSD	838.2	55.78	.4941	1.527	24.71	1.501	106.1	171.1	23.50	131.5
#1	-.0002	.0437	.3339	.0044	-.0001	.1833	.0000	.0000	.0003	-.0003
#2	.0001	.0176	.3306	.0043	-.0002	.1818	.0000	.0000	.0005	.0000
#3	.0002	.0185	.3325	.0042	-.0002	.1780	.0000	.0001	.0003	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0025	.3525	.0954	.0075	-.0026	.1656	.0012	.0000	.0000	.0028
Stddev	.0012	.0236	.0205	.0001	.0001	.0083	.0001	.0001	.0006	.0012
%RSD	48.69	6.696	21.46	.7782	4.710	5.020	12.93	297.1	3367.	44.54
#1	-.0011	.3797	.1136	.0074	-.0025	.1729	.0013	.0001	-.0002	.0013
#2	-.0034	.3366	.0732	.0075	-.0026	.1565	.0010	.0000	-.0004	.0035
#3	-.0030	.3414	.0992	.0075	-.0027	.1673	.0012	-.0001	.0007	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3666	-.0004	.0010	-.0008	-.0006	-.0003	.0301
Stddev	.0009	.0002	.0001	.0001	.0009	.0003	.0001
%RSD	.2404	42.85	12.39	11.58	154.0	129.1	.4280
#1	.3676	-.0002	.0011	-.0007	-.0013	-.0005	.0302
#2	.3661	-.0005	.0010	-.0008	.0004	.0001	.0300
#3	.3660	-.0005	.0009	-.0009	-.0007	-.0004	.0300

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3446.8	6627.7	58786.	5028.2
Stddev	1.3	4.6	290.	46.8
%RSD	.03846	.06898	.49412	.93125
#1	3447.0	6622.5	58939.	5058.1
#2	3448.0	6629.8	58451.	4974.2
#3	3445.3	6630.8	58969.	5052.2

Zoom In Zoom Out

Sample Name: FA22006-5 Acquired: 2/12/2015 12:21:45 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1103	1.469	.0068	-.0001	.1704	.0000	.0001	.0003	.0000
Stddev	.000	.0032	.005	.0002	.0001	.0037	.000	.0001	.0001	.000
%RSD	1087.	2.887	.3535	3.412	65.17	2.173	2914.	118.9	53.44	1097.
#1	.0000	.1067	1.472	.0071	-.0002	.1717	.0000	.0001	.0002	-.0001
#2	-.0003	.1114	1.472	.0067	.0000	.1662	.0000	.0000	.0004	-.0001
#3	.0003	.1127	1.463	.0067	-.0002	.1733	.0000	.0002	.0002	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0173	.3279	.0696	.0092	-.0027	.3249	.0015	.0000	.0007	.0014
Stddev	.0046	.0471	.0091	.0000	.0001	.0128	.0001	.000	.0004	.0010
%RSD	26.31	14.36	13.12	.4037	3.043	3.928	6.620	1441.	61.45	68.38
#1	.0163	.3346	.0705	.0092	-.0026	.3117	.0015	.0001	.0005	.0012
#2	.0223	.2778	.0600	.0092	-.0027	.3371	.0013	.0002	.0011	.0006
#3	.0134	.3713	.0782	.0092	-.0027	.3258	.0015	-.0003	.0003	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3770	-.0001	.0010	-.0006	-.0010	-.0001	.0346
Stddev	.0015	.0002	.0000	.0001	.0007	.0001	.0002
%RSD	.3850	161.8	3.681	18.54	69.64	80.04	.4458
#1	.3777	-.0003	.0010	-.0006	-.0013	.0000	.0346
#2	.3780	-.0003	.0010	-.0005	-.0014	-.0002	.0347
#3	.3754	.0001	.0010	-.0007	-.0002	-.0001	.0344

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.9	6665.8	58917.	4949.1
Stddev	4.3	9.2	138.	61.4
%RSD	.12539	.13760	.23347	1.2399
#1	3444.5	6659.8	59047.	4987.9
#2	3442.0	6661.3	58773.	4981.0
#3	3436.1	6676.4	58930.	4878.4

Zoom In Zoom Out

Sample Name: FA22006-6 Acquired: 2/12/2015 12:26:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.1025	1.342	.0064	.0000	.1481	-.0001	.0001	.0003	-.0003
Stddev	.0006	.0104	.004	.0001	.000	.0012	.0000	.0001	.0001	.0002
%RSD	353.4	10.15	.2896	2.296	1504.	.7923	18.73	113.6	31.88	73.36
#1	.0000	.0976	1.344	.0064	.0000	.1490	-.0001	.0001	.0004	-.0001
#2	-.0004	.0955	1.338	.0066	-.0001	.1468	.0000	.0000	.0004	-.0003
#3	.0009	.1145	1.345	.0063	.0001	.1486	-.0001	.0002	.0002	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0147	.3270	.0662	.0087	-.0028	.1044	.0014	.0003	.0001	.0013
Stddev	.0019	.0302	.0113	.0000	.0001	.0158	.0001	.0003	.0006	.0014
%RSD	12.84	9.230	17.11	.1010	2.785	15.18	9.025	107.1	571.2	108.6
#1	.0131	.3511	.0761	.0087	-.0028	.1069	.0015	.0004	-.0001	.0016
#2	.0168	.2931	.0687	.0087	-.0028	.0875	.0013	.0004	.0008	.0024
#3	.0143	.3368	.0538	.0087	-.0027	.1189	.0012	-.0001	-.0004	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3676	-.0003	.0009	-.0007	-.0012	-.0002	.0353
Stddev	.0010	.0002	.0000	.0001	.0004	.0001	.0003
%RSD	.2832	79.27	3.244	7.559	33.59	45.65	.7551
#1	.3683	-.0005	.0009	-.0008	-.0015	-.0002	.0356
#2	.3664	-.0002	.0009	-.0007	-.0008	-.0004	.0351
#3	.3681	-.0001	.0008	-.0007	-.0012	-.0002	.0351

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.8	6678.5	58799.	4892.2
Stddev	9.6	6.6	66.	23.8
%RSD	.28012	.09886	.11205	.48701
#1	3431.5	6671.4	58775.	4919.7
#2	3440.0	6684.5	58748.	4877.5
#3	3450.8	6679.5	58873.	4879.3

Zoom In Zoom Out

Sample Name: FA22006-7 Acquired: 2/12/2015 12:30:33 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.6229	F6.581	.0090	.0000	.2368	-.0001	.0002	.0005
Stddev	.0008	.0149	.010	.0003	.0001	.0061	.0000	.0001	.0003
%RSD	1268.	2.387	.1484	2.801	401.9	2.582	16.14	62.13	64.69
#1	-.0002	.6223	6.592	.0092	.0000	.2340	-.0001	.0003	.0004
#2	.0010	.6381	6.575	.0090	-.0001	.2438	-.0001	.0001	.0002
#3	-.0006	.6084	6.576	.0087	.0001	.2327	-.0001	.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0434	.3609	.0774	.0155	-.0025	.1291	.0017	.0003
Stddev	.0004	.0017	.0206	.0206	.0001	.0000	.0109	.0001	.0005
%RSD	337.0	3.963	5.721	26.58	.8663	1.490	8.420	4.002	169.6
#1	.0001	.0434	.3731	.0840	.0154	-.0025	.1372	.0017	.0007
#2	-.0005	.0417	.3371	.0940	.0157	-.0025	.1332	.0017	-.0003
#3	.0001	.0451	.3725	.0544	.0154	-.0026	.1167	.0018	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0009	.3754	-.0005	.0013	-.0006	-.0008	-.0001	.0300
Stddev	.0004	.0011	.0013	.0003	.0000	.0000	.0009	.0000	.0001
%RSD	117.5	121.8	.3403	58.34	3.364	3.058	112.2	46.72	.3294
#1	.0003	.0017	.3754	-.0008	.0012	-.0006	.0000	-.0001	.0300
#2	.0008	.0014	.3767	-.0003	.0013	-.0006	-.0018	-.0001	.0301
#3	-.0001	-.0004	.3742	-.0004	.0013	-.0006	-.0006	.0000	.0299

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3455.1	6730.6	59215.	4942.8
Stddev	2.6	4.7	295.	28.3
%RSD	.07539	.06953	.49839	.57332
#1	3454.4	6726.8	59482.	4974.8
#2	3458.0	6729.3	58898.	4920.9
#3	3452.9	6735.9	59264.	4932.7

Zoom In Zoom Out

Sample Name: FA22006-8 Acquired: 2/12/2015 12:34:56 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.5781	F6.837	.0087	.0000	.2458	.0000	.0001	.0003
Stddev	.0002	.0185	.017	.0002	.000	.0044	.000	.0000	.0001
%RSD	34.85	3.197	.2454	2.635	131.2	1.782	36.68	33.98	28.54
#1	-.0008	.5950	6.824	.0087	.0000	.2484	.0000	.0001	.0002
#2	-.0005	.5809	6.856	.0085	-.0001	.2408	.0000	.0001	.0004
#3	-.0004	.5584	6.831	.0090	.0000	.2483	.0000	.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0004	.0371	.3413	.0712	.0134	-.0027	.1377	.0014	.0003
Stddev	.0002	.0025	.0299	.0116	.0000	.0001	.0100	.0001	.0006
%RSD	55.26	6.729	8.758	16.28	.3625	4.441	7.284	9.154	189.5
#1	-.0004	.0375	.3141	.0586	.0134	-.0026	.1323	.0015	.0005
#2	-.0001	.0344	.3733	.0815	.0133	-.0026	.1315	.0013	.0008
#3	-.0005	.0393	.3365	.0736	.0134	-.0028	.1492	.0016	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	.0012	.3690	-.0003	.0013	-.0006	-.0007	-.0001	.0333
Stddev	.0013	.0002	.0009	.0001	.0001	.0000	.0008	.0002	.0000
%RSD	1021.	18.54	.2356	31.73	4.390	7.250	105.5	161.3	.0680
#1	-.0011	.0012	.3682	-.0004	.0013	-.0007	-.0016	-.0003	.0333
#2	.0015	.0014	.3699	-.0003	.0014	-.0006	-.0006	.0001	.0333
#3	.0000	.0010	.3688	-.0003	.0013	-.0007	.0000	-.0002	.0334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3457.5	6736.4	59439.	4979.3
Stddev	3.4	5.1	171.	27.0
%RSD	.09859	.07512	.28727	.54179
#1	3457.3	6735.9	59262.	4948.2
#2	3454.2	6731.6	59603.	4993.9
#3	3461.0	6741.7	59452.	4995.9

Zoom In Zoom Out

Sample Name: FA22006-9 Acquired: 2/12/2015 12:39:20 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	1.065	F8.565	.0093	.0000	.1728	-.0001	.0001	.0005
Stddev	.0004	.007	.014	.0002	.0000	.0008	.0000	.0002	.0000
%RSD	68.62	.7046	.1636	1.883	13.01	.4868	34.48	108.4	3.217
#1	-.0003	1.073	8.561	.0094	.0000	.1737	-.0001	.0000	.0005
#2	-.0003	1.064	8.581	.0091	.0000	.1727	.0000	.0003	.0005
#3	-.0009	1.058	8.555	.0095	.0000	.1721	-.0001	.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0565	.4011	.0666	.0139	-.0026	.1307	.0016	.0006
Stddev	.0001	.0008	.0123	.0342	.0001	.0001	.0055	.0001	.0005
%RSD	138.4	1.493	3.076	51.40	.4966	2.694	4.240	6.545	90.17
#1	.0000	.0559	.3925	.0306	.0139	-.0027	.1366	.0015	.0010
#2	-.0002	.0575	.3954	.0987	.0139	-.0026	.1256	.0017	.0000
#3	-.0001	.0561	.4152	.0704	.0138	-.0026	.1298	.0017	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0010	.3997	-.0007	.0010	-.0006	-.0006	-.0001	.0271
Stddev	.0006	.0006	.0007	.0001	.0001	.0001	.0007	.0002	.0000
%RSD	216.7	63.69	.1813	21.53	5.284	7.856	118.7	224.7	.0357
#1	.0009	.0004	.4004	-.0008	.0011	-.0006	-.0006	.0001	.0271
#2	.0001	.0016	.3998	-.0005	.0010	-.0006	-.0013	-.0003	.0271
#3	-.0002	.0010	.3989	-.0007	.0010	-.0007	.0001	.0000	.0271

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3467.9	6735.8	59429.	5003.1
Stddev	5.8	12.2	115.	19.8
%RSD	.16610	.18122	.19386	.39610
#1	3471.2	6741.3	59392.	5025.0
#2	3471.3	6721.8	59338.	4997.7
#3	3461.3	6744.2	59559.	4986.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 12:43:42 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2595	41.38	2.014	2.085	2.043	40.61	2.036	2.045	2.051	2.059
Stddev	.0003	.14	.013	.010	.006	.15	.016	.016	.011	.006
%RSD	.1219	.3473	.6672	.4952	.2791	.3586	.7955	.7776	.5174	.2899
#1	.2593	41.40	2.018	2.090	2.044	40.74	2.043	2.051	2.050	2.058
#2	.2598	41.22	2.026	2.073	2.036	40.45	2.048	2.058	2.041	2.054
#3	.2593	41.51	2.000	2.092	2.047	40.65	2.018	2.027	2.062	2.066

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.34	41.32	41.39	2.073	2.039	41.38	2.028	2.005	2.017	2.038
Stddev	.14	.21	.28	.015	.013	.13	.015	.019	.014	.015
%RSD	.3272	.5091	.6771	.7237	.6242	.3215	.7298	.9501	.6805	.7155
#1	41.46	41.42	41.64	2.077	2.043	41.49	2.032	2.014	2.021	2.043
#2	41.19	41.08	41.08	2.057	2.050	41.23	2.041	2.017	2.027	2.049
#3	41.35	41.47	41.44	2.086	2.025	41.42	2.012	1.983	2.001	2.021

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.837	2.064	2.066	2.066	2.025	1.994	2.020
Stddev	.014	.018	.008	.007	.013	.006	.017
%RSD	.7328	.8469	.3732	.3333	.6389	.2929	.8503
#1	1.840	2.072	2.070	2.069	2.026	1.998	2.027
#2	1.849	2.076	2.057	2.059	2.038	1.987	2.032
#3	1.822	2.044	2.071	2.071	2.012	1.998	2.000

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 12:43:42 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2984.6	6379.1	55750.	4950.8
Stddev	24.7	44.8	374.	76.5
%RSD	.82639	.70299	.67088	1.5453
#1	2977.4	6370.3	55836.	4883.9
#2	2964.4	6339.3	56073.	5034.2
#3	3012.1	6427.7	55340.	4934.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 12:47:55 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0174	.0009	.0007	.0005	.0108	.0004	.0003	.0003
Stddev	.0003	.0095	.0005	.0002	.0002	.0012	.0000	.0001	.0002
%RSD	137.5	54.53	51.10	31.83	36.61	10.82	10.39	19.81	74.53
#1	.0000	.0167	.0004	.0008	.0007	.0112	.0005	.0004	.0001
#2	-.0006	.0083	.0014	.0007	.0004	.0118	.0005	.0003	.0005
#3	-.0001	.0272	.0010	.0004	.0003	.0095	.0004	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0283	.1229	-.0008	.0005	F.0025	.0562	.0004	.0007
Stddev	.0001	.0064	.0094	.0139	.0000	.0014	.0110	.0001	.0004
%RSD	27.47	22.68	7.611	1663.	3.099	58.94	19.48	25.25	55.08
#1	.0002	.0354	.1236	.0152	.0005	.0040	.0669	.0005	.0005
#2	.0004	.0268	.1319	-.0093	.0005	.0023	.0450	.0003	.0004
#3	.0004	.0228	.1133	-.0084	.0005	.0011	.0568	.0003	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0000	.0007	.0005	.0005	F.0021	.0017	.0004	.0003
Stddev	.0002	.0007	.0004	.0001	.0000	.0003	.0003	.0001	.0001
%RSD	16.31	2540.	51.62	18.51	6.434	13.00	18.09	13.14	24.72
#1	.0016	-.0007	.0004	.0005	.0005	.0024	.0017	.0004	.0004
#2	.0012	.0007	.0006	.0006	.0005	.0020	.0013	.0004	.0004
#3	.0013	.0000	.0012	.0005	.0005	.0019	.0019	.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 12:47:55 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3461.9	6678.0	58747.	4980.0
Stddev	16.0	33.8	122.	22.7
%RSD	.46215	.50636	.20843	.45597
#1	3462.3	6671.6	58616.	5001.6
#2	3445.6	6647.9	58858.	4956.3
#3	3477.6	6714.6	58767.	4982.0

Zoom In Zoom Out

Sample Name: FA22006-10 Acquired: 2/12/2015 12:52:23 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.9857	F8.108	.0092	.0000	.1535	.0000	.0003	.0004
Stddev	.0003	.0070	.122	.0003	.0001	.0022	.0000	.0001	.0001
%RSD	64.37	.7052	1.502	3.742	1688.	1.412	49.96	34.24	33.47
#1	.0004	.9789	7.968	.0095	.0000	.1542	.0000	.0003	.0004
#2	.0002	.9854	8.178	.0088	-.0001	.1553	.0000	.0003	.0003
#3	.0007	.9928	8.179	.0093	.0001	.1511	.0000	.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0733	.3759	.0841	.0127	-.0016	.1527	.0018	.0001
Stddev	.0000	.0071	.0381	.0092	.0000	.0002	.0058	.0001	.0002
%RSD	47.97	9.699	10.13	10.89	.2536	10.10	3.802	6.418	151.3
#1	-.0001	.0793	.3441	.0908	.0127	-.0015	.1494	.0017	.0003
#2	-.0001	.0751	.3656	.0737	.0127	-.0016	.1594	.0017	.0001
#3	.0000	.0655	.4181	.0879	.0127	-.0018	.1493	.0019	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0012	.0012	.3979	.0001	.0009	.0002	-.0005	.0001	.0249
Stddev	.0003	.0011	.0061	.0001	.0001	.0001	.0004	.0001	.0003
%RSD	26.25	94.59	1.538	78.10	6.180	49.89	74.95	52.44	1.263
#1	.0010	.0013	.3908	.0001	.0010	.0004	-.0001	.0002	.0245
#2	.0016	.0000	.4009	.0000	.0009	.0002	-.0008	.0001	.0249
#3	.0011	.0022	.4018	.0001	.0009	.0002	-.0007	.0001	.0252

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3454.2	6771.0	59188.	4891.4
Stddev	48.7	80.6	212.	12.2
%RSD	1.4105	1.1900	.35755	.24868
#1	3510.4	6864.0	59006.	4905.4
#2	3427.3	6724.5	59420.	4883.5
#3	3424.8	6724.3	59138.	4885.3

Zoom In Zoom Out

Sample Name: FA22007-1 Acquired: 2/12/2015 12:56:47 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.4322	.0051	.0075	-.0001	21.29	.0002	.0007	.0036	.0233
Stddev	.0002	.0028	.0006	.0001	.0001	.14	.0000	.0001	.0002	.0001
%RSD	66.70	.6493	12.18	1.833	68.00	.6696	19.64	17.29	4.659	.5569
#1	.0002	.4309	.0057	.0074	-.0001	21.26	.0001	.0006	.0035	.0234
#2	.0002	.4303	.0050	.0074	-.0001	21.16	.0001	.0007	.0038	.0232
#3	.0006	.4354	.0045	.0076	.0000	21.45	.0002	.0009	.0036	.0232

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4070	1.438	.7472	.0104	-.0009	3.955	.0025	.0073	.0034	.0029
Stddev	.0030	.039	.0223	.0001	.0001	.028	.0001	.0003	.0010	.0015
%RSD	.7398	2.702	2.988	.5020	13.00	.6969	4.479	4.131	28.05	49.57
#1	.4051	1.470	.7218	.0104	-.0007	3.951	.0026	.0073	.0030	.0040
#2	.4054	1.395	.7561	.0105	-.0009	3.929	.0025	.0070	.0027	.0036
#3	.4105	1.450	.7638	.0104	-.0010	3.984	.0024	.0076	.0045	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.650	.0002	.1198	.0391	-.0008	.0065	.0662
Stddev	.012	.0001	.0007	.0008	.0017	.0002	.0001
%RSD	.3277	82.47	.5784	2.028	207.0	2.958	.0898
#1	3.655	.0002	.1200	.0394	-.0019	.0067	.0662
#2	3.658	.0003	.1191	.0383	-.0017	.0064	.0663
#3	3.636	.0000	.1204	.0398	.0011	.0063	.0663

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3324.0	6624.1	58080.	4938.0
Stddev	4.8	10.0	183.	29.8
%RSD	.14446	.15031	.31441	.60356
#1	3329.4	6635.6	58215.	4954.7
#2	3322.2	6619.1	58153.	4955.8
#3	3320.3	6617.7	57872.	4903.6

Zoom In Zoom Out

Sample Name: FA22021-1 Acquired: 2/12/2015 13:01:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	6.917	.0058	.1875	.0004	9.285	.0011	.0040	.0040	.0245
Stddev	.0006	.029	.0006	.0010	.0001	.033	.0000	.0001	.0002	.0003
%RSD	162.7	.4175	10.45	.5428	31.58	.3513	2.048	1.972	5.323	1.209
#1	.0002	6.943	.0059	.1886	.0003	9.319	.0011	.0039	.0042	.0243
#2	-.0003	6.886	.0063	.1866	.0005	9.282	.0011	.0041	.0039	.0245
#3	-.0009	6.922	.0051	.1871	.0004	9.254	.0012	.0040	.0038	.0249

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.915	4.283	1.792	1.469	-.0015	1.172	.0033	.0143	.0007	.0032
Stddev	.032	.048	.021	.003	.0001	.004	.0001	.0003	.0008	.0007
%RSD	.3551	1.130	1.192	.2082	3.719	.3374	3.741	1.785	119.7	20.58
#1	8.948	4.338	1.810	1.466	-.0014	1.176	.0033	.0140	.0006	.0040
#2	8.912	4.248	1.768	1.469	-.0015	1.173	.0033	.0143	.0015	.0030
#3	8.885	4.261	1.797	1.472	-.0015	1.168	.0035	.0146	-.0001	.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.467	.0001	.0535	.1525	-.0007	.0120	.0761
Stddev	.006	.0004	.0002	.0004	.0004	.0001	.0001
%RSD	.1123	415.1	.4062	.2440	53.23	.5600	.1607
#1	5.463	.0002	.0538	.1521	-.0012	.0119	.0760
#2	5.474	.0005	.0534	.1525	-.0006	.0119	.0762
#3	5.463	-.0004	.0534	.1528	-.0004	.0120	.0762

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3335.4	7185.3	62828.	5324.0
Stddev	2.0	8.6	216.	24.1
%RSD	.05935	.11903	.34436	.45343
#1	3337.3	7176.6	62969.	5328.3
#2	3335.4	7185.7	62937.	5345.7
#3	3333.4	7193.7	62579.	5298.0

Zoom In Zoom Out

Sample Name: FA22021-2 Acquired: 2/12/2015 13:05:29 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	17.88	.0134	.4206	.0012	.2936	.0008	.0666	.0054	.0551
Stddev	.0006	.02	.0003	.0004	.0001	.0014	.0000	.0001	.0002	.0002
%RSD	93.68	.1349	2.097	.0962	5.163	.4639	4.787	.1654	3.662	.2775
#1	.0000	17.90	.0136	.4203	.0012	.2925	.0008	.0666	.0052	.0553
#2	-.0011	17.86	.0134	.4210	.0011	.2931	.0008	.0665	.0054	.0550
#3	-.0008	17.87	.0131	.4203	.0012	.2951	.0008	.0667	.0056	.0551

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	21.15	5.272	2.667	2.921	-.0025	7.637	.0015	.0425	-.0013	.0027
Stddev	.02	.026	.013	.018	.0001	.015	.0000	.0003	.0004	.0015
%RSD	.0805	.4850	.4871	.6089	4.696	.1993	3.218	.6024	31.15	55.76
#1	21.17	5.299	2.681	2.939	-.0024	7.654	.0015	.0427	-.0012	.0015
#2	21.15	5.248	2.667	2.921	-.0027	7.635	.0016	.0422	-.0017	.0044
#3	21.13	5.270	2.655	2.904	-.0025	7.623	.0015	.0426	-.0009	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.85	.0009	.0073	.2878	.0005	.0213	.0812
Stddev	.02	.0001	.0001	.0003	.0014	.0001	.0001
%RSD	.1546	12.40	1.433	.1077	280.4	.6693	.1782
#1	12.83	.0010	.0073	.2880	.0006	.0213	.0813
#2	12.86	.0009	.0074	.2875	-.0009	.0212	.0812
#3	12.87	.0008	.0072	.2880	.0018	.0215	.0810

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3275.3	9634.6	83753.	7168.3
Stddev	8.7	3.5	207.	60.9
%RSD	.26418	.03624	.24658	.84893
#1	3265.4	9635.0	83660.	7128.5
#2	3279.6	9637.9	83990.	7138.0
#3	3281.0	9631.0	83610.	7238.3

Zoom In Zoom Out

Sample Name: FA22021-3 Acquired: 2/12/2015 13:09:58 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	8.548	.0080	.2285	.0004	1.280	.0002	.0183	.0019	.0147
Stddev	.0001	.060	.0004	.0014	.0001	.014	.0000	.0001	.0003	.0001
%RSD	32.26	.7066	5.461	.6258	20.88	1.088	9.814	.6279	14.03	.3927
#1	-.0004	8.586	.0075	.2295	.0004	1.281	.0002	.0184	.0021	.0148
#2	-.0004	8.580	.0081	.2269	.0004	1.294	.0002	.0182	.0016	.0147
#3	-.0002	8.479	.0084	.2292	.0005	1.266	.0002	.0183	.0020	.0147

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.16	47.16	1.814	1.165	-.0026	11.83	.0016	.0316	-.0001	.0021
Stddev	.07	.29	.033	.006	.0001	.09	.0001	.0004	.0006	.0011
%RSD	.5589	.6223	1.830	.5274	5.506	.7244	4.648	1.269	405.0	53.94
#1	12.22	47.33	1.810	1.171	-.0025	11.87	.0015	.0312	-.0007	.0014
#2	12.19	47.32	1.849	1.166	-.0026	11.89	.0016	.0320	.0005	.0034
#3	12.09	46.82	1.783	1.159	-.0028	11.73	.0017	.0315	-.0002	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.501	-.0002	.0097	.0500	-.0001	.0084	.1280
Stddev	.008	.0002	.0000	.0002	.0003	.0001	.0005
%RSD	.1228	115.6	.2309	.4987	266.3	.6244	.4189
#1	6.500	-.0004	.0097	.0502	-.0004	.0083	.1285
#2	6.493	-.0002	.0097	.0499	.0000	.0084	.1274
#3	6.509	.0000	.0097	.0497	.0001	.0084	.1282

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3220.1	7855.2	68338.	5892.4
Stddev	7.9	18.0	510.	80.9
%RSD	.24479	.22878	.74661	1.3738
#1	3211.9	7850.2	67883.	5869.2
#2	3227.6	7875.1	68243.	5825.6
#3	3220.8	7840.2	68890.	5982.4

Zoom In Zoom Out

Sample Name: FA22021-4 Acquired: 2/12/2015 13:14:20 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	1.433	-.0001	.2100	.0000	1.896	.0001	.0702	.0012	.0025
Stddev	.0003	.017	.0005	.0005	.000	.015	.0000	.0002	.0001	.0001
%RSD	90.66	1.202	914.3	.2144	590.7	.8106	24.64	.2497	7.837	3.013
#1	.0000	1.443	.0005	.2103	.0000	1.913	.0001	.0704	.0013	.0026
#2	.0004	1.413	-.0005	.2103	-.0001	1.883	.0002	.0700	.0011	.0025
#3	.0006	1.442	-.0001	.2095	.0000	1.893	.0001	.0702	.0012	.0025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9298	4.031	.5009	2.711	-.0029	2.791	.0033	.0555	.0003	.0038
Stddev	.0098	.052	.0379	.014	.0001	.012	.0001	.0004	.0003	.0006
%RSD	1.054	1.296	7.568	.5177	5.135	.4343	1.746	.7871	131.7	15.88
#1	.9371	4.089	.5412	2.695	-.0030	2.778	.0034	.0557	-.0001	.0046
#2	.9186	4.015	.4659	2.722	-.0029	2.792	.0033	.0559	.0006	.0035
#3	.9335	3.989	.4957	2.716	-.0027	2.802	.0033	.0550	.0003	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.830	-.0002	.0134	.0311	-.0005	.0010	.1640
Stddev	.008	.0002	.0001	.0065	.0010	.0001	.0004
%RSD	.1973	156.2	.8509	20.81	191.8	14.41	.2200
#1	3.822	-.0004	.0133	.0283	.0006	.0011	.1641
#2	3.837	.0001	.0135	.0384	-.0011	.0009	.1636
#3	3.832	-.0001	.0133	.0265	-.0010	.0009	.1643

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3392.9	6724.3	59352.	4990.4
Stddev	3.6	11.4	219.	55.7
%RSD	.10566	.16985	.36860	1.1163
#1	3388.7	6711.2	59487.	4926.1
#2	3394.6	6732.1	59470.	5020.0
#3	3395.3	6729.6	59100.	5025.1

Zoom In Zoom Out

Sample Name: FA22021-5 Acquired: 2/12/2015 13:18:52 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	1.848	.0004	.3449	-.0001	24.28	-.0001	.0008	.0149	.0000
Stddev	.0004	.014	.0008	.0007	.0001	.10	.0001	.0001	.0001	.0003
%RSD	115.2	.7504	215.9	.2010	57.89	.4003	72.69	16.55	.5218	631.6
#1	.0001	1.852	.0009	.3457	-.0001	24.28	.0000	.0007	.0148	-.0003
#2	.0008	1.832	-.0005	.3444	.0000	24.18	-.0001	.0009	.0149	.0001
#3	.0001	1.859	.0007	.3446	-.0002	24.37	-.0002	.0007	.0149	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2401	17.06	2.386	1.965	.0056	21.78	.0001	.0007	.0010	.0025
Stddev	.0041	.10	.027	.009	.0002	.07	.0002	.0002	.0008	.0007
%RSD	1.723	.5861	1.133	.4837	3.753	.3417	191.7	31.05	81.79	26.50
#1	.2428	17.14	2.415	1.956	.0058	21.80	-.0001	.0007	.0006	.0021
#2	.2353	16.95	2.361	1.963	.0055	21.70	.0002	.0004	.0020	.0021
#3	.2422	17.10	2.383	1.975	.0054	21.85	.0002	.0009	.0005	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.819	.0000	.2184	.0076	-.0006	.0066	.0086
Stddev	.007	.0002	.0005	.0008	.0012	.0002	.0000
%RSD	.1757	2657.	.2472	10.35	192.0	3.012	.0471
#1	3.825	.0000	.2178	.0073	.0001	.0067	.0086
#2	3.812	.0002	.2183	.0071	-.0019	.0064	.0086
#3	3.820	-.0002	.2189	.0086	.0000	.0066	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3216.8	6609.6	57286.	4874.7
Stddev	2.0	10.5	185.	29.9
%RSD	.06245	.15916	.32308	.61246
#1	3215.0	6597.9	57499.	4904.9
#2	3216.3	6612.6	57194.	4874.0
#3	3218.9	6618.3	57165.	4845.2

Zoom In Zoom Out

Sample Name: FA22048-2 Acquired: 2/12/2015 13:23:15 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0025	-.0010	-.0001	-.0001	.0035	-.0001	-.0001	.0000	-.0004
Stddev	.0003	.0060	.0004	.0002	.0001	.0091	.0000	.0000	.000	.0004
%RSD	124.8	237.7	44.25	177.0	51.68	263.6	34.13	15.31	731.7	104.8
#1	.0001	.0066	-.0014	-.0001	-.0001	.0135	-.0001	-.0001	.0001	-.0005
#2	-.0003	.0053	-.0012	-.0004	-.0002	.0012	-.0001	-.0001	-.0001	-.0007
#3	-.0006	-.0044	-.0005	.0001	-.0001	-.0043	.0000	-.0001	.0000	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0072	.0884	-.0061	.0003	-.0028	.0248	-.0001	-.0002	-.0002	.0009
Stddev	.0015	.0230	.0212	.0000	.0002	.0085	.0003	.0003	.0009	.0006
%RSD	20.29	26.04	345.2	12.79	6.674	34.47	354.6	160.2	344.0	70.43
#1	-.0068	.1072	-.0271	.0003	-.0027	.0284	.0002	.0001	.0006	.0010
#2	-.0087	.0952	-.0067	.0003	-.0030	.0309	-.0003	-.0003	-.0002	.0002
#3	-.0059	.0627	.0154	.0003	-.0027	.0150	-.0002	-.0003	-.0011	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0255	-.0005	-.0001	-.0012	-.0008	-.0002	.0010
Stddev	.0005	.0003	.0001	.0000	.0007	.0001	.0000
%RSD	2.107	71.54	102.8	3.736	89.40	75.15	.7014
#1	.0261	-.0008	.0000	-.0012	-.0008	-.0003	.0010
#2	.0252	-.0001	-.0001	-.0012	-.0015	-.0003	.0010
#3	.0252	-.0005	-.0001	-.0011	-.0001	.0000	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3444.2	6748.9	59136.	4907.1
Stddev	6.6	5.5	274.	24.4
%RSD	.19188	.08111	.46270	.49766
#1	3436.8	6746.7	58821.	4879.0
#2	3446.6	6744.9	59313.	4919.2
#3	3449.3	6755.1	59274.	4923.1

Zoom In Zoom Out

Sample Name: FA22048-3A Acquired: 2/12/2015 13:27:44 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0050	-.0011	.0024	-.0002	.0738	-.0001	-.0001	.0001	-.0002
Stddev	.0005	.0122	.0004	.0001	.0001	.0025	.0001	.0000	.0001	.0002
%RSD	894.0	244.0	38.34	5.729	30.66	3.391	64.99	33.73	110.5	96.65
#1	.0003	-.0033	-.0011	.0023	-.0003	.0754	-.0002	-.0001	.0002	.0000
#2	.0003	-.0007	-.0014	.0025	-.0001	.0751	-.0001	-.0002	.0000	-.0002
#3	-.0005	.0191	-.0006	.0025	-.0002	.0709	.0000	-.0001	.0001	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0077	.0213	-.0120	.0001	-.0027	.5574	-.0001	-.0002	.0003	.0023
Stddev	.0017	.0057	.0127	.0000	.0001	.0109	.0002	.0002	.0002	.0020
%RSD	22.69	26.99	105.4	68.80	3.685	1.949	115.8	105.7	74.51	88.86
#1	-.0084	.0194	-.0235	.0001	-.0028	.5528	-.0003	.0000	.0001	.0045
#2	-.0090	.0167	.0016	.0001	-.0027	.5497	-.0001	-.0003	.0002	.0007
#3	-.0057	.0277	-.0142	.0000	-.0027	.5699	.0000	-.0002	.0005	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0258	-.0004	.0003	-.0012	.0002	-.0001	.0004
Stddev	.0002	.0001	.0001	.0001	.0014	.0001	.0000
%RSD	.7110	22.27	18.76	5.882	667.7	101.2	11.82
#1	.0256	-.0003	.0003	-.0012	.0012	.0000	.0004
#2	.0259	-.0005	.0004	-.0011	.0008	-.0002	.0004
#3	.0258	-.0004	.0003	-.0012	-.0014	-.0002	.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3458.8	6767.1	59341.	4911.8
Stddev	7.5	4.5	76.	13.5
%RSD	.21598	.06683	.12800	.27479
#1	3454.4	6766.1	59318.	4904.1
#2	3454.5	6772.0	59425.	4927.4
#3	3467.4	6763.1	59279.	4904.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 13:36:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2602	41.78	1.975	2.119	2.030	40.14	2.017	2.045	2.045	2.063
Stddev	.0012	.77	.029	.037	.042	.81	.026	.027	.001	.006
%RSD	.4788	1.847	1.458	1.764	2.061	2.015	1.289	1.319	.0252	.2836
#1	.2588	42.35	1.971	2.150	2.058	40.68	2.016	2.044	2.045	2.057
#2	.2605	42.09	1.949	2.128	2.051	40.54	1.992	2.018	2.045	2.063
#3	.2612	40.90	2.006	2.077	1.982	39.21	2.044	2.072	2.046	2.068
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.37	40.88	42.35	2.044	2.041	41.20	1.995	2.002	1.984	2.007
Stddev	.84	.83	.75	.009	.030	.82	.029	.030	.028	.023
%RSD	2.026	2.037	1.767	.4422	1.483	1.993	1.442	1.501	1.405	1.142
#1	41.98	41.64	42.96	2.033	2.037	41.82	1.991	2.002	1.985	2.005
#2	41.72	41.03	42.58	2.050	2.013	41.52	1.969	1.971	1.956	1.984
#3	40.42	39.99	41.51	2.048	2.073	40.27	2.026	2.031	2.012	2.030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.809	2.081	2.036	2.029	2.025	1.957	1.983
Stddev	.025	.029	.042	.004	.024	.006	.027
%RSD	1.402	1.372	2.051	.2169	1.163	.3283	1.358
#1	1.805	2.082	2.066	2.025	2.026	1.956	1.976
#2	1.786	2.051	2.054	2.033	2.001	1.964	1.960
#3	1.836	2.108	1.988	2.029	2.048	1.951	2.012
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 13:36:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2964.3	6416.9	55685.	4876.2
Stddev	37.7	81.0	91.	66.4
%RSD	1.2716	1.2626	.16259	1.3616
#1	2962.6	6423.8	55630.	4807.7
#2	3002.9	6494.2	55636.	4880.8
#3	2927.5	6332.6	55790.	4940.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 13:40:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0199	.0003	.0008	.0007	.0158	.0009	.0009	.0009
Stddev	.0002	.0135	.0005	.0002	.0001	.0037	.0002	.0001	.0001
%RSD	73.99	67.83	172.9	23.54	11.27	23.32	23.23	11.27	11.55
#1	.0002	.0044	.0007	.0010	.0008	.0134	.0007	.0008	.0010
#2	.0005	.0285	.0002	.0009	.0007	.0200	.0011	.0009	.0009
#3	.0001	.0269	-.0002	.0006	.0007	.0139	.0009	.0009	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0268	.1503	-.0160	.0008	F.0029	.0360	.0009	F.0011
Stddev	.0004	.0065	.0118	.0181	.0001	.0015	.0115	.0002	.0004
%RSD	96.28	24.26	7.880	113.5	7.397	52.82	31.88	23.14	31.86
#1	.0000	.0340	.1388	-.0327	.0007	.0044	.0231	.0007	.0011
#2	.0004	.0251	.1497	-.0184	.0008	.0030	.0449	.0011	.0008
#3	.0007	.0213	.1625	.0033	.0007	.0013	.0401	.0009	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	F.0020	.0016	.0009	.0008	.0017	.0018	.0005	.0007
Stddev	.0004	.0012	.0006	.0002	.0000	.0001	.0011	.0001	.0002
%RSD	27.94	61.40	38.69	19.71	5.107	8.375	57.57	17.56	22.21
#1	.0015	.0030	.0012	.0009	.0008	.0019	.0029	.0004	.0006
#2	.0019	.0024	.0023	.0010	.0007	.0017	.0019	.0006	.0009
#3	.0011	.0006	.0013	.0007	.0008	.0016	.0008	.0005	.0007
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 13:40:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3453.5	6762.8	58898.	4882.5
Stddev	21.1	52.0	211.	24.0
%RSD	.61059	.76827	.35794	.49130
#1	3453.7	6773.5	58762.	4899.5
#2	3432.3	6706.4	58792.	4855.0
#3	3474.5	6808.6	59141.	4892.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:04:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2504	40.33	1.987	2.024	2.006	39.93	2.011	2.017	2.001	2.001
Stddev	.0009	.19	.008	.012	.009	.20	.007	.006	.002	.007
%RSD	.3429	.4604	.4073	.5743	.4654	.4904	.3436	.3107	.1108	.3718
#1	.2497	40.11	1.978	2.011	1.995	39.70	2.004	2.010	2.003	1.993
#2	.2501	40.42	1.989	2.033	2.013	40.05	2.013	2.018	2.002	2.001
#3	.2513	40.45	1.994	2.027	2.009	40.03	2.017	2.022	1.999	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	40.18	40.81	2.025	2.023	40.29	2.003	1.973	1.994	2.001
Stddev	.16	.13	.12	.006	.006	.18	.009	.007	.010	.009
%RSD	.3883	.3121	.2880	.2895	.2919	.4581	.4338	.3658	.5124	.4760
#1	40.48	40.07	40.78	2.018	2.017	40.08	1.994	1.966	1.983	1.990
#2	40.78	40.31	40.94	2.029	2.024	40.40	2.006	1.972	1.996	2.005
#3	40.71	40.15	40.71	2.027	2.028	40.39	2.010	1.980	2.003	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.817	2.026	2.008	2.018	1.999	1.948	1.996
Stddev	.009	.006	.011	.006	.001	.006	.009
%RSD	.4805	.3092	.5360	.3197	.0459	.3165	.4532
#1	1.808	2.022	1.995	2.012	1.999	1.942	1.986
#2	1.818	2.024	2.015	2.018	1.999	1.948	1.998
#3	1.825	2.033	2.013	2.025	2.000	1.955	2.003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:04:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2975.0	6453.0	56137.	4826.7
Stddev	9.0	22.2	170.	17.8
%RSD	.30130	.34422	.30261	.36921
#1	2984.4	6477.5	55953.	4812.2
#2	2974.3	6447.2	56168.	4821.3
#3	2966.5	6434.2	56288.	4846.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 14:11:25 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0127	.0004	.0004	.0003	.0078	.0001	.0001	-.0001
Stddev	.0005	.0059	.0000	.0001	.0001	.0045	.0002	.0002	.0002
%RSD	546.5	46.13	5.047	33.59	16.05	57.73	387.3	262.3	132.5
#1	.0003	.0122	.0004	.0003	.0004	.0030	-.0001	-.0001	.0000
#2	.0004	.0188	.0004	.0005	.0004	.0119	.0000	.0001	-.0003
#3	-.0005	.0071	.0004	.0003	.0003	.0086	.0003	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0226	.1381	.0084	.0001	F.0067	.0378	.0000	.0002
Stddev	.0002	.0024	.0402	.0072	.0000	.0018	.0040	.0002	.0010
%RSD	126.2	10.72	29.11	86.17	22.12	26.22	10.67	738.5	398.5
#1	.0002	.0241	.1784	.0066	.0001	.0085	.0419	-.0002	-.0008
#2	.0002	.0239	.0980	.0164	.0001	.0065	.0377	.0001	.0010
#3	-.0001	.0198	.1377	.0022	.0001	.0050	.0338	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0006	-.0001	.0009	.0003	F.0027	.0007	.0000	.0000
Stddev	.0003	.0014	.0002	.0003	.0000	.0002	.0004	.0002	.0002
%RSD	25.31	243.7	289.0	36.01	9.819	5.665	52.82	642.9	563.8
#1	.0009	-.0010	-.0003	.0012	.0003	.0028	.0011	.0003	-.0001
#2	.0015	.0009	.0002	.0010	.0003	.0026	.0006	-.0002	.0000
#3	.0010	.0018	-.0001	.0005	.0003	.0025	.0004	.0001	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 14:11:25 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3478.9	6754.4	58960.	4938.1
Stddev	46.5	100.1	53.	26.2
%RSD	1.3380	1.4815	.08960	.53141
#1	3456.6	6694.3	58905.	4960.9
#2	3447.8	6698.9	58963.	4943.9
#3	3532.4	6869.9	59011.	4909.4

Zoom In Zoom Out

Sample Name: MP28549-MB1 Acquired: 2/12/2015 14:50:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0047	-.0013	-.0001	-.0003	.0330	-.0007	-.0007	-.0001	-.0004
Stddev	.0006	.0032	.0003	.0002	.0000	.0041	.0000	.0001	.0002	.0001
%RSD	172.6	68.69	21.02	149.4	16.72	12.41	3.478	10.92	187.7	21.31
#1	-.0010	.0080	-.0015	.0001	-.0003	.0376	-.0007	-.0008	-.0001	-.0003
#2	-.0001	.0046	-.0014	-.0003	-.0003	.0301	-.0007	-.0007	.0001	-.0005
#3	.0001	.0015	-.0010	-.0002	-.0002	.0311	-.0007	-.0007	-.0004	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0161	.1446	-.0147	-.0001	-.0009	.0442	-.0007	-.0006	-.0007	-.0006
Stddev	.0015	.0098	.0033	.0000	.0000	.0017	.0002	.0006	.0002	.0005
%RSD	9.054	6.787	22.19	36.60	1.177	3.850	24.32	95.89	21.47	94.51
#1	.0151	.1488	-.0128	-.0001	-.0009	.0461	-.0008	-.0008	-.0009	-.0004
#2	.0177	.1333	-.0185	-.0001	-.0009	.0428	-.0005	-.0011	-.0006	-.0002
#3	.0154	.1515	-.0129	-.0002	-.0009	.0438	-.0009	.0001	-.0007	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0143	.0232	-.0001	-.0001	.0007	-.0007	.0010
Stddev	.0002	.0002	.0000	.0001	.0008	.0003	.0000
%RSD	1.210	1.041	39.61	49.06	111.9	42.88	3.251
#1	.0141	.0229	-.0001	-.0001	.0000	-.0004	.0010
#2	.0143	.0233	-.0001	-.0002	.0006	-.0010	.0010
#3	.0144	.0233	-.0001	-.0001	.0016	-.0006	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28549-MB1 Acquired: 2/12/2015 14:50:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3526.9	6922.8	60629.	4983.5
Stddev	7.5	14.4	173.	20.6
%RSD	.21282	.20769	.28521	.41419
#1	3533.8	6937.5	60744.	5005.5
#2	3518.9	6908.8	60712.	4964.6
#3	3528.0	6921.9	60430.	4980.3

Zoom In Zoom Out

Sample Name: MP28549-B1 Acquired: 2/12/2015 14:55:12 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0488	28.25	2.039	2.142	.0536	25.86	.0507	.5217	.2146	.2661
Stddev	.0004	.13	.009	.015	.0001	.09	.0001	.0005	.0008	.0001
%RSD	.7971	.4643	.4299	.6833	.2568	.3506	.2376	.0930	.3545	.0527
#1	.0485	28.38	2.049	2.149	.0538	25.96	.0506	.5221	.2144	.2660
#2	.0492	28.25	2.036	2.151	.0535	25.79	.0506	.5212	.2139	.2662
#3	.0486	28.11	2.032	2.125	.0535	25.82	.0508	.5217	.2154	.2660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.32	26.21	26.18	.5273	.5081	26.31	.5273	.4995	.4940	2.024
Stddev	.07	.13	.15	.0002	.0009	.10	.0004	.0021	.0004	.004
%RSD	.2695	.4871	.5726	.0444	.1698	.3779	.0827	.4270	.0734	.1734
#1	27.40	26.35	26.33	.5272	.5084	26.39	.5277	.5013	.4936	2.027
#2	27.31	26.17	26.16	.5272	.5088	26.34	.5269	.4971	.4943	2.021
#3	27.25	26.10	26.03	.5276	.5072	26.19	.5273	.5001	.4943	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106	.5566	.5199	.5222	2.002	.4973	.5177
Stddev	.0005	.0022	.0017	.0012	.002	.0021	.0012
%RSD	4.496	.3883	.3233	.2345	.1123	.4300	.2381
#1	.0100	.5585	.5219	.5235	1.999	.4981	.5179
#2	.0108	.5542	.5191	.5219	2.003	.4989	.5164
#3	.0109	.5570	.5188	.5211	2.002	.4949	.5188
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28549-B1 Acquired: 2/12/2015 14:55:12 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3145.4	6639.0	57678.	4874.2
Stddev	4.3	2.6	78.	44.0
%RSD	.13825	.03980	.13576	.90286
#1	3143.9	6636.0	57767.	4828.6
#2	3150.3	6640.4	57649.	4916.5
#3	3142.0	6640.7	57618.	4877.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:59:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2501	40.04	1.942	2.011	1.982	39.36	1.979	1.991	1.988	1.985
Stddev	.0028	.60	.030	.027	.030	.61	.031	.031	.013	.012
%RSD	1.107	1.491	1.554	1.362	1.529	1.547	1.545	1.539	.6363	.5916
#1	.2482	40.61	1.930	2.038	2.012	39.98	1.964	1.976	1.982	1.986
#2	.2488	39.41	1.976	1.983	1.951	38.76	2.015	2.026	1.979	1.974
#3	.2532	40.09	1.919	2.012	1.984	39.36	1.960	1.971	2.002	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.17	39.83	40.49	1.986	1.981	40.07	1.968	1.948	1.952	1.959
Stddev	.56	.39	.45	.009	.032	.57	.031	.031	.031	.033
%RSD	1.382	.9812	1.117	.4636	1.604	1.422	1.584	1.579	1.565	1.675
#1	40.70	40.27	40.96	1.981	1.964	40.66	1.953	1.930	1.942	1.944
#2	39.59	39.52	40.05	1.981	2.017	39.53	2.004	1.983	1.987	1.996
#3	40.21	39.70	40.46	1.997	1.961	40.01	1.948	1.930	1.928	1.936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.777	2.007	1.982	1.992	1.971	1.921	1.956
Stddev	.027	.030	.030	.013	.034	.013	.030
%RSD	1.522	1.489	1.524	.6720	1.699	.6812	1.537
#1	1.769	1.990	2.011	1.985	1.954	1.917	1.940
#2	1.808	2.042	1.951	1.983	2.009	1.911	1.991
#3	1.755	1.990	1.984	2.007	1.949	1.936	1.937
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:59:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2998.2	6548.9	56541.	4827.3
Stddev	41.8	83.8	428.	36.2
%RSD	1.3946	1.2801	.75649	.74997
#1	3020.4	6590.4	56907.	4797.4
#2	2950.0	6452.4	56646.	4817.0
#3	3024.2	6603.8	56071.	4867.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 15:03:45 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0091	.0001	.0003	.0005	.0142	.0004	.0004	.0002
Stddev	.0004	.0090	.0011	.0002	.0001	.0086	.0003	.0003	.0000
%RSD	1779.	99.72	835.2	58.58	13.35	60.92	81.84	65.72	17.97
#1	.0004	.0066	-.0010	.0005	.0004	.0114	.0001	.0002	.0003
#2	-.0002	.0191	.0011	.0003	.0005	.0238	.0007	.0007	.0002
#3	-.0002	.0015	.0003	.0001	.0004	.0073	.0004	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0307	.1745	-.0037	.0003	F.0054	.0430	.0003	.0008
Stddev	.0004	.0060	.0781	.0090	.0000	.0016	.0133	.0002	.0005
%RSD	786.8	19.46	44.75	245.6	1.470	29.72	30.97	77.09	60.77
#1	-.0004	.0359	.1017	-.0049	.0003	.0070	.0549	.0001	.0006
#2	.0005	.0322	.1647	.0059	.0003	.0053	.0286	.0006	.0013
#3	.0001	.0242	.2569	-.0121	.0003	.0038	.0456	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0022	-.0014	.0002	.0010	.0006	F.0026	F.0028	.0003	.0003
Stddev	.0008	.0006	.0003	.0000	.0001	.0002	.0005	.0003	.0003
%RSD	34.92	40.93	171.8	4.571	19.50	8.124	16.44	109.0	113.4
#1	.0023	-.0008	.0001	.0009	.0006	.0028	.0023	.0006	.0000
#2	.0029	-.0019	-.0001	.0010	.0007	.0025	.0029	.0004	.0006
#3	.0014	-.0014	.0006	.0010	.0005	.0024	.0032	-.0001	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020					.0020	.0020		
Low Limit	-.0020					-.0020	-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 15:03:45 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3486.9	6876.4	59898.	4878.2
Stddev	18.2	28.1	365.	33.3
%RSD	.52329	.40822	.60948	.68188
#1	3466.7	6845.0	59498.	4879.8
#2	3502.1	6899.0	60214.	4844.1
#3	3491.9	6885.3	59982.	4910.6

Zoom In Zoom Out

Sample Name: FA22009-2 Acquired: 2/12/2015 15:08:14 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	126.4	.0841	.0214	.0004	.2802	-.0008	.0007	.1983	.0048
Stddev	.0002	1.9	.0015	.0005	.0001	.0040	.0000	.0002	.0013	.0001
%RSD	122.0	1.509	1.831	2.364	16.53	1.410	4.737	21.52	.6615	2.118
#1	-.0001	125.7	.0830	.0208	.0005	.2794	-.0008	.0006	.1970	.0047
#2	.0004	124.9	.0834	.0216	.0004	.2768	-.0008	.0007	.1996	.0047
#3	.0002	128.5	.0858	.0218	.0004	.2845	-.0008	.0009	.1984	.0049

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.514	.2556	.3019	.0025	.0024	.0902	.0222	.0804	-.0002	.0036
Stddev	.115	.0207	.0124	.0000	.0002	.0051	.0004	.0020	.0004	.0003
%RSD	1.767	8.102	4.109	.5493	7.107	5.638	1.763	2.537	161.1	7.350
#1	6.455	.2389	.2939	.0025	.0022	.0937	.0218	.0781	.0001	.0035
#2	6.440	.2492	.3162	.0025	.0023	.0844	.0222	.0815	-.0002	.0040
#3	6.646	.2788	.2955	.0024	.0025	.0925	.0225	.0817	-.0006	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.060	.0219	.0533	.6631	-.0006	.0524	.0018
Stddev	.017	.0004	.0008	.0049	.0007	.0006	.0000
%RSD	1.556	1.954	1.541	.7450	119.3	1.149	2.111
#1	1.047	.0214	.0530	.6581	-.0011	.0517	.0018
#2	1.053	.0221	.0527	.6680	.0002	.0527	.0017
#3	1.078	.0223	.0542	.6631	-.0010	.0527	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3298.0	7097.9	60121.	5024.5
Stddev	46.3	89.2	394.	107.7
%RSD	1.4033	1.2572	.65480	2.1429
#1	3337.6	7173.9	60387.	5057.6
#2	3309.2	7120.1	59668.	5111.7
#3	3247.1	6999.7	60306.	4904.1

Zoom In Zoom Out

Sample Name: MP28549-D1 Acquired: 2/12/2015 15:12:36 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	121.6	.0784	.0212	.0004	.3097	-.0006	.0009	.1896	.0058
Stddev	.0003	.4	.0016	.0003	.0001	.0028	.0001	.0001	.0007	.0001
%RSD	242.9	.3367	2.011	1.518	15.60	.9181	14.63	14.54	.3545	2.494
#1	.0002	121.2	.0783	.0215	.0003	.3129	-.0007	.0008	.1899	.0057
#2	-.0001	121.6	.0769	.0209	.0004	.3075	-.0006	.0009	.1900	.0057
#3	-.0004	122.1	.0801	.0212	.0004	.3088	-.0006	.0011	.1888	.0059

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.937	.3734	.3348	.0027	.0020	.2895	.0253	.0798	.0004	.0016
Stddev	.021	.0332	.0206	.0000	.0002	.0127	.0004	.0016	.0009	.0018
%RSD	.3552	8.880	6.148	1.226	7.343	4.388	1.744	2.066	236.7	117.9
#1	5.919	.3825	.3290	.0027	.0021	.3008	.0254	.0815	.0008	.0036
#2	5.933	.4011	.3178	.0027	.0019	.2757	.0248	.0782	-.0006	.0010
#3	5.960	.3367	.3577	.0027	.0022	.2921	.0257	.0799	.0010	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.216	.0218	.0520	.6356	-.0007	.0497	.0032
Stddev	.018	.0003	.0005	.0020	.0010	.0004	.0001
%RSD	1.465	1.277	1.011	.3181	140.7	.7103	2.574
#1	1.226	.0220	.0516	.6358	-.0018	.0499	.0032
#2	1.196	.0215	.0518	.6375	-.0003	.0499	.0031
#3	1.227	.0220	.0526	.6335	.0000	.0493	.0033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3299.3	7073.3	60428.	5103.9
Stddev	43.2	93.0	259.	25.1
%RSD	1.3088	1.3143	.42868	.49176
#1	3268.6	7019.4	60416.	5093.5
#2	3348.7	7180.6	60175.	5132.5
#3	3280.6	7019.8	60693.	5085.7

Zoom In Zoom Out

Sample Name: MP28549-SD1 Acquired: 2/12/2015 15:16:58 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	130.0	.0853	.0214	-.0007	.8472	-.0038	-.0022	.2056	.0066
Stddev	.0017	.2	.0043	.0011	.0001	.0126	.0001	.0005	.0019	.0013
%RSD	618.3	.1581	5.037	4.981	9.575	1.482	2.807	20.97	.9058	19.07
#1	.0023	130.1	.0886	.0210	-.0007	.8330	-.0036	-.0024	.2064	.0060
#2	-.0009	130.1	.0869	.0226	-.0008	.8517	-.0039	-.0024	.2035	.0081
#3	-.0005	129.8	.0805	.0206	-.0006	.8569	-.0038	-.0016	.2070	.0058

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.596	.9157	.3414	.0013	-.0028	.9513	.0227	.0819	-.0055	-.0087
Stddev	.019	.0633	.1701	.0001	.0002	.0260	.0002	.0010	.0050	.0041
%RSD	.2843	6.908	49.82	6.070	7.759	2.729	.9469	1.259	91.32	46.80
#1	6.588	.9537	.2801	.0014	-.0026	.9705	.0226	.0808	-.0084	-.0134
#2	6.583	.9507	.5336	.0013	-.0029	.9218	.0230	.0828	.0003	-.0067
#3	6.617	.8426	.2104	.0013	-.0030	.9616	.0226	.0820	-.0083	-.0060

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.146	.0201	.0543	.6961	-.0010	.0527	.0075
Stddev	.009	.0007	.0001	.0025	.0019	.0003	.0002
%RSD	.8119	3.358	.1456	.3619	189.4	.6424	2.236
#1	1.146	.0193	.0543	.6954	-.0018	.0531	.0075
#2	1.155	.0202	.0543	.6940	.0012	.0524	.0076
#3	1.137	.0206	.0544	.6989	-.0025	.0527	.0073

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3439.6	6946.4	59658.	4960.5
Stddev	7.6	25.6	188.	17.0
%RSD	.22176	.36919	.31468	.34304
#1	3439.7	6958.9	59821.	4976.4
#2	3432.0	6916.9	59701.	4942.5
#3	3447.2	6963.4	59452.	4962.5

Zoom In Zoom Out

Sample Name: MP28549-PS1 Acquired: 2/12/2015 15:21:24 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0479	121.0	.1770	.2752	.0503	5.205	.0480	.0502	.2390	.1054
Stddev	.0000	.4	.0006	.0017	.0002	.033	.0000	.0001	.0005	.0003
%RSD	.0501	.3576	.3112	.6333	.4439	.6415	.0231	.1906	.1886	.2771
#1	.0480	121.5	.1765	.2770	.0504	5.239	.0480	.0503	.2393	.1051
#2	.0479	120.8	.1769	.2735	.0500	5.205	.0480	.0501	.2384	.1057
#3	.0479	120.8	.1776	.2751	.0504	5.172	.0480	.0502	.2392	.1055

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.971	9.848	5.028	.0530	.0977	10.45	.1206	.1281	.0939	.0946
Stddev	.037	.054	.030	.0001	.0001	.04	.0004	.0009	.0006	.0014
%RSD	.4148	.5479	.6014	.2633	.0558	.3924	.3144	.6989	.5902	1.490
#1	9.011	9.910	5.018	.0530	.0977	10.49	.1209	.1289	.0942	.0932
#2	8.967	9.823	5.061	.0528	.0977	10.41	.1206	.1283	.0932	.0945
#3	8.937	9.810	5.003	.0531	.0976	10.44	.1202	.1272	.0942	.0960

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.036	.0697	.0980	.7277	.0960	.0958	.2430
Stddev	.000	.0003	.0005	.0014	.0009	.0006	.0004
%RSD	.0367	.3819	.5100	.1988	.9354	.6049	.1578
#1	1.037	.0695	.0985	.7285	.0952	.0965	.2434
#2	1.036	.0700	.0979	.7261	.0970	.0957	.2427
#3	1.037	.0697	.0976	.7287	.0959	.0954	.2428

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3215.0	7049.1	60365.	5065.7
Stddev	3.4	7.4	232.	43.5
%RSD	.10581	.10567	.38367	.85956
#1	3218.8	7056.0	60190.	5015.4
#2	3212.1	7050.3	60627.	5091.8
#3	3214.1	7041.2	60276.	5089.8

Zoom In Zoom Out

Sample Name: MP28549-S1 Acquired: 2/12/2015 15:25:41 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0480	164.3	1.948	2.136	.0522	25.16	.0464	.4861	.4175	.2653
Stddev	.0006	.2	.035	.003	.0003	.01	.0009	.0095	.0011	.0009
%RSD	1.268	.0954	1.823	.1389	.5825	.0484	1.979	1.953	.2751	.3523
#1	.0478	164.5	1.960	2.139	.0520	25.15	.0467	.4901	.4185	.2658
#2	.0486	164.2	1.908	2.137	.0525	25.16	.0453	.4752	.4178	.2659
#3	.0475	164.2	1.976	2.133	.0520	25.17	.0471	.4929	.4162	.2642

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	33.58	25.71	25.99	.5033	.4479	25.92	.5107	.5833	.2052	1.862
Stddev	.07	.02	.12	.0014	.0086	.01	.0095	.0105	.0047	.034
%RSD	.2008	.0916	.4429	.2789	1.911	.0565	1.863	1.804	2.276	1.829
#1	33.65	25.73	26.12	.5031	.4513	25.93	.5143	.5890	.2058	1.871
#2	33.53	25.68	25.90	.5048	.4382	25.94	.5000	.5712	.2003	1.824
#3	33.54	25.72	25.94	.5020	.4542	25.91	.5179	.5898	.2096	1.891

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.434	.5040	.5686	.9877	1.935	.5238	.4766
Stddev	.027	.0110	.0016	.0006	.031	.0010	.0087
%RSD	1.914	2.184	.2771	.0601	1.607	.1860	1.821
#1	1.447	.5078	.5704	.9871	1.946	.5248	.4801
#2	1.403	.4916	.5674	.9883	1.900	.5236	.4667
#3	1.453	.5127	.5681	.9877	1.960	.5229	.4829

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3094.3	7035.1	59121.	5044.6
Stddev	46.4	114.0	195.	6.1
%RSD	1.5000	1.6204	.32905	.12155
#1	3077.6	6991.0	58926.	5039.5
#2	3146.7	7164.6	59124.	5043.0
#3	3058.5	6949.8	59315.	5051.4

Zoom In Zoom Out

Sample Name: MP28549-S2 Acquired: 2/12/2015 15:29:54 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0479	151.2	1.937	2.117	.0519	25.14	.0464	.4853	.3977	.2661
Stddev	.0007	.6	.017	.009	.0006	.10	.0004	.0043	.0026	.0013
%RSD	1.421	.4023	.8672	.4240	1.129	.3968	.8489	.8763	.6440	.4960
#1	.0476	151.5	1.924	2.117	.0522	25.25	.0461	.4817	.3957	.2655
#2	.0474	151.6	1.931	2.126	.0523	25.09	.0463	.4842	.3968	.2652
#3	.0487	150.5	1.956	2.108	.0513	25.08	.0468	.4900	.4006	.2676

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	32.64	25.69	25.88	.5063	.4494	25.72	.5089	.5728	.2144	1.862
Stddev	.13	.04	.13	.0022	.0044	.12	.0045	.0060	.0014	.016
%RSD	.3981	.1521	.4940	.4324	.9705	.4485	.8906	1.056	.6694	.8594
#1	32.75	25.72	25.74	.5047	.4458	25.75	.5057	.5668	.2129	1.852
#2	32.67	25.70	25.98	.5054	.4480	25.81	.5070	.5726	.2145	1.855
#3	32.50	25.64	25.93	.5088	.4542	25.59	.5141	.5789	.2158	1.881

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.443	.5031	.5578	.9436	1.935	.5228	.4767
Stddev	.013	.0036	.0019	.0032	.018	.0024	.0032
%RSD	.8786	.7134	.3322	.3421	.9571	.4548	.6689
#1	1.433	.5000	.5587	.9408	1.918	.5212	.4739
#2	1.438	.5023	.5591	.9430	1.932	.5216	.4759
#3	1.457	.5070	.5557	.9471	1.954	.5255	.4801

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3097.2	7004.8	58615.	5052.8
Stddev	26.6	51.2	291.	37.9
%RSD	.85803	.73052	.49616	.74909
#1	3118.5	7045.1	58861.	5014.9
#2	3105.6	7022.1	58690.	5052.9
#3	3067.4	6947.2	58294.	5090.6

Zoom In Zoom Out

Sample Name: FA22009-5 Acquired: 2/12/2015 15:34:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	150.1	.3578	.0275	.0005	.5412	-.0008	.0013	.1795	.0023
Stddev	.0003	.1	.0023	.0001	.0001	.0052	.0000	.0001	.0011	.0002
%RSD	170.5	.0775	.6335	.4649	23.54	.9670	2.109	4.483	.6089	8.820
#1	.0002	150.2	.3551	.0277	.0004	.5448	-.0008	.0013	.1807	.0022
#2	-.0005	150.1	.3590	.0274	.0004	.5437	-.0008	.0014	.1787	.0022
#3	-.0003	150.0	.3591	.0276	.0006	.5352	-.0008	.0013	.1790	.0025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.414	.4417	.4162	.0063	.0034	.2155	.0314	.0586	.0019	.0055
Stddev	.032	.0596	.0069	.0000	.0002	.0126	.0003	.0007	.0010	.0016
%RSD	.3351	13.50	1.669	.4520	4.896	5.864	.8070	1.195	52.30	29.56
#1	9.445	.3862	.4107	.0063	.0034	.2011	.0312	.0587	.0029	.0040
#2	9.382	.5047	.4138	.0063	.0035	.2249	.0315	.0578	.0019	.0072
#3	9.416	.4341	.4240	.0064	.0032	.2205	.0317	.0592	.0009	.0052

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.191	.0213	.0440	.7637	.0033	.0688	.0045
Stddev	.004	.0005	.0002	.0025	.0011	.0003	.0000
%RSD	.2938	2.180	.5343	.3214	34.34	.3807	.6809
#1	1.189	.0208	.0439	.7664	.0045	.0691	.0044
#2	1.189	.0215	.0438	.7617	.0028	.0686	.0045
#3	1.195	.0217	.0442	.7629	.0025	.0687	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3284.2	7068.7	60429.	5137.8
Stddev	2.5	19.3	113.	10.0
%RSD	.07563	.27349	.18771	.19371
#1	3282.6	7083.7	60306.	5132.9
#2	3283.0	7075.4	60530.	5149.3
#3	3287.1	7046.9	60451.	5131.3

Zoom In Zoom Out

Sample Name: FA22009-6 Acquired: 2/12/2015 15:38:28 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	127.4	.3097	.0247	.0004	.3642	-.0009	.0007	.1541	.0026
Stddev	.0001	.4	.0007	.0003	.0001	.0013	.0000	.0001	.0001	.0001
%RSD	154.0	.3268	.2195	1.375	25.19	.3488	4.391	16.82	.0572	3.473
#1	.0002	126.9	.3090	.0246	.0003	.3656	-.0009	.0008	.1541	.0027
#2	-.0001	127.6	.3104	.0251	.0005	.3640	-.0009	.0008	.1541	.0025
#3	.0001	127.7	.3096	.0244	.0004	.3631	-.0010	.0006	.1540	.0027

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.08	.2933	.3841	.0054	.0026	.1298	.0271	.0491	-.0001	.0038
Stddev	.04	.0125	.0148	.0000	.0001	.0096	.0001	.0010	.0006	.0008
%RSD	.3128	4.266	3.851	.8522	2.230	7.423	.2830	2.125	535.9	20.17
#1	12.05	.2812	.3794	.0054	.0026	.1349	.0272	.0488	-.0005	.0043
#2	12.08	.2925	.4007	.0054	.0026	.1187	.0271	.0483	.0006	.0029
#3	12.12	.3061	.3723	.0053	.0027	.1359	.0270	.0503	-.0005	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.184	.0213	.0383	.7326	.0004	.0750	.0052
Stddev	.005	.0004	.0001	.0010	.0003	.0002	.0000
%RSD	.4156	1.947	.3754	.1387	57.79	.2775	.6883
#1	1.190	.0216	.0383	.7335	.0002	.0752	.0052
#2	1.183	.0213	.0382	.7328	.0006	.0750	.0051
#3	1.180	.0208	.0385	.7315	.0005	.0748	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3285.4	7003.1	60052.	5064.4
Stddev	9.1	20.1	115.	6.2
%RSD	.27645	.28638	.19175	.12242
#1	3277.8	6981.8	60184.	5071.5
#2	3295.4	7005.7	59974.	5059.9
#3	3283.0	7021.6	59999.	5061.8

Zoom In Zoom Out

Sample Name: FA22009-9 Acquired: 2/12/2015 15:42:48 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	172.4	.1890	.0395	.0001	.3855	-.0008	-.0001	.1642	.0103
Stddev	.0002	.3	.0010	.0004	.0001	.0059	.0000	.0001	.0010	.0002
%RSD	34.75	.1746	.5082	.8943	57.95	1.536	5.716	152.4	.5843	1.587
#1	-.0009	172.2	.1899	.0395	.0002	.3844	-.0008	-.0001	.1639	.0104
#2	-.0005	172.3	.1892	.0392	.0001	.3919	-.0008	.0001	.1634	.0101
#3	-.0005	172.7	.1880	.0399	.0001	.3802	-.0009	-.0002	.1652	.0103

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.598	.3252	.9394	.0040	.0054	.1474	.0095	.1062	.0001	.0089
Stddev	.003	.0735	.0274	.0000	.0001	.0063	.0001	.0003	.0009	.0004
%RSD	.1128	22.59	2.916	.5923	1.350	4.284	1.165	.3060	614.8	4.408
#1	2.599	.3268	.9673	.0040	.0055	.1543	.0096	.1065	.0001	.0089
#2	2.600	.3978	.9125	.0040	.0053	.1420	.0094	.1061	.0010	.0084
#3	2.594	.2509	.9386	.0040	.0054	.1458	.0095	.1059	-.0007	.0092

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.510	.0173	.1116	.8348	.0005	.0370	.0037
Stddev	.004	.0004	.0004	.0020	.0011	.0002	.0001
%RSD	.2416	2.200	.3211	.2438	208.6	.4587	2.269
#1	1.514	.0174	.1116	.8355	.0006	.0371	.0036
#2	1.511	.0168	.1113	.8324	.0015	.0369	.0037
#3	1.506	.0175	.1120	.8363	-.0006	.0368	.0038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3245.1	7125.9	60163.	5053.5
Stddev	9.1	4.3	247.	22.1
%RSD	.27956	.06015	.41030	.43714
#1	3248.4	7130.7	60252.	5037.1
#2	3252.1	7124.6	60354.	5044.7
#3	3234.9	7122.4	59884.	5078.6

Sample Name: FA22009-12 Acquired: 2/12/2015 15:47:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	13.24	.0050	.0142	-.0002	1.414	-.0007	-.0004	.0191	.0038
Stddev	.0003	.03	.0003	.0001	.0001	.007	.0000	.0001	.0000	.0002
%RSD	403.7	.2167	6.558	1.045	31.92	.5111	6.810	14.80	.1358	4.434
#1	.0003	13.26	.0051	.0143	-.0003	1.416	-.0008	-.0005	.0190	.0040
#2	-.0003	13.25	.0046	.0140	-.0001	1.405	-.0007	-.0004	.0191	.0037
#3	-.0001	13.21	.0052	.0142	-.0002	1.419	-.0007	-.0004	.0191	.0037

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.406	.0856	.5587	.0070	.0007	.1583	.0010	.0310	.0004	.0031
Stddev	.005	.0378	.0246	.0000	.0001	.0179	.0000	.0005	.0003	.0007
%RSD	.3944	44.15	4.396	.3865	10.98	11.34	4.367	1.759	70.41	24.00
#1	1.412	.1277	.5595	.0070	.0008	.1559	.0010	.0306	.0005	.0025
#2	1.402	.0742	.5828	.0070	.0006	.1773	.0009	.0316	.0001	.0039
#3	1.403	.0548	.5337	.0069	.0007	.1417	.0010	.0308	.0006	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1180	.0203	.0351	.5610	-.0011	.0073	.0017
Stddev	.0004	.0000	.0002	.0018	.0004	.0003	.0000
%RSD	.3258	.2141	.6284	.3215	40.71	4.051	.3724
#1	.1178	.0204	.0352	.5627	-.0014	.0075	.0017
#2	.1179	.0203	.0349	.5612	-.0012	.0074	.0017
#3	.1185	.0203	.0353	.5591	-.0006	.0069	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3445.9	6982.6	61056.	4991.8
Stddev	2.5	8.8	212.	8.7
%RSD	.07198	.12552	.34797	.17360
#1	3448.6	6989.3	60929.	4981.9
#2	3445.6	6985.8	60938.	4997.9
#3	3443.7	6972.6	61301.	4995.7

Sample Name: CCV Acquired: 2/12/2015 15:51:31 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2515	40.91	1.956	2.066	1.999	39.67	1.979	2.001	1.997	2.024
Stddev	.0009	.09	.018	.001	.007	.17	.016	.016	.004	.003
%RSD	.3630	.2140	.8987	.0527	.3478	.4242	.7948	.7825	.1977	.1445
#1	.2525	40.83	1.944	2.068	1.993	39.48	1.972	1.992	2.000	2.020
#2	.2512	41.00	1.976	2.066	2.007	39.80	1.997	2.019	1.993	2.026
#3	.2507	40.89	1.947	2.066	1.998	39.74	1.969	1.992	1.999	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.83	40.49	41.28	1.998	1.999	40.72	1.960	1.953	1.963	1.976
Stddev	.13	.04	.28	.006	.017	.11	.014	.023	.013	.014
%RSD	.3214	.1010	.6839	.3100	.8301	.2734	.7304	1.168	.6614	.6897
#1	40.71	40.52	40.97	2.002	1.988	40.59	1.951	1.943	1.951	1.968
#2	40.97	40.44	41.51	1.990	2.018	40.79	1.977	1.979	1.977	1.992
#3	40.82	40.49	41.37	2.001	1.991	40.77	1.953	1.937	1.960	1.969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.787	2.023	1.999	1.991	1.965	1.930	1.945
Stddev	.012	.018	.003	.002	.021	.002	.015
%RSD	.6795	.9066	.1304	.1222	1.041	.0827	.7818
#1	1.777	2.017	1.996	1.992	1.954	1.931	1.937
#2	1.801	2.044	2.000	1.988	1.988	1.928	1.962
#3	1.783	2.009	2.001	1.993	1.952	1.931	1.935
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 2/12/2015 15:51:31 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3005.8	6560.2	56610.	4789.4
Stddev	29.8	41.7	294.	49.5
%RSD	.99236	.63498	.51926	1.0327
#1	3015.4	6582.2	56673.	4843.2
#2	2972.3	6512.2	56867.	4745.8
#3	3029.6	6586.3	56289.	4779.4

Sample Name: CCB Acquired: 2/12/2015 15:55:43 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0191	.0001	.0004	.0005	.0135	.0001	.0001	.0002
Stddev	.0001	.0038	.0006	.0000	.0001	.0023	.0001	.0001	.0002
%RSD	75.47	19.69	515.1	8.405	16.65	16.97	72.43	99.16	74.14
#1	.0000	.0200	.0007	.0004	.0005	.0131	.0000	.0000	.0003
#2	.0003	.0149	-.0006	.0005	.0006	.0160	.0001	.0001	.0000
#3	.0002	.0222	.0003	.0004	.0004	.0115	.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0257	.1592	.0190	.0003	F.0042	.0274	.0001	.0002
Stddev	.0002	.0046	.0412	.0252	.0000	.0016	.0086	.0002	.0005
%RSD	319.0	17.85	25.87	132.2	13.07	37.33	31.41	122.4	246.8
#1	.0002	.0295	.2066	.0328	.0004	.0059	.0226	.0001	-.0002
#2	.0002	.0270	.1393	-.0100	.0004	.0039	.0223	.0003	.0001
#3	-.0002	.0206	.1318	.0344	.0003	.0028	.0374	.0000	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0004	.0000	.0005	.0006	.0017	.0008	.0002	.0001
Stddev	.0008	.0009	.0002	.0003	.0001	.0002	.0005	.0001	.0001
%RSD	103.2	248.3	943.1	69.75	9.851	13.36	63.58	43.55	101.8
#1	.0015	-.0008	.0001	.0008	.0005	.0019	.0009	.0001	.0000
#2	.0011	-.0010	-.0002	.0003	.0007	.0018	.0003	.0003	.0001
#3	-.0001	.0007	.0002	.0002	.0006	.0014	.0013	.0002	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 15:55:43 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3495.5	6900.0	60772.	4947.4
Stddev	8.0	11.6	1342.	40.8
%RSD	.22843	.16760	2.2087	.82447
#1	3500.0	6913.3	60153.	4988.2
#2	3500.3	6894.0	59851.	4947.4
#3	3486.3	6892.6	62312.	4906.6

Zoom In Zoom Out

Sample Name: FA22009-15 Acquired: 2/12/2015 16:00:12 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.1628	.0004	.0022	-.0003	.1623	-.0007	-.0007	.0005	.0005
Stddev	.0001	.0088	.0003	.0002	.0001	.0037	.0000	.0001	.0000	.0002
%RSD	31.38	5.424	79.03	7.622	30.36	2.295	4.406	15.69	3.194	41.66
#1	-.0005	.1529	.0006	.0021	-.0003	.1608	-.0007	-.0006	.0005	.0003
#2	-.0004	.1656	.0006	.0024	-.0002	.1595	-.0007	-.0008	.0005	.0004
#3	-.0003	.1699	.0000	.0021	-.0003	.1665	-.0007	-.0008	.0005	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1222	.0968	.0277	.0010	.0002	.1632	-.0004	.0170	-.0001	-.0008
Stddev	.0023	.0260	.0093	.0000	.0002	.0010	.0002	.0005	.0000	.0012
%RSD	1.861	26.84	33.78	3.099	98.91	.6036	41.55	2.724	49.14	142.1
#1	.1244	.1103	.0331	.0010	.0003	.1623	-.0006	.0170	-.0001	.0004
#2	.1224	.1133	.0169	.0010	.0000	.1631	-.0004	.0174	.0000	-.0019
#3	.1198	.0669	.0330	.0010	.0001	.1642	-.0002	.0165	-.0001	-.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0631	.0215	.0008	.0969	-.0007	.0002	.0018
Stddev	.0002	.0002	.0000	.0003	.0009	.0001	.0001
%RSD	.3226	.7908	3.873	.2931	132.0	70.21	3.581
#1	.0633	.0216	.0008	.0966	.0002	.0003	.0018
#2	.0629	.0215	.0009	.0971	-.0006	.0001	.0017
#3	.0631	.0213	.0008	.0971	-.0017	.0002	.0018

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3499.7	6944.7	60790.	4924.2
Stddev	10.7	20.1	332.	17.9
%RSD	.30557	.28905	.54561	.36275
#1	3499.9	6947.1	60810.	4926.4
#2	3510.3	6963.4	61110.	4940.9
#3	3488.9	6923.4	60448.	4905.3

Zoom In Zoom Out

Sample Name: FA22009-19 Acquired: 2/12/2015 16:04:40 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.2283	.0002	.0030	-.0002	.0926	.0004	-.0007	.0010	.0022
Stddev	.0002	.0064	.0008	.0003	.0001	.0025	.0000	.0001	.0002	.0001
%RSD	138.8	2.807	439.6	9.601	25.94	2.676	1.487	7.902	14.85	3.036
#1	.0000	.2333	-.0004	.0033	-.0003	.0899	.0004	-.0007	.0012	.0022
#2	-.0005	.2306	-.0001	.0031	-.0002	.0947	.0004	-.0008	.0009	.0022
#3	-.0001	.2211	.0011	.0027	-.0002	.0932	.0004	-.0007	.0011	.0021

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2762	.0528	.0152	.0023	-.0003	.0860	-.0001	.0023	.0008	-.0003
Stddev	.0025	.0265	.0137	.0000	.0001	.0176	.0000	.0005	.0007	.0006
%RSD	.9164	50.18	89.89	.3018	44.36	20.43	29.03	20.34	89.48	191.5
#1	.2776	.0803	.0241	.0023	-.0003	.0831	-.0001	.0027	.0003	.0000
#2	.2778	.0275	.0221	.0023	-.0004	.0700	-.0001	.0018	.0016	-.0010
#3	.2733	.0504	-.0005	.0023	-.0002	.1048	-.0002	.0024	.0005	.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0433	.0212	.0006	.1221	-.0013	.0004	.0034
Stddev	.0008	.0005	.0001	.0003	.0007	.0001	.0001
%RSD	1.913	2.358	13.69	.2115	52.90	23.86	2.864
#1	.0436	.0215	.0005	.1218	-.0018	.0004	.0034
#2	.0440	.0214	.0006	.1222	-.0015	.0005	.0035
#3	.0424	.0206	.0006	.1223	-.0005	.0003	.0033

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3521.6	6979.0	60941.	4979.4
Stddev	32.8	66.1	234.	39.0
%RSD	.93207	.94754	.38338	.78257
#1	3506.8	6946.1	61138.	4982.2
#2	3498.9	6935.8	60683.	4939.1
#3	3559.3	7055.2	61001.	5016.9

Zoom In Zoom Out

Sample Name: FA22009-22 Acquired: 2/12/2015 16:09:10 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.2845	.0011	.0014	-.0003	.1193	-.0007	-.0007	.0009	.0002
Stddev	.0002	.0044	.0004	.0001	.0001	.0025	.0000	.0000	.0001	.0002
%RSD	459.6	1.546	37.74	9.811	17.51	2.088	4.033	1.814	11.70	75.69
#1	.0003	.2795	.0009	.0013	-.0003	.1200	-.0007	-.0007	.0009	.0000
#2	-.0001	.2878	.0009	.0013	-.0003	.1214	-.0008	-.0008	.0010	.0003
#3	-.0001	.2862	.0016	.0016	-.0004	.1166	-.0007	-.0007	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1699	.0816	.0423	.0010	-.0005	.1158	-.0004	.0248	.0006	-.0014
Stddev	.0019	.0161	.0220	.0000	.0001	.0089	.0002	.0002	.0008	.0008
%RSD	1.121	19.71	52.00	.3464	19.01	7.695	43.38	.6637	130.4	55.53
#1	.1678	.0705	.0669	.0010	-.0004	.1217	-.0004	.0246	.0003	-.0023
#2	.1702	.1001	.0353	.0010	-.0004	.1202	-.0002	.0249	.0015	-.0008
#3	.1715	.0743	.0246	.0010	-.0005	.1055	-.0006	.0248	.0000	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0559	.0214	.0007	.1487	-.0010	.0005	.0015
Stddev	.0006	.0005	.0000	.0003	.0002	.0001	.0001
%RSD	1.088	2.373	6.456	.1812	21.11	24.07	4.651
#1	.0562	.0218	.0006	.1484	-.0012	.0006	.0016
#2	.0552	.0209	.0007	.1489	-.0010	.0004	.0014
#3	.0563	.0216	.0007	.1487	-.0008	.0004	.0015

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3527.3	6977.5	60899.	4986.3
Stddev	27.5	54.3	279.	35.5
%RSD	.77900	.77848	.45857	.71193
#1	3513.3	6948.2	60886.	4995.5
#2	3558.9	7040.2	61184.	4947.1
#3	3509.6	6944.2	60626.	5016.3

Zoom In Zoom Out

Sample Name: FA22009-25 Acquired: 2/12/2015 16:13:39 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	40.71	.0108	.0975	-.0001	.3385	-.0010	-.0004	.0566	.0093
Stddev	.0000	.22	.0003	.0004	.0000	.0053	.0000	.0000	.0008	.0002
%RSD	8.124	.5318	2.375	.3949	23.49	1.551	2.166	10.13	1.372	2.556
#1	-.0005	40.52	.0108	.0972	-.0001	.3328	-.0010	-.0004	.0559	.0095
#2	-.0005	40.66	.0111	.0979	-.0002	.3431	-.0010	-.0005	.0564	.0093
#3	-.0006	40.94	.0106	.0975	-.0001	.3397	-.0010	-.0004	.0574	.0090

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	20.89	.1050	.0793	.0132	.0023	.1555	.0053	.0339	-.0008	-.0001
Stddev	.11	.0130	.0087	.0001	.0000	.0024	.0003	.0005	.0009	.0006
%RSD	.5376	12.37	10.93	.6314	1.614	1.550	4.906	1.400	110.3	795.3
#1	20.76	.0972	.0697	.0131	.0023	.1527	.0051	.0335	-.0007	.0005
#2	20.93	.0979	.0865	.0132	.0023	.1567	.0056	.0340	.0000	-.0006
#3	20.97	.1200	.0817	.0133	.0023	.1570	.0051	.0344	-.0018	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.568	.0211	.1921	.3607	-.0029	.0350	.0127
Stddev	.008	.0003	.0015	.0005	.0008	.0001	.0001
%RSD	.4955	1.247	.7558	.1479	27.05	.4016	.6998
#1	1.574	.0213	.1905	.3602	-.0022	.0348	.0128
#2	1.570	.0208	.1925	.3612	-.0028	.0350	.0126
#3	1.559	.0211	.1934	.3608	-.0038	.0351	.0127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3396.8	7076.5	61073.	5060.9
Stddev	10.2	32.4	323.	22.2
%RSD	.30066	.45784	.52880	.43817
#1	3389.5	7047.4	61330.	5059.9
#2	3392.6	7070.7	61178.	5039.3
#3	3408.5	7111.4	60710.	5083.6

Zoom In Zoom Out

Sample Name: FA22009-26 Acquired: 2/12/2015 16:18:01 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	48.27	.0131	.1125	-.0002	.3936	-.0011	-.0004	.0673	.0144
Stddev	.0004	2.72	.0007	.0060	.0000	.0216	.0001	.0001	.0006	.0002
%RSD	78.42	5.630	5.423	5.352	19.15	5.486	12.38	20.92	.8690	1.270
#1	-.0002	50.06	.0123	.1165	-.0002	.4022	-.0012	-.0005	.0679	.0146
#2	-.0009	45.15	.0137	.1056	-.0002	.3690	-.0009	-.0004	.0668	.0144
#3	-.0003	49.61	.0133	.1154	-.0001	.4096	-.0011	-.0003	.0673	.0143

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	22.90	.1584	.1316	.0156	.0030	.1348	.0066	.0393	-.0013	.0000
Stddev	1.25	.0379	.0098	.0002	.0001	.0019	.0001	.0020	.0009	.000
%RSD	5.438	23.91	7.448	1.027	2.285	1.435	1.156	5.061	69.40	6902.
#1	23.72	.1946	.1429	.0157	.0029	.1326	.0066	.0379	-.0023	.0005
#2	21.47	.1190	.1257	.0154	.0030	.1360	.0065	.0416	-.0004	-.0003
#3	23.51	.1615	.1261	.0157	.0030	.1358	.0067	.0385	-.0013	-.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.839	.0210	.2181	.4075	-.0020	.0412	.0181
Stddev	.033	.0004	.0124	.0013	.0005	.0005	.0003
%RSD	1.786	1.827	5.668	.3092	24.10	1.221	1.832
#1	1.816	.0207	.2260	.4089	-.0025	.0414	.0179
#2	1.877	.0214	.2038	.4064	-.0015	.0407	.0185
#3	1.825	.0209	.2244	.4073	-.0019	.0416	.0180

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3405.6	7184.3	60974.	5117.7
Stddev	42.1	92.8	345.	260.2
%RSD	1.2371	1.2919	.56641	5.0850
#1	3439.8	7255.9	60584.	4941.0
#2	3358.5	7079.4	61099.	5416.5
#3	3418.3	7217.5	61240.	4995.5

Zoom In Zoom Out

Sample Name: FA22009-29 Acquired: 2/12/2015 16:22:24 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	1.321	.0073	.0027	-.0003	.2117	-.0007	-.0007	.0023	.0007
Stddev	.000	.016	.0011	.0002	.0000	.0026	.0000	.0001	.0003	.0001
%RSD	2317.	1.195	14.62	7.859	9.114	1.246	6.342	10.83	11.76	10.24
#1	-.0003	1.303	.0083	.0029	-.0002	.2147	-.0007	-.0006	.0022	.0007
#2	-.0002	1.333	.0074	.0025	-.0003	.2097	-.0007	-.0007	.0022	.0008
#3	.0004	1.328	.0062	.0027	-.0003	.2106	-.0007	-.0007	.0027	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.900	.0316	.0276	.0029	-.0008	.1361	-.0004	.0021	.0015	-.0003
Stddev	.003	.0202	.0204	.0000	.0001	.0076	.0001	.0004	.0010	.0009
%RSD	.1508	64.03	73.89	1.144	13.87	5.570	34.29	17.06	63.81	325.2
#1	1.899	.0109	.0510	.0030	-.0009	.1445	-.0005	.0017	.0012	.0000
#2	1.898	.0326	.0137	.0029	-.0008	.1338	-.0003	.0023	.0007	.0004
#3	1.903	.0512	.0181	.0029	-.0007	.1299	-.0003	.0023	.0026	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3557	.0214	.0038	.0971	-.0010	.0019	.0028
Stddev	.0032	.0001	.0001	.0003	.0009	.0002	.0001
%RSD	.8918	.3972	2.211	.2656	88.76	9.051	3.109
#1	.3523	.0214	.0039	.0971	-.0002	.0021	.0027
#2	.3586	.0215	.0038	.0974	-.0020	.0017	.0029
#3	.3561	.0215	.0038	.0969	-.0009	.0018	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3482.1	6943.0	60603.	4939.9
Stddev	20.9	51.3	150.	11.5
%RSD	.60099	.73956	.24697	.23236
#1	3506.1	7001.7	60688.	4952.2
#2	3467.3	6906.3	60430.	4929.4
#3	3473.0	6921.0	60691.	4938.1

Zoom In Zoom Out

Sample Name: FA22015-2 Acquired: 2/12/2015 16:26:52 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0049	346.9	.0811	5.188	.0331	23.25	-.0140	.0179
Stddev	.0035	7.3	.0035	.108	.0005	.43	.0011	.0003
%RSD	70.19	2.113	4.273	2.089	1.606	1.848	8.152	1.430
#1	-.0086	352.1	.0808	5.267	.0335	23.57	-.0152	.0180
#2	-.0017	350.1	.0847	5.232	.0333	23.41	-.0139	.0181
#3	-.0045	338.5	.0778	5.064	.0325	22.76	-.0129	.0176

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	1.316	.0398	968.9	6.989	8.980	.5004	.0228	.9917
Stddev	.004	.0026	20.2	.216	.276	.0009	.0005	.0696
%RSD	.3225	6.466	2.080	3.089	3.068	.1756	2.405	7.023
#1	1.318	.0408	984.3	7.078	9.144	.4995	.0228	.9560
#2	1.311	.0418	976.3	7.147	9.135	.5006	.0233	1.072
#3	1.318	.0369	946.1	6.743	8.662	.5012	.0222	.9471

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.1651	.2575	F-.0294	.0106	2.580	.0295	2.490	1.227
Stddev	.0015	.0085	.0044	.0081	.024	.0016	.054	.001
%RSD	.8888	3.292	15.01	76.49	.9159	5.466	2.162	.1056
#1	.1652	.2479	-.0255	.0199	2.578	.0288	2.527	1.228
#2	.1664	.2640	-.0286	.0053	2.605	.0314	2.516	1.226
#3	.1635	.2606	-.0342	.0065	2.557	.0284	2.429	1.227

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0427	1.601	.1406
Stddev	.0069	.004	.0011
%RSD	16.10	.2608	.7985
#1	-.0362	1.597	.1404
#2	-.0499	1.599	.1418
#3	-.0419	1.605	.1395

Zoom In Zoom Out

Sample Name: FA22015-2 Acquired: 2/12/2015 16:26:52 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3303.6	8612.9	72985.	6143.1
Stddev	32.8	66.0	72.	97.1
%RSD	.99237	.76608	.09918	1.5812
#1	3313.3	8627.5	73011.	6042.5
#2	3267.1	8540.8	72903.	6150.2
#3	3330.5	8670.3	73040.	6236.4

Zoom In Zoom Out

Sample Name: FA22020-1 Acquired: 2/12/2015 16:31:13 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	48.24	.0076	.0893	.0002	11.19	-.0007	.0020	.0409	.0375
Stddev	.0005	.17	.0002	.0002	.0001	.05	.0001	.0001	.0002	.0004
%RSD	115.9	.3613	2.523	.2195	56.56	.4424	9.294	5.599	.4008	.9479
#1	.0001	48.40	.0076	.0894	.0003	11.25	-.0007	.0021	.0411	.0378
#2	-.0004	48.26	.0078	.0894	.0001	11.16	-.0007	.0021	.0407	.0371
#3	-.0009	48.05	.0074	.0891	.0001	11.16	-.0008	.0019	.0410	.0375

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	24.74	1.851	3.595	.4308	.0014	.2634	.0139	.0339	-.0016	.0017
Stddev	.09	.031	.043	.0016	.0001	.0049	.0002	.0002	.0011	.0008
%RSD	.3695	1.651	1.187	.3621	4.221	1.878	1.092	.7202	68.18	46.96
#1	24.79	1.822	3.644	.4320	.0014	.2684	.0139	.0341	-.0011	.0009
#2	24.80	1.883	3.567	.4313	.0014	.2585	.0141	.0336	-.0009	.0017
#3	24.64	1.850	3.574	.4290	.0013	.2632	.0138	.0340	-.0028	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.352	.0240	.0707	.5605	-.0024	.0582	.1999
Stddev	.011	.0003	.0004	.0020	.0005	.0003	.0010
%RSD	.8230	1.067	.5793	.3537	20.40	.4703	.4767
#1	1.358	.0241	.0712	.5616	-.0021	.0585	.2005
#2	1.358	.0237	.0705	.5616	-.0021	.0580	.2003
#3	1.339	.0241	.0704	.5582	-.0029	.0581	.1988

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3351.8	7021.5	60452.	4998.9
Stddev	14.6	37.1	223.	34.4
%RSD	.43557	.52810	.36903	.68785
#1	3339.2	6990.3	60312.	4966.0
#2	3348.4	7011.8	60334.	5034.6
#3	3367.8	7062.5	60709.	4996.1

Zoom In Zoom Out

Sample Name: FA22020-2 Acquired: 2/12/2015 16:35:36 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	33.65	.0104	.0864	.0000	10.70	.0000	.0019	.0573	.0487
Stddev	.0004	.77	.0004	.0020	.000	.22	.000	.0001	.0004	.0005
%RSD	156.9	2.287	3.733	2.346	116.1	2.014	209.1	6.261	.7418	.9499
#1	-.0007	33.45	.0100	.0858	.0000	10.63	.0000	.0020	.0577	.0488
#2	-.0001	34.50	.0104	.0887	.0000	10.95	-.0001	.0020	.0569	.0481
#3	.0000	33.01	.0107	.0847	.0000	10.54	.0000	.0018	.0572	.0490

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.13	1.071	1.806	.2072	.0009	.1360	.0149	.0621	-.0009	.0014
Stddev	.33	.070	.044	.0007	.0000	.0034	.0002	.0008	.0004	.0012
%RSD	2.165	6.544	2.455	.3413	5.685	2.482	1.466	1.245	40.94	89.68
#1	15.04	1.068	1.771	.2074	.0008	.1397	.0152	.0625	-.0013	.0012
#2	15.50	1.143	1.856	.2064	.0009	.1332	.0149	.0612	-.0007	.0027
#3	14.86	1.003	1.790	.2078	.0008	.1351	.0147	.0626	-.0007	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.294	.0234	.0645	.4970	-.0022	.0427	.4739
Stddev	.004	.0001	.0014	.0011	.0011	.0003	.0018
%RSD	.3061	.5518	2.204	.2217	49.19	.7884	.3766
#1	1.299	.0233	.0642	.4975	-.0015	.0430	.4759
#2	1.293	.0235	.0660	.4958	-.0017	.0426	.4724
#3	1.291	.0235	.0633	.4978	-.0035	.0424	.4734

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3366.7	6992.8	60379.	4920.5
Stddev	10.3	17.8	120.	76.3
%RSD	.30456	.25449	.19918	1.5508
#1	3356.5	6972.6	60315.	4982.3
#2	3377.0	7006.2	60517.	4835.2
#3	3366.7	6999.7	60304.	4943.9

Zoom In Zoom Out

Sample Name: FA22020-3 Acquired: 2/12/2015 16:39:56 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0016	48.99	.0247	.2747	.0015	F571.6	.0090	.0137	.3225
Stddev	.0005	.92	.0006	.0063	.0000	11.1	.0001	.0002	.0008
%RSD	30.72	1.878	2.361	2.284	2.477	1.948	1.560	1.615	.2509
#1	.0021	49.40	.0243	.2776	.0015	577.8	.0089	.0135	.3227
#2	.0011	49.63	.0246	.2791	.0015	578.2	.0090	.0138	.3232
#3	.0016	47.93	.0254	.2675	.0016	558.7	.0091	.0139	.3216

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3461	45.73	3.217	37.22	.8565	.0049	.8104	.0952	.1706
Stddev	.0009	.87	.093	.51	.0021	.0001	.0119	.0007	.0029
%RSD	.2543	1.910	2.886	1.375	.2507	1.791	1.466	.7828	1.683
#1	.3453	46.06	3.182	37.50	.8578	.0048	.7967	.0945	.1677
#2	.3470	46.38	3.322	37.53	.8576	.0050	.8180	.0951	.1708
#3	.3459	44.74	3.147	36.63	.8540	.0048	.8165	.0960	.1734

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0034	.0039	1.642	.0364	.8942	.6449	-.0018	.1271	F4.653
Stddev	.0005	.0016	.013	.0002	.0195	.0017	.0024	.0008	.042
%RSD	15.18	42.11	.7892	.5031	2.176	.2606	135.5	.6420	.9061
#1	.0032	.0053	1.627	.0363	.8993	.6454	.0010	.1276	4.608
#2	.0030	.0043	1.646	.0363	.9105	.6463	-.0030	.1275	4.661
#3	.0040	.0021	1.652	.0366	.8726	.6430	-.0034	.1261	4.691

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2843.4	6674.6	56879.	4904.0
Stddev	29.2	55.5	81.	77.5
%RSD	1.0262	.83106	.14305	1.5809
#1	2877.0	6737.6	56790.	4838.7
#2	2828.8	6653.3	56896.	4883.7
#3	2824.4	6633.0	56950.	4989.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 16:44:23 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2513	41.20	1.924	2.086	1.991	39.50	1.960	1.991	1.986	2.021
Stddev	.0009	.27	.006	.010	.013	.25	.002	.002	.003	.005
%RSD	.3702	.6467	.3338	.4598	.6643	.6322	.1206	.1148	.1700	.2742
#1	.2522	41.50	1.917	2.097	2.006	39.78	1.957	1.988	1.988	2.019
#2	.2515	41.09	1.930	2.079	1.982	39.38	1.962	1.993	1.987	2.027
#3	.2504	41.00	1.924	2.082	1.986	39.32	1.960	1.992	1.982	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.72	40.37	41.58	1.954	1.988	40.79	1.935	1.941	1.941	1.965
Stddev	.26	.30	.15	.020	.004	.27	.004	.004	.005	.006
%RSD	.6451	.7369	.3550	1.005	.2081	.6610	.1950	.1874	.2531	.3281
#1	41.02	40.70	41.71	1.941	1.984	41.10	1.932	1.944	1.937	1.958
#2	40.63	40.29	41.62	1.945	1.989	40.59	1.939	1.937	1.946	1.971
#3	40.51	40.12	41.42	1.977	1.992	40.69	1.934	1.942	1.939	1.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.768	2.018	1.991	1.972	1.956	1.908	1.921
Stddev	.003	.003	.009	.004	.003	.005	.003
%RSD	.1794	.1584	.4301	.2251	.1293	.2666	.1705
#1	1.764	2.014	2.000	1.973	1.957	1.913	1.920
#2	1.769	2.021	1.984	1.976	1.958	1.907	1.925
#3	1.770	2.018	1.987	1.967	1.953	1.903	1.919
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 16:44:23 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3002.7	6589.8	56882.	4710.9
Stddev	10.3	9.0	109.	55.3
%RSD	.34413	.13662	.19219	1.1734
#1	2998.4	6598.1	56798.	4652.5
#2	3014.5	6591.1	57006.	4717.7
#3	2995.2	6580.2	56843.	4762.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 16:48:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0092	-.0006	.0000	.0004	.0246	-.0002	-.0002	-.0001
Stddev	.0004	.0022	.0006	.0003	.0001	.0056	.0000	.0001	.0002
%RSD	947.4	24.05	104.6	1060.	14.38	22.91	9.292	35.73	198.0
#1	-.0004	.0073	-.0011	.0004	.0004	.0280	-.0002	-.0002	.0000
#2	.0003	.0087	-.0008	-.0001	.0003	.0181	-.0002	-.0002	-.0003
#3	.0003	.0117	.0001	-.0002	.0004	.0277	-.0002	-.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0266	.1851	-.0086	.0002	F.0038	.0389	-.0002	.0002
Stddev	.0004	.0028	.0815	.0216	.0000	.0014	.0059	.0001	.0003
%RSD	689.6	10.62	44.01	249.9	19.50	37.41	15.24	61.02	151.5
#1	.0003	.0299	.2787	.0137	.0002	.0054	.0450	-.0001	.0005
#2	.0003	.0254	.1464	-.0294	.0002	.0034	.0331	-.0002	.0000
#3	-.0004	.0246	.1302	-.0103	.0001	.0026	.0385	-.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0004	.0012	.0005	.0004	.0015	-.0002	.0001	.0005
Stddev	.000	.0006	.0002	.0001	.0001	.0001	.0003	.0001	.0001
%RSD	713.2	139.0	17.68	27.59	26.18	9.273	186.7	142.7	11.00
#1	.0001	-.0011	.0015	.0005	.0005	.0016	-.0004	.0000	.0005
#2	.0002	-.0001	.0012	.0003	.0003	.0015	-.0003	.0002	.0004
#3	-.0004	.0000	.0010	.0005	.0005	.0014	.0002	.0000	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 16:48:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3482.2	6912.1	59883.	4753.0
Stddev	12.6	9.2	142.	70.4
%RSD	.36129	.13264	.23676	1.4813
#1	3489.0	6921.6	59721.	4792.7
#2	3467.7	6903.3	59942.	4794.6
#3	3489.8	6911.4	59985.	4671.7

Zoom In Zoom Out

Sample Name: FA22020-4 Acquired: 2/12/2015 16:53:10 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	118.1	.0177	.4524	.0111	360.6	-.0005	.0103	.0923
Stddev	.0001	3.1	.0006	.0102	.0003	16.0	.0001	.0001	.0028
%RSD	17.09	2.598	3.376	2.258	2.352	4.427	14.06	1.016	3.056
#1	.0005	114.6	.0172	.4408	.0108	343.3	-.0004	.0103	.0936
#2	.0007	120.3	.0184	.4600	.0113	374.8	-.0005	.0103	.0942
#3	.0006	119.3	.0176	.4565	.0112	363.8	-.0005	.0105	.0890

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0165	25.68	14.36	30.30	F4.492	.0025	2.626	.0144	.1195
Stddev	.0005	.75	.35	.97	.107	.0002	.069	.0001	.0016
%RSD	3.264	2.901	2.415	3.211	2.384	9.668	2.621	.8723	1.323
#1	.0167	24.83	13.96	29.21	4.553	.0027	2.547	.0145	.1212
#2	.0170	26.24	14.57	31.10	4.555	.0023	2.675	.0145	.1181
#3	.0159	25.97	14.55	30.58	4.369	.0023	2.655	.0143	.1191

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0011	.0036	1.370	.0154	.6974	1.999	-.0005	.1511	.0939
Stddev	.0014	.0008	.006	.0002	.0162	.066	.0011	.0050	.0005
%RSD	127.7	21.37	.4405	1.513	2.316	3.278	238.8	3.306	.5269
#1	.0004	.0035	1.376	.0157	.6788	2.029	-.0014	.1535	.0941
#2	-.0022	.0045	1.372	.0152	.7081	2.043	-.0007	.1544	.0942
#3	-.0014	.0029	1.364	.0153	.7054	1.923	.0007	.1453	.0933

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2844.1	8562.0	72939.	6287.3
Stddev	15.8	23.7	1957.	194.2
%RSD	.55499	.27704	2.6825	3.0885
#1	2842.0	8550.6	72006.	6505.4
#2	2829.5	8546.2	71622.	6133.2
#3	2860.9	8589.3	75187.	6223.3

Zoom In Zoom Out

Sample Name: FA22020-5 Acquired: 2/12/2015 16:57:46 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	8.956	.0007	.0273	-.0002	.4710	-.0008	.0000	.0117	.0028
Stddev	.0003	.060	.0004	.0004	.0001	.0079	.0000	.000	.0000	.0002
%RSD	47.47	.6739	51.75	1.442	26.01	1.673	3.212	376.4	.1504	7.204
#1	-.0004	8.914	.0008	.0274	-.0003	.4759	-.0008	.0000	.0117	.0026
#2	-.0011	9.025	.0003	.0276	-.0003	.4751	-.0008	-.0001	.0117	.0029
#3	-.0007	8.928	.0011	.0268	-.0002	.4619	-.0008	.0000	.0116	.0029

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.483	.4788	.6845	.0245	-.0003	.2724	.0031	.0141	-.0006	-.0019
Stddev	.008	.0150	.0251	.0001	.0001	.0081	.0001	.0011	.0010	.0001
%RSD	.1851	3.133	3.666	.4384	24.48	2.982	2.407	7.734	187.0	3.467
#1	4.476	.4669	.6768	.0246	-.0004	.2786	.0031	.0136	.0002	-.0020
#2	4.492	.4956	.6642	.0245	-.0002	.2632	.0032	.0134	-.0001	-.0019
#3	4.480	.4739	.7126	.0243	-.0004	.2754	.0031	.0154	-.0017	-.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.018	.0217	.0066	.5355	-.0018	.0147	.0162
Stddev	.003	.0001	.0001	.0007	.0009	.0001	.0001
%RSD	.3065	.6785	1.875	.1241	50.49	.6470	.5305
#1	1.021	.0216	.0065	.5362	-.0015	.0148	.0162
#2	1.020	.0216	.0067	.5356	-.0028	.0147	.0161
#3	1.015	.0219	.0066	.5349	-.0011	.0146	.0162

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.2	6985.4	60812.	4916.6
Stddev	4.5	4.5	223.	45.9
%RSD	.12984	.06432	.36607	.93405
#1	3444.7	6989.7	60589.	4924.1
#2	3440.1	6986.0	60815.	4958.3
#3	3435.8	6980.7	61034.	4867.3

Zoom In Zoom Out

Sample Name: FA22032-1 Acquired: 2/12/2015 17:02:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	84.66	.0224	.7223	.0037	F2741.	.0005	.0262	.0773
Stddev	.0002	.55	.0002	.0048	.0001	12.	.0001	.0003	.0003
%RSD	50.33	.6475	1.045	.6618	3.020	.4307	26.44	1.186	.4150
#1	.0005	84.08	.0224	.7177	.0038	2728.	.0006	.0264	.0777
#2	.0002	84.74	.0227	.7220	.0036	2752.	.0003	.0258	.0771
#3	.0005	85.16	.0222	.7273	.0037	2744.	.0005	.0264	.0773

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1185	79.16	21.68	67.99	1.678	.0057	2.949	.0603	.0921
Stddev	.0004	.41	.14	.42	.005	.0005	.008	.0009	.0025
%RSD	.3544	.5134	.6230	.6185	.3223	9.312	.2601	1.551	2.737
#1	.1189	78.75	21.53	67.51	1.685	.0062	2.945	.0609	.0930
#2	.1181	79.17	21.73	68.24	1.674	.0052	2.958	.0592	.0892
#3	.1184	79.56	21.79	68.23	1.676	.0056	2.945	.0609	.0940

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0092	-.0046	2.374	.0196	F15.26	1.596	.0054	.1234	.2266
Stddev	.0006	.0007	.040	.0006	.21	.004	.0008	.0006	.0035
%RSD	7.027	16.09	1.674	3.227	1.360	.2516	15.01	.4950	1.531
#1	.0094	-.0051	2.394	.0201	15.03	1.600	.0052	.1229	.2288
#2	.0098	-.0051	2.329	.0189	15.32	1.592	.0063	.1233	.2226
#3	.0085	-.0038	2.401	.0197	15.43	1.596	.0047	.1241	.2283

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2294.6	5855.8	50546.	4694.5
Stddev	31.7	69.4	121.	43.9
%RSD	1.3826	1.1856	.23871	.93512
#1	2281.0	5818.0	50407.	4744.7
#2	2330.9	5935.9	50627.	4663.4
#3	2272.0	5813.4	50604.	4675.4

Zoom In Zoom Out

Sample Name: FA22032-2 Acquired: 2/12/2015 17:06:43 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	148.5	.0384	1.441	.0061	F1768.	.0009	.0454	.1304
Stddev	.0005	5.9	.0005	.057	.0002	58.	.0003	.0005	.0060
%RSD	222.3	3.992	1.241	3.962	3.679	3.262	38.62	1.051	4.638
#1	.0001	141.6	.0389	1.375	.0059	1703.	.0013	.0454	.1234
#2	.0007	151.8	.0379	1.471	.0063	1815.	.0006	.0449	.1339
#3	-.0002	151.9	.0385	1.477	.0061	1784.	.0009	.0458	.1339

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1628	129.2	45.12	105.1	3.465	.0063	3.028	.0999	.1413
Stddev	.0075	5.0	1.85	3.8	.145	.0001	.116	.0010	.0019
%RSD	4.614	3.832	4.098	3.645	4.177	1.848	3.818	.9718	1.360
#1	.1541	123.5	42.98	100.7	3.298	.0062	2.894	.0994	.1418
#2	.1674	132.1	46.17	107.6	3.537	.0064	3.098	.0994	.1392
#3	.1669	132.0	46.20	107.1	3.560	.0062	3.091	.1011	.1430

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0042	-.0006	2.159	.0201	F9.152	2.798	.0014	.2099	.3878
Stddev	.0023	.0010	.027	.0001	.166	.125	.0022	.0097	.0046
%RSD	54.55	160.2	1.243	.4989	1.811	4.466	160.5	4.643	1.182
#1	.0065	-.0003	2.141	.0200	8.973	2.654	.0025	.1986	.3865
#2	.0044	-.0017	2.148	.0201	9.183	2.869	.0029	.2156	.3840
#3	.0019	.0002	2.190	.0202	9.300	2.871	-.0012	.2154	.3929

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2425.7	6868.0	59962.	5484.2
Stddev	31.7	73.7	2431.	184.4
%RSD	1.3065	1.0734	4.0546	3.3624
#1	2450.6	6920.6	62763.	5695.7
#2	2436.5	6899.6	58713.	5356.7
#3	2390.0	6783.7	58408.	5400.2

Zoom In Zoom Out

Sample Name: FA22032-3 Acquired: 2/12/2015 17:11:26 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	134.0	.0350	1.370	.0050	F2271.	.0003	.0384	.1150
Stddev	.0000	1.2	.0012	.015	.0001	30.	.0001	.0003	.0005
%RSD	10.01	.8953	3.333	1.102	2.283	1.328	40.44	.8543	.4515
#1	.0004	132.8	.0360	1.353	.0052	2244.	.0004	.0386	.1145
#2	.0003	135.2	.0337	1.382	.0050	2303.	.0002	.0380	.1155
#3	.0003	133.9	.0352	1.374	.0049	2267.	.0004	.0386	.1149

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1408	111.7	37.32	87.67	2.828	.0059	2.668	.0866	.1131
Stddev	.0005	1.0	.32	.98	.009	.0002	.027	.0008	.0019
%RSD	.3200	.8731	.8593	1.117	.3254	2.964	1.001	.9615	1.637
#1	.1406	111.0	37.05	86.92	2.818	.0061	2.645	.0866	.1147
#2	.1413	112.8	37.68	88.78	2.836	.0058	2.697	.0858	.1111
#3	.1405	111.3	37.25	87.31	2.832	.0058	2.661	.0875	.1137

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0045	-.0011	2.497	.0186	F11.03	2.690	.0022	.1821	.3225
Stddev	.0005	.0006	.017	.0003	.18	.009	.0018	.0005	.0023
%RSD	11.37	50.97	.6843	1.400	1.607	.3296	78.63	.2915	.7014
#1	.0051	-.0010	2.501	.0188	10.83	2.680	.0041	.1815	.3227
#2	.0043	-.0007	2.478	.0183	11.14	2.695	.0006	.1825	.3202
#3	.0041	-.0018	2.511	.0187	11.13	2.695	.0020	.1823	.3247

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2332.7	6420.4	55306.	5073.4
Stddev	14.8	33.6	308.	69.2
%RSD	.63411	.52396	.55658	1.3635
#1	2325.3	6412.6	55605.	5136.0
#2	2349.8	6457.3	55322.	4999.1
#3	2323.1	6391.4	54990.	5085.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/12/2015 17:16:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0097	.2330	.0087	.2148	.0047	1.683	.0044	.0517	.0096	.0256
Stddev	.0005	.0069	.0009	.0018	.0001	.028	.0001	.0006	.0004	.0005
%RSD	4.710	2.948	10.39	.8208	1.488	1.671	1.308	1.217	4.035	2.095
#1	.0095	.2388	.0094	.2133	.0046	1.715	.0045	.0524	.0092	.0250
#2	.0102	.2254	.0090	.2143	.0047	1.675	.0043	.0515	.0099	.0258
#3	.0093	.2347	.0077	.2167	.0048	1.660	.0044	.0511	.0097	.0260

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3555	10.63	5.172	.0156	.0473	10.50	.0408	.0039	.0036	.0068
Stddev	.0012	.08	.066	.0001	.0008	.08	.0006	.0007	.0006	.0011
%RSD	.3450	.7628	1.268	.5635	1.681	.7697	1.429	19.14	16.09	15.65
#1	.3556	10.54	5.121	.0155	.0482	10.42	.0414	.0031	.0038	.0076
#2	.3567	10.65	5.149	.0156	.0470	10.50	.0405	.0046	.0040	.0072
#3	.3543	10.70	5.246	.0157	.0467	10.58	.0403	.0039	.0029	.0056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0606	.0516	.0125	.0111	.0090	.0467	.0209
Stddev	.0004	.0007	.0000	.0001	.0004	.0005	.0002
%RSD	.6548	1.360	.0599	.9444	4.582	1.020	.7320
#1	.0609	.0523	.0125	.0111	.0094	.0462	.0211
#2	.0608	.0518	.0125	.0112	.0087	.0472	.0209
#3	.0602	.0509	.0125	.0110	.0089	.0467	.0208

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3364.5	6826.4	59554.	4774.1
Stddev	28.8	54.5	381.	63.3
%RSD	.85670	.79847	.64001	1.3256
#1	3333.3	6765.0	59971.	4845.1
#2	3370.1	6845.3	59469.	4753.3
#3	3390.1	6869.0	59223.	4723.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/12/2015 17:20:32 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	F506.0	-.0003	.0003	-.0003	464.4	-.0022	-.0016	-.0002
Stddev	.0008	4.7	.0010	.0002	.0000	10.3	.0001	.0001	.0001
%RSD	226.8	.9233	336.9	65.00	7.477	2.219	4.955	4.775	36.46
#1	-.0013	500.6	-.0014	.0001	-.0003	476.3	-.0023	-.0015	-.0003
#2	.0001	508.5	.0007	.0006	-.0003	458.3	-.0023	-.0016	-.0001
#3	.0001	508.9	-.0002	.0003	-.0002	458.6	-.0021	-.0016	-.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0008	181.3	.2683	489.9	-.0006	.0011	.1370	-.0001	-.0043
Stddev	.0001	.4	.0465	1.5	.0001	.0001	.0066	.0001	.0018
%RSD	15.64	.2287	17.32	.3135	12.57	6.141	4.824	88.46	42.77
#1	.0010	181.4	.2743	490.4	-.0007	.0012	.1444	-.0001	-.0022
#2	.0008	181.6	.3115	491.2	-.0005	.0011	.1351	-.0002	-.0055
#3	.0007	180.8	.2191	488.2	-.0006	.0010	.1315	.0000	-.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0031	-.0001	.0794	.0009	.0002	.0006	-.0026	.0007	-.0022
Stddev	.0015	.0010	.0014	.0003	.0001	.0002	.0014	.0003	.0001
%RSD	48.54	1256.	1.823	33.09	52.39	31.85	54.44	37.31	2.812
#1	-.0049	.0010	.0791	.0006	.0002	.0008	-.0039	.0008	-.0022
#2	-.0023	-.0001	.0781	.0011	.0001	.0005	-.0029	.0004	-.0023
#3	-.0022	-.0011	.0809	.0012	.0003	.0004	-.0011	.0009	-.0023

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2672.7	6157.0	51659.	4439.6
Stddev	7.9	14.5	237.	4.5
%RSD	.29399	.23558	.45946	.10161
#1	2677.0	6160.8	51743.	4435.1
#2	2677.4	6169.3	51843.	4439.6
#3	2663.6	6141.0	51391.	4444.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/12/2015 17:25:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.032	F511.8	.9924	.5468	.4871	453.7	.8764	.4633	.4783
Stddev	.002	7.8	.0131	.0021	.0006	5.1	.0126	.0064	.0026
%RSD	.1453	1.533	1.315	.3924	.1307	1.127	1.435	1.386	.5411
#1	1.033	520.9	1.001	.5456	.4876	457.6	.8839	.4672	.4787
#2	1.030	506.7	.9992	.5456	.4864	447.9	.8834	.4669	.4755
#3	1.031	507.9	.9773	.5493	.4872	455.5	.8619	.4559	.4806

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5530	179.7	.1273	489.5	.4843	.8984	.0908	.8968	.9192
Stddev	.0020	.7	.0376	2.9	.0033	.0136	.0145	.0122	.0109
%RSD	.3591	.3666	29.54	.5892	.6769	1.511	16.00	1.359	1.182
#1	.5551	179.9	.0982	490.3	.4838	.9062	.0936	.9034	.9273
#2	.5512	179.0	.1698	486.3	.4812	.9062	.1037	.9041	.9235
#3	.5528	180.2	.1140	492.0	.4877	.8827	.0751	.8827	.9069

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9919	.9779	.0373	.9157	.9854	.9541	.9297	.4521	.8821
Stddev	.0150	.0111	.0011	.0138	.0009	.0034	.0129	.0030	.0126
%RSD	1.510	1.136	3.011	1.511	.0949	.3604	1.389	.6641	1.432
#1	.9979	.9846	.0384	.9248	.9853	.9544	.9377	.4530	.8890
#2	1.003	.9841	.0373	.9225	.9845	.9506	.9367	.4488	.8897
#3	.9748	.9651	.0362	.8998	.9864	.9574	.9148	.4546	.8675

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2648.6	6184.1	51759.	4452.2
Stddev	28.3	72.2	404.	38.0
%RSD	1.0671	1.1672	.78059	.85352
#1	2630.3	6142.2	51735.	4427.7
#2	2634.4	6142.6	52174.	4496.0
#3	2681.2	6267.4	51367.	4433.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 17:29:36 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2523	41.42	1.935	2.125	1.948	39.17	1.961	2.001	1.973	2.031
Stddev	.0014	.21	.024	.008	.007	.10	.023	.024	.013	.006
%RSD	.5682	.5129	1.215	.3684	.3577	.2610	1.161	1.206	.6803	.3069
#1	.2507	41.31	1.936	2.117	1.943	39.16	1.964	2.006	1.958	2.025
#2	.2528	41.67	1.910	2.133	1.956	39.27	1.936	1.975	1.983	2.037
#3	.2535	41.29	1.957	2.126	1.945	39.07	1.981	2.023	1.979	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.22	41.46	40.85	1.947	2.006	41.51	1.933	1.945	1.952	1.977
Stddev	.13	.21	.09	.027	.024	.22	.024	.024	.020	.026
%RSD	.3302	.4977	.2150	1.408	1.189	.5216	1.251	1.219	1.034	1.320
#1	40.13	41.26	40.92	1.915	2.011	41.30	1.937	1.952	1.958	1.982
#2	40.37	41.67	40.75	1.962	1.980	41.73	1.907	1.919	1.929	1.948
#3	40.17	41.45	40.87	1.963	2.027	41.48	1.955	1.964	1.968	2.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.776	2.023	2.008	1.954	1.956	1.894	1.911
Stddev	.024	.024	.010	.010	.027	.014	.024
%RSD	1.351	1.163	.4899	.5271	1.401	.7147	1.231
#1	1.783	2.027	2.000	1.942	1.965	1.878	1.911
#2	1.750	1.998	2.019	1.960	1.925	1.904	1.887
#3	1.796	2.045	2.006	1.960	1.978	1.898	1.934
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 17:29:36 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2989.3	6568.0	57270.	4661.5
Stddev	30.7	62.8	364.	13.5
%RSD	1.0281	.95567	.63641	.28975
#1	2981.7	6561.4	57660.	4645.9
#2	3023.1	6633.8	56939.	4668.6
#3	2963.1	6508.8	57211.	4670.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 17:33:51 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0224	-.0008	.0004	.0004	.0293	-.0001	.0000	.0002
Stddev	.0006	.0060	.0006	.0002	.0000	.0028	.0000	.0000	.0002
%RSD	297.9	26.88	68.72	50.97	7.283	9.646	38.43	82.66	89.23
#1	.0003	.0278	-.0002	.0002	.0004	.0326	-.0001	.0001	.0001
#2	-.0008	.0159	-.0010	.0006	.0004	.0277	.0000	.0000	.0003
#3	-.0001	.0235	-.0013	.0003	.0004	.0277	-.0001	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0345	.1472	.0276	.0003	F.0039	.0276	-.0001	.0002
Stddev	.0002	.0067	.0526	.0270	.0001	.0015	.0098	.0001	.0004
%RSD	65.22	19.50	35.76	97.93	22.02	37.54	35.42	85.79	179.9
#1	.0004	.0423	.1900	.0367	.0004	.0055	.0385	-.0001	.0003
#2	.0002	.0303	.1632	.0488	.0003	.0038	.0247	.0000	.0006
#3	.0001	.0310	.0884	-.0028	.0003	.0025	.0196	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0006	.0014	.0006	.0005	.0013	.0007	.0000	.0007
Stddev	.0013	.0017	.0003	.0005	.0000	.0001	.0013	.0002	.0000
%RSD	223.0	277.7	19.19	82.74	8.622	6.597	181.6	1104.	4.040
#1	.0017	.0026	.0013	.0002	.0005	.0014	-.0006	-.0001	.0006
#2	-.0008	-.0003	.0017	.0011	.0006	.0013	.0019	.0002	.0007
#3	.0008	-.0004	.0011	.0004	.0005	.0013	.0008	.0000	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 17:33:51 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3486.8	6933.0	59640.	4677.6
Stddev	43.4	78.1	178.	17.6
%RSD	1.2445	1.1268	.29857	.37523
#1	3475.7	6905.4	59564.	4660.0
#2	3450.1	6872.5	59513.	4677.8
#3	3534.7	7021.2	59844.	4695.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	2	V	-0.007608	0.000000	No
			Fe	0.000007	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.040330	0.000000	No
As 189.042 {478}	X	4	Fe	-0.000093	0.000000	No
			Cr	-0.000129	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000005	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000006	0.000000	No
Be 313.042 {108}	X	2	V	0.000042	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000076	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	X	4	Al	0.000001	0.000000	No
			Fe	-0.000011	0.000000	No
			Ca	-0.000000	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	X	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000154	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000013	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000014	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	-0.000000	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	X	8	Al	0.000216	0.000000	No
			Fe	0.000070	0.000000	No
			Mo	-0.001466	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000275	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	X	11	Fe	0.000058	0.000000	No
			Cr	0.006369	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.002569	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	-0.000005	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000006	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000000	0.000000	No
Se 196.090 {472}	X	12	Fe	-0.000010	0.000000	No
			Ca	0.000004	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000025	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	0.000001	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	X	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	X	None				
Sr 407.771 { 83}	X	1	Ca	0.000003	0.000000	No
Ti 334.941 {101}	X	1	Ca	-0.000017	0.000000	No
Tl 190.856 {477}	X	10	Co	0.003248	0.000000	No
			Fe	0.000045	0.000000	No
			Al	-0.000022	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000001	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	X	5	Fe	0.000004	0.000000	No
			Cr	-0.001960	0.000000	No
			Mo	-0.004535	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	X	None				
Y 360.073 { 94}*	X	None				
Y 371.030 { 91}*	X	None				
Zn 206.200 {463}	X	5	Cr	-0.001305	0.000000	No
			Al	0.000000	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000020	0.000000	No
			As	0.001105	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000894	0.481054	0.000000	1.000000
	Al 396.152 { 85}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000328	0.137366	0.000000	1.000000
	As 189.042 {478}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000405	0.186670	0.000000	1.000000
	Ba 455.403 { 74}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.001332	6.993433	0.000000	1.000000
	Be 313.042 {108}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000865	6.557844	0.000000	1.000000
	Ca 317.933 {106}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.002729	0.178674	0.000000	1.000000
	Cd 226.502 {449}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.001117	4.764754	0.000000	1.000000
	Co 228.616 {447}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000396	2.357697	0.000000	1.000000
	Cr 267.716 {126}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000094	0.419701	0.000000	1.000000
	Cu 324.754 {104}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.005746	0.611236	0.000000	1.000000
	Fe 259.940 {130}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.001823	0.140709	0.000000	1.000000
	In 230.606 {446}*	2/12/2015 10:47:57	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.003545	0.064952	0.000000	1.000000
	Mg 279.079 {121}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000051	0.019259	0.000000	1.000000
	Mn 257.610 {131}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000417	2.528714	0.000000	1.000000
	Mo 202.030 {467}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.003393	1.027929	0.000000	1.000000
	Na 589.592 { 57}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.009956	0.232376	0.000000	1.000000
	Ni 231.604 {445}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000206	1.465454	0.000000	1.000000
	Pb 220.353 {453}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000118	0.833981	0.000000	1.000000
	Sb 206.833 {463}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000611	0.233277	0.000000	1.000000
	Se 196.090 {472}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000373	0.133563	0.000000	1.000000
	Si 212.412 {459}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.004233	0.423569	0.000000	1.000000
	Sn 189.989 {477}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000759	0.401197	0.000000	1.000000
	Sr 407.771 { 83}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000389	11.599716	0.000000	1.000000
	Ti 334.941 {101}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.002800	1.634340	0.000000	1.000000
	Tl 190.856 {477}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.001461	0.310030	0.000000	1.000000
	V 292.402 {115}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000580	0.531091	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.002013	2.751815	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999988	0.000022	0.000387	0.001291	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999787	0.004577	0.010360	0.034534	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999986	0.000080	0.000734	0.002447	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999789	0.011564	0.000257	0.000856	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999812	0.010248	0.000094	0.000313	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999837	0.005199	0.003877	0.012922	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999937	0.004330	0.000044	0.000147	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999937	0.002130	0.000099	0.000331	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999915	0.000441	0.000261	0.000869	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999975	0.000349	0.000270	0.000899	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999350	0.008177	0.002724	0.009081	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999889	0.001561	0.036149	0.120498	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999656	0.000814	0.025142	0.083808	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999744	0.004610	0.000040	0.000133	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999988	0.000407	0.000137	0.000455	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999751	0.008357	0.010825	0.036084	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999936	0.001333	0.000162	0.000539	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999945	0.000707	0.000548	0.001826	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999991	0.000081	0.000946	0.003154	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999996	0.000029	0.001517	0.005057	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.990726	0.004768	0.000366	0.001220	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999874	0.000512	0.000291	0.000971	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999806	0.018422	0.000098	0.000327	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999867	0.002147	0.000105	0.000350	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999996	0.000071	0.000885	0.002950	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999968	0.000341	0.000256	0.000855	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999930	0.002625	0.000058	0.000195	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/13/2015 9:28:55 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0025	-.0003	.0226	.0038	.0088	.0009	.0015	.0002
Stddev	.0002	.0014	.0001	.0025	.0015	.0007	.0002	.0002	.0001
%RSD	192.8	54.52	43.88	11.14	39.58	8.520	19.03	12.21	56.32
#1	.0002	.0020	-.0004	.0206	.0035	.0083	.0008	.0017	.0001
#2	.0003	.0040	-.0004	.0217	.0053	.0096	.0011	.0015	.0004
#3	-.0001	.0014	-.0002	.0254	.0024	.0084	.0009	.0013	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0050	.0043	.0065	-.0002	.0018	.0026	-.0196	.0004	-.0037
Stddev	.0003	.0004	.0055	.0008	.0001	.0004	.0073	.0000	.0012
%RSD	5.493	9.872	84.89	433.2	8.192	16.48	37.37	11.65	31.53
#1	.0048	.0046	.0084	-.0005	.0016	.0030	-.0157	.0004	-.0028
#2	.0048	.0046	.0003	.0007	.0019	.0025	-.0151	.0005	-.0032
#3	.0053	.0038	.0107	-.0008	.0017	.0022	-.0281	.0004	-.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0006	-.0008	.0091	.0004	.0045	.0040	-.0061	-.0001	.0045
Stddev	.0003	.0002	.0001	.0001	.0031	.0002	.0002	.0003	.0003
%RSD	48.50	22.94	.7228	30.94	68.54	4.013	3.722	264.2	6.740
#1	.0008	-.0009	.0092	.0004	.0055	.0041	-.0058	-.0003	.0042
#2	.0006	-.0006	.0091	.0005	.0069	.0038	-.0063	.0002	.0048
#3	.0003	-.0009	.0091	.0002	.0010	.0041	-.0061	-.0002	.0046

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1676.6	4879.0	31798.	2294.8
Stddev	1.9	3.3	148.	34.9
%RSD	.11211	.06854	.46420	1.5217
#1	1677.7	4879.9	31630.	2254.5
#2	1674.5	4881.8	31908.	2315.2
#3	1677.7	4875.3	31856.	2314.9

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/13/2015 9:36:06 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0406	1.623	.1407	5.644	3.958	2.411	2.825	1.286	.2834	.4395
Stddev	.0002	.008	.0003	.021	.013	.010	.002	.001	.0009	.0005
%RSD	.4949	.4847	.2355	.3804	.3344	.4125	.0632	.1016	.3224	.1180
#1	.0405	1.632	.1406	5.666	3.972	2.421	2.827	1.287	.2844	.4400
#2	.0409	1.616	.1411	5.623	3.946	2.402	2.824	1.284	.2831	.4390
#3	.0405	1.621	.1405	5.643	3.957	2.409	2.825	1.287	.2826	.4394

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.356	1.504	.2114	1.822	.6234	4.871	.8037	.6710	.1436	.1067
Stddev	.006	.011	.0009	.003	.0011	.020	.0007	.0008	.0006	.0005
%RSD	.4279	.7368	.4037	.1355	.1776	.3997	.0917	.1262	.4004	.4316
#1	1.362	1.511	.2122	1.824	.6221	4.887	.8043	.6711	.1431	.1064
#2	1.351	1.491	.2105	1.820	.6237	4.849	.8029	.6719	.1442	.1065
#3	1.354	1.510	.2114	1.820	.6243	4.876	.8040	.6702	.1434	.1073

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1886	.2412	8.440	1.103	.2867	.3692	1.924
Stddev	.0000	.0004	.034	.002	.0013	.0011	.002
%RSD	.0202	.1467	.4033	.1885	.4419	.2987	.0998
#1	.1886	.2408	8.472	1.105	.2853	.3704	1.926
#2	.1886	.2415	8.404	1.101	.2877	.3683	1.922
#3	.1886	.2413	8.443	1.102	.2872	.3688	1.925

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1650.3	4718.8	31655.	2352.9
Stddev	5.3	9.2	19.	11.6
%RSD	.31885	.19543	.06130	.49428
#1	1656.3	4729.3	31635.	2339.5
#2	1646.5	4715.1	31673.	2358.8
#3	1648.2	4712.0	31658.	2360.5

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/13/2015 9:39:15 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1574	6.045	.5529	21.33	14.90	8.896	10.82	4.943	1.062	1.682
Stddev	.0023	.020	.0040	.04	.05	.035	.07	.034	.010	.016
%RSD	1.450	.3293	.7274	.1888	.3613	.3945	.6870	.6962	.9646	.9725
#1	.1569	6.058	.5522	21.37	14.95	8.929	10.82	4.941	1.062	1.682
#2	.1599	6.055	.5573	21.34	14.90	8.900	10.89	4.979	1.072	1.698
#3	.1554	6.022	.5494	21.29	14.85	8.859	10.74	4.910	1.052	1.665

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.987	5.806	.7954	6.957	2.413	18.52	3.086	2.583	.5594	.4183
Stddev	.020	.014	.0026	.073	.016	.05	.020	.018	.0036	.0038
%RSD	.4085	.2352	.3242	1.054	.6463	.2451	.6337	.6824	.6395	.9000
#1	5.007	5.803	.7954	6.945	2.404	18.56	3.081	2.585	.5595	.4179
#2	4.989	5.821	.7979	7.036	2.431	18.53	3.107	2.599	.5629	.4223
#3	4.966	5.794	.7927	6.891	2.403	18.47	3.069	2.564	.5557	.4148

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.037	.9347	32.17	4.283	1.132	1.405	7.209
Stddev	.007	.0056	.10	.047	.007	.015	.049
%RSD	.6358	.6037	.3211	1.096	.5920	1.050	.6743
#1	1.036	.9340	32.26	4.282	1.136	1.401	7.215
#2	1.043	.9406	32.19	4.331	1.137	1.421	7.255
#3	1.030	.9294	32.06	4.237	1.125	1.392	7.158

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1646.8	4703.3	31696.	2407.2
Stddev	7.8	26.1	216.	12.9
%RSD	.47504	.55409	.67999	.53632
#1	1645.2	4705.7	31697.	2404.0
#2	1639.9	4676.0	31480.	2396.2
#3	1655.3	4728.0	31911.	2421.4

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/13/2015 9:42:22 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3211	12.29	1.161	43.80	30.14	17.81	22.36	10.31	2.140	3.468
Stddev	.0005	.08	.002	.19	.19	.13	.04	.02	.006	.007
%RSD	.1407	.6496	.2015	.4368	.6158	.7429	.1786	.1978	.2666	.2064
#1	.3210	12.29	1.163	43.80	30.19	17.85	22.40	10.33	2.141	3.461
#2	.3216	12.21	1.159	43.61	29.94	17.66	22.32	10.29	2.145	3.476
#3	.3207	12.37	1.160	44.00	30.30	17.92	22.38	10.32	2.133	3.467

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.925	11.92	1.618	13.88	5.081	37.60	6.446	5.388	1.181	.8763
Stddev	.058	.08	.009	.12	.008	.20	.011	.006	.002	.0014
%RSD	.5858	.6703	.5514	.8511	.1523	.5371	.1705	.1112	.1551	.1614
#1	9.955	11.92	1.621	13.96	5.080	37.66	6.456	5.391	1.183	.8768
#2	9.858	11.84	1.608	13.93	5.074	37.38	6.434	5.381	1.179	.8747
#3	9.963	12.00	1.625	13.75	5.090	37.77	6.448	5.392	1.181	.8774

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.618	1.961	64.76	8.637	2.362	2.941	14.83
Stddev	.006	.003	.36	.015	.005	.003	.03
%RSD	.2484	.1354	.5490	.1704	.2218	.1159	.1738
#1	2.624	1.962	64.76	8.637	2.365	2.939	14.84
#2	2.612	1.958	64.40	8.652	2.356	2.945	14.80
#3	2.617	1.963	65.11	8.622	2.366	2.940	14.84

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1521.6	4352.5	30173.	2307.7
Stddev	2.3	8.9	191.	17.1
%RSD	.15343	.20400	.63334	.74204
#1	1520.5	4348.7	30009.	2300.5
#2	1524.2	4362.7	30128.	2327.2
#3	1520.0	4346.2	30383.	2295.3

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/13/2015 9:46:47 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4853	76.93	3.959	3.913	3.854	76.45	3.895	3.913	3.808	3.877
Stddev	.0006	.13	.004	.007	.007	.16	.010	.008	.017	.025
%RSD	.1143	.1629	.1033	.1783	.1882	.2071	.2493	.1981	.4538	.6355
#1	.4852	76.85	3.958	3.915	3.850	76.33	3.906	3.922	3.788	3.850
#2	.4847	77.08	3.956	3.918	3.862	76.63	3.891	3.910	3.819	3.882
#3	.4858	76.87	3.963	3.905	3.849	76.40	3.888	3.908	3.817	3.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	76.41	78.24	77.13	3.830	3.961	76.93	3.937	3.912	3.968	3.951
Stddev	.20	.23	.32	.016	.004	.19	.005	.012	.004	.007
%RSD	.2593	.2945	.4171	.4225	.1100	.2481	.1201	.3167	.1014	.1889
#1	76.30	78.33	76.89	3.811	3.965	76.88	3.942	3.925	3.969	3.960
#2	76.64	78.42	77.49	3.838	3.956	77.14	3.934	3.912	3.964	3.946
#3	76.29	77.98	77.00	3.840	3.960	76.77	3.934	3.900	3.972	3.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.330	3.957	3.863	3.852	3.927	3.892	3.876
Stddev	.008	.009	.007	.018	.016	.025	.011
%RSD	.1766	.2310	.1899	.4769	.4045	.6300	.2868
#1	4.338	3.967	3.866	3.831	3.945	3.863	3.889
#2	4.324	3.950	3.868	3.859	3.923	3.903	3.871
#3	4.327	3.952	3.855	3.866	3.914	3.908	3.868
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/13/2015 9:46:47 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1564.3	4464.8	31338.	2382.2
Stddev	4.3	7.5	118.	17.0
%RSD	.27776	.16831	.37723	.71252
#1	1559.7	4456.8	31472.	2397.3
#2	1564.9	4471.7	31247.	2363.8
#3	1568.3	4466.0	31297.	2385.6

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/13/2015 9:53:35 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2401	38.67	1.966	2.026	1.918	39.80	1.876	1.916	1.833	1.859
Stddev	.0004	.03	.006	.006	.008	.08	.003	.004	.009	.005
%RSD	.1854	.0892	.2977	.2746	.4275	.2035	.1543	.1905	.4666	.2823
#1	.2406	38.65	1.965	2.021	1.911	39.76	1.879	1.918	1.843	1.865
#2	.2400	38.64	1.973	2.025	1.915	39.76	1.877	1.918	1.828	1.858
#3	.2397	38.71	1.961	2.032	1.927	39.90	1.873	1.912	1.829	1.854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.28	40.16	39.25	1.905	1.830	39.37	1.989	1.887	1.940	1.959
Stddev	.07	.08	.06	.005	.002	.04	.003	.007	.005	.004
%RSD	.1902	.2047	.1434	.2397	.1109	.1025	.1574	.3810	.2350	.1774
#1	39.20	40.13	39.21	1.910	1.830	39.33	1.991	1.893	1.945	1.955
#2	39.34	40.11	39.31	1.902	1.832	39.37	1.990	1.888	1.939	1.961
#3	39.32	40.26	39.23	1.902	1.828	39.41	1.986	1.879	1.937	1.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0148	2.018	1.866	1.843	1.947	1.835	1.932
Stddev	.0003	.003	.004	.005	.008	.005	.003
%RSD	1.985	.1616	.2350	.2837	.4074	.2527	.1749
#1	.0145	2.019	1.862	1.849	1.955	1.840	1.935
#2	.0150	2.021	1.866	1.841	1.946	1.832	1.933
#3	.0150	2.015	1.870	1.839	1.940	1.833	1.929
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/13/2015 9:53:35 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1632.3	4563.3	32261.	2421.5
Stddev	3.2	5.9	131.	4.1
%RSD	.19400	.12882	.40623	.16870
#1	1629.0	4562.0	32119.	2416.8
#2	1632.4	4558.1	32377.	2424.4
#3	1635.4	4569.7	32287.	2423.2

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/13/2015 10:00:11 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0053	-.0009	-.0007	-.0004	-.0084	-.0002	-.0004
Stddev	.0000	.0257	.0005	.0003	.0001	.0028	.0001	.0002
%RSD	6.415	481.8	52.84	37.85	35.93	32.91	41.09	47.38
#1	.0005	.0152	-.0004	-.0009	-.0004	-.0113	-.0003	-.0002
#2	.0005	.0030	-.0013	-.0008	-.0005	-.0082	-.0001	-.0004
#3	.0005	-.0342	-.0011	-.0004	-.0002	-.0058	-.0003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0004	-.0136	.0230	-.0121	-.0003	-.0003	.0093
Stddev	.0002	.0003	.0048	.0260	.0135	.0000	.0002	.0102
%RSD	54.07	81.49	35.64	113.1	111.8	11.62	56.55	109.7
#1	-.0002	.0001	-.0099	.0339	-.0199	-.0003	-.0002	-.0009
#2	-.0002	.0008	-.0190	-.0067	.0035	-.0002	-.0002	.0195
#3	-.0005	.0004	-.0117	.0417	-.0198	-.0003	-.0005	.0094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F-.0014	-.0017	-.0003	-.0002	.0007	-.0002	-.0003
Stddev	.0002	.0007	.0007	.0003	.0002	.0002	.0001	.0002
%RSD	183.6	46.67	42.95	97.52	79.02	27.34	56.64	76.20
#1	.0000	-.0007	-.0025	-.0002	-.0002	.0008	-.0002	-.0003
#2	.0000	-.0016	-.0011	-.0006	-.0001	.0005	-.0004	-.0001
#3	-.0004	-.0020	-.0015	-.0001	-.0004	.0008	-.0002	-.0005
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/13/2015 10:00:11 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0004	.0000	-.0002
Stddev	.0016	.000	.0001
%RSD	384.1	1396.	26.14
#1	-.0014	.0003	-.0002
#2	.0015	-.0002	-.0001
#3	.0010	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1666.2	4625.6	33404.	2477.8
Stddev	9.7	25.3	633.	17.7
%RSD	.57961	.54641	1.8952	.71274
#1	1677.3	4651.4	33904.	2462.3
#2	1662.1	4624.6	32692.	2497.1
#3	1659.4	4600.8	33615.	2474.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/13/2015 10:08:49 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0104	.1849	.0106	.2029	.0044	.9485	.0047	.0502	.0089
Stddev	.0003	.0068	.0005	.0001	.0000	.0034	.0001	.0005	.0001
%RSD	3.170	3.704	5.174	.0447	.1118	.3576	1.283	.9411	1.183
#1	.0101	.1897	.0102	.2029	.0044	.9509	.0047	.0498	.0090
#2	.0106	.1800	.0109	.2030	.0044	.9461	.0046	.0505	.0088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0250	.2676	9.716	5.013	.0146	.0465	9.449	.0420	F.0036
Stddev	.0001	.0066	.086	.000	.0000	.0002	.056	.0006	.0006
%RSD	.2959	2.483	.8808	.0036	.0752	.4718	.5869	1.328	16.32
#1	.0249	.2723	9.776	5.013	.0146	.0464	9.489	.0416	.0032
#2	.0250	.2629	9.655	5.012	.0145	.0467	9.410	.0424	.0040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value									.0050
Range									-20.00%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	.0112	.0396	.0536	.0095	.0082	.0095	.0479	.0208
Stddev	.0005	.0001	.0002	.0004	.0000	.0000	.0014	.0001	.0001
%RSD	11.43	1.034	.5591	.6794	.0199	.2134	14.99	.1506	.6809
#1	.0039	.0111	.0395	.0539	.0095	.0082	.0105	.0478	.0207
#2	.0045	.0112	.0398	.0533	.0095	.0082	.0085	.0479	.0209
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/13/2015 10:08:49 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1654.5	4538.4	33068.	2452.8
Stddev	2.8	10.1	131.	13.7
%RSD	.16800	.22189	.39559	.55692
#1	1652.6	4545.5	33160.	2443.2
#2	1656.5	4531.3	32975.	2462.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:15:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	36.56	2.092	1.975	1.903	36.75	1.990	1.995	1.827	1.927
Stddev	.0008	.01	.005	.002	.004	.03	.003	.003	.006	.004
%RSD	.3130	.0402	.2573	.0946	.2007	.0839	.1482	.1556	.3314	.2312
#1	.2451	36.57	2.097	1.977	1.907	36.78	1.992	1.998	1.821	1.925
#2	.2466	36.55	2.086	1.974	1.900	36.74	1.986	1.992	1.834	1.932
#3	.2455	36.54	2.092	1.975	1.902	36.72	1.990	1.995	1.827	1.925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.51	38.60	39.12	1.942	2.026	37.01	2.074	1.915	2.069	2.087
Stddev	.02	.02	.12	.003	.004	.01	.003	.003	.006	.003
%RSD	.0593	.0641	.2998	.1630	.2246	.0301	.1540	.1297	.2893	.1529
#1	38.50	38.60	39.25	1.938	2.024	37.00	2.077	1.913	2.074	2.090
#2	38.53	38.63	39.10	1.942	2.022	37.02	2.072	1.917	2.062	2.084
#3	38.49	38.58	39.01	1.945	2.031	37.02	2.072	1.913	2.070	2.086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.884	2.149	1.898	1.908	1.930	1.960	2.000
Stddev	.006	.002	.002	.003	.005	.004	.002
%RSD	.2974	.1064	.0986	.1549	.2653	.2118	.0909
#1	1.888	2.150	1.900	1.905	1.926	1.955	2.002
#2	1.878	2.146	1.896	1.911	1.936	1.963	1.999
#3	1.885	2.150	1.898	1.909	1.929	1.962	1.998
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:15:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1601.7	4376.2	32329.	2455.2
Stddev	7.3	13.3	169.	6.9
%RSD	.45857	.30451	.52234	.27987
#1	1601.5	4365.5	32490.	2463.1
#2	1594.5	4372.0	32343.	2451.8
#3	1609.2	4391.1	32153.	2450.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:21:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0041	-.0001	-.0001	.0002	.0077	.0003	.0002	.0003	.0008
Stddev	.0005	.0127	.0001	.0001	.0000	.0021	.0000	.0000	.0001	.0001
%RSD	79.60	312.5	114.3	79.76	20.93	26.90	16.57	22.01	41.03	9.670
#1	.0010	-.0101	-.0002	-.0001	.0002	.0087	.0002	.0002	.0003	.0008
#2	.0006	.0144	-.0003	.0000	.0002	.0053	.0003	.0002	.0005	.0009
#3	.0001	.0079	.0000	-.0002	.0002	.0090	.0003	.0002	.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0048	.0059	.0280	.0002	-.0003	.0221	.0004	-.0001	-.0005	.0008
Stddev	.0040	.0095	.0393	.0000	.0001	.0059	.0004	.0007	.0002	.0008
%RSD	82.30	161.7	140.2	20.87	34.40	26.66	85.60	937.6	48.80	98.22
#1	-.0007	.0009	.0227	.0003	-.0002	.0283	.0006	-.0007	-.0003	.0002
#2	-.0051	.0168	-.0083	.0002	-.0003	.0166	.0007	-.0002	-.0008	.0017
#3	-.0086	-.0001	.0697	.0002	-.0004	.0214	.0000	.0006	-.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0006	.0003	-.0001	.0001	.0003	.0003
Stddev	.0003	.0002	.0000	.0001	.0016	.0002	.0000
%RSD	59.17	30.52	9.962	223.8	2414.	57.68	1.103
#1	.0006	.0008	.0002	.0000	-.0015	.0004	.0003
#2	.0002	.0004	.0003	.0000	.0016	.0001	.0003
#3	.0007	.0005	.0003	-.0002	.0001	.0004	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:21:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1686.2	4609.7	34273.	2520.7
Stddev	1.6	5.1	107.	14.4
%RSD	.09578	.11037	.31262	.57164
#1	1687.7	4615.5	34333.	2514.6
#2	1684.5	4607.7	34150.	2537.1
#3	1686.4	4605.9	34338.	2510.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:44:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2543	40.68	1.974	2.006	2.032	40.96	2.005	1.995	2.067	2.041
Stddev	.0013	.14	.002	.007	.009	.17	.001	.001	.003	.006
%RSD	.4990	.3556	.1042	.3488	.4406	.4186	.0247	.0445	.1200	.3132
#1	.2548	40.56	1.974	1.998	2.022	40.79	2.006	1.995	2.065	2.036
#2	.2529	40.84	1.976	2.007	2.039	41.13	2.005	1.995	2.067	2.038
#3	.2553	40.63	1.972	2.012	2.034	40.96	2.006	1.994	2.070	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.95	40.13	40.45	2.054	1.980	40.68	1.979	1.983	1.972	1.976
Stddev	.10	.12	.10	.004	.002	.18	.003	.005	.002	.001
%RSD	.2488	.2897	.2591	.1717	.0900	.4391	.1444	.2431	.1077	.0485
#1	40.83	40.00	40.40	2.055	1.978	40.51	1.982	1.988	1.973	1.975
#2	41.01	40.16	40.38	2.050	1.982	40.87	1.979	1.978	1.973	1.977
#3	41.01	40.23	40.57	2.056	1.981	40.67	1.976	1.983	1.969	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.789	1.979	2.042	2.062	1.991	2.020	2.001
Stddev	.003	.001	.011	.003	.006	.003	.000
%RSD	.1533	.0698	.5495	.1215	.2977	.1704	.0077
#1	1.791	1.979	2.030	2.061	1.996	2.019	2.001
#2	1.791	1.980	2.052	2.060	1.984	2.017	2.001
#3	1.786	1.978	2.044	2.064	1.992	2.023	2.001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:44:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1593.7	4315.6	32375.	2475.1
Stddev	4.6	2.5	49.	4.9
%RSD	.28884	.05705	.15085	.19628
#1	1590.7	4314.3	32362.	2469.9
#2	1599.0	4314.1	32429.	2479.6
#3	1591.4	4318.4	32334.	2475.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:50:56 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0187	.0006	.0004	.0006	.0103	.0005	.0004	.0005
Stddev	.0001	.0107	.0006	.0002	.0002	.0067	.0001	.0000	.0002
%RSD	22.56	57.23	103.8	44.01	28.68	65.29	16.86	6.268	38.76
#1	.0007	.0201	.0011	.0002	.0004	.0030	.0006	.0004	.0007
#2	.0007	.0073	.0007	.0004	.0008	.0117	.0005	.0004	.0003
#3	.0004	.0286	-.0001	.0006	.0007	.0162	.0005	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0222	.0754	-.0167	.0006	F.0014	.0409	.0002	F.0015
Stddev	.0002	.0040	.0191	.0290	.0000	.0001	.0089	.0000	.0008
%RSD	38.99	18.21	25.37	173.7	7.115	5.493	21.79	6.114	56.37
#1	.0004	.0182	.0585	.0126	.0006	.0015	.0511	.0002	.0016
#2	.0008	.0263	.0962	-.0454	.0006	.0014	.0351	.0002	.0022
#3	.0006	.0222	.0716	-.0172	.0005	.0013	.0364	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0008	.0016	.0009	.0007	.0013	.0010	.0006	.0006
Stddev	.0007	.0011	.0007	.0002	.0002	.0001	.0014	.0002	.0000
%RSD	126.8	143.6	45.01	25.13	28.62	6.696	133.1	33.52	6.248
#1	.0014	-.0021	.0010	.0010	.0006	.0014	-.0001	.0008	.0007
#2	.0001	-.0002	.0013	.0006	.0005	.0012	.0006	.0006	.0006
#3	.0002	-.0001	.0024	.0010	.0009	.0013	.0025	.0004	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:50:56 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1673.9	4531.7	33760.	2522.0
Stddev	2.5	4.1	57.	22.6
%RSD	.15082	.09030	.16831	.89413
#1	1673.5	4529.9	33756.	2537.1
#2	1676.5	4528.8	33818.	2532.9
#3	1671.5	4536.4	33705.	2496.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 10:55:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	518.7	-.0013	-.0002	.0000	496.3	.0000	.0007	-.0004	.0000
Stddev	.0005	2.5	.0009	.0001	.000	2.7	.0001	.0002	.0002	.0002
%RSD	68.79	.4827	71.78	52.91	1848.	.5377	241.5	23.53	45.44	972.3
#1	.0008	521.4	-.0002	-.0001	-.0001	498.9	.0000	.0008	-.0006	.0000
#2	.0002	516.4	-.0018	-.0002	-.0001	493.5	.0000	.0007	-.0005	.0002
#3	.0013	518.2	-.0020	-.0001	.0002	496.6	.0001	.0005	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	189.7	.2313	498.4	.0004	.0000	.1968	-.0002	-.0002	.0001	.0001
Stddev	.6	.0450	2.6	.0001	.0001	.0111	.0001	.0026	.0012	.0028
%RSD	.3307	19.45	.5145	15.72	319.9	5.643	40.84	1189.	1371.	1872.
#1	190.3	.1805	500.6	.0003	.0001	.1936	-.0003	-.0027	-.0010	.0017
#2	189.0	.2662	495.6	.0004	.0000	.1877	-.0003	.0025	-.0001	.0019
#3	189.8	.2472	499.2	.0004	.0000	.2092	-.0001	-.0004	.0014	-.0031
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0931	.0005	.0001	.0001	-.0018	-.0001	.0003
Stddev	.0012	.0007	.0001	.0003	.0030	.0002	.0001
%RSD	1.326	128.8	172.4	647.8	169.6	202.2	31.27
#1	.0939	-.0002	.0001	-.0003	-.0051	.0000	.0004
#2	.0916	.0012	.0001	.0002	-.0007	-.0004	.0004
#3	.0936	.0006	.0000	.0003	.0005	.0001	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 10:55:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1486.0	3927.9	28845.	2352.4
Stddev	4.1	10.2	26.	23.9
%RSD	.27704	.25891	.08907	1.0163
#1	1483.8	3925.6	28828.	2344.6
#2	1490.7	3939.0	28832.	2379.3
#3	1483.5	3919.1	28874.	2333.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/13/2015 11:01:03 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.019	518.2	1.044	.5174	.5181	488.4	.9642	.5044	.5237	.5786
Stddev	.002	.2	.001	.0007	.0004	.7	.0028	.0011	.0020	.0032
%RSD	.1765	.0301	.0743	.1449	.0702	.1451	.2952	.2172	.3774	.5473
#1	1.020	518.1	1.043	.5182	.5178	487.7	.9611	.5031	.5257	.5822
#2	1.017	518.1	1.044	.5168	.5181	488.5	.9648	.5047	.5236	.5761
#3	1.019	518.4	1.045	.5172	.5185	489.1	.9666	.5053	.5218	.5776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	183.6	.2378	484.0	.5202	.9516	.1972	.9935	.9772	1.065	1.019
Stddev	.4	.0114	1.9	.0009	.0018	.0051	.0015	.0034	.003	.002
%RSD	.1927	4.772	.3838	.1789	.1860	2.591	.1478	.3491	.2488	.2353
#1	183.4	.2333	483.9	.5210	.9501	.1988	.9920	.9750	1.063	1.016
#2	183.5	.2294	482.2	.5204	.9511	.2014	.9934	.9756	1.068	1.020
#3	184.0	.2508	485.9	.5192	.9536	.1915	.9950	.9812	1.064	1.020
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0417	.9663	1.030	1.050	1.014	.5021	.9780
Stddev	.0003	.0017	.002	.001	.001	.0017	.0030
%RSD	.6612	.1810	.1641	.1364	.1212	.3423	.3087
#1	.0420	.9643	1.031	1.052	1.015	.5040	.9745
#2	.0415	.9671	1.030	1.049	1.013	.5007	.9795
#3	.0416	.9675	1.028	1.049	1.014	.5016	.9800
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/13/2015 11:01:03 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1502.6	4036.8	29199.	2371.3
Stddev	3.5	8.7	32.	21.7
%RSD	.23008	.21481	.10935	.91314
#1	1506.6	4046.2	29232.	2385.7
#2	1500.8	4029.1	29168.	2381.8
#3	1500.5	4035.2	29196.	2346.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 11:06:16 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2451	40.17	1.844	1.924	1.963	40.13	1.911	1.896	2.050	1.983
Stddev	.0011	.13	.004	.006	.008	.10	.002	.003	.001	.004
%RSD	.4683	.3300	.2046	.3162	.3969	.2612	.1105	.1451	.0418	.1935
#1	.2464	40.24	1.841	1.927	1.968	40.16	1.910	1.895	2.049	1.987
#2	.2441	40.25	1.843	1.927	1.968	40.22	1.910	1.895	2.051	1.980
#3	.2447	40.02	1.848	1.917	1.954	40.02	1.914	1.900	2.050	1.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.48	39.19	38.64	1.986	1.867	40.42	1.850	1.908	1.854	1.851
Stddev	.14	.14	.12	.002	.006	.15	.003	.004	.005	.003
%RSD	.3439	.3503	.3201	.0988	.3134	.3806	.1477	.2350	.2974	.1331
#1	39.56	39.29	38.73	1.988	1.863	40.53	1.851	1.906	1.857	1.848
#2	39.56	39.24	38.70	1.985	1.864	40.49	1.847	1.905	1.848	1.852
#3	39.32	39.03	38.50	1.985	1.874	40.25	1.852	1.913	1.858	1.853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.677	1.831	1.998	2.006	1.920	1.941	1.906
Stddev	.003	.003	.010	.002	.002	.003	.002
%RSD	.1730	.1390	.4901	.1069	.0899	.1598	.1101
#1	1.677	1.830	2.002	2.009	1.920	1.944	1.905
#2	1.674	1.829	2.005	2.005	1.919	1.941	1.904
#3	1.680	1.834	1.987	2.005	1.922	1.938	1.908
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 11:06:16 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1660.8	4566.2	33212.	2514.8
Stddev	4.2	5.1	15.	2.1
%RSD	.25063	.11136	.04549	.08532
#1	1661.4	4568.2	33200.	2517.2
#2	1664.6	4570.0	33229.	2514.1
#3	1656.4	4560.4	33208.	2513.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 11:12:43 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0010	.0001	.0001	.0003	.0082	.0002	.0002	.0002
Stddev	.0003	.0094	.0002	.0002	.0001	.0074	.0001	.0002	.0002
%RSD	307.0	940.9	141.0	291.5	32.02	89.95	30.78	79.71	159.6
#1	.0004	-.0098	.0001	.0003	.0004	.0013	.0003	.0000	.0003
#2	.0002	.0072	.0000	.0000	.0004	.0074	.0002	.0003	-.0001
#3	-.0002	.0055	.0004	-.0001	.0002	.0160	.0002	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0235	.0996	-.0007	.0002	F.0012	.0451	.0000	.0003
Stddev	.0002	.0046	.0464	.0226	.0000	.0002	.0065	.000	.0005
%RSD	1074.	19.55	46.54	3458.	9.595	21.20	14.53	1542.	138.2
#1	.0002	.0288	.0462	-.0153	.0002	.0015	.0473	-.0001	.0009
#2	-.0002	.0217	.1288	.0254	.0002	.0011	.0502	.0000	.0000
#3	.0001	.0201	.1240	-.0121	.0003	.0010	.0377	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	-.0006	.0009	.0004	.0004	.0009	-.0015	.0003	.0003
Stddev	.0003	.0009	.0003	.0004	.0001	.0002	.0006	.0002	.0000
%RSD	15.34	149.5	33.71	106.5	32.48	18.20	40.99	73.36	12.40
#1	.0019	.0004	.0006	.0005	.0003	.0011	-.0020	.0006	.0003
#2	.0016	-.0013	.0012	.0007	.0005	.0009	-.0008	.0002	.0004
#3	.0021	-.0009	.0009	-.0001	.0006	.0008	-.0017	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 11:12:43 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.6	4632.1	33622.	2466.6
Stddev	7.4	12.0	87.	8.9
%RSD	.43762	.25978	.25938	.36071
#1	1685.5	4645.8	33521.	2470.1
#2	1671.4	4623.5	33681.	2473.3
#3	1681.9	4626.9	33663.	2456.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 12:54:40 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2496	40.63	1.963	2.008	2.032	40.90	1.987	1.977	2.018	1.991
Stddev	.0007	.09	.001	.008	.001	.10	.003	.002	.005	.004
%RSD	.2792	.2197	.0595	.3913	.0392	.2341	.1336	.0959	.2292	.2272
#1	.2490	40.65	1.962	2.013	2.031	40.96	1.984	1.975	2.022	1.995
#2	.2503	40.71	1.964	2.012	2.033	40.95	1.988	1.978	2.018	1.992
#3	.2495	40.54	1.963	1.999	2.031	40.79	1.988	1.979	2.013	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.86	40.39	40.43	2.027	1.965	40.69	1.967	1.966	1.963	1.965
Stddev	.12	.25	.01	.002	.007	.07	.002	.001	.003	.001
%RSD	.2818	.6261	.0334	.0989	.3524	.1783	.0865	.0634	.1551	.0692
#1	40.90	40.54	40.43	2.028	1.958	40.70	1.965	1.967	1.961	1.965
#2	40.95	40.52	40.42	2.028	1.966	40.76	1.967	1.964	1.962	1.964
#3	40.73	40.10	40.44	2.025	1.972	40.62	1.968	1.967	1.967	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.783	1.971	2.041	2.016	1.976	1.971	1.984
Stddev	.004	.003	.005	.003	.004	.006	.003
%RSD	.2298	.1292	.2655	.1511	.1855	.2821	.1630
#1	1.781	1.968	2.041	2.019	1.972	1.970	1.981
#2	1.779	1.972	2.047	2.016	1.979	1.977	1.987
#3	1.787	1.973	2.036	2.013	1.976	1.966	1.985
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 12:54:40 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1559.2	4409.0	29856.	2177.0
Stddev	.8	5.7	34.	5.9
%RSD	.04866	.13004	.11242	.26953
#1	1560.1	4415.4	29855.	2174.6
#2	1558.7	4407.4	29823.	2172.8
#3	1558.8	4404.3	29890.	2183.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:00:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0031	-.0001	.0004	.0004	.0093	.0004	.0002	-.0002
Stddev	.0005	.0108	.0011	.0001	.0002	.0009	.0000	.0001	.0002
%RSD	8700.	351.9	2045.	18.66	60.10	10.24	6.180	52.56	147.3
#1	-.0005	.0043	-.0002	.0005	.0004	.0092	.0004	.0003	-.0001
#2	.0001	-.0083	.0012	.0004	.0001	.0103	.0004	.0003	.0000
#3	.0004	.0132	-.0011	.0005	.0006	.0084	.0004	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0360	.0655	.0343	.0005	F.0025	.0293	.0003	.0003
Stddev	.0002	.0021	.0208	.0488	.0001	.0004	.0134	.0000	.0013
%RSD	76.40	5.783	31.80	142.3	9.425	15.98	45.70	12.06	470.5
#1	.0002	.0337	.0437	.0466	.0005	.0029	.0438	.0003	.0018
#2	.0001	.0378	.0675	-.0195	.0006	.0024	.0172	.0003	-.0008
#3	.0004	.0364	.0852	.0757	.0005	.0021	.0270	.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0023	.0012	-.0003	F.0014	.0005	.0015	.0004	.0003	.0004
Stddev	.0004	.0005	.0003	.0001	.0001	.0001	.0001	.0002	.0001
%RSD	15.45	44.73	111.9	8.982	12.83	9.356	30.57	49.16	22.02
#1	.0022	.0008	-.0003	.0013	.0005	.0014	.0004	.0004	.0005
#2	.0028	.0010	.0001	.0015	.0006	.0014	.0005	.0004	.0004
#3	.0021	.0017	-.0005	.0014	.0006	.0017	.0003	.0001	.0003
Check ?	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020			.0010					
Low Limit	-.0020			-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:00:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.2	4458.4	29947.	2152.2
Stddev	8.8	26.4	106.	14.1
%RSD	.56036	.59207	.35484	.65665
#1	1566.5	4427.9	30062.	2138.0
#2	1578.3	4472.7	29928.	2152.3
#3	1583.8	4474.5	29852.	2166.3

Zoom In Zoom Out

Sample Name: FA22015-2 Acquired: 2/13/2015 13:04:19 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0123	375.2	.0777	5.445	.0360	26.66	-.0247	.0286	1.441	.0564
Stddev	.0030	1.5	.0089	.019	.0006	.10	.0006	.0002	.005	.0022
%RSD	24.15	.3907	11.40	.3422	1.546	.3936	2.470	.5523	.3444	3.897
#1	.0146	376.1	.0755	5.456	.0354	26.59	-.0249	.0288	1.436	.0542
#2	.0090	376.0	.0701	5.455	.0365	26.78	-.0252	.0284	1.441	.0586
#3	.0134	373.5	.0874	5.424	.0361	26.61	-.0240	.0287	1.446	.0565

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1070.	7.514	9.757	.5514	.0420	.9036	.1896	.1830	-.0062	.0518
Stddev	3.	.057	.536	.0007	.0012	.0772	.0017	.0046	.0058	.0200
%RSD	.2862	.7557	5.491	.1237	2.955	8.549	.8940	2.535	93.28	38.61
#1	1071.	7.469	9.196	.5515	.0433	.9781	.1877	.1862	.0000	.0748
#2	1072.	7.578	10.26	.5506	.0408	.9087	.1902	.1776	-.0071	.0379
#3	1067.	7.495	9.812	.5520	.0419	.8239	.1909	.1850	-.0115	.0428

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.753	.0396	2.779	1.381	-.0320	1.767	.2115
Stddev	.006	.0033	.011	.005	.0073	.003	.0007
%RSD	.1316	8.309	.4040	.3415	22.94	.1551	.3439
#1	4.758	.0374	2.784	1.378	-.0403	1.767	.2113
#2	4.746	.0381	2.787	1.378	-.0265	1.764	.2123
#3	4.755	.0434	2.766	1.386	-.0292	1.769	.2109

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1690.6	5385.4	36136.	2622.7
Stddev	1.5	4.9	124.	7.7
%RSD	.08592	.09142	.34382	.29401
#1	1690.2	5385.4	36219.	2617.2
#2	1689.3	5390.4	36195.	2619.4
#3	1692.1	5380.5	35993.	2631.5

Zoom In Zoom Out

Sample Name: FA22020-3 Acquired: 2/13/2015 13:08:23 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	51.08	.0251	.2775	.0017	643.9	.0098	.0151	.3540	.3735
Stddev	.0004	.27	.0011	.0008	.0002	2.1	.0001	.0001	.0014	.0174
%RSD	12.23	.5249	4.437	.2936	9.849	.3309	.7860	.8048	.3918	4.647
#1	.0028	51.39	.0260	.2782	.0017	646.4	.0099	.0151	.3555	.3935
#2	.0034	50.95	.0238	.2779	.0019	643.0	.0097	.0150	.3527	.3629
#3	.0027	50.91	.0255	.2766	.0016	642.4	.0098	.0152	.3539	.3641

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	48.87	3.070	38.32	.9318	.0045	.6653	.1060	.1773	.0033	.0060
Stddev	.11	.034	.08	.0014	.0002	.0165	.0002	.0028	.0020	.0027
%RSD	.2245	1.098	.2102	.1480	4.226	2.474	.2228	1.564	61.31	45.78
#1	48.95	3.062	38.23	.9333	.0046	.6802	.1061	.1768	.0054	.0029
#2	48.75	3.041	38.39	.9317	.0045	.6681	.1062	.1802	.0013	.0082
#3	48.92	3.107	38.34	.9305	.0042	.6476	.1058	.1747	.0033	.0067

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.527	.0402	.9681	.7055	-.0004	.1421	5.252
Stddev	.005	.0005	.0042	.0027	.0020	.0009	.010
%RSD	.2131	1.304	.4344	.3788	506.9	.6510	.1867
#1	2.531	.0404	.9729	.7081	.0017	.1427	5.260
#2	2.529	.0406	.9655	.7028	-.0006	.1410	5.255
#3	2.521	.0396	.9658	.7056	-.0023	.1425	5.241

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1531.4	4409.6	29300.	2193.9
Stddev	1.6	7.6	80.	10.2
%RSD	.10675	.17308	.27238	.46384
#1	1529.5	4403.1	29263.	2182.3
#2	1532.0	4407.6	29246.	2201.5
#3	1532.6	4418.0	29392.	2197.9

Zoom In Zoom Out

Sample Name: FA22020-4 Acquired: 2/13/2015 13:12:26 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	141.2	.0204	.5591	.0143	489.7	-.0004	.0108	.1134	.0191
Stddev	.0008	4.5	.0007	.0162	.0003	15.9	.0001	.0001	.0004	.0011
%RSD	476.1	3.169	3.367	2.895	2.322	3.253	15.88	.5997	.3776	5.525
#1	.0007	137.6	.0211	.5467	.0141	477.7	-.0004	.0108	.1138	.0199
#2	.0004	146.2	.0198	.5774	.0147	507.8	-.0005	.0108	.1130	.0196
#3	-.0007	139.7	.0201	.5530	.0141	483.5	-.0004	.0109	.1132	.0179

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	29.52	18.33	38.73	6.437	.0020	3.144	.0178	.1210	.0009	.0043
Stddev	.91	.50	1.17	.042	.0001	.097	.0003	.0028	.0016	.0024
%RSD	3.073	2.740	3.024	.6498	6.114	3.078	1.726	2.354	176.9	55.71
#1	28.83	18.04	37.79	6.395	.0019	3.078	.0181	.1226	.0024	.0034
#2	30.54	18.91	40.04	6.435	.0021	3.256	.0178	.1177	.0011	.0071
#3	29.17	18.04	38.36	6.479	.0019	3.099	.0175	.1227	-.0008	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.547	.0199	.9092	2.774	-.0025	.2045	.1153
Stddev	.003	.0007	.0281	.001	.0023	.0010	.0001
%RSD	.0501	3.724	3.085	.0348	90.85	.4764	.1044
#1	5.547	.0195	.8876	2.774	-.0015	.2033	.1154
#2	5.550	.0208	.9409	2.773	-.0051	.2051	.1152
#3	5.545	.0195	.8992	2.775	-.0009	.2050	.1152

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1564.1	5169.4	34401.	2605.6
Stddev	3.9	8.0	108.	70.3
%RSD	.24952	.15523	.31536	2.6993
#1	1559.8	5161.0	34503.	2657.4
#2	1565.1	5170.3	34413.	2525.5
#3	1567.4	5176.9	34287.	2633.9

Zoom In Zoom Out

Sample Name: FA22032-1 Acquired: 2/13/2015 13:16:38 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	85.33	.0180	.7110	.0047	3753.	-.0028	.0276	.0808	.1186
Stddev	.0068	.48	.0014	.0011	.0017	9.	.0002	.0002	.0023	.0016
%RSD	173800.	.5611	7.606	.1520	36.51	.2378	7.369	.9068	2.816	1.331
#1	-.0004	85.81	.0166	.7098	.0067	3764.	-.0028	.0276	.0830	.1175
#2	-.0066	85.32	.0193	.7111	.0036	3749.	-.0026	.0273	.0784	.1178
#3	.0070	84.86	.0180	.7120	.0039	3747.	-.0030	.0278	.0811	.1204

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	87.46	20.40	73.57	1.856	-.0042	3.363	.0703	.0597	.0004	-.0029
Stddev	.22	.62	.44	.006	.0011	.072	.0018	.0054	.0058	.0088
%RSD	.2477	3.044	.6019	.3071	26.70	2.133	2.608	9.071	1383.	309.2
#1	87.71	19.81	74.01	1.861	-.0030	3.302	.0700	.0539	.0032	.0074
#2	87.30	21.04	73.13	1.850	-.0053	3.442	.0685	.0604	.0042	-.0077
#3	87.38	20.35	73.57	1.857	-.0044	3.344	.0722	.0647	-.0062	-.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.992	.0231	17.17	1.716	.0170	.1348	.2766
Stddev	.018	.0039	.08	.005	.0218	.0037	.0022
%RSD	.6039	16.78	.4623	.2934	127.8	2.713	.7959
#1	2.972	.0187	17.26	1.722	.0359	.1306	.2740
#2	3.008	.0246	17.14	1.715	.0221	.1372	.2779
#3	2.994	.0260	17.11	1.712	-.0068	.1366	.2778

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1577.3	4470.0	29858.	2175.3
Stddev	7.4	18.7	32.	9.9
%RSD	.46629	.41836	.10791	.45652
#1	1585.7	4491.5	29829.	2185.9
#2	1573.3	4461.6	29893.	2174.0
#3	1572.8	4457.1	29853.	2166.1

Zoom In Zoom Out

Sample Name: FA22032-2 Acquired: 2/13/2015 13:20:42 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0012	174.0	.0427	1.646	.0069	F2687.	-.0015	.0566	.1666
Stddev	.0048	.7	.0030	.002	.0005	39.	.0003	.0012	.0025
%RSD	399.0	.3899	6.964	.1142	7.872	1.451	22.09	2.140	1.515
#1	.0065	173.3	.0439	1.644	.0063	2646.	-.0018	.0577	.1638
#2	-.0028	174.6	.0448	1.648	.0074	2693.	-.0015	.0570	.1674
#3	-.0002	174.1	.0393	1.645	.0069	2723.	-.0011	.0553	.1686

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1902	165.6	51.27	129.4	4.606	.0029	3.805	.1332	.1321
Stddev	.0023	.7	.10	.6	.037	.0002	.034	.0006	.0069
%RSD	1.188	.4348	.1882	.4711	.8027	5.253	.8804	.4555	5.249
#1	.1882	165.2	51.16	128.7	4.563	.0030	3.814	.1329	.1331
#2	.1896	166.5	51.32	129.7	4.630	.0028	3.834	.1339	.1385
#3	.1927	165.3	51.34	129.9	4.625	.0030	3.769	.1328	.1248

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0033	5.091	.0286	12.04	3.547	.0029	.2711	.5357
Stddev	.0034	.0064	.016	.0021	.04	.032	.0053	.0035	.0016
%RSD	382.5	193.2	.3147	7.214	.3281	.9035	180.8	1.306	.3025
#1	.0027	.0073	5.073	.0283	12.01	3.510	.0046	.2672	.5343
#2	-.0030	-.0041	5.096	.0267	12.08	3.562	-.0030	.2742	.5374
#3	.0029	.0068	5.105	.0308	12.02	3.568	.0072	.2720	.5352

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1544.7	4530.8	30308.	2254.5
Stddev	.6	8.0	233.	12.4
%RSD	.04193	.17547	.76909	.55077
#1	1543.9	4539.6	30560.	2267.2
#2	1544.9	4524.1	30099.	2253.9
#3	1545.2	4528.7	30264.	2242.4

Zoom In Zoom Out

Sample Name: FA22032-3 Acquired: 2/13/2015 13:24:55 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	143.1	.0340	1.423	.0057	3248.	-.0029	.0452	.1356	.1490
Stddev	.0027	.9	.0058	.007	.0007	27.	.0002	.0004	.0017	.0009
%RSD	313.5	.6014	16.95	.5040	12.42	.8391	7.514	.9097	1.256	.6189
#1	.0003	144.0	.0277	1.427	.0054	3279.	-.0029	.0450	.1371	.1498
#2	.0011	142.9	.0352	1.426	.0052	3240.	-.0027	.0456	.1358	.1480
#3	-.0039	142.3	.0391	1.414	.0065	3226.	-.0032	.0449	.1337	.1493

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	133.0	37.32	102.7	3.440	-.0025	3.200	.1064	.0834	.0132	.0004
Stddev	1.0	.44	.8	.001	.0015	.090	.0023	.0133	.0113	.0187
%RSD	.7792	1.185	.8015	.0207	60.00	2.807	2.199	15.94	85.74	4815.
#1	134.1	37.81	103.6	3.440	-.0008	3.175	.1047	.0697	.0091	.0056
#2	132.4	37.23	102.2	3.439	-.0037	3.300	.1054	.0843	.0045	-.0204
#3	132.3	36.94	102.2	3.440	-.0031	3.126	.1090	.0962	.0261	.0160

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.061	.0220	13.03	3.074	.0142	.2143	.4233
Stddev	.006	.0038	.09	.001	.0079	.0025	.0013
%RSD	.1538	17.39	.6992	.0333	55.58	1.184	.3035
#1	4.056	.0264	13.13	3.075	.0198	.2156	.4239
#2	4.068	.0199	13.00	3.073	.0175	.2160	.4219
#3	4.059	.0197	12.96	3.074	.0052	.2114	.4242

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1583.0	4511.5	30198.	2200.3
Stddev	3.0	1.3	33.	23.3
%RSD	.19063	.02974	.10845	1.0592
#1	1580.2	4510.0	30234.	2174.3
#2	1586.2	4512.6	30171.	2207.4
#3	1582.8	4512.1	30190.	2219.3

Zoom In Zoom Out

Sample Name: MP28551-MB1 Acquired: 2/13/2015 13:28:59 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0072	-.0006	.0000	-.0002	.0372	.0000	-.0002	-.0005	-.0002
Stddev	.0002	.0126	.0001	.0006	.0000	.0080	.000	.0001	.0001	.0001
%RSD	75.78	174.9	18.40	1226.	16.76	21.47	40.05	31.50	10.85	76.50
#1	-.0003	.0171	-.0005	.0007	-.0002	.0336	.0000	-.0002	-.0005	-.0002
#2	.0000	.0114	-.0007	-.0004	-.0002	.0463	.0000	-.0001	-.0005	-.0001
#3	-.0003	-.0069	-.0006	-.0001	-.0001	.0316	.0000	-.0002	-.0006	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0245	-.0125	.0044	.0001	.0003	.0014	.0002	-.0002	.0006	.0008
Stddev	.0036	.0509	.0149	.0000	.0001	.0047	.0002	.0003	.0011	.0012
%RSD	14.71	407.7	342.7	45.19	57.85	346.0	97.93	136.9	204.0	148.0
#1	.0281	.0395	.0154	.0000	.0002	.0029	.0000	-.0005	.0017	-.0001
#2	.0209	-.0624	-.0126	.0001	.0001	.0051	.0004	-.0001	-.0006	.0004
#3	.0245	-.0146	.0103	.0001	.0004	-.0039	.0002	.0000	.0006	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0201	.0004	.0002	.0003	-.0022	-.0002	.0007
Stddev	.0001	.0003	.0000	.0001	.0006	.0004	.0001
%RSD	.6106	85.17	10.89	38.77	28.70	272.6	16.39
#1	.0200	.0002	.0002	.0003	-.0018	.0001	.0007
#2	.0203	.0008	.0003	.0004	-.0018	.0001	.0007
#3	.0201	.0002	.0002	.0002	-.0029	-.0006	.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28551-MB1 Acquired: 2/13/2015 13:28:59 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.5	4489.9	30498.	2152.1
Stddev	3.1	6.9	186.	5.6
%RSD	.19401	.15327	.61123	.26157
#1	1579.9	4486.0	30676.	2147.1
#2	1574.1	4486.0	30513.	2150.9
#3	1575.3	4497.9	30304.	2158.2

Zoom In Zoom Out

Sample Name: MP28551-B1 Acquired: 2/13/2015 13:33:11 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486	27.69	1.962	2.057	.0524	25.88	.0489	.4949	.2102	.2555
Stddev	.0002	.09	.008	.004	.0003	.05	.0001	.0016	.0008	.0011
%RSD	.4080	.3398	.3967	.1756	.5998	.2050	.3043	.3215	.3860	.4351
#1	.0484	27.76	1.962	2.061	.0524	25.90	.0488	.4943	.2094	.2551
#2	.0485	27.72	1.954	2.056	.0527	25.91	.0488	.4937	.2110	.2568
#3	.0488	27.58	1.970	2.055	.0521	25.82	.0490	.4967	.2102	.2546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.57	25.35	25.17	.5104	.4749	25.75	.5008	.4929	.4899	1.940
Stddev	.02	.02	.02	.0008	.0014	.04	.0018	.0013	.0022	.007
%RSD	.0746	.0981	.0705	.1539	.2930	.1655	.3506	.2714	.4567	.3529
#1	26.55	25.36	25.18	.5108	.4741	25.78	.4999	.4921	.4906	1.946
#2	26.56	25.37	25.15	.5110	.4740	25.78	.4996	.4922	.4874	1.932
#3	26.59	25.32	25.17	.5095	.4765	25.71	.5028	.4945	.4918	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0235	.4980	.5110	.4998	1.988	.4891	.5010
Stddev	.0002	.0022	.0011	.0010	.002	.0025	.0017
%RSD	.8232	.4381	.2081	.2084	.0943	.5119	.3450
#1	.0235	.4978	.5116	.5002	1.989	.4867	.5000
#2	.0233	.4960	.5117	.5007	1.986	.4917	.4999
#3	.0236	.5003	.5098	.4987	1.990	.4889	.5030
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28551-B1 Acquired: 2/13/2015 13:33:11 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1598.6	4528.3	30371.	2186.0
Stddev	4.7	11.7	86.	4.8
%RSD	.29107	.25802	.28202	.21998
#1	1599.8	4529.4	30470.	2182.7
#2	1602.5	4539.4	30325.	2191.5
#3	1593.4	4516.1	30318.	2183.7

Zoom In Zoom Out

Sample Name: FA22049-1 Acquired: 2/13/2015 13:37:08 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0427	-.0004	.0078	-.0001	30.48	.0000	-.0002	-.0002	-.0002
Stddev	.0006	.0091	.0002	.0002	.0001	.11	.000	.0001	.0001	.0004
%RSD	550.0	21.27	45.43	2.919	83.17	.3570	86.82	44.57	38.04	202.5
#1	-.0008	.0349	-.0004	.0077	-.0002	30.44	.0000	-.0001	-.0001	-.0005
#2	.0001	.0527	-.0003	.0076	-.0001	30.60	.0000	-.0002	-.0003	-.0004
#3	.0003	.0406	-.0006	.0080	.0000	30.40	.0000	-.0002	-.0003	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0440	1.278	1.099	.0005	.0012	1.468	.0002	-.0022	.0002	.0019
Stddev	.0067	.027	.029	.0000	.0000	.006	.0001	.0007	.0003	.0017
%RSD	15.34	2.124	2.678	5.844	1.468	.3978	97.56	31.36	152.0	88.30
#1	.0510	1.298	1.113	.0005	.0012	1.469	.0000	-.0014	-.0001	.0003
#2	.0435	1.289	1.065	.0005	.0012	1.473	.0002	-.0024	.0003	.0037
#3	.0375	1.247	1.118	.0004	.0012	1.462	.0002	-.0027	.0003	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4711	.0002	.0322	.0018	-.0002	.0010	.0097
Stddev	.0008	.0003	.0003	.0001	.0005	.0001	.0000
%RSD	.1640	133.1	.8637	2.983	291.3	10.37	.1617
#1	.4718	.0005	.0325	.0017	.0001	.0011	.0097
#2	.4703	-.0001	.0322	.0018	-.0007	.0011	.0097
#3	.4711	.0002	.0320	.0018	.0001	.0009	.0097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1621.0	4583.3	31050.	2200.0
Stddev	5.6	1.7	187.	20.1
%RSD	.34656	.03664	.60261	.91232
#1	1626.0	4581.4	30942.	2211.2
#2	1614.9	4584.0	30943.	2176.8
#3	1622.2	4584.6	31266.	2211.9

Zoom In Zoom Out

Sample Name: MP28551-D1 Acquired: 2/13/2015 13:41:15 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0478	-.0009	.0076	-.0001	30.79	-.0001	-.0002	-.0004	-.0005
Stddev	.001	.0089	.0002	.0003	.0000	.09	.0001	.0001	.0003	.0002
%RSD	3348.	18.65	27.76	3.476	41.19	.3020	120.6	43.97	79.82	45.26
#1	.0006	.0551	-.0011	.0074	-.0001	30.71	.0000	-.0001	-.0003	-.0006
#2	-.0003	.0503	-.0007	.0079	-.0001	30.89	.0000	-.0003	-.0001	-.0002
#3	-.0003	.0379	-.0008	.0074	-.0001	30.76	-.0002	-.0003	-.0007	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0273	1.278	1.105	.0005	.0009	1.459	.0002	-.0007	.0007	.0021
Stddev	.0019	.017	.019	.0001	.0001	.012	.0002	.0007	.0011	.0010
%RSD	6.798	1.321	1.731	15.09	9.578	.8157	134.5	101.8	158.6	48.54
#1	.0287	1.266	1.120	.0004	.0010	1.445	.0000	.0001	-.0004	.0026
#2	.0252	1.270	1.084	.0005	.0008	1.468	.0004	-.0008	.0008	.0009
#3	.0281	1.297	1.111	.0005	.0009	1.463	.0001	-.0012	.0016	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4771	.0005	.0329	.0015	-.0008	.0012	.0096
Stddev	.0005	.0001	.0001	.0001	.0004	.0002	.0001
%RSD	.0958	17.92	.2661	3.830	52.07	14.52	1.024
#1	.4766	.0005	.0329	.0015	-.0013	.0014	.0094
#2	.4774	.0004	.0328	.0016	-.0006	.0010	.0096
#3	.4773	.0004	.0329	.0016	-.0006	.0012	.0096

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1619.1	4565.1	30840.	2175.7
Stddev	3.6	4.4	108.	5.7
%RSD	.22122	.09686	.35068	.26042
#1	1619.8	4560.2	30899.	2180.7
#2	1615.2	4566.4	30715.	2169.5
#3	1622.2	4568.8	30907.	2176.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 13:45:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2462	40.03	1.948	1.977	1.989	40.10	1.969	1.959	1.994	1.968
Stddev	.0008	.09	.002	.005	.007	.23	.001	.001	.010	.007
%RSD	.3274	.2141	.1022	.2507	.3442	.5626	.0378	.0717	.4948	.3391
#1	.2470	39.94	1.946	1.975	1.983	39.89	1.969	1.958	2.002	1.974
#2	.2454	40.03	1.948	1.974	1.988	40.06	1.969	1.958	1.997	1.968
#3	.2461	40.11	1.949	1.983	1.996	40.34	1.970	1.960	1.983	1.961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.88	39.96	39.41	2.003	1.944	40.25	1.949	1.960	1.943	1.953
Stddev	.21	.15	.20	.007	.007	.15	.001	.002	.004	.003
%RSD	.5331	.3734	.5065	.3325	.3783	.3796	.0681	.0844	.2073	.1577
#1	39.75	39.97	39.24	2.010	1.936	40.12	1.950	1.958	1.941	1.951
#2	39.77	39.81	39.36	2.002	1.944	40.22	1.947	1.960	1.941	1.952
#3	40.13	40.10	39.63	1.996	1.951	40.42	1.950	1.961	1.948	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.767	1.949	2.012	1.994	1.967	1.947	1.969
Stddev	.004	.001	.006	.008	.002	.006	.000
%RSD	.2083	.0266	.2934	.3823	.1055	.3104	.0164
#1	1.767	1.949	2.007	2.001	1.964	1.953	1.969
#2	1.762	1.949	2.012	1.994	1.967	1.945	1.969
#3	1.770	1.948	2.019	1.986	1.969	1.941	1.969
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 13:45:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1571.4	4459.5	30371.	2188.0
Stddev	2.2	4.0	125.	17.2
%RSD	.13921	.08894	.41182	.78499
#1	1573.3	4461.8	30254.	2201.7
#2	1569.0	4454.9	30357.	2193.6
#3	1571.7	4461.8	30503.	2168.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:49:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0169	.0002	.0004	.0004	.0100	.0005	.0003	.0002
Stddev	.0002	.0148	.0009	.0001	.0001	.0080	.0001	.0001	.0003
%RSD	84.50	87.24	385.9	25.29	13.45	80.66	13.41	37.81	160.2
#1	.0005	.0033	.0012	.0003	.0004	.0065	.0005	.0002	.0002
#2	.0002	.0148	.0002	.0005	.0005	.0043	.0004	.0004	-.0001
#3	.0001	.0326	-.0007	.0004	.0005	.0191	.0005	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0429	.0511	.0149	.0006	F.0038	.0194	.0004	.0008
Stddev	.0001	.0052	.0543	.0362	.0000	.0006	.0082	.0002	.0011
%RSD	14.87	12.05	106.2	243.6	4.352	16.90	41.99	58.53	142.0
#1	.0004	.0477	.0819	.0402	.0006	.0045	.0273	.0004	.0020
#2	.0005	.0374	-.0116	-.0266	.0007	.0036	.0110	.0006	.0000
#3	.0006	.0437	.0829	.0310	.0006	.0033	.0200	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0011	-.0002	.0009	.0005	.0020	.0000	.0007	.0005
Stddev	.0008	.0023	.0004	.0005	.0001	.0003	.0011	.0001	.0001
%RSD	39.77	211.3	197.8	55.57	14.73	13.20	27780.	9.339	16.45
#1	.0018	.0031	.0003	.0014	.0004	.0023	-.0007	.0008	.0005
#2	.0015	-.0014	-.0005	.0009	.0005	.0018	-.0006	.0007	.0006
#3	.0031	.0015	-.0004	.0004	.0005	.0019	.0013	.0007	.0004
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:49:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1608.1	4554.6	31328.	2213.6
Stddev	4.1	17.8	356.	14.7
%RSD	.25634	.38992	1.1365	.66529
#1	1608.3	4554.8	31336.	2215.6
#2	1603.9	4536.8	31680.	2227.2
#3	1612.2	4572.4	30968.	2197.9

Zoom In Zoom Out

Sample Name: MP28551-SD1 Acquired: 2/13/2015 13:53:31 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	.0537	-.0020	.0080	.0001	31.46	.0000	-.0008	-.0030	-.0016
Stddev	.0019	.0304	.0024	.0014	.0011	.15	.000	.0006	.0013	.0009
%RSD	240.7	56.57	117.9	17.12	1912.	.4922	616.7	72.90	42.28	57.32
#1	-.0002	.0862	-.0019	.0074	-.0009	31.28	-.0002	-.0012	-.0020	-.0006
#2	.0029	.0486	.0003	.0096	-.0003	31.54	.0002	-.0011	-.0045	-.0019
#3	-.0004	.0262	-.0045	.0071	.0013	31.56	-.0002	-.0001	-.0027	-.0023

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0793	1.307	1.172	.0008	.0038	1.489	.0024	-.0009	.0014	.0067
Stddev	.0088	.164	.127	.0002	.0009	.031	.0010	.0058	.0039	.0097
%RSD	11.09	12.54	10.83	23.68	22.54	2.062	39.99	638.6	285.0	143.1
#1	.0772	1.466	1.094	.0010	.0030	1.524	.0035	.0018	-.0027	.0102
#2	.0718	1.139	1.319	.0009	.0047	1.465	.0019	.0030	.0050	.0142
#3	.0890	1.317	1.104	.0006	.0037	1.479	.0018	-.0075	.0018	-.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4752	.0014	.0327	.0035	-.0048	.0006	.0111
Stddev	.0014	.0016	.0009	.0005	.0039	.0004	.0001
%RSD	.2935	121.1	2.839	13.35	81.11	67.10	1.253
#1	.4738	.0030	.0336	.0037	-.0025	.0002	.0112
#2	.4766	.0013	.0317	.0030	-.0093	.0006	.0111
#3	.4753	-.0003	.0327	.0039	-.0026	.0009	.0109

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.3	4571.5	30892.	2166.8
Stddev	2.1	6.8	53.	16.9
%RSD	.12900	.14984	.17122	.77919
#1	1612.3	4573.8	30837.	2175.3
#2	1612.6	4576.9	30942.	2177.7
#3	1608.9	4563.8	30896.	2147.4

Zoom In Zoom Out

Sample Name: MP28551-PS1 Acquired: 2/13/2015 13:57:42 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0465	2.576	.0976	.2641	.0515	34.96	.0492	.0489	.0511	.0989
Stddev	.0007	.015	.0006	.0004	.0003	.06	.0001	.0000	.0003	.0003
%RSD	1.559	.5662	.6598	.1384	.5557	.1622	.1517	.0832	.5409	.3337
#1	.0471	2.560	.0977	.2643	.0516	34.93	.0493	.0489	.0514	.0991
#2	.0457	2.587	.0968	.2643	.0512	34.92	.0493	.0489	.0511	.0985
#3	.0469	2.582	.0981	.2637	.0518	35.02	.0491	.0490	.0509	.0991

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.007	11.17	5.855	.0518	.0971	11.91	.0998	.0470	.0971	.0946
Stddev	.020	.01	.021	.0002	.0001	.02	.0004	.0011	.0018	.0016
%RSD	.6588	.0842	.3550	.2968	.1322	.1935	.3598	2.330	1.880	1.681
#1	3.012	11.16	5.842	.0520	.0971	11.89	.0999	.0474	.0953	.0962
#2	2.985	11.17	5.879	.0518	.0972	11.94	.0994	.0458	.0990	.0944
#3	3.024	11.17	5.843	.0517	.0970	11.91	.1001	.0479	.0971	.0930

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4733	.0479	.0823	.0999	.0977	.0489	.2555
Stddev	.0005	.0001	.0004	.0001	.0009	.0001	.0006
%RSD	.0975	.2081	.4870	.1132	.9711	.1612	.2475
#1	.4731	.0479	.0818	.1000	.0984	.0488	.2558
#2	.4738	.0480	.0826	.0999	.0979	.0490	.2548
#3	.4729	.0478	.0824	.0998	.0966	.0489	.2559

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1603.2	4543.5	30660.	2139.5
Stddev	6.7	12.8	161.	5.5
%RSD	.41582	.28131	.52580	.25694
#1	1598.1	4532.1	30496.	2145.6
#2	1610.7	4557.3	30818.	2138.1
#3	1600.6	4540.9	30668.	2134.9

Zoom In Zoom Out

Sample Name: MP28551-S1 Acquired: 2/13/2015 14:01:44 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0498	28.35	1.998	2.106	.0536	56.39	.0498	.5063	.2169	.2642
Stddev	.0004	.04	.001	.006	.0001	.11	.0000	.0004	.0000	.0007
%RSD	.8193	.1583	.0470	.2965	.2282	.2024	.0693	.0883	.0162	.2516
#1	.0498	28.40	1.999	2.114	.0536	56.44	.0498	.5060	.2170	.2636
#2	.0495	28.31	1.997	2.102	.0535	56.25	.0498	.5068	.2170	.2640
#3	.0503	28.35	1.997	2.103	.0537	56.47	.0499	.5062	.2169	.2649

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.94	27.11	26.54	.5256	.4855	27.83	.5096	.5044	.4997	1.972
Stddev	.04	.09	.13	.0015	.0004	.07	.0011	.0004	.0004	.004
%RSD	.1405	.3245	.4759	.2915	.0793	.2340	.2085	.0764	.0798	.2135
#1	26.97	27.21	26.40	.5254	.4859	27.90	.5103	.5043	.5002	1.977
#2	26.90	27.09	26.58	.5242	.4851	27.79	.5100	.5040	.4994	1.970
#3	26.94	27.04	26.64	.5273	.4855	27.79	.5083	.5048	.4995	1.968

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4852	.5032	.5551	.5155	2.047	.5043	.5198
Stddev	.0010	.0012	.0016	.0015	.004	.0011	.0005
%RSD	.2063	.2360	.2957	.2936	.1932	.2094	.0940
#1	.4859	.5026	.5567	.5146	2.046	.5045	.5192
#2	.4856	.5046	.5534	.5147	2.044	.5032	.5202
#3	.4840	.5025	.5550	.5173	2.051	.5053	.5200

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1569.1	4457.2	29570.	2131.9
Stddev	.7	8.2	13.	6.5
%RSD	.04268	.18476	.04308	.30266
#1	1569.6	4454.2	29571.	2138.9
#2	1569.5	4450.9	29557.	2126.2
#3	1568.4	4466.5	29583.	2130.5

Zoom In Zoom Out

Sample Name: MP28551-S2 Acquired: 2/13/2015 14:05:41 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0508	28.83	1.993	2.111	.0543	57.55	.0501	.5079	.2206	.2669
Stddev	.0005	.18	.001	.005	.0001	.17	.0001	.0006	.0002	.0008
%RSD	.9860	.6289	.0475	.2553	.2126	.3006	.1379	.1125	.0770	.2921
#1	.0503	28.63	1.993	2.112	.0544	57.40	.0500	.5085	.2208	.2668
#2	.0513	28.99	1.992	2.116	.0542	57.74	.0501	.5073	.2205	.2677
#3	.0509	28.86	1.994	2.106	.0543	57.51	.0501	.5080	.2205	.2661

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.09	27.27	26.69	.5282	.4866	28.27	.5085	.5073	.4991	1.973
Stddev	.06	.10	.22	.0003	.0001	.12	.0005	.0021	.0017	.003
%RSD	.2181	.3729	.8062	.0527	.0201	.4236	.0971	.4106	.3374	.1616
#1	27.05	27.19	26.79	.5283	.4866	28.20	.5090	.5096	.4974	1.974
#2	27.16	27.38	26.84	.5285	.4867	28.41	.5084	.5054	.5007	1.976
#3	27.06	27.23	26.44	.5279	.4865	28.21	.5081	.5070	.4992	1.970

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4929	.5020	.5621	.5207	2.058	.5086	.5215
Stddev	.0006	.0008	.0020	.0009	.004	.0002	.0003
%RSD	.1137	.1531	.3571	.1788	.1680	.0361	.0651
#1	.4932	.5024	.5603	.5216	2.061	.5086	.5219
#2	.4932	.5024	.5643	.5208	2.055	.5084	.5212
#3	.4922	.5011	.5616	.5198	2.060	.5088	.5215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1573.8	4482.6	29477.	2121.5
Stddev	5.9	12.0	21.	14.5
%RSD	.37511	.26662	.07150	.68501
#1	1567.4	4471.9	29464.	2117.9
#2	1575.2	4480.4	29467.	2109.2
#3	1578.9	4495.5	29502.	2137.6

Zoom In Zoom Out

Sample Name: FA22049-2 Acquired: 2/13/2015 14:09:39 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.6805	-.0004	.0062	.0001	70.28	.0007	.0006	.0257	-.0003
Stddev	.0004	.0050	.0003	.0001	.0001	.28	.0000	.0001	.0002	.0002
%RSD	185.8	.7356	76.55	2.210	243.6	.3930	2.896	21.54	.8758	74.61
#1	.0002	.6794	-.0001	.0061	.0000	69.96	.0007	.0007	.0259	-.0001
#2	-.0002	.6860	-.0008	.0063	.0002	70.46	.0007	.0007	.0256	-.0005
#3	-.0006	.6762	-.0004	.0064	-.0001	70.41	.0007	.0005	.0255	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0600	1.871	6.435	.0073	.0024	17.10	.0017	-.0034	.0010	.0030
Stddev	.0064	.003	.093	.0001	.0001	.06	.0003	.0009	.0006	.0006
%RSD	10.74	.1711	1.450	.8314	4.239	.3364	14.83	25.53	59.84	18.46
#1	.0627	1.873	6.359	.0072	.0023	17.03	.0017	-.0035	.0017	.0025
#2	.0647	1.872	6.539	.0073	.0025	17.14	.0020	-.0041	.0008	.0036
#3	.0527	1.867	6.406	.0074	.0024	17.12	.0015	-.0024	.0005	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.630	.0007	.1151	.0033	-.0003	.0030	.0106
Stddev	.003	.0002	.0004	.0001	.0012	.0001	.0001
%RSD	.1672	24.30	.3420	2.953	355.1	4.756	.8705
#1	1.627	.0005	.1147	.0034	.0003	.0028	.0105
#2	1.629	.0007	.1154	.0034	.0005	.0030	.0107
#3	1.633	.0008	.1154	.0032	-.0018	.0031	.0105

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1604.8	4558.0	30014.	2146.2
Stddev	5.7	2.5	86.	4.8
%RSD	.35558	.05467	.28760	.22209
#1	1606.9	4558.8	30069.	2150.3
#2	1609.3	4560.0	29914.	2141.0
#3	1598.4	4555.2	30057.	2147.3

Zoom In Zoom Out

Sample Name: FA22021-6F Acquired: 2/13/2015 14:13:46 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0137	-.0005	.0347	-.0001	3.427	-.0001	.0000	-.0005	.0279
Stddev	.001	.0080	.0003	.0002	.0001	.014	.0000	.000	.0002	.0001
%RSD	4486.	58.51	57.45	.5293	286.4	.4009	45.92	481.0	44.24	.4586
#1	.0002	.0123	-.0002	.0349	-.0002	3.412	-.0001	-.0001	-.0002	.0278
#2	.0006	.0065	-.0008	.0345	-.0001	3.439	-.0001	.0001	-.0006	.0280
#3	-.0008	.0224	-.0005	.0346	.0001	3.429	.0000	.0000	-.0006	.0279

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.188	2.133	1.928	.0344	.0004	7.090	.0002	.0033	.0019	.0022
Stddev	.005	.011	.032	.0002	.0001	.030	.0001	.0002	.0015	.0015
%RSD	.4654	.5320	1.678	.6041	23.77	.4236	65.18	6.024	76.36	69.12
#1	1.184	2.145	1.893	.0345	.0004	7.113	.0001	.0034	.0036	.0006
#2	1.194	2.133	1.935	.0342	.0005	7.056	.0003	.0035	.0010	.0036
#3	1.185	2.122	1.957	.0345	.0003	7.102	.0001	.0031	.0012	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.36	.0003	.0337	.0002	-.0009	.0000	.0687
Stddev	.02	.0002	.0001	.0000	.0005	.000	.0001
%RSD	.2313	80.61	.3544	15.65	51.61	151.9	.0853
#1	10.38	.0004	.0336	.0003	-.0004	.0000	.0687
#2	10.36	.0003	.0336	.0002	-.0014	.0000	.0687
#3	10.33	.0000	.0338	.0002	-.0010	-.0001	.0686

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1622.2	4623.7	30478.	2144.4
Stddev	6.3	17.2	46.	13.0
%RSD	.38601	.37226	.15036	.60562
#1	1615.1	4604.1	30442.	2142.8
#2	1624.6	4630.6	30530.	2158.1
#3	1626.9	4636.4	30462.	2132.3

Zoom In Zoom Out

Sample Name: FA22021-7F Acquired: 2/13/2015 14:17:54 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0216	-.0004	.0169	-.0001	9.143	.0000	-.0002	-.0001	.0149
Stddev	.0006	.0125	.0004	.0003	.0001	.026	.0000	.0001	.0002	.0004
%RSD	417.4	58.05	104.6	1.957	89.31	.2795	871.1	63.39	175.8	2.542
#1	.0002	.0286	-.0005	.0165	-.0001	9.140	.0000	-.0002	.0001	.0152
#2	-.0009	.0071	-.0007	.0168	.0000	9.119	.0000	-.0001	-.0001	.0150
#3	.0002	.0290	.0001	.0172	-.0002	9.170	.0000	-.0004	-.0003	.0145

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0197	2.697	3.039	.0008	.0005	14.39	.0001	-.0004	.0005	.0003
Stddev	.0033	.044	.052	.0001	.0001	.03	.0002	.0010	.0006	.0004
%RSD	16.68	1.639	1.726	6.850	12.11	.2168	337.9	222.5	121.6	134.6
#1	.0190	2.746	3.086	.0007	.0004	14.40	.0003	.0006	.0003	.0008
#2	.0168	2.684	2.983	.0008	.0005	14.36	-.0001	-.0007	.0000	.0003
#3	.0232	2.660	3.048	.0008	.0005	14.42	.0000	-.0012	.0011	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.711	.0004	.0560	.0004	-.0004	.0005	.0221
Stddev	.004	.0003	.0001	.0001	.0010	.0003	.0001
%RSD	.1298	62.00	.1442	31.78	273.6	66.94	.3948
#1	2.707	.0005	.0561	.0005	-.0015	.0002	.0220
#2	2.712	.0006	.0559	.0005	-.0002	.0005	.0222
#3	2.713	.0001	.0560	.0003	.0006	.0008	.0221

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1641.3	4655.2	30714.	2179.2
Stddev	3.6	7.7	109.	9.6
%RSD	.21752	.16599	.35556	.44110
#1	1645.4	4664.1	30589.	2179.5
#2	1639.9	4650.1	30794.	2188.7
#3	1638.7	4651.4	30758.	2169.4

Zoom In Zoom Out

Sample Name: FA22021-8F Acquired: 2/13/2015 14:22:01 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0229	-.0007	.0153	-.0001	9.395	.0000	-.0002	-.0005	.0043
Stddev	.0005	.0244	.0005	.0002	.0000	.040	.000	.0001	.0003	.0001
%RSD	168.3	106.3	74.02	1.324	35.23	.4227	4282.	38.45	48.09	2.433
#1	-.0009	.0505	-.0010	.0152	-.0001	9.409	.0000	-.0001	-.0008	.0042
#2	-.0001	.0140	-.0009	.0152	-.0001	9.351	.0000	-.0003	-.0005	.0043
#3	.0001	.0043	-.0001	.0155	-.0001	9.427	-.0001	-.0003	-.0003	.0044

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0171	2.767	3.147	.0003	.0005	14.76	.0002	-.0009	-.0001	.0014
Stddev	.0025	.028	.050	.0000	.0000	.06	.0001	.0009	.0002	.0012
%RSD	14.59	.9923	1.597	11.93	6.041	.3886	29.19	92.35	274.1	91.41
#1	.0149	2.735	3.091	.0003	.0005	14.76	.0003	-.0010	-.0001	.0004
#2	.0165	2.786	3.161	.0003	.0004	14.70	.0003	.0000	-.0003	.0009
#3	.0198	2.779	3.189	.0003	.0005	14.82	.0002	-.0018	.0002	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.697	.0004	.0564	.0005	-.0011	.0004	.0103
Stddev	.002	.0003	.0001	.0000	.0004	.0002	.0000
%RSD	.0807	80.75	.2020	4.724	38.28	46.90	.2323
#1	2.696	.0004	.0565	.0005	-.0007	.0003	.0102
#2	2.696	.0008	.0565	.0005	-.0015	.0006	.0103
#3	2.700	.0001	.0563	.0005	-.0009	.0003	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.2	4586.0	30366.	2130.5
Stddev	1.7	6.4	64.	8.0
%RSD	.10718	.13894	.21239	.37483
#1	1610.1	4585.6	30377.	2124.9
#2	1610.4	4592.5	30297.	2139.7
#3	1613.2	4579.8	30425.	2126.9

Zoom In Zoom Out

Sample Name: FA22021-9F Acquired: 2/13/2015 14:26:10 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0416	-.0005	.0034	-.0001	16.25	-.0001	-.0003	.0002	.0830
Stddev	.000	.0151	.0006	.0002	.0001	.04	.0000	.0001	.0004	.0002
%RSD	2198.	36.22	107.2	4.989	90.94	.2592	48.22	39.68	181.6	.1901
#1	.0001	.0245	-.0012	.0033	-.0001	16.30	-.0001	-.0001	.0005	.0830
#2	-.0005	.0529	-.0002	.0033	-.0002	16.24	.0000	-.0003	.0003	.0832
#3	.0004	.0475	-.0002	.0036	.0000	16.22	.0000	-.0003	-.0002	.0829

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0598	1.407	5.021	.0013	.0000	5.732	.0001	.0009	.0000	.0004
Stddev	.0042	.022	.057	.0000	.000	.026	.0001	.0010	.001	.0013
%RSD	7.053	1.534	1.125	3.424	4128.	.4559	76.42	109.9	4435.	305.8
#1	.0602	1.412	5.069	.0013	-.0002	5.762	.0001	.0004	.0006	.0014
#2	.0554	1.426	4.959	.0013	.0000	5.714	.0001	.0002	.0005	-.0010
#3	.0638	1.384	5.036	.0014	.0002	5.720	.0000	.0021	-.0012	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.414	.0009	.0426	.0029	-.0012	.0029	.0549
Stddev	.050	.0001	.0002	.0002	.0004	.0001	.0005
%RSD	.5930	12.68	.4472	6.190	35.51	4.131	.8518
#1	8.362	.0009	.0427	.0028	-.0016	.0028	.0544
#2	8.417	.0010	.0426	.0031	-.0008	.0029	.0550
#3	8.462	.0008	.0424	.0029	-.0012	.0030	.0553

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1653.4	4703.8	31667.	2206.8
Stddev	7.7	25.1	160.	14.3
%RSD	.46601	.53341	.50458	.64811
#1	1660.0	4725.3	31640.	2191.7
#2	1655.3	4710.0	31838.	2208.4
#3	1644.9	4676.2	31522.	2220.2

Zoom In Zoom Out

Sample Name: FA22052-4 Acquired: 2/13/2015 14:30:17 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	16.43	.0003	.0063	.0003	4.247	.0000	-.0002	.0210	.0034
Stddev	.0001	.09	.0002	.0002	.0000	.022	.000	.0000	.0002	.0002
%RSD	83.46	.5657	78.09	3.442	8.835	.5220	70.47	29.54	.8944	5.449
#1	-.0001	16.35	.0001	.0065	.0002	4.238	.0000	-.0002	.0212	.0033
#2	-.0001	16.53	.0002	.0065	.0003	4.273	-.0001	-.0001	.0209	.0033
#3	-.0003	16.42	.0006	.0061	.0003	4.232	.0000	-.0001	.0209	.0036

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.940	5.446	.8022	.0126	.0010	5.361	.0019	.0070	.0006	.0025
Stddev	.009	.062	.0339	.0000	.0002	.010	.0003	.0006	.0005	.0005
%RSD	.4763	1.138	4.225	.3820	19.70	.1928	15.83	7.986	77.59	18.60
#1	1.930	5.376	.7772	.0125	.0012	5.353	.0021	.0072	.0001	.0027
#2	1.940	5.467	.8408	.0126	.0008	5.373	.0020	.0063	.0010	.0029
#3	1.949	5.494	.7885	.0126	.0009	5.357	.0015	.0074	.0006	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.538	.0007	.0098	.0134	-.0007	.0069	.0135
Stddev	.007	.0002	.0001	.0001	.0006	.0002	.0001
%RSD	.1640	25.75	.8694	.5560	87.66	2.383	.7299
#1	4.532	.0008	.0098	.0135	.0000	.0070	.0134
#2	4.536	.0005	.0099	.0134	-.0011	.0070	.0135
#3	4.546	.0009	.0097	.0134	-.0010	.0067	.0136

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1652.0	4716.8	32036.	2275.5
Stddev	2.7	5.6	66.	3.6
%RSD	.16354	.11865	.20735	.15933
#1	1653.6	4722.8	32007.	2275.3
#2	1653.5	4716.0	31989.	2272.0
#3	1648.8	4711.7	32112.	2279.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 14:34:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2460	39.99	1.928	1.974	1.986	40.19	1.955	1.942	1.998	1.967
Stddev	.0014	.13	.010	.003	.003	.05	.009	.010	.003	.005
%RSD	.5517	.3282	.5348	.1319	.1286	.1362	.4658	.5193	.1517	.2742
#1	.2473	40.07	1.935	1.973	1.985	40.15	1.961	1.948	2.002	1.973
#2	.2462	39.84	1.932	1.972	1.984	40.17	1.959	1.947	1.997	1.965
#3	.2446	40.07	1.916	1.977	1.989	40.25	1.944	1.931	1.996	1.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.82	39.96	39.41	1.999	1.929	40.38	1.929	1.943	1.927	1.938
Stddev	.09	.10	.02	.005	.006	.06	.009	.010	.007	.009
%RSD	.2303	.2446	.0552	.2334	.3284	.1375	.4838	.5143	.3653	.4719
#1	39.71	39.86	39.41	2.004	1.929	40.37	1.936	1.951	1.930	1.942
#2	39.86	39.96	39.44	1.995	1.936	40.33	1.933	1.946	1.932	1.945
#3	39.88	40.06	39.39	1.997	1.923	40.44	1.919	1.932	1.919	1.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.748	1.931	2.014	1.989	1.947	1.948	1.956
Stddev	.008	.011	.006	.006	.008	.003	.009
%RSD	.4779	.5565	.2849	.3233	.4261	.1473	.4644
#1	1.752	1.942	2.015	1.997	1.948	1.951	1.962
#2	1.754	1.931	2.008	1.986	1.954	1.946	1.960
#3	1.739	1.920	2.020	1.985	1.938	1.946	1.945
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 14:34:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1598.6	4530.8	30540.	2184.4
Stddev	4.6	16.4	33.	1.3
%RSD	.28797	.36115	.10916	.05770
#1	1595.5	4517.2	30526.	2183.4
#2	1596.4	4526.2	30516.	2185.8
#3	1603.9	4548.9	30578.	2183.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 14:38:22 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0022	.0005	.0002	.0003	.0053	.0003	.0002	-.0001
Stddev	.0005	.0140	.0004	.0004	.0001	.0021	.0001	.0001	.0005
%RSD	215.8	641.7	95.17	194.4	16.79	39.86	26.90	27.46	554.3
#1	-.0006	-.0005	.0001	.0001	.0003	.0077	.0004	.0003	.0003
#2	-.0004	-.0103	.0009	.0006	.0004	.0046	.0004	.0002	.0002
#3	.0003	.0173	.0004	-.0001	.0003	.0037	.0002	.0003	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0404	-.0008	.0349	.0004	F.0035	.0133	.0006	.0000
Stddev	.0001	.0108	.0226	.0631	.0000	.0007	.0066	.0002	.0002
%RSD	133.4	26.74	2997.	180.5	7.761	19.96	49.53	34.00	920.5
#1	.0000	.0529	.0211	.0207	.0004	.0043	.0209	.0004	-.0001
#2	.0001	.0347	.0007	.1039	.0004	.0033	.0106	.0005	.0000
#3	.0001	.0337	-.0240	-.0198	.0005	.0030	.0085	.0008	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0018	-.0005	F.0010	.0004	.0018	.0011	.0007	.0004
Stddev	.0007	.0013	.0000	.0002	.0001	.0002	.0013	.0001	.0000
%RSD	32.83	69.36	6.073	18.71	20.45	11.61	110.8	12.24	11.15
#1	.0028	.0015	-.0005	.0012	.0003	.0020	.0022	.0007	.0004
#2	.0014	.0032	-.0005	.0011	.0004	.0017	-.0003	.0008	.0004
#3	.0022	.0007	-.0006	.0008	.0005	.0016	.0015	.0006	.0004
Check ?	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020			.0010					
Low Limit	-.0020			-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 14:38:22 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1667.4	4752.2	32156.	2245.1
Stddev	6.3	10.1	76.	8.3
%RSD	.37690	.21287	.23538	.36766
#1	1669.3	4759.6	32073.	2254.5
#2	1672.6	4756.3	32172.	2239.0
#3	1660.4	4740.7	32222.	2241.8

Zoom In Zoom Out

Sample Name: FA22052-4F Acquired: 2/13/2015 14:42:33 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	17.96	.0010	.0071	.0003	4.335	.0000	-.0001	.0233	.0040
Stddev	.0003	.02	.0008	.0000	.0001	.014	.000	.0001	.0002	.0001
%RSD	99.92	.1279	77.30	.6142	39.00	.3248	73.79	55.66	.9299	1.945
#1	.0000	17.98	.0002	.0071	.0005	4.330	-.0001	-.0001	.0234	.0041
#2	-.0006	17.96	.0017	.0071	.0003	4.324	.0000	.0000	.0231	.0040
#3	-.0003	17.94	.0012	.0072	.0002	4.351	.0000	-.0001	.0235	.0040

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.097	5.571	.8120	.0132	.0017	5.452	.0023	.0078	.0001	.0037
Stddev	.014	.013	.0183	.0000	.0003	.017	.0003	.0007	.0014	.0018
%RSD	.6429	.2283	2.254	.1419	18.17	.3077	11.85	8.975	1788.	48.12
#1	2.108	5.567	.7938	.0132	.0019	5.468	.0020	.0078	-.0014	.0030
#2	2.082	5.561	.8304	.0132	.0019	5.452	.0022	.0071	.0003	.0057
#3	2.101	5.586	.8118	.0132	.0014	5.434	.0026	.0085	.0014	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.583	.0008	.0106	.0146	-.0003	.0072	.0115
Stddev	.009	.0004	.0000	.0001	.0002	.0003	.0001
%RSD	.1918	46.82	.1909	.9123	50.35	4.494	.9509
#1	4.578	.0004	.0105	.0147	-.0005	.0072	.0115
#2	4.577	.0011	.0106	.0147	-.0004	.0075	.0114
#3	4.593	.0009	.0106	.0145	-.0001	.0069	.0116

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1656.8	4744.2	32179.	2263.3
Stddev	2.5	6.6	66.	12.1
%RSD	.15149	.13843	.20512	.53604
#1	1659.1	4750.5	32105.	2249.3
#2	1654.2	4744.8	32200.	2271.2
#3	1657.1	4737.4	32233.	2269.4

Zoom In Zoom Out

Sample Name: FA22073-1 Acquired: 2/13/2015 14:46:40 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0671	-.0007	.0117	-.0001	25.90	.0000	-.0002	.0000	.0001
Stddev	.000	.0065	.0005	.0002	.0001	.08	.0000	.0001	.000	.0004
%RSD	1022.	9.751	73.06	1.862	119.0	.3038	1578.	42.97	10050.	356.8
#1	.0000	.0706	-.0006	.0118	-.0003	25.87	.0000	-.0002	-.0003	.0000
#2	.0000	.0710	-.0002	.0119	-.0001	25.99	.0000	-.0002	.0003	.0006
#3	.0000	.0595	-.0012	.0115	.0000	25.84	.0000	-.0001	-.0001	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1260	20.56	5.587	.0250	.0005	1.199	.0004	-.0015	.0003	.0010
Stddev	.0046	.02	.017	.0000	.0001	.024	.0003	.0008	.0004	.0017
%RSD	3.669	.0876	.3093	.1565	25.04	1.978	71.93	53.85	148.0	161.6
#1	.1237	20.56	5.574	.0251	.0004	1.174	.0008	-.0007	.0001	-.0008
#2	.1313	20.58	5.580	.0250	.0006	1.203	.0002	-.0022	.0000	.0025
#3	.1230	20.54	5.607	.0250	.0004	1.221	.0003	-.0015	.0007	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.799	.0005	.0674	.0018	.0001	.0008	.0067
Stddev	.008	.0004	.0003	.0000	.0011	.0004	.0000
%RSD	.2996	73.21	.3729	1.870	893.6	47.61	.6911
#1	2.809	.0005	.0674	.0018	.0010	.0006	.0067
#2	2.794	.0009	.0677	.0018	.0005	.0012	.0067
#3	2.795	.0002	.0672	.0018	-.0011	.0005	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1670.0	4730.8	32065.	2246.5
Stddev	3.1	11.1	129.	10.1
%RSD	.18746	.23455	.40278	.44889
#1	1666.7	4718.5	31948.	2239.0
#2	1673.0	4740.2	32044.	2242.6
#3	1670.3	4733.6	32203.	2258.0

Zoom In Zoom Out

Sample Name: FA22073-2 Acquired: 2/13/2015 14:50:49 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.4840	-.0008	.0212	.0001	45.10	.0000	-.0002	.0012	.0007
Stddev	.000	.0218	.0004	.0002	.0001	.28	.000	.0002	.0001	.0002
%RSD	3506.	4.510	45.80	.9923	124.8	.6163	195.0	92.24	12.45	26.84
#1	.0002	.4597	-.0008	.0212	.0001	44.78	.0000	-.0001	.0011	.0008
#2	.0001	.4902	-.0004	.0210	.0000	45.29	-.0001	-.0004	.0014	.0005
#3	-.0003	.5020	-.0011	.0214	.0001	45.23	.0000	.0000	.0011	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1954	2.971	3.954	.0093	.0005	.8254	.0010	-.0016	.0008	.0010
Stddev	.0047	.020	.031	.0000	.0001	.0113	.0002	.0008	.0014	.0010
%RSD	2.417	.6703	.7855	.2073	11.01	1.373	18.33	52.19	178.4	108.7
#1	.2008	2.948	3.919	.0093	.0005	.8129	.0012	-.0023	.0003	.0003
#2	.1927	2.983	3.979	.0092	.0005	.8350	.0010	-.0017	-.0003	.0022
#3	.1926	2.982	3.964	.0093	.0004	.8284	.0008	-.0007	.0024	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.989	.0001	.1490	.0155	-.0011	.0036	.0143
Stddev	.003	.0003	.0007	.0011	.0010	.0001	.0001
%RSD	.1361	271.5	.4880	7.383	92.12	2.142	.3513
#1	1.991	.0004	.1482	.0145	.0001	.0036	.0144
#2	1.986	.0000	.1493	.0167	-.0018	.0037	.0143
#3	1.990	-.0001	.1496	.0154	-.0017	.0036	.0143

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1601.4	4522.6	30730.	2137.3
Stddev	3.7	5.7	89.	20.0
%RSD	.23396	.12668	.28895	.93787
#1	1600.4	4526.8	30735.	2160.0
#2	1605.6	4525.1	30816.	2129.7
#3	1598.3	4516.1	30638.	2122.1

Zoom In Zoom Out

Sample Name: FA22073-3 Acquired: 2/13/2015 14:54:56 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0104	.1426	-.0005	.9027	.0008	1778.	-.0027	-.0024	-.0008	-.0035
Stddev	.0039	.5403	.0069	.0088	.0035	6.	.0008	.0010	.0096	.0152
%RSD	37.22	379.0	1370.	.9797	462.8	.3294	28.74	39.47	1135.	429.0
#1	-.0133	.3754	-.0020	.9124	.0003	1776.	-.0018	-.0035	-.0118	.0055
#2	-.0060	.5275	.0070	.9006	.0044	1784.	-.0033	-.0022	.0033	-.0210
#3	-.0118	-.4751	-.0065	.8952	-.0025	1773.	-.0029	-.0016	.0060	.0049

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.180	10.93	253.9	.4997	-.0210	900.7	.0016	-.0851	.0004	-.0231
Stddev	.122	.44	.9	.0024	.0043	4.1	.0031	.0203	.0110	.0186
%RSD	1.490	3.994	.3732	.4892	20.54	.4541	185.6	23.89	2839.	80.36
#1	8.198	11.07	253.9	.4971	-.0187	898.6	.0035	-.0632	-.0014	-.0430
#2	8.050	11.29	254.9	.5003	-.0184	905.4	.0033	-.0887	-.0096	-.0204
#3	8.292	10.45	253.0	.5019	-.0260	898.1	-.0019	-.1034	.0121	-.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.446	.0065	9.192	.0388	.0529	.0026	.0340
Stddev	.076	.0048	.039	.0008	.0046	.0076	.0011
%RSD	.8088	73.93	.4263	2.184	8.705	292.2	3.300
#1	9.396	.0013	9.177	.0398	.0561	.0108	.0353
#2	9.407	.0108	9.237	.0382	.0476	.0011	.0335
#3	9.534	.0074	9.163	.0385	.0550	-.0041	.0332

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1582.8	4470.6	30213.	2108.0
Stddev	11.4	20.3	86.	22.9
%RSD	.72256	.45474	.28474	1.0859
#1	1588.1	4481.2	30310.	2130.2
#2	1590.7	4483.4	30145.	2084.4
#3	1569.7	4447.1	30185.	2109.5

Zoom In Zoom Out

Sample Name: FA22073-4 Acquired: 2/13/2015 14:59:05 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0087	-.0008	.0264	.0000	112.7	.0000	-.0004	.0000	.0003
Stddev	.0004	.0093	.0002	.0002	.0002	.4	.000	.0001	.000	.0002
%RSD	134.2	106.1	21.91	.9311	4071.	.3612	235.6	27.94	789.6	51.16
#1	.0002	.0118	-.0008	.0267	.0002	112.2	.0000	-.0003	-.0002	.0001
#2	-.0005	-.0017	-.0010	.0264	.0000	112.7	.0000	-.0005	.0002	.0004
#3	-.0004	.0160	-.0006	.0262	-.0002	113.0	-.0001	-.0003	-.0002	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0054	3.181	17.19	.0005	-.0007	58.94	-.0001	-.0015	.0006	.0003
Stddev	.0053	.040	.04	.0001	.0001	.20	.0001	.0003	.0001	.0008
%RSD	97.85	1.251	.2381	14.44	18.43	.3360	136.4	23.50	20.69	318.6
#1	.0008	3.142	17.17	.0006	-.0006	58.72	-.0002	-.0017	.0004	-.0004
#2	.0042	3.221	17.16	.0005	-.0009	59.01	.0000	-.0016	.0007	.0012
#3	.0112	3.179	17.23	.0005	-.0008	59.10	-.0001	-.0011	.0006	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.30	.0003	.7284	.0014	-.0006	.0000	.0336
Stddev	.01	.0001	.0023	.0001	.0022	.000	.0001
%RSD	.0582	26.03	.3173	8.521	344.1	391.0	.4322
#1	15.30	.0002	.7259	.0015	-.0013	-.0001	.0338
#2	15.31	.0003	.7288	.0015	.0018	-.0001	.0336
#3	15.30	.0004	.7305	.0013	-.0024	.0001	.0335

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1594.8	4521.0	29754.	2125.1
Stddev	4.5	5.3	152.	5.8
%RSD	.28053	.11741	.50983	.27178
#1	1589.9	4518.3	29641.	2130.9
#2	1595.8	4517.7	29695.	2125.1
#3	1598.7	4527.2	29927.	2119.3

Zoom In Zoom Out

Sample Name: FA22073-5 Acquired: 2/13/2015 15:03:13 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0024	-.0785	.0090	.4516	.0003	849.0	-.0001	-.0005	-.0035	-.0057
Stddev	.0023	.1129	.0139	.0016	.0006	4.5	.0002	.0011	.0012	.0017
%RSD	95.61	143.8	154.8	.3652	205.9	.5321	171.3	208.9	35.09	30.57
#1	-.0050	-.1935	.0178	.4518	.0004	844.4	-.0001	-.0009	-.0044	-.0059
#2	-.0005	.0321	.0162	.4498	-.0003	849.1	.0001	-.0014	-.0021	-.0038
#3	-.0017	-.0740	-.0070	.4530	.0008	853.5	-.0003	.0007	-.0040	-.0073

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.141	9.955	127.9	.1313	-.0075	353.5	-.0004	-.0314	.0055	-.0101
Stddev	.007	.378	.3	.0005	.0024	1.6	.0003	.0050	.0069	.0124
%RSD	.6017	3.799	.2666	.3573	32.02	.4515	68.36	15.98	123.8	122.9
#1	1.133	10.36	128.1	.1314	-.0096	352.1	-.0002	-.0337	.0102	-.0042
#2	1.147	9.902	128.1	.1307	-.0049	353.1	-.0007	-.0257	.0087	-.0018
#3	1.141	9.607	127.5	.1316	-.0081	355.2	-.0003	-.0349	-.0023	-.0244

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.603	.0002	7.515	.0161	.0164	-.0005	.0045
Stddev	.026	.0048	.047	.0040	.0083	.0020	.0009
%RSD	.2710	2950.	.6309	24.77	50.64	360.2	19.29
#1	9.593	.0010	7.465	.0136	.0071	.0001	.0047
#2	9.583	-.0050	7.521	.0141	.0232	-.0028	.0036
#3	9.632	.0045	7.560	.0207	.0189	.0010	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1625.6	4610.6	30375.	2163.4
Stddev	.2	11.3	71.	9.3
%RSD	.01521	.24539	.23521	.43056
#1	1625.5	4602.8	30456.	2166.7
#2	1625.8	4623.5	30351.	2170.7
#3	1625.4	4605.4	30319.	2152.9

Zoom In Zoom Out

Sample Name: FA22073-6 Acquired: 2/13/2015 15:07:22 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0256	-.0003	.0062	-.0001	9.680	-.0001	.0000	-.0001	.0039
Stddev	.000	.0060	.0003	.0003	.0001	.078	.0000	.0001	.0002	.0004
%RSD	1769.	23.29	102.1	5.424	77.90	.8099	18.07	173.7	240.4	10.67
#1	.0001	.0198	.0000	.0062	-.0001	9.605	-.0001	.0001	.0001	.0037
#2	-.0003	.0254	-.0004	.0065	-.0002	9.761	-.0001	.0000	-.0002	.0044
#3	.0001	.0317	-.0006	.0058	.0000	9.672	-.0001	.0000	-.0001	.0037

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.163	44.16	4.883	.0293	.0010	5.618	.0010	-.0005	.0002	.0025
Stddev	.014	.41	.063	.0000	.0000	.036	.0001	.0004	.0004	.0008
%RSD	1.177	.9397	1.287	.0898	4.034	.6382	8.297	83.30	256.0	30.42
#1	1.155	43.70	4.847	.0294	.0011	5.592	.0010	.0000	-.0001	.0023
#2	1.179	44.50	4.956	.0293	.0010	5.659	.0010	-.0007	.0006	.0019
#3	1.155	44.28	4.847	.0293	.0011	5.603	.0011	-.0006	.0000	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.604	.0006	.0375	.0011	-.0005	.0003	.0151
Stddev	.004	.0005	.0002	.0001	.0005	.0002	.0001
%RSD	.2355	78.37	.6409	9.827	102.5	61.85	.6869
#1	1.609	.0006	.0373	.0010	-.0011	.0005	.0152
#2	1.603	.0011	.0377	.0012	-.0002	.0001	.0151
#3	1.602	.0001	.0374	.0011	-.0002	.0004	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1593.5	4552.9	30024.	2115.5
Stddev	1.9	8.8	35.	23.1
%RSD	.11826	.19370	.11671	1.0901
#1	1594.3	4543.8	30051.	2135.6
#2	1591.3	4553.7	30037.	2090.3
#3	1594.7	4561.3	29985.	2120.5

Zoom In Zoom Out

Sample Name: FA22073-7 Acquired: 2/13/2015 15:11:30 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0014	.0410	-.0024	.1189	.0012	117.6	-.0005	-.0010	-.0030	-.0060
Stddev	.0041	.0646	.0024	.0009	.0007	.2	.0000	.0022	.0040	.0015
%RSD	290.4	157.6	102.4	.7869	56.20	.1840	8.368	210.1	133.0	24.98
#1	-.0060	.0871	-.0026	.1181	.0016	117.6	-.0005	.0001	-.0040	-.0063
#2	.0018	.0687	.0002	.1188	.0004	117.4	-.0006	-.0035	-.0064	-.0073
#3	.0000	-.0329	-.0046	.1199	.0015	117.8	-.0005	.0004	.0014	-.0044

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.884	13.76	14.50	.0403	.0000	201.8	.0017	-.0011	-.0010	.0164
Stddev	.012	.06	.17	.0004	.0017	.7	.0013	.0050	.0080	.0027
%RSD	.6234	.4212	1.197	1.086	12890.	.3682	76.68	443.7	846.5	16.33
#1	1.896	13.72	14.67	.0399	-.0018	202.1	.0024	.0009	.0041	.0188
#2	1.883	13.72	14.49	.0401	.0002	201.0	.0002	-.0068	.0032	.0135
#3	1.873	13.82	14.33	.0408	.0016	202.4	.0025	.0026	-.0102	.0169

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.550	.0011	1.714	.0054	.0115	.0014	.0144
Stddev	.014	.0035	.010	.0025	.0067	.0041	.0006
%RSD	.3848	313.2	.5835	46.82	57.88	301.2	4.108
#1	3.535	-.0005	1.715	.0043	.0038	.0000	.0140
#2	3.551	-.0013	1.704	.0036	.0152	-.0019	.0141
#3	3.562	.0051	1.724	.0083	.0155	.0060	.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1671.9	4765.7	31779.	2223.7
Stddev	7.3	14.6	29.	3.3
%RSD	.43712	.30542	.09134	.14666
#1	1678.6	4781.3	31750.	2220.3
#2	1672.8	4763.1	31808.	2226.7
#3	1664.1	4752.6	31778.	2224.2

Zoom In Zoom Out

Sample Name: FA22073-8 Acquired: 2/13/2015 15:15:41 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0037	.1902	.0137	.1478	-.0004	92.77	.0000	-.0025	-.0128	-.0122
Stddev	.0069	.4691	.0046	.0036	.0018	.53	.0014	.0015	.0086	.0008
%RSD	185.9	246.7	33.78	2.419	423.0	.5696	3969.	61.54	67.50	6.269
#1	-.0023	.6834	.0185	.1450	.0009	93.38	-.0014	-.0039	-.0168	-.0127
#2	.0024	-.2503	.0093	.1466	-.0025	92.40	.0013	-.0009	-.0186	-.0126
#3	-.0113	.1373	.0134	.1518	.0004	92.53	.0002	-.0027	-.0029	-.0113

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.905	12.02	13.96	.0376	.0009	474.4	-.0007	-.0163	.0206	.0361
Stddev	.037	.41	.60	.0004	.0034	1.1	.0019	.0122	.0070	.0208
%RSD	.7471	3.424	4.316	1.000	365.2	.2269	275.0	75.09	34.13	57.46
#1	4.864	11.61	13.33	.0380	-.0028	474.5	.0014	-.0082	.0168	.0515
#2	4.918	12.03	14.53	.0373	.0038	473.2	-.0024	-.0304	.0164	.0125
#3	4.933	12.43	14.03	.0375	.0018	475.4	-.0011	-.0103	.0288	.0444

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.424	.0057	1.070	.0042	.0026	-.0025	.0152
Stddev	.036	.0053	.002	.0015	.0013	.0044	.0004
%RSD	.8143	93.90	.1477	36.29	48.43	176.3	2.922
#1	4.391	.0104	1.068	.0054	.0039	-.0074	.0148
#2	4.419	-.0001	1.071	.0045	.0027	.0008	.0152
#3	4.463	.0067	1.071	.0025	.0013	-.0008	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1707.5	4853.3	32101.	2232.5
Stddev	8.4	22.9	151.	10.5
%RSD	.49299	.47181	.47164	.46929
#1	1714.7	4869.9	31948.	2240.6
#2	1709.6	4862.9	32250.	2236.2
#3	1698.2	4827.2	32105.	2220.6

Zoom In Zoom Out

Sample Name: FA22073-9 Acquired: 2/13/2015 15:19:51 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0345	-.1746	.0313	.2717	-.0093	594.5	.0005	-.0124	-.0447	-.0779
Stddev	.0222	1.429	.0481	.0422	.0062	1.4	.0057	.0158	.0211	.0145
%RSD	64.22	818.4	153.4	15.55	67.19	.2330	1228.	127.9	47.11	18.62
#1	-.0585	-1.574	.0524	.2294	-.0080	594.9	-.0061	.0018	-.0324	-.0731
#2	-.0303	-.2317	-.0237	.2718	-.0161	595.6	.0035	-.0094	-.0327	-.0942
#3	-.0148	1.282	.0652	.3139	-.0038	592.9	.0040	-.0295	-.0690	-.0664

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.602	176.1	78.58	.0626	-.0100	2700.	.0075	-.0692	-.0358	.1424
Stddev	.253	2.6	2.48	.0021	.0022	4.	.0064	.0657	.0615	.0941
%RSD	7.026	1.480	3.160	3.331	21.60	.1404	86.26	95.02	171.8	66.06
#1	3.832	179.1	76.00	.0628	-.0091	2700.	.0047	-.0407	.0179	.2095
#2	3.642	175.2	80.95	.0647	-.0084	2704.	.0148	-.0225	-.0224	.0349
#3	3.331	174.1	78.79	.0605	-.0124	2697.	.0029	-.1443	-.1028	.1829

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.026	.0084	23.01	.0195	.1448	-.0300	.0170
Stddev	.069	.0088	.03	.0043	.1101	.0325	.0034
%RSD	.9823	105.2	.1120	22.15	76.01	108.1	20.06
#1	6.947	.0180	22.98	.0197	.0605	-.0547	.0181
#2	7.051	.0063	23.03	.0151	.1045	-.0421	.0198
#3	7.078	.0008	23.02	.0237	.2693	.0067	.0132

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1698.5	4856.2	32135.	2240.2
Stddev	.5	10.2	174.	2.9
%RSD	.03018	.20924	.54188	.13030
#1	1698.0	4867.7	31980.	2241.9
#2	1699.0	4848.6	32323.	2236.9
#3	1698.6	4852.3	32102.	2241.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 15:24:01 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2519	41.13	1.950	2.007	2.029	41.18	1.994	1.982	2.071	2.024
Stddev	.0013	.37	.001	.015	.017	.41	.001	.002	.002	.001
%RSD	.5022	.9035	.0655	.7569	.8571	.9935	.0709	.1022	.0932	.0681
#1	.2532	40.76	1.951	1.992	2.010	40.73	1.994	1.982	2.071	2.024
#2	.2518	41.12	1.950	2.005	2.031	41.28	1.996	1.985	2.070	2.023
#3	.2507	41.51	1.949	2.023	2.045	41.53	1.994	1.981	2.073	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.52	40.73	39.85	2.050	1.965	41.43	1.954	1.988	1.955	1.962
Stddev	.34	.40	.24	.001	.006	.34	.001	.002	.001	.005
%RSD	.8500	.9875	.6071	.0574	.3035	.8260	.0719	.1125	.0251	.2682
#1	40.17	40.36	39.58	2.051	1.958	41.08	1.953	1.986	1.955	1.961
#2	40.53	40.66	39.94	2.050	1.967	41.46	1.955	1.987	1.954	1.968
#3	40.85	41.16	40.03	2.048	1.969	41.76	1.953	1.990	1.955	1.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.773	1.945	2.063	2.048	1.998	1.993	1.991
Stddev	.002	.004	.019	.001	.004	.002	.002
%RSD	.0829	.1778	.9241	.0559	.2246	.0809	.1075
#1	1.772	1.944	2.044	2.049	1.994	1.994	1.990
#2	1.773	1.949	2.064	2.047	2.003	1.991	1.994
#3	1.774	1.943	2.082	2.049	1.998	1.994	1.990
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 15:24:01 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1564.1	4458.6	29698.	2123.5
Stddev	2.5	5.2	35.	20.8
%RSD	.16246	.11576	.11736	.98026
#1	1567.0	4464.5	29660.	2139.6
#2	1563.0	4455.9	29729.	2130.9
#3	1562.3	4455.3	29704.	2100.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 15:27:58 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0182	.0006	.0003	.0002	.0048	.0003	.0001	-.0001
Stddev	.0004	.0159	.0002	.0003	.0001	.0055	.0001	.0001	.0004
%RSD	150.6	87.45	28.23	103.8	52.39	113.7	46.73	97.80	341.2
#1	-.0001	.0245	.0005	.0005	.0001	.0102	.0004	.0003	.0001
#2	-.0007	.0001	.0009	.0000	.0001	.0050	.0003	.0001	-.0005
#3	.0000	.0300	.0006	.0004	.0003	-.0007	.0002	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0433	.0400	-.0105	.0004	F.0036	.0241	.0004	.0003
Stddev	.0001	.0123	.0491	.0450	.0000	.0006	.0162	.0001	.0008
%RSD	175.4	28.52	122.8	427.4	9.817	18.02	67.16	37.38	254.6
#1	-.0001	.0569	.0899	-.0408	.0004	.0042	.0426	.0004	.0007
#2	.0000	.0399	-.0083	-.0320	.0003	.0036	.0170	.0005	-.0006
#3	-.0001	.0329	.0384	.0412	.0004	.0029	.0127	.0002	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0019	-.0007	F.0012	.0004	.0017	-.0004	.0004	.0004
Stddev	.0006	.0016	.0006	.0002	.0001	.0002	.0002	.0003	.0000
%RSD	72.06	83.87	83.81	17.10	18.82	10.90	45.23	98.04	5.790
#1	.0008	.0007	.0000	.0013	.0003	.0019	-.0003	.0007	.0004
#2	.0003	.0036	-.0012	.0014	.0003	.0017	-.0006	.0003	.0004
#3	.0016	.0012	-.0010	.0010	.0004	.0015	-.0003	.0000	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 15:27:58 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1622.4	4638.6	30878.	2153.6
Stddev	5.8	7.0	142.	9.4
%RSD	.35794	.15120	.46124	.43841
#1	1620.3	4634.2	30743.	2154.8
#2	1629.0	4646.7	31027.	2162.4
#3	1618.0	4634.9	30863.	2143.6

Zoom In Zoom Out

Sample Name: FA22073-10 Acquired: 2/13/2015 15:32:11 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0135	-.0011	.1667	.0002	231.0	-.0002	-.0004	.0006
Stddev	.0018	.0184	.0006	.0010	.0001	1.3	.0000	.0002	.0001
%RSD	259.7	135.7	55.49	.6173	32.23	.5685	14.62	44.26	20.37
#1	.0009	.0299	-.0017	.1657	.0003	230.4	-.0002	-.0002	.0005
#2	-.0002	.0170	-.0009	.1668	.0002	230.2	-.0003	-.0005	.0008
#3	-.0027	-.0063	-.0006	.1678	.0003	232.6	-.0002	-.0004	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	1.958	39.61	26.89	.0883	.0000	F1429.	-.0004	-.0031
Stddev	.0010	.004	.33	.14	.0016	.000	9.	.0006	.0022
%RSD	387.0	.2259	.8255	.5086	1.782	2433.	.6019	140.7	69.82
#1	.0012	1.959	39.27	26.73	.0894	.0002	1435.	-.0011	-.0007
#2	.0004	1.953	39.64	26.97	.0890	-.0004	1419.	-.0002	-.0049
#3	-.0008	1.961	39.92	26.96	.0865	.0001	1432.	.0000	-.0037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	-.0013	9.185	.0004	6.020	.0040	.0032	.0003	.0062
Stddev	.0040	.0027	.033	.0005	.023	.0002	.0015	.0002	.0001
%RSD	1575.	201.9	.3605	123.8	.3890	4.000	46.34	74.24	1.120
#1	-.0031	-.0044	9.149	.0002	6.004	.0042	.0015	.0005	.0061
#2	.0043	.0005	9.191	.0010	6.009	.0040	.0041	.0005	.0063
#3	-.0020	-.0001	9.214	.0001	6.047	.0040	.0040	.0000	.0062

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1492.8	4367.0	27912.	2031.6
Stddev	6.6	16.8	384.	20.3
%RSD	.44468	.38416	1.3746	1.0014
#1	1496.5	4385.3	27650.	2046.6
#2	1496.7	4363.5	27733.	2039.7
#3	1485.1	4352.3	28352.	2008.4

Zoom In Zoom Out

Sample Name: FA22073-11 Acquired: 2/13/2015 15:36:28 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0063	.1213	-.0083	.5642	-.0003	1650.	-.0018	-.0025	-.0023	-.0075
Stddev	.0034	.1282	.0152	.0018	.0041	4.	.0003	.0008	.0080	.0068
%RSD	53.74	105.7	182.1	.3130	1576.	.2200	19.28	31.03	347.1	90.29
#1	-.0091	.2629	.0089	.5661	.0033	1653.	-.0017	-.0034	-.0053	-.0002
#2	-.0025	.0879	-.0140	.5627	.0007	1646.	-.0022	-.0024	.0068	-.0136
#3	-.0072	.0132	-.0199	.5636	-.0048	1651.	-.0015	-.0018	-.0083	-.0088

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5009	7.726	146.0	.1894	-.0112	757.9	.0020	-.0320	.0140	-.0161
Stddev	.0595	.284	.5	.0007	.0030	.8	.0009	.0140	.0129	.0174
%RSD	11.88	3.680	.3100	.3698	27.08	.1023	43.62	43.75	92.43	107.8
#1	.5658	7.402	146.3	.1888	-.0111	758.7	.0020	-.0414	.0112	.0015
#2	.4882	7.932	146.3	.1893	-.0083	757.2	.0029	-.0387	.0027	-.0332
#3	.4488	7.844	145.5	.1902	-.0143	757.9	.0011	-.0159	.0281	-.0167

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.482	-.0011	6.457	.0294	.0428	.0017	.0084
Stddev	.028	.0095	.032	.0024	.0195	.0027	.0004
%RSD	.2898	840.9	.4992	8.197	45.52	161.5	5.115
#1	9.455	-.0015	6.495	.0314	.0319	.0028	.0088
#2	9.483	.0086	6.439	.0267	.0312	-.0014	.0079
#3	9.510	-.0104	6.439	.0301	.0653	.0036	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.8	4584.1	30128.	2119.2
Stddev	4.6	11.8	96.	5.8
%RSD	.28539	.25796	.31951	.27499
#1	1611.7	4597.4	30038.	2122.5
#2	1605.9	4580.2	30230.	2122.7
#3	1602.7	4574.7	30116.	2112.5

Zoom In Zoom Out

Sample Name: FA22073-12 Acquired: 2/13/2015 15:40:38 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0128	.1470	.0098	.0903	-.0068	142.8	-.0014	-.0100	-.0326	-.0268
Stddev	.0199	.1880	.0067	.0157	.0062	.7	.0022	.0038	.0112	.0027
%RSD	156.2	127.9	68.09	17.34	90.71	.5183	154.2	38.29	34.47	10.12
#1	-.0346	.0130	.0053	.0908	-.0052	142.0	-.0006	-.0141	-.0324	-.0295
#2	.0046	.3619	.0176	.1058	-.0016	143.4	.0003	-.0065	-.0439	-.0240
#3	-.0083	.0662	.0067	.0744	-.0136	143.1	-.0039	-.0094	-.0215	-.0271

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.6394	4.832	16.08	.0238	.0114	67.62	-.0040	-.0112	.0483	.0338
Stddev	.1911	1.164	1.68	.0015	.0018	1.12	.0065	.0154	.0207	.0376
%RSD	29.89	24.09	10.44	6.517	15.35	1.653	163.5	137.4	42.82	111.2
#1	.4890	6.169	15.19	.0244	.0094	68.57	-.0002	.0030	.0674	.0490
#2	.8544	4.045	15.03	.0249	.0125	67.89	-.0002	-.0090	.0264	-.0090
#3	.5747	4.281	18.02	.0220	.0124	66.39	-.0114	-.0277	.0510	.0615

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.946	.0120	.6548	.0138	-.0147	-.0062	.0165
Stddev	.034	.0219	.0097	.0094	.0243	.0038	.0016
%RSD	.4933	183.4	1.486	68.39	166.0	61.01	9.443
#1	6.976	.0160	.6438	.0246	-.0423	-.0019	.0157
#2	6.909	-.0117	.6624	.0081	-.0050	-.0090	.0183
#3	6.953	.0316	.6580	.0086	.0033	-.0077	.0154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.6	4626.0	30774.	2108.0
Stddev	.7	4.2	26.	9.9
%RSD	.04583	.09150	.08302	.46799
#1	1623.9	4626.8	30785.	2111.7
#2	1624.1	4629.8	30793.	2096.8
#3	1622.7	4621.5	30745.	2115.5

Zoom In Zoom Out

Sample Name: MP28553-MB1 Acquired: 2/13/2015 15:44:50 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0077	-.0011	.0002	-.0001	.0129	.0000	-.0002	-.0007	-.0007
Stddev	.0005	.0093	.0005	.0003	.0001	.0087	.000	.0001	.0003	.0001
%RSD	167.7	121.0	48.39	204.6	50.78	67.63	37.23	59.06	41.52	19.12
#1	.0003	.0094	-.0017	.0001	-.0002	.0222	.0000	-.0002	-.0010	-.0008
#2	-.0005	-.0024	-.0010	-.0001	-.0001	.0113	.0000	-.0001	-.0006	-.0006
#3	-.0006	.0160	-.0007	.0005	.0000	.0050	.0000	-.0003	-.0005	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0056	.0030	.0000	.0003	.0806	-.0001	-.0006	.0001	.0004
Stddev	.0050	.0075	.0262	.0000	.0001	.0201	.0001	.0005	.0004	.0004
%RSD	299.9	135.3	862.5	84.90	44.55	24.93	110.8	90.71	270.2	117.4
#1	-.0021	.0067	.0332	.0001	.0002	.0939	.0000	-.0002	-.0003	.0006
#2	.0074	-.0025	-.0110	.0000	.0003	.0905	-.0001	-.0003	.0002	.0007
#3	-.0002	.0125	-.0131	.0000	.0005	.0575	-.0001	-.0012	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0179	.0005	.0000	-.0001	-.0014	.0000	.0005
Stddev	.0003	.0004	.0000	.0001	.0006	.0001	.0001
%RSD	1.565	91.75	113.4	146.8	44.51	957.5	15.55
#1	.0181	.0002	.0000	-.0001	-.0020	.0001	.0006
#2	.0176	.0002	.0000	.0001	-.0016	.0000	.0004
#3	.0180	.0009	.0000	-.0002	-.0007	-.0001	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28553-MB1 Acquired: 2/13/2015 15:44:50 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1601.8	4604.6	30722.	2120.8
Stddev	2.2	5.0	22.	12.6
%RSD	.13437	.10835	.07117	.59581
#1	1599.6	4600.1	30734.	2109.6
#2	1601.7	4603.8	30735.	2134.5
#3	1603.9	4610.0	30697.	2118.2

Zoom In Zoom Out

Sample Name: MP28553-B1 Acquired: 2/13/2015 15:49:02 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0492	28.46	1.949	2.073	.0534	26.45	.0492	.4999	.2174	.2622
Stddev	.0002	.12	.002	.017	.0004	.07	.0001	.0003	.0002	.0005
%RSD	.4743	.4044	.0882	.8209	.8389	.2741	.2061	.0640	.1149	.2057
#1	.0495	28.45	1.949	2.079	.0531	26.43	.0493	.4998	.2171	.2624
#2	.0491	28.59	1.947	2.086	.0539	26.54	.0492	.5002	.2176	.2616
#3	.0491	28.36	1.950	2.054	.0531	26.40	.0492	.4996	.2175	.2626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.64	25.52	25.08	.5197	.4771	26.49	.4998	.4974	.4885	1.927
Stddev	.14	.20	.15	.0016	.0007	.10	.0005	.0004	.0008	.003
%RSD	.5217	.7710	.5793	.3092	.1550	.3713	.1045	.0820	.1701	.1554
#1	26.69	25.66	25.08	.5203	.4764	26.54	.4994	.4978	.4895	1.930
#2	26.75	25.61	25.22	.5179	.4779	26.56	.4995	.4975	.4881	1.925
#3	26.48	25.30	24.93	.5210	.4770	26.38	.5004	.4970	.4880	1.925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0209	.4939	.5252	.5117	2.017	.4982	.5054
Stddev	.0003	.0015	.0031	.0013	.004	.0023	.0003
%RSD	1.669	.3008	.5849	.2604	.1987	.4564	.0661
#1	.0208	.4945	.5273	.5127	2.021	.4986	.5051
#2	.0206	.4949	.5267	.5102	2.018	.4958	.5053
#3	.0213	.4922	.5217	.5123	2.013	.5003	.5058
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28553-B1 Acquired: 2/13/2015 15:49:02 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1593.1	4533.2	29744.	2115.7
Stddev	3.9	3.0	76.	8.7
%RSD	.24627	.06707	.25522	.41146
#1	1591.1	4532.8	29810.	2125.3
#2	1590.6	4530.3	29762.	2108.4
#3	1597.6	4536.3	29661.	2113.3

Zoom In Zoom Out

Sample Name: FA22018-2 Acquired: 2/13/2015 15:53:01 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	-.0159	-.0007	.0359	.0000	5.184	-.0001	-.0002	.0026
Stddev	.0003	.0047	.0006	.0002	.000	.051	.0001	.0001	.0002
%RSD	153.7	29.24	89.38	.5267	408.2	.9810	81.15	71.81	9.444
#1	.0005	-.0105	-.0014	.0358	.0000	5.130	.0000	-.0003	.0029
#2	.0002	-.0185	-.0001	.0357	-.0001	5.193	-.0001	-.0003	.0026
#3	-.0001	-.0187	-.0006	.0361	.0000	5.231	-.0001	.0000	.0024

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	.0384	.1569	38.02	.0001	.0390	F141.8	.0001	.0009
Stddev	.0007	.0041	.0199	.15	.0000	.0003	.8	.0002	.0009
%RSD	219.7	10.74	12.66	.3883	4.664	.6936	.5772	172.8	104.2
#1	.0011	.0392	.1473	37.88	.0001	.0393	140.9	.0001	.0019
#2	-.0001	.0421	.1437	38.02	.0001	.0390	142.3	.0003	.0002
#3	-.0001	.0340	.1798	38.17	.0001	.0387	142.4	-.0001	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0020	.0499	.0007	.0079	.0005	.0011	.0000	.0012
Stddev	.0003	.0014	.0031	.0002	.0000	.0002	.0005	.000	.0000
%RSD	104.4	66.16	6.247	27.76	.1694	33.57	44.66	899.9	1.839
#1	.0000	.0029	.0486	.0006	.0079	.0006	.0009	.0000	.0011
#2	.0005	.0005	.0535	.0007	.0079	.0006	.0007	.0003	.0012
#3	.0004	.0027	.0477	.0010	.0079	.0003	.0016	-.0004	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1581.2	4540.7	29569.	2083.2
Stddev	2.3	2.6	291.	16.8
%RSD	.14400	.05721	.98527	.80641
#1	1579.6	4540.0	29347.	2101.1
#2	1580.2	4538.5	29460.	2080.9
#3	1583.8	4543.6	29899.	2067.7

Zoom In Zoom Out

Sample Name: MP28553-D1 Acquired: 2/13/2015 15:57:11 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	-.0031	.0001	.0357	.0000	5.169	-.0001	-.0002	.0022
Stddev	.0002	.0181	.0012	.0004	.000	.011	.0001	.0001	.0003
%RSD	238.0	584.2	1853.	1.048	169.7	.2154	151.1	75.48	13.61
#1	-.0001	-.0103	-.0012	.0353	-.0001	5.156	-.0001	-.0002	.0019
#2	.0003	-.0166	.0002	.0359	-.0001	5.176	-.0002	.0000	.0022
#3	.0000	.0175	.0012	.0359	.0000	5.174	.0000	-.0003	.0025

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	.0208	.1352	37.98	.0001	.0391	F140.8	.0000	.0005
Stddev	.0002	.0050	.0292	.17	.0001	.0004	.3	.000	.0006
%RSD	90.89	24.13	21.62	.4561	118.8	.8985	.2034	308.4	123.9
#1	.0001	.0197	.1620	37.86	.0001	.0390	140.6	-.0002	-.0002
#2	.0005	.0263	.1040	38.18	.0000	.0388	140.6	.0001	.0010
#3	.0001	.0165	.1396	37.91	.0001	.0395	141.1	-.0001	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0012	.0499	.0005	.0078	.0003	-.0012	-.0003	.0012
Stddev	.0015	.0013	.0004	.0003	.0001	.0001	.0005	.0001	.0001
%RSD	250.9	106.5	.8338	71.45	1.206	32.33	43.83	41.20	6.342
#1	-.0012	.0007	.0497	.0009	.0078	.0004	-.0015	-.0001	.0013
#2	.0013	.0027	.0495	.0004	.0078	.0002	-.0006	-.0003	.0012
#3	.0017	.0003	.0503	.0002	.0079	.0003	-.0015	-.0003	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1575.1	4518.4	29417.	2097.6
Stddev	7.3	10.8	21.	5.4
%RSD	.46340	.23830	.07219	.25823
#1	1583.2	4530.9	29419.	2091.4
#2	1572.8	4512.5	29437.	2099.6
#3	1569.2	4512.0	29394.	2101.7

Zoom In Zoom Out

Sample Name: MP28553-SD1 Acquired: 2/13/2015 16:01:23 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0027	-.0290	.0001	.0374	-.0011	5.623	-.0001	-.0010	.0018	-.0014
Stddev	.0027	.0670	.0030	.0013	.0002	.008	.0003	.0006	.0021	.0011
%RSD	103.0	231.2	2609.	3.391	15.15	.1494	206.1	55.52	112.9	74.97
#1	-.0003	-.0726	.0009	.0372	-.0010	5.628	-.0005	-.0005	.0027	-.0023
#2	-.0057	-.0625	.0026	.0388	-.0010	5.613	.0001	-.0009	.0033	-.0002
#3	-.0020	.0482	-.0032	.0363	-.0013	5.627	-.0001	-.0016	-.0005	-.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0252	-.0528	38.75	.0000	.0393	148.1	.0007	-.0008	.0050	.0090
Stddev	.0287	.2055	.36	.000	.0001	.3	.0010	.0033	.0027	.0012
%RSD	114.0	388.9	.9383	1666.	.2373	.1807	143.7	401.4	54.03	13.77
#1	-.0064	.1808	38.40	.0000	.0392	147.9	.0004	.0018	.0056	.0102
#2	.0322	-.2055	38.73	-.0001	.0393	147.9	-.0001	-.0045	.0075	.0090
#3	.0498	-.1337	39.13	.0001	.0394	148.4	.0018	.0003	.0021	.0077

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0436	.0022	.0082	.0002	.0041	-.0004	.0020
Stddev	.0039	.0016	.0008	.0002	.0027	.0015	.0003
%RSD	8.920	74.13	9.279	108.8	65.55	354.3	15.42
#1	.0443	.0005	.0074	.0000	.0014	.0013	.0016
#2	.0394	.0024	.0083	.0004	.0068	-.0016	.0021
#3	.0471	.0038	.0089	.0001	.0042	-.0010	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1643.7	4691.3	31056.	2150.4
Stddev	1.3	9.2	25.	12.4
%RSD	.07812	.19521	.08159	.57624
#1	1644.7	4700.4	31074.	2164.3
#2	1642.2	4691.4	31027.	2146.1
#3	1644.0	4682.1	31067.	2140.7

Zoom In Zoom Out

Sample Name: MP28553-S1 Acquired: 2/13/2015 16:05:36 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0503	28.59	2.011	2.143	.0535	31.54	.0498	.5045	.2192
Stddev	.0007	.15	.004	.007	.0003	.16	.0002	.0014	.0002
%RSD	1.348	.5105	.1839	.3322	.5801	.4944	.3213	.2813	.0811
#1	.0506	28.53	2.007	2.137	.0533	31.47	.0496	.5029	.2191
#2	.0495	28.75	2.013	2.151	.0539	31.72	.0499	.5049	.2193
#3	.0507	28.48	2.014	2.140	.0534	31.43	.0498	.5056	.2194

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2654	26.85	27.06	63.59	.5194	.5258	F166.7	.5055	.5059
Stddev	.0003	.12	.14	.33	.0012	.0022	.7	.0019	.0018
%RSD	.0998	.4315	.5073	.5209	.2384	.4268	.4454	.3754	.3491
#1	.2656	26.80	26.93	63.51	.5184	.5232	166.3	.5033	.5038
#2	.2651	26.99	27.20	63.96	.5208	.5267	167.6	.5067	.5070
#3	.2655	26.78	27.06	63.31	.5189	.5275	166.3	.5066	.5068

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5028	2.008	.0519	.5049	.5380	.5158	2.063	.5044	.5092
Stddev	.0025	.007	.0010	.0010	.0014	.0005	.012	.0009	.0018
%RSD	.4922	.3693	1.993	.1937	.2676	.1008	.5663	.1828	.3566
#1	.5001	2.000	.0525	.5042	.5371	.5164	2.050	.5043	.5071
#2	.5034	2.013	.0507	.5046	.5397	.5153	2.073	.5035	.5104
#3	.5050	2.011	.0525	.5061	.5372	.5159	2.065	.5053	.5101

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1573.0	4492.4	29529.	2118.8
Stddev	7.8	16.9	65.	14.5
%RSD	.49608	.37718	.21900	.68381
#1	1581.7	4511.8	29587.	2128.4
#2	1566.8	4485.1	29459.	2102.2
#3	1570.5	4480.3	29541.	2126.0

Zoom In Zoom Out

Sample Name: MP28553-S2 Acquired: 2/13/2015 16:09:34 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0502	28.28	1.990	2.129	.0531	31.19	.0493	.5007	.2179
Stddev	.0001	.06	.002	.005	.0002	.08	.0001	.0004	.0008
%RSD	.2099	.1980	.0990	.2429	.4186	.2682	.2158	.0774	.3834
#1	.0501	28.33	1.990	2.135	.0531	31.28	.0492	.5009	.2187
#2	.0503	28.22	1.992	2.126	.0529	31.11	.0493	.5003	.2171
#3	.0502	28.30	1.988	2.126	.0533	31.19	.0494	.5010	.2178

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2626	26.59	26.95	62.95	.5154	.5211	F164.9	.5016	.5029
Stddev	.0005	.04	.11	.16	.0010	.0002	.2	.0003	.0026
%RSD	.1834	.1333	.3991	.2478	.1994	.0379	.1127	.0622	.5079
#1	.2632	26.60	27.07	63.12	.5164	.5209	165.0	.5018	.5038
#2	.2623	26.55	26.89	62.82	.5143	.5211	164.9	.5017	.4999
#3	.2624	26.61	26.87	62.91	.5153	.5212	164.7	.5012	.5048

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4967	1.986	.0509	.4992	.5326	.5105	2.044	.4999	.5047
Stddev	.0012	.003	.0003	.0009	.0009	.0009	.005	.0005	.0003
%RSD	.2476	.1723	.6524	.1718	.1757	.1694	.2438	.1004	.0519
#1	.4978	1.982	.0511	.5002	.5332	.5110	2.044	.5004	.5044
#2	.4969	1.988	.0512	.4991	.5331	.5095	2.039	.4994	.5049
#3	.4954	1.988	.0506	.4985	.5315	.5110	2.049	.5000	.5048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1569.5	4488.2	29484.	2096.2
Stddev	3.9	4.4	52.	10.0
%RSD	.24688	.09763	.17781	.47505
#1	1566.4	4483.9	29428.	2096.6
#2	1573.9	4488.0	29532.	2106.0
#3	1568.2	4492.7	29492.	2086.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 16:13:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2514	41.42	1.958	2.027	2.039	41.40	1.999	1.987	2.070	2.016
Stddev	.0008	.13	.004	.002	.005	.09	.002	.002	.005	.002
%RSD	.3116	.3074	.1922	.0866	.2328	.2143	.0755	.0897	.2509	.1015
#1	.2520	41.56	1.959	2.026	2.041	41.50	1.999	1.987	2.064	2.014
#2	.2505	41.41	1.953	2.029	2.041	41.33	1.998	1.986	2.071	2.016
#3	.2515	41.30	1.960	2.027	2.033	41.36	2.001	1.989	2.074	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.69	41.37	40.04	2.054	1.970	41.72	1.961	1.996	1.959	1.970
Stddev	.05	.05	.23	.003	.005	.08	.001	.004	.004	.003
%RSD	.1164	.1198	.5715	.1320	.2503	.1812	.0691	.1887	.2122	.1518
#1	40.74	41.32	40.29	2.051	1.965	41.80	1.960	2.000	1.961	1.973
#2	40.69	41.42	39.98	2.055	1.970	41.68	1.959	1.993	1.955	1.969
#3	40.65	41.36	39.84	2.056	1.975	41.67	1.962	1.996	1.962	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.775	1.947	2.081	2.050	2.004	1.985	1.997
Stddev	.003	.002	.004	.001	.003	.002	.002
%RSD	.1515	.1102	.1846	.0638	.1566	.0824	.0744
#1	1.773	1.948	2.084	2.049	2.003	1.987	1.998
#2	1.774	1.944	2.082	2.049	2.002	1.984	1.996
#3	1.778	1.948	2.076	2.052	2.008	1.985	1.997
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 16:13:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1565.2	4466.6	29793.	2099.9
Stddev	1.6	3.2	22.	9.0
%RSD	.10429	.07129	.07509	.43010
#1	1564.1	4464.2	29816.	2089.7
#2	1567.0	4470.2	29792.	2107.0
#3	1564.4	4465.4	29771.	2103.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 16:17:26 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0154	.0002	.0003	.0004	.0027	.0003	.0002	.0003
Stddev	.0001	.0038	.0007	.0003	.0001	.0019	.0000	.0001	.0005
%RSD	50.24	24.69	431.8	136.4	30.30	71.27	8.387	31.18	140.6
#1	-.0001	.0110	.0010	.0001	.0002	.0037	.0003	.0002	.0003
#2	-.0001	.0175	-.0002	.0000	.0004	.0005	.0003	.0001	.0009
#3	-.0002	.0178	-.0003	.0006	.0004	.0040	.0002	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0441	-.0264	.0036	.0004	F.0035	.0505	.0003	-.0003
Stddev	.0003	.0159	.0179	.0407	.0000	.0010	.0021	.0001	.0011
%RSD	251.8	36.03	67.79	1132.	6.478	27.48	4.206	24.09	383.9
#1	.0003	.0614	-.0098	.0484	.0004	.0045	.0513	.0002	.0009
#2	.0001	.0409	-.0454	-.0311	.0005	.0034	.0481	.0003	-.0012
#3	-.0002	.0301	-.0241	-.0065	.0004	.0026	.0521	.0003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0014	-.0006	F.0010	.0004	.0019	.0011	.0003	.0003
Stddev	.0015	.0008	.0002	.0000	.0001	.0002	.0005	.0002	.0001
%RSD	89.49	57.33	29.74	4.511	26.94	10.61	42.48	52.91	17.42
#1	.0032	.0023	-.0004	.0011	.0003	.0021	.0016	.0001	.0004
#2	.0003	.0013	-.0008	.0010	.0005	.0020	.0009	.0004	.0003
#3	.0015	.0007	-.0006	.0010	.0005	.0017	.0007	.0005	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 16:17:26 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1601.5	4579.1	30527.	2109.0
Stddev	4.0	12.6	78.	27.0
%RSD	.24903	.27554	.25539	1.2811
#1	1597.3	4569.3	30437.	2096.9
#2	1605.2	4593.4	30578.	2090.1
#3	1601.9	4574.8	30565.	2140.0

Zoom In Zoom Out

Sample Name: FA22018-1 Acquired: 2/13/2015 16:21:40 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0006	-.0001	.0445	.0000	5.236	.0000	-.0002	.0021
Stddev	.0004	.0156	.0005	.0000	.000	.015	.000	.0001	.0002
%RSD	625.5	2584.	432.2	.0402	319.7	.2936	315.7	58.53	10.19
#1	-.0004	.0184	.0003	.0445	.0001	5.220	.0000	-.0003	.0021
#2	.0000	-.0104	.0000	.0445	-.0001	5.251	-.0001	-.0002	.0018
#3	.0003	-.0062	-.0006	.0445	-.0001	5.239	.0000	-.0001	.0023

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0082	.1666	32.56	.0001	.0224	F148.2	-.0001	.0000
Stddev	.0001	.0067	.0210	.06	.0000	.0001	.2	.0001	.000
%RSD	30.64	81.48	12.59	.1713	52.53	.4853	.1485	83.84	1391.
#1	.0005	.0142	.1451	32.54	.0001	.0225	148.3	-.0002	-.0004
#2	.0004	.0010	.1869	32.52	.0001	.0223	148.4	-.0001	.0001
#3	.0003	.0096	.1679	32.63	.0000	.0223	148.0	.0000	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0021	.0278	.0006	.0083	.0005	-.0012	-.0001	.0007
Stddev	.0017	.0010	.0003	.0000	.0001	.0002	.0005	.0002	.0000
%RSD	87.61	46.30	1.048	6.367	1.543	39.45	39.08	160.9	1.663
#1	.0036	.0021	.0281	.0006	.0084	.0007	-.0018	-.0001	.0007
#2	.0002	.0031	.0275	.0006	.0084	.0006	-.0010	.0001	.0007
#3	.0020	.0012	.0277	.0006	.0082	.0003	-.0010	-.0003	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1592.1	4550.9	30175.	2110.2
Stddev	2.1	9.0	68.	4.4
%RSD	.13481	.19740	.22663	.20672
#1	1591.5	4540.6	30254.	2105.2
#2	1590.4	4555.6	30126.	2112.2
#3	1594.5	4556.6	30146.	2113.2

Zoom In Zoom Out

Sample Name: MP28553-D2 Acquired: 2/13/2015 16:25:53 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0141	.0001	.0439	-.0001	5.330	.0000	-.0002	.0016
Stddev	.0002	.0223	.0007	.0002	.0001	.006	.000	.0001	.0006
%RSD	587.9	157.7	515.7	.4799	184.9	.1073	43.97	62.13	37.30
#1	-.0002	.0040	-.0007	.0436	-.0001	5.327	.0000	-.0002	.0024
#2	.0002	.0397	.0007	.0440	-.0001	5.326	-.0001	-.0001	.0013
#3	.0001	-.0013	.0004	.0440	.0001	5.337	.0000	-.0004	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	.0052	.1511	33.82	.0000	.0226	F153.3	.0000	.0009
Stddev	.0001	.0044	.0528	.10	.000	.0003	.2	.000	.0011
%RSD	66.18	85.25	34.95	.2975	176.5	1.117	.1476	2100.	123.7
#1	.0002	.0101	.1472	33.73	.0000	.0224	153.0	.0002	-.0002
#2	.0001	.0039	.2058	33.80	.0000	.0227	153.5	-.0002	.0020
#3	.0003	.0015	.1003	33.93	.0000	.0228	153.3	.0000	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0027	.0272	.0004	.0086	.0003	.0001	-.0001	.0005
Stddev	.0004	.0007	.0007	.0003	.0001	.0002	.0007	.0001	.0001
%RSD	97.30	28.01	2.584	68.38	.9908	49.87	584.5	70.11	12.62
#1	.0000	.0019	.0272	.0005	.0086	.0005	.0005	.0000	.0005
#2	.0005	.0034	.0265	.0007	.0087	.0001	-.0007	-.0001	.0006
#3	.0008	.0028	.0279	.0001	.0085	.0003	.0005	-.0001	.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1567.2	4504.2	29552.	2066.4
Stddev	5.4	7.4	57.	4.7
%RSD	.34655	.16318	.19278	.22596
#1	1567.1	4500.6	29573.	2063.0
#2	1572.7	4512.6	29488.	2064.5
#3	1561.9	4499.3	29596.	2071.7

Zoom In Zoom Out

Sample Name: MP28553-MB2 Acquired: 2/13/2015 16:30:05 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0013	-.0003	.0022	-.0001	.0672	-.0001	-.0002	-.0003
Stddev	.0001	.0181	.0007	.0002	.0001	.0012	.0000	.0001	.0003
%RSD	107.3	1406.	264.7	9.018	113.4	1.818	36.21	64.82	96.03
#1	-.0001	-.0127	-.0008	.0021	-.0001	.0685	-.0001	-.0001	-.0002
#2	.0000	.0217	-.0006	.0021	-.0002	.0673	-.0001	-.0004	-.0001
#3	-.0002	-.0051	.0006	.0024	.0000	.0660	.0000	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0027	.1142	.0338	.0001	.0005	F143.1	.0000	.0024
Stddev	.0003	.0027	.0191	.0499	.0000	.0002	.9	.0001	.0010
%RSD	71.70	98.66	16.73	147.6	27.29	35.75	.6263	172.1	42.18
#1	-.0005	.0057	.0959	.0632	.0001	.0006	144.0	.0001	.0032
#2	-.0008	.0021	.1127	-.0238	.0001	.0004	143.0	.0001	.0013
#3	-.0001	.0004	.1340	.0621	.0002	.0004	142.2	.0000	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0016	.0226	.0009	.0001	.0001	-.0010	-.0003	.0016
Stddev	.0005	.0006	.0001	.0001	.0001	.0001	.0012	.0001	.0000
%RSD	36.94	41.86	.6540	16.67	111.2	96.16	119.9	28.40	2.822
#1	.0009	.0013	.0228	.0009	.0000	.0000	.0003	-.0002	.0016
#2	.0019	.0011	.0226	.0007	.0001	.0002	-.0021	-.0004	.0016
#3	.0012	.0023	.0225	.0010	.0000	.0001	-.0012	-.0003	.0016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28553-MB2 Acquired: 2/13/2015 16:30:05 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1609.3	4603.0	29803.	2095.3
Stddev	3.1	8.6	98.	22.2
%RSD	.18959	.18780	.32943	1.0591
#1	1607.5	4593.9	29914.	2070.7
#2	1612.8	4611.2	29729.	2101.2
#3	1607.5	4603.8	29765.	2113.9

Zoom In Zoom Out

Sample Name: MP28553-B2 Acquired: 2/13/2015 16:34:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0493	28.30	1.950	2.074	.0531	26.32	.0490	.4971	.2158
Stddev	.0003	.07	.001	.003	.0001	.10	.0001	.0002	.0013
%RSD	.5282	.2319	.0538	.1357	.2145	.3803	.1878	.0396	.5862
#1	.0495	28.33	1.951	2.076	.0532	26.32	.0491	.4973	.2173
#2	.0493	28.35	1.949	2.076	.0531	26.42	.0491	.4969	.2151
#3	.0490	28.23	1.950	2.071	.0530	26.22	.0489	.4970	.2150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2604	26.45	26.56	24.81	.5136	.4774	F166.6	.4953	.5036
Stddev	.0010	.07	.17	.21	.0010	.0006	.8	.0009	.0017
%RSD	.3779	.2681	.6471	.8546	.1957	.1291	.4732	.1717	.3448
#1	.2616	26.42	26.67	24.82	.5148	.4779	166.8	.4963	.5043
#2	.2599	26.53	26.66	25.02	.5133	.4767	167.4	.4950	.5049
#3	.2598	26.39	26.37	24.60	.5129	.4774	165.8	.4947	.5017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4861	1.945	.0245	.4926	.5264	.5128	2.036	.4959	.5036
Stddev	.0006	.002	.0003	.0005	.0024	.0014	.005	.0010	.0001
%RSD	.1183	.0988	1.187	.0941	.4546	.2788	.2633	.2045	.0193
#1	.4864	1.943	.0248	.4925	.5265	.5144	2.041	.4970	.5035
#2	.4865	1.945	.0242	.4931	.5288	.5125	2.035	.4949	.5037
#3	.4855	1.947	.0246	.4921	.5240	.5116	2.031	.4959	.5037
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28553-B2 Acquired: 2/13/2015 16:34:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1579.9	4540.1	29523.	2086.1
Stddev	2.8	3.8	92.	25.8
%RSD	.17934	.08377	.31020	1.2382
#1	1578.4	4542.4	29418.	2078.9
#2	1578.1	4535.7	29585.	2064.6
#3	1583.2	4542.2	29566.	2114.8

Zoom In Zoom Out

Sample Name: MP28552-MB1 Acquired: 2/13/2015 16:38:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	.0019	-.0010	.0003	.0000	.0199	-.0001	-.0002	-.0004	-.0008
Stddev	.0004	.0074	.0003	.0003	.0002	.0023	.0000	.0001	.0002	.0001
%RSD	56.37	381.4	34.96	95.36	682.4	11.40	53.75	34.89	59.39	7.999
#1	-.0013	-.0061	-.0010	.0007	.0000	.0213	-.0001	-.0002	-.0007	-.0008
#2	-.0004	.0034	-.0013	.0000	-.0002	.0173	-.0001	-.0001	-.0002	-.0007
#3	-.0007	.0085	-.0006	.0003	.0002	.0212	.0000	-.0003	-.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0233	-.0249	.0086	.0002	.0005	.1299	.0001	-.0010	.0017	.0022
Stddev	.0068	.0422	.0389	.0000	.0000	.0072	.0002	.0004	.0009	.0012
%RSD	29.16	169.1	453.5	6.613	4.343	5.574	317.7	38.25	51.25	54.99
#1	.0262	-.0273	.0522	.0002	.0005	.1363	-.0002	-.0006	.0021	.0032
#2	.0281	-.0659	-.0224	.0002	.0005	.1220	.0003	-.0014	.0023	.0009
#3	.0155	.0184	-.0042	.0002	.0005	.1314	.0001	-.0011	.0007	.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196	.0005	.0001	.0002	-.0011	-.0004	.0009
Stddev	.0001	.0002	.0002	.0001	.0019	.0001	.0000
%RSD	.5430	42.19	286.4	62.50	178.5	26.50	2.894
#1	.0194	.0007	.0002	.0003	-.0007	-.0004	.0009
#2	.0196	.0006	.0001	.0001	.0006	-.0003	.0009
#3	.0196	.0003	-.0001	.0001	-.0031	-.0005	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28552-MB1 Acquired: 2/13/2015 16:38:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1615.4	4639.7	31073.	2119.2
Stddev	3.9	5.0	106.	1.8
%RSD	.24072	.10878	.34078	.08667
#1	1611.1	4636.1	30982.	2119.5
#2	1616.6	4645.5	31190.	2117.3
#3	1618.6	4637.6	31048.	2120.9

Zoom In Zoom Out

Sample Name: MP28552-B1 Acquired: 2/13/2015 16:42:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0492	28.73	1.971	2.096	.0532	26.65	.0498	.5049	.2187	.2630
Stddev	.0005	.08	.002	.002	.0002	.10	.0000	.0007	.0012	.0004
%RSD	1.105	.2741	.1216	.0745	.4012	.3655	.0100	.1382	.5331	.1452
#1	.0493	28.69	1.970	2.095	.0534	26.71	.0497	.5043	.2176	.2626
#2	.0486	28.67	1.971	2.095	.0532	26.54	.0498	.5047	.2186	.2633
#3	.0496	28.82	1.974	2.098	.0530	26.71	.0497	.5056	.2199	.2630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.84	26.06	25.34	.5240	.4862	26.74	.5056	.5061	.4949	1.952
Stddev	.04	.04	.18	.0009	.0008	.04	.0006	.0007	.0008	.001
%RSD	.1618	.1576	.7296	.1650	.1626	.1510	.1094	.1327	.1635	.0486
#1	26.86	26.11	25.54	.5233	.4853	26.77	.5050	.5068	.4940	1.951
#2	26.79	26.02	25.18	.5239	.4867	26.69	.5060	.5059	.4955	1.952
#3	26.87	26.06	25.29	.5250	.4866	26.74	.5059	.5055	.4952	1.952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0243	.5029	.5332	.5194	2.044	.5011	.5107
Stddev	.0005	.0005	.0007	.0010	.004	.0020	.0007
%RSD	2.249	.0939	.1323	.1910	.1897	.3892	.1352
#1	.0240	.5026	.5340	.5183	2.042	.4989	.5103
#2	.0241	.5026	.5329	.5196	2.043	.5016	.5103
#3	.0250	.5034	.5328	.5203	2.049	.5027	.5115
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28552-B1 Acquired: 2/13/2015 16:42:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.0	4501.0	29631.	2080.2
Stddev	2.6	4.6	142.	13.2
%RSD	.16302	.10135	.48044	.63291
#1	1574.2	4500.6	29795.	2066.8
#2	1578.9	4505.7	29554.	2093.1
#3	1574.8	4496.6	29543.	2080.5

Zoom In Zoom Out

Sample Name: FA21997-1L Acquired: 2/13/2015 16:46:32 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	1.565	.0241	.0046	.0000	1.228	-.0001	-.0004	.0019	.0008
Stddev	.0007	.016	.0007	.0003	.000	.010	.0001	.0000	.0004	.0002
%RSD	1304.	1.026	3.078	5.663	476.9	.8045	58.59	11.47	21.07	29.67
#1	-.0008	1.547	.0234	.0048	.0001	1.239	.0000	-.0004	.0024	.0008
#2	.0000	1.578	.0238	.0048	-.0002	1.225	-.0002	-.0004	.0018	.0005
#3	.0006	1.569	.0249	.0043	.0000	1.220	-.0001	-.0003	.0016	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2593	.2270	.4713	.0027	.0009	4.827	.0007	.0992	.0330	.0013
Stddev	.0110	.0415	.0251	.0001	.0001	.030	.0003	.0004	.0000	.0020
%RSD	4.234	18.28	5.327	3.677	17.34	.6153	36.63	.3772	.0433	150.6
#1	.2720	.1930	.4991	.0026	.0010	4.861	.0008	.0988	.0330	.0036
#2	.2538	.2148	.4504	.0028	.0008	4.806	.0009	.0996	.0331	.0005
#3	.2522	.2732	.4643	.0026	.0007	4.813	.0004	.0993	.0331	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.550	.0005	.0023	.1077	-.0001	.0022	.0057
Stddev	.006	.0003	.0001	.0023	.0005	.0003	.0002
%RSD	.3621	64.01	3.378	2.155	485.5	11.43	2.761
#1	1.555	.0002	.0023	.1093	.0000	.0019	.0058
#2	1.552	.0009	.0024	.1051	-.0006	.0025	.0056
#3	1.544	.0004	.0022	.1089	.0003	.0023	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1604.3	4591.4	30651.	2118.5
Stddev	2.9	17.3	34.	5.3
%RSD	.18204	.37728	.11155	.25052
#1	1601.4	4582.1	30646.	2112.3
#2	1604.1	4580.7	30619.	2121.7
#3	1607.3	4611.4	30687.	2121.3

Zoom In Zoom Out

Sample Name: MP28552-D1 Acquired: 2/13/2015 16:50:45 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	1.501	.0234	.0043	-.0001	1.206	-.0001	-.0003	.0018	.0011
Stddev	.0002	.009	.0015	.0004	.0001	.018	.0000	.0001	.0004	.0003
%RSD	46.53	.5709	6.401	10.21	62.73	1.448	44.29	35.41	20.75	26.94
#1	-.0006	1.510	.0224	.0039	-.0001	1.188	.0000	-.0004	.0019	.0008
#2	-.0003	1.493	.0251	.0041	-.0002	1.223	-.0001	-.0002	.0020	.0014
#3	-.0007	1.501	.0228	.0047	-.0001	1.207	-.0001	-.0004	.0013	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2412	.1952	.4158	.0026	.0005	4.777	.0006	.0984	.0341	.0022
Stddev	.0051	.0208	.0372	.0000	.0000	.020	.0001	.0007	.0010	.0011
%RSD	2.125	10.68	8.938	1.251	10.29	.4131	16.01	.7052	2.817	49.09
#1	.2357	.1881	.4156	.0026	.0004	4.780	.0006	.0976	.0330	.0032
#2	.2459	.2186	.3788	.0026	.0005	4.796	.0006	.0985	.0346	.0023
#3	.2420	.1788	.4531	.0026	.0005	4.757	.0005	.0990	.0348	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.462	.0005	.0024	.1004	-.0020	.0024	.0053
Stddev	.013	.0003	.0002	.0015	.0024	.0002	.0000
%RSD	.8718	55.84	9.350	1.520	119.9	9.240	.6307
#1	1.475	.0002	.0027	.1017	-.0033	.0027	.0052
#2	1.462	.0006	.0023	.0987	.0008	.0023	.0053
#3	1.450	.0007	.0023	.1008	-.0035	.0022	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.9	4660.3	30922.	2145.3
Stddev	3.8	5.1	130.	6.7
%RSD	.23163	.10981	.41925	.31345
#1	1622.6	4659.9	30786.	2145.6
#2	1628.1	4665.6	30938.	2138.4
#3	1621.0	4655.4	31044.	2151.9

Zoom In Zoom Out

Sample Name: MP28552-SD1 Acquired: 2/13/2015 16:54:57 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	1.555	.0247	.0047	-.0010	1.558	-.0003	-.0011	-.0005	-.0014
Stddev	.0019	.096	.0028	.0027	.0004	.035	.0001	.0009	.0024	.0004
%RSD	414.8	6.162	11.37	57.66	35.90	2.262	32.86	81.53	452.2	28.21
#1	.0016	1.608	.0272	.0042	-.0013	1.599	-.0003	-.0002	.0018	-.0016
#2	-.0009	1.613	.0217	.0076	-.0006	1.539	-.0002	-.0019	-.0004	-.0017
#3	-.0022	1.444	.0254	.0023	-.0011	1.537	-.0003	-.0011	-.0030	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2476	.1996	.3454	.0026	.0007	5.014	.0010	.1009	.0338	.0056
Stddev	.0112	.2187	.1272	.0002	.0004	.110	.0017	.0027	.0035	.0034
%RSD	4.526	109.6	36.81	9.243	51.28	2.199	162.3	2.684	10.39	60.60
#1	.2353	.2414	.3162	.0023	.0005	5.116	.0018	.1007	.0298	.0095
#2	.2503	.3944	.2354	.0028	.0011	5.029	-.0009	.1037	.0365	.0030
#3	.2573	-.0371	.4846	.0028	.0005	4.897	.0022	.0983	.0350	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.602	.0019	.0025	.1117	-.0046	.0021	.0064
Stddev	.017	.0008	.0004	.0041	.0057	.0004	.0002
%RSD	1.055	41.45	17.47	3.644	124.8	20.45	3.067
#1	1.617	.0013	.0021	.1095	-.0101	.0016	.0063
#2	1.605	.0016	.0029	.1092	.0013	.0023	.0067
#3	1.583	.0028	.0024	.1164	-.0049	.0024	.0064

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1621.1	4628.8	31057.	2123.8
Stddev	1.7	13.9	35.	47.4
%RSD	.10730	.30036	.11138	2.2309
#1	1623.0	4638.6	31097.	2096.9
#2	1620.6	4635.0	31037.	2096.0
#3	1619.7	4612.9	31037.	2178.5

Zoom In Zoom Out

Sample Name: MP28552-S1 Acquired: 2/13/2015 16:59:09 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0486	28.87	1.964	2.054	.0515	26.70	.0483	.4911	.2101	.2539
Stddev	.0004	.04	.004	.004	.0002	.04	.0002	.0005	.0007	.0006
%RSD	.7926	.1245	.1997	.1858	.3436	.1316	.4382	.0926	.3394	.2327
#1	.0491	28.84	1.965	2.056	.0516	26.67	.0481	.4907	.2101	.2541
#2	.0484	28.91	1.967	2.056	.0517	26.68	.0484	.4916	.2094	.2544
#3	.0484	28.88	1.960	2.049	.0513	26.74	.0485	.4912	.2108	.2533

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.28	25.84	25.12	.5104	.4755	30.23	.4971	.5866	.5148	1.912
Stddev	.03	.04	.05	.0015	.0002	.08	.0005	.0017	.0029	.004
%RSD	.1150	.1406	.2154	.3012	.0475	.2552	.1023	.2874	.5707	.1966
#1	26.24	25.80	25.09	.5122	.4758	30.30	.4973	.5850	.5171	1.911
#2	26.30	25.88	25.10	.5095	.4753	30.15	.4974	.5883	.5159	1.915
#3	26.29	25.83	25.18	.5096	.4755	30.26	.4965	.5864	.5115	1.908

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.471	.4951	.5152	.5973	1.988	.4854	.5007
Stddev	.003	.0012	.0004	.0014	.007	.0014	.0005
%RSD	.1864	.2505	.0776	.2395	.3678	.2781	.0928
#1	1.472	.4959	.5150	.5988	1.991	.4867	.5006
#2	1.473	.4958	.5150	.5960	1.994	.4840	.5013
#3	1.468	.4937	.5157	.5970	1.980	.4854	.5004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.2	4578.4	30531.	2122.7
Stddev	4.8	7.5	88.	10.0
%RSD	.29563	.16357	.28925	.46917
#1	1610.2	4577.1	30456.	2112.4
#2	1605.5	4571.6	30629.	2132.3
#3	1615.0	4586.4	30509.	2123.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:03:08 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2571	41.80	1.990	2.055	2.058	41.75	2.035	2.022	2.112	2.061
Stddev	.0011	.04	.008	.005	.005	.07	.007	.005	.011	.008
%RSD	.4214	.0940	.4009	.2387	.2310	.1782	.3515	.2721	.5208	.4052
#1	.2572	41.82	1.996	2.059	2.060	41.77	2.041	2.026	2.106	2.053
#2	.2559	41.76	1.992	2.049	2.052	41.67	2.037	2.024	2.106	2.060
#3	.2581	41.83	1.981	2.056	2.060	41.82	2.027	2.016	2.125	2.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.01	41.83	40.58	2.096	1.999	42.18	1.997	2.017	1.992	1.996
Stddev	.04	.08	.26	.005	.004	.12	.006	.007	.008	.006
%RSD	.1088	.1992	.6314	.2565	.1789	.2839	.2962	.3683	.3894	.3094
#1	41.00	41.86	40.36	2.093	1.998	42.22	2.002	2.021	1.999	2.000
#2	40.97	41.73	40.52	2.093	2.003	42.04	1.998	2.021	1.994	1.999
#3	41.06	41.89	40.86	2.102	1.996	42.27	1.991	2.008	1.984	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.808	1.992	2.100	2.089	2.026	2.035	2.033
Stddev	.005	.010	.004	.006	.005	.009	.008
%RSD	.2707	.4897	.2049	.2859	.2394	.4249	.3818
#1	1.813	2.000	2.104	2.085	2.027	2.031	2.039
#2	1.808	1.994	2.096	2.087	2.030	2.030	2.036
#3	1.803	1.981	2.101	2.096	2.020	2.045	2.024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:03:08 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1544.4	4385.1	29108.	2068.9
Stddev	4.8	13.6	59.	14.1
%RSD	.30912	.31072	.20256	.68214
#1	1539.5	4370.6	29169.	2079.4
#2	1544.8	4386.9	29102.	2074.4
#3	1549.0	4397.7	29052.	2052.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:07:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F.0540	.0006	.0005	.0003	F.2267	.0002	.0001	.0001
Stddev	.0002	.0050	.0004	.0003	.0002	.0401	.0001	.0001	.0003
%RSD	118.8	9.241	69.91	51.49	65.41	17.70	31.92	105.5	367.9
#1	-.0003	.0592	.0010	.0004	.0003	.2573	.0003	.0002	.0001
#2	.0000	.0537	.0002	.0004	.0001	.2416	.0002	.0000	-.0002
#3	-.0002	.0492	.0005	.0009	.0004	.1813	.0002	.0000	.0003
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250				.1000			
Low Limit		-.0250				-.1000			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0459	.0087	.0307	.0005	F.0036	.0538	.0004	-.0005
Stddev	.0001	.0120	.0395	.0438	.0001	.0009	.0142	.0001	.0006
%RSD	107.6	26.17	456.7	142.3	9.642	25.86	26.40	17.92	117.7
#1	-.0002	.0586	-.0370	-.0136	.0006	.0045	.0698	.0005	-.0006
#2	.0000	.0445	.0326	.0738	.0005	.0035	.0427	.0004	.0001
#3	-.0002	.0347	.0304	.0320	.0005	.0027	.0489	.0005	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0015	-.0006	.0008	.0005	.0019	.0005	.0002	.0006
Stddev	.0007	.0023	.0005	.0002	.0002	.0002	.0002	.0001	.0002
%RSD	42.91	157.6	84.37	28.62	35.44	10.59	51.54	38.26	35.62
#1	.0018	.0041	-.0008	.0009	.0007	.0020	.0003	.0002	.0009
#2	.0024	-.0003	-.0010	.0009	.0004	.0021	.0003	.0001	.0006
#3	.0009	.0007	.0000	.0005	.0004	.0017	.0008	.0002	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:07:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1635.4	4662.7	31167.	2132.8
Stddev	4.3	10.0	81.	11.5
%RSD	.26115	.21429	.25993	.53760
#1	1637.7	4671.7	31086.	2145.9
#2	1638.0	4664.5	31169.	2127.8
#3	1630.5	4652.0	31248.	2124.6

Zoom In Zoom Out

Sample Name: MP28552-S2 Acquired: 2/13/2015 17:11:17 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0496	29.67	1.988	2.078	.0528	27.33	.0495	.5009	.2192	.2637
Stddev	.0003	.08	.002	.007	.0001	.09	.0000	.0007	.0004	.0007
%RSD	.6238	.2803	.0960	.3241	.2080	.3334	.0501	.1408	.1844	.2527
#1	.0492	29.71	1.988	2.082	.0527	27.35	.0495	.5008	.2196	.2643
#2	.0498	29.58	1.986	2.071	.0529	27.24	.0494	.5003	.2190	.2638
#3	.0496	29.73	1.990	2.082	.0529	27.42	.0495	.5017	.2188	.2630

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.66	25.97	25.36	.5218	.4806	31.06	.5026	.5960	.5221	1.943
Stddev	.05	.15	.07	.0011	.0004	.10	.0007	.0020	.0027	.003
%RSD	.1947	.5913	.2783	.2049	.0778	.3282	.1458	.3368	.5124	.1459
#1	26.62	26.00	25.33	.5230	.4804	31.10	.5020	.5942	.5197	1.942
#2	26.63	25.80	25.31	.5209	.4804	30.94	.5024	.5958	.5250	1.942
#3	26.72	26.11	25.44	.5214	.4810	31.13	.5034	.5982	.5215	1.947

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.496	.4981	.5259	.6098	2.020	.5008	.5109
Stddev	.004	.0003	.0018	.0020	.004	.0003	.0014
%RSD	.2855	.0583	.3498	.3242	.2202	.0531	.2661
#1	1.500	.4978	.5256	.6109	2.019	.5011	.5099
#2	1.491	.4981	.5243	.6109	2.016	.5006	.5103
#3	1.498	.4983	.5279	.6075	2.025	.5007	.5124

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1596.3	4544.5	29923.	2119.7
Stddev	3.2	1.5	53.	7.5
%RSD	.20020	.03389	.17823	.35395
#1	1595.6	4543.4	29863.	2121.1
#2	1599.7	4546.2	29967.	2126.3
#3	1593.5	4543.7	29938.	2111.5

Zoom In Zoom Out

Sample Name: MP28552-MB2 Acquired: 2/13/2015 17:15:18 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0212	-.0006	.0005	-.0001	.0387	.0000	-.0001	.0001
Stddev	.0008	.0030	.0005	.0002	.0002	.0023	.000	.0000	.0001
%RSD	136.7	14.18	78.62	44.06	194.4	5.946	162.9	14.34	227.3
#1	.0003	.0208	-.0008	.0005	.0001	.0411	.0000	-.0002	.0002
#2	-.0007	.0184	-.0001	.0002	-.0002	.0365	-.0001	-.0002	.0001
#3	-.0014	.0244	-.0010	.0007	-.0002	.0386	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0278	.0337	.0659	.0005	.0008	F3.990	.0003	.0002
Stddev	.0002	.0040	.0105	.0365	.0000	.0002	.030	.0003	.0003
%RSD	36.63	14.53	31.12	55.43	7.857	28.87	.7642	101.3	158.5
#1	-.0003	.0324	.0416	.0661	.0006	.0010	3.987	.0004	.0005
#2	-.0007	.0260	.0218	.0293	.0005	.0008	3.961	.0000	.0000
#3	-.0007	.0249	.0377	.1023	.0005	.0006	4.022	.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0023	.0570	.0007	.0000	.0005	-.0010	.0001	.0040
Stddev	.0003	.0006	.0018	.0004	.000	.0001	.0016	.0002	.0000
%RSD	32.12	25.62	3.095	56.64	887.2	27.83	159.0	244.5	1.106
#1	.0012	.0017	.0567	.0007	.0000	.0006	.0004	.0001	.0040
#2	.0010	.0029	.0554	.0003	-.0001	.0006	-.0028	-.0001	.0040
#3	.0006	.0023	.0588	.0011	.0000	.0004	-.0007	.0002	.0040
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28552-MB2 Acquired: 2/13/2015 17:15:18 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1670.6	4754.9	31688.	2161.2
Stddev	6.3	22.2	154.	7.8
%RSD	.37777	.46726	.48649	.36045
#1	1668.4	4739.9	31513.	2158.3
#2	1677.7	4780.4	31747.	2170.1
#3	1665.6	4744.4	31804.	2155.3

Zoom In Zoom Out

Sample Name: MP28552-B2 Acquired: 2/13/2015 17:19:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497	28.54	2.008	2.101	.0531	26.55	.0505	.5115	.2177
Stddev	.0005	.12	.021	.004	.0001	.13	.0006	.0058	.0034
%RSD	1.002	.4241	1.058	.1945	.2563	.4955	1.112	1.128	1.568
#1	.0496	28.48	2.033	2.099	.0530	26.47	.0511	.5181	.2165
#2	.0492	28.68	1.997	2.105	.0532	26.70	.0501	.5079	.2150
#3	.0502	28.47	1.996	2.098	.0532	26.47	.0503	.5084	.2215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2626	26.76	26.20	25.36	.5226	.4910	F30.77	.5129	.5107
Stddev	.0039	.14	.13	.20	.0085	.0049	.10	.0062	.0057
%RSD	1.496	.5175	.4906	.7867	1.633	.9906	.3372	1.217	1.112
#1	.2628	26.69	26.25	25.14	.5224	.4966	30.72	.5201	.5172
#2	.2585	26.92	26.30	25.53	.5141	.4878	30.89	.5092	.5065
#3	.2664	26.67	26.06	25.41	.5312	.4887	30.70	.5095	.5085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5034	1.988	.0713	.5098	.5286	.5153	2.066	.5004	.5201
Stddev	.0063	.025	.0033	.0051	.0017	.0094	.021	.0081	.0052
%RSD	1.256	1.263	4.610	.9996	.3298	1.815	1.001	1.619	.9911
#1	.5106	2.017	.0742	.5157	.5280	.5146	2.090	.5013	.5261
#2	.4986	1.973	.0720	.5062	.5306	.5063	2.053	.4919	.5172
#3	.5010	1.974	.0677	.5076	.5273	.5249	2.055	.5080	.5172
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28552-B2 Acquired: 2/13/2015 17:19:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1591.8	4530.4	30277.	2104.7
Stddev	16.0	45.8	363.	7.3
%RSD	1.0048	1.0104	1.1987	.34823
#1	1573.4	4477.6	30260.	2101.7
#2	1602.5	4558.4	30648.	2099.3
#3	1599.6	4555.2	29923.	2113.0

Zoom In Zoom Out

Sample Name: MP28554-MB1 Acquired: 2/13/2015 17:23:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0043	-.0007	-.0001	.0000	.0142	.0000	-.0003	-.0002	-.0007
Stddev	.0003	.0024	.0005	.0003	.000	.0061	.000	.0001	.0005	.0002
%RSD	84.04	55.45	78.27	493.0	502.7	42.57	52.39	28.33	206.9	24.60
#1	-.0007	.0043	-.0006	.0002	-.0001	.0095	.0000	-.0002	-.0007	-.0005
#2	.0000	.0019	-.0013	-.0004	-.0002	.0211	.0000	-.0004	.0003	-.0008
#3	-.0005	.0067	-.0002	.0000	.0002	.0121	.0000	-.0003	-.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0234	-.0263	.0092	.0001	.0006	.0208	.0000	-.0002	-.0004	.0019
Stddev	.0077	.0346	.0286	.0000	.0001	.0084	.0001	.0006	.0005	.0007
%RSD	32.96	131.7	311.8	40.57	9.758	40.21	7969.	328.6	134.6	34.24
#1	.0322	.0072	.0240	.0001	.0007	.0224	.0001	-.0008	-.0006	.0027
#2	.0199	-.0619	.0273	.0001	.0006	.0283	-.0001	.0004	.0002	.0016
#3	.0181	-.0242	-.0238	.0000	.0006	.0118	-.0001	-.0002	-.0007	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0173	.0007	.0000	.0003	-.0006	.0002	.0007
Stddev	.0004	.0002	.0001	.0001	.0011	.0003	.0000
%RSD	2.508	33.77	1768.	20.82	180.1	130.1	2.802
#1	.0168	.0009	.0000	.0003	.0005	.0000	.0007
#2	.0175	.0008	-.0001	.0002	-.0007	.0005	.0006
#3	.0176	.0004	.0001	.0003	-.0017	.0001	.0007
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28554-MB1 Acquired: 2/13/2015 17:23:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1687.3	4826.5	32298.	2179.1
Stddev	2.5	10.3	126.	22.0
%RSD	.14807	.21431	.39000	1.0091
#1	1686.7	4821.4	32443.	2197.2
#2	1690.1	4838.4	32214.	2154.6
#3	1685.2	4819.6	32237.	2185.5

Zoom In Zoom Out

Sample Name: MP28554-B1 Acquired: 2/13/2015 17:27:46 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0482	27.15	1.898	2.027	.0513	25.31	.0477	.4822	.2090	.2517
Stddev	.0003	.11	.004	.004	.0002	.13	.0002	.0009	.0009	.0016
%RSD	.6630	.4087	.1888	.2121	.4208	.5186	.3800	.1911	.4292	.6233
#1	.0485	27.03	1.901	2.028	.0511	25.16	.0479	.4832	.2096	.2534
#2	.0484	27.25	1.897	2.022	.0515	25.37	.0475	.4820	.2094	.2513
#3	.0479	27.18	1.894	2.031	.0512	25.39	.0477	.4814	.2079	.2504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.55	24.99	24.22	.5030	.4632	25.44	.4861	.4840	.4737	1.881
Stddev	.08	.07	.08	.0020	.0013	.10	.0008	.0012	.0021	.004
%RSD	.3086	.2872	.3296	.4015	.2836	.4075	.1709	.2493	.4345	.1851
#1	25.47	25.06	24.16	.5053	.4647	25.32	.4867	.4827	.4760	1.885
#2	25.57	24.92	24.18	.5022	.4623	25.46	.4852	.4843	.4723	1.881
#3	25.62	24.98	24.31	.5016	.4626	25.53	.4865	.4850	.4727	1.878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0216	.4821	.5077	.4938	1.957	.4820	.4890
Stddev	.0003	.0014	.0021	.0019	.000	.0032	.0009
%RSD	1.415	.2801	.4067	.3757	.0034	.6691	.1766
#1	.0219	.4836	.5055	.4957	1.957	.4857	.4899
#2	.0213	.4813	.5081	.4935	1.957	.4805	.4883
#3	.0216	.4813	.5096	.4920	1.957	.4798	.4886
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28554-B1 Acquired: 2/13/2015 17:27:46 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1639.4	4673.0	30910.	2143.7
Stddev	2.9	8.0	171.	9.1
%RSD	.17571	.17132	.55324	.42615
#1	1636.2	4664.2	30716.	2153.5
#2	1641.9	4679.7	31040.	2142.4
#3	1639.9	4675.2	30973.	2135.3

Zoom In Zoom Out

Sample Name: FA22073-13 Acquired: 2/13/2015 17:31:46 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0434	-.0009	.1769	.0001	134.8	-.0001	-.0002	.0000	.0004
Stddev	.000	.0369	.0010	.0010	.0001	.7	.0000	.0001	.000	.0001
%RSD	3990.	85.02	107.6	.5882	122.1	.5267	69.45	46.64	605.7	15.90
#1	-.0002	.0585	-.0019	.1765	.0000	134.7	.0000	-.0003	-.0003	.0004
#2	.0005	.0014	-.0010	.1781	.0001	135.5	-.0001	-.0001	.0000	.0005
#3	-.0003	.0705	.0001	.1762	.0000	134.1	-.0001	-.0002	.0002	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1479	4.117	22.18	.0194	-.0002	47.51	.0023	-.0033	.0001	.0005
Stddev	.0069	.042	.21	.0002	.0001	.29	.0002	.0007	.0013	.0018
%RSD	4.670	1.014	.9357	.8243	64.05	.6186	10.24	20.97	1393.	346.5
#1	.1470	4.136	21.99	.0194	-.0001	47.49	.0020	-.0028	.0013	.0002
#2	.1553	4.145	22.40	.0195	-.0002	47.82	.0024	-.0030	-.0013	.0025
#3	.1416	4.069	22.16	.0192	-.0003	47.23	.0025	-.0041	.0003	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.051	.0005	.9487	.0024	.0014	-.0001	.0083
Stddev	.015	.0001	.0055	.0000	.0013	.0002	.0001
%RSD	.1651	29.64	.5762	1.873	93.76	257.2	.9015
#1	9.063	.0004	.9485	.0023	.0021	-.0002	.0084
#2	9.055	.0007	.9543	.0024	-.0001	-.0002	.0084
#3	9.034	.0004	.9434	.0023	.0022	.0002	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1566.1	4429.7	29654.	2026.4
Stddev	2.3	6.5	161.	13.0
%RSD	.14612	.14710	.54293	.64132
#1	1564.6	4422.6	29597.	2024.1
#2	1565.0	4431.2	29529.	2014.7
#3	1568.7	4435.4	29836.	2040.4

Zoom In Zoom Out

Sample Name: MP28554-D1 Acquired: 2/13/2015 17:35:56 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0306	-.0001	.1709	-.0001	131.4	-.0001	-.0004	.0000	.0004
Stddev	.0003	.0046	.0009	.0010	.0000	.4	.0000	.0001	.000	.0001
%RSD	104.8	15.09	715.4	.5935	65.07	.3138	23.07	13.09	2141.	37.78
#1	.0003	.0286	.0005	.1699	.0000	131.4	-.0001	-.0004	.0000	.0002
#2	.0007	.0274	.0003	.1708	-.0001	131.0	-.0001	-.0004	-.0001	.0005
#3	.0000	.0359	-.0012	.1719	-.0001	131.8	-.0001	-.0005	.0001	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1358	3.970	21.58	.0190	-.0005	46.38	.0024	-.0027	-.0003	.0012
Stddev	.0056	.027	.07	.0000	.0001	.09	.0002	.0012	.0011	.0008
%RSD	4.156	.6907	.3439	.2558	14.97	.1904	7.292	47.05	326.0	69.72
#1	.1362	3.938	21.57	.0190	-.0005	46.40	.0024	-.0015	-.0013	.0014
#2	.1299	3.984	21.51	.0189	-.0004	46.28	.0026	-.0040	-.0005	.0003
#3	.1412	3.987	21.65	.0190	-.0004	46.45	.0022	-.0025	.0008	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.882	.0002	.9213	.0022	.0009	.0003	.0079
Stddev	.006	.0004	.0022	.0001	.0011	.0002	.0001
%RSD	.0635	235.1	.2349	6.423	119.0	73.45	.6771
#1	8.888	-.0003	.9207	.0024	.0010	.0005	.0079
#2	8.880	.0004	.9195	.0021	-.0002	.0001	.0079
#3	8.878	.0004	.9237	.0022	.0020	.0002	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1592.4	4505.0	29848.	2056.4
Stddev	2.6	9.0	22.	3.4
%RSD	.16388	.20001	.07393	.16387
#1	1589.9	4498.6	29831.	2054.2
#2	1595.1	4515.3	29873.	2060.2
#3	1592.2	4501.1	29842.	2054.6

Zoom In Zoom Out

Sample Name: MP28554-SD1 Acquired: 2/13/2015 17:40:06 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	.0514	.0015	.1751	-.0001	139.6	-.0001	-.0009	-.0029	-.0013
Stddev	.0007	.0514	.0012	.0014	.0003	.4	.0002	.0006	.0019	.0019
%RSD	57.62	100.0	78.63	.8242	523.4	.3075	175.7	62.62	63.92	150.0
#1	.0019	.0117	.0004	.1766	-.0002	139.7	.0000	-.0009	-.0039	-.0032
#2	.0007	.1095	.0013	.1737	.0003	139.2	-.0004	-.0003	-.0008	-.0011
#3	.0009	.0331	.0027	.1749	-.0003	140.0	.0000	-.0015	-.0041	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1223	3.791	22.94	.0199	-.0016	48.26	.0020	-.0056	.0025	.0085
Stddev	.0081	.144	.31	.0003	.0006	.15	.0004	.0032	.0009	.0035
%RSD	6.599	3.811	1.352	1.748	37.49	.3131	19.31	56.41	37.60	41.93
#1	.1285	3.937	22.70	.0197	-.0022	48.36	.0023	-.0090	.0020	.0048
#2	.1253	3.649	22.83	.0203	-.0017	48.09	.0022	-.0052	.0019	.0119
#3	.1132	3.788	23.29	.0196	-.0010	48.34	.0016	-.0027	.0035	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.036	.0009	.9677	.0056	.0069	.0000	.0094
Stddev	.011	.0016	.0024	.0005	.0077	.0003	.0001
%RSD	.1200	190.5	.2456	8.206	110.8	1610.	1.230
#1	9.044	-.0010	.9705	.0062	.0157	-.0003	.0096
#2	9.041	.0019	.9660	.0053	.0017	.0002	.0093
#3	9.024	.0017	.9667	.0054	.0034	.0001	.0094

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1622.6	4602.6	30400.	2090.8
Stddev	1.5	4.2	156.	14.6
%RSD	.09342	.09229	.51283	.69806
#1	1621.7	4601.3	30226.	2094.2
#2	1621.8	4607.4	30448.	2103.3
#3	1624.4	4599.2	30527.	2074.7

Zoom In Zoom Out

Sample Name: MP28554-PS1 Acquired: 2/13/2015 17:44:18 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0484	2.674	.1002	.4277	.0528	134.9	.0501	.0497	.0539	.1050
Stddev	.0002	.016	.0005	.0023	.0001	.4	.0002	.0002	.0001	.0003
%RSD	.4898	.6097	.5459	.5271	.1160	.2815	.3043	.3700	.2218	.3030
#1	.0486	2.668	.0996	.4256	.0527	134.4	.0500	.0499	.0539	.1053
#2	.0485	2.660	.1002	.4276	.0528	135.1	.0502	.0496	.0540	.1048
#3	.0481	2.692	.1007	.4301	.0528	135.1	.0502	.0495	.0538	.1048

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.103	14.29	25.90	.0709	.0973	56.65	.1019	.0462	.0997	.0962
Stddev	.021	.10	.13	.0001	.0001	.08	.0001	.0010	.0006	.0002
%RSD	.6928	.7175	.4908	.1277	.1141	.1433	.0583	2.077	.6063	.2423
#1	3.079	14.17	25.84	.0708	.0972	56.55	.1020	.0453	.0999	.0962
#2	3.110	14.33	25.82	.0708	.0973	56.70	.1019	.0462	.0990	.0964
#3	3.120	14.37	26.05	.0710	.0974	56.68	.1019	.0472	.1002	.0959

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.779	.0483	.9600	.1038	.1013	.0504	.2591
Stddev	.007	.0000	.0024	.0003	.0017	.0003	.0001
%RSD	.0747	.0474	.2499	.2732	1.649	.6804	.0506
#1	8.772	.0483	.9575	.1037	.1001	.0502	.2590
#2	8.784	.0483	.9623	.1042	.1032	.0501	.2592
#3	8.782	.0483	.9603	.1037	.1005	.0508	.2591

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1583.0	4501.5	29615.	2062.4
Stddev	1.6	4.5	169.	7.0
%RSD	.10320	.09944	.56980	.33810
#1	1584.9	4498.3	29739.	2065.7
#2	1582.4	4499.5	29683.	2067.1
#3	1581.8	4506.6	29423.	2054.4

Zoom In Zoom Out

Sample Name: MP28554-S1 Acquired: 2/13/2015 17:48:23 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0505	28.50	1.990	2.254	.0532	158.0	.0493	.4999	.2172	.2657
Stddev	.0002	.15	.004	.014	.0006	.8	.0001	.0006	.0013	.0010
%RSD	.3656	.5204	.2140	.6076	1.154	.5232	.2322	.1226	.6098	.3660
#1	.0503	28.59	1.994	2.259	.0538	158.6	.0493	.5001	.2170	.2658
#2	.0507	28.58	1.985	2.263	.0531	158.2	.0491	.4992	.2187	.2667
#3	.0505	28.33	1.991	2.238	.0526	157.0	.0493	.5004	.2160	.2647

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.38	30.51	46.14	.5376	.4853	73.28	.5021	.4998	.4975	1.966
Stddev	.15	.24	.19	.0015	.0003	.42	.0010	.0012	.0001	.005
%RSD	.5771	.7946	.4157	.2748	.0545	.5749	.2058	.2423	.0295	.2362
#1	26.51	30.64	46.22	.5379	.4855	73.57	.5013	.5010	.4976	1.970
#2	26.42	30.67	46.28	.5390	.4850	73.46	.5016	.4998	.4974	1.961
#3	26.21	30.23	45.92	.5360	.4854	72.79	.5032	.4986	.4974	1.967

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.124	.5014	1.454	.5201	2.038	.5033	.5090
Stddev	.014	.0020	.007	.0007	.005	.0017	.0004
%RSD	.1526	.4032	.4878	.1334	.2264	.3366	.0871
#1	9.134	.5024	1.459	.5206	2.041	.5046	.5093
#2	9.109	.4991	1.457	.5204	2.032	.5041	.5085
#3	9.131	.5027	1.446	.5193	2.040	.5014	.5093

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1557.4	4432.5	29082.	2062.4
Stddev	5.8	9.4	114.	24.9
%RSD	.37542	.21210	.39218	1.2061
#1	1550.8	4422.0	29049.	2047.7
#2	1559.3	4440.1	28988.	2048.3
#3	1562.0	4435.4	29209.	2091.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:52:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2528	41.57	1.960	2.027	2.036	41.61	2.005	1.992	2.085	2.029
Stddev	.0008	.18	.004	.004	.006	.12	.002	.003	.004	.002
%RSD	.3256	.4419	.2186	.1859	.3054	.2906	.1137	.1375	.2013	.0848
#1	.2535	41.73	1.960	2.031	2.043	41.74	2.005	1.993	2.086	2.028
#2	.2519	41.37	1.956	2.023	2.031	41.51	2.003	1.988	2.088	2.031
#3	.2528	41.60	1.965	2.027	2.034	41.57	2.008	1.994	2.080	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	41.51	39.98	2.061	1.972	41.98	1.965	1.996	1.964	1.972
Stddev	.09	.20	.10	.007	.009	.14	.002	.006	.007	.001
%RSD	.2196	.4765	.2436	.3303	.4310	.3280	.0899	.3249	.3549	.0353
#1	40.76	41.70	40.06	2.069	1.964	42.11	1.966	1.989	1.960	1.971
#2	40.64	41.31	40.01	2.059	1.972	41.84	1.964	1.996	1.960	1.971
#3	40.58	41.52	39.87	2.056	1.981	42.00	1.967	2.002	1.972	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.782	1.954	2.083	2.059	2.003	1.999	2.003
Stddev	.002	.003	.008	.005	.004	.004	.002
%RSD	.1210	.1500	.3653	.2678	.2130	.2113	.0860
#1	1.781	1.952	2.091	2.063	1.999	2.001	2.003
#2	1.780	1.954	2.076	2.061	2.003	1.994	2.002
#3	1.784	1.957	2.083	2.053	2.007	2.002	2.005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:52:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1564.3	4456.2	29610.	2053.2
Stddev	5.1	5.4	67.	11.6
%RSD	.32762	.12118	.22476	.56568
#1	1570.1	4460.3	29580.	2040.3
#2	1562.8	4458.2	29563.	2062.8
#3	1560.2	4450.1	29686.	2056.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:56:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0103	.0004	.0002	.0003	.0180	.0003	.0003	.0000
Stddev	.0001	.0136	.0003	.0001	.0001	.0019	.0001	.0001	.0001
%RSD	32.47	132.0	76.13	33.98	37.60	10.71	27.46	35.06	2287.
#1	-.0002	.0220	.0008	.0001	.0004	.0158	.0003	.0004	.0001
#2	-.0004	.0136	.0001	.0002	.0002	.0193	.0002	.0002	-.0001
#3	-.0005	-.0047	.0004	.0002	.0003	.0190	.0002	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0437	.0380	-.0073	.0005	F.0036	.0512	.0004	-.0001
Stddev	.0003	.0129	.0393	.0491	.0001	.0009	.0095	.0003	.0004
%RSD	179.1	29.58	103.3	676.1	9.714	24.40	18.48	57.35	543.5
#1	.0000	.0577	.0648	.0377	.0005	.0045	.0427	.0007	.0004
#2	.0000	.0411	.0564	.0002	.0005	.0036	.0614	.0003	-.0003
#3	.0006	.0323	-.0071	-.0597	.0006	.0027	.0496	.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0010	.0004	F.0010	.0003	F.0021	.0012	.0003	.0008
Stddev	.0008	.0017	.0001	.0004	.0001	.0002	.0005	.0000	.0001
%RSD	54.62	164.4	33.45	37.38	29.00	7.643	44.87	9.479	18.47
#1	.0021	-.0007	.0004	.0013	.0002	.0022	.0012	.0003	.0010
#2	.0014	.0026	.0006	.0012	.0004	.0021	.0007	.0002	.0008
#3	.0006	.0012	.0003	.0006	.0003	.0019	.0017	.0003	.0007
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:56:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1622.7	4626.5	31117.	2093.0
Stddev	4.4	11.7	372.	5.3
%RSD	.27165	.25196	1.1957	.25457
#1	1625.1	4626.3	30897.	2087.2
#2	1625.3	4638.3	30907.	2094.1
#3	1617.6	4615.0	31546.	2097.7

Zoom In Zoom Out

Sample Name: MP28554-S2 Acquired: 2/13/2015 18:00:33 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0489	27.16	1.962	2.167	.0506	150.5	.0482	.4882	.2071	.2562
Stddev	.0001	.03	.009	.003	.0002	.0	.0004	.0024	.0007	.0013
%RSD	.1976	.1099	.4849	.1443	.4713	.0258	.8857	.4956	.3376	.4993
#1	.0490	27.16	1.953	2.164	.0506	150.5	.0478	.4861	.2079	.2576
#2	.0488	27.19	1.960	2.170	.0508	150.5	.0481	.4875	.2070	.2561
#3	.0490	27.13	1.972	2.166	.0503	150.5	.0487	.4908	.2065	.2550

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.27	29.43	44.61	.5179	.4768	69.98	.4940	.4855	.4899	1.939
Stddev	.04	.07	.17	.0018	.0029	.09	.0025	.0026	.0011	.005
%RSD	.1563	.2256	.3923	.3535	.6036	.1353	.5156	.5271	.2162	.2565
#1	25.26	29.46	44.41	.5200	.4744	70.09	.4923	.4844	.4892	1.934
#2	25.23	29.48	44.74	.5171	.4760	69.92	.4929	.4837	.4894	1.939
#3	25.31	29.35	44.68	.5165	.4800	69.92	.4970	.4885	.4912	1.944

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.006	.4958	1.390	.4994	1.983	.4886	.4972
Stddev	.048	.0035	.003	.0012	.011	.0013	.0023
%RSD	.5325	.7158	.1948	.2324	.5624	.2676	.4572
#1	8.965	.4925	1.387	.5007	1.977	.4899	.4952
#2	8.995	.4953	1.392	.4985	1.976	.4873	.4966
#3	9.059	.4995	1.391	.4991	1.996	.4886	.4997

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1582.5	4476.0	29912.	2124.2
Stddev	6.8	19.6	93.	11.6
%RSD	.42988	.43844	.31227	.54622
#1	1587.0	4493.9	29811.	2114.0
#2	1585.8	4479.2	29995.	2121.7
#3	1574.7	4455.0	29930.	2136.8

Zoom In Zoom Out

Sample Name: FA22073-14 Acquired: 2/13/2015 18:04:30 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0755	-.0001	.0022	.0000	2.559	.0000	.0000	-.0003	.0013
Stddev	.0003	.0130	.0003	.0001	.0002	.012	.000	.000	.0001	.0003
%RSD	1106.	17.27	298.6	6.287	901.9	.4723	28.00	366.5	36.90	20.86
#1	-.0002	.0610	-.0001	.0023	-.0002	2.547	.0000	-.0001	-.0004	.0016
#2	.0004	.0861	-.0004	.0022	.0002	2.571	-.0001	-.0001	-.0003	.0010
#3	-.0001	.0795	.0002	.0021	.0000	2.559	.0000	.0001	-.0002	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1377	2.920	.8693	.0076	.0007	.8114	.0004	-.0004	.0008	.0020
Stddev	.0040	.025	.0343	.0000	.0000	.0068	.0002	.0008	.0017	.0009
%RSD	2.928	.8562	3.951	.0167	3.131	.8411	52.13	175.3	202.0	42.95
#1	.1423	2.943	.9041	.0076	.0007	.8180	.0002	-.0001	.0016	.0014
#2	.1360	2.924	.8354	.0076	.0007	.8118	.0005	.0001	-.0011	.0016
#3	.1348	2.893	.8685	.0076	.0007	.8043	.0005	-.0013	.0020	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2846	.0011	.0069	.0022	.0005	.0003	.0163
Stddev	.0004	.0003	.0002	.0001	.0010	.0003	.0000
%RSD	.1535	27.85	2.885	2.441	192.2	103.1	.2851
#1	.2847	.0007	.0071	.0022	.0008	.0004	.0164
#2	.2842	.0013	.0067	.0023	-.0006	.0000	.0163
#3	.2850	.0011	.0068	.0021	.0014	.0007	.0163

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1619.3	4624.0	31164.	2120.1
Stddev	3.3	5.7	74.	12.5
%RSD	.20197	.12333	.23639	.59009
#1	1619.2	4619.7	31237.	2106.4
#2	1616.1	4621.8	31090.	2122.9
#3	1622.7	4630.5	31165.	2130.9

Zoom In Zoom Out

Sample Name: FA22073-15 Acquired: 2/13/2015 18:08:41 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0354	.0002	.0150	-.0001	17.24	.0000	-.0001	.0003	.0018
Stddev	.0007	.0106	.0002	.0002	.0000	.06	.000	.0001	.0006	.0003
%RSD	287.1	29.83	110.4	1.501	25.66	.3367	893.1	74.24	203.9	14.52
#1	.0008	.0475	.0004	.0150	-.0002	17.18	-.0002	-.0001	-.0004	.0021
#2	-.0006	.0280	.0001	.0148	-.0001	17.23	.0000	-.0002	.0007	.0018
#3	.0005	.0307	.0001	.0153	-.0001	17.30	.0001	.0000	.0004	.0016

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1437	20.00	5.353	.0201	.0009	2.359	.0013	-.0006	.0010	.0015
Stddev	.0055	.09	.090	.0001	.0000	.008	.0001	.0010	.0006	.0017
%RSD	3.810	.4434	1.683	.2519	3.371	.3229	11.26	162.8	57.55	115.2
#1	.1500	20.00	5.349	.0201	.0009	2.360	.0014	-.0013	.0004	-.0004
#2	.1401	19.91	5.265	.0200	.0009	2.350	.0012	-.0012	.0016	.0029
#3	.1410	20.09	5.445	.0201	.0009	2.365	.0012	.0006	.0010	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.340	.0004	.0494	.0017	-.0018	.0026	.0077
Stddev	.005	.0001	.0003	.0000	.0012	.0003	.0000
%RSD	.3463	18.87	.6490	.2869	66.35	10.02	.6364
#1	1.335	.0003	.0495	.0017	-.0029	.0024	.0077
#2	1.341	.0003	.0491	.0017	-.0020	.0026	.0077
#3	1.344	.0004	.0497	.0017	-.0005	.0029	.0076

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.5	4544.6	30869.	2088.4
Stddev	6.6	6.5	91.	21.3
%RSD	.41071	.14325	.29561	1.0223
#1	1599.0	4537.6	30766.	2112.9
#2	1611.5	4550.5	30901.	2073.7
#3	1609.1	4545.6	30940.	2078.7

Zoom In Zoom Out

Sample Name: FA22073-16 Acquired: 2/13/2015 18:12:49 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0994	-.0004	.0339	-.0001	32.55	-.0001	-.0001	.0004	-.0001
Stddev	.001	.0095	.0004	.0005	.0001	.13	.0001	.0001	.0002	.0002
%RSD	1327.	9.584	123.2	1.425	101.0	.3965	146.5	149.5	52.25	137.0
#1	.0005	.0971	-.0002	.0334	-.0001	32.41	-.0001	.0001	.0005	-.0002
#2	.0001	.1098	.0000	.0342	.0000	32.58	.0000	-.0002	.0005	.0001
#3	-.0008	.0912	-.0008	.0343	-.0001	32.66	-.0001	-.0002	.0001	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7263	32.84	4.806	.0333	.0007	8.342	.0018	-.0015	-.0008	.0007
Stddev	.0098	.08	.062	.0001	.0002	.037	.0002	.0014	.0009	.0008
%RSD	1.351	.2527	1.295	.3530	22.31	.4472	13.87	91.94	116.7	106.6
#1	.7157	32.75	4.765	.0333	.0008	8.308	.0017	-.0003	-.0013	.0010
#2	.7350	32.92	4.776	.0335	.0008	8.337	.0020	-.0030	-.0013	.0013
#3	.7281	32.86	4.878	.0333	.0005	8.382	.0016	-.0012	.0003	-.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.842	.0008	.1956	.0045	-.0001	.0013	.0100
Stddev	.004	.0002	.0008	.0005	.0017	.0002	.0002
%RSD	.1310	32.35	.3841	10.92	1494.	19.54	1.516
#1	2.845	.0005	.1959	.0050	.0018	.0015	.0102
#2	2.838	.0009	.1948	.0044	-.0005	.0011	.0099
#3	2.844	.0009	.1963	.0040	-.0016	.0011	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1602.0	4550.3	30121.	2064.4
Stddev	4.6	11.3	107.	12.5
%RSD	.28490	.24878	.35613	.60604
#1	1597.1	4537.3	30244.	2078.8
#2	1602.5	4557.7	30072.	2058.4
#3	1606.2	4555.9	30047.	2056.0

Zoom In Zoom Out

Sample Name: FA22073-17 Acquired: 2/13/2015 18:16:57 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0116	-.0001	.0050	.0001	68.03	.0000	-.0002	.0005	-.0005
Stddev	.0003	.0201	.0011	.0001	.0001	.30	.000	.0001	.0003	.0002
%RSD	193.7	173.5	868.0	2.108	73.47	.4403	135.7	59.32	47.67	42.47
#1	.0001	-.0115	.0005	.0049	.0002	67.91	-.0001	-.0002	.0008	-.0007
#2	.0004	.0212	.0006	.0049	.0000	67.81	-.0001	-.0004	.0004	-.0003
#3	-.0001	.0250	-.0014	.0051	.0001	68.37	.0000	-.0001	.0004	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0034	.5363	4.471	.0000	.0087	8.222	.0001	-.0036	.0014	.0017
Stddev	.0084	.0210	.072	.0000	.0002	.025	.0001	.0008	.0004	.0018
%RSD	243.9	3.909	1.603	59.04	2.837	.3020	38.88	21.60	29.38	106.4
#1	.0115	.5121	4.548	.0000	.0085	8.193	.0001	-.0040	.0009	.0006
#2	-.0053	.5468	4.407	.0000	.0090	8.235	.0002	-.0027	.0017	.0007
#3	.0041	.5500	4.459	.0000	.0088	8.237	.0002	-.0042	.0016	.0037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.809	.0003	.2455	.0014	-.0001	.0050	.0052
Stddev	.001	.0003	.0006	.0003	.0005	.0003	.0000
%RSD	.0397	86.44	.2412	18.39	364.0	5.953	.6897
#1	2.809	.0005	.2450	.0011	.0002	.0047	.0051
#2	2.809	.0003	.2454	.0016	.0001	.0052	.0051
#3	2.811	.0000	.2461	.0016	-.0008	.0052	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1621.2	4583.2	30183.	2059.2
Stddev	2.4	4.1	132.	12.2
%RSD	.14699	.08845	.43757	.59471
#1	1623.9	4578.6	30128.	2048.8
#2	1619.7	4584.8	30087.	2072.7
#3	1619.9	4586.3	30333.	2056.2

Zoom In Zoom Out

Sample Name: FA22073-18 Acquired: 2/13/2015 18:21:07 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0066	-.0005	.1022	-.0002	98.71	-.0001	-.0004	-.0001	-.0005
Stddev	.0003	.0194	.0013	.0007	.0002	.74	.0001	.0001	.0004	.0002
%RSD	149.1	295.6	281.6	.6972	105.7	.7456	99.86	40.87	388.3	46.46
#1	.0005	.0017	-.0012	.1030	-.0001	99.27	-.0002	-.0002	.0001	-.0005
#2	.0002	.0279	.0010	.1019	-.0001	98.99	.0000	-.0005	.0001	-.0008
#3	-.0001	-.0100	-.0012	.1016	-.0004	97.88	-.0002	-.0003	-.0005	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5012	4.432	12.85	.0181	-.0009	78.49	.0000	-.0034	.0021	.0036
Stddev	.0047	.124	.00	.0003	.0003	.56	.000	.0018	.0016	.0025
%RSD	.9361	2.789	.0323	1.628	33.40	.7110	7317.	53.80	80.02	68.78
#1	.5022	4.528	12.85	.0178	-.0006	78.90	-.0001	-.0054	.0019	.0010
#2	.4961	4.475	12.86	.0182	-.0009	78.71	-.0002	-.0031	.0005	.0060
#3	.5053	4.293	12.86	.0183	-.0012	77.85	.0003	-.0017	.0038	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.052	.0002	.3853	.0028	.0017	.0000	.0057
Stddev	.022	.0001	.0034	.0002	.0033	.001	.0001
%RSD	.2746	21.66	.8734	8.034	193.5	7895.	1.338
#1	8.077	.0002	.3880	.0029	-.0013	-.0002	.0056
#2	8.036	.0003	.3864	.0029	.0053	-.0006	.0058
#3	8.042	.0002	.3816	.0025	.0012	.0007	.0057

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1615.4	4581.5	29978.	2038.9
Stddev	5.0	13.2	379.	11.5
%RSD	.30931	.28917	1.2657	.56198
#1	1609.7	4566.5	30394.	2040.6
#2	1619.0	4586.1	29891.	2026.6
#3	1617.5	4591.8	29650.	2049.4

Zoom In Zoom Out

Sample Name: FA22073-19 Acquired: 2/13/2015 18:25:17 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0895	-.0003	.0154	.0000	3.370	-.0001	-.0002	-.0001	.0016
Stddev	.0003	.0153	.0003	.0003	.000	.020	.0000	.0001	.0004	.0002
%RSD	152.2	17.15	98.19	1.915	377.9	.5818	89.91	73.52	384.5	12.49
#1	-.0004	.0718	-.0001	.0152	-.0002	3.348	.0000	-.0002	.0002	.0016
#2	-.0004	.0974	-.0007	.0152	-.0001	3.380	-.0001	-.0003	-.0005	.0017
#3	.0002	.0992	-.0002	.0157	.0001	3.383	-.0001	-.0001	.0000	.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.076	4.409	2.726	.0759	.0001	.5083	.0018	-.0002	.0003	.0027
Stddev	.009	.031	.056	.0004	.0001	.0083	.0001	.0002	.0012	.0011
%RSD	.8229	.6995	2.062	.5290	78.01	1.634	6.135	96.66	370.6	41.85
#1	1.075	4.383	2.718	.0758	.0001	.5091	.0020	.0000	-.0007	.0015
#2	1.085	4.402	2.786	.0756	.0003	.5161	.0018	-.0004	.0001	.0037
#3	1.067	4.443	2.674	.0763	.0001	.4996	.0018	-.0002	.0017	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8419	.0009	.0194	.0020	-.0013	.0005	.0128
Stddev	.0011	.0003	.0004	.0002	.0008	.0002	.0000
%RSD	.1288	33.84	1.809	7.471	64.00	35.50	.1708
#1	.8411	.0012	.0192	.0020	-.0019	.0003	.0128
#2	.8415	.0006	.0198	.0019	-.0016	.0005	.0128
#3	.8431	.0009	.0193	.0022	-.0003	.0006	.0128

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1626.2	4654.8	30750.	2086.8
Stddev	4.6	3.1	173.	8.8
%RSD	.28547	.06740	.56175	.42267
#1	1620.9	4652.1	30727.	2090.9
#2	1628.1	4654.1	30933.	2092.8
#3	1629.5	4658.3	30590.	2076.7

Zoom In Zoom Out

Sample Name: FA22073-20 Acquired: 2/13/2015 18:29:26 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.1529	-.0008	.0290	-.0001	44.40	.0000	-.0002	.0001	.0007
Stddev	.0002	.0247	.0010	.0004	.0000	.63	.000	.0001	.0004	.0001
%RSD	49.06	16.12	127.0	1.488	33.85	1.412	118.8	38.75	287.9	20.03
#1	-.0003	.1808	-.0008	.0294	-.0001	44.99	.0000	-.0001	-.0003	.0006
#2	-.0003	.1441	.0002	.0286	-.0001	43.74	-.0001	-.0002	.0003	.0008
#3	-.0007	.1339	-.0018	.0290	-.0001	44.47	.0000	-.0003	.0004	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5330	7.920	3.616	.0209	.0003	13.85	.0012	-.0027	.0005	.0007
Stddev	.0140	.134	.027	.0000	.0001	.22	.0002	.0001	.0018	.0010
%RSD	2.627	1.689	.7408	.1996	48.70	1.598	20.37	5.553	338.3	139.7
#1	.5466	8.074	3.611	.0210	.0004	14.07	.0011	-.0028	.0000	.0009
#2	.5186	7.831	3.592	.0209	.0001	13.63	.0010	-.0026	-.0010	-.0004
#3	.5337	7.855	3.645	.0209	.0002	13.87	.0014	-.0025	.0026	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.483	.0005	.1559	.0017	-.0007	.0007	.0080
Stddev	.036	.0002	.0026	.0001	.0013	.0002	.0001
%RSD	.7957	43.74	1.646	8.245	177.9	29.56	.9488
#1	4.523	.0006	.1582	.0016	.0001	.0004	.0081
#2	4.472	.0006	.1532	.0016	-.0023	.0008	.0080
#3	4.454	.0002	.1563	.0018	-.0001	.0008	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1686.3	4770.5	31142.	2142.3
Stddev	9.2	28.7	165.	25.5
%RSD	.54632	.60204	.53082	1.1886
#1	1676.5	4738.2	30952.	2113.7
#2	1687.4	4780.4	31256.	2162.4
#3	1694.9	4793.0	31217.	2150.8

Zoom In Zoom Out

Sample Name: FA22073-21 Acquired: 2/13/2015 18:33:35 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.0255	-.0006	.0482	.0000	13.79	.0000	.0000	-.0004	-.0002
Stddev	.0003	.0080	.0008	.0005	.0001	.02	.000	.0001	.0002	.0006
%RSD	56.65	31.49	132.8	1.074	230.5	.1378	67.06	272.8	58.81	390.3
#1	-.0005	.0346	-.0012	.0476	-.0001	13.79	.0000	.0000	-.0002	-.0002
#2	-.0003	.0194	-.0009	.0485	.0001	13.77	-.0001	.0000	-.0006	-.0008
#3	-.0010	.0224	.0003	.0485	.0001	13.81	.0000	.0001	-.0004	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0414	8.568	1.918	.0025	.0024	28.76	.0010	-.0009	.0058	.0009
Stddev	.0085	.023	.018	.0000	.0001	.06	.0002	.0001	.0005	.0014
%RSD	20.56	.2669	.9374	.4289	5.848	.1963	15.57	11.78	8.155	158.8
#1	.0402	8.551	1.914	.0025	.0024	28.70	.0008	-.0009	.0055	-.0007
#2	.0336	8.561	1.902	.0024	.0023	28.79	.0011	-.0010	.0055	.0018
#3	.0505	8.594	1.938	.0025	.0026	28.79	.0010	-.0008	.0063	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.697	.0007	.3879	.0006	-.0004	.0000	.0071
Stddev	.004	.0003	.0007	.0001	.0006	.000	.0000
%RSD	.1387	45.61	.1713	14.37	145.5	836.9	.5439
#1	2.693	.0004	.3871	.0005	.0002	-.0003	.0071
#2	2.696	.0007	.3882	.0006	-.0010	.0004	.0071
#3	2.701	.0010	.3884	.0007	-.0004	-.0002	.0070

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.1	4567.4	30259.	2103.4
Stddev	4.6	9.4	65.	5.7
%RSD	.28833	.20506	.21333	.27312
#1	1608.8	4565.5	30333.	2098.1
#2	1616.5	4577.6	30218.	2102.5
#3	1608.1	4559.2	30225.	2109.5

Zoom In Zoom Out

Sample Name: FA22073-22 Acquired: 2/13/2015 18:37:45 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0144	-.0006	.0052	-.0002	68.58	.0000	-.0003	.0005	-.0007
Stddev	.0006	.0074	.0004	.0001	.0001	.11	.000	.0001	.0001	.0006
%RSD	162.0	51.36	76.41	1.881	80.64	.1561	65.21	33.99	28.75	84.99
#1	-.0003	.0165	-.0002	.0052	-.0002	68.57	-.0001	-.0004	.0005	-.0013
#2	.0009	.0062	-.0005	.0051	-.0003	68.48	-.0001	-.0002	.0004	-.0007
#3	.0006	.0206	-.0011	.0053	.0000	68.69	.0000	-.0003	.0006	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0023	.4992	4.490	.0001	.0087	8.275	.0001	-.0017	-.0004	.0016
Stddev	.0005	.0095	.080	.0000	.0002	.017	.0001	.0013	.0020	.0006
%RSD	23.42	1.901	1.789	15.31	2.207	.2082	243.9	76.75	555.2	35.50
#1	.0017	.5099	4.438	.0001	.0085	8.255	.0001	-.0004	.0006	.0010
#2	.0025	.4918	4.583	.0001	.0089	8.288	-.0001	-.0030	-.0026	.0019
#3	.0027	.4959	4.450	.0001	.0087	8.280	.0001	-.0016	.0009	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.867	.0002	.2478	.0013	-.0006	.0050	.0056
Stddev	.003	.0002	.0004	.0001	.0019	.0000	.0000
%RSD	.1093	90.52	.1670	9.097	295.6	.9272	.4295
#1	2.869	.0004	.2481	.0014	.0003	.0051	.0056
#2	2.868	.0001	.2479	.0012	.0006	.0050	.0056
#3	2.863	.0001	.2473	.0013	-.0028	.0050	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1620.5	4569.5	30397.	2074.4
Stddev	2.1	4.9	53.	10.5
%RSD	.12905	.10671	.17374	.50622
#1	1618.1	4564.7	30416.	2076.4
#2	1621.8	4574.5	30337.	2083.8
#3	1621.7	4569.3	30437.	2063.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 18:41:55 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2365	39.81	1.979	1.953	1.954	39.90	2.025	2.011	1.943	1.895
Stddev	.0119	.03	.007	.004	.004	.01	.006	.004	.098	.095
%RSD	5.045	.0665	.3764	.1772	.2150	.0337	.2921	.2120	5.022	5.004
#1	.2429	39.84	1.970	1.956	1.958	39.91	2.018	2.006	1.989	1.944
#2	.2439	39.79	1.981	1.949	1.955	39.89	2.028	2.013	2.010	1.955
#3	.2227	39.80	1.985	1.955	1.950	39.89	2.029	2.014	1.831	1.786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.96	40.05	38.46	1.925	1.989	40.44	1.984	2.009	1.983	1.987
Stddev	.08	.06	.18	.097	.012	.08	.005	.009	.003	.005
%RSD	.2056	.1575	.4714	5.023	.5790	.1929	.2703	.4433	.1542	.2597
#1	38.87	40.07	38.37	1.976	1.976	40.52	1.978	2.000	1.980	1.982
#2	39.00	39.99	38.34	1.985	1.993	40.44	1.986	2.010	1.986	1.988
#3	39.02	40.11	38.67	1.814	1.997	40.36	1.988	2.018	1.983	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.799	1.981	2.005	1.919	2.009	1.875	2.025
Stddev	.004	.006	.003	.093	.011	.099	.005
%RSD	.2510	.3213	.1660	4.851	.5515	5.275	.2727
#1	1.794	1.974	2.009	1.966	1.997	1.928	2.018
#2	1.802	1.985	2.002	1.979	2.014	1.937	2.028
#3	1.802	1.984	2.004	1.811	2.017	1.761	2.028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 18:41:55 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1554.2	4417.7	31336.	2116.3
Stddev	6.3	11.9	1291.	12.7
%RSD	.40396	.26881	4.1190	.60048
#1	1560.8	4430.7	30780.	2130.6
#2	1553.6	4414.8	30416.	2111.9
#3	1548.3	4407.5	32811.	2106.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 18:45:53 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0166	.0009	.0002	.0002	.0118	.0004	.0003	-.0001
Stddev	.0002	.0104	.0003	.0002	.0001	.0065	.0001	.0002	.0002
%RSD	333.4	62.87	30.73	125.7	24.47	54.50	24.25	71.94	200.4
#1	.0000	.0232	.0012	.0004	.0003	.0044	.0005	.0002	-.0001
#2	.0000	.0046	.0008	.0002	.0002	.0155	.0005	.0005	.0001
#3	.0002	.0220	.0006	-.0001	.0002	.0157	.0003	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0456	-.0166	.0235	.0007	F.0038	.0294	.0005	.0006
Stddev	.0003	.0110	.0101	.0152	.0001	.0008	.0099	.0002	.0010
%RSD	85.96	24.21	60.54	64.62	9.933	22.23	33.82	40.18	152.1
#1	.0002	.0574	-.0115	.0105	.0006	.0045	.0378	.0007	.0015
#2	.0002	.0439	-.0102	.0402	.0008	.0039	.0184	.0004	.0007
#3	.0008	.0355	-.0282	.0199	.0007	.0029	.0319	.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0013	.0004	F.0014	.0003	F.0025	.0004	.0004	.0010
Stddev	.0003	.0010	.0001	.0002	.0001	.0001	.0005	.0002	.0000
%RSD	30.79	75.29	35.44	11.09	34.53	4.245	127.9	47.41	2.837
#1	.0009	.0004	.0004	.0015	.0003	.0024	-.0001	.0006	.0010
#2	.0015	.0023	.0002	.0014	.0002	.0026	.0010	.0002	.0010
#3	.0009	.0011	.0004	.0012	.0004	.0023	.0005	.0004	.0010
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 18:45:53 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1623.8	4623.1	30825.	2061.6
Stddev	2.1	3.1	130.	8.2
%RSD	.13127	.06633	.42033	.39680
#1	1623.9	4623.6	30764.	2052.3
#2	1625.9	4625.9	30974.	2065.2
#3	1621.7	4619.8	30737.	2067.5

Zoom In Zoom Out

Sample Name: FA22073-23 Acquired: 2/13/2015 18:50:06 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0538	-.0004	.0123	.0001	27.10	-.0001	-.0002	.0003	.0002
Stddev	.0002	.0020	.0005	.0003	.0002	.14	.0000	.0001	.0002	.0002
%RSD	40.78	3.781	103.6	2.697	257.4	.5116	43.17	21.63	67.35	73.06
#1	.0007	.0552	-.0002	.0125	.0001	26.94	.0000	-.0003	.0002	.0000
#2	.0004	.0514	-.0001	.0119	.0002	27.14	-.0001	-.0003	.0001	.0004
#3	.0004	.0546	-.0010	.0124	-.0001	27.21	-.0001	-.0002	.0005	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1472	21.53	5.790	.0266	.0009	1.267	.0003	-.0015	.0013	.0016
Stddev	.0037	.13	.072	.0002	.0001	.013	.0002	.0008	.0007	.0012
%RSD	2.522	.6005	1.246	.6732	16.21	1.033	44.21	53.78	57.43	76.09
#1	.1434	21.39	5.843	.0265	.0010	1.272	.0005	-.0022	.0019	.0011
#2	.1509	21.55	5.708	.0267	.0007	1.252	.0002	-.0015	.0015	.0007
#3	.1474	21.65	5.820	.0264	.0009	1.276	.0003	-.0007	.0005	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.873	.0003	.0709	.0021	-.0007	.0006	.0070
Stddev	.002	.0006	.0007	.0002	.0007	.0004	.0001
%RSD	.0695	185.3	.9953	8.643	99.88	63.80	.7322
#1	2.874	.0000	.0703	.0020	-.0005	.0009	.0070
#2	2.871	.0010	.0708	.0023	-.0014	.0008	.0070
#3	2.874	.0000	.0717	.0020	-.0001	.0002	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1628.5	4612.2	30661.	2102.7
Stddev	2.9	2.1	176.	7.5
%RSD	.18039	.04599	.57450	.35664
#1	1626.5	4613.2	30662.	2102.2
#2	1631.9	4613.6	30484.	2095.5
#3	1627.1	4609.7	30837.	2110.5

Zoom In Zoom Out

Sample Name: FA22073-24 Acquired: 2/13/2015 18:54:14 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.3886	-.0001	.0215	-.0001	45.78	.0000	-.0001	.0009	.0011
Stddev	.0002	.0156	.0004	.0005	.0002	.08	.000	.0001	.0001	.0001
%RSD	97.71	4.013	348.1	2.529	174.0	.1834	168.0	189.5	9.243	9.523
#1	.0000	.3718	.0000	.0210	.0000	45.87	.0000	.0000	.0008	.0010
#2	-.0002	.3915	-.0005	.0215	-.0004	45.70	.0000	.0000	.0008	.0011
#3	-.0004	.4026	.0002	.0221	-.0001	45.78	-.0001	-.0002	.0009	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1913	2.993	4.025	.0100	.0004	.8260	.0010	-.0030	.0007	.0017
Stddev	.0059	.018	.012	.0001	.0001	.0055	.0001	.0006	.0010	.0008
%RSD	3.087	.6134	.2862	.5234	16.21	.6656	12.27	19.32	130.6	49.84
#1	.1980	3.013	4.012	.0100	.0004	.8197	.0009	-.0028	.0015	.0016
#2	.1869	2.977	4.026	.0101	.0003	.8288	.0010	-.0036	.0010	.0009
#3	.1889	2.989	4.035	.0100	.0004	.8295	.0011	-.0025	-.0003	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.945	.0002	.1515	.0114	-.0004	.0036	.0125
Stddev	.002	.0002	.0004	.0005	.0006	.0004	.0000
%RSD	.1036	67.30	.2616	4.054	183.5	10.65	.2326
#1	1.947	.0002	.1511	.0117	-.0011	.0038	.0125
#2	1.943	.0001	.1516	.0116	.0000	.0031	.0125
#3	1.945	.0004	.1518	.0109	.0000	.0038	.0125

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.1	4553.1	30617.	2073.3
Stddev	1.1	1.7	53.	5.0
%RSD	.07115	.03664	.17154	.23961
#1	1611.8	4551.2	30563.	2069.1
#2	1613.4	4554.4	30621.	2078.8
#3	1614.0	4553.6	30668.	2072.0

Zoom In Zoom Out

Sample Name: FA22084-1 Acquired: 2/13/2015 18:58:22 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0113	-.0002	.0003	-.0001	.3165	-.0001	-.0002	.0007	-.0007
Stddev	.0003	.0236	.0005	.0001	.0001	.0048	.0001	.0001	.0001	.0001
%RSD	95.32	208.6	311.2	22.98	69.94	1.512	118.5	66.41	15.02	15.02
#1	.0000	.0081	.0004	.0003	-.0001	.3210	-.0001	-.0003	.0008	-.0007
#2	-.0003	-.0105	-.0006	.0003	-.0001	.3115	.0000	-.0001	.0007	-.0006
#3	-.0006	.0364	-.0003	.0002	.0000	.3169	-.0001	-.0003	.0006	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0156	-.0023	.1015	.0003	.0005	1.820	.0002	-.0008	.0006	.0021
Stddev	.0056	.0443	.0055	.0000	.0000	.012	.0002	.0006	.0007	.0021
%RSD	35.92	1895.	5.454	3.385	8.858	.6803	76.59	75.08	111.4	101.3
#1	.0094	.0126	.0956	.0003	.0005	1.817	.0001	-.0010	.0010	.0011
#2	.0173	.0326	.1065	.0003	.0004	1.810	.0004	-.0013	-.0002	.0006
#3	.0202	-.0522	.1024	.0003	.0005	1.834	.0001	-.0001	.0011	.0045

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.442	.0007	.0003	.0006	-.0010	.0021	.0056
Stddev	.001	.0003	.0002	.0001	.0005	.0003	.0000
%RSD	.0924	46.54	54.00	11.64	44.88	13.76	.3698
#1	1.444	.0004	.0005	.0005	-.0014	.0021	.0055
#2	1.441	.0007	.0001	.0007	-.0012	.0018	.0056
#3	1.442	.0010	.0004	.0006	-.0005	.0023	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1641.5	4645.2	31475.	2100.8
Stddev	1.2	6.8	130.	10.0
%RSD	.07157	.14727	.41401	.47400
#1	1642.4	4642.6	31414.	2106.6
#2	1641.9	4653.0	31625.	2106.5
#3	1640.2	4640.0	31386.	2089.3

Zoom In Zoom Out

Sample Name: FA22084-2 Acquired: 2/13/2015 19:02:34 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0319	-.0008	.0004	-.0001	.2351	.0000	-.0001	.0001	-.0003
Stddev	.0005	.0085	.0005	.0002	.0000	.0082	.000	.0000	.0001	.0001
%RSD	403.8	26.75	54.49	50.36	25.93	3.479	31.55	17.63	110.8	28.77
#1	.0003	.0261	-.0005	.0004	-.0001	.2305	.0000	-.0001	.0001	-.0004
#2	.0005	.0280	-.0014	.0006	-.0001	.2445	-.0001	-.0001	.0000	-.0002
#3	-.0005	.0417	-.0007	.0002	-.0001	.2301	.0000	-.0001	.0003	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0060	.0397	.2303	.0007	.0003	1.110	.0003	-.0006	.0006	.0008
Stddev	.0011	.0231	.0215	.0000	.0000	.028	.0002	.0010	.0002	.0007
%RSD	17.78	58.31	9.346	1.530	14.32	2.511	78.95	161.2	26.57	78.31
#1	.0047	.0247	.2082	.0008	.0003	1.079	.0003	-.0003	.0008	.0004
#2	.0066	.0663	.2512	.0008	.0003	1.132	.0004	.0002	.0005	.0006
#3	.0065	.0280	.2314	.0007	.0003	1.120	.0000	-.0017	.0005	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.285	.0005	.0007	.0001	-.0008	.0007	.0070
Stddev	.004	.0004	.0001	.0001	.0008	.0002	.0001
%RSD	.2874	83.07	16.33	145.4	97.69	26.57	.9332
#1	1.281	.0005	.0006	.0001	.0001	.0009	.0071
#2	1.284	.0008	.0006	.0000	-.0013	.0008	.0070
#3	1.289	.0001	.0008	.0002	-.0012	.0005	.0070

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1619.3	4584.6	30913.	2103.3
Stddev	4.4	19.3	145.	26.5
%RSD	.27209	.42109	.47037	1.2604
#1	1623.9	4599.5	30973.	2130.7
#2	1618.6	4591.4	30748.	2077.8
#3	1615.2	4562.8	31020.	2101.3

Zoom In Zoom Out

Sample Name: FA22084-3 Acquired: 2/13/2015 19:06:47 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3176	-.0011	.0044	.0001	27.64	.0016	.0011	-.0002	-.0005
Stddev	.0006	.0145	.0011	.0004	.0000	.16	.0001	.0001	.0003	.0002
%RSD	529.3	4.564	100.0	8.601	73.23	.5902	3.249	10.14	137.5	38.17
#1	-.0003	.3205	-.0004	.0040	.0000	27.59	.0016	.0010	-.0004	-.0007
#2	.0005	.3019	-.0005	.0046	.0001	27.82	.0015	.0010	.0001	-.0003
#3	-.0006	.3305	-.0023	.0048	.0000	27.51	.0015	.0012	-.0005	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0094	.8979	6.263	.0154	-.0001	16.32	.0043	-.0024	.0008	.0011
Stddev	.0016	.0155	.061	.0000	.0001	.08	.0000	.0006	.0003	.0008
%RSD	17.07	1.730	.9689	.2466	126.5	.5161	1.074	23.41	36.03	66.52
#1	.0081	.8858	6.196	.0154	-.0001	16.32	.0042	-.0022	.0011	.0003
#2	.0088	.8926	6.282	.0155	-.0002	16.40	.0043	-.0019	.0009	.0017
#3	.0112	.9154	6.313	.0154	.0000	16.23	.0043	-.0030	.0005	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.693	.0006	.0172	.0011	-.0003	.0004	.0135
Stddev	.001	.0002	.0001	.0001	.0008	.0001	.0000
%RSD	.0296	28.99	.5186	4.944	316.5	34.84	.3174
#1	1.693	.0005	.0172	.0011	-.0006	.0004	.0136
#2	1.693	.0005	.0173	.0011	-.0009	.0005	.0135
#3	1.692	.0008	.0171	.0010	.0007	.0002	.0135

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.7	4597.0	30941.	2082.2
Stddev	1.7	5.7	165.	15.6
%RSD	.10653	.12429	.53222	.74904
#1	1622.1	4592.4	30823.	2096.0
#2	1625.5	4603.4	30871.	2065.3
#3	1623.3	4595.2	31129.	2085.4

Zoom In Zoom Out

Sample Name: FA22084-4 Acquired: 2/13/2015 19:10:56 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	3.381	.0000	.0060	.0005	18.00	.0007	.0020	.0001	.0001
Stddev	.0005	.158	.0005	.0007	.0001	.85	.0000	.0001	.0004	.0003
%RSD	326.7	4.686	4585.	11.61	23.79	4.742	4.364	3.972	667.8	492.3
#1	-.0007	3.246	-.0002	.0053	.0005	17.27	.0007	.0019	.0005	.0001
#2	.0003	3.555	.0006	.0067	.0006	18.94	.0007	.0020	.0000	-.0002
#3	-.0001	3.342	-.0004	.0060	.0004	17.80	.0007	.0020	-.0003	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0265	.2573	18.49	.0687	-.0001	28.49	.0034	-.0015	.0000	.0023
Stddev	.0031	.0355	.79	.0002	.0002	1.27	.0001	.0005	.002	.0007
%RSD	11.65	13.81	4.268	.3076	147.3	4.439	3.936	34.63	6567.	29.60
#1	.0234	.2208	17.77	.0688	-.0003	27.37	.0033	-.0020	.0002	.0016
#2	.0296	.2918	19.33	.0685	.0001	29.86	.0033	-.0015	-.0016	.0025
#3	.0264	.2592	18.35	.0689	-.0003	28.23	.0036	-.0010	.0014	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.107	.0004	.0099	.0010	-.0008	.0001	.0172
Stddev	.002	.0003	.0004	.0001	.0009	.0002	.0001
%RSD	.2085	75.66	4.125	12.03	113.7	197.0	.3679
#1	1.107	.0001	.0095	.0008	.0002	.0002	.0172
#2	1.104	.0003	.0103	.0011	-.0014	.0003	.0172
#3	1.109	.0007	.0098	.0009	-.0011	-.0002	.0173

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1602.4	4559.5	30514.	2039.0
Stddev	1.3	7.2	145.	80.4
%RSD	.08317	.15726	.47615	3.9448
#1	1602.7	4562.3	30550.	2110.4
#2	1603.6	4564.9	30637.	1951.9
#3	1601.0	4551.4	30353.	2054.7

Zoom In Zoom Out

Sample Name: FA22084-5 Acquired: 2/13/2015 19:15:04 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.5263	-.0008	.0238	.0002	199.2	.0049	.0041	.0007
Stddev	.0001	.0081	.0011	.0004	.0001	.6	.0001	.0000	.0004
%RSD	23.46	1.543	145.8	1.614	31.17	.3182	1.105	1.185	54.06
#1	-.0006	.5169	-.0021	.0235	.0003	198.9	.0049	.0041	.0009
#2	-.0004	.5304	.0000	.0237	.0003	198.7	.0050	.0041	.0003
#3	-.0004	.5316	-.0003	.0243	.0001	199.9	.0048	.0041	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0209	2.415	38.15	.0608	-.0010	F86.57	.0150	-.0024
Stddev	.0001	.0062	.017	.18	.0001	.0000	.20	.0002	.0012
%RSD	17.52	29.89	.7069	.4756	.2028	3.544	.2274	1.397	51.45
#1	-.0004	.0204	2.422	38.08	.0608	-.0010	86.54	.0152	-.0029
#2	-.0005	.0149	2.396	38.02	.0607	-.0011	86.40	.0149	-.0032
#3	-.0006	.0273	2.428	38.36	.0610	-.0011	86.79	.0148	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0001	2.158	.0003	.1332	.0022	.0009	.0022	.0250
Stddev	.0010	.0009	.003	.0004	.0005	.0001	.0010	.0004	.0000
%RSD	50.31	988.9	.1342	148.3	.4078	6.958	110.3	17.02	.1553
#1	.0030	.0008	2.161	.0005	.1328	.0023	.0000	.0018	.0250
#2	.0015	.0003	2.156	.0006	.1329	.0021	.0020	.0026	.0249
#3	.0012	-.0008	2.157	-.0002	.1338	.0020	.0008	.0022	.0249

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1579.8	4512.7	29734.	2053.7
Stddev	.8	2.9	95.	14.2
%RSD	.04821	.06318	.31948	.68928
#1	1578.9	4510.1	29769.	2070.0
#2	1580.1	4515.8	29627.	2044.0
#3	1580.4	4512.3	29808.	2047.2

Zoom In Zoom Out

Sample Name: FA22084-6 Acquired: 2/13/2015 19:19:11 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	4.138	.0005	.1436	.0007	36.88	.0003	.0011	.0008	.0003
Stddev	.0003	.025	.0003	.0008	.0002	.11	.0000	.0001	.0004	.0001
%RSD	70.67	.5965	60.63	.5495	35.02	.2994	11.08	10.64	51.07	38.34
#1	-.0002	4.167	.0003	.1444	.0009	36.87	.0003	.0012	.0010	.0002
#2	-.0007	4.125	.0008	.1437	.0004	36.99	.0003	.0010	.0004	.0004
#3	-.0002	4.123	.0003	.1428	.0007	36.77	.0004	.0010	.0012	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0549	1.990	1.609	.0256	-.0003	24.70	.0041	-.0021	.0009	.0018
Stddev	.0038	.007	.060	.0001	.0001	.07	.0003	.0010	.0008	.0025
%RSD	6.949	.3551	3.755	.4875	16.27	.2666	6.558	46.76	85.24	137.0
#1	.0549	1.983	1.603	.0257	-.0003	24.66	.0044	-.0013	.0017	-.0005
#2	.0511	1.997	1.552	.0256	-.0004	24.77	.0039	-.0018	.0007	.0015
#3	.0587	1.989	1.672	.0255	-.0003	24.65	.0041	-.0032	.0002	.0045

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.389	.0002	.1762	.0019	.0001	.0003	.0233
Stddev	.004	.0004	.0005	.0001	.0004	.0004	.0000
%RSD	.0922	141.2	.3101	3.555	756.2	122.1	.1109
#1	4.393	.0004	.1765	.0019	.0003	.0000	.0233
#2	4.385	-.0001	.1765	.0019	-.0004	.0007	.0233
#3	4.388	.0005	.1756	.0018	.0003	.0002	.0233

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1617.1	4584.8	30298.	2075.1
Stddev	4.5	5.4	65.	11.8
%RSD	.27869	.11779	.21492	.57089
#1	1611.9	4578.6	30228.	2065.0
#2	1619.1	4588.3	30309.	2072.1
#3	1620.3	4587.5	30356.	2088.1

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/13/2015 19:23:18 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0091	.2127	.0098	.2041	.0050	1.081	.0049	.0497	.0103	.0255
Stddev	.0003	.0176	.0007	.0008	.0001	.010	.0000	.0001	.0002	.0003
%RSD	3.385	8.274	7.006	.4010	1.953	.9040	.6638	.1230	2.300	1.112
#1	.0093	.2218	.0106	.2050	.0051	1.092	.0049	.0497	.0101	.0253
#2	.0092	.2238	.0097	.2038	.0049	1.078	.0049	.0497	.0105	.0254
#3	.0087	.1924	.0092	.2035	.0049	1.074	.0049	.0498	.0103	.0258

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3091	10.20	5.037	.0155	.0460	10.47	.0398	.0041	.0056	.0101
Stddev	.0017	.15	.053	.0000	.0002	.08	.0001	.0005	.0002	.0006
%RSD	.5470	1.429	1.048	.2510	.3930	.7787	.1299	13.25	4.111	6.092
#1	.3072	10.37	5.084	.0155	.0460	10.56	.0398	.0047	.0054	.0106
#2	.3102	10.09	4.980	.0155	.0458	10.45	.0397	.0038	.0059	.0103
#3	.3099	10.14	5.047	.0156	.0462	10.40	.0398	.0036	.0055	.0094

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0393	.0487	.0104	.0099	.0095	.0484	.0210
Stddev	.0004	.0005	.0001	.0001	.0014	.0001	.0000
%RSD	.9233	.9856	.6664	1.442	14.84	.2379	.0422
#1	.0389	.0482	.0104	.0099	.0089	.0483	.0210
#2	.0395	.0490	.0104	.0101	.0086	.0485	.0209
#3	.0394	.0490	.0103	.0098	.0112	.0485	.0210

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1638.6	4647.8	30750.	2084.7
Stddev	2.5	5.3	64.	7.7
%RSD	.15021	.11487	.20782	.36772
#1	1640.9	4651.2	30816.	2077.1
#2	1639.0	4650.5	30745.	2092.4
#3	1636.0	4641.7	30689.	2084.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 19:27:25 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0002	484.1	-.0003	-.0002	.0001	463.5	-.0013	.0006
Stddev	.0003	.9	.0006	.0003	.0001	1.0	.0001	.0000
%RSD	108.8	.1930	195.7	139.2	128.4	.2081	7.500	6.199
#1	.0000	484.5	.0003	.0001	.0001	464.2	-.0013	.0006
#2	.0003	483.0	-.0004	-.0002	.0000	462.4	-.0015	.0007
#3	.0005	484.7	-.0009	-.0005	.0001	463.8	-.0013	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0006	-.0029	172.2	.0832	454.7	.0003	.0000	.1456
Stddev	.0002	.0004	.0	.0326	.8	.0000	.000	.0041
%RSD	38.91	14.99	.0284	39.18	.1823	5.489	561.8	2.832
#1	-.0008	-.0034	172.2	.0942	453.8	.0002	.0002	.1424
#2	-.0004	-.0029	172.3	.0465	454.8	.0003	-.0001	.1441
#3	-.0004	-.0025	172.2	.1089	455.5	.0003	-.0003	.1503

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0009	F-.0059	.0002	.0023	.0854	.0011	.0001	.0002
Stddev	.0002	.0023	.0015	.0017	.0006	.0007	.0001	.0001
%RSD	20.37	38.99	723.3	72.50	.7281	63.78	38.60	26.65
#1	.0008	-.0082	-.0007	.0016	.0861	.0012	.0001	.0002
#2	.0007	-.0059	-.0006	.0043	.0853	.0017	.0001	.0002
#3	.0011	-.0036	.0020	.0012	.0848	.0003	.0002	.0003

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0004	.0000
Stddev	.0032	.0005	.0001
%RSD	835.7	133.2	771.6
#1	-.0015	.0008	.0001
#2	.0040	-.0002	.0001
#3	-.0014	.0005	-.0001

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 19:27:25 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1541.8	4251.7	27738.	2063.3
Stddev	4.4	11.0	77.	13.9
%RSD	.28854	.25890	.27610	.67373
#1	1543.9	4255.3	27682.	2047.3
#2	1544.9	4260.4	27826.	2069.8
#3	1536.7	4239.3	27707.	2072.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:31:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2439	39.92	1.880	1.952	1.950	39.87	1.925	1.910	2.016	1.968
Stddev	.0011	.09	.005	.004	.002	.03	.007	.006	.007	.006
%RSD	.4667	.2308	.2945	.2135	.1209	.0817	.3582	.3334	.3352	.3244
#1	.2447	40.02	1.886	1.952	1.952	39.90	1.932	1.917	2.017	1.971
#2	.2426	39.88	1.878	1.948	1.948	39.84	1.924	1.908	2.008	1.960
#3	.2444	39.85	1.875	1.957	1.950	39.87	1.918	1.904	2.021	1.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.88	40.00	38.42	1.987	1.886	40.57	1.884	1.898	1.882	1.886
Stddev	.07	.08	.24	.005	.002	.07	.007	.009	.009	.006
%RSD	.1849	.2072	.6219	.2613	.0826	.1784	.3503	.4535	.4700	.3356
#1	38.85	40.06	38.68	1.992	1.888	40.64	1.891	1.907	1.892	1.893
#2	38.83	39.90	38.35	1.982	1.885	40.57	1.880	1.899	1.879	1.884
#3	38.97	40.04	38.22	1.988	1.886	40.50	1.879	1.890	1.875	1.881
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.710	1.885	2.010	1.981	1.909	1.947	1.922
Stddev	.006	.006	.002	.007	.002	.004	.007
%RSD	.3294	.3363	.0937	.3500	.1227	.1890	.3523
#1	1.716	1.893	2.011	1.987	1.911	1.950	1.929
#2	1.708	1.884	2.008	1.973	1.907	1.943	1.922
#3	1.705	1.880	2.011	1.983	1.908	1.948	1.915
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:31:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1629.0	4616.7	30379.	2097.2
Stddev	2.7	7.1	53.	2.4
%RSD	.16660	.15417	.17556	.11410
#1	1628.7	4611.7	30319.	2096.8
#2	1626.5	4613.6	30396.	2095.1
#3	1631.9	4624.9	30421.	2099.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:35:27 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0077	-.0001	.0005	.0001	.0200	.0002	.0002	-.0002
Stddev	.001	.0056	.0008	.0002	.0002	.0007	.0001	.0001	.0002
%RSD	1338.	72.26	965.4	40.49	203.2	3.571	95.27	72.70	128.0
#1	.0002	.0045	-.0004	.0004	-.0001	.0202	.0003	.0001	.0000
#2	.0003	.0142	.0008	.0008	.0001	.0192	.0001	.0003	-.0001
#3	-.0006	.0046	-.0008	.0004	.0003	.0205	.0001	.0001	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F.0545	.0361	.0366	.0004	F.0036	.0273	.0004	-.0005
Stddev	.0002	.0075	.0507	.0136	.0000	.0011	.0071	.0001	.0007
%RSD	92.82	13.77	140.4	37.14	9.682	30.17	25.93	28.00	161.0
#1	.0000	.0624	.0029	.0243	.0004	.0047	.0354	.0003	.0004
#2	-.0004	.0534	.0110	.0343	.0003	.0035	.0222	.0005	-.0007
#3	-.0004	.0475	.0945	.0511	.0004	.0025	.0242	.0004	-.0010
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0009	.0001	.0010	.0003	.0019	.0001	.0001	.0007
Stddev	.0014	.0017	.0001	.0005	.0001	.0002	.0004	.0003	.0000
%RSD	128.5	185.3	110.9	51.88	28.10	8.510	389.0	226.6	5.462
#1	.0020	.0022	.0002	.0014	.0003	.0021	.0005	.0001	.0008
#2	.0017	.0016	.0000	.0011	.0002	.0019	-.0002	-.0001	.0007
#3	-.0005	-.0010	.0001	.0004	.0003	.0018	.0000	.0005	.0007
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:35:27 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1621.5	4614.1	30556.	2048.5
Stddev	2.3	5.8	129.	12.6
%RSD	.14243	.12538	.42148	.61497
#1	1624.1	4615.5	30687.	2034.7
#2	1619.9	4607.8	30430.	2059.5
#3	1620.3	4619.1	30552.	2051.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/13/2015 19:39:39 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.010	F518.2	1.068	.5246	.5126	488.2	.9755	.5106	.5200
Stddev	.002	2.0	.003	.0015	.0013	1.8	.0007	.0005	.0018
%RSD	.1591	.3848	.2448	.2877	.2574	.3702	.0759	.0930	.3553
#1	1.011	516.0	1.065	.5232	.5111	486.1	.9756	.5104	.5180
#2	1.010	518.7	1.069	.5244	.5129	489.3	.9747	.5103	.5217
#3	1.008	519.9	1.069	.5262	.5137	489.2	.9762	.5112	.5202

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5719	180.7	.0182	477.9	.5221	.9653	.1004	1.013	.9778
Stddev	.0025	.6	.0266	1.4	.0003	.0016	.0151	.000	.0052
%RSD	.4353	.3167	146.0	.2846	.0589	.1704	15.00	.0240	.5284
#1	.5694	180.1	.0022	476.3	.5224	.9643	.0835	1.013	.9836
#2	.5744	181.0	.0035	478.5	.5218	.9645	.1052	1.013	.9736
#3	.5719	181.1	.0490	478.8	.5222	.9672	.1124	1.013	.9763

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.086	1.037	.0417	.9935	1.041	1.042	1.018	.5034	.9939
Stddev	.002	.000	.0006	.0009	.003	.001	.003	.0018	.0006
%RSD	.2138	.0354	1.450	.0891	.2963	.0899	.2626	.3561	.0609
#1	1.086	1.037	.0411	.9926	1.037	1.042	1.021	.5013	.9943
#2	1.083	1.037	.0415	.9943	1.041	1.040	1.017	.5043	.9932
#3	1.088	1.037	.0423	.9937	1.043	1.042	1.016	.5045	.9941

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1455.1	4043.0	26519.	1949.9
Stddev	4.8	2.5	19.	9.4
%RSD	.32909	.06283	.07066	.48187
#1	1450.1	4040.2	26540.	1960.2
#2	1455.5	4045.2	26512.	1941.9
#3	1459.7	4043.6	26505.	1947.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:43:36 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2499	40.56	1.945	1.992	1.974	40.46	1.984	1.969	2.051	2.008
Stddev	.0004	.09	.002	.004	.004	.13	.003	.003	.006	.003
%RSD	.1493	.2190	.1142	.2253	.1963	.3095	.1241	.1704	.2926	.1339
#1	.2500	40.46	1.943	1.996	1.970	40.34	1.983	1.967	2.057	2.011
#2	.2502	40.62	1.944	1.994	1.975	40.46	1.983	1.967	2.052	2.008
#3	.2495	40.60	1.947	1.987	1.978	40.59	1.987	1.973	2.045	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.49	41.02	39.21	2.032	1.949	41.41	1.947	1.962	1.946	1.954
Stddev	.10	.09	.13	.002	.006	.06	.002	.002	.001	.003
%RSD	.2405	.2077	.3423	.0782	.3137	.1432	.0851	.0983	.0590	.1369
#1	39.39	41.11	39.13	2.033	1.943	41.35	1.946	1.960	1.945	1.953
#2	39.58	41.00	39.36	2.031	1.949	41.41	1.946	1.964	1.945	1.952
#3	39.49	40.94	39.12	2.031	1.955	41.47	1.949	1.963	1.947	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.765	1.952	2.042	2.027	1.968	1.989	1.984
Stddev	.004	.006	.004	.003	.004	.003	.003
%RSD	.2249	.3065	.1952	.1629	.2211	.1390	.1400
#1	1.764	1.950	2.039	2.030	1.965	1.990	1.982
#2	1.762	1.947	2.042	2.025	1.965	1.991	1.984
#3	1.770	1.958	2.047	2.025	1.973	1.986	1.987
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:43:36 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1586.1	4493.9	29875.	2044.3
Stddev	3.4	7.2	85.	6.7
%RSD	.21490	.16017	.28444	.32717
#1	1588.6	4502.2	29785.	2047.1
#2	1582.2	4489.6	29886.	2036.6
#3	1587.5	4489.9	29954.	2049.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:47:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0070	.0009	.0001	.0003	.0208	.0002	.0000	-.0002
Stddev	.0004	.0133	.0007	.0002	.0001	.0040	.0000	.0001	.0001
%RSD	691.9	188.5	74.99	208.3	36.66	19.46	17.45	311.6	49.24
#1	-.0003	.0130	.0014	.0001	.0002	.0176	.0002	.0002	-.0002
#2	.0001	-.0082	.0012	.0003	.0004	.0254	.0002	.0000	-.0003
#3	.0004	.0163	.0001	-.0001	.0004	.0195	.0002	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F.0515	.0325	.0164	.0004	F.0038	.0199	.0005	-.0003
Stddev	.0004	.0095	.0491	.0209	.0000	.0010	.0072	.0002	.0001
%RSD	585.5	18.35	150.9	126.9	3.031	26.87	35.92	36.69	27.14
#1	.0000	.0619	-.0235	.0405	.0004	.0050	.0278	.0006	-.0003
#2	.0003	.0494	.0681	.0041	.0004	.0036	.0138	.0003	-.0002
#3	-.0005	.0433	.0529	.0047	.0004	.0029	.0181	.0005	-.0004
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	-.0001	F.0012	.0005	F.0021	.0003	-.0001	.0008
Stddev	.0015	.0005	.0004	.0001	.0000	.0002	.0015	.0002	.0000
%RSD	260.4	227.1	330.8	4.869	7.948	9.539	494.9	307.1	4.773
#1	.0022	.0002	.0003	.0012	.0004	.0023	.0018	.0002	.0008
#2	-.0003	-.0003	-.0004	.0013	.0005	.0021	-.0012	-.0003	.0008
#3	-.0002	.0008	-.0003	.0012	.0005	.0019	.0003	-.0001	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:47:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1624.2	4612.5	30707.	2036.5
Stddev	5.3	6.9	24.	5.6
%RSD	.32659	.14920	.07804	.27550
#1	1627.4	4608.7	30731.	2036.2
#2	1627.1	4620.4	30707.	2042.3
#3	1618.0	4608.4	30683.	2031.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.053780	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000071	0.000000	No
			Cr	-0.002131	0.000000	No
			Mo	0.000500	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000009	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000099	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000002	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000001	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000182	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000008	0.000000	No
			Mg	0.000005	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000018	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000054	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000971	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000276	0.000000	No
			Fe	0.000129	0.000000	No
			Mo	-0.001480	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000044	0.000000	No
			Cr	0.012815	0.000000	No
			Mo	-0.000310	0.000000	No
			V	-0.001708	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000031	0.000000	No
			Ca	-0.000000	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000017	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000009	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000009	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000003	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	0.000002	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.025078	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000012	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.003709	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000016	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000027	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000112	0.692763	0.000000	1.000000
	Al 396.152 { 85}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.002570	0.153039	0.000000	1.000000
	As 189.042 {478}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000311	0.286271	0.000000	1.000000
	Ba 455.403 { 74}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.022685	10.876842	0.000000	1.000000
	Be 313.042 {108}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.003891	7.536276	0.000000	1.000000
	Ca 317.933 {106}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.008914	0.223776	0.000000	1.000000
	Cd 226.502 {449}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000935	5.527194	0.000000	1.000000
	Co 228.616 {447}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.001485	2.539967	0.000000	1.000000
	Cr 267.716 {126}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000239	0.536126	0.000000	1.000000
	Cu 324.754 {104}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004954	0.860801	0.000000	1.000000
	Fe 259.940 {130}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004419	0.125039	0.000000	1.000000
	In 230.606 {446}*	2/13/2015 11:00:43	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.006465	0.147784	0.000000	1.000000
	Mg 279.079 {121}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000184	0.020198	0.000000	1.000000
	Mn 257.610 {131}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.001840	3.484847	0.000000	1.000000
	Mo 202.030 {467}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.002556	1.248094	0.000000	1.000000
	Na 589.592 { 57}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.019474	0.469618	0.000000	1.000000
	Ni 231.604 {445}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000397	1.589976	0.000000	1.000000
	Pb 220.353 {453}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.003658	1.321036	0.000000	1.000000
	Sb 206.833 {463}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000558	0.289420	0.000000	1.000000
	Se 196.090 {472}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000807	0.215957	0.000000	1.000000
	Si 212.412 {459}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.008990	0.576023	0.000000	1.000000
	Sn 189.989 {477}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000376	0.482420	0.000000	1.000000
	Sr 407.771 { 83}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004712	16.205375	0.000000	1.000000
	Ti 334.941 {101}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004008	2.156028	0.000000	1.000000
	Tl 190.856 {477}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.006064	0.599878	0.000000	1.000000
	V 292.402 {115}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000095	0.730141	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004542	3.684325	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999949	0.000065	0.000510	0.001698	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999841	0.004406	0.016990	0.056633	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999760	0.000503	0.000732	0.002439	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999880	0.013561	0.000336	0.001120	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999885	0.009219	0.000136	0.000452	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999775	0.007640	0.005534	0.018445	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999872	0.007137	0.000058	0.000194	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999814	0.003948	0.000135	0.000450	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999862	0.000717	0.000381	0.001271	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999887	0.001037	0.000352	0.001175	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999727	0.004710	0.004955	0.016516	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999919	0.003031	0.040083	0.133611	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999876	0.000511	0.038026	0.126752	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999918	0.003603	0.000054	0.000179	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999724	0.002363	0.000174	0.000581	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999907	0.010315	0.011980	0.039934	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999803	0.002541	0.000213	0.000710	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999820	0.002037	0.000687	0.002290	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999691	0.000580	0.001170	0.003899	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999792	0.000355	0.001479	0.004929	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.988220	0.007322	0.000418	0.001394	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999767	0.000839	0.000361	0.001204	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999926	0.015882	0.000138	0.000461	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999976	0.001198	0.000151	0.000503	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999842	0.000838	0.000974	0.003247	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999777	0.001235	0.000355	0.001183	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999845	0.005232	0.000063	0.000212	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/16/2015 10:04:40 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0012	.0020	-.0003	.0010	.0034	.0059	.0034	.0016	.0001
Stddev	.0004	.0003	.0000	.0026	.0009	.0010	.0014	.0007	.0001
%RSD	34.84	16.56	10.84	265.0	25.58	17.27	42.71	45.82	69.72
#1	.0012	.0017	-.0003	.0023	.0030	.0066	.0018	.0008	.0002
#2	.0008	.0020	-.0003	-.0020	.0044	.0065	.0046	.0022	.0001
#3	.0016	.0023	-.0003	.0027	.0028	.0047	.0037	.0018	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0052	.0064	-.0081	-.0002	.0013	.0123	-.0124	.0014	.0011
Stddev	.0000	.0007	.0025	.0008	.0000	.0028	.0021	.0005	.0004
%RSD	.8692	10.84	31.21	422.7	2.773	22.75	16.97	39.07	39.44
#1	.0052	.0070	-.0065	-.0010	.0012	.0153	-.0149	.0010	.0010
#2	.0052	.0064	-.0110	-.0001	.0013	.0121	-.0111	.0020	.0016
#3	.0053	.0057	-.0068	.0005	.0013	.0097	-.0113	.0012	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0011	-.0001	.0056	.0015	.0048	.0062	-.0009	-.0006	.0048
Stddev	.0003	.0001	.0002	.0002	.0020	.0005	.0002	.0001	.0008
%RSD	26.17	57.65	3.736	13.87	41.55	8.686	24.48	8.863	17.12
#1	.0008	-.0002	.0054	.0012	.0071	.0068	-.0011	-.0006	.0042
#2	.0013	-.0001	.0056	.0016	.0037	.0061	-.0007	-.0006	.0058
#3	.0012	-.0001	.0058	.0016	.0036	.0058	-.0008	-.0007	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3148.3	6350.3	54517.	4241.6
Stddev	4.0	8.1	211.	42.4
%RSD	.12552	.12830	.38621	.99897
#1	3150.1	6359.2	54754.	4199.2
#2	3143.8	6348.6	54442.	4241.6
#3	3151.0	6343.1	54353.	4284.0

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/16/2015 10:08:24 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0280	1.379	.0815	3.502	3.166	1.778	2.263	1.127	.2070	.2925
Stddev	.0005	.004	.0006	.011	.012	.005	.013	.007	.0004	.0021
%RSD	1.780	.2563	.7558	.2990	.3799	.2777	.5782	.6010	.1702	.7065
#1	.0284	1.378	.0821	3.511	3.173	1.782	2.276	1.134	.2066	.2910
#2	.0275	1.376	.0809	3.505	3.153	1.772	2.249	1.120	.2070	.2917
#3	.0280	1.382	.0815	3.490	3.174	1.779	2.264	1.128	.2073	.2949

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.430	.6096	.2038	1.259	.4837	2.239	.7031	.3912	.1048	.0574
Stddev	.002	.0032	.0013	.005	.0028	.007	.0040	.0021	.0007	.0002
%RSD	.1344	.5208	.6491	.3628	.5868	.3326	.5715	.5281	.6797	.3027
#1	1.430	.6060	.2048	1.257	.4865	2.239	.7068	.3929	.1054	.0576
#2	1.427	.6108	.2023	1.256	.4809	2.231	.6988	.3889	.1040	.0573
#3	1.431	.6119	.2042	1.265	.4836	2.246	.7037	.3917	.1050	.0573

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1270	.1942	5.380	.7944	.1482	.2507	1.333
Stddev	.0008	.0012	.009	.0032	.0015	.0008	.007
%RSD	.6576	.6078	.1751	.4031	.9942	.3349	.5442
#1	.1280	.1955	5.374	.7923	.1496	.2500	1.339
#2	.1265	.1932	5.374	.7929	.1467	.2505	1.325
#3	.1266	.1940	5.391	.7981	.1483	.2516	1.336

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2991.2	6251.0	53046.	4181.8
Stddev	21.2	27.8	110.	24.5
%RSD	.70901	.44476	.20797	.58671
#1	2976.0	6227.5	53099.	4162.1
#2	3015.4	6281.7	53120.	4209.3
#3	2982.3	6243.8	52919.	4174.0

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/16/2015 10:11:47 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1098	5.498	.3379	14.01	12.75	7.093	9.104	4.512	.8234	1.160
Stddev	.0003	.032	.0015	.07	.08	.031	.039	.022	.0013	.002
%RSD	.2475	.5784	.4586	.4712	.5992	.4335	.4299	.4877	.1533	.1933
#1	.1095	5.482	.3376	13.99	12.71	7.070	9.096	4.507	.8247	1.162
#2	.1100	5.477	.3365	13.96	12.71	7.080	9.069	4.492	.8234	1.160
#3	.1097	5.534	.3396	14.09	12.84	7.128	9.146	4.536	.8222	1.158

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.616	2.515	.8043	5.014	1.952	9.099	2.788	1.633	.4268	.2374
Stddev	.035	.005	.0034	.004	.007	.045	.013	.002	.0020	.0009
%RSD	.6196	.2052	.4206	.0821	.3865	.4957	.4609	.1382	.4707	.3685
#1	5.601	2.509	.8036	5.016	1.950	9.065	2.785	1.631	.4272	.2372
#2	5.591	2.517	.8013	5.009	1.945	9.082	2.778	1.633	.4246	.2367
#3	5.656	2.518	.8080	5.016	1.960	9.150	2.803	1.635	.4285	.2384

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7322	.7729	22.04	3.212	.6164	1.005	5.267
Stddev	.0034	.0034	.10	.009	.0016	.003	.023
%RSD	.4603	.4404	.4629	.2665	.2539	.2652	.4327
#1	.7303	.7714	21.99	3.221	.6147	1.008	5.259
#2	.7303	.7705	21.97	3.205	.6169	1.003	5.248
#3	.7361	.7768	22.15	3.209	.6177	1.003	5.292

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2740.1	6059.0	51937.	4183.3
Stddev	4.9	13.2	170.	8.0
%RSD	.17963	.21846	.32697	.19141
#1	2743.4	6060.3	51782.	4185.9
#2	2734.4	6071.6	52118.	4189.8
#3	2742.4	6045.2	51910.	4174.4

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/16/2015 10:15:09 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2106	10.63	.6649	27.19	24.53	13.66	17.49	8.686	1.572	2.232
Stddev	.0005	.04	.0016	.06	.11	.08	.07	.030	.007	.007
%RSD	.2228	.4143	.2414	.2304	.4669	.6104	.4008	.3508	.4356	.3049
#1	.2109	10.62	.6645	27.22	24.46	13.61	17.43	8.662	1.580	2.238
#2	.2101	10.68	.6666	27.24	24.66	13.76	17.56	8.720	1.571	2.234
#3	.2110	10.59	.6635	27.12	24.46	13.62	17.46	8.675	1.566	2.225

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.60	4.872	1.548	9.395	3.783	17.68	5.361	3.248	.8348	.4639
Stddev	.04	.032	.010	.031	.015	.08	.023	.012	.0025	.0017
%RSD	.3441	.6642	.6239	.3276	.3960	.4710	.4252	.3618	.2991	.3692
#1	10.60	4.857	1.545	9.414	3.769	17.63	5.341	3.241	.8322	.4624
#2	10.64	4.909	1.559	9.410	3.799	17.77	5.386	3.262	.8372	.4658
#3	10.57	4.850	1.540	9.359	3.782	17.62	5.357	3.242	.8349	.4635

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.708	1.481	42.07	6.109	1.205	1.984	10.12
Stddev	.006	.006	.16	.025	.004	.007	.04
%RSD	.3700	.4246	.3800	.4037	.3752	.3437	.3745
#1	1.702	1.475	42.00	6.131	1.202	1.992	10.09
#2	1.714	1.487	42.25	6.114	1.210	1.982	10.17
#3	1.707	1.479	41.96	6.083	1.202	1.979	10.12

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2563.1	5879.9	51014.	4158.8
Stddev	7.5	17.7	209.	29.0
%RSD	.29346	.30065	.40988	.69770
#1	2566.8	5895.7	50853.	4154.4
#2	2554.4	5860.8	50937.	4132.2
#3	2568.0	5883.1	51250.	4189.7

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/16/2015 10:18:53 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4945	79.13	4.004	3.968	3.960	79.48	3.959	3.946	3.954	3.949
Stddev	.0015	.48	.013	.025	.023	.51	.019	.020	.011	.008
%RSD	.3086	.6063	.3352	.6396	.5858	.6437	.4854	.5017	.2774	.2112
#1	.4954	79.08	3.999	3.972	3.956	79.40	3.953	3.941	3.962	3.958
#2	.4954	79.63	3.993	3.991	3.986	80.02	3.943	3.930	3.957	3.947
#3	.4928	78.67	4.019	3.941	3.940	79.00	3.980	3.969	3.941	3.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.53	79.78	78.75	3.933	3.975	79.46	3.964	4.027	3.987	4.004
Stddev	.49	.48	.56	.040	.021	.47	.021	.016	.016	.029
%RSD	.6231	.6034	.7072	1.022	.5339	.5920	.5384	.4038	.4041	.7183
#1	78.58	79.65	78.55	3.946	3.967	79.43	3.957	4.028	3.983	3.996
#2	79.00	80.32	79.38	3.965	3.959	79.95	3.947	4.011	3.974	3.981
#3	78.02	79.38	78.32	3.888	3.999	79.01	3.988	4.043	4.005	4.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.354	3.938	3.967	3.956	3.990	4.016	3.977
Stddev	.021	.023	.023	.013	.013	.014	.022
%RSD	.4748	.5881	.5740	.3174	.3208	.3565	.5449
#1	4.352	3.935	3.966	3.967	3.992	4.029	3.970
#2	4.335	3.916	3.991	3.959	3.977	4.019	3.960
#3	4.376	3.962	3.946	3.942	4.002	4.000	4.002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/16/2015 10:18:53 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2553.7	5843.8	50621.	4145.3
Stddev	10.1	25.6	185.	35.1
%RSD	.39383	.43863	.36598	.84652
#1	2551.9	5850.2	50591.	4149.1
#2	2564.5	5865.7	50452.	4108.5
#3	2544.7	5815.6	50819.	4178.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/16/2015 10:25:31 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2484	41.17	1.990	2.071	2.020	42.66	1.968	1.992	1.993	1.940
Stddev	.0008	.12	.009	.005	.009	.21	.005	.005	.008	.001
%RSD	.3237	.2965	.4480	.2331	.4559	.4983	.2689	.2497	.4196	.0516
#1	.2487	41.15	1.997	2.070	2.022	42.68	1.967	1.992	2.000	1.941
#2	.2491	41.29	1.994	2.076	2.028	42.86	1.974	1.997	1.994	1.939
#3	.2475	41.05	1.980	2.067	2.010	42.44	1.964	1.987	1.984	1.940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.36	42.06	40.46	2.032	1.887	41.79	2.052	1.968	1.973	1.996
Stddev	.15	.13	.15	.007	.006	.16	.005	.009	.005	.008
%RSD	.3565	.3151	.3820	.3272	.3206	.3822	.2611	.4772	.2777	.4172
#1	41.32	42.01	40.37	2.036	1.889	41.80	2.053	1.968	1.976	1.999
#2	41.52	42.21	40.64	2.035	1.892	41.95	2.057	1.977	1.977	2.003
#3	41.23	41.96	40.37	2.024	1.881	41.63	2.047	1.958	1.967	1.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0217	2.026	1.983	1.974	2.031	1.925	2.036
Stddev	.0005	.007	.007	.005	.011	.009	.005
%RSD	2.367	.3515	.3674	.2738	.5454	.4929	.2303
#1	.0211	2.025	1.982	1.979	2.034	1.935	2.035
#2	.0218	2.033	1.991	1.974	2.041	1.923	2.042
#3	.0221	2.019	1.976	1.968	2.019	1.917	2.033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/16/2015 10:25:31 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2725.3	5981.0	51385.	4163.3
Stddev	10.0	17.2	295.	34.9
%RSD	.36748	.28770	.57312	.83739
#1	2733.5	5999.7	51188.	4167.6
#2	2714.1	5965.9	51244.	4126.5
#3	2728.3	5977.4	51724.	4195.9

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/16/2015 10:31:59 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0009	-.0014	-.0002	-.0002	-.0082	-.0007	-.0008
Stddev	.0006	.0033	.0002	.0003	.0001	.0067	.0001	.0003
%RSD	126.5	346.6	18.24	136.6	42.95	81.76	16.96	32.67
#1	-.0002	.0028	-.0011	-.0001	-.0001	-.0066	-.0009	-.0011
#2	.0009	-.0028	-.0015	-.0006	-.0002	-.0024	-.0007	-.0006
#3	.0007	-.0028	-.0015	.0000	-.0003	-.0156	-.0006	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0003	-.0167	.0412	.0013	-.0002	F-.0039	.0060
Stddev	.0002	.0004	.0048	.0705	.0104	.0000	.0017	.0300
%RSD	54.05	134.2	28.57	171.3	829.3	19.84	42.87	501.6
#1	-.0003	.0007	-.0116	.1037	.0133	-.0002	-.0022	-.0066
#2	-.0004	-.0001	-.0176	-.0352	-.0045	-.0002	-.0040	.0402
#3	-.0001	.0002	-.0210	.0550	-.0050	-.0002	-.0055	-.0157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0008	-.0005	F-.0020	.0002	-.0009	-.0002	-.0007
Stddev	.0000	.0005	.0012	.0021	.0005	.0001	.0001	.0003
%RSD	4.461	61.86	245.6	105.1	217.3	15.67	30.50	36.02
#1	-.0008	-.0009	-.0017	-.0045	.0008	-.0010	-.0002	-.0005
#2	-.0009	-.0003	.0007	-.0007	-.0001	-.0008	-.0003	-.0007
#3	-.0008	-.0014	-.0005	-.0009	.0000	-.0010	-.0001	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit				.0020				
Low Limit				-.0020				

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/16/2015 10:31:59 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0008	-.0002	-.0012
Stddev	.0011	.0003	.0001
%RSD	140.2	117.7	6.559
#1	.0003	-.0005	-.0013
#2	-.0018	-.0002	-.0011
#3	-.0008	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3089.9	6115.4	52840.	4099.5
Stddev	7.8	14.2	489.	8.2
%RSD	.25254	.23201	.92611	.19915
#1	3098.0	6126.8	52539.	4099.7
#2	3082.4	6099.5	52576.	4091.3
#3	3089.2	6119.9	53404.	4107.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/16/2015 10:36:51 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106	.1993	.0092	.2094	.0048	1.066	.0045	.0536	.0105	.0271
Stddev	.0002	.0097	.0006	.0010	.0001	.007	.0001	.0001	.0003	.0002
%RSD	1.533	4.881	6.411	.4633	1.486	.6794	1.231	.1091	2.923	.8019
#1	.0108	.2089	.0086	.2083	.0049	1.071	.0045	.0535	.0104	.0273
#2	.0105	.1895	.0097	.2096	.0047	1.071	.0046	.0535	.0108	.0270
#3	.0105	.1996	.0093	.2102	.0048	1.058	.0045	.0536	.0102	.0269
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2862	10.56	5.217	.0165	.0403	10.52	.0437	.0045	.0042	.0090
Stddev	.0053	.06	.034	.0001	.0004	.01	.0001	.0005	.0009	.0005
%RSD	1.840	.6071	.6562	.8090	.8731	.1154	.3231	11.91	22.45	5.620
#1	.2889	10.62	5.190	.0164	.0404	10.53	.0436	.0039	.0050	.0085
#2	.2896	10.49	5.206	.0166	.0406	10.51	.0438	.0048	.0044	.0095
#3	.2801	10.56	5.256	.0164	.0399	10.51	.0438	.0047	.0031	.0089
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0432	.0522	.0103	.0084	.0089	.0508	.0216
Stddev	.0007	.0004	.0001	.0001	.0004	.0001	.0000
%RSD	1.576	.7824	.5180	1.083	4.074	.2118	.0819
#1	.0431	.0521	.0102	.0084	.0089	.0508	.0217
#2	.0439	.0526	.0103	.0085	.0085	.0508	.0216
#3	.0426	.0518	.0103	.0083	.0093	.0506	.0217
Check ?	None	Chk PassChk PassChk PassChk PassChk PassChk Pass					
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/16/2015 10:36:51 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3020.6	6136.0	52270.	4152.4
Stddev	5.5	11.5	291.	24.7
%RSD	.18141	.18686	.55764	.59603
#1	3014.8	6124.5	52490.	4161.8
#2	3021.5	6136.1	51940.	4171.0
#3	3025.6	6147.5	52381.	4124.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/16/2015 10:43:03 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	507.6	.0000	.0000	-.0006	495.1	.0000	.0000	.0000	-.0013
Stddev	.0004	4.9	.001	.000	.0001	4.3	.000	.0001	.000	.0003
%RSD	427.2	.9601	15830.	1025.	19.61	.8721	342.5	263.2	317.5	21.37
#1	.0000	513.2	-.0014	.0001	-.0006	495.0	-.0001	-.0001	-.0001	-.0011
#2	-.0002	504.3	.0015	-.0002	-.0005	490.9	-.0001	.0001	-.0001	-.0011
#3	.0005	505.3	-.0001	.0000	-.0007	499.5	.0001	.0001	.0001	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	189.7	.1232	488.9	-.0004	.0000	.1592	.0000	.0000	.0000	.0009
Stddev	1.5	.0134	4.8	.0000	.0004	.0093	.0002	.0006	.0012	.0057
%RSD	.8152	10.86	.9870	5.612	1882.	5.815	537.8	10250.	7553.	622.8
#1	191.5	.1282	494.4	-.0004	.0002	.1492	.0001	.0002	.0012	-.0047
#2	188.7	.1080	485.4	-.0004	.0003	.1674	-.0002	.0005	.0002	.0007
#3	188.9	.1333	486.9	-.0004	-.0004	.1611	.0002	-.0007	-.0013	.0067
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0849	-.0006	-.0003	-.0013	-.0011	.0001	-.0030
Stddev	.0013	.0004	.0001	.0001	.0014	.0003	.0001
%RSD	1.490	75.30	19.78	7.288	123.7	242.8	2.498
#1	.0842	-.0003	-.0003	-.0014	-.0016	.0004	-.0030
#2	.0842	-.0010	-.0002	-.0013	.0004	.0000	-.0031
#3	.0864	-.0003	-.0002	-.0013	-.0022	-.0001	-.0029
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/16/2015 10:43:03 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2460.0	5619.8	47051.	4044.5
Stddev	6.4	19.5	213.	49.1
%RSD	.26021	.34737	.45373	1.2151
#1	2452.7	5603.6	47115.	3989.4
#2	2464.7	5641.5	47225.	4083.9
#3	2462.7	5614.3	46812.	4060.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/16/2015 10:50:04 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.055	510.8	1.089	.5272	.5249	499.0	.9647	.4926	.5054	.5528
Stddev	.019	.7	.007	.0048	.0029	8.2	.0057	.0028	.0095	.0097
%RSD	1.779	.1433	.6268	.9014	.5602	1.653	.5943	.5684	1.880	1.752
#1	1.068	511.2	1.085	.5323	.5274	508.6	.9621	.4920	.5103	.5578
#2	1.064	510.0	1.097	.5266	.5255	493.9	.9713	.4956	.5114	.5590
#3	1.033	511.3	1.087	.5228	.5217	494.6	.9608	.4901	.4944	.5417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	188.2	.1769	490.9	.5257	.9499	.1627	1.006	.9993	1.081	1.045
Stddev	1.2	.0218	3.9	.0105	.0062	.0181	.007	.0074	.007	.010
%RSD	.6554	12.30	.7925	1.992	.6489	11.15	.6545	.7371	.6419	.9272
#1	189.5	.1646	494.8	.5316	.9471	.1557	1.002	.9978	1.077	1.041
#2	188.2	.1641	490.8	.5318	.9570	.1833	1.013	1.007	1.089	1.057
#3	187.0	.2021	487.0	.5136	.9456	.1491	1.002	.9928	1.077	1.039
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0406	.9602	1.041	1.036	.9995	.4962	1.009
Stddev	.0008	.0053	.006	.020	.0024	.0096	.007
%RSD	1.923	.5470	.6137	1.955	.2407	1.928	.7215
#1	.0416	.9579	1.047	1.046	1.000	.4997	1.004
#2	.0402	.9662	1.042	1.049	1.001	.5036	1.017
#3	.0402	.9565	1.034	1.013	.9967	.4854	1.005
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/16/2015 10:50:04 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2378.4	5487.5	46708.	3921.8
Stddev	14.1	30.6	710.	26.7
%RSD	.59206	.55804	1.5207	.68140
#1	2384.4	5507.9	46295.	3891.0
#2	2362.3	5452.2	46300.	3938.1
#3	2388.5	5502.2	47528.	3936.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 10:58:15 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2639	41.57	2.105	2.056	2.105	42.21	2.126	2.101	2.131	2.080
Stddev	.0014	.27	.012	.005	.010	.31	.014	.013	.011	.012
%RSD	.5284	.6418	.5633	.2454	.4725	.7312	.6481	.6219	.5063	.5674
#1	.2624	41.80	2.113	2.062	2.111	42.43	2.139	2.113	2.119	2.067
#2	.2640	41.64	2.091	2.053	2.110	42.34	2.112	2.087	2.136	2.087
#3	.2652	41.28	2.110	2.053	2.093	41.86	2.125	2.101	2.138	2.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.20	42.28	41.16	2.197	2.091	42.06	2.138	2.067	2.104	2.100
Stddev	.20	.34	.23	.009	.012	.26	.012	.010	.015	.012
%RSD	.4654	.7976	.5648	.4262	.5865	.6184	.5739	.4935	.7078	.5699
#1	42.40	42.57	41.41	2.187	2.103	42.27	2.150	2.073	2.119	2.111
#2	42.18	42.36	41.12	2.205	2.078	42.15	2.126	2.055	2.090	2.088
#3	42.01	41.91	40.95	2.201	2.092	41.77	2.138	2.072	2.103	2.101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.910	2.101	2.137	2.169	2.102	2.112	2.155
Stddev	.011	.012	.012	.012	.011	.014	.014
%RSD	.5925	.5886	.5510	.5281	.5136	.6497	.6580
#1	1.921	2.113	2.147	2.156	2.107	2.096	2.170
#2	1.899	2.088	2.141	2.176	2.090	2.121	2.141
#3	1.910	2.102	2.124	2.175	2.110	2.117	2.154
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 10:58:15 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.4	5869.5	49829.	4030.6
Stddev	11.1	37.4	173.	28.4
%RSD	.41364	.63742	.34746	.70511
#1	2677.1	5832.0	49985.	3997.9
#2	2698.0	5906.8	49643.	4043.9
#3	2681.1	5869.8	49860.	4049.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:03:47 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0070	-.0003	.0002	.0000	-.0016	-.0006	-.0007
Stddev	.0004	.0095	.0004	.0003	.000	.0001	.0001	.0000
%RSD	56.02	135.0	141.5	167.9	160.4	4.682	12.50	4.804
#1	.0004	.0039	-.0006	.0006	.0000	-.0016	-.0007	-.0007
#2	.0005	-.0132	.0002	.0000	-.0001	-.0016	-.0006	-.0006
#3	.0011	-.0117	-.0004	.0000	.0000	-.0017	-.0005	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0003	-.0060	.0252	.0114	.0001	F-.0071	.0249
Stddev	.000	.0002	.0023	.0735	.0183	.0000	.0013	.0084
%RSD	673.7	76.63	37.74	291.0	160.2	27.09	18.18	33.50
#1	.0001	.0005	-.0050	.0771	.0140	.0001	-.0057	.0250
#2	.0000	.0001	-.0044	.0575	-.0080	.0001	-.0073	.0332
#3	-.0001	.0002	-.0086	-.0588	.0283	.0002	-.0082	.0165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F-.0013	-.0007	F-.0021	.0005	-.0005	.0001	-.0011
Stddev	.0001	.0003	.0003	.0006	.0002	.0013	.0001	.0000
%RSD	10.07	24.50	42.40	29.55	31.33	269.3	77.60	3.612
#1	-.0007	-.0011	-.0008	-.0022	.0004	.0010	.0000	-.0011
#2	-.0007	-.0012	-.0004	-.0027	.0005	-.0009	.0002	-.0011
#3	-.0006	-.0017	-.0010	-.0014	.0007	-.0015	.0001	-.0012
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010		.0020				
Low Limit		-.0010		-.0020				

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:03:47 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0003	.0000	-.0009
Stddev	.0009	.0002	.0000
%RSD	274.0	820.8	3.184
#1	.0007	.0002	-.0009
#2	-.0009	.0000	-.0009
#3	-.0009	-.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3134.8	6232.8	53399.	4184.8
Stddev	17.8	47.7	127.	50.9
%RSD	.56887	.76463	.23785	1.2154
#1	3147.6	6253.0	53356.	4221.3
#2	3114.4	6178.4	53542.	4206.5
#3	3142.3	6267.0	53299.	4126.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 11:31:10 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2508	39.73	1.998	2.007	1.994	39.81	2.018	2.010	2.001	1.981
Stddev	.0008	.15	.003	.008	.009	.26	.007	.006	.005	.001
%RSD	.3368	.3886	.1358	.4120	.4730	.6513	.3448	.2784	.2508	.0394
#1	.2498	39.75	1.997	2.013	1.998	39.85	2.019	2.011	2.006	1.981
#2	.2510	39.88	2.001	2.011	2.000	40.04	2.025	2.015	1.996	1.980
#3	.2515	39.57	1.997	1.998	1.983	39.53	2.011	2.004	2.001	1.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.31	39.95	40.02	2.036	2.008	39.68	2.019	1.980	1.995	2.000
Stddev	.13	.13	.13	.003	.006	.20	.006	.011	.006	.004
%RSD	.3248	.3348	.3361	.1445	.3234	.5093	.3068	.5557	.2925	.2107
#1	40.37	40.03	39.99	2.040	2.009	39.77	2.020	1.977	1.995	2.000
#2	40.39	40.03	40.16	2.035	2.014	39.82	2.024	1.993	2.001	2.005
#3	40.16	39.80	39.90	2.035	2.001	39.45	2.012	1.971	1.989	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.815	2.016	2.017	2.020	2.001	1.959	2.019
Stddev	.006	.004	.012	.006	.008	.008	.008
%RSD	.3327	.2156	.5886	.2897	.4114	.4119	.4142
#1	1.815	2.015	2.023	2.026	2.007	1.968	2.018
#2	1.822	2.021	2.024	2.019	2.006	1.954	2.028
#3	1.810	2.013	2.003	2.015	1.992	1.954	2.011
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 11:31:10 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2757.7	6112.3	52117.	4169.7
Stddev	7.1	12.1	115.	18.6
%RSD	.25767	.19778	.22083	.44574
#1	2762.6	6123.1	52059.	4166.6
#2	2749.5	6099.2	52250.	4189.7
#3	2760.9	6114.6	52044.	4152.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:37:55 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0151	-.0010	.0001	.0002	.0036	-.0001	-.0001	-.0001
Stddev	.0001	.0099	.0009	.0004	.0000	.0037	.0000	.0001	.0001
%RSD	40.65	65.62	86.06	543.4	22.31	104.0	35.63	59.54	59.09
#1	.0005	.0040	-.0011	.0003	.0001	.0052	-.0001	-.0002	-.0001
#2	.0003	.0232	-.0001	.0003	.0002	-.0007	-.0001	-.0001	.0000
#3	.0002	.0181	-.0018	-.0004	.0002	.0062	-.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0209	.0593	-.0113	-.0002	F.0068	-.0043	-.0003	.0001
Stddev	.0002	.0012	.0178	.0322	.0000	.0018	.0136	.0001	.0003
%RSD	68.52	5.994	30.08	284.4	11.29	26.11	319.5	43.04	264.6
#1	-.0005	.0219	.0584	-.0485	-.0001	.0088	.0104	-.0001	.0002
#2	-.0001	.0212	.0776	.0084	-.0002	.0065	-.0165	-.0004	-.0002
#3	-.0005	.0195	.0420	.0061	-.0002	.0052	-.0068	-.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0010	.0008	.0004	.0002	F.0021	.0008	-.0001	-.0001
Stddev	.0005	.0019	.0002	.0002	.0001	.0002	.0005	.0003	.0000
%RSD	52.63	190.1	24.82	38.17	34.47	9.962	64.79	244.6	26.55
#1	-.0013	.0002	.0007	.0005	.0002	.0022	.0012	-.0002	-.0001
#2	-.0011	-.0004	.0006	.0004	.0002	.0021	.0010	.0002	-.0001
#3	-.0004	.0032	.0010	.0002	.0001	.0018	.0002	-.0003	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:37:55 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3114.4	6260.0	53049.	4083.4
Stddev	10.0	20.0	232.	44.3
%RSD	.31992	.31920	.43662	1.0859
#1	3103.8	6243.7	53312.	4126.2
#2	3115.9	6254.0	52874.	4086.3
#3	3123.6	6282.3	52962.	4037.7

Zoom In Zoom Out

Sample Name: FA22073-10 Acquired: 2/16/2015 11:42:49 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0058	.3676	-.0225	.1887	.0029	240.1	.0009	.0028	.0053	.0040
Stddev	.0085	.2056	.0108	.0031	.0013	1.1	.0025	.0036	.0087	.0120
%RSD	147.3	55.94	48.19	1.652	45.64	.4769	286.6	131.8	164.3	298.2
#1	.0117	.1358	-.0339	.1905	.0044	238.8	.0034	.0068	-.0044	-.0047
#2	.0095	.4388	-.0124	.1851	.0023	240.5	.0009	.0017	.0078	.0177
#3	-.0040	.5281	-.0212	.1905	.0019	240.9	-.0017	-.0003	.0126	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	2.282	37.61	29.65	.0971	.0422	1824.	-.0048	-.0021	-.0207	.0230
Stddev	.096	.33	.97	.0055	.0117	4.	.0015	.0174	.0299	.0154
%RSD	4.218	.8825	3.282	5.713	27.82	.2337	30.74	823.8	144.2	66.92
#1	2.276	37.90	28.73	.0913	.0557	1819.	-.0034	-.0108	-.0542	.0316
#2	2.381	37.25	29.57	.0977	.0372	1827.	-.0047	.0180	.0033	.0052
#3	2.189	37.68	30.67	.1024	.0338	1825.	-.0063	-.0135	-.0113	.0321

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	9.942	.0108	6.162	.0323	.0271	.0024	.0161
Stddev	.041	.0090	.028	.0036	.0188	.0065	.0017
%RSD	.4097	83.90	.4548	11.04	69.45	274.3	10.80
#1	9.899	.0180	6.132	.0282	.0480	.0005	.0180
#2	9.947	.0136	6.187	.0345	.0116	-.0030	.0157
#3	9.980	.0007	6.167	.0342	.0216	.0096	.0146

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2889.6	6117.4	51408.	4044.8
Stddev	8.6	16.6	263.	25.3
%RSD	.29695	.27211	.51243	.62663
#1	2888.6	6130.3	51710.	4045.3
#2	2898.6	6123.3	51284.	4070.0
#3	2881.5	6098.6	51228.	4019.3

Zoom In Zoom Out

Sample Name: FA22073-12 Acquired: 2/16/2015 11:47:14 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0285	-.0008	.0840	.0000	128.8	-.0001	-.0003	.0002	-.0008
Stddev	.0002	.0083	.0003	.0001	.0002	1.1	.0001	.0001	.0001	.0002
%RSD	109.8	29.26	32.68	.1354	485.7	.8907	106.2	53.92	28.67	29.24
#1	.0000	.0377	-.0010	.0841	.0000	129.2	.0000	-.0002	.0002	-.0011
#2	-.0002	.0262	-.0010	.0839	.0002	127.5	-.0002	-.0004	.0002	-.0007
#3	-.0002	.0215	-.0005	.0841	-.0001	129.6	-.0001	-.0002	.0003	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.4727	3.334	14.90	.0218	.0019	56.38	-.0002	-.0002	.0004	.0030
Stddev	.0029	.042	.19	.0002	.0004	.45	.0002	.0011	.0008	.0009
%RSD	.6124	1.245	1.297	1.103	20.47	.8060	118.2	632.1	193.7	29.20
#1	.4751	3.337	14.99	.0216	.0023	56.56	.0000	-.0012	.0000	.0036
#2	.4695	3.291	14.68	.0218	.0020	55.86	-.0003	-.0004	-.0001	.0020
#3	.4735	3.374	15.03	.0221	.0015	56.71	-.0002	.0010	.0013	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	7.145	.0016	.6032	.0022	.0006	.0000	.0071
Stddev	.052	.0002	.0032	.0002	.0007	.000	.0002
%RSD	.7250	12.12	.5375	8.627	108.4	341.6	2.418
#1	7.197	.0018	.6054	.0020	-.0002	-.0001	.0073
#2	7.146	.0014	.5995	.0022	.0009	-.0001	.0071
#3	7.093	.0017	.6048	.0024	.0011	.0001	.0070

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2867.4	6134.0	52368.	4169.4
Stddev	12.5	26.3	364.	46.7
%RSD	.43484	.42816	.69456	1.1205
#1	2853.0	6103.8	52766.	4158.1
#2	2875.6	6151.6	52282.	4220.7
#3	2873.6	6146.6	52054.	4129.4

Zoom In Zoom Out

Sample Name: FA22084-5 Acquired: 2/16/2015 11:51:36 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.5475	-.0037	.0252	.0002	202.0	.0050	.0041	.0017	-.0013
Stddev	.002	.0087	.0020	.0005	.0003	1.6	.0002	.0003	.0002	.0007
%RSD	148000.	1.594	53.48	2.025	183.1	.8058	3.068	6.648	10.01	49.21
#1	.0017	.5564	-.0050	.0256	.0000	200.5	.0049	.0042	.0019	-.0016
#2	-.0008	.5390	-.0047	.0246	.0006	201.7	.0051	.0037	.0015	-.0019
#3	-.0009	.5472	-.0014	.0255	.0000	203.7	.0051	.0042	.0017	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0243	2.478	40.28	.0633	.0002	85.51	.0153	-.0016	.0003	.0022
Stddev	.0066	.090	.39	.0006	.0003	.73	.0006	.0008	.0009	.0030
%RSD	27.14	3.634	.9615	.9921	133.1	.8560	3.991	52.27	326.9	136.4
#1	.0214	2.374	39.89	.0635	.0003	84.97	.0159	-.0021	.0009	.0048
#2	.0197	2.530	40.28	.0626	-.0001	85.22	.0153	-.0006	-.0008	.0028
#3	.0319	2.530	40.66	.0638	.0004	86.34	.0146	-.0020	.0008	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.285	.0002	.1320	.0035	.0010	.0016	.0271
Stddev	.016	.0007	.0009	.0004	.0014	.0004	.0001
%RSD	.7014	299.3	.6771	10.19	149.1	23.24	.4020
#1	2.302	.0004	.1312	.0034	.0009	.0019	.0272
#2	2.271	-.0005	.1319	.0033	.0024	.0012	.0270
#3	2.281	.0008	.1330	.0040	-.0004	.0018	.0270

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2767.9	5925.7	50809.	4003.4
Stddev	13.0	47.8	435.	42.1
%RSD	.46946	.80619	.85694	1.0508
#1	2757.4	5885.0	50757.	4032.4
#2	2782.4	5978.3	51269.	4022.6
#3	2763.8	5913.9	50403.	3955.1

Zoom In Zoom Out

Sample Name: MP28556-MB1 Acquired: 2/16/2015 11:55:58 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0058	-.0016	-.0001	.0001	.0498	-.0002	-.0001	.0001	-.0010
Stddev	.0009	.0008	.0005	.0002	.0001	.0127	.0000	.0001	.0001	.0002
%RSD	260.7	13.72	30.72	189.0	50.35	25.59	20.85	47.30	198.4	15.48
#1	-.0008	.0052	-.0018	.0001	.0001	.0381	-.0002	-.0001	.0001	-.0010
#2	.0007	.0067	-.0010	-.0001	.0002	.0479	-.0002	-.0002	.0002	-.0008
#3	-.0009	.0055	-.0020	-.0002	.0001	.0634	-.0003	-.0001	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	.0661	.0108	-.0002	.0000	.0592	-.0004	-.0005	-.0009	.0019
Stddev	.0008	.0376	.0063	.0001	.000	.0193	.0002	.0002	.0012	.0006
%RSD	15.15	56.90	58.40	27.26	185.0	32.63	39.21	34.94	134.0	33.27
#1	.0051	.0470	.0154	-.0002	-.0001	.0409	-.0006	-.0004	-.0001	.0012
#2	.0057	.1095	.0036	-.0002	.0000	.0795	-.0002	-.0005	-.0003	.0022
#3	.0042	.0419	.0133	-.0001	-.0001	.0573	-.0005	-.0007	-.0022	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0240	.0003	.0001	.0003	.0003	-.0003	.0002
Stddev	.0005	.0002	.0000	.0001	.0007	.0002	.0001
%RSD	2.109	52.49	69.86	24.25	219.9	66.86	41.98
#1	.0242	.0005	.0000	.0002	-.0004	-.0005	.0001
#2	.0244	.0003	.0001	.0004	.0005	-.0001	.0002
#3	.0235	.0002	.0000	.0003	.0009	-.0002	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28556-MB1 Acquired: 2/16/2015 11:55:58 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3081.4	6274.2	53639.	3996.9
Stddev	2.0	2.6	103.	31.6
%RSD	.06522	.04087	.19267	.79114
#1	3079.1	6274.4	53750.	3971.1
#2	3082.4	6276.7	53545.	3987.3
#3	3082.7	6271.5	53622.	4032.1

Zoom In Zoom Out

Sample Name: MP28556-B1 Acquired: 2/16/2015 12:00:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0472	27.99	1.935	2.053	.0513	25.69	.0486	.4969	.2038	.2515
Stddev	.0007	.14	.004	.004	.0001	.08	.0001	.0006	.0010	.0006
%RSD	1.504	.5062	.2277	.1854	.1457	.3302	.1697	.1247	.5084	.2572
#1	.0480	27.83	1.936	2.051	.0512	25.59	.0487	.4976	.2049	.2519
#2	.0467	28.05	1.930	2.058	.0513	25.73	.0485	.4966	.2037	.2519
#3	.0469	28.10	1.939	2.051	.0513	25.75	.0487	.4965	.2028	.2508
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.08	25.60	26.10	.4991	.5018	25.65	.5005	.4750	.4798	1.927
Stddev	.06	.03	.12	.0013	.0002	.08	.0008	.0020	.0027	.004
%RSD	.2066	.1109	.4778	.2530	.0327	.3026	.1536	.4183	.5542	.2339
#1	27.03	25.63	26.00	.4998	.5019	25.56	.5014	.4736	.4829	1.923
#2	27.09	25.61	26.06	.4976	.5018	25.67	.5000	.4741	.4787	1.928
#3	27.14	25.57	26.24	.4998	.5016	25.71	.5001	.4772	.4779	1.931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0273	.5291	.5149	.5085	1.909	.4712	.4900
Stddev	.0008	.0019	.0007	.0010	.008	.0028	.0016
%RSD	2.792	.3511	.1437	.1900	.4409	.5872	.3352
#1	.0269	.5308	.5140	.5093	1.915	.4740	.4909
#2	.0268	.5294	.5152	.5074	1.900	.4685	.4881
#3	.0281	.5272	.5154	.5089	1.914	.4713	.4910
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28556-B1 Acquired: 2/16/2015 12:00:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2917.9	6309.2	53531.	4167.7
Stddev	2.9	5.6	271.	7.1
%RSD	.09978	.08834	.50659	.17050
#1	2921.0	6308.6	53403.	4175.8
#2	2917.6	6315.0	53843.	4162.8
#3	2915.2	6303.9	53348.	4164.5

Zoom In Zoom Out

Sample Name: FA22100-1 Acquired: 2/16/2015 12:04:38 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1100	-.0008	.1009	.0001	27.35	-.0002	.0002	.0012	.0022
Stddev	.0002	.0153	.0002	.0003	.0000	.02	.0001	.0002	.0001	.0002
%RSD	188.6	13.91	22.50	.3213	27.36	.0839	53.69	113.3	8.626	10.82
#1	-.0004	.0933	-.0010	.1012	.0001	27.33	-.0001	.0004	.0011	.0022
#2	-.0001	.1133	-.0009	.1011	.0001	27.37	-.0002	.0001	.0012	.0025
#3	.0001	.1234	-.0006	.1006	.0001	27.34	-.0001	.0000	.0013	.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.360	5.594	1.986	.1092	.0032	63.14	.0009	-.0006	.0002	.0025
Stddev	.002	.048	.009	.0003	.0001	.14	.0002	.0004	.0002	.0005
%RSD	.0660	.8621	.4752	.2919	3.578	.2291	20.05	60.03	66.01	18.00
#1	3.361	5.607	1.997	.1095	.0033	63.09	.0010	-.0011	.0002	.0030
#2	3.362	5.541	1.979	.1091	.0031	63.30	.0007	-.0005	.0004	.0024
#3	3.358	5.635	1.984	.1089	.0032	63.02	.0010	-.0004	.0001	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6081	.0004	.3894	.0058	.0014	.0009	.0381
Stddev	.0025	.0001	.0007	.0005	.0017	.0002	.0000
%RSD	.4036	24.37	.1735	8.824	118.6	23.13	.1132
#1	.6107	.0005	.3897	.0053	.0021	.0009	.0381
#2	.6080	.0004	.3898	.0063	.0027	.0011	.0381
#3	.6058	.0003	.3886	.0057	-.0005	.0007	.0380

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2897.5	6117.6	52035.	4094.5
Stddev	4.0	7.5	219.	12.5
%RSD	.13662	.12282	.42005	.30644
#1	2893.8	6109.2	51858.	4107.4
#2	2897.0	6119.7	52279.	4082.4
#3	2901.7	6123.8	51968.	4093.7

Zoom In Zoom Out

Sample Name: MP28556-D1 Acquired: 2/16/2015 12:08:58 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.1132	-.0015	.0999	.0000	26.79	-.0002	.0000	.0013	.0021
Stddev	.0004	.0128	.0014	.0004	.0001	.13	.0000	.000	.0002	.0002
%RSD	132.3	11.28	94.36	.3970	344.1	.4845	11.23	261.5	14.25	10.86
#1	.0001	.1006	-.0031	.0999	.0001	26.74	-.0002	.0000	.0011	.0022
#2	.0000	.1130	-.0012	.0994	-.0001	26.69	-.0002	-.0001	.0012	.0022
#3	.0007	.1261	-.0003	.1002	.0000	26.93	-.0002	.0000	.0015	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.297	5.462	1.962	.1077	.0027	62.09	.0008	-.0003	.0000	.0033
Stddev	.010	.045	.034	.0003	.0001	.33	.0002	.0005	.0011	.0005
%RSD	.2939	.8248	1.718	.2348	4.967	.5383	18.96	146.7	10960.	16.72
#1	3.301	5.411	1.963	.1076	.0029	61.93	.0010	.0002	-.0008	.0028
#2	3.286	5.494	1.928	.1075	.0027	61.86	.0007	-.0006	.0013	.0031
#3	3.305	5.481	1.995	.1080	.0026	62.47	.0007	-.0006	-.0005	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.5952	.0002	.3832	.0052	-.0004	.0008	.0375
Stddev	.0017	.0001	.0024	.0008	.0017	.0002	.0000
%RSD	.2825	79.67	.6184	15.42	388.0	27.76	.0871
#1	.5939	.0003	.3825	.0053	-.0014	.0008	.0374
#2	.5945	.0002	.3813	.0043	.0015	.0010	.0375
#3	.5971	.0000	.3859	.0059	-.0014	.0005	.0374

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2892.1	6106.3	51929.	4073.6
Stddev	8.5	9.1	233.	23.8
%RSD	.29313	.14976	.44845	.58376
#1	2884.3	6104.4	51885.	4094.9
#2	2890.8	6116.3	52180.	4078.0
#3	2901.1	6098.3	51721.	4047.9

Zoom In Zoom Out

Sample Name: MP28556-SD1 Acquired: 2/16/2015 12:13:19 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	.1438	-.0054	.1034	.0000	26.80	-.0009	-.0009	.0005	-.0003
Stddev	.0021	.0850	.0017	.0019	.0004	.18	.0002	.0003	.0012	.0019
%RSD	230.0	59.15	30.53	1.867	2545.	.6853	16.80	31.70	225.3	695.4
#1	.0003	.2419	-.0043	.1019	.0002	26.59	-.0011	-.0008	.0012	-.0012
#2	.0003	.0910	-.0047	.1056	.0003	26.94	-.0008	-.0007	.0012	.0019
#3	-.0034	.0985	-.0073	.1027	-.0004	26.86	-.0009	-.0013	-.0008	-.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.182	5.305	1.818	.1021	.0002	60.05	-.0010	-.0023	.0002	.0162
Stddev	.040	.216	.092	.0004	.0009	.52	.0010	.0032	.0057	.0057
%RSD	1.251	4.070	5.077	.3746	480.3	.8630	100.8	140.0	2527.	35.53
#1	3.162	5.248	1.749	.1024	-.0005	59.48	-.0021	.0010	.0048	.0132
#2	3.228	5.544	1.784	.1021	-.0001	60.50	-.0009	-.0055	-.0062	.0228
#3	3.157	5.123	1.923	.1017	.0012	60.15	-.0001	-.0024	.0021	.0125

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.5874	.0005	.3677	.0036	.0023	-.0001	.0396
Stddev	.0067	.0016	.0032	.0004	.0034	.0005	.0005
%RSD	1.139	341.0	.8719	9.862	145.9	427.7	1.162
#1	.5929	-.0013	.3644	.0037	-.0015	-.0006	.0396
#2	.5894	.0020	.3708	.0038	.0047	.0003	.0400
#3	.5799	.0007	.3678	.0032	.0038	.0000	.0391

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3030.3	6236.4	52795.	3986.5
Stddev	6.2	17.3	89.	43.0
%RSD	.20601	.27740	.16804	1.0782
#1	3023.3	6222.2	52739.	4035.5
#2	3032.0	6231.4	52749.	3968.7
#3	3035.5	6255.7	52897.	3955.3

Zoom In Zoom Out

Sample Name: MP28556-PS1 Acquired: 2/16/2015 12:17:43 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0515	2.726	.1039	.3652	.0529	31.18	.0526	.0533	.0550	.1093
Stddev	.0010	.011	.0009	.0031	.0007	.31	.0001	.0001	.0003	.0003
%RSD	1.853	.3891	.8868	.8352	1.260	.9807	.1037	.2724	.5101	.2634
#1	.0520	2.719	.1039	.3619	.0521	30.84	.0526	.0535	.0553	.1091
#2	.0521	2.721	.1030	.3679	.0531	31.26	.0526	.0532	.0547	.1092
#3	.0504	2.738	.1048	.3659	.0534	31.43	.0525	.0532	.0551	.1096

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	6.287	15.38	6.898	.1585	.1072	71.18	.1080	.0498	.1034	.1035
Stddev	.060	.21	.064	.0005	.0002	.49	.0002	.0005	.0016	.0014
%RSD	.9565	1.393	.9235	.3116	.1451	.6840	.2216	.9365	1.555	1.357
#1	6.218	15.17	6.825	.1591	.1071	70.62	.1077	.0496	.1018	.1044
#2	6.328	15.38	6.922	.1581	.1072	71.38	.1082	.0503	.1050	.1041
#3	6.316	15.60	6.946	.1583	.1074	71.53	.1080	.0495	.1035	.1019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.6071	.0522	.4228	.1084	.1012	.0517	.2976
Stddev	.0025	.0002	.0040	.0006	.0004	.0006	.0006
%RSD	.4115	.3227	.9493	.5579	.3977	1.186	.2162
#1	.6092	.0523	.4182	.1083	.1016	.0523	.2971
#2	.6078	.0520	.4248	.1078	.1008	.0511	.2984
#3	.6044	.0523	.4255	.1090	.1011	.0518	.2974

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2856.6	6134.4	51974.	4103.8
Stddev	10.0	10.6	459.	39.5
%RSD	.35110	.17264	.88262	.96232
#1	2867.6	6138.8	51669.	4143.4
#2	2847.8	6122.4	52502.	4103.8
#3	2854.5	6142.2	51752.	4064.4

Zoom In Zoom Out

Sample Name: MP28556-S1 Acquired: 2/16/2015 12:22:00 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0493	28.21	2.003	2.183	.0519	52.07	.0496	.5039	.2070
Stddev	.0005	.02	.011	.007	.0001	.10	.0001	.0019	.0004
%RSD	1.010	.0703	.5293	.3220	.2223	.1944	.2981	.3783	.1939
#1	.0488	28.19	2.004	2.189	.0520	51.95	.0497	.5042	.2066
#2	.0491	28.23	1.991	2.175	.0518	52.12	.0494	.5019	.2070
#3	.0498	28.21	2.012	2.184	.0519	52.14	.0497	.5057	.2074

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.2609	30.27	31.32	27.91	.6102	.5164	F86.92	.5085	.4873
Stddev	.0007	.01	.04	.24	.0005	.0012	.13	.0030	.0013
%RSD	.2846	.0304	.1129	.8724	.0838	.2295	.1479	.5948	.2682
#1	.2612	30.28	31.35	27.74	.6098	.5167	87.01	.5077	.4858
#2	.2601	30.27	31.28	27.81	.6108	.5151	86.77	.5060	.4881
#3	.2615	30.26	31.34	28.19	.6101	.5175	86.97	.5118	.4880

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.4950	1.955	.6122	.5346	.8978	.5241	1.939	.4823	.5343
Stddev	.0010	.005	.0052	.0012	.0016	.0009	.007	.0014	.0032
%RSD	.2012	.2757	.8545	.2246	.1770	.1635	.3589	.2922	.5967
#1	.4953	1.956	.6116	.5357	.8992	.5241	1.944	.4816	.5335
#2	.4939	1.949	.6072	.5333	.8961	.5233	1.931	.4813	.5316
#3	.4958	1.960	.6177	.5349	.8981	.5250	1.943	.4839	.5378

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2772.2	6113.8	51792.	4140.8
Stddev	5.7	25.5	100.	36.8
%RSD	.20522	.41644	.19386	.88816
#1	2773.9	6123.0	51895.	4182.6
#2	2776.9	6133.5	51694.	4126.2
#3	2765.9	6085.1	51787.	4113.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 12:26:12 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2563	40.96	1.987	2.067	2.023	40.22	2.016	2.025	2.023	2.028
Stddev	.0015	.23	.007	.011	.004	.16	.006	.005	.005	.001
%RSD	.5951	.5729	.3798	.5299	.2091	.3966	.2972	.2322	.2587	.0256
#1	.2563	40.81	1.989	2.054	2.020	40.16	2.018	2.027	2.020	2.028
#2	.2578	41.23	1.993	2.073	2.027	40.40	2.020	2.029	2.029	2.027
#3	.2547	40.83	1.978	2.073	2.020	40.09	2.009	2.020	2.020	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.11	40.48	41.51	2.038	2.017	40.17	2.002	1.998	1.986	2.005
Stddev	.15	.11	.03	.003	.004	.12	.007	.005	.008	.011
%RSD	.3581	.2654	.0695	.1436	.1952	.2924	.3770	.2679	.3900	.5517
#1	40.95	40.54	41.50	2.035	2.017	40.07	2.005	2.003	1.991	2.007
#2	41.25	40.55	41.54	2.038	2.021	40.30	2.007	1.998	1.989	2.015
#3	41.14	40.36	41.48	2.040	2.013	40.15	1.993	1.992	1.977	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.808	2.045	2.030	2.015	2.015	1.960	1.995
Stddev	.006	.005	.009	.003	.006	.003	.007
%RSD	.3414	.2473	.4548	.1520	.3038	.1474	.3735
#1	1.814	2.044	2.022	2.015	2.022	1.962	1.999
#2	1.807	2.050	2.040	2.012	2.013	1.956	2.000
#3	1.802	2.041	2.029	2.018	2.010	1.961	1.986
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 12:26:12 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2739.7	6143.7	51907.	4024.8
Stddev	5.4	12.4	204.	16.3
%RSD	.19617	.20230	.39257	.40562
#1	2734.6	6140.8	52142.	4006.9
#2	2739.1	6133.0	51801.	4028.6
#3	2745.3	6157.3	51779.	4038.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 12:30:24 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0049	-.0001	.0005	.0005	.0114	.0002	.0002	.0003
Stddev	.0007	.0234	.0001	.0005	.0001	.0013	.0001	.0001	.0001
%RSD	112.9	481.5	99.53	97.83	17.49	11.44	44.20	42.76	22.69
#1	.0011	.0064	.0000	.0009	.0005	.0124	.0002	.0002	.0004
#2	-.0002	.0275	-.0001	.0007	.0006	.0120	.0002	.0001	.0002
#3	.0009	-.0192	-.0002	-.0001	.0004	.0099	.0004	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0307	.0842	.0089	.0002	F.0045	.0447	.0001	-.0003
Stddev	.0003	.0083	.0205	.0235	.0000	.0015	.0043	.0002	.0008
%RSD	42.72	27.14	24.37	262.3	17.97	33.41	9.593	308.9	247.0
#1	-.0007	.0370	.0650	-.0033	.0002	.0061	.0493	.0000	-.0002
#2	-.0009	.0338	.1058	-.0059	.0002	.0042	.0408	-.0001	.0004
#3	-.0003	.0212	.0818	.0360	.0001	.0031	.0439	.0003	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0010	.0017	.0007	.0004	.0019	F.0021	.0003	.0002
Stddev	.0009	.0022	.0004	.0003	.0001	.0003	.0005	.0001	.0001
%RSD	1359.	218.2	22.09	49.82	30.28	15.76	25.82	46.12	34.58
#1	.0001	.0017	.0017	.0009	.0004	.0022	.0015	.0004	.0001
#2	-.0011	.0027	.0013	.0003	.0002	.0017	.0025	.0001	.0003
#3	.0008	-.0014	.0020	.0009	.0004	.0017	.0021	.0004	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 12:30:24 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3115.7	6355.1	53993.	4038.5
Stddev	6.6	12.3	254.	7.9
%RSD	.21302	.19373	.47059	.19494
#1	3108.1	6347.3	54124.	4039.9
#2	3119.8	6348.7	53700.	4030.0
#3	3119.3	6369.3	54154.	4045.6

Zoom In Zoom Out

Sample Name: MP28556-S2 Acquired: 2/16/2015 12:34:50 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	28.84	1.983	2.210	.0523	52.22	.0493	.5048	.2084
Stddev	.0016	.06	.000	.006	.0002	.17	.0001	.0008	.0002
%RSD	3.235	.1917	.0175	.2709	.4489	.3319	.1709	.1492	.1043
#1	.0515	28.78	1.983	2.203	.0523	52.20	.0492	.5056	.2085
#2	.0491	28.88	1.984	2.214	.0520	52.05	.0494	.5041	.2081
#3	.0485	28.86	1.983	2.212	.0525	52.40	.0492	.5048	.2085

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2624	30.74	31.51	28.49	.6098	.5186	F87.33	.5053	.4874
Stddev	.0002	.10	.08	.11	.0003	.0009	.15	.0003	.0032
%RSD	.0700	.3186	.2475	.3900	.0447	.1652	.1728	.0662	.6584
#1	.2626	30.64	31.59	28.42	.6101	.5195	87.16	.5057	.4896
#2	.2622	30.74	31.44	28.44	.6095	.5178	87.36	.5050	.4837
#3	.2623	30.84	31.50	28.62	.6099	.5187	87.46	.5052	.4889

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4937	1.948	.5897	.5375	.8975	.5248	1.943	.4814	.5297
Stddev	.0020	.002	.0037	.0011	.0021	.0001	.003	.0006	.0010
%RSD	.4000	.1227	.6263	.1970	.2385	.0206	.1588	.1321	.1848
#1	.4928	1.946	.5940	.5385	.8956	.5249	1.944	.4817	.5308
#2	.4960	1.946	.5881	.5364	.8972	.5247	1.940	.4807	.5293
#3	.4924	1.951	.5871	.5377	.8998	.5248	1.946	.4818	.5289

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2750.3	6087.6	51243.	4029.2
Stddev	5.9	6.2	231.	26.6
%RSD	.21612	.10141	.45072	.66128
#1	2746.5	6081.7	51071.	4026.5
#2	2757.1	6094.0	51506.	4057.1
#3	2747.2	6087.2	51153.	4004.0

Zoom In Zoom Out

Sample Name: FA22103-1F Acquired: 2/16/2015 12:39:03 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1010	-.0013	.1314	.0003	6.850	-.0002	.0014	.0003	-.0010
Stddev	.0005	.0150	.0002	.0006	.0000	.029	.0001	.0001	.0002	.0002
%RSD	10840.	14.81	16.02	.4783	8.292	.4290	45.70	3.976	67.53	15.50
#1	-.0006	.0851	-.0016	.1310	.0003	6.876	-.0001	.0014	.0001	-.0012
#2	.0005	.1147	-.0013	.1322	.0003	6.855	-.0001	.0014	.0005	-.0009
#3	.0002	.1032	-.0011	.1311	.0004	6.818	-.0002	.0013	.0003	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0388	3.090	3.108	.0355	.0003	6.387	.0021	-.0002	-.0002	.0029
Stddev	.0041	.054	.019	.0001	.0001	.052	.0003	.0005	.0006	.0015
%RSD	10.47	1.753	.6066	.3590	30.39	.8162	12.11	243.3	282.7	51.38
#1	.0404	3.151	3.091	.0356	.0004	6.410	.0023	-.0006	.0002	.0037
#2	.0341	3.073	3.128	.0355	.0003	6.423	.0023	-.0005	.0001	.0012
#3	.0417	3.047	3.105	.0353	.0002	6.327	.0018	.0004	-.0010	.0037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.617	.0006	.0905	.0014	.0014	.0003	.0075
Stddev	.004	.0001	.0006	.0001	.0006	.0002	.0001
%RSD	.0974	15.31	.6761	8.990	44.34	58.18	.9793
#1	4.619	.0006	.0910	.0015	.0021	.0001	.0076
#2	4.621	.0007	.0908	.0012	.0009	.0005	.0074
#3	4.612	.0006	.0898	.0014	.0013	.0002	.0075

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3041.1	6318.1	53873.	4021.9
Stddev	11.4	12.1	111.	24.2
%RSD	.37372	.19140	.20675	.60113
#1	3053.2	6320.8	53806.	4013.8
#2	3030.7	6304.8	54001.	4002.7
#3	3039.5	6328.5	53811.	4049.0

Zoom In Zoom Out

Sample Name: FA22103-2F Acquired: 2/16/2015 12:43:26 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	3.927	-.0005	.0373	.0001	4.204	-.0002	-.0001	.0049	.0024
Stddev	.0005	.026	.0004	.0007	.0001	.013	.0001	.0001	.0001	.0004
%RSD	493.2	.6658	97.34	1.947	95.79	.3131	35.12	122.0	1.957	14.64
#1	.0005	3.905	.0000	.0365	.0002	4.207	-.0002	.0000	.0048	.0025
#2	-.0004	3.920	-.0009	.0373	.0001	4.190	-.0002	-.0001	.0048	.0020
#3	-.0004	3.956	-.0004	.0380	.0000	4.216	-.0003	-.0002	.0050	.0027

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.468	3.283	1.301	.0132	.0002	7.235	.0004	.0027	-.0001	.0031
Stddev	.018	.063	.025	.0000	.0001	.026	.0000	.0004	.0004	.0010
%RSD	.2860	1.906	1.892	.2133	64.88	.3539	9.193	14.51	587.6	33.22
#1	6.449	3.355	1.299	.0132	.0003	7.232	.0004	.0030	-.0001	.0019
#2	6.469	3.252	1.327	.0131	.0001	7.212	.0004	.0029	.0003	.0039
#3	6.486	3.241	1.278	.0131	.0002	7.263	.0004	.0023	-.0005	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.433	.0002	.0369	.0197	.0001	.0085	.0119
Stddev	.014	.0001	.0001	.0002	.0008	.0002	.0001
%RSD	.1862	46.01	.2867	1.173	1229.	2.241	.7762
#1	7.443	.0003	.0370	.0197	-.0001	.0085	.0120
#2	7.439	.0003	.0369	.0199	-.0007	.0084	.0119
#3	7.417	.0001	.0369	.0194	.0010	.0088	.0118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3008.1	6325.8	53681.	4098.9
Stddev	3.4	9.1	117.	6.0
%RSD	.11344	.14342	.21729	.14632
#1	3011.1	6333.1	53776.	4104.5
#2	3004.4	6315.7	53551.	4099.8
#3	3008.9	6328.7	53716.	4092.6

Zoom In Zoom Out

Sample Name: FA22103-3F Acquired: 2/16/2015 12:47:45 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2880	-.0004	.2327	.0004	5.664	-.0002	.0015	.0002	-.0009
Stddev	.0004	.0056	.0005	.0007	.0001	.036	.0001	.0001	.0001	.0004
%RSD	522.4	1.947	136.6	.3148	17.61	.6329	29.39	5.922	38.77	47.45
#1	.0003	.2883	-.0002	.2319	.0005	5.643	-.0002	.0015	.0002	-.0011
#2	-.0004	.2935	-.0009	.2329	.0004	5.643	-.0002	.0016	.0001	-.0011
#3	.0003	.2823	.0001	.2333	.0003	5.705	-.0001	.0014	.0001	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0200	2.479	5.332	.0244	-.0003	3.172	.0016	.0000	-.0004	.0024
Stddev	.0019	.044	.080	.0000	.0001	.025	.0001	.0006	.0002	.0006
%RSD	9.576	1.761	1.492	.1602	32.94	.7824	9.016	2922.	51.16	27.01
#1	.0218	2.449	5.297	.0243	-.0002	3.193	.0017	.0000	-.0002	.0020
#2	.0204	2.529	5.276	.0244	-.0003	3.144	.0015	-.0006	-.0005	.0031
#3	.0180	2.459	5.423	.0244	-.0004	3.177	.0015	.0007	-.0004	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.900	-.0003	.1015	.0001	-.0004	-.0003	.0091
Stddev	.003	.0001	.0003	.0001	.0005	.0002	.0001
%RSD	.1774	31.39	.2585	128.0	131.1	47.03	.8530
#1	1.904	-.0003	.1013	.0000	.0001	-.0003	.0092
#2	1.899	-.0002	.1013	.0001	-.0004	-.0005	.0091
#3	1.898	-.0003	.1018	.0002	-.0008	-.0002	.0090

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3022.4	6282.1	53199.	3981.0
Stddev	.8	5.3	274.	54.1
%RSD	.02556	.08490	.51553	1.3584
#1	3021.9	6278.4	53390.	4020.3
#2	3022.0	6279.6	53321.	4003.4
#3	3023.3	6288.2	52885.	3919.3

Zoom In Zoom Out

Sample Name: FA22103-4F Acquired: 2/16/2015 12:52:07 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3422	-.0020	.2734	.0006	5.165	-.0003	.0019	.0000	-.0010
Stddev	.0004	.0080	.0015	.0007	.0001	.016	.0000	.0001	.000	.0003
%RSD	350.4	2.351	77.24	.2684	11.16	.3099	9.770	5.578	384.0	26.28
#1	-.0003	.3337	-.0033	.2739	.0006	5.170	-.0003	.0019	-.0001	-.0009
#2	.0003	.3497	-.0003	.2738	.0005	5.178	-.0003	.0018	.0000	-.0008
#3	-.0003	.3432	-.0025	.2726	.0007	5.148	-.0003	.0020	.0000	-.0013

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0005	1.834	4.916	.0448	-.0005	4.495	.0036	.0003	-.0003	.0019
Stddev	.0008	.029	.037	.0001	.0001	.005	.0001	.0003	.0002	.0005
%RSD	156.7	1.563	.7476	.2173	30.21	.1024	2.160	95.02	71.43	24.14
#1	.0003	1.867	4.908	.0448	-.0006	4.493	.0037	.0006	-.0001	.0017
#2	.0014	1.820	4.956	.0447	-.0003	4.491	.0035	.0001	-.0005	.0015
#3	-.0002	1.815	4.884	.0449	-.0005	4.500	.0037	.0002	-.0002	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.034	-.0001	.1066	-.0001	-.0009	.0000	.0092
Stddev	.004	.0002	.0004	.0001	.0001	.0002	.0000
%RSD	.1106	418.8	.3689	89.39	14.69	470.3	.3486
#1	4.030	-.0001	.1066	-.0002	-.0010	.0001	.0091
#2	4.039	.0002	.1070	-.0001	-.0008	.0001	.0092
#3	4.034	-.0003	.1062	.0000	-.0010	-.0001	.0091

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3035.5	6325.9	53407.	3998.4
Stddev	9.8	16.9	170.	29.3
%RSD	.32237	.26638	.31809	.73275
#1	3033.3	6326.1	53210.	3973.3
#2	3026.9	6308.9	53505.	3991.4
#3	3046.1	6342.6	53504.	4030.6

Zoom In Zoom Out

Sample Name: FA22103-5F Acquired: 2/16/2015 12:56:30 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.2673	-.0015	.0582	.0001	4.630	-.0002	.0001	.0001	-.0008
Stddev	.0005	.0054	.0007	.0006	.0001	.029	.0000	.0001	.0002	.0004
%RSD	728.9	2.015	47.55	1.101	52.76	.6335	16.50	54.33	198.3	43.92
#1	.0002	.2612	-.0014	.0587	.0002	4.656	-.0003	.0002	-.0001	-.0004
#2	-.0007	.2695	-.0008	.0575	.0001	4.598	-.0002	.0002	.0001	-.0009
#3	.0003	.2713	-.0022	.0585	.0001	4.635	-.0002	.0001	.0003	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0171	9.894	2.128	.0071	-.0004	2.083	-.0002	.0001	-.0008	.0024
Stddev	.0057	.045	.017	.0000	.0001	.004	.0002	.0008	.0013	.0015
%RSD	33.22	.4511	.7799	.3580	29.48	.1883	78.56	1355.	173.6	61.75
#1	.0196	9.855	2.113	.0071	-.0003	2.087	-.0004	-.0008	.0004	.0024
#2	.0106	9.885	2.125	.0071	-.0004	2.079	-.0001	.0003	-.0022	.0009
#3	.0212	9.943	2.146	.0072	-.0006	2.083	-.0001	.0007	-.0005	.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8795	-.0001	.0124	.0001	-.0001	.0001	.0055
Stddev	.0018	.0001	.0001	.0000	.0003	.0003	.0001
%RSD	.1999	81.68	.9461	45.11	284.1	217.9	.9351
#1	.8798	-.0002	.0125	.0000	.0002	-.0002	.0054
#2	.8776	.0000	.0123	.0000	-.0004	.0003	.0055
#3	.8811	-.0002	.0123	.0001	-.0002	.0003	.0054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3057.9	6354.6	53543.	4003.3
Stddev	4.6	23.6	357.	9.4
%RSD	.15150	.37173	.66624	.23447
#1	3052.6	6327.5	53269.	4008.7
#2	3060.2	6366.1	53413.	3992.4
#3	3061.0	6370.4	53946.	4008.7

Zoom In Zoom Out

Sample Name: FA22103-6F Acquired: 2/16/2015 13:00:55 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.2474	-.0011	.2342	.0010	3.203	-.0002	.0045	.0001	-.0011
Stddev	.0010	.0088	.0004	.0013	.0001	.016	.0000	.0001	.0004	.0005
%RSD	170.2	3.545	37.79	.5553	7.124	.5027	17.80	2.300	616.4	44.41
#1	-.0016	.2570	-.0016	.2357	.0010	3.219	-.0002	.0045	-.0003	-.0006
#2	.0004	.2398	-.0009	.2338	.0009	3.187	-.0002	.0045	.0000	-.0016
#3	-.0005	.2455	-.0009	.2332	.0011	3.204	-.0002	.0043	.0005	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0103	4.751	2.920	.0183	-.0005	2.110	.0051	-.0002	.0004	.0017
Stddev	.0024	.065	.022	.0000	.0002	.008	.0003	.0007	.0011	.0012
%RSD	23.72	1.370	.7516	.0249	31.25	.3821	6.156	404.4	324.7	69.76
#1	.0086	4.809	2.945	.0183	-.0007	2.109	.0049	.0001	-.0010	.0030
#2	.0131	4.765	2.911	.0183	-.0004	2.119	.0054	.0003	.0010	.0010
#3	.0091	4.681	2.904	.0183	-.0006	2.103	.0049	-.0009	.0010	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.591	-.0001	.0593	.0000	-.0003	-.0002	.0115
Stddev	.007	.0003	.0003	.0000	.0009	.0002	.0001
%RSD	.2769	439.5	.5348	48.97	303.6	82.90	.9675
#1	2.598	.0001	.0596	.0000	-.0004	-.0003	.0116
#2	2.584	.0001	.0590	.0000	.0006	.0000	.0114
#3	2.591	-.0005	.0593	.0000	-.0011	-.0002	.0115

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3042.7	6296.9	53456.	4001.3
Stddev	8.6	.4	217.	27.3
%RSD	.28114	.00660	.40555	.68300
#1	3051.4	6296.9	53284.	3970.0
#2	3034.3	6296.5	53385.	4020.4
#3	3042.5	6297.3	53700.	4013.5

Zoom In Zoom Out

Sample Name: FA22103-7F Acquired: 2/16/2015 13:05:18 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.4055	-.0010	.2446	.0009	7.158	-.0003	.0024	.0002	-.0007
Stddev	.0006	.0073	.0005	.0008	.0001	.003	.0000	.0002	.0001	.0002
%RSD	2908.	1.810	44.55	.3186	13.32	.0433	17.30	8.693	50.88	35.92
#1	.0006	.4137	-.0006	.2454	.0009	7.157	-.0002	.0025	.0002	-.0004
#2	.0001	.3996	-.0015	.2446	.0007	7.155	-.0003	.0022	.0003	-.0008
#3	-.0006	.4031	-.0011	.2439	.0009	7.161	-.0003	.0026	.0001	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0098	7.586	3.586	.0234	-.0005	3.243	.0033	.0004	.0001	.0010
Stddev	.0019	.047	.003	.0000	.0001	.013	.0003	.0010	.0009	.0005
%RSD	19.82	.6135	.0838	.1381	19.84	.3927	8.172	232.8	672.3	50.79
#1	.0113	7.626	3.587	.0234	-.0005	3.251	.0034	-.0004	.0006	.0014
#2	.0076	7.535	3.583	.0234	-.0007	3.228	.0036	.0002	.0006	.0004
#3	.0104	7.597	3.588	.0234	-.0005	3.250	.0030	.0015	-.0009	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.810	.0001	.0666	.0000	-.0007	-.0002	.0110
Stddev	.005	.0001	.0003	.0001	.0010	.0003	.0000
%RSD	.2815	101.8	.5138	201.6	138.7	163.1	.4288
#1	1.813	.0001	.0666	.0000	-.0016	-.0001	.0110
#2	1.812	.0000	.0670	.0000	.0004	.0000	.0110
#3	1.804	.0003	.0663	.0002	-.0010	-.0005	.0109

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2976.9	6194.6	52925.	4014.8
Stddev	1.1	7.2	62.	26.6
%RSD	.03760	.11663	.11693	.66178
#1	2977.2	6199.3	52953.	4043.3
#2	2975.6	6186.3	52854.	4010.5
#3	2977.8	6198.1	52968.	3990.7

Zoom In Zoom Out

Sample Name: FA22104-3 Acquired: 2/16/2015 13:09:40 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.4604	.0052	.0012	-.0001	22.06	-.0002	-.0003	.0013	.0007
Stddev	.0001	.0100	.0009	.0002	.0001	.09	.0000	.0000	.0003	.0002
%RSD	17.85	2.173	17.47	15.55	105.2	.4107	17.69	15.86	25.07	31.83
#1	-.0007	.4711	.0042	.0012	.0000	22.05	-.0002	-.0003	.0015	.0009
#2	-.0007	.4512	.0059	.0014	-.0001	22.15	-.0003	-.0002	.0009	.0005
#3	-.0005	.4588	.0054	.0010	-.0002	21.97	-.0002	-.0003	.0014	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1564	1.106	1.226	.0003	.0005	5.431	-.0002	.0006	.0003	.0024
Stddev	.0022	.039	.018	.0001	.0002	.018	.0002	.0008	.0003	.0017
%RSD	1.393	3.502	1.459	20.27	32.90	.3374	117.9	130.2	100.5	72.62
#1	.1586	1.104	1.220	.0003	.0006	5.422	-.0003	.0013	.0005	.0043
#2	.1563	1.146	1.211	.0003	.0005	5.452	.0001	-.0002	.0005	.0019
#3	.1542	1.069	1.246	.0002	.0003	5.419	-.0002	.0008	.0000	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.725	-.0001	.0378	.0012	-.0009	.0008	.0314
Stddev	.004	.0003	.0002	.0000	.0007	.0003	.0001
%RSD	.2083	180.6	.5746	2.005	76.14	33.15	.4216
#1	1.729	-.0003	.0379	.0011	-.0014	.0009	.0314
#2	1.723	-.0002	.0379	.0012	-.0013	.0005	.0312
#3	1.722	.0001	.0375	.0012	-.0001	.0010	.0315

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2922.3	6118.5	52186.	3925.6
Stddev	11.7	2.3	516.	35.3
%RSD	.40024	.03788	.98889	.89892
#1	2930.9	6120.4	52429.	3952.7
#2	2926.9	6119.1	51593.	3885.7
#3	2909.0	6115.9	52535.	3938.5

Zoom In Zoom Out

Sample Name: FA22131-1F Acquired: 2/16/2015 13:14:03 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	.0329	.0017	.1994	.0001	34.19	-.0004	.0003	.0006	-.0008
Stddev	.0003	.0069	.0006	.0002	.0000	.11	.0001	.0002	.0002	.0005
%RSD	31.16	21.14	32.60	.1204	53.05	.3215	14.65	47.57	36.61	70.08
#1	-.0007	.0407	.0019	.1997	.0000	34.24	-.0003	.0004	.0009	-.0008
#2	-.0013	.0305	.0021	.1992	.0001	34.06	-.0004	.0001	.0005	-.0013
#3	-.0011	.0274	.0011	.1994	.0001	34.26	-.0004	.0004	.0005	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	18.38	3.816	16.28	.0554	.0007	50.91	.0006	-.0016	.0006	.0035
Stddev	.05	.060	.05	.0002	.0001	.12	.0001	.0008	.0004	.0005
%RSD	.2507	1.570	.3287	.3461	12.17	.2353	23.85	53.81	58.35	15.00
#1	18.41	3.753	16.33	.0555	.0008	51.00	.0007	-.0021	.0008	.0030
#2	18.33	3.821	16.23	.0552	.0007	50.77	.0005	-.0006	.0008	.0040
#3	18.40	3.873	16.29	.0554	.0007	50.95	.0007	-.0020	.0002	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.297	-.0001	.4245	.0007	-.0029	.0010	.0055
Stddev	.038	.0003	.0007	.0001	.0006	.0003	.0000
%RSD	.5269	197.1	.1589	8.132	22.25	32.05	.8707
#1	7.266	-.0004	.4244	.0007	-.0036	.0008	.0055
#2	7.340	.0000	.4239	.0008	-.0024	.0008	.0056
#3	7.284	.0000	.4253	.0007	-.0026	.0013	.0055

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2827.8	6150.6	52214.	4041.4
Stddev	16.7	29.4	156.	21.0
%RSD	.58930	.47856	.29865	.51862
#1	2840.9	6168.4	52035.	4021.2
#2	2809.1	6116.7	52284.	4063.1
#3	2833.5	6166.9	52322.	4039.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 13:18:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2617	42.21	1.999	2.146	2.056	40.62	2.032	2.061	2.058	2.090
Stddev	.0002	.26	.003	.019	.017	.28	.006	.007	.010	.016
%RSD	.0654	.6167	.1374	.8646	.8476	.6992	.2826	.3223	.4640	.7656
#1	.2617	42.32	2.000	2.157	2.064	40.78	2.039	2.069	2.068	2.105
#2	.2615	42.39	1.996	2.157	2.068	40.79	2.029	2.057	2.057	2.091
#3	.2619	41.91	2.001	2.125	2.036	40.29	2.029	2.058	2.049	2.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.99	40.91	42.87	2.051	2.060	41.04	2.006	2.025	2.005	2.036
Stddev	.36	.38	.21	.010	.003	.34	.005	.008	.010	.001
%RSD	.8686	.9223	.4925	.4752	.1572	.8319	.2676	.3891	.4765	.0630
#1	42.20	41.08	43.03	2.062	2.064	41.27	2.012	2.034	2.016	2.037
#2	42.21	41.18	42.96	2.047	2.058	41.19	2.004	2.024	1.997	2.035
#3	41.57	40.48	42.63	2.043	2.059	40.65	2.003	2.018	2.002	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.831	2.092	2.056	2.031	2.036	1.973	1.991
Stddev	.003	.007	.017	.014	.006	.016	.005
%RSD	.1468	.3155	.8472	.6693	.2858	.7910	.2692
#1	1.834	2.099	2.066	2.046	2.042	1.990	1.998
#2	1.829	2.090	2.067	2.029	2.031	1.969	1.989
#3	1.830	2.086	2.036	2.019	2.036	1.960	1.988
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 13:18:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.0	6117.8	51578.	4017.2
Stddev	14.1	19.6	27.	13.2
%RSD	.52071	.32025	.05326	.32909
#1	2684.9	6095.4	51550.	4032.3
#2	2707.3	6126.8	51578.	4008.0
#3	2710.9	6131.3	51605.	4011.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 13:22:36 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0089	-.0005	.0007	.0006	.0148	.0003	.0003	.0004
Stddev	.0003	.0089	.0005	.0001	.0000	.0034	.0000	.0001	.0001
%RSD	28.10	100.2	98.21	15.84	6.146	23.29	14.61	27.98	18.42
#1	-.0011	.0081	-.0011	.0006	.0006	.0153	.0003	.0004	.0003
#2	-.0006	.0181	-.0001	.0008	.0005	.0111	.0002	.0003	.0005
#3	-.0010	.0004	-.0004	.0008	.0006	.0180	.0003	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0287	.0895	.0027	.0003	F.0038	.0162	.0001	-.0004
Stddev	.0003	.0017	.0244	.0287	.0000	.0012	.0034	.0001	.0002
%RSD	128.8	6.042	27.30	1045.	11.19	31.24	21.13	85.05	54.64
#1	.0001	.0295	.0741	.0260	.0003	.0050	.0122	.0001	-.0006
#2	-.0005	.0298	.0767	-.0294	.0003	.0036	.0183	.0000	-.0002
#3	-.0004	.0267	.1176	.0116	.0003	.0027	.0180	.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0023	.0024	.0007	.0005	.0017	.0019	.0005	.0003
Stddev	.0011	.0004	.0002	.0005	.0002	.0002	.0008	.0003	.0001
%RSD	727.4	18.48	6.623	67.40	29.65	9.441	41.07	52.66	19.13
#1	.0009	.0027	.0026	.0012	.0007	.0019	.0023	.0007	.0003
#2	.0000	.0018	.0024	.0008	.0004	.0016	.0010	.0006	.0004
#3	-.0013	.0024	.0023	.0002	.0004	.0016	.0023	.0002	.0003
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 13:22:36 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3126.7	6386.1	54060.	4065.2
Stddev	9.2	18.9	279.	28.0
%RSD	.29378	.29615	.51629	.68997
#1	3119.6	6385.7	53837.	4096.5
#2	3123.5	6367.3	53969.	4042.3
#3	3137.1	6405.1	54373.	4056.9

Zoom In Zoom Out

Sample Name: FA22131-8F Acquired: 2/16/2015 13:27:02 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.0147	-.0006	.0167	.0000	54.27	-.0002	-.0002	.0023	.0018
Stddev	.0006	.0100	.0006	.0002	.000	.72	.0000	.0000	.0001	.0001
%RSD	73.83	67.90	100.6	1.430	337.5	1.321	13.85	17.96	4.641	3.985
#1	-.0002	.0032	-.0008	.0169	.0000	54.86	-.0002	-.0002	.0022	.0017
#2	-.0013	.0198	-.0010	.0164	-.0001	53.47	-.0001	-.0002	.0023	.0018
#3	-.0007	.0211	.0001	.0168	.0000	54.48	-.0002	-.0003	.0024	.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3289	3.951	5.983	.0045	.0021	10.74	.0004	-.0004	.0008	.0037
Stddev	.0044	.019	.080	.0000	.0001	.12	.0001	.0007	.0005	.0017
%RSD	1.337	.4769	1.343	.1618	4.827	1.144	15.88	197.2	68.00	44.41
#1	.3339	3.956	6.021	.0045	.0023	10.86	.0004	-.0008	.0011	.0046
#2	.3255	3.930	5.891	.0045	.0021	10.62	.0004	-.0008	.0002	.0048
#3	.3274	3.967	6.038	.0045	.0021	10.73	.0003	.0005	.0009	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.652	.0005	.5776	.0012	-.0007	.0027	.0098
Stddev	.008	.0003	.0071	.0001	.0012	.0001	.0001
%RSD	.3011	61.48	1.224	5.683	166.6	2.634	.5211
#1	2.659	.0006	.5833	.0012	-.0003	.0027	.0098
#2	2.654	.0001	.5697	.0013	-.0020	.0028	.0099
#3	2.643	.0007	.5798	.0012	.0003	.0026	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2904.5	6113.2	51778.	4000.3
Stddev	3.8	7.0	136.	20.9
%RSD	.13165	.11457	.26204	.52314
#1	2908.8	6121.3	51868.	3984.5
#2	2903.3	6108.7	51622.	4024.1
#3	2901.4	6109.6	51844.	3992.4

Zoom In Zoom Out

Sample Name: FA22110-1 Acquired: 2/16/2015 13:31:26 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0558	-.0002	.0934	.0000	48.22	-.0002	.0071	.0007	-.0004
Stddev	.0005	.0034	.0005	.0005	.0001	.26	.0000	.0001	.0001	.0006
%RSD	425.4	6.141	284.6	.5515	218.6	.5441	25.22	1.834	12.88	159.5
#1	.0002	.0593	-.0001	.0940	.0000	48.52	-.0001	.0073	.0007	-.0005
#2	-.0004	.0525	-.0007	.0930	.0000	48.01	-.0002	.0072	.0007	-.0008
#3	.0005	.0556	.0003	.0934	.0001	48.15	-.0002	.0070	.0008	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.92	1.638	6.492	1.800	.0023	38.10	.0006	-.0009	.0002	.0020
Stddev	.05	.021	.049	.003	.0001	.16	.0000	.0008	.0014	.0015
%RSD	.4297	1.311	.7528	.1378	6.385	.4116	6.982	89.31	621.2	78.63
#1	10.96	1.649	6.526	1.801	.0024	38.26	.0007	-.0012	-.0014	.0024
#2	10.87	1.651	6.436	1.802	.0025	37.94	.0006	.0000	.0011	.0032
#3	10.94	1.613	6.515	1.797	.0022	38.10	.0006	-.0015	.0010	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.079	.0002	.3836	.0020	-.0008	-.0001	.0168
Stddev	.004	.0001	.0012	.0002	.0002	.0001	.0001
%RSD	.3209	27.88	.3201	11.18	21.69	105.1	.5180
#1	1.076	.0002	.3849	.0021	-.0010	.0000	.0169
#2	1.080	.0002	.3824	.0022	-.0006	-.0002	.0168
#3	1.083	.0003	.3836	.0018	-.0009	.0000	.0167

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2837.2	6104.5	51503.	3914.9
Stddev	4.5	6.4	67.	39.2
%RSD	.16024	.10535	.13070	1.0008
#1	2832.3	6105.1	51487.	3872.9
#2	2838.0	6097.8	51445.	3921.3
#3	2841.2	6110.6	51577.	3950.5

Zoom In Zoom Out

Sample Name: FA22121-1 Acquired: 2/16/2015 13:35:47 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0104	-.0020	.0447	.0001	54.34	-.0002	-.0001	.0001	.0010
Stddev	.0003	.0090	.0005	.0003	.0001	.26	.0000	.0001	.0003	.0003
%RSD	75.59	86.32	26.81	.5939	183.8	.4858	11.85	114.3	318.0	29.90
#1	-.0002	.0119	-.0015	.0450	.0002	54.64	-.0002	.0000	-.0002	.0007
#2	-.0008	.0008	-.0019	.0444	-.0001	54.26	-.0002	-.0001	.0001	.0012
#3	-.0003	.0186	-.0025	.0448	.0001	54.13	-.0002	-.0002	.0003	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0428	4.793	6.902	.0008	.0014	11.15	.0018	.0003	.0010	.0035
Stddev	.0011	.018	.030	.0000	.0000	.04	.0004	.0006	.0007	.0009
%RSD	2.625	.3812	.4313	1.297	1.450	.3679	21.98	189.3	68.32	24.98
#1	.0438	4.814	6.932	.0008	.0014	11.20	.0021	-.0002	.0014	.0042
#2	.0431	4.778	6.873	.0008	.0014	11.12	.0014	.0010	.0014	.0025
#3	.0416	4.788	6.900	.0008	.0014	11.13	.0018	.0002	.0002	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.314	.0001	.4772	.0009	-.0010	.0001	.0137
Stddev	.003	.0002	.0021	.0001	.0004	.0003	.0001
%RSD	.1966	189.3	.4467	11.72	39.58	382.3	.5644
#1	1.315	.0001	.4797	.0010	-.0015	-.0001	.0137
#2	1.311	.0004	.4759	.0008	-.0008	.0004	.0136
#3	1.316	-.0001	.4761	.0009	-.0007	-.0001	.0138

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2895.9	6146.1	51992.	3952.7
Stddev	3.2	7.4	356.	27.1
%RSD	.11022	.12045	.68554	.68482
#1	2893.4	6138.8	51586.	3921.7
#2	2894.7	6145.8	52137.	3971.3
#3	2899.5	6153.6	52253.	3965.1

Zoom In Zoom Out

Sample Name: FA22150-1 Acquired: 2/16/2015 13:40:11 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3387	-.0016	.0280	.0001	211.6	-.0002	-.0002	.0037	-.0011
Stddev	.0007	.0195	.0003	.0005	.0001	.5	.0000	.0001	.0001	.0002
%RSD	524.5	5.745	20.49	1.745	204.0	.2424	14.70	41.84	3.291	21.13
#1	-.0008	.3209	-.0020	.0276	.0002	211.9	-.0003	-.0003	.0035	-.0009
#2	.0004	.3594	-.0013	.0285	.0001	211.0	-.0002	-.0002	.0037	-.0014
#3	.0000	.3356	-.0015	.0278	-.0001	211.9	-.0002	-.0001	.0037	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8800	9.146	10.44	.0362	.0006	14.95	.0000	-.0011	.0009	.0024
Stddev	.0068	.033	.01	.0001	.0002	.07	.000	.0007	.0004	.0009
%RSD	.7743	.3593	.1218	.2011	30.42	.4964	431.4	63.03	47.05	38.90
#1	.8765	9.169	10.43	.0362	.0007	15.00	-.0002	-.0012	.0005	.0027
#2	.8757	9.109	10.45	.0361	.0004	14.86	.0000	-.0004	.0014	.0014
#3	.8879	9.161	10.45	.0363	.0006	14.98	.0001	-.0017	.0009	.0032

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.737	.0000	2.299	.0123	-.0004	.0073	.0072
Stddev	.007	.0005	.005	.0018	.0016	.0001	.0000
%RSD	.0860	1014.	.2065	14.35	355.8	1.616	.6655
#1	7.730	-.0005	2.303	.0114	-.0003	.0072	.0072
#2	7.744	.0004	2.294	.0112	-.0021	.0072	.0071
#3	7.738	.0002	2.299	.0143	.0010	.0074	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2743.8	5986.3	50580.	3918.9
Stddev	8.7	10.8	116.	17.5
%RSD	.31656	.18111	.22906	.44729
#1	2752.4	5998.6	50709.	3910.7
#2	2743.9	5978.1	50547.	3939.1
#3	2735.1	5982.2	50484.	3907.1

Zoom In Zoom Out

Sample Name: FA22150-2 Acquired: 2/16/2015 13:44:34 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.9719	-.0006	.0506	.0002	221.1	-.0002	.0001	.0060	-.0004
Stddev	.0001	.0151	.0007	.0003	.0000	.1	.0000	.0002	.0001	.0002
%RSD	28.23	1.549	122.7	.5152	28.18	.0462	14.87	227.3	1.885	59.90
#1	-.0007	.9893	-.0011	.0505	.0001	221.2	-.0003	.0002	.0061	-.0006
#2	-.0005	.9633	.0002	.0504	.0001	221.2	-.0002	.0001	.0061	-.0005
#3	-.0004	.9632	-.0007	.0509	.0002	221.0	-.0002	-.0001	.0059	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.148	11.10	16.39	.0402	.0028	33.34	.0007	-.0010	.0006	.0015
Stddev	.023	.01	.19	.0003	.0000	.05	.0002	.0005	.0006	.0016
%RSD	.7326	.1247	1.129	.6446	1.602	.1357	34.54	46.00	97.18	109.1
#1	3.155	11.09	16.39	.0404	.0029	33.33	.0007	-.0008	.0006	.0023
#2	3.166	11.11	16.58	.0399	.0028	33.39	.0009	-.0007	.0013	-.0004
#3	3.122	11.09	16.21	.0402	.0029	33.30	.0004	-.0016	.0001	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.066	-.0003	3.492	.0459	.0001	.0077	.0077
Stddev	.036	.0003	.002	.0055	.0005	.0002	.0000
%RSD	.4487	77.24	.0650	12.07	373.0	2.489	.5733
#1	8.100	-.0006	3.493	.0523	.0007	.0077	.0078
#2	8.070	-.0003	3.493	.0422	-.0001	.0075	.0077
#3	8.028	-.0001	3.489	.0432	-.0002	.0079	.0077

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2768.4	6037.2	51153.	4046.8
Stddev	6.7	6.5	158.	21.5
%RSD	.24251	.10778	.30826	.53112
#1	2772.1	6041.8	50985.	4022.2
#2	2772.4	6039.9	51175.	4055.9
#3	2760.7	6029.7	51298.	4062.2

Zoom In Zoom Out

Sample Name: FA22150-3 Acquired: 2/16/2015 13:48:55 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.4549	-.0023	.0263	.0000	182.1	-.0002	-.0003	.0041	-.0009
Stddev	.0001	.0053	.0006	.0004	.000	.7	.0000	.0001	.0002	.0006
%RSD	63.89	1.164	27.23	1.371	4436.	.3672	13.90	20.89	5.351	65.39
#1	-.0003	.4495	-.0030	.0259	.0000	181.9	-.0002	-.0003	.0039	-.0011
#2	-.0001	.4552	-.0022	.0265	.0001	181.6	-.0002	-.0002	.0044	-.0003
#3	-.0001	.4601	-.0018	.0265	.0000	182.9	-.0002	-.0004	.0041	-.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.483	7.185	11.53	.0268	.0006	12.35	-.0004	-.0006	.0004	.0022
Stddev	.003	.035	.12	.0001	.0001	.10	.0003	.0002	.0012	.0005
%RSD	.1895	.4947	1.003	.3309	12.30	.8036	84.10	38.85	306.2	24.74
#1	1.486	7.173	11.52	.0268	.0005	12.23	.0000	-.0004	.0004	.0016
#2	1.480	7.157	11.43	.0268	.0006	12.39	-.0005	-.0004	.0016	.0026
#3	1.484	7.225	11.66	.0267	.0006	12.41	-.0006	-.0008	-.0008	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.742	.0003	2.587	.0166	.0002	.0065	.0131
Stddev	.029	.0002	.009	.0024	.0005	.0001	.0001
%RSD	.3698	61.37	.3469	14.18	204.6	1.421	.7150
#1	7.771	.0001	2.583	.0182	.0000	.0066	.0130
#2	7.742	.0004	2.580	.0139	-.0001	.0064	.0132
#3	7.714	.0005	2.597	.0176	.0007	.0065	.0130

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2752.3	5992.7	50415.	3904.9
Stddev	9.2	2.8	272.	14.6
%RSD	.33508	.04694	.54020	.37494
#1	2756.7	5995.6	50296.	3919.6
#2	2758.5	5992.4	50222.	3904.8
#3	2741.7	5990.0	50726.	3890.3

Zoom In Zoom Out

Sample Name: FA22150-4 Acquired: 2/16/2015 13:53:16 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	4.550	-.0002	.0287	.0002	169.4	-.0003	.0003	.0116	.0001
Stddev	.000	.044	.0004	.0002	.0002	.1	.0000	.0001	.0002	.0003
%RSD	1999.	.9638	276.9	.8551	79.44	.0658	7.550	30.43	1.914	321.9
#1	-.0005	4.599	-.0006	.0288	.0002	169.5	-.0003	.0002	.0116	.0001
#2	.0001	4.513	.0003	.0290	.0001	169.3	-.0002	.0003	.0113	-.0002
#3	.0003	4.539	-.0001	.0285	.0004	169.3	-.0003	.0004	.0117	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	4.050	6.275	6.758	.0447	.0028	10.43	.0018	.0008	.0010	.0035
Stddev	.021	.023	.039	.0001	.0001	.05	.0001	.0006	.0004	.0008
%RSD	.5302	.3669	.5782	.3270	3.094	.4352	6.489	78.74	38.83	21.90
#1	4.073	6.279	6.753	.0448	.0029	10.48	.0017	.0003	.0006	.0038
#2	4.030	6.295	6.799	.0447	.0027	10.41	.0020	.0006	.0010	.0041
#3	4.046	6.250	6.721	.0446	.0028	10.39	.0018	.0015	.0014	.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	8.585	.0000	1.776	.1622	-.0007	.0148	.0094
Stddev	.038	.0002	.002	.0045	.0010	.0005	.0001
%RSD	.4451	427.2	.1255	2.774	140.9	3.728	.7559
#1	8.629	.0002	1.776	.1614	.0004	.0145	.0094
#2	8.557	-.0002	1.778	.1581	-.0012	.0143	.0094
#3	8.569	.0001	1.774	.1670	-.0012	.0154	.0093

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2749.8	6085.6	51000.	3881.6
Stddev	2.3	6.6	320.	27.4
%RSD	.08418	.10912	.62670	.70668
#1	2752.3	6078.9	50836.	3866.4
#2	2747.7	6092.2	50797.	3913.3
#3	2749.4	6085.5	51369.	3865.2

Zoom In Zoom Out

Sample Name: FA22150-5 Acquired: 2/16/2015 13:57:38 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	1.217	-.0009	.0361	.0000	211.8	-.0001	-.0002	.0082	.0000
Stddev	.0005	.003	.0011	.0003	.0001	.8	.0001	.0001	.0003	.0000
%RSD	704.7	.2075	125.8	.9586	639.3	.3942	53.71	54.22	3.436	78.76
#1	.0003	1.220	-.0019	.0364	.0000	212.5	-.0001	-.0003	.0079	.0000
#2	.0002	1.215	.0002	.0362	.0000	212.0	-.0001	-.0001	.0085	.0000
#3	-.0007	1.217	-.0009	.0357	-.0001	210.9	-.0002	-.0001	.0082	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	1.188	21.87	23.45	.0293	.0029	20.16	.0006	.0004	.0008	.0018
Stddev	.007	.13	.11	.0002	.0002	.05	.0002	.0001	.0005	.0005
%RSD	.5824	.5754	.4761	.8520	6.068	.2676	35.49	28.54	62.80	25.36
#1	1.187	22.00	23.57	.0291	.0031	20.21	.0008	.0005	.0003	.0014
#2	1.195	21.75	23.35	.0296	.0028	20.16	.0004	.0004	.0007	.0016
#3	1.182	21.87	23.44	.0292	.0028	20.11	.0006	.0003	.0013	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	10.20	.0000	2.647	.0378	-.0004	.0093	.0126
Stddev	.02	.000	.010	.0010	.0008	.0002	.0000
%RSD	.1765	2773.	.3765	2.678	201.9	1.783	.2383
#1	10.21	-.0005	2.654	.0386	.0005	.0095	.0126
#2	10.22	.0002	2.652	.0382	-.0005	.0091	.0126
#3	10.18	.0002	2.635	.0367	-.0011	.0093	.0127

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2693.2	5973.7	50220.	3873.6
Stddev	6.6	3.2	197.	18.3
%RSD	.24377	.05341	.39278	.47135
#1	2686.1	5970.8	50350.	3861.2
#2	2694.4	5977.1	49993.	3864.9
#3	2699.1	5973.4	50317.	3894.5

Zoom In Zoom Out

Sample Name: FA22095-5 Acquired: 2/16/2015 14:01:58 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0051	-.0020	.0002	.0000	.0781	-.0003	-.0002	.0000	-.0011
Stddev	.0005	.0092	.0009	.0001	.0000	.0080	.0000	.0001	.000	.0005
%RSD	93.93	180.5	42.37	59.22	193.1	10.25	17.30	37.86	1148.	49.15
#1	-.0006	.0151	-.0029	.0003	.0000	.0773	-.0002	-.0002	.0001	-.0017
#2	-.0009	-.0029	-.0021	.0001	.0000	.0864	-.0003	-.0002	.0001	-.0006
#3	.0000	.0030	-.0011	.0002	.0000	.0705	-.0003	-.0003	-.0002	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.0020	.0695	-.0130	-.0002	-.0005	.0475	-.0004	-.0005	-.0005	.0005
Stddev	.0022	.0135	.0201	.0001	.0001	.0082	.0001	.0004	.0004	.0019
%RSD	110.3	19.37	154.0	32.15	29.82	17.30	17.45	95.67	95.59	361.8
#1	.0004	.0602	-.0219	-.0003	-.0004	.0382	-.0003	-.0002	-.0002	.0027
#2	-.0039	.0634	.0100	-.0002	-.0006	.0506	-.0004	-.0010	-.0003	-.0005
#3	-.0026	.0850	-.0272	-.0002	-.0004	.0537	-.0004	-.0002	-.0010	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0304	-.0003	.0006	-.0005	-.0011	.0001	.0012
Stddev	.0005	.0004	.0001	.0001	.0005	.0002	.0000
%RSD	1.610	149.9	13.93	18.70	42.27	250.1	3.475
#1	.0298	-.0006	.0007	-.0004	-.0007	.0002	.0012
#2	.0304	.0002	.0006	-.0006	-.0017	-.0002	.0012
#3	.0308	-.0004	.0005	-.0005	-.0010	.0002	.0013

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3079.4	6328.8	53669.	3971.1
Stddev	7.2	1.1	36.	19.0
%RSD	.23468	.01749	.06699	.47802
#1	3078.6	6327.6	53630.	3988.5
#2	3072.7	6329.0	53700.	3950.9
#3	3087.0	6329.8	53678.	3973.9

Zoom In Zoom Out

Sample Name: MP28556-MB2A Acquired: 2/16/2015 14:07:00 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0057	-.0018	.0001	.0000	.0247	-.0003	-.0003	-.0002	-.0012
Stddev	.000	.0158	.0003	.0003	.0001	.0035	.0001	.0001	.0001	.0000
%RSD	690.8	278.0	16.31	505.6	3770.	14.01	24.39	19.80	62.19	2.961
#1	-.0004	.0176	-.0015	-.0001	.0000	.0287	-.0004	-.0004	-.0001	-.0012
#2	.0002	.0118	-.0017	-.0001	.0000	.0232	-.0002	-.0003	-.0003	-.0012
#3	.0000	-.0123	-.0021	.0004	-.0001	.0223	-.0003	-.0002	-.0001	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075	-.0037	-.0269	-.0002	-.0005	.0072	-.0007	-.0002	-.0003	.0001
Stddev	.0033	.0591	.0065	.0000	.0000	.0171	.0001	.0005	.0011	.0012
%RSD	43.87	1577.	24.27	13.72	7.911	237.6	17.08	245.7	352.3	1112.
#1	.0088	-.0636	-.0294	-.0002	-.0005	-.0029	-.0007	-.0008	-.0007	.0015
#2	.0037	.0546	-.0195	-.0002	-.0006	-.0024	-.0008	.0000	.0009	-.0005
#3	.0098	-.0022	-.0319	-.0001	-.0005	.0269	-.0005	.0001	-.0012	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0253	.0000	.0002	-.0005	-.0013	-.0003	.0045
Stddev	.0003	.0004	.0001	.0001	.0006	.0002	.0001
%RSD	1.108	2763.	36.18	14.62	45.08	61.23	1.254
#1	.0252	-.0001	.0002	-.0005	-.0007	-.0005	.0044
#2	.0256	.0005	.0001	-.0005	-.0014	-.0001	.0046
#3	.0250	-.0003	.0001	-.0004	-.0018	-.0004	.0045
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28556-MB2A Acquired: 2/16/2015 14:07:00 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3028.6	6263.8	53383.	3961.7
Stddev	4.1	12.8	191.	47.4
%RSD	.13470	.20474	.35807	1.1957
#1	3024.7	6260.5	53306.	3908.4
#2	3032.8	6253.0	53243.	3998.9
#3	3028.1	6278.0	53601.	3977.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:11:27 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2633	42.60	1.968	2.182	2.055	40.32	2.019	2.059	2.055	2.087
Stddev	.0014	.14	.006	.006	.006	.15	.005	.003	.004	.007
%RSD	.5220	.3173	.3314	.2782	.2830	.3793	.2614	.1642	.1787	.3317
#1	.2644	42.48	1.976	2.175	2.050	40.21	2.024	2.062	2.057	2.089
#2	.2638	42.75	1.966	2.185	2.061	40.50	2.020	2.057	2.057	2.092
#3	.2617	42.58	1.963	2.186	2.054	40.26	2.014	2.056	2.051	2.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.21	40.68	43.52	2.041	2.054	40.98	1.989	2.013	1.978	2.013
Stddev	.15	.21	.09	.002	.002	.20	.005	.007	.005	.007
%RSD	.3581	.5224	.2161	.0929	.0750	.4882	.2571	.3305	.2442	.3268
#1	42.09	40.69	43.42	2.043	2.055	40.91	1.994	2.021	1.984	2.020
#2	42.38	40.89	43.55	2.042	2.054	41.20	1.990	2.009	1.977	2.009
#3	42.16	40.46	43.60	2.039	2.052	40.82	1.984	2.010	1.975	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.810	2.096	2.044	2.015	2.022	1.946	1.972
Stddev	.005	.002	.006	.003	.012	.005	.005
%RSD	.2980	.0707	.2739	.1235	.6153	.2532	.2524
#1	1.816	2.097	2.040	2.017	2.036	1.947	1.976
#2	1.808	2.097	2.051	2.014	2.018	1.951	1.972
#3	1.805	2.094	2.043	2.013	2.013	1.941	1.967
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:11:27 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2678.6	6097.2	51216.	3864.3
Stddev	3.7	7.4	113.	28.4
%RSD	.13628	.12154	.22137	.73570
#1	2675.3	6101.3	51227.	3861.4
#2	2678.0	6088.6	51323.	3837.5
#3	2682.6	6101.6	51097.	3894.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:15:38 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	F.0255	.0004	.0011	.0008	.0208	.0010	.0010	.0006
Stddev	.0004	.0047	.0005	.0005	.0002	.0039	.0001	.0001	.0002
%RSD	87.95	18.26	150.0	48.89	19.48	18.65	11.30	14.25	39.61
#1	.0004	.0265	.0003	.0016	.0010	.0167	.0010	.0008	.0004
#2	.0001	.0296	.0009	.0012	.0007	.0214	.0011	.0011	.0008
#3	.0010	.0205	-.0001	.0005	.0008	.0244	.0009	.0010	.0005
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250							
Low Limit		-.0250							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0364	.0830	.0258	.0006	F.0055	.0364	.0005	.0009
Stddev	.0000	.0066	.0615	.0408	.0001	.0015	.0138	.0001	.0003
%RSD	20.95	18.19	74.03	157.9	12.21	27.00	37.83	10.09	35.82
#1	-.0001	.0440	.0982	-.0171	.0005	.0070	.0282	.0006	.0005
#2	-.0001	.0331	.0154	.0641	.0007	.0054	.0287	.0006	.0009
#3	-.0001	.0321	.1355	.0305	.0006	.0041	.0523	.0005	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	F.0021	.0028	F.0014	.0009	F.0024	F.0026	.0006	.0010
Stddev	.0003	.0004	.0003	.0004	.0002	.0001	.0012	.0003	.0001
%RSD	23.57	20.64	10.84	25.74	24.74	5.619	45.76	44.19	13.91
#1	.0014	.0018	.0027	.0017	.0011	.0024	.0013	.0004	.0009
#2	.0017	.0026	.0031	.0015	.0009	.0025	.0030	.0005	.0010
#3	.0011	.0019	.0025	.0010	.0007	.0022	.0036	.0009	.0012
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020		.0010		.0020	.0020		
Low Limit		-.0020		-.0010		-.0020	-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:15:38 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3074.8	6349.7	53198.	3921.1
Stddev	6.9	8.4	264.	17.4
%RSD	.22529	.13279	.49650	.44359
#1	3082.5	6351.6	52943.	3910.1
#2	3069.1	6357.1	53470.	3941.1
#3	3072.6	6340.5	53183.	3912.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:40:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2570	41.02	2.063	2.038	2.073	41.49	2.074	2.059	2.076	2.055
Stddev	.0007	.02	.002	.006	.005	.11	.002	.002	.006	.001
%RSD	.2649	.0552	.0867	.3150	.2304	.2618	.0748	.1132	.2859	.0548
#1	.2577	41.02	2.062	2.031	2.079	41.60	2.075	2.061	2.077	2.055
#2	.2568	41.04	2.062	2.043	2.070	41.39	2.072	2.059	2.082	2.056
#3	.2564	40.99	2.065	2.042	2.071	41.49	2.074	2.056	2.070	2.054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.78	41.65	40.85	2.108	2.060	41.35	2.076	2.033	2.060	2.064
Stddev	.12	.16	.14	.004	.005	.13	.003	.007	.004	.004
%RSD	.2757	.3815	.3534	.2029	.2303	.3171	.1653	.3571	.1701	.1832
#1	41.91	41.82	40.89	2.107	2.065	41.50	2.080	2.034	2.064	2.066
#2	41.69	41.64	40.97	2.113	2.059	41.27	2.075	2.026	2.058	2.059
#3	41.73	41.50	40.69	2.104	2.056	41.27	2.073	2.040	2.058	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.877	2.058	2.091	2.101	2.056	2.053	2.075
Stddev	.003	.005	.004	.004	.007	.002	.004
%RSD	.1380	.2382	.1751	.2033	.3520	.0748	.1779
#1	1.878	2.063	2.095	2.098	2.047	2.051	2.079
#2	1.878	2.053	2.087	2.106	2.059	2.054	2.072
#3	1.874	2.058	2.091	2.100	2.060	2.052	2.075
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:40:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2694.6	6139.1	51284.	3935.1
Stddev	8.3	9.7	176.	15.2
%RSD	.30873	.15723	.34286	.38527
#1	2697.3	6131.0	51372.	3927.3
#2	2701.3	6149.8	51081.	3952.6
#3	2685.3	6136.6	51398.	3925.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:49:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0149	.0014	.0007	.0007	.0174	.0009	.0009	.0010
Stddev	.0007	.0075	.0003	.0004	.0001	.0059	.0000	.0000	.0002
%RSD	131.2	50.47	25.40	59.80	11.25	33.86	5.326	3.757	20.21
#1	.0012	.0081	.0015	.0006	.0007	.0221	.0008	.0009	.0012
#2	-.0001	.0137	.0016	.0003	.0008	.0108	.0009	.0010	.0009
#3	.0005	.0229	.0010	.0011	.0006	.0193	.0009	.0009	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0256	.0460	.0193	.0007	F.0064	.0116	F.0012	.0009
Stddev	.0001	.0028	.0236	.0182	.0000	.0015	.0143	.0002	.0002
%RSD	12.77	10.76	51.17	94.12	5.507	23.11	122.9	15.99	29.30
#1	.0008	.0271	.0350	.0378	.0006	.0079	.0280	.0011	.0008
#2	.0007	.0273	.0731	.0185	.0007	.0062	.0044	.0011	.0011
#3	.0009	.0224	.0300	.0015	.0007	.0050	.0024	.0014	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit						.0010		.0010	
Low Limit						-.0010		-.0010	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	F.0027	.0011	F.0016	.0007	F.0023	.0016	.0002	.0009
Stddev	.0007	.0007	.0002	.0003	.0000	.0001	.0005	.0002	.0000
%RSD	56.79	26.03	21.17	17.70	5.709	2.629	30.71	100.9	.5435
#1	.0014	.0021	.0013	.0019	.0007	.0023	.0011	.0005	.0009
#2	.0005	.0025	.0013	.0015	.0007	.0023	.0019	.0000	.0009
#3	.0018	.0035	.0009	.0013	.0007	.0022	.0020	.0001	.0009
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010		.0020			
Low Limit		-.0020		-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:49:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3051.0	6312.1	53065.	3933.5
Stddev	15.7	27.1	422.	11.0
%RSD	.51541	.42928	.79593	.27907
#1	3054.4	6317.5	52647.	3924.9
#2	3033.8	6282.7	53056.	3945.9
#3	3064.7	6336.0	53491.	3929.9

Zoom In Zoom Out

Sample Name: MP28558-MB1 Acquired: 2/16/2015 14:53:13 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0095	-.0008	-.0002	.0000	.0381	-.0001	-.0002	.0006	.0000
Stddev	.0003	.0125	.0001	.0003	.000	.0034	.0000	.0001	.0002	.000
%RSD	42.71	132.3	16.09	139.0	1410.	8.924	40.22	51.96	33.80	304.6
#1	-.0006	.0030	-.0010	-.0003	.0001	.0420	-.0001	-.0001	.0006	.0000
#2	-.0004	.0015	-.0009	.0001	-.0001	.0356	-.0001	-.0003	.0004	.0000
#3	-.0009	.0239	-.0007	-.0005	-.0001	.0367	-.0001	-.0001	.0008	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0240	.0502	.0071	.0002	.0014	-.0009	.0002	-.0004	-.0001	.0011
Stddev	.0031	.0110	.0280	.0000	.0003	.0146	.0001	.0012	.0005	.0030
%RSD	12.80	21.88	392.0	12.89	21.97	1592.	54.44	308.2	1071.	284.2
#1	.0261	.0394	-.0173	.0002	.0018	.0156	.0001	-.0017	-.0003	.0045
#2	.0255	.0614	.0010	.0002	.0014	-.0062	.0004	.0005	.0006	-.0005
#3	.0205	.0498	.0377	.0002	.0012	-.0121	.0002	.0000	-.0004	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0137	.0231	.0000	.0012	-.0011	-.0005	.0015
Stddev	.0002	.0002	.0001	.0001	.0008	.0002	.0001
%RSD	1.710	.9064	150.5	7.926	77.83	48.49	7.033
#1	.0140	.0232	.0000	.0013	-.0004	-.0007	.0014
#2	.0137	.0228	.0001	.0011	-.0020	-.0005	.0016
#3	.0135	.0232	.0000	.0011	-.0008	-.0002	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28558-MB1 Acquired: 2/16/2015 14:53:13 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3079.9	6382.5	53841.	3972.1
Stddev	9.6	16.0	395.	33.1
%RSD	.31030	.25106	.73393	.83285
#1	3083.3	6401.0	53862.	3955.0
#2	3069.1	6372.9	53435.	3951.1
#3	3087.3	6373.6	54225.	4010.3

Zoom In Zoom Out

Sample Name: MP28558-B1 Acquired: 2/16/2015 14:57:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0480	28.24	2.013	2.062	.0524	26.27	.0506	.5139	.2118	.2609
Stddev	.0004	.16	.005	.003	.0002	.07	.0001	.0009	.0020	.0023
%RSD	.7358	.5745	.2588	.1612	.2907	.2560	.1177	.1827	.9470	.8670
#1	.0481	28.35	2.017	2.064	.0525	26.31	.0505	.5148	.2108	.2591
#2	.0476	28.30	2.015	2.065	.0522	26.30	.0505	.5140	.2106	.2602
#3	.0483	28.05	2.007	2.059	.0524	26.19	.0506	.5130	.2142	.2635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.42	26.09	26.10	.5210	.5234	26.12	.5229	.4926	.4948	1.989
Stddev	.11	.09	.12	.0034	.0009	.10	.0018	.0009	.0003	.003
%RSD	.4155	.3263	.4458	.6506	.1716	.3662	.3462	.1779	.0596	.1242
#1	27.42	26.04	26.23	.5181	.5242	26.15	.5242	.4926	.4947	1.991
#2	27.53	26.19	26.05	.5201	.5237	26.19	.5237	.4935	.4952	1.989
#3	27.30	26.05	26.01	.5247	.5224	26.01	.5208	.4918	.4947	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138	.5677	.5314	.5357	1.976	.4950	.5130
Stddev	.0006	.0021	.0007	.0034	.009	.0033	.0009
%RSD	4.176	.3704	.1342	.6321	.4355	.6710	.1674
#1	.0135	.5695	.5311	.5325	1.985	.4917	.5135
#2	.0134	.5682	.5322	.5354	1.975	.4949	.5135
#3	.0144	.5654	.5309	.5393	1.967	.4983	.5120
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28558-B1 Acquired: 2/16/2015 14:57:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2779.0	6170.6	51791.	3905.7
Stddev	5.9	3.9	392.	35.5
%RSD	.21411	.06351	.75684	.90841
#1	2772.1	6167.9	52024.	3872.3
#2	2782.9	6168.9	52012.	3901.9
#3	2781.9	6175.1	51339.	3942.9

Zoom In Zoom Out

Sample Name: FA22051-3 Acquired: 2/16/2015 15:01:56 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0015	98.83	.0079	.0971	.0009	48.00	-.0004	.0024	.0635	.0062
Stddev	.0004	.17	.0014	.0004	.0001	.07	.0000	.0002	.0005	.0003
%RSD	25.80	.1737	17.58	.4047	6.868	.1503	12.62	6.526	.7159	4.603
#1	-.0010	98.80	.0090	.0966	.0009	47.92	-.0004	.0025	.0630	.0063
#2	-.0017	99.02	.0085	.0972	.0009	48.06	-.0003	.0025	.0635	.0059
#3	-.0017	98.68	.0064	.0974	.0008	48.04	-.0004	.0022	.0639	.0064

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	34.18	.8023	2.215	.0774	.0044	.1167	.0294	.0827	.0046	.0050
Stddev	.08	.0620	.010	.0001	.0001	.0187	.0001	.0006	.0016	.0023
%RSD	.2239	7.730	.4407	.1064	1.353	15.99	.2685	.7368	35.09	46.09
#1	34.12	.8159	2.207	.0774	.0044	.1048	.0295	.0834	.0064	.0076
#2	34.26	.7346	2.212	.0774	.0044	.1382	.0294	.0824	.0032	.0041
#3	34.15	.8564	2.226	.0773	.0043	.1071	.0294	.0823	.0042	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.181	.0263	.2043	.4314	-.0013	.0350	.0362
Stddev	.001	.0001	.0005	.0008	.0003	.0000	.0001
%RSD	.0695	.3689	.2273	.1849	22.91	.1236	.3487
#1	1.182	.0263	.2041	.4323	-.0009	.0349	.0361
#2	1.182	.0262	.2048	.4309	-.0013	.0349	.0363
#3	1.181	.0263	.2040	.4310	-.0015	.0350	.0361

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2868.2	6417.1	53212.	4017.0
Stddev	4.2	10.6	104.	31.1
%RSD	.14636	.16536	.19632	.77346
#1	2872.9	6429.3	53298.	4025.1
#2	2864.7	6409.6	53242.	3982.6
#3	2867.0	6412.6	53095.	4043.1

Zoom In Zoom Out

Sample Name: MP28558-D1 Acquired: 2/16/2015 15:06:15 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0007	108.1	.0136	.1315	.0011	62.90	-.0001	.0055	.0933	.0778
Stddev	.0005	.5	.0012	.0003	.0001	.36	.0001	.0002	.0001	.0003
%RSD	66.37	.4384	8.621	.2151	7.679	.5648	125.9	4.024	.1293	.4071
#1	-.0004	108.1	.0127	.1315	.0010	62.99	-.0001	.0052	.0933	.0777
#2	-.0013	107.7	.0149	.1313	.0011	62.50	.0000	.0055	.0931	.0781
#3	-.0005	108.6	.0132	.1318	.0012	63.19	.0000	.0056	.0934	.0775

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.39	.9157	2.450	.2397	.0082	.1679	.0552	.1028	.0019	.0046
Stddev	.24	.0387	.024	.0003	.0001	.0223	.0001	.0017	.0014	.0017
%RSD	.4030	4.227	.9654	.1368	1.353	13.29	.1867	1.607	72.70	35.95
#1	58.41	.9101	2.427	.2401	.0081	.1875	.0553	.1031	.0027	.0039
#2	58.15	.8800	2.449	.2394	.0083	.1436	.0552	.1044	.0029	.0065
#3	58.62	.9568	2.474	.2397	.0081	.1727	.0551	.1011	.0003	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.143	.0741	.2782	.4549	-.0034	.0448	.1005
Stddev	.004	.0003	.0009	.0007	.0014	.0003	.0004
%RSD	.3025	.3790	.3144	.1571	43.10	.6317	.4310
#1	1.145	.0738	.2782	.4557	-.0018	.0446	.1001
#2	1.145	.0743	.2773	.4546	-.0036	.0448	.1010
#3	1.139	.0742	.2791	.4544	-.0047	.0451	.1004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2835.9	6407.1	53418.	4118.5
Stddev	6.8	18.3	396.	27.8
%RSD	.23868	.28520	.74104	.67465
#1	2837.5	6426.5	53096.	4118.6
#2	2828.5	6390.2	53860.	4146.2
#3	2841.7	6404.8	53298.	4090.7

Zoom In Zoom Out

Sample Name: MP28558-SD1 Acquired: 2/16/2015 15:10:34 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	101.7	.0083	.1013	.0008	49.63	-.0012	.0013	.0655	.0075
Stddev	.0012	.4	.0095	.0002	.0003	.32	.0003	.0002	.0002	.0015
%RSD	221.2	.3982	113.3	.1820	42.24	.6453	27.11	15.06	.3199	19.96
#1	.0005	101.9	.0013	.1013	.0012	49.88	-.0010	.0015	.0657	.0081
#2	-.0019	102.0	.0191	.1015	.0006	49.74	-.0015	.0012	.0654	.0086
#3	-.0002	101.3	.0047	.1011	.0006	49.27	-.0010	.0011	.0654	.0058

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	35.08	1.029	2.329	.0801	.0016	.3681	.0307	.0851	-.0039	.0104
Stddev	.17	.244	.178	.0001	.0002	.0724	.0004	.0024	.0051	.0032
%RSD	.4870	23.74	7.657	.1171	13.69	19.67	1.320	2.809	129.9	30.92
#1	35.12	1.258	2.338	.0802	.0014	.2894	.0304	.0823	-.0074	.0067
#2	35.24	.7720	2.502	.0801	.0018	.4320	.0312	.0866	.0019	.0122
#3	34.90	1.056	2.146	.0800	.0017	.3829	.0305	.0863	-.0063	.0123

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.191	.0255	.2092	.4358	-.0055	.0339	.0436
Stddev	.003	.0021	.0007	.0004	.0017	.0019	.0004
%RSD	.2430	8.103	.3516	.0865	30.63	5.533	.8849
#1	1.188	.0273	.2100	.4360	-.0037	.0321	.0440
#2	1.191	.0232	.2088	.4354	-.0070	.0358	.0432
#3	1.194	.0259	.2087	.4361	-.0058	.0337	.0435

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3009.6	6458.0	53528.	3986.5
Stddev	6.7	2.1	308.	28.1
%RSD	.22163	.03254	.57621	.70460
#1	3007.2	6458.6	53582.	3997.6
#2	3004.5	6455.7	53806.	3954.6
#3	3017.1	6459.8	53196.	4007.3

Zoom In Zoom Out

Sample Name: MP28558-PS1 Acquired: 2/16/2015 15:14:56 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0492	98.80	.1068	.3532	.0524	51.15	.0498	.0526	.1131	.1102
Stddev	.0010	.34	.0004	.0023	.0001	.19	.0001	.0001	.0008	.0002
%RSD	2.108	.3416	.3945	.6527	.2843	.3810	.2997	.1749	.7344	.2137
#1	.0498	99.07	.1064	.3557	.0526	51.34	.0496	.0525	.1140	.1103
#2	.0498	98.42	.1068	.3511	.0524	50.95	.0499	.0526	.1123	.1104
#3	.0480	98.90	.1072	.3529	.0523	51.15	.0498	.0527	.1131	.1100

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	35.99	10.63	6.932	.1266	.1014	10.60	.1307	.1297	.0980	.0996
Stddev	.15	.09	.057	.0004	.0001	.04	.0004	.0012	.0020	.0022
%RSD	.4047	.8746	.8230	.3496	.0608	.3918	.3233	.9114	2.004	2.255
#1	36.02	10.73	6.915	.1271	.1014	10.64	.1306	.1308	.0998	.0972
#2	35.83	10.55	6.996	.1263	.1013	10.56	.1312	.1285	.0959	.1017
#3	36.12	10.62	6.885	.1266	.1014	10.62	.1303	.1300	.0982	.0999

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.155	.0738	.2473	.5146	.0967	.0819	.2833
Stddev	.003	.0002	.0012	.0013	.0009	.0006	.0002
%RSD	.2366	.2446	.4712	.2470	.9125	.7035	.0642
#1	1.158	.0738	.2479	.5159	.0976	.0826	.2832
#2	1.156	.0739	.2460	.5134	.0966	.0815	.2835
#3	1.153	.0736	.2481	.5144	.0958	.0818	.2832

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2803.4	6391.1	52686.	3962.4
Stddev	4.8	13.5	340.	1.9
%RSD	.17069	.21055	.64587	.04813
#1	2808.1	6394.0	52297.	3960.2
#2	2798.5	6376.4	52932.	3963.1
#3	2803.6	6402.9	52828.	3963.8

Zoom In Zoom Out

Sample Name: MP28558-S1 Acquired: 2/16/2015 15:19:14 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0468	136.2	1.856	2.098	.0518	83.22	.0464	.4747	.2723	.2604
Stddev	.0008	.4	.003	.008	.0003	.17	.0001	.0003	.0011	.0010
%RSD	1.614	.3203	.1813	.3663	.6505	.2056	.2210	.0623	.3968	.4009
#1	.0477	136.7	1.859	2.107	.0518	83.32	.0465	.4749	.2735	.2609
#2	.0466	136.2	1.856	2.094	.0514	83.31	.0463	.4748	.2714	.2592
#3	.0462	135.8	1.853	2.093	.0521	83.02	.0464	.4744	.2720	.2611

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	41.25	26.44	27.81	.5786	.4593	25.57	.5101	.5651	.1839	1.848
Stddev	.13	.11	.34	.0017	.0002	.06	.0010	.0010	.0004	.005
%RSD	.3170	.3987	1.225	.2910	.0508	.2250	.1889	.1849	.2196	.2608
#1	41.25	26.56	28.15	.5805	.4595	25.59	.5112	.5656	.1844	1.853
#2	41.38	26.37	27.80	.5776	.4595	25.61	.5099	.5639	.1836	1.846
#3	41.12	26.38	27.47	.5776	.4591	25.50	.5093	.5657	.1837	1.844

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.271	.5078	.7306	.8982	1.890	.5091	.5175
Stddev	.004	.0006	.0013	.0033	.001	.0020	.0010
%RSD	.2798	.1133	.1773	.3670	.0663	.3869	.1956
#1	1.272	.5084	.7299	.9019	1.889	.5112	.5186
#2	1.274	.5079	.7321	.8957	1.892	.5074	.5174
#3	1.267	.5072	.7297	.8970	1.890	.5087	.5165

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2720.3	6448.1	52290.	4015.1
Stddev	3.7	11.4	176.	34.4
%RSD	.13760	.17674	.33592	.85688
#1	2717.3	6439.8	52087.	3982.3
#2	2724.5	6443.4	52395.	4012.0
#3	2719.1	6461.1	52388.	4050.9

Zoom In Zoom Out

Sample Name: MP28558-S2 Acquired: 2/16/2015 15:23:26 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0470	126.6	1.857	2.082	.0517	79.38	.0466	.4758	.2655	.2603
Stddev	.0009	.3	.003	.006	.0002	.41	.0001	.0002	.0009	.0005
%RSD	1.859	.2743	.1543	.2838	.3860	.5228	.1274	.0334	.3221	.1755
#1	.0479	126.6	1.859	2.088	.0515	79.37	.0466	.4758	.2646	.2605
#2	.0462	126.3	1.854	2.082	.0517	78.97	.0465	.4759	.2662	.2605
#3	.0469	127.0	1.858	2.076	.0519	79.80	.0466	.4756	.2658	.2597

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	40.69	26.30	27.47	.5709	.4637	25.58	.5100	.5580	.2017	1.850
Stddev	.13	.16	.09	.0015	.0006	.14	.0009	.0007	.0010	.001
%RSD	.3273	.5901	.3119	.2565	.1361	.5404	.1832	.1296	.4845	.0590
#1	40.63	26.36	27.41	.5700	.4644	25.55	.5089	.5572	.2021	1.851
#2	40.60	26.12	27.42	.5701	.4635	25.45	.5103	.5582	.2024	1.850
#3	40.84	26.40	27.56	.5726	.4632	25.73	.5107	.5586	.2006	1.848

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.385	.5158	.7082	.8670	1.892	.5067	.5157
Stddev	.001	.0006	.0016	.0016	.009	.0012	.0002
%RSD	.0877	.1244	.2279	.1885	.4580	.2460	.0301
#1	1.384	.5165	.7080	.8673	1.898	.5054	.5159
#2	1.386	.5152	.7067	.8653	1.882	.5069	.5156
#3	1.386	.5158	.7099	.8685	1.897	.5079	.5157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2705.6	6391.6	52139.	4005.3
Stddev	2.3	2.1	189.	24.3
%RSD	.08610	.03357	.36282	.60771
#1	2702.9	6393.9	52353.	4024.5
#2	2706.5	6389.7	52074.	4013.5
#3	2707.3	6391.2	51992.	3977.9

Zoom In Zoom Out

Sample Name: FA22086-1 Acquired: 2/16/2015 15:27:39 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	27.70	.0415	.7589	.0023	191.3	.0489	.0403	.3687
Stddev	.0004	.05	.0005	.0014	.0001	.5	.0000	.0002	.0019
%RSD	39.58	.1957	1.321	.1827	5.934	.2516	.0820	.3952	.5181
#1	-.0011	27.63	.0411	.7592	.0022	191.7	.0490	.0404	.3698
#2	-.0016	27.73	.0414	.7573	.0023	191.4	.0489	.0405	.3665
#3	-.0007	27.73	.0421	.7600	.0025	190.7	.0489	.0402	.3698

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.003	197.5	2.505	5.405	1.964	.1151	2.203	.1775	.1932
Stddev	.003	.2	.049	.039	.006	.0003	.008	.0001	.0008
%RSD	.2762	.0843	1.957	.7267	.2905	.2374	.3751	.0835	.4252
#1	1.006	197.6	2.514	5.444	1.965	.1150	2.196	.1777	.1936
#2	1.001	197.5	2.550	5.405	1.958	.1154	2.201	.1774	.1923
#3	1.003	197.3	2.453	5.365	1.969	.1148	2.212	.1774	.1937

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0103	.0181	.9989	.0420	.6619	.6877	-.0054	.1310	F6.718
Stddev	.0003	.0006	.0018	.0002	.0006	.0018	.0005	.0008	.009
%RSD	2.703	3.179	.1777	.4805	.0967	.2592	9.908	.6465	.1384
#1	.0100	.0186	1.001	.0418	.6626	.6896	-.0048	.1315	6.727
#2	.0104	.0182	.9990	.0421	.6613	.6860	-.0056	.1301	6.718
#3	.0105	.0174	.9970	.0421	.6619	.6875	-.0058	.1315	6.708

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2764.4	7149.0	59186.	4502.0
Stddev	4.1	10.3	436.	28.5
%RSD	.14685	.14400	.73723	.63398
#1	2760.6	7137.8	59177.	4504.0
#2	2768.7	7151.2	59627.	4472.5
#3	2763.9	7158.0	58754.	4529.5

Zoom In Zoom Out

Sample Name: FA22062-1 Acquired: 2/16/2015 15:31:57 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	53.04	.0025	.0795	.0003	.5239	-.0003	.0020	.0425	.0086
Stddev	.0004	.21	.0011	.0004	.0001	.0078	.0000	.0000	.0002	.0002
%RSD	288.4	.3976	44.00	.4444	27.92	1.486	6.291	1.572	.4508	2.363
#1	.0005	53.12	.0031	.0794	.0002	.5308	-.0003	.0021	.0428	.0088
#2	-.0003	53.19	.0012	.0799	.0004	.5254	-.0002	.0020	.0424	.0087
#3	.0003	52.80	.0032	.0792	.0003	.5155	-.0002	.0020	.0424	.0084

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.059	1.187	2.020	.0771	.0037	.1239	.0140	.0355	-.0002	.0037
Stddev	.047	.069	.005	.0002	.0001	.0091	.0003	.0004	.0010	.0017
%RSD	.6634	5.795	.2506	.2129	3.330	7.343	1.992	1.216	389.1	47.27
#1	7.095	1.259	2.021	.0772	.0038	.1210	.0141	.0351	-.0012	.0055
#2	7.077	1.179	2.025	.0769	.0038	.1342	.0137	.0354	-.0002	.0033
#3	7.006	1.122	2.015	.0771	.0036	.1167	.0142	.0359	.0007	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.404	.0226	.0079	.7106	-.0012	.0501	.0537
Stddev	.004	.0003	.0001	.0011	.0010	.0001	.0008
%RSD	.2589	1.112	1.393	.1557	88.36	.2905	1.409
#1	1.400	.0228	.0079	.7116	-.0018	.0500	.0530
#2	1.405	.0227	.0079	.7106	.0000	.0502	.0536
#3	1.407	.0223	.0077	.7094	-.0017	.0500	.0545

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2955.7	6523.9	54003.	3959.7
Stddev	5.0	9.6	37.	3.2
%RSD	.16871	.14689	.06907	.08120
#1	2957.8	6526.8	54032.	3958.5
#2	2950.0	6513.1	54015.	3963.4
#3	2959.2	6531.6	53961.	3957.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 15:36:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2596	41.78	2.026	2.083	2.073	41.50	2.048	2.052	2.086	2.079
Stddev	.0010	.06	.003	.001	.005	.19	.001	.002	.014	.012
%RSD	.4028	.1499	.1251	.0607	.2329	.4521	.0580	.0952	.6581	.5934
#1	.2604	41.80	2.028	2.084	2.077	41.72	2.049	2.054	2.084	2.082
#2	.2584	41.71	2.023	2.082	2.068	41.40	2.048	2.053	2.073	2.065
#3	.2601	41.84	2.026	2.083	2.074	41.40	2.047	2.050	2.100	2.089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.00	41.53	42.03	2.095	2.045	41.69	2.037	2.024	2.023	2.049
Stddev	.14	.14	.18	.013	.003	.22	.001	.002	.001	.002
%RSD	.3375	.3442	.4298	.6078	.1602	.5360	.0236	.1002	.0388	.1017
#1	42.14	41.69	42.24	2.093	2.041	41.95	2.038	2.025	2.023	2.049
#2	41.85	41.44	41.90	2.084	2.045	41.52	2.037	2.021	2.024	2.050
#3	42.02	41.45	41.96	2.109	2.047	41.61	2.038	2.025	2.022	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.848	2.067	2.087	2.079	2.037	2.033	2.035
Stddev	.002	.003	.008	.012	.007	.014	.003
%RSD	.1011	.1483	.3714	.5636	.3246	.6986	.1207
#1	1.847	2.068	2.095	2.077	2.029	2.032	2.038
#2	1.851	2.069	2.080	2.068	2.040	2.020	2.035
#3	1.848	2.063	2.087	2.091	2.041	2.048	2.033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 15:36:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2683.8	6170.4	50733.	3838.7
Stddev	2.1	9.4	379.	22.6
%RSD	.07899	.15283	.74639	.58984
#1	2682.4	6159.7	50771.	3813.1
#2	2682.7	6173.7	51091.	3847.1
#3	2686.2	6177.7	50336.	3856.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 15:40:28 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0096	-.0004	.0004	.0007	.0160	.0008	.0006	.0007
Stddev	.0003	.0052	.0005	.0001	.0001	.0051	.0001	.0002	.0001
%RSD	102.6	54.36	106.8	34.01	16.10	32.02	15.78	26.11	13.09
#1	-.0002	.0094	-.0008	.0002	.0007	.0114	.0006	.0004	.0006
#2	.0000	.0149	-.0005	.0004	.0005	.0151	.0008	.0006	.0007
#3	-.0005	.0045	.0001	.0005	.0007	.0216	.0009	.0008	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0330	.0517	.0400	.0007	F.0049	.0090	F.0010	.0007
Stddev	.0003	.0040	.0154	.0112	.0000	.0013	.0034	.0002	.0004
%RSD	73.63	12.13	29.79	28.13	.9079	26.86	38.11	20.81	55.09
#1	.0003	.0375	.0440	.0510	.0007	.0062	.0054	.0012	.0004
#2	.0002	.0298	.0418	.0403	.0007	.0048	.0123	.0011	.0012
#3	.0008	.0317	.0695	.0286	.0007	.0036	.0093	.0008	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit						.0010		.0010	
Low Limit						-.0010		-.0010	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0016	.0006	F.0012	.0007	F.0023	.0004	.0003	.0008
Stddev	.0006	.0006	.0004	.0002	.0001	.0001	.0008	.0003	.0001
%RSD	66.88	34.12	57.83	13.92	9.497	5.221	226.1	100.3	9.003
#1	.0008	.0010	.0003	.0014	.0008	.0025	.0012	.0005	.0007
#2	.0015	.0018	.0010	.0011	.0007	.0023	.0002	-.0001	.0008
#3	.0003	.0021	.0006	.0011	.0007	.0023	-.0004	.0006	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 15:40:28 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3080.4	6409.3	53333.	3926.8
Stddev	11.8	40.2	255.	23.1
%RSD	.38171	.62680	.47814	.58774
#1	3086.9	6402.2	53618.	3900.2
#2	3066.9	6373.2	53254.	3937.9
#3	3087.5	6452.6	53127.	3942.1

Zoom In Zoom Out

Sample Name: FA22062-2 Acquired: 2/16/2015 15:44:57 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	17.72	.0014	.0239	.0000	.5443	-.0002	.0004	.0187	.0030
Stddev	.0005	.10	.0010	.0003	.0001	.0035	.0001	.0001	.0000	.0002
%RSD	58.43	.5725	72.54	1.142	252.0	.6385	24.86	24.53	.0746	6.717
#1	-.0014	17.83	.0019	.0241	.0000	.5457	-.0002	.0003	.0187	.0029
#2	-.0006	17.63	.0002	.0236	.0000	.5469	-.0003	.0004	.0187	.0029
#3	-.0005	17.68	.0020	.0239	.0001	.5404	-.0002	.0004	.0186	.0032

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.325	.3786	.6990	.0185	.0015	.0656	.0051	.0157	-.0001	.0049
Stddev	.015	.0435	.0192	.0000	.0002	.0146	.0003	.0011	.0008	.0013
%RSD	.6509	11.48	2.748	.0646	11.06	22.27	6.076	6.800	860.3	26.17
#1	2.341	.3497	.6819	.0185	.0016	.0589	.0054	.0160	-.0007	.0052
#2	2.324	.4286	.6954	.0185	.0015	.0823	.0049	.0166	-.0005	.0035
#3	2.310	.3574	.7198	.0185	.0013	.0555	.0048	.0145	.0009	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.237	.0190	.0035	.4922	-.0028	.0205	.0168
Stddev	.003	.0002	.0000	.0012	.0016	.0001	.0001
%RSD	.2151	.9213	.4510	.2479	59.49	.7252	.3513
#1	1.239	.0191	.0035	.4936	-.0014	.0206	.0168
#2	1.238	.0190	.0035	.4916	-.0023	.0204	.0168
#3	1.234	.0188	.0035	.4914	-.0046	.0207	.0167

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2998.9	6470.9	54071.	3925.8
Stddev	12.9	17.2	214.	38.7
%RSD	.43150	.26645	.39578	.98577
#1	2984.1	6451.2	53879.	3898.3
#2	3007.7	6483.3	54032.	3970.1
#3	3005.1	6478.2	54302.	3909.0

Zoom In Zoom Out

Sample Name: FA22062-3 Acquired: 2/16/2015 15:49:22 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	74.29	.0251	.0336	.0004	1.919	-.0005	.0011	.0907	.0204
Stddev	.0005	.11	.0005	.0003	.0001	.018	.0000	.0001	.0005	.0000
%RSD	91.13	.1536	2.024	1.005	16.55	.9512	2.863	7.982	.5863	.2249
#1	-.0008	74.41	.0255	.0340	.0005	1.935	-.0006	.0010	.0913	.0204
#2	-.0010	74.18	.0252	.0334	.0005	1.899	-.0005	.0011	.0904	.0204
#3	.0000	74.28	.0245	.0334	.0003	1.924	-.0006	.0012	.0904	.0204

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	62.55	.4388	.5350	.0564	.0078	.0670	.0070	.0351	-.0003	.0029
Stddev	.23	.0577	.0141	.0002	.0000	.0169	.0001	.0007	.0008	.0022
%RSD	.3642	13.15	2.641	.3942	.0753	25.26	1.849	1.971	260.6	74.64
#1	62.81	.4475	.5480	.0566	.0078	.0516	.0072	.0354	-.0009	.0015
#2	62.37	.3772	.5371	.0564	.0078	.0851	.0069	.0357	.0005	.0018
#3	62.46	.4916	.5199	.0562	.0078	.0643	.0070	.0344	-.0005	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.555	.0236	.0135	.6316	-.0039	.1595	.0170
Stddev	.003	.0003	.0000	.0015	.0008	.0005	.0001
%RSD	.2165	1.345	.2555	.2422	21.07	.2859	.6168
#1	1.559	.0239	.0135	.6331	-.0041	.1596	.0171
#2	1.553	.0236	.0136	.6300	-.0030	.1590	.0169
#3	1.554	.0233	.0135	.6318	-.0047	.1599	.0169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2931.4	6559.4	54156.	3999.4
Stddev	6.5	22.9	166.	8.1
%RSD	.22248	.34906	.30622	.20145
#1	2925.8	6533.3	54108.	3990.7
#2	2929.9	6568.6	54340.	4001.1
#3	2938.5	6576.2	54019.	4006.5

Zoom In Zoom Out

Sample Name: FA22062-4 Acquired: 2/16/2015 15:53:42 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	12.78	.0053	.0475	.0002	12.15	-.0001	.0003	.0135	.0050
Stddev	.0005	.02	.0006	.0004	.0001	.02	.0001	.0001	.0002	.0005
%RSD	72.83	.1301	10.37	.9108	71.09	.1396	82.47	17.36	1.175	10.81
#1	-.0009	12.76	.0054	.0479	.0003	12.17	-.0001	.0004	.0136	.0048
#2	-.0001	12.79	.0059	.0476	.0001	12.13	-.0001	.0004	.0133	.0046
#3	-.0010	12.79	.0048	.0471	.0001	12.15	.0000	.0003	.0134	.0056

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.783	1.292	2.130	.0706	.0012	.7398	.0043	.0595	-.0001	.0030
Stddev	.024	.020	.061	.0002	.0001	.0156	.0002	.0003	.0018	.0014
%RSD	.4184	1.571	2.883	.2354	8.376	2.105	3.600	.4926	1195.	46.87
#1	5.782	1.271	2.182	.0705	.0013	.7432	.0042	.0597	-.0022	.0015
#2	5.808	1.311	2.062	.0704	.0011	.7228	.0044	.0596	.0005	.0032
#3	5.759	1.293	2.147	.0707	.0012	.7534	.0044	.0591	.0013	.0043

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.237	.0227	.0641	.5827	-.0025	.0241	.0316
Stddev	.005	.0004	.0002	.0009	.0010	.0001	.0002
%RSD	.4308	1.766	.2490	.1581	40.86	.4176	.6040
#1	1.242	.0224	.0643	.5830	-.0028	.0243	.0318
#2	1.238	.0231	.0640	.5817	-.0013	.0241	.0316
#3	1.231	.0224	.0640	.5835	-.0033	.0241	.0315

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2994.2	6476.0	54207.	4004.9
Stddev	10.2	13.9	104.	40.3
%RSD	.34198	.21451	.19247	1.0073
#1	2983.9	6460.2	54293.	3966.7
#2	2994.2	6486.0	54237.	4000.9
#3	3004.4	6481.9	54091.	4047.1

Zoom In Zoom Out

Sample Name: FA22062-5 Acquired: 2/16/2015 15:58:03 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	10.66	.0013	.0280	.0000	.4135	-.0002	.0004	.0132	.0035
Stddev	.0005	.05	.0005	.0001	.0000	.0051	.0000	.0001	.0003	.0002
%RSD	84.96	.5044	36.50	.2667	21.40	1.244	19.96	13.32	1.965	6.336
#1	-.0008	10.72	.0008	.0279	.0000	.4076	-.0003	.0004	.0135	.0036
#2	.0000	10.62	.0013	.0280	.0000	.4169	-.0003	.0005	.0132	.0032
#3	-.0009	10.64	.0018	.0279	.0000	.4160	-.0002	.0004	.0130	.0036

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.415	.3708	.7526	.0288	.0004	.0578	.0093	.0131	.0001	.0028
Stddev	.016	.0316	.0380	.0001	.0001	.0049	.0001	.0008	.0010	.0013
%RSD	.2914	8.526	5.054	.4536	25.24	8.420	1.328	6.408	1103.	48.11
#1	5.406	.3407	.7095	.0287	.0004	.0526	.0093	.0122	-.0003	.0013
#2	5.405	.4037	.7666	.0289	.0004	.0622	.0094	.0139	.0013	.0039
#3	5.433	.3678	.7816	.0287	.0002	.0587	.0092	.0133	-.0007	.0031

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.048	.0234	.0041	.4097	-.0023	.0162	.0671
Stddev	.002	.0001	.0003	.0014	.0009	.0006	.0002
%RSD	.1891	.5169	6.187	.3454	40.17	3.463	.3110
#1	1.046	.0236	.0042	.4113	-.0013	.0168	.0669
#2	1.048	.0234	.0038	.4086	-.0026	.0159	.0670
#3	1.050	.0234	.0043	.4092	-.0030	.0158	.0673

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3017.8	6462.0	53879.	3920.3
Stddev	16.4	24.7	160.	46.0
%RSD	.54393	.38294	.29701	1.1724
#1	3035.7	6486.4	54064.	3896.0
#2	3014.3	6462.7	53795.	3973.3
#3	3003.5	6436.9	53779.	3891.5

Zoom In Zoom Out

Sample Name: FA22062-6 Acquired: 2/16/2015 16:02:25 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	14.42	.0039	.0206	.0001	.4711	-.0003	.0010	.0161	.0053
Stddev	.0001	.11	.0006	.0001	.0000	.0032	.0000	.0001	.0001	.0002
%RSD	16.25	.7455	16.00	.5353	28.96	.6846	6.246	6.524	.8030	4.440
#1	-.0005	14.46	.0044	.0207	.0001	.4737	-.0003	.0011	.0160	.0050
#2	-.0007	14.50	.0032	.0205	.0001	.4722	-.0003	.0011	.0161	.0055
#3	-.0006	14.30	.0041	.0205	.0000	.4675	-.0003	.0010	.0162	.0053

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.37	.3747	.8208	.0385	.0010	.0631	.0111	.0120	.0004	.0019
Stddev	.07	.0253	.0067	.0001	.0001	.0106	.0003	.0010	.0006	.0011
%RSD	.5671	6.758	.8203	.2065	6.833	16.73	2.762	8.208	143.4	56.68
#1	12.37	.3471	.8259	.0384	.0011	.0730	.0109	.0109	.0011	.0022
#2	12.44	.3969	.8233	.0385	.0010	.0643	.0108	.0124	-.0001	.0007
#3	12.30	.3801	.8131	.0386	.0010	.0520	.0114	.0128	.0003	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7404	.0216	.0041	.4432	-.0014	.0233	.0748
Stddev	.0031	.0002	.0000	.0006	.0009	.0004	.0001
%RSD	.4204	.7906	.9514	.1325	64.23	1.812	.1361
#1	.7433	.0214	.0041	.4436	-.0021	.0234	.0749
#2	.7407	.0215	.0041	.4434	-.0004	.0237	.0748
#3	.7371	.0218	.0042	.4425	-.0019	.0229	.0747

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3020.5	6495.6	53915.	3909.5
Stddev	2.1	12.0	322.	11.6
%RSD	.06811	.18456	.59731	.29691
#1	3021.6	6498.0	54215.	3915.2
#2	3018.2	6482.6	53955.	3896.2
#3	3021.8	6506.2	53575.	3917.2

Zoom In Zoom Out

Sample Name: FA22125-4 Acquired: 2/16/2015 16:06:48 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	43.47	.0120	.2857	.0010	F3476.	.0015	.0065	.1167
Stddev	.0006	.07	.0004	.0013	.0001	27.	.0001	.0000	.0009
%RSD	3826.	.1704	3.726	.4661	5.878	.7635	9.232	.1126	.7782
#1	.0002	43.51	.0116	.2869	.0010	3506.	.0016	.0065	.1178
#2	-.0007	43.50	.0125	.2861	.0011	3466.	.0013	.0065	.1161
#3	.0006	43.38	.0118	.2843	.0010	3456.	.0014	.0065	.1163

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0141	16.24	2.817	32.06	.4703	.0048	4.242	.0326	.0886
Stddev	.0006	.03	.060	.10	.0029	.0003	.024	.0001	.0015
%RSD	4.322	.1650	2.129	.3225	.6252	5.242	.5531	.3904	1.660
#1	.0148	16.22	2.776	32.09	.4732	.0048	4.218	.0327	.0892
#2	.0137	16.27	2.789	32.14	.4673	.0050	4.264	.0324	.0897
#3	.0138	16.23	2.886	31.94	.4705	.0045	4.244	.0325	.0869

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0130	-.0042	1.631	.0183	F8.724	.3029	.0075	.1389	.0423
Stddev	.0007	.0034	.004	.0007	.049	.0015	.0022	.0007	.0001
%RSD	5.106	81.07	.2637	3.576	.5560	.4940	29.72	.5024	.1961
#1	.0137	-.0016	1.636	.0177	8.777	.3046	.0050	.1397	.0424
#2	.0125	-.0028	1.629	.0181	8.683	.3017	.0094	.1386	.0423
#3	.0126	-.0080	1.627	.0190	8.710	.3025	.0082	.1384	.0424

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2002.6	5516.5	46464.	3842.0
Stddev	6.0	15.3	239.	23.7
%RSD	.30134	.27714	.51474	.61718
#1	1999.6	5500.5	46232.	3829.8
#2	1998.7	5518.2	46710.	3826.9
#3	2009.6	5530.9	46451.	3869.3

Zoom In Zoom Out

Sample Name: FA22032-4 Acquired: 2/16/2015 16:11:24 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	156.6	.0413	1.341	.0069	F1690.	.0019	.0471	.1439
Stddev	.0008	.4	.0005	.004	.0001	30.	.0001	.0002	.0009
%RSD	855.0	.2593	1.250	.2805	1.589	1.777	4.098	.4667	.6489
#1	-.0007	156.8	.0410	1.341	.0070	1716.	.0018	.0469	.1440
#2	.0008	156.9	.0419	1.345	.0068	1696.	.0020	.0470	.1429
#3	-.0003	156.1	.0411	1.338	.0070	1657.	.0018	.0473	.1448

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1434	136.1	46.19	112.4	3.784	.0143	2.962	.1051	.1427
Stddev	.0007	.5	.22	.5	.028	.0002	.009	.0001	.0001
%RSD	.4620	.3414	.4766	.4129	.7433	1.170	.2986	.0979	.0896
#1	.1441	136.3	46.40	112.9	3.769	.0145	2.971	.1052	.1427
#2	.1428	136.5	46.20	112.3	3.766	.0144	2.953	.1050	.1426
#3	.1434	135.6	45.96	112.0	3.816	.0141	2.962	.1051	.1429

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0053	.0039	1.953	.0196	F8.259	3.378	-.0016	.2336	.4109
Stddev	.0016	.0012	.004	.0005	.099	.006	.0021	.0009	.0007
%RSD	30.77	30.86	.1849	2.559	1.198	.1899	130.8	.3706	.1657
#1	.0044	.0037	1.956	.0197	8.242	3.381	-.0039	.2345	.4107
#2	.0072	.0053	1.954	.0200	8.366	3.370	-.0008	.2328	.4117
#3	.0044	.0029	1.949	.0190	8.170	3.382	.0000	.2333	.4104

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2194.4	6457.7	53195.	4363.7
Stddev	3.2	10.9	274.	26.9
%RSD	.14414	.16953	.51419	.61539
#1	2193.5	6466.9	53131.	4339.9
#2	2191.9	6445.6	53495.	4358.4
#3	2198.0	6460.6	52959.	4392.8

Zoom In Zoom Out

Sample Name: FA22032-5 Acquired: 2/16/2015 16:16:06 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	152.6	.0429	1.409	.0067	F1859.	.0023	.0464	.1400
Stddev	.0010	.6	.0007	.006	.0000	11.	.0001	.0002	.0006
%RSD	316.2	.3635	1.627	.4576	.1608	.6070	3.902	.4107	.4101
#1	.0013	151.9	.0421	1.402	.0067	1871.	.0023	.0462	.1406
#2	-.0007	152.9	.0435	1.411	.0067	1858.	.0023	.0465	.1400
#3	.0004	152.8	.0431	1.415	.0067	1849.	.0022	.0465	.1394

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1904	132.1	44.92	105.8	3.581	.0151	3.194	.1028	.1462
Stddev	.0005	.5	.21	.4	.013	.0001	.010	.0005	.0013
%RSD	.2475	.3592	.4727	.3687	.3735	.8079	.3245	.4677	.8693
#1	.1900	131.5	44.69	105.5	3.593	.0150	3.188	.1032	.1465
#2	.1909	132.3	44.98	105.8	3.583	.0150	3.188	.1029	.1473
#3	.1903	132.4	45.10	106.2	3.567	.0152	3.206	.1023	.1448

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0053	-.0001	2.041	.0203	F9.316	3.261	-.0003	.2279	.4103
Stddev	.0013	.0021	.006	.0004	.066	.003	.0021	.0005	.0007
%RSD	24.55	1427.	.2865	1.917	.7054	.0962	603.9	.2343	.1709
#1	.0048	-.0019	2.046	.0199	9.248	3.264	-.0026	.2285	.4101
#2	.0044	.0022	2.041	.0207	9.320	3.259	.0016	.2278	.4111
#3	.0068	-.0008	2.035	.0203	9.379	3.259	.0000	.2275	.4098

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2155.6	6358.3	52936.	4293.5
Stddev	4.3	4.3	96.	16.0
%RSD	.20001	.06810	.18044	.37317
#1	2156.0	6353.9	52942.	4307.4
#2	2151.2	6358.3	53028.	4276.0
#3	2159.8	6362.6	52838.	4297.0

Zoom In Zoom Out

Sample Name: FA22032-6 Acquired: 2/16/2015 16:20:50 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	133.0	.0365	1.150	.0059	F2206.	.0019	.0416	.1213
Stddev	.0009	.4	.0010	.000	.0001	20.	.0001	.0002	.0004
%RSD	1060.	.3236	2.768	.0379	1.025	.8979	5.001	.3891	.3532
#1	.0010	132.9	.0362	1.150	.0059	2184.	.0018	.0418	.1208
#2	.0002	132.6	.0377	1.150	.0058	2222.	.0020	.0415	.1216
#3	-.0009	133.5	.0358	1.150	.0058	2212.	.0018	.0415	.1215

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1378	116.7	38.14	97.52	3.070	.0132	3.062	.0922	.1235
Stddev	.0004	.4	.12	.23	.011	.0001	.021	.0006	.0007
%RSD	.3178	.3491	.3110	.2366	.3557	.9885	.6920	.6781	.5365
#1	.1383	116.7	38.28	97.46	3.079	.0131	3.073	.0929	.1234
#2	.1375	116.3	38.09	97.33	3.058	.0133	3.037	.0921	.1242
#3	.1376	117.1	38.06	97.78	3.071	.0132	3.075	.0917	.1229

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0065	.0019	2.129	.0202	F11.36	2.739	.0022	.1961	.3560
Stddev	.0022	.0022	.005	.0003	.08	.007	.0030	.0009	.0010
%RSD	34.58	119.9	.2299	1.561	.7060	.2401	138.6	.4480	.2870
#1	.0051	-.0001	2.133	.0205	11.30	2.741	.0051	.1964	.3571
#2	.0053	.0014	2.124	.0199	11.34	2.744	-.0009	.1967	.3556
#3	.0091	.0043	2.129	.0202	11.45	2.731	.0023	.1951	.3552

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2113.9	6004.8	50234.	4047.0
Stddev	3.8	10.5	178.	28.0
%RSD	.17912	.17540	.35373	.69083
#1	2111.7	5995.2	50078.	4075.7
#2	2111.8	6003.0	50427.	4045.3
#3	2118.3	6016.1	50196.	4019.9

Zoom In Zoom Out

Sample Name: FA22032-7 Acquired: 2/16/2015 16:25:31 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	94.29	.0291	.8780	.0045	F2602.	.0017	.0331	.1033
Stddev	.0004	.16	.0006	.0014	.0001	44.	.0001	.0001	.0001
%RSD	69.65	.1677	2.209	.1592	3.104	1.701	4.647	.4047	.1305
#1	-.0002	94.25	.0292	.8768	.0046	2556.	.0018	.0331	.1034
#2	-.0004	94.46	.0296	.8795	.0046	2605.	.0018	.0329	.1033
#3	-.0009	94.15	.0284	.8775	.0044	2644.	.0017	.0332	.1031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2639	111.0	24.86	71.91	2.298	.0156	2.629	.0823	.1172
Stddev	.0002	.3	.12	.09	.004	.0003	.010	.0004	.0008
%RSD	.0905	.2399	.5007	.1273	.1603	2.042	.3875	.5170	.6415
#1	.2642	111.1	24.95	71.91	2.302	.0159	2.640	.0824	.1171
#2	.2638	111.1	24.91	72.00	2.297	.0155	2.629	.0819	.1165
#3	.2638	110.7	24.72	71.82	2.295	.0153	2.620	.0827	.1180

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0085	-.0009	2.124	.0220	F13.31	1.786	.0031	.1420	.2704
Stddev	.0013	.0029	.002	.0001	.07	.003	.0032	.0004	.0003
%RSD	15.30	307.0	.0891	.3246	.5529	.1611	102.9	.2684	.1126
#1	.0083	-.0041	2.126	.0221	13.24	1.788	.0063	.1418	.2703
#2	.0074	.0016	2.124	.0220	13.30	1.786	.0000	.1425	.2708
#3	.0099	-.0003	2.122	.0219	13.39	1.783	.0029	.1418	.2702

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2097.3	5628.3	47400.	3857.1
Stddev	1.3	11.5	185.	11.8
%RSD	.06233	.20510	.38972	.30588
#1	2098.8	5634.7	47199.	3869.7
#2	2096.7	5615.0	47562.	3846.3
#3	2096.5	5635.3	47440.	3855.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 16:30:06 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2592	41.74	2.007	2.109	2.012	41.51	2.038	2.048	2.068	2.066
Stddev	.0008	.03	.008	.001	.006	.10	.003	.003	.008	.006
%RSD	.2940	.0772	.4050	.0262	.3001	.2513	.1269	.1271	.3856	.3055
#1	.2599	41.77	2.013	2.110	2.019	41.59	2.039	2.048	2.075	2.070
#2	.2593	41.72	1.998	2.109	2.007	41.54	2.036	2.045	2.070	2.069
#3	.2584	41.72	2.011	2.109	2.009	41.39	2.041	2.050	2.059	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.04	41.93	41.10	2.075	2.040	41.67	2.025	2.014	2.010	2.028
Stddev	.06	.17	.17	.006	.005	.16	.003	.003	.007	.002
%RSD	.1548	.4111	.4035	.3050	.2628	.3794	.1656	.1629	.3646	.0897
#1	41.09	42.09	40.96	2.081	2.038	41.85	2.027	2.017	2.013	2.027
#2	41.06	41.75	41.29	2.075	2.036	41.56	2.021	2.012	2.002	2.027
#3	40.97	41.94	41.07	2.068	2.046	41.60	2.026	2.011	2.016	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.837	2.066	2.079	2.058	2.029	2.005	2.019
Stddev	.004	.003	.009	.005	.001	.005	.003
%RSD	.1995	.1434	.4244	.2542	.0683	.2750	.1619
#1	1.838	2.066	2.090	2.064	2.031	2.009	2.022
#2	1.833	2.063	2.075	2.057	2.030	2.007	2.015
#3	1.840	2.069	2.073	2.054	2.028	1.998	2.019
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 16:30:06 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2664.4	6140.7	50754.	3768.2
Stddev	3.6	10.2	185.	40.6
%RSD	.13628	.16663	.36525	1.0783
#1	2665.9	6148.4	50566.	3786.3
#2	2660.2	6144.6	50757.	3721.6
#3	2667.0	6129.1	50937.	3796.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 16:34:17 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0073	.0013	.0007	.0009	F.1175	F.0015	F.0015	F.0011
Stddev	.0007	.0091	.0001	.0003	.0000	.0079	.0002	.0003	.0004
%RSD	156.3	124.7	10.18	42.05	5.577	6.760	11.58	19.62	35.61
#1	.0000	-.0027	.0015	.0010	.0009	.1262	.0016	.0018	.0009
#2	-.0012	.0096	.0013	.0004	.0009	.1106	.0016	.0016	.0008
#3	.0000	.0151	.0012	.0008	.0008	.1158	.0013	.0012	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit						.1000	.0010	.0010	.0010
Low Limit						-.1000	-.0010	-.0010	-.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0383	.1975	.0384	F.0012	F.0058	.0178	F.0017	F.0013
Stddev	.0003	.0057	.0596	.0254	.0002	.0016	.0196	.0001	.0005
%RSD	36.82	14.91	30.18	66.20	19.95	27.50	110.6	4.793	41.18
#1	.0008	.0443	.1316	.0669	.0010	.0075	-.0009	.0018	.0019
#2	.0005	.0377	.2477	.0305	.0011	.0057	.0383	.0017	.0010
#3	.0010	.0329	.2131	.0179	.0015	.0043	.0159	.0016	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail
High Limit					.0010	.0010		.0010	.0010
Low Limit					-.0010	-.0010		-.0010	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	F.0032	.0017	F.0019	F.0013	F.0024	-.0002	.0008	.0014
Stddev	.0007	.0023	.0002	.0005	.0001	.0002	.0006	.0001	.0002
%RSD	40.96	71.74	13.36	25.35	9.441	9.834	369.5	14.25	10.70
#1	.0023	.0023	.0017	.0024	.0015	.0022	-.0008	.0007	.0016
#2	.0014	.0015	.0019	.0020	.0012	.0023	.0003	.0007	.0015
#3	.0011	.0057	.0014	.0014	.0013	.0026	.0000	.0009	.0013
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010	.0010	.0020			
Low Limit		-.0020		-.0010	-.0010	-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 16:34:17 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3042.9	6380.2	52904.	3763.5
Stddev	5.8	16.3	454.	35.5
%RSD	.19219	.25613	.85771	.94298
#1	3036.1	6367.8	52594.	3731.4
#2	3045.7	6374.2	52693.	3757.4
#3	3046.8	6398.7	53425.	3801.6

Zoom In Zoom Out

Sample Name: FA22133-1 Acquired: 2/16/2015 16:38:44 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	2.840	.0015	.0927	.0000	3.016	.0003	.0011	.0080	.0082
Stddev	.0008	.018	.0003	.0003	.0001	.021	.0000	.0000	.0004	.0001
%RSD	151.3	.6194	20.01	.3566	144.4	.6892	6.142	3.850	4.637	.7740
#1	-.0012	2.831	.0013	.0924	.0001	3.002	.0003	.0011	.0076	.0082
#2	.0004	2.860	.0012	.0931	.0001	3.040	.0003	.0011	.0084	.0083
#3	-.0007	2.828	.0018	.0927	.0000	3.006	.0003	.0010	.0081	.0082

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.022	.2885	.4492	.0172	.0016	.1534	.0075	.0883	.0001	.0024
Stddev	.013	.0529	.0246	.0001	.0002	.0134	.0001	.0004	.0007	.0006
%RSD	.3233	18.35	5.486	.6862	9.595	8.725	1.529	.4787	566.0	24.75
#1	4.007	.3443	.4388	.0172	.0018	.1525	.0076	.0880	.0009	.0031
#2	4.026	.2822	.4773	.0173	.0017	.1673	.0075	.0881	-.0002	.0024
#3	4.033	.2390	.4314	.0170	.0015	.1405	.0073	.0888	-.0004	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2104	.0222	.0350	.2954	-.0026	.0159	.0713
Stddev	.0018	.0002	.0003	.0007	.0004	.0002	.0005
%RSD	.8707	.8631	.8575	.2353	13.52	1.499	.6856
#1	.2118	.0223	.0348	.2958	-.0030	.0157	.0719
#2	.2110	.0222	.0354	.2959	-.0026	.0161	.0713
#3	.2083	.0220	.0349	.2946	-.0023	.0157	.0709

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3056.1	6451.9	53975.	3883.0
Stddev	12.0	28.3	294.	38.7
%RSD	.39138	.43903	.54393	.99574
#1	3050.0	6433.3	53638.	3916.3
#2	3048.4	6437.9	54112.	3892.0
#3	3069.9	6484.5	54174.	3840.6

Zoom In Zoom Out

Sample Name: FA22133-2 Acquired: 2/16/2015 16:43:07 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	3.173	.0009	.0309	.0000	5.040	.0000	.0012	.0129	.0034
Stddev	.0003	.024	.0006	.0005	.0001	.003	.000	.0001	.0002	.0001
%RSD	114.7	.7552	66.10	1.499	3603.	.0682	216.4	10.70	1.888	3.059
#1	-.0001	3.197	.0003	.0304	.0001	5.043	.0000	.0013	.0131	.0033
#2	-.0001	3.172	.0015	.0311	.0000	5.042	-.0001	.0010	.0129	.0034
#3	-.0006	3.149	.0011	.0312	.0000	5.037	.0000	.0013	.0126	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.011	.3035	.5737	.0245	.0011	.1316	.0065	.0528	.0007	.0037
Stddev	.009	.0321	.0204	.0001	.0002	.0064	.0002	.0008	.0016	.0011
%RSD	.3025	10.57	3.555	.2602	16.55	4.902	3.071	1.516	222.3	30.83
#1	3.021	.3263	.5707	.0245	.0014	.1264	.0066	.0528	-.0007	.0024
#2	3.008	.2668	.5550	.0244	.0010	.1388	.0066	.0536	.0025	.0045
#3	3.004	.3174	.5954	.0245	.0011	.1294	.0063	.0520	.0004	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2162	.0216	.0619	.4165	-.0018	.0149	.0613
Stddev	.0002	.0003	.0002	.0012	.0018	.0002	.0002
%RSD	.0998	1.345	.3631	.2836	94.65	1.128	.3428
#1	.2160	.0216	.0620	.4178	-.0033	.0151	.0614
#2	.2164	.0219	.0621	.4162	.0001	.0147	.0611
#3	.2163	.0213	.0616	.4155	-.0024	.0150	.0614

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3025.9	6395.3	53722.	3900.3
Stddev	6.5	4.2	242.	21.5
%RSD	.21407	.06593	.45090	.55126
#1	3032.8	6398.4	53619.	3924.5
#2	3024.8	6397.0	53548.	3883.3
#3	3020.0	6390.5	53998.	3893.1

Zoom In Zoom Out

Sample Name: FA22133-3 Acquired: 2/16/2015 16:47:28 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.9825	-.0002	.0466	.0000	5.993	.0001	.0008	.0119	.0069
Stddev	.0004	.0216	.0003	.0003	.000	.016	.0000	.0001	.0002	.0000
%RSD	92.94	2.201	134.0	.5961	706.5	.2733	31.54	16.54	1.845	.2694
#1	.0000	1.007	-.0004	.0468	.0000	6.008	.0001	.0008	.0117	.0069
#2	-.0009	.9739	.0001	.0466	.0001	5.975	.0001	.0008	.0119	.0069
#3	-.0005	.9665	-.0003	.0463	-.0002	5.995	.0001	.0006	.0121	.0068

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.417	.3117	.3870	.0233	.0008	.0936	.0039	.0899	.0004	.0023
Stddev	.015	.0331	.0260	.0000	.0001	.0068	.0002	.0002	.0008	.0029
%RSD	.6113	10.61	6.719	.2137	11.06	7.293	4.576	.1715	180.1	129.0
#1	2.430	.3482	.3793	.0233	.0009	.0978	.0037	.0898	.0013	.0057
#2	2.419	.2837	.4160	.0232	.0008	.0974	.0039	.0901	-.0003	.0005
#3	2.401	.3032	.3658	.0233	.0008	.0858	.0040	.0898	.0003	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3020	.0221	.0316	.3252	-.0026	.0117	.1312
Stddev	.0003	.0005	.0002	.0002	.0012	.0002	.0004
%RSD	.1006	2.307	.7475	.0644	45.18	1.304	.3046
#1	.3017	.0225	.0316	.3253	-.0018	.0115	.1312
#2	.3023	.0223	.0318	.3250	-.0040	.0116	.1316
#3	.3020	.0215	.0314	.3253	-.0021	.0118	.1308

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3000.2	6376.0	53604.	3821.6
Stddev	8.7	5.3	229.	26.0
%RSD	.29097	.08298	.42669	.68013
#1	2990.1	6371.9	53529.	3840.1
#2	3004.7	6374.1	53860.	3791.9
#3	3005.8	6381.9	53422.	3833.0

Zoom In Zoom Out

Sample Name: FA22133-4 Acquired: 2/16/2015 16:51:50 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	2.049	.0005	.0381	.0000	2.184	.0001	.0016	.0128	.0118
Stddev	.0003	.026	.0010	.0002	.0002	.005	.0000	.0001	.0001	.0004
%RSD	132.6	1.279	177.5	.5587	470.1	.2225	33.02	8.357	.6637	3.465
#1	-.0001	2.062	-.0005	.0379	.0002	2.188	.0001	.0016	.0127	.0122
#2	-.0005	2.066	.0009	.0381	.0001	2.185	.0001	.0014	.0129	.0120
#3	.0000	2.019	.0012	.0383	-.0002	2.178	.0001	.0016	.0127	.0114

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	11.07	.3346	.4628	.0462	.0013	.0839	.0084	.0951	.0004	.0029
Stddev	.03	.0507	.0530	.0002	.0001	.0063	.0001	.0006	.0006	.0007
%RSD	.2294	15.16	11.46	.4389	4.337	7.454	.6851	.5997	137.4	24.01
#1	11.10	.2848	.5221	.0464	.0013	.0872	.0085	.0957	-.0002	.0033
#2	11.06	.3327	.4198	.0461	.0013	.0878	.0084	.0948	.0006	.0021
#3	11.05	.3862	.4465	.0461	.0012	.0767	.0084	.0947	.0009	.0032

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2470	.0231	.0236	.2576	-.0019	.0150	.1070
Stddev	.0010	.0004	.0002	.0010	.0005	.0003	.0003
%RSD	.4249	1.870	.6551	.3983	23.65	2.274	.2560
#1	.2461	.0229	.0238	.2588	-.0015	.0154	.1069
#2	.2467	.0228	.0236	.2571	-.0019	.0149	.1069
#3	.2482	.0236	.0235	.2570	-.0024	.0148	.1074

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3032.0	6405.1	53760.	3839.7
Stddev	3.5	13.8	415.	15.8
%RSD	.11479	.21571	.77192	.41269
#1	3028.2	6418.8	53288.	3845.3
#2	3032.8	6405.3	53926.	3852.0
#3	3035.1	6391.2	54067.	3821.8

Zoom In Zoom Out

Sample Name: FA22133-5 Acquired: 2/16/2015 16:56:12 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0016	7.019	.0350	1.685	.0000	.4537	-.0010	.0440
Stddev	.0005	.051	.0005	.006	.0001	.0033	.0001	.0002
%RSD	29.73	.7275	1.467	.3780	10220.	.7173	12.86	.5201
#1	-.0020	7.048	.0346	1.688	.0000	.4501	-.0011	.0437
#2	-.0018	7.050	.0356	1.689	-.0001	.4564	-.0011	.0442
#3	-.0011	6.960	.0350	1.678	.0001	.4545	-.0009	.0440

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.1545	.6400	352.7	.2064	.3867	1.517	.0555	.1391
Stddev	.0006	.0020	1.3	.0333	.0329	.004	.0001	.0080
%RSD	.3723	.3088	.3601	16.15	8.518	.2705	.1723	5.763
#1	.1542	.6420	353.5	.1893	.3695	1.515	.0556	.1302
#2	.1552	.6399	353.4	.1851	.4247	1.521	.0554	.1413
#3	.1543	.6381	351.2	.2449	.3659	1.513	.0555	.1458

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.2033	.1043	.0014	.0016	.8494	.0603	.0356	.1831
Stddev	.0002	.0004	.0010	.0009	.0035	.0005	.0002	.0004
%RSD	.1221	.4284	72.97	55.48	.4118	.8691	.5953	.2153
#1	.2034	.1047	.0004	.0007	.8506	.0604	.0355	.1831
#2	.2035	.1039	.0014	.0016	.8521	.0607	.0359	.1834
#3	.2030	.1044	.0024	.0024	.8455	.0597	.0355	.1826

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0157	.0219	.1419
Stddev	.0008	.0005	.0001
%RSD	4.926	2.069	.0609
#1	-.0165	.0214	.1418
#2	-.0150	.0221	.1419
#3	-.0154	.0222	.1419

Zoom In Zoom Out

Sample Name: FA22133-5 Acquired: 2/16/2015 16:56:12 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2973.6	6298.2	52689.	3829.4
Stddev	7.6	12.0	435.	9.3
%RSD	.25725	.19098	.82545	.24267
#1	2981.2	6312.0	52906.	3827.3
#2	2973.6	6292.5	52188.	3821.4
#3	2965.9	6290.1	52972.	3839.6

Zoom In Zoom Out

Sample Name: FA22134-1 Acquired: 2/16/2015 17:00:32 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	18.04	.0019	.0591	.0002	6.042	.0004	.0011	.0513	.0263
Stddev	.0004	.12	.0003	.0002	.0002	.063	.0001	.0002	.0004	.0003
%RSD	93.59	.6584	17.14	.3410	84.60	1.036	21.09	14.87	.8560	1.114
#1	-.0008	18.18	.0020	.0593	.0001	6.112	.0004	.0013	.0508	.0259
#2	-.0001	17.99	.0016	.0589	.0004	6.024	.0003	.0011	.0517	.0264
#3	-.0003	17.96	.0022	.0592	.0001	5.991	.0005	.0010	.0515	.0264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.103	.8251	1.655	.0906	.0019	.3805	.0129	2.920	.0018	.0023
Stddev	.026	.0410	.041	.0003	.0002	.0193	.0002	.009	.0015	.0014
%RSD	.6252	4.970	2.480	.3750	10.10	5.080	1.165	.3110	82.52	62.43
#1	4.130	.7778	1.683	.0902	.0021	.3986	.0131	2.911	.0012	.0015
#2	4.079	.8507	1.608	.0908	.0017	.3601	.0130	2.930	.0007	.0014
#3	4.099	.8467	1.674	.0908	.0019	.3827	.0128	2.920	.0035	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8924	.0240	.1151	.1865	-.0030	.0191	.1576
Stddev	.0031	.0002	.0012	.0004	.0008	.0003	.0004
%RSD	.3479	.6572	1.045	.2027	25.56	1.496	.2782
#1	.8921	.0242	.1165	.1861	-.0039	.0191	.1572
#2	.8956	.0239	.1145	.1866	-.0025	.0189	.1581
#3	.8894	.0239	.1143	.1868	-.0026	.0194	.1576

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2996.0	6483.3	54360.	3953.7
Stddev	10.5	25.8	213.	39.6
%RSD	.35071	.39721	.39204	1.0021
#1	3007.3	6509.0	54548.	3909.4
#2	2986.6	6457.5	54403.	3985.8
#3	2993.9	6483.4	54128.	3965.8

Zoom In Zoom Out

Sample Name: FA22036-1 Acquired: 2/16/2015 17:04:53 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0013	134.1	.1057	2.950	.0180	120.1	-.0008	.1654	.1238	.1231
Stddev	.0004	.5	.0006	.005	.0002	.7	.0000	.0001	.0005	.0006
%RSD	27.76	.4075	.6032	.1752	.9843	.5809	3.032	.0649	.3774	.4540
#1	-.0017	133.5	.1057	2.945	.0179	119.4	-.0008	.1656	.1244	.1232
#2	-.0011	134.2	.1050	2.950	.0179	120.3	-.0008	.1654	.1235	.1226
#3	-.0011	134.5	.1063	2.955	.0182	120.7	-.0008	.1654	.1236	.1237

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	78.93	6.605	30.83	1.107	.0185	21.57	.1602	.0139	-.0013	.0243
Stddev	.45	.106	.12	.002	.0001	.15	.0006	.0007	.0008	.0023
%RSD	.5660	1.598	.3969	.1526	.7310	.7073	.3915	5.055	59.61	9.607
#1	78.49	6.487	30.71	1.109	.0187	21.40	.1608	.0132	-.0007	.0216
#2	78.93	6.690	30.84	1.106	.0184	21.62	.1602	.0146	-.0010	.0259
#3	79.38	6.638	30.95	1.106	.0185	21.69	.1595	.0140	-.0021	.0253

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5535	.0152	2.660	2.039	-.0050	.1977	.0507
Stddev	.0017	.0003	.013	.006	.0016	.0006	.0002
%RSD	.3048	1.660	.4848	.2830	31.87	.3065	.3894
#1	.5551	.0150	2.647	2.046	-.0048	.1984	.0509
#2	.5536	.0154	2.660	2.035	-.0066	.1973	.0507
#3	.5517	.0151	2.673	2.036	-.0034	.1974	.0506

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2654.2	7742.5	62812.	4674.5
Stddev	5.9	21.7	202.	51.5
%RSD	.22211	.28055	.32208	1.1019
#1	2651.0	7722.9	63011.	4731.0
#2	2650.5	7738.7	62607.	4662.2
#3	2661.0	7765.8	62819.	4630.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/16/2015 17:09:12 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0098	.2379	.0095	.2170	.0053	1.072	.0051	.0535	.0108	.0269
Stddev	.0003	.0024	.0008	.0010	.0001	.007	.0001	.0001	.0001	.0004
%RSD	2.851	.9933	8.853	.4751	2.110	.6690	1.071	.2547	.8922	1.467
#1	.0102	.2363	.0087	.2161	.0052	1.071	.0050	.0535	.0108	.0273
#2	.0097	.2368	.0103	.2168	.0052	1.066	.0051	.0537	.0109	.0265
#3	.0096	.2406	.0094	.2181	.0054	1.080	.0051	.0534	.0107	.0270

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3545	10.53	5.286	.0162	.0491	10.54	.0428	.0055	.0044	.0106
Stddev	.0088	.03	.030	.0000	.0002	.02	.0003	.0003	.0006	.0023
%RSD	2.491	.2661	.5735	.2509	.4710	.2147	.7549	6.127	13.08	21.80
#1	.3575	10.55	5.321	.0162	.0490	10.52	.0426	.0058	.0039	.0085
#2	.3615	10.54	5.274	.0162	.0493	10.57	.0432	.0053	.0050	.0102
#3	.3446	10.50	5.264	.0161	.0489	10.54	.0427	.0052	.0043	.0131

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0420	.0539	.0109	.0117	.0084	.0490	.0216
Stddev	.0007	.0009	.0002	.0002	.0002	.0002	.0001
%RSD	1.570	1.709	1.985	1.741	2.903	.3809	.5921
#1	.0418	.0537	.0111	.0119	.0087	.0491	.0216
#2	.0427	.0549	.0109	.0118	.0083	.0488	.0218
#3	.0414	.0531	.0106	.0115	.0083	.0491	.0215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2966.1	6338.4	53152.	3768.1
Stddev	14.8	29.7	170.	30.8
%RSD	.49838	.46904	.32065	.81781
#1	2970.3	6347.8	53314.	3768.3
#2	2949.6	6305.1	52974.	3798.9
#3	2978.3	6362.3	53167.	3737.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/16/2015 17:13:36 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	F513.3	.0015	.0010	-.0001	478.8	-.0005	.0011	.0006
Stddev	.0002	3.1	.0014	.0004	.0002	2.3	.0001	.0001	.0001
%RSD	33.68	.6038	94.46	40.86	191.3	.4748	17.58	6.165	18.74
#1	-.0008	512.5	.0019	.0015	-.0002	477.7	-.0005	.0010	.0006
#2	-.0006	510.7	.0026	.0008	.0001	477.3	-.0005	.0011	.0005
#3	-.0004	516.8	-.0001	.0008	-.0001	481.4	-.0007	.0011	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	184.9	.2547	488.5	-.0005	.0112	.1711	.0017	-.0010
Stddev	.000	1.3	.0290	2.7	.0000	.0001	.0133	.0001	.0013
%RSD	577.4	.7100	11.37	.5556	7.107	.8329	7.789	7.079	135.8
#1	-.0001	184.4	.2673	487.5	-.0005	.0113	.1557	.0017	.0002
#2	.0001	183.9	.2753	486.5	-.0004	.0112	.1797	.0016	-.0008
#3	.0000	186.4	.2216	491.6	-.0005	.0111	.1778	.0019	-.0023

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	.0017	.0834	.0013	.0002	.0015	-.0031	.0011	-.0016
Stddev	.0029	.0019	.0011	.0003	.0001	.0001	.0009	.0001	.0000
%RSD	592.2	110.9	1.379	24.28	81.22	5.901	28.39	7.344	1.378
#1	-.0015	.0011	.0846	.0011	.0001	.0016	-.0029	.0012	-.0016
#2	-.0027	.0039	.0823	.0017	.0003	.0015	-.0024	.0010	-.0016
#3	.0028	.0002	.0832	.0012	.0001	.0014	-.0041	.0012	-.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2369.7	5709.1	46384.	3634.1
Stddev	9.9	13.5	98.	22.1
%RSD	.41734	.23558	.21087	.60798
#1	2358.2	5702.3	46274.	3630.5
#2	2375.5	5724.6	46463.	3657.8
#3	2375.3	5700.5	46413.	3614.0

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/16/2015 17:18:04 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.052	F523.0	1.028	.5443	.5069	473.8	.9199	.4820	.4983
Stddev	.004	2.6	.005	.0011	.0048	5.6	.0011	.0006	.0026
%RSD	.3959	.5021	.4515	.1974	.9537	1.186	.1158	.1228	.5313
#1	1.051	526.0	1.024	.5452	.5125	477.9	.9201	.4817	.4956
#2	1.048	521.8	1.033	.5445	.5035	476.0	.9209	.4827	.4984
#3	1.056	521.2	1.026	.5431	.5049	467.4	.9188	.4816	.5009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5602	184.0	.1580	492.1	.5054	.9355	.1160	.9483	.9661
Stddev	.0018	1.0	.0875	2.5	.0025	.0008	.0023	.0014	.0032
%RSD	.3260	.5587	55.39	.5120	.4868	.0812	1.991	.1519	.3359
#1	.5604	185.2	.2325	495.0	.5026	.9346	.1178	.9487	.9698
#2	.5583	183.6	.1799	490.9	.5061	.9357	.1134	.9495	.9650
#3	.5619	183.3	.0616	490.4	.5074	.9361	.1167	.9467	.9637

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.031	.9961	.0418	.9483	1.018	.9960	.9668	.4749	.9378
Stddev	.002	.0041	.0013	.0003	.006	.0024	.0012	.0017	.0020
%RSD	.2244	.4109	3.100	.0345	.5824	.2458	.1244	.3617	.2150
#1	1.034	1.001	.0425	.9480	1.024	.9933	.9681	.4736	.9373
#2	1.030	.9929	.0403	.9483	1.013	.9968	.9657	.4769	.9400
#3	1.030	.9948	.0426	.9486	1.016	.9980	.9666	.4744	.9360

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2328.2	5677.4	46088.	3590.1
Stddev	5.1	12.5	461.	12.4
%RSD	.22069	.22061	.99937	.34410
#1	2325.2	5676.6	46491.	3581.7
#2	2325.3	5665.3	46186.	3584.3
#3	2334.2	5690.4	45586.	3604.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 17:22:26 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2612	41.67	1.993	2.117	1.996	40.00	2.024	2.047	2.055	2.075
Stddev	.0082	.10	.005	.006	.006	.10	.007	.007	.066	.062
%RSD	3.136	.2506	.2571	.2961	.2786	.2552	.3375	.3374	3.204	2.968
#1	.2698	41.55	1.990	2.109	1.990	39.89	2.019	2.041	2.124	2.136
#2	.2535	41.76	1.991	2.121	2.001	40.01	2.020	2.044	1.994	2.013
#3	.2603	41.68	1.999	2.119	1.997	40.09	2.032	2.054	2.047	2.075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.83	41.48	41.20	2.056	2.045	41.26	2.005	2.004	2.006	2.024
Stddev	.10	.08	.17	.066	.010	.17	.009	.009	.007	.007
%RSD	.2532	.1811	.4047	3.232	.4931	.4014	.4475	.4293	.3574	.3690
#1	40.72	41.45	41.01	2.127	2.037	41.10	2.000	1.997	2.001	2.020
#2	40.93	41.56	41.28	1.995	2.041	41.43	2.001	2.001	2.003	2.019
#3	40.85	41.42	41.32	2.046	2.056	41.24	2.016	2.014	2.014	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.829	2.066	2.045	2.032	2.027	1.979	1.994
Stddev	.007	.004	.009	.063	.014	.057	.009
%RSD	.4065	.2091	.4148	3.111	.6741	2.902	.4614
#1	1.824	2.063	2.035	2.097	2.017	2.039	1.989
#2	1.827	2.066	2.052	1.971	2.022	1.924	1.988
#3	1.838	2.071	2.047	2.029	2.043	1.974	2.004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 17:22:26 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2669.7	6181.8	51089.	3778.8
Stddev	9.2	19.3	1466.	25.0
%RSD	.34348	.31182	2.8692	.66177
#1	2676.4	6193.1	49470.	3795.8
#2	2673.4	6192.8	52325.	3790.4
#3	2659.2	6159.6	51471.	3750.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 17:26:37 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	F.0379	.0001	.0011	.0007	.0367	.0006	.0005	.0007
Stddev	.0001	.0064	.0006	.0002	.0001	.0059	.0001	.0000	.0001
%RSD	27.28	16.94	564.7	17.43	11.81	15.95	12.84	5.972	14.59
#1	-.0004	.0354	.0000	.0013	.0008	.0354	.0005	.0005	.0006
#2	-.0005	.0453	.0008	.0009	.0007	.0431	.0006	.0005	.0008
#3	-.0006	.0332	-.0004	.0012	.0007	.0316	.0007	.0005	.0007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250							
Low Limit		-.0250							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0445	.1060	.0221	.0007	F.0044	-.0061	.0006	.0003
Stddev	.0004	.0060	.0129	.0370	.0001	.0013	.0048	.0003	.0001
%RSD	111.2	13.42	12.13	167.8	7.855	28.77	78.48	48.03	44.72
#1	-.0001	.0476	.1192	-.0072	.0007	.0058	-.0006	.0010	.0003
#2	.0006	.0482	.0935	.0637	.0007	.0042	-.0087	.0005	.0005
#3	.0005	.0376	.1052	.0097	.0006	.0033	-.0090	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F.0031	.0022	F.0013	.0007	.0019	.0009	.0003	.0011
Stddev	.0009	.0002	.0007	.0003	.0001	.0001	.0009	.0003	.0001
%RSD	39660.	7.280	30.40	21.94	12.54	6.376	98.69	105.4	6.405
#1	-.0008	.0032	.0025	.0015	.0008	.0020	.0019	.0001	.0011
#2	-.0002	.0029	.0027	.0015	.0007	.0019	.0001	.0002	.0011
#3	.0010	.0033	.0015	.0010	.0006	.0018	.0007	.0006	.0012
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010					
Low Limit		-.0020		-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 17:26:37 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3039.5	6384.5	53311.	3778.1
Stddev	17.1	44.6	245.	18.4
%RSD	.56191	.69830	.46044	.48605
#1	3042.5	6409.0	53203.	3797.1
#2	3021.1	6333.0	53139.	3760.5
#3	3054.9	6411.4	53592.	3776.6

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	2	V	-0.007608	0.000000	No
			Fe	0.000007	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.040330	0.000000	No
As 189.042 {478}	X	4	Fe	-0.000107	0.000000	No
			Cr	-0.000129	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000005	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000006	0.000000	No
Be 313.042 {108}	X	2	V	0.000042	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000068	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	-0.000004	0.000000	No
Cr 267.716 {126}	X	4	Al	0.000001	0.000000	No
			Fe	-0.000004	0.000000	No
			Ca	-0.000000	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	X	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000154	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000062	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000023	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	-0.000000	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	X	8	Al	0.000216	0.000000	No
			Fe	0.000080	0.000000	No
			Mo	-0.001466	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000275	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	X	11	Fe	0.000046	0.000000	No
			Cr	0.006369	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.002569	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	-0.000005	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000006	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000000	0.000000	No
Se 196.090 {472}	X	12	Fe	-0.000010	0.000000	No
			Ca	0.000004	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000025	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	0.000001	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	X	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	X	None				
Sr 407.771 { 83}	X	1	Ca	0.000003	0.000000	No
Ti 334.941 {101}	X	1	Ca	-0.000017	0.000000	No
Tl 190.856 {477}	X	10	Co	0.003248	0.000000	No
			Fe	0.000045	0.000000	No
			Al	-0.000022	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000001	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	X	5	Fe	0.000004	0.000000	No
			Cr	-0.001960	0.000000	No
			Mo	-0.004535	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	X	None				
Y 360.073 { 94}*	X	None				
Y 371.030 { 91}*	X	None				
Zn 206.200 {463}	X	5	Cr	-0.001305	0.000000	No
			Al	0.000000	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000020	0.000000	No
			As	0.001105	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001198	0.451325	0.000000	1.000000
	Al 396.152 { 85}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.002047	0.134333	0.000000	1.000000
	As 189.042 {478}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000278	0.167228	0.000000	1.000000
	Ba 455.403 { 74}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001078	6.876655	0.000000	1.000000
	Be 313.042 {108}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.003485	6.222043	0.000000	1.000000
	Ca 317.933 {106}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.005981	0.173207	0.000000	1.000000
	Cd 226.502 {449}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.003430	4.430891	0.000000	1.000000
	Co 228.616 {447}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001649	2.201103	0.000000	1.000000
	Cr 267.716 {126}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.000130	0.400413	0.000000	1.000000
	Cu 324.754 {104}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.005245	0.566511	0.000000	1.000000
	Fe 259.940 {130}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.006440	0.135584	0.000000	1.000000
	In 230.606 {446}*	2/16/2015 10:49:39	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.008092	0.061698	0.000000	1.000000
	Mg 279.079 {121}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000173	0.019668	0.000000	1.000000
	Mn 257.610 {131}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001333	2.409508	0.000000	1.000000
	Mo 202.030 {467}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.012334	0.952201	0.000000	1.000000
	Na 589.592 { 57}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.012410	0.223470	0.000000	1.000000
	Ni 231.604 {445}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001411	1.360807	0.000000	1.000000
	Pb 220.353 {453}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001120	0.806731	0.000000	1.000000
	Sb 206.833 {463}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001068	0.210780	0.000000	1.000000
	Se 196.090 {472}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000146	0.116877	0.000000	1.000000
	Si 212.412 {459}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.005534	0.384994	0.000000	1.000000
	Sn 189.989 {477}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001492	0.375872	0.000000	1.000000
	Sr 407.771 { 83}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.004937	10.687363	0.000000	1.000000
	Ti 334.941 {101}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.006250	1.553863	0.000000	1.000000
	Tl 190.856 {477}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000884	0.302358	0.000000	1.000000
	V 292.402 {115}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000616	0.501923	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.004887	2.570053	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999862	0.000071	0.000471	0.001571	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999861	0.003622	0.012328	0.041094	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999954	0.000129	0.000887	0.002958	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999894	0.008073	0.000309	0.001028	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999832	0.009198	0.000114	0.000380	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999837	0.005042	0.004618	0.015392	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999818	0.006828	0.000053	0.000176	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999831	0.003261	0.000118	0.000395	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999732	0.000747	0.000311	0.001036	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999848	0.000792	0.000333	0.001110	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999555	0.006515	0.003283	0.010942	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999885	0.001506	0.046329	0.154431	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999792	0.000647	0.028411	0.094703	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999479	0.006268	0.000048	0.000160	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999914	0.001003	0.000161	0.000538	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999906	0.004933	0.013507	0.045023	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999801	0.002186	0.000194	0.000646	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999938	0.000727	0.000639	0.002129	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999949	0.000170	0.001149	0.003832	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999934	0.000108	0.001890	0.006301	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.991485	0.004150	0.000444	0.001478	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999788	0.000624	0.000338	0.001126	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999775	0.018265	0.000125	0.000416	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999739	0.002860	0.000127	0.000423	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999929	0.000291	0.001003	0.003342	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999979	0.000259	0.000311	0.001037	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999795	0.004196	0.000069	0.000229	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/17/2015 9:38:04 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0023	-.0003	.0089	.0003	.0073	.0004	.0009	.0001
Stddev	.0003	.0008	.0001	.0005	.0001	.0002	.0004	.0004	.0002
%RSD	255.4	34.32	19.06	5.860	38.05	2.286	110.6	41.37	148.5
#1	.0004	.0018	-.0004	.0087	.0002	.0074	.0000	.0005	.0001
#2	.0001	.0019	-.0003	.0084	.0003	.0071	.0004	.0009	.0003
#3	-.0002	.0032	-.0003	.0094	.0003	.0075	.0008	.0012	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0049	.0047	.0077	-.0004	.0008	.0045	-.0162	-.0001	-.0047
Stddev	.0002	.0004	.0019	.0004	.0001	.0007	.0036	.0002	.0011
%RSD	3.797	9.525	24.59	79.38	10.65	14.83	22.22	148.8	24.24
#1	.0049	.0052	.0082	-.0008	.0007	.0052	-.0173	-.0004	-.0045
#2	.0047	.0046	.0092	-.0001	.0008	.0044	-.0122	-.0001	-.0059
#3	.0051	.0043	.0056	-.0005	.0009	.0038	-.0191	.0000	-.0036

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0003	-.0009	.0084	.0008	.0020	.0043	-.0057	-.0003	.0038
Stddev	.0001	.0001	.0001	.0001	.0009	.0001	.0009	.0002	.0002
%RSD	43.18	10.05	1.458	15.10	43.20	3.180	16.15	62.44	4.990
#1	.0001	-.0009	.0084	.0007	.0019	.0045	-.0066	-.0001	.0036
#2	.0003	-.0008	.0082	.0009	.0029	.0043	-.0048	-.0004	.0039
#3	.0003	-.0010	.0085	.0009	.0012	.0042	-.0058	-.0004	.0040

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1705.8	4992.8	34221.	4305.2
Stddev	1.6	1.0	75.	61.4
%RSD	.09179	.02066	.21985	1.4261
#1	1704.1	4992.8	34249.	4263.9
#2	1707.1	4991.8	34278.	4375.7
#3	1706.2	4993.8	34136.	4275.9

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/17/2015 9:41:35 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0387	1.524	.1350	5.399	3.473	2.282	2.680	1.218	.2669	.4194
Stddev	.0002	.004	.0003	.015	.007	.008	.001	.002	.0004	.0012
%RSD	.5344	.2778	.2071	.2774	.1988	.3437	.0271	.1394	.1338	.2912
#1	.0385	1.520	.1351	5.397	3.467	2.275	2.680	1.218	.2673	.4206
#2	.0389	1.526	.1347	5.384	3.472	2.281	2.680	1.217	.2668	.4194
#3	.0386	1.528	.1352	5.414	3.481	2.291	2.679	1.220	.2666	.4182

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.318	1.253	.2086	1.717	.5882	4.325	.7643	.6436	.1358	.1021
Stddev	.006	.004	.0016	.004	.0009	.011	.0005	.0015	.0004	.0002
%RSD	.4213	.3199	.7640	.2137	.1578	.2494	.0649	.2342	.2627	.2269
#1	1.313	1.249	.2068	1.720	.5879	4.315	.7649	.6421	.1360	.1020
#2	1.317	1.254	.2099	1.713	.5874	4.322	.7639	.6438	.1359	.1019
#3	1.324	1.257	.2091	1.719	.5892	4.337	.7642	.6451	.1353	.1024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1774	.2313	7.933	1.035	.2765	.3508	1.847
Stddev	.0000	.0003	.024	.003	.0017	.0013	.001
%RSD	.0218	.1216	.2957	.2461	.6163	.3765	.0643
#1	.1775	.2309	7.924	1.038	.2769	.3521	1.848
#2	.1774	.2314	7.916	1.033	.2746	.3494	1.846
#3	.1775	.2315	7.960	1.033	.2779	.3509	1.848

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1678.0	4865.7	33359.	4217.8
Stddev	.6	3.1	111.	15.8
%RSD	.03329	.06319	.33321	.37519
#1	1677.4	4862.6	33233.	4236.0
#2	1678.5	4865.9	33400.	4207.3
#3	1677.9	4868.7	33443.	4210.2

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/17/2015 9:48:05 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3087	11.79	1.100	42.35	26.90	17.19	21.36	9.791	2.079	3.343
Stddev	.0005	.01	.001	.05	.02	.01	.03	.006	.005	.005
%RSD	.1770	.1102	.1121	.1119	.0861	.0790	.1294	.0596	.2413	.1552
#1	.3093	11.80	1.101	42.29	26.90	17.19	21.37	9.792	2.078	3.346
#2	.3084	11.77	1.099	42.39	26.87	17.17	21.33	9.784	2.085	3.347
#3	.3084	11.79	1.100	42.36	26.92	17.20	21.38	9.795	2.075	3.337

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.754	9.834	1.578	13.16	4.772	33.45	6.068	5.267	1.114	.8363
Stddev	.017	.013	.003	.09	.003	.01	.007	.009	.002	.0007
%RSD	.1712	.1301	.1691	.6828	.0615	.0292	.1203	.1607	.1514	.0866
#1	9.769	9.848	1.581	13.12	4.770	33.46	6.072	5.277	1.114	.8370
#2	9.736	9.833	1.575	13.26	4.771	33.44	6.059	5.260	1.115	.8356
#3	9.758	9.822	1.578	13.09	4.776	33.46	6.071	5.265	1.112	.8364

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.449	1.835	62.26	8.247	2.317	2.803	14.26
Stddev	.002	.003	.03	.006	.009	.009	.02
%RSD	.0715	.1829	.0433	.0708	.3747	.3233	.1730
#1	2.451	1.837	62.23	8.250	2.326	2.803	14.27
#2	2.448	1.831	62.27	8.250	2.315	2.812	14.23
#3	2.449	1.836	62.28	8.240	2.309	2.793	14.28

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1556.9	4562.8	31706.	4244.9
Stddev	3.2	7.0	127.	24.9
%RSD	.20507	.15413	.40106	.58649
#1	1553.2	4558.4	31699.	4216.3
#2	1558.8	4570.9	31582.	4261.5
#3	1558.6	4559.0	31836.	4256.8

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/17/2015 9:54:09 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1592	6.153	.5588	22.00	14.05	9.090	10.97	4.993	1.078	1.706
Stddev	.0007	.014	.0008	.01	.01	.012	.01	.004	.002	.003
%RSD	.4627	.2319	.1455	.0600	.0892	.1345	.0688	.0784	.2081	.1703
#1	.1599	6.168	.5596	22.01	14.06	9.102	10.97	4.997	1.077	1.707
#2	.1591	6.139	.5579	21.99	14.04	9.077	10.97	4.992	1.080	1.708
#3	.1585	6.152	.5588	21.98	14.05	9.091	10.96	4.989	1.076	1.703

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.219	5.072	.8272	6.994	2.422	17.56	3.105	2.688	.5632	.4255
Stddev	.008	.008	.0025	.006	.004	.02	.005	.004	.0014	.0018
%RSD	.1532	.1638	.3074	.0832	.1866	.1288	.1720	.1414	.2477	.4117
#1	5.221	5.072	.8243	6.996	2.417	17.59	3.109	2.686	.5648	.4269
#2	5.211	5.064	.8285	6.999	2.422	17.54	3.099	2.693	.5626	.4236
#3	5.226	5.081	.8289	6.988	2.426	17.55	3.108	2.686	.5622	.4261

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.035	.9371	32.78	4.310	1.182	1.407	7.369
Stddev	.001	.0019	.06	.008	.002	.002	.003
%RSD	.1172	.2001	.1860	.1846	.1454	.1600	.0467
#1	1.036	.9371	32.84	4.317	1.184	1.404	7.370
#2	1.035	.9352	32.72	4.311	1.181	1.408	7.365
#3	1.034	.9390	32.77	4.301	1.180	1.408	7.371

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1614.7	4723.1	32413.	4210.6
Stddev	3.0	4.5	130.	17.3
%RSD	.18365	.09472	.40129	.41094
#1	1618.1	4725.7	32471.	4229.6
#2	1613.5	4725.7	32264.	4206.3
#3	1612.5	4717.9	32505.	4195.9

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/17/2015 9:58:43 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4959	78.62	3.968	3.939	3.920	78.02	3.950	3.966	3.937	3.978
Stddev	.0008	.24	.006	.014	.011	.27	.004	.007	.008	.005
%RSD	.1531	.3109	.1550	.3645	.2876	.3396	.1053	.1769	.1955	.1209
#1	.4967	78.56	3.974	3.941	3.921	78.01	3.950	3.966	3.936	3.982
#2	.4958	78.88	3.961	3.952	3.931	78.29	3.945	3.958	3.945	3.973
#3	.4952	78.40	3.968	3.924	3.909	77.76	3.954	3.972	3.930	3.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.62	79.03	78.52	3.918	3.969	78.51	3.950	3.948	3.985	3.961
Stddev	.27	.21	.31	.033	.005	.27	.005	.018	.007	.006
%RSD	.3439	.2622	.3921	.8339	.1340	.3411	.1287	.4505	.1802	.1408
#1	77.67	79.15	78.67	3.950	3.967	78.65	3.955	3.966	3.990	3.965
#2	77.86	79.14	78.73	3.919	3.965	78.69	3.945	3.948	3.977	3.954
#3	77.33	78.79	78.17	3.884	3.975	78.20	3.951	3.930	3.987	3.962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.359	3.968	3.916	3.938	3.962	3.999	3.933
Stddev	.006	.009	.010	.003	.011	.004	.003
%RSD	.1475	.2240	.2461	.0724	.2750	.1109	.0814
#1	4.364	3.975	3.918	3.935	3.974	4.002	3.933
#2	4.351	3.958	3.925	3.941	3.960	4.000	3.929
#3	4.361	3.971	3.906	3.939	3.952	3.994	3.936
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/17/2015 9:58:43 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1559.5	4558.4	31574.	4190.7
Stddev	6.6	4.3	129.	32.3
%RSD	.42172	.09327	.40927	.77034
#1	1555.6	4554.2	31598.	4185.9
#2	1555.9	4558.4	31435.	4161.0
#3	1567.1	4562.7	31690.	4225.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/17/2015 10:04:36 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	41.96	1.932	2.060	2.025	43.00	1.919	1.954	2.007	1.959
Stddev	.0010	.10	.004	.006	.006	.09	.001	.002	.004	.008
%RSD	.4022	.2473	.2072	.3005	.3081	.2183	.0614	.0963	.1986	.4030
#1	.2476	42.08	1.935	2.067	2.032	43.10	1.920	1.955	2.010	1.967
#2	.2458	41.89	1.927	2.058	2.022	42.92	1.918	1.952	2.002	1.951
#3	.2460	41.91	1.933	2.055	2.021	42.97	1.919	1.954	2.009	1.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.31	41.95	40.78	2.000	1.834	42.39	1.968	1.947	1.921	1.929
Stddev	.09	.12	.04	.004	.003	.11	.003	.003	.001	.003
%RSD	.2240	.2861	.0874	.1877	.1407	.2537	.1503	.1390	.0729	.1766
#1	41.41	42.08	40.78	2.003	1.832	42.52	1.971	1.950	1.922	1.932
#2	41.22	41.91	40.74	1.996	1.834	42.34	1.966	1.944	1.919	1.927
#3	41.30	41.85	40.81	2.001	1.837	42.32	1.965	1.947	1.921	1.926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0173	1.951	1.980	1.953	2.009	1.897	1.967
Stddev	.0008	.003	.007	.002	.004	.009	.002
%RSD	4.451	.1291	.3347	.1073	.1840	.4687	.0931
#1	.0180	1.950	1.988	1.955	2.007	1.904	1.969
#2	.0165	1.948	1.977	1.951	2.006	1.887	1.965
#3	.0175	1.953	1.976	1.953	2.013	1.899	1.967
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/17/2015 10:04:36 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1623.6	4745.5	31835.	4156.9
Stddev	2.3	6.2	99.	12.6
%RSD	.14013	.13038	.30988	.30365
#1	1621.9	4740.1	31911.	4142.9
#2	1626.2	4752.3	31872.	4167.4
#3	1622.7	4744.2	31724.	4160.5

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/17/2015 10:10:45 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0066	.0004	-.0002	.0000	-.0002	-.0001	.0000	.0000	.0001
Stddev	.0001	.0092	.0005	.0002	.0001	.0032	.0001	.000	.000	.0002
%RSD	54.21	140.3	123.4	90.60	153.1	1322.	104.7	62.03	4384.	251.4
#1	.0001	.0167	.0007	-.0003	.0000	.0015	.0000	-.0001	-.0002	-.0002
#2	.0003	-.0014	-.0002	-.0004	.0000	.0017	.0000	.0000	.0002	.0002
#3	.0002	.0045	.0008	.0000	.0001	-.0040	-.0001	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0062	.0021	.0047	.0001	-.0006	.0063	.0002	-.0004	.0011	.0002
Stddev	.0024	.0301	.0110	.0001	.0004	.0063	.0002	.0006	.0005	.0006
%RSD	38.39	1441.	232.3	85.10	72.14	99.25	110.4	154.9	47.61	289.1
#1	-.0052	-.0019	-.0011	.0000	-.0002	.0006	.0000	.0002	.0012	-.0004
#2	-.0044	.0339	.0174	.0001	-.0007	.0131	.0005	-.0009	.0005	.0007
#3	-.0089	-.0258	-.0021	.0001	-.0010	.0053	.0001	-.0004	.0016	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0002	-.0001	-.0002	-.0011	-.0002	-.0001
Stddev	.0003	.0003	.0000	.0001	.0019	.0003	.0001
%RSD	244.4	177.0	27.37	61.58	173.7	187.4	120.6
#1	.0004	-.0006	-.0001	-.0002	-.0020	-.0003	-.0001
#2	-.0001	.0000	-.0001	-.0003	.0011	.0002	.0000
#3	.0001	.0000	-.0001	-.0001	-.0024	-.0004	-.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/17/2015 10:10:45 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1691.0	4909.5	33961.	4259.3
Stddev	5.5	19.7	112.	12.0
%RSD	.32304	.40121	.32931	.28062
#1	1685.9	4887.3	33847.	4249.6
#2	1690.4	4916.6	34071.	4272.7
#3	1696.7	4924.7	33966.	4255.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/17/2015 10:14:54 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107	.2227	.0107	.2064	.0052	1.070	.0048	.0504	.0102	.0261
Stddev	.0003	.0053	.0001	.0003	.0001	.002	.0000	.0000	.0003	.0003
%RSD	3.238	2.363	1.367	.1639	1.944	.1459	.9772	.0308	2.833	1.082
#1	.0109	.2190	.0106	.2062	.0052	1.071	.0048	.0504	.0104	.0263
#2	.0104	.2264	.0108	.2066	.0053	1.068	.0048	.0504	.0100	.0259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3013	10.31	5.213	.0156	.0451	10.45	.0408	.0041	.0045	.0102
Stddev	.0041	.00	.038	.0001	.0002	.01	.0001	.0005	.0008	.0000
%RSD	1.370	.0262	.7363	.4623	.5374	.0749	.1858	12.16	16.85	.1259
#1	.3043	10.31	5.186	.0156	.0449	10.44	.0409	.0045	.0050	.0102
#2	.2984	10.31	5.240	.0155	.0453	10.45	.0408	.0038	.0039	.0102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0391	.0499	.0104	.0091	.0088	.0486	.0210
Stddev	.0008	.0002	.0001	.0001	.0009	.0008	.0002
%RSD	2.026	.4766	1.090	.8592	9.794	1.571	.9230
#1	.0386	.0498	.0103	.0090	.0082	.0481	.0209
#2	.0397	.0501	.0105	.0091	.0094	.0491	.0212
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/17/2015 10:14:54 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1690.3	4903.2	33677.	4259.5
Stddev	3.4	3.8	109.	19.6
%RSD	.20075	.07834	.32352	.46025
#1	1692.7	4905.9	33754.	4273.4
#2	1687.9	4900.5	33600.	4245.7

Zoom In Zoom Out

Sample Name: SiSIC Acquired: 2/17/2015 10:20:18 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0145	-.0004	-.0003	-.0002	.0039	-.0003	-.0006	-.0002
Stddev	.0001	.0146	.0008	.0002	.0000	.0018	.0001	.0001	.0001
%RSD	41.94	101.0	187.3	76.74	6.389	46.61	30.46	22.41	51.82
#1	.0004	-.0022	-.0001	.0000	-.0002	.0051	-.0002	-.0007	-.0002
#2	.0002	.0203	.0001	-.0004	-.0002	.0018	-.0002	-.0007	-.0001
#3	.0002	.0252	-.0013	-.0004	-.0002	.0048	-.0004	-.0004	-.0002
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0199	-.0267	.0189	-.0001	-.0028	.0078	-.0006	-.0005
Stddev	.0001	.0036	.0152	.0118	.0000	.0001	.0036	.0001	.0013
%RSD	126.1	18.21	56.85	62.79	32.80	3.755	46.03	15.70	246.5
#1	-.0001	-.0238	-.0137	.0237	-.0001	-.0027	.0063	-.0005	.0001
#2	-.0001	-.0193	-.0230	.0054	-.0002	-.0027	.0052	-.0006	.0004
#3	.0000	-.0166	-.0434	.0275	-.0001	-.0029	.0119	-.0005	-.0020
Check ?	None	None	None	None	None	None	None	None	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0004	F26.72	-.0009	-.0002	-.0005	-.0005	-.0003	.0009
Stddev	.0010	.0016	.03	.0004	.0001	.0001	.0011	.0002	.0000
%RSD	290.9	365.8	.1272	39.97	69.02	19.34	220.1	83.18	1.816
#1	-.0014	.0010	26.69	-.0007	-.0001	-.0004	.0006	-.0001	.0009
#2	.0004	-.0001	26.71	-.0007	-.0001	-.0004	-.0016	-.0005	.0009
#3	.0000	-.0022	26.75	-.0013	-.0003	-.0005	-.0004	-.0001	.0009
Check ?	None	None	Chk Fail	None	None	None	None	None	None
Value			60.00						
Range			40.00						

Zoom In Zoom Out

Sample Name: SiSIC Acquired: 2/17/2015 10:20:18 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1697.0	4950.8	33770.	4283.2
Stddev	1.4	6.2	70.	17.2
%RSD	.08215	.12494	.20637	.40171
#1	1695.4	4948.0	33801.	4291.2
#2	1697.8	4946.5	33691.	4263.5
#3	1697.8	4957.9	33820.	4295.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/17/2015 10:24:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	491.0	.0005	.0001	-.0001	471.5	.0000	.0007	.0000	-.0013
Stddev	.0004	7.2	.0004	.0002	.0000	8.3	.000	.0002	.000	.0003
%RSD	79.42	1.474	71.56	262.5	19.18	1.763	582.2	27.87	3117.	21.87
#1	.0002	499.3	.0007	-.0001	-.0001	480.6	-.0002	.0009	-.0003	-.0012
#2	.0010	486.3	.0001	.0003	-.0001	464.4	.0001	.0006	.0004	-.0016
#3	.0004	487.3	.0007	.0000	-.0001	469.3	.0000	.0006	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	182.4	.2192	478.9	.0002	.0000	.1694	.0008	-.0001	.0001	.0000
Stddev	.3	.0422	.7	.0000	.0001	.0099	.0000	.0014	.0014	.002
%RSD	.1440	19.23	.1555	32.12	329.4	5.849	4.257	1876.	932.3	25150.
#1	182.7	.1749	479.6	.0002	.0000	.1583	.0008	-.0016	-.0001	-.0024
#2	182.2	.2240	478.1	.0001	.0001	.1773	.0008	.0005	.0016	.0017
#3	182.3	.2588	479.0	.0001	.0000	.1727	.0009	.0009	-.0011	.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0932	-.0003	.0000	-.0012	.0008	.0003	.0000
Stddev	.0006	.0006	.000	.0002	.0023	.0000	.0003
%RSD	.6780	173.5	4139.	17.00	295.5	9.850	631.8
#1	.0936	-.0007	-.0001	-.0010	.0007	.0003	-.0002
#2	.0936	.0003	.0000	-.0014	-.0015	.0003	.0001
#3	.0925	-.0006	.0000	-.0012	.0031	.0003	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/17/2015 10:24:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1539.1	4372.7	29511.	4073.1
Stddev	3.6	4.2	86.	25.6
%RSD	.23667	.09647	.29281	.62950
#1	1534.9	4372.0	29412.	4044.5
#2	1541.3	4368.9	29548.	4094.2
#3	1541.2	4377.2	29573.	4080.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/17/2015 10:31:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9918	499.8	1.069	.5078	.5061	472.3	.9649	.5060	.5026	.5614
Stddev	.0005	5.4	.002	.0011	.0013	5.5	.0011	.0004	.0015	.0014
%RSD	.0475	1.077	.1701	.2182	.2639	1.155	.1138	.0876	.2952	.2425
#1	.9917	501.6	1.067	.5079	.5075	471.7	.9661	.5063	.5036	.5625
#2	.9923	504.0	1.071	.5089	.5060	467.2	.9647	.5061	.5033	.5617
#3	.9913	493.7	1.068	.5067	.5049	478.1	.9639	.5055	.5009	.5598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.1	.0970	476.4	.5122	.9623	.1342	1.013	.9674	1.089	1.039
Stddev	.5	.0132	1.0	.0001	.0007	.0076	.002	.0015	.005	.002
%RSD	.2958	13.64	.2188	.0272	.0706	5.692	.1658	.1505	.4979	.2003
#1	180.6	.0831	477.6	.5122	.9627	.1368	1.014	.9678	1.090	1.037
#2	180.1	.0985	476.0	.5123	.9626	.1256	1.013	.9658	1.093	1.041
#3	179.6	.1094	475.7	.5120	.9615	.1402	1.011	.9686	1.083	1.039
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0444	.9949	1.001	1.015	.9999	.4953	.9829
Stddev	.0004	.0013	.003	.001	.0025	.0004	.0020
%RSD	.8797	.1286	.3110	.1285	.2527	.0803	.2003
#1	.0443	.9958	1.003	1.016	1.003	.4957	.9851
#2	.0448	.9956	1.002	1.016	.9993	.4949	.9823
#3	.0440	.9935	.9976	1.014	.9978	.4954	.9813
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/17/2015 10:31:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1525.6	4342.6	29109.	4099.1
Stddev	1.9	6.0	56.	20.4
%RSD	.12765	.13737	.19401	.49780
#1	1523.5	4336.3	29162.	4080.4
#2	1527.3	4343.4	29049.	4120.8
#3	1526.1	4348.1	29116.	4095.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 10:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2565	41.41	2.032	2.054	2.056	41.41	2.041	2.036	2.066	2.047
Stddev	.0004	.14	.005	.001	.006	.14	.002	.002	.004	.004
%RSD	.1722	.3423	.2687	.0609	.3013	.3432	.0822	.1058	.2123	.2210
#1	.2570	41.55	2.026	2.055	2.062	41.55	2.041	2.034	2.070	2.050
#2	.2561	41.27	2.032	2.055	2.050	41.27	2.043	2.038	2.064	2.050
#3	.2564	41.41	2.037	2.053	2.058	41.42	2.040	2.035	2.062	2.042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.49	41.46	41.15	2.090	2.025	41.79	2.038	2.023	2.032	2.035
Stddev	.10	.15	.13	.005	.007	.13	.003	.012	.005	.005
%RSD	.2467	.3522	.3241	.2395	.3446	.3098	.1307	.6019	.2611	.2395
#1	41.59	41.62	41.23	2.096	2.018	41.93	2.035	2.036	2.025	2.030
#2	41.38	41.33	41.00	2.088	2.027	41.68	2.041	2.021	2.034	2.039
#3	41.49	41.44	41.23	2.087	2.031	41.75	2.037	2.012	2.035	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.843	2.042	2.084	2.069	2.030	2.031	2.045
Stddev	.004	.007	.004	.006	.007	.003	.002
%RSD	.2309	.3665	.2029	.3122	.3406	.1671	.1011
#1	1.838	2.034	2.089	2.075	2.038	2.034	2.044
#2	1.844	2.045	2.080	2.071	2.027	2.028	2.047
#3	1.847	2.048	2.083	2.062	2.025	2.029	2.043
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 10:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1612.9	4692.1	32103.	4157.1
Stddev	7.8	7.3	72.	13.9
%RSD	.48445	.15519	.22496	.33366
#1	1604.4	4698.2	32064.	4141.7
#2	1614.4	4684.0	32058.	4160.8
#3	1619.8	4694.0	32186.	4168.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 10:44:17 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0034	-.0004	-.0002	.0000	.0105	-.0001	-.0001
Stddev	.0004	.0095	.0003	.0001	.000	.0012	.0001	.0001
%RSD	984.6	282.9	65.52	34.37	229.0	11.61	48.01	105.8
#1	.0005	.0072	-.0007	-.0002	.0000	.0104	-.0001	.0000
#2	-.0002	-.0059	-.0001	-.0001	-.0001	.0118	-.0001	-.0001
#3	-.0001	-.0114	-.0005	-.0002	.0000	.0094	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	.0005	-.0106	.0044	.0000	F-.0022	.0131
Stddev	.0003	.0003	.0053	.0201	.0181	.0001	.0002	.0087
%RSD	130.4	101.7	1148.	189.4	407.6	174.8	6.916	67.00
#1	.0005	.0000	.0031	-.0129	-.0118	.0000	-.0021	.0078
#2	.0001	.0005	.0040	.0105	.0012	.0001	-.0022	.0232
#3	.0000	.0003	-.0057	-.0295	.0239	.0001	-.0024	.0082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	.0000	-.0011	.0020	.0000	.0000	-.0007
Stddev	.0001	.0004	.0009	.0009	.0003	.0003	.000	.0001
%RSD	46.11	138.4	1962.	80.03	16.39	2799.	142.6	10.13
#1	.0001	.0003	-.0008	-.0004	.0016	.0000	.0000	-.0006
#2	.0002	-.0001	.0010	-.0007	.0021	-.0002	-.0001	-.0007
#3	.0001	.0008	-.0001	-.0020	.0022	.0003	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 10:44:17 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0011	-.0001	.0004
Stddev	.0013	.0003	.0000
%RSD	120.1	411.7	9.508
#1	-.0010	-.0004	.0005
#2	.0002	.0000	.0004
#3	-.0025	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1688.3	4893.3	33763.	4207.4
Stddev	4.8	6.2	129.	23.9
%RSD	.28244	.12649	.38274	.56832
#1	1683.0	4887.4	33734.	4188.8
#2	1692.1	4892.8	33904.	4198.9
#3	1689.9	4899.7	33650.	4234.4

Zoom In Zoom Out

Sample Name: MP28555-MB1 Acquired: 2/17/2015 10:48:27 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0091	-.0003	.0000	-.0002	-.0009	-.0003	-.0001	.0004	-.0001
Stddev	.0003	.0017	.0005	.000	.0001	.0038	.0001	.0001	.0002	.0002
%RSD	32.15	18.88	173.1	406.2	31.49	421.3	19.26	111.8	51.92	155.3
#1	.0008	-.0088	-.0005	-.0002	-.0001	-.0022	-.0003	.0000	.0006	-.0001
#2	.0013	-.0075	-.0006	.0001	-.0002	.0033	-.0004	-.0001	.0002	-.0004
#3	.0007	-.0109	.0003	.0000	-.0002	-.0038	-.0003	-.0002	.0004	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0261	-.0527	.0166	-.0001	-.0032	-.0087	.0001	-.0008	-.0004	-.0004
Stddev	.0025	.0380	.0147	.0000	.0000	.0065	.0002	.0007	.0007	.0013
%RSD	9.513	72.21	88.53	32.33	.9732	74.17	310.5	84.90	189.7	311.5
#1	-.0234	-.0461	.0229	-.0002	-.0032	-.0038	-.0001	-.0001	-.0012	.0011
#2	-.0283	-.0936	.0269	-.0002	-.0031	-.0063	.0002	-.0010	.0000	-.0012
#3	-.0266	-.0184	-.0002	-.0001	-.0032	-.0160	.0001	-.0015	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0012	-.0002	-.0015	-.0011	-.0003	-.0003
Stddev	.0004	.0003	.0001	.0000	.0004	.0001	.0001
%RSD	85.76	23.35	55.18	2.167	39.75	16.91	19.55
#1	.0002	-.0014	-.0003	-.0015	-.0006	-.0003	-.0004
#2	.0009	-.0009	-.0002	-.0015	-.0011	-.0003	-.0004
#3	.0003	-.0013	-.0001	-.0015	-.0015	-.0004	-.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28555-MB1 Acquired: 2/17/2015 10:48:27 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1671.7	4880.2	33185.	4154.2
Stddev	1.7	14.5	76.	4.7
%RSD	.10185	.29638	.22778	.11332
#1	1673.2	4896.7	33099.	4151.8
#2	1669.8	4869.4	33222.	4159.6
#3	1672.0	4874.6	33236.	4151.3

Zoom In Zoom Out

Sample Name: MP28555-B1 Acquired: 2/17/2015 10:52:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481	28.19	1.925	2.017	.0510	26.34	.0478	.4860	.2040	.2511
Stddev	.0002	.03	.004	.002	.0003	.07	.0000	.0005	.0007	.0008
%RSD	.3243	.0971	.1940	.0759	.5452	.2518	.0801	.1062	.3378	.3186
#1	.0482	28.16	1.927	2.019	.0509	26.27	.0477	.4858	.2045	.2521
#2	.0481	28.22	1.921	2.016	.0513	26.40	.0478	.4857	.2042	.2506
#3	.0479	28.18	1.927	2.016	.0508	26.34	.0478	.4866	.2032	.2507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.20	26.01	25.83	.5004	.4928	26.51	.4927	.4847	.4779	1.889
Stddev	.08	.03	.03	.0011	.0005	.03	.0005	.0016	.0010	.003
%RSD	.2784	.1293	.1084	.2207	.0923	.0998	.1001	.3258	.2195	.1464
#1	27.13	25.97	25.83	.5017	.4923	26.53	.4928	.4853	.4789	1.886
#2	27.28	26.03	25.86	.5000	.4932	26.52	.4922	.4858	.4768	1.890
#3	27.17	26.02	25.80	.4997	.4928	26.48	.4932	.4829	.4780	1.892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0858	.5154	.5256	.5156	1.949	.4775	.4924
Stddev	.0004	.0013	.0004	.0006	.005	.0009	.0009
%RSD	.4741	.2459	.0700	.1155	.2487	.1921	.1780
#1	.0860	.5166	.5252	.5162	1.945	.4783	.4925
#2	.0853	.5141	.5260	.5154	1.954	.4776	.4915
#3	.0861	.5155	.5255	.5151	1.949	.4765	.4933
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28555-B1 Acquired: 2/17/2015 10:52:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1630.2	4770.7	32353.	4199.0
Stddev	3.0	5.9	117.	3.6
%RSD	.18535	.12441	.36061	.08682
#1	1627.3	4768.2	32252.	4200.1
#2	1630.1	4777.5	32325.	4195.0
#3	1633.4	4766.5	32480.	4202.0

Zoom In Zoom Out

Sample Name: FA21871-1 Acquired: 2/17/2015 10:56:34 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0260	-.0012	.1265	-.0001	28.85	-.0003	-.0004	.0004
Stddev	.0001	.0010	.0007	.0001	.0000	.08	.0000	.0001	.0004
%RSD	50.50	4.020	58.35	.0489	50.34	.2761	6.392	23.21	94.42
#1	.0001	.0272	-.0012	.1265	-.0001	28.86	-.0003	-.0005	.0001
#2	.0004	.0258	-.0018	.1265	-.0001	28.77	-.0003	-.0005	.0003
#3	.0003	.0251	-.0005	.1266	.0000	28.93	-.0003	-.0003	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	-.0002	4.402	11.08	.0023	-.0034	F105.2	-.0004	.0002
Stddev	.0000	.0071	.034	.08	.0000	.0003	.1	.0001	.0017
%RSD	4.926	3919.	.7668	.7508	1.519	8.081	.0773	29.15	876.8
#1	-.0006	.0079	4.364	11.01	.0023	-.0033	105.3	-.0005	-.0007
#2	-.0005	-.0037	4.426	11.05	.0022	-.0038	105.1	-.0005	.0021
#3	-.0005	-.0048	4.418	11.17	.0023	-.0033	105.2	-.0003	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0013	22.58	-.0010	.1729	.0001	.0000	-.0001	.0018
Stddev	.0004	.0014	.04	.0003	.0001	.0000	.0004	.0001	.0000
%RSD	113.5	110.2	.1900	26.21	.0766	28.63	3238.	75.74	1.357
#1	.0004	.0004	22.53	-.0008	.1727	.0001	-.0001	-.0002	.0018
#2	-.0001	.0029	22.60	-.0008	.1729	.0001	.0005	-.0001	.0019
#3	.0008	.0006	22.61	-.0012	.1730	.0001	-.0003	.0000	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.5	4815.1	32304.	4168.9
Stddev	1.9	4.1	59.	51.9
%RSD	.11635	.08589	.18408	1.2458
#1	1637.4	4812.8	32275.	4191.3
#2	1640.0	4819.8	32372.	4205.9
#3	1641.1	4812.5	32264.	4109.6

Zoom In Zoom Out

Sample Name: MP28555-D1 Acquired: 2/17/2015 11:00:43 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0227	-.0011	.1244	.0000	28.84	-.0003	-.0004	.0005
Stddev	.0002	.0087	.0005	.0003	.000	.12	.0000	.0001	.0001
%RSD	52.41	38.29	48.01	.2046	250.3	.4000	7.953	22.52	13.07
#1	.0003	.0129	-.0005	.1247	-.0001	28.85	-.0003	-.0005	.0005
#2	.0007	.0296	-.0012	.1243	-.0001	28.95	-.0002	-.0003	.0005
#3	.0003	.0254	-.0016	.1242	.0001	28.72	-.0003	-.0004	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	-.0118	4.379	11.01	.0021	-.0040	F104.1	-.0003	.0002
Stddev	.0003	.0035	.032	.09	.0000	.0002	.4	.0002	.0008
%RSD	103.3	29.42	.7325	.8370	2.259	4.060	.3588	60.48	405.9
#1	-.0006	-.0129	4.346	11.04	.0021	-.0038	104.3	-.0006	-.0005
#2	-.0002	-.0147	4.410	11.09	.0020	-.0041	104.4	-.0002	.0001
#3	.0000	-.0080	4.380	10.91	.0021	-.0041	103.7	-.0002	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0011	22.36	-.0008	.1722	-.0003	-.0030	.0000	.0020
Stddev	.0009	.0007	.02	.0003	.0005	.0001	.0009	.0001	.0001
%RSD	330.0	60.22	.1082	44.43	.3094	42.86	31.50	251.0	2.882
#1	-.0008	.0004	22.35	-.0004	.1721	-.0002	-.0040	.0000	.0021
#2	.0008	.0012	22.34	-.0008	.1728	-.0004	-.0030	.0001	.0020
#3	-.0008	.0018	22.39	-.0011	.1718	-.0004	-.0021	.0000	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1643.6	4830.0	32022.	4184.7
Stddev	.7	4.4	141.	38.7
%RSD	.04366	.09075	.44138	.92592
#1	1644.4	4834.6	32173.	4159.0
#2	1643.1	4825.8	32001.	4165.9
#3	1643.3	4829.5	31893.	4229.3

Zoom In Zoom Out

Sample Name: MP28555-SD1 Acquired: 2/17/2015 11:04:52 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	-.0164	-.0044	.1218	-.0009	28.94	-.0014	-.0012	-.0002	-.0018
Stddev	.0009	.0407	.0062	.0025	.0003	.12	.0001	.0005	.0017	.0012
%RSD	55.70	247.2	140.5	2.049	39.69	.4206	9.132	43.02	950.3	70.25
#1	.0025	-.0627	.0019	.1227	-.0013	29.07	-.0015	-.0006	.0006	-.0017
#2	.0008	-.0005	-.0104	.1189	-.0008	28.89	-.0013	-.0017	-.0021	-.0006
#3	.0013	.0138	-.0047	.1237	-.0006	28.84	-.0013	-.0013	.0010	-.0031

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.1603	4.083	10.74	.0014	-.0185	104.5	-.0010	-.0050	.0007	-.0025
Stddev	.0095	.118	.25	.0001	.0007	.5	.0009	.0040	.0075	.0036
%RSD	5.938	2.889	2.298	8.954	3.928	.4415	96.71	79.81	1141.	143.2
#1	-.1712	4.120	10.98	.0016	-.0180	105.0	-.0018	-.0093	.0093	.0009
#2	-.1566	3.951	10.76	.0014	-.0194	104.5	-.0013	-.0041	-.0035	-.0063
#3	-.1533	4.178	10.49	.0013	-.0182	104.1	.0001	-.0015	-.0038	-.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.36	-.0061	.1685	-.0064	-.0043	-.0018	.0019
Stddev	.03	.0013	.0013	.0008	.0052	.0012	.0003
%RSD	.1315	20.72	.7483	13.11	122.5	65.81	15.02
#1	21.36	-.0066	.1699	-.0074	.0012	-.0030	.0017
#2	21.33	-.0070	.1675	-.0059	-.0092	-.0017	.0022
#3	21.39	-.0047	.1681	-.0059	-.0048	-.0006	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1677.0	4922.9	32842.	4211.4
Stddev	2.9	12.3	60.	32.5
%RSD	.17033	.25068	.18314	.77262
#1	1678.6	4931.9	32819.	4195.6
#2	1678.6	4928.0	32797.	4189.8
#3	1673.7	4908.8	32911.	4248.8

Zoom In Zoom Out

Sample Name: MP28555-S1 Acquired: 2/17/2015 11:09:02 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0489	28.32	1.923	2.132	.0513	54.77	.0475	.4841	.2059
Stddev	.0001	.04	.002	.006	.0003	.13	.0001	.0006	.0009
%RSD	.2828	.1560	.1201	.2632	.5135	.2388	.3097	.1158	.4441
#1	.0490	28.27	1.926	2.127	.0513	54.64	.0477	.4843	.2067
#2	.0487	28.36	1.922	2.138	.0516	54.91	.0474	.4834	.2060
#3	.0489	28.34	1.923	2.133	.0511	54.77	.0475	.4844	.2049

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2506	27.31	30.27	36.64	.5019	.4916	F128.9	.4882	.4856
Stddev	.0003	.07	.02	.10	.0011	.0007	.3	.0005	.0020
%RSD	.1119	.2740	.0802	.2686	.2104	.1434	.2666	.0927	.4100
#1	.2509	27.22	30.25	36.61	.5029	.4918	128.8	.4882	.4863
#2	.2503	27.35	30.30	36.55	.5021	.4909	129.2	.4878	.4834
#3	.2506	27.34	30.27	36.74	.5008	.4922	128.5	.4887	.4872

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4792	1.892	22.72	.5097	.6938	.5196	1.970	.4773	.4896
Stddev	.0006	.007	.03	.0011	.0025	.0003	.004	.0011	.0008
%RSD	.1168	.3675	.1499	.2139	.3536	.0576	.2037	.2378	.1552
#1	.4787	1.895	22.74	.5108	.6915	.5199	1.968	.4786	.4897
#2	.4798	1.884	22.68	.5086	.6964	.5193	1.968	.4764	.4887
#3	.4791	1.897	22.73	.5098	.6935	.5196	1.975	.4769	.4902

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.2	4761.2	31690.	4141.7
Stddev	3.6	9.4	171.	10.3
%RSD	.22035	.19787	.54110	.24886
#1	1612.4	4754.6	31495.	4146.6
#2	1617.0	4772.0	31756.	4129.9
#3	1610.1	4757.0	31819.	4148.7

Zoom In Zoom Out

Sample Name: MP28555-S2 Acquired: 2/17/2015 11:12:58 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0492	28.59	1.950	2.163	.0519	55.41	.0483	.4916	.2097
Stddev	.0005	.14	.006	.008	.0003	.27	.0001	.0010	.0009
%RSD	.9775	.4758	.3282	.3808	.6254	.4907	.2859	.2006	.4140
#1	.0489	28.49	1.955	2.154	.0517	55.27	.0482	.4917	.2094
#2	.0497	28.55	1.943	2.165	.0517	55.25	.0483	.4906	.2090
#3	.0489	28.75	1.951	2.170	.0522	55.73	.0485	.4926	.2106

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2550	27.57	30.58	37.01	.5100	.4983	F129.7	.4954	.4924
Stddev	.0007	.11	.15	.27	.0016	.0011	.4	.0012	.0019
%RSD	.2715	.3815	.4849	.7235	.3214	.2201	.3236	.2363	.3818
#1	.2547	27.49	30.43	36.88	.5092	.4980	129.4	.4956	.4937
#2	.2544	27.53	30.56	36.83	.5089	.4974	129.5	.4941	.4902
#3	.2557	27.69	30.73	37.32	.5119	.4995	130.2	.4965	.4932

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4876	1.914	23.04	.5166	.7025	.5268	2.002	.4872	.4965
Stddev	.0007	.006	.05	.0003	.0027	.0011	.004	.0013	.0010
%RSD	.1392	.3086	.1979	.0542	.3786	.2118	.1777	.2571	.1981
#1	.4871	1.920	23.03	.5168	.7001	.5268	1.998	.4865	.4970
#2	.4873	1.908	23.00	.5168	.7021	.5257	2.005	.4865	.4954
#3	.4884	1.915	23.09	.5163	.7054	.5279	2.003	.4887	.4972

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.3	4751.3	31495.	4135.7
Stddev	3.5	11.2	114.	44.4
%RSD	.21613	.23670	.36139	1.0739
#1	1607.7	4739.8	31496.	4145.5
#2	1609.0	4762.2	31608.	4174.3
#3	1614.3	4751.9	31380.	4087.2

Zoom In Zoom Out

Sample Name: FA21871-2 Acquired: 2/17/2015 11:16:54 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0194	-.0015	.0172	-.0001	10.93	-.0003	-.0007	.0000
Stddev	.0002	.0019	.0001	.0001	.0001	.02	.0000	.0001	.000
%RSD	62.61	9.896	6.275	.7827	49.36	.1690	10.26	8.022	638.0
#1	.0001	.0202	-.0016	.0173	-.0002	10.93	-.0003	-.0007	-.0002
#2	.0004	.0209	-.0014	.0170	-.0001	10.92	-.0003	-.0006	-.0001
#3	.0003	.0173	-.0016	.0172	-.0001	10.95	-.0003	-.0007	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0006	.0009	3.375	4.019	.0002	-.0034	F84.36	-.0004	-.0006
Stddev	.0001	.0110	.045	.046	.0000	.0002	.21	.0002	.0004
%RSD	18.71	1240.	1.341	1.142	7.230	5.768	.2488	44.83	73.18
#1	-.0007	.0119	3.353	3.985	.0002	-.0033	84.54	-.0004	-.0002
#2	-.0005	.0009	3.346	4.072	.0002	-.0032	84.13	-.0002	-.0010
#3	-.0006	-.0102	3.427	4.001	.0002	-.0036	84.42	-.0005	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0027	21.37	-.0008	.0602	-.0002	-.0019	.0000	.0021
Stddev	.0007	.0019	.06	.0004	.0001	.0000	.0007	.000	.0000
%RSD	332.8	70.10	.2698	46.10	.1156	15.76	35.35	419.4	2.374
#1	-.0006	.0036	21.31	-.0010	.0602	-.0002	-.0024	-.0002	.0021
#2	.0007	.0040	21.37	-.0004	.0601	-.0003	-.0021	-.0001	.0020
#3	.0006	.0005	21.43	-.0010	.0602	-.0002	-.0011	.0001	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1646.2	4857.4	32117.	4166.5
Stddev	2.7	4.1	116.	31.0
%RSD	.16183	.08538	.36170	.74517
#1	1647.3	4861.9	32228.	4140.3
#2	1648.1	4856.4	32126.	4158.4
#3	1643.2	4853.8	31996.	4200.8

Zoom In Zoom Out

Sample Name: FA22025-1 Acquired: 2/17/2015 11:21:03 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.0130	-.0015	.1172	-.0001	28.54	-.0002	-.0004	.0007
Stddev	.0004	.0118	.0006	.0005	.0001	.10	.0001	.0001	.0002
%RSD	59.18	91.05	42.26	.4347	59.66	.3400	35.10	27.88	34.38
#1	.0012	.0092	-.0008	.1173	-.0001	28.48	-.0003	-.0002	.0007
#2	.0003	.0262	-.0016	.1177	-.0002	28.65	-.0002	-.0004	.0004
#3	.0007	.0035	-.0020	.1167	-.0002	28.48	-.0002	-.0004	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	-.0183	4.644	11.79	.0039	-.0039	F118.9	-.0003	-.0005
Stddev	.0001	.0021	.001	.06	.0000	.0000	.4	.0002	.0003
%RSD	31.53	11.36	.0227	.5087	.8840	1.216	.3494	84.87	71.56
#1	-.0001	-.0183	4.644	11.73	.0039	-.0040	119.0	-.0001	-.0001
#2	-.0003	-.0204	4.645	11.84	.0039	-.0039	119.3	-.0005	-.0005
#3	-.0002	-.0162	4.644	11.81	.0040	-.0039	118.4	-.0001	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0004	.0010	22.27	-.0009	.1706	-.0004	-.0016	.0000	.0010
Stddev	.0007	.0013	.02	.0005	.0007	.0001	.0005	.000	.0000
%RSD	187.5	137.8	.0714	51.22	.4150	21.16	32.65	6399.	3.520
#1	-.0002	.0025	22.29	-.0005	.1704	-.0003	-.0016	.0000	.0010
#2	-.0011	.0003	22.25	-.0014	.1713	-.0004	-.0021	.0000	.0010
#3	.0002	.0001	22.27	-.0008	.1699	-.0005	-.0011	-.0001	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.0	4792.4	32239.	4180.1
Stddev	2.1	10.4	64.	8.2
%RSD	.12838	.21719	.19793	.19556
#1	1636.7	4780.9	32299.	4180.4
#2	1639.3	4795.3	32172.	4188.2
#3	1640.9	4801.1	32247.	4171.8

Zoom In Zoom Out

Sample Name: FA22025-2 Acquired: 2/17/2015 11:25:11 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0196	-.0019	.0217	-.0001	14.81	-.0003	-.0006	.0002	-.0002
Stddev	.0005	.0048	.0005	.0001	.0001	.08	.0001	.0001	.0003	.0004
%RSD	94.52	24.25	23.95	.2468	116.6	.5544	20.08	12.78	169.9	169.2
#1	.0005	.0251	-.0023	.0217	-.0001	14.84	-.0003	-.0006	.0005	-.0004
#2	.0000	.0165	-.0014	.0217	-.0002	14.72	-.0002	-.0007	.0000	.0002
#3	.0010	.0173	-.0021	.0216	.0000	14.88	-.0003	-.0006	.0000	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0221	3.641	5.661	.0004	-.0039	62.08	-.0004	-.0004	.0009	.0007
Stddev	.0030	.022	.017	.0000	.0000	.21	.0002	.0006	.0007	.0009
%RSD	13.49	.6009	.2919	1.892	.4805	.3325	42.90	142.3	79.64	131.1
#1	.0216	3.620	5.664	.0004	-.0039	62.16	-.0002	-.0010	.0005	.0015
#2	.0194	3.663	5.644	.0004	-.0039	61.85	-.0006	.0001	.0018	.0009
#3	.0253	3.641	5.676	.0005	-.0039	62.24	-.0004	-.0003	.0005	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.47	-.0010	.0815	-.0008	-.0029	-.0002	.0016
Stddev	.01	.0003	.0003	.0001	.0017	.0005	.0000
%RSD	.0677	31.90	.3436	17.04	58.93	192.3	1.186
#1	21.47	-.0007	.0818	-.0009	-.0011	-.0002	.0016
#2	21.49	-.0014	.0813	-.0009	-.0033	.0002	.0015
#3	21.46	-.0011	.0814	-.0007	-.0044	-.0007	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1651.5	4813.7	32782.	4231.4
Stddev	5.2	3.3	172.	57.6
%RSD	.31454	.06947	.52358	1.3612
#1	1655.8	4816.3	32821.	4226.0
#2	1653.0	4809.9	32931.	4291.5
#3	1645.7	4814.9	32595.	4176.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 11:29:20 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2608	41.33	2.070	2.061	2.068	41.50	2.077	2.072	2.094	2.086
Stddev	.0005	.04	.001	.005	.001	.03	.001	.001	.008	.004
%RSD	.1740	.0908	.0365	.2328	.0445	.0709	.0620	.0582	.3926	.2141
#1	.2613	41.36	2.071	2.057	2.068	41.48	2.076	2.071	2.094	2.090
#2	.2606	41.34	2.069	2.060	2.068	41.53	2.076	2.073	2.103	2.086
#3	.2605	41.29	2.070	2.066	2.069	41.49	2.078	2.072	2.087	2.081

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.62	41.93	41.78	2.112	2.056	41.40	2.075	2.042	2.062	2.073
Stddev	.05	.06	.12	.005	.008	.02	.001	.009	.001	.003
%RSD	.1240	.1409	.2899	.2372	.3777	.0406	.0352	.4386	.0677	.1590
#1	41.58	41.99	41.91	2.112	2.047	41.42	2.075	2.044	2.061	2.072
#2	41.60	41.92	41.76	2.118	2.057	41.41	2.074	2.032	2.063	2.077
#3	41.68	41.88	41.67	2.108	2.063	41.39	2.076	2.050	2.064	2.070

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.888	2.094	2.088	2.088	2.045	2.086	2.085
Stddev	.001	.002	.001	.002	.006	.008	.001
%RSD	.0607	.0858	.0456	.1130	.3076	.3882	.0411
#1	1.887	2.094	2.087	2.089	2.045	2.088	2.085
#2	1.888	2.093	2.088	2.090	2.039	2.094	2.084
#3	1.889	2.096	2.089	2.086	2.052	2.078	2.085

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 11:29:20 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.6	4664.0	31915.	4177.9
Stddev	4.2	2.0	122.	12.9
%RSD	.25836	.04312	.38308	.30830
#1	1609.8	4666.1	31994.	4169.7
#2	1615.1	4663.9	31774.	4171.3
#3	1606.8	4662.1	31977.	4192.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 11:33:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0005	-.0002	-.0001	.0000	.0065	-.0001	.0001	.0002	.0003
Stddev	.0003	.0057	.0005	.0002	.000	.0013	.0001	.0001	.0003	.0004
%RSD	69.44	1040.	317.8	410.2	1467.	19.83	111.1	118.7	167.0	146.2
#1	.0004	.0045	-.0006	.0001	.0001	.0066	-.0001	.0001	.0000	-.0001
#2	.0001	-.0059	-.0002	.0001	-.0001	.0051	.0000	.0001	.0000	.0007
#3	.0006	.0030	.0004	-.0003	.0000	.0077	.0000	.0000	.0005	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0271	.0342	.0306	.0001	.0009	.0591	.0003	.0002	.0008	-.0003
Stddev	.0191	.0198	.0364	.0000	.0010	.0081	.0001	.0007	.0013	.0015
%RSD	70.38	57.69	118.9	88.91	120.0	13.75	19.43	325.0	159.3	537.3
#1	.0455	.0521	.0711	.0001	.0020	.0685	.0003	-.0002	.0018	-.0020
#2	.0282	.0376	.0204	.0000	.0007	.0542	.0003	-.0001	.0013	.0002
#3	.0075	.0130	.0004	.0001	-.0001	.0546	.0002	.0010	-.0007	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040	-.0002	.0000	.0016	-.0019	.0002	.0005
Stddev	.0007	.0003	.0000	.0002	.0005	.0004	.0001
%RSD	17.68	144.0	161.8	10.08	26.57	185.3	21.74
#1	.0047	.0001	.0000	.0016	-.0013	.0002	.0004
#2	.0040	-.0001	.0000	.0014	-.0022	.0006	.0005
#3	.0033	-.0006	.0001	.0017	-.0022	-.0002	.0006
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 11:33:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1675.4	4854.1	33434.	4231.8
Stddev	3.7	9.1	96.	38.4
%RSD	.22118	.18785	.28664	.90818
#1	1677.0	4849.8	33472.	4268.7
#2	1671.1	4847.9	33505.	4192.0
#3	1677.9	4864.5	33325.	4234.7

Zoom In Zoom Out

Sample Name: MP28556-S1 Acquired: 2/17/2015 11:37:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0500	27.98	1.979	2.121	.0514	53.11	.0488	.4967	.2074	.2559
Stddev	.0008	.03	.005	.007	.0003	.16	.0001	.0006	.0007	.0009
%RSD	1.564	.1053	.2577	.3432	.5023	.2926	.1911	.1127	.3354	.3446
#1	.0494	28.01	1.983	2.114	.0511	53.11	.0487	.4966	.2066	.2548
#2	.0496	27.96	1.974	2.128	.0515	52.95	.0488	.4961	.2080	.2564
#3	.0509	27.98	1.982	2.120	.0516	53.26	.0489	.4972	.2076	.2563

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	30.31	31.41	27.82	.6134	.4948	88.61	.5064	.4883	.4909	1.930
Stddev	.08	.03	.12	.0015	.0004	.16	.0008	.0002	.0028	.009
%RSD	.2722	.1046	.4245	.2460	.0892	.1793	.1583	.0375	.5736	.4703
#1	30.24	31.41	27.88	.6116	.4948	88.56	.5071	.4881	.4898	1.940
#2	30.30	31.38	27.69	.6142	.4943	88.49	.5056	.4884	.4941	1.926
#3	30.40	31.45	27.90	.6142	.4952	88.79	.5066	.4885	.4888	1.924

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5612	.5226	.9037	.5171	1.989	.4906	.5398
Stddev	.0018	.0016	.0024	.0009	.001	.0011	.0011
%RSD	.3188	.2983	.2674	.1668	.0379	.2166	.2107
#1	.5615	.5213	.9024	.5164	1.990	.4898	.5388
#2	.5593	.5222	.9023	.5180	1.989	.4918	.5395
#3	.5629	.5244	.9065	.5168	1.989	.4901	.5410

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1654.6	4810.0	32610.	4224.3
Stddev	2.2	3.8	86.	21.7
%RSD	.13572	.07815	.26302	.51404
#1	1652.4	4808.5	32701.	4204.9
#2	1656.9	4814.3	32599.	4247.8
#3	1654.5	4807.2	32531.	4220.2

Zoom In Zoom Out

Sample Name: MP28556-S2 Acquired: 2/17/2015 11:41:24 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0494	28.59	1.919	2.135	.0523	53.59	.0500	.4957	.2069	.2535
Stddev	.0003	.09	.021	.006	.0001	.17	.0016	.0005	.0028	.0026
%RSD	.5616	.2973	1.070	.2603	.1489	.3149	3.123	.1002	1.372	1.037
#1	.0491	28.65	1.940	2.133	.0523	53.61	.0486	.4953	.2101	.2563
#2	.0493	28.50	1.916	2.131	.0523	53.41	.0498	.4957	.2056	.2532
#3	.0497	28.63	1.899	2.142	.0524	53.74	.0517	.4963	.2049	.2510

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	30.76	31.73	28.09	.6105	.4995	88.87	.5016	.5136	.4599	1.907
Stddev	.14	.03	.07	.0037	.0082	.28	.0017	.0097	.0237	.003
%RSD	.4486	.0917	.2558	.6001	1.640	.3133	.3317	1.888	5.150	.1737
#1	30.81	31.74	28.18	.6147	.4932	88.85	.5013	.5049	.4844	1.904
#2	30.60	31.69	28.04	.6089	.4966	88.61	.5001	.5118	.4583	1.906
#3	30.86	31.75	28.06	.6079	.5088	89.16	.5034	.5240	.4371	1.911

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5599	.5391	.9087	.5169	1.941	.4798	.5333
Stddev	.0132	.0256	.0032	.0032	.066	.0069	.0029
%RSD	2.359	4.754	.3540	.6264	3.401	1.430	.5467
#1	.5468	.5154	.9080	.5204	1.993	.4870	.5360
#2	.5596	.5355	.9058	.5162	1.963	.4791	.5338
#3	.5732	.5663	.9122	.5141	1.867	.4734	.5302

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1536.9	4592.0	32272.	4188.0
Stddev	15.6	29.2	171.	18.6
%RSD	1.0136	.63622	.52942	.44441
#1	1554.7	4625.5	32297.	4185.8
#2	1525.6	4578.5	32429.	4170.7
#3	1530.5	4572.0	32090.	4207.7

Zoom In Zoom Out

Sample Name: FA22125-4 Acquired: 2/17/2015 11:45:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	44.12	.0072	.2855	.0005	4417.	-.0038	.0049	.1253	.0128
Stddev	.0033	.04	.0047	.0024	.0002	47.	.0001	.0003	.0049	.0057
%RSD	401.1	.0794	66.00	.8507	38.26	1.057	3.746	6.133	3.908	44.64
#1	-.0024	44.15	.0099	.2846	.0003	4450.	-.0037	.0049	.1238	.0160
#2	.0007	44.08	.0017	.2836	.0007	4438.	-.0037	.0045	.1308	.0162
#3	.0042	44.13	.0099	.2882	.0006	4364.	-.0039	.0051	.1213	.0062

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	17.29	2.125	35.22	.5117	-.0458	4.756	.0337	.0463	-.0035	-.0195
Stddev	.09	.287	.24	.0015	.0019	.066	.0014	.0053	.0033	.0162
%RSD	.4958	13.51	.6860	.2968	4.043	1.383	4.125	11.44	96.22	82.99
#1	17.22	1.876	34.96	.5109	-.0452	4.695	.0327	.0507	-.0045	-.0173
#2	17.39	2.060	35.26	.5134	-.0444	4.826	.0352	.0404	-.0061	-.0045
#3	17.28	2.439	35.44	.5107	-.0479	4.747	.0331	.0476	.0003	-.0366

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.977	.0033	9.135	.3346	.0133	.1492	.0462
Stddev	.009	.0026	.005	.0014	.0052	.0009	.0002
%RSD	.4294	79.39	.0534	.4042	39.45	.6086	.4547
#1	1.985	.0027	9.132	.3334	.0191	.1483	.0460
#2	1.977	.0061	9.141	.3361	.0120	.1501	.0462
#3	1.968	.0010	9.133	.3343	.0088	.1493	.0464

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.3	4767.8	31492.	4121.3
Stddev	2.8	.7	32.	23.7
%RSD	.17605	.01452	.10054	.57397
#1	1618.6	4768.3	31469.	4100.0
#2	1617.1	4767.0	31528.	4117.3
#3	1613.1	4768.0	31480.	4146.7

Zoom In Zoom Out

Sample Name: FA22032-4 Acquired: 2/17/2015 11:49:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	184.5	.0394	1.541	.0082	2303.	-.0016	.0557	.1812	.1711
Stddev	.0012	.1	.0020	.003	.0006	22.	.0001	.0003	.0035	.0007
%RSD	85.55	.0768	5.032	.2034	7.160	.9417	4.454	.5751	1.912	.4067
#1	.0020	184.5	.0371	1.538	.0082	2303.	-.0015	.0554	.1824	.1719
#2	.0000	184.3	.0403	1.542	.0076	2324.	-.0016	.0560	.1773	.1706
#3	.0021	184.6	.0407	1.544	.0088	2281.	-.0015	.0559	.1838	.1708

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	169.1	53.71	137.6	4.782	-.0119	3.888	.1320	.1295	-.0044	-.0040
Stddev	.4	.13	.7	.010	.0006	.023	.0007	.0031	.0020	.0100
%RSD	.2341	.2365	.5007	.2096	5.395	.5987	.5140	2.426	46.45	246.7
#1	168.7	53.64	137.1	4.782	-.0123	3.914	.1325	.1270	-.0022	-.0008
#2	169.2	53.86	137.3	4.772	-.0112	3.868	.1312	.1330	-.0063	.0039
#3	169.5	53.64	138.3	4.793	-.0122	3.882	.1323	.1284	-.0046	-.0152

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.846	.0190	10.24	4.073	-.0073	.2856	.5388
Stddev	.023	.0020	.01	.005	.0026	.0008	.0028
%RSD	.4679	10.68	.1383	.1265	35.25	.2861	.5186
#1	4.844	.0167	10.24	4.072	-.0049	.2853	.5391
#2	4.824	.0207	10.22	4.069	-.0100	.2850	.5358
#3	4.869	.0196	10.25	4.079	-.0070	.2865	.5414

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1594.3	4814.1	31735.	4240.8
Stddev	5.5	19.2	67.	4.6
%RSD	.34471	.39827	.21103	.10823
#1	1590.3	4812.2	31690.	4237.6
#2	1600.5	4834.1	31812.	4238.8
#3	1592.0	4795.9	31703.	4246.1

Zoom In Zoom Out

Sample Name: FA22032-5 Acquired: 2/17/2015 11:53:47 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0041	177.1	.0389	1.605	.0082	F2522.	-.0007	.0553	.1727
Stddev	.0016	.6	.0018	.005	.0004	33.	.0001	.0004	.0007
%RSD	40.18	.3210	4.671	.2850	4.362	1.317	15.31	.7209	.3946
#1	.0054	176.5	.0373	1.600	.0078	2492.	-.0008	.0556	.1728
#2	.0023	177.6	.0409	1.609	.0085	2518.	-.0006	.0553	.1733
#3	.0045	177.3	.0386	1.605	.0082	2558.	-.0007	.0549	.1720

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2262	163.6	52.25	128.4	4.567	-.0129	3.976	.1300	.1327
Stddev	.0010	.6	.16	.3	.012	.0004	.058	.0006	.0041
%RSD	.4517	.3815	.3017	.2718	.2572	3.153	1.454	.4660	3.113
#1	.2257	163.0	52.10	128.1	4.562	-.0126	3.988	.1300	.1311
#2	.2274	163.6	52.25	128.8	4.580	-.0129	4.027	.1293	.1374
#3	.2256	164.2	52.41	128.4	4.558	-.0134	3.913	.1306	.1297

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0027	-.0054	4.051	.0172	11.52	3.929	-.0016	.2825	.5410
Stddev	.0014	.0024	.007	.0015	.04	.013	.0026	.0030	.0016
%RSD	51.55	44.85	.1809	8.761	.3632	.3283	168.1	1.077	.2966
#1	-.0034	-.0028	4.044	.0189	11.48	3.917	-.0045	.2804	.5424
#2	-.0011	-.0076	4.051	.0162	11.56	3.943	-.0009	.2859	.5393
#3	-.0035	-.0059	4.058	.0165	11.53	3.926	.0006	.2811	.5413

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1588.4	4796.6	32131.	4296.8
Stddev	3.2	9.2	197.	15.6
%RSD	.20032	.19192	.61400	.36376
#1	1589.9	4795.3	32240.	4290.6
#2	1590.6	4806.3	31903.	4314.6
#3	1584.8	4788.1	32250.	4285.3

Zoom In Zoom Out

Sample Name: FA22032-6 Acquired: 2/17/2015 12:05:03 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	154.4	.0256	1.282	.0072	3139.	-.0039	.0469	.1542	.1567
Stddev	.0014	.6	.0057	.005	.0008	60.	.0002	.0023	.0008	.0039
%RSD	175.1	.3603	22.36	.3665	11.31	1.907	4.720	4.844	.5340	2.467
#1	.0021	154.2	.0318	1.277	.0063	3095.	-.0038	.0447	.1547	.1526
#2	-.0006	154.0	.0246	1.286	.0077	3114.	-.0037	.0492	.1533	.1573
#3	.0008	155.0	.0205	1.282	.0077	3207.	-.0041	.0469	.1547	.1603

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	145.3	42.62	119.8	3.838	-.0393	3.530	.1104	.0965	-.0134	.0005
Stddev	.3	.07	.6	.002	.0014	.051	.0026	.0076	.0082	.0132
%RSD	.2169	.1744	.4778	.0540	3.530	1.436	2.329	7.901	61.49	2606.
#1	145.1	42.55	119.2	3.840	-.0394	3.545	.1133	.0990	-.0195	-.0141
#2	145.7	42.61	119.9	3.836	-.0378	3.572	.1083	.0879	-.0040	.0115
#3	145.2	42.70	120.3	3.839	-.0406	3.474	.1097	.1025	-.0167	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.749	.0104	13.97	3.394	.0035	.2378	.4529
Stddev	.024	.0015	.05	.010	.0108	.0017	.0011
%RSD	.2500	14.67	.3279	.2980	308.3	.7343	.2457
#1	9.723	.0086	13.92	3.405	-.0044	.2385	.4518
#2	9.771	.0113	13.99	3.385	.0158	.2358	.4531
#3	9.754	.0112	14.01	3.392	-.0009	.2391	.4540

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.8	4784.4	31614.	4125.2
Stddev	3.4	1.0	78.	30.6
%RSD	.21073	.02021	.24768	.74243
#1	1613.6	4784.6	31533.	4156.4
#2	1620.4	4785.3	31619.	4124.0
#3	1616.4	4783.4	31690.	4095.1

Zoom In Zoom Out

Sample Name: FA22032-7 Acquired: 2/17/2015 12:09:17 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0048	96.95	.0151	.8583	.0041	3311.	-.0041	.0327	.1151	.2655
Stddev	.0013	.16	.0141	.0018	.0016	57.	.0008	.0014	.0039	.0019
%RSD	27.06	.1694	93.81	.2113	38.89	1.719	18.68	4.401	3.419	.7027
#1	.0059	96.77	.0288	.8565	.0045	3247.	-.0036	.0311	.1108	.2637
#2	.0034	97.00	.0006	.8601	.0023	3355.	-.0038	.0332	.1185	.2674
#3	.0051	97.09	.0158	.8583	.0054	3331.	-.0050	.0338	.1161	.2654

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	122.4	23.69	79.35	2.509	-.0386	3.069	.0865	.0800	.0000	-.0148
Stddev	.6	.10	.34	.002	.0006	.037	.0033	.0025	.0113	.0022
%RSD	.4735	.4228	.4274	.0937	1.650	1.215	3.867	3.103	308200.	14.89
#1	121.7	23.69	78.99	2.507	-.0385	3.066	.0903	.0787	-.0113	-.0165
#2	122.6	23.78	79.67	2.512	-.0393	3.034	.0850	.0785	.0114	-.0157
#3	122.8	23.58	79.39	2.508	-.0380	3.108	.0842	.0829	-.0002	-.0123

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.741	.0076	14.54	1.873	-.0035	.1486	.3111
Stddev	.005	.0045	.03	.005	.0096	.0006	.0001
%RSD	.1710	59.13	.1721	.2438	275.4	.3735	.0214
#1	2.743	.0115	14.52	1.868	-.0023	.1488	.3111
#2	2.736	.0027	14.54	1.875	-.0135	.1480	.3111
#3	2.745	.0085	14.57	1.877	.0055	.1490	.3110

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1620.8	4791.8	31324.	4065.2
Stddev	4.2	6.1	30.	24.0
%RSD	.25717	.12825	.09672	.58920
#1	1616.6	4784.8	31350.	4087.5
#2	1624.9	4794.3	31291.	4039.9
#3	1621.0	4796.3	31332.	4068.2

Zoom In Zoom Out

Sample Name: MP28559-MB1 Acquired: 2/17/2015 12:13:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0010	-.0010	-.0001	-.0002	.0394	-.0003	-.0003	-.0003	-.0003
Stddev	.0003	.0074	.0002	.0003	.0001	.0095	.0001	.0002	.0001	.0005
%RSD	284.9	703.6	22.96	286.8	65.48	24.04	16.36	60.52	29.00	153.7
#1	-.0004	.0029	-.0012	-.0004	.0000	.0474	-.0003	-.0001	-.0002	.0001
#2	-.0002	.0073	-.0012	.0002	-.0002	.0419	-.0003	-.0003	-.0002	-.0002
#3	.0003	-.0071	-.0008	-.0001	-.0003	.0289	-.0004	-.0005	-.0004	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0082	-.0490	.0312	-.0001	-.0036	.0017	-.0002	-.0008	.0005	.0005
Stddev	.0078	.0074	.0189	.0000	.0001	.0080	.0002	.0003	.0005	.0011
%RSD	94.63	15.12	60.52	24.63	3.327	484.2	122.1	43.52	97.32	204.0
#1	.0007	-.0572	.0171	-.0001	-.0037	.0069	.0001	-.0011	.0011	.0016
#2	-.0122	-.0468	.0527	-.0001	-.0037	-.0076	-.0003	-.0007	.0002	.0005
#3	-.0132	-.0429	.0238	-.0002	-.0035	.0057	-.0002	-.0005	.0003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0208	-.0013	.0000	-.0012	-.0037	.0000	.0000
Stddev	.0002	.0001	.0000	.0001	.0007	.000	.000
%RSD	.8930	7.045	979.1	7.749	18.47	324.9	34.66
#1	.0208	-.0012	.0000	-.0011	-.0041	-.0001	.0000
#2	.0206	-.0014	.0000	-.0012	-.0029	.0000	.0000
#3	.0209	-.0012	.0000	-.0013	-.0042	.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28559-MB1 Acquired: 2/17/2015 12:13:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1662.4	4898.3	32857.	4112.7
Stddev	4.0	3.0	118.	9.5
%RSD	.23785	.06217	.36021	.23144
#1	1658.5	4899.4	32781.	4115.2
#2	1666.4	4900.7	32993.	4102.2
#3	1662.4	4894.9	32796.	4120.8

Zoom In Zoom Out

Sample Name: MP28559-B1 Acquired: 2/17/2015 12:17:40 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0505	29.26	1.961	2.060	.0527	27.18	.0494	.5018	.2185	.2626
Stddev	.0004	.04	.004	.007	.0001	.04	.0001	.0003	.0006	.0002
%RSD	.8093	.1431	.1919	.3436	.2251	.1355	.1691	.0526	.2563	.0680
#1	.0501	29.31	1.965	2.057	.0528	27.23	.0494	.5017	.2184	.2624
#2	.0505	29.23	1.957	2.055	.0526	27.16	.0493	.5017	.2179	.2626
#3	.0509	29.25	1.961	2.068	.0527	27.17	.0495	.5021	.2191	.2628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.63	27.11	26.31	.5209	.4987	27.52	.5020	.4981	.4898	1.937
Stddev	.07	.03	.07	.0010	.0001	.05	.0006	.0010	.0018	.004
%RSD	.2376	.1118	.2577	.1853	.0248	.1908	.1160	.1948	.3602	.1966
#1	27.59	27.13	26.38	.5198	.4987	27.58	.5026	.4983	.4894	1.941
#2	27.60	27.13	26.24	.5213	.4986	27.48	.5016	.4989	.4882	1.936
#3	27.70	27.08	26.30	.5216	.4988	27.51	.5016	.4970	.4917	1.933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0259	.5216	.5420	.5334	2.015	.5015	.5076
Stddev	.0004	.0002	.0005	.0005	.005	.0004	.0005
%RSD	1.511	.0404	.0902	.0996	.2460	.0896	.0903
#1	.0255	.5217	.5416	.5328	2.010	.5014	.5076
#2	.0263	.5213	.5419	.5336	2.018	.5012	.5071
#3	.0260	.5216	.5426	.5338	2.018	.5021	.5081
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28559-B1 Acquired: 2/17/2015 12:17:40 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1636.9	4795.7	31633.	4082.7
Stddev	2.7	4.4	66.	44.3
%RSD	.16308	.09192	.21013	1.0862
#1	1636.6	4790.8	31630.	4032.7
#2	1634.4	4797.1	31701.	4098.4
#3	1639.7	4799.3	31568.	4117.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:26:32 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2509	43.21	1.936	2.099	2.053	43.98	1.946	1.981	2.070	2.000
Stddev	.0004	.11	.002	.007	.009	.17	.002	.001	.010	.013
%RSD	.1648	.2486	.0931	.3285	.4169	.3823	.1061	.0455	.4978	.6610
#1	.2513	43.16	1.934	2.093	2.055	43.99	1.946	1.981	2.081	2.015
#2	.2505	43.14	1.938	2.098	2.044	43.81	1.947	1.982	2.068	1.995
#3	.2511	43.33	1.936	2.106	2.061	44.15	1.943	1.980	2.061	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.84	43.15	41.20	2.048	1.855	43.92	1.986	1.989	1.934	1.937
Stddev	.17	.17	.19	.008	.005	.12	.002	.007	.002	.003
%RSD	.4088	.3902	.4535	.3796	.2855	.2781	.0780	.3328	.0763	.1651
#1	41.76	43.13	41.12	2.056	1.849	43.93	1.984	1.995	1.934	1.941
#2	41.72	42.99	41.06	2.041	1.857	43.79	1.987	1.982	1.934	1.937
#3	42.03	43.33	41.41	2.045	1.859	44.03	1.987	1.990	1.936	1.934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0178	1.958	2.029	2.000	2.047	1.930	1.997
Stddev	.0002	.002	.005	.006	.006	.015	.003
%RSD	.8608	.0782	.2535	.3206	.2752	.7687	.1340
#1	.0176	1.956	2.030	2.007	2.053	1.947	1.998
#2	.0177	1.957	2.023	1.998	2.041	1.921	2.000
#3	.0179	1.959	2.033	1.995	2.047	1.922	1.994
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:26:32 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1591.7	4688.3	31048.	3968.2
Stddev	4.9	7.5	103.	22.6
%RSD	.30582	.16016	.33038	.56898
#1	1586.1	4687.9	30929.	3989.0
#2	1594.9	4681.1	31113.	3971.3
#3	1594.1	4696.1	31101.	3944.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 12:32:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0072	-.0005	.0002	-.0001	.0109	-.0002	-.0001
Stddev	.0002	.0069	.0006	.0001	.0000	.0013	.0001	.0001
%RSD	3097.	95.64	116.6	49.36	6.737	11.92	38.46	153.8
#1	.0001	.0064	-.0010	.0001	-.0001	.0123	-.0002	.0000
#2	-.0002	.0007	.0002	.0003	-.0001	.0109	-.0001	.0000
#3	.0001	.0144	-.0008	.0003	-.0001	.0096	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0001	-.0046	.0148	.0280	.0000	F-.0020	.0122
Stddev	.0002	.0002	.0014	.0131	.0177	.0000	.0002	.0093
%RSD	196.2	218.9	29.47	88.15	63.32	67.17	9.968	76.28
#1	-.0001	-.0001	-.0031	.0266	.0478	.0001	-.0019	.0156
#2	.0001	.0003	-.0052	.0008	.0223	.0000	-.0019	.0192
#3	.0002	.0001	-.0056	.0172	.0138	.0000	-.0022	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0001	.0002	.0000	.0022	-.0008	.0000	-.0004
Stddev	.0000	.0017	.0010	.0009	.0005	.0001	.000	.0001
%RSD	39.68	3075.	576.8	2052.	20.77	9.877	124.6	33.35
#1	-.0001	-.0008	.0002	.0003	.0017	-.0007	.0000	-.0005
#2	-.0001	-.0010	.0012	.0008	.0025	-.0007	.0000	-.0003
#3	-.0001	.0020	-.0009	-.0010	.0025	-.0009	.0000	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 12:32:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0003	-.0002	.0004
Stddev	.0006	.0000	.0001
%RSD	198.1	9.823	17.60
#1	-.0002	-.0002	.0005
#2	.0003	-.0003	.0003
#3	-.0010	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1669.3	4883.2	32586.	4058.8
Stddev	2.8	3.0	30.	52.9
%RSD	.16504	.06221	.09197	1.3022
#1	1670.9	4885.4	32566.	4025.2
#2	1670.9	4884.5	32620.	4119.7
#3	1666.2	4879.8	32571.	4031.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:55:48 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	40.37	1.970	2.006	2.018	40.61	1.986	1.977	2.008	1.975
Stddev	.0009	.17	.006	.005	.007	.20	.002	.003	.003	.002
%RSD	.3770	.4318	.2895	.2664	.3613	.4963	.0748	.1561	.1267	.1052
#1	.2461	40.40	1.967	2.011	2.021	40.69	1.986	1.975	2.011	1.974
#2	.2458	40.53	1.967	2.008	2.023	40.76	1.985	1.975	2.005	1.977
#3	.2476	40.19	1.977	2.000	2.010	40.38	1.988	1.980	2.008	1.973
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.29	40.08	40.20	2.029	1.969	40.52	1.976	1.983	1.965	1.977
Stddev	.09	.10	.28	.002	.009	.17	.003	.003	.003	.002
%RSD	.2279	.2531	.6984	.1068	.4473	.4320	.1373	.1731	.1671	.0964
#1	40.31	40.07	40.34	2.031	1.961	40.61	1.974	1.982	1.964	1.976
#2	40.36	40.19	40.38	2.027	1.969	40.63	1.975	1.980	1.962	1.975
#3	40.18	39.99	39.88	2.030	1.978	40.32	1.979	1.986	1.968	1.979
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.393	1.963	2.020	2.003	1.979	1.965	1.989
Stddev	.002	.003	.007	.001	.004	.002	.001
%RSD	.1322	.1430	.3516	.0462	.1829	.0933	.0453
#1	1.391	1.962	2.022	2.004	1.982	1.967	1.989
#2	1.393	1.961	2.025	2.002	1.975	1.964	1.988
#3	1.395	1.966	2.012	2.003	1.981	1.964	1.990
Check ?	None Chk PassChk PassChk PassChk PassChk PassChk Pass						
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:55:48 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1582.7	4662.3	30719.	3950.2
Stddev	.6	4.5	101.	30.0
%RSD	.03771	.09731	.32763	.76029
#1	1582.6	4666.3	30633.	3929.0
#2	1583.4	4663.2	30830.	3937.0
#3	1582.2	4657.4	30694.	3984.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 13:06:35 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0018	.0002	.0000	-.0001	.0078	.0000	.0000	.0001	.0001
Stddev	.0003	.0099	.0004	.0003	.0000	.0018	.0000	.0000	.0001	.0001
%RSD	107.3	561.7	287.7	546.9	66.56	23.39	142.4	197.9	165.5	126.0
#1	.0002	-.0047	-.0002	.0000	-.0001	.0060	.0000	.0000	.0000	.0002
#2	.0005	-.0031	.0006	-.0002	.0000	.0096	.0000	.0001	.0000	.0002
#3	.0000	.0131	.0000	.0003	.0000	.0076	.0000	.0000	.0002	.0000
Check ?	Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass									
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	-.0083	-.0108	.0001	.0006	.0087	.0001	.0003	.0009	.0008
Stddev	.0003	.0200	.0076	.0000	.0001	.0049	.0001	.0006	.0004	.0006
%RSD	16.66	241.6	70.47	38.39	23.18	56.95	94.89	197.3	37.42	73.52
#1	.0015	.0020	-.0031	.0001	.0007	.0122	.0001	.0006	.0008	.0001
#2	.0013	-.0314	-.0109	.0000	.0006	.0108	.0000	.0006	.0013	.0010
#3	.0018	.0045	-.0183	.0000	.0004	.0030	.0002	-.0004	.0007	.0012
Check ?	Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass									
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0005	.0000	.0004	.0000	-.0003	.0006
Stddev	.0005	.0002	.000	.0001	.0005	.0001	.0000
%RSD	36.70	42.01	32.17	21.27	6651.	32.81	4.511
#1	.0015	.0006	.0000	.0003	-.0001	-.0002	.0006
#2	.0020	.0007	.0000	.0004	.0006	-.0004	.0006
#3	.0009	.0003	.0000	.0004	-.0004	-.0002	.0006
Check ?	None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass						
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 13:06:35 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1655.9	4869.7	32043.	4002.7
Stddev	2.2	7.2	96.	15.6
%RSD	.13531	.14862	.30095	.38875
#1	1658.5	4877.3	31961.	4010.6
#2	1655.0	4862.9	32150.	4012.8
#3	1654.2	4869.0	32019.	3984.8

Zoom In Zoom Out

Sample Name: FA22140-1 Acquired: 2/17/2015 13:10:46 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.1575	.0011	.1072	-.0001	157.9	.0218	.0017	.0035
Stddev	.0003	.0031	.0004	.0005	.0000	.3	.0000	.0002	.0004
%RSD	60.00	1.970	34.62	.4283	57.72	.1708	.1316	11.11	11.67
#1	.0003	.1581	.0010	.1077	-.0001	157.7	.0217	.0016	.0033
#2	.0008	.1541	.0007	.1069	.0000	158.2	.0218	.0015	.0040
#3	.0003	.1602	.0014	.1069	-.0001	157.7	.0218	.0019	.0033

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0223	.8029	46.82	10.09	.2426	.0375	F118.7	.0243	.0444
Stddev	.0002	.0030	.07	.10	.0003	.0002	.4	.0000	.0003
%RSD	.7698	.3762	.1579	.9608	.1043	.6032	.3148	.1318	.6066
#1	.0222	.7995	46.86	9.992	.2427	.0374	119.0	.0243	.0446
#2	.0224	.8052	46.87	10.19	.2429	.0373	118.8	.0243	.0443
#3	.0222	.8041	46.74	10.08	.2424	.0377	118.3	.0244	.0441

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0191	.0020	3.248	.0018	.9337	.0132	.0007	.0012	.6385
Stddev	.0008	.0015	.001	.0003	.0012	.0010	.0003	.0001	.0009
%RSD	4.051	78.17	.0418	17.67	.1263	7.564	51.97	10.84	.1403
#1	.0182	.0008	3.249	.0021	.9341	.0144	.0008	.0012	.6387
#2	.0197	.0014	3.246	.0017	.9345	.0127	.0003	.0013	.6375
#3	.0193	.0037	3.248	.0015	.9323	.0126	.0009	.0010	.6392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.9	4778.4	30736.	4008.2
Stddev	.4	3.5	57.	19.9
%RSD	.02213	.07384	.18497	.49761
#1	1613.9	4777.7	30673.	4022.8
#2	1613.5	4782.2	30751.	3985.5
#3	1614.2	4775.2	30784.	4016.3

Zoom In Zoom Out

Sample Name: MP28559-D1 Acquired: 2/17/2015 13:14:51 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.1476	.0023	.1073	-.0001	160.1	.0220	.0017	.0036
Stddev	.0009	.0126	.0005	.0002	.0000	.5	.0001	.0002	.0004
%RSD	2523.	8.519	20.18	.1842	50.88	.2889	.3639	9.112	10.34
#1	-.0008	.1516	.0028	.1072	-.0001	159.5	.0220	.0018	.0040
#2	-.0001	.1577	.0023	.1072	-.0001	160.3	.0219	.0017	.0034
#3	.0011	.1335	.0019	.1076	.0000	160.3	.0221	.0015	.0034

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0223	.8189	47.35	10.28	.2470	.0377	F119.3	.0249	.0462
Stddev	.0002	.0080	.21	.06	.0003	.0002	.2	.0003	.0004
%RSD	1.027	.9726	.4344	.5687	.1240	.4453	.1544	1.068	.8434
#1	.0226	.8131	47.12	10.26	.2467	.0376	119.1	.0246	.0461
#2	.0222	.8156	47.43	10.24	.2472	.0376	119.5	.0249	.0466
#3	.0221	.8280	47.51	10.35	.2472	.0379	119.4	.0251	.0458

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0205	-.0006	3.292	.0019	.9472	.0125	-.0010	.0012	.6496
Stddev	.0007	.0005	.010	.0001	.0032	.0012	.0006	.0001	.0017
%RSD	3.593	84.15	.3170	6.892	.3405	9.348	57.60	10.98	.2645
#1	.0204	-.0008	3.289	.0018	.9436	.0115	-.0003	.0013	.6487
#2	.0198	-.0010	3.284	.0019	.9479	.0138	-.0014	.0013	.6485
#3	.0212	.0000	3.304	.0020	.9500	.0123	-.0012	.0010	.6516

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.4	4773.8	30728.	4016.5
Stddev	2.4	8.0	49.	22.3
%RSD	.15049	.16825	.15808	.55448
#1	1604.1	4772.5	30696.	4041.5
#2	1608.9	4782.4	30704.	3998.8
#3	1606.2	4766.5	30784.	4009.1

Zoom In Zoom Out

Sample Name: MP28559-SD1 Acquired: 2/17/2015 13:18:57 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1800	.0015	.1035	-.0005	156.0	.0211	.0020	.0035	.0209
Stddev	.0016	.0552	.0021	.0023	.0002	.1	.0003	.0002	.0010	.0010
%RSD	1231.	30.68	140.4	2.204	46.22	.0745	1.518	8.182	29.82	4.556
#1	.0009	.2052	.0037	.1060	-.0003	155.9	.0208	.0022	.0045	.0198
#2	-.0019	.2181	-.0005	.1027	-.0008	156.1	.0210	.0021	.0037	.0216
#3	.0006	.1166	.0013	.1017	-.0005	156.1	.0214	.0018	.0024	.0213

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7446	45.13	10.18	.2388	.0327	117.5	.0238	.0343	.0204	.0059
Stddev	.0157	.11	.08	.0003	.0006	.3	.0018	.0029	.0096	.0016
%RSD	2.115	.2467	.7398	.1304	1.909	.2406	7.514	8.534	47.22	27.90
#1	.7538	45.01	10.23	.2390	.0334	117.3	.0259	.0367	.0219	.0065
#2	.7265	45.23	10.22	.2390	.0324	117.4	.0231	.0311	.0291	.0070
#3	.7536	45.14	10.09	.2385	.0324	117.8	.0225	.0352	.0101	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.080	.0006	.9096	.0121	.0023	-.0002	.6333
Stddev	.001	.0003	.0012	.0013	.0072	.0002	.0015
%RSD	.0253	49.86	.1299	11.15	318.3	86.48	.2415
#1	3.080	.0006	.9087	.0136	-.0021	-.0001	.6317
#2	3.081	.0003	.9092	.0110	.0106	-.0004	.6334
#3	3.080	.0009	.9109	.0117	-.0017	-.0001	.6347

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1654.9	4898.1	31808.	4023.3
Stddev	3.2	2.8	76.	24.5
%RSD	.19618	.05710	.24021	.60828
#1	1656.0	4900.1	31760.	4012.9
#2	1651.2	4894.9	31768.	4005.8
#3	1657.4	4899.3	31896.	4051.3

Zoom In Zoom Out

Sample Name: MP28559-PS1 Acquired: 2/17/2015 13:23:04 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	2.850	.1051	.3788	.0543	161.7	.0725	.0531	.0576
Stddev	.0002	.017	.0005	.0023	.0001	.2	.0001	.0003	.0004
%RSD	.4048	.5872	.5189	.6166	.2040	.1178	.1737	.5084	.6446
#1	.0499	2.869	.1057	.3800	.0542	161.9	.0724	.0528	.0572
#2	.0495	2.837	.1046	.3802	.0543	161.5	.0725	.0532	.0576
#3	.0497	2.844	.1049	.3761	.0544	161.7	.0727	.0533	.0579

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1278	3.918	56.59	14.83	.2921	.1362	F127.3	.1265	.0953
Stddev	.0002	.017	.10	.08	.0006	.0001	.3	.0002	.0012
%RSD	.1543	.4268	.1783	.5268	.2157	.0389	.2738	.1398	1.224
#1	.1276	3.902	56.64	14.86	.2914	.1362	127.7	.1264	.0963
#2	.1278	3.915	56.48	14.74	.2927	.1363	127.3	.1267	.0955
#3	.1280	3.935	56.67	14.89	.2922	.1362	127.0	.1264	.0940

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1207	.1013	3.209	.0504	.9765	.1149	.1037	.0515	.8789
Stddev	.0007	.0003	.006	.0003	.0011	.0012	.0027	.0003	.0012
%RSD	.5659	.3428	.1743	.6939	.1175	1.028	2.576	.6586	.1319
#1	.1210	.1013	3.203	.0502	.9767	.1141	.1015	.0512	.8778
#2	.1211	.1010	3.212	.0508	.9775	.1144	.1066	.0515	.8788
#3	.1199	.1017	3.213	.0502	.9752	.1163	.1029	.0519	.8801

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1598.5	4759.3	30360.	3939.4
Stddev	.6	2.0	155.	29.0
%RSD	.04002	.04229	.50908	.73668
#1	1599.0	4760.9	30511.	3917.6
#2	1598.8	4757.1	30202.	3972.4
#3	1597.8	4759.9	30368.	3928.3

Zoom In Zoom Out

Sample Name: MP28559-S1 Acquired: 2/17/2015 13:27:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0516	29.92	1.994	2.185	.0539	192.2	.0715	.5007	.2184
Stddev	.0003	.13	.002	.003	.0000	.8	.0001	.0002	.0011
%RSD	.6776	.4288	.0863	.1309	.0126	.4317	.0889	.0446	.5212
#1	.0519	29.80	1.995	2.183	.0539	191.4	.0714	.5004	.2183
#2	.0517	29.90	1.995	2.184	.0539	192.2	.0715	.5009	.2174
#3	.0512	30.06	1.992	2.188	.0539	193.0	.0715	.5008	.2196

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2847	29.10	75.62	36.40	.7714	.5443	F148.8	.5221	.5528
Stddev	.0010	.06	.07	.18	.0018	.0008	.2	.0003	.0007
%RSD	.3556	.1966	.0926	.5005	.2325	.1497	.1353	.0658	.1187
#1	.2848	29.03	75.56	36.20	.7726	.5438	148.6	.5223	.5535
#2	.2836	29.12	75.60	36.46	.7693	.5439	148.7	.5218	.5527
#3	.2856	29.14	75.70	36.55	.7722	.5453	149.0	.5224	.5522

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5195	1.962	3.400	.5119	1.524	.5530	2.038	.4926	1.150
Stddev	.0022	.007	.006	.0010	.003	.0004	.002	.0016	.001
%RSD	.4319	.3736	.1838	.1897	.1678	.0794	.0876	.3206	.0967
#1	.5212	1.953	3.399	.5120	1.523	.5535	2.038	.4910	1.149
#2	.5170	1.967	3.395	.5128	1.522	.5526	2.039	.4928	1.151
#3	.5204	1.964	3.407	.5109	1.527	.5529	2.036	.4941	1.149

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1564.5	4692.1	29591.	3919.9
Stddev	4.3	8.7	87.	40.4
%RSD	.27533	.18647	.29525	1.0299
#1	1562.9	4694.6	29499.	3965.4
#2	1561.2	4682.3	29673.	3905.7
#3	1569.3	4699.2	29600.	3888.5

Zoom In Zoom Out

Sample Name: MP28559-S2 Acquired: 2/17/2015 13:31:03 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0509	29.62	2.004	2.194	.0535	188.6	.0710	.4996	.2149
Stddev	.0002	.02	.003	.004	.0002	.5	.0001	.0004	.0007
%RSD	.2987	.0724	.1433	.1639	.3628	.2554	.1495	.0860	.3210
#1	.0510	29.61	2.001	2.190	.0537	188.3	.0711	.4993	.2156
#2	.0509	29.65	2.006	2.196	.0533	189.1	.0709	.4994	.2146
#3	.0507	29.62	2.006	2.196	.0534	188.3	.0711	.5001	.2143

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2821	29.05	74.30	36.21	.7649	.5452	F145.9	.5250	.5512
Stddev	.0007	.03	.13	.24	.0017	.0018	.4	.0013	.0018
%RSD	.2514	.1190	.1720	.6634	.2269	.3238	.2711	.2559	.3274
#1	.2824	29.03	74.32	36.02	.7669	.5444	146.0	.5260	.5504
#2	.2813	29.09	74.41	36.48	.7637	.5440	146.1	.5235	.5500
#3	.2827	29.03	74.16	36.13	.7640	.5473	145.4	.5254	.5533

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5203	1.971	3.362	.5159	1.502	.5474	2.030	.4883	1.140
Stddev	.0008	.008	.011	.0016	.001	.0009	.009	.0034	.002
%RSD	.1566	.3916	.3320	.3018	.0834	.1628	.4613	.6955	.1777
#1	.5196	1.969	3.350	.5143	1.503	.5465	2.019	.4917	1.139
#2	.5202	1.964	3.365	.5158	1.502	.5483	2.037	.4849	1.139
#3	.5212	1.980	3.371	.5175	1.500	.5472	2.033	.4882	1.142

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1566.2	4673.4	29933.	3918.1
Stddev	4.1	10.0	85.	13.5
%RSD	.26080	.21310	.28232	.34456
#1	1570.7	4674.8	29836.	3932.8
#2	1565.3	4682.5	29987.	3906.2
#3	1562.6	4662.8	29977.	3915.3

Zoom In Zoom Out

Sample Name: FA22132-1 Acquired: 2/17/2015 13:35:01 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0134	-.0008	.0103	-.0001	34.13	-.0001	.0000	.0002	-.0002
Stddev	.0005	.0039	.0002	.0001	.0000	.15	.0000	.0000	.0001	.0003
%RSD	344.9	28.93	20.55	1.325	35.02	.4513	22.43	330.8	38.83	128.6
#1	.0005	.0096	-.0006	.0102	-.0001	34.24	-.0001	.0000	.0003	.0000
#2	.0004	.0133	-.0009	.0104	-.0002	33.95	-.0001	.0000	.0002	-.0002
#3	-.0004	.0173	-.0010	.0104	-.0001	34.19	-.0001	.0000	.0001	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.341	1.033	1.605	.0123	-.0002	5.955	-.0003	-.0028	.0004	.0013
Stddev	.005	.021	.016	.0000	.0002	.024	.0001	.0003	.0016	.0009
%RSD	.3885	2.010	.9674	.3448	70.39	.3977	49.45	9.717	373.7	71.26
#1	1.347	1.056	1.597	.0122	-.0001	5.980	-.0004	-.0025	.0022	.0019
#2	1.338	1.026	1.623	.0123	-.0002	5.933	-.0002	-.0031	-.0011	.0016
#3	1.338	1.016	1.596	.0123	-.0004	5.952	-.0003	-.0029	.0002	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8358	.0002	.0486	.0013	-.0004	.0002	.0051
Stddev	.0015	.0003	.0003	.0001	.0013	.0001	.0001
%RSD	.1821	152.4	.5295	9.727	358.8	76.61	1.790
#1	.8374	.0005	.0486	.0013	.0002	.0001	.0050
#2	.8344	.0003	.0483	.0011	.0005	.0001	.0050
#3	.8357	-.0001	.0488	.0013	-.0018	.0003	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1658.2	4890.9	31840.	4027.0
Stddev	4.8	7.6	125.	27.2
%RSD	.28913	.15589	.39181	.67446
#1	1656.6	4894.4	31776.	3998.1
#2	1663.5	4896.1	31984.	4052.0
#3	1654.3	4882.1	31761.	4030.9

Zoom In Zoom Out

Sample Name: FA22132-1F Acquired: 2/17/2015 13:39:09 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0073	-.0002	.0099	-.0001	34.86	-.0001	.0000	.0005	-.0005
Stddev	.0002	.0090	.0001	.0003	.0000	.04	.0000	.0001	.0002	.0001
%RSD	145.0	124.1	79.51	3.179	33.12	.1003	38.36	611.6	47.21	15.48
#1	-.0001	.0082	-.0001	.0102	-.0001	34.90	-.0001	-.0001	.0005	-.0006
#2	.0004	-.0022	-.0001	.0096	-.0001	34.83	-.0001	.0001	.0002	-.0004
#3	.0002	.0158	-.0004	.0099	-.0002	34.86	-.0001	.0000	.0007	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.162	.9916	1.670	.0121	-.0007	6.368	-.0005	-.0004	.0007	.0009
Stddev	.004	.0226	.022	.0001	.0002	.002	.0001	.0004	.0001	.0008
%RSD	.3439	2.278	1.345	.5569	31.96	.0349	17.67	104.7	22.45	97.77
#1	1.165	1.017	1.651	.0122	-.0005	6.367	-.0006	-.0005	.0008	.0005
#2	1.164	.9814	1.664	.0120	-.0009	6.371	-.0004	.0001	.0006	.0003
#3	1.158	.9759	1.695	.0121	-.0006	6.367	-.0005	-.0006	.0006	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8286	.0004	.0484	.0008	.0002	.0001	.0051
Stddev	.0006	.0001	.0001	.0001	.0006	.0000	.0001
%RSD	.0696	14.19	.2468	10.04	314.4	38.20	1.905
#1	.8282	.0004	.0485	.0008	.0009	.0002	.0052
#2	.8284	.0004	.0482	.0008	-.0002	.0001	.0051
#3	.8292	.0004	.0483	.0009	-.0001	.0001	.0051

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1650.6	4895.8	31575.	3966.2
Stddev	5.6	9.9	44.	4.6
%RSD	.34047	.20208	.13843	.11515
#1	1646.5	4885.3	31540.	3961.1
#2	1648.4	4897.0	31561.	3967.6
#3	1657.0	4904.9	31624.	3969.8

Zoom In Zoom Out

Sample Name: FA22132-2F Acquired: 2/17/2015 13:43:16 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0096	-.0014	.0092	.0000	23.57	-.0001	-.0001	.0003	-.0003
Stddev	.0002	.0047	.0005	.0003	.000	.01	.0001	.0002	.0001	.0002
%RSD	399.4	49.35	36.95	3.415	65.78	.0577	63.97	149.6	34.02	74.96
#1	-.0001	.0064	-.0014	.0094	.0000	23.59	-.0001	.0000	.0003	-.0002
#2	.0000	.0074	-.0020	.0092	-.0001	23.58	-.0001	-.0003	.0004	-.0006
#3	.0002	.0151	-.0010	.0088	.0000	23.56	-.0002	-.0001	.0002	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0435	.5610	1.717	.0010	.0017	3.901	-.0003	-.0007	.0012	.0018
Stddev	.0015	.0202	.032	.0000	.0001	.009	.0002	.0008	.0016	.0006
%RSD	3.387	3.606	1.840	1.990	6.175	.2234	61.61	120.7	131.2	34.66
#1	.0452	.5717	1.705	.0010	.0018	3.900	-.0002	-.0009	-.0004	.0021
#2	.0423	.5737	1.752	.0010	.0016	3.910	-.0001	-.0013	.0028	.0022
#3	.0431	.5377	1.693	.0010	.0017	3.892	-.0005	.0002	.0014	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6578	-.0002	.0326	.0005	-.0001	-.0004	.0052
Stddev	.0008	.0004	.0002	.0001	.0006	.0004	.0000
%RSD	.1259	193.7	.4803	14.98	563.3	119.6	.2197
#1	.6569	.0003	.0328	.0005	.0004	-.0004	.0052
#2	.6583	-.0005	.0325	.0004	-.0008	-.0008	.0052
#3	.6583	-.0005	.0325	.0004	.0001	.0001	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1648.3	4906.6	31748.	3963.7
Stddev	1.3	5.7	203.	13.0
%RSD	.08106	.11565	.64009	.32854
#1	1646.8	4903.7	31548.	3949.6
#2	1648.6	4902.9	31742.	3966.2
#3	1649.4	4913.1	31954.	3975.2

Zoom In Zoom Out

Sample Name: FA22154-1 Acquired: 2/17/2015 13:47:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	.2779	.0006	.0880	-.0001	445.0	-.0005	-.0003	.0017	-.0004
Stddev	.0009	.0308	.0017	.0008	.0005	.5	.0001	.0000	.0007	.0006
%RSD	86.73	11.07	304.3	.8931	468.8	.1139	14.52	13.98	40.56	135.1
#1	.0003	.2425	.0018	.0874	.0004	444.6	-.0006	-.0004	.0025	-.0005
#2	.0008	.2971	.0012	.0878	-.0002	444.9	-.0005	-.0003	.0016	-.0010
#3	.0021	.2943	-.0014	.0889	-.0005	445.5	-.0005	-.0003	.0011	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5306	3.941	86.85	.0608	-.0055	159.1	-.0020	-.0097	-.0047	.0036
Stddev	.0179	.053	.32	.0003	.0004	.1	.0006	.0037	.0045	.0021
%RSD	3.376	1.353	.3722	.5081	7.137	.0532	30.29	37.80	93.86	57.87
#1	.5462	3.978	86.52	.0607	-.0053	159.2	-.0022	-.0078	-.0005	.0028
#2	.5111	3.880	87.16	.0606	-.0053	159.0	-.0013	-.0073	-.0044	.0020
#3	.5346	3.964	86.87	.0612	-.0060	159.2	-.0024	-.0139	-.0094	.0059

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.567	-.0018	1.171	.0102	.0054	-.0001	.0065
Stddev	.012	.0002	.001	.0015	.0012	.0011	.0001
%RSD	.1282	8.820	.0540	14.21	21.84	903.3	1.445
#1	9.564	-.0019	1.170	.0090	.0041	-.0012	.0065
#2	9.557	-.0016	1.170	.0099	.0065	.0010	.0064
#3	9.581	-.0018	1.171	.0118	.0055	-.0001	.0065

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.2	4801.2	30780.	3866.1
Stddev	4.4	5.6	31.	13.4
%RSD	.27482	.11685	.10126	.34746
#1	1620.9	4807.6	30753.	3876.0
#2	1615.4	4798.8	30773.	3850.8
#3	1612.1	4797.2	30814.	3871.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 13:51:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2501	41.45	1.945	2.014	2.050	41.61	2.003	1.991	2.083	2.021
Stddev	.0005	.06	.006	.001	.001	.14	.003	.004	.005	.005
%RSD	.2182	.1431	.2978	.0634	.0237	.3473	.1481	.1916	.2456	.2742
#1	.2500	41.50	1.939	2.013	2.051	41.73	1.999	1.986	2.087	2.023
#2	.2497	41.46	1.948	2.015	2.050	41.64	2.004	1.992	2.077	2.015
#3	.2508	41.38	1.949	2.013	2.050	41.45	2.005	1.994	2.085	2.026
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	40.84	40.50	2.065	1.966	41.60	1.961	2.004	1.951	1.956
Stddev	.03	.11	.23	.007	.010	.08	.003	.003	.004	.005
%RSD	.0810	.2763	.5751	.3438	.4999	.1964	.1753	.1399	.2270	.2389
#1	40.65	40.93	40.75	2.071	1.956	41.65	1.957	2.003	1.945	1.951
#2	40.70	40.87	40.46	2.057	1.969	41.65	1.963	2.002	1.953	1.959
#3	40.64	40.71	40.29	2.067	1.975	41.51	1.963	2.007	1.953	1.959
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.384	1.926	2.061	2.048	2.002	1.995	1.999
Stddev	.003	.001	.002	.003	.003	.008	.001
%RSD	.2447	.0330	.0798	.1628	.1235	.4081	.0718
#1	1.380	1.926	2.062	2.051	2.000	1.999	1.997
#2	1.386	1.927	2.061	2.044	2.004	1.985	2.000
#3	1.386	1.927	2.059	2.050	2.004	1.999	2.000
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 13:51:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1575.8	4684.2	30053.	3858.6
Stddev	1.2	4.7	78.	48.3
%RSD	.07722	.10001	.25936	1.2515
#1	1574.7	4681.9	30012.	3819.7
#2	1575.5	4681.2	30143.	3843.5
#3	1577.1	4689.6	30005.	3912.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:00:49 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0049	.0002	-.0001	-.0001	-.0049	-.0001	.0000	-.0003	.0002
Stddev	.0005	.0135	.0005	.0001	.0001	.0021	.0000	.0001	.0001	.0001
%RSD	255.4	275.4	268.3	65.94	80.69	42.58	17.17	308.3	36.67	31.17
#1	-.0002	.0033	.0002	.0000	-.0001	-.0031	-.0001	.0000	-.0003	.0001
#2	.0001	.0025	-.0003	-.0002	-.0001	-.0072	-.0001	.0000	-.0003	.0002
#3	.0007	-.0204	.0007	-.0001	.0000	-.0045	-.0001	.0001	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0039	-.0128	.0002	-.0001	-.0001	.0068	-.0002	.0003	.0011	.0003
Stddev	.0006	.0208	.0442	.0000	.0000	.0059	.0001	.0004	.0003	.0021
%RSD	16.59	162.9	19490.	33.55	28.12	87.22	83.31	127.0	23.76	760.5
#1	-.0042	-.0363	-.0453	-.0001	-.0001	.0026	.0000	.0002	.0012	-.0021
#2	-.0043	.0034	.0030	-.0002	-.0001	.0136	-.0002	.0008	.0008	.0020
#3	-.0031	-.0054	.0430	-.0001	-.0001	.0042	-.0003	.0000	.0012	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0001	-.0001	-.0002	-.0003	-.0003	-.0002
Stddev	.0005	.0004	.0000	.0001	.0011	.0002	.0001
%RSD	137.4	550.4	15.96	62.45	372.0	90.78	42.26
#1	-.0002	-.0001	-.0001	-.0001	-.0014	-.0001	-.0002
#2	.0007	-.0002	-.0001	-.0001	-.0002	-.0002	-.0001
#3	.0006	.0005	-.0001	-.0003	.0007	-.0005	-.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:00:49 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1638.7	4883.6	31363.	3879.7
Stddev	2.2	8.4	31.	19.5
%RSD	.13542	.17271	.09821	.50143
#1	1638.9	4879.7	31331.	3857.4
#2	1636.4	4877.9	31392.	3893.2
#3	1640.8	4893.3	31367.	3888.6

Zoom In Zoom Out

Sample Name: FA22154-2 Acquired: 2/17/2015 14:05:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	1.337	.0037	.3557	.0003	1108.	-.0012	-.0004	.0137	-.0018
Stddev	.0045	.044	.0004	.0019	.0008	2.	.0005	.0014	.0015	.0017
%RSD	915.3	3.311	12.08	.5245	251.3	.1461	41.96	375.1	11.28	93.61
#1	.0036	1.293	.0042	.3539	.0012	1109.	-.0013	.0013	.0119	-.0021
#2	-.0047	1.382	.0034	.3556	-.0002	1109.	-.0007	-.0013	.0143	-.0034
#3	.0026	1.337	.0034	.3576	-.0001	1106.	-.0017	-.0011	.0148	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.66	5.866	334.3	.0790	-.0052	346.0	-.0023	-.0189	-.0068	.0074
Stddev	.02	.157	1.0	.0005	.0016	.5	.0007	.0052	.0138	.0127
%RSD	.1476	2.680	.2982	.6195	30.32	.1411	29.29	27.50	203.2	171.8
#1	10.67	5.853	334.4	.0795	-.0065	346.0	-.0027	-.0144	.0041	.0220
#2	10.64	6.030	335.3	.0790	-.0034	346.5	-.0026	-.0245	-.0223	-.0001
#3	10.67	5.716	333.3	.0785	-.0058	345.5	-.0015	-.0177	-.0022	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.08	-.0066	4.062	.0429	.0165	.0056	.0149
Stddev	.02	.0037	.010	.0011	.0117	.0021	.0004
%RSD	.2233	55.69	.2441	2.469	70.95	37.10	2.832
#1	11.09	-.0060	4.070	.0441	.0270	.0032	.0146
#2	11.10	-.0033	4.065	.0421	.0186	.0069	.0153
#3	11.05	-.0106	4.051	.0424	.0039	.0067	.0147

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.9	4859.8	31034.	3922.6
Stddev	1.1	9.7	49.	15.6
%RSD	.06500	.20048	.15720	.39698
#1	1625.1	4866.0	31024.	3908.1
#2	1623.5	4864.9	31087.	3920.6
#3	1623.1	4848.6	30991.	3939.1

Zoom In Zoom Out

Sample Name: FA22154-3 Acquired: 2/17/2015 14:09:46 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0290	-.0004	.0158	.0000	83.75	-.0001	-.0001	.0006	-.0004
Stddev	.0001	.0052	.0002	.0001	.0000	.15	.0000	.0001	.0001	.0002
%RSD	45.49	17.84	48.42	.4688	77.37	.1833	32.19	57.39	9.818	54.17
#1	.0005	.0230	-.0002	.0157	.0000	83.64	-.0001	-.0002	.0007	-.0007
#2	.0002	.0324	-.0004	.0158	.0001	83.69	-.0001	.0000	.0006	-.0004
#3	.0002	.0316	-.0005	.0158	.0000	83.93	-.0001	-.0002	.0006	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1210	1.238	24.67	.0220	.0017	27.07	-.0003	-.0005	.0012	-.0002
Stddev	.0061	.029	.07	.0000	.0001	.04	.0001	.0007	.0014	.0007
%RSD	5.055	2.340	.2759	.0846	6.914	.1412	38.04	144.8	115.1	296.3
#1	.1278	1.206	24.60	.0220	.0018	27.05	-.0004	.0003	-.0003	.0002
#2	.1159	1.262	24.67	.0220	.0016	27.05	-.0002	-.0011	.0014	-.0011
#3	.1194	1.247	24.73	.0220	.0016	27.11	-.0002	-.0008	.0025	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	11.19	-.0001	.2427	.0068	.0003	.0003	.0079
Stddev	.02	.0001	.0004	.0002	.0007	.0003	.0001
%RSD	.1598	84.91	.1645	2.942	274.3	116.0	.6443
#1	11.19	.0000	.2425	.0066	-.0001	.0000	.0079
#2	11.17	-.0001	.2425	.0070	-.0002	.0006	.0079
#3	11.20	-.0001	.2432	.0068	.0011	.0002	.0080

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1638.6	4879.5	31079.	3947.5
Stddev	4.2	15.7	193.	7.1
%RSD	.25344	.32274	.62214	.17902
#1	1635.7	4867.3	31287.	3943.1
#2	1643.3	4897.3	30905.	3943.8
#3	1636.7	4874.0	31046.	3955.7

Zoom In Zoom Out

Sample Name: FA22154-4 Acquired: 2/17/2015 14:13:54 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0758	-.0001	.0374	-.0001	71.72	-.0001	-.0002	.0006	.0019
Stddev	.0005	.0082	.0006	.0001	.0001	.12	.0001	.0001	.0001	.0001
%RSD	504.8	10.86	755.2	.3633	76.66	.1632	65.76	69.88	15.81	4.583
#1	-.0006	.0668	-.0005	.0375	-.0001	71.59	-.0001	-.0001	.0006	.0020
#2	.0004	.0778	.0006	.0372	-.0001	71.83	.0000	-.0001	.0007	.0018
#3	-.0001	.0828	-.0004	.0374	.0000	71.73	-.0001	-.0003	.0005	.0019

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2541	9.673	9.759	.0022	.0015	21.76	.0006	-.0018	.0000	.0006
Stddev	.0037	.047	.020	.0000	.0001	.02	.0002	.0006	.0006	.0006
%RSD	1.474	.4849	.2030	.8400	6.235	.1061	27.30	35.25	12380.	94.61
#1	.2527	9.620	9.737	.0022	.0014	21.74	.0006	-.0025	.0005	.0000
#2	.2514	9.708	9.771	.0022	.0014	21.79	.0008	-.0018	.0001	.0012
#3	.2584	9.691	9.770	.0022	.0016	21.77	.0004	-.0012	-.0006	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	5.312	.0000	.3477	.0058	-.0007	.0007	.0514
Stddev	.013	.0003	.0005	.0005	.0007	.0003	.0001
%RSD	.2465	2427.	.1439	8.801	104.4	37.76	.1606
#1	5.325	.0002	.3477	.0062	-.0001	.0006	.0514
#2	5.299	.0002	.3483	.0059	-.0015	.0011	.0515
#3	5.312	-.0003	.3473	.0052	-.0005	.0005	.0513

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1639.5	4895.4	30862.	3926.4
Stddev	.6	5.6	15.	25.2
%RSD	.03953	.11427	.04936	.64139
#1	1640.3	4890.0	30873.	3930.0
#2	1639.2	4901.1	30845.	3899.6
#3	1639.1	4895.2	30868.	3949.5

Zoom In Zoom Out

Sample Name: FA22154-5 Acquired: 2/17/2015 14:18:02 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0202	-.0007	.2825	.0000	320.4	-.0003	-.0001	.0000	-.0011
Stddev	.000	.0153	.0006	.0010	.0000	1.0	.0001	.0001	.0002	.0002
%RSD	857.0	75.84	86.98	.3368	148.6	.3079	16.72	82.15	385.7	18.24
#1	.0000	.0364	-.0002	.2825	.0001	320.6	-.0004	.0000	.0002	-.0013
#2	.0001	.0060	-.0014	.2835	.0001	321.3	-.0003	-.0001	-.0002	-.0010
#3	-.0002	.0181	-.0006	.2816	.0000	319.4	-.0003	-.0001	.0001	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.9421	3.566	47.24	.0278	-.0015	68.11	-.0006	-.0016	.0006	-.0013
Stddev	.0029	.016	.10	.0001	.0002	.12	.0004	.0005	.0005	.0007
%RSD	.3064	.4463	.2088	.1821	13.47	.1832	73.17	33.57	85.76	56.30
#1	.9452	3.548	47.31	.0278	-.0014	68.07	-.0009	-.0012	.0011	-.0008
#2	.9416	3.572	47.29	.0278	-.0013	68.25	-.0007	-.0014	.0003	-.0021
#3	.9395	3.578	47.13	.0279	-.0017	68.01	-.0001	-.0022	.0003	-.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	9.366	-.0001	2.303	.0008	-.0007	-.0003	.0043
Stddev	.013	.0003	.005	.0000	.0003	.0002	.0001
%RSD	.1418	374.8	.2181	3.473	41.14	53.41	1.420
#1	9.351	.0003	2.298	.0008	-.0006	-.0004	.0042
#2	9.372	-.0004	2.308	.0009	-.0004	-.0001	.0043
#3	9.376	-.0002	2.302	.0008	-.0010	-.0004	.0042

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1577.0	4725.7	29709.	3837.3
Stddev	3.9	6.3	49.	23.6
%RSD	.24535	.13306	.16381	.61582
#1	1572.7	4719.4	29655.	3812.0
#2	1578.2	4732.0	29723.	3840.9
#3	1580.2	4725.7	29749.	3858.9

Zoom In Zoom Out

Sample Name: FA22154-6 Acquired: 2/17/2015 14:22:18 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	.3161	.0029	.0383	-.0004	119.4	-.0001	.0006	.0012	-.0002
Stddev	.0013	.0323	.0027	.0009	.0004	.2	.0001	.0002	.0008	.0002
%RSD	75.15	10.21	91.41	2.462	112.5	.1847	43.63	31.35	71.46	118.4
#1	.0022	.2796	-.0001	.0385	-.0003	119.1	-.0002	.0007	.0021	-.0003
#2	.0002	.3405	.0037	.0391	-.0008	119.4	-.0001	.0006	.0006	.0000
#3	.0026	.3283	.0050	.0372	.0000	119.6	-.0002	.0004	.0008	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2591	1.287	32.25	.0036	-.0012	199.1	.0004	-.0031	.0038	.0042
Stddev	.0220	.069	.10	.0001	.0005	.2	.0004	.0026	.0011	.0054
%RSD	8.488	5.332	.3029	1.767	43.57	.1013	116.0	84.58	28.92	130.3
#1	.2381	1.234	32.36	.0036	-.0016	198.9	.0001	-.0008	.0040	.0033
#2	.2820	1.262	32.22	.0037	-.0014	199.3	.0009	-.0025	.0026	.0099
#3	.2572	1.364	32.18	.0036	-.0006	199.1	.0001	-.0060	.0048	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	6.785	-.0008	.3994	.0071	.0014	.0003	.0085
Stddev	.011	.0011	.0011	.0006	.0037	.0003	.0001
%RSD	.1561	140.0	.2804	8.859	267.7	101.9	1.191
#1	6.782	-.0010	.3990	.0066	.0010	.0001	.0087
#2	6.797	.0004	.4007	.0078	.0053	.0001	.0085
#3	6.776	-.0017	.3986	.0070	-.0021	.0006	.0085

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1657.3	4939.5	31336.	3919.5
Stddev	3.7	6.5	136.	21.4
%RSD	.22583	.13058	.43282	.54508
#1	1661.6	4946.9	31352.	3941.3
#2	1655.7	4935.5	31462.	3918.5
#3	1654.6	4936.1	31192.	3898.6

Zoom In Zoom Out

Sample Name: FA22154-7 Acquired: 2/17/2015 14:26:27 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0951	-.0002	.0332	.0000	89.90	-.0001	-.0001	.0007	-.0003
Stddev	.0003	.0057	.0005	.0002	.0001	.25	.0001	.0002	.0003	.0002
%RSD	531.6	6.043	309.2	.5229	1304.	.2730	44.13	122.1	40.55	82.07
#1	.0000	.0893	-.0003	.0330	.0000	89.68	-.0001	-.0003	.0008	.0000
#2	.0004	.1008	.0004	.0334	-.0001	89.86	-.0002	-.0002	.0004	-.0004
#3	-.0002	.0952	-.0006	.0332	.0000	90.16	-.0002	.0000	.0008	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7113	10.72	16.42	.1074	.0098	39.46	.0000	-.0007	.0007	.0019
Stddev	.0095	.04	.10	.0002	.0000	.07	.000	.0005	.0005	.0003
%RSD	1.338	.3614	.6193	.2256	.4783	.1813	2042.	74.05	73.35	18.42
#1	.7129	10.68	16.34	.1072	.0098	39.40	-.0002	-.0007	.0001	.0021
#2	.7199	10.73	16.40	.1074	.0097	39.43	.0004	-.0002	.0011	.0015
#3	.7011	10.75	16.54	.1076	.0098	39.54	-.0003	-.0012	.0010	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.612	.0000	.2814	.0036	-.0006	.0003	.0334
Stddev	.008	.0001	.0007	.0004	.0006	.0002	.0001
%RSD	.1348	239.8	.2375	10.77	95.26	87.38	.4195
#1	5.604	.0000	.2808	.0040	-.0009	.0005	.0333
#2	5.612	.0000	.2814	.0032	.0001	.0001	.0336
#3	5.619	.0002	.2821	.0035	-.0009	.0001	.0334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.0	4852.0	30901.	3911.0
Stddev	3.2	6.6	105.	11.5
%RSD	.19489	.13570	.34049	.29467
#1	1629.3	4849.9	31016.	3908.8
#2	1632.1	4859.4	30810.	3923.5
#3	1625.7	4846.7	30875.	3900.8

Zoom In Zoom Out

Sample Name: FA22154-8 Acquired: 2/17/2015 14:30:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.3346	.0069	.0225	-.0001	33.06	-.0004	.0000	.0010	.0017
Stddev	.0003	.0149	.0005	.0003	.0001	.09	.0001	.000	.0003	.0002
%RSD	420.3	4.443	7.879	1.552	94.43	.2752	14.80	311.8	25.47	9.872
#1	.0003	.3193	.0066	.0221	.0000	33.09	-.0004	.0001	.0008	.0016
#2	-.0002	.3354	.0066	.0227	-.0001	33.13	-.0003	.0000	.0013	.0017
#3	.0001	.3490	.0075	.0227	-.0002	32.96	-.0004	-.0001	.0009	.0019

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	13.13	5.732	5.703	.0212	.0014	19.82	.0003	-.0015	.0011	.0002
Stddev	.03	.027	.037	.0001	.0001	.04	.0002	.0001	.0005	.0010
%RSD	.1933	.4673	.6530	.3432	9.698	.1950	49.25	7.174	49.55	591.9
#1	13.14	5.707	5.729	.0213	.0015	19.85	.0003	-.0016	.0006	-.0007
#2	13.14	5.760	5.660	.0212	.0014	19.84	.0005	-.0015	.0017	.0012
#3	13.10	5.728	5.720	.0212	.0012	19.78	.0002	-.0013	.0011	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.894	-.0001	.1277	.0127	-.0011	.0016	.0694
Stddev	.011	.0002	.0002	.0011	.0005	.0000	.0002
%RSD	.2849	111.2	.1261	9.012	43.53	2.150	.2219
#1	3.898	-.0003	.1275	.0127	-.0008	.0016	.0693
#2	3.903	-.0001	.1279	.0116	-.0009	.0015	.0693
#3	3.882	.0000	.1277	.0139	-.0017	.0016	.0695

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1641.1	4922.7	30837.	3893.7
Stddev	2.6	3.7	44.	43.4
%RSD	.16023	.07617	.14153	1.1138
#1	1640.7	4922.4	30790.	3857.2
#2	1643.9	4926.6	30877.	3882.3
#3	1638.7	4919.2	30844.	3941.6

Zoom In Zoom Out

Sample Name: FA22154-9 Acquired: 2/17/2015 14:34:43 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.3339	.0147	.0470	.0001	126.1	-.0003	.0010	.0010	-.0001
Stddev	.0003	.0093	.0005	.0002	.0001	.3	.0000	.0001	.0002	.0001
%RSD	158.9	2.797	3.145	.5010	81.90	.2613	9.491	8.831	20.36	130.2
#1	.0002	.3334	.0153	.0470	.0001	126.2	-.0003	.0009	.0008	.0000
#2	-.0003	.3248	.0145	.0473	.0000	126.4	-.0003	.0010	.0012	-.0003
#3	-.0004	.3435	.0144	.0468	.0001	125.8	-.0003	.0011	.0010	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.742	2.672	12.20	.0431	.0004	28.15	.0005	-.0025	.0015	.0005
Stddev	.015	.023	.04	.0001	.0001	.09	.0002	.0016	.0007	.0010
%RSD	.1687	.8465	.2960	.2450	31.93	.3369	45.07	62.90	45.82	203.5
#1	8.752	2.663	12.21	.0430	.0004	28.23	.0002	-.0008	.0011	.0002
#2	8.748	2.698	12.22	.0430	.0005	28.17	.0007	-.0029	.0011	.0016
#3	8.725	2.656	12.16	.0432	.0003	28.05	.0005	-.0038	.0023	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.362	.0000	.2945	.0065	-.0001	.0089	.0074
Stddev	.013	.000	.0007	.0003	.0012	.0001	.0001
%RSD	.3954	158.3	.2423	4.270	911.3	1.378	.7051
#1	3.377	-.0001	.2949	.0068	-.0015	.0088	.0074
#2	3.359	.0000	.2951	.0063	.0004	.0090	.0073
#3	3.351	.0000	.2937	.0064	.0007	.0088	.0074

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1617.9	4870.8	30420.	3826.2
Stddev	.2	3.0	159.	24.6
%RSD	.01294	.06180	.52130	.64402
#1	1617.7	4873.9	30357.	3846.2
#2	1618.1	4867.9	30600.	3833.7
#3	1617.9	4870.7	30303.	3798.7

Zoom In Zoom Out

Sample Name: FA22154-10 Acquired: 2/17/2015 14:38:50 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.0227	-.0001	.0378	.0000	146.3	-.0001	-.0002	.0003
Stddev	.0005	.0029	.0005	.0001	.000	.6	.0000	.0001	.0004
%RSD	68.86	12.94	762.2	.1866	631.4	.3887	18.56	63.57	173.4
#1	.0004	.0201	-.0004	.0377	-.0001	145.9	-.0001	-.0004	.0005
#2	.0005	.0259	.0005	.0378	.0001	146.0	-.0001	-.0001	-.0003
#3	.0013	.0221	-.0003	.0378	.0000	146.9	-.0002	-.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	1.046	4.080	26.13	.0150	.0001	F343.1	-.0001	-.0021
Stddev	.0002	.004	.065	.11	.0001	.0002	.5	.0001	.0006
%RSD	26.00	.4064	1.585	.4026	.5432	124.5	.1470	78.09	28.72
#1	-.0006	1.041	4.020	26.08	.0150	.0001	343.5	-.0001	-.0018
#2	-.0010	1.049	4.071	26.06	.0149	.0003	342.5	-.0003	-.0017
#3	-.0007	1.047	4.148	26.25	.0150	.0000	343.3	-.0001	-.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0001	.0004	9.298	-.0006	.6928	.0013	.0012	-.0001	.0084
Stddev	.0002	.0014	.012	.0005	.0019	.0002	.0008	.0003	.0001
%RSD	138.4	330.3	.1280	95.03	.2802	17.10	62.85	193.8	.8077
#1	-.0003	.0005	9.289	-.0011	.6927	.0015	.0009	.0001	.0084
#2	.0001	-.0010	9.292	.0000	.6910	.0014	.0021	-.0002	.0085
#3	-.0002	.0018	9.311	-.0006	.6948	.0011	.0007	-.0004	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1580.6	4785.2	29603.	3778.9
Stddev	6.8	9.6	45.	25.5
%RSD	.42870	.20150	.15303	.67368
#1	1572.8	4774.6	29614.	3803.0
#2	1584.9	4787.8	29641.	3781.5
#3	1584.0	4793.4	29553.	3752.2

Zoom In Zoom Out

Sample Name: FA22154-11 Acquired: 2/17/2015 14:43:05 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0225	-.0001	.0278	.0000	153.5	-.0002	-.0002	.0005	-.0002
Stddev	.0004	.0055	.0004	.0002	.0000	.2	.0000	.0001	.0004	.0003
%RSD	1051.	24.60	514.3	.5416	596.5	.1534	9.078	43.96	75.94	134.9
#1	.0003	.0162	.0001	.0276	.0000	153.2	-.0002	-.0001	.0010	.0000
#2	-.0004	.0264	.0002	.0279	.0000	153.7	-.0002	-.0002	.0005	-.0001
#3	.0002	.0250	-.0005	.0279	.0000	153.4	-.0002	-.0002	.0001	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3718	1.989	24.68	.0218	-.0015	47.88	-.0002	-.0019	.0004	.0010
Stddev	.0037	.004	.08	.0001	.0002	.06	.0001	.0007	.0016	.0020
%RSD	.9960	.2214	.3429	.3316	12.26	.1260	56.56	38.40	407.6	191.9
#1	.3733	1.994	24.58	.0218	-.0014	47.85	-.0001	-.0021	.0018	-.0010
#2	.3746	1.986	24.71	.0219	-.0017	47.95	-.0002	-.0011	-.0014	.0030
#3	.3676	1.987	24.75	.0217	-.0013	47.85	-.0003	-.0024	.0008	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.279	-.0002	.3922	.0013	.0000	.0000	.0054
Stddev	.009	.0005	.0009	.0003	.0004	.000	.0001
%RSD	.1220	200.6	.2315	19.78	14540.	1492.	1.164
#1	7.269	.0002	.3916	.0016	.0004	-.0001	.0054
#2	7.282	-.0001	.3932	.0014	-.0005	-.0001	.0054
#3	7.285	-.0008	.3917	.0011	.0001	.0002	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.1	4811.4	30376.	3855.1
Stddev	2.9	1.3	60.	2.4
%RSD	.18180	.02801	.19685	.06235
#1	1606.9	4812.2	30316.	3855.8
#2	1612.7	4812.2	30435.	3857.2
#3	1610.8	4809.8	30377.	3852.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 14:47:11 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2488	41.65	1.889	1.985	2.029	41.59	1.972	1.957	2.092	2.007
Stddev	.0009	.03	.002	.005	.006	.03	.002	.002	.001	.003
%RSD	.3588	.0751	.1154	.2626	.2745	.0638	.1076	.1035	.0575	.1521
#1	.2498	41.62	1.889	1.984	2.026	41.56	1.970	1.955	2.091	2.010
#2	.2483	41.64	1.886	1.990	2.035	41.61	1.973	1.957	2.093	2.004
#3	.2483	41.68	1.891	1.980	2.026	41.60	1.974	1.959	2.091	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.10	41.09	39.75	2.048	1.920	41.80	1.907	1.972	1.901	1.901
Stddev	.05	.07	.15	.003	.006	.02	.000	.005	.001	.002
%RSD	.1329	.1630	.3830	.1375	.3402	.0561	.0190	.2587	.0653	.1070
#1	40.04	41.02	39.77	2.050	1.913	41.78	1.908	1.966	1.901	1.902
#2	40.12	41.13	39.89	2.045	1.921	41.82	1.907	1.976	1.900	1.903
#3	40.14	41.14	39.59	2.050	1.926	41.79	1.907	1.975	1.903	1.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.349	1.860	2.059	2.039	1.968	1.970	1.966
Stddev	.001	.004	.003	.002	.005	.007	.003
%RSD	.0997	.2169	.1601	.0740	.2366	.3332	.1533
#1	1.349	1.857	2.055	2.041	1.964	1.969	1.962
#2	1.347	1.859	2.062	2.040	1.968	1.964	1.967
#3	1.350	1.864	2.060	2.038	1.973	1.977	1.968
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 14:47:11 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1606.1	4787.0	30223.	3841.1
Stddev	6.3	10.6	65.	19.0
%RSD	.38992	.22195	.21577	.49572
#1	1612.3	4797.0	30298.	3819.9
#2	1599.8	4775.8	30177.	3856.9
#3	1606.1	4788.2	30195.	3846.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:51:08 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0024	.0002	.0001	-.0001	-.0032	.0000	.0000	.0001
Stddev	.0002	.0082	.0003	.0003	.0001	.0031	.000	.0002	.0001
%RSD	41.27	340.9	126.0	329.1	81.42	98.43	9217.	333.8	85.81
#1	-.0006	.0118	.0005	.0000	-.0001	-.0058	-.0001	.0000	.0000
#2	-.0003	-.0022	-.0001	.0003	-.0001	-.0039	.0001	.0002	.0001
#3	-.0003	-.0024	.0003	-.0002	.0000	.0003	.0000	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0459	-.0067	.0196	.0000	F.0037	.0255	-.0003	-.0004
Stddev	.0001	.0153	.0496	.0200	.0001	.0010	.0081	.0001	.0017
%RSD	37.61	33.41	739.8	102.2	457.4	27.49	31.92	36.46	386.6
#1	-.0002	.0620	-.0283	.0386	.0000	.0048	.0204	-.0002	-.0019
#2	-.0002	.0441	-.0419	-.0013	.0000	.0035	.0211	-.0004	-.0010
#3	-.0001	.0315	.0501	.0215	.0000	.0028	.0348	-.0002	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0009	.0005	.0001	.0000	F.0022	.0005	-.0005	-.0001
Stddev	.0002	.0014	.0003	.0002	.000	.0002	.0011	.0002	.0001
%RSD	10.87	157.5	59.64	173.1	163.2	10.24	220.0	33.68	58.08
#1	.0016	.0007	.0005	.0004	-.0001	.0024	.0012	-.0004	.0000
#2	.0018	-.0004	.0008	.0001	.0000	.0022	-.0008	-.0007	-.0001
#3	.0014	.0023	.0002	-.0001	.0000	.0020	.0010	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:51:08 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1662.0	4996.0	31352.	3849.4
Stddev	3.9	9.7	16.	25.9
%RSD	.23265	.19400	.04947	.67305
#1	1659.2	4987.1	31348.	3876.2
#2	1666.4	5006.4	31369.	3847.6
#3	1660.3	4994.6	31339.	3824.5

Zoom In Zoom Out

Sample Name: FA22154-12 Acquired: 2/17/2015 14:55:21 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0060	-.0004	.0195	.0000	7.468	.0001	.0009	.0023
Stddev	.0002	.0070	.0004	.0002	.000	.026	.0000	.0002	.0001
%RSD	91.20	115.8	86.01	1.220	185.4	.3511	31.64	21.56	5.937
#1	-.0004	.0074	-.0002	.0197	.0000	7.492	.0001	.0007	.0024
#2	.0000	.0122	-.0002	.0192	.0000	7.473	.0002	.0011	.0022
#3	-.0002	-.0015	-.0008	.0196	.0000	7.440	.0001	.0009	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0841	F127.8	1.838	.0005	.0011	56.41	.0008	.0010
Stddev	.0003	.0035	.7	.009	.0000	.0004	.31	.0003	.0002
%RSD	317.0	4.126	.5324	.5168	4.858	32.69	.5520	33.85	23.82
#1	-.0003	.0872	128.4	1.835	.0005	.0014	56.64	.0007	.0007
#2	-.0002	.0846	128.1	1.830	.0005	.0011	56.55	.0005	.0012
#3	.0002	.0804	127.1	1.848	.0005	.0007	56.06	.0010	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0013	4.503	.0000	.7928	.0009	-.0017	.0000	.0073
Stddev	.0000	.0002	.002	.000	.0039	.0002	.0006	.0001	.0001
%RSD	6.150	14.22	.0515	318.1	.4972	27.58	38.06	1434.	1.324
#1	.0005	.0015	4.500	.0001	.7953	.0011	-.0024	-.0001	.0074
#2	.0005	.0014	4.505	-.0001	.7948	.0007	-.0011	.0000	.0073
#3	.0006	.0011	4.504	-.0001	.7883	.0008	-.0016	.0001	.0072

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1633.8	4905.0	30655.	3816.0
Stddev	6.9	5.9	96.	30.5
%RSD	.42497	.12098	.31359	.79961
#1	1625.9	4898.1	30610.	3815.3
#2	1636.8	4908.6	30765.	3785.9
#3	1638.7	4908.3	30590.	3846.9

Zoom In Zoom Out

Sample Name: FA22154-13 Acquired: 2/17/2015 14:59:30 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0246	.0005	.0426	.0000	145.8	-.0001	-.0001	.0004	-.0010
Stddev	.0001	.0193	.0003	.0002	.0001	.7	.0001	.0001	.0002	.0002
%RSD	29.83	78.23	65.45	.4087	2167.	.4535	61.51	94.66	53.39	23.83
#1	-.0003	.0026	.0002	.0427	-.0001	145.4	.0000	.0000	.0001	-.0008
#2	-.0002	.0330	.0006	.0427	.0000	145.4	-.0001	-.0002	.0005	-.0012
#3	-.0002	.0382	.0008	.0424	.0001	146.6	-.0002	.0000	.0004	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1576	1.995	39.70	.0063	-.0006	36.18	.0003	-.0023	-.0001	.0011
Stddev	.0026	.040	.18	.0001	.0001	.14	.0002	.0006	.0008	.0008
%RSD	1.674	1.990	.4516	1.334	15.91	.3844	77.75	26.90	559.6	71.55
#1	.1603	2.035	39.56	.0064	-.0006	36.10	.0001	-.0031	.0007	.0002
#2	.1576	1.956	39.63	.0063	-.0005	36.11	.0002	-.0019	-.0009	.0016
#3	.1550	1.995	39.90	.0063	-.0007	36.34	.0005	-.0021	-.0002	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.42	-.0001	.5085	.0014	.0006	-.0003	.0066
Stddev	.01	.0002	.0021	.0001	.0019	.0004	.0000
%RSD	.0991	230.8	.4127	8.271	341.1	145.3	.4848
#1	11.40	.0001	.5074	.0014	.0011	.0000	.0066
#2	11.42	-.0003	.5072	.0013	-.0015	-.0007	.0066
#3	11.42	-.0001	.5109	.0015	.0021	-.0001	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.2	4795.3	30146.	3824.3
Stddev	2.6	7.9	200.	7.9
%RSD	.16291	.16430	.66291	.20759
#1	1607.2	4795.5	29942.	3820.0
#2	1611.8	4787.4	30155.	3833.5
#3	1611.6	4803.1	30341.	3819.5

Zoom In Zoom Out

Sample Name: FA22154-14 Acquired: 2/17/2015 15:03:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0170	-.0002	.0053	-.0001	71.83	-.0001	-.0002	.0008	-.0007
Stddev	.0001	.0153	.0002	.0001	.0001	.14	.0000	.0000	.0003	.0003
%RSD	21.92	89.65	98.27	2.411	106.8	.1881	54.63	24.14	38.01	46.79
#1	.0006	.0002	-.0002	.0054	-.0001	71.88	-.0001	-.0002	.0010	-.0006
#2	.0006	.0207	-.0005	.0052	.0000	71.93	-.0001	-.0002	.0004	-.0011
#3	.0004	.0301	.0000	.0054	-.0001	71.67	.0000	-.0001	.0008	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0036	.5272	4.726	.0000	.0086	8.799	-.0002	-.0019	.0003	.0021
Stddev	.0032	.0065	.026	.0001	.0001	.013	.0002	.0001	.0007	.0009
%RSD	89.02	1.229	.5533	120.5	.9646	.1424	89.08	7.904	248.5	41.39
#1	-.0018	.5319	4.753	.0001	.0085	8.813	-.0001	-.0017	.0006	.0020
#2	-.0017	.5298	4.724	.0001	.0086	8.789	-.0001	-.0020	-.0005	.0031
#3	-.0072	.5198	4.701	.0000	.0086	8.795	-.0005	-.0018	.0008	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.101	-.0001	.2562	.0010	-.0002	.0050	.0053
Stddev	.003	.0004	.0004	.0002	.0017	.0001	.0001
%RSD	.0848	328.7	.1731	21.09	1002.	2.020	1.110
#1	3.104	-.0002	.2558	.0013	-.0012	.0049	.0053
#2	3.098	-.0005	.2566	.0009	.0018	.0050	.0052
#3	3.101	.0003	.2563	.0009	-.0011	.0051	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1645.4	4891.9	30931.	3817.1
Stddev	2.3	6.3	75.	34.0
%RSD	.14229	.12903	.24241	.89024
#1	1644.9	4886.2	30845.	3778.4
#2	1643.4	4890.7	30981.	3830.7
#3	1648.0	4898.7	30967.	3842.2

Zoom In Zoom Out

Sample Name: FA22154-15 Acquired: 2/17/2015 15:07:47 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0938	.0064	.0186	.0000	124.7	-.0002	.0004	.0036
Stddev	.0003	.0009	.0005	.0002	.0001	.4	.0000	.0001	.0004
%RSD	93.60	1.007	7.761	.9150	408.5	.3310	33.16	16.87	11.84
#1	.0004	.0948	.0062	.0185	.0000	124.2	-.0002	.0004	.0035
#2	.0007	.0937	.0070	.0185	.0002	124.9	-.0001	.0003	.0033
#3	.0000	.0929	.0060	.0188	.0000	125.0	-.0001	.0004	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	2.912	6.560	6.359	.0097	.0018	F97.78	.0008	-.0025
Stddev	.0003	.011	.044	.034	.0000	.0002	.20	.0003	.0006
%RSD	670.7	.3683	.6712	.5319	.4210	8.948	.2086	39.31	23.21
#1	.0002	2.907	6.539	6.323	.0097	.0019	97.54	.0008	-.0019
#2	-.0003	2.906	6.531	6.390	.0098	.0016	97.90	.0005	-.0030
#3	.0001	2.925	6.611	6.363	.0097	.0019	97.90	.0012	-.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0010	3.681	-.0002	1.319	.0045	-.0002	.0077	.0067
Stddev	.0005	.0006	.004	.0002	.004	.0017	.0006	.0001	.0000
%RSD	52.85	58.87	.1010	116.1	.2740	36.76	324.7	.7876	.2008
#1	.0015	.0018	3.676	-.0001	1.315	.0034	.0003	.0076	.0067
#2	.0004	.0007	3.682	-.0005	1.319	.0038	.0000	.0077	.0067
#3	.0012	.0007	3.683	.0000	1.322	.0064	-.0009	.0077	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.7	4858.5	30173.	3834.7
Stddev	.6	7.9	88.	21.6
%RSD	.03956	.16166	.29031	.56281
#1	1613.9	4850.2	30134.	3837.8
#2	1613.0	4859.6	30111.	3811.7
#3	1614.2	4865.8	30273.	3854.6

Zoom In Zoom Out

Sample Name: FA22154-16 Acquired: 2/17/2015 15:11:56 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0067	-.0006	.0157	-.0001	67.52	-.0001	-.0002	.0003	-.0005
Stddev	.0003	.0100	.0002	.0001	.0000	.20	.0000	.0001	.0002	.0002
%RSD	82.84	149.1	32.64	.6934	5.517	.2905	34.86	44.29	50.14	31.76
#1	.0006	-.0038	-.0004	.0158	-.0001	67.57	-.0001	-.0002	.0003	-.0004
#2	.0005	.0162	-.0008	.0158	-.0001	67.31	-.0001	-.0001	.0002	-.0007
#3	.0000	.0078	-.0008	.0156	-.0002	67.70	-.0001	-.0002	.0005	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0214	3.100	21.52	.0046	-.0013	13.94	-.0003	-.0015	.0008	.0005
Stddev	.0036	.036	.10	.0000	.0001	.05	.0004	.0009	.0007	.0005
%RSD	16.83	1.175	.4848	.7770	7.611	.3530	131.4	55.22	91.66	94.09
#1	.0255	3.072	21.59	.0046	-.0012	13.95	-.0005	-.0018	.0012	.0005
#2	.0194	3.087	21.40	.0046	-.0014	13.89	-.0004	-.0006	.0000	.0001
#3	.0192	3.141	21.57	.0046	-.0013	13.99	.0001	-.0022	.0011	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.775	-.0002	.1890	.0011	.0000	-.0003	.0053
Stddev	.007	.0001	.0007	.0001	.001	.0003	.0000
%RSD	.0793	55.92	.3918	8.654	353100.	93.17	.4108
#1	8.767	-.0003	.1891	.0013	.0013	-.0007	.0054
#2	8.777	-.0001	.1882	.0011	-.0004	-.0001	.0053
#3	8.780	-.0003	.1897	.0011	-.0009	-.0002	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1630.9	4878.6	30792.	3817.5
Stddev	3.8	6.8	22.	31.9
%RSD	.22995	.14034	.07304	.83625
#1	1634.3	4881.9	30767.	3781.8
#2	1626.9	4870.7	30811.	3843.3
#3	1631.4	4883.2	30799.	3827.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 15:36:38 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2474	40.68	1.917	1.983	1.993	40.62	1.968	1.956	2.045	1.985
Stddev	.0004	.22	.000	.005	.008	.11	.002	.001	.009	.006
%RSD	.1456	.5316	.0159	.2454	.4082	.2729	.0895	.0628	.4337	.3197
#1	.2478	40.93	1.917	1.989	2.003	40.74	1.969	1.957	2.051	1.992
#2	.2470	40.53	1.917	1.982	1.988	40.52	1.966	1.955	2.035	1.979
#3	.2474	40.60	1.917	1.979	1.989	40.59	1.969	1.956	2.050	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.47	40.76	39.43	2.029	1.933	41.19	1.931	1.969	1.920	1.925
Stddev	.06	.13	.17	.005	.006	.23	.001	.006	.003	.004
%RSD	.1633	.3198	.4300	.2367	.2899	.5498	.0433	.3112	.1769	.1982
#1	39.54	40.91	39.62	2.034	1.927	41.45	1.932	1.971	1.921	1.928
#2	39.45	40.69	39.37	2.024	1.935	41.05	1.931	1.973	1.917	1.921
#3	39.41	40.67	39.29	2.029	1.937	41.06	1.930	1.962	1.924	1.927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.361	1.902	2.026	2.009	1.965	1.967	1.967
Stddev	.001	.001	.010	.004	.005	.007	.002
%RSD	.0365	.0493	.4786	.2233	.2422	.3654	.0959
#1	1.361	1.903	2.037	2.014	1.968	1.974	1.968
#2	1.362	1.902	2.020	2.005	1.968	1.960	1.965
#3	1.361	1.901	2.020	2.009	1.959	1.969	1.967
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 15:36:38 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1613.0	4780.9	30643.	3882.4
Stddev	3.7	7.1	104.	7.3
%RSD	.22954	.14830	.34012	.18849
#1	1610.4	4772.9	30663.	3874.3
#2	1611.4	4786.4	30735.	3888.5
#3	1617.3	4783.5	30530.	3884.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 15:40:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0015	.0003	.0001	.0000	.0000	.0000	.0002	.0001
Stddev	.0004	.0051	.0009	.0001	.0001	.0043	.000	.0001	.0003
%RSD	108.1	327.2	260.5	202.1	124.4	100000.	10.51	43.74	224.9
#1	.0007	.0066	.0014	.0001	.0000	-.0021	.0000	.0002	.0004
#2	.0005	-.0036	.0000	.0002	.0001	-.0028	.0000	.0002	-.0002
#3	-.0001	.0016	-.0003	-.0001	.0000	.0049	.0000	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0479	-.0084	.0102	.0000	F.0037	.0076	-.0002	.0001
Stddev	.0002	.0124	.0240	.0135	.0001	.0013	.0054	.0002	.0001
%RSD	290.2	25.93	284.3	132.9	450.3	35.23	70.69	107.7	63.64
#1	-.0001	.0587	-.0309	.0122	.0001	.0051	.0129	.0000	.0002
#2	-.0003	.0507	-.0111	.0225	.0000	.0034	.0021	-.0003	.0000
#3	.0002	.0343	.0168	-.0042	.0000	.0025	.0079	-.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0001	.0000	.0004	.0001	F.0022	.0001	-.0001	-.0001
Stddev	.0004	.0002	.0007	.0005	.0000	.0003	.0011	.0002	.0000
%RSD	21.80	362.2	1835.	141.9	71.99	13.13	759.3	255.9	28.40
#1	.0019	.0003	.0001	.0009	.0001	.0026	-.0002	-.0001	-.0001
#2	.0014	.0000	.0007	-.0001	.0000	.0020	.0014	.0001	-.0001
#3	.0022	-.0002	-.0006	.0003	.0001	.0021	-.0007	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 15:40:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1669.6	4953.3	32301.	3960.7
Stddev	4.6	3.6	134.	14.9
%RSD	.27378	.07291	.41423	.37633
#1	1670.4	4956.8	32149.	3973.4
#2	1664.7	4949.6	32352.	3964.4
#3	1673.7	4953.5	32402.	3944.3

Zoom In Zoom Out

Sample Name: MP28563-MB1 Acquired: 2/17/2015 16:05:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0096	-.0012	.0000	-.0001	.0069	-.0001	-.0002	-.0001	-.0003
Stddev	.0004	.0100	.0011	.0001	.0001	.0030	.0000	.0001	.0004	.0004
%RSD	301.6	104.4	91.44	247.9	151.8	43.30	8.307	36.88	370.0	131.9
#1	.0001	-.0202	.0000	.0000	-.0002	.0060	-.0001	-.0002	.0003	-.0002
#2	.0001	-.0003	-.0015	.0000	.0000	.0102	-.0001	-.0001	-.0001	-.0007
#3	-.0005	-.0084	-.0023	.0001	-.0001	.0045	-.0001	-.0002	-.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0173	.0172	-.0001	-.0003	.0088	-.0004	.0003	.0007	.0015
Stddev	.0057	.0080	.0246	.0000	.0002	.0033	.0001	.0008	.0006	.0023
%RSD	752.0	46.19	142.9	17.34	49.43	37.59	19.15	281.9	79.09	155.5
#1	.0057	-.0100	.0292	-.0001	-.0003	.0125	-.0004	.0007	.0002	.0028
#2	-.0054	-.0259	.0334	-.0001	-.0005	.0078	-.0003	.0008	.0007	.0028
#3	.0020	-.0161	-.0111	-.0001	-.0002	.0061	-.0004	-.0006	.0013	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0218	-.0001	-.0001	-.0004	-.0027	-.0004	.0009
Stddev	.0004	.0002	.0000	.0001	.0007	.0004	.0000
%RSD	2.062	187.0	41.98	33.34	25.32	94.07	2.870
#1	.0214	-.0003	-.0001	-.0004	-.0022	-.0004	.0009
#2	.0217	.0001	-.0001	-.0002	-.0024	-.0007	.0010
#3	.0223	.0000	-.0001	-.0005	-.0035	.0000	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28563-MB1 Acquired: 2/17/2015 16:05:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1653.9	4981.6	31833.	3925.6
Stddev	5.8	5.2	141.	5.9
%RSD	.34872	.10460	.44210	.15101
#1	1659.6	4986.5	31671.	3932.5
#2	1654.1	4976.1	31903.	3922.1
#3	1648.1	4982.2	31925.	3922.3

Zoom In Zoom Out

Sample Name: MP28563-B1 Acquired: 2/17/2015 16:09:16 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0510	30.30	1.931	2.097	.0541	28.24	.0498	.5041	.2250	.2660
Stddev	.0004	.06	.002	.000	.0002	.04	.0001	.0003	.0003	.0004
%RSD	.8633	.2039	.0964	.0092	.3273	.1420	.1871	.0612	.1399	.1376
#1	.0513	30.35	1.932	2.097	.0539	28.27	.0497	.5041	.2252	.2656
#2	.0505	30.23	1.932	2.097	.0542	28.19	.0498	.5038	.2246	.2660
#3	.0513	30.30	1.929	2.098	.0543	28.24	.0498	.5044	.2252	.2664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.56	27.75	26.69	.5303	.5026	28.59	.4980	.5077	.4841	1.909
Stddev	.02	.03	.03	.0006	.0004	.03	.0006	.0005	.0012	.002
%RSD	.0678	.0964	.1245	.1200	.0786	.1219	.1156	.1080	.2442	.1218
#1	28.58	27.73	26.72	.5306	.5022	28.62	.4976	.5082	.4828	1.909
#2	28.56	27.74	26.66	.5296	.5030	28.55	.4986	.5071	.4845	1.912
#3	28.55	27.78	26.67	.5307	.5026	28.60	.4976	.5078	.4851	1.907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0289	.5093	.5623	.5505	2.038	.5016	.5098
Stddev	.0001	.0012	.0007	.0006	.004	.0010	.0002
%RSD	.4003	.2360	.1226	.1124	.1982	.1930	.0386
#1	.0288	.5079	.5625	.5502	2.041	.5017	.5097
#2	.0288	.5101	.5615	.5501	2.039	.5006	.5096
#3	.0290	.5099	.5628	.5512	2.033	.5025	.5100
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28563-B1 Acquired: 2/17/2015 16:09:16 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1625.7	4865.1	30159.	3864.4
Stddev	4.7	6.9	86.	26.7
%RSD	.29182	.14237	.28430	.69085
#1	1620.2	4857.1	30097.	3833.5
#2	1627.7	4869.5	30257.	3879.1
#3	1629.1	4868.6	30123.	3880.4

Zoom In Zoom Out

Sample Name: FA22014-2L Acquired: 2/17/2015 16:13:15 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0382	-.0002	.0200	-.0001	11.42	.0007	.0005	.0007
Stddev	.0003	.0067	.0006	.0002	.0000	.02	.0000	.0001	.0003
%RSD	94.09	17.44	286.8	.9240	20.28	.1512	1.693	11.19	51.45
#1	-.0006	.0407	-.0007	.0198	-.0002	11.44	.0007	.0006	.0005
#2	.0000	.0433	-.0005	.0200	-.0001	11.40	.0007	.0004	.0005
#3	-.0003	.0307	.0005	.0201	-.0001	11.43	.0007	.0005	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6554	.2129	.5621	.2717	.0957	-.0003	F149.8	.0008	-.0010
Stddev	.0018	.0103	.0333	.0420	.0001	.0002	.4	.0001	.0007
%RSD	.2722	4.852	5.928	15.46	.1203	73.72	.2401	16.31	72.55
#1	.6566	.2248	.5343	.2847	.0958	.0000	150.2	.0008	-.0016
#2	.6534	.2063	.5990	.3057	.0957	-.0004	149.5	.0007	-.0002
#3	.6563	.2077	.5530	.2247	.0956	-.0004	149.8	.0009	-.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0013	.0690	.0005	.0236	.0018	.0003	-.0005	.1334
Stddev	.0005	.0007	.0028	.0002	.0001	.0001	.0006	.0002	.0001
%RSD	92.18	49.50	4.024	39.89	.3429	6.962	170.6	36.05	.0514
#1	.0002	.0016	.0686	.0003	.0237	.0016	.0010	-.0007	.1334
#2	.0012	.0018	.0720	.0007	.0236	.0019	.0002	-.0004	.1333
#3	.0003	.0006	.0665	.0004	.0236	.0018	-.0001	-.0004	.1334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1638.2	4939.8	30242.	3829.8
Stddev	3.0	4.2	159.	13.1
%RSD	.18170	.08474	.52622	.34199
#1	1641.6	4936.6	30062.	3829.0
#2	1636.9	4944.5	30299.	3843.3
#3	1636.2	4938.1	30364.	3817.2

Zoom In Zoom Out

Sample Name: MP28563-D1 Acquired: 2/17/2015 16:17:24 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0512	-.0003	.0202	-.0001	11.39	.0007	.0004	.0005
Stddev	.0003	.0031	.0007	.0002	.0001	.04	.0000	.0002	.0001
%RSD	177.1	5.989	250.6	.7837	54.87	.3701	4.341	43.07	16.12
#1	.0005	.0547	.0003	.0203	-.0001	11.36	.0007	.0004	.0005
#2	.0001	.0501	-.0001	.0201	-.0002	11.44	.0007	.0002	.0006
#3	-.0001	.0488	-.0011	.0203	.0000	11.37	.0008	.0006	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6501	.2007	.5435	.2735	.0961	-.0006	F148.6	.0007	-.0015
Stddev	.0026	.0041	.0119	.0183	.0003	.0000	.6	.0000	.0010
%RSD	.4001	2.050	2.182	6.684	.3094	8.829	.3822	4.437	66.35
#1	.6529	.1965	.5398	.2909	.0965	-.0005	148.8	.0007	-.0006
#2	.6479	.2008	.5340	.2751	.0959	-.0006	149.1	.0007	-.0025
#3	.6495	.2047	.5568	.2544	.0960	-.0006	148.0	.0007	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0025	.0705	.0003	.0238	.0012	-.0012	-.0004	.1348
Stddev	.0012	.0006	.0016	.0002	.0000	.0002	.0006	.0001	.0001
%RSD	80.98	22.86	2.243	73.96	.1251	16.33	53.66	37.74	.0684
#1	.0021	.0029	.0693	.0001	.0238	.0011	-.0013	-.0005	.1347
#2	.0001	.0018	.0699	.0006	.0238	.0010	-.0005	-.0002	.1349
#3	.0023	.0027	.0723	.0003	.0238	.0014	-.0018	-.0004	.1347

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1640.2	4928.3	30613.	3861.9
Stddev	4.5	12.3	92.	28.0
%RSD	.27462	.25000	.30156	.72446
#1	1635.3	4918.5	30512.	3885.8
#2	1641.1	4924.4	30692.	3831.1
#3	1644.2	4942.1	30636.	3868.7

Zoom In Zoom Out

Sample Name: MP28563-SD1 Acquired: 2/17/2015 16:21:32 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0014	.0409	.0008	.0200	-.0003	11.06	.0002	.0000	-.0005	.6119
Stddev	.0007	.0232	.0028	.0014	.0003	.04	.0001	.000	.0006	.0021
%RSD	47.41	56.77	377.2	6.989	112.2	.3169	28.83	17260.	129.9	.3421
#1	-.0007	.0593	.0040	.0212	-.0005	11.07	.0003	-.0005	.0001	.6133
#2	-.0014	.0148	-.0008	.0203	.0001	11.02	.0002	.0003	-.0004	.6129
#3	-.0021	.0487	-.0010	.0184	-.0004	11.09	.0002	.0001	-.0011	.6095

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1335	.3718	.1797	.0905	-.0023	146.1	.0006	-.0004	.0022	.0024
Stddev	.0078	.0584	.0744	.0006	.0004	.1	.0008	.0016	.0050	.0040
%RSD	5.856	15.71	41.41	.6410	17.94	.0408	130.1	395.6	222.8	170.5
#1	.1252	.3054	.2519	.0902	-.0027	146.2	.0014	.0000	.0059	-.0008
#2	.1408	.3949	.1032	.0912	-.0023	146.1	.0007	.0010	.0042	.0069
#3	.1343	.4152	.1840	.0901	-.0018	146.1	-.0002	-.0022	-.0034	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0635	.0000	.0218	-.0003	.0012	-.0027	.1274
Stddev	.0009	.001	.0004	.0001	.0071	.0010	.0001
%RSD	1.409	2001.	2.026	17.96	574.1	37.76	.0984
#1	.0631	.0004	.0220	-.0003	-.0064	-.0037	.1273
#2	.0645	-.0007	.0213	-.0002	.0025	-.0017	.1275
#3	.0628	.0002	.0222	-.0003	.0076	-.0028	.1273

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1668.0	5004.0	31125.	3837.4
Stddev	3.5	3.7	157.	3.0
%RSD	.21069	.07307	.50507	.07743
#1	1664.2	5003.6	31197.	3834.2
#2	1671.1	5000.6	31234.	3837.9
#3	1668.8	5007.9	30945.	3840.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 16:25:42 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2524	42.06	1.888	1.983	2.037	41.95	1.981	1.968	2.141	2.046
Stddev	.0008	.31	.002	.009	.014	.29	.001	.002	.002	.004
%RSD	.3278	.7364	.1168	.4462	.6699	.6895	.0360	.1129	.0916	.1696
#1	.2515	41.72	1.886	1.974	2.022	41.64	1.981	1.965	2.139	2.043
#2	.2532	42.32	1.890	1.992	2.049	42.22	1.982	1.970	2.142	2.049
#3	.2524	42.14	1.888	1.984	2.039	41.99	1.982	1.969	2.142	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.17	41.67	39.95	2.065	1.924	42.44	1.909	1.974	1.907	1.903
Stddev	.27	.26	.30	.003	.008	.28	.002	.009	.003	.006
%RSD	.6774	.6320	.7427	.1514	.4070	.6664	.0842	.4548	.1743	.3202
#1	39.89	41.42	39.62	2.061	1.915	42.14	1.907	1.978	1.904	1.900
#2	40.43	41.94	40.20	2.067	1.926	42.70	1.910	1.964	1.907	1.910
#3	40.20	41.65	40.02	2.066	1.930	42.48	1.909	1.981	1.911	1.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.351	1.867	2.075	2.059	1.973	2.013	1.977
Stddev	.003	.004	.015	.002	.011	.006	.001
%RSD	.1830	.2299	.7079	.1173	.5322	.3060	.0731
#1	1.349	1.865	2.059	2.057	1.972	2.007	1.976
#2	1.354	1.872	2.087	2.059	1.963	2.019	1.977
#3	1.351	1.863	2.080	2.062	1.984	2.012	1.979
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 16:25:42 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1608.7	4794.3	29782.	3820.0
Stddev	8.5	8.9	75.	18.9
%RSD	.52677	.18581	.25248	.49604
#1	1608.6	4803.9	29867.	3830.7
#2	1617.2	4792.7	29759.	3798.1
#3	1600.3	4786.3	29722.	3831.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 16:29:39 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0025	.0003	.0001	.0000	.0030	.0000	.0000	-.0001
Stddev	.0003	.0122	.0006	.0001	.000	.0033	.0000	.0001	.0002
%RSD	394.1	492.8	226.4	231.8	1293.	109.5	86.74	2083.	233.1
#1	-.0004	.0073	.0007	.0001	.0000	.0053	.0000	.0001	-.0003
#2	.0001	-.0114	-.0004	-.0001	-.0001	.0044	.0000	-.0001	-.0001
#3	.0001	.0116	.0006	.0001	.0001	-.0008	.0001	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0488	.0290	.0230	.0001	F.0037	.0232	-.0001	-.0001
Stddev	.000	.0154	.0092	.0074	.0000	.0009	.0122	.0002	.0011
%RSD	873.4	31.55	31.63	32.10	40.01	23.53	52.71	183.6	1883.
#1	.0001	.0660	.0211	.0187	.0000	.0047	.0127	-.0001	.0012
#2	-.0003	.0443	.0391	.0315	.0001	.0035	.0366	.0001	-.0005
#3	.0001	.0362	.0269	.0187	.0001	.0030	.0203	-.0003	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0028	.0000	.0010	.0004	.0000	F.0026	-.0002	-.0002	.0002
Stddev	.0017	.0007	.0010	.0004	.0001	.0003	.0005	.0003	.0000
%RSD	59.86	1926.	92.58	88.30	187.4	10.68	335.2	161.7	13.06
#1	.0022	.0005	.0021	.0001	.0001	.0028	.0000	-.0004	.0002
#2	.0047	.0004	.0003	.0008	.0001	.0026	.0002	-.0002	.0002
#3	.0016	-.0008	.0007	.0003	.0000	.0023	-.0008	.0001	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020					.0020			
Low Limit	-.0020					-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 16:29:39 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1663.9	4994.5	30812.	3826.5
Stddev	1.6	9.5	97.	17.3
%RSD	.09831	.19031	.31588	.45251
#1	1662.0	4984.0	30797.	3807.3
#2	1665.2	4997.1	30916.	3840.8
#3	1664.4	5002.5	30723.	3831.5

Zoom In Zoom Out

Sample Name: MP28563-S1 Acquired: 2/17/2015 16:33:51 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0501	30.32	1.937	2.111	.0540	39.25	.0499	.4993	.2212
Stddev	.0002	.05	.001	.004	.0002	.11	.0001	.0004	.0009
%RSD	.4115	.1666	.0434	.1866	.3306	.2896	.1411	.0719	.3901
#1	.0503	30.32	1.938	2.113	.0542	39.23	.0500	.4995	.2215
#2	.0501	30.27	1.937	2.106	.0538	39.14	.0499	.4988	.2218
#3	.0499	30.37	1.936	2.112	.0539	39.37	.0499	.4995	.2202

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9120	28.68	28.27	26.49	.6172	.5035	F173.9	.4954	.5080
Stddev	.0025	.08	.10	.11	.0014	.0003	1.7	.0003	.0027
%RSD	.2789	.2805	.3498	.4083	.2207	.0686	1.005	.0600	.5329
#1	.9126	28.70	28.33	26.43	.6175	.5032	172.6	.4957	.5049
#2	.9142	28.59	28.16	26.42	.6184	.5036	173.3	.4953	.5099
#3	.9093	28.75	28.33	26.61	.6157	.5039	175.9	.4952	.5092

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4862	1.927	.0761	.5062	.5832	.5495	2.046	.4935	.6358
Stddev	.0031	.002	.0005	.0012	.0012	.0010	.005	.0020	.0004
%RSD	.6409	.1092	.6289	.2376	.2079	.1883	.2386	.4149	.0651
#1	.4849	1.930	.0763	.5058	.5837	.5492	2.040	.4939	.6354
#2	.4840	1.927	.0756	.5053	.5818	.5506	2.049	.4953	.6357
#3	.4898	1.926	.0765	.5076	.5841	.5486	2.049	.4913	.6362

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1600.5	4826.6	29813.	3813.6
Stddev	.9	4.4	136.	25.9
%RSD	.05706	.09073	.45718	.67988
#1	1601.2	4826.3	29962.	3837.1
#2	1599.5	4831.1	29694.	3818.0
#3	1600.9	4822.4	29783.	3785.8

Zoom In Zoom Out

Sample Name: MP28563-S2 Acquired: 2/17/2015 16:37:58 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0502	29.99	1.930	2.095	.0534	39.01	.0497	.4967	.2194
Stddev	.0004	.06	.004	.005	.0001	.06	.0002	.0009	.0008
%RSD	.7353	.1963	.1924	.2561	.1570	.1600	.3894	.1778	.3482
#1	.0500	30.01	1.926	2.099	.0535	39.04	.0496	.4965	.2187
#2	.0507	30.04	1.931	2.097	.0534	39.05	.0496	.4959	.2194
#3	.0501	29.92	1.934	2.089	.0533	38.94	.0499	.4977	.2202

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9139	28.43	28.15	26.33	.6142	.5007	F174.2	.4934	.5048
Stddev	.0020	.08	.05	.11	.0004	.0013	2.7	.0012	.0016
%RSD	.2183	.2902	.1765	.4121	.0727	.2670	1.565	.2526	.3259
#1	.9116	28.47	28.18	26.28	.6141	.5008	176.8	.4924	.5040
#2	.9150	28.48	28.19	26.45	.6137	.4994	174.3	.4930	.5038
#3	.9151	28.34	28.10	26.26	.6146	.5020	171.4	.4948	.5067

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4830	1.917	.0762	.5054	.5767	.5441	2.041	.4921	.6342
Stddev	.0008	.003	.0021	.0005	.0018	.0008	.008	.0005	.0013
%RSD	.1754	.1716	2.740	.0911	.3100	.1554	.3887	.1082	.2057
#1	.4832	1.915	.0780	.5049	.5778	.5433	2.037	.4925	.6336
#2	.4837	1.916	.0739	.5055	.5777	.5441	2.036	.4923	.6333
#3	.4821	1.921	.0767	.5058	.5747	.5450	2.050	.4915	.6357

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1609.7	4847.6	29981.	3821.7
Stddev	5.8	7.9	39.	5.8
%RSD	.35836	.16362	.13024	.15155
#1	1611.0	4849.8	29962.	3828.3
#2	1614.7	4854.2	30026.	3819.6
#3	1603.4	4838.8	29955.	3817.3

Zoom In Zoom Out

Sample Name: FA22014-1L Acquired: 2/17/2015 16:42:05 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0240	.0001	.0152	-.0001	51.57	-.0001	.0000	.0001
Stddev	.0004	.0019	.0006	.0002	.0000	.16	.0000	.0001	.0004
%RSD	119.4	7.923	870.1	1.061	25.49	.3072	53.89	220.8	526.9
#1	.0007	.0218	-.0004	.0154	-.0001	51.41	-.0001	.0000	.0001
#2	.0005	.0253	.0008	.0151	-.0001	51.72	-.0001	.0001	-.0003
#3	-.0001	.0248	-.0002	.0152	-.0001	51.57	.0000	.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0456	.7324	.6788	.0474	-.0003	F149.9	-.0001	-.0011
Stddev	.0000	.0065	.0262	.0221	.0001	.0001	.2	.0001	.0009
%RSD	7.594	14.33	3.573	3.260	.2160	47.64	.1572	135.4	81.74
#1	.0004	.0530	.7108	.6589	.0475	-.0001	149.9	-.0001	-.0007
#2	.0004	.0430	.7249	.6749	.0474	-.0004	150.1	.0000	-.0005
#3	.0004	.0407	.7615	.7026	.0473	-.0003	149.7	-.0002	-.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0011	.0907	.0003	.0849	.0019	.0022	.0000	.0827
Stddev	.0002	.0001	.0016	.0002	.0001	.0000	.0013	.0002	.0002
%RSD	31.78	5.071	1.783	64.43	.1694	2.036	60.45	505.8	.2374
#1	.0006	.0011	.0918	.0001	.0849	.0018	.0007	-.0002	.0825
#2	.0006	.0012	.0889	.0003	.0850	.0019	.0025	.0003	.0829
#3	.0010	.0011	.0916	.0005	.0847	.0019	.0033	.0001	.0829

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.9	4895.2	30052.	3792.5
Stddev	1.8	8.8	108.	38.9
%RSD	.11313	.17893	.36034	1.0245
#1	1631.4	4904.5	29974.	3836.3
#2	1627.8	4887.1	30175.	3779.0
#3	1630.4	4893.9	30006.	3762.2

Zoom In Zoom Out

Sample Name: FA22014-3L Acquired: 2/17/2015 16:46:14 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0525	-.0001	.1416	-.0001	16.34	.0000	.0000	.0003
Stddev	.0007	.0060	.0003	.0005	.0000	.05	.0000	.0001	.0002
%RSD	341.7	11.45	260.1	.3189	42.89	.3038	89.60	146.7	77.20
#1	.0009	.0471	-.0004	.1415	-.0001	16.38	.0000	.0001	.0005
#2	.0003	.0590	-.0002	.1421	-.0001	16.35	.0000	.0000	.0003
#3	-.0006	.0515	.0002	.1412	-.0001	16.28	.0000	.0000	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0036	.0202	.7108	.2957	.0250	-.0005	F149.9	-.0002	-.0006
Stddev	.0003	.0019	.0179	.0168	.0001	.0002	.6	.0003	.0012
%RSD	8.017	9.226	2.516	5.679	.2031	30.67	.3921	154.3	185.8
#1	.0039	.0213	.7021	.2818	.0250	-.0004	150.3	.0000	-.0016
#2	.0033	.0212	.7313	.2909	.0249	-.0006	150.3	-.0006	.0007
#3	.0036	.0181	.6988	.3143	.0250	-.0007	149.2	-.0001	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0014	.0951	.0002	.0234	.0005	.0002	.0006	.0148
Stddev	.0008	.0018	.0006	.0003	.0000	.0001	.0017	.0001	.0001
%RSD	99.51	124.8	.6597	185.9	.1093	16.13	784.4	17.99	.7838
#1	.0005	.0014	.0953	-.0002	.0234	.0004	-.0017	.0005	.0147
#2	.0002	-.0003	.0944	.0002	.0234	.0004	.0016	.0007	.0148
#3	.0017	.0033	.0956	.0004	.0234	.0006	.0008	.0005	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1634.4	4921.7	29954.	3824.0
Stddev	2.3	4.6	68.	39.9
%RSD	.14267	.09358	.22704	1.0445
#1	1635.7	4918.9	29892.	3802.1
#2	1631.7	4919.2	30027.	3799.9
#3	1635.8	4927.0	29944.	3870.2

Zoom In Zoom Out

Sample Name: FA22014-4L Acquired: 2/17/2015 16:50:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	.0893	-.0008	.0653	.0000	14.33	.0037	.0003	.0008
Stddev	.0003	.0060	.0004	.0007	.000	.02	.0001	.0002	.0005
%RSD	45.58	6.749	44.83	1.141	273.2	.1492	1.786	55.44	62.26
#1	.0010	.0876	-.0012	.0660	-.0002	14.34	.0037	.0003	.0011
#2	.0006	.0842	-.0005	.0653	-.0001	14.35	.0037	.0005	.0010
#3	.0004	.0959	-.0006	.0645	.0001	14.31	.0036	.0001	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0195	.0360	1.196	.5484	.0397	-.0006	F154.9	.0006	.0007
Stddev	.0004	.0026	.004	.0236	.0001	.0001	.2	.0001	.0004
%RSD	2.146	7.345	.3128	4.295	.2071	15.58	.1436	15.26	51.91
#1	.0199	.0340	1.200	.5751	.0396	-.0005	155.1	.0005	.0011
#2	.0191	.0350	1.192	.5307	.0398	-.0006	154.9	.0007	.0003
#3	.0196	.0390	1.197	.5394	.0397	-.0007	154.6	.0005	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0022	.1560	.0003	.0356	.0010	-.0010	.0001	.1989
Stddev	.0010	.0006	.0027	.0001	.0001	.0002	.0003	.0002	.0003
%RSD	37.36	28.72	1.732	33.45	.2157	15.67	31.66	188.0	.1710
#1	.0033	.0015	.1570	.0002	.0356	.0008	-.0013	.0003	.1988
#2	.0015	.0024	.1580	.0002	.0356	.0010	-.0007	-.0001	.1987
#3	.0030	.0028	.1529	.0004	.0355	.0011	-.0011	.0002	.1993

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1632.4	4909.5	30368.	3795.3
Stddev	8.1	13.3	96.	4.2
%RSD	.49343	.27059	.31517	.10999
#1	1628.0	4905.2	30361.	3796.4
#2	1641.7	4924.4	30277.	3790.7
#3	1627.6	4898.8	30468.	3798.9

Zoom In Zoom Out

Sample Name: FA22014-5L Acquired: 2/17/2015 16:54:30 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.3502	-.0002	.0261	-.0001	3.895	.0007	.0001	.0009
Stddev	.0007	.0110	.0005	.0002	.0001	.016	.0000	.0000	.0002
%RSD	525.2	3.144	273.2	.9146	58.51	.4068	4.184	33.28	17.53
#1	-.0004	.3445	-.0005	.0264	-.0001	3.901	.0007	.0001	.0009
#2	-.0007	.3629	.0004	.0261	-.0001	3.907	.0007	.0001	.0010
#3	.0007	.3432	-.0006	.0259	-.0002	3.877	.0007	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0008	.0544	.5364	.1499	.0129	-.0003	F155.2	.0002	.0008
Stddev	.0002	.0014	.0162	.0212	.0001	.0001	.5	.0002	.0003
%RSD	27.97	2.511	3.026	14.11	.4460	35.39	.3316	113.0	31.08
#1	.0006	.0530	.5181	.1619	.0128	-.0004	155.7	.0001	.0006
#2	.0009	.0557	.5490	.1254	.0129	-.0003	155.2	.0000	.0011
#3	.0010	.0545	.5421	.1623	.0128	-.0002	154.7	.0004	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	.0004	.3524	.0002	.0101	.0101	-.0010	-.0001	.0989
Stddev	.0005	.0010	.0060	.0001	.0001	.0010	.0011	.0001	.0002
%RSD	35.26	221.4	1.694	34.47	1.185	10.33	108.0	107.6	.1639
#1	.0015	-.0002	.3494	.0002	.0101	.0108	-.0019	-.0002	.0987
#2	.0018	.0016	.3593	.0002	.0103	.0105	.0001	-.0001	.0990
#3	.0008	.0000	.3486	.0001	.0100	.0089	-.0011	.0000	.0991

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.0	4932.1	30280.	3805.9
Stddev	1.1	3.9	56.	4.4
%RSD	.06965	.07860	.18578	.11678
#1	1640.3	4936.5	30268.	3801.9
#2	1638.7	4929.4	30342.	3805.1
#3	1638.1	4930.3	30231.	3810.7

Zoom In Zoom Out

Sample Name: FA22014-6L Acquired: 2/17/2015 16:58:39 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.2200	-.0003	.0072	-.0001	42.85	-.0001	-.0002	.0007
Stddev	.0002	.0066	.0005	.0001	.0001	.08	.0000	.0000	.0003
%RSD	281.9	2.992	154.6	1.386	44.85	.1790	28.20	8.420	46.81
#1	-.0001	.2171	.0001	.0073	-.0001	42.77	-.0001	-.0002	.0010
#2	.0001	.2275	-.0002	.0071	-.0002	42.86	-.0001	-.0002	.0008
#3	.0003	.2153	-.0009	.0071	-.0002	42.92	-.0001	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0060	.1847	.2916	.0040	-.0011	F157.6	-.0005	-.0032
Stddev	.000	.0008	.0067	.0273	.0000	.0002	.3	.0002	.0003
%RSD	968.7	12.64	3.622	9.362	.6968	14.03	.1646	39.64	9.965
#1	-.0001	.0057	.1780	.2634	.0039	-.0010	157.3	-.0003	-.0034
#2	.0000	.0054	.1848	.2933	.0040	-.0010	157.5	-.0005	-.0033
#3	.0001	.0069	.1914	.3179	.0039	-.0012	157.8	-.0007	-.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0021	.1494	.0001	.0611	.0198	.0001	.0005	.0018
Stddev	.0010	.0014	.0017	.0004	.0001	.0002	.0005	.0003	.0001
%RSD	123.7	66.69	1.112	532.0	.1565	1.105	749.8	55.78	4.221
#1	.0002	.0007	.1492	.0003	.0610	.0201	.0005	.0004	.0017
#2	.0003	.0035	.1478	.0003	.0612	.0198	.0001	.0003	.0019
#3	.0019	.0022	.1511	-.0004	.0610	.0197	-.0004	.0008	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1633.5	4921.2	30015.	3792.8
Stddev	2.2	7.3	54.	17.5
%RSD	.13747	.14790	.18002	.46043
#1	1635.6	4929.1	29956.	3812.8
#2	1631.2	4914.9	30027.	3784.4
#3	1633.6	4919.6	30062.	3781.1

Zoom In Zoom Out

Sample Name: FA22014-7L Acquired: 2/17/2015 17:02:49 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0374	.0055	.1064	-.0001	10.92	.0000	-.0001	.0015
Stddev	.0005	.0116	.0005	.0004	.0002	.01	.000	.0001	.0000
%RSD	300.3	30.92	9.088	.4158	129.7	.0843	143.9	85.41	2.891
#1	.0004	.0389	.0060	.1069	-.0003	10.92	.0000	-.0001	.0014
#2	-.0004	.0252	.0054	.1061	-.0002	10.92	.0000	.0000	.0015
#3	-.0006	.0481	.0050	.1061	.0001	10.91	-.0001	-.0003	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0113	.0203	1.042	.2317	.0143	-.0007	F149.0	-.0003	.0023
Stddev	.0003	.0010	.029	.0255	.0000	.0001	.1	.0002	.0009
%RSD	2.588	4.708	2.834	11.00	.0600	10.27	.0827	55.04	37.73
#1	.0111	.0213	1.019	.2293	.0143	-.0007	149.1	-.0004	.0016
#2	.0117	.0203	1.075	.2583	.0143	-.0007	149.0	-.0001	.0019
#3	.0112	.0194	1.030	.2074	.0143	-.0006	148.9	-.0003	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0002	.1219	.0003	.0160	.0010	-.0006	-.0002	.0368
Stddev	.0009	.0011	.0032	.0002	.0001	.0001	.0009	.0002	.0001
%RSD	312.5	649.1	2.595	81.40	.4650	8.984	162.1	123.8	.2832
#1	.0000	.0006	.1217	.0000	.0161	.0009	.0004	-.0001	.0367
#2	-.0004	-.0011	.1188	.0004	.0159	.0011	-.0013	.0000	.0369
#3	.0013	.0010	.1251	.0004	.0161	.0011	-.0008	-.0004	.0368

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.6	4938.7	30133.	3783.0
Stddev	5.6	7.8	121.	1.9
%RSD	.33964	.15814	.40002	.05007
#1	1635.1	4929.9	30197.	3783.5
#2	1637.7	4941.4	29993.	3784.5
#3	1645.8	4944.9	30207.	3780.9

Zoom In Zoom Out

Sample Name: FA22014-8L Acquired: 2/17/2015 17:06:56 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0405	-.0005	.1309	-.0001	11.23	.0000	.0000	.0002
Stddev	.0002	.0110	.0009	.0002	.0000	.04	.0000	.000	.0004
%RSD	401.2	27.17	169.7	.1454	33.05	.3777	129.6	603.8	205.6
#1	.0000	.0509	.0004	.1311	-.0001	11.27	.0000	.0001	-.0001
#2	-.0001	.0417	-.0015	.1308	-.0001	11.19	.0000	.0000	.0000
#3	.0003	.0290	-.0006	.1308	-.0001	11.23	.0000	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0103	.7429	.1958	.0149	-.0006	F153.2	-.0004	.0000
Stddev	.0002	.0053	.0155	.0194	.0001	.0001	.8	.0002	.0007
%RSD	62.87	51.70	2.093	9.904	.7943	23.00	.5405	38.72	5054.
#1	.0003	.0148	.7521	.2163	.0149	-.0005	154.1	-.0003	-.0008
#2	.0001	.0116	.7249	.1777	.0149	-.0006	152.4	-.0006	.0007
#3	.0006	.0044	.7516	.1935	.0147	-.0008	153.1	-.0004	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0007	.1008	.0003	.0157	.0002	-.0014	.0002	.0055
Stddev	.0002	.0011	.0017	.0001	.0001	.0000	.0003	.0002	.0001
%RSD	21.50	167.2	1.695	23.04	.8551	8.704	24.04	78.21	1.371
#1	.0007	-.0006	.0991	.0002	.0159	.0002	-.0013	.0001	.0055
#2	.0007	.0017	.1025	.0003	.0156	.0002	-.0018	.0001	.0056
#3	.0010	.0009	.1008	.0003	.0157	.0002	-.0011	.0004	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1635.7	4945.3	30274.	3778.6
Stddev	9.0	12.0	119.	21.0
%RSD	.54958	.24244	.39453	.55653
#1	1626.4	4935.3	30136.	3756.6
#2	1644.3	4958.6	30335.	3798.5
#3	1636.4	4942.1	30350.	3780.8

Zoom In Zoom Out

Sample Name: FA22014-9L Acquired: 2/17/2015 17:11:05 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.1557	-.0006	.0213	-.0001	20.51	.0008	.0005	.0004
Stddev	.0001	.0145	.0007	.0002	.0000	.01	.0000	.0001	.0002
%RSD	48.13	9.309	118.5	1.166	34.95	.0460	.9551	16.17	53.39
#1	.0004	.1426	-.0001	.0214	-.0001	20.50	.0008	.0005	.0006
#2	.0002	.1713	-.0014	.0215	-.0001	20.52	.0008	.0006	.0002
#3	.0002	.1531	-.0003	.0211	-.0001	20.52	.0008	.0004	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0051	.0344	.3231	.2969	.0311	-.0006	F153.8	.0000	.0005
Stddev	.0002	.0029	.0248	.0383	.0000	.0001	.1	.000	.0006
%RSD	2.968	8.299	7.672	12.91	.1463	19.84	.0971	748.9	129.6
#1	.0051	.0361	.3009	.2863	.0311	-.0006	153.8	.0000	.0011
#2	.0053	.0311	.3185	.2649	.0311	-.0007	154.0	.0002	.0004
#3	.0050	.0361	.3499	.3394	.0311	-.0005	153.7	-.0002	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0021	.2103	.0004	.0283	.0077	-.0011	.0002	.0600
Stddev	.0009	.0023	.0013	.0004	.0001	.0003	.0006	.0000	.0001
%RSD	98.06	112.9	.6104	99.22	.3352	4.003	48.90	20.47	.1894
#1	.0002	.0025	.2117	.0004	.0284	.0080	-.0009	.0002	.0599
#2	.0007	-.0004	.2101	.0007	.0283	.0076	-.0018	.0002	.0600
#3	.0019	.0041	.2092	.0000	.0282	.0074	-.0007	.0002	.0601

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.0	4922.1	30252.	3790.5
Stddev	1.6	6.6	135.	26.4
%RSD	.09763	.13373	.44567	.69595
#1	1630.7	4926.9	30398.	3774.7
#2	1627.6	4924.7	30132.	3820.9
#3	1628.5	4914.6	30227.	3775.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 17:15:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2521	42.36	1.884	2.004	2.037	42.09	1.980	1.965	2.135	2.026
Stddev	.0003	.07	.003	.002	.003	.07	.002	.003	.004	.005
%RSD	.1135	.1742	.1768	.1095	.1459	.1667	.1103	.1388	.1983	.2505
#1	.2523	42.44	1.883	2.007	2.040	42.17	1.977	1.962	2.140	2.031
#2	.2522	42.36	1.882	2.003	2.035	42.03	1.980	1.966	2.134	2.026
#3	.2518	42.29	1.888	2.004	2.035	42.08	1.982	1.967	2.132	2.021

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.21	41.71	40.14	2.069	1.924	42.53	1.909	1.984	1.901	1.898
Stddev	.05	.08	.25	.003	.009	.09	.002	.006	.005	.006
%RSD	.1127	.1894	.6107	.1383	.4611	.2225	.1146	.2982	.2555	.3175
#1	40.17	41.64	40.27	2.072	1.915	42.62	1.907	1.977	1.895	1.891
#2	40.22	41.70	39.85	2.066	1.925	42.54	1.910	1.985	1.904	1.900
#3	40.26	41.80	40.28	2.069	1.933	42.43	1.911	1.989	1.903	1.903

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.346	1.866	2.081	2.058	1.972	1.997	1.981
Stddev	.002	.003	.004	.001	.006	.006	.002
%RSD	.1298	.1771	.1706	.0446	.2916	.3141	.1000
#1	1.344	1.863	2.085	2.059	1.967	2.002	1.979
#2	1.347	1.865	2.081	2.057	1.970	1.990	1.982
#3	1.346	1.870	2.078	2.057	1.978	1.998	1.982

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 17:15:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.2	4808.5	29824.	3744.2
Stddev	3.2	2.9	77.	11.3
%RSD	.19722	.06129	.25812	.30209
#1	1613.6	4811.0	29771.	3732.8
#2	1607.4	4805.3	29912.	3755.4
#3	1609.5	4809.2	29789.	3744.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 17:19:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0017	.0004	.0003	.0001	.0021	.0001	.0001	.0003
Stddev	.0004	.0016	.0004	.0002	.0001	.0015	.0000	.0002	.0004
%RSD	801.1	93.11	88.14	66.09	78.13	70.97	18.45	152.0	121.1
#1	.0002	.0035	.0001	.0005	.0002	.0038	.0001	-.0001	.0002
#2	-.0004	.0013	.0004	.0004	.0001	.0015	.0001	.0001	.0000
#3	.0003	.0003	.0008	.0001	.0001	.0011	.0001	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F.0511	.0239	.0162	.0001	F.0041	.0515	.0001	-.0001
Stddev	.0002	.0126	.0202	.0220	.0000	.0009	.0058	.0001	.0005
%RSD	140.7	24.67	84.57	135.9	23.65	22.36	11.32	115.4	381.2
#1	-.0003	.0639	.0436	.0171	.0001	.0051	.0574	.0001	-.0001
#2	-.0003	.0506	.0249	.0377	.0001	.0040	.0457	.0002	.0003
#3	.0001	.0387	.0032	-.0062	.0001	.0033	.0515	.0000	-.0006
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0024	.0002	.0007	.0010	.0001	F.0029	.0002	-.0002	.0003
Stddev	.0008	.0008	.0003	.0007	.0001	.0002	.0006	.0002	.0001
%RSD	34.59	517.3	42.00	71.51	128.7	8.581	251.6	138.2	33.19
#1	.0034	.0009	.0004	.0012	.0001	.0032	.0007	-.0004	.0003
#2	.0021	-.0007	.0008	.0016	.0002	.0028	.0003	.0001	.0004
#3	.0018	.0003	.0010	.0002	.0000	.0027	-.0004	-.0002	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020					.0020			
Low Limit	-.0020					-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 17:19:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1672.7	4994.5	31008.	3798.8
Stddev	.4	6.8	53.	18.2
%RSD	.02131	.13615	.17213	.47801
#1	1672.3	4992.7	31027.	3779.2
#2	1672.8	4988.7	30947.	3815.1
#3	1672.9	5002.0	31049.	3802.1

Zoom In Zoom Out

Sample Name: D67687-4 Acquired: 2/17/2015 17:23:21 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0129	-.0011	.0005	.0000	.0785	-.0001	-.0001	.0001	.0000
Stddev	.0003	.0051	.0008	.0001	.000	.0030	.0001	.0001	.0004	.0001
%RSD	266.7	39.37	73.53	12.64	100.9	3.865	56.04	182.4	312.2	280.9
#1	.0003	.0071	-.0020	.0005	.0000	.0776	-.0001	.0001	-.0002	-.0001
#2	.0002	.0148	-.0011	.0005	.0000	.0761	-.0002	-.0001	.0000	.0000
#3	-.0002	.0167	-.0003	.0004	-.0001	.0819	-.0001	-.0002	.0006	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0030	-.0052	.0078	.0000	.0006	.5386	-.0001	.0001	.0023	.0008
Stddev	.0036	.0106	.0172	.0001	.0002	.0026	.0001	.0006	.0004	.0003
%RSD	122.6	202.1	221.3	285.1	25.53	.4839	89.72	401.9	15.31	42.38
#1	.0068	-.0147	-.0019	-.0001	.0008	.5370	-.0001	.0008	.0026	.0004
#2	.0024	.0062	-.0025	.0001	.0006	.5371	.0000	-.0003	.0026	.0008
#3	-.0004	-.0071	.0277	.0001	.0005	.5416	-.0002	-.0001	.0019	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0341	.0000	.0001	.0003	-.0023	-.0004	.0007
Stddev	.0004	.000	.0001	.0001	.0009	.0002	.0000
%RSD	1.253	3285.	155.1	18.49	38.36	50.82	4.474
#1	.0337	.0003	-.0001	.0003	-.0020	-.0004	.0008
#2	.0340	.0000	.0001	.0003	-.0016	-.0002	.0007
#3	.0346	-.0003	.0002	.0004	-.0033	-.0005	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1656.3	4961.0	31323.	3850.2
Stddev	1.2	4.7	106.	15.3
%RSD	.07148	.09498	.33685	.39862
#1	1654.9	4964.1	31252.	3867.5
#2	1656.8	4955.6	31273.	3838.2
#3	1657.1	4963.3	31445.	3844.9

Zoom In Zoom Out

Sample Name: MP28563-D2 Acquired: 2/17/2015 17:27:33 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0088	.0003	.0102	-.0001	50.76	.0000	-.0001	.0006
Stddev	.0005	.0091	.0005	.0001	.0001	.06	.000	.0001	.0001
%RSD	247.3	103.6	182.9	.9665	155.6	.1083	182.4	169.1	24.13
#1	.0005	.0186	.0006	.0103	.0000	50.78	-.0001	-.0001	.0006
#2	-.0004	.0073	-.0003	.0101	-.0001	50.80	.0000	.0000	.0005
#3	.0005	.0005	.0006	.0103	-.0001	50.69	.0000	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0098	.5883	.6202	.0468	-.0007	F148.8	-.0002	-.0024
Stddev	.0005	.0045	.0253	.0168	.0001	.0001	.4	.0002	.0004
%RSD	139.1	45.92	4.308	2.708	.2933	6.830	.2976	74.25	15.40
#1	.0009	.0129	.6043	.6160	.0470	-.0007	149.1	-.0001	-.0028
#2	-.0002	.0046	.6016	.6059	.0467	-.0008	148.9	-.0004	-.0021
#3	.0004	.0118	.5591	.6387	.0469	-.0007	148.3	-.0001	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0006	.0828	.0000	.0833	.0010	.0009	-.0001	.0820
Stddev	.0017	.0006	.0005	.001	.0001	.0001	.0008	.0003	.0000
%RSD	154.4	101.5	.6087	1179.	.0728	13.05	86.27	300.9	.0594
#1	.0022	.0014	.0827	.0001	.0833	.0011	.0000	-.0003	.0819
#2	.0020	.0002	.0824	-.0007	.0834	.0009	.0015	.0002	.0820
#3	-.0009	.0004	.0833	.0004	.0833	.0012	.0011	-.0002	.0820

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1631.4	4898.6	30322.	3758.9
Stddev	1.1	7.6	101.	12.9
%RSD	.06945	.15554	.33425	.34376
#1	1632.5	4900.6	30214.	3763.3
#2	1631.5	4890.2	30414.	3744.4
#3	1630.2	4905.0	30339.	3769.1

Zoom In Zoom Out

Sample Name: MP28563-MB2 Acquired: 2/17/2015 17:31:41 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0006	-.0003	.0016	-.0001	.0566	-.0001	-.0002	.0001
Stddev	.0004	.0024	.0005	.0002	.0001	.0014	.0000	.0001	.0001
%RSD	403.2	389.9	152.3	13.08	68.14	2.401	50.04	90.96	139.2
#1	-.0002	-.0029	-.0002	.0017	-.0001	.0574	.0000	.0000	.0000
#2	.0006	.0019	-.0009	.0013	-.0001	.0572	-.0001	-.0003	.0002
#3	-.0001	-.0009	.0001	.0016	-.0002	.0550	-.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0091	.1266	.0252	-.0001	-.0003	F159.7	-.0003	-.0003
Stddev	.0004	.0031	.0350	.0199	.0000	.0002	.3	.0000	.0015
%RSD	217.6	34.16	27.67	78.90	36.82	66.68	.1795	14.29	493.4
#1	.0000	-.0070	.0870	.0314	-.0001	-.0005	159.5	-.0003	-.0019
#2	.0001	-.0126	.1536	.0029	-.0001	-.0003	160.0	-.0003	.0010
#3	-.0006	-.0076	.1393	.0411	.0000	-.0001	159.7	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0019	.0290	.0001	.0000	-.0002	-.0021	-.0002	.0016
Stddev	.0006	.0005	.0017	.0003	.0000	.0001	.0021	.0003	.0001
%RSD	652.0	25.39	5.825	329.5	397.3	42.95	100.4	143.5	3.255
#1	-.0004	.0017	.0283	-.0002	.0001	-.0003	-.0010	-.0004	.0016
#2	.0008	.0025	.0279	.0003	.0000	-.0001	-.0045	-.0003	.0017
#3	-.0001	.0016	.0310	.0001	.0000	-.0003	-.0008	.0001	.0016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28563-MB2 Acquired: 2/17/2015 17:31:41 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1635.5	4926.0	30180.	3801.9
Stddev	2.6	5.3	16.	20.5
%RSD	.16089	.10809	.05155	.53903
#1	1632.5	4919.9	30195.	3780.8
#2	1637.5	4929.3	30180.	3803.3
#3	1636.5	4928.9	30164.	3821.7

Zoom In Zoom Out

Sample Name: MP28563-B2 Acquired: 2/17/2015 17:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0511	30.31	1.916	2.058	.0536	28.16	.0491	.4980	.2262
Stddev	.0006	.06	.001	.003	.0001	.09	.0001	.0003	.0007
%RSD	1.158	.1850	.0562	.1473	.2410	.3252	.1265	.0595	.3156
#1	.0513	30.35	1.917	2.055	.0537	28.26	.0491	.4980	.2262
#2	.0504	30.35	1.915	2.060	.0534	28.11	.0492	.4983	.2255
#3	.0516	30.25	1.915	2.060	.0537	28.10	.0492	.4978	.2270
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2660	28.13	28.50	26.29	.5243	.4985	F185.4	.4903	.5054
Stddev	.0004	.03	.05	.10	.0010	.0006	.5	.0005	.0011
%RSD	.1372	.1202	.1892	.3662	.1900	.1115	.2626	.0974	.2272
#1	.2664	28.16	28.53	26.39	.5254	.4992	184.8	.4905	.5061
#2	.2658	28.12	28.44	26.29	.5235	.4984	185.7	.4906	.5061
#3	.2657	28.09	28.54	26.20	.5240	.4981	185.6	.4897	.5041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4799	1.914	.0312	.5048	.5603	.5514	2.017	.5041	.5072
Stddev	.0005	.004	.0011	.0008	.0013	.0012	.005	.0008	.0006
%RSD	.0970	.2107	3.640	.1616	.2368	.2228	.2455	.1654	.1197
#1	.4795	1.916	.0317	.5056	.5613	.5522	2.011	.5045	.5074
#2	.4804	1.917	.0320	.5049	.5609	.5500	2.020	.5031	.5077
#3	.4798	1.909	.0299	.5040	.5588	.5519	2.019	.5046	.5065
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28563-B2 Acquired: 2/17/2015 17:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1605.8	4838.8	29274.	3746.9
Stddev	3.6	10.2	79.	21.4
%RSD	.22249	.21080	.26938	.57131
#1	1607.7	4839.1	29238.	3722.2
#2	1601.7	4828.4	29364.	3758.9
#3	1608.0	4848.8	29219.	3759.7

Zoom In Zoom Out

Sample Name: MP28563-MB3 Acquired: 2/17/2015 17:40:01 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0005	-.0003	.0000	-.0001	.0019	-.0002	-.0001	.0001	-.0003
Stddev	.0007	.0076	.0005	.0003	.0000	.0053	.0001	.0001	.0003	.0002
%RSD	362.7	1650.	144.4	802.5	39.19	286.5	40.24	72.35	231.9	50.39
#1	.0009	-.0082	-.0008	-.0002	-.0001	.0027	-.0001	.0000	-.0002	-.0001
#2	-.0006	.0061	-.0004	.0003	-.0001	.0067	-.0002	-.0001	.0004	-.0004
#3	.0003	.0034	.0002	.0000	-.0001	-.0038	-.0001	-.0002	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0204	.0158	.0322	-.0001	-.0001	.0792	-.0002	-.0003	.0017	.0015
Stddev	.0048	.0169	.0251	.0001	.0001	.0015	.0001	.0011	.0010	.0005
%RSD	23.54	106.5	77.88	91.32	257.1	1.866	82.22	333.1	56.88	34.28
#1	.0252	.0334	.0570	.0000	.0001	.0779	.0000	.0009	.0023	.0016
#2	.0203	-.0002	.0328	-.0001	-.0002	.0790	-.0002	-.0008	.0023	.0019
#3	.0156	.0142	.0068	-.0001	-.0001	.0808	-.0003	-.0010	.0006	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0214	.0005	-.0001	.0002	-.0010	-.0003	.0003
Stddev	.0003	.0002	.0000	.0000	.0008	.0006	.0000
%RSD	1.173	34.16	23.43	11.62	75.36	211.9	7.755
#1	.0213	.0006	-.0002	.0002	-.0019	.0004	.0003
#2	.0217	.0003	-.0001	.0002	-.0007	-.0005	.0003
#3	.0212	.0005	-.0001	.0002	-.0005	-.0008	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28563-MB3 Acquired: 2/17/2015 17:40:01 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1653.7	4985.9	31152.	3814.4
Stddev	3.8	7.2	200.	19.3
%RSD	.23072	.14493	.64256	.50600
#1	1652.0	4987.2	30962.	3797.4
#2	1658.1	4992.3	31134.	3835.3
#3	1651.1	4978.1	31361.	3810.5

Zoom In Zoom Out

Sample Name: MP28563-B3 Acquired: 2/17/2015 17:44:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502	29.63	1.899	2.052	.0526	27.49	.0486	.4917	.2175	.2570
Stddev	.0009	.02	.001	.002	.0003	.00	.0000	.0004	.0009	.0003
%RSD	1.744	.0758	.0256	.1052	.6202	.0053	.0864	.0830	.3924	.0975
#1	.0508	29.62	1.899	2.049	.0524	27.49	.0486	.4920	.2184	.2572
#2	.0492	29.61	1.899	2.054	.0525	27.49	.0486	.4912	.2170	.2567
#3	.0507	29.66	1.898	2.052	.0530	27.48	.0486	.4919	.2169	.2571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.74	27.51	26.15	.5173	.4919	27.99	.4913	.4955	.4764	1.878
Stddev	.08	.01	.21	.0004	.0002	.04	.0004	.0013	.0019	.002
%RSD	.2732	.0394	.8017	.0811	.0412	.1449	.0872	.2568	.4012	.0877
#1	27.68	27.52	26.05	.5177	.4920	27.95	.4913	.4964	.4746	1.879
#2	27.83	27.50	26.39	.5169	.4917	27.99	.4917	.4941	.4761	1.878
#3	27.73	27.52	26.00	.5174	.4921	28.03	.4909	.4960	.4784	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0262	.5055	.5461	.5335	1.975	.4894	.5014
Stddev	.0009	.0003	.0008	.0006	.011	.0011	.0006
%RSD	3.344	.0690	.1459	.1063	.5701	.2236	.1134
#1	.0254	.5057	.5452	.5342	1.963	.4907	.5021
#2	.0260	.5058	.5464	.5331	1.977	.4888	.5011
#3	.0271	.5051	.5467	.5334	1.986	.4887	.5012
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28563-B3 Acquired: 2/17/2015 17:44:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1628.3	4858.6	30411.	3783.1
Stddev	3.2	6.1	131.	34.5
%RSD	.19349	.12631	.43131	.91111
#1	1627.6	4851.9	30294.	3747.6
#2	1631.8	4859.9	30386.	3785.2
#3	1625.6	4864.0	30553.	3816.5

Zoom In Zoom Out

Sample Name: MP28561-MB1 Acquired: 2/17/2015 17:48:12 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0087	-.0009	.0002	.0000	.0238	-.0001	-.0001	.0007	.0001
Stddev	.0003	.0140	.0003	.0001	.0000	.0004	.0000	.0001	.0002	.0001
%RSD	115.4	159.8	38.55	66.45	369.4	1.598	15.46	177.2	32.82	165.0
#1	.0005	.0158	-.0005	.0001	.0000	.0242	-.0001	-.0002	.0009	.0002
#2	.0005	.0178	-.0012	.0003	.0000	.0238	-.0001	.0000	.0004	.0000
#3	-.0001	-.0073	-.0010	.0002	.0000	.0235	-.0001	.0000	.0008	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0468	.0304	.0173	.0002	.0000	.0424	-.0001	-.0004	.0001	.0010
Stddev	.0113	.0172	.0055	.0001	.000	.0105	.0003	.0013	.0004	.0006
%RSD	24.02	56.48	31.88	36.93	468.8	24.74	369.6	342.0	298.5	66.52
#1	.0597	.0491	.0231	.0003	.0001	.0517	-.0002	-.0014	.0000	.0017
#2	.0424	.0267	.0168	.0002	.0001	.0443	.0002	-.0007	-.0002	.0006
#3	.0385	.0154	.0121	.0001	-.0003	.0311	-.0003	.0010	.0006	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0161	.0207	.0000	.0007	-.0008	-.0006	.0016
Stddev	.0007	.0002	.000	.0001	.0004	.0001	.0001
%RSD	4.521	.9528	3973.	16.67	41.88	14.73	4.806
#1	.0159	.0205	.0001	.0007	-.0012	-.0005	.0015
#2	.0155	.0209	-.0001	.0008	-.0009	-.0006	.0017
#3	.0169	.0206	.0000	.0006	-.0005	-.0006	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28561-MB1 Acquired: 2/17/2015 17:48:12 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1659.8	4986.8	31331.	3902.0
Stddev	1.2	7.3	21.	23.9
%RSD	.07040	.14541	.06844	.61179
#1	1660.3	4994.3	31309.	3912.3
#2	1658.4	4986.5	31351.	3874.7
#3	1660.6	4979.8	31333.	3919.0

Zoom In Zoom Out

Sample Name: MP28561-B1 Acquired: 2/17/2015 17:52:25 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0511	30.00	1.907	2.061	.0530	27.80	.0490	.4958	.2229	.2689
Stddev	.0004	.02	.003	.002	.0001	.01	.0001	.0003	.0012	.0004
%RSD	.7378	.0713	.1354	.1118	.2750	.0246	.1962	.0507	.5443	.1336
#1	.0506	30.00	1.909	2.061	.0528	27.80	.0489	.4956	.2215	.2691
#2	.0513	30.01	1.905	2.059	.0531	27.79	.0491	.4961	.2234	.2685
#3	.0513	29.97	1.909	2.064	.0530	27.80	.0491	.4958	.2238	.2691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.85	27.72	26.25	.5236	.4936	28.36	.4913	.5006	.4736	1.886
Stddev	.05	.06	.09	.0015	.0003	.01	.0007	.0011	.0013	.004
%RSD	.1775	.1998	.3502	.2954	.0528	.0346	.1331	.2183	.2703	.2224
#1	27.80	27.70	26.33	.5219	.4933	28.37	.4920	.5009	.4723	1.889
#2	27.89	27.68	26.27	.5249	.4935	28.37	.4907	.4994	.4739	1.881
#3	27.88	27.79	26.15	.5240	.4939	28.35	.4913	.5015	.4748	1.888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0147	.5247	.5551	.5436	2.000	.4960	.5053
Stddev	.0007	.0007	.0010	.0015	.004	.0014	.0001
%RSD	4.586	.1273	.1758	.2754	.2086	.2837	.0235
#1	.0154	.5242	.5540	.5426	1.998	.4943	.5052
#2	.0141	.5255	.5554	.5429	2.004	.4968	.5054
#3	.0146	.5245	.5559	.5453	1.997	.4967	.5052
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28561-B1 Acquired: 2/17/2015 17:52:25 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1619.9	4866.2	30085.	3778.8
Stddev	3.9	4.2	126.	18.9
%RSD	.24308	.08714	.41750	.49891
#1	1620.7	4863.0	30224.	3757.3
#2	1615.6	4864.5	29979.	3792.4
#3	1623.3	4871.0	30052.	3786.6

Zoom In Zoom Out

Sample Name: FA22095-4 Acquired: 2/17/2015 17:56:25 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0028	61.67	.0250	.0617	.0004	10.23	-.0027	.0007	.1313	.0066
Stddev	.0002	.31	.0006	.0001	.0000	.05	.0001	.0001	.0003	.0002
%RSD	7.935	.4960	2.415	.1154	6.501	.4505	2.791	13.33	.2357	2.591
#1	.0027	61.83	.0256	.0618	.0004	10.25	-.0028	.0007	.1316	.0064
#2	.0027	61.32	.0248	.0617	.0004	10.17	-.0026	.0007	.1310	.0067
#3	.0031	61.86	.0245	.0616	.0004	10.26	-.0027	.0006	.1313	.0066

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	148.8	.2629	.7414	.0067	.0074	.2758	.0084	.0326	.0010	.0133
Stddev	.6	.0207	.0150	.0000	.0001	.0078	.0002	.0009	.0008	.0011
%RSD	.4270	7.859	2.022	.3309	1.443	2.816	2.228	2.698	76.70	8.594
#1	149.0	.2654	.7428	.0068	.0073	.2817	.0082	.0322	.0019	.0123
#2	148.1	.2412	.7258	.0067	.0074	.2787	.0086	.0336	.0003	.0146
#3	149.3	.2823	.7557	.0067	.0075	.2670	.0083	.0319	.0010	.0131

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.185	.0215	.0759	.2171	-.0037	.3030	.0087
Stddev	.006	.0001	.0005	.0004	.0007	.0009	.0001
%RSD	.2725	.3587	.6858	.1783	18.84	.3097	.7465
#1	2.178	.0215	.0761	.2174	-.0030	.3039	.0087
#2	2.187	.0214	.0753	.2166	-.0036	.3029	.0087
#3	2.189	.0215	.0763	.2172	-.0044	.3021	.0088

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1694.5	5015.6	31340.	3932.1
Stddev	4.3	12.0	69.	8.3
%RSD	.25356	.23896	.22126	.21114
#1	1699.2	5023.7	31265.	3934.3
#2	1693.3	5021.3	31402.	3939.0
#3	1690.9	5001.8	31354.	3922.9

Zoom In Zoom Out

Sample Name: MP28561-D1 Acquired: 2/17/2015 18:00:31 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0029	77.04	.0237	.0753	.0006	8.178	-.0025	.0010	.1498	.0073
Stddev	.0007	.06	.0003	.0005	.0001	.003	.0001	.0002	.0002	.0003
%RSD	25.06	.0779	1.293	.7248	16.64	.0309	2.548	15.50	.1381	4.241
#1	.0023	77.10	.0233	.0747	.0004	8.180	-.0025	.0010	.1500	.0076
#2	.0037	77.04	.0239	.0757	.0006	8.175	-.0025	.0012	.1496	.0071
#3	.0027	76.98	.0238	.0756	.0006	8.178	-.0024	.0009	.1499	.0071

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	150.6	.3493	.9827	.0083	.0071	.4048	.0106	.0423	.0002	.0131
Stddev	.2	.0090	.0100	.0001	.0000	.0018	.0002	.0004	.0010	.0021
%RSD	.1486	2.591	1.014	.9335	.3064	.4426	2.158	1.018	570.3	15.89
#1	150.9	.3461	.9824	.0083	.0072	.4051	.0108	.0427	.0013	.0111
#2	150.6	.3423	.9729	.0083	.0071	.4064	.0104	.0423	-.0004	.0130
#3	150.4	.3595	.9929	.0084	.0071	.4029	.0107	.0418	-.0004	.0152

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.637	.0226	.0860	.2828	-.0049	.3097	.0098
Stddev	.001	.0002	.0003	.0006	.0007	.0008	.0001
%RSD	.0511	1.094	.3423	.2176	13.45	.2540	1.369
#1	2.636	.0228	.0864	.2822	-.0053	.3089	.0099
#2	2.639	.0223	.0859	.2834	-.0041	.3100	.0098
#3	2.637	.0225	.0858	.2830	-.0052	.3104	.0096

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1687.0	4986.6	31206.	3955.8
Stddev	4.3	12.0	101.	19.7
%RSD	.25722	.23996	.32223	.49741
#1	1682.4	4973.8	31121.	3946.2
#2	1690.9	4988.7	31181.	3942.7
#3	1687.8	4997.4	31317.	3978.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:04:34 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2532	41.99	1.889	1.991	2.026	41.78	1.981	1.965	2.132	2.031
Stddev	.0004	.03	.004	.003	.001	.06	.001	.002	.005	.003
%RSD	.1409	.0804	.1878	.1447	.0603	.1494	.0730	.1053	.2597	.1534
#1	.2533	41.96	1.892	1.990	2.025	41.80	1.981	1.966	2.137	2.028
#2	.2534	42.02	1.885	1.994	2.027	41.82	1.980	1.963	2.132	2.029
#3	.2528	41.99	1.891	1.989	2.025	41.71	1.983	1.966	2.126	2.034
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value																		
Range																		

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.99	42.31	40.09	2.068	1.925	42.84	1.916	1.983	1.901	1.904
Stddev	.08	.12	.15	.003	.006	.07	.002	.003	.003	.003
%RSD	.2029	.2844	.3718	.1626	.3328	.1620	.0927	.1564	.1318	.1621
#1	39.97	42.45	40.20	2.071	1.919	42.90	1.918	1.987	1.904	1.905
#2	40.08	42.27	40.15	2.068	1.924	42.87	1.915	1.982	1.899	1.900
#3	39.92	42.22	39.92	2.064	1.932	42.77	1.915	1.981	1.900	1.906
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value																		
Range																		

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.350	1.884	2.069	2.051	1.969	2.014	1.987
Stddev	.002	.002	.002	.003	.002	.001	.001
%RSD	.1364	.0857	.1049	.1210	.0878	.0547	.0570
#1	1.351	1.886	2.069	2.052	1.969	2.015	1.985
#2	1.348	1.883	2.072	2.048	1.971	2.014	1.988
#3	1.351	1.883	2.067	2.052	1.967	2.013	1.987
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value													
Range													

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:04:34 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.0	4818.1	29852.	3727.5
Stddev	2.5	3.1	115.	31.3
%RSD	.15764	.06379	.38530	.83940
#1	1618.4	4821.6	29719.	3693.3
#2	1614.0	4816.7	29915.	3734.3
#3	1618.5	4816.0	29921.	3754.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:08:31 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0056	.0010	.0003	.0001	.0022	.0001	.0002	.0001
Stddev	.0001	.0061	.0007	.0001	.0000	.0016	.0000	.0000	.0001
%RSD	187.1	110.3	68.33	15.51	48.15	72.43	37.27	20.38	116.0
#1	.0000	-.0008	.0017	.0003	.0001	.0041	.0001	.0003	.0001
#2	.0002	.0114	.0008	.0004	.0001	.0016	.0001	.0002	.0000
#3	.0000	.0061	.0004	.0003	.0001	.0010	.0002	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0548	.0308	.0117	.0001	F.0041	.0153	-.0001	-.0006
Stddev	.0001	.0137	.0226	.0130	.0000	.0014	.0017	.0000	.0009
%RSD	53.24	25.07	73.24	111.4	31.95	33.96	11.35	27.17	164.2
#1	-.0002	.0670	.0109	.0258	.0001	.0055	.0173	-.0001	.0005
#2	-.0001	.0575	.0262	.0091	.0001	.0038	.0144	-.0001	-.0012
#3	-.0002	.0399	.0554	.0001	.0001	.0028	.0142	-.0001	-.0010
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0025	F.0029	.0007	.0008	.0000	.0017	-.0001	-.0004	.0003
Stddev	.0005	.0020	.0001	.0002	.0001	.0003	.0003	.0001	.0000
%RSD	21.72	68.73	12.91	27.14	132.1	16.34	221.0	36.54	11.33
#1	.0019	.0041	.0008	.0010	.0001	.0020	.0002	-.0003	.0004
#2	.0030	.0006	.0008	.0006	.0001	.0015	-.0004	-.0003	.0003
#3	.0026	.0039	.0006	.0009	.0000	.0015	-.0002	-.0005	.0003
Check ?	Chk Fail	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020	.0020							
Low Limit	-.0020	-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:08:31 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1693.7	5061.5	31459.	3805.1
Stddev	4.5	11.9	61.	24.0
%RSD	.26665	.23545	.19487	.63143
#1	1697.8	5067.8	31413.	3823.7
#2	1694.4	5068.9	31437.	3813.8
#3	1688.8	5047.7	31529.	3778.0

Zoom In Zoom Out

Sample Name: MP28561-SD1 Acquired: 2/17/2015 18:12:44 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0033	65.87	.0305	.0666	.0002	11.31	-.0036	.0009	.1388	.0073
Stddev	.0020	.07	.0013	.0003	.0001	.04	.0003	.0006	.0017	.0011
%RSD	58.88	.1101	4.354	.5216	73.33	.3493	8.858	67.94	1.226	15.46
#1	.0047	65.93	.0295	.0662	.0001	11.35	-.0035	.0004	.1400	.0080
#2	.0011	65.79	.0300	.0668	.0002	11.29	-.0034	.0008	.1396	.0079
#3	.0042	65.90	.0320	.0669	.0003	11.28	-.0040	.0015	.1369	.0060

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	161.0	.3510	.8225	.0069	.0088	.4547	.0073	.0354	.0024	.0124
Stddev	.1	.1575	.1749	.0001	.0006	.0490	.0005	.0010	.0055	.0068
%RSD	.0649	44.87	21.26	1.086	6.317	10.78	6.237	2.726	233.8	55.12
#1	160.8	.5329	.7499	.0068	.0092	.5067	.0068	.0352	-.0020	.0129
#2	161.0	.2603	.6956	.0070	.0090	.4093	.0074	.0364	.0005	.0189
#3	161.0	.2598	1.022	.0070	.0082	.4482	.0077	.0345	.0086	.0053

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.287	.0215	.0807	.2250	.0012	.3151	.0117
Stddev	.004	.0004	.0003	.0011	.0036	.0021	.0002
%RSD	.1840	1.899	.4333	.4865	296.2	.6814	1.437
#1	2.283	.0215	.0803	.2256	.0001	.3156	.0115
#2	2.287	.0211	.0808	.2257	-.0016	.3170	.0117
#3	2.291	.0219	.0810	.2238	.0052	.3128	.0118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1694.9	5035.0	31329.	3848.7
Stddev	1.5	4.4	97.	38.3
%RSD	.09134	.08715	.30918	.99452
#1	1694.8	5039.4	31308.	3832.1
#2	1696.5	5034.9	31244.	3821.5
#3	1693.4	5030.6	31434.	3892.5

Zoom In Zoom Out

Sample Name: MP28561-PS1 Acquired: 2/17/2015 18:16:52 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0515	62.52	.1227	.3145	.0527	15.16	.0476	.0508	.1836	.1112
Stddev	.0005	.17	.0001	.0006	.0002	.04	.0001	.0002	.0003	.0003
%RSD	1.059	.2641	.1183	.1935	.3125	.2412	.1892	.4004	.1858	.2824
#1	.0520	62.67	.1226	.3141	.0528	15.19	.0475	.0506	.1833	.1108
#2	.0510	62.35	.1228	.3142	.0525	15.12	.0477	.0507	.1837	.1114
#3	.0516	62.55	.1225	.3152	.0527	15.17	.0477	.0510	.1840	.1112

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	147.3	10.63	5.434	.0596	.1025	11.45	.1073	.0830	.0964	.1065
Stddev	.4	.01	.019	.0001	.0001	.03	.0001	.0012	.0018	.0013
%RSD	.2698	.1346	.3498	.2184	.0570	.2448	.0573	1.412	1.893	1.195
#1	147.4	10.64	5.412	.0596	.1025	11.47	.1074	.0833	.0949	.1051
#2	146.9	10.62	5.447	.0594	.1025	11.42	.1073	.0817	.0984	.1066
#3	147.7	10.64	5.443	.0597	.1024	11.46	.1074	.0840	.0960	.1076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.159	.0669	.1257	.3144	.0958	.3458	.2589
Stddev	.001	.0003	.0003	.0005	.0005	.0020	.0004
%RSD	.0640	.5086	.2168	.1663	.4760	.5652	.1726
#1	2.159	.0666	.1260	.3142	.0955	.3471	.2587
#2	2.157	.0673	.1254	.3140	.0963	.3436	.2586
#3	2.160	.0668	.1257	.3150	.0956	.3468	.2594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1674.0	4989.1	30956.	3928.9
Stddev	8.2	12.5	63.	23.6
%RSD	.48951	.24961	.20320	.60169
#1	1676.1	4981.8	30931.	3907.4
#2	1680.9	5003.5	31028.	3954.2
#3	1664.9	4981.9	30910.	3925.2

Zoom In Zoom Out

Sample Name: MP28561-S1 Acquired: 2/17/2015 18:20:53 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0516	100.4	1.848	2.055	.0520	35.48	.0458	.4844	.3375	.2681
Stddev	.0004	.1	.002	.002	.0000	.04	.0001	.0002	.0005	.0003
%RSD	.8100	.0745	.1113	.0844	.0821	.1079	.2196	.0475	.1509	.1269
#1	.0521	100.4	1.850	2.056	.0520	35.50	.0459	.4842	.3376	.2685
#2	.0512	100.4	1.846	2.055	.0520	35.51	.0458	.4847	.3370	.2680
#3	.0515	100.3	1.848	2.053	.0521	35.44	.0457	.4844	.3380	.2678

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	141.8	27.53	26.12	.5176	.4630	28.23	.4885	.5232	.1617	1.824
Stddev	.1	.05	.07	.0005	.0004	.03	.0001	.0005	.0005	.004
%RSD	.0499	.1860	.2549	.0973	.0799	.1194	.0178	.0952	.3136	.2446
#1	141.9	27.59	26.09	.5181	.4626	28.27	.4885	.5230	.1621	1.827
#2	141.8	27.52	26.07	.5176	.4631	28.22	.4885	.5229	.1611	1.826
#3	141.7	27.49	26.20	.5171	.4634	28.21	.4884	.5238	.1619	1.819

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.554	.4932	.6273	.5195	1.917	.7300	.4959
Stddev	.001	.0012	.0015	.0008	.004	.0011	.0006
%RSD	.0471	.2405	.2331	.1529	.2275	.1554	.1119
#1	2.555	.4922	.6290	.5200	1.922	.7294	.4964
#2	2.553	.4927	.6262	.5201	1.914	.7313	.4953
#3	2.553	.4945	.6268	.5186	1.916	.7293	.4958

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1635.6	4895.2	29785.	3831.7
Stddev	4.8	12.3	105.	26.4
%RSD	.29541	.25211	.35243	.69008
#1	1630.3	4882.7	29733.	3842.2
#2	1636.8	4895.3	29715.	3801.6
#3	1639.7	4907.4	29905.	3851.2

Zoom In Zoom Out

Sample Name: MP28561-S2 Acquired: 2/17/2015 18:24:51 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0532	117.7	1.887	2.098	.0528	82.12	.0468	.4947	.3666	.2740
Stddev	.0005	.2	.003	.003	.0001	.12	.0002	.0005	.0016	.0007
%RSD	.9705	.1650	.1774	.1242	.2400	.1471	.3407	.0991	.4482	.2725
#1	.0538	117.6	1.883	2.096	.0527	82.02	.0468	.4951	.3683	.2748
#2	.0530	117.6	1.887	2.098	.0530	82.07	.0467	.4942	.3650	.2739
#3	.0528	118.0	1.890	2.101	.0527	82.25	.0470	.4947	.3666	.2733

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	159.3	28.23	26.73	.5323	.4703	28.71	.5008	.5389	.1617	1.864
Stddev	.2	.06	.10	.0006	.0006	.01	.0009	.0021	.0005	.004
%RSD	.1352	.2284	.3652	.1210	.1291	.0382	.1789	.3883	.2859	.2042
#1	159.1	28.16	26.82	.5329	.4705	28.70	.5013	.5380	.1614	1.868
#2	159.4	28.25	26.74	.5316	.4697	28.72	.4998	.5413	.1622	1.861
#3	159.5	28.29	26.62	.5325	.4709	28.71	.5014	.5375	.1615	1.864

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.864	.5026	.7003	.5393	1.953	.7870	.5054
Stddev	.004	.0006	.0010	.0010	.007	.0012	.0006
%RSD	.1321	.1111	.1447	.1902	.3695	.1466	.1213
#1	2.862	.5029	.7001	.5401	1.946	.7882	.5053
#2	2.861	.5020	.6995	.5382	1.961	.7859	.5049
#3	2.868	.5029	.7014	.5397	1.951	.7869	.5061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1628.0	4866.8	29700.	3820.3
Stddev	3.2	6.2	158.	20.7
%RSD	.19649	.12792	.53202	.54196
#1	1630.0	4864.9	29629.	3813.1
#2	1624.3	4873.8	29881.	3804.1
#3	1629.7	4861.7	29589.	3843.6

Zoom In Zoom Out

Sample Name: FA22095-1 Acquired: 2/17/2015 18:28:50 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0031	59.17	.0204	.0722	.0009	50.39	-.0003	.0012	.1446	.0871
Stddev	.0005	.14	.0014	.0005	.0000	.10	.0000	.0001	.0005	.0006
%RSD	17.28	.2372	6.826	.6527	4.564	.1996	14.29	9.748	.3635	.6660
#1	.0028	59.02	.0217	.0718	.0009	50.33	-.0002	.0012	.1447	.0874
#2	.0037	59.19	.0189	.0727	.0009	50.33	-.0003	.0012	.1441	.0864
#3	.0027	59.30	.0206	.0720	.0010	50.50	-.0002	.0010	.1452	.0875

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	153.9	.3831	1.023	.0190	.0078	.4602	.0096	.0497	.0003	.0149
Stddev	.4	.0381	.017	.0001	.0002	.0049	.0001	.0004	.0001	.0017
%RSD	.2365	9.957	1.644	.7497	3.045	1.061	1.508	.8967	38.69	11.66
#1	153.5	.3874	1.013	.0190	.0080	.4618	.0094	.0492	.0004	.0141
#2	153.9	.4190	1.043	.0189	.0076	.4548	.0097	.0498	.0002	.0169
#3	154.3	.3430	1.014	.0192	.0080	.4642	.0097	.0500	.0004	.0137

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.424	.0227	.0858	.2847	-.0029	.3569	.0244
Stddev	.003	.0003	.0004	.0005	.0007	.0010	.0001
%RSD	.1386	1.296	.4193	.1821	24.66	.2667	.3182
#1	2.427	.0227	.0855	.2852	-.0029	.3577	.0244
#2	2.424	.0230	.0856	.2842	-.0037	.3559	.0245
#3	2.421	.0224	.0862	.2846	-.0022	.3573	.0243

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1674.5	4973.3	30654.	3892.7
Stddev	2.5	4.4	161.	11.9
%RSD	.15067	.08776	.52388	.30662
#1	1675.6	4976.6	30477.	3892.3
#2	1671.6	4968.4	30791.	3881.0
#3	1676.2	4975.0	30694.	3904.8

Zoom In Zoom Out

Sample Name: FA22095-2 Acquired: 2/17/2015 18:32:53 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0050	113.3	.0382	.0964	.0014	5.486	-.0040	.0021	.2687	.0079
Stddev	.0005	.2	.0007	.0002	.0001	.015	.0001	.0001	.0017	.0006
%RSD	9.068	.1770	1.733	.1599	4.658	.2649	2.220	5.771	.6359	7.286
#1	.0055	113.2	.0386	.0964	.0014	5.469	-.0040	.0020	.2705	.0073
#2	.0049	113.5	.0374	.0963	.0015	5.496	-.0041	.0022	.2671	.0083
#3	.0046	113.2	.0385	.0966	.0013	5.492	-.0040	.0020	.2686	.0083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	251.1	.3428	1.282	.0061	.0134	.4568	.0162	.0527	-.0010	.0267
Stddev	.6	.0204	.030	.0001	.0003	.0038	.0002	.0007	.0010	.0016
%RSD	.2219	5.938	2.337	1.095	2.041	.8347	1.476	1.413	103.5	6.099
#1	250.5	.3368	1.282	.0062	.0133	.4542	.0159	.0521	-.0018	.0286
#2	251.5	.3261	1.312	.0061	.0137	.4612	.0164	.0525	-.0014	.0257
#3	251.3	.3655	1.252	.0061	.0132	.4551	.0161	.0535	.0002	.0258

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.537	.0229	.0643	.3798	-.0075	.5389	.0149
Stddev	.001	.0003	.0002	.0012	.0008	.0005	.0001
%RSD	.0523	1.199	.2430	.3143	11.25	.0931	.3385
#1	2.537	.0225	.0641	.3811	-.0084	.5394	.0148
#2	2.538	.0230	.0644	.3787	-.0075	.5384	.0149
#3	2.535	.0230	.0643	.3794	-.0067	.5391	.0149

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1697.3	5082.1	31357.	4000.5
Stddev	.7	6.7	95.	4.7
%RSD	.03887	.13263	.30377	.11644
#1	1698.0	5088.7	31247.	3997.6
#2	1696.6	5075.2	31421.	4005.9
#3	1697.3	5082.3	31403.	3998.0

Zoom In Zoom Out

Sample Name: FA22095-3 Acquired: 2/17/2015 18:36:57 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0054	134.5	.0541	.1140	.0016	4.133	-.0046	.0026	.3278	.0074
Stddev	.0002	.1	.0004	.0001	.0001	.020	.0001	.0000	.0009	.0002
%RSD	4.474	.0934	.7325	.1016	3.768	.4766	2.870	1.952	.2816	3.301
#1	.0051	134.6	.0540	.1140	.0017	4.134	-.0048	.0025	.3274	.0077
#2	.0056	134.4	.0545	.1138	.0016	4.113	-.0045	.0026	.3271	.0074
#3	.0056	134.5	.0538	.1140	.0016	4.152	-.0046	.0025	.3289	.0072

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	327.6	.4119	1.463	.0059	.0165	.4931	.0201	.0559	-.0022	.0321
Stddev	.5	.0176	.020	.0000	.0001	.0078	.0003	.0017	.0010	.0020
%RSD	.1496	4.273	1.337	.1892	.3811	1.587	1.561	2.961	44.73	6.154
#1	328.1	.4186	1.485	.0059	.0165	.4861	.0201	.0567	-.0016	.0344
#2	327.1	.4252	1.449	.0059	.0166	.5016	.0198	.0570	-.0016	.0310
#3	327.6	.3920	1.455	.0059	.0165	.4917	.0204	.0540	-.0033	.0310

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.989	.0238	.0711	.4079	-.0096	.6311	.0154
Stddev	.004	.0004	.0002	.0005	.0024	.0005	.0001
%RSD	.1250	1.670	.2671	.1267	24.93	.0716	.5607
#1	2.985	.0234	.0713	.4081	-.0103	.6308	.0154
#2	2.990	.0242	.0709	.4083	-.0116	.6309	.0153
#3	2.993	.0237	.0711	.4073	-.0070	.6316	.0154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1690.2	5061.9	31469.	4001.8
Stddev	8.2	7.7	28.	31.5
%RSD	.48449	.15279	.08801	.78752
#1	1684.7	5061.2	31445.	3968.4
#2	1686.4	5054.5	31499.	4031.0
#3	1699.6	5069.9	31462.	4006.0

Zoom In Zoom Out

Sample Name: FA22095-6 Acquired: 2/17/2015 18:40:59 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	5.453	.0217	.0126	.0001	.3648	.0486	-.0002	.0105	.0175
Stddev	.0003	.012	.0006	.0000	.0001	.0033	.0002	.0000	.0001	.0004
%RSD	46.38	.2247	2.823	.3194	48.53	.9035	.3276	7.240	.8952	2.054
#1	.0009	5.458	.0221	.0126	.0002	.3662	.0485	-.0003	.0106	.0171
#2	.0003	5.439	.0210	.0126	.0001	.3673	.0486	-.0002	.0106	.0177
#3	.0007	5.462	.0221	.0125	.0001	.3611	.0488	-.0003	.0104	.0178

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.02	.0518	.0931	.0115	.0013	.0907	.0122	.0085	-.0002	.0020
Stddev	.00	.0104	.0169	.0001	.0000	.0051	.0001	.0003	.0013	.0011
%RSD	.0178	20.13	18.21	.4406	2.009	5.597	.7150	3.331	540.0	55.39
#1	27.02	.0586	.0765	.0115	.0013	.0962	.0121	.0084	-.0010	.0030
#2	27.03	.0569	.0923	.0114	.0012	.0862	.0123	.0088	-.0009	.0021
#3	27.02	.0398	.1104	.0115	.0013	.0898	.0122	.0082	.0012	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.031	.0201	.0064	.1727	-.0038	.1012	.0683
Stddev	.001	.0003	.0001	.0004	.0010	.0003	.0001
%RSD	.1064	1.294	1.207	.2547	26.38	.2616	.1496
#1	1.032	.0204	.0064	.1731	-.0048	.1009	.0681
#2	1.030	.0201	.0063	.1722	-.0028	.1014	.0683
#3	1.031	.0198	.0063	.1727	-.0037	.1013	.0683

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1674.9	5067.8	32106.	3924.8
Stddev	4.5	7.3	85.	22.5
%RSD	.26859	.14468	.26566	.57367
#1	1671.8	5059.9	32133.	3904.8
#2	1672.7	5069.1	32174.	3920.5
#3	1680.0	5074.4	32010.	3949.2

Zoom In Zoom Out

Sample Name: FA22095-7 Acquired: 2/17/2015 18:45:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0001	1.815	.0229	.0121	.0000	3.013	.0059	.0085
Stddev	.0004	.013	.0110	.0003	.000	.016	.0013	.0041
%RSD	377.1	.7005	48.16	2.281	132.4	.5166	21.25	48.38
#1	-.0005	1.800	.0118	.0119	.0000	2.996	.0047	.0045
#2	.0004	1.824	.0231	.0122	.0000	3.017	.0059	.0083
#3	-.0002	1.820	.0338	.0124	-.0001	3.026	.0072	.0127

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0070	.0087	4.448	.0674	.1464	.0079	.0181	.1516
Stddev	.0004	.0006	.012	.0306	.0103	.0002	.0094	.0090
%RSD	5.588	7.454	.2710	45.45	7.034	2.437	51.76	5.926
#1	.0067	.0088	4.439	.0567	.1362	.0077	.0090	.1616
#2	.0067	.0093	4.444	.0436	.1568	.0078	.0175	.1491
#3	.0074	.0080	4.462	.1020	.1461	.0081	.0277	.1442

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0132	.0448	F-.0156	.0530	.6706	.0703	.0087	.1137
Stddev	.0060	.0103	.0055	.0207	.0123	.0245	.0001	.0004
%RSD	45.08	22.90	35.41	39.08	1.829	34.79	.8803	.3867
#1	.0075	.0345	-.0102	.0318	.6574	.0464	.0087	.1142
#2	.0128	.0451	-.0153	.0542	.6729	.0693	.0087	.1133
#3	.0194	.0550	-.0212	.0732	.6816	.0953	.0086	.1137

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0338	.0135	.0440
Stddev	.0115	.0005	.0015
%RSD	33.98	3.977	3.437
#1	-.0218	.0139	.0427
#2	-.0347	.0138	.0437
#3	-.0447	.0129	.0457

Zoom In Zoom Out

Sample Name: FA22095-7 Acquired: 2/17/2015 18:45:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1553.4	4734.1	30626.	3811.0
Stddev	8.2	4.5	182.	72.3
%RSD	.52576	.09496	.59348	1.8977
#1	1547.9	4737.5	30731.	3884.8
#2	1549.6	4735.7	30731.	3807.8
#3	1562.8	4729.0	30416.	3740.3

Zoom In Zoom Out

Sample Name: FA22095-8 Acquired: 2/17/2015 18:49:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	12.07	.0131	.0159	.0001	1.560	.0008	.0001	.0205	.0072
Stddev	.0003	.06	.0010	.0002	.0001	.010	.0000	.0002	.0006	.0003
%RSD	78.31	.4595	7.281	1.154	72.17	.6156	3.679	188.2	3.039	4.499
#1	.0001	12.05	.0138	.0157	.0002	1.556	.0008	-.0001	.0198	.0075
#2	.0007	12.03	.0135	.0161	.0001	1.552	.0008	.0003	.0210	.0068
#3	.0005	12.14	.0120	.0160	.0001	1.570	.0008	.0001	.0208	.0072

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	33.93	.0812	.2083	.0049	.0020	.6091	.0087	.0132	.0001	.0046
Stddev	.20	.0138	.0203	.0000	.0002	.0033	.0002	.0007	.0007	.0006
%RSD	.5935	17.01	9.746	.8594	10.21	.5447	2.829	5.219	1312.	13.05
#1	33.85	.0654	.1849	.0048	.0020	.6072	.0086	.0131	-.0006	.0042
#2	33.79	.0872	.2207	.0049	.0018	.6072	.0089	.0139	.0007	.0044
#3	34.16	.0909	.2194	.0049	.0022	.6130	.0085	.0125	.0001	.0053

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.025	.0203	.0146	.1760	-.0033	.0676	.0250
Stddev	.002	.0004	.0001	.0001	.0010	.0001	.0000
%RSD	.2349	2.124	.5653	.0813	31.00	.1739	.1365
#1	1.028	.0208	.0145	.1758	-.0039	.0678	.0250
#2	1.023	.0202	.0146	.1761	-.0022	.0675	.0250
#3	1.025	.0200	.0147	.1760	-.0040	.0676	.0250

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1684.5	5067.0	31775.	3915.3
Stddev	.9	9.4	43.	35.8
%RSD	.05422	.18529	.13525	.91480
#1	1683.6	5057.8	31737.	3914.6
#2	1685.4	5076.5	31822.	3951.5
#3	1684.6	5066.7	31767.	3879.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:53:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2515	41.38	1.907	1.990	1.996	41.18	1.980	1.964	2.101	2.010
Stddev	.0005	.08	.005	.000	.003	.08	.003	.002	.004	.002
%RSD	.2123	.1941	.2473	.0109	.1338	.2026	.1385	.1213	.2159	.0904
#1	.2517	41.29	1.902	1.990	1.993	41.10	1.977	1.961	2.101	2.012
#2	.2518	41.44	1.912	1.990	1.999	41.27	1.981	1.964	2.105	2.010
#3	.2508	41.42	1.906	1.990	1.996	41.17	1.982	1.966	2.096	2.008

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.43	41.82	39.67	2.054	1.931	42.40	1.929	1.980	1.904	1.916
Stddev	.09	.07	.13	.004	.009	.06	.004	.002	.007	.007
%RSD	.2404	.1751	.3172	.1792	.4918	.1303	.1973	.0830	.3484	.3499
#1	39.32	41.74	39.57	2.054	1.920	42.34	1.925	1.982	1.896	1.909
#2	39.50	41.87	39.81	2.058	1.933	42.45	1.931	1.979	1.909	1.922
#3	39.46	41.86	39.63	2.050	1.939	42.41	1.931	1.980	1.907	1.919

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.354	1.905	2.048	2.033	1.968	1.995	1.989
Stddev	.001	.005	.003	.003	.005	.002	.003
%RSD	.0840	.2396	.1569	.1517	.2466	.0847	.1368
#1	1.353	1.900	2.044	2.035	1.964	1.994	1.986
#2	1.355	1.908	2.050	2.034	1.967	1.997	1.989
#3	1.354	1.907	2.049	2.029	1.973	1.994	1.991

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:53:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.0	4803.3	30241.	3737.4
Stddev	1.1	4.8	74.	8.7
%RSD	.07031	.10097	.24309	.23207
#1	1616.7	4808.0	30283.	3742.6
#2	1618.3	4803.7	30156.	3727.4
#3	1616.1	4798.3	30285.	3742.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:57:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0044	.0006	.0003	.0001	.0005	.0001	.0002	.0001
Stddev	.0002	.0057	.0009	.0004	.0001	.0043	.0001	.0001	.0002
%RSD	78.46	130.9	162.0	140.5	133.2	854.7	70.89	40.54	362.3
#1	-.0004	.0062	-.0005	.0000	.0001	-.0022	.0001	.0001	.0002
#2	-.0002	-.0020	.0012	.0001	.0002	-.0018	.0002	.0002	-.0002
#3	-.0001	.0090	.0010	.0007	.0000	.0055	.0000	.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0433	.0237	.0220	.0001	F.0043	.0108	-.0001	.0000
Stddev	.0004	.0097	.0229	.0338	.0000	.0012	.0114	.0001	.000
%RSD	475.2	22.34	96.29	153.6	20.11	26.94	105.5	170.0	2120.
#1	.0006	.0544	.0484	-.0169	.0001	.0056	.0092	.0001	-.0002
#2	-.0003	.0388	.0033	.0389	.0001	.0041	.0003	-.0001	.0003
#3	.0000	.0366	.0195	.0441	.0001	.0033	.0229	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0009	.0008	.0007	.0002	.0013	.0002	-.0001	.0003
Stddev	.0017	.0016	.0004	.0002	.0001	.0002	.0013	.0001	.0000
%RSD	109.4	173.4	46.55	29.05	35.82	12.15	681.9	37.75	17.08
#1	.0029	-.0002	.0005	.0007	.0002	.0014	.0017	-.0001	.0002
#2	-.0003	.0027	.0012	.0009	.0001	.0014	-.0009	-.0001	.0003
#3	.0020	.0002	.0008	.0005	.0002	.0011	-.0002	-.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:57:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.1	4995.5	31439.	3780.2
Stddev	3.7	6.8	109.	14.4
%RSD	.22167	.13687	.34813	.38027
#1	1683.2	5003.3	31320.	3778.2
#2	1678.4	4992.2	31460.	3766.9
#3	1675.8	4990.9	31536.	3795.4

Zoom In Zoom Out

Sample Name: FA22095-9 Acquired: 2/17/2015 19:01:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0120	92.27	.0482	.1911	.0010	1.309	-.0025	.0030
Stddev	.0004	.22	.0005	.0005	.0001	.006	.0000	.0001
%RSD	3.673	.2413	.9848	.2475	4.895	.4615	1.946	2.800
#1	.0115	92.02	.0486	.1916	.0010	1.302	-.0024	.0031
#2	.0123	92.43	.0477	.1908	.0011	1.313	-.0025	.0031
#3	.0122	92.36	.0484	.1908	.0010	1.311	-.0025	.0029

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2492	.0074	200.3	.6894	3.227	.0093	.0093	1.350
Stddev	.0006	.0001	.4	.0122	.024	.0000	.0000	.003
%RSD	.2339	1.493	.2124	1.769	.7507	.3510	.1112	.2306
#1	.2486	.0076	199.8	.6754	3.200	.0094	.0093	1.354
#2	.2497	.0074	200.5	.6949	3.247	.0093	.0093	1.348
#3	.2493	.0074	200.5	.6979	3.234	.0093	.0093	1.349

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0140	.1159	.0015	.0121	1.546	.0186	.1560	.1346
Stddev	.0001	.0004	.0014	.0008	.001	.0005	.0003	.0005
%RSD	.6297	.3179	96.51	6.698	.0308	2.433	.1815	.3493
#1	.0139	.1162	-.0001	.0127	1.546	.0186	.1559	.1342
#2	.0141	.1155	.0027	.0112	1.546	.0190	.1564	.1351
#3	.0140	.1161	.0018	.0125	1.546	.0181	.1559	.1344

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0454	1.528	.0248
Stddev	.0020	.007	.0000
%RSD	4.329	.4431	.1620
#1	-.0444	1.523	.0248
#2	-.0441	1.536	.0248
#3	-.0477	1.525	.0248

Zoom In Zoom Out

Sample Name: FA22095-9 Acquired: 2/17/2015 19:01:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1690.0	6733.8	41886.	5291.5
Stddev	1.1	3.1	240.	29.1
%RSD	.06521	.04560	.57404	.55045
#1	1690.0	6736.7	42096.	5325.1
#2	1691.1	6734.2	41624.	5275.5
#3	1688.9	6730.6	41939.	5273.9

Zoom In Zoom Out

Sample Name: FA22095-10 Acquired: 2/17/2015 19:05:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0124	114.3	.0351	.2450	.0013	1.226	-.0015	.0036
Stddev	.0003	.3	.0008	.0006	.0000	.001	.0001	.0000
%RSD	2.786	.2365	2.144	.2544	2.252	.1073	5.167	1.285
#1	.0127	114.7	.0357	.2457	.0013	1.226	-.0016	.0036
#2	.0125	114.2	.0343	.2449	.0013	1.227	-.0015	.0036
#3	.0120	114.2	.0353	.2444	.0012	1.224	-.0014	.0037

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2627	.0051	133.7	.6046	3.750	.0113	.0067	1.242
Stddev	.0018	.0001	.4	.0250	.010	.0000	.0001	.010
%RSD	.6754	1.976	.2620	4.139	.2549	.2265	1.108	.8015
#1	.2626	.0052	134.1	.6239	3.741	.0113	.0066	1.249
#2	.2645	.0051	133.5	.6135	3.760	.0113	.0067	1.246
#3	.2610	.0050	133.5	.5763	3.750	.0113	.0067	1.230

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0161	.1782	-.0002	.0098	1.480	.0167	.1868	.1386
Stddev	.0003	.0009	.0008	.0012	.001	.0002	.0006	.0006
%RSD	1.556	.5111	498.1	12.36	.0444	1.229	.3369	.4004
#1	.0161	.1782	-.0010	.0112	1.480	.0167	.1874	.1392
#2	.0158	.1792	.0001	.0093	1.480	.0169	.1862	.1387
#3	.0163	.1773	.0004	.0090	1.481	.0165	.1867	.1381

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0579	1.606	.0184
Stddev	.0022	.006	.0001
%RSD	3.882	.3880	.3040
#1	-.0568	1.606	.0184
#2	-.0605	1.613	.0184
#3	-.0564	1.600	.0183

Zoom In Zoom Out

Sample Name: FA22095-10 Acquired: 2/17/2015 19:05:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1681.2	7341.9	45859.	5874.3
Stddev	4.8	11.8	196.	36.9
%RSD	.28552	.16082	.42659	.62850
#1	1675.9	7335.8	45874.	5831.7
#2	1682.3	7334.4	45657.	5894.5
#3	1685.3	7355.5	46047.	5896.8

Zoom In Zoom Out

Sample Name: FA22134-2 Acquired: 2/17/2015 19:09:28 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	25.18	.0013	.0306	.0002	.8490	.0000	.0007	.0245	.0041
Stddev	.0001	.08	.0000	.0002	.0000	.0060	.000	.0001	.0001	.0001
%RSD	86.26	.3214	3.759	.6294	17.40	.7074	185.2	7.582	.3632	1.354
#1	.0000	25.18	.0013	.0306	.0002	.8544	.0000	.0007	.0244	.0041
#2	.0002	25.10	.0014	.0308	.0001	.8499	-.0001	.0007	.0245	.0041
#3	.0003	25.26	.0013	.0305	.0001	.8425	.0000	.0008	.0245	.0040

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.746	.3132	.5637	.0118	.0008	.1328	.0097	.0790	.0007	.0010
Stddev	.033	.0209	.0339	.0001	.0000	.0067	.0002	.0011	.0001	.0023
%RSD	1.217	6.681	6.009	.7230	2.224	5.033	1.753	1.438	11.41	234.5
#1	2.778	.3289	.5936	.0118	.0008	.1305	.0099	.0784	.0006	.0006
#2	2.749	.2895	.5707	.0119	.0008	.1276	.0097	.0783	.0007	.0035
#3	2.711	.3214	.5269	.0118	.0008	.1404	.0095	.0803	.0008	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.398	.0202	.0599	.3493	-.0035	.0150	.0107
Stddev	.001	.0003	.0001	.0005	.0017	.0002	.0000
%RSD	.0347	1.548	.1825	.1359	47.21	1.505	.1647
#1	1.398	.0200	.0599	.3492	-.0022	.0148	.0107
#2	1.398	.0206	.0597	.3498	-.0029	.0152	.0107
#3	1.397	.0200	.0599	.3489	-.0054	.0149	.0107

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1678.1	4983.4	31238.	3900.6
Stddev	4.7	8.2	80.	9.2
%RSD	.28167	.16395	.25471	.23533
#1	1681.9	4986.1	31173.	3900.3
#2	1672.8	4974.2	31215.	3909.9
#3	1679.5	4989.8	31327.	3891.6

Zoom In Zoom Out

Sample Name: FA22134-3 Acquired: 2/17/2015 19:13:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	48.79	.0043	.0860	.0008	5.492	.0000	.0016	.0495	.0185
Stddev	.0003	.09	.0004	.0001	.0000	.013	.000	.0002	.0002	.0003
%RSD	40.08	.1932	9.833	.1107	.8515	.2409	175.5	10.80	.3714	1.820
#1	.0005	48.80	.0039	.0859	.0008	5.492	.0000	.0014	.0496	.0183
#2	.0011	48.68	.0044	.0860	.0008	5.479	-.0001	.0017	.0493	.0189
#3	.0007	48.87	.0047	.0861	.0008	5.505	.0000	.0017	.0496	.0182

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.686	.6765	1.028	.0176	.0015	.4014	.0141	1.009	.0029	.0038
Stddev	.028	.0153	.024	.0001	.0001	.0070	.0001	.001	.0007	.0021
%RSD	.3219	2.258	2.352	.3343	4.594	1.733	.7345	.1270	24.41	54.73
#1	8.680	.6800	1.009	.0176	.0014	.4041	.0141	1.008	.0032	.0014
#2	8.661	.6897	1.055	.0176	.0014	.3935	.0140	1.010	.0021	.0050
#3	8.716	.6597	1.019	.0175	.0015	.4066	.0142	1.008	.0034	.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.570	.0203	.3178	.3666	-.0031	.0274	.0176
Stddev	.003	.0002	.0004	.0004	.0014	.0003	.0001
%RSD	.2014	.9631	.1125	.1171	43.69	1.030	.5385
#1	1.567	.0202	.3176	.3671	-.0030	.0272	.0175
#2	1.573	.0201	.3175	.3666	-.0045	.0277	.0176
#3	1.571	.0205	.3182	.3662	-.0018	.0272	.0177

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.3	5168.6	32093.	4048.6
Stddev	3.0	6.0	133.	12.7
%RSD	.18086	.11540	.41537	.31346
#1	1673.5	5171.4	32105.	4035.7
#2	1670.2	5161.7	31954.	4061.0
#3	1676.3	5172.6	32220.	4049.1

Zoom In Zoom Out

Sample Name: FA22134-4 Acquired: 2/17/2015 19:17:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	53.52	.0024	.0623	.0003	1.920	-.0002	.0039	.0443	.0063
Stddev	.0003	.17	.0009	.0004	.0001	.018	.0001	.0001	.0003	.0002
%RSD	36.94	.3263	36.67	.6410	28.07	.9504	29.14	3.079	.6229	3.191
#1	.0006	53.40	.0035	.0623	.0004	1.905	-.0002	.0038	.0445	.0062
#2	.0011	53.44	.0018	.0618	.0002	1.914	-.0001	.0039	.0440	.0063
#3	.0006	53.72	.0021	.0626	.0004	1.940	-.0002	.0040	.0444	.0066

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.985	.5933	1.059	.0186	.0011	.1534	.0257	.1856	.0008	.0044
Stddev	.028	.0127	.029	.0001	.0001	.0035	.0002	.0007	.0005	.0013
%RSD	.5671	2.145	2.779	.4702	9.396	2.308	.8025	.3830	63.07	30.57
#1	4.971	.5800	1.025	.0186	.0012	.1532	.0255	.1853	.0004	.0030
#2	4.966	.5946	1.080	.0185	.0010	.1499	.0256	.1864	.0013	.0045
#3	5.018	.6054	1.072	.0187	.0010	.1570	.0259	.1851	.0006	.0057

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.613	.0201	.1015	.3837	-.0022	.0271	.0157
Stddev	.001	.0001	.0003	.0003	.0011	.0004	.0000
%RSD	.0584	.6983	.2899	.0877	49.87	1.436	.2585
#1	1.614	.0200	.1012	.3835	-.0033	.0271	.0157
#2	1.613	.0203	.1016	.3835	-.0022	.0268	.0156
#3	1.612	.0202	.1017	.3841	-.0011	.0275	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1679.0	5013.3	31240.	3905.5
Stddev	3.3	6.6	42.	16.3
%RSD	.19926	.13246	.13457	.41651
#1	1675.4	5005.8	31193.	3920.9
#2	1679.6	5015.2	31253.	3907.1
#3	1682.0	5018.7	31274.	3888.5

Zoom In Zoom Out

Sample Name: FA22134-5 Acquired: 2/17/2015 19:21:44 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	47.89	.0135	.0408	.0002	2.689	.0003	.0011	.0470
Stddev	.0004	.14	.0005	.0003	.0001	.009	.0001	.0001	.0002
%RSD	83.04	.2923	3.977	.7941	32.68	.3233	15.06	9.823	.4781
#1	.0001	47.84	.0129	.0405	.0002	2.691	.0003	.0010	.0471
#2	.0004	48.05	.0135	.0408	.0002	2.696	.0004	.0012	.0467
#3	.0009	47.78	.0140	.0411	.0001	2.679	.0003	.0011	.0472

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3119	3.514	.6166	1.276	.0329	.0012	.1536	.0165	F47.70
Stddev	.0002	.009	.0134	.014	.0000	.0001	.0029	.0002	.13
%RSD	.0682	.2645	2.165	1.087	.1333	10.09	1.868	1.111	.2656
#1	.3117	3.509	.6068	1.263	.0328	.0011	.1567	.0167	47.80
#2	.3121	3.524	.6112	1.290	.0329	.0013	.1531	.0165	47.56
#3	.3119	3.507	.6318	1.276	.0328	.0011	.1510	.0163	47.74

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0384	.0054	1.168	.0466	.0606	.2260	-.0028	.0248	.0530
Stddev	.0012	.0006	.003	.0005	.0001	.0003	.0021	.0002	.0001
%RSD	3.133	11.02	.2588	1.086	.1341	.1144	73.49	.7431	.1050
#1	.0383	.0053	1.166	.0461	.0605	.2258	-.0042	.0249	.0531
#2	.0397	.0060	1.167	.0470	.0607	.2260	-.0004	.0246	.0530
#3	.0373	.0048	1.172	.0468	.0605	.2263	-.0039	.0250	.0530

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1696.4	5036.2	31983.	3980.9
Stddev	6.6	15.8	52.	34.4
%RSD	.38698	.31321	.16306	.86363
#1	1690.9	5029.4	31994.	3977.6
#2	1703.6	5054.2	31926.	3948.3
#3	1694.5	5024.9	32029.	4016.8

Zoom In Zoom Out

Sample Name: FA22134-6 Acquired: 2/17/2015 19:25:49 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	29.89	.0014	.0308	.0002	.2161	-.0002	.0008	.0256	.0033
Stddev	.000	.11	.0002	.0003	.0001	.0036	.0000	.0001	.0004	.0004
%RSD	1456.	.3666	10.60	.9371	47.99	1.674	20.61	16.29	1.490	10.89
#1	-.0003	29.96	.0014	.0310	.0002	.2193	-.0002	.0009	.0258	.0037
#2	-.0001	29.76	.0013	.0305	.0001	.2168	-.0002	.0008	.0258	.0030
#3	.0004	29.94	.0016	.0310	.0001	.2122	-.0002	.0007	.0251	.0032

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.282	.2584	.4421	.0080	.0007	.1633	.0093	.0560	.0275	.0043
Stddev	.023	.0438	.0136	.0001	.0000	.0044	.0001	.0002	.0013	.0006
%RSD	1.010	16.96	3.078	.6331	4.431	2.672	.5818	.2884	4.746	13.53
#1	2.294	.2159	.4540	.0079	.0008	.1658	.0093	.0559	.0290	.0039
#2	2.255	.2557	.4451	.0080	.0007	.1582	.0092	.0560	.0271	.0041
#3	2.296	.3035	.4273	.0080	.0007	.1657	.0093	.0562	.0265	.0050

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.294	.0203	.0336	.3232	-.0026	.0166	.0069
Stddev	.001	.0004	.0001	.0001	.0006	.0005	.0001
%RSD	.0417	2.004	.2575	.0436	21.00	3.214	1.497
#1	1.294	.0202	.0337	.3232	-.0026	.0162	.0068
#2	1.294	.0207	.0335	.3230	-.0032	.0164	.0070
#3	1.295	.0199	.0337	.3233	-.0021	.0172	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1680.9	4990.3	31540.	3931.3
Stddev	4.6	11.1	147.	24.2
%RSD	.27081	.22300	.46702	.61653
#1	1678.5	4983.1	31402.	3924.7
#2	1678.1	4984.7	31523.	3958.2
#3	1686.2	5003.1	31695.	3911.1

Zoom In Zoom Out

Sample Name: FA22134-7 Acquired: 2/17/2015 19:29:56 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	20.04	.1047	.0848	.0002	13.91	.0000	.0011	.0283
Stddev	.0005	.12	.0009	.0006	.0001	.10	.0000	.0001	.0003
%RSD	66.64	.6020	.8811	.6624	33.91	.7114	159.0	5.380	1.217
#1	.0008	19.93	.1055	.0844	.0001	13.85	.0000	.0012	.0281
#2	.0002	20.17	.1050	.0854	.0003	14.03	.0000	.0011	.0287
#3	.0011	20.03	.1037	.0846	.0003	13.86	.0000	.0011	.0281

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.423	3.646	.7715	1.189	.0191	.0008	.1524	.0098	F18.54
Stddev	.005	.030	.0409	.025	.0000	.0001	.0032	.0000	.06
%RSD	.3685	.8273	5.304	2.127	.2521	7.814	2.128	.3333	.3143
#1	1.429	3.611	.7465	1.217	.0191	.0008	.1500	.0098	18.48
#2	1.422	3.663	.8187	1.167	.0192	.0007	.1561	.0098	18.57
#3	1.419	3.664	.7493	1.183	.0192	.0009	.1511	.0099	18.59

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1471	.0035	1.562	.0394	.3163	.1946	-.0018	.0181	.2186
Stddev	.0006	.0009	.002	.0002	.0013	.0005	.0008	.0002	.0001
%RSD	.4177	26.42	.1296	.6037	.4001	.2479	44.15	.9686	.0442
#1	.1465	.0036	1.560	.0392	.3150	.1951	-.0014	.0182	.2187
#2	.1469	.0026	1.564	.0394	.3175	.1946	-.0028	.0179	.2185
#3	.1477	.0044	1.563	.0397	.3163	.1941	-.0014	.0182	.2185

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1676.0	5055.4	31633.	3956.3
Stddev	5.8	7.8	94.	26.5
%RSD	.34805	.15435	.29619	.67034
#1	1682.7	5063.9	31529.	3972.8
#2	1672.5	5048.6	31711.	3925.7
#3	1672.8	5053.6	31659.	3970.4

Zoom In Zoom Out

Sample Name: FA22134-8 Acquired: 2/17/2015 19:34:00 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	30.59	.0602	.0857	.0003	13.97	.0000	.0014	.0722	.2814
Stddev	.0003	.05	.0003	.0005	.0000	.02	.000	.0001	.0004	.0009
%RSD	114.2	.1759	.4496	.5687	14.83	.1613	793.5	7.499	.5614	.3279
#1	.0004	30.53	.0600	.0855	.0004	13.95	.0000	.0015	.0717	.2818
#2	-.0001	30.63	.0601	.0863	.0003	14.00	-.0001	.0013	.0723	.2803
#3	.0003	30.60	.0605	.0854	.0003	13.96	.0000	.0014	.0724	.2821

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.732	.8610	1.381	.0217	.0015	.2728	.0119	2.977	.0267	.0035
Stddev	.018	.0282	.019	.0000	.0001	.0083	.0003	.005	.0028	.0011
%RSD	.3721	3.271	1.404	.1752	6.554	3.040	2.391	.1737	10.40	30.16
#1	4.729	.8930	1.366	.0217	.0016	.2632	.0116	2.972	.0269	.0026
#2	4.750	.8397	1.403	.0218	.0015	.2780	.0120	2.978	.0239	.0047
#3	4.715	.8504	1.374	.0217	.0014	.2771	.0121	2.982	.0294	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.730	.0251	.4038	.2551	-.0021	.0248	.0933
Stddev	.003	.0002	.0007	.0007	.0002	.0003	.0001
%RSD	.1489	.6811	.1846	.2672	7.514	1.202	.0726
#1	1.733	.0252	.4030	.2557	-.0019	.0245	.0934
#2	1.728	.0249	.4045	.2544	-.0022	.0250	.0933
#3	1.728	.0252	.4037	.2551	-.0022	.0249	.0933

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1679.6	5073.6	31934.	3991.7
Stddev	2.7	3.2	78.	17.5
%RSD	.16074	.06234	.24488	.43884
#1	1682.4	5071.8	31884.	3988.2
#2	1679.3	5071.8	31894.	4010.7
#3	1677.1	5077.3	32024.	3976.2

Zoom In Zoom Out

Sample Name: FA22134-9 Acquired: 2/17/2015 19:38:04 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	26.53	.0745	.0916	.0004	18.32	.0002	.0012	.0718
Stddev	.0005	.01	.0013	.0004	.0000	.01	.0000	.0001	.0004
%RSD	53.04	.0426	1.746	.4033	7.784	.0428	17.82	10.05	.5725
#1	.0013	26.52	.0751	.0912	.0004	18.31	.0002	.0012	.0722
#2	.0004	26.52	.0730	.0917	.0003	18.32	.0002	.0011	.0719
#3	.0009	26.54	.0753	.0919	.0004	18.33	.0003	.0013	.0714

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7191	5.728	.7952	1.767	.0462	.0016	.2868	.0298	F18.97
Stddev	.0016	.022	.0142	.019	.0000	.0001	.0093	.0000	.04
%RSD	.2199	.3913	1.788	1.084	.0768	6.542	3.250	.0609	.1923
#1	.7206	5.712	.7789	1.776	.0462	.0016	.2882	.0297	19.01
#2	.7193	5.718	.8020	1.745	.0462	.0016	.2953	.0298	18.95
#3	.7175	5.754	.8048	1.779	.0462	.0014	.2768	.0298	18.95

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0930	.0032	1.749	.0567	.2984	.2369	-.0011	.0280	.3216
Stddev	.0021	.0009	.001	.0006	.0002	.0005	.0019	.0003	.0001
%RSD	2.261	27.60	.0361	1.003	.0708	.1913	169.1	.9370	.0364
#1	.0906	.0023	1.749	.0567	.2982	.2374	.0006	.0282	.3215
#2	.0942	.0033	1.748	.0572	.2986	.2369	-.0008	.0277	.3216
#3	.0942	.0041	1.749	.0561	.2983	.2365	-.0031	.0282	.3217

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.2	5053.1	31792.	3961.8
Stddev	5.0	7.5	155.	19.5
%RSD	.29629	.14772	.48646	.49272
#1	1667.7	5047.0	31779.	3952.3
#2	1677.3	5061.4	31645.	3984.3
#3	1674.6	5050.7	31953.	3948.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 19:42:07 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2492	41.37	1.889	1.986	1.994	41.19	1.962	1.948	2.072	1.988
Stddev	.0009	.09	.002	.004	.004	.09	.002	.002	.003	.001
%RSD	.3562	.2295	.1242	.2168	.1938	.2297	.0894	.1030	.1290	.0718
#1	.2482	41.45	1.886	1.984	1.998	41.29	1.960	1.946	2.073	1.986
#2	.2495	41.38	1.890	1.984	1.991	41.12	1.962	1.948	2.069	1.989
#3	.2499	41.27	1.890	1.991	1.994	41.14	1.964	1.950	2.073	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.33	41.99	39.69	2.038	1.918	42.55	1.915	1.973	1.894	1.900
Stddev	.04	.14	.19	.003	.009	.12	.002	.005	.003	.004
%RSD	.0962	.3286	.4791	.1612	.4540	.2770	.0832	.2322	.1454	.2296
#1	39.30	42.12	39.90	2.042	1.909	42.68	1.913	1.970	1.891	1.896
#2	39.31	41.84	39.53	2.036	1.919	42.52	1.915	1.978	1.895	1.905
#3	39.37	42.01	39.63	2.037	1.927	42.45	1.916	1.971	1.895	1.900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.343	1.885	2.050	2.015	1.956	1.972	1.971
Stddev	.004	.003	.004	.000	.003	.005	.001
%RSD	.2762	.1565	.1686	.0175	.1567	.2797	.0624
#1	1.339	1.882	2.053	2.015	1.954	1.967	1.969
#2	1.344	1.886	2.046	2.016	1.954	1.970	1.971
#3	1.347	1.888	2.050	2.015	1.960	1.978	1.972
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 19:42:07 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1629.3	4853.1	30578.	3728.5
Stddev	1.8	5.9	51.	22.8
%RSD	.11189	.12063	.16771	.61179
#1	1627.3	4853.5	30599.	3702.3
#2	1629.7	4858.7	30616.	3739.9
#3	1630.9	4847.0	30520.	3743.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 19:46:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0090	.0003	.0001	.0001	.0012	.0001	.0002	.0000
Stddev	.0002	.0090	.0002	.0004	.0001	.0023	.0001	.0001	.0004
%RSD	49.26	100.6	72.99	665.0	84.31	192.4	118.0	44.76	982.5
#1	.0002	.0194	.0005	-.0004	.0000	-.0012	.0001	.0002	-.0001
#2	.0006	.0040	.0001	.0003	.0001	.0035	.0000	.0003	-.0003
#3	.0003	.0036	.0003	.0002	.0002	.0014	.0001	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0421	.0453	-.0115	.0001	F.0042	.0080	.0000	.0009
Stddev	.0002	.0120	.0398	.0109	.0000	.0013	.0032	.0001	.0001
%RSD	458.1	28.50	87.81	95.06	45.37	30.67	40.33	721.3	16.77
#1	.0003	.0559	.0366	-.0220	.0001	.0056	.0048	.0001	.0011
#2	.0000	.0365	.0106	-.0002	.0001	.0041	.0113	.0000	.0008
#3	-.0001	.0339	.0887	-.0122	.0000	.0030	.0079	.0000	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0004	.0009	.0007	.0001	.0017	.0003	-.0003	.0002
Stddev	.0008	.0015	.0002	.0004	.0000	.0001	.0006	.0002	.0000
%RSD	42.84	405.4	20.34	63.49	49.27	3.773	188.5	62.56	7.898
#1	.0010	.0009	.0011	.0005	.0001	.0018	.0001	-.0006	.0002
#2	.0020	.0016	.0009	.0012	.0000	.0017	.0010	-.0003	.0003
#3	.0025	-.0013	.0007	.0003	.0001	.0017	-.0001	-.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 19:46:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1684.1	5000.5	31541.	3779.1
Stddev	2.5	5.7	72.	30.3
%RSD	.15109	.11336	.22848	.80119
#1	1687.1	5005.4	31543.	3769.3
#2	1682.3	4994.3	31612.	3813.1
#3	1683.1	5001.7	31468.	3755.0

Zoom In Zoom Out

Sample Name: FA22134-10 Acquired: 2/17/2015 19:50:17 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	26.02	.0131	.0727	.0004	8.657	.0000	.0009	.0357	.3487
Stddev	.0002	.04	.0011	.0003	.0000	.010	.0000	.0001	.0001	.0010
%RSD	35.92	.1461	8.661	.4036	7.660	.1147	433.1	11.53	.3358	.2920
#1	.0006	26.05	.0117	.0727	.0005	8.661	.0000	.0011	.0358	.3479
#2	.0003	25.98	.0137	.0724	.0004	8.664	.0000	.0009	.0356	.3484
#3	.0005	26.03	.0137	.0730	.0004	8.646	.0000	.0009	.0356	.3499

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.967	.4932	1.100	.0307	.0031	.1908	.0118	2.003	.0144	.0029
Stddev	.008	.0178	.030	.0002	.0002	.0049	.0002	.002	.0011	.0011
%RSD	.0950	3.617	2.738	.5769	5.390	2.571	1.825	.1219	7.640	37.17
#1	7.974	.5072	1.090	.0308	.0031	.1959	.0118	2.002	.0148	.0040
#2	7.959	.4992	1.076	.0308	.0033	.1862	.0116	2.002	.0152	.0019
#3	7.967	.4731	1.133	.0305	.0029	.1903	.0120	2.006	.0131	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.674	.0279	.2911	.2937	-.0021	.0263	.1572
Stddev	.001	.0006	.0004	.0003	.0012	.0003	.0003
%RSD	.0376	2.086	.1216	.1010	58.03	1.063	.2216
#1	1.674	.0280	.2913	.2939	-.0008	.0260	.1571
#2	1.675	.0272	.2907	.2934	-.0023	.0266	.1569
#3	1.674	.0284	.2912	.2938	-.0033	.0263	.1576

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1676.6	5030.5	31634.	3957.1
Stddev	3.3	10.8	97.	33.3
%RSD	.19700	.21383	.30516	.84068
#1	1675.5	5028.2	31543.	3942.6
#2	1680.3	5042.2	31625.	3933.6
#3	1674.0	5021.1	31735.	3995.2

Zoom In Zoom Out

Sample Name: FA22134-11 Acquired: 2/17/2015 19:54:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	25.52	.0818	.1166	.0004	27.70	.0004	.0015	.1031
Stddev	.0004	.08	.0001	.0003	.0001	.08	.0000	.0001	.0005
%RSD	117.4	.3169	.1095	.2249	17.47	.2825	9.598	6.233	.4516
#1	-.0001	25.50	.0819	.1166	.0005	27.68	.0004	.0016	.1036
#2	.0008	25.45	.0817	.1164	.0004	27.64	.0004	.0014	.1028
#3	.0004	25.61	.0818	.1169	.0004	27.79	.0004	.0014	.1028

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7278	6.536	.6893	2.385	.0869	.0026	.1854	.0163	F9.958
Stddev	.0022	.016	.0155	.033	.0003	.0001	.0016	.0001	.039
%RSD	.3056	.2396	2.245	1.385	.2978	2.541	.8409	.4596	.3948
#1	.7303	6.548	.6820	2.357	.0872	.0027	.1840	.0163	9.941
#2	.7270	6.518	.6788	2.377	.0867	.0026	.1871	.0164	9.931
#3	.7261	6.542	.7071	2.422	.0868	.0025	.1851	.0163	10.00

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0285	.0050	1.259	.0314	.4393	.3013	-.0004	.0284	.9213
Stddev	.0008	.0003	.001	.0001	.0008	.0003	.0005	.0002	.0015
%RSD	2.770	5.425	.1015	.2804	.1750	.1089	108.4	.7108	.1576
#1	.0284	.0051	1.260	.0314	.4387	.3016	-.0007	.0283	.9214
#2	.0293	.0052	1.258	.0313	.4390	.3011	.0001	.0286	.9199
#3	.0277	.0047	1.259	.0315	.4401	.3010	-.0007	.0282	.9228

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1683.9	5089.4	31896.	3991.8
Stddev	7.5	11.4	175.	6.9
%RSD	.44731	.22475	.55019	.17192
#1	1684.2	5081.6	31723.	3984.2
#2	1691.2	5102.5	31890.	3997.4
#3	1676.2	5084.1	32074.	3993.9

Zoom In Zoom Out

Sample Name: FA22134-12 Acquired: 2/17/2015 19:58:27 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	17.61	.0693	.1094	.0003	21.89	.0003	.0018	.0754	.2961
Stddev	.0006	.05	.0003	.0001	.0001	.07	.0001	.0001	.0002	.0009
%RSD	195.9	.3031	.4270	.0868	40.00	.3364	26.23	6.410	.2033	.3000
#1	-.0001	17.62	.0689	.1095	.0003	21.93	.0004	.0017	.0754	.2967
#2	.0000	17.56	.0695	.1094	.0005	21.81	.0004	.0018	.0753	.2965
#3	.0010	17.66	.0694	.1093	.0002	21.94	.0002	.0019	.0756	.2951

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.200	.5235	.9617	.0874	.0030	.2897	.0139	3.582	.0161	.0040
Stddev	.007	.0088	.0297	.0003	.0001	.0102	.0001	.007	.0009	.0007
%RSD	.0773	1.672	3.086	.3123	2.736	3.533	.4801	.1964	5.723	17.92
#1	9.195	.5236	.9942	.0877	.0030	.2798	.0138	3.590	.0152	.0037
#2	9.198	.5321	.9550	.0874	.0031	.3003	.0139	3.577	.0161	.0035
#3	9.208	.5146	.9360	.0872	.0030	.2890	.0139	3.578	.0170	.0048

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.579	.0269	.2510	.2150	-.0014	.0248	.4637
Stddev	.002	.0001	.0003	.0003	.0003	.0002	.0004
%RSD	.1360	.4489	.1043	.1228	23.83	.6619	.0848
#1	1.576	.0269	.2508	.2152	-.0013	.0250	.4633
#2	1.580	.0270	.2509	.2147	-.0018	.0248	.4639
#3	1.580	.0267	.2513	.2151	-.0012	.0247	.4640

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.7	5021.8	31830.	3966.8
Stddev	3.4	5.6	40.	23.3
%RSD	.20345	.11099	.12548	.58661
#1	1670.4	5024.9	31797.	3941.6
#2	1673.5	5015.4	31875.	3987.4
#3	1677.2	5025.2	31820.	3971.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/17/2015 20:02:31 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0103	.2211	.0101	.2080	.0053	1.083	.0050	.0507	.0109	.0265
Stddev	.0002	.0116	.0005	.0012	.0000	.003	.0000	.0001	.0005	.0002
%RSD	1.587	5.231	4.853	.5927	.7293	.2966	.6222	.1262	4.925	.7512
#1	.0103	.2100	.0098	.2081	.0053	1.081	.0050	.0508	.0112	.0263
#2	.0104	.2331	.0098	.2091	.0052	1.087	.0049	.0507	.0103	.0265
#3	.0101	.2202	.0107	.2067	.0053	1.082	.0050	.0508	.0113	.0267

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3227	10.93	5.203	.0160	.0462	11.05	.0401	.0044	.0049	.0098
Stddev	.0022	.03	.033	.0000	.0003	.04	.0002	.0002	.0007	.0010
%RSD	.6779	.2578	.6348	.1168	.6387	.3853	.5898	3.888	15.04	9.751
#1	.3221	10.95	5.239	.0160	.0463	11.08	.0401	.0044	.0054	.0089
#2	.3251	10.94	5.174	.0160	.0459	11.07	.0403	.0043	.0041	.0108
#3	.3209	10.90	5.196	.0160	.0464	11.01	.0399	.0046	.0052	.0097

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0426	.0493	.0106	.0100	.0103	.0496	.0215
Stddev	.0004	.0003	.0000	.0002	.0006	.0005	.0000
%RSD	.9288	.6637	.4446	1.939	6.155	.9556	.1302
#1	.0424	.0490	.0106	.0102	.0106	.0496	.0215
#2	.0425	.0493	.0105	.0101	.0107	.0491	.0215
#3	.0431	.0497	.0106	.0098	.0096	.0501	.0215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1687.5	4994.6	31692.	3821.2
Stddev	3.2	6.1	92.	32.2
%RSD	.19222	.12143	.29053	.84200
#1	1686.1	5000.0	31725.	3840.1
#2	1685.3	4988.0	31588.	3839.4
#3	1691.3	4995.9	31764.	3784.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/17/2015 20:06:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	F514.0	.0015	.0004	.0000	487.3	-.0009	.0009	-.0002
Stddev	.0002	6.2	.0016	.0002	.000	.7	.0001	.0001	.0005
%RSD	46.88	1.202	107.8	54.56	110.1	.1378	14.39	8.674	244.6
#1	.0006	508.0	.0006	.0001	.0000	487.0	-.0008	.0010	-.0003
#2	.0003	513.5	.0005	.0005	.0000	486.8	-.0010	.0009	.0003
#3	.0004	520.4	.0033	.0005	-.0001	488.1	-.0009	.0009	-.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0029	183.5	.2016	479.6	.0001	.0028	.1423	.0011	-.0046
Stddev	.0002	.6	.0270	1.3	.0001	.0002	.0045	.0002	.0004
%RSD	5.627	.3029	13.39	.2629	52.86	6.316	3.152	20.94	9.090
#1	-.0030	182.9	.1929	478.3	.0001	.0029	.1372	.0014	-.0047
#2	-.0029	183.7	.2319	479.7	.0000	.0030	.1446	.0010	-.0042
#3	-.0027	183.9	.1800	480.8	.0001	.0026	.1453	.0011	-.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0019	.0967	.0006	.0001	.0002	-.0002	.0004	-.0002
Stddev	.0027	.0012	.0002	.0004	.0000	.0002	.0025	.0002	.0001
%RSD	342.4	63.28	.2150	67.55	34.32	133.5	1313.	48.10	79.58
#1	.0027	.0032	.0968	.0003	.0002	.0004	.0021	.0002	-.0001
#2	.0019	.0011	.0965	.0010	.0001	.0000	-.0029	.0003	.0000
#3	-.0023	.0013	.0969	.0005	.0001	.0001	.0002	.0005	-.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1533.7	4423.8	27656.	3596.5
Stddev	2.5	6.1	162.	22.8
%RSD	.16377	.13863	.58648	.63501
#1	1531.0	4419.5	27470.	3618.1
#2	1536.0	4430.8	27770.	3598.6
#3	1534.0	4421.0	27727.	3572.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/17/2015 20:10:59 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.012	F522.6	1.048	.5160	.5123	487.0	.9720	.5080	.5305
Stddev	.001	8.5	.004	.0019	.0024	1.8	.0009	.0002	.0008
%RSD	.0913	1.630	.3859	.3745	.4596	.3646	.0965	.0363	.1533
#1	1.013	513.5	1.051	.5151	.5118	486.6	.9720	.5078	.5307
#2	1.012	530.4	1.048	.5146	.5103	489.0	.9711	.5080	.5311
#3	1.011	523.9	1.043	.5182	.5149	485.5	.9730	.5082	.5296

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5714	182.2	.0728	479.2	.5241	.9576	.1054	.9990	.9791
Stddev	.0005	.9	.0375	1.6	.0002	.0018	.0091	.0004	.0035
%RSD	.0901	.4780	51.51	.3331	.0308	.1831	8.619	.0358	.3569
#1	.5720	181.6	.0404	478.2	.5240	.9564	.1159	.9987	.9831
#2	.5711	181.8	.0642	478.3	.5242	.9567	.1010	.9994	.9765
#3	.5712	183.2	.1139	481.0	.5239	.9596	.0994	.9990	.9779

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.069	1.016	.0483	.9699	1.042	1.046	1.003	.5023	.9923
Stddev	.005	.004	.0004	.0016	.005	.001	.001	.0012	.0014
%RSD	.4602	.3498	.7392	.1687	.4498	.0932	.1426	.2381	.1389
#1	1.071	1.018	.0480	.9695	1.040	1.046	1.002	.5017	.9919
#2	1.064	1.012	.0487	.9685	1.038	1.047	1.002	.5037	.9912
#3	1.073	1.018	.0482	.9717	1.047	1.045	1.004	.5015	.9938

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1522.2	4413.2	27285.	3590.7
Stddev	2.5	5.4	96.	25.1
%RSD	.16738	.12216	.35060	.69785
#1	1525.0	4418.0	27283.	3618.1
#2	1521.5	4414.2	27191.	3585.0
#3	1520.0	4407.4	27383.	3568.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 20:15:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2574	41.75	1.944	2.009	2.007	41.46	1.995	1.979	2.126	2.040
Stddev	.0015	.22	.003	.004	.010	.25	.003	.003	.001	.006
%RSD	.5714	.5382	.1558	.1867	.4857	.6110	.1396	.1295	.0603	.3172
#1	.2583	41.53	1.947	2.005	1.997	41.20	1.994	1.978	2.125	2.046
#2	.2557	41.76	1.941	2.008	2.007	41.46	1.993	1.978	2.125	2.033
#3	.2582	41.98	1.943	2.013	2.017	41.71	1.998	1.982	2.127	2.040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.96	42.77	39.83	2.068	1.962	42.88	1.945	1.991	1.943	1.955
Stddev	.20	.20	.27	.001	.007	.21	.003	.004	.002	.003
%RSD	.5031	.4580	.6803	.0471	.3846	.4824	.1398	.1894	.0895	.1475
#1	39.75	42.55	39.60	2.068	1.954	42.67	1.946	1.988	1.943	1.957
#2	39.97	42.85	39.76	2.069	1.963	42.88	1.942	1.991	1.941	1.952
#3	40.16	42.92	40.13	2.068	1.969	43.09	1.947	1.995	1.945	1.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.366	1.936	2.072	2.067	1.983	2.033	1.997
Stddev	.002	.002	.007	.003	.003	.001	.002
%RSD	.1777	.0754	.3574	.1228	.1346	.0712	.1008
#1	1.366	1.937	2.066	2.070	1.982	2.033	1.996
#2	1.363	1.934	2.069	2.065	1.980	2.032	1.996
#3	1.368	1.936	2.080	2.067	1.986	2.035	1.999
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 20:15:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1609.5	4776.1	29991.	3676.4
Stddev	3.8	7.1	99.	50.2
%RSD	.23349	.14859	.33063	1.3662
#1	1613.1	4777.9	30096.	3727.0
#2	1609.8	4782.1	29899.	3675.5
#3	1605.6	4768.3	29979.	3626.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 20:19:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0070	.0014	.0003	.0000	.0038	.0000	.0002	.0001
Stddev	.0003	.0037	.0000	.0003	.0001	.0015	.000	.0001	.0000
%RSD	106.0	52.62	2.184	106.6	132.9	39.74	290.7	83.14	27.99
#1	.0001	.0090	.0015	.0007	.0001	.0046	.0000	.0001	.0001
#2	.0006	.0028	.0014	.0003	.0001	.0047	.0001	.0003	.0001
#3	.0001	.0093	.0014	.0000	.0000	.0020	-.0001	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F.0524	-.0009	.0385	.0000	F.0041	.0046	.0001	-.0010
Stddev	.0002	.0143	.0279	.0067	.000	.0010	.0097	.0003	.0011
%RSD	529.1	27.30	3087.	17.30	243.7	24.68	209.3	413.7	114.9
#1	.0001	.0688	.0307	.0462	.0000	.0051	.0025	-.0003	-.0003
#2	.0002	.0461	-.0218	.0352	.0000	.0041	-.0038	.0003	-.0022
#3	-.0002	.0424	-.0116	.0341	-.0001	.0031	.0153	.0002	-.0004
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0005	.0001	.0009	.0000	.0014	.0001	-.0003	.0000
Stddev	.0012	.0001	.0005	.0003	.000	.0003	.0008	.0002	.000
%RSD	70.33	28.44	516.4	39.84	311.9	17.60	735.0	71.35	222.7
#1	.0021	.0003	-.0002	.0013	-.0001	.0016	-.0005	-.0004	-.0001
#2	.0004	.0005	-.0002	.0006	.0000	.0016	-.0002	-.0001	.0000
#3	.0027	.0006	.0007	.0007	.0000	.0011	.0010	-.0006	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 20:19:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1677.2	4958.2	31612.	3762.6
Stddev	2.8	5.8	45.	12.6
%RSD	.16488	.11640	.14184	.33568
#1	1679.8	4964.8	31623.	3754.7
#2	1674.3	4955.9	31562.	3777.2
#3	1677.3	4953.9	31650.	3755.9

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.053780	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000071	0.000000	No
			Cr	-0.002131	0.000000	No
			Mo	0.000500	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000009	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000086	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000002	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000001	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000182	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000008	0.000000	No
			Mg	0.000005	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000038	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000054	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000971	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000276	0.000000	No
			Fe	0.000119	0.000000	No
			Mo	-0.001480	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000044	0.000000	No
			Cr	0.012815	0.000000	No
			Mo	-0.000310	0.000000	No
			V	-0.001708	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000019	0.000000	No
			Ca	-0.000000	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000017	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000006	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000009	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000003	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	0.000002	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.025078	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000012	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.003709	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000016	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000027	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000110	0.676010	0.000000	1.000000
	Al 396.152 { 85}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.002330	0.149282	0.000000	1.000000
	As 189.042 {478}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000342	0.276934	0.000000	1.000000
	Ba 455.403 { 74}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.008955	10.723257	0.000000	1.000000
	Be 313.042 {108}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000347	6.833063	0.000000	1.000000
	Ca 317.933 {106}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.007446	0.219528	0.000000	1.000000
	Cd 226.502 {449}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000406	5.375155	0.000000	1.000000
	Co 228.616 {447}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000853	2.457064	0.000000	1.000000
	Cr 267.716 {126}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000125	0.526824	0.000000	1.000000
	Cu 324.754 {104}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004868	0.842242	0.000000	1.000000
	Fe 259.940 {130}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004777	0.125211	0.000000	1.000000
	In 230.606 {446}*	2/17/2015 10:30:32	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.007681	0.124129	0.000000	1.000000
	Mg 279.079 {121}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000437	0.020116	0.000000	1.000000
	Mn 257.610 {131}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000866	3.364073	0.000000	1.000000
	Mo 202.030 {467}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004453	1.196130	0.000000	1.000000
	Na 589.592 { 57}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.016068	0.426053	0.000000	1.000000
	Ni 231.604 {445}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000136	1.528918	0.000000	1.000000
	Pb 220.353 {453}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.004660	1.315145	0.000000	1.000000
	Sb 206.833 {463}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000266	0.278604	0.000000	1.000000
	Se 196.090 {472}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000879	0.210189	0.000000	1.000000
	Si 212.412 {459}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.008245	0.549035	0.000000	1.000000
	Sn 189.989 {477}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000827	0.461613	0.000000	1.000000
	Sr 407.771 { 83}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.002139	15.838277	0.000000	1.000000
	Ti 334.941 {101}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004327	2.089365	0.000000	1.000000
	Tl 190.856 {477}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.005722	0.598692	0.000000	1.000000
	V 292.402 {115}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000279	0.706186	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.003889	3.610097	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999901	0.000088	0.000488	0.001628	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999798	0.004849	0.011792	0.039307	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999957	0.000206	0.000750	0.002501	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999850	0.014972	0.000230	0.000766	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999789	0.011295	0.000100	0.000335	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999623	0.009714	0.003805	0.012683	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999926	0.005267	0.000059	0.000198	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999955	0.001872	0.000139	0.000463	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999859	0.000713	0.000364	0.001212	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999957	0.000625	0.000337	0.001125	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999428	0.006824	0.003274	0.010912	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999904	0.002769	0.029090	0.096966	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999701	0.000792	0.025486	0.084954	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999595	0.007717	0.000052	0.000174	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999958	0.000887	0.000181	0.000603	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999735	0.015790	0.008749	0.029165	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999944	0.001303	0.000220	0.000734	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999933	0.001231	0.000685	0.002283	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999955	0.000213	0.001207	0.004025	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999947	0.000174	0.001510	0.005032	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.990534	0.006245	0.000437	0.001456	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999955	0.000354	0.000375	0.001249	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999722	0.030096	0.000095	0.000316	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999793	0.003425	0.000146	0.000486	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999903	0.000653	0.000968	0.003227	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999999	0.000097	0.000344	0.001147	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999872	0.004660	0.000064	0.000214	OK.	1.000000	0.000000	1	0

Accutest Laboratories SE Metals Digestion Log Soil

MP #: 28549 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 2/12/15 9:01
HotBlock I.D. 6
Thermometer I.D. 60071
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 94/93
Balance I.D. ADVPRO3

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC 861	0.50	10
ACC 841	0.25	10
Met 5036	0.25	10

Filter Lot#: 140730082
Dig. Tube Lot# MP2455

Added B:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	145881	0000088909	0000088821	J997-4F015

Sample #			Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.00	50.0	
Spike Blank(SB)			1.00		
Matrix Spike(MS)			1.26		
Matrix Spike Dup(MSD)			1.13		
Duplicate(DUP)			1.06		
1 QC C	FA22009-2	D 1	1.12		
2		5	1.45		
3		6	1.23		
4		9	1.28		
5		12	1.16		
6		15	1.05		
7		19	1.40		
8		22	1.39		
9		25	1.36		
10		26	1.47		
11		29	1.22		
12	FA22015-2	10	1.53		Added additional DI H_2O to prevent bubbling over.
13	FA22020-1	6	1.13		
14		2	1.44		
15		3	1.20		
16		4	1.14		
17		5	1.37		
18	FA22032-1	1	1.15		
19		2	1.14		
20		3	1.21		
21 E					
22 E				DB	
23 E				2/12/15	
24 E					

Analyst: [signature] Date: 2/12/15

QC Review: [signature] Date: 2.12.15

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

DOD

Accutest Laboratories SE **Metals Digestion Log Soil**

MP #: 28558 **Method of Digestion: SW846-3050B**

Prep Date/Time (mm/dd/yy 24:00): 2/16/15 9:32

HotBlock I.D. 6

Thermometer I.D. 60711

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 93/92

Balance I.D. ADVPRO3

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC 875	0.50	10
ACC 841	0.25	10
Met 5036	0.25	10

Filter Lot#: 140730082

Dig. Tube Lot# MP2455

Added [B]:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	145881	000008896 9	0000088821	J997-4F015

Sample #			Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.00	50.0	
Spike Blank(SB)			1.00		
Matrix Spike(MS)			1.23		
Matrix Spike Dup(MSD)			1.19		
Duplicate(DUP)			1.36		
1 QC [C]	FA22051-3	D 7	1.14		
2	FA22086-1	1	1.42		
3	FA22062-1	5	1.43		
4	2		1.22		
5	3		1.38		
6	4		1.10		
7	5		1.22		
8	6		1.28		
9	FA22125-4	10	1.10		ROCKY
10	FA22032-4	1	1.05		
11	5		1.14		
12	6		1.13		
13	7		1.10		
14	FA22133-1		1.22		
15	2		1.37		
16	3		1.08		
17	4		1.20		
18	5		1.15		
19	FA22134-1		1.12		
20	FA22036-1		1.24		pellets/brown fumes, added 2.5mL HNO_3
21 [E]					
22 [E]					DB
23 [E]					
24 [E]					2/16/15

Analyst: [signature] Date: 2/16/15

QC Review: [signature] Date: 2.16.15

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: FA22032-1 **Analyzed:** 12-FEB-15 by KC **Method:** SM19 2540G
ClientID: ML865SOS10A1A

Wet Weight (Total)	7.24	g
Tare Weight	1.03	g
Dry Weight (Total)	5.96	g
Solids, Percent	79.4	%

Sample: FA22032-2 **Analyzed:** 12-FEB-15 by KC **Method:** SM19 2540G
ClientID: SR864SOSDA2A

Wet Weight (Total)	7.26	g
Tare Weight	1.01	g
Dry Weight (Total)	6.39	g
Solids, Percent	86.1	%

Sample: FA22032-3 **Analyzed:** 12-FEB-15 by KC **Method:** SM19 2540G
ClientID: SR864SOSG1A

Wet Weight (Total)	7.71	g
Tare Weight	1.02	g
Dry Weight (Total)	6.56	g
Solids, Percent	82.8	%

Sample: FA22032-4 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSG2A

Wet Weight (Total)	7.88	g
Tare Weight	1.03	g
Dry Weight (Total)	6.92	g
Solids, Percent	86	%

Sample: FA22032-5 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSDA2C

Wet Weight (Total)	8.09	g
Tare Weight	1.04	g
Dry Weight (Total)	7.16	g
Solids, Percent	86.8	%

Sample: FA22032-6 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSG1S

Wet Weight (Total)	8.07	g
Tare Weight	1.02	g
Dry Weight (Total)	6.93	g
Solids, Percent	83.8	%

Percent Solids Raw Data Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: FA22032-7 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSG2D

Wet Weight (Total)	8.09	g
Tare Weight	.97	g
Dry Weight (Total)	6.63	g
Solids, Percent	79.5	%

Southeast
ACCUTEST LABORATORIES

02/03/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-ML865.05

Accutest Job Number: FA21555

Sampling Date: 01/16/15

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **341**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10

Table of Contents

Section 1: Sample Summary 4
Section 2: Case Narrative/Conformance Summary 5
Section 3: Summary of Hits 9
Section 4: Sample Results 12
4.1: FA21555-1: ML865SOFH588A 13
4.2: FA21555-2: ML865SOFH588S 15
4.3: FA21555-3: ML865SOFI589A 17
4.4: FA21555-4: ML865SOFI589D 19
4.5: FA21555-5: ML865SOFJ589A 21
4.6: FA21555-6: ML865SOFI590A 23
4.7: FA21555-7: ML865SOFB589A 25
4.8: FA21555-8: ML865SOFB589C 27
4.9: FA21555-9: ML865SOFB588A 29
4.10: FA21555-10: ML865SOFA588A 31
4.11: FA21555-11: ML865SOFD589A 33
Section 5: Misc. Forms 35
5.1: Chain of Custody 36
5.2: QC Evaluation: DOD QSM5 Limits 39
Section 6: GC Semi-volatiles - QC Data Summaries 43
6.1: Method Blank Summary 44
6.2: Blank Spike Summary 45
6.3: Matrix Spike/Matrix Spike Duplicate Summary 46
6.4: Surrogate Recovery Summaries 47
6.5: GC Surrogate Retention Time Summaries 48
6.6: Initial and Continuing Calibration Summaries 50
Section 7: GC Semi-volatiles - Raw Data 60
7.1: Samples 61
7.2: Method Blanks 94
7.3: Blank Spikes 97
7.4: Matrix Spike/Matrix Spike Duplicates 100
7.5: Initial and Continuing Calibarations 106
7.6: Instrument Run Logs 139
7.7: Prep Logs 142
Section 8: Metals Analysis - QC Data Summaries 143
8.1: Inst QC MA12173: Al,Sb,Cr,Cu,Fe,Pb,Zn 144
8.2: Inst QC MA12175: Sb,Cr,Pb,Zn 158
8.3: Inst QC MA12184: Al,Sb,Cr,Cu,Fe,Pb,Zn 169
8.4: Inst QC MA12186: Sb,Cr,Pb,Zn 185
8.5: Prep QC MP28478: Al,Sb,Cr,Cu,Fe,Pb,Zn 199
8.6: Prep QC MP28497: Al,Sb,Cr,Cu,Fe,Pb,Zn 205
8.7: IDL and Linear Range Summaries 211
Section 9: Metals Analysis - Raw Data 217

Table of Contents

9.1: Raw Data MA12173 218
9.2: Raw Data MA12175 247
9.3: Raw Data MA12184 271
9.4: Raw Data MA12186 308
9.5: Prep Logs 337
Section 10: General Chemistry - QC Data Summaries 339
10.1: Percent Solids Raw Data Summary 340

Sample Summary

FPM Remediations

Job No: FA21555

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-ML865.05

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA21555-1	01/16/15	11:30	RM	01/21/15	SO	Soil	ML865SOFH588A
FA21555-2	01/16/15	11:35	RM	01/21/15	SO	Soil	ML865SOFH588S
FA21555-3	01/16/15	12:00	RM	01/21/15	SO	Soil	ML865SOFI589A
FA21555-4	01/16/15	12:05	RM	01/21/15	SO	Soil	ML865SOFI589D
FA21555-5	01/16/15	12:25	RM	01/21/15	SO	Soil	ML865SOFJ589A
FA21555-6	01/16/15	12:40	RM	01/21/15	SO	Soil	ML865SOFI590A
FA21555-7	01/16/15	13:30	RM	01/21/15	SO	Soil	ML865SOFB589A
FA21555-8	01/16/15	13:35	RM	01/21/15	SO	Soil	ML865SOFB589C
FA21555-9	01/16/15	13:50	RM	01/21/15	SO	Soil	ML865SOFB588A
FA21555-10	01/16/15	14:00	RM	01/21/15	SO	Soil	ML865SOFA588A
FA21555-11	01/16/15	14:20	RM	01/21/15	SO	Soil	ML865SOFD589A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA21555

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 2/3/2015 3:46:40 PM

11 Sample(s) were collected on 01/16/2015 and were received at Accutest SE on 01/21/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA21555. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8330A

Matrix: SO **Batch ID:** OP54769

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA21555-1MS, FA21555-1MSD were used as the QC samples indicated.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28478

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA21510-1DUP, FA21510-1MS, FA21510-1MSD, FA21510-1PS, FA21510-1SDL were used as the QC samples for metals.

Matrix Spike /Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Aluminum, Chromium, Antimony, Zinc are outside control limits for sample MP28478-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Copper, Zinc, Aluminum, Chromium, Iron are outside control limits for sample MP28478-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28478-D1 for Zinc: RPD acceptable due to low duplicate and sample concentrations.

MP28478-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

MP28478-SD1 for Chromium: Serial dilution indicates possible matrix interference.

MP28478-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

MP28478-SD1 for Iron: Serial dilution indicates possible matrix interference.

MP28478-PS1 for Iron: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA21555-2 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-2 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-2 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-2 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-1 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-1 for Lead: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28478

FA21555-1 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-1 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-4 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-3 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-7 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-6 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-5 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-8 for Chromium: Elevated reporting limit(s) due to matrix interference.

Matrix: SO **Batch ID:** MP28497

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA21642-24DUP, FA21642-24MS, FA21642-24MSD, FA21642-24PS, FA21642-24SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Aluminum, Antimony, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Aluminum, Antimony, Chromium, Lead are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike/ Matrix Spike Duplicate Recovery(s) for Iron are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

RPD(s) for Duplicate for Aluminum, Chromium, Iron, Lead, Antimony are outside control limits for sample MP28497-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Zinc, Aluminum, Chromium, Iron are outside control limits for sample MP28497-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28497-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

MP28497-SD1 for Iron: Serial dilution indicates possible matrix interference.

MP28497-SD1 for Chromium: Serial dilution indicates possible matrix interference.

MP28497-SD1 for Aluminum: Serial dilution indicates possible matrix interference.

MP28497-PS1 for Iron: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP28497-PS1 for Zinc: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP28497-PS1 for Antimony: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

MP28497-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA21555-10 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-10 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-10 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-11 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-11 for Lead: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28497

FA21555-11 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-10 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Lead: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA21555-11 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA21555-9 for Antimony: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN64940

Sample(s) FA21555-3DUP were used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Date: February 3, 2015

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
FA21555-1	GCSEMI	BB045933.D	3,4-Dinitrotoluene
FA21555-10	GCSEMI	BB045946.D	3,4-Dinitrotoluene
FA21555-11	GCSEMI	BB045947.D	3,4-Dinitrotoluene
FA21555-2	GCSEMI	BB045936.D	3,4-Dinitrotoluene
FA21555-3	GCSEMI	BB045937.D	3,4-Dinitrotoluene
FA21555-4	GCSEMI	BB045938.D	3,4-Dinitrotoluene
FA21555-5	GCSEMI	BB045939.D	3,4-Dinitrotoluene
FA21555-6	GCSEMI	BB045940.D	3,4-Dinitrotoluene
FA21555-7	GCSEMI	BB045943.D	3,4-Dinitrotoluene
FA21555-8	GCSEMI	BB045944.D	3,4-Dinitrotoluene
FA21555-9	GCSEMI	BB045945.D	3,4-Dinitrotoluene
GBB1235-CC1235	GCSEMI	BB045822.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1235-IC1235	GCSEMI	BB045814.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1235-IC1235	GCSEMI	BB045815.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, TNX

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
GBB1235-IC1235	GCSEMI	BB045816.D	2,4-Dinitrotoluene, HMX, PETN
GBB1235-IC1235	GCSEMI	BB045817.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1235-IC1235	GCSEMI	BB045819.D	PETN
GBB1235-IC1235	GCSEMI	BB045820.D	PETN
GBB1235-ICC1235	GCSEMI	BB045818.D	PETN
GBB1235-ICV1235	GCSEMI	BB045821.D	HMX, PETN
GBB1236-CC1235	GCSEMI	BB045835.D	m-Nitrotoluene, PETN
GBB1236-CC1235	GCSEMI	BB045843.D	PETN
GBB1236-ECC1235	GCSEMI	BB045846.D	Nitroglycerine, PETN
GBB1237-CC1235	GCSEMI	BB045848.D	PETN
GBB1237-CC1235	GCSEMI	BB045855.D	PETN
GBB1237-CC1235	GCSEMI	BB045867.D	PETN
GBB1237-CC1235	GCSEMI	BB045879.D	PETN
GBB1237-ECC1235	GCSEMI	BB045882.D	PETN
GBB1238-CC1235	GCSEMI	BB045885.D	m-Nitrotoluene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1238-CC1235	GCSEMI	BB045896.D	PETN
GBB1238-ECC1235	GCSEMI	BB045907.D	PETN
GBB1239-CC1235	GCSEMI	BB045920.D	PETN
GBB1239-CC1235	GCSEMI	BB045929.D	PETN
GBB1239-CC1235	GCSEMI	BB045941.D	PETN
GBB1239-ECC1235	GCSEMI	BB045948.D	PETN
GBB1240-CC1235	GCSEMI	BB045960.D	m-Nitrotoluene, PETN
OP54769-MB	GCSEMI	BB045932.D	3,4-Dinitrotoluene

37 Manual Integrations were found for FA21555

Summary of Hits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA21555-1	**ML865SOFH588A**					
Aluminum		3590	12	2.9	mg/kg	SW846 6010C
Chromium [a]		6.3	5.8	1.2	mg/kg	SW846 6010C
Copper		15.0	1.4	0.12	mg/kg	SW846 6010C
Iron		3570	17	2.9	mg/kg	SW846 6010C
Lead [a]		4.8 J	12	2.3	mg/kg	SW846 6010C
Zinc [a]		42.2	12	2.9	mg/kg	SW846 6010C
FA21555-2	**ML865SOFH588S**					
Aluminum		3460	11	2.7	mg/kg	SW846 6010C
Chromium [a]		6.7	5.4	1.1	mg/kg	SW846 6010C
Copper		19.7	1.3	0.11	mg/kg	SW846 6010C
Iron		3310	16	2.7	mg/kg	SW846 6010C
Lead [a]		4.6 J	11	2.2	mg/kg	SW846 6010C
Zinc [a]		34.5	11	2.7	mg/kg	SW846 6010C
FA21555-3	**ML865SOFI589A**					
Aluminum		4030	12	2.9	mg/kg	SW846 6010C
Chromium [a]		4.3 J	5.8	1.2	mg/kg	SW846 6010C
Copper		6.8	1.5	0.12	mg/kg	SW846 6010C
Iron		3480	17	2.9	mg/kg	SW846 6010C
Lead [a]		5.1 J	12	2.3	mg/kg	SW846 6010C
Zinc [a]		20.9	12	2.9	mg/kg	SW846 6010C
FA21555-4	**ML865SOFI589D**					
Aluminum		3470	10	2.6	mg/kg	SW846 6010C
Antimony [a]		1.0 J	10	2.6	mg/kg	SW846 6010C
Chromium [a]		4.5 J	5.2	1.0	mg/kg	SW846 6010C
Copper		5.7	1.3	0.10	mg/kg	SW846 6010C
Iron		2890	16	2.6	mg/kg	SW846 6010C
Lead [a]		4.4 J	10	2.1	mg/kg	SW846 6010C
Zinc [a]		15.8	10	2.6	mg/kg	SW846 6010C
FA21555-5	**ML865SOFJ589A**					
Aluminum		4180	12	3.0	mg/kg	SW846 6010C
Chromium [a]		4.9 J	6.0	1.2	mg/kg	SW846 6010C
Copper		21.9	1.5	0.12	mg/kg	SW846 6010C
Iron		3400	18	3.0	mg/kg	SW846 6010C
Lead [a]		5.6 J	12	2.4	mg/kg	SW846 6010C
Zinc [a]		18.7	12	3.0	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

Lab Sample ID / Analyte	Client Sample ID	Result / Qual	LOQ	LOD	Units	Method
FA21555-6	**ML865SOFI590A**					
Aluminum		3830	11	2.8	mg/kg	SW846 6010C
Chromium [a]		4.4 J	5.7	1.1	mg/kg	SW846 6010C
Copper		10.2	1.4	0.11	mg/kg	SW846 6010C
Iron		3360	17	2.8	mg/kg	SW846 6010C
Lead [a]		6.0 J	11	2.3	mg/kg	SW846 6010C
Zinc [a]		18.7	11	2.8	mg/kg	SW846 6010C
FA21555-7	**ML865SOFB589A**					
Aluminum		4910	11	2.8	mg/kg	SW846 6010C
Chromium [a]		5.6	5.6	1.1	mg/kg	SW846 6010C
Copper		6.5	1.4	0.11	mg/kg	SW846 6010C
Iron		4280	17	2.8	mg/kg	SW846 6010C
Lead [a]		8.5 J	11	2.3	mg/kg	SW846 6010C
Zinc [a]		20.3	11	2.8	mg/kg	SW846 6010C
FA21555-8	**ML865SOFB589C**					
Aluminum		4070	12	3.0	mg/kg	SW846 6010C
Chromium [a]		4.6 J	5.9	1.2	mg/kg	SW846 6010C
Copper		5.8	1.5	0.12	mg/kg	SW846 6010C
Iron		3580	18	3.0	mg/kg	SW846 6010C
Lead [a]		6.0 J	12	2.4	mg/kg	SW846 6010C
Zinc [a]		15.4	12	3.0	mg/kg	SW846 6010C
FA21555-9	**ML865SOFB588A**					
Aluminum		3460	11	2.7	mg/kg	SW846 6010C
Chromium [a]		3.4 J	5.4	1.1	mg/kg	SW846 6010C
Copper		4.4	1.4	0.11	mg/kg	SW846 6010C
Iron		2930	16	2.7	mg/kg	SW846 6010C
Lead [a]		3.1 J	11	2.2	mg/kg	SW846 6010C
Zinc [a]		12.2	11	2.7	mg/kg	SW846 6010C
FA21555-10	**ML865SOFA588A**					
Aluminum		3110	11	2.8	mg/kg	SW846 6010C
Chromium [a]		3.1 J	5.6	1.1	mg/kg	SW846 6010C
Copper		4.6	1.4	0.11	mg/kg	SW846 6010C
Iron		3050	17	2.8	mg/kg	SW846 6010C
Lead [a]		3.5 J	11	2.2	mg/kg	SW846 6010C
Zinc [a]		11.7	11	2.8	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA21555-11	**ML865SOFD589A**					
Aluminum		4570	11	2.7	mg/kg	SW846 6010C
Chromium [a]		4.8 J	5.5	1.1	mg/kg	SW846 6010C
Copper		6.4	1.4	0.11	mg/kg	SW846 6010C
Iron		3940	16	2.7	mg/kg	SW846 6010C
Lead [a]		5.0 J	11	2.2	mg/kg	SW846 6010C
Zinc [a]		18.7	11	2.7	mg/kg	SW846 6010C

(a) Elevated reporting limit(s) due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFH588A
Lab Sample ID: FA21555-1 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 81.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045933.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.18 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	92 U	180	92	73	ug/kg	
121-82-4	RDX	92 U	180	92	73	ug/kg	
99-65-0	1,3-Dinitrobenzene	92 U	180	92	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	92 U	180	92	73	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	92 U	180	92	73	ug/kg	
98-95-3	Nitrobenzene	92 U	180	92	73	ug/kg	
88-72-2	o-Nitrotoluene	92 U	180	92	73	ug/kg	
99-08-1	m-Nitrotoluene	92 U	180	92	78	ug/kg	
99-99-0	p-Nitrotoluene	92 U	180	92	73	ug/kg	
479-45-8	Tetryl	92 U	180	92	73	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	92 U	180	92	73	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	92 U	180	92	73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFH588A
Lab Sample ID: FA21555-1
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 81.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3590	12	2.9	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	12	2.9	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.3	5.8	1.2	0.58	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	15.0	1.4	0.12	0.058	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3570	17	2.9	1.4	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.8 J	12	2.3	0.93	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	42.2	12	2.9	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFH588S
Lab Sample ID: FA21555-2 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 81.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045936.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.09 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	96 U	190	96	77	ug/kg	
121-82-4	RDX	96 U	190	96	77	ug/kg	
99-65-0	1,3-Dinitrobenzene	96 U	190	96	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	96 U	190	96	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	96 U	190	96	77	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	96 U	190	96	79	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	96 U	190	96	77	ug/kg	
98-95-3	Nitrobenzene	96 U	190	96	77	ug/kg	
88-72-2	o-Nitrotoluene	96 U	190	96	77	ug/kg	
99-08-1	m-Nitrotoluene	96 U	190	96	81	ug/kg	
99-99-0	p-Nitrotoluene	96 U	190	96	77	ug/kg	
479-45-8	Tetryl	96 U	190	96	77	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	96 U	190	96	77	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	96 U	190	96	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFH588S
Lab Sample ID: FA21555-2
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 81.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3460	11	2.7	1.7	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	1.1	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.7	5.4	1.1	0.54	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	19.7	1.3	0.11	0.054	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3310	16	2.7	1.3	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.6 J	11	2.2	0.86	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	34.5	11	2.7	1.6	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFI589A
Lab Sample ID: FA21555-3 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 80.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045937.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.24 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	89 U	180	89	71	ug/kg	
121-82-4	RDX	89 U	180	89	71	ug/kg	
99-65-0	1,3-Dinitrobenzene	89 U	180	89	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	89 U	180	89	73	ug/kg	
121-14-2	2,4-Dinitrotoluene	89 U	180	89	71	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	89 U	180	89	73	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	89 U	180	89	71	ug/kg	
98-95-3	Nitrobenzene	89 U	180	89	71	ug/kg	
88-72-2	o-Nitrotoluene	89 U	180	89	71	ug/kg	
99-08-1	m-Nitrotoluene	89 U	180	89	76	ug/kg	
99-99-0	p-Nitrotoluene	89 U	180	89	71	ug/kg	
479-45-8	Tetryl	89 U	180	89	71	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	89 U	180	89	71	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	89 U	180	89	71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	112%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFI589A
Lab Sample ID: FA21555-3
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 80.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4030	12	2.9	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	12	2.9	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.3 J	5.8	1.2	0.58	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.8	1.5	0.12	0.058	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3480	17	2.9	1.5	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.1 J	12	2.3	0.93	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	20.9	12	2.9	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID:	ML865SOFI589D		
Lab Sample ID:	FA21555-4	**Date Sampled:**	01/16/15
Matrix:	SO - Soil	**Date Received:**	01/21/15
Method:	SW846 8330A SW846 8330A	**Percent Solids:**	79.9
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045938.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.18 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	92 U	180	92	73	ug/kg	
121-82-4	RDX	92 U	180	92	73	ug/kg	
99-65-0	1,3-Dinitrobenzene	92 U	180	92	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	92 U	180	92	73	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	92 U	180	92	75	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	92 U	180	92	73	ug/kg	
98-95-3	Nitrobenzene	92 U	180	92	73	ug/kg	
88-72-2	o-Nitrotoluene	92 U	180	92	73	ug/kg	
99-08-1	m-Nitrotoluene	92 U	180	92	78	ug/kg	
99-99-0	p-Nitrotoluene	92 U	180	92	73	ug/kg	
479-45-8	Tetryl	92 U	180	92	73	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	92 U	180	92	73	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	92 U	180	92	73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFI589D
Lab Sample ID: FA21555-4
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 79.9

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3470	10	2.6	1.7	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.0 J	10	2.6	1.0	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.5 J	5.2	1.0	0.52	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	5.7	1.3	0.10	0.052	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2890	16	2.6	1.3	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.4 J	10	2.1	0.83	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.8	10	2.6	1.6	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFJ589A
Lab Sample ID: FA21555-5 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.7
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045939.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.07 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	97 U	190	97	77	ug/kg	
121-82-4	RDX	97 U	190	97	77	ug/kg	
99-65-0	1,3-Dinitrobenzene	97 U	190	97	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	97 U	190	97	79	ug/kg	
121-14-2	2,4-Dinitrotoluene	97 U	190	97	77	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	97 U	190	97	79	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	97 U	190	97	77	ug/kg	
98-95-3	Nitrobenzene	97 U	190	97	77	ug/kg	
88-72-2	o-Nitrotoluene	97 U	190	97	77	ug/kg	
99-08-1	m-Nitrotoluene	97 U	190	97	82	ug/kg	
99-99-0	p-Nitrotoluene	97 U	190	97	77	ug/kg	
479-45-8	Tetryl	97 U	190	97	77	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	97 U	190	97	77	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	97 U	190	97	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFJ589A
Lab Sample ID: FA21555-5
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 79.7

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4180	12	3.0	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	3.0 U	12	3.0	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.9 J	6.0	1.2	0.60	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	21.9	1.5	0.12	0.060	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3400	18	3.0	1.5	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.6 J	12	2.4	0.96	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	18.7	12	3.0	1.8	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFI590A
Lab Sample ID: FA21555-6 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 80.0
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045940.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.01 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	100 U	200	100	80	ug/kg	
121-82-4	RDX	100 U	200	100	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	100 U	200	100	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	100 U	200	100	81	ug/kg	
121-14-2	2,4-Dinitrotoluene	100 U	200	100	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	100 U	200	100	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	100 U	200	100	80	ug/kg	
98-95-3	Nitrobenzene	100 U	200	100	80	ug/kg	
88-72-2	o-Nitrotoluene	100 U	200	100	80	ug/kg	
99-08-1	m-Nitrotoluene	100 U	200	100	84	ug/kg	
99-99-0	p-Nitrotoluene	100 U	200	100	80	ug/kg	
479-45-8	Tetryl	100 U	200	100	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	100 U	200	100	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	100 U	200	100	80	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFI590A
Lab Sample ID: FA21555-6
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 80.0

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3830	11	2.8	1.8	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.8 U	11	2.8	1.1	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.4 J	5.7	1.1	0.57	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	10.2	1.4	0.11	0.057	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3360	17	2.8	1.4	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.0 J	11	2.3	0.91	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	18.7	11	2.8	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFB589A
Lab Sample ID: FA21555-7 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 81.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045943.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.20 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	91 U	180	91	73	ug/kg	
121-82-4	RDX	91 U	180	91	73	ug/kg	
99-65-0	1,3-Dinitrobenzene	91 U	180	91	73	ug/kg	
606-20-2	2,6-Dinitrotoluene	91 U	180	91	74	ug/kg	
121-14-2	2,4-Dinitrotoluene	91 U	180	91	73	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	91 U	180	91	75	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	91 U	180	91	73	ug/kg	
98-95-3	Nitrobenzene	91 U	180	91	73	ug/kg	
88-72-2	o-Nitrotoluene	91 U	180	91	73	ug/kg	
99-08-1	m-Nitrotoluene	91 U	180	91	77	ug/kg	
99-99-0	p-Nitrotoluene	91 U	180	91	73	ug/kg	
479-45-8	Tetryl	91 U	180	91	73	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	91 U	180	91	73	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	91 U	180	91	73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFB589A
Lab Sample ID: FA21555-7
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 81.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4910	11	2.8	1.8	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.8 U	11	2.8	1.1	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	5.6	5.6	1.1	0.56	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.5	1.4	0.11	0.056	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	4280	17	2.8	1.4	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	8.5 J	11	2.3	0.90	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	20.3	11	2.8	1.7	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFB589C
Lab Sample ID: FA21555-8
Matrix: SO - Soil
Method: SW846 8330A SW846 8330A
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 81.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045944.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	98 U	200	98	78	ug/kg	
121-82-4	RDX	98 U	200	98	78	ug/kg	
99-65-0	1,3-Dinitrobenzene	98 U	200	98	78	ug/kg	
606-20-2	2,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
121-14-2	2,4-Dinitrotoluene	98 U	200	98	78	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	98 U	200	98	78	ug/kg	
98-95-3	Nitrobenzene	98 U	200	98	78	ug/kg	
88-72-2	o-Nitrotoluene	98 U	200	98	78	ug/kg	
99-08-1	m-Nitrotoluene	98 U	200	98	83	ug/kg	
99-99-0	p-Nitrotoluene	98 U	200	98	78	ug/kg	
479-45-8	Tetryl	98 U	200	98	78	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	98 U	200	98	78	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	98 U	200	98	78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFB589C
Lab Sample ID: FA21555-8
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 81.0

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4070	12	3.0	1.9	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	3.0 U	12	3.0	1.2	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.6 J	5.9	1.2	0.59	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	5.8	1.5	0.12	0.059	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3580	18	3.0	1.5	mg/kg	1	01/22/15	01/22/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.0 J	12	2.4	0.95	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.4	12	3.0	1.8	mg/kg	10	01/22/15	01/23/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12173
(2) Instrument QC Batch: MA12175
(3) Prep QC Batch: MP28478

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFB588A
Lab Sample ID: FA21555-9 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 80.1
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045945.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.13 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	94 U	190	94	75	ug/kg	
121-82-4	RDX	94 U	190	94	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	94 U	190	94	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
121-14-2	2,4-Dinitrotoluene	94 U	190	94	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	94 U	190	94	75	ug/kg	
98-95-3	Nitrobenzene	94 U	190	94	75	ug/kg	
88-72-2	o-Nitrotoluene	94 U	190	94	75	ug/kg	
99-08-1	m-Nitrotoluene	94 U	190	94	79	ug/kg	
99-99-0	p-Nitrotoluene	94 U	190	94	75	ug/kg	
479-45-8	Tetryl	94 U	190	94	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	94 U	190	94	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	94 U	190	94	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	110%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFB588A
Lab Sample ID: FA21555-9
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 80.1

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3460	11	2.7	1.9	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	3.4 J	5.4	1.1	0.54	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	4.4	1.4	0.11	0.054	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	2930	16	2.7	0.92	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.1 J	11	2.2	0.54	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	12.2	11	2.7	1.6	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12184
(2) Instrument QC Batch: MA12186
(3) Prep QC Batch: MP28497

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFA588A
Lab Sample ID: FA21555-10 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045946.D	1	02/03/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.08 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	96 U	190	96	77	ug/kg	
121-82-4	RDX	96 U	190	96	77	ug/kg	
99-65-0	1,3-Dinitrobenzene	96 U	190	96	77	ug/kg	
606-20-2	2,6-Dinitrotoluene	96 U	190	96	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	96 U	190	96	77	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	96 U	190	96	79	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	96 U	190	96	77	ug/kg	
98-95-3	Nitrobenzene	96 U	190	96	77	ug/kg	
88-72-2	o-Nitrotoluene	96 U	190	96	77	ug/kg	
99-08-1	m-Nitrotoluene	96 U	190	96	81	ug/kg	
99-99-0	p-Nitrotoluene	96 U	190	96	77	ug/kg	
479-45-8	Tetryl	96 U	190	96	77	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	96 U	190	96	77	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	96 U	190	96	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFA588A
Lab Sample ID: FA21555-10
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 79.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3110	11	2.8	2.0	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.8 U	11	2.8	0.73	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	3.1 J	5.6	1.1	0.56	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	4.6	1.4	0.11	0.056	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3050	17	2.8	0.96	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.5 J	11	2.2	0.56	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	11.7	11	2.8	1.7	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12184
(2) Instrument QC Batch: MA12186
(3) Prep QC Batch: MP28497

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOFD589A
Lab Sample ID: FA21555-11 **Date Sampled:** 01/16/15
Matrix: SO - Soil **Date Received:** 01/21/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 80.1
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045947.D	1	02/03/15	KL	01/30/15	OP54769	GBB1239
Run #2							

	Initial Weight	Final Volume
Run #1	2.14 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	75	ug/kg	
121-82-4	RDX	93 U	190	93	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	75	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	75	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	79	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	75	ug/kg	
479-45-8	Tetryl	93 U	190	93	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	118%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOFD589A
Lab Sample ID: FA21555-11
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 01/16/15
Date Received: 01/21/15
Percent Solids: 80.1

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4570	11	2.7	1.9	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.8 J	5.5	1.1	0.55	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.4	1.4	0.11	0.055	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	3940	16	2.7	0.93	mg/kg	1	01/28/15	01/28/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.0 J	11	2.2	0.55	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	18.7	11	2.7	1.6	mg/kg	10	01/28/15	01/29/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12184
(2) Instrument QC Batch: MA12186
(3) Prep QC Batch: MP28497

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA21555 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM Remediations Inc.
Address: 5811 University Heights Blvd. Suite 101
City: San Antonio State: TX Zip: 78249
Project Contact: Ivana Raicevic E-mail: I.raicevic@fpm-remediations.com
Phone#: 210-495-7744 ext. 13
Sampler(s) Name(s) (Printed): Robert Martin

Project Information

Project Name: NM-AZ PBR
Street: Holloman AFB
City: Alamogorda State: NM
Project #: 1029-13-01-N-ML865 05
Fax #: 210-495-8544
Client Purchase Order #: Holloman AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection DATE	Collection TIME	Sampled By	Matrix	Total # of Bottles	Container Information	Mo-16	LCB330 EXP	Lab Use Only
	ML86590FH588A	1/16	1130	RM	Soil	1		X	X	
2	ML86590FH588S	1/16	1135	RM	Soil	1		X	X	
3	ML86590FI589A	1/16	1200	RM	Soil	1		X	X	
4	ML86590FI589D	1/16	1205	RM	Soil	1		X	X	
5	ML86590FJ589A	1/16	1225	RM	Soil	1		X	X	
6	ML86590FJ590A	1/16	1240	RM	Soil	1		X	X	
7	ML86590FB589A	1/16	1330	RM	Soil	1		X	X	
8	ML86590FB589C	1/16	1335	RM	Soil	1		X	X	
9	ML86590FB588A	1/16	1350	RM	Soil	1		X	X	
10	ML86590FA588A	1/16	1400	RM	Soil	1		X	X	
11	ML86590FD589A	1/16	1420	RM	Soil	1		X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH — RM
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Robert Martin	1/20/15 1430	2 FX	3 FX	01-21-15	4 Courier (ALS) 10:00
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2-8

5.1 5

FA21555: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 21555 CLIENT: EPM REMEDIATION PROJECT: NM-AZ POR

DATE/TIME RECEIVED: 01-21-15 10:00 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 5195

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.1
- [ ] OBSERVED TEMPS: 2.1
- [ ] CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 01-21-15 REVIEWER SIGNATURE/DATE 01-21-15

NF 10/14

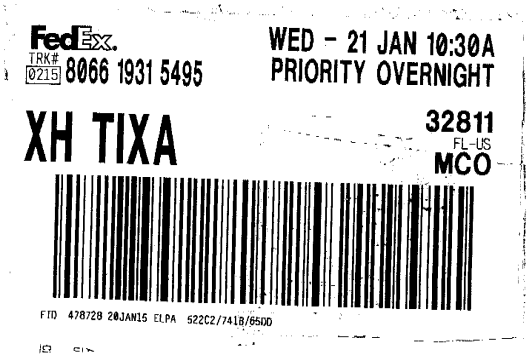
receipt confirmation 102914.xls

5.1

5

FA21555: Chain of Custody

Page 2 of 3



FA21555: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP54769	SW846 8330A						
OP54769-BS	2691-41-0	HMX	BSP	REC	105	%	77-122
OP54769-BS	121-82-4	RDX	BSP	REC	98	%	82-124
OP54769-BS	99-65-0	1,3-Dinitrobenzene	BSP	REC	88	%	84-124
OP54769-BS	606-20-2	2,6-Dinitrotoluene	BSP	REC	106	%	86-119
OP54769-BS	121-14-2	2,4-Dinitrotoluene	BSP	REC	100	%	82-123
OP54769-BS	35572-78-2	2-amino-4,6-Dinitrotoluene	BSP	REC	101	%	87-121
OP54769-BS	19406-51-0	4-amino-2,6-Dinitrotoluene	BSP	REC	99	%	84-124
OP54769-BS	98-95-3	Nitrobenzene	BSP	REC	100	%	80-128
OP54769-BS	88-72-2	o-Nitrotoluene	BSP	REC	98	%	84-120
OP54769-BS	99-08-1	m-Nitrotoluene	BSP	REC	101	%	79-127
OP54769-BS	99-99-0	p-Nitrotoluene	BSP	REC	94	%	83-122
OP54769-BS	479-45-8	Tetryl	BSP	REC	97	%	66-138
OP54769-BS	99-35-4	1,3,5-Trinitrobenzene	BSP	REC	101	%	81-123
OP54769-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	93	%	75-125
OP54769-MS	2691-41-0	HMX	MS	REC	102	%	77-122
OP54769-MS	121-82-4	RDX	MS	REC	87	%	82-124
OP54769-MS	99-65-0	1,3-Dinitrobenzene	MS	REC	85	%	84-124
OP54769-MS	606-20-2	2,6-Dinitrotoluene	MS	REC	100	%	86-119
OP54769-MS	121-14-2	2,4-Dinitrotoluene	MS	REC	97	%	82-123
OP54769-MS	35572-78-2	2-amino-4,6-Dinitrotoluene	MS	REC	98	%	87-121
OP54769-MS	19406-51-0	4-amino-2,6-Dinitrotoluene	MS	REC	96	%	84-124
OP54769-MS	98-95-3	Nitrobenzene	MS	REC	93	%	80-128
OP54769-MS	88-72-2	o-Nitrotoluene	MS	REC	93	%	84-120
OP54769-MS	99-08-1	m-Nitrotoluene	MS	REC	96	%	79-127
OP54769-MS	99-99-0	p-Nitrotoluene	MS	REC	90	%	83-122
OP54769-MS	479-45-8	Tetryl	MS	REC	95	%	66-138
OP54769-MS	99-35-4	1,3,5-Trinitrobenzene	MS	REC	95	%	81-123
OP54769-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	89	%	75-125
OP54769-MSD	2691-41-0	HMX	MSD	REC	103	%	77-122
OP54769-MSD	2691-41-0	HMX	MSD	RPD	4	%	30
OP54769-MSD	121-82-4	RDX	MSD	REC	90	%	82-124
OP54769-MSD	121-82-4	RDX	MSD	RPD	7	%	30
OP54769-MSD	99-65-0	1,3-Dinitrobenzene	MSD	REC	88	%	84-124
OP54769-MSD	99-65-0	1,3-Dinitrobenzene	MSD	RPD	6	%	30
OP54769-MSD	606-20-2	2,6-Dinitrotoluene	MSD	REC	104	%	86-119
OP54769-MSD	606-20-2	2,6-Dinitrotoluene	MSD	RPD	7	%	30
OP54769-MSD	121-14-2	2,4-Dinitrotoluene	MSD	REC	100	%	82-123
OP54769-MSD	121-14-2	2,4-Dinitrotoluene	MSD	RPD	6	%	30
OP54769-MSD	35572-78-2	2-amino-4,6-Dinitrotoluene	MSD	REC	100	%	87-121
OP54769-MSD	35572-78-2	2-amino-4,6-Dinitrotoluene	MSD	RPD	5	%	30
OP54769-MSD	19406-51-0	4-amino-2,6-Dinitrotoluene	MSD	REC	99	%	84-124
OP54769-MSD	19406-51-0	4-amino-2,6-Dinitrotoluene	MSD	RPD	6	%	30

* Sample used for QC is not from job FA21555

QC Evaluation: DOD QSM5 Limits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP54769-MSD	98-95-3	Nitrobenzene	MSD	REC	101	%	80-128
OP54769-MSD	98-95-3	Nitrobenzene	MSD	RPD	10	%	30
OP54769-MSD	88-72-2	o-Nitrotoluene	MSD	REC	96	%	84-120
OP54769-MSD	88-72-2	o-Nitrotoluene	MSD	RPD	5	%	30
OP54769-MSD	99-08-1	m-Nitrotoluene	MSD	REC	99	%	79-127
OP54769-MSD	99-08-1	m-Nitrotoluene	MSD	RPD	6	%	30
OP54769-MSD	99-99-0	p-Nitrotoluene	MSD	REC	93	%	83-122
OP54769-MSD	99-99-0	p-Nitrotoluene	MSD	RPD	5	%	30
OP54769-MSD	479-45-8	Tetryl	MSD	REC	96	%	66-138
OP54769-MSD	479-45-8	Tetryl	MSD	RPD	3	%	30
OP54769-MSD	99-35-4	1,3,5-Trinitrobenzene	MSD	REC	98	%	81-123
OP54769-MSD	99-35-4	1,3,5-Trinitrobenzene	MSD	RPD	5	%	30
OP54769-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	93	%	75-125
OP54769-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	6	%	30
MP28478	SW846 6010C						
MP28478-B1	7429-90-5	Aluminum	BSP	REC	104.4	%	74-119
MP28478-B1	7440-36-0	Antimony	BSP	REC	98.4	%	79-114
MP28478-B1	7440-47-3	Chromium	BSP	REC	108	%	85-113
MP28478-B1	7440-50-8	Copper	BSP	REC	107.2	%	81-117
MP28478-B1	7439-89-6	Iron	BSP	REC	103.1	%	81-118
MP28478-B1	7439-92-1	Lead	BSP	REC	99.6	%	81-112
MP28478-B1	7440-66-6	Zinc	BSP	REC	101.6	%	82-113
MP28478-S1*	7429-90-5	Aluminum	MS	REC	102.9	%	74-119
MP28478-S1*	7440-36-0	Antimony	MS	REC	47.1 [a]	%	79-114
MP28478-S1*	7440-47-3	Chromium	MS	REC	94.3	%	85-113
MP28478-S1*	7440-50-8	Copper	MS	REC	91.1	%	81-117
MP28478-S1*	7439-89-6	Iron	MS	REC	83.2	%	81-118
MP28478-S1*	7439-92-1	Lead	MS	REC	102.2	%	81-112
MP28478-S1*	7440-66-6	Zinc	MS	REC	86.2	%	82-113
MP28478-S2*	7429-90-5	Aluminum	MSD	REC	103.5	%	74-119
MP28478-S2*	7429-90-5	Aluminum	MSD	RPD	.6	%	20
MP28478-S2*	7440-36-0	Antimony	MSD	REC	47.1 [a]	%	79-114
MP28478-S2*	7440-36-0	Antimony	MSD	RPD	.9	%	20
MP28478-S2*	7440-47-3	Chromium	MSD	REC	92.4	%	85-113
MP28478-S2*	7440-47-3	Chromium	MSD	RPD	.8	%	20
MP28478-S2*	7440-50-8	Copper	MSD	REC	90.3	%	81-117
MP28478-S2*	7440-50-8	Copper	MSD	RPD	0	%	20
MP28478-S2*	7439-89-6	Iron	MSD	REC	92.1	%	81-118
MP28478-S2*	7439-89-6	Iron	MSD	RPD	4.2	%	20
MP28478-S2*	7439-92-1	Lead	MSD	REC	103	%	81-112
MP28478-S2*	7439-92-1	Lead	MSD	RPD	1.6	%	20
MP28478-S2*	7440-66-6	Zinc	MSD	REC	86.2	%	82-113
MP28478-S2*	7440-66-6	Zinc	MSD	RPD	.9	%	20

* Sample used for QC is not from job FA21555

QC Evaluation: DOD QSM5 Limits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP28478-D1*	7429-90-5	Aluminum	DUP	RPD	32.9 [b]	%	20
MP28478-D1*	7440-36-0	Antimony	DUP	RPD	200 [c]	%	20
MP28478-D1*	7440-47-3	Chromium	DUP	RPD	22.8 [b]	%	20
MP28478-D1*	7440-50-8	Copper	DUP	RPD	20	%	20
MP28478-D1*	7439-89-6	Iron	DUP	RPD	7.7	%	20
MP28478-D1*	7439-92-1	Lead	DUP	RPD	16.7	%	20
MP28478-D1*	7440-66-6	Zinc	DUP	RPD	38.5 [c]	%	20
MP28497	SW846 6010C						
MP28497-B1	7429-90-5	Aluminum	BSP	REC	100	%	74-119
MP28497-B1	7440-36-0	Antimony	BSP	REC	97.2	%	79-114
MP28497-B1	7440-47-3	Chromium	BSP	REC	105	%	85-113
MP28497-B1	7440-50-8	Copper	BSP	REC	103.2	%	81-117
MP28497-B1	7439-89-6	Iron	BSP	REC	101.5	%	81-118
MP28497-B1	7439-92-1	Lead	BSP	REC	97.2	%	81-112
MP28497-B1	7440-66-6	Zinc	BSP	REC	100	%	82-113
MP28497-S1*	7429-90-5	Aluminum	MS	REC	64.3 [a]	%	74-119
MP28497-S1*	7440-36-0	Antimony	MS	REC	75.2 [a]	%	79-114
MP28497-S1*	7440-47-3	Chromium	MS	REC	80.5	%	85-113
MP28497-S1*	7440-50-8	Copper	MS	REC	97.6	%	81-117
MP28497-S1*	7439-89-6	Iron	MS	REC	-707.9 [d]	%	81-118
MP28497-S1*	7439-92-1	Lead	MS	REC	-46.4 [a]	%	81-112
MP28497-S1*	7440-66-6	Zinc	MS	REC	90.2	%	82-113
MP28497-S2*	7429-90-5	Aluminum	MSD	REC	61.1 [a]	%	74-119
MP28497-S2*	7429-90-5	Aluminum	MSD	RPD	4.5	%	20
MP28497-S2*	7440-36-0	Antimony	MSD	REC	74.3 [a]	%	79-114
MP28497-S2*	7440-36-0	Antimony	MSD	RPD	4.1	%	20
MP28497-S2*	7440-47-3	Chromium	MSD	REC	75.9 [a]	%	85-113
MP28497-S2*	7440-47-3	Chromium	MSD	RPD	6.1	%	20
MP28497-S2*	7440-50-8	Copper	MSD	REC	96.3	%	81-117
MP28497-S2*	7440-50-8	Copper	MSD	RPD	4.3	%	20
MP28497-S2*	7439-89-6	Iron	MSD	REC	-769.9 [d]	%	81-118
MP28497-S2*	7439-89-6	Iron	MSD	RPD	8.5	%	20
MP28497-S2*	7439-92-1	Lead	MSD	REC	-66 [a]	%	81-112
MP28497-S2*	7439-92-1	Lead	MSD	RPD	11	%	20
MP28497-S2*	7440-66-6	Zinc	MSD	REC	92.8	%	82-113
MP28497-S2*	7440-66-6	Zinc	MSD	RPD	0	%	20
MP28497-D1*	7429-90-5	Aluminum	DUP	RPD	123.6 [b]	%	20
MP28497-D1*	7440-36-0	Antimony	DUP	RPD	200 [c]	%	20
MP28497-D1*	7440-47-3	Chromium	DUP	RPD	107.7 [b]	%	20
MP28497-D1*	7440-50-8	Copper	DUP	RPD	0	%	20
MP28497-D1*	7439-89-6	Iron	DUP	RPD	143.2 [b]	%	20
MP28497-D1*	7439-92-1	Lead	DUP	RPD	130.2 [b]	%	20
MP28497-D1*	7440-66-6	Zinc	DUP	RPD	5.4	%	20

* Sample used for QC is not from job FA21555

QC Evaluation: DOD QSM5 Limits

Job Number: FA21555
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 01/16/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) High RPD due to possible sample non-homogeneity.
(c) RPD acceptable due to low duplicate and sample concentrations.
(d) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

* Sample used for QC is not from job FA21555

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54769-MB	BB045932.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8, FA21555-9, FA21555-10, FA21555-11

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	200	80	ug/kg	
121-82-4	RDX	ND	200	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	ND	200	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	82	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	200	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	200	80	ug/kg	
98-95-3	Nitrobenzene	ND	200	80	ug/kg	
88-72-2	o-Nitrotoluene	ND	200	80	ug/kg	
99-08-1	m-Nitrotoluene	ND	200	85	ug/kg	
99-99-0	p-Nitrotoluene	ND	200	80	ug/kg	
479-45-8	Tetryl	ND	200	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	ND	200	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	200	80	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	104%	72-134%

Blank Spike Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54769-BS	BB045931.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8, FA21555-9, FA21555-10, FA21555-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	5000	5260	105	64-159
121-82-4	RDX	5000	4900	98	78-120
99-65-0	1,3-Dinitrobenzene	5000	4380	88	80-125
606-20-2	2,6-Dinitrotoluene	5000	5290	106	75-143
121-14-2	2,4-Dinitrotoluene	5000	4990	100	80-130
35572-78-2	2-amino-4,6-Dinitrotoluene	5000	5030	101	79-122
19406-51-0	4-amino-2,6-Dinitrotoluene	5000	4930	99	76-124
98-95-3	Nitrobenzene	5000	5000	100	77-139
88-72-2	o-Nitrotoluene	5000	4890	98	84-126
99-08-1	m-Nitrotoluene	5000	5050	101	84-129
99-99-0	p-Nitrotoluene	5000	4720	94	83-132
479-45-8	Tetryl	5000	4830	97	63-135
99-35-4	1,3,5-Trinitrobenzene	5000	5030	101	81-133
118-96-7	2,4,6-Trinitrotoluene	5000	4630	93	69-124

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	98%	72-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54769-MS	BB045934.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
OP54769-MSD	BB045935.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239
FA21555-1	BB045933.D	1	02/02/15	KL	01/30/15	OP54769	GBB1239

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8, FA21555-9, FA21555-10, FA21555-11

CAS No.	Compound	FA21555-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	180	U	4880	4980	102	5000	5170	103	4	64-159/17
121-82-4	RDX	180	U	4880	4230	87	5000	4520	90	7	78-120/16
99-65-0	1,3-Dinitrobenzene	180	U	4880	4140	85	5000	4390	88	6	80-125/15
606-20-2	2,6-Dinitrotoluene	180	U	4880	4870	100	5000	5220	104	7	75-143/22
121-14-2	2,4-Dinitrotoluene	180	U	4880	4710	97	5000	4990	100	6	80-130/20
35572-78-2	2-amino-4,6-Dinitrotoluene	180	U	4880	4780	98	5000	5010	100	5	79-122/20
19406-51-0	4-amino-2,6-Dinitrotoluene	180	U	4880	4700	96	5000	4970	99	6	76-124/23
98-95-3	Nitrobenzene	180	U	4880	4540	93	5000	5030	101	10	77-139/17
88-72-2	o-Nitrotoluene	180	U	4880	4560	93	5000	4790	96	5	84-126/21
99-08-1	m-Nitrotoluene	180	U	4880	4680	96	5000	4960	99	6	84-129/21
99-99-0	p-Nitrotoluene	180	U	4880	4400	90	5000	4640	93	5	83-132/25
479-45-8	Tetryl	180	U	4880	4650	95	5000	4790	96	3	63-135/25
99-35-4	1,3,5-Trinitrobenzene	180	U	4880	4650	95	5000	4900	98	5	81-133/19
118-96-7	2,4,6-Trinitrotoluene	180	U	4880	4350	89	5000	4640	93	6	69-124/18

CAS No.	Surrogate Recoveries	MS	MSD	FA21555-1	Limits
610-39-9	3,4-Dinitrotoluene	102%	99%	108%	72-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA21555-1	BB045933.D	108
FA21555-2	BB045936.D	106
FA21555-3	BB045937.D	112
FA21555-4	BB045938.D	104
FA21555-5	BB045939.D	107
FA21555-6	BB045940.D	106
FA21555-7	BB045943.D	106
FA21555-8	BB045944.D	106
FA21555-9	BB045945.D	110
FA21555-10	BB045946.D	106
FA21555-11	BB045947.D	118
OP54769-BS	BB045931.D	98
OP54769-MB	BB045932.D	104
OP54769-MS	BB045934.D	102
OP54769-MSD	BB045935.D	99

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	72-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1239-CC1235	**Injection Date:**	02/02/15
Lab File ID:	BB045929.D	**Injection Time:**	17:06
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] **RT**
Check Std	11.38

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
OP54769-BS	BB045931.D	02/02/15	17:56	11.38
OP54769-MB	BB045932.D	02/02/15	18:21	11.38
FA21555-1	BB045933.D	02/02/15	18:46	11.37
OP54769-MS	BB045934.D	02/02/15	19:11	11.37
OP54769-MSD	BB045935.D	02/02/15	19:36	11.38
FA21555-2	BB045936.D	02/02/15	20:01	11.37
FA21555-3	BB045937.D	02/02/15	20:26	11.37
FA21555-4	BB045938.D	02/02/15	20:51	11.37
FA21555-5	BB045939.D	02/02/15	21:15	11.37
FA21555-6	BB045940.D	02/02/15	21:40	11.37

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1239-CC1235	**Injection Date:**	02/02/15
Lab File ID:	BB045941.D	**Injection Time:**	22:05
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	11.37	11.37

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA21555-7	BB045943.D	02/02/15	22:55		11.36
FA21555-8	BB045944.D	02/02/15	23:20		11.36
FA21555-9	BB045945.D	02/02/15	23:45		11.36
FA21555-10	BB045946.D	02/03/15	00:10		11.36
FA21555-11	BB045947.D	02/03/15	00:35		11.36
GBB1239-ECC123B	BB045948.D	02/03/15	01:00	11.37	11.37

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICC1235
Lab FileID: BB045818.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Initial Calibration

Calibration Files
20 =BB045814.D 50 =BB045815.D 100 =BB045816.D 200 =BB045817.D
500 =BB045818.D 1000=BB045819.D 2000=BB045820.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.070	3.275	3.420	3.229	3.160	3.152	3.271	3.225	E3	3.49
2)	HMX	1.843	1.499	1.516	1.645	1.591	1.550	1.627	1.610	E3	7.22
3)	DNX	2.867	2.618	2.870	2.755	2.713	2.693	2.820	2.762	E3	3.43
4)	MNX	2.627	2.684	2.508	2.428	2.364	2.327	2.443	2.483	E3	5.33
5)	RDX	2.040	2.072	1.814	1.896	1.790	1.753	1.838	1.886	E3	6.60
6)	1,3,5-Trinitroben	4.263	4.171	4.099	4.076	3.940	3.925	4.083	4.080	E3	2.93
7)	1,3-Dinitrobenzen	5.676	5.476	5.497	5.233	5.119	5.122	5.291	5.345	E3	3.94
8)	3,5-Dinitroanilin	5.015	4.519	4.801	4.435	4.273	4.384	4.507	4.562	E3	5.65
9)	Nitrobenzene	2.736	3.629	3.077	2.939	2.997	3.029	3.063	3.067	E3	8.92
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	2.533	2.951	2.847	2.657	2.581	2.590	2.786	2.706	E3	5.80
12)	2,4,6-Trinitrotol	3.672	3.814	3.618	3.555	3.532	3.618	3.763	3.653	E3	2.85
13)	2-Amino-4,6-Dinit	2.552	3.316	2.944	2.980	3.024	3.132	3.281	3.033	E3	8.45
14)	4-Amino-2,6-Dinit	1.741	2.041	2.037	2.095	2.173	2.270	2.387	2.106	E3	9.74
15)S	3,4-Dinitrotoluen	2.389	2.541	2.235	2.095	2.036	2.093	2.170	2.223	E3	8.21
16)	2,4-Dinitrotoluen	4.109	4.720	4.937	4.585	4.576	4.632	4.774	4.619	E3	5.58
17)	2,6-Dinitrotoluen	2.235	2.518	2.691	2.646	2.567	2.636	2.700	2.570	E3	6.28
18)	o-Nitrotoluene	2.239	2.334	2.370	2.291	2.248	2.252	2.260	2.285	E3	2.17
19)	p-Nitrotoluene	3.908	3.692	3.593	3.493	3.503	3.509	3.545	3.606	E3	4.16
20)	m-Nitrotoluene	3.655	3.142	3.192	3.130	3.136	3.138	3.164	3.222	E3	5.96
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	5.130	5.086	5.148	4.922	4.828	4.809	4.989	4.987	E3	2.80
2)	HMX	4.749	4.161	4.204	4.539	4.469	4.251	4.447	4.403	E3	4.78
3)	DNX	5.133	5.013	5.025	4.485	4.411	4.269	4.485	4.689	E3	7.56
4)	MNX	3.635	3.825	3.797	3.770	3.654	3.610	3.787	3.725	E3	2.39
5)	RDX	3.353	3.086	3.134	2.973	2.838	2.810	2.942	3.019	E3	6.25
6)	1,3,5-Trinitroben	7.890	7.835	7.829	7.813	7.591	7.637	7.946	7.792	E3	1.67
7)	1,3-Dinitrobenzen	3.623	3.548	3.616	3.572	3.483	3.529	3.629	3.571	E3	1.53
8)	3,5-Dinitroanilin	7.959	7.717	7.652	7.463	7.289	7.279	7.562	7.560	E3	3.21
9)	Nitrobenzene	2.762	3.229	3.045	2.904	2.911	2.956	2.973	2.969	E3	4.84
10)	Nitroglycerin	1.243	1.278	1.254	1.228	1.222	1.225	1.279	1.247	E3	1.92
11)	Tetryl	4.175	4.586	4.380	4.244	4.179	4.190	4.543	4.328	E3	4.08
12)	2,4,6-Trinitrotol	3.675	4.464	4.332	4.165	4.151	4.290	4.520	4.228	E3	6.63
13)	2-Amino-4,6-Dinit	4.308	4.728	4.489	4.419	4.399	4.598	4.939	4.554	E3	4.81
14)	4-Amino-2,6-Dinit	3.230	3.120	3.714	4.009	4.242	4.468	4.814	3.942	E3	15.93
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9987										
	Response Ratio = 0.00000 + 4712.50791 *A										
15)S	3,4-Dinitrotoluen	2.354	2.818	3.204	3.310	3.549	3.597	3.826	3.237	E3	15.63
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9992										
	Response Ratio = 0.00000 + 3764.18145 *A										
16)	2,4-Dinitrotoluen	2.613	2.678	2.774	2.933	3.047	3.017	3.152	2.888	E3	7.01
17)	2,6-Dinitrotoluen	3.431	2.825	3.254	3.396	3.336	3.397	3.550	3.313	E3	7.04

Initial Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICC1235
Lab FileID: BB045818.D

18)	o-Nitrotoluene	2.494	3.233	3.033	3.063	3.020	3.041	3.184	3.010	E3	8.03
19)	p-Nitrotoluene	3.232	2.824	2.822	2.870	2.834	2.929	3.025	2.934	E3	5.12
20)	m-Nitrotoluene	3.694	3.661	3.432	3.533	3.571	3.649	3.769	3.615	E3	3.10
21)	PETN	1.463	1.477	1.451	1.415	1.410	1.396	1.449	1.437	E3	2.10

(#) = Out of Range

8330B_0107.M Fri Jan 23 14:49:15 2015

Initial Calibration Verification

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICV1235
Lab FileID: BB045821.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	529.286	-5.9	108	0.00	1.08- 1.68
2	HMX	500.000	573.328	-14.7	116	0.00	1.19- 1.79
3	DNX	500.000	537.360	-7.5	109	0.00	1.46- 2.06
4	MNX	500.000	509.783	-2.0	107	0.00	2.04- 2.64
5	RDX	500.000	491.716	1.7	104	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	500.000	520.053	-4.0	108	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	457.959	8.4	96	0.00	5.51- 6.31
8	3,5-Dinitroaniline	500.000	468.838	6.2	100	0.00	5.96- 6.76
9	Nitrobenzene	500.000	524.094	-4.8	107	0.00	7.12- 7.92
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	451.877	9.6	95	0.00	9.14- 9.94
12	2,4,6-Trinitrotoluene	500.000	463.147	7.4	96	0.00	9.56-10.36
13	2-Amino-4,6-Dinitrotol	500.000	541.123	-8.2	109	0.00	10.03-10.83
14	4-Amino-2,6-Dinitrotol	500.000	555.255	-11.1	108	0.00	10.52-11.32
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	525.910	-5.2	106	0.00	11.49-12.29
17	2,6-Dinitrotoluene	500.000	547.381	-9.5	110	0.00	11.89-12.69
18	o-Nitrotoluene	500.000	515.628	-3.1	105	0.00	14.10-14.98
19	p-Nitrotoluene	500.000	502.087	-0.4	103	0.00	14.36-15.36
20	m-Nitrotoluene	500.000	543.666	-8.7	112	0.00	14.90-15.90
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	519.029	-3.8	107	0.00	1.08- 1.68
2	HMX	500.000	565.918	-13.2	112	0.00	1.19- 1.79
3	DNX	500.000	499.130	0.2	106	0.00	1.46- 2.06
4	MNX	500.000	520.625	-4.1	106	0.00	2.04- 2.64
5	RDX	500.000	497.299	0.5	106	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	500.000	526.624	-5.3	108	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	469.936	6.0	96	0.00	5.51- 6.31
8	3,5-Dinitroaniline	500.000	482.526	3.5	100	0.00	5.96- 6.76
9	Nitrobenzene	500.000	530.075	-6.0	108	0.00	7.12- 7.92
10	Nitroglycerin	2500.000	2533.654	-1.3	103	0.00	8.67- 9.67
11	Tetryl	500.000	457.633	8.5	95	0.00	9.14- 9.94
12	2,4,6-Trinitrotoluene	500.000	496.730	0.7	101	0.00	9.56-10.36
13	2-Amino-4,6-Dinitrotol	500.000	546.801	-9.4	113	0.00	10.03-10.83

	----------	Amount	Calc.	%Drift			----------
14	4-Amino-2,6-Dinitrotol	500.000	495.904	0.8	110	0.00	10.52-11.32
15 S	3,4-Dinitrotoluene		----------NA----------				

Initial Calibration Verification

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICV1235
Lab FileID: BB045821.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	500.000	534.743	-6.9	101	0.00	11.50-12.30
17	2,6-Dinitrotoluene	500.000	537.287	-7.5	107	0.00	11.89-12.69
18	o-Nitrotoluene	500.000	534.800	-7.0	107	0.00	13.98-14.98
19	p-Nitrotoluene	500.000	500.973	-0.2	104	0.00	14.36-15.36
20	m-Nitrotoluene	500.000	562.797	-12.6	114	0.00	14.90-15.90
21	PETN	2500.000	2629.624	-5.2	107	0.00	16.32-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045818.D 8330B_0107.M Fri Jan 23 14:49:38 2015

Continuing Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1239-CC1235
Lab FileID: BB045929.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045929.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045929.D\dad1A.ch
Acq On : 02-Feb-2015, 17:06:18 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	993.319	0.7	102	0.00	1.09- 1.69
2	HMX	1000.000	969.338	3.1	101	0.00	1.20- 1.80
3	DNX	1000.000	994.865	0.5	102	0.00	1.47- 2.07
4	MNX	1000.000	965.265	3.5	103	0.00	2.05- 2.65
5	RDX	1000.000	958.971	4.1	103	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	1000.000	977.927	2.2	102	0.00	4.26- 5.06
7	1,3-Dinitrobenzene	1000.000	961.826	3.8	100	0.00	5.55- 6.35
8	3,5-Dinitroaniline	1000.000	908.992	9.1	95	0.00	6.02- 6.82
9	Nitrobenzene	1000.000	987.829	1.2	100	0.00	7.16- 7.96
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	992.358	0.8	104	-0.01	9.23-10.03
12	2,4,6-Trinitrotoluene	1000.000	1001.640	-0.2	101	-0.01	9.64-10.44
13	2-Amino-4,6-Dinitrotol	1000.000	1044.341	-4.4	101	-0.01	10.15-10.95
14	4-Amino-2,6-Dinitrotol	1000.000	1094.674	-9.5	102	-0.01	10.65-11.45
15 S	3,4-Dinitrotoluene	1000.000	953.206	4.7	101	-0.02	11.00-11.80
16	2,4-Dinitrotoluene	1000.000	1011.414	-1.1	101	-0.01	11.59-12.39
17	2,6-Dinitrotoluene	1000.000	1027.480	-2.7	100	-0.01	11.98-12.78
18	o-Nitrotoluene	1000.000	984.078	1.6	100	0.00	14.17-15.04
19	p-Nitrotoluene	1000.000	975.354	2.5	100	0.00	14.42-15.42
20	m-Nitrotoluene	1000.000	978.030	2.2	100	0.00	14.96-15.96
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	982.760	1.7	102	0.00	1.09- 1.69
2	HMX	1000.000	978.265	2.2	101	0.00	1.20- 1.80
3	DNX	1000.000	928.667	7.1	102	0.00	1.47- 2.07
4	MNX	1000.000	989.063	1.1	102	0.00	2.05- 2.65
5	RDX	1000.000	952.655	4.7	102	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	1000.000	996.679	0.3	102	0.00	4.26- 5.06
7	1,3-Dinitrobenzene	1000.000	969.531	3.0	98	0.00	5.55- 6.35
8	3,5-Dinitroaniline	1000.000	925.824	7.4	96	0.00	6.02- 6.82
9	Nitrobenzene	1000.000	985.251	1.5	99	0.00	7.16- 7.96
10	Nitroglycerin	5000.000	4988.343	0.2	102	0.00	8.73- 9.73
11	Tetryl	1000.000	999.167	0.1	103	-0.01	9.23-10.03
12	2,4,6-Trinitrotoluene	1000.000	1023.915	-2.4	101	-0.01	9.64-10.44
13	2-Amino-4,6-Dinitrotol	1000.000	1018.684	-1.9	101	-0.02	10.15-10.95

	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	960.736	3.9	101	-0.01	10.65-11.45
15 S	3,4-Dinitrotoluene	1000.000	977.930	2.2	102	-0.02	11.00-11.80

Continuing Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1239-CC1235
Lab FileID: BB045929.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1069.474	-6.9	102	-0.01	11.59-12.39
17	2,6-Dinitrotoluene	1000.000	1031.766	-3.2	101	-0.01	11.98-12.78
18	o-Nitrotoluene	1000.000	1027.453	-2.7	102	-0.01	14.04-15.04
19	p-Nitrotoluene	1000.000	1002.342	-0.2	100	0.00	14.42-15.42
20	m-Nitrotoluene	1000.000	1021.417	-2.1	101	0.00	14.96-15.96
21	PETN	5000.000	4772.368	4.6	98	-0.01	16.37-17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Tue Feb 03 08:00:13 2015

Continuing Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1239-CC1235
Lab FileID: BB045941.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045941.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045941.D\dad1A.ch
Acq On : 02-Feb-2015, 22:05:58 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	991.729	0.8	101	0.00	1.09- 1.69
2	HMX	1000.000	974.405	2.6	101	0.00	1.20- 1.80
3	DNX	1000.000	992.452	0.8	102	0.00	1.47- 2.07
4	MNX	1000.000	960.728	3.9	103	0.00	2.05- 2.65
5	RDX	1000.000	960.809	3.9	103	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	1000.000	971.829	2.8	101	0.00	4.26- 5.06
7	1,3-Dinitrobenzene	1000.000	961.642	3.8	100	0.00	5.55- 6.35
8	3,5-Dinitroaniline	1000.000	905.258	9.5	94	0.00	6.02- 6.82
9	Nitrobenzene	1000.000	982.517	1.7	99	0.00	7.16- 7.96
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	985.646	1.4	103	-0.03	9.23-10.03
12	2,4,6-Trinitrotoluene	1000.000	997.374	0.3	101	-0.03	9.64-10.44
13	2-Amino-4,6-Dinitrotol	1000.000	1036.655	-3.7	100	-0.03	10.15-10.95
14	4-Amino-2,6-Dinitrotol	1000.000	1083.690	-8.4	101	-0.03	10.65-11.45
15 S	3,4-Dinitrotoluene	1000.000	946.246	5.4	100	-0.03	11.00-11.80
16	2,4-Dinitrotoluene	1000.000	1005.503	-0.6	100	-0.03	11.59-12.39
17	2,6-Dinitrotoluene	1000.000	1019.741	-2.0	99	-0.02	11.98-12.78
18	o-Nitrotoluene	1000.000	985.901	1.4	100	-0.02	14.17-15.04
19	p-Nitrotoluene	1000.000	972.384	2.8	100	-0.02	14.42-15.42
20	m-Nitrotoluene	1000.000	972.210	2.8	100	-0.02	14.96-15.96
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	978.829	2.1	102	0.00	1.09- 1.69
2	HMX	1000.000	973.137	2.7	101	0.00	1.20- 1.80
3	DNX	1000.000	924.391	7.6	102	0.00	1.47- 2.07
4	MNX	1000.000	984.902	1.5	102	0.00	2.05- 2.65
5	RDX	1000.000	947.314	5.3	102	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	1000.000	992.118	0.8	101	0.00	4.26- 5.06
7	1,3-Dinitrobenzene	1000.000	993.390	0.7	101	0.00	5.55- 6.35
8	3,5-Dinitroaniline	1000.000	931.560	6.8	97	-0.01	6.02- 6.82
9	Nitrobenzene	1000.000	995.745	0.4	100	-0.01	7.16- 7.96
10	Nitroglycerin	5000.000	4961.768	0.8	101	-0.02	8.73- 9.73
11	Tetryl	1000.000	992.802	0.7	103	-0.03	9.23-10.03
12	2,4,6-Trinitrotoluene	1000.000	1012.250	-1.2	100	-0.03	9.64-10.44
13	2-Amino-4,6-Dinitrotol	1000.000	1005.560	-0.6	100	-0.03	10.15-10.95

	----------	Amount	Calc.	%Drift			----------
14	4-Amino-2,6-Dinitrotol	1000.000	947.708	5.2	100	-0.03	10.65-11.45
15 S	3,4-Dinitrotoluene	1000.000	971.802	2.8	102	-0.03	11.00-11.80

Continuing Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1239-CC1235
Lab FileID: BB045941.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1060.681	-6.1	102	-0.03	11.59-12.39
17	2,6-Dinitrotoluene	1000.000	1025.341	-2.5	100	-0.02	11.98-12.78
18	o-Nitrotoluene	1000.000	1050.824	-5.1	104	-0.02	14.04-15.04
19	p-Nitrotoluene	1000.000	1003.353	-0.3	100	-0.02	14.42-15.42
20	m-Nitrotoluene	1000.000	1026.513	-2.7	102	-0.02	14.96-15.96
21	PETN	5000.000	4757.700	4.8	98	-0.03	16.37-17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Tue Feb 03 08:00:14 2015

Continuing Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1239-ECC1235
Lab FileID: BB045948.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045948.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045948.D\dad1A.ch
Acq On : 03-Feb-2015, 01:00:44 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	987.408	1.3	101	0.00	1.09- 1.69
2	HMX	1000.000	975.170	2.5	101	0.00	1.20- 1.80
3	DNX	1000.000	991.021	0.9	102	0.00	1.47- 2.07
4	MNX	1000.000	949.415	5.1	101	0.00	2.05- 2.65
5	RDX	1000.000	940.794	5.9	101	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	1000.000	974.888	2.5	101	-0.01	4.26- 5.06
7	1,3-Dinitrobenzene	1000.000	954.728	4.5	100	-0.01	5.55- 6.35
8	3,5-Dinitroaniline	1000.000	900.993	9.9	94	-0.01	6.02- 6.82
9	Nitrobenzene	1000.000	999.758	0.0	101	-0.01	7.16- 7.96
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	985.665	1.4	103	-0.03	9.23-10.03
12	2,4,6-Trinitrotoluene	1000.000	993.257	0.7	100	-0.03	9.64-10.44
13	2-Amino-4,6-Dinitrotol	1000.000	1034.050	-3.4	100	-0.03	10.15-10.95
14	4-Amino-2,6-Dinitrotol	1000.000	1086.626	-8.7	101	-0.03	10.65-11.45
15 S	3,4-Dinitrotoluene	1000.000	945.766	5.4	100	-0.03	11.00-11.80
16	2,4-Dinitrotoluene	1000.000	1007.972	-0.8	101	-0.03	11.59-12.39
17	2,6-Dinitrotoluene	1000.000	1021.801	-2.2	100	-0.03	11.98-12.78
18	o-Nitrotoluene	1000.000	986.282	1.4	100	-0.01	14.17-15.04
19	p-Nitrotoluene	1000.000	974.279	2.6	100	-0.02	14.42-15.42
20	m-Nitrotoluene	1000.000	969.531	3.0	100	-0.02	14.96-15.96
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	975.671	2.4	101	0.00	1.09- 1.69
2	HMX	1000.000	983.069	1.7	102	0.00	1.20- 1.80
3	DNX	1000.000	927.182	7.3	102	0.00	1.47- 2.07
4	MNX	1000.000	974.300	2.6	101	0.00	2.05- 2.65
5	RDX	1000.000	937.382	6.3	101	0.00	2.55- 3.35
6	1,3,5-Trinitrobenzene	1000.000	984.547	1.5	100	-0.01	4.26- 5.06
7	1,3-Dinitrobenzene	1000.000	993.023	0.7	100	-0.01	5.55- 6.35
8	3,5-Dinitroaniline	1000.000	926.012	7.4	96	-0.02	6.02- 6.82
9	Nitrobenzene	1000.000	989.875	1.0	99	-0.01	7.16- 7.96
10	Nitroglycerin	5000.000	4952.354	1.0	101	-0.03	8.73- 9.73
11	Tetryl	1000.000	992.307	0.8	102	-0.03	9.23-10.03
12	2,4,6-Trinitrotoluene	1000.000	1014.324	-1.4	100	-0.04	9.64-10.44
13	2-Amino-4,6-Dinitrotol	1000.000	1005.891	-0.6	100	-0.04	10.15-10.95

	----------	Amount	Calc.	%Drift			----------
14	4-Amino-2,6-Dinitrotol	1000.000	947.982	5.2	100	-0.03	10.65-11.45
15 S	3,4-Dinitrotoluene	1000.000	966.311	3.4	101	-0.03	11.00-11.80

Continuing Calibration Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1239-ECC1235
Lab FileID: BB045948.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1061.070	-6.1	102	-0.03	11.59-12.39
17	2,6-Dinitrotoluene	1000.000	1030.772	-3.1	101	-0.03	11.98-12.78
18	o-Nitrotoluene	1000.000	1031.113	-3.1	102	-0.02	14.04-15.04
19	p-Nitrotoluene	1000.000	1004.414	-0.4	101	-0.02	14.42-15.42
20	m-Nitrotoluene	1000.000	1027.715	-2.8	102	-0.02	14.96-15.96
21	PETN	5000.000	4703.681	5.9	97	-0.03	16.37-17.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Tue Feb 03 08:00:15 2015

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045933.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045933.D\dad1A.ch
Acq On : 02-Feb-2015, 18:46:09 Operator: KISMETL
Sample : FA21555-1 Inst : G1315B
Misc : OP54769,GBB1239,2.18,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1200494	2107331	540.113m	559.838m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		108.02%	111.97%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

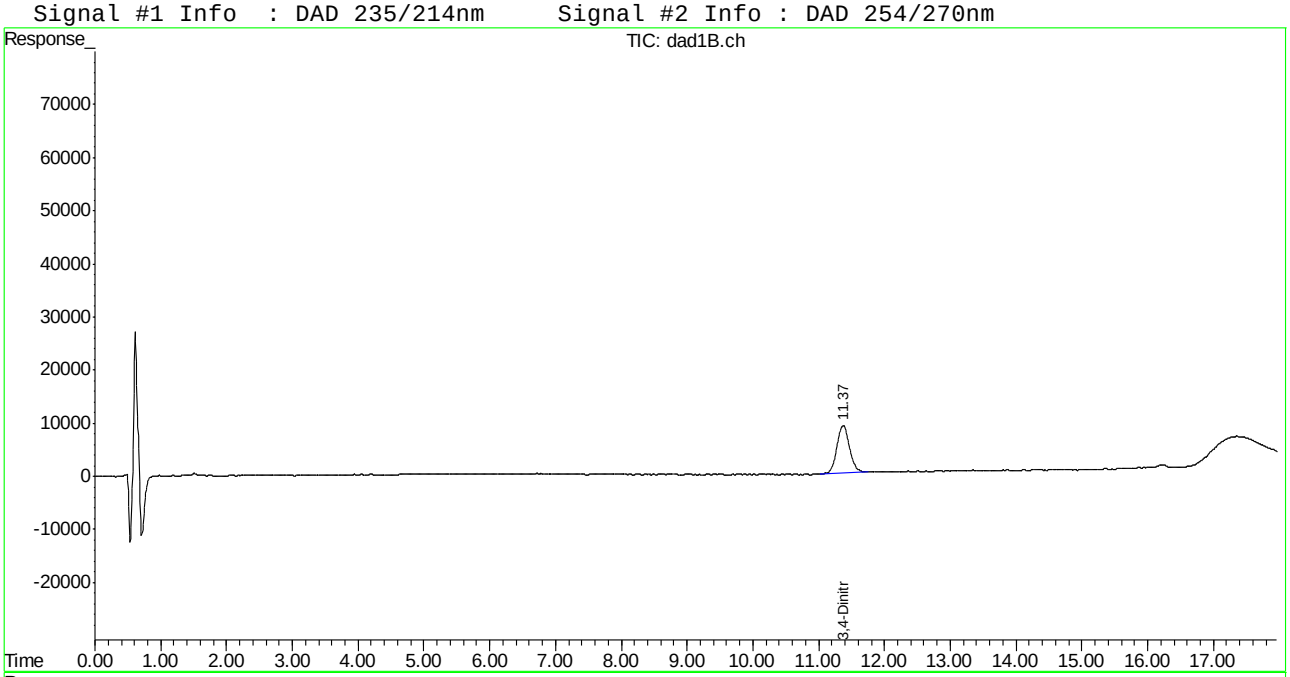
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045933.D 8330B_0107.M Tue Feb 03 08:02:06 2015

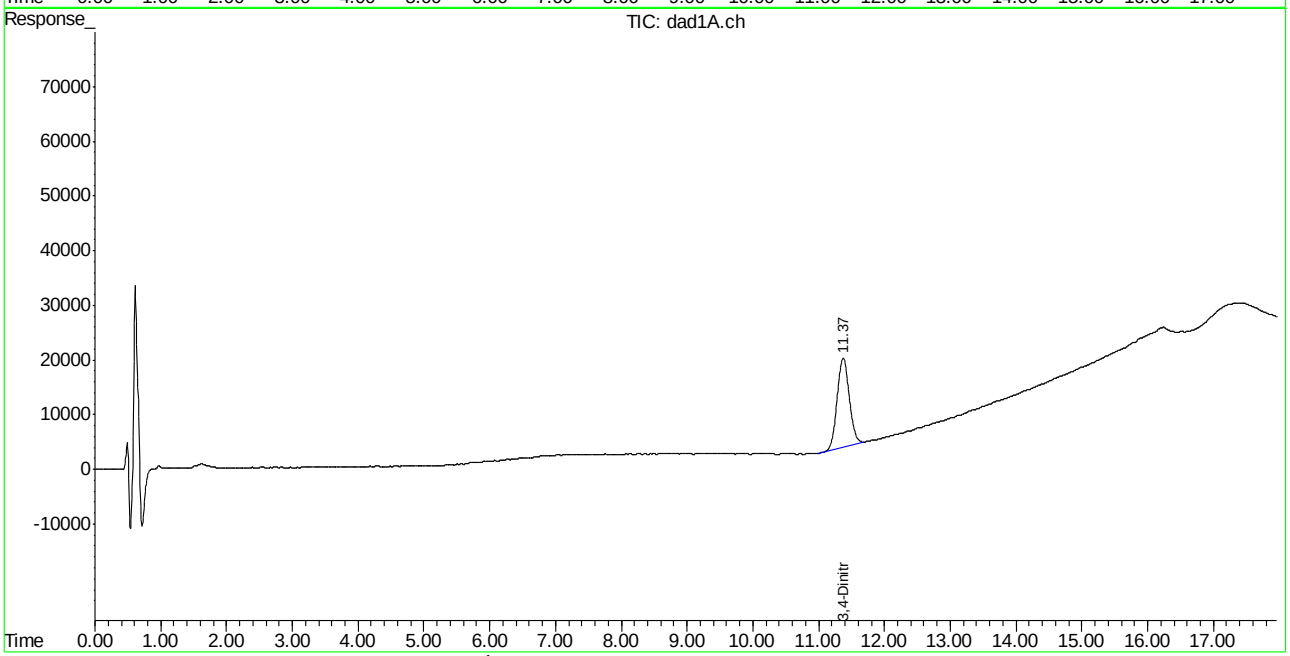
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045933.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045933.D\dad1A.ch
Acq On : 02-Feb-2015, 18:46:09 Operator: KISMETL
Sample : FA21555-1 Inst : G1315B
Misc : OP54769,GBB1239,2.18,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:45 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-1
Lab FileID: BB045933.D
Injection Time: 02/02/15 18:46
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.37	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.37	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045936.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045936.D\dad1A.ch
Acq On : 02-Feb-2015, 20:01:02 Operator: KISMETL
Sample : FA21555-2 Inst : G1315B
Misc : OP54769,GBB1239,2.09,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:49 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1176231	2003838	529.197m	532.344m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.84%	106.47%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

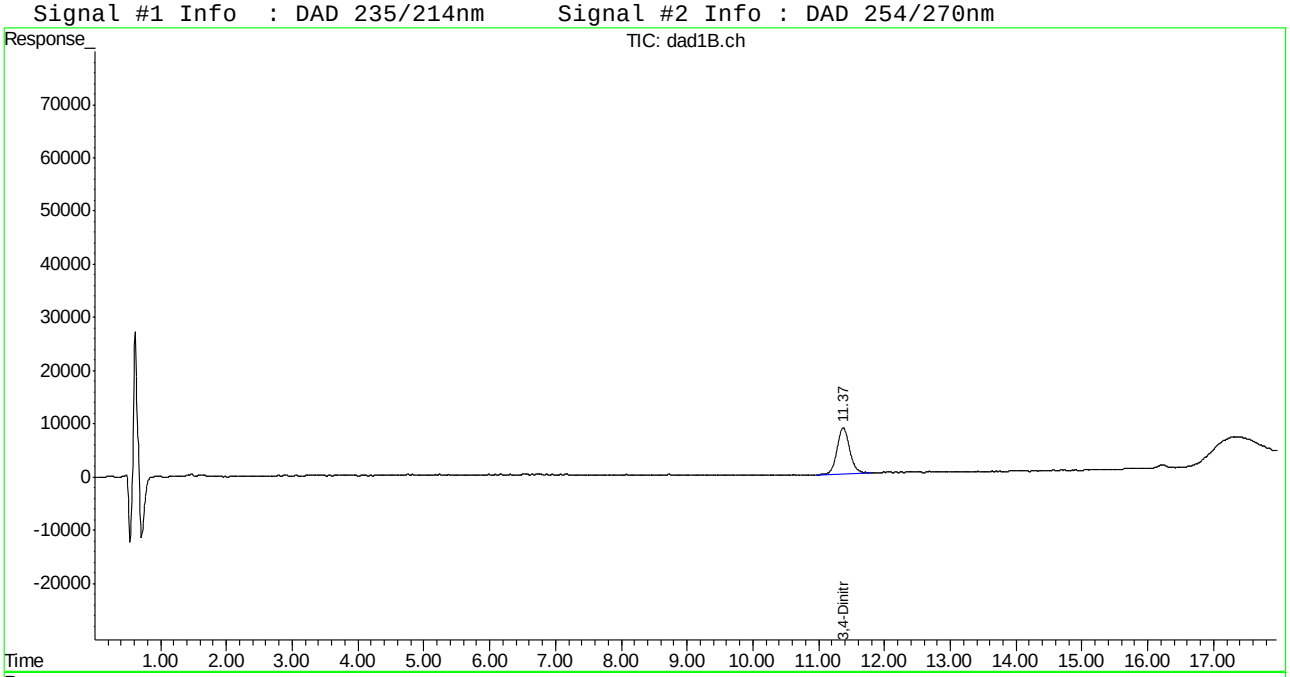
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045936.D 8330B_0107.M Tue Feb 03 08:02:09 2015 Page 1

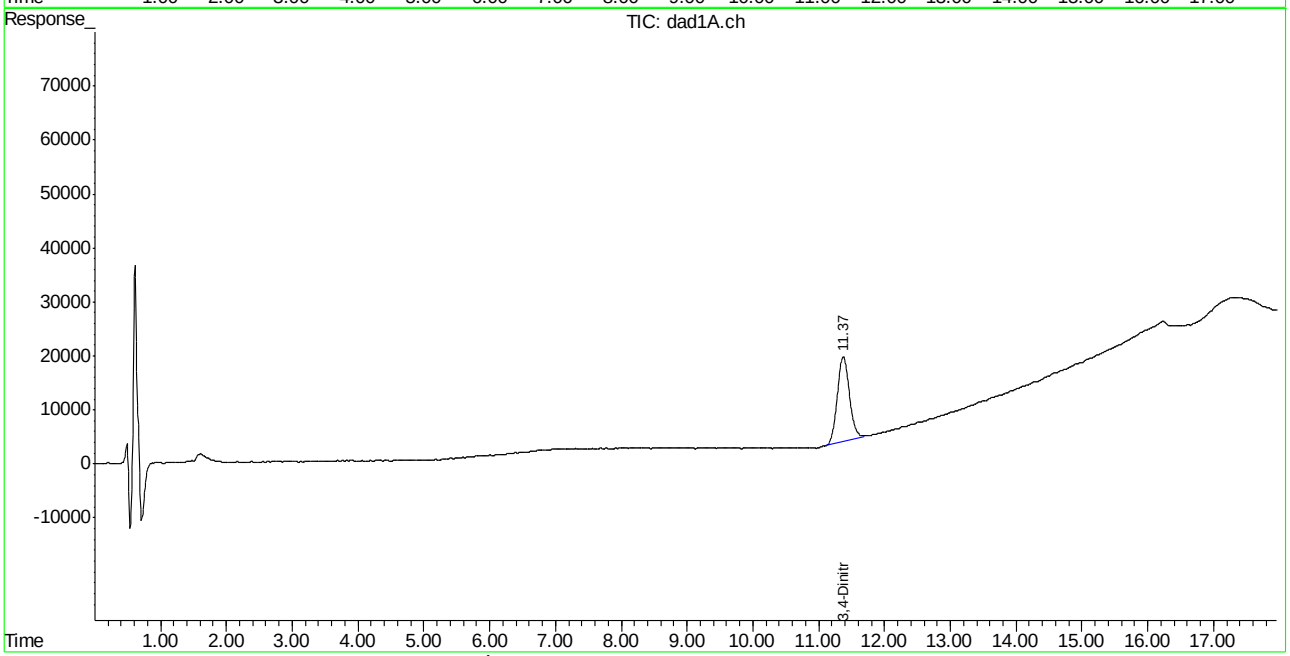
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045936.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045936.D\dad1A.ch
Acq On : 02-Feb-2015, 20:01:02 Operator: KISMETL
Sample : FA21555-2 Inst : G1315B
Misc : OP54769,GBB1239,2.09,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:47 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-2
Lab FileID: BB045936.D
Injection Time: 02/02/15 20:01
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.37	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.37	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045937.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045937.D\dad1A.ch
Acq On : 02-Feb-2015, 20:26:03 Operator: KISMETL
Sample : FA21555-3 Inst : G1315B
Misc : OP54769,GBB1239,2.24,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:50 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1243252	2149480	559.351m	571.035m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		111.87%	114.21%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

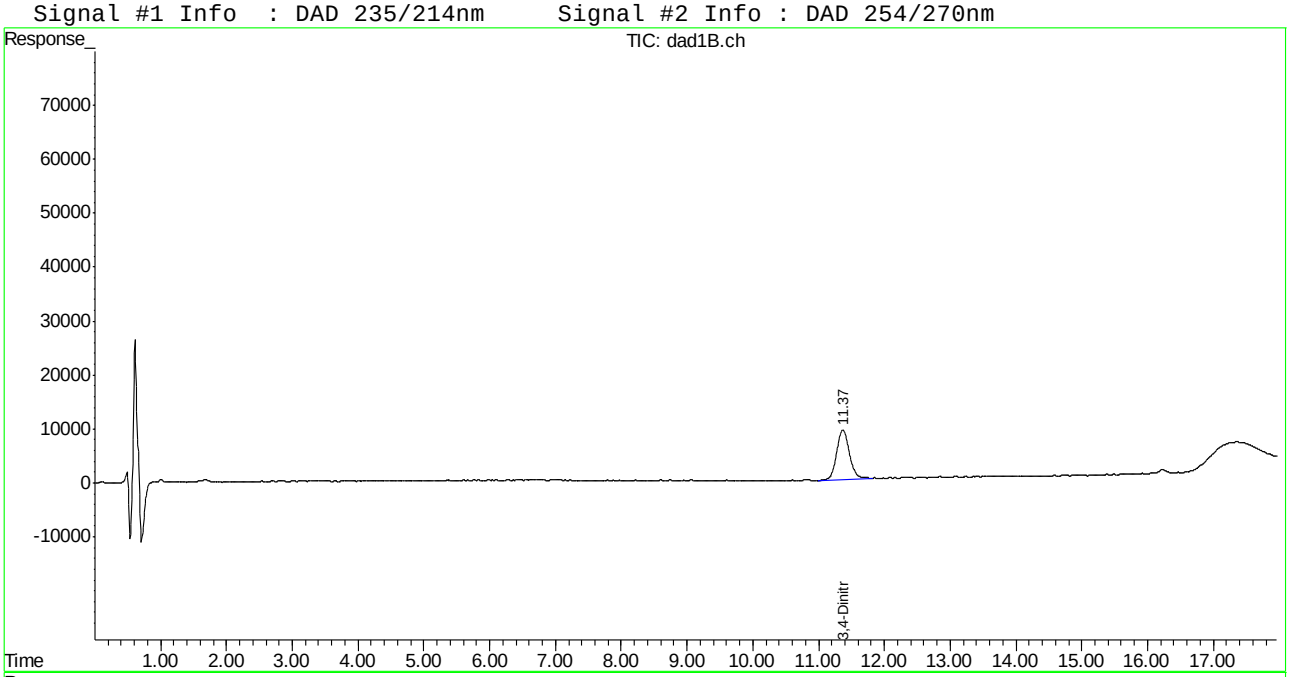
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045937.D 8330B_0107.M Tue Feb 03 08:02:10 2015

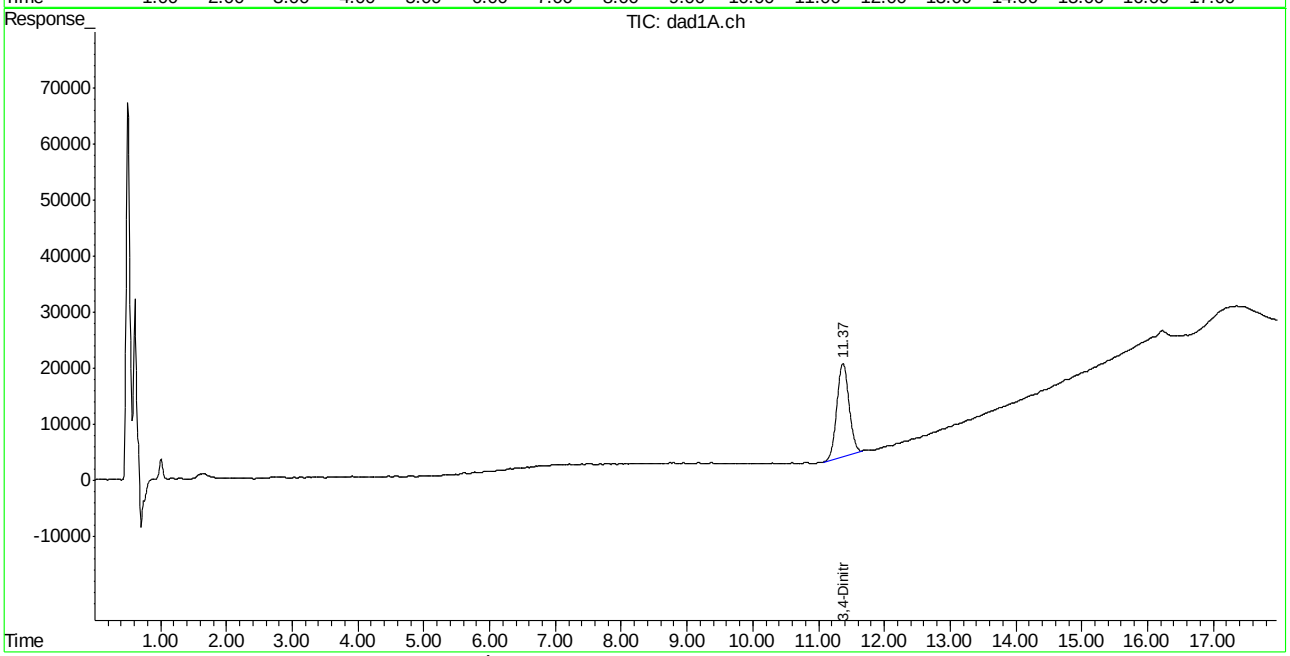
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045937.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045937.D\dad1A.ch
Acq On : 02-Feb-2015, 20:26:03 Operator: KISMETL
Sample : FA21555-3 Inst : G1315B
Misc : OP54769,GBB1239,2.24,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:48 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: FA21555-3
Lab FileID: BB045937.D
Injection Time: 02/02/15 20:26
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.37	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.37	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045938.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045938.D\dad1A.ch
Acq On : 02-Feb-2015, 20:51:01 Operator: KISMETL
Sample : FA21555-4 Inst : G1315B
Misc : OP54769,GBB1239,2.18,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:51 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1158253	2040758	521.109m	542.152m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		104.22%	108.43%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

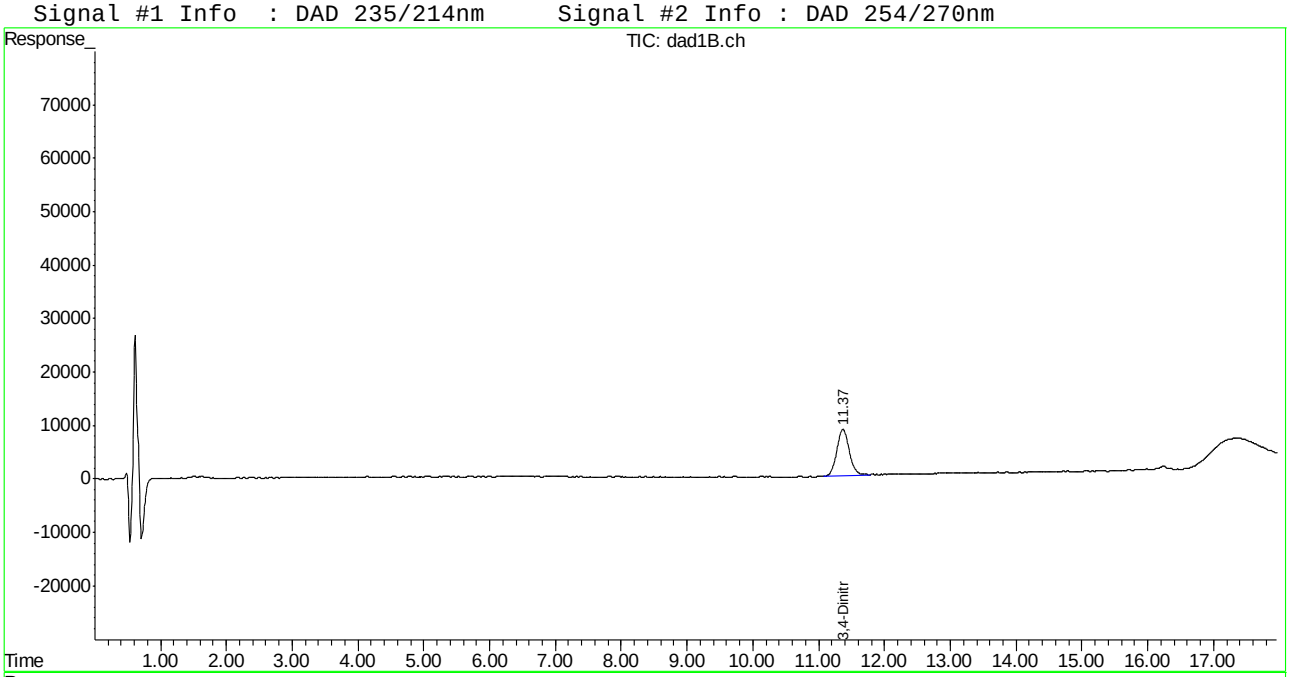
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045938.D 8330B_0107.M Tue Feb 03 08:02:11 2015 Page 1

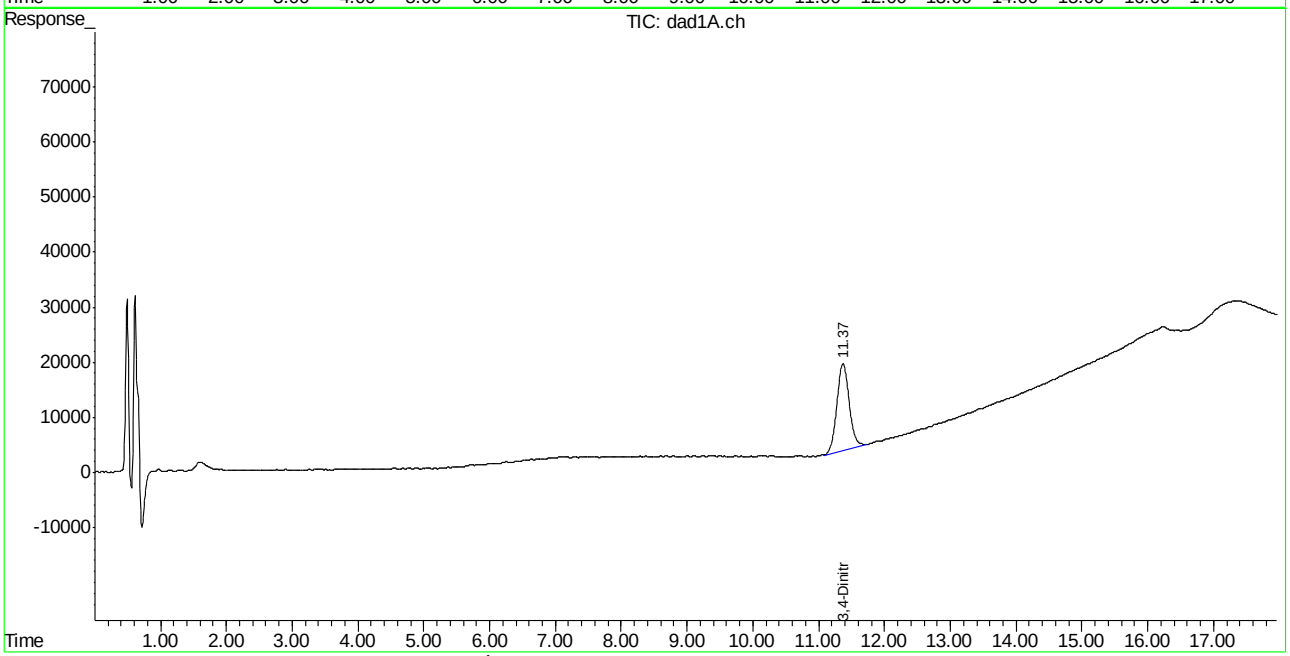
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045938.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045938.D\dad1A.ch
Acq On : 02-Feb-2015, 20:51:01 Operator: KISMETL
Sample : FA21555-4 Inst : G1315B
Misc : OP54769,GBB1239,2.18,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:49 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-4
Lab FileID: BB045938.D
Injection Time: 02/02/15 20:51
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.37	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.37	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045939.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045939.D\dad1A.ch
Acq On : 02-Feb-2015, 21:15:59 Operator: KISMETL
Sample : FA21555-5 Inst : G1315B
Misc : OP54769,GBB1239,2.07,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:52 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1188847	2132322	534.873m	566.477m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.97%	113.30%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

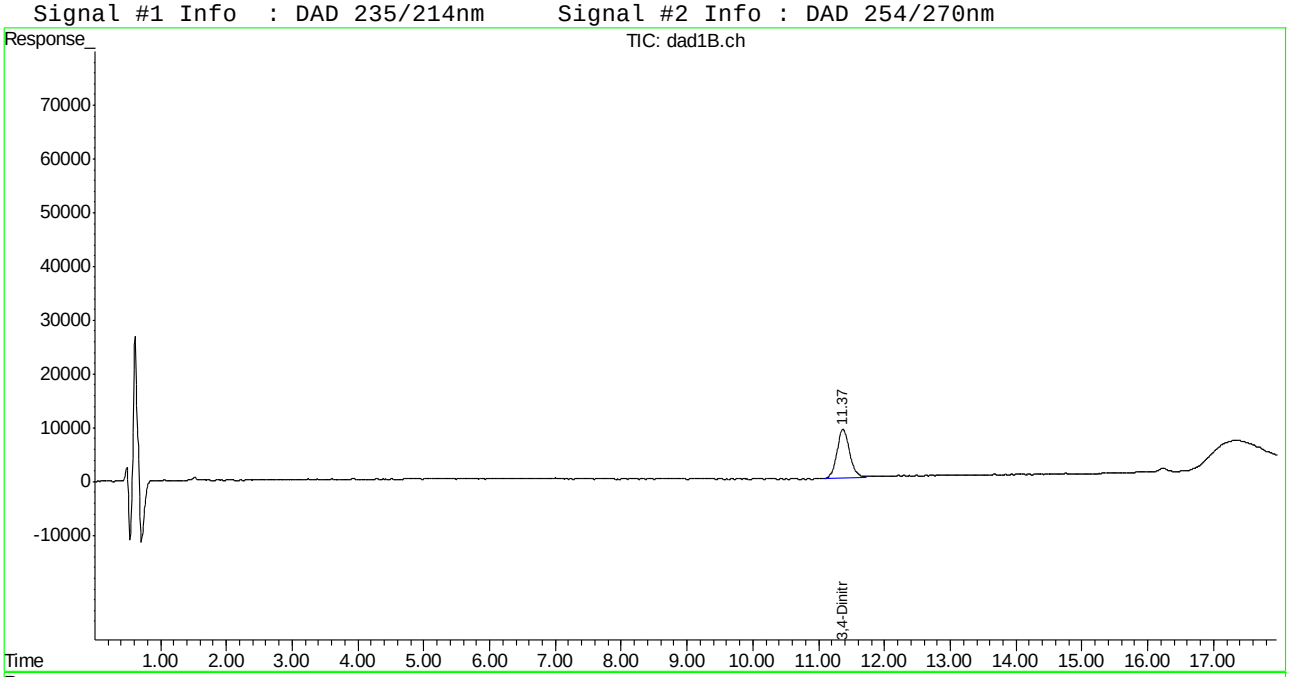
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045939.D 8330B_0107.M Tue Feb 03 08:02:12 2015 Page 1

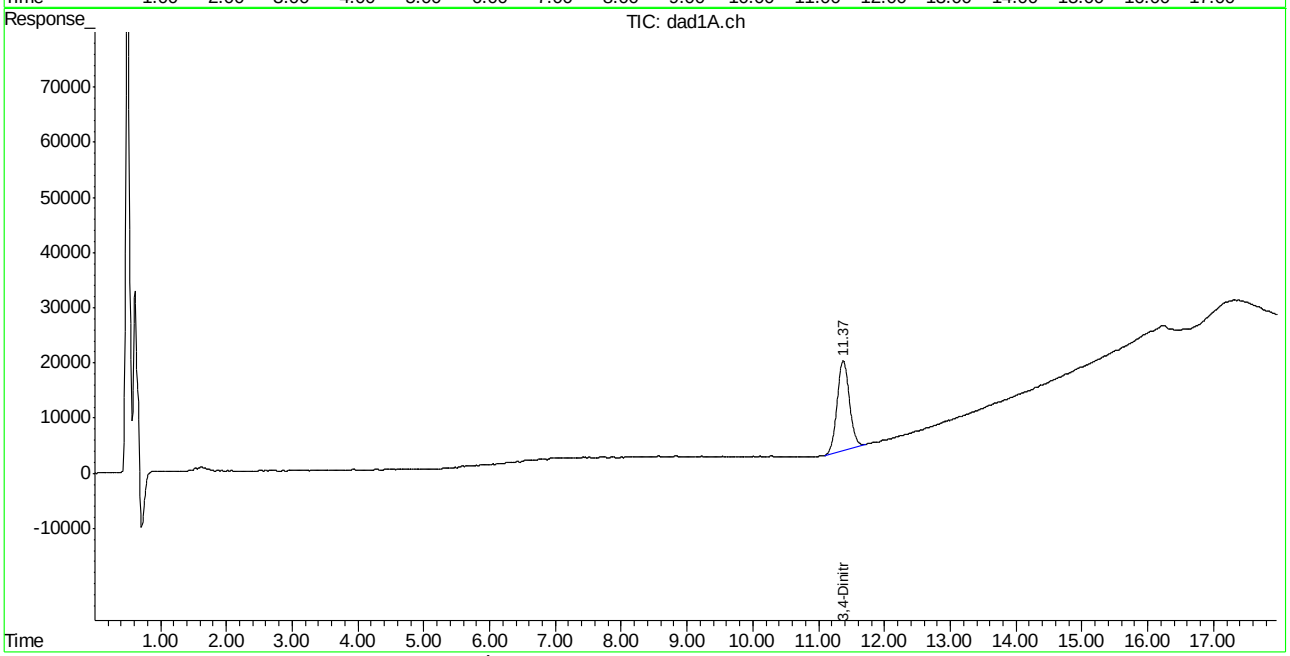
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045939.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045939.D\dad1A.ch
Acq On : 02-Feb-2015, 21:15:59 Operator: KISMETL
Sample : FA21555-5 Inst : G1315B
Misc : OP54769,GBB1239,2.07,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:50 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-5
Lab FileID: BB045939.D
Injection Time: 02/02/15 21:15
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.37	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.37	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045940.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045940.D\dad1A.ch
Acq On : 02-Feb-2015, 21:40:58 Operator: KISMETL
Sample : FA21555-6 Inst : G1315B
Misc : OP54769,GBB1239,2.01,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:53 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1176419	2081736	529.282m	553.038m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.86%	110.61%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

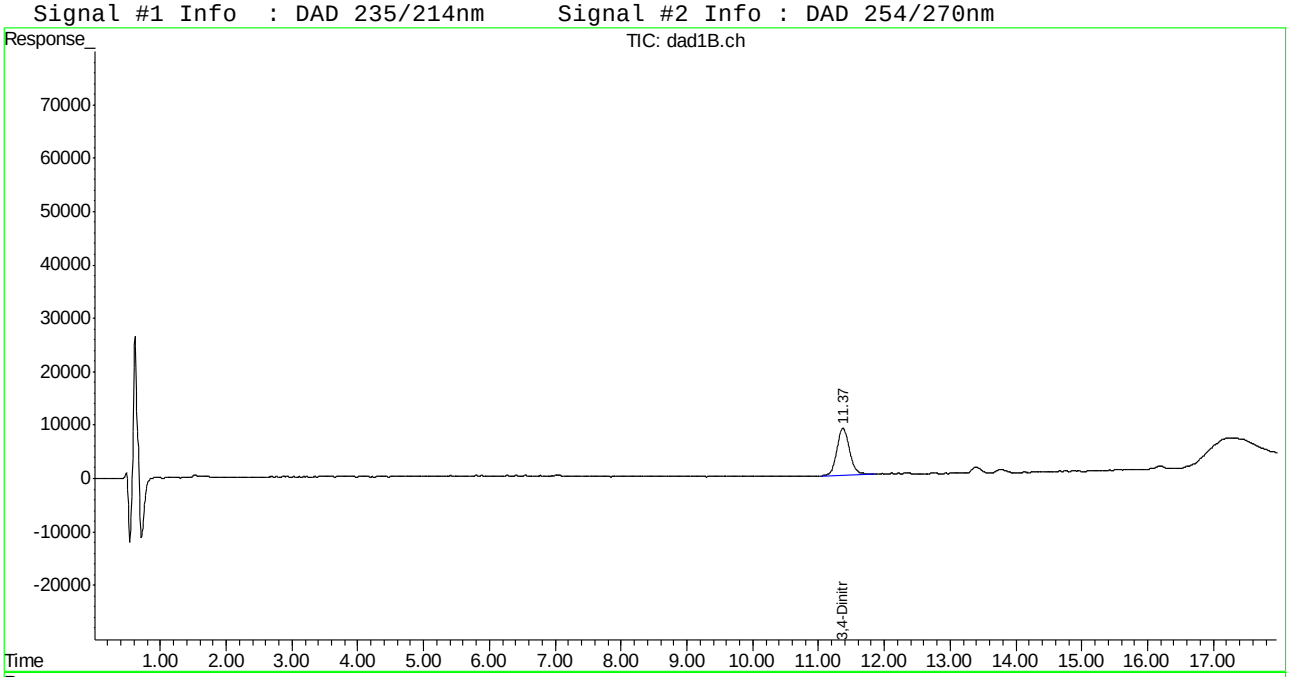
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045940.D 8330B_0107.M Tue Feb 03 08:02:13 2015 Page 1

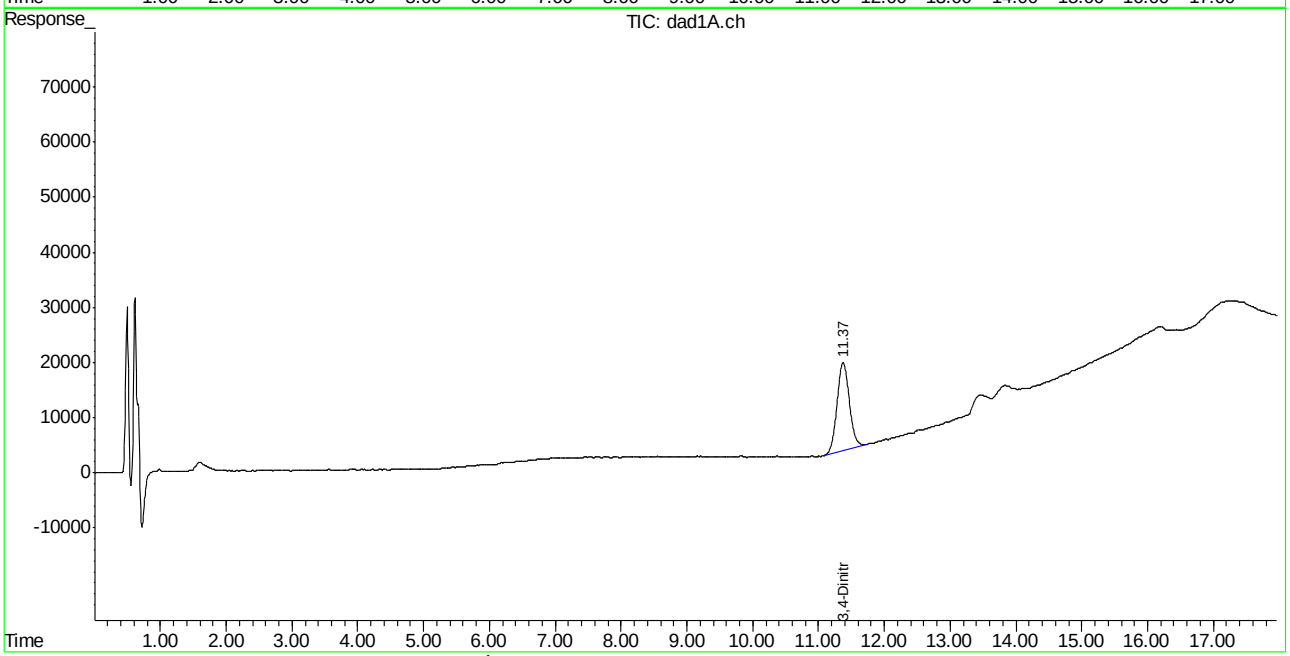
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045940.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045940.D\dad1A.ch
Acq On : 02-Feb-2015, 21:40:58 Operator: KISMETL
Sample : FA21555-6 Inst : G1315B
Misc : OP54769,GBB1239,2.01,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:51 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-6
Lab FileID: BB045940.D
Injection Time: 02/02/15 21:40
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.37	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.37	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045943.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045943.D\dad1A.ch
Acq On : 02-Feb-2015, 22:55:56 Operator: KISMETL
Sample : FA21555-7 Inst : G1315B
Misc : OP54769,GBB1239,2.20,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.36	11.36	1176941	2040584	529.517m	542.106m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.90%	108.42%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

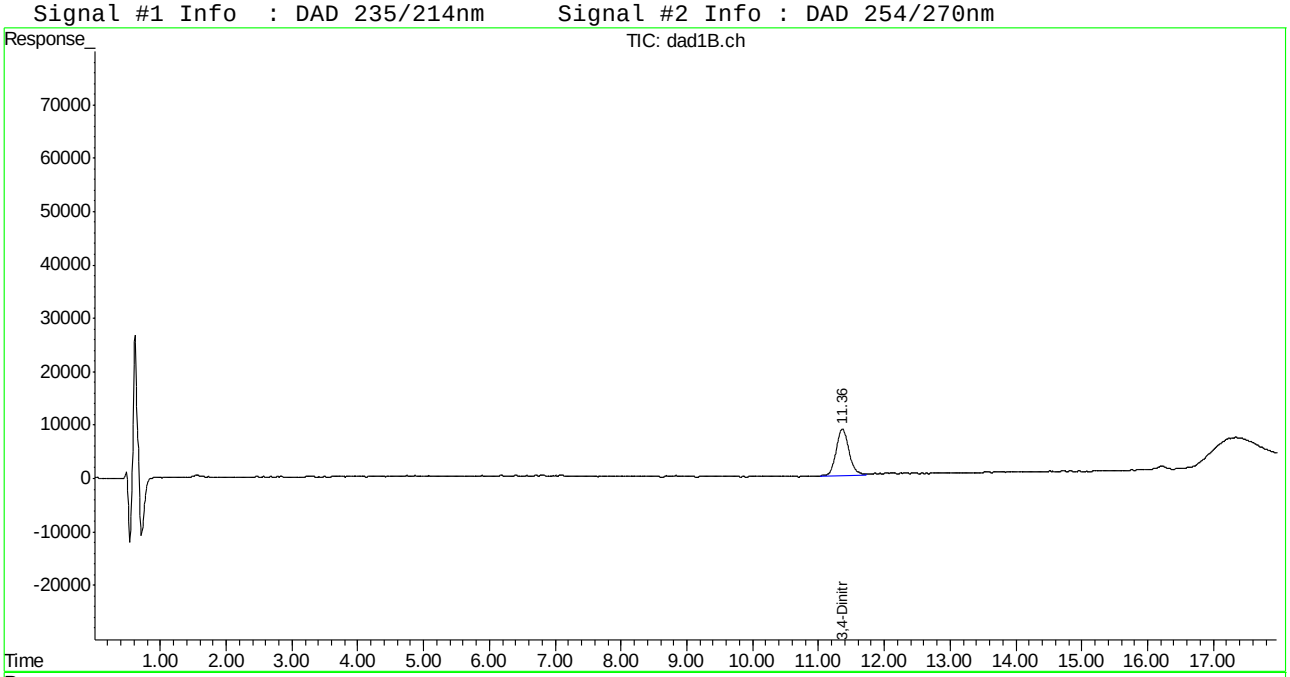
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045943.D 8330B_0107.M Tue Feb 03 08:02:16 2015 Page 1

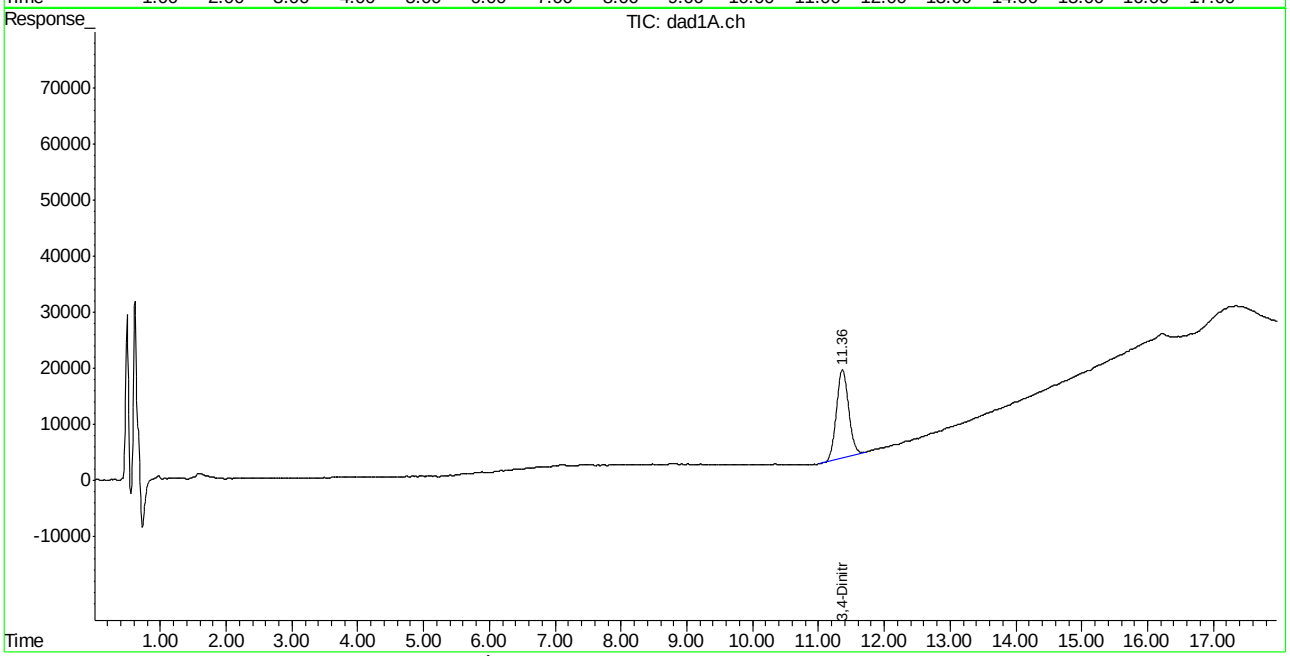
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045943.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045943.D\dad1A.ch
Acq On : 02-Feb-2015, 22:55:56 Operator: KISMETL
Sample : FA21555-7 Inst : G1315B
Misc : OP54769,GBB1239,2.20,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:52 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-7
Lab FileID: BB045943.D
Injection Time: 02/02/15 22:55
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.36	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.36	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045944.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045944.D\dad1A.ch
Acq On : 02-Feb-2015, 23:20:50 Operator: KISMETL
Sample : FA21555-8 Inst : G1315B
Misc : OP54769,GBB1239,2.04,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:57 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.36	11.36	1176953	2066777	529.522m	549.064m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.90%	109.81%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

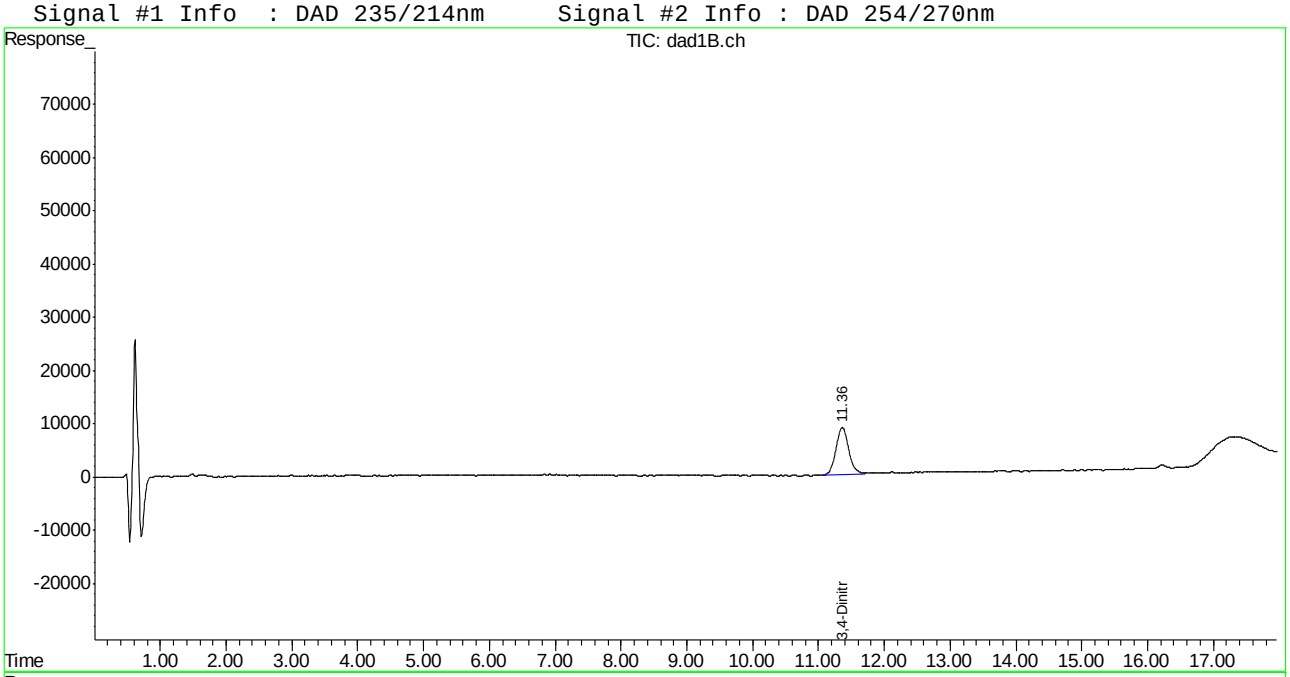
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045944.D 8330B_0107.M Tue Feb 03 08:02:17 2015

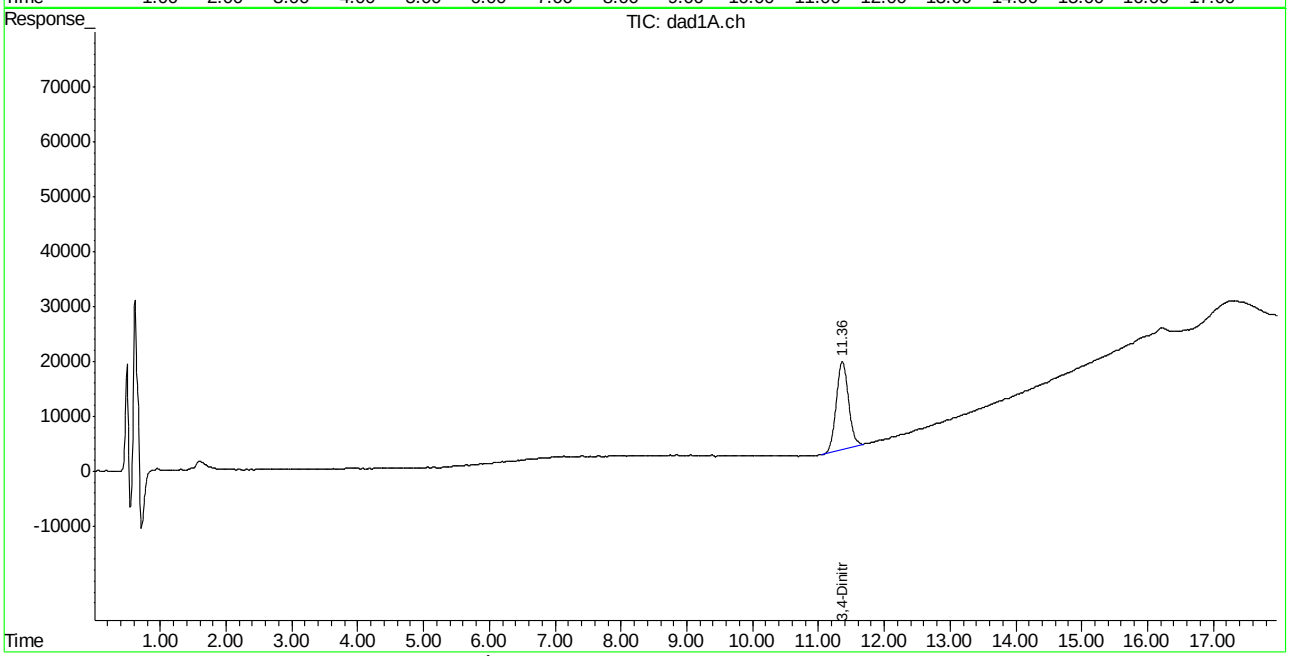
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045944.D\dad1B.ch Vial: 27
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045944.D\dad1A.ch
Acq On : 02-Feb-2015, 23:20:50 Operator: KISMETL
Sample : FA21555-8 Inst : G1315B
Misc : OP54769,GBB1239,2.04,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:54 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-8
Lab FileID: BB045944.D
Injection Time: 02/02/15 23:20
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.36	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.36	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045945.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045945.D\dad1A.ch
Acq On : 02-Feb-2015, 23:45:49 Operator: KISMETL
Sample : FA21555-9 Inst : G1315B
Misc : OP54769,GBB1239,2.13,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:58 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.36	11.36	1217138	2117955	547.602m	562.660m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		109.52%	112.53%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

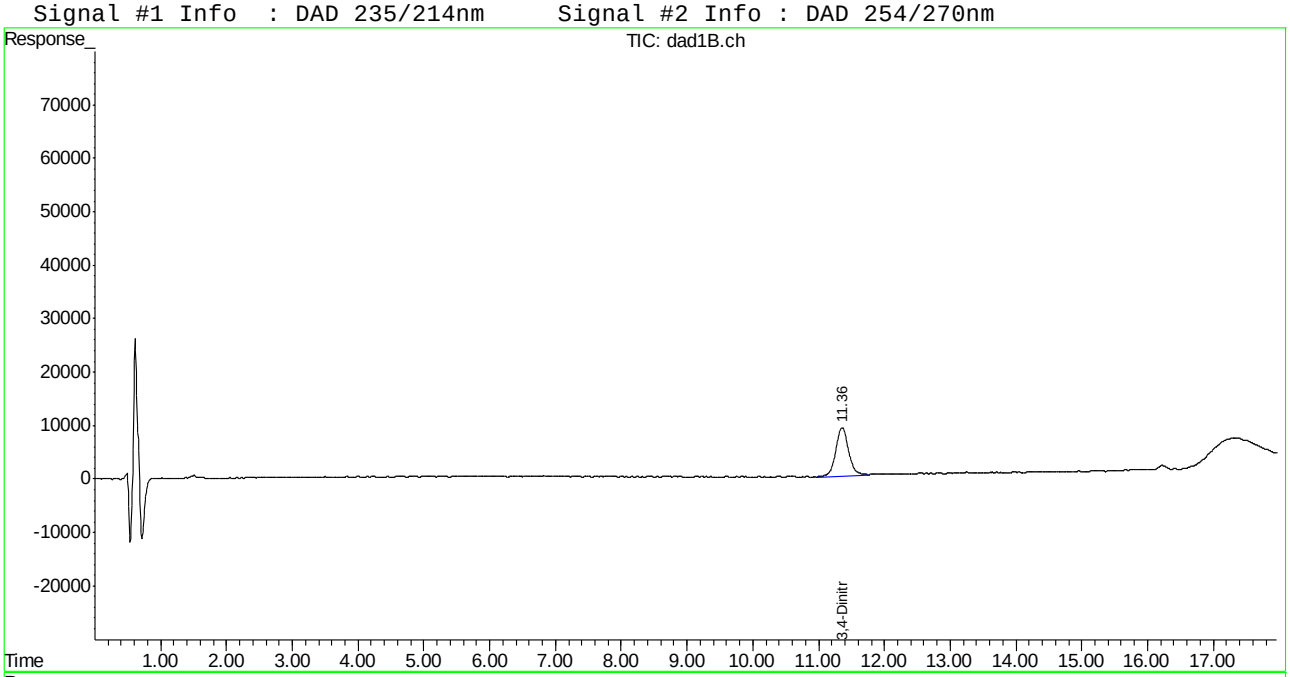
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045945.D 8330B_0107.M Tue Feb 03 08:02:18 2015 Page 1

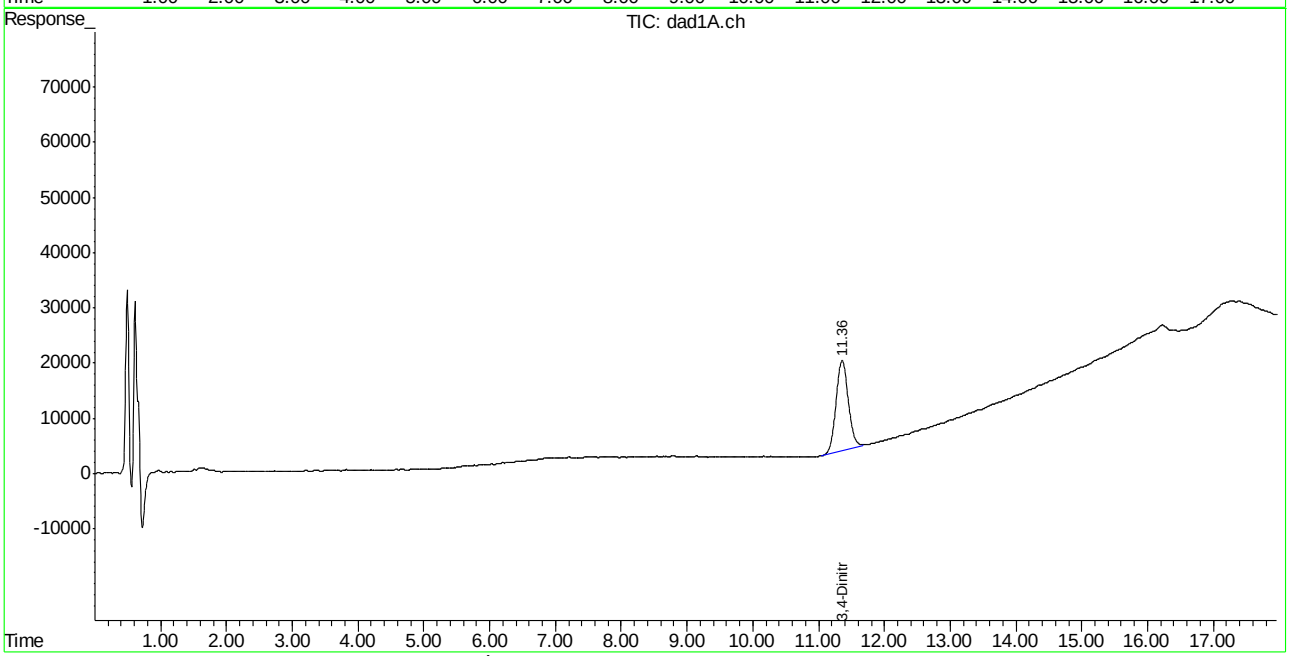
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045945.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045945.D\dad1A.ch
Acq On : 02-Feb-2015, 23:45:49 Operator: KISMETL
Sample : FA21555-9 Inst : G1315B
Misc : OP54769,GBB1239,2.13,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:55 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-9
Lab FileID: BB045945.D
Injection Time: 02/02/15 23:45
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.36	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.36	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045946.D\dad1B.ch Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045946.D\dad1A.ch
Acq On : 03-Feb-2015, 00:10:45 Operator: KISMETL
Sample : FA21555-10 Inst : G1315B
Misc : OP54769,GBB1239,2.08,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:59 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.36	11.36	1173906	2098165	528.151m	557.403m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.63%	111.48%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

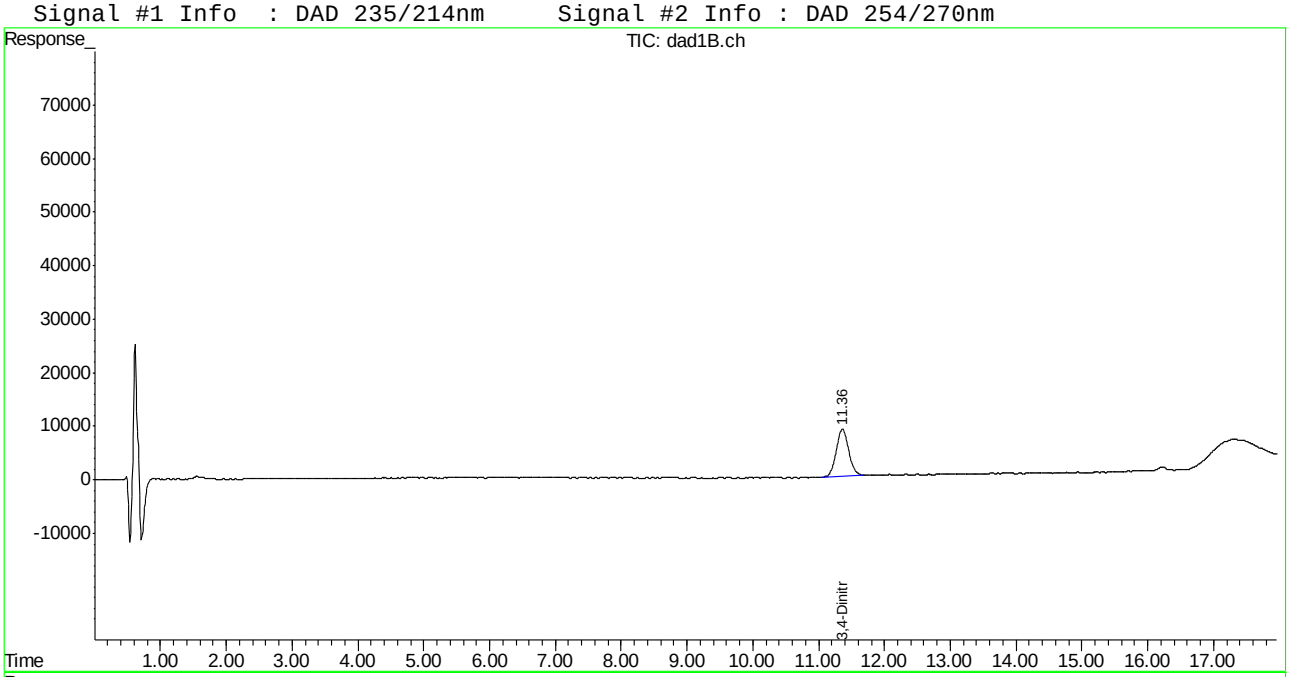
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045946.D 8330B_0107.M Tue Feb 03 08:02:19 2015 Page 1

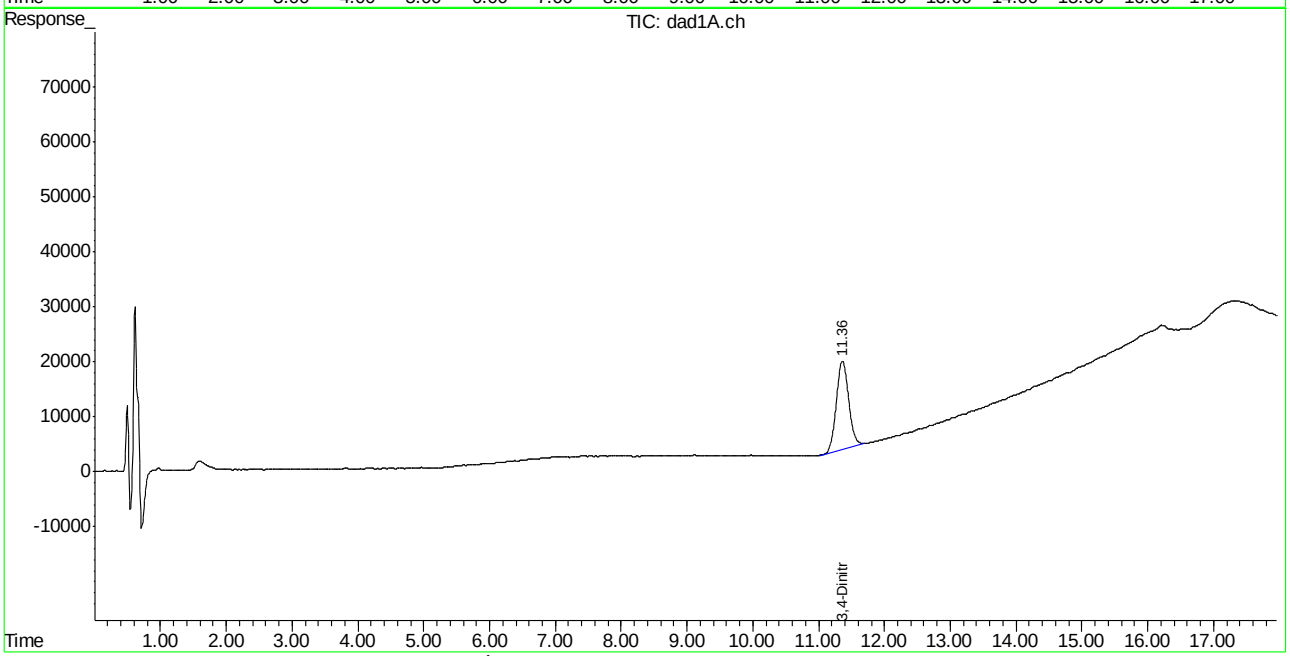
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045946.D\dad1B.ch Vial: 29
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045946.D\dad1A.ch
Acq On : 03-Feb-2015, 00:10:45 Operator: KISMETL
Sample : FA21555-10 Inst : G1315B
Misc : OP54769,GBB1239,2.08,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:58 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-10
Lab FileID: BB045946.D
Injection Time: 02/03/15 00:10
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.36	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.36	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045947.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045947.D\dad1A.ch
Acq On : 03-Feb-2015, 00:35:45 Operator: KISMETL
Sample : FA21555-11 Inst : G1315B
Misc : OP54769,GBB1239,2.14,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:07:00 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.36	11.36	1306527	2285270	587.819m	607.110m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		117.56%	121.42%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

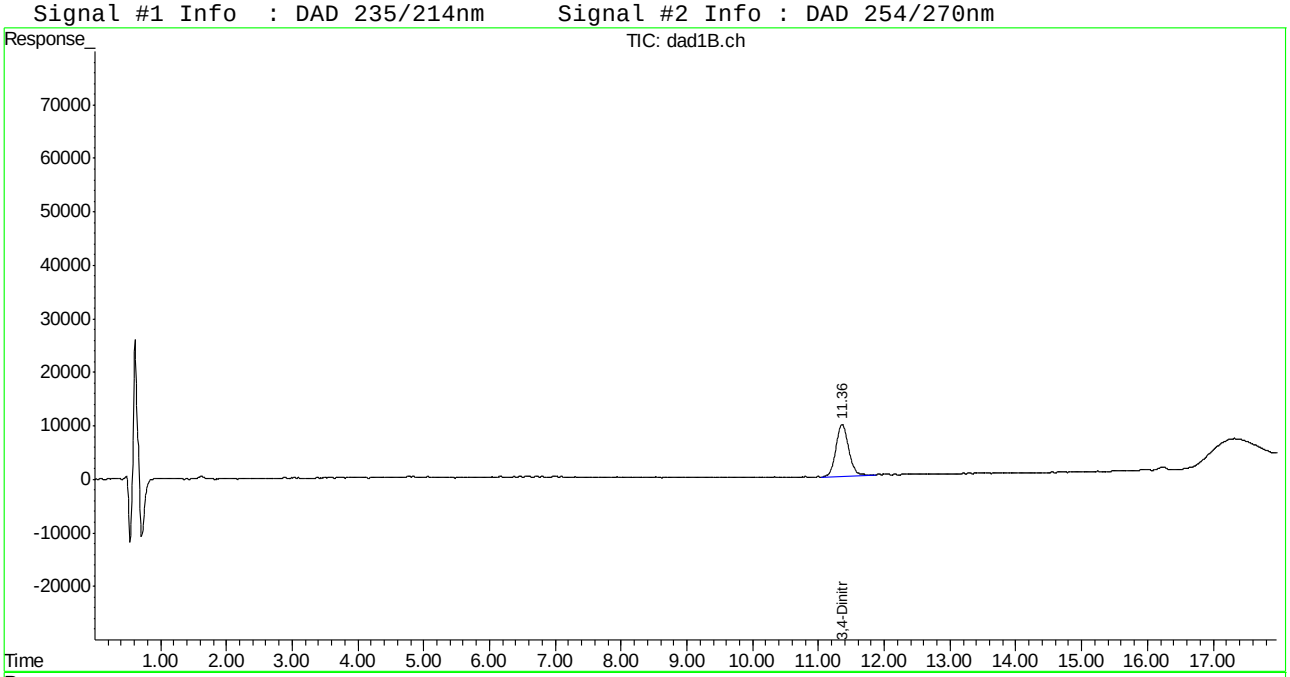
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045947.D 8330B_0107.M Tue Feb 03 08:02:20 2015 Page 1

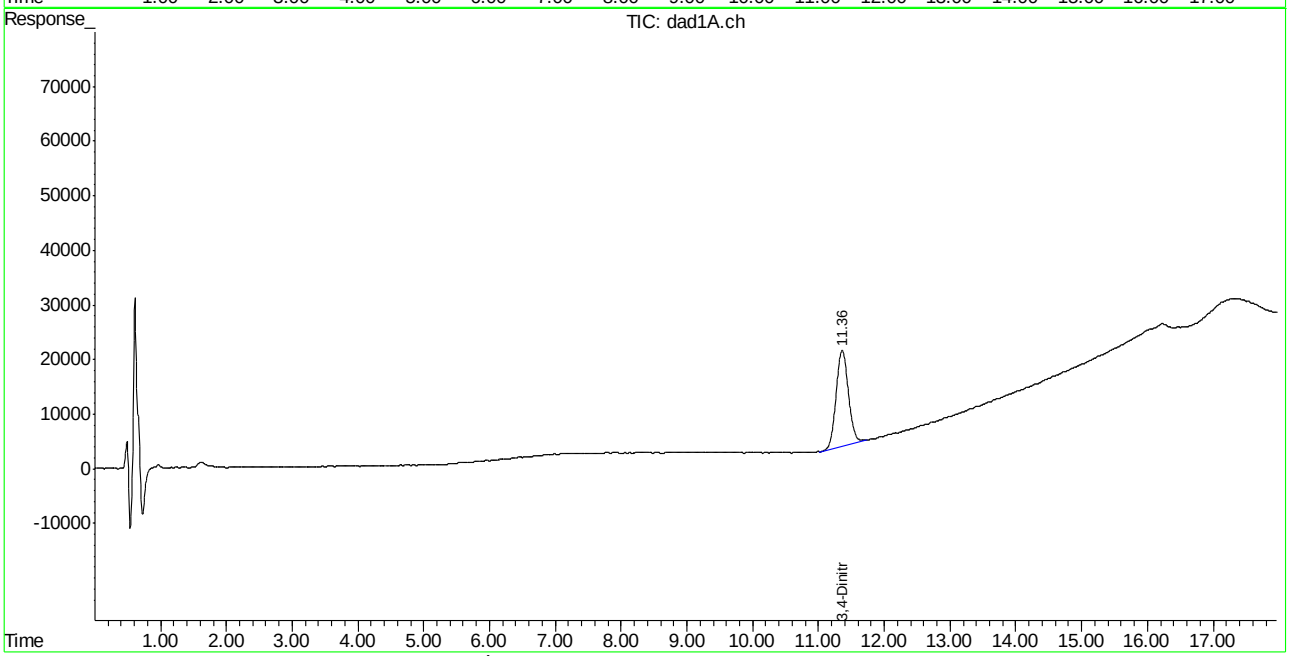
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045947.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045947.D\dad1A.ch
Acq On : 03-Feb-2015, 00:35:45 Operator: KISMETL
Sample : FA21555-11 Inst : G1315B
Misc : OP54769,GBB1239,2.14,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:59 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA21555-11
Lab FileID: BB045947.D
Injection Time: 02/03/15 00:35
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.36	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.36	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045932.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045932.D\dad1A.ch
Acq On : 02-Feb-2015, 18:21:14 Operator: KISMETL
Sample : op54769-mb Inst : G1315B
Misc : OP54769,GBB1239,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:45 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.38	11.38	1159832	2058782	521.819m	546.940m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		104.36%	109.39%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

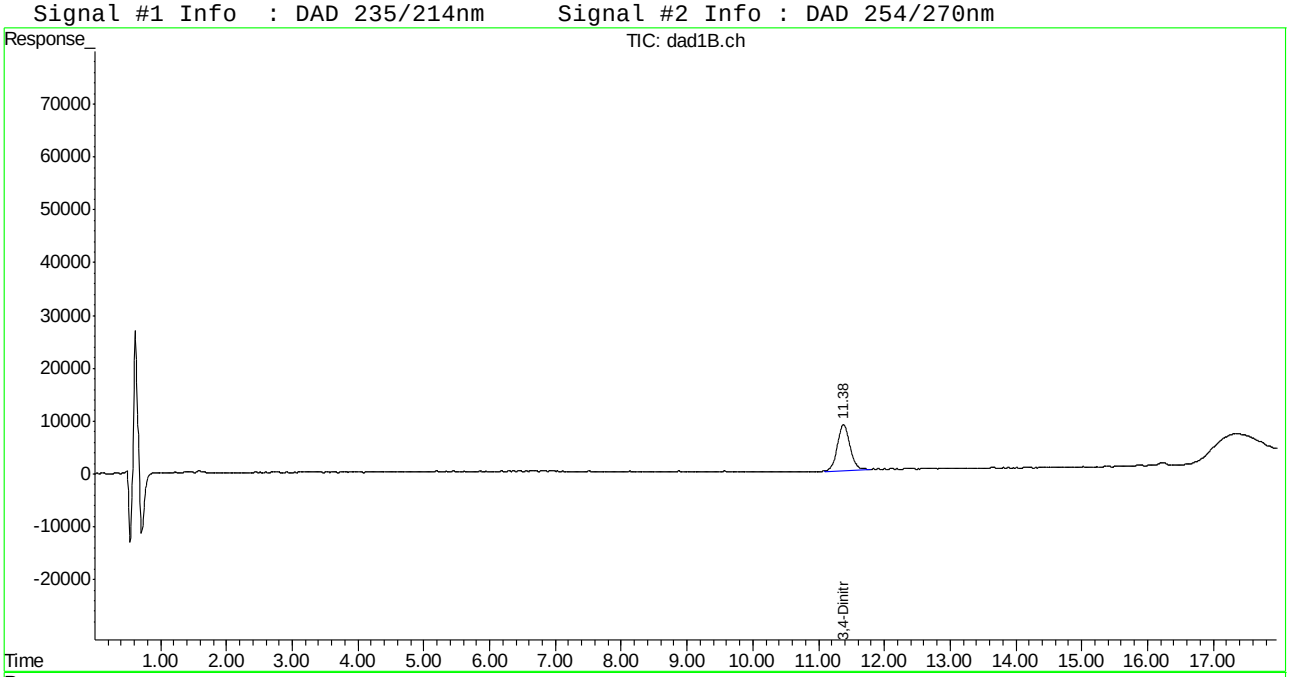
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045932.D 8330B_0107.M Tue Feb 03 08:02:05 2015 Page 1

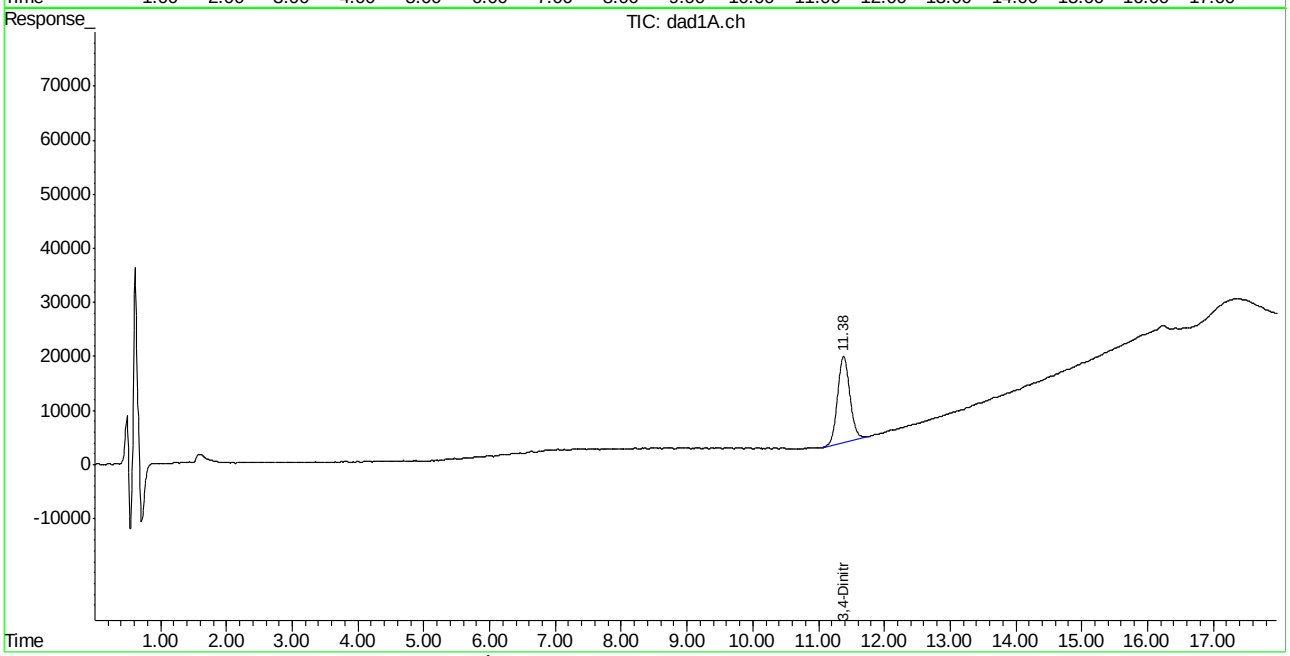
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045932.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045932.D\dad1A.ch
Acq On : 02-Feb-2015, 18:21:14 Operator: KISMETL
Sample : op54769-mb Inst : G1315B
Misc : OP54769,GBB1239,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:44 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54769-MB
Lab FileID: BB045932.D
Injection Time: 02/02/15 18:21
Method: SW846 8330A
Analyst approved: 02/03/15 08:20 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.38	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.38	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045931.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045931.D\dad1A.ch
Acq On : 02-Feb-2015, 17:56:15 Operator: KISMETL
Sample : op54769-bs Inst : G1315B
Misc : OP54769,GBB1239,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:44 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.38	11.38	1091414	1863197	491.037	494.981
	Spiked Amount 500.000	Range 72 - 134		Recovery =		98.21%	99.00%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	846208	2350071	525.572	533.782
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.94	923808	1431340	489.781	474.073
6)	1,3,5-Trinitrobe	4.65	4.65	2050908	3942838	502.731	506.034
7)	1,3-Dinitrobenze	5.94	5.94	2342656	1663127	438.305	465.694
8)	3,5-Dinitroanili	6.41	6.41	1865917	3196369	409.011	422.787m
9)	Nitrobenzene	7.55	7.55	1534517	1501809	500.306	505.912m
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	9.62	9.61	1308020	2092844	483.346	483.546
12)	2,4,6-Trinitroto	10.02	10.02	1692972	2052473	463.426	485.424
13)	2-Amino-4,6-Dini	10.53	10.53	1526420	2247638	503.309	493.501
14)	4-Amino-2,6-Dini	11.03	11.03	1039139	1991394	493.343	422.576
16)	2,4-Dinitrotolue	11.97	11.97	2304735	1482971	498.968	513.555
17)	2,6-Dinitrotolue	12.37	12.37	1360184	1703940	529.169	514.344
18)	o-Nitrotoluene	14.53	14.53	1117824	1506899	489.229	500.694m
19)	p-Nitrotoluene	14.91	14.91	1701029	1405134	471.690	478.978
20)	m-Nitrotoluene	15.45	15.45	1627669	1907224	505.141	527.523
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

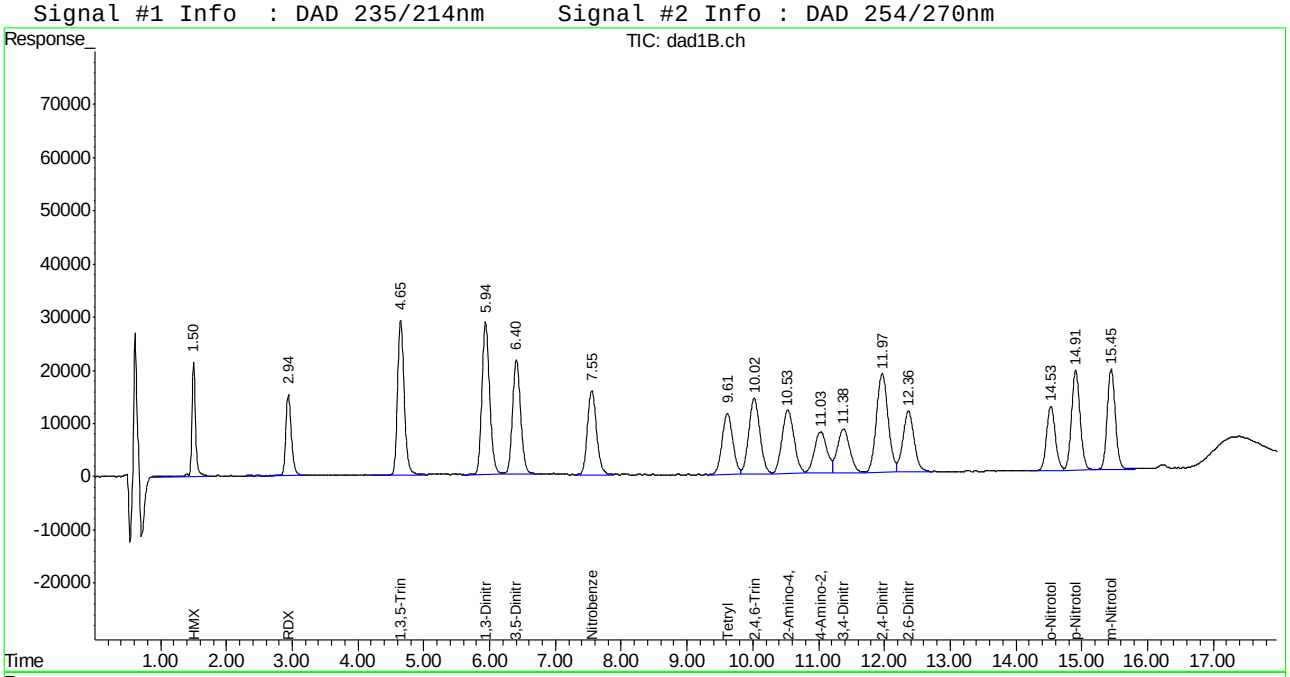
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045931.D 8330B_0107.M Tue Feb 03 08:02:04 2015

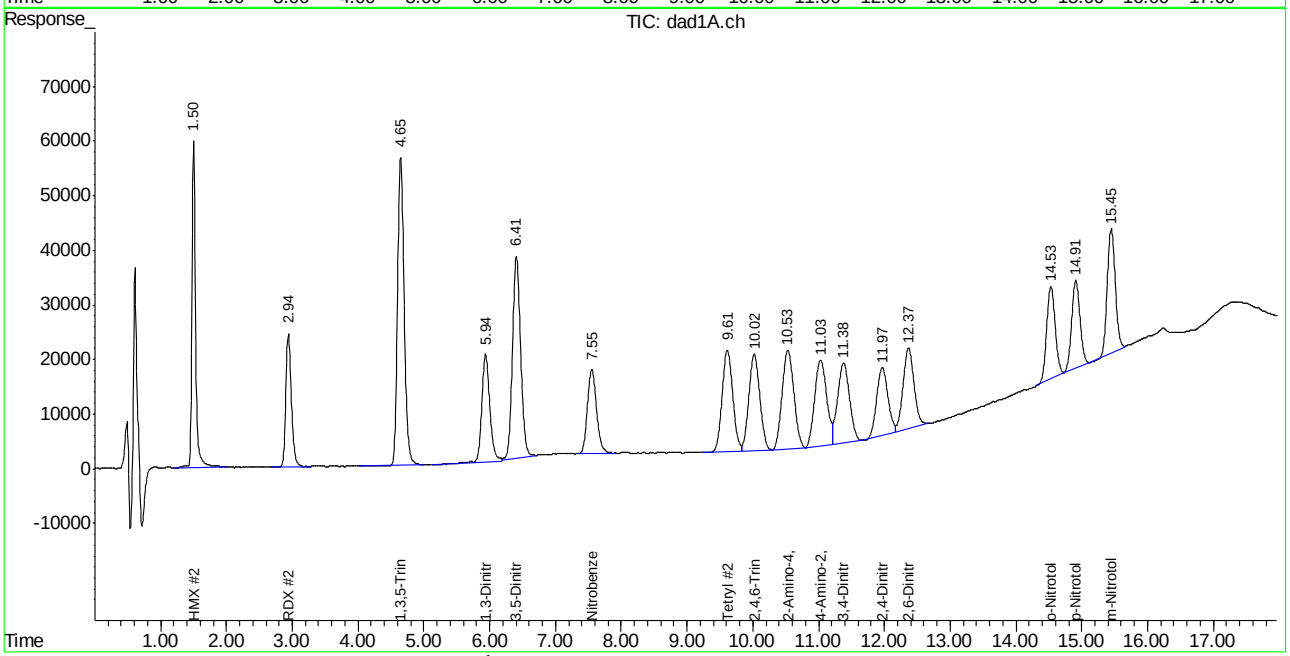
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045931.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045931.D\dad1A.ch
Acq On : 02-Feb-2015, 17:56:15 Operator: KISMETL
Sample : op54769-bs Inst : G1315B
Misc : OP54769,GBB1239,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:43 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54769-BS
Lab FileID: BB045931.D
Injection Time: 02/02/15 17:56
Method: SW846 8330A
Analyst approved: 02/03/15 08:20 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.41	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.55	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045934.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045934.D\dad1A.ch
Acq On : 02-Feb-2015, 19:11:06 Operator: KISMETL
Sample : op54769-ms Inst : G1315B
Misc : OP54769,GBB1239,2.05,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:47 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	1132452	1895308	509.500	503.511
	Spiked Amount 500.000	Range 72 - 134		Recovery =		101.90%	100.70%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	821054	2300211	509.949	522.457
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.94	817339	1361083	433.333	450.803
6)	1,3,5-Trinitrobe	4.65	4.65	1944745	3774701	476.708	484.455
7)	1,3-Dinitrobenze	5.94	5.94	2268159	1532061	424.367	428.994m
8)	3,5-Dinitroanili	6.41	6.41	1793658	3031492	393.172	400.979m
9)	Nitrobenzene	7.55	7.55	1426901	1416067	465.219	477.029m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.61	9.61	1291159	2076508	477.115	479.772
12)	2,4,6-Trinitroto	10.02	10.02	1629719	1968402	446.111	465.541
13)	2-Amino-4,6-Dini	10.53	10.53	1486558	2144515	490.165	470.859
14)	4-Amino-2,6-Dini	11.02	11.02	1015059	1913009	481.911	405.943
16)	2,4-Dinitrotolue	11.96	11.96	2228071	1417679	482.370	490.944
17)	2,6-Dinitrotolue	12.36	12.36	1282725	1632747	499.035	492.853
18)	o-Nitrotoluene	14.53	14.53	1067624	1479925	467.258	491.731m
19)	p-Nitrotoluene	14.91	14.91	1627724	1347663	451.363	459.388
20)	m-Nitrotoluene	15.45	15.44	1546007	1881871	479.798	520.510m
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

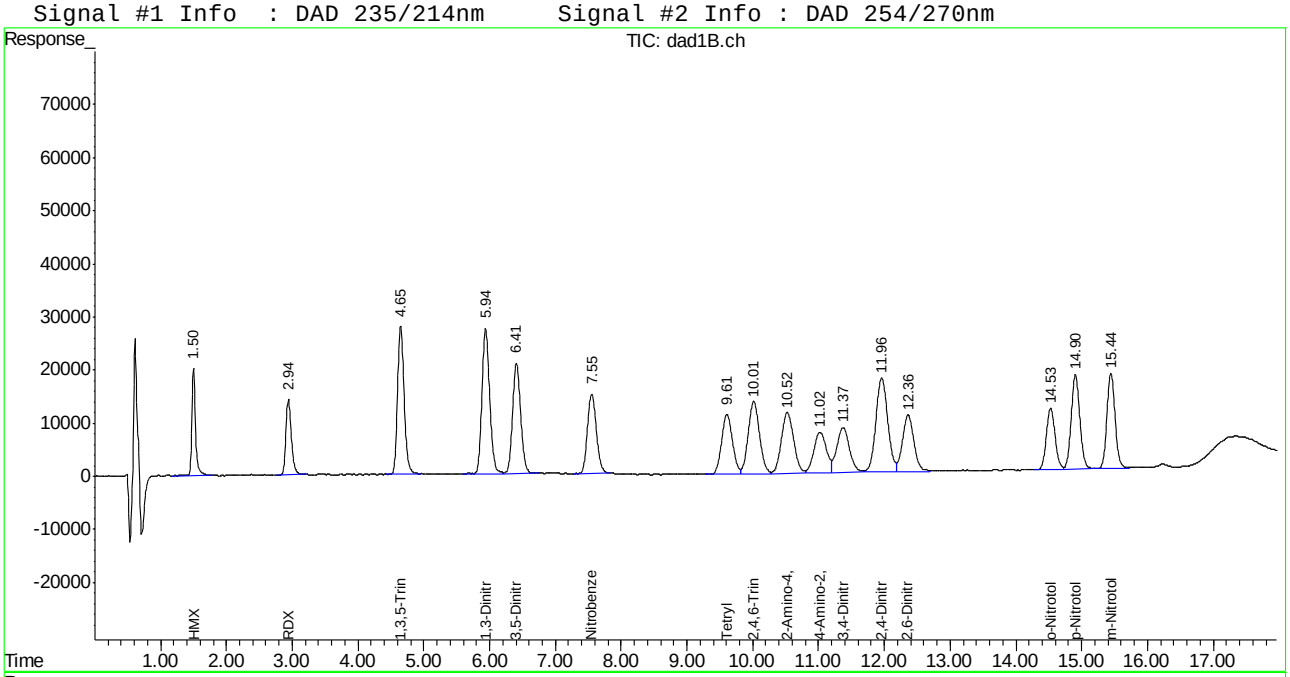
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045934.D 8330B_0107.M Tue Feb 03 08:02:07 2015 Page 1

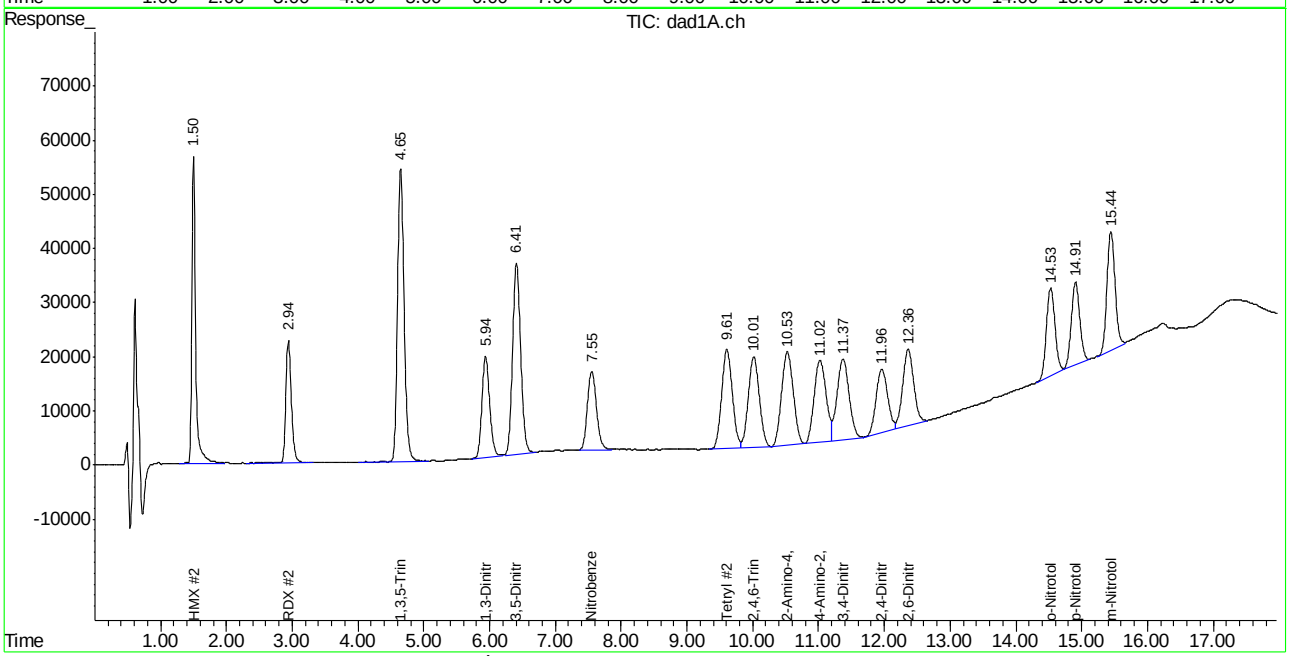
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045934.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045934.D\dad1A.ch
Acq On : 02-Feb-2015, 19:11:06 Operator: KISMETL
Sample : op54769-ms Inst : G1315B
Misc : OP54769,GBB1239,2.05,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54769-MS
Lab FileID: BB045934.D
Injection Time: 02/02/15 19:11
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.94	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.41	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.55	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.44	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045935.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045935.D\dad1A.ch
Acq On : 02-Feb-2015, 19:36:05 Operator: KISMETL
Sample : op54769-msd Inst : G1315B
Misc : OP54769,GBB1239,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:48 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.38	11.38	1100818	1802307	495.268	478.804
	Spiked Amount 500.000	Range 72 - 134		Recovery =		99.05%	95.76%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	832540	2277718	517.083	517.348
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.94	853043	1356935	452.263	449.429
6)	1,3,5-Trinitrobe	4.65	4.65	1999341	3894529	490.091	499.834
7)	1,3-Dinitrobenze	5.94	5.94	2344686	1635251	438.685	457.888
8)	3,5-Dinitroanili	6.41	6.41	1869027	3111119	409.693	411.511m
9)	Nitrobenzene	7.56	7.55	1541528	1493099	502.591	502.978m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.61	9.61	1295062	2071154	478.557	478.535
12)	2,4,6-Trinitroto	10.02	10.02	1694306	1997999	463.791	472.541
13)	2-Amino-4,6-Dini	10.53	10.53	1520730	2174399	501.432	477.421
14)	4-Amino-2,6-Dini	11.03	11.03	1047365	1931629	497.249	409.894
16)	2,4-Dinitrotolue	11.96	11.97	2306867	1463004	499.429	506.641
17)	2,6-Dinitrotolue	12.37	12.37	1341167	1713946	521.771	517.364
18)	o-Nitrotoluene	14.53	14.53	1094947	1497611	479.216	497.608m
19)	p-Nitrotoluene	14.91	14.91	1674797	1409454	464.416	480.451
20)	m-Nitrotoluene	15.45	15.45	1598394	1896532	496.056	524.565
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

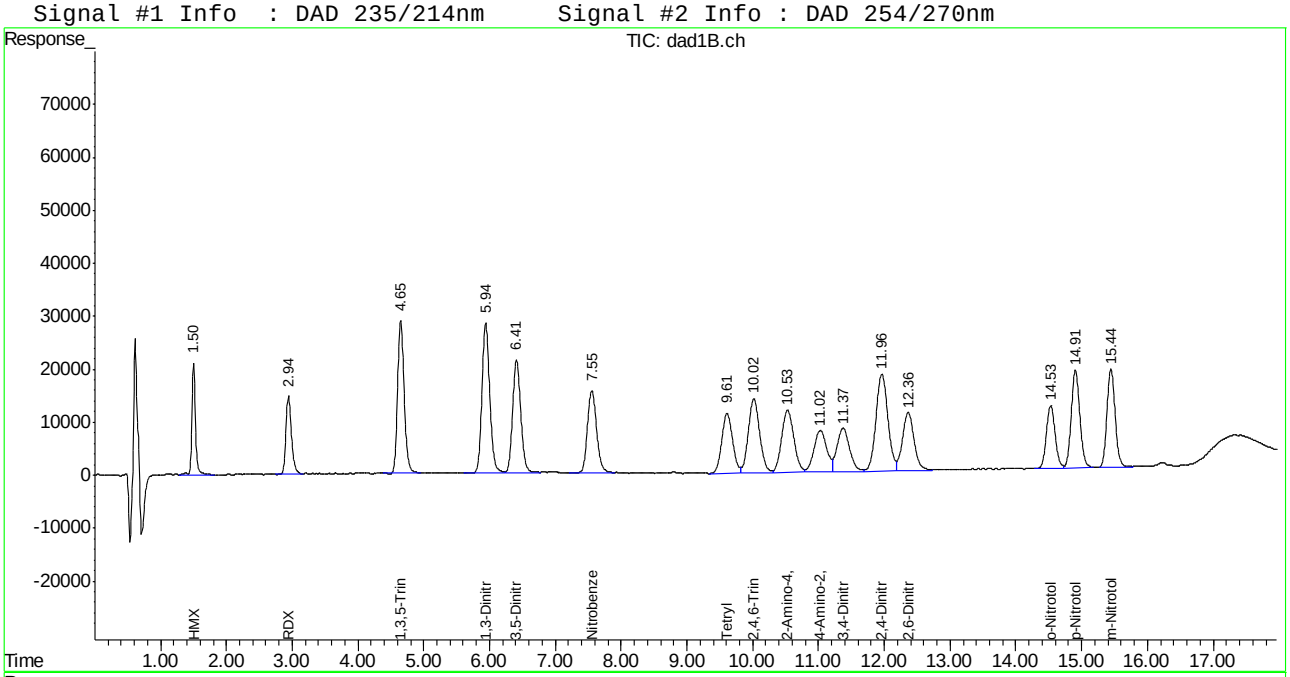
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045935.D 8330B_0107.M Tue Feb 03 08:02:08 2015 Page 1

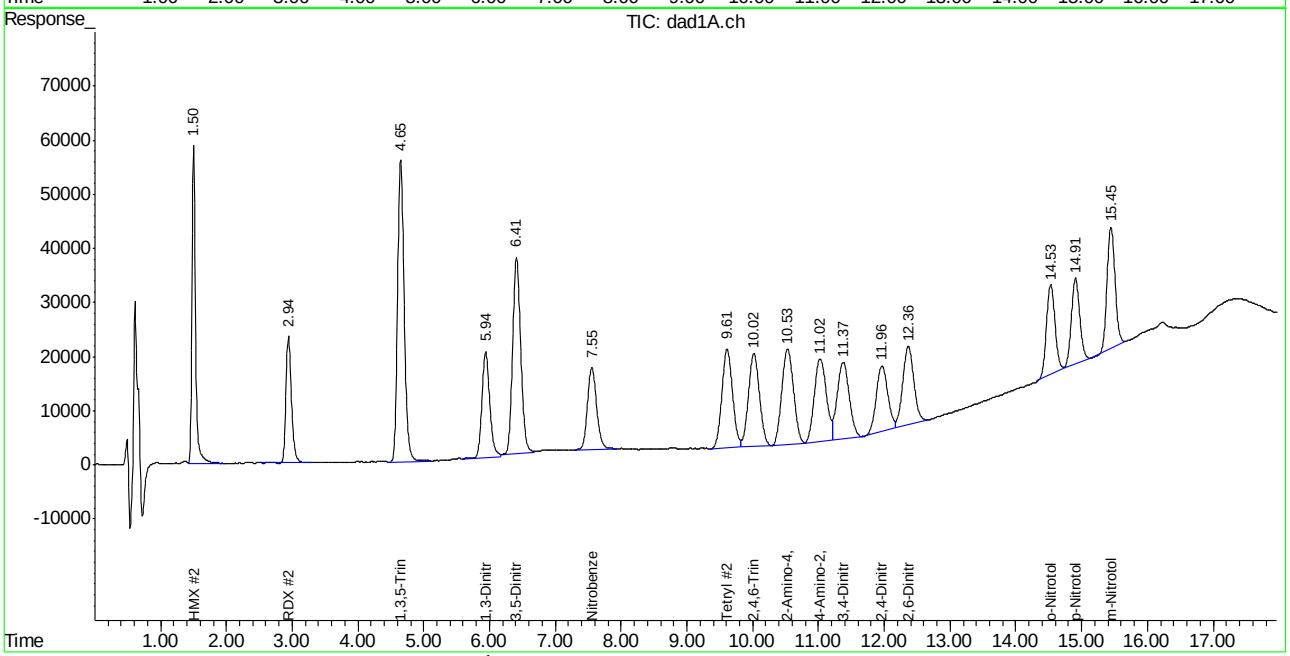
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045935.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045935.D\dad1A.ch
Acq On : 02-Feb-2015, 19:36:05 Operator: KISMETL
Sample : op54769-msd Inst : G1315B
Misc : OP54769,GBB1239,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: OP54769-MSD
Lab FileID: BB045935.D
Injection Time: 02/02/15 19:36
Method: SW846 8330A
Analyst approved: 02/03/15 08:25 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.41	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.55	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1A.ch
Acq On : 23-Jan-2015, 08:15:29 Operator: KISMETL
Sample : ic1235-20 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:39 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.28	11.28	47776	47072	21.093m	14.351m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.22%#	2.87%#
	Target Compounds						
1)	TNX	1.38	1.38	61405	102591	19.261m	21.746m
2)	HMX	1.50	1.50	36865	94986	22.597	21.087
3)	DNX	1.75	1.75	57337	102668	19.420m	21.934m
4)	MNX	2.33	2.34	52533	72696	20.782m	19.520
5)	RDX	2.94	2.93	40810	67053	21.221m	22.724m
6)	1,3,5-Trinitrobe	4.63	4.63	85269	157803	20.989m	19.884m
7)	1,3-Dinitrobenze	5.91	5.92	113524	72452	21.801m	19.519m
8)	3,5-Dinitroanili	6.35	6.36	100297	159178	21.621m	19.632m
9)	Nitrobenzene	7.51	7.51	54710	55238	17.106	17.696m
10)	Nitroglycerin	0.00	9.17	0	124338	N.D.	104.809m#
11)	Tetryl	9.53	9.53	50655	83490	17.608m	17.705m
12)	2,4,6-Trinitroto	9.95	9.97	73440	73501	20.779m	18.151m
13)	2-Amino-4,6-Dini	10.45	10.45	51038	86163	16.652m	20.346m
14)	4-Amino-2,6-Dini	10.90	10.92	34830	64599	16.127m	14.945m
16)	2,4-Dinitrotolue	11.87	11.94	82175	52269	18.130m	20.624m
17)	2,6-Dinitrotolue	12.26	12.29	44703	68629	16.861m	21.770m
18)	o-Nitrotoluene	14.49	14.56	44783	49876	20.061m	16.201m
19)	p-Nitrotoluene	14.88	14.89	78161	64632	22.105m	22.937m
20)	m-Nitrotoluene	15.39	15.42	73102	73881	22.980m	20.184m
21)	PETN	0.00	16.91	0	146280	N.D. d	99.091m

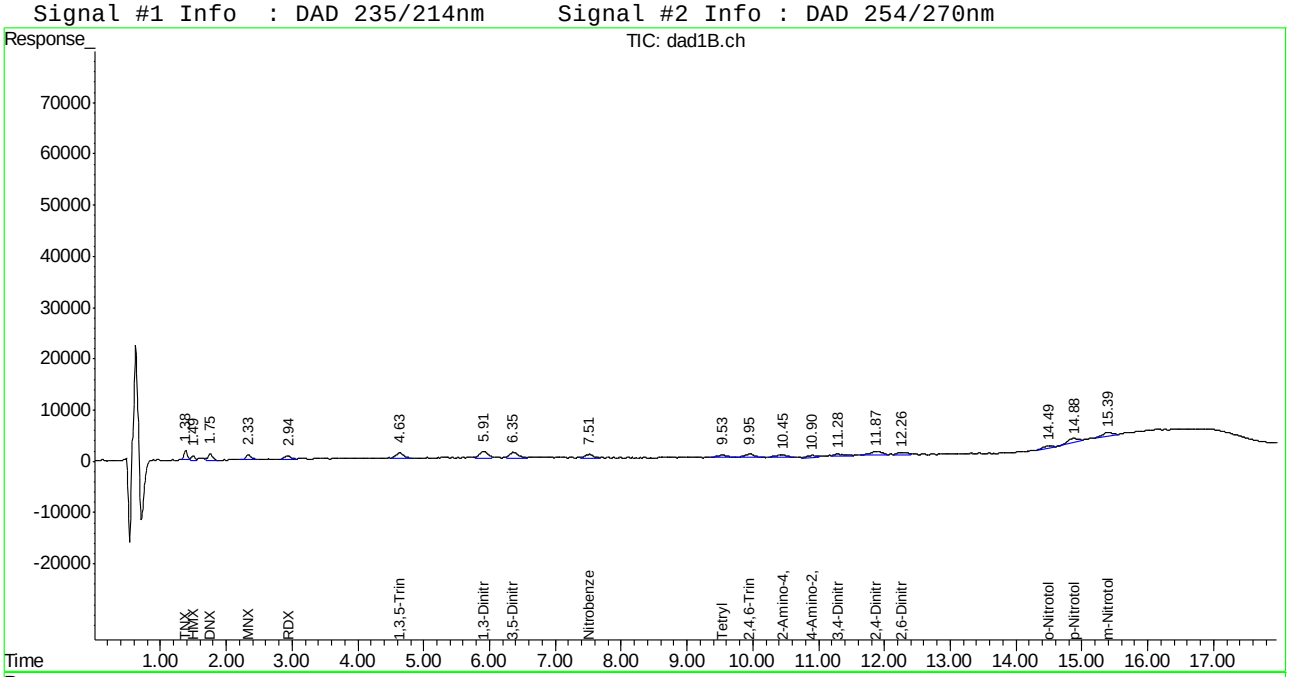
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045814.D 8330B_0107.M Fri Jan 23 14:50:20 2015 Page 1

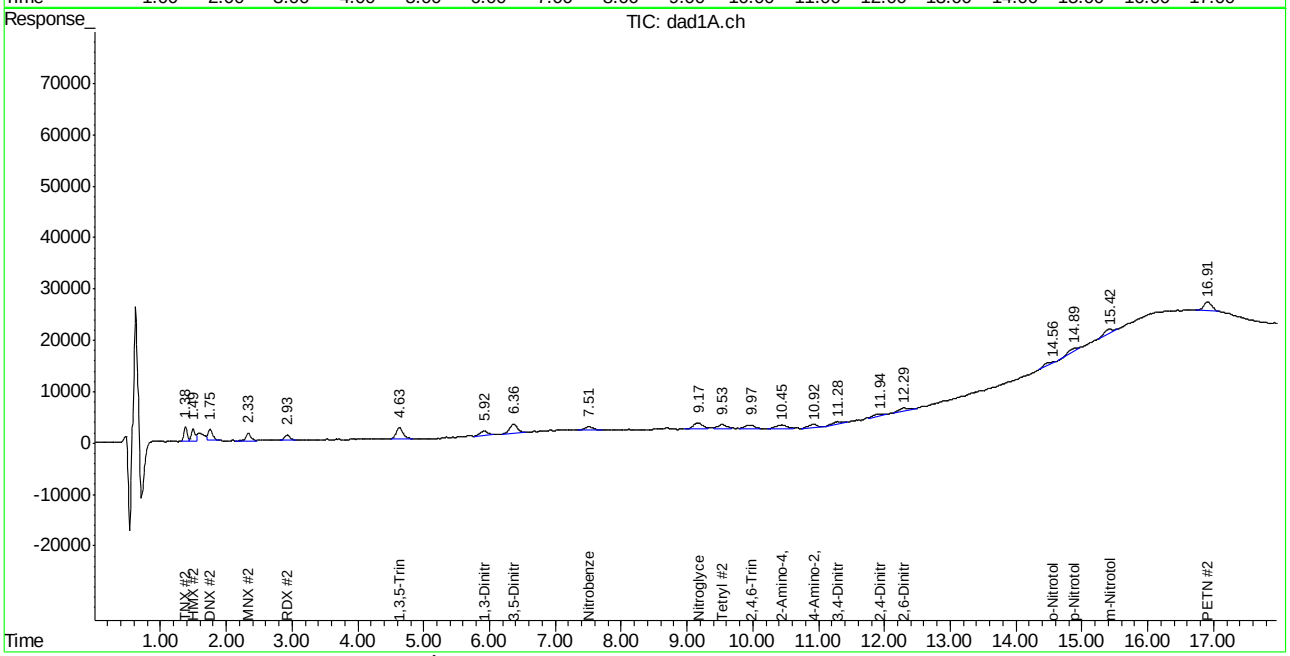
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1A.ch
Acq On : 23-Jan-2015, 08:15:29 Operator: KISMETL
Sample : ic1235-20 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045814.D
Injection Time: 01/23/15 08:15
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.38	Poorly defined baseline
TNX		2	1.38	Poorly defined baseline
DNX		1	1.75	Poorly defined baseline
DNX		2	1.75	Poorly defined baseline
MNX		1	2.33	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
RDX	121-82-4	1	2.94	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.63	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.63	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.91	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.17	Poorly defined baseline
Tetryl	479-45-8	1	9.53	Poorly defined baseline
Tetryl	479-45-8	2	9.53	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.95	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.97	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.45	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.45	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.90	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.92	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.28	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.87	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.94	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.26	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.49	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.56	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.88	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.89	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.42	Poorly defined baseline
PETN	78-11-5	2	16.91	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1A.ch
Acq On : 23-Jan-2015, 08:40:25 Operator: KISMETL
Sample : ic1235-50 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:40 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	127054	140895	56.095m	42.843m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	11.22%#	8.57%#
	Target Compounds						
1)	TNX	1.38	1.38	163728	254307	51.358m	53.905m
2)	HMX	1.49	1.49	74960	208056	45.947	46.189m
3)	DNX	1.76	1.76	130915	250671	44.341	53.553
4)	MNX	2.33	2.33	134204	191257	53.091m	51.356m
5)	RDX	2.93	2.93	103584	154295	53.864m	52.290m
6)	1,3,5-Trinitrobe	4.63	4.63	208536	391762	51.331	49.364m
7)	1,3-Dinitrobenze	5.91	5.91	273809	177376	52.582	47.786m
8)	3,5-Dinitroanili	6.36	6.36	225926	385855	48.703	47.590
9)	Nitrobenzene	7.52	7.51	181473	161452	56.739	51.723
10)	Nitroglycerin	0.00	9.17	0	319397	N.D.	269.231m#
11)	Tetryl	9.54	9.53	147528	229292	51.282	48.625
12)	2,4,6-Trinitroto	9.96	9.95	190689	223195	53.954	55.118
13)	2-Amino-4,6-Dini	10.45	10.44	165810	236408	54.098	55.687
14)	4-Amino-2,6-Dini	10.90	10.90	102040	155981	47.246m	36.086m
16)	2,4-Dinitrotolue	11.89	11.90	236012	133893	52.069m	52.831m
17)	2,6-Dinitrotolue	12.28	12.29	125905	141246	47.489m	44.806m
18)	o-Nitrotoluene	14.47	14.48	116724	161640	52.286m	52.504m
19)	p-Nitrotoluene	14.86	14.87	184619	141194	52.213m	50.048
20)	m-Nitrotoluene	15.39	15.40	157080	183046	49.379m	50.007m
21)	PETN	0.00	16.92	0	369167	N.D.	250.077m#

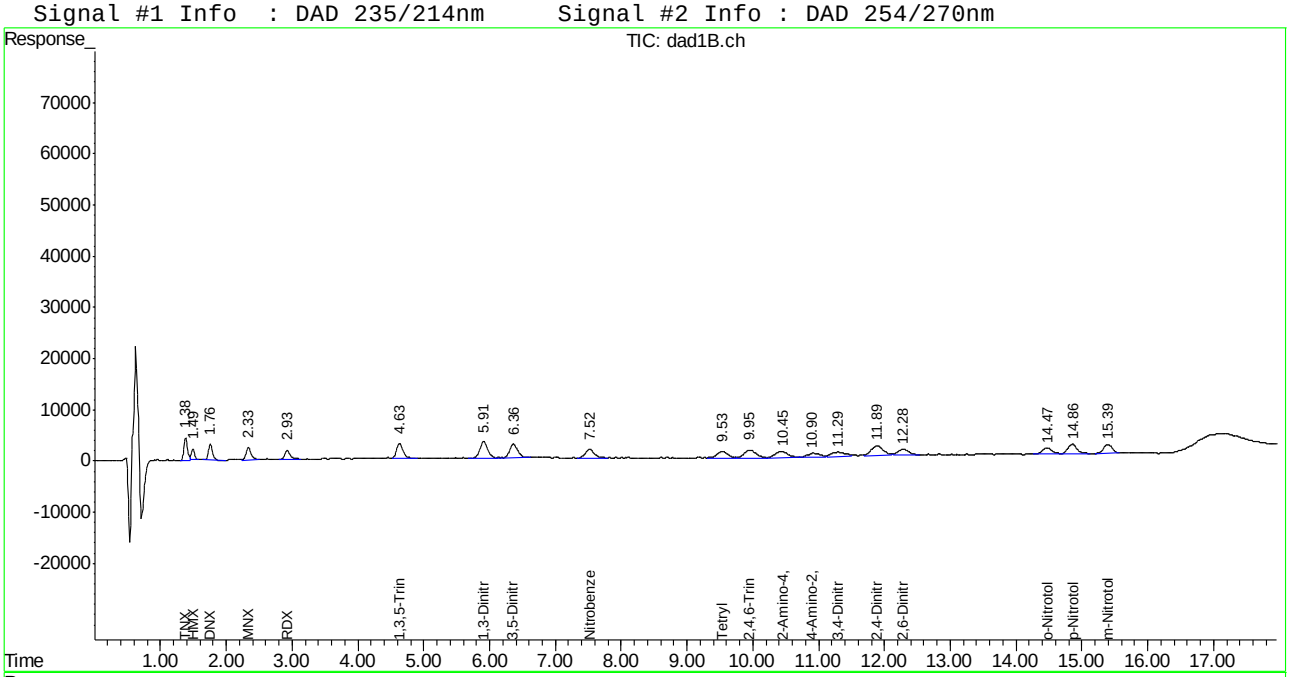
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045815.D 8330B_0107.M Fri Jan 23 14:50:21 2015 Page 1

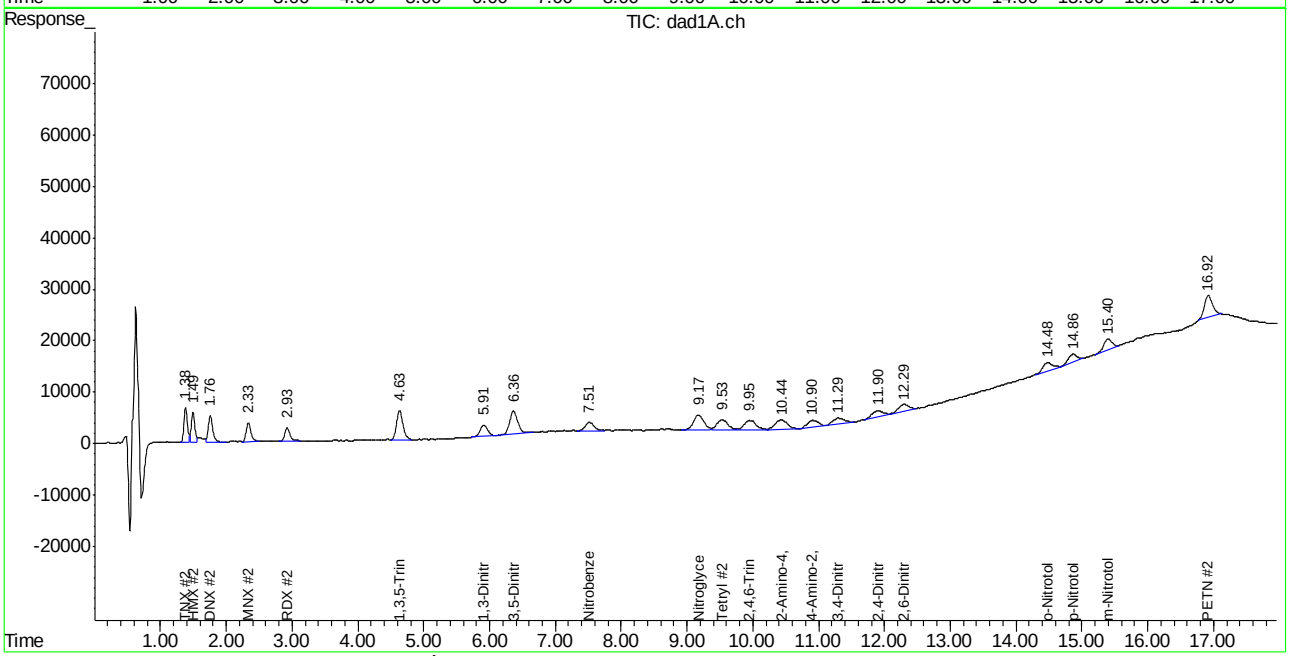
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1A.ch
Acq On : 23-Jan-2015, 08:40:25 Operator: KISMETL
Sample : ic1235-50 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:27 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235 **Method:** SW846 8330A
Lab FileID: BB045815.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 08:40 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.38	Poorly defined baseline
TNX		2	1.38	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
MNX		1	2.33	Poorly defined baseline
MNX		2	2.33	Poorly defined baseline
RDX	121-82-4	1	2.93	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.63	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.91	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.17	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.90	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.90	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.29	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.29	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.90	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.28	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.48	Missed peak
p-Nitrotoluene	99-99-0	1	14.86	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.40	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1A.ch
Acq On : 23-Jan-2015, 09:05:23 Operator: KISMETL
Sample : ic1235-100 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:41 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.28	11.29	223517	320429	98.683	96.954
Spiked Amount	500.000	Range 70 - 136		Recovery =		19.74%#	19.39%#
	Target Compounds						
1)	TNX	1.38	1.38	342000	514829	107.279	109.128m
2)	HMX	1.49	1.49	151558	420408	92.900m	93.331m
3)	DNX	1.76	1.76	286960	502499	97.194	107.352
4)	MNX	2.34	2.34	250814	379692	99.222	101.953
5)	RDX	2.93	2.93	181404	313393	94.331	106.207
6)	1,3,5-Trinitrobe	4.64	4.64	409860	782856	100.886	98.644
7)	1,3-Dinitrobenze	5.91	5.91	549723	361578	105.569	97.410m
8)	3,5-Dinitroanili	6.37	6.36	480128	765245	103.501	94.382m
9)	Nitrobenzene	7.52	7.52	307709	304528	96.207	97.560m
10)	Nitroglycerin	0.00	9.17	0	627033	N.D. d	528.548
11)	Tetryl	9.54	9.54	284681	437982	98.958	92.881
12)	2,4,6-Trinitroto	9.96	9.96	361844	433219	102.382	106.984
13)	2-Amino-4,6-Dini	10.43	10.43	294424	448887	96.061	105.376
14)	4-Amino-2,6-Dini	10.92	10.91	203665	371394	94.301	85.922
16)	2,4-Dinitrotolue	11.89	11.89	493701	277438	108.921m	109.472m
17)	2,6-Dinitrotolue	12.29	12.30	269119	325412	101.506	103.227
18)	o-Nitrotoluene	14.48	14.47	236955	303268	106.144	98.508m
19)	p-Nitrotoluene	14.86	14.86	359271	282150	101.606	99.796
20)	m-Nitrotoluene	15.39	15.40	319240	343176	100.354	93.753
21)	PETN	0.00	16.92	0	725413	N.D.	491.402m#

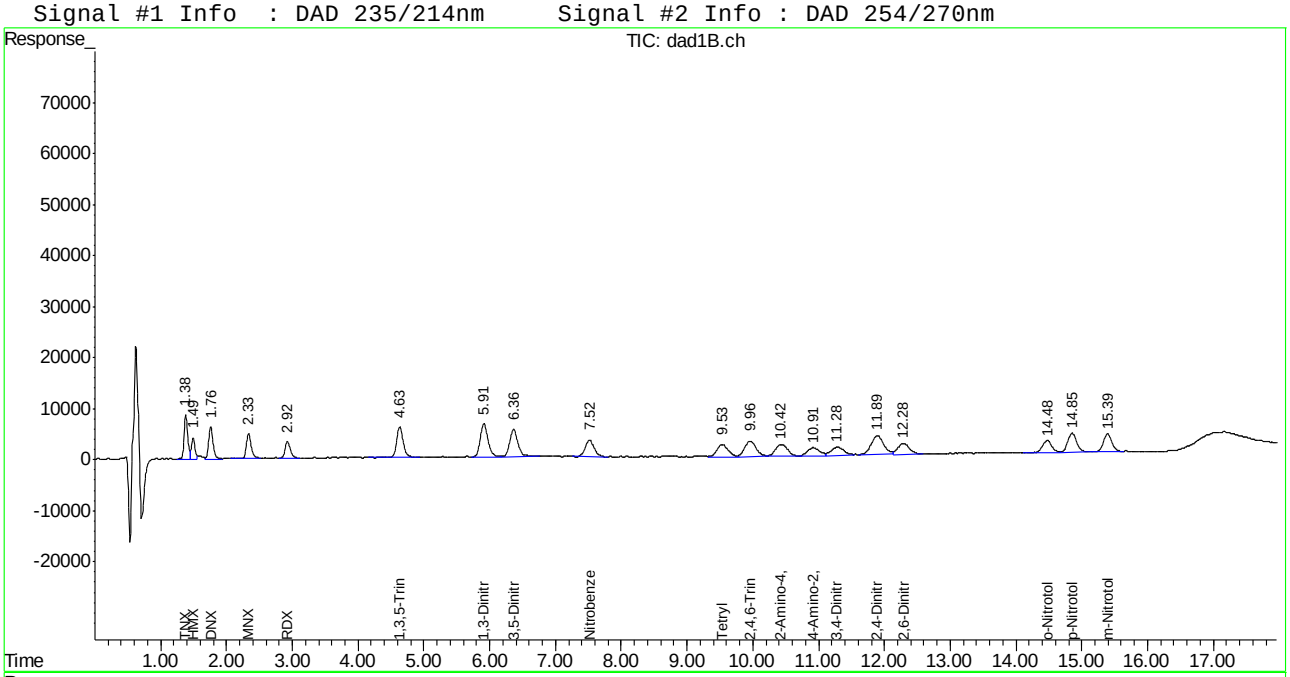
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045816.D 8330B_0107.M Fri Jan 23 14:50:22 2015 Page 1

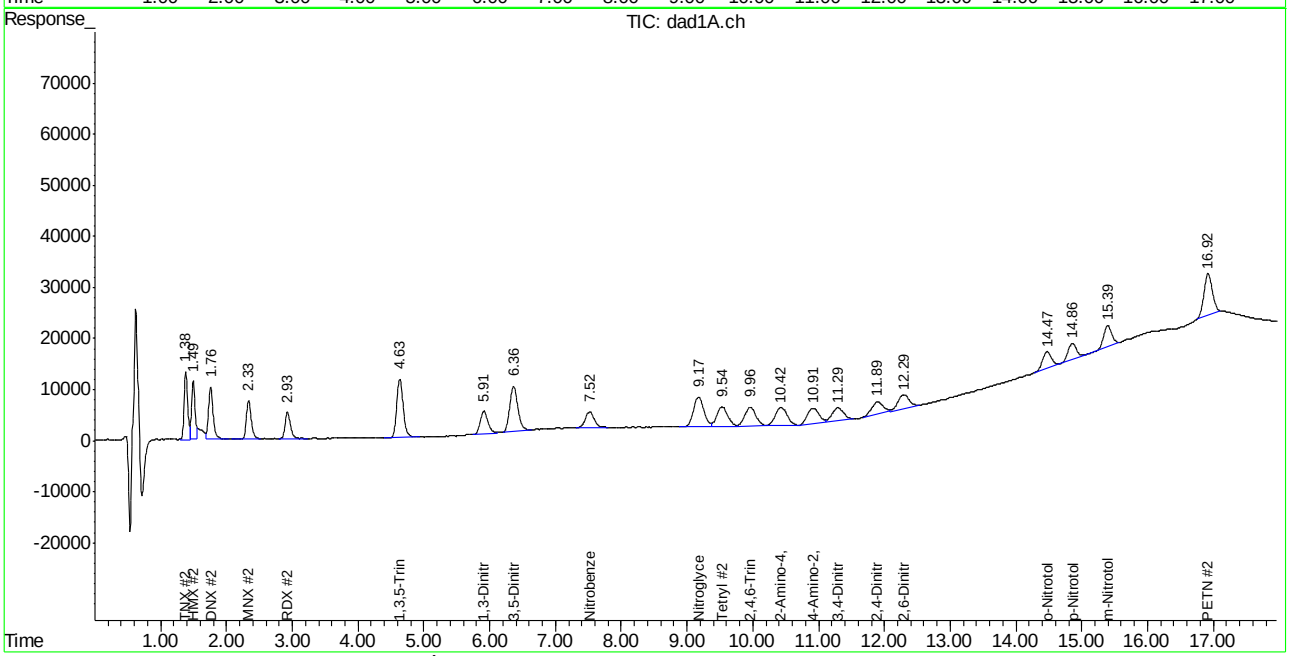
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1A.ch
Acq On : 23-Jan-2015, 09:05:23 Operator: KISMETL
Sample : ic1235-100 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:29 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045816.D
Injection Time: 01/23/15 09:05
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	1.38	Poorly defined baseline
HMX	2691-41-0	1	1.49	Overlapping peak
HMX	2691-41-0	2	1.49	Overlapping peak
1,3-Dinitrobenzene	99-65-0	2	5.91	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.52	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.89	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Missed peak
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1A.ch
Acq On : 23-Jan-2015, 09:30:20 Operator: KISMETL
Sample : ic1235-200 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:42 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.30	419047	662047	185.009m	198.484
	Spiked Amount 500.000	Range 70 - 136		Recovery =		37.00%#	39.70%#
	Target Compounds						
1)	TNX	1.38	1.38	645817	984396	202.580	208.661
2)	HMX	1.50	1.50	328914	907718	201.612	201.514
3)	DNX	1.76	1.76	550912	897084	186.595	191.650
4)	MNX	2.34	2.34	485670	753900	192.131	202.434
5)	RDX	2.93	2.93	379186	594539	197.178	201.486
6)	1,3,5-Trinitrobe	4.64	4.64	815197	1562512	200.659	196.886
7)	1,3-Dinitrobenze	5.92	5.92	1046565	714362	200.983	192.451m
8)	3,5-Dinitroanili	6.37	6.37	887026	1492668	191.215	184.100m
9)	Nitrobenzene	7.52	7.52	587897	580779	183.810	186.061m
10)	Nitroglycerin	0.00	9.18	0	1228177	N.D.	1035.273 #
11)	Tetryl	9.54	9.54	531459	848775	184.741	179.997
12)	2,4,6-Trinitroto	9.96	9.97	710966	833064	201.164	205.726
13)	2-Amino-4,6-Dini	10.44	10.44	595950	883848	194.439	206.057
14)	4-Amino-2,6-Dini	10.93	10.93	418976	801733	193.994	185.482
16)	2,4-Dinitrotolue	11.90	11.90	916943	586608	202.297m	231.465m
17)	2,6-Dinitrotolue	12.29	12.30	529195	679283	199.602m	215.482
18)	o-Nitrotoluene	14.47	14.48	458184	612611	205.243m	198.990m
19)	p-Nitrotoluene	14.85	14.86	698685	574070	197.596m	202.154
20)	m-Nitrotoluene	15.39	15.40	625916	706517	196.759m	193.015
21)	PETN	0.00	16.92	0	1414697	N.D.	958.331m#

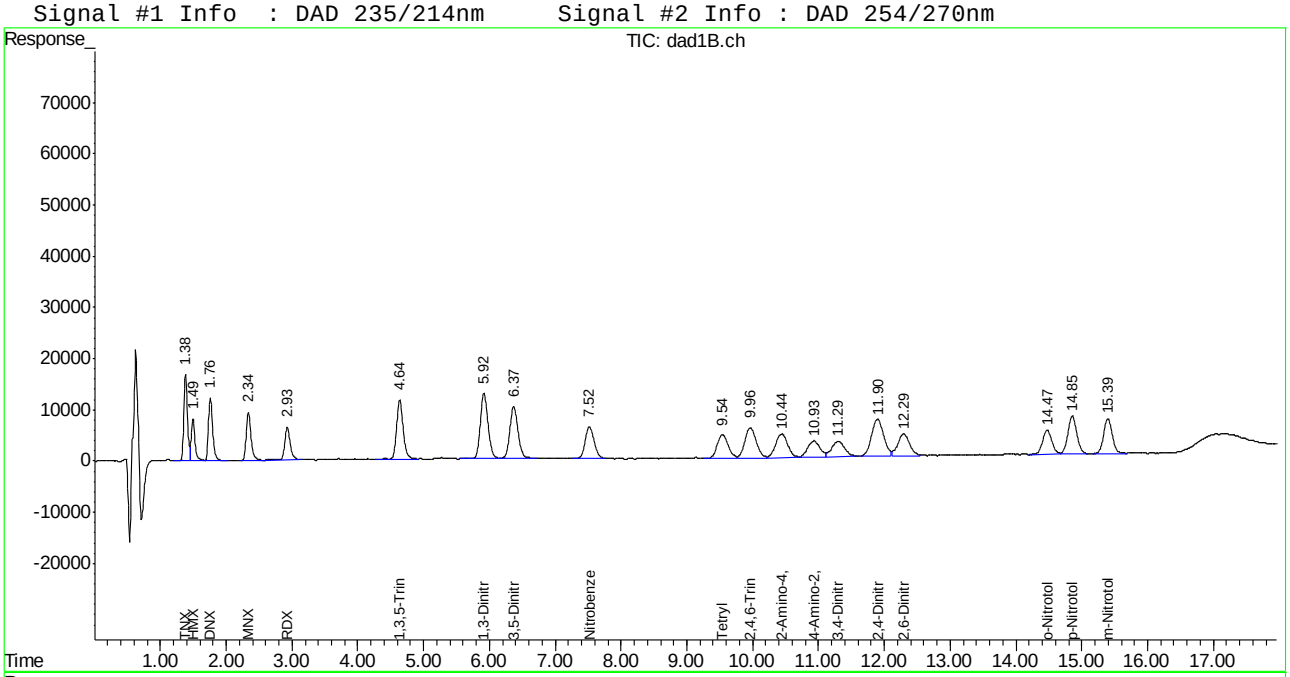
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045817.D 8330B_0107.M Fri Jan 23 14:50:23 2015 Page 1

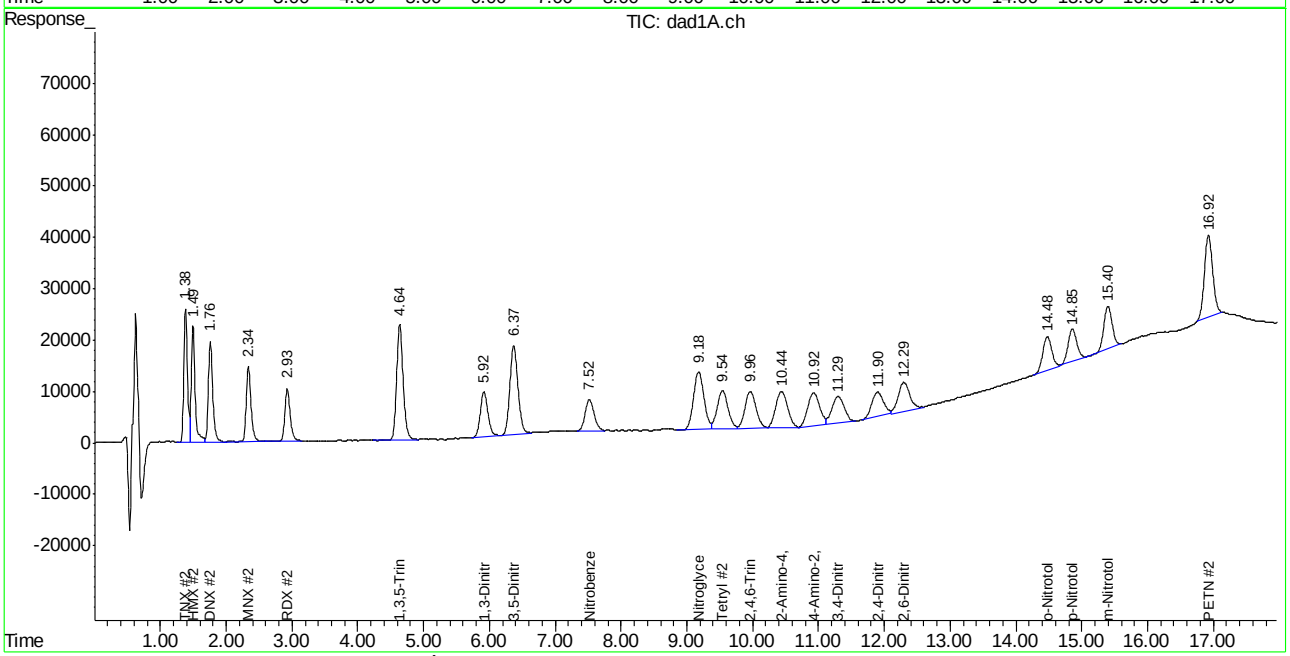
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1A.ch
Acq On : 23-Jan-2015, 09:30:20 Operator: KISMETL
Sample : ic1235-200 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:31 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045817.D
Injection Time: 01/23/15 09:30
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.37	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.52	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.29	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.90	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.90	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.48	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.85	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1A.ch
Acq On : 23-Jan-2015, 09:55:16 Operator: KISMETL
Sample : icc1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:43 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	1017850	1774675	449.381	517.180
	Spiked Amount 500.000	Range 70 - 136		Recovery =		89.88%	103.44%
	Target Compounds						
1)	TNX	1.38	1.38	1579981	2414118	495.609	511.718
2)	HMX	1.49	1.49	795478	2234251	487.599	496.005
3)	DNX	1.76	1.76	1356349	2205261	459.397	471.126
4)	MNX	2.34	2.34	1181790	1826964	467.516	490.567
5)	RDX	2.93	2.93	894778	1419161	465.288	480.947
6)	1,3,5-Trinitrobe	4.64	4.64	1969901	3795702	484.886	478.280
7)	1,3-Dinitrobenze	5.91	5.91	2559287	1741625	491.487	469.200
8)	3,5-Dinitroanili	6.37	6.37	2136678	3644710	460.601	449.525
9)	Nitrobenzene	7.52	7.52	1498292	1455731	468.451	466.364
10)	Nitroglycerin	0.00	9.18	0	3055086	N.D. d	2575.236
11)	Tetryl	9.54	9.54	1290324	2089632	448.530	443.141
12)	2,4,6-Trinitroto	9.96	9.96	1766223	2075678	499.742	512.591
13)	2-Amino-4,6-Dini	10.43	10.43	1511769	2199677	493.239	502.648
14)	4-Amino-2,6-Dini	10.92	10.92	1086430	2121041	503.039	490.706
16)	2,4-Dinitrotolue	11.89	11.89	2287858	1523372	504.749	601.094
17)	2,6-Dinitrotolue	12.29	12.29	1283271	1667968	484.025	529.112
18)	o-Nitrotoluene	14.47	14.47	1123944	1509912	503.470	490.453m
19)	p-Nitrotoluene	14.86	14.86	1751347	1417064	495.302	492.846
20)	m-Nitrotoluene	15.40	15.40	1567788	1785271	492.839	487.723
21)	PETN	0.00	16.92	0	3525351	N.D. d	2388.109m

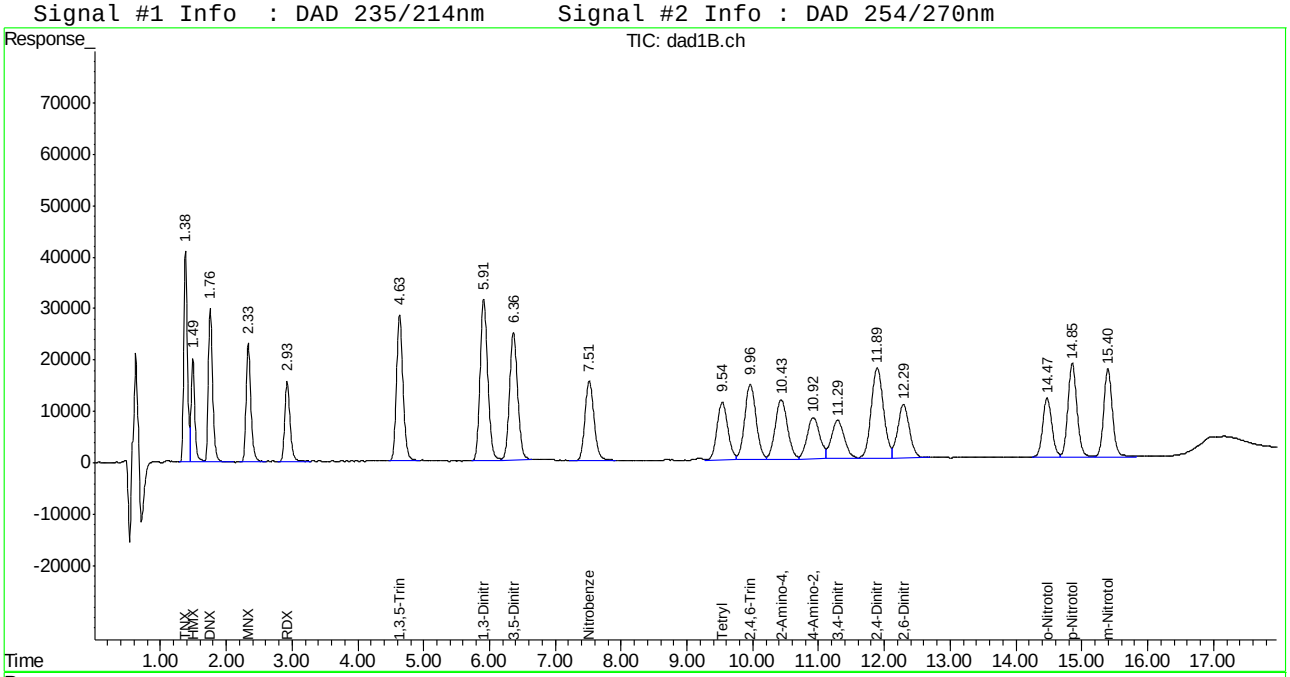
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045818.D 8330B_0107.M Fri Jan 23 14:50:24 2015 Page 1

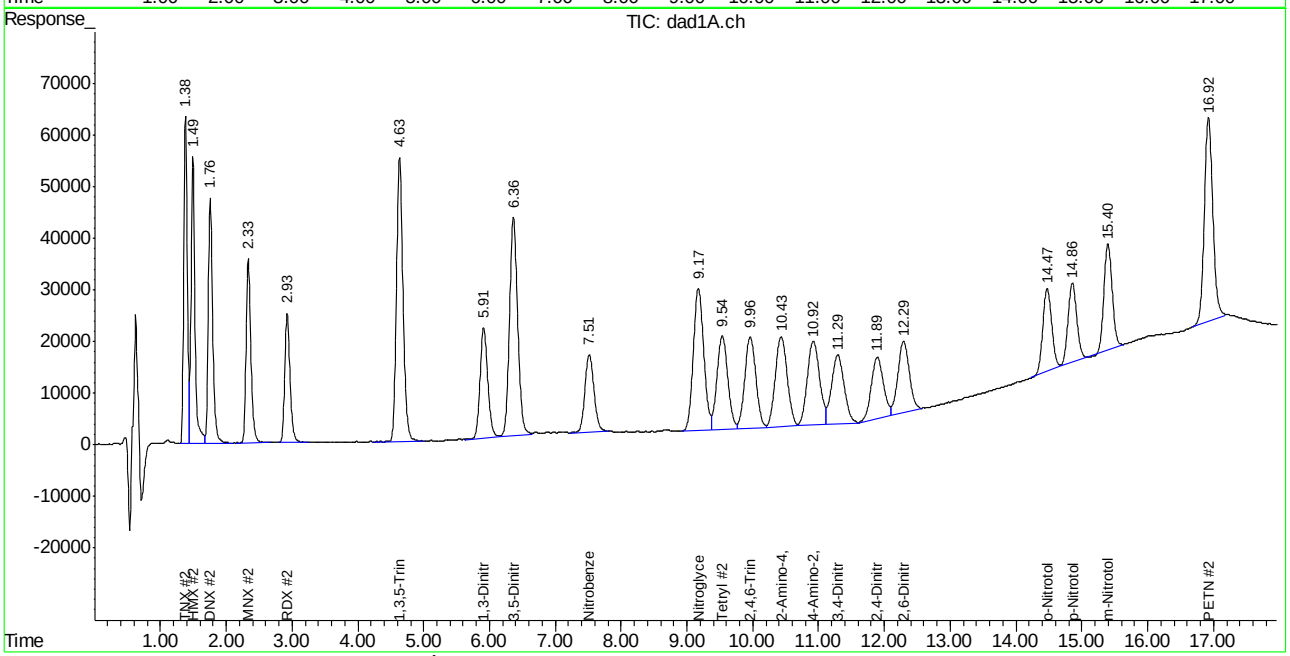
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1A.ch
Acq On : 23-Jan-2015, 09:55:16 Operator: KISMETL
Sample : icc1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:32 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-ICC1235 **Method:** SW846 8330A
Lab FileID: BB045818.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 09:55 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1A.ch
Acq On : 23-Jan-2015, 10:20:12 Operator: KISMETL
Sample : ic1235-1000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:44 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.30	2093074	3597419	924.093	1005.321
	Spiked Amount 500.000	Range 70 - 136		Recovery =		184.82%#	201.06%#
	Target Compounds						
1)	TNX	1.38	1.38	3151820	4809440	988.665	1019.451
2)	HMX	1.49	1.50	1549694	4250596	949.905	943.635
3)	DNX	1.76	1.76	2692893	4268569	912.086	911.925
4)	MNX	2.34	2.34	2326982	3609530	920.554	969.213
5)	RDX	2.93	2.93	1753066	2809601	911.602	952.161
6)	1,3,5-Trinitrobe	4.63	4.64	3924810	7637435	966.081	962.361
7)	1,3-Dinitrobenze	5.91	5.91	5121609	3529154	983.557	950.765
8)	3,5-Dinitroanili	6.37	6.36	4383626	7278881	944.974	897.750m
9)	Nitrobenzene	7.52	7.51	3028770	2955506	946.964	946.838m
10)	Nitroglycerin	0.00	9.17	0	6125686	N.D. d	5163.551
11)	Tetryl	9.54	9.54	2589682	4190433	900.200	888.650
12)	2,4,6-Trinitroto	9.97	9.97	3617711	4289718	1023.609	1059.350
13)	2-Amino-4,6-Dini	10.43	10.43	3132395	4598167	1021.995	1015.848
14)	4-Amino-2,6-Dini	10.92	10.92	2270320	4467902	1051.203	1033.655
16)	2,4-Dinitrotolue	11.89	11.90	4632178	3016536	1021.955	1190.269
17)	2,6-Dinitrotolue	12.29	12.29	2636335	3396797	994.374	1077.531
18)	o-Nitrotoluene	14.48	14.47	2252092	3040803	1008.823	987.721m
19)	p-Nitrotoluene	14.86	14.86	3509463	2929185	992.518	997.381
20)	m-Nitrotoluene	15.40	15.40	3137505	3649217	986.285	996.940
21)	PETN	0.00	16.92	0	6978906	N.D. d	4727.583m

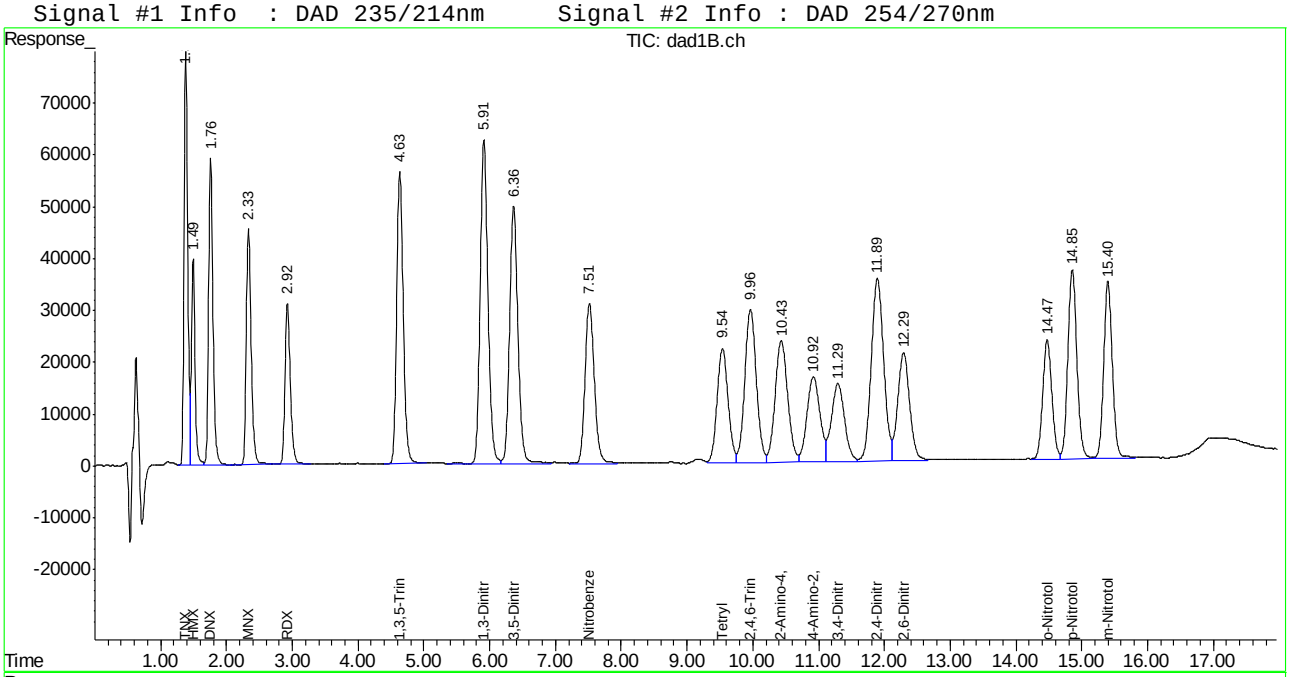
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045819.D 8330B_0107.M Fri Jan 23 14:50:25 2015 Page 1

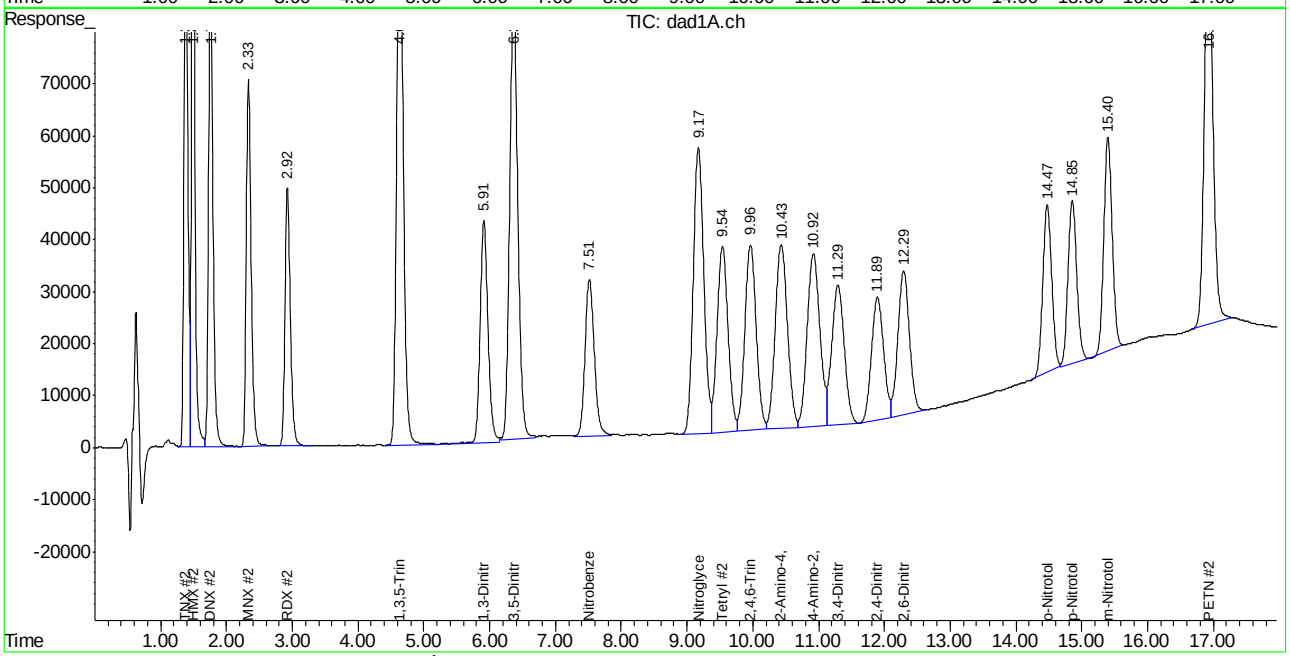
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1A.ch
Acq On : 23-Jan-2015, 10:20:12 Operator: KISMETL
Sample : ic1235-1000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:33 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045819.D
Injection Time: 01/23/15 10:20
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

BB045820.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1A.ch
Acq On : 23-Jan-2015, 10:45:07 Operator: KISMETL
Sample : ic1235-2000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:45 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	4339319	7651941	1915.812	1976.832
	Spiked Amount 500.000	Range 70 - 136		Recovery =		383.16%#	395.37%#
	Target Compounds						
1)	TNX	1.38	1.38	6541013	9977549	2051.789	2114.929
2)	HMX	1.49	1.49	3254466	8893092	1994.867	1974.272
3)	DNX	1.76	1.76	5640488	8970353	1910.441	1916.401
4)	MNX	2.34	2.34	4885390	7573854	1932.659	2033.694
5)	RDX	2.93	2.93	3676805	5883122	1911.954	1993.762
6)	1,3,5-Trinitrobe	4.63	4.63	8166660	15892279	2010.201	2002.519
7)	1,3-Dinitrobenze	5.91	5.91	10582042	7257799	2032.183	1955.275
8)	3,5-Dinitroanili	6.36	6.36	9014679	15123011	1943.285	1865.215m
9)	Nitrobenzene	7.51	7.51	6126452	5945040	1915.474	1904.577m
10)	Nitroglycerin	0.00	9.17	0	12785798	N.D. d	10777.588
11)	Tetryl	9.54	9.54	5571011	9086155	1936.540	1926.867
12)	2,4,6-Trinitroto	9.97	9.97	7525920	9039833	2129.413	2232.397
13)	2-Amino-4,6-Dini	10.43	10.43	6562744	9878743	2141.202	2046.107
14)	4-Amino-2,6-Dini	10.92	10.92	4774526	9627480	2210.701	2227.331
16)	2,4-Dinitrotolue	11.89	11.89	9548837	6303219	2106.673	2487.132
17)	2,6-Dinitrotolue	12.29	12.29	5399207	7100603	2036.476	2252.452
18)	o-Nitrotoluene	14.48	14.47	4519998	6368740	2024.729	2068.708m
19)	p-Nitrotoluene	14.86	14.86	7089919	6049141	2005.113	1978.949
20)	m-Nitrotoluene	15.40	15.40	6327401	7538005	1989.039	2059.328
21)	PETN	0.00	16.92	0	14488827	N.D. d	9814.881m

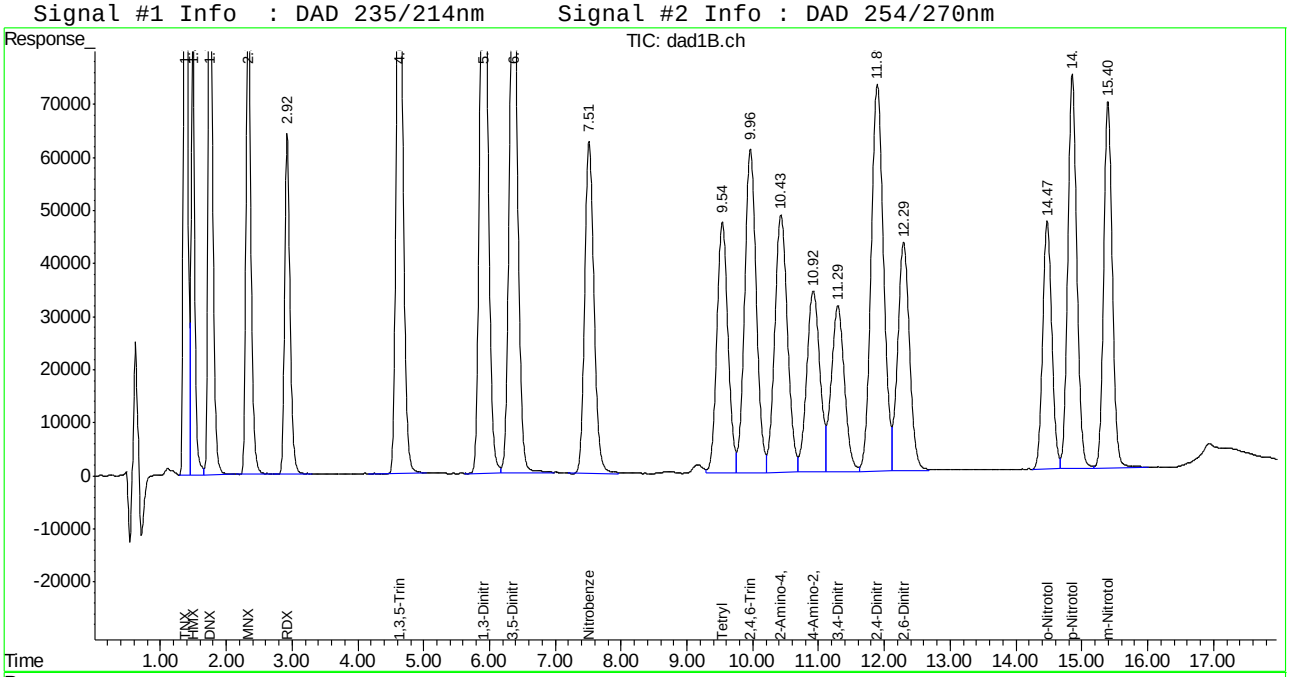
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045820.D 8330B_0107.M Fri Jan 23 14:50:26 2015 Page 1

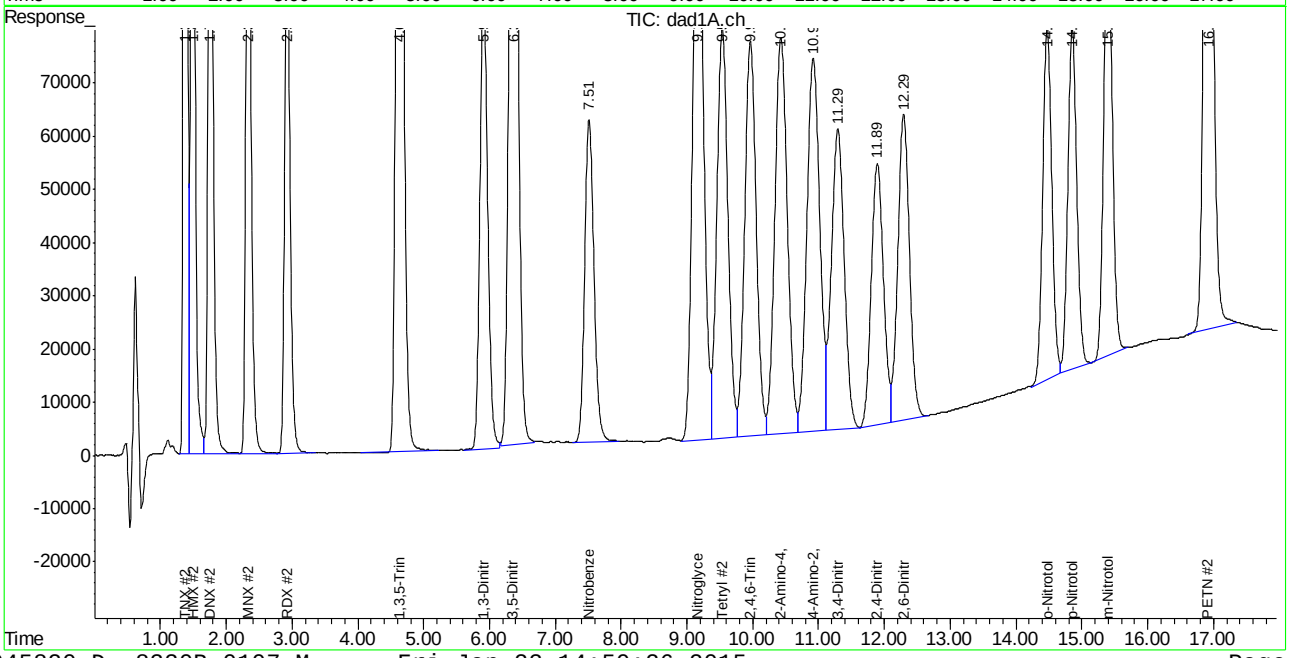
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1A.ch
Acq On : 23-Jan-2015, 10:45:07 Operator: KISMETL
Sample : ic1235-2000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:34 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045820.D
Injection Time: 01/23/15 10:45
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:38:07 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.38	1.38	1707035	2588651	529.286	519.029
2)	HMX	1.49	1.49	923099	2491555	573.328m	565.918m
3)	DNX	1.76	1.75	1484274	2340316	537.360	499.130
4)	MNX	2.33	2.33	1265753	1939459	509.783	520.625
5)	RDX	2.92	2.92	927458	1501464	491.716	497.299
6)	1,3,5-Trinitrobe	4.63	4.63	2121574	4103269	520.053	526.624
7)	1,3-Dinitrobenze	5.91	5.91	2447703	1678277	457.959	469.936
8)	3,5-Dinitroanili	6.36	6.36	2138846	3648010	468.838	482.526m
9)	Nitrobenzene	7.51	7.51	1607482	1573535	524.094	530.075m
10)	Nitroglycerin	0.00	9.18	0	3159453	N.D. d	2533.654
11)	Tetryl	9.54	9.54	1222859	1980687	451.877	457.633
12)	2,4,6-Trinitroto	9.96	9.96	1691954	2100276	463.147	496.730
13)	2-Amino-4,6-Dini	10.43	10.43	1641103	2490389	541.123	546.801
14)	4-Amino-2,6-Dini	10.92	10.91	1169545	2336951	555.255	495.904
16)	2,4-Dinitrotolue	11.89	11.89	2429182	1544153	525.910	534.743
17)	2,6-Dinitrotolue	12.29	12.29	1406995	1779950	547.381	537.287
18)	o-Nitrotoluene	14.47	14.47	1178143	1609545	515.628	534.800m
19)	p-Nitrotoluene	14.86	14.86	1810650	1469658	502.087	500.973
20)	m-Nitrotoluene	15.40	15.39	1751802	2034758	543.666	562.797m
21)	PETN	0.00	16.92	0	3779066	N.D. d	2629.624m

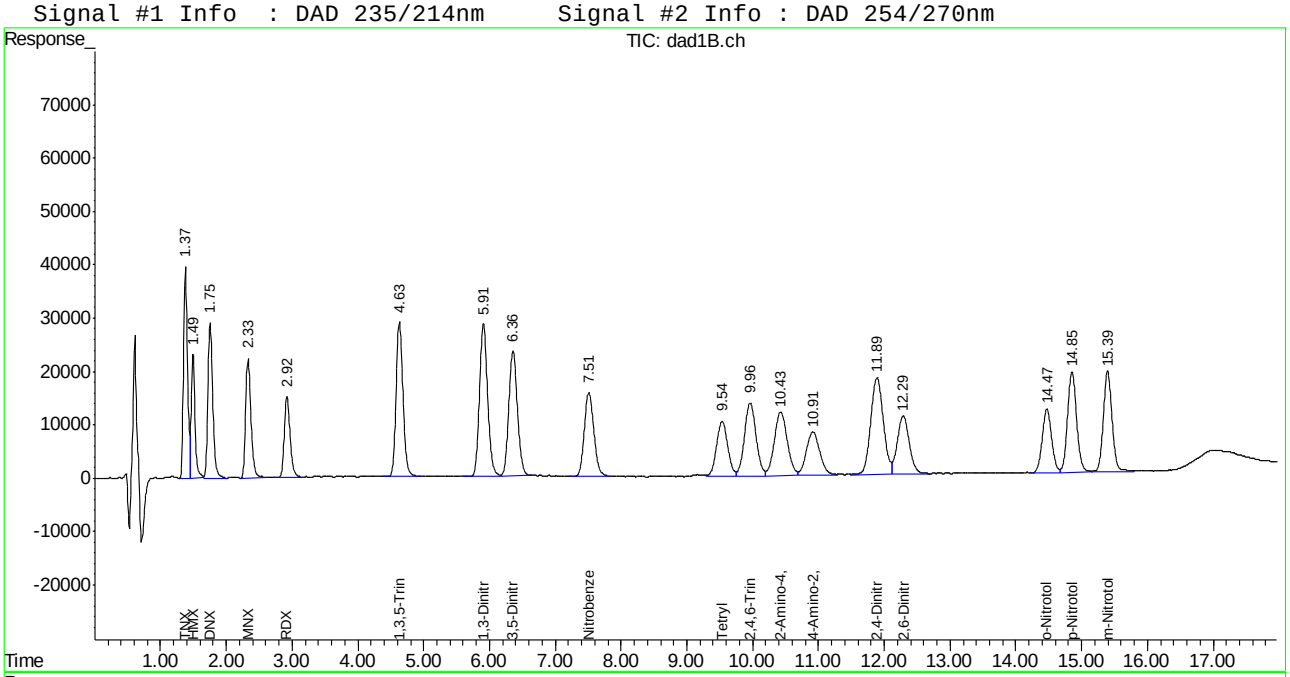
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045821.D 8330B_0107.M Fri Jan 23 14:50:27 2015 Page 1

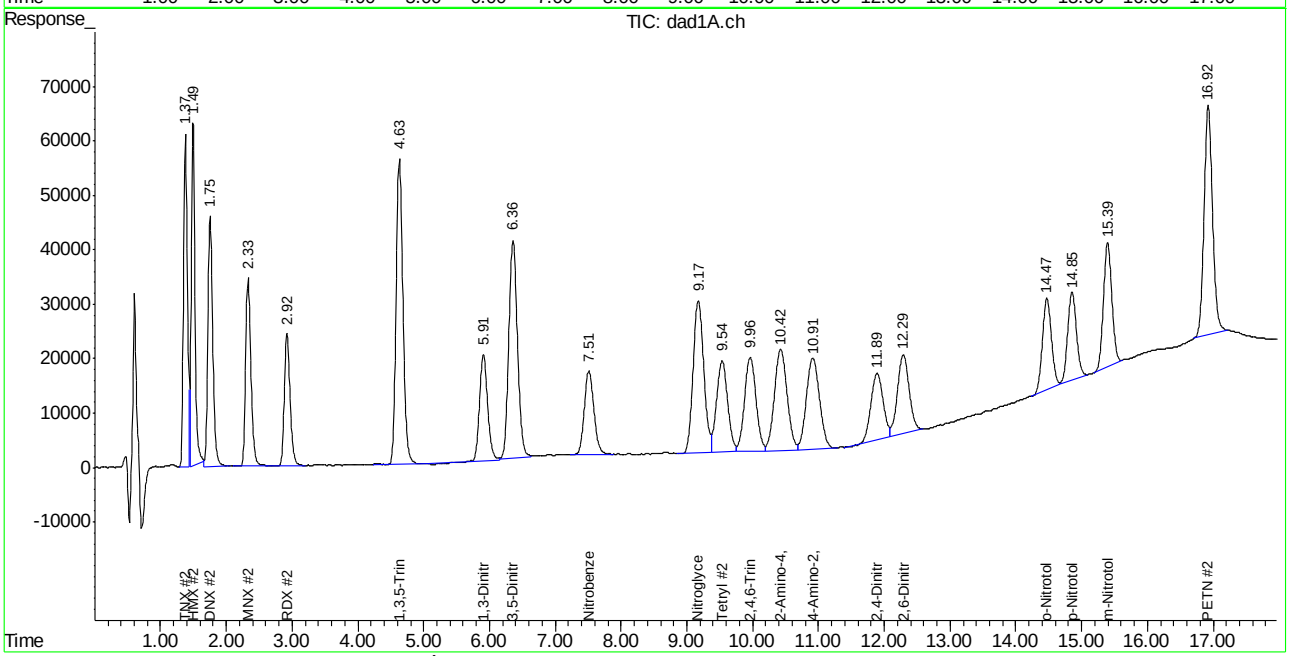
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:39 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA21555

Manual Integration Approval Summary

Sample Number: GBB1235-ICV1235 **Method:** SW846 8330A
Lab FileID: BB045821.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 11:10 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.39	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045929.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045929.D\dad1A.ch
Acq On : 02-Feb-2015, 17:06:18 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:42 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.38	11.38	2118664	3681105	953.206	977.930
	Spiked Amount 500.000	Range 70 - 136		Recovery =		190.64%#	195.59%#
	Target Compounds						
1)	TNX	1.39	1.39	3203618	4901509	993.319	982.760
2)	HMX	1.50	1.50	1560702	4306985	969.338	978.265
3)	DNX	1.77	1.77	2747978	4354321	994.865	928.667
4)	MNX	2.35	2.35	2396681	3684509	965.265	989.063
5)	RDX	2.95	2.95	1808778	2876294	958.971	952.655
6)	1,3,5-Trinitrobe	4.66	4.66	3989483	7765765	977.927	996.679
7)	1,3-Dinitrobenze	5.95	5.95	5140773	3462472	961.826	969.531
8)	3,5-Dinitroanili	6.42	6.41	4146836	6999447	908.992	925.824
9)	Nitrobenzene	7.56	7.56	3029829	2924734	987.829	985.251
10)	Nitroglycerin	0.00	9.22	0	6220438	N.D. d	4988.343
11)	Tetryl	9.62	9.62	2685500	4324511	992.358	999.167
12)	2,4,6-Trinitroto	10.03	10.02	3659158	4329323	1001.640	1023.915
13)	2-Amino-4,6-Dini	10.54	10.54	3167248	4639569	1044.341	1018.684
14)	4-Amino-2,6-Dini	11.03	11.03	2305734	4527478	1094.674	960.736
16)	2,4-Dinitrotolue	11.97	11.97	4671729	3088274	1011.414	1069.474
17)	2,6-Dinitrotolue	12.37	12.37	2641047	3418081	1027.480	1031.766
18)	o-Nitrotoluene	14.54	14.53	2248490	3092245	984.078	1027.453m
19)	p-Nitrotoluene	14.91	14.91	3517364	2940475	975.354	1002.342
20)	m-Nitrotoluene	15.45	15.45	3151414	3692869	978.030	1021.417
21)	PETN	0.00	16.96	0	6858432	N.D. d	4772.368m

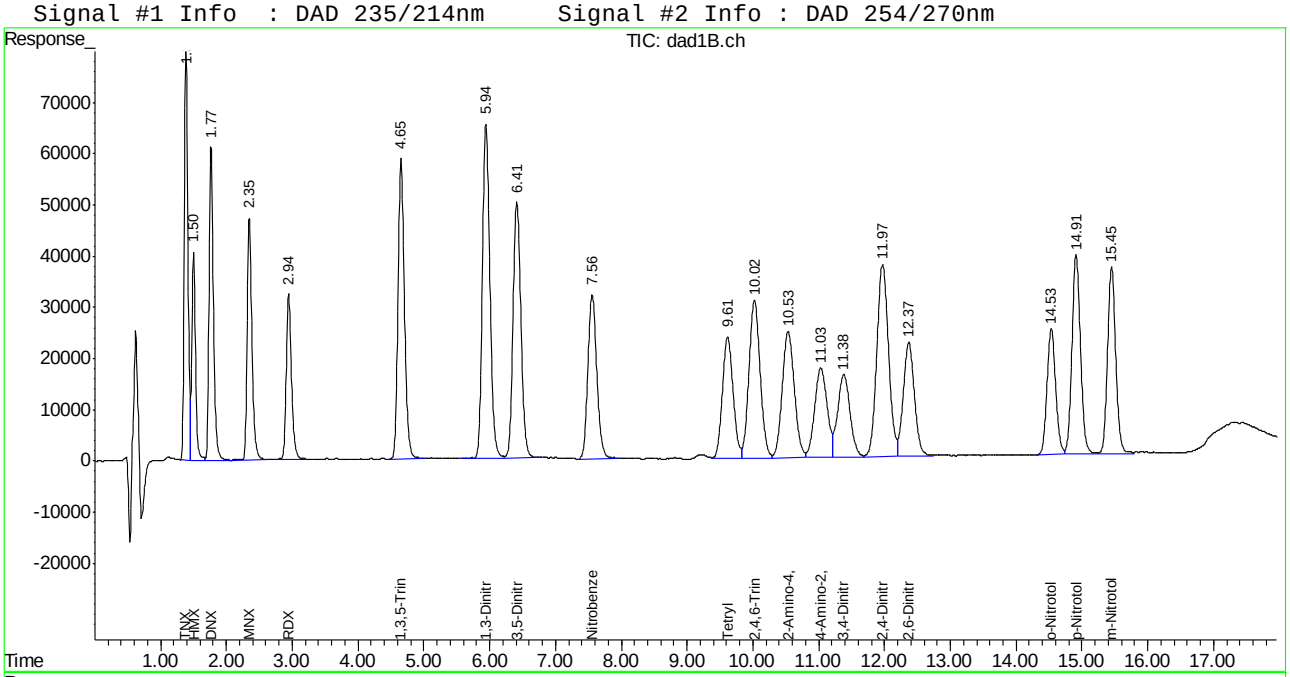
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045929.D 8330B_0107.M Tue Feb 03 08:02:02 2015 Page 1

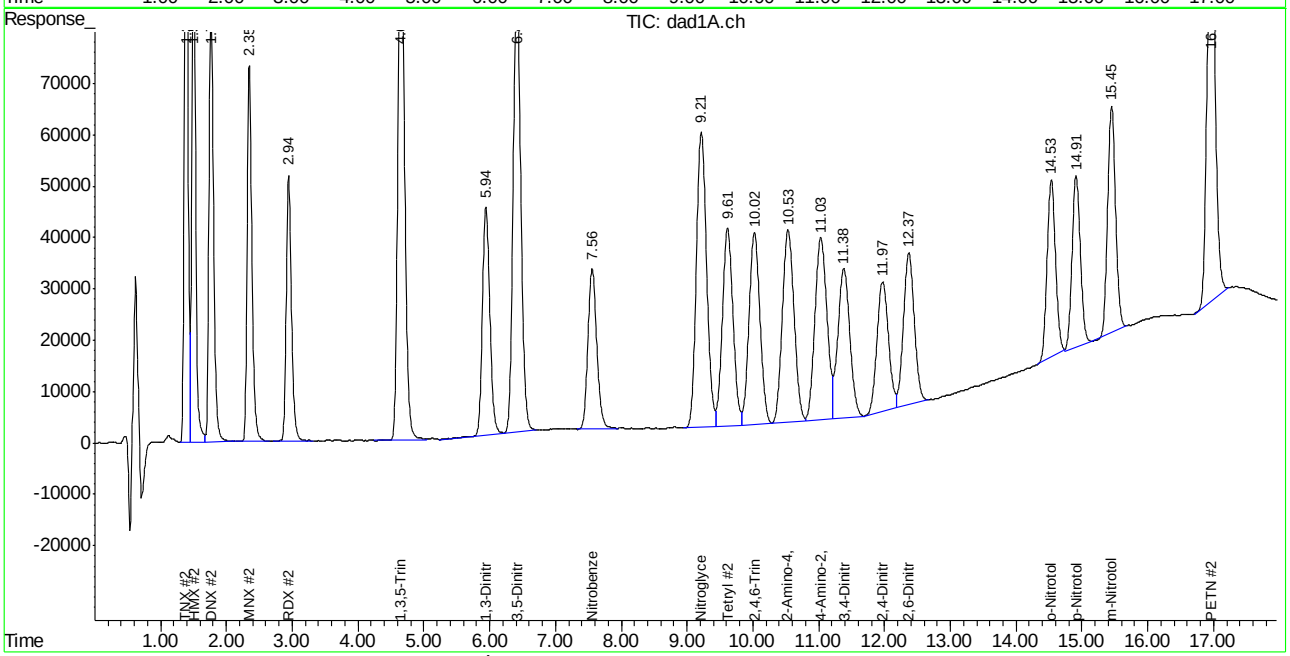
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045929.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045929.D\dad1A.ch
Acq On : 02-Feb-2015, 17:06:18 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:11 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1239-CC1235
Lab FileID: BB045929.D
Injection Time: 02/02/15 17:06
Method: SW846 8330A
Analyst approved: 02/03/15 08:20 Kismet Lugo
Supervisor approved: 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline
PETN	78-11-5	2	16.96	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045941.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045941.D\dad1A.ch
Acq On : 02-Feb-2015, 22:05:58 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:06:54 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	2103194	3658040	946.246	971.802
Spiked Amount	500.000	Range	70 - 136	Recovery	=	189.25%#	194.36%#
	Target Compounds						
1)	TNX	1.39	1.39	3198491	4881902	991.729	978.829
2)	HMX	1.50	1.50	1568860	4284408	974.405	973.137
3)	DNX	1.77	1.77	2741312	4334274	992.452	924.391
4)	MNX	2.35	2.35	2385415	3669009	960.728	984.902
5)	RDX	2.94	2.94	1812245	2860168	960.809	947.314
6)	1,3,5-Trinitrobe	4.65	4.65	3964606	7730230	971.829	992.118
7)	1,3-Dinitrobenze	5.94	5.94	5139788	3547681	961.642	993.390
8)	3,5-Dinitroanili	6.41	6.40	4129803	7042811	905.258	931.560m
9)	Nitrobenzene	7.55	7.55	3013539	2955885	982.517	995.745m
10)	Nitroglycerin	0.00	9.21	0	6187299	N.D. d	4961.768
11)	Tetryl	9.60	9.60	2667334	4296963	985.646	992.802
12)	2,4,6-Trinitroto	10.01	10.01	3643572	4280000	997.374	1012.250
13)	2-Amino-4,6-Dini	10.52	10.52	3143937	4579797	1036.655	1005.560
14)	4-Amino-2,6-Dini	11.02	11.02	2282599	4466079	1083.690	947.708
16)	2,4-Dinitrotolue	11.96	11.96	4644426	3062882	1005.503	1060.681
17)	2,6-Dinitrotolue	12.36	12.36	2621153	3396795	1019.741	1025.341
18)	o-Nitrotoluene	14.53	14.53	2252656	3162583	985.901	1050.824m
19)	p-Nitrotoluene	14.90	14.90	3506654	2943441	972.384	1003.353
20)	m-Nitrotoluene	15.44	15.44	3132661	3711292	972.210	1026.513
21)	PETN	0.00	16.95	0	6837352	N.D. d	4757.700m

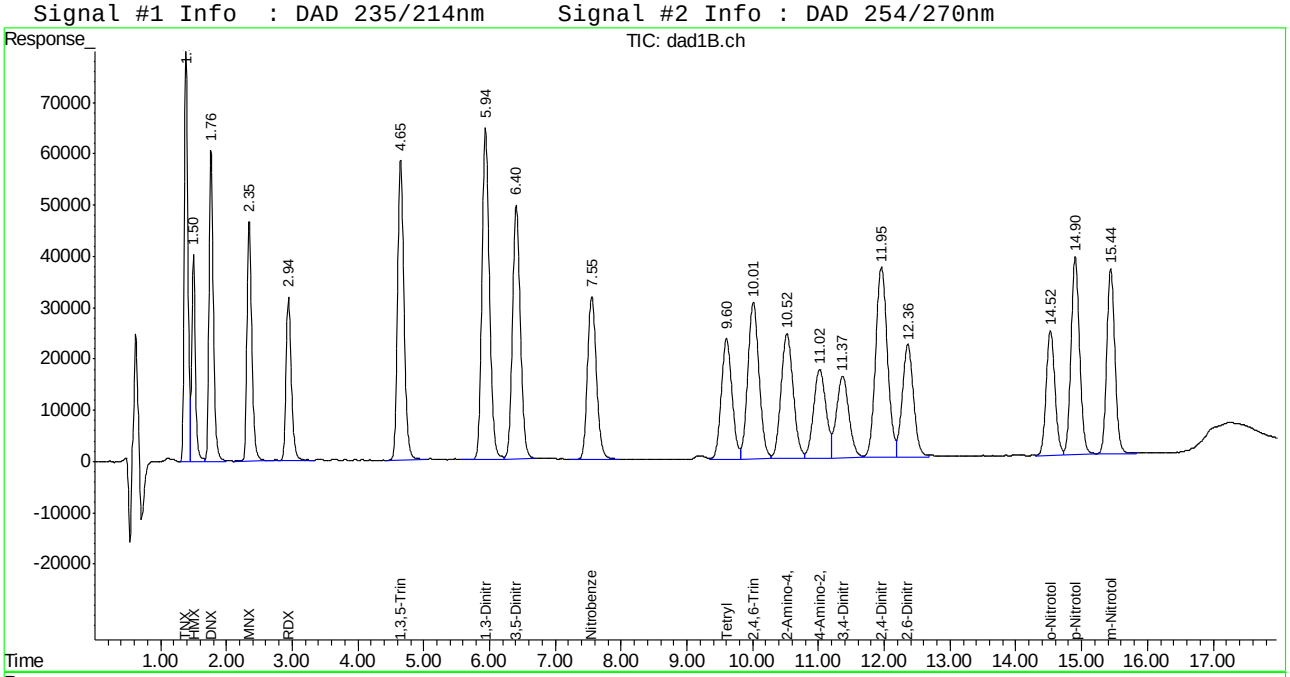
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045941.D 8330B_0107.M Tue Feb 03 08:02:14 2015 Page 1

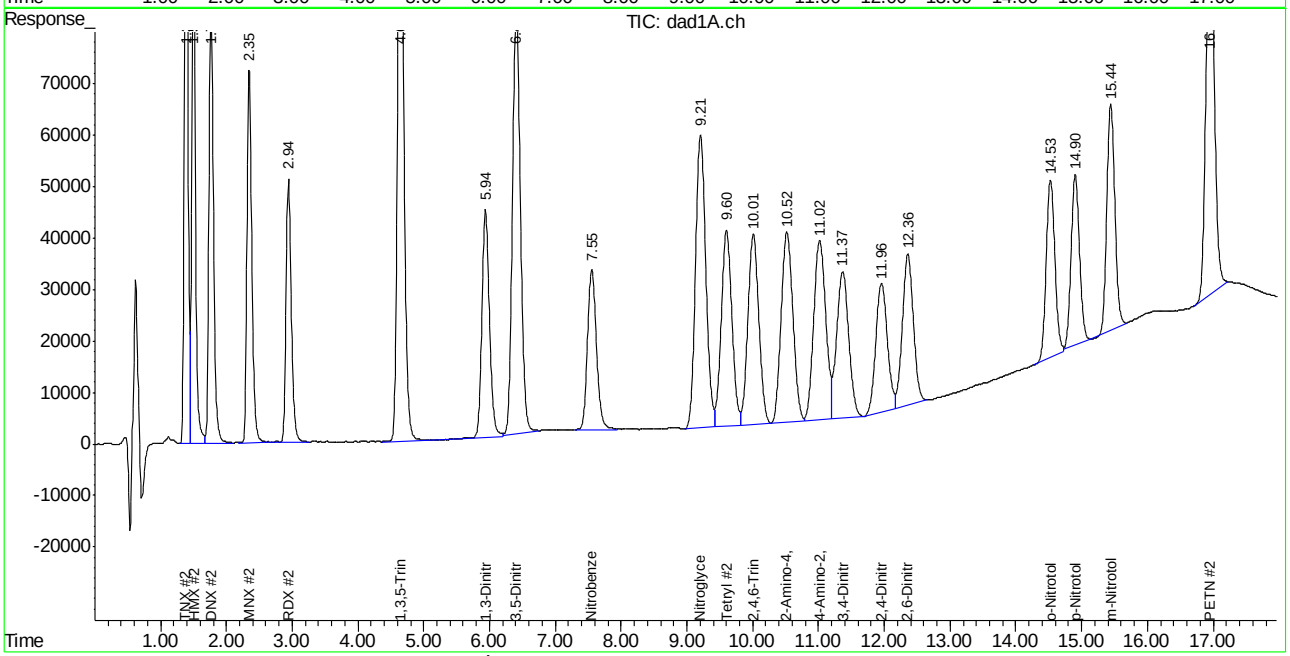
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045941.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045941.D\dad1A.ch
Acq On : 02-Feb-2015, 22:05:58 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:13 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1239-CC1235 **Method:** SW846 8330A
Lab FileID: BB045941.D **Analyst approved:** 02/03/15 08:20 Kismet Lugo
Injection Time: 02/02/15 22:05 **Supervisor approved:** 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.40	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.55	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline
PETN	78-11-5	2	16.95	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/03/15 15:30

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045948.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045948.D\dad1A.ch
Acq On : 03-Feb-2015, 01:00:44 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 03 07:07:01 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.37	11.37	2102126	3637368	945.766	966.311
Spiked Amount	500.000	Range	70 - 136	Recovery	=	189.15%#	193.26%#
	Target Compounds						
1)	TNX	1.38	1.38	3184554	4866152	987.408	975.671
2)	HMX	1.50	1.50	1570091	4328138	975.170	983.069
3)	DNX	1.77	1.77	2737360	4347357	991.021	927.182
4)	MNX	2.35	2.35	2357327	3629512	949.415	974.300
5)	RDX	2.94	2.94	1774494	2830181	940.794	937.382
6)	1,3,5-Trinitrobe	4.64	4.64	3977088	7671237	974.888	984.547
7)	1,3-Dinitrobenze	5.94	5.94	5102834	3546370	954.728	993.023
8)	3,5-Dinitroanili	6.40	6.40	4110344	7000865	900.993	926.012m
9)	Nitrobenzene	7.55	7.55	3066419	2938460	999.758	989.875m
10)	Nitroglycerin	0.00	9.20	0	6175560	N.D. d	4952.354
11)	Tetryl	9.60	9.60	2667386	4294817	985.665	992.307
12)	2,4,6-Trinitroto	10.00	10.00	3628535	4288772	993.257	1014.324
13)	2-Amino-4,6-Dini	10.52	10.52	3136037	4581304	1034.050	1005.891
14)	4-Amino-2,6-Dini	11.02	11.02	2288782	4467375	1086.626	947.982
16)	2,4-Dinitrotolue	11.95	11.96	4655828	3064004	1007.972	1061.070
17)	2,6-Dinitrotolue	12.36	12.36	2626449	3414787	1021.801	1030.772
18)	o-Nitrotoluene	14.53	14.53	2253525	3103260	986.282	1031.113m
19)	p-Nitrotoluene	14.90	14.90	3513487	2946555	974.279	1004.414
20)	m-Nitrotoluene	15.44	15.44	3124029	3715637	969.531	1027.715
21)	PETN	0.00	16.94	0	6759720	N.D. d	4703.681m

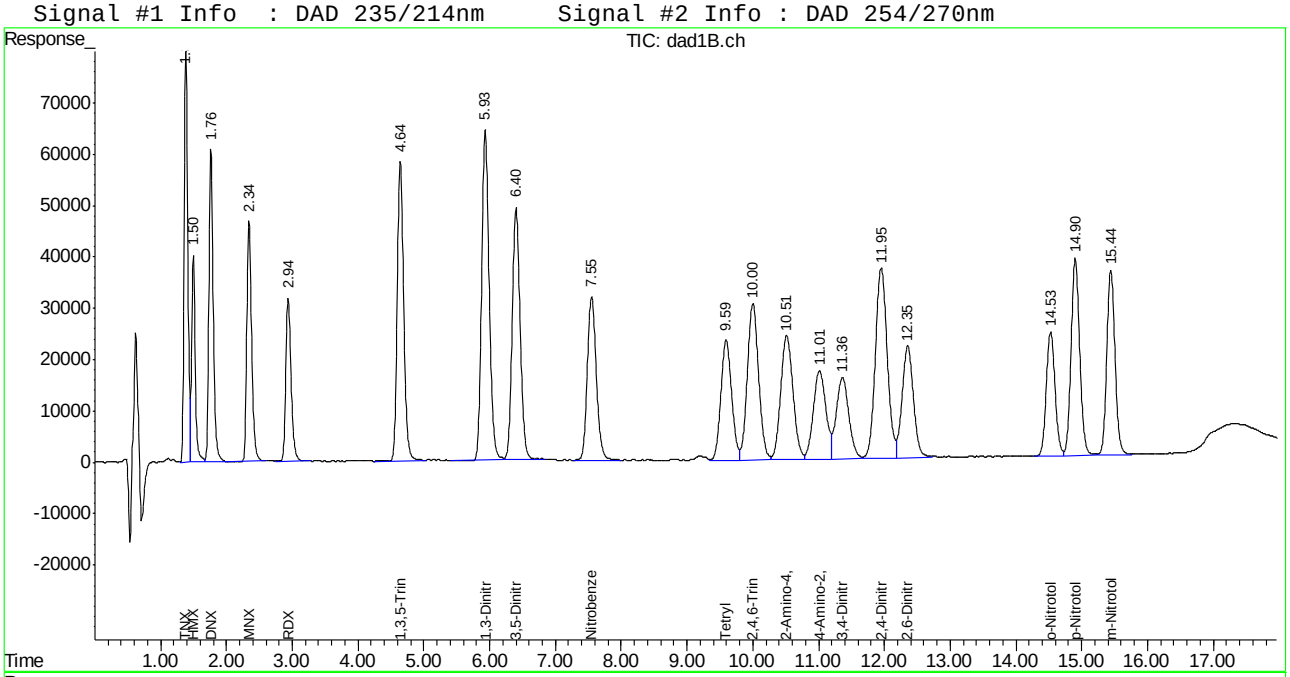
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045948.D 8330B_0107.M Tue Feb 03 08:02:21 2015 Page 1

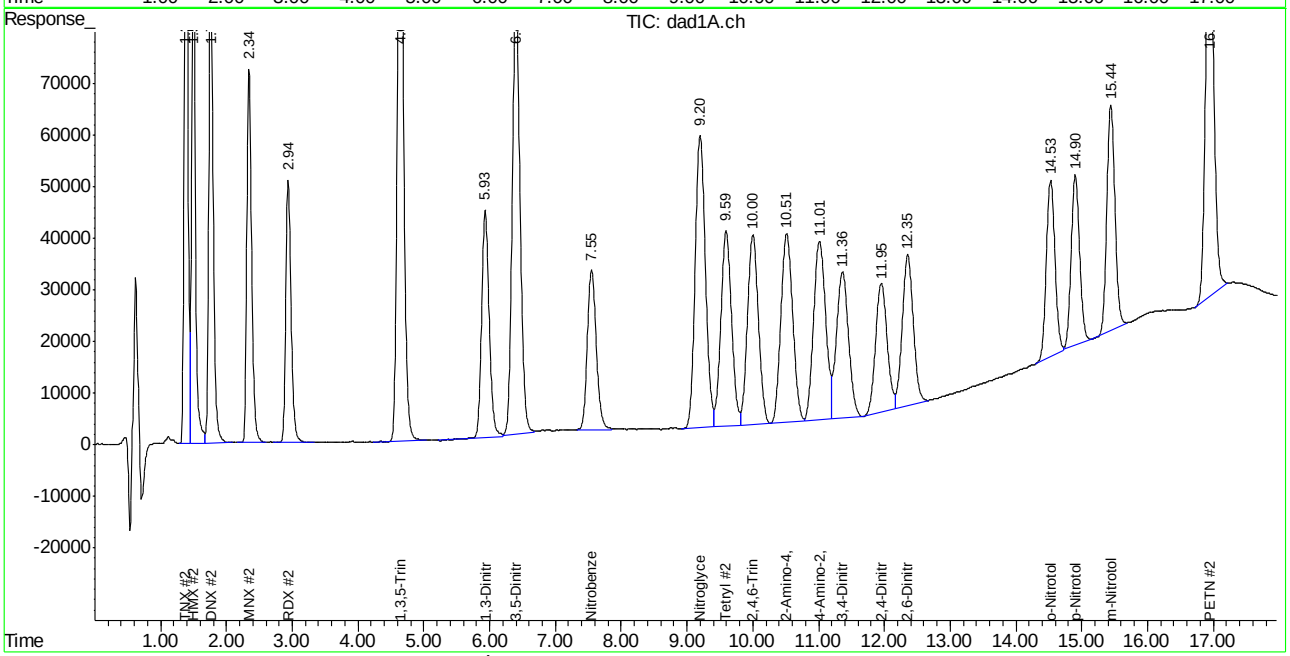
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0202BPL\BB045948.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0202BPL\BB045948.D\dad1A.ch
Acq On : 03-Feb-2015, 01:00:44 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP54777,GBB1239,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 3 7:14 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 02 07:17:46 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1239-ECC1235 **Method:** SW846 8330A
Lab FileID: BB045948.D **Analyst approved:** 02/03/15 08:20 Kismet Lugo
Injection Time: 02/03/15 01:00 **Supervisor approved:** 02/03/15 15:30 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.40	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.55	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.53	Poorly defined baseline
PETN	78-11-5	2	16.94	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330-0107 M
CALIB. DATE:	01/07/15
RUN BATCH: GBB	1235

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	254

JL 01/23/15

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045812	1	solvent	8330	—	—		ND
BB 13	2	~~cc1235-500~~ cc1235-1000		LC509	1:1	PDB	Pass
BB 14	3	ic1235-20			50+450 or 50+450	PDB	✓
BB 15	4	ic1235-50			10+390	PDB oMP52	✓
BB 16	5	ic1235-100			20+475	HMX or PDB oMP52	✓
BB 17	6	ic1235-200			50+450	PDB	✓
BB 18	7	icc1235-500			1:4	PDB	✓
BB 19	8	ic1235-1000			1:1	PDB	✓
BB 20	9	ic1235-2000		↓	1x	PDB	✓ Pass
BB 21	10	icv1235-500		LC497 E4944 LC498 E5029 *		PDB	✓ Pass
BB 22	3	cc1235-20	↓	LC509	50+450 or 50+450	PDB	✓ Pass 4A↓52
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

* LC497 25ml
LC510 25ml + 920
E4944 10ml
E5029 20ml

Analyst's Signature: Kimit Lyo

ACCUTEST LABORATORIES SE

DATE:	02/02/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330-0107M
CALIB. DATE:	01/23 L15
RUN BATCH: GBB	1239

ANALYST:	KL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045908	1	solvent	8330	—	—		ND
BB 09	2	CC1235-1000		LC511	1:1	PDB	Pass
BB 10	4	op54777-bs		op54777	1x	PDB	✓
BB 11	5	op54777-mb				PDB	ND
BB 12	6	C38230-1				Surr OP	ND
BB 13	7	op54777-ms				PDB	✓
BB 14	8	op54777-msd				PDB	✓
BB 15	9	FA21768-1			↓	PDB	✓ RM (50x)
BB 16	31	FA21768-1			10+490	Hmxdf PDB	✓
BB 17	10	FA21768-2			1x	PDB	✓ RM (20x)
BB 18	32	FA21768-2			25+475	PDB	✓
BB 19	11	FA21768-3		↓	1x	PDB	✓ RM (10x)
BB 20	2	CC1235-1000		LC511	1:1	PDB	Pass
BB 21	1	ccb		—	—		ND
BB 22	12	FA21768-4		op54777	1x	PDB	✓ RM (40x)
BB 23	34	FA21768-4			10+390	PDB	✓
BB 24	13	FA21768-5			1x	PDB	✓
BB 25	14	FA21768-6			↓	PDB	✓ RM (10x)
BB 26	15	FA21768-7		↓	↓	PDB	✓ RM (10x)
BB 27	1	solvent	↓	—	—		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kismet Lay

ACCUTEST LABORATORIES SE

DATE:	02/02/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330-0107M
CALIB. DATE:	01/23/15
RUN BATCH: GBB	1239

ANALYST:	KL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 054928	33	FA21768-3	8330	op54777	50.450	PDB	✓
BB 29	3	cc1235-1000		LC511	1:1	PDB	Pass
BB 30	1	clb		—	—		ND
BB 31	16	op54769-bs		op54769	1X	PDB	✓
BB 32	17	op54769-mb				PDB	ND
BB 33	18	FA21555-1				PDB	ND
BB 34	19	op54769-ms				PDB	✓
BB 35	20	op54769-MSd				PDB	✓
BB 36	21	FA21555-2				PDB	ND
BB 37	22	FA21555-3				PDB	ND
BB 38	23	FA21555-4				PDB	ND
BB 39	24	FA21555-5				PDB	ND
BB 40	25	FA21555-6				PDB	ND
BB 41	3	cc1235-1000		LC511	1:1	PDB	Pass
BB 42	1	clb		—	—		ND
BB 43	26	FA21555-7		op54769	1X	PDB	ND
BB 44	27	FA21555-8				PDB	ND
BB 45	28	FA21555-9				PDB	ND
BB 46	29	FA21555-10				PDB	ND
BB 47	30	FA21555-11				PDB	ND
48	3	cc1235-1000		LC511	1:1	PDB	Pass

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kristi Lyn

ACCUTEST LABORATORIES SE

EXP SAMPLE PREP REPORT

Prep Method: (8330A), 8332, 8330B or Method (circle)

Date/Time: 01/30/15 1400 Started {mm/dd/yy 24:00}

Date/Time: 01/31/15 0900 Finished {mm/dd/yy 24:00}

Therm. ID: / Corr. Factor (±℃): /

Bath Temp. (High) ℃ : / / {obs/corr}

Ultrasonic Bath ID (8330A or 8332): UB1

Shaker Table ID (8330B): /

Batch#: OP54769 Ext. By: MB Vialed By: MB Balance ID: ADVPRO5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54769 MB	X	2.00	0.5 ml		20 ml	
OP 54769 BS	X	2.00		0.5 ml		
FA21555-1	1	2.18				
-2	1	2.09				
-3	1	2.24				
-4	1	2.18				
-5	1	2.07				
-6	1	2.01				
-7	1	2.20				
-8	1	2.04				
-9	1	2.13				
-10	1	2.08				
-11	1	2.14				
			MB 01/31/15			
FA21555-1 MS	1	2.05	0.5 ml	0.5 ml	20 ml	
-1 MSD	1	2.00	"	"	"	
DUP						
TRP						

Comments:

Surr. ID: E50366 Conc: 20 ppm Exp. Date: 06/23/15 Inj. By: MB Ver. By MB

Spk.1 ID: ES049 Conc: 20 ppm Exp. Date: 06/05/15 Inj. By: MB Ver. By MB

Spk.2 ID: / Conc: / Exp. Date: / Inj. By: / Ver. By /

Acetonitrile Lot # 06/8/7 Methanol Lot # / Water Lot# 076032 HPLC

Syringe Filter Lot# 13092500 7 Reagent # CS1 Reagent # /

Relinquished By: Date: 01/31/15

Accepted By: Date: 02/02/15

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12173
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:43	MA12173-STD1	1		STDA
08:46	MA12173-STD2	1		STDB
08:49	MA12173-STD3	1		STDC
08:57	MA12173-STD4	1		STDD
09:05	MA12173-HSTD1	1		
09:15	MA12173-ICV1	1		
09:21	MA12173-ICB1	1		
09:30	MA12173-CRIA1	1		
09:36	MA12173-ICSA1	1		
09:43	MA12173-ICSAB1	1		
09:50	MA12173-CCV1	1		
09:58	MA12173-CCB1	1		
10:04	FA21335-4	20		(sample used for QC only; not part of login FA21555)
10:08	MP28466-D1	20		
10:12	MP28466-S1	20		
10:16	MP28466-S2	20		
10:20	MP28466-PS1	20		
10:24	MP28466-SD1	100		
10:28	MP28472-MB1	1		
10:32	MP28472-B1	1		
10:36	FA21328-1	1		(sample used for QC only; not part of login FA21555)
10:41	MP28472-D1	1		
10:45	MA12173-CCV2	1		
10:49	MA12173-CCB2	1		
10:53	MP28472-SD1	5		
10:57	MP28472-S1	1		
11:01	MP28472-S2	1		
11:05	ZZZZZZ	1		
11:09	MA12173-CCV3	1		
11:13	MA12173-CCB3	1		
11:57	MP28478-MB1	1		
12:01	MP28478-B1	1		
12:05	FA21510-1	1		(sample used for QC only; not part of login FA21555)

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12173
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:09	MP28478-D1	1		
12:13	MP28478-SD1	5		
12:17	MP28478-PS1	1		
12:21	MP28478-S1	1		
12:25	MP28478-S2	1		
12:29	ZZZZZZ	1		
12:33	ZZZZZZ	1		
12:37	MA12173-CCV4	1		
12:41	MA12173-CCB4	1		
12:46	ZZZZZZ	1		
12:50	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:58	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:10	ZZZZZZ	1		
13:14	FA21555-1	1		
13:19	FA21555-2	1		
13:23	FA21555-3	1		
13:27	MA12173-CCV5	1		
13:34	MA12173-CCB5	1		
13:38	FA21555-4	1		
13:42	FA21555-5	1		
13:47	FA21555-6	1		
13:51	FA21555-7	1		
13:55	FA21555-8	1		
---------->	Last reportable sample/prep for job FA21555			
14:00	ZZZZZZ	1		
14:04	ZZZZZZ	10		
14:08	MA12173-CRIA2	1		
14:13	MA12173-ICSA2	1		
14:18	MA12173-ICSAB2	1		
14:22	MA12173-CCV6	1		
14:26	MA12173-CCB6	1		
---------->	Last reportable CCB for job FA21555			

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12173
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:30	MA12173-CCV7	1		
14:34	MA12173-CCB7	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12173
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:43	MA12173-STD1	4251	33344	5710	1546
08:46	MA12173-STD2	4149	32768	5734	1522
08:49	MA12173-STD3	4004	31490	5735	1460
08:57	MA12173-STD4	3853	30717	5730	1385
09:05	MA12173-HSTD1	3763	31075	5776	1382
09:15	MA12173-ICV1	3922	31650	5765	1442
09:21	MA12173-ICB1	4128 R	33298 R	5874 R	1531 R
09:30	MA12173-CRIA1	4074	33016	5890	1533
09:36	MA12173-ICSA1	3570	28463	5650	1353
09:43	MA12173-ICSAB1	3605	28744	5665	1355
09:50	MA12173-CCV1	3878	31603	5785	1434
09:58	MA12173-CCB1	4087	32986	5768	1517
10:04	FA21335-4	4010	32479	5828	1519
10:08	MP28466-D1	4058	32567	5845	1530
10:12	MP28466-S1	4063	32331	5816	1512
10:16	MP28466-S2	4080	32316	5826	1519
10:20	MP28466-PS1	4090	32138	5790	1517
10:24	MP28466-SD1	4096	32955	5789	1535
10:28	MP28472-MB1	4117	32940	5799	1525
10:32	MP28472-B1	3940	30922	5659	1441
10:36	FA21328-1	3977	31159	5646	1466
10:41	MP28472-D1	3957	30645	5601	1446
10:45	MA12173-CCV2	3902	31422	5683	1437
10:49	MA12173-CCB2	4120	32805	5736	1525
10:53	MP28472-SD1	4105	32294	5695	1512
10:57	MP28472-S1	3861	30179	5603	1416
11:01	MP28472-S2	3900	29938	5607	1416
11:05	ZZZZZZ	3988	30782	5553	1453
11:09	MA12173-CCV3	3950	31102	5731	1442
11:13	MA12173-CCB3	4156	32441	5690	1520
11:57	MP28478-MB1	4111	33309	5757	1522
12:01	MP28478-B1	4022	31310	5727	1475
12:05	FA21510-1	4736	37279	6624	1481

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12173
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:09	MP28478-D1	5006	39144	7085	1486
12:13	MP28478-SD1	4299	33825	5936	1530
12:17	MP28478-PS1	4680	36872	6581	1471
12:21	MP28478-S1	4738	36794	6723	1451
12:25	MP28478-S2	4751	36670	6691	1440
12:29	ZZZZZZ	4054	31445	5810	1487
12:33	ZZZZZZ	4097	31852	5754	1491
12:37	MA12173-CCV4	3988	31352	5692	1450
12:41	MA12173-CCB4	4167	32745	5668	1534
12:46	ZZZZZZ	4108	32009	5740	1486
12:50	ZZZZZZ	4062	31793	5698	1482
12:54	ZZZZZZ	4105	31952	5675	1487
12:58	ZZZZZZ	4253	32963	5871	1525
13:02	ZZZZZZ	4313	33635	6064	1472
13:06	ZZZZZZ	4267	32406	6285	1368
13:10	ZZZZZZ	4108	31591	5751	1452
13:14	FA21555-1	3757	29043	5730	1279
13:19	FA21555-2	3808	28975	5898	1294
13:23	FA21555-3	3830	29705	6097	1276
13:27	MA12173-CCV5	4092	32006	6043	1485
13:34	MA12173-CCB5	4421	34139	6155	1603
13:38	FA21555-4	3852	29267	6048	1280
13:42	FA21555-5	3898	29193	5805	1276
13:47	FA21555-6	3780	26786	5110	1198
13:51	FA21555-7	3882	27405	5157	1223
13:55	FA21555-8	3713	26645	4986	1209
14:00	ZZZZZZ	4174	31593	5538	1503
14:04	ZZZZZZ	4287	32248	5665	1527
14:08	MA12173-CRIA2	4387	32508	5603	1565
14:13	MA12173-ICSA2	3714	27146	5189	1354
14:18	MA12173-ICSAB2	3882	28168	5320	1398
14:22	MA12173-CCV6	4235	31359	5460	1496
14:26	MA12173-CCB6	4328	32223	5426	1547

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12173
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:30	MA12173-CCV7	4330	32434	5677	1528
14:34	MA12173-CCB7	4387	32152	5659	1571

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12173 Units: ug/l

Time: / Sample ID:			09:21 ICB1		09:58 CCB1		10:49 CCB2		11:13 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	15	0.0	<200	4.2	<200	6.1	<200	4.6	<200
Antimony	6.0	2	0.30	<6.0	-0.20	<6.0	2.4	<6.0	0.60	<6.0
Arsenic	10	2	anr							
Barium	200	1	anr							
Beryllium	4.0	.5	anr							
Cadmium	5.0	.5	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.10	<10	0.20	<10	0.30	<10	0.30	<10
Cobalt	50	.5	anr							
Copper	25	1	0.90	<25	0.80	<25	1.0	<25	1.1	<25
Iron	300	17	-18	<300	-14	<300	7.0	<300	6.8	<300
Lead	5.0	1.1	-0.40	<5.0	-1.2	<5.0	-1.6	<5.0	-1.2	<5.0
Magnesium	5000	50	anr							
Manganese	15	.5	anr							
Molybdenum	50	.5								
Nickel	40	.5	anr							
Potassium	10000	200	anr							
Selenium	10	2.3	anr							
Silver	10	.65	anr							
Sodium	10000	500	anr							
Strontium	10	.4								
Thallium	10	1.5	anr							
Tin	50	.7								
Titanium	10	.9								
Vanadium	50	.5	anr							
Zinc	20	3	-0.30	<20	0.10	<20	0.10	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12173 Units: ug/l

Time:			12:41		13:34		14:26	
Sample ID:			CCB4		CCB5		CCB6	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	15	6.1	<200	-2.5	<200	5.6	<200
Antimony	6.0	2	1.0	<6.0	0.0	<6.0	1.1	<6.0
Arsenic	10	2	anr					
Barium	200	1	anr					
Beryllium	4.0	.5	anr					
Cadmium	5.0	.5	anr					
Calcium	1000	50	anr					
Chromium	10	1	0.30	<10	-0.10	<10	0.10	<10
Cobalt	50	.5	anr					
Copper	25	1	0.90	<25	0.60	<25	0.50	<25
Iron	300	17	1.1	<300	-15	<300	5.8	<300
Lead	5.0	1.1	-1.1	<5.0	-0.50	<5.0	-1.3	<5.0
Magnesium	5000	50	anr					
Manganese	15	.5	anr					
Molybdenum	50	.5						
Nickel	40	.5	anr					
Potassium	10000	200	anr					
Selenium	10	2.3	anr					
Silver	10	.65	anr					
Sodium	10000	500	anr					
Strontium	10	.4						
Thallium	10	1.5	anr					
Tin	50	.7						
Titanium	10	.9						
Vanadium	50	.5	anr					
Zinc	20	3	0.20	<20	0.0	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12173 Units: ug/l

Time:		09:15			09:50			10:45	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	40100	100.3	40000	40500	101.3	40000	40600	101.5
Antimony	2000	2040	102.0	2000	2030	101.5	2000	2030	101.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2030	101.5	2000	2040	102.0	2000	2030	101.5
Cobalt	anr								
Copper	2000	2020	101.0	2000	2010	100.5	2000	2030	101.5
Iron	40000	40200	100.5	40000	39700	99.3	40000	40300	100.8
Lead	2000	1990	99.5	2000	1970	98.5	2000	1980	99.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2030	101.5	2000	2020	101.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12173 Units: ug/l

Time:		11:09			12:37			13:27	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	40600	101.5	40000	40400	101.0	40000	41400	103.5
Antimony	2000	2020	101.0	2000	2010	100.5	2000	2070	103.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2050	102.5	2000	2040	102.0	2000	2070	103.5
Cobalt	anr								
Copper	2000	2070	103.5	2000	2050	102.5	2000	2130	106.5
Iron	40000	40400	101.0	40000	40400	101.0	40000	40400	101.0
Lead	2000	2000	100.0	2000	2000	100.0	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2030	101.5	2000	2030	101.5	2000	2050	102.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12173 Units: ug/l

Time:		14:22	
Sample ID:	CCV	CCV6	
Metal	True	Results	% Rec
Aluminum	40000	40200	100.5
Antimony	2000	1950	97.5
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	1990	99.5
Cobalt	anr		
Copper	2000	2100	105.0
Iron	40000	41100	102.8
Lead	2000	2030	101.5
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12173 Units: ug/l

Time:		09:05	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	80000	80100	100.1
Antimony	4000	4100	102.5
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3990	99.8
Cobalt	anr		
Copper	4000	3960	99.0
Iron	80000	76700	95.9
Lead	4000	3940	98.5
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3970	99.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12173 Units: ug/l

Time:			09:30		14:08	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	221	110.5	208	104.0
Antimony	10	5.0	5.6	112.0	4.4	88.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.8	108.0	10.7	107.0
Cobalt	100	50	anr			
Copper	50	25	27.1	108.4	27.4	109.6
Iron	600	300	283	94.3	303	101.0
Lead	10	5.0	4.3	86.0	4.3	86.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50				
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	20.5	102.5	22.8	114.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012215M1.ICP Date Analyzed: 01/22/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12173 Units: ug/l

Time:			09:36		09:43		14:13		14:18	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	488000	97.6	492000	98.4	508000	101.6	497000	99.4
Antimony		1000	0.0		1100	110.0	-0.90		1070	107.0
Arsenic		1000	-0.80		1090	109.0	1.4		1050	105.0
Barium		500	-0.10		506	101.2	0.20		538	107.6
Beryllium		500	0.0		497	99.4	-0.10		524	104.8
Cadmium		1000	0.0		960	96.0	-2.0		967	96.7
Calcium	500000	500000	469000	93.8	470000	94.0	474000	94.8	459000	91.8
Chromium		500	-0.90		500	100.0	-0.70		494	98.8
Cobalt		500	-0.80		502	100.4	-0.70		505	101.0
Copper		500	0.0		553	110.6	0.10		584	116.8
Iron	200000	200000	171000	85.5	175000	87.5	185000	92.5	184000	92.0
Lead		1000	0.0		951	95.1	-0.80		989	98.9
Magnesium	500000	500000	464000	92.8	469000	93.8	484000	96.8	476000	95.2
Manganese		500	0.0		502	100.4	-0.70		533	106.6
Molybdenum		1000	0.40		973	97.3	0.0		962	96.2
Nickel		1000	-0.70		1020	102.0	0.30		983	98.3
Potassium			91.8		50.0		56.8		-10	
Selenium		1000	0.40		1050	105.0	-1.5		1010	101.0
Silver		1000	0.70		990	99.0	0.40		1020	102.0
Sodium			97.4		107		87.2		78.5	
Strontium		1000	0.10		982	98.2	0.40		1090	109.0
Thallium		1000	-1.2		1000	100.0	0.40		1050	105.0
Tin		1000	-0.10		1010	101.0	0.20		940	94.0
Titanium		1000	-0.10		984	98.4	-0.60		1070	107.0
Vanadium		500	0.0		484	96.8	0.70		497	99.4
Zinc		1000	0.40		971	97.1	0.60		970	97.0

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12175
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:05	MA12175-STD1	1		STDA
09:08	MA12175-STD2	1		STDB
09:12	MA12175-STD3	1		STDC
09:20	MA12175-STD4	1		STDD
09:25	MA12175-HSTD1	1		
09:34	MA12175-ICV1	1		
09:40	MA12175-ICB1	1		
09:44	MA12175-CRIA1	1		
09:53	MA12175-ICSA1	1		
10:02	MA12175-ICSAB1	1		
10:08	MA12175-CCV1	1		
10:12	MA12175-CCB1	1		
10:17	ZZZZZZ	4		
10:22	FA21555-1	10		
10:26	FA21555-2	10		
10:31	FA21555-3	10		
10:35	FA21555-4	10		
10:40	FA21555-5	10		
10:44	FA21555-6	10		
10:49	FA21555-7	10		
10:54	FA21555-8	10		
---------->	Last reportable sample/prep for job FA21555			
10:58	ZZZZZZ	50		
11:02	MA12175-CCV2	1		
11:14	MA12175-CCB2	1		
11:18	MP28481-MB1	1		
11:23	MP28481-B1	1		
11:27	FA21532-3F	1		(sample used for QC only; not part of login FA21555)
11:32	MP28481-D1	1		
11:36	MP28481-SD1	5		
11:41	MP28481-PS1	1		
11:45	MP28481-S1	1		
11:49	MP28481-S2	1		
11:53	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12175
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:58	ZZZZZZ	1		
12:02	MA12175-CCV3	1		
12:06	MA12175-CCB3	1		
12:11	ZZZZZZ	1		
12:15	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:24	ZZZZZZ	1		
12:29	ZZZZZZ	1		
12:34	ZZZZZZ	1		
12:39	ZZZZZZ	1		
12:44	ZZZZZZ	1		
12:49	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:59	MA12175-CCV4	1		
13:03	MA12175-CCB4	1		
13:08	ZZZZZZ	1		
13:13	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:36	ZZZZZZ	1		
13:40	MA12175-CRIA2	1		
13:44	MA12175-ICSA2	1		
13:49	MA12175-ICSAB2	1		
13:53	MA12175-CCV5	1		
13:58	MA12175-CCB5	1		
---------->	Last reportable CCB for job FA21555			
14:02	MA12175-CCV6	1		
14:06	MA12175-CCB6	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12175
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:05	MA12175-STD1	5965	55512	6573	3017
09:08	MA12175-STD2	5928	54832	6525	2857
09:12	MA12175-STD3	5697	52841	6467	2616
09:20	MA12175-STD4	5524	51808	6377	2441
09:25	MA12175-HSTD1	5519	51670	6371	2453
09:34	MA12175-ICV1	5696	53070	6528	2633
09:40	MA12175-ICB1	5867 R	55128 R	6597 R	3028 R
09:44	MA12175-CRIA1	5830	54590	6615	2940
09:53	MA12175-ICSA1	5277	48502	6300	2330
10:02	MA12175-ICSAB1	5252	48236	6266	2288
10:08	MA12175-CCV1	5639	52644	6454	2625
10:12	MA12175-CCB1	5853	55063	6583	3015
10:17	ZZZZZZ	5626	52960	6597	2560
10:22	FA21555-1	5397	50594	6380	2574
10:26	FA21555-2	5425	50326	6348	2587
10:31	FA21555-3	5482	51150	6423	2612
10:35	FA21555-4	5356	50054	6263	2517
10:40	FA21555-5	5425	50926	6382	2557
10:44	FA21555-6	5344	50030	6348	2538
10:49	FA21555-7	5424	50916	6327	2559
10:54	FA21555-8	5421	50885	6357	2571
10:58	ZZZZZZ	5885	55457	6665	2981
11:02	MA12175-CCV2	5648	52822	6415	2619
11:14	MA12175-CCB2	5844	54948	6533	3024
11:18	MP28481-MB1	5749	54452	6472	2958
11:23	MP28481-B1	5601	52540	6396	2699
11:27	FA21532-3F	5718	54120	6517	2871
11:32	MP28481-D1	5735	53987	6517	2877
11:36	MP28481-SD1	5841	54749	6505	2972
11:41	MP28481-PS1	5730	53917	6547	2810
11:45	MP28481-S1	5659	52780	6471	2678
11:49	MP28481-S2	5683	53010	6477	2681
11:53	ZZZZZZ	5684	53548	6452	2846

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12175
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:58	ZZZZZZ	5682	53649	6513	2848
12:02	MA12175-CCV3	5661	52695	6432	2619
12:06	MA12175-CCB3	5874	54681	6448	3011
12:11	ZZZZZZ	5805	54495	6590	2838
12:15	ZZZZZZ	5826	54851	6569	2885
12:20	ZZZZZZ	5647	53271	6413	2803
12:24	ZZZZZZ	4336	39995	5836	1905
12:29	ZZZZZZ	4105	38598	5705	1786 !
12:34	ZZZZZZ	4179	38726	5721	1815 !
12:39	ZZZZZZ	4530	41942	5986	2020
12:44	ZZZZZZ	4442	41484	5925	1978
12:49	ZZZZZZ	4688	43812	6083	2126
12:54	ZZZZZZ	4511	42006	6036	2017
12:59	MA12175-CCV4	5654	52878	6546	2620
13:03	MA12175-CCB4	5862	54908	6551	3008
13:08	ZZZZZZ	4527	41890	6038	2011
13:13	ZZZZZZ	4580	41855	6049	2025
13:17	ZZZZZZ	4668	42567	6094	2070
13:22	ZZZZZZ	6266	57920	7268	2759
13:27	ZZZZZZ	7786 !	72395 !	9117 !	2670
13:31	ZZZZZZ	6197	57525	7207	2756
13:36	ZZZZZZ	6109	56984	7107	2715
13:40	MA12175-CRIA2	5881	54485	6563	2960
13:44	MA12175-ICSA2	5276	48406	6233	2320
13:49	MA12175-ICSAB2	5222	47625	6174	2268
13:53	MA12175-CCV5	5654	52599	6387	2619
13:58	MA12175-CCB5	5875	55143	6523	3017
14:02	MA12175-CCV6	5643	52434	6397	2609
14:06	MA12175-CCB6	5858	54738	6407	3004

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12175 Units: ug/l

Time: / Sample ID:			09:40 ICB1		10:12 CCB1		11:14 CCB2		12:06 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	15								
Antimony	6.0	2	-0.10	<6.0	1.4	<6.0	0.40	<6.0	0.30	<6.0
Arsenic	10	2	anr							
Barium	200	1	anr							
Beryllium	4.0	.5								
Cadmium	5.0	.5	anr							
Calcium	1000	50								
Chromium	10	1	0.10	<10	0.0	<10	0.10	<10	0.40	<10
Cobalt	50	.5								
Copper	25	1								
Iron	300	17								
Lead	5.0	1.1	0.10	<5.0	-0.10	<5.0	0.90	<5.0	0.10	<5.0
Magnesium	5000	50								
Manganese	15	.5								
Molybdenum	50	.5								
Nickel	40	.5								
Potassium	10000	200								
Selenium	10	2.3	anr							
Silver	10	.65								
Sodium	10000	500								
Strontium	10	.4								
Thallium	10	1.5								
Tin	50	.7								
Titanium	10	.9								
Vanadium	50	.5								
Zinc	20	3	-0.20	<20	0.80	<20	0.70	<20	0.70	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12175 Units: ug/l

Time: / Sample ID: / Metal	RL	IDL	13:03 CCB4 raw	final	13:58 CCB5 raw	final
Aluminum	200	15				
Antimony	6.0	2	0.30	<6.0	0.0	<6.0
Arsenic	10	2	anr			
Barium	200	1	anr			
Beryllium	4.0	.5				
Cadmium	5.0	.5	anr			
Calcium	1000	50				
Chromium	10	1	0.30	<10	0.10	<10
Cobalt	50	.5				
Copper	25	1				
Iron	300	17				
Lead	5.0	1.1	-0.30	<5.0	-0.10	<5.0
Magnesium	5000	50				
Manganese	15	.5				
Molybdenum	50	.5				
Nickel	40	.5				
Potassium	10000	200				
Selenium	10	2.3	anr			
Silver	10	.65				
Sodium	10000	500				
Strontium	10	.4				
Thallium	10	1.5				
Tin	50	.7				
Titanium	10	.9				
Vanadium	50	.5				
Zinc	20	3	0.80	<20	0.50	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12175 Units: ug/l

Time:		09:34			10:08			11:02	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2050	102.5	2000	2070	103.5	2000	2050	102.5
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2040	102.0	2000	2050	102.5	2000	2040	102.0
Cobalt									
Copper									
Iron									
Lead	2000	2010	100.5	2000	2010	100.5	2000	2000	100.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2030	101.5	2000	2020	101.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12175 Units: ug/l

Time:		12:02			12:59			13:53	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	2050	102.5	2000	2060	103.0	2000	2060	103.0
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2060	103.0	2000	2050	102.5	2000	2050	102.5
Cobalt									
Copper									
Iron									
Lead	2000	2010	100.5	2000	2010	100.5	2000	2010	100.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2040	102.0	2000	2030	101.5	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12175 Units: ug/l

Time:		09:25	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	4040	101.0
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium			
Chromium	4000	3970	99.3
Cobalt			
Copper			
Iron			
Lead	4000	4040	101.0
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver			
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc	4000	3960	99.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12175 Units: ug/l

Time:			09:44		13:40	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0	4.4	88.0	4.4	88.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	10.8	108.0	10.6	106.0
Cobalt	100	50				
Copper	50	25				
Iron	600	300				
Lead	10	5.0	4.9	98.0	4.8	96.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10				
Sodium	20000	10000				
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20	21.4	107.0	21.6	108.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012315M1.ICP Date Analyzed: 01/23/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12175 Units: ug/l

Time:			09:53		10:02		13:44		13:49	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	480000	96.0	490000	98.0	492000	98.4	500000	100.0
Antimony		1000	-1.4		1070	107.0	-1.7		1070	107.0
Arsenic		1000	-0.10		1060	106.0	0.80		1060	106.0
Barium		500	0.10		505	101.0	0.10		518	103.6
Beryllium		500	-0.20		504	100.8	-0.30		495	99.0
Cadmium		1000	-0.50		925	92.5	-0.30		925	92.5
Calcium	500000	500000	450000	90.0	450000	90.0	446000	89.2	444000	88.8
Chromium		500	-0.10		484	96.8	-0.10		490	98.0
Cobalt		500	0.40		476	95.2	0.40		478	95.6
Copper		500	0.0		549	109.8	-0.70		559	111.8
Iron	200000	200000	172000	86.0	178000	89.0	167000	83.5	173000	86.5
Lead		1000	-0.10		958	95.8	-3.3		962	96.2
Magnesium	500000	500000	464000	92.8	473000	94.6	454000	90.8	463000	92.6
Manganese		500	0.30		510	102.0	0.30		509	101.8
Molybdenum		1000	-0.20		922	92.2	-0.90		932	93.2
Nickel		1000	0.40		962	96.2	0.30		959	95.9
Potassium			139		146		132		65.1	
Selenium		1000	0.20		1010	101.0	-2.6		1010	101.0
Silver		1000	-0.90		1020	102.0	-0.80		1030	103.0
Sodium			123		133		260		203	
Strontium		1000	-0.10		987	98.7	-0.10		1010	101.0
Thallium		1000	-1.4		980	98.0	0.20		977	97.7
Tin		1000	1.1		922	92.2	1.4		932	93.2
Titanium		1000	0.30		1000	100.0	0.20		1010	101.0
Vanadium		500	0.0		460	92.0	0.40		472	94.4
Zinc		1000	-1.3		924	92.4	-1.3		937	93.7

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12184
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:05	MA12184-STD1	1		STDA
10:08	MA12184-STD2	1		STDB
10:12	MA12184-STD3	1		STDC
10:21	MA12184-STD4	1		STDD
10:26	MA12184-HSTD1	1		
10:33	MA12184-ICV1	1		
10:39	MA12184-ICB1	1		
10:43	MA12184-CRIA1	1		
10:50	MA12184-ICSA1	1		
10:58	MA12184-ICSAB1	1		
11:06	MA12184-CCV1	1		
11:13	MA12184-CCB1	1		
11:21	ZZZZZZ	25		
11:25	ZZZZZZ	25		
11:30	ZZZZZZ	25		
11:34	ZZZZZZ	25		
11:38	ZZZZZZ	10		
11:43	MA12184-CCV2	1		
11:47	MA12184-CCB2	1		
12:21	MA12184-CCV3	1		
12:40	MA12184-CCB3	1		
12:45	MP28497-MB1	1		
12:50	MP28497-B1	1		
12:54	FA21642-24	1		(sample used for QC only; not part of login FA21555)
12:58	MP28497-D1	1		
13:03	MP28497-SD1	5		
13:07	MP28497-PS1	1		
13:11	MP28497-S1	1		
13:15	MP28497-S2	1		
13:20	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:28	MA12184-CCV4	1		
13:47	MA12184-CCB4	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12184
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:51	ZZZZZZ	1		
13:56	ZZZZZZ	1		
14:00	ZZZZZZ	1		
14:04	ZZZZZZ	1		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:27	FA21555-9	1		
14:31	FA21555-10	1		
14:36	MA12184-CCV5	1		
14:40	MA12184-CCB5	1		
14:45	FA21555-11	1		
---------->	Last reportable sample/prep for job FA21555			
14:49	ZZZZZZ	1		
14:54	ZZZZZZ	1		
14:58	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:07	ZZZZZZ	1		
15:12	ZZZZZZ	1		
15:16	MP28500-MB1	1		
15:21	MP28500-B1	1		
15:25	FA21596-1	1		(sample used for QC only; not part of login FA21555)
15:29	MA12184-CCV6	1		
15:33	MA12184-CCB6	1		
15:55	MA12184-CCV7	1		
15:59	MA12184-CCB7	1		
16:03	MP28500-D1	1		
16:07	MP28500-SD1	5		
16:12	MP28500-S1	1		
16:16	MP28500-S2	1		
16:20	FA21612-1L	1		(sample used for QC only; not part of login FA21555)
16:25	ZZZZZZ	1		
16:29	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12184
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:34	ZZZZZZ	1		
16:38	FA21676-1	1		(sample used for QC only; not part of login FA21555)
16:42	ZZZZZZ	1		
16:47	MA12184-CCV8	1		
16:51	MA12184-CCB8	1		
16:55	ZZZZZZ	1		
17:00	MP28500-D2	1		
17:04	MP28500-D3	1		
17:09	MP28500-MB2	1		
17:13	MP28500-B2	1		
17:17	MP28500-MB3	1		
17:22	MP28500-B3	1		
17:26	MP28500-MB4	1		
17:31	MP28500-B4	1		
17:35	MA12184-CRIA2	1		
17:39	MA12184-CCV9	1		
17:44	MA12184-CCB9	1		
17:48	MA12184-ICSA2	1		
17:53	MA12184-ICSAB2	1		
17:57	MA12184-CCV10	1		
18:01	MA12184-CCB10	1		

----------> Last reportable CCB for job FA21555
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12184
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:05	MA12184-STD1	5848	52152	5157	3067
10:08	MA12184-STD2	5764	50893	5144	2847
10:12	MA12184-STD3	5507	49079	5062	2582
10:21	MA12184-STD4	5267	47473	5000	2374
10:26	MA12184-HSTD1	5413	48542	5067	2447
10:33	MA12184-ICV1	5586	49727	5186	2650
10:39	MA12184-ICB1	5836 R	52319 R	5265 R	3102 R
10:43	MA12184-CRIA1	5795	51445	5294	2974
10:50	MA12184-ICSA1	4941	43098	4791	2263
10:58	MA12184-ICSAB1	5127	44908	5008	2321
11:06	MA12184-CCV1	5386	48999	5161	2575
11:13	MA12184-CCB1	5778	52107	5222	3115
11:21	ZZZZZZ	5805	52128	5287	2995
11:25	ZZZZZZ	5731	51280	5256	2927
11:30	ZZZZZZ	5617	50463	5192	2879
11:34	ZZZZZZ	5684	50886	5268	2921
11:38	ZZZZZZ	5484	50541	5193	2948
11:43	MA12184-CCV2	5298	48005	5060	2549
11:47	MA12184-CCB2	5596	50424	5090	3028
12:21	MA12184-CCV3	5243	47268	4985	2535
12:40	MA12184-CCB3	5554	50042	5017	2994
12:45	MP28497-MB1	5695	51870	5258	3064
12:50	MP28497-B1	5532	49838	5141	2746
12:54	FA21642-24	6765	60331	6340	2932
12:58	MP28497-D1	5919	53870	5454	2985
13:03	MP28497-SD1	5820	52763	5424	2962
13:07	MP28497-PS1	6707	60209	6338	2883
13:11	MP28497-S1	5891	52699	5584	2727
13:15	MP28497-S2	5873	52412	5531	2785
13:20	ZZZZZZ	5866	52959	5492	3037
13:24	ZZZZZZ	6135	55142	5646	2940
13:28	MA12184-CCV4	5474	49155	5069	2626
13:47	MA12184-CCB4	5684	51385	5215	3072

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12184
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:51	ZZZZZZ	6077	54830	5600	2953
13:56	ZZZZZZ	5823	51892	5375	2779
14:00	ZZZZZZ	5872	52969	5415	2917
14:04	ZZZZZZ	5665	50852	5336	2702
14:09	ZZZZZZ	6650	60038	6113	2954
14:13	ZZZZZZ	4892	43921	5053	2112
14:18	ZZZZZZ	5968	53502	6268	2029
14:22	ZZZZZZ	4900	44199	5092	2054
14:27	FA21555-9	4697	42853	5033	1966
14:31	FA21555-10	4676	42973	5109	1986
14:36	MA12184-CCV5	5367	49380	5316	2589
14:40	MA12184-CCB5	5631	51834	5294	3065
14:45	FA21555-11	4834	45206	5362	2000
14:49	ZZZZZZ	5611	52014	5524	2811
14:54	ZZZZZZ	3175 !	35277	4441	1664 !
14:58	ZZZZZZ	4912	45069	5099	2303
15:03	ZZZZZZ	5197	47847	5222	2470
15:07	ZZZZZZ	4936	45055	5104	2253
15:12	ZZZZZZ	4886	44749	5094	2297
15:16	MP28500-MB1	5750	53996	5476	3131
15:21	MP28500-B1	5593	51229	5289	2785
15:25	FA21596-1	5716	53317	5407	3047
15:29	MA12184-CCV6	5436	49738	5192	2608
15:33	MA12184-CCB6	5711	52524	5251	3086
15:55	MA12184-CCV7	5397	49473	5101	2592
15:59	MA12184-CCB7	5679	52130	5161	3063
16:03	MP28500-D1	5699	52772	5375	3034
16:07	MP28500-SD1	5758	53153	5362	3093
16:12	MP28500-S1	5532	50567	5315	2738
16:16	MP28500-S2	5526	50918	5285	2748
16:20	FA21612-1L	5454	49691	5255	2751
16:25	ZZZZZZ	5402	49088	5185	2729
16:29	ZZZZZZ	5502	49458	5219	2762

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12184
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:34	ZZZZZZ	5534	49997	5226	2753
16:38	FA21676-1	5484	49937	5247	2744
16:42	ZZZZZZ	5497	49708	5233	2770
16:47	MA12184-CCV8	5508	50073	5173	2644
16:51	MA12184-CCB8	5767	53119	5202	3119
16:55	ZZZZZZ	5509	49746	5185	2756
17:00	MP28500-D2	5498	50308	5253	2745
17:04	MP28500-D3	5513	49990	5295	2760
17:09	MP28500-MB2	5843	53671	5261	3131
17:13	MP28500-B2	5594	50581	5160	2772
17:17	MP28500-MB3	5495	49512	5095	2764
17:22	MP28500-B3	5491	49478	5139	2654
17:26	MP28500-MB4	5524	49787	5096	2784
17:31	MP28500-B4	5501	49219	5093	2657
17:35	MA12184-CRIA2	5735	51952	5121	2987
17:39	MA12184-CCV9	5500	49941	5088	2623
17:44	MA12184-CCB9	5806	52865	5163	3127
17:48	MA12184-ICSA2	5056	45156	4857	2337
17:53	MA12184-ICSAB2	5062	45010	4872	2303
17:57	MA12184-CCV10	5473	49854	5023	2627
18:01	MA12184-CCB10	5783	52798	5089	3119

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12184 Units: ug/l

Time: / Sample ID:			10:39 ICB1		11:13 CCB1		11:47 CCB2		12:40 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	-14	<200	16.0	<200	14.2	<200	5.0	<200
Antimony	20	1	-0.20	<20	-0.10	<20	0.60	<20	1.4	<20
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	5000	50	anr							
Chromium	10	1	-0.20	<10	0.20	<10	0.30	<10	-0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	0.10	<25	0.60	<25	1.4	<25	0.0	<25
Iron	300	17	-25	<300	-13	<300	-8.7	<300	-1.0	<300
Lead	20	1	-1.0	<20	-1.1	<20	-0.60	<20	0.20	<20
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.60	<20	-0.30	<20	0.30	<20	2.1	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12184 Units: ug/l

Time: / Sample ID:			13:47 CCB4		14:40 CCB5		15:33 CCB6		15:59 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	8.7	<200	17.0	<200	6.8	<200	1.9	<200
Antimony	20	1	0.90	<20	1.8	<20	2.2	<20	0.80	<20
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	5.0	.2	anr							
Cadmium	4.0	.2	anr							
Calcium	5000	50	anr							
Chromium	10	1	0.20	<10	0.50	<10	0.30	<10	-0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	0.10	<25	0.30	<25	0.10	<25	-0.30	<25
Iron	300	17	6.4	<300	16.0	<300	11.9	<300	15.9	<300
Lead	20	1	0.20	<20	0.60	<20	0.60	<20	0.50	<20
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	20	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.30	<20	0.30	<20	0.0	<20	1.5	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12184 Units: ug/l

Time: / Sample ID:			16:51 CCB8		17:44 CCB9		18:01 CCB10	
Metal	RL	IDL	raw	final	raw	final	raw	final
Aluminum	200	14	2.9	<200	2.2	<200	6.6	<200
Antimony	20	1	0.20	<20	0.0	<20	0.50	<20
Arsenic	10	1.3	anr					
Barium	200	1	anr					
Beryllium	5.0	.2	anr					
Cadmium	4.0	.2	anr					
Calcium	5000	50	anr					
Chromium	10	1	0.30	<10	0.60	<10	0.50	<10
Cobalt	50	.2	anr					
Copper	25	1	-0.10	<25	-0.20	<25	0.10	<25
Iron	300	17	20.1	<300	24.1	<300	31.8	<300
Lead	20	1	0.40	<20	0.30	<20	0.60	<20
Magnesium	5000	35	anr					
Manganese	15	.5	anr					
Molybdenum	50	.3						
Nickel	40	.4	anr					
Potassium	10000	200	anr					
Selenium	20	2.4	anr					
Silver	10	.7	anr					
Sodium	10000	500	anr					
Strontium	10	.5						
Thallium	10	1.1	anr					
Tin	50	.9						
Titanium	10	.5						
Vanadium	50	.5	anr					
Zinc	20	3	0.90	<20	0.90	<20	0.90	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12184 Units: ug/l

Time:		10:33			11:06			11:43	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38100	95.3	40000	39400	98.5	40000	40300	100.8
Antimony	2000	1920	96.0	2000	2110	105.5	2000	2160	108.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1920	96.0	2000	2050	102.5	2000	2100	105.0
Cobalt	anr								
Copper	2000	1880	94.0	2000	2020	101.0	2000	2070	103.5
Iron	40000	38600	96.5	40000	40000	100.0	40000	41100	102.8
Lead	2000	1900	95.0	2000	2040	102.0	2000	2070	103.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1950	97.5	2000	2140	107.0	2000	2190	109.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12184 Units: ug/l

Time:		12:21			13:28			14:36	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41300	103.3	40000	40200	100.5	40000	40900	102.3
Antimony	2000	2060	103.0	2000	1980	99.0	2000	2060	103.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2090	104.5	2000	2000	100.0	2000	2010	100.5
Cobalt	anr								
Copper	2000	2070	103.5	2000	2020	101.0	2000	2090	104.5
Iron	40000	41800	104.5	40000	39900	99.8	40000	39500	98.8
Lead	2000	2050	102.5	2000	1980	99.0	2000	1990	99.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2090	104.5	2000	1990	99.5	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12184 Units: ug/l

Time:		15:29			15:55			16:47	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41000	102.5	40000	40700	101.8	40000	40300	100.8
Antimony	2000	2030	101.5	2000	2030	101.5	2000	2020	101.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1990	99.5	2000	2060	103.0	2000	2070	103.5
Cobalt	anr								
Copper	2000	2070	103.5	2000	2060	103.0	2000	2040	102.0
Iron	40000	39200	98.0	40000	41100	102.8	40000	40600	101.5
Lead	2000	1970	98.5	2000	2020	101.0	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1940	97.0	2000	2050	102.5	2000	2040	102.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12184 Units: ug/l

Time:		17:39			17:57	
Sample ID:	CCV	CCV9		CCV	CCV10	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	40900	102.3	40000	40200	100.5
Antimony	2000	2010	100.5	2000	2010	100.5
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	2000	2060	103.0	2000	2050	102.5
Cobalt	anr					
Copper	2000	2050	102.5	2000	2020	101.0
Iron	40000	40900	102.3	40000	40300	100.8
Lead	2000	2020	101.0	2000	2010	100.5
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	2000	2040	102.0	2000	2050	102.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12184 Units: ug/l

Time:		10:26	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	80000	77600	97.0
Antimony	4000	3870	96.8
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3810	95.3
Cobalt	anr		
Copper	4000	3840	96.0
Iron	80000	76700	95.9
Lead	4000	3880	97.0
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3850	96.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12184 Units: ug/l

Time:			10:43		17:35	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	181	90.5	211	105.5
Antimony	10	5.0	4.1	82.0	4.6	92.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.0	100.0	10.4	104.0
Cobalt	100	50	anr			
Copper	50	25	25.3	101.2	26.1	104.4
Iron	600	300	268	89.3	320	106.7
Lead	10	5.0	4.2	84.0	5.0	100.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50				
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	20.9	104.5	22.0	110.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA012815M1.ICP Date Analyzed: 01/28/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12184 Units: ug/l

Time:			10:50		10:58		17:48		17:53	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	503000	100.6	480000	96.0	499000	99.8	493000	98.6
Antimony		1000	-1.8		1040	104.0	1.3		1030	103.0
Arsenic		1000	-0.10		1040	104.0	-0.60		1040	104.0
Barium		500	0.10		489	97.8	1.0		510	102.0
Beryllium		500	-0.80		494	98.8	-0.10		501	100.2
Cadmium		1000	-0.20		916	91.6	1.1		911	91.1
Calcium	500000	500000	491000	98.2	463000	92.6	465000	93.0	466000	93.2
Chromium		500	0.60		478	95.6	0.90		487	97.4
Cobalt		500	-0.60		465	93.0	0.40		468	93.6
Copper		500	0.0		524	104.8	0.30		539	107.8
Iron	200000	200000	187000	93.5	179000	89.5	183000	91.5	183000	91.5
Lead		1000	0.10		928	92.8	-4.9		934	93.4
Magnesium	500000	500000	491000	98.2	458000	91.6	494000	98.8	484000	96.8
Manganese		500	0.40		503	100.6	0.80		504	100.8
Molybdenum		1000	0.40		927	92.7	8.7		941	94.1
Nickel		1000	-0.40		951	95.1	0.50		937	93.7
Potassium			362		283		65.7		11.9	
Selenium		1000	0.0		1000	100.0	0.90		996	99.6
Silver		1000	0.10		983	98.3	-0.10		1010	101.0
Sodium			272		236		146		101	
Strontium		1000	-0.30		1020	102.0	0.20		1020	102.0
Thallium		1000	0.0		946	94.6	0.60		950	95.0
Tin		1000	0.10		906	90.6	1.4		920	92.0
Titanium		1000	-0.10		1010	101.0	3.2		1010	101.0
Vanadium		500	0.0		470	94.0	0.0		469	93.8
Zinc		1000	-2.4		943	94.3	-1.8		930	93.0

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12186
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:59	MA12186-STD1	1		STDA
09:03	MA12186-STD2	1		STDB
09:07	MA12186-STD3	1		STDC
09:10	MA12186-STD4	1		STDD
09:16	MA12186-HSTD1	1		
09:22	MA12186-ICV1	1		
09:29	MA12186-ICB1	1		
09:33	MA12186-CRIA1	1		
09:42	MA12186-ICSA1	1		
09:49	MA12186-ICSAB1	1		
09:56	MA12186-CCV1	1		
10:04	MA12186-CCB1	1		
10:08	ZZZZZZ	4		
10:22	ZZZZZZ	10		
10:26	ZZZZZZ	10		
10:30	ZZZZZZ	10		
10:34	FA21555-9	10		
10:39	FA21555-10	10		
10:43	FA21555-11	10		
---------->	Last reportable sample/prep for job FA21555			
10:47	ZZZZZZ	10		
10:51	ZZZZZZ	25		
10:55	MA12186-CCV2	1		
10:59	MA12186-CCB2	1		
11:04	ZZZZZZ	4		
11:08	ZZZZZZ	2		
11:12	ZZZZZZ	4		
11:16	ZZZZZZ	4		
11:20	MP28500-MB1	1		
11:24	MA12186-CCV3	1		
11:28	MA12186-CCB3	1		
11:55	MP28504-MB1	1		
12:00	MP28504-B1	1		
12:04	FA21679-10	1		(sample used for QC only; not part of login FA21555)

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12186
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:08	MP28504-D1	1		
12:12	MP28504-SD1	5		
12:16	MP28504-PS1	1		
12:20	MP28504-S1	1		
12:24	MP28504-S2	1		
12:28	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:36	MA12186-CCV4	1		
12:40	MA12186-CCB4	1		
12:44	ZZZZZZ	1		
12:48	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:13	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:25	MA12186-CCV5	1		
13:29	MA12186-CCB5	1		
13:33	ZZZZZZ	1		
13:37	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:54	ZZZZZZ	1		
13:58	ZZZZZZ	1		
14:15	MA12186-CCV6	1		
14:19	MA12186-CCB6	1		
15:20	MA12186-CRIA2	1		
15:24	MA12186-ICSA2	1		
15:29	MA12186-ICSAB2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12186
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:33	MA12186-CCV7	1		
15:37	MA12186-CCB7	1		

----------> Last reportable CCB for job FA21555
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12186
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:59	MA12186-STD1	4627	35109	5915	1756
09:03	MA12186-STD2	4490	33280	5717	1697
09:07	MA12186-STD3	4278	32259	5704	1603
09:10	MA12186-STD4	4157	31868	5632	1550
09:16	MA12186-HSTD1	4181	32212	5693	1555
09:22	MA12186-ICV1	4357	33430	5893	1653
09:29	MA12186-ICB1	4542 R	34988 R	5926 R	1747 R
09:33	MA12186-CRIA1	4443	33663	5731	1706
09:42	MA12186-ICSA1	3910	29978	5620	1544
09:49	MA12186-ICSAB1	3871	29859	5647	1521
09:56	MA12186-CCV1	4272	33488	5830	1641
10:04	MA12186-CCB1	4459	34565	5875	1719
10:08	ZZZZZZ	4424	34729	5950	1700
10:22	ZZZZZZ	4255	33045	5736	1639
10:26	ZZZZZZ	4242	33126	5847	1639
10:30	ZZZZZZ	4341	33614	5932	1624
10:34	FA21555-9	4218	32702	5758	1635
10:39	FA21555-10	4236	33074	5877	1642
10:43	FA21555-11	4220	32824	5794	1624
10:47	ZZZZZZ	4401	34737	6005	1711
10:51	ZZZZZZ	4076	32229	5620	1597
10:55	MA12186-CCV2	4117	32468	5717	1588
10:59	MA12186-CCB2	4360	34454	5810	1704
11:04	ZZZZZZ	4155	32489	5855	1616
11:08	ZZZZZZ	4140	32159	5773	1605
11:12	ZZZZZZ	4123	32384	5816	1596
11:16	ZZZZZZ	4125	32459	5750	1600
11:20	MP28500-MB1	4322	34558	5881	1673
11:24	MA12186-CCV3	4170	32729	5812	1611
11:28	MA12186-CCB3	4316	33559	5776	1666
11:55	MP28504-MB1	4345	34834	5996	1684
12:00	MP28504-B1	4165	32857	5771	1614
12:04	FA21679-10	4247	33740	5813	1652

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12186
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:08	MP28504-D1	4262	33444	5836	1655
12:12	MP28504-SD1	4385	34348	5948	1700
12:16	MP28504-PS1	4281	33057	5846	1641
12:20	MP28504-S1	4202	32476	5780	1607
12:24	MP28504-S2	4196	32726	5782	1606
12:28	ZZZZZZ	4429	34626	6121	1637
12:32	ZZZZZZ	4595	36114	6393	1651
12:36	MA12186-CCV4	4177	32429	5741	1598
12:40	MA12186-CCB4	4364	33970	5815	1683
12:44	ZZZZZZ	4291	33083	5832	1654
12:48	ZZZZZZ	4208	32888	5727	1616
12:52	ZZZZZZ	4296	33196	5712	1651
12:56	ZZZZZZ	4361	33748	5785	1676
13:01	ZZZZZZ	4375	33569	5771	1678
13:05	ZZZZZZ	4383	34095	5851	1677
13:09	ZZZZZZ	4339	33486	5810	1653
13:13	ZZZZZZ	4356	33367	5831	1665
13:17	ZZZZZZ	4308	32831	5767	1638
13:21	ZZZZZZ	4346	33257	5843	1654
13:25	MA12186-CCV5	4284	33231	5760	1630
13:29	MA12186-CCB5	4500	34868	5871	1725
13:33	ZZZZZZ	4322	32914	5721	1656
13:37	ZZZZZZ	4239	31981	5612	1612
13:41	ZZZZZZ	4235	31971	5612	1605
13:46	ZZZZZZ	4362	33271	5632	1664
13:50	ZZZZZZ	4326	32626	5643	1653
13:54	ZZZZZZ	4116	31524	5704	1469
13:58	ZZZZZZ	4399	33150	5710	1674
14:15	MA12186-CCV6	4410	33336	5778	1647
14:19	MA12186-CCB6	4504	34119	5668	1698
15:20	MA12186-CRIA2	4594	33975	5659	1711
15:24	MA12186-ICSA2	3990	29115	5322	1523
15:29	MA12186-ICSAB2	3965	28650	5245	1495

INTERNAL STANDARD SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12186
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:33	MA12186-CCV7	4317	32212	5547	1602
15:37	MA12186-CCB7	4467	33202	5497	1675

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12186 Units: ug/l

Time: / Sample ID:			09:29 ICB1		10:04 CCB1		10:59 CCB2		11:28 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	-0.40	<6.0	0.50	<6.0	1.6	<6.0	2.1	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.10	<10	0.0	<10	0.0	<10	0.0	<10
Cobalt	50	.2								
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.80	<5.0	0.90	<5.0	0.70	<5.0	0.30	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-0.40	<20	-0.10	<20	-0.10	<20	-0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12186 Units: ug/l

Time: / Sample ID:			12:40 CCB4		13:29 CCB5		14:19 CCB6		15:37 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	1.5	<6.0	2.1	<6.0	1.7	<6.0	2.3	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	-0.10	<10	0.0	<10	0.0	<10	-0.60	<10
Cobalt	50	.2								
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	1.1	<5.0	1.2	<5.0	1.1	<5.0	1.1	<5.0
Magnesium	5000	35								
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-0.10	<20	-0.20	<20	-0.10	<20	-0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12186 Units: ug/l

Time:		09:22			09:56			10:55	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1960	98.0	2000	1980	99.0	2000	2040	102.0
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium	anr								
Chromium	2000	1960	98.0	2000	1990	99.5	2000	2040	102.0
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	1940	97.0	2000	1900	95.0	2000	1940	97.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	1960	98.0	2000	1940	97.0	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12186 Units: ug/l

Time:		11:24			12:36			13:25	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	2040	102.0	2000	2040	102.0	2000	1990	99.5
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium	anr								
Chromium	2000	2030	101.5	2000	2030	101.5	2000	1980	99.0
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	1920	96.0	2000	1950	97.5	2000	1940	97.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc	2000	1970	98.5	2000	1990	99.5	2000	1960	98.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12186 Units: ug/l

Time:		14:15			15:33	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	2000	1960	98.0	2000	2030	101.5
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium	anr					
Chromium	2000	1950	97.5	2000	1990	99.5
Cobalt						
Copper	anr					
Iron	anr					
Lead	2000	1950	97.5	2000	2040	102.0
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc	2000	1950	97.5	2000	2020	101.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12186 Units: ug/l

Time:		09:16	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	4030	100.8
Arsenic	anr		
Barium	anr		
Beryllium			
Cadmium	anr		
Calcium	anr		
Chromium	4000	3930	98.3
Cobalt			
Copper	anr		
Iron	anr		
Lead	4000	4010	100.3
Magnesium			
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium			
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium			
Zinc	4000	3970	99.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12186 Units: ug/l

Time:			09:33		15:20	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	4.5	90.0	5.2	104.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.7	107.0	10.0	100.0
Cobalt	100	50				
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	5.0	100.0	5.3	106.0
Magnesium	10000	5000				
Manganese	30	15	anr			
Molybdenum	100	50				
Nickel	80	40	anr			
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20	21.3	106.5	21.2	106.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB012915M1.ICP Date Analyzed: 01/29/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12186 Units: ug/l

Time:			09:42		09:49		15:24		15:29	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	498000	99.6	506000	101.2	507000	101.4	512000	102.4
Antimony		1000	0.30		1130	113.0	1.8		1120	112.0
Arsenic		1000	0.0		1110	111.0	0.40		1090	109.0
Barium		500	-0.30		514	102.8	-0.20		536	107.2
Beryllium		500	0.0		499	99.8	0.0		517	103.4
Cadmium		1000	0.0		961	96.1	-0.90		988	98.8
Calcium	500000	500000	481000	96.2	479000	95.8	474000	94.8	474000	94.8
Chromium		500	0.0		503	100.6	0.10		499	99.8
Cobalt		500	0.20		506	101.2	0.60		517	103.4
Copper		500	0.0		554	110.8	-0.10		584	116.8
Iron	200000	200000	180000	90.0	180000	90.0	181000	90.5	186000	93.0
Lead		1000	0.30		942	94.2	-2.5		999	99.9
Magnesium	500000	500000	481000	96.2	475000	95.0	476000	95.2	476000	95.2
Manganese		500	0.0		501	100.2	-1.1		528	105.6
Molybdenum		1000	-0.40		1010	101.0	-0.50		1020	102.0
Nickel		1000	0.0		1030	103.0	0.90		1020	102.0
Potassium			172		101		429		287	
Selenium		1000	0.40		1070	107.0	-0.40		1060	106.0
Silver		1000	0.60		985	98.5	0.30		1020	102.0
Sodium			206		161		156		108	
Strontium		1000	0.0		1020	102.0	0.20		1110	111.0
Thallium		1000	0.70		994	99.4	-4.4		1070	107.0
Tin		1000	0.50		1030	103.0	-0.20		990	99.0
Titanium		1000	0.10		1010	101.0	-0.10		1080	108.0
Vanadium		500	0.30		490	98.0	0.70		499	99.8
Zinc		1000	-0.30		971	97.1	-0.30		994	99.4

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28478 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 01/22/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.75	1.6	0.77	<10
Antimony	1.0	.1	.1	0.030	<1.0
Arsenic	0.50	.1	.1		
Barium	10	.05	.05		
Beryllium	0.25	.025	.025		
Cadmium	0.20	.025	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	0.020	<0.50
Cobalt	2.5	.025	.025		
Copper	1.3	.05	.05	0.045	<1.3
Iron	15	.85	1.3	0.18	<15
Lead	1.0	.055	.08	-0.055	<1.0
Magnesium	250	2.5	2.5		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.025	.03		
Nickel	2.0	.025	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.15		
Silver	0.50	.033	.033		
Sodium	500	25	25		
Strontium	0.50	.02	.025		
Thallium	0.50	.075	.075		
Tin	2.5	.035	.035		
Titanium	0.50	.045	.045		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.095	<1.0

Associated samples MP28478: FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28478
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			01/22/15					01/22/15	
Metal	FA21510-1 Original	DUP	RPD	QC Limits	FA21510-1 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1980	2760	32.9*(a)	0-20	1980	3290	1270	102.9	80-120
Antimony	0.10	0.0	200.0(b)	0-20	0.10	11.2	23.6	47.1N(c)	80-120
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	3.5	4.4	22.8*(a)	0-20	3.5	12.4	9.43	94.3	80-120
Cobalt	anr								
Copper	0.36	0.44	20.0	0-20	0.36	11.1	11.8	91.1	80-120
Iron	1750	1890	7.7	0-20	1750	2770	1230	83.2	80-120
Lead	1.1	1.3	16.7	0-20	1.1	25.2	23.6	102.2	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	0.88	1.3	38.5 (b)	0-20	0.88	21.2	23.6	86.2	80-120

Associated samples MP28478: FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) High RPD due to possible sample non-homogeneity.
(b) RPD acceptable due to low duplicate and sample concentrations.
(c) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28478 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 01/22/15

Metal	FA21510-1 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	1980	3310	1290	103.5	0.6	20
Antimony	0.10	11.3	23.8	47.1N(a)	0.9	20
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	3.5	12.3	9.52	92.4	0.8	20
Cobalt	anr					
Copper	0.36	11.1	11.9	90.3	0.0	20
Iron	1750	2890	1240	92.1	4.2	20
Lead	1.1	25.6	23.8	103.0	1.6	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	0.88	21.4	23.8	86.2	0.9	20

Associated samples MP28478: FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28478
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 01/22/15

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1410	1350	104.4	80-120
Antimony	24.6	25	98.4	80-120
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	10.8	10	108.0	80-120
Cobalt	anr			
Copper	13.4	12.5	107.2	80-120
Iron	1340	1300	103.1	80-120
Lead	24.9	25	99.6	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	25.4	25	101.6	80-120

Associated samples MP28478: FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28478
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 01/22/15

Metal	FA21510-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	40100	46200	15.1*(a)	0-10
Antimony	2.10	0.00	100.0(b)	0-10
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	69.9	79.5	13.7*(a)	0-10
Cobalt	anr			
Copper	7.30	13.6	86.3 (b)	0-10
Iron	35500	40900	14.9*(a)	0-10
Lead	22.1	20.7	6.3	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	17.9	45.6	154.7(b)	0-10

Associated samples MP28478: FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28478
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 01/22/15

Metal	Sample ml	Final ml	FA21510-1 Raw	FA21510-1 Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10	40090	39288.2	41490	0.2	125	2500	88.1	80-120
Antimony	9.8	10	2.1	2.058	88.8	0.2	5	100	86.7	80-120
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium	9.8	10	69.9	68.502	116.3	0.2	2.5	50	95.6	80-120
Cobalt										
Copper	9.8	10	7.3	7.154	101.8	0.2	5	100	94.6	80-120
Iron	9.8	10	35540	34829.2	37110	0.2	150	3000	76.0*(a)	80-120
Lead	9.8	10	22.1	21.658	73.9	0.2	2.5	50	104.5	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	17.9	17.542	248.3	0.2	12.5	250	92.3	80-120

Associated samples MP28478: FA21555-1, FA21555-2, FA21555-3, FA21555-4, FA21555-5, FA21555-6, FA21555-7, FA21555-8

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28497 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 01/28/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8	0.29	<10
Antimony	1.0	.05	.065	0.11	<1.0
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	0.025	<0.50
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	0.015	<1.3
Iron	15	.85	.85	1.1	<15
Lead	1.0	.05	.05	0.0	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.095	<1.0

Associated samples MP28497: FA21555-9, FA21555-10, FA21555-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28497
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			01/28/15					01/28/15	
Metal	FA21642-24 Original	DUP	RPD	QC Limits	FA21642-24 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	775	183	123.6*(a	0-20	775	1800	1590	64.3N(c)	80-120
Antimony	0.0	0.10	200.0(b)	0-20	0.0	22.2	29.5	75.2N(c)	80-120
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	4.0	1.2	107.7*(a	0-20	4.0	13.5	11.8	80.5	80-120
Cobalt	anr								
Copper	0.0	0.0	NC	0-20	0.0	14.4	14.8	97.6	80-120
Iron	18300	3030	143.2*(a	0-20	18300	7440	1530	-707.9(d	80-120
Lead	63.4	13.4	130.2*(a	0-20	63.4	49.7	29.5	-46.4N(c	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	5.4	5.7	5.4	0-20	5.4	32.0	29.5	90.2	80-120

Associated samples MP28497: FA21555-9, FA21555-10, FA21555-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) High RPD due to possible sample non-homogeneity.
(b) RPD acceptable due to low duplicate and sample concentrations.
(c) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(d) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28497 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 01/28/15

Metal	FA21642-24 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	775	1720	1550	61.1N(a)	4.5	20
Antimony	0.0	21.3	28.7	74.3N(a)	4.1	20
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	4.0	12.7	11.5	75.9N(a)	6.1	20
Cobalt	anr					
Copper	0.0	13.8	14.3	96.3	4.3	20
Iron	18300	6830	1490	-769.9(b	8.5	20
Lead	63.4	44.5	28.7	-66.0N(a	11.0	20
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	5.4	32.0	28.7	92.8	0.0	20

Associated samples MP28497: FA21555-9, FA21555-10, FA21555-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28497
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 01/28/15

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1350	1350	100.0	80-120
Antimony	24.3	25	97.2	80-120
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	10.5	10	105.0	80-120
Cobalt	anr			
Copper	12.9	12.5	103.2	80-120
Iron	1320	1300	101.5	80-120
Lead	24.3	25	97.2	80-120
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	25.0	25	100.0	80-120

Associated samples MP28497: FA21555-9, FA21555-10, FA21555-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28497
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 01/28/15

Metal	FA21642-24 Original	SDL 1:5	%DIF	QC Limits
Aluminum	14700	17300	17.8*(a)	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Cadmium	anr			
Calcium	anr			
Chromium	76.5	90.5	18.3*(a)	0-10
Cobalt	anr			
Copper	0.00	0.00	NC	0-10
Iron	346000	436000	25.7*(a)	0-10
Lead	1200	1290	7.1	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	102	130	26.7 (b)	0-10

Associated samples MP28497: FA21555-9, FA21555-10, FA21555-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.
(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA21555
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28497
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 01/28/15

Metal	Sample ml	Final ml	FA21642-24 Raw	FA21642-24 Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10	14700	14406	16360	0.2	125	2500	78.2*(a)	80-120
Antimony	9.8	10			75.8	0.2	5	100	75.8*(a)	80-120
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium	9.8	10	76.5	74.97	116.1	0.2	2.5	50	82.3	80-120
Cobalt										
Copper	9.8	10			83.5	0.2	5	100	83.5	80-120
Iron	9.8	10	346400	339472	341800	0.2	150	3000	77.6*(a)	80-120
Lead	9.8	10	1202	1177.96	1229	0.2	2.5	50	102.1	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	102.4	100.352	299.1	0.2	12.5	250	79.5*(a)	80-120

Associated samples MP28497: FA21555-9, FA21555-10, FA21555-11

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 01/07/14

Analyte	IDL ug/l
Aluminum	15
Antimony	2
Arsenic	2
Barium	1
Beryllium	.5
Cadmium	.5
Calcium	50
Chromium	1
Cobalt	.5
Copper	1
Iron	17
Lead	1.1
Magnesium	50
Manganese	.5
Molybdenum	.5
Nickel	.5
Potassium	200
Selenium	2.3
Silicon	5
Silver	.65
Sodium	500
Strontium	.4
Sulfur	5
Thallium	1.5
Tin	.7
Titanium	.9
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12175

Instrument Detection Limits

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12184

Instrument Detection Limits

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 01/07/14

Analyte	IDL ug/l
Aluminum	15
Antimony	2
Arsenic	2
Barium	1
Beryllium	.5
Cadmium	.5
Calcium	50
Chromium	1
Cobalt	.5
Copper	1
Iron	17
Lead	1.1
Magnesium	50
Manganese	.5
Molybdenum	.5
Nickel	.5
Potassium	200
Selenium	2.3
Silicon	5
Silver	.65
Sodium	500
Strontium	.4
Sulfur	5
Thallium	1.5
Tin	.7
Titanium	.9
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12173

Instrument Detection Limits

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12186

Instrument Linear Ranges

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA12175,MA12184

Instrument Linear Ranges

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA12173,MA12186

Metals Analysis

Raw Data

Sample Name: Blank Acquired: 1/22/2015 8:43:11 Type: Cal
Method: 60102007_041712(v77) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0008	-.0044	-.0004	.0048	.0000	.0045	-.0009	.0006	.0001
Stddev	.0002	.0016	.0001	.0007	.0006	.0011	.0000	.0004	.0001
%RSD	21.51	36.62	33.68	14.33	2577.	25.32	5.323	66.27	74.39
#1	.0008	-.0034	-.0005	.0050	.0005	.0037	-.0009	.0010	.0001
#2	.0010	-.0062	-.0002	.0040	-.0006	.0058	-.0009	.0008	.0001
#3	.0006	-.0035	-.0004	.0054	.0001	.0039	-.0008	.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0061	.0051	.0020	-.0002	.0011	.0021	-.0198	.0005	-.0049
Stddev	.0001	.0003	.0023	.0006	.0002	.0002	.0026	.0002	.0008
%RSD	2.139	6.447	112.3	333.4	17.64	11.19	13.23	34.25	16.15
#1	.0063	.0054	.0002	-.0008	.0012	.0024	-.0175	.0007	-.0046
#2	.0060	.0050	.0013	.0004	.0009	.0021	-.0226	.0003	-.0057
#3	.0061	.0048	.0046	-.0002	.0011	.0019	-.0192	.0005	-.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0010	-.0010	.0086	.0005	.0007	.0033	-.0073	-.0003	.0039
Stddev	.0000	.0002	.0002	.0001	.0005	.0001	.0004	.0002	.0002
%RSD	.6075	21.47	2.809	17.76	69.14	3.109	6.145	72.23	4.372
#1	.0010	-.0013	.0087	.0006	.0002	.0032	-.0067	-.0006	.0037
#2	.0010	-.0010	.0087	.0006	.0011	.0033	-.0075	-.0002	.0039
#3	.0010	-.0009	.0083	.0004	.0009	.0034	-.0075	-.0001	.0040

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1545.7	4251.0	33344.	5710.0
Stddev	1.8	8.2	70.	32.0
%RSD	.11571	.19342	.20941	.56042
#1	1547.7	4257.3	33312.	5686.2
#2	1544.4	4254.0	33424.	5746.4
#3	1545.0	4241.7	33296.	5697.4

Sample Name: LowStd Acquired: 1/22/2015 8:46:33 Type: Cal
Method: 60102007_041712(v77) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0409	1.530	.1515	5.360	3.643	2.498	2.801	1.294	.2578	.4250
Stddev	.0001	.007	.0007	.017	.006	.005	.006	.002	.0002	.0006
%RSD	.3363	.4431	.4421	.3155	.1685	.2148	.2020	.1622	.0762	.1529
#1	.0408	1.535	.1510	5.356	3.644	2.493	2.795	1.292	.2580	.4245
#2	.0411	1.533	.1522	5.379	3.649	2.504	2.806	1.296	.2577	.4258
#3	.0409	1.523	.1511	5.346	3.637	2.496	2.801	1.294	.2577	.4248

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.549	1.002	.2455	1.706	.6488	3.610	.8629	.6556	.1526	.1144
Stddev	.004	.003	.0012	.001	.0021	.015	.0009	.0005	.0008	.0001
%RSD	.2681	.3388	.4805	.0553	.3270	.4159	.1062	.0801	.5051	.1227
#1	1.545	1.001	.2442	1.706	.6464	3.605	.8620	.6551	.1531	.1142
#2	1.553	1.006	.2459	1.705	.6497	3.627	.8639	.6555	.1530	.1144
#3	1.550	.9993	.2465	1.706	.6503	3.599	.8628	.6561	.1517	.1145

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1985	.2738	7.495	1.011	.2828	.3602	1.929
Stddev	.0007	.0006	.021	.001	.0005	.0004	.004
%RSD	.3515	.2325	.2842	.1409	.1763	.1157	.2010
#1	.1990	.2735	7.497	1.010	.2823	.3600	1.927
#2	.1988	.2746	7.515	1.012	.2833	.3599	1.934
#3	.1977	.2734	7.473	1.013	.2828	.3606	1.927

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1522.1	4149.2	32768.	5733.8
Stddev	4.2	10.3	95.	18.1
%RSD	.27595	.24864	.29089	.31508
#1	1519.2	4145.0	32775.	5732.7
#2	1520.2	4141.6	32860.	5716.3
#3	1526.9	4160.9	32669.	5752.4

Sample Name: MidStd Acquired: 1/22/2015 8:49:43 Type: Cal
Method: 60102007_041712(v77) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1597	6.059	.6197	21.24	14.45	9.818	11.32	5.227	1.024	1.694
Stddev	.0006	.013	.0001	.05	.03	.020	.01	.003	.002	.003
%RSD	.3482	.2147	.0182	.2437	.1822	.2013	.0563	.0538	.1474	.1686
#1	.1603	6.073	.6196	21.28	14.47	9.841	11.31	5.224	1.023	1.696
#2	.1592	6.053	.6198	21.18	14.42	9.806	11.31	5.228	1.026	1.691
#3	.1597	6.049	.6196	21.26	14.47	9.808	11.32	5.230	1.024	1.695

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.934	4.002	.9596	6.778	2.606	14.32	3.448	2.671	.6191	.4650
Stddev	.008	.008	.0022	.009	.005	.02	.001	.000	.0003	.0001
%RSD	.1395	.1925	.2279	.1291	.1751	.1558	.0221	.0158	.0500	.0137
#1	5.942	4.008	.9607	6.767	2.601	14.35	3.447	2.671	.6189	.4650
#2	5.926	3.994	.9571	6.783	2.609	14.31	3.448	2.670	.6195	.4650
#3	5.935	4.006	.9611	6.782	2.609	14.31	3.448	2.671	.6190	.4649

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.8956	1.094	30.21	4.111	1.177	1.451	7.701
Stddev	.0007	.001	.07	.002	.001	.001	.005
%RSD	.0737	.0542	.2383	.0475	.0724	.0940	.0691
#1	.8951	1.094	30.24	4.112	1.178	1.449	7.701
#2	.8963	1.093	30.13	4.112	1.177	1.452	7.696
#3	.8954	1.094	30.26	4.109	1.176	1.451	7.707

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1459.8	4003.7	31490.	5735.2
Stddev	2.2	5.8	95.	36.4
%RSD	.14858	.14476	.30259	.63527
#1	1457.5	3997.2	31552.	5737.5
#2	1460.2	4008.5	31380.	5770.4
#3	1461.7	4005.3	31538.	5697.6

Sample Name: HighStd Acquired: 1/22/2015 8:57:24 Type: Cal
Method: 60102007_041712(v77) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3243	12.05	1.247	42.23	28.29	19.32	22.41	10.42	2.005	3.354
Stddev	.0009	.03	.001	.02	.08	.05	.01	.01	.003	.005
%RSD	.2708	.2451	.0516	.0471	.2889	.2671	.0559	.1239	.1238	.1445
#1	.3250	12.08	1.246	42.25	28.38	19.38	22.40	10.40	2.004	3.358
#2	.3233	12.06	1.247	42.23	28.28	19.30	22.43	10.42	2.003	3.349
#3	.3247	12.02	1.248	42.21	28.22	19.28	22.42	10.43	2.007	3.357

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	11.60	8.010	1.884	13.10	5.381	28.22	6.882	5.414	1.253	.9361
Stddev	.04	.028	.008	.02	.007	.06	.007	.003	.001	.0012
%RSD	.3852	.3427	.4388	.1791	.1395	.2021	.1018	.0612	.1002	.1330
#1	11.65	8.033	1.893	13.13	5.372	28.27	6.874	5.416	1.252	.9346
#2	11.59	8.018	1.883	13.10	5.384	28.22	6.885	5.410	1.252	.9368
#3	11.57	7.980	1.877	13.09	5.385	28.16	6.886	5.416	1.254	.9368

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.257	2.251	59.38	8.215	2.381	2.914	15.17
Stddev	.002	.002	1.87	.014	.004	.004	.01
%RSD	.0825	.0792	3.143	.1757	.1792	.1355	.0811
#1	2.255	2.249	61.33	8.229	2.379	2.915	15.16
#2	2.257	2.253	59.19	8.200	2.378	2.910	15.18
#3	2.259	2.250	57.61	8.215	2.386	2.918	15.18

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1385.2	3853.0	30717.	5730.0
Stddev	3.5	6.9	20.	78.4
%RSD	.25218	.17804	.06561	1.3677
#1	1387.5	3860.5	30714.	5653.1
#2	1386.9	3851.3	30738.	5727.1
#3	1381.1	3847.1	30698.	5809.8

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/22/2015 9:05:56 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5009	80.10	4.104	3.926	3.859	79.65	3.972	4.001	3.992	3.963
Stddev	.0006	.16	.004	.006	.008	.14	.002	.002	.010	.008
%RSD	.1101	.2051	.1107	.1479	.1989	.1763	.0492	.0460	.2425	.1996
#1	.5004	80.29	4.105	3.932	3.867	79.78	3.970	3.999	3.995	3.972
#2	.5015	79.97	4.107	3.922	3.852	79.50	3.974	4.002	3.982	3.957
#3	.5008	80.05	4.099	3.923	3.860	79.66	3.973	4.001	4.001	3.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	76.68	78.75	78.41	3.831	4.066	80.36	4.057	3.935	4.097	4.092
Stddev	.15	.16	.25	.025	.007	.19	.003	.006	.009	.002
%RSD	.2021	.2047	.3130	.6457	.1652	.2422	.0701	.1489	.2262	.0568
#1	76.80	78.92	78.56	3.810	4.059	80.56	4.059	3.940	4.092	4.090
#2	76.50	78.59	78.12	3.858	4.069	80.17	4.058	3.929	4.108	4.094
#3	76.73	78.75	78.53	3.826	4.072	80.36	4.054	3.938	4.091	4.090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.486	4.167	3.814	3.883	3.949	3.996	3.974
Stddev	.003	.002	.039	.004	.010	.010	.003
%RSD	.0597	.0489	1.017	.0949	.2491	.2399	.0822
#1	4.483	4.168	3.776	3.887	3.956	4.000	3.976
#2	4.488	4.168	3.814	3.881	3.938	3.985	3.976
#3	4.487	4.164	3.854	3.880	3.954	4.002	3.970
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/22/2015 9:05:56 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1381.9	3762.7	31075.	5776.2
Stddev	4.5	9.3	52.	23.9
%RSD	.32686	.24714	.16600	.41408
#1	1376.6	3754.1	31134.	5755.1
#2	1384.5	3761.5	31055.	5802.2
#3	1384.4	3772.5	31037.	5771.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/22/2015 9:15:14 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2502	40.08	2.046	2.037	2.028	40.17	2.020	2.019	2.033	2.022
Stddev	.0011	.03	.002	.003	.003	.06	.000	.001	.004	.003
%RSD	.4541	.0717	.1038	.1563	.1364	.1407	.0119	.0476	.2067	.1238
#1	.2490	40.10	2.045	2.035	2.025	40.20	2.019	2.019	2.033	2.024
#2	.2513	40.08	2.044	2.034	2.028	40.21	2.020	2.019	2.028	2.019
#3	.2504	40.05	2.048	2.040	2.030	40.11	2.020	2.020	2.037	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.23	39.62	39.86	2.040	2.006	40.40	2.045	1.991	2.039	2.046
Stddev	.06	.03	.10	.004	.007	.01	.003	.002	.003	.003
%RSD	.1562	.0815	.2435	.1856	.3557	.0199	.1491	.0866	.1327	.1686
#1	40.16	39.61	39.78	2.037	1.999	40.39	2.042	1.992	2.039	2.042
#2	40.25	39.65	39.97	2.039	2.007	40.40	2.044	1.992	2.037	2.049
#3	40.28	39.59	39.83	2.044	2.013	40.40	2.048	1.989	2.042	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.555	2.045	2.014	1.975	1.994	1.989	2.029
Stddev	.002	.004	.004	.004	.002	.005	.001
%RSD	.0984	.2035	.1803	.1925	.0925	.2563	.0708
#1	1.554	2.041	2.011	1.974	1.992	1.989	2.030
#2	1.555	2.049	2.013	1.971	1.995	1.984	2.030
#3	1.557	2.044	2.018	1.979	1.995	1.994	2.027
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/22/2015 9:15:14 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1441.5	3921.7	31650.	5765.1
Stddev	2.0	.6	126.	49.0
%RSD	.13820	.01485	.39765	.84920
#1	1439.4	3921.3	31699.	5781.5
#2	1441.7	3921.4	31744.	5710.1
#3	1443.4	3922.4	31507.	5803.8

Sample Name: ICB Acquired: 1/22/2015 9:21:49 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0000	-.0003	-.0002	.0000	-.0031	.0000	.0001	.0001	.0009
Stddev	.0003	.0022	.0005	.0001	.000	.0034	.000	.0001	.0003	.0000
%RSD	132.3	5548.	159.3	75.47	55.69	107.1	53.29	141.7	417.6	4.043
#1	.0000	.0026	-.0009	-.0002	.0000	-.0036	.0000	.0002	-.0003	.0009
#2	.0000	-.0015	.0002	-.0001	-.0001	.0004	.0000	.0001	.0004	.0009
#3	-.0005	-.0010	-.0003	-.0003	.0000	-.0062	.0000	.0000	.0001	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0179	.0349	-.0120	-.0002	-.0003	.0046	.0000	-.0004	.0003	.0008
Stddev	.0038	.0314	.0087	.0000	.0002	.0025	.000	.0003	.0012	.0005
%RSD	21.30	90.17	72.02	7.434	76.50	54.48	563.1	70.23	421.4	67.28
#1	-.0151	.0625	-.0120	-.0002	-.0003	.0017	-.0002	-.0007	.0000	.0006
#2	-.0223	.0006	-.0034	-.0002	-.0001	.0062	-.0002	-.0001	.0016	.0003
#3	-.0165	.0415	-.0207	-.0002	-.0005	.0061	.0002	-.0004	-.0007	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0002	-.0001	-.0002	.0000	-.0001	-.0003
Stddev	.0008	.0002	.0000	.0000	.001	.0001	.0000
%RSD	244.3	95.11	22.84	3.345	14210.	87.07	7.962
#1	.0002	.0004	-.0001	-.0002	-.0010	.0000	-.0003
#2	.0001	.0002	-.0001	-.0001	.0014	-.0002	-.0003
#3	-.0013	.0000	-.0001	-.0002	-.0004	-.0001	-.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICB Acquired: 1/22/2015 9:21:49 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1530.7	4128.2	33298.	5873.5
Stddev	1.4	6.2	36.	34.0
%RSD	.08833	.14992	.10937	.57814
#1	1530.4	4123.6	33263.	5909.4
#2	1529.6	4125.6	33336.	5869.3
#3	1532.2	4135.2	33296.	5841.9

Sample Name: CRIA Acquired: 1/22/2015 9:30:22 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0098	.2208	.0097	.2079	.0052	1.063	.0051	.0512	.0108	.0271
Stddev	.0005	.0077	.0007	.0009	.0001	.005	.0000	.0001	.0001	.0005
%RSD	5.294	3.471	7.151	.4339	1.075	.4578	.5234	.1326	.4961	1.839
#1	.0102	.2130	.0102	.2071	.0051	1.061	.0051	.0513	.0108	.0276
#2	.0092	.2283	.0100	.2089	.0052	1.068	.0052	.0512	.0109	.0266
#3	.0100	.2211	.0089	.2078	.0052	1.059	.0051	.0512	.0108	.0272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2831	10.29	5.159	.0155	.0463	10.71	.0423	.0043	.0056	.0108
Stddev	.0068	.07	.039	.0001	.0001	.03	.0002	.0008	.0006	.0002
%RSD	2.412	.6407	.7518	.7067	.1609	.2892	.5441	19.14	10.09	2.018
#1	.2827	10.24	5.129	.0156	.0462	10.67	.0425	.0052	.0057	.0106
#2	.2902	10.36	5.203	.0154	.0463	10.73	.0421	.0036	.0062	.0109
#3	.2765	10.25	5.144	.0154	.0463	10.73	.0423	.0040	.0050	.0110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0318	.0516	.0100	.0088	.0085	.0491	.0205
Stddev	.0006	.0007	.0001	.0001	.0014	.0004	.0001
%RSD	1.964	1.273	.5745	.8498	15.92	.8556	.2946
#1	.0311	.0523	.0099	.0089	.0084	.0493	.0204
#2	.0321	.0511	.0099	.0089	.0099	.0486	.0205
#3	.0321	.0513	.0100	.0088	.0072	.0494	.0205
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CRIA Acquired: 1/22/2015 9:30:22 Type: QC
Method: 60102007_041712(v77) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1532.8	4074.3	33016.	5889.6
Stddev	1.5	6.3	201.	26.7
%RSD	.09461	.15582	.60857	.45336
#1	1531.4	4067.2	32804.	5911.7
#2	1532.9	4079.3	33041.	5897.0
#3	1534.3	4076.4	33204.	5859.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/22/2015 9:36:03 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	488.0	-.0008	-.0001	.0000	469.2	.0000	-.0008	-.0009	.0000
Stddev	.0005	5.2	.0018	.0002	.000	2.1	.0001	.0002	.0003	.000
%RSD	79.57	1.070	218.9	140.0	152.0	.4569	543.3	28.61	35.16	587.2
#1	.0010	482.5	-.0015	-.0002	.0000	467.7	.0001	-.0010	-.0008	-.0002
#2	.0001	488.7	.0012	-.0003	.0000	471.7	-.0001	-.0009	-.0012	-.0001
#3	.0009	492.8	-.0022	.0001	-.0001	468.4	.0000	-.0006	-.0006	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	171.4	.0918	463.5	.0000	.0004	.0974	-.0007	.0000	.0000	.0004
Stddev	.5	.0114	.6	.000	.0003	.0044	.0001	.0034	.000	.0021
%RSD	.3199	12.37	.1229	209.9	80.79	4.543	18.54	7017.	1217.	532.6
#1	170.8	.0903	463.0	.0000	.0001	.0941	-.0008	.0033	-.0004	.0010
#2	171.7	.0813	463.3	-.0001	.0008	.0958	-.0005	.0003	.0002	-.0020
#3	171.8	.1038	464.1	-.0001	.0004	.1025	-.0008	-.0035	.0001	.0021
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0369	-.0001	.0001	-.0001	-.0012	.0000	.0004
Stddev	.0002	.0001	.0001	.0002	.0022	.0002	.0002
%RSD	.6596	79.23	70.47	146.5	180.7	2069.	55.95
#1	.0366	.0000	.0002	.0001	-.0004	.0002	.0007
#2	.0368	-.0001	.0001	-.0001	-.0037	-.0002	.0004
#3	.0371	-.0001	.0001	-.0003	.0004	.0000	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/22/2015 9:36:03 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1353.3	3569.5	28463.	5650.2
Stddev	2.7	6.6	63.	21.6
%RSD	.20172	.18449	.21976	.38203
#1	1350.9	3577.1	28514.	5630.2
#2	1352.7	3565.9	28393.	5647.2
#3	1356.3	3565.5	28481.	5673.1

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/22/2015 9:43:13 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9899	492.0	1.090	.5059	.4968	469.5	.9597	.5023	.4998	.5531
Stddev	.0014	2.7	.004	.0038	.0024	2.3	.0036	.0019	.0007	.0019
%RSD	.1459	.5398	.3988	.7455	.4895	.4894	.3731	.3698	.1422	.3427
#1	.9912	493.1	1.092	.5043	.4956	466.8	.9580	.5020	.4998	.5536
#2	.9883	489.0	1.093	.5032	.4952	471.0	.9638	.5043	.4991	.5510
#3	.9901	493.9	1.085	.5102	.4996	470.6	.9573	.5006	.5006	.5547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	175.4	.0500	469.0	.5022	.9727	.1066	1.021	.9513	1.104	1.050
Stddev	1.1	.0286	2.4	.0008	.0043	.0082	.004	.0055	.006	.007
%RSD	.6175	57.27	.5079	.1592	.4424	7.679	.4012	.5767	.5112	.6329
#1	174.7	.0829	467.5	.5031	.9699	.1150	1.021	.9452	1.102	1.049
#2	174.8	.0311	467.8	.5019	.9777	.1061	1.025	.9529	1.110	1.057
#3	176.6	.0359	471.8	.5017	.9706	.0987	1.017	.9559	1.099	1.044
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0538	1.012	.9815	.9839	1.001	.4837	.9713
Stddev	.0009	.005	.0056	.0024	.003	.0004	.0040
%RSD	1.749	.5023	.5677	.2413	.2843	.0841	.4111
#1	.0527	1.012	.9801	.9860	.9978	.4834	.9694
#2	.0543	1.017	.9768	.9813	1.003	.4835	.9759
#3	.0544	1.007	.9877	.9843	1.003	.4841	.9686
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/22/2015 9:43:13 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1355.4	3605.3	28744.	5664.7
Stddev	1.6	16.3	81.	32.5
%RSD	.12083	.45287	.28014	.57384
#1	1356.9	3603.7	28665.	5700.0
#2	1353.6	3589.9	28739.	5658.0
#3	1355.5	3622.4	28826.	5636.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 9:50:31 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2481	40.46	2.046	2.019	1.996	40.43	2.006	2.010	2.037	2.011
Stddev	.0008	.06	.001	.004	.002	.05	.001	.002	.005	.004
%RSD	.3070	.1435	.0407	.2149	.0973	.1114	.0504	.0890	.2633	.2104
#1	.2484	40.52	2.045	2.024	1.994	40.47	2.007	2.009	2.043	2.015
#2	.2473	40.40	2.046	2.017	1.995	40.38	2.007	2.013	2.032	2.007
#3	.2488	40.46	2.045	2.017	1.998	40.44	2.005	2.010	2.035	2.009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.68	39.77	39.78	2.018	1.986	40.92	2.041	1.970	2.032	2.042
Stddev	.02	.04	.10	.005	.004	.11	.002	.006	.005	.006
%RSD	.0605	.1078	.2606	.2403	.1825	.2735	.0857	.2981	.2347	.3011
#1	39.69	39.79	39.78	2.024	1.982	41.05	2.041	1.963	2.032	2.035
#2	39.66	39.79	39.67	2.015	1.988	40.86	2.043	1.975	2.037	2.045
#3	39.70	39.72	39.88	2.016	1.987	40.85	2.040	1.971	2.028	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.771	2.021	1.995	1.972	1.974	1.986	2.016
Stddev	.000	.003	.001	.005	.005	.004	.002
%RSD	.0252	.1696	.0250	.2355	.2751	.2241	.1172
#1	1.770	2.018	1.994	1.977	1.968	1.991	2.016
#2	1.771	2.024	1.995	1.971	1.976	1.983	2.018
#3	1.771	2.020	1.994	1.968	1.978	1.985	2.013
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 9:50:31 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1433.6	3878.0	31603.	5784.6
Stddev	1.2	6.9	109.	31.1
%RSD	.08659	.17727	.34503	.53696
#1	1434.9	3870.4	31482.	5755.5
#2	1432.4	3879.5	31631.	5817.3
#3	1433.6	3883.9	31694.	5781.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 9:58:04 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0042	-.0008	-.0001	.0001	.0089	.0001	.0000
Stddev	.0005	.0083	.0005	.0001	.0001	.0009	.0001	.0001
%RSD	889.5	197.5	55.47	161.6	67.33	10.11	88.82	328.9
#1	-.0006	.0042	-.0013	.0000	.0001	.0097	.0003	-.0001
#2	.0004	-.0041	-.0007	.0000	.0002	.0091	.0000	.0000
#3	.0000	.0124	-.0004	-.0002	.0001	.0079	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0008	-.0136	.0057	.0025	.0000	-.0008	.0152
Stddev	.0001	.0002	.0022	.0338	.0043	.0001	.0002	.0053
%RSD	63.33	30.18	16.26	595.0	173.1	564.8	20.49	35.05
#1	.0001	.0010	-.0113	.0442	.0049	.0000	-.0008	.0101
#2	.0003	.0005	-.0137	-.0084	-.0025	.0001	-.0006	.0207
#3	.0001	.0008	-.0158	-.0188	.0051	.0000	-.0010	.0147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F-.0012	-.0002	F.0020	.0023	-.0002	.0001	-.0006
Stddev	.0001	.0003	.0001	.0009	.0004	.0000	.0001	.0001
%RSD	132.4	24.47	56.74	42.71	18.36	17.30	85.62	8.306
#1	.0001	-.0013	-.0001	.0021	.0018	-.0002	.0003	-.0006
#2	.0001	-.0009	-.0001	.0011	.0024	-.0002	.0001	-.0006
#3	.0000	-.0015	-.0003	.0028	.0026	-.0001	.0000	-.0007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010		.0020				
Low Limit		-.0010		-.0020				

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 9:58:04 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0004	.0001	.0001
Stddev	.0012	.0002	.0000
%RSD	294.3	182.6	28.71
#1	.0017	.0004	.0002
#2	-.0008	.0000	.0001
#3	.0004	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1516.7	4087.1	32986.	5768.3
Stddev	1.4	2.6	123.	21.2
%RSD	.09536	.06424	.37425	.36812
#1	1516.2	4087.8	32882.	5748.5
#2	1515.6	4089.3	32953.	5765.6
#3	1518.3	4084.2	33122.	5790.7

Zoom In Zoom Out

Sample Name: FA21335-4 Acquired: 1/22/2015 10:04:05 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0059	.3381	-.0236	.0008	.0014	44.66	.0008	-.0034	.0096	.0314
Stddev	.0111	.2207	.0135	.0008	.0006	.15	.0009	.0028	.0047	.0033
%RSD	186.5	65.29	57.06	108.0	39.28	.3375	115.4	81.65	49.28	10.47
#1	.0155	.5109	-.0392	.0001	.0020	44.49	.0006	-.0060	.0084	.0330
#2	-.0062	.0894	-.0162	.0017	.0009	44.73	.0000	-.0005	.0056	.0336
#3	.0085	.4138	-.0155	.0005	.0014	44.77	.0018	-.0036	.0148	.0276

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.2884	55.85	84.16	.0081	-.0266	1166.	-.0010	-.0165	-.0228	.0181
Stddev	.0726	.35	.93	.0010	.0018	2.	.0047	.0021	.0101	.0145
%RSD	25.17	.6259	1.106	12.38	6.633	.2015	456.5	12.96	44.10	80.17
#1	-.2586	56.22	85.01	.0091	-.0269	1168.	-.0038	-.0178	-.0114	.0269
#2	-.3711	55.79	83.17	.0081	-.0246	1165.	-.0037	-.0140	-.0303	.0014
#3	-.2354	55.53	84.29	.0071	-.0281	1164.	.0044	-.0176	-.0269	.0260

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.010	-.0035	.5368	.0111	-.0012	.0519	.0952
Stddev	.016	.0068	.0015	.0025	.0114	.0022	.0005
%RSD	.2658	193.8	.2788	22.71	980.0	4.201	.5152
#1	6.001	.0043	.5379	.0111	.0005	.0525	.0951
#2	6.000	-.0078	.5374	.0087	.0093	.0536	.0957
#3	6.028	-.0071	.5351	.0137	-.0133	.0494	.0947

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1519.4	4009.9	32479.	5828.3
Stddev	2.0	6.1	98.	63.7
%RSD	.13222	.15202	.30173	1.0933
#1	1517.1	4004.2	32485.	5832.3
#2	1520.0	4016.3	32574.	5889.9
#3	1521.0	4009.0	32378.	5762.7

Zoom In Zoom Out

Sample Name: MP21335-D1 Acquired: 1/22/2015 10:08:12 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0040	.1442	-.0013	.0022	.0006	45.45	.0012	-.0005	.0077	.0202
Stddev	.0049	.0374	.0167	.0049	.0020	.06	.0007	.0027	.0032	.0006
%RSD	121.8	25.91	1271.	226.8	342.6	.1422	60.68	555.7	41.57	3.221
#1	.0078	.1559	-.0115	-.0027	.0011	45.50	.0020	.0023	.0109	.0195
#2	.0058	.1743	-.0104	.0021	-.0016	45.38	.0007	-.0007	.0044	.0202
#3	-.0015	.1024	.0180	.0072	.0022	45.48	.0008	-.0030	.0079	.0208

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.3871	57.35	85.97	.0082	-.0297	1184.	-.0023	-.0042	-.0308	-.0058
Stddev	.0447	.20	1.08	.0001	.0055	3.	.0052	.0259	.0146	.0361
%RSD	11.55	.3515	1.251	1.497	18.50	.2293	223.7	611.5	47.50	619.5
#1	-.3501	57.57	86.42	.0081	-.0259	1185.	-.0011	-.0216	-.0175	.0337
#2	-.3744	57.31	84.74	.0083	-.0271	1180.	.0021	.0256	-.0465	-.0371
#3	-.4367	57.17	86.75	.0082	-.0360	1185.	-.0080	-.0167	-.0283	-.0141

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.106	-.0062	.5521	.0080	.0204	.0555	.0960
Stddev	.021	.0047	.0017	.0036	.0124	.0050	.0005
%RSD	.3382	75.69	.3164	44.75	60.71	9.005	.4860
#1	6.083	-.0110	.5520	.0059	.0096	.0506	.0959
#2	6.123	-.0015	.5539	.0122	.0176	.0553	.0956
#3	6.112	-.0062	.5504	.0060	.0340	.0606	.0965

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1529.7	4058.2	32567.	5844.5
Stddev	2.6	13.7	154.	10.6
%RSD	.17124	.33661	.47368	.18109
#1	1527.3	4053.8	32729.	5834.1
#2	1529.4	4047.3	32552.	5855.3
#3	1532.5	4073.5	32422.	5844.2

Zoom In Zoom Out

Sample Name: MP21335-S1 Acquired: 1/22/2015 10:12:20 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0595	29.15	2.076	2.137	.0523	70.94	.0512	.5167	.2321	.2871
Stddev	.0066	.14	.015	.006	.0001	.41	.0007	.0019	.0026	.0049
%RSD	11.06	.4752	.7285	.2703	.2261	.5813	1.390	.3722	1.114	1.702
#1	.0522	29.13	2.078	2.143	.0525	71.42	.0504	.5153	.2291	.2913
#2	.0651	29.02	2.059	2.136	.0523	70.76	.0516	.5160	.2335	.2884
#3	.0611	29.30	2.089	2.132	.0523	70.65	.0516	.5189	.2337	.2817

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.40	82.55	109.8	.5422	.4637	1175.	.5325	.4973	.4940	1.784
Stddev	.06	.81	.3	.0018	.0036	5.	.0014	.0096	.0203	.020
%RSD	.2179	.9798	.2625	.3396	.7775	.4507	.2672	1.936	4.102	1.119
#1	27.40	83.28	109.6	.5406	.4669	1180.	.5309	.4964	.5170	1.801
#2	27.46	82.70	110.2	.5443	.4598	1174.	.5336	.4881	.4857	1.762
#3	27.34	81.68	109.8	.5418	.4644	1169.	.5330	.5073	.4791	1.789

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.973	.5180	1.074	.5150	2.010	.5634	.6166
Stddev	.018	.0087	.004	.0023	.031	.0050	.0011
%RSD	.2957	1.688	.3902	.4517	1.553	.8900	.1739
#1	5.982	.5249	1.074	.5128	2.019	.5589	.6155
#2	5.985	.5081	1.079	.5174	1.975	.5688	.6176
#3	5.953	.5208	1.070	.5148	2.036	.5625	.6168

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1511.7	4063.2	32331.	5816.0
Stddev	.9	1.0	153.	35.3
%RSD	.06103	.02442	.47390	.60731
#1	1511.8	4064.2	32498.	5776.2
#2	1512.5	4062.3	32197.	5828.4
#3	1510.7	4063.0	32297.	5843.5

Zoom In Zoom Out

Sample Name: MP28335-S2 Acquired: 1/22/2015 10:16:25 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0558	29.17	2.109	2.156	.0530	72.00	.0507	.5248	.2444	.3036
Stddev	.0048	.32	.021	.003	.0021	.13	.0000	.0004	.0071	.0039
%RSD	8.678	1.100	.9820	.1562	3.913	.1823	.0598	.0831	2.914	1.279
#1	.0599	28.98	2.087	2.153	.0523	71.91	.0507	.5251	.2364	.3029
#2	.0505	28.99	2.111	2.156	.0514	72.15	.0507	.5249	.2501	.3001
#3	.0570	29.54	2.128	2.159	.0553	71.93	.0507	.5243	.2467	.3078

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	28.11	84.26	111.1	.5491	.4714	1188.	.5410	.4891	.5069	1.809
Stddev	.11	.24	.7	.0044	.0081	2.	.0064	.0272	.0346	.030
%RSD	.3944	.2853	.6314	.7995	1.711	.1650	1.181	5.571	6.835	1.674
#1	28.05	84.49	111.7	.5529	.4685	1188.	.5382	.5022	.5021	1.780
#2	28.23	84.27	111.2	.5443	.4653	1186.	.5364	.4577	.5436	1.807
#3	28.03	84.01	110.3	.5502	.4806	1190.	.5483	.5073	.4748	1.841

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.082	.5180	1.082	.5231	2.062	.5587	.6064
Stddev	.026	.0076	.006	.0054	.013	.0030	.0046
%RSD	.4211	1.459	.5546	1.027	.6119	.5343	.7598
#1	6.103	.5208	1.089	.5282	2.061	.5608	.6020
#2	6.054	.5094	1.078	.5238	2.075	.5600	.6061
#3	6.090	.5237	1.080	.5175	2.050	.5552	.6112

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1518.5	4079.7	32316.	5825.8
Stddev	4.6	6.0	79.	7.1
%RSD	.29987	.14759	.24502	.12204
#1	1522.5	4077.7	32273.	5831.7
#2	1513.6	4074.9	32407.	5817.9
#3	1519.5	4086.4	32267.	5827.8

Zoom In Zoom Out

Sample Name: MP28335-PS1 Acquired: 1/22/2015 10:20:30 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0575	3.746	.0975	.2922	.0578	50.49	.0571	.0542	.0740	.1383
Stddev	.0045	.080	.0034	.0053	.0006	.19	.0008	.0012	.0058	.0025
%RSD	7.801	2.131	3.519	1.807	.9672	.3710	1.444	2.258	7.864	1.787
#1	.0626	3.742	.0936	.2983	.0578	50.58	.0571	.0552	.0703	.1410
#2	.0545	3.827	.0986	.2889	.0572	50.27	.0579	.0528	.0808	.1375
#3	.0553	3.668	.1001	.2895	.0583	50.62	.0563	.0547	.0711	.1363

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.156	69.39	90.68	.0675	.0804	1174.	.1203	.0520	.1005	.1080
Stddev	.026	.10	.04	.0008	.0036	1.	.0029	.0124	.0198	.0400
%RSD	.8219	.1409	.0459	1.191	4.484	.1262	2.408	23.81	19.73	37.07
#1	3.149	69.32	90.64	.0682	.0813	1173.	.1170	.0656	.1042	.0623
#2	3.184	69.50	90.67	.0677	.0835	1172.	.1212	.0493	.0791	.1248
#3	3.134	69.35	90.72	.0666	.0765	1175.	.1226	.0413	.1182	.1370

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.876	.0377	.6125	.1249	.0974	.1082	.3920
Stddev	.049	.0098	.0027	.0012	.0101	.0059	.0008
%RSD	.7113	26.08	.4371	.9630	10.37	5.429	.2041
#1	6.932	.0470	.6146	.1240	.1050	.1026	.3928
#2	6.852	.0387	.6095	.1245	.0859	.1143	.3912
#3	6.844	.0274	.6135	.1263	.1012	.1076	.3920

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1516.9	4089.7	32138.	5789.9
Stddev	7.3	6.0	57.	17.1
%RSD	.48431	.14728	.17706	.29553
#1	1525.3	4096.5	32097.	5770.8
#2	1511.9	4085.2	32203.	5804.0
#3	1513.4	4087.2	32114.	5794.7

Zoom In Zoom Out

Sample Name: MP28335-SD1 Acquired: 1/22/2015 10:24:37 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0330	.3203	-.0773	-.0195	-.0080	45.81	-.0025	-.0141	.0073	.0692
Stddev	.0110	1.740	.0828	.0134	.0052	.46	.0026	.0164	.0274	.0278
%RSD	33.20	543.3	107.2	68.46	64.87	1.004	107.2	116.6	378.0	40.12
#1	.0221	1.676	-.1728	-.0129	-.0022	45.86	-.0043	.0007	-.0179	.0388
#2	.0329	.9274	-.0253	-.0108	-.0121	46.24	-.0036	-.0113	.0365	.0931
#3	.0441	-1.642	-.0337	-.0349	-.0097	45.32	.0006	-.0318	.0031	.0758

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-2.752	58.75	88.74	-.0046	-.1697	1187.	.0000	-.0138	.0348	.1449
Stddev	.195	1.58	2.56	.0048	.0069	3.	.0130	.0809	.1036	.0300
%RSD	7.073	2.681	2.883	104.2	4.047	.2796	158500.	585.0	298.0	20.71
#1	-2.977	57.18	85.98	-.0055	-.1661	1183.	.0115	.0017	-.0737	.1609
#2	-2.629	60.33	91.02	-.0088	-.1777	1187.	-.0141	-.1013	.0451	.1635
#3	-2.651	58.75	89.23	.0006	-.1655	1190.	.0027	.0581	.1328	.1103

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.070	-.0556	.5457	-.0467	.0542	.0460	.6267
Stddev	.007	.0098	.0038	.0154	.0470	.0095	.0063
%RSD	.0959	17.69	.6993	33.00	86.71	20.55	1.007
#1	7.077	-.0445	.5485	-.0606	.0001	.0378	.6321
#2	7.064	-.0634	.5414	-.0494	.0855	.0439	.6281
#3	7.070	-.0590	.5473	-.0301	.0771	.0564	.6198

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1534.7	4095.5	32955.	5788.8
Stddev	6.6	13.0	72.	39.8
%RSD	.43037	.31688	.21827	.68798
#1	1530.1	4095.0	33028.	5762.4
#2	1542.3	4108.8	32951.	5834.6
#3	1531.7	4082.8	32885.	5769.5

Zoom In Zoom Out

Sample Name: MP28472-MB1 Acquired: 1/22/2015 10:28:47 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0098	-.0007	-.0004	-.0001	-.0038	.0000	-.0001	-.0002	.0008
Stddev	.0003	.0052	.0006	.0001	.0000	.0005	.000	.0001	.0001	.0004
%RSD	293.7	53.17	90.50	33.42	35.08	12.77	122.1	127.7	58.11	45.87
#1	.0003	-.0059	-.0006	-.0005	-.0001	-.0035	.0000	-.0002	-.0003	.0005
#2	-.0002	-.0157	-.0001	-.0002	-.0001	-.0035	-.0001	.0000	-.0001	.0012
#3	.0002	-.0077	-.0013	-.0004	-.0001	-.0043	.0000	.0000	-.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0324	-.0078	.0003	-.0002	-.0017	.0113	-.0002	-.0007	.0006	.0011
Stddev	.0013	.0062	.0099	.0000	.0001	.0045	.0002	.0010	.0014	.0018
%RSD	4.087	78.70	3366.	16.00	4.588	39.59	134.1	135.6	242.4	169.0
#1	-.0320	-.0020	.0117	-.0002	-.0018	.0090	-.0003	-.0016	-.0008	.0027
#2	-.0339	-.0072	-.0055	-.0002	-.0017	.0164	-.0003	-.0009	.0020	.0014
#3	-.0314	-.0143	-.0053	-.0003	-.0017	.0084	.0001	.0003	.0005	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0004	-.0002	-.0012	-.0004	-.0003	-.0004
Stddev	.0002	.0002	.0000	.0001	.0015	.0002	.0000
%RSD	24.25	45.52	25.21	7.504	363.5	78.19	3.914
#1	.0010	-.0005	-.0002	-.0012	-.0021	-.0003	-.0004
#2	.0006	-.0002	-.0001	-.0014	.0000	.0000	-.0004
#3	.0008	-.0004	-.0002	-.0012	.0008	-.0005	-.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28472-MB1 Acquired: 1/22/2015 10:28:47 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1524.7	4116.6	32940.	5799.1
Stddev	1.1	3.3	151.	50.9
%RSD	.07066	.07990	.45769	.87696
#1	1525.7	4113.3	32977.	5785.5
#2	1523.6	4116.7	33068.	5855.4
#3	1524.8	4119.9	32774.	5756.4

Zoom In Zoom Out

Sample Name: MP28472-B1 Acquired: 1/22/2015 10:32:57 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0501	27.91	2.001	2.090	.0529	25.97	.0494	.5034	.2097	.2635
Stddev	.0004	.06	.001	.004	.0002	.05	.0001	.0006	.0010	.0007
%RSD	.7808	.2131	.0695	.1925	.3847	.1936	.1149	.1276	.4576	.2514
#1	.0502	27.97	2.003	2.090	.0531	26.02	.0494	.5041	.2089	.2627
#2	.0497	27.85	2.000	2.086	.0527	25.93	.0494	.5030	.2108	.2638
#3	.0505	27.91	2.001	2.094	.0529	25.95	.0493	.5030	.2094	.2639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.17	25.93	25.62	.5189	.4971	26.27	.5128	.4956	.4986	1.966
Stddev	.04	.09	.11	.0011	.0006	.05	.0005	.0016	.0011	.003
%RSD	.1515	.3552	.4205	.2114	.1268	.1800	.0956	.3205	.2277	.1607
#1	27.22	26.04	25.75	.5193	.4971	26.30	.5129	.4974	.4973	1.968
#2	27.14	25.87	25.54	.5198	.4965	26.21	.5122	.4946	.4996	1.963
#3	27.16	25.89	25.59	.5177	.4978	26.29	.5131	.4948	.4988	1.968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1225	.5188	.5329	.5229	2.008	.4888	.5012
Stddev	.0011	.0010	.0009	.0011	.005	.0019	.0005
%RSD	.9263	.1992	.1720	.2162	.2323	.3911	.0991
#1	.1217	.5182	.5339	.5222	2.013	.4875	.5017
#2	.1238	.5183	.5324	.5242	2.008	.4910	.5007
#3	.1221	.5200	.5322	.5222	2.004	.4879	.5013
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28472-B1 Acquired: 1/22/2015 10:32:57 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1440.7	3940.2	30922.	5659.4
Stddev	6.7	11.5	181.	55.4
%RSD	.46723	.29184	.58512	.97825
#1	1433.0	3927.1	30840.	5604.8
#2	1443.9	3948.6	30796.	5715.5
#3	1445.2	3944.8	31129.	5657.8

Zoom In Zoom Out

Sample Name: FA21328-1 Acquired: 1/22/2015 10:36:53 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0125	-.0011	.1412	-.0001	33.12	.0000	-.0004	.0005
Stddev	.0004	.0147	.0007	.0004	.0001	.05	.000	.0001	.0004
%RSD	387.2	117.7	61.80	.2811	71.53	.1518	481.2	40.95	67.67
#1	-.0005	.0265	-.0006	.1416	.0000	33.06	.0000	-.0005	.0002
#2	.0001	.0139	-.0019	.1411	.0000	33.16	-.0001	-.0002	.0009
#3	.0002	-.0028	-.0009	.1408	-.0001	33.13	.0000	-.0003	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0010	-.0100	4.362	12.85	.0024	-.0020	F113.1	-.0004	-.0020
Stddev	.0004	.0074	.061	.06	.0001	.0002	.2	.0001	.0007
%RSD	39.09	74.09	1.391	.4790	2.209	11.89	.1714	16.54	33.36
#1	.0007	-.0021	4.305	12.78	.0025	-.0017	113.2	-.0004	-.0026
#2	.0008	-.0110	4.354	12.90	.0024	-.0021	113.2	-.0004	-.0013
#3	.0014	-.0167	4.426	12.86	.0024	-.0021	112.8	-.0003	-.0022

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0005	.0013	29.20	-.0005	.1974	.0007	.0009	-.0006	.0023
Stddev	.0010	.0016	.01	.0002	.0006	.0002	.0016	.0001	.0000
%RSD	198.9	120.0	.0351	40.16	.3172	23.07	182.2	25.29	1.637
#1	.0016	.0030	29.21	-.0006	.1979	.0008	.0017	-.0007	.0023
#2	-.0004	-.0001	29.20	-.0003	.1976	.0007	.0018	-.0005	.0023
#3	.0003	.0010	29.19	-.0004	.1967	.0005	-.0009	-.0005	.0024

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1466.1	3976.5	31159.	5645.9
Stddev	1.9	4.9	112.	32.7
%RSD	.13088	.12235	.35997	.57961
#1	1463.9	3974.0	31031.	5682.8
#2	1467.3	3973.3	31201.	5634.2
#3	1467.1	3982.1	31243.	5620.5

Zoom In Zoom Out

Sample Name: MP28472-D1 Acquired: 1/22/2015 10:41:00 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0173	-.0020	.1393	.0000	32.73	.0000	-.0005	.0003
Stddev	.0003	.0119	.0002	.0004	.000	.05	.0000	.0000	.0000
%RSD	95.38	68.66	8.293	.2820	153.8	.1538	12.76	9.302	8.839
#1	.0002	.0063	-.0018	.1390	-.0001	32.68	.0000	-.0005	.0003
#2	.0001	.0299	-.0021	.1392	.0000	32.76	.0001	-.0004	.0003
#3	.0006	.0158	-.0021	.1397	.0000	32.77	.0000	-.0004	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0011	-.0246	4.405	12.77	.0024	-.0020	F111.0	-.0003	-.0017
Stddev	.0002	.0004	.017	.01	.0001	.0001	.1	.0001	.0007
%RSD	16.75	1.593	.3787	.0463	4.592	5.251	.0884	49.15	41.30
#1	.0010	-.0245	4.387	12.77	.0023	-.0018	111.0	-.0004	-.0024
#2	.0011	-.0242	4.420	12.76	.0025	-.0020	110.9	-.0002	-.0015
#3	.0013	-.0250	4.409	12.77	.0023	-.0020	111.1	-.0002	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0020	28.77	-.0005	.1976	.0003	-.0004	-.0001	.0020
Stddev	.0011	.0017	.02	.0002	.0007	.0001	.0014	.0002	.0001
%RSD	695.2	83.97	.0813	33.72	.3553	36.64	368.6	274.3	3.424
#1	-.0005	.0003	28.79	-.0004	.1969	.0003	-.0005	-.0003	.0020
#2	-.0004	.0036	28.75	-.0007	.1975	.0005	.0011	.0001	.0021
#3	.0014	.0021	28.79	-.0004	.1983	.0002	-.0017	.0000	.0020

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1446.1	3957.0	30645.	5601.0
Stddev	4.3	9.2	70.	15.8
%RSD	.29772	.23145	.22994	.28216
#1	1450.9	3966.6	30687.	5619.2
#2	1442.5	3948.4	30563.	5593.1
#3	1444.9	3955.9	30684.	5590.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 10:45:08 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2503	40.64	2.041	2.038	2.028	40.52	2.016	2.021	2.032	2.029
Stddev	.0004	.02	.006	.004	.002	.05	.005	.005	.007	.006
%RSD	.1729	.0452	.2983	.1917	.1039	.1158	.2742	.2598	.3529	.2899
#1	.2504	40.65	2.035	2.036	2.030	40.56	2.011	2.016	2.035	2.034
#2	.2507	40.62	2.042	2.036	2.026	40.47	2.015	2.019	2.038	2.029
#3	.2498	40.65	2.047	2.043	2.028	40.53	2.022	2.026	2.024	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.27	40.38	40.26	2.040	1.992	40.89	2.042	1.983	2.030	2.038
Stddev	.06	.14	.05	.006	.009	.08	.006	.005	.006	.002
%RSD	.1371	.3346	.1157	.2844	.4665	.1935	.2893	.2574	.2886	.0991
#1	40.29	40.53	40.24	2.041	1.982	40.92	2.036	1.984	2.023	2.035
#2	40.31	40.30	40.32	2.045	1.994	40.80	2.044	1.988	2.032	2.039
#3	40.20	40.30	40.24	2.034	2.000	40.94	2.047	1.978	2.034	2.039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.772	2.013	2.031	1.995	1.989	1.994	2.026
Stddev	.008	.008	.002	.004	.003	.008	.006
%RSD	.4448	.4054	.1141	.2212	.1627	.4079	.2748
#1	1.764	2.005	2.033	1.997	1.987	1.997	2.021
#2	1.772	2.015	2.029	1.999	1.993	2.000	2.026
#3	1.780	2.021	2.031	1.990	1.987	1.984	2.032
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 10:45:08 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1437.2	3902.3	31422.	5683.2
Stddev	4.0	13.6	149.	50.9
%RSD	.28090	.34861	.47464	.89636
#1	1439.3	3917.6	31414.	5624.5
#2	1432.5	3897.7	31277.	5709.5
#3	1439.7	3891.6	31575.	5715.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 10:49:05 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0061	-.0004	.0001	.0002	.0037	.0002	.0001
Stddev	.0005	.0064	.0004	.0003	.0000	.0027	.0001	.0002
%RSD	263.5	105.0	101.2	348.6	7.649	72.56	42.45	215.7
#1	-.0004	.0008	-.0009	-.0003	.0002	.0007	.0003	-.0001
#2	.0004	.0132	-.0001	.0002	.0002	.0059	.0002	.0002
#3	.0006	.0042	-.0003	.0004	.0002	.0045	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0010	.0070	.0253	.0066	.0001	F.0013	.0311
Stddev	.0004	.0004	.0082	.0250	.0110	.0001	.0007	.0136
%RSD	144.6	38.00	117.6	98.67	165.4	84.44	53.66	43.68
#1	.0004	.0015	.0163	.0207	.0125	.0002	.0021	.0441
#2	.0006	.0007	.0009	.0030	.0134	.0001	.0011	.0170
#3	-.0002	.0010	.0037	.0523	-.0060	.0000	.0007	.0323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	F-.0016	F.0024	.0015	.0025	.0001	.0001	.0010
Stddev	.0002	.0002	.0009	.0007	.0003	.0003	.0001	.0001
%RSD	74.29	10.04	37.12	46.66	10.60	250.9	57.61	13.17
#1	.0004	-.0018	.0022	.0020	.0023	.0004	.0001	.0011
#2	.0002	-.0015	.0034	.0017	.0025	-.0002	.0002	.0009
#3	.0001	-.0015	.0016	.0007	.0028	.0002	.0002	.0009
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010	.0020					
Low Limit		-.0010	-.0020					

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 10:49:05 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0007	.0001	.0001
Stddev	.0008	.0002	.0000
%RSD	117.5	336.4	20.47
#1	.0000	.0003	.0001
#2	.0016	.0001	.0002
#3	.0005	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1525.0	4120.1	32805.	5736.4
Stddev	4.1	4.3	185.	40.1
%RSD	.27157	.10492	.56459	.69855
#1	1520.9	4115.7	32725.	5709.1
#2	1529.2	4124.4	33017.	5782.4
#3	1524.7	4120.3	32673.	5717.6

Zoom In Zoom Out

Sample Name: MP28472-SD1 Acquired: 1/22/2015 10:53:14 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0013	-.0128	-.0043	.1251	-.0001	29.69	.0001	-.0004	.0008	.0047
Stddev	.0009	.0289	.0013	.0003	.0003	.07	.0004	.0004	.0006	.0006
%RSD	67.02	226.4	29.04	.2687	343.9	.2364	262.3	93.29	72.50	12.89
#1	.0008	.0021	-.0055	.1248	-.0002	29.66	-.0003	-.0008	.0007	.0054
#2	.0023	-.0460	-.0030	.1254	.0002	29.65	.0005	-.0002	.0015	.0045
#3	.0008	.0057	-.0045	.1253	-.0002	29.78	.0002	-.0002	.0003	.0042

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.1333	3.813	11.75	.0012	-.0063	102.4	-.0008	-.0042	.0019	-.0028
Stddev	.0177	.118	.11	.0001	.0004	.3	.0016	.0028	.0040	.0015
%RSD	13.25	3.096	.9453	11.75	7.063	.2777	208.9	68.05	208.7	53.88
#1	-.1276	3.722	11.62	.0012	-.0065	102.3	.0011	-.0038	.0059	-.0024
#2	-.1532	3.946	11.83	.0013	-.0066	102.2	-.0019	-.0072	-.0020	-.0045
#3	-.1192	3.769	11.80	.0010	-.0058	102.8	-.0015	-.0016	.0018	-.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	25.51	-.0025	.1780	-.0019	.0006	-.0006	.0211
Stddev	.05	.0002	.0008	.0006	.0056	.0013	.0001
%RSD	.1951	8.729	.4536	30.42	961.0	227.0	.5332
#1	25.50	-.0027	.1785	-.0024	-.0048	.0009	.0212
#2	25.46	-.0025	.1771	-.0021	.0065	-.0014	.0212
#3	25.56	-.0022	.1784	-.0013	.0001	-.0012	.0210

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1511.8	4104.9	32294.	5694.9
Stddev	4.2	3.9	40.	18.3
%RSD	.27539	.09531	.12423	.32094
#1	1507.7	4103.0	32291.	5705.1
#2	1516.0	4109.4	32256.	5705.7
#3	1511.6	4102.2	32336.	5673.8

Zoom In Zoom Out

Sample Name: MP28472-S1 Acquired: 1/22/2015 10:57:23 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0513	28.42	2.061	2.244	.0532	59.29	.0500	.5093	.2150
Stddev	.0006	.07	.002	.004	.0003	.12	.0002	.0004	.0004
%RSD	1.110	.2627	.0973	.1974	.6107	.2085	.3285	.0721	.1786
#1	.0515	28.35	2.059	2.240	.0534	59.15	.0499	.5089	.2146
#2	.0507	28.50	2.062	2.249	.0534	59.37	.0502	.5094	.2153
#3	.0518	28.41	2.063	2.242	.0528	59.35	.0500	.5096	.2153

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2674	27.12	30.51	38.51	.5236	.5041	F137.4	.5185	.4993
Stddev	.0001	.02	.03	.15	.0006	.0003	1.0	.0005	.0014
%RSD	.0373	.0752	.0990	.3853	.1099	.0516	.7371	.1038	.2739
#1	.2675	27.11	30.51	38.41	.5243	.5041	138.5	.5182	.4993
#2	.2674	27.14	30.54	38.68	.5234	.5044	137.0	.5192	.4980
#3	.2673	27.10	30.48	38.43	.5232	.5039	136.6	.5182	.5007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5133	2.020	29.97	.5319	.7231	.5270	2.043	.5009	.5087
Stddev	.0016	.002	.02	.0009	.0008	.0002	.006	.0013	.0010
%RSD	.3072	.1116	.0580	.1761	.1053	.0302	.2762	.2550	.1961
#1	.5140	2.018	29.95	.5312	.7238	.5268	2.050	.5023	.5079
#2	.5144	2.022	29.98	.5330	.7232	.5270	2.040	.5005	.5098
#3	.5115	2.021	29.99	.5316	.7223	.5271	2.040	.4999	.5084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1415.6	3860.8	30179.	5603.1
Stddev	3.0	11.0	26.	31.4
%RSD	.21400	.28372	.08464	.56121
#1	1413.6	3864.2	30183.	5596.2
#2	1414.2	3848.6	30203.	5575.6
#3	1419.1	3869.7	30152.	5637.4

Zoom In Zoom Out

Sample Name: MP28472-S2 Acquired: 1/22/2015 11:01:27 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0519	28.56	2.071	2.270	.0544	59.56	.0510	.5189	.2175
Stddev	.0001	.05	.001	.002	.0001	.16	.0001	.0006	.0009
%RSD	.1264	.1872	.0520	.0907	.2626	.2761	.2132	.1104	.4086
#1	.0519	28.50	2.070	2.269	.0542	59.39	.0509	.5184	.2183
#2	.0519	28.58	2.072	2.273	.0545	59.59	.0511	.5187	.2177
#3	.0520	28.61	2.072	2.270	.0545	59.72	.0510	.5195	.2165

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2751	27.65	31.20	39.03	.5376	.5101	F136.7	.5221	.5115
Stddev	.0007	.07	.05	.16	.0011	.0008	1.9	.0005	.0024
%RSD	.2616	.2539	.1720	.4133	.2106	.1656	1.423	.0927	.4663
#1	.2746	27.57	31.14	38.91	.5382	.5092	138.1	.5226	.5093
#2	.2760	27.71	31.22	38.96	.5383	.5103	134.5	.5216	.5111
#3	.2748	27.68	31.24	39.21	.5363	.5108	137.6	.5220	.5140

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5171	2.033	30.00	.5317	.7434	.5454	2.093	.5120	.5207
Stddev	.0024	.006	.03	.0003	.0019	.0005	.007	.0012	.0005
%RSD	.4627	.3202	.0994	.0563	.2499	.0939	.3246	.2310	.1031
#1	.5178	2.041	30.03	.5314	.7412	.5452	2.088	.5131	.5202
#2	.5191	2.030	29.98	.5316	.7447	.5459	2.091	.5123	.5206
#3	.5144	2.030	29.98	.5320	.7442	.5450	2.101	.5108	.5212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1416.3	3899.7	29938.	5606.9
Stddev	3.7	1.1	154.	45.0
%RSD	.26391	.02786	.51337	.80192
#1	1419.9	3899.5	29952.	5636.1
#2	1416.5	3898.6	29777.	5629.5
#3	1412.4	3900.8	30084.	5555.1

Zoom In Zoom Out

Sample Name: FA21328-2 Acquired: 1/22/2015 11:05:33 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0510	-.0011	.0038	-.0001	2.120	.0000	-.0007	.0002
Stddev	.0004	.0014	.0007	.0001	.0000	.011	.0001	.0000	.0003
%RSD	818.3	2.713	60.08	1.720	24.52	.5357	460.6	6.429	131.7
#1	.0001	.0515	-.0018	.0039	-.0002	2.109	.0000	-.0006	.0005
#2	.0005	.0520	-.0011	.0038	-.0001	2.132	.0000	-.0007	.0000
#3	-.0004	.0494	-.0005	.0038	-.0001	2.120	.0001	-.0007	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0024	.0208	3.796	.8907	.0002	-.0012	F131.2	-.0006	.0000
Stddev	.0003	.0041	.016	.0014	.0000	.0001	2.6	.0001	.001
%RSD	14.34	19.66	.4121	.1622	19.09	9.816	1.970	23.00	3436.
#1	.0021	.0250	3.794	.8892	.0002	-.0012	132.3	-.0005	.0001
#2	.0027	.0204	3.812	.8921	.0003	-.0010	133.1	-.0007	.0004
#3	.0024	.0169	3.781	.8907	.0002	-.0013	128.3	-.0004	-.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0018	27.61	-.0002	.0121	.0007	-.0017	-.0001	.0019
Stddev	.0013	.0005	.03	.0001	.0001	.0001	.0006	.0000	.0001
%RSD	221.1	28.18	.1257	55.60	.8681	11.14	34.14	22.54	2.808
#1	.0005	.0015	27.57	-.0003	.0120	.0008	-.0010	-.0001	.0019
#2	.0019	.0024	27.62	-.0001	.0122	.0008	-.0020	-.0001	.0018
#3	-.0007	.0015	27.64	-.0003	.0122	.0006	-.0021	-.0001	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1452.8	3988.3	30782.	5553.1
Stddev	4.2	6.7	176.	34.9
%RSD	.28944	.16907	.57270	.62923
#1	1457.0	3994.8	30587.	5578.5
#2	1448.6	3981.3	30929.	5513.3
#3	1453.0	3988.7	30831.	5567.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 11:09:49 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2530	40.63	2.021	2.037	2.044	40.49	2.028	2.028	2.054	2.068
Stddev	.0007	.08	.003	.006	.004	.05	.004	.004	.010	.011
%RSD	.2843	.1883	.1357	.3125	.2121	.1344	.2118	.1976	.4781	.5176
#1	.2527	40.55	2.018	2.030	2.044	40.46	2.023	2.024	2.047	2.059
#2	.2525	40.70	2.023	2.040	2.049	40.55	2.030	2.029	2.050	2.065
#3	.2538	40.65	2.022	2.042	2.040	40.46	2.031	2.032	2.065	2.080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.42	40.75	40.33	2.067	1.985	40.84	2.024	2.001	2.020	2.020
Stddev	.11	.10	.16	.005	.008	.08	.003	.002	.005	.004
%RSD	.2653	.2457	.3908	.2621	.4226	.1878	.1352	.0931	.2457	.2079
#1	40.35	40.73	40.25	2.063	1.976	40.75	2.022	2.003	2.015	2.016
#2	40.55	40.85	40.51	2.064	1.989	40.90	2.023	2.000	2.020	2.019
#3	40.38	40.65	40.23	2.073	1.992	40.88	2.027	1.999	2.025	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.763	1.990	2.052	2.031	2.015	2.027	2.033
Stddev	.004	.003	.005	.006	.001	.007	.004
%RSD	.2014	.1318	.2298	.3109	.0610	.3679	.2165
#1	1.759	1.989	2.049	2.026	2.015	2.021	2.028
#2	1.762	1.988	2.058	2.030	2.016	2.026	2.035
#3	1.766	1.993	2.050	2.038	2.014	2.036	2.037
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 11:09:49 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1442.1	3950.1	31102.	5730.6
Stddev	2.1	6.7	173.	29.4
%RSD	.14481	.17009	.55480	.51351
#1	1440.1	3957.7	31147.	5718.6
#2	1441.9	3947.4	31248.	5709.1
#3	1444.2	3945.1	30912.	5764.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 11:13:45 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0046	-.0012	.0002	.0001	.0025	.0001	.0000
Stddev	.0006	.0108	.0007	.0001	.0001	.0028	.0001	.0000
%RSD	227.5	237.2	60.32	69.04	95.82	115.8	51.20	87.50
#1	.0008	.0167	-.0015	.0000	.0000	.0000	.0001	.0000
#2	.0003	.0010	-.0017	.0002	.0002	.0056	.0002	.0001
#3	-.0003	-.0040	-.0004	.0002	.0001	.0018	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0011	.0068	.0067	-.0083	-.0001	F.0012	.0439
Stddev	.0002	.0004	.0038	.0135	.0068	.0000	.0007	.0079
%RSD	58.84	33.09	55.76	202.2	81.61	70.23	62.42	18.00
#1	.0001	.0008	.0111	.0009	-.0160	-.0001	.0019	.0432
#2	.0002	.0010	.0051	.0221	-.0032	.0000	.0011	.0363
#3	.0004	.0016	.0041	-.0030	-.0057	.0000	.0005	.0521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F-.0012	.0006	F.0025	.0023	.0001	.0001	.0011
Stddev	.000	.0007	.0005	.0007	.0004	.0003	.0001	.0001
%RSD	2059.	56.58	76.51	26.51	16.07	278.0	79.08	12.65
#1	.0001	-.0014	.0010	.0032	.0020	.0003	.0001	.0012
#2	.0002	-.0018	.0001	.0021	.0027	-.0002	.0001	.0012
#3	-.0002	-.0005	.0006	.0022	.0021	.0003	.0000	.0010
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010		.0020				
Low Limit		-.0010		-.0020				

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 11:13:45 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0011	.0000	.0001
Stddev	.0003	.000	.0001
%RSD	29.18	837.6	76.16
#1	.0015	.0000	.0002
#2	.0009	-.0002	.0001
#3	.0010	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1519.5	4156.2	32441.	5689.5
Stddev	6.0	10.9	35.	43.1
%RSD	.39511	.26122	.10751	.75682
#1	1521.6	4158.1	32418.	5737.9
#2	1524.2	4166.0	32481.	5655.2
#3	1512.7	4144.5	32424.	5675.5

Zoom In Zoom Out

Sample Name: MP28478-MB1 Acquired: 1/22/2015 11:57:40 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0153	-.0026	.0001	-.0001	.0190	.0000	-.0004	.0004	.0009
Stddev	.0005	.0001	.0001	.0000	.0001	.0034	.0000	.0001	.0002	.0002
%RSD	196.4	.5577	4.881	43.06	76.75	17.74	186.1	16.58	44.86	20.11
#1	-.0008	.0153	-.0025	.0001	-.0002	.0228	.0000	-.0004	.0007	.0009
#2	-.0002	.0152	-.0025	.0001	.0000	.0179	.0001	-.0003	.0003	.0010
#3	.0002	.0153	-.0027	.0002	-.0001	.0164	.0000	-.0004	.0004	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036	-.0443	.0169	.0002	-.0013	.0082	.0003	-.0011	.0006	.0011
Stddev	.0022	.0345	.0085	.0000	.0002	.0111	.0003	.0006	.0004	.0006
%RSD	60.68	77.88	50.34	8.430	15.00	136.2	76.52	57.48	63.97	51.95
#1	.0051	-.0151	.0263	.0002	-.0013	-.0008	.0006	-.0015	.0011	.0014
#2	.0011	-.0824	.0097	.0002	-.0015	.0206	.0001	-.0004	.0005	.0004
#3	.0047	-.0356	.0148	.0001	-.0011	.0046	.0004	-.0015	.0003	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0227	.0214	.0000	-.0005	-.0040	-.0002	.0019
Stddev	.0006	.0003	.0001	.0001	.0006	.0003	.0001
%RSD	2.526	1.176	312.8	22.56	15.58	136.2	7.783
#1	.0231	.0212	.0001	-.0006	-.0043	-.0001	.0020
#2	.0230	.0214	.0000	-.0005	-.0044	-.0005	.0019
#3	.0221	.0217	.0000	-.0004	-.0033	.0000	.0017
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28478-MB1 Acquired: 1/22/2015 11:57:40 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1521.7	4110.5	33309.	5756.5
Stddev	5.0	7.7	125.	17.2
%RSD	.32543	.18677	.37664	.29837
#1	1524.9	4108.0	33347.	5755.0
#2	1516.0	4104.5	33169.	5774.4
#3	1524.2	4119.2	33410.	5740.2

Zoom In Zoom Out

Sample Name: MP28478-B1 Acquired: 1/22/2015 12:01:51 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0499	28.10	2.018	2.085	.0528	26.21	.0499	.5086	.2162	.2673
Stddev	.0006	.08	.001	.006	.0002	.07	.0001	.0004	.0003	.0012
%RSD	1.115	.2720	.0678	.2733	.2931	.2629	.1973	.0698	.1500	.4537
#1	.0505	28.03	2.017	2.082	.0529	26.16	.0500	.5088	.2164	.2663
#2	.0497	28.09	2.020	2.080	.0527	26.17	.0498	.5082	.2158	.2668
#3	.0495	28.18	2.017	2.091	.0529	26.29	.0499	.5087	.2163	.2686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.76	26.02	25.62	.5224	.4780	26.49	.5165	.4980	.4923	1.978
Stddev	.09	.08	.08	.0010	.0005	.03	.0009	.0026	.0021	.002
%RSD	.3201	.3092	.3217	.1886	.1131	.0969	.1760	.5200	.4295	.1086
#1	26.68	26.01	25.53	.5222	.4777	26.50	.5171	.4975	.4908	1.981
#2	26.74	25.94	25.68	.5216	.4776	26.47	.5155	.4957	.4914	1.977
#3	26.85	26.10	25.65	.5235	.4786	26.52	.5170	.5008	.4947	1.977
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0174	.5234	.5017	.4941	2.016	.5018	.5080
Stddev	.0004	.0012	.0010	.0009	.001	.0011	.0008
%RSD	2.458	.2363	.1971	.1923	.0704	.2143	.1549
#1	.0178	.5242	.5013	.4932	2.015	.5018	.5072
#2	.0172	.5220	.5009	.4940	2.015	.5008	.5080
#3	.0170	.5241	.5028	.4951	2.017	.5029	.5088
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28478-B1 Acquired: 1/22/2015 12:01:51 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1474.7	4021.9	31310.	5726.7
Stddev	3.3	5.4	130.	27.7
%RSD	.22712	.13394	.41418	.48380
#1	1476.8	4024.4	31364.	5737.7
#2	1476.6	4025.5	31403.	5695.2
#3	1470.9	4015.7	31162.	5747.3

Zoom In Zoom Out

Sample Name: FA21510-1 Acquired: 1/22/2015 12:05:47 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	40.09	.0655	.3014	.0024	1.507	-.0008	.0040	.0699	.0073
Stddev	.0002	.03	.0007	.0002	.0001	.010	.0001	.0001	.0001	.0000
%RSD	24.78	.0772	1.116	.0528	2.399	.6382	8.349	1.297	.2131	.5317
#1	-.0009	40.08	.0657	.3014	.0023	1.518	-.0007	.0039	.0700	.0073
#2	-.0006	40.06	.0661	.3016	.0025	1.500	-.0008	.0040	.0700	.0072
#3	-.0006	40.12	.0647	.3012	.0024	1.504	-.0009	.0040	.0698	.0073

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	35.54	1.100	1.463	.0293	.0218	.0892	.0111	.0221	.0021	.0054
Stddev	.05	.018	.020	.0001	.0001	.0014	.0003	.0014	.0010	.0002
%RSD	.1513	1.634	1.348	.3038	.6328	1.586	2.688	6.383	49.14	4.315
#1	35.48	1.096	1.440	.0293	.0217	.0888	.0111	.0205	.0018	.0057
#2	35.59	1.084	1.472	.0293	.0220	.0908	.0107	.0227	.0032	.0053
#3	35.55	1.120	1.477	.0294	.0218	.0880	.0113	.0232	.0012	.0052

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.258	.0186	.5120	.6340	-.0041	.0507	.0179
Stddev	.001	.0003	.0009	.0007	.0005	.0003	.0000
%RSD	.0842	1.623	.1664	.1132	11.31	.5452	.1203
#1	1.256	.0186	.5112	.6334	-.0036	.0510	.0179
#2	1.259	.0189	.5129	.6339	-.0045	.0505	.0179
#3	1.258	.0183	.5119	.6348	-.0042	.0507	.0179

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1480.5	4735.7	37279.	6624.4
Stddev	1.9	6.1	58.	35.2
%RSD	.13142	.12923	.15476	.53083
#1	1479.7	4741.6	37345.	6586.3
#2	1482.7	4729.4	37245.	6631.1
#3	1479.1	4736.0	37245.	6655.7

Zoom In Zoom Out

Sample Name: MP28478-D1 Acquired: 1/22/2015 12:09:50 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	56.51	.0649	.3798	.0031	1.676	-.0008	.0059	.0897	.0090
Stddev	.0002	.10	.0007	.0011	.0001	.006	.0000	.0002	.0001	.0002
%RSD	27.23	.1722	1.060	.2978	3.526	.3675	4.209	3.187	.1552	1.828
#1	-.0007	56.51	.0655	.3806	.0031	1.669	-.0007	.0060	.0898	.0092
#2	-.0011	56.61	.0649	.3802	.0030	1.680	-.0008	.0061	.0895	.0088
#3	-.0006	56.41	.0641	.3785	.0032	1.679	-.0008	.0057	.0897	.0091

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	38.57	1.631	2.011	.0391	.0205	.2260	.0166	.0276	-.0005	.0063
Stddev	.08	.005	.038	.0001	.0002	.0033	.0001	.0007	.0013	.0006
%RSD	.2035	.3349	1.885	.2319	.7937	1.445	.8065	2.654	244.3	8.788
#1	38.65	1.629	2.055	.0390	.0206	.2244	.0165	.0268	.0009	.0059
#2	38.57	1.627	1.990	.0392	.0203	.2239	.0165	.0282	-.0015	.0069
#3	38.49	1.637	1.989	.0390	.0204	.2298	.0167	.0278	-.0010	.0060

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.826	.0176	.6243	.7373	-.0059	.0663	.0258
Stddev	.001	.0002	.0011	.0017	.0010	.0002	.0001
%RSD	.0385	1.403	.1830	.2367	16.05	.2388	.3319
#1	1.825	.0176	.6255	.7363	-.0069	.0661	.0259
#2	1.826	.0179	.6233	.7362	-.0059	.0665	.0258
#3	1.826	.0174	.6241	.7393	-.0050	.0663	.0257

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1486.1	5005.9	39144.	7085.3
Stddev	4.3	15.7	55.	30.2
%RSD	.28704	.31440	.13964	.42615
#1	1482.9	4994.2	39088.	7050.5
#2	1484.4	4999.6	39147.	7105.1
#3	1490.9	5023.8	39197.	7100.3

Zoom In Zoom Out

Sample Name: MP28478-SD1 Acquired: 1/22/2015 12:13:51 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	46.16	.0741	.3464	.0025	1.940	-.0012	.0043	.0795	.0136
Stddev	.0021	.08	.0048	.0023	.0007	.016	.0003	.0001	.0013	.0006
%RSD	645.9	.1627	6.464	.6566	26.49	.8209	26.10	3.278	1.576	4.268
#1	.0021	46.21	.0692	.3458	.0033	1.941	-.0014	.0041	.0789	.0143
#2	-.0017	46.20	.0744	.3489	.0021	1.955	-.0013	.0043	.0787	.0132
#3	-.0014	46.08	.0788	.3444	.0023	1.923	-.0008	.0044	.0809	.0134

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	40.85	1.532	1.686	.0330	.0175	.8399	.0126	.0207	-.0034	.0104
Stddev	.01	.132	.074	.0003	.0005	.0324	.0004	.0048	.0066	.0019
%RSD	.0233	8.638	4.387	1.039	3.110	3.859	3.010	23.35	194.7	18.74
#1	40.85	1.640	1.641	.0334	.0178	.8605	.0129	.0237	.0024	.0126
#2	40.85	1.384	1.645	.0329	.0179	.8566	.0122	.0151	-.0105	.0091
#3	40.87	1.571	1.771	.0328	.0169	.8025	.0128	.0232	-.0020	.0094

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.404	.0174	.5902	.7112	-.0008	.0583	.0456
Stddev	.004	.0007	.0008	.0011	.0043	.0016	.0001
%RSD	.3076	3.986	.1349	.1534	530.3	2.767	.2180
#1	1.400	.0182	.5908	.7121	-.0017	.0570	.0455
#2	1.407	.0173	.5905	.7115	.0038	.0601	.0456
#3	1.407	.0168	.5893	.7100	-.0045	.0579	.0457

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1529.8	4299.2	33825.	5935.9
Stddev	3.4	5.2	86.	18.6
%RSD	.22335	.12049	.25544	.31300
#1	1529.2	4299.5	33793.	5926.9
#2	1533.5	4304.2	33923.	5957.3
#3	1526.7	4293.8	33759.	5923.6

Zoom In Zoom Out

Sample Name: MP28478-PS1 Acquired: 1/22/2015 12:17:58 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0428	41.49	.1563	.5259	.0490	6.038	.0447	.0494	.1163	.1018
Stddev	.0003	.11	.0004	.0007	.0001	.022	.0000	.0001	.0004	.0003
%RSD	.6383	.2694	.2792	.1253	.1429	.3605	.1061	.1132	.3320	.2520
#1	.0432	41.36	.1566	.5252	.0489	6.014	.0447	.0495	.1165	.1018
#2	.0427	41.55	.1565	.5265	.0489	6.045	.0447	.0494	.1158	.1015
#3	.0426	41.57	.1558	.5261	.0490	6.055	.0446	.0495	.1165	.1020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	37.11	10.01	5.679	.0762	.1091	9.688	.1038	.0739	.0888	.0924
Stddev	.07	.03	.027	.0001	.0003	.013	.0002	.0006	.0010	.0005
%RSD	.1807	.2695	.4798	.1395	.2897	.1372	.1828	.7845	1.089	.5478
#1	37.04	9.975	5.679	.0762	.1087	9.674	.1040	.0743	.0877	.0929
#2	37.14	10.03	5.707	.0762	.1093	9.691	.1036	.0732	.0893	.0926
#3	37.16	10.02	5.652	.0764	.1092	9.700	.1037	.0741	.0893	.0919

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.245	.0622	.5410	.7079	.1003	.0945	.2483
Stddev	.002	.0001	.0011	.0014	.0023	.0001	.0002
%RSD	.1656	.2158	.2021	.2041	2.320	.1067	.0772
#1	1.243	.0621	.5398	.7065	.1027	.0944	.2481
#2	1.245	.0623	.5412	.7078	.0981	.0946	.2482
#3	1.247	.0624	.5420	.7094	.1000	.0946	.2485

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1470.8	4680.0	36872.	6580.5
Stddev	4.5	9.0	174.	33.4
%RSD	.30275	.19304	.47166	.50805
#1	1466.1	4670.2	36930.	6612.1
#2	1475.0	4681.6	37010.	6545.5
#3	1471.3	4688.1	36676.	6583.9

Zoom In Zoom Out

Sample Name: MP28478-S1 Acquired: 1/22/2015 12:21:59 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0422	69.64	1.752	2.084	.0476	23.52	.0416	.4347	.2623	.2360
Stddev	.0003	.06	.005	.001	.0001	.01	.0001	.0004	.0011	.0005
%RSD	.7625	.0849	.2946	.0237	.2568	.0254	.1273	.0900	.4158	.2160
#1	.0419	69.59	1.756	2.084	.0475	23.52	.0416	.4351	.2614	.2363
#2	.0422	69.61	1.754	2.083	.0475	23.53	.0416	.4343	.2635	.2364
#3	.0425	69.70	1.746	2.084	.0477	23.52	.0415	.4348	.2620	.2354

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.77	23.30	23.42	.4746	.4195	22.49	.4485	.5340	.2378	1.659
Stddev	.08	.06	.09	.0004	.0004	.02	.0006	.0017	.0012	.002
%RSD	.1361	.2515	.3820	.0838	.0982	.0836	.1432	.3208	.5134	.1169
#1	58.72	23.27	23.35	.4750	.4199	22.48	.4492	.5327	.2380	1.661
#2	58.74	23.26	23.40	.4742	.4197	22.48	.4479	.5334	.2364	1.658
#3	58.87	23.37	23.52	.4747	.4191	22.51	.4483	.5360	.2388	1.658

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.286	.4403	.9722	1.097	2.023	.4805	.4490
Stddev	.002	.0015	.0023	.001	.007	.0007	.0001
%RSD	.0892	.3469	.2345	.0730	.3401	.1379	.0264
#1	2.287	.4421	.9721	1.097	2.028	.4799	.4489
#2	2.286	.4395	.9701	1.096	2.015	.4804	.4491
#3	2.283	.4393	.9746	1.097	2.026	.4812	.4489

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1451.4	4737.8	36794.	6722.6
Stddev	2.5	11.5	142.	23.6
%RSD	.17081	.24233	.38675	.35088
#1	1450.6	4725.1	36679.	6696.1
#2	1454.2	4741.1	36748.	6730.3
#3	1449.4	4747.3	36953.	6741.4

Zoom In Zoom Out

Sample Name: MP28478-S2 Acquired: 1/22/2015 12:25:55 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0421	69.64	1.740	2.092	.0479	23.31	.0412	.4324	.2579	.2342
Stddev	.0006	.11	.006	.002	.0002	.02	.0001	.0011	.0017	.0018
%RSD	1.371	.1623	.3198	.1028	.4426	.0751	.2099	.2439	.6501	.7689
#1	.0428	69.51	1.735	2.092	.0481	23.29	.0412	.4312	.2598	.2360
#2	.0419	69.74	1.746	2.094	.0477	23.30	.0411	.4329	.2565	.2340
#3	.0417	69.65	1.740	2.089	.0477	23.33	.0413	.4331	.2575	.2324

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	60.66	23.29	23.42	.4777	.4210	22.36	.4451	.5377	.2380	1.641
Stddev	.05	.04	.04	.0012	.0008	.02	.0015	.0016	.0005	.004
%RSD	.0814	.1636	.1645	.2609	.1985	.1113	.3433	.2965	.2171	.2236
#1	60.71	23.26	23.41	.4791	.4202	22.37	.4434	.5395	.2374	1.640
#2	60.61	23.28	23.38	.4774	.4219	22.37	.4456	.5372	.2383	1.646
#3	60.65	23.33	23.46	.4767	.4211	22.33	.4463	.5365	.2382	1.638

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.002	.4363	.9713	1.108	2.037	.4759	.4500
Stddev	.005	.0006	.0017	.003	.007	.0025	.0009
%RSD	.2377	.1422	.1758	.2441	.3438	.5192	.1913
#1	1.997	.4356	.9731	1.110	2.040	.4786	.4491
#2	2.005	.4365	.9711	1.108	2.042	.4753	.4507
#3	2.005	.4368	.9697	1.105	2.029	.4737	.4503

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1440.0	4750.6	36670.	6690.7
Stddev	2.2	11.3	147.	60.7
%RSD	.15450	.23828	.40126	.90767
#1	1437.8	4763.6	36503.	6746.5
#2	1440.2	4745.0	36782.	6699.6
#3	1442.2	4743.2	36724.	6626.0

Zoom In Zoom Out

Sample Name: FA21516-1 Acquired: 1/22/2015 12:29:51 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0011	125.4	.0100	.1673	.0009	3.369	.0000	.0048	.0930	.1536
Stddev	.0008	.5	.0008	.0007	.0001	.014	.0000	.0002	.0002	.0007
%RSD	75.74	.3884	7.991	.3941	7.696	.4078	121.2	3.867	.2124	.4322
#1	.0002	125.0	.0103	.1666	.0010	3.354	.0000	.0046	.0931	.1533
#2	.0018	126.0	.0091	.1679	.0008	3.380	.0001	.0049	.0932	.1543
#3	.0014	125.3	.0106	.1675	.0008	3.375	.0001	.0049	.0928	.1531

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	13.83	.9570	1.341	.0563	.0043	.2846	.0678	.0633	.0014	.0033
Stddev	.05	.0179	.006	.0001	.0002	.0084	.0000	.0007	.0024	.0013
%RSD	.3335	1.869	.4282	.0956	3.790	2.945	.0186	1.138	170.5	40.99
#1	13.78	.9776	1.335	.0562	.0042	.2781	.0678	.0640	.0038	.0032
#2	13.87	.9471	1.342	.0563	.0045	.2818	.0678	.0633	.0016	.0046
#3	13.82	.9462	1.347	.0563	.0042	.2941	.0678	.0626	-.0011	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.559	.0223	.0599	.3768	-.0068	.1209	.3341
Stddev	.002	.0003	.0002	.0010	.0008	.0002	.0004
%RSD	.0873	1.447	.2998	.2762	11.45	.1897	.1224
#1	2.557	.0220	.0597	.3775	-.0061	.1207	.3337
#2	2.561	.0226	.0600	.3773	-.0077	.1211	.3345
#3	2.558	.0223	.0599	.3756	-.0067	.1209	.3339

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1486.7	4053.7	31445.	5809.8
Stddev	6.1	7.4	54.	45.0
%RSD	.40933	.18362	.17308	.77487
#1	1479.9	4048.6	31497.	5832.4
#2	1488.6	4050.3	31389.	5757.9
#3	1491.5	4062.3	31448.	5838.9

Zoom In Zoom Out

Sample Name: FA21516-2 Acquired: 1/22/2015 12:33:53 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	47.50	.0025	.0901	.0008	6.280	.0001	.0016	.0362	.0389
Stddev	.0006	.16	.0005	.0002	.0000	.022	.0000	.0001	.0004	.0003
%RSD	378.0	.3282	19.43	.2183	5.178	.3547	26.96	4.930	1.082	.8804
#1	.0002	47.50	.0028	.0899	.0008	6.276	.0002	.0017	.0361	.0385
#2	.0007	47.35	.0026	.0901	.0007	6.260	.0001	.0016	.0366	.0392
#3	-.0005	47.66	.0019	.0903	.0008	6.304	.0001	.0015	.0358	.0391

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.825	.6837	1.181	.0541	.0003	.3574	.0154	.0364	.0010	.0030
Stddev	.018	.0193	.003	.0001	.0001	.0083	.0000	.0009	.0023	.0007
%RSD	.2263	2.827	.2435	.1321	22.39	2.319	.0762	2.367	220.1	22.13
#1	7.813	.7021	1.183	.0541	.0003	.3487	.0154	.0355	.0035	.0029
#2	7.816	.6636	1.181	.0540	.0002	.3653	.0154	.0367	.0008	.0024
#3	7.845	.6856	1.177	.0542	.0002	.3581	.0154	.0371	-.0011	.0037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.399	.0222	.0447	.3419	-.0031	.0264	3.014
Stddev	.003	.0003	.0003	.0004	.0005	.0001	.004
%RSD	.1373	1.553	.6753	.1274	17.15	.3610	.1255
#1	2.402	.0223	.0446	.3420	-.0025	.0265	3.014
#2	2.398	.0218	.0444	.3414	-.0032	.0263	3.018
#3	2.396	.0225	.0450	.3423	-.0036	.0263	3.011

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1490.6	4096.7	31852.	5753.7
Stddev	3.2	2.0	183.	8.2
%RSD	.21413	.04835	.57596	.14327
#1	1493.2	4094.5	32063.	5753.6
#2	1491.6	4097.6	31756.	5762.0
#3	1487.1	4098.1	31736.	5745.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 12:37:57 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2522	40.40	2.011	2.042	2.039	40.31	2.016	2.016	2.037	2.054
Stddev	.0006	.05	.006	.005	.006	.11	.002	.002	.007	.005
%RSD	.2351	.1210	.2819	.2240	.3209	.2616	.1110	.0909	.3355	.2386
#1	.2528	40.43	2.005	2.045	2.044	40.38	2.013	2.014	2.041	2.057
#2	.2517	40.43	2.010	2.045	2.042	40.38	2.016	2.016	2.041	2.048
#3	.2521	40.35	2.017	2.037	2.032	40.19	2.018	2.018	2.029	2.056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.44	40.66	40.31	2.062	1.980	41.09	2.020	2.004	2.008	2.012
Stddev	.09	.10	.15	.003	.008	.06	.003	.002	.005	.006
%RSD	.2153	.2389	.3741	.1384	.3939	.1391	.1254	.0789	.2641	.3053
#1	40.53	40.75	40.42	2.065	1.971	41.11	2.017	2.003	2.002	2.005
#2	40.44	40.65	40.37	2.061	1.982	41.13	2.020	2.003	2.013	2.018
#3	40.35	40.56	40.14	2.059	1.986	41.02	2.022	2.006	2.009	2.013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.744	1.981	2.047	2.025	2.019	2.009	2.026
Stddev	.003	.003	.005	.003	.002	.002	.002
%RSD	.1605	.1732	.2667	.1656	.1075	.1117	.0871
#1	1.742	1.978	2.051	2.026	2.019	2.011	2.024
#2	1.743	1.981	2.048	2.021	2.017	2.008	2.025
#3	1.747	1.985	2.041	2.027	2.021	2.006	2.028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 12:37:57 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1449.6	3987.6	31352.	5691.6
Stddev	2.3	6.1	128.	20.3
%RSD	.15983	.15269	.40817	.35667
#1	1449.8	3992.6	31271.	5689.8
#2	1451.7	3989.4	31285.	5672.2
#3	1447.1	3980.8	31499.	5712.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 12:41:52 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0061	-.0009	.0001	.0001	.0029	.0001	.0000
Stddev	.0005	.0043	.0006	.0002	.0000	.0009	.0001	.000
%RSD	513.0	70.79	69.52	161.7	34.95	29.77	47.63	542.5
#1	.0006	.0047	-.0015	-.0001	.0002	.0029	.0002	.0001
#2	.0001	.0026	-.0002	.0001	.0002	.0038	.0001	-.0001
#3	-.0004	.0109	-.0010	.0003	.0001	.0021	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0009	.0011	-.0174	.0018	.0000	F.0015	.0154
Stddev	.0002	.0002	.0074	.0370	.0027	.000	.0007	.0051
%RSD	85.15	22.51	661.4	212.4	151.1	554.3	46.00	33.28
#1	.0006	.0012	.0087	.0201	-.0009	-.0001	.0022	.0173
#2	.0002	.0008	.0007	-.0185	.0045	.0001	.0013	.0096
#3	.0001	.0008	-.0061	-.0538	.0017	.0000	.0009	.0192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	F-.0011	.0010	.0011	.0010	.0000	.0001	.0003
Stddev	.0002	.0002	.0003	.0022	.0003	.000	.0000	.0002
%RSD	230.4	16.71	33.56	209.0	33.46	1458.	11.79	75.38
#1	.0000	-.0009	.0006	-.0001	.0014	.0001	.0001	.0006
#2	.0003	-.0011	.0013	.0036	.0008	-.0001	.0002	.0002
#3	-.0001	-.0013	.0011	-.0003	.0008	.0000	.0001	.0001
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 12:41:52 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0002	.0000	.0002
Stddev	.0012	.000	.0001
%RSD	516.1	509.1	75.83
#1	.0016	-.0001	.0003
#2	-.0003	.0001	.0002
#3	-.0006	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1534.2	4167.2	32745.	5667.8
Stddev	6.2	11.3	184.	14.8
%RSD	.40574	.27162	.56187	.26025
#1	1530.6	4155.5	32806.	5665.0
#2	1530.6	4168.0	32538.	5683.7
#3	1541.4	4178.1	32890.	5654.6

Zoom In Zoom Out

Sample Name: FA21516-3 Acquired: 1/22/2015 12:46:03 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	52.02	.0104	.0541	.0004	1.224	.0001	.0006	.0622	.1454
Stddev	.0003	.15	.0004	.0003	.0000	.006	.0001	.0002	.0002	.0008
%RSD	187.8	.2828	3.948	.6301	7.196	.4862	195.9	37.25	.3400	.5454
#1	.0000	51.91	.0100	.0538	.0004	1.217	.0001	.0008	.0624	.1447
#2	-.0005	51.96	.0105	.0540	.0004	1.228	.0002	.0007	.0620	.1453
#3	.0000	52.19	.0108	.0545	.0004	1.227	-.0001	.0003	.0623	.1463

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.280	.2629	.4351	.0503	.0021	.1740	.0113	.0564	.0007	.0031
Stddev	.011	.0425	.0317	.0002	.0002	.0075	.0001	.0006	.0005	.0012
%RSD	.2630	16.18	7.286	.3211	9.164	4.304	.5187	1.005	79.19	37.20
#1	4.271	.2333	.4653	.0502	.0023	.1796	.0113	.0558	.0007	.0040
#2	4.276	.3117	.4021	.0505	.0022	.1655	.0112	.0568	.0001	.0035
#3	4.292	.2437	.4380	.0504	.0019	.1770	.0113	.0566	.0012	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.438	.0199	.1004	.3997	-.0051	.0306	.0479
Stddev	.006	.0004	.0002	.0009	.0003	.0004	.0001
%RSD	.2636	2.023	.2048	.2140	5.807	1.264	.2171
#1	2.436	.0202	.1005	.3994	-.0048	.0304	.0480
#2	2.445	.0200	.1002	.3990	-.0053	.0303	.0478
#3	2.432	.0195	.1006	.4007	-.0053	.0311	.0478

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1486.2	4107.9	32009.	5739.9
Stddev	2.5	8.6	38.	22.7
%RSD	.17075	.20970	.11738	.39584
#1	1485.7	4102.3	32052.	5744.2
#2	1483.9	4103.6	31995.	5760.1
#3	1488.9	4117.8	31981.	5715.3

Zoom In Zoom Out

Sample Name: FA21516-4 Acquired: 1/22/2015 12:50:07 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	78.44	.0057	.0826	.0010	3.257	-.0001	.0024	.0611	.0181
Stddev	.0002	.14	.0010	.0000	.0000	.007	.0001	.0002	.0005	.0001
%RSD	100.4	.1827	18.13	.0093	4.242	.2064	48.59	10.50	.7632	.8002
#1	.0001	78.29	.0069	.0826	.0010	3.265	-.0002	.0025	.0616	.0182
#2	.0001	78.58	.0050	.0826	.0010	3.251	-.0001	.0025	.0607	.0179
#3	.0004	78.46	.0052	.0826	.0011	3.256	-.0001	.0021	.0609	.0181

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.636	.9243	1.814	.0269	.0021	.2616	.0228	.0467	.0007	.0038
Stddev	.004	.0322	.026	.0000	.0001	.0029	.0002	.0012	.0013	.0023
%RSD	.0412	3.482	1.450	.1732	4.130	1.094	1.009	2.476	186.2	58.91
#1	8.635	.8875	1.835	.0269	.0020	.2584	.0226	.0476	-.0003	.0015
#2	8.641	.9380	1.823	.0269	.0022	.2625	.0227	.0454	.0022	.0060
#3	8.634	.9473	1.784	.0270	.0021	.2639	.0230	.0471	.0002	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.431	.0201	.0584	.4642	-.0046	.0367	.0280
Stddev	.003	.0002	.0001	.0008	.0006	.0002	.0001
%RSD	.1374	.8643	.1818	.1828	13.18	.4947	.3168
#1	2.428	.0200	.0584	.4634	-.0047	.0365	.0279
#2	2.433	.0203	.0585	.4650	-.0039	.0368	.0280
#3	2.433	.0200	.0583	.4643	-.0051	.0369	.0281

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1482.3	4061.6	31793.	5698.1
Stddev	3.0	3.7	18.	38.5
%RSD	.20381	.09045	.05658	.67588
#1	1478.9	4057.6	31803.	5692.8
#2	1484.1	4062.7	31772.	5662.5
#3	1484.0	4064.7	31804.	5739.0

Zoom In Zoom Out

Sample Name: FA21516-5 Acquired: 1/22/2015 12:54:11 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	1.869	-.0009	.0132	.0000	2.245	.0003	-.0004	.0120	.1930
Stddev	.000	.017	.0006	.0002	.000	.013	.0000	.0001	.0005	.0005
%RSD	391.6	.9068	67.08	1.699	144.3	.5794	13.93	14.06	4.207	.2836
#1	.0001	1.856	-.0003	.0131	.0000	2.240	.0003	-.0003	.0126	.1926
#2	.0000	1.862	-.0015	.0132	.0000	2.235	.0003	-.0003	.0118	.1936
#3	-.0002	1.888	-.0011	.0135	.0000	2.259	.0003	-.0004	.0117	.1928

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3784	.0334	.1615	.0297	-.0002	.1055	.0012	.0106	.0009	.0028
Stddev	.0063	.0473	.0212	.0001	.0004	.0082	.0000	.0005	.0012	.0018
%RSD	1.677	141.7	13.12	.2254	232.5	7.724	2.849	4.937	131.0	66.10
#1	.3826	.0864	.1514	.0298	.0002	.1112	.0012	.0111	-.0005	.0019
#2	.3711	.0183	.1473	.0297	-.0001	.1092	.0012	.0100	.0015	.0049
#3	.3816	-.0045	.1859	.0297	-.0005	.0962	.0012	.0106	.0017	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4289	.0202	.0137	.2052	-.0042	.0042	.0167
Stddev	.0003	.0003	.0000	.0002	.0016	.0001	.0000
%RSD	.0741	1.257	.3551	.1043	37.16	2.751	.1813
#1	.4288	.0199	.0137	.2054	-.0048	.0043	.0167
#2	.4287	.0204	.0138	.2052	-.0054	.0041	.0167
#3	.4293	.0202	.0137	.2050	-.0025	.0041	.0166

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1486.8	4105.0	31952.	5674.5
Stddev	2.0	10.3	45.	59.3
%RSD	.13228	.25155	.14101	1.0453
#1	1488.4	4094.0	31965.	5733.4
#2	1484.6	4106.2	31903.	5675.4
#3	1487.3	4114.6	31990.	5614.8

Zoom In Zoom Out

Sample Name: FA21516-6 Acquired: 1/22/2015 12:58:17 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0009	9.067	.0027	.0749	.0004	10.88	.0026	.0004	.0617	.5883
Stddev	.0001	.011	.0001	.0002	.0000	.04	.0000	.0001	.0003	.0020
%RSD	7.702	.1204	3.691	.2070	9.322	.3270	1.668	17.06	.5421	.3318
#1	.0009	9.055	.0028	.0749	.0003	10.92	.0026	.0005	.0615	.5905
#2	.0008	9.076	.0027	.0747	.0004	10.85	.0025	.0003	.0615	.5878
#3	.0010	9.070	.0026	.0750	.0004	10.86	.0026	.0005	.0621	.5867

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.807	.1984	.5692	.4156	-.0004	.0985	.0046	.0698	.0005	.0037
Stddev	.010	.0315	.0126	.0005	.0002	.0175	.0002	.0005	.0006	.0007
%RSD	.2512	15.90	2.219	.1094	44.23	17.77	4.340	.7313	110.0	19.49
#1	3.817	.2348	.5728	.4156	-.0003	.0785	.0044	.0694	-.0001	.0037
#2	3.798	.1806	.5796	.4151	-.0006	.1060	.0048	.0704	.0008	.0030
#3	3.806	.1797	.5552	.4161	-.0003	.1111	.0047	.0697	.0009	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.545	.0212	.0606	.1836	-.0040	.0123	.1291
Stddev	.002	.0002	.0001	.0005	.0019	.0001	.0001
%RSD	.1469	.7773	.1694	.2700	48.43	.7075	.0527
#1	1.547	.0214	.0606	.1842	-.0022	.0122	.1290
#2	1.543	.0212	.0607	.1835	-.0061	.0124	.1291
#3	1.544	.0210	.0605	.1832	-.0037	.0122	.1291

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1524.5	4252.5	32963.	5870.9
Stddev	2.0	5.2	206.	14.7
%RSD	.12835	.12184	.62385	.24970
#1	1525.6	4248.8	32987.	5854.2
#2	1525.6	4258.4	33155.	5881.9
#3	1522.2	4250.4	32746.	5876.4

Zoom In Zoom Out

Sample Name: FA21527-1 Acquired: 1/22/2015 13:02:22 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	71.64	.0106	.6550	.0009	38.87	-.0004	.0033	.1000	.0323
Stddev	.0002	.19	.0004	.0022	.0001	.10	.0000	.0001	.0008	.0001
%RSD	180.0	.2690	3.606	.3285	8.772	.2458	2.082	4.261	.7864	.1854
#1	.0000	71.43	.0109	.6528	.0010	38.76	-.0004	.0034	.0993	.0322
#2	.0000	71.67	.0108	.6552	.0009	38.90	-.0004	.0031	.1008	.0323
#3	-.0004	71.82	.0102	.6571	.0009	38.94	-.0004	.0033	.1000	.0323

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	20.12	.5548	1.008	.0511	.0018	.2404	.0133	.1330	.0000	.0016
Stddev	.08	.0149	.016	.0000	.0002	.0024	.0001	.0007	.001	.0013
%RSD	.3911	2.681	1.561	.0611	11.24	1.014	.8422	.5210	3928.	79.55
#1	20.04	.5567	.9941	.0512	.0020	.2381	.0133	.1338	.0003	.0026
#2	20.14	.5686	1.025	.0511	.0016	.2429	.0134	.1328	-.0008	.0002
#3	20.19	.5391	1.005	.0511	.0019	.2401	.0131	.1325	.0005	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.757	.0206	1.818	.5251	-.0047	.0540	.1103
Stddev	.006	.0004	.004	.0009	.0004	.0001	.0002
%RSD	.2135	1.805	.1975	.1654	8.201	.1659	.1594
#1	2.751	.0207	1.813	.5248	-.0047	.0539	.1102
#2	2.756	.0202	1.820	.5260	-.0050	.0540	.1102
#3	2.763	.0209	1.820	.5243	-.0043	.0541	.1105

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1472.3	4312.5	33635.	6064.1
Stddev	5.5	4.2	65.	6.3
%RSD	.37058	.09640	.19225	.10391
#1	1466.0	4310.4	33702.	6066.7
#2	1475.4	4317.2	33628.	6056.9
#3	1475.4	4309.7	33573.	6068.7

Zoom In Zoom Out

Sample Name: FA21545-1 Acquired: 1/22/2015 13:06:25 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0002	37.42	.0112	.1628	.0017	F1167.	.0021	.0049
Stddev	.0005	.02	.0004	.0002	.0001	4.	.0001	.0001
%RSD	290.2	.0526	3.944	.1032	2.971	.3373	5.144	2.806
#1	.0002	37.40	.0111	.1629	.0017	1163.	.0022	.0048
#2	-.0007	37.43	.0109	.1626	.0017	1171.	.0020	.0049
#3	.0000	37.44	.0117	.1628	.0017	1167.	.0021	.0051

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.1345	.0865	15.45	1.392	53.26	.1900	.0022	5.313
Stddev	.0008	.0009	.03	.047	.16	.0009	.0001	.012
%RSD	.6250	.9881	.1807	3.389	.2981	.4675	4.863	.2229
#1	.1336	.0855	15.43	1.339	53.08	.1891	.0021	5.300
#2	.1352	.0872	15.42	1.407	53.29	.1909	.0023	5.319
#3	.1346	.0868	15.48	1.430	53.40	.1901	.0022	5.321

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0332	.5642	.0038	.0038	2.528	.0229	3.304	.1831
Stddev	.0002	.0026	.0003	.0023	.011	.0005	.048	.0011
%RSD	.5015	.4555	7.117	60.61	.4447	2.242	1.443	.5807
#1	.0333	.5659	.0041	.0064	2.538	.0234	3.254	.1820
#2	.0330	.5613	.0038	.0023	2.516	.0225	3.349	.1841
#3	.0333	.5656	.0036	.0026	2.531	.0226	3.310	.1831

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0125	.1367	.3741
Stddev	.0008	.0015	.0018
%RSD	6.570	1.111	.4753
#1	-.0116	.1351	.3747
#2	-.0132	.1381	.3720
#3	-.0126	.1369	.3754

Zoom In Zoom Out

Sample Name: FA21545-1 Acquired: 1/22/2015 13:06:25 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1367.6	4267.0	32406.	6284.7
Stddev	2.9	11.6	65.	38.2
%RSD	.20991	.27245	.20119	.60831
#1	1364.7	4257.4	32480.	6319.8
#2	1370.4	4279.9	32378.	6290.3
#3	1367.8	4263.6	32359.	6243.9

Zoom In Zoom Out

Sample Name: FA21545-2 Acquired: 1/22/2015 13:10:46 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	8.642	.0144	.1009	.0005	115.5	.0083	.0072	.0639
Stddev	.0003	.006	.0007	.0003	.0000	.3	.0001	.0001	.0004
%RSD	34.87	.0707	4.601	.2686	6.093	.2343	1.065	1.426	.6790
#1	.0006	8.639	.0139	.1006	.0005	115.2	.0082	.0071	.0643
#2	.0010	8.649	.0140	.1009	.0006	115.6	.0084	.0073	.0638
#3	.0012	8.638	.0151	.1012	.0005	115.8	.0083	.0073	.0634

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.022	24.09	.4359	4.368	.2522	.0014	.7892	.0153	.8617
Stddev	.004	.03	.0341	.027	.0004	.0000	.0050	.0004	.0031
%RSD	.3630	.1271	7.826	.6190	.1636	.8958	.6334	2.575	.3545
#1	1.024	24.06	.4420	4.348	.2527	.0014	.7838	.0149	.8635
#2	1.025	24.11	.3992	4.358	.2519	.0014	.7904	.0157	.8634
#3	1.018	24.11	.4666	4.399	.2520	.0014	.7936	.0153	.8581

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0024	.0039	2.221	.0800	.4165	.1602	-.0026	.0221	F4.327
Stddev	.0006	.0011	.004	.0002	.0003	.0005	.0011	.0002	.005
%RSD	25.58	27.73	.1744	.2729	.0811	.2971	43.58	.9156	.1099
#1	.0019	.0034	2.223	.0803	.4166	.1605	-.0013	.0223	4.331
#2	.0031	.0031	2.217	.0799	.4167	.1603	-.0036	.0220	4.327
#3	.0022	.0051	2.223	.0799	.4161	.1596	-.0028	.0220	4.322

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1451.6	4108.2	31591.	5750.9
Stddev	4.3	5.2	160.	34.7
%RSD	.29370	.12562	.50511	.60333
#1	1448.4	4103.8	31578.	5741.9
#2	1449.9	4106.8	31439.	5789.2
#3	1456.4	4113.9	31757.	5721.6

Zoom In Zoom Out

Sample Name: FA21555-1 Acquired: 1/22/2015 13:14:50 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0007	61.87	.0117	.6948	.0022	F2670.	.0052	.0196
Stddev	.0002	.20	.0002	.0017	.0001	16.	.0002	.0003
%RSD	35.29	.3232	1.951	.2508	2.712	.5908	3.709	1.438
#1	-.0008	61.64	.0119	.6930	.0021	2662.	.0051	.0195
#2	-.0004	61.99	.0114	.6965	.0022	2660.	.0052	.0193
#3	-.0008	61.98	.0117	.6947	.0022	2688.	.0055	.0199

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0814	.2584	61.67	15.44	76.54	1.543	.0096	3.297
Stddev	.0006	.0007	.12	.03	.19	.004	.0000	.012
%RSD	.6789	.2600	.1916	.1999	.2464	.2869	.2972	.3643
#1	.0820	.2578	61.56	15.41	76.66	1.547	.0096	3.289
#2	.0811	.2583	61.80	15.44	76.65	1.542	.0096	3.310
#3	.0810	.2591	61.64	15.47	76.33	1.538	.0096	3.290

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0597	.0741	.0051	.0012	2.933	.0197	F20.40	1.435
Stddev	.0009	.0027	.0012	.0018	.009	.0007	.18	.002
%RSD	1.549	3.647	22.45	146.9	.2918	3.398	.8819	.1134
#1	.0591	.0727	.0040	.0002	2.931	.0192	20.38	1.436
#2	.0593	.0724	.0063	.0032	2.925	.0196	20.23	1.433
#3	.0608	.0772	.0052	.0002	2.942	.0205	20.59	1.434

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0208	.1060	.5468
Stddev	.0012	.0002	.0128
%RSD	5.937	.1670	2.348
#1	-.0208	.1061	.5386
#2	-.0219	.1058	.5402
#3	-.0195	.1061	.5616

Zoom In Zoom Out

Sample Name: FA21555-1 Acquired: 1/22/2015 13:14:50 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1278.7	3756.8	29043.	5730.2
Stddev	28.5	60.5	217.	36.6
%RSD	2.2317	1.6114	.74858	.63846
#1	1291.1	3787.4	28869.	5697.8
#2	1298.9	3795.9	28974.	5722.9
#3	1246.1	3687.1	29287.	5769.9

Zoom In Zoom Out

Sample Name: FA21555-2 Acquired: 1/22/2015 13:19:09 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0005	64.26	.0132	.8887	.0024	F2693.	.0027	.0234
Stddev	.0001	.21	.0003	.0025	.0001	23.	.0001	.0001
%RSD	25.32	.3195	2.372	.2866	2.825	.8376	3.572	.4241
#1	-.0005	64.29	.0135	.8887	.0025	2708.	.0026	.0233
#2	-.0006	64.45	.0129	.8913	.0023	2704.	.0027	.0235
#3	-.0004	64.05	.0133	.8862	.0024	2667.	.0028	.0234

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0996	.3661	61.40	15.77	152.0	1.699	.0127	3.563
Stddev	.0005	.0016	.24	.07	.7	.001	.0004	.003
%RSD	.4578	.4323	.3908	.4287	.4722	.0379	3.205	.0779
#1	.1001	.3679	61.50	15.75	152.3	1.699	.0123	3.565
#2	.0997	.3652	61.57	15.85	152.6	1.700	.0127	3.565
#3	.0992	.3652	61.12	15.72	151.2	1.700	.0131	3.560

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0608	.0700	.0020	-.0001	2.676	.0196	F20.51	1.407
Stddev	.0003	.0009	.0007	.0005	.020	.0006	.26	.001
%RSD	.5284	1.288	36.96	377.6	.7591	2.868	1.284	.0863
#1	.0606	.0690	.0017	-.0004	2.655	.0193	20.81	1.408
#2	.0607	.0706	.0015	-.0005	2.678	.0193	20.40	1.407
#3	.0612	.0705	.0029	.0004	2.696	.0203	20.32	1.406

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0211	.1104	.4955
Stddev	.0021	.0004	.0006
%RSD	9.777	.3951	.1147
#1	-.0231	.1102	.4959
#2	-.0210	.1109	.4957
#3	-.0190	.1100	.4948

Zoom In Zoom Out

Sample Name: FA21555-2 Acquired: 1/22/2015 13:19:09 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1293.5	3807.8	28975.	5898.3
Stddev	3.9	10.9	63.	66.0
%RSD	.30302	.28622	.21762	1.1193
#1	1290.3	3799.8	29028.	5857.9
#2	1292.4	3803.4	28905.	5862.6
#3	1297.9	3820.2	28993.	5974.5

Zoom In Zoom Out

Sample Name: FA21555-3 Acquired: 1/22/2015 13:23:28 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0013	69.28	.0194	.6660	.0026	F2476.	-.0001	.0214
Stddev	.0004	.53	.0009	.0043	.0001	9.	.0000	.0002
%RSD	29.99	.7590	4.854	.6470	3.536	.3671	47.59	.9391
#1	-.0010	68.91	.0185	.6623	.0025	2485.	-.0001	.0213
#2	-.0011	69.04	.0204	.6649	.0026	2476.	-.0001	.0212
#3	-.0017	69.88	.0193	.6707	.0027	2467.	-.0002	.0216

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0590	.1177	59.96	20.65	76.26	1.794	.0058	9.130
Stddev	.0003	.0006	.28	.16	.28	.009	.0002	.067
%RSD	.4914	.5358	.4645	.7537	.3659	.5256	3.070	.7346
#1	.0593	.1171	59.77	20.53	76.10	1.788	.0059	9.081
#2	.0587	.1178	59.83	20.60	76.09	1.790	.0058	9.103
#3	.0590	.1183	60.28	20.83	76.58	1.805	.0056	9.206

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0500	.0881	.0047	-.0007	3.279	.0195	F13.92	1.874
Stddev	.0004	.0003	.0009	.0027	.012	.0003	.15	.008
%RSD	.7628	.3458	19.83	412.7	.3518	1.650	1.059	.4307
#1	.0496	.0878	.0052	.0017	3.279	.0191	14.08	1.867
#2	.0501	.0882	.0037	-.0036	3.290	.0195	13.88	1.873
#3	.0504	.0883	.0054	.0000	3.267	.0198	13.79	1.883

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0206	.1138	.2707
Stddev	.0023	.0009	.0024
%RSD	11.12	.8301	.8761
#1	-.0229	.1129	.2687
#2	-.0183	.1137	.2702
#3	-.0205	.1148	.2733

Zoom In Zoom Out

Sample Name: FA21555-3 Acquired: 1/22/2015 13:23:28 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1276.4	3830.0	29705.	6097.0
Stddev	6.8	19.6	114.	23.7
%RSD	.53651	.51141	.38468	.38951
#1	1281.5	3843.1	29748.	6075.3
#2	1279.1	3839.4	29791.	6122.4
#3	1268.6	3807.5	29575.	6093.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 13:27:46 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2571	41.35	2.059	2.117	2.070	40.46	2.068	2.077	2.066	2.131
Stddev	.0011	.05	.003	.003	.004	.10	.005	.004	.006	.009
%RSD	.4283	.1153	.1631	.1566	.1703	.2495	.2345	.1793	.2963	.4188
#1	.2577	41.38	2.055	2.119	2.071	40.57	2.063	2.072	2.068	2.130
#2	.2578	41.38	2.060	2.119	2.072	40.45	2.069	2.078	2.071	2.141
#3	.2558	41.30	2.061	2.113	2.066	40.37	2.072	2.079	2.059	2.123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.37	42.74	39.63	2.113	2.031	42.53	2.048	2.037	2.070	2.075
Stddev	.04	.07	.03	.006	.007	.05	.001	.002	.003	.001
%RSD	.1097	.1545	.0786	.2698	.3617	.1117	.0662	.1131	.1456	.0384
#1	40.34	42.71	39.67	2.112	2.023	42.59	2.047	2.036	2.067	2.076
#2	40.42	42.81	39.61	2.119	2.032	42.52	2.048	2.036	2.070	2.075
#3	40.35	42.69	39.62	2.108	2.037	42.49	2.049	2.040	2.073	2.074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.802	1.985	2.152	2.105	2.067	2.070	2.053
Stddev	.003	.004	.003	.006	.005	.007	.004
%RSD	.1623	.2280	.1331	.2844	.2434	.3220	.2032
#1	1.800	1.980	2.152	2.104	2.063	2.074	2.049
#2	1.801	1.987	2.155	2.111	2.065	2.074	2.055
#3	1.806	1.989	2.149	2.099	2.072	2.062	2.056
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 13:27:46 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1484.6	4091.6	32006.	6042.6
Stddev	1.9	5.7	203.	16.2
%RSD	.12577	.13948	.63313	.26802
#1	1485.9	4098.1	32001.	6036.0
#2	1485.5	4089.6	31807.	6061.0
#3	1482.5	4087.3	32212.	6030.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 13:34:23 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0025	-.0007	.0000	.0000	.0453	.0000	-.0001	-.0001
Stddev	.0003	.0057	.0004	.0001	.0000	.0053	.0000	.0002	.0003
%RSD	115.7	230.3	62.10	8598.	123.7	11.74	88.92	272.0	428.3
#1	-.0003	.0039	-.0004	.0000	.0000	.0480	.0000	-.0001	.0001
#2	-.0005	-.0069	-.0005	-.0001	.0001	.0487	.0001	-.0003	-.0004
#3	.0001	-.0045	-.0012	.0001	.0000	.0392	.0000	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0150	-.0227	.0032	-.0001	-.0009	.0265	-.0002	-.0005
Stddev	.0001	.0037	.0071	.0097	.0000	.0001	.0053	.0001	.0009
%RSD	20.78	24.90	31.25	304.6	37.77	13.67	19.89	42.38	169.1
#1	.0005	-.0109	-.0309	.0068	-.0001	-.0008	.0318	-.0003	-.0015
#2	.0005	-.0159	-.0197	-.0078	-.0001	-.0008	.0263	-.0001	.0002
#3	.0007	-.0183	-.0176	.0105	-.0002	-.0010	.0213	-.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F.0023	.0000	-.0005	.0003	-.0006	.0007	-.0001	.0000
Stddev	.002	.0004	.000	.0003	.0000	.0001	.0006	.0002	.0000
%RSD	4194.	18.33	366.7	74.20	5.325	13.09	98.72	166.1	406.5
#1	-.0007	.0027	.0000	-.0001	.0003	-.0006	-.0001	.0001	.0001
#2	.0019	.0024	-.0002	-.0007	.0003	-.0005	.0008	-.0004	.0000
#3	-.0013	.0019	.0001	-.0005	.0003	-.0006	.0012	-.0001	.0000
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 13:34:23 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1603.4	4420.5	34139.	6154.9
Stddev	4.8	1.2	66.	11.7
%RSD	.29715	.02803	.19371	.18986
#1	1602.7	4419.1	34202.	6166.0
#2	1608.5	4420.9	34146.	6142.7
#3	1599.0	4421.4	34070.	6156.1

Zoom In Zoom Out

Sample Name: FA21555-4 Acquired: 1/22/2015 13:38:36 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0011	67.14	.0172	.7048	.0026	F2683.	-.0009	.0196
Stddev	.0004	.22	.0007	.0004	.0000	32.	.0001	.0001
%RSD	33.18	.3349	4.307	.0624	.7418	1.197	10.75	.4929
#1	-.0013	67.11	.0164	.7052	.0026	2649.	-.0009	.0196
#2	-.0014	67.37	.0175	.7043	.0026	2713.	-.0008	.0196
#3	-.0007	66.92	.0179	.7049	.0026	2688.	-.0010	.0195

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0552	.1101	55.93	18.58	71.64	1.620	.0049	5.738
Stddev	.0008	.0004	.07	.09	.37	.004	.0002	.017
%RSD	1.420	.3196	.1289	.4764	.5098	.2617	3.646	.2936
#1	.0544	.1105	55.86	18.48	71.43	1.616	.0050	5.740
#2	.0552	.1098	56.01	18.64	72.06	1.624	.0049	5.754
#3	.0560	.1100	55.92	18.63	71.43	1.621	.0047	5.721

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0456	.0628	.0045	-.0027	3.078	.0183	F14.65	1.758
Stddev	.0002	.0005	.0005	.0028	.014	.0002	.11	.004
%RSD	.3638	.8396	12.09	105.0	.4520	1.337	.7541	.2554
#1	.0456	.0622	.0039	-.0004	3.092	.0181	14.54	1.754
#2	.0454	.0630	.0048	-.0019	3.078	.0185	14.76	1.763
#3	.0458	.0632	.0049	-.0059	3.064	.0182	14.65	1.757

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0211	.1053	.2082
Stddev	.0008	.0006	.0014
%RSD	3.827	.6003	.6668
#1	-.0216	.1053	.2069
#2	-.0202	.1059	.2078
#3	-.0215	.1047	.2097

Zoom In Zoom Out

Sample Name: FA21555-4 Acquired: 1/22/2015 13:38:36 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1279.8	3851.7	29267.	6047.7
Stddev	6.3	12.8	134.	24.8
%RSD	.49030	.33177	.45859	.41013
#1	1287.0	3865.8	29392.	6045.9
#2	1275.3	3840.8	29125.	6023.8
#3	1277.2	3848.5	29283.	6073.3

Zoom In Zoom Out

Sample Name: FA21555-5 Acquired: 1/22/2015 13:42:56 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0009	69.89	.0216	.6488	.0025	F2452.	-.0006	.0192
Stddev	.0005	.17	.0015	.0010	.0000	34.	.0001	.0006
%RSD	56.56	.2502	6.943	.1469	1.246	1.393	21.37	2.941
#1	-.0014	70.09	.0199	.6497	.0026	2456.	-.0008	.0186
#2	-.0004	69.82	.0220	.6478	.0026	2416.	-.0005	.0196
#3	-.0009	69.76	.0228	.6488	.0025	2484.	-.0006	.0195

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0565	.3667	56.90	21.24	86.99	1.637	.0049	10.96
Stddev	.0004	.0014	.19	.07	.30	.002	.0002	.01
%RSD	.7626	.3805	.3259	.3254	.3413	.1477	4.993	.0538
#1	.0565	.3663	56.99	21.18	87.10	1.639	.0046	10.96
#2	.0570	.3655	56.69	21.21	86.66	1.635	.0048	10.96
#3	.0561	.3682	57.03	21.31	87.22	1.636	.0051	10.95

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0459	.0742	.0039	-.0038	3.322	.0188	F18.48	1.812
Stddev	.0007	.0016	.0015	.0019	.042	.0005	.28	.002
%RSD	1.590	2.175	37.73	50.48	1.263	2.443	1.523	.1208
#1	.0451	.0723	.0039	-.0037	3.273	.0182	18.80	1.813
#2	.0460	.0749	.0054	-.0019	3.347	.0191	18.28	1.810
#3	.0465	.0753	.0025	-.0057	3.345	.0190	18.36	1.814

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0197	.1148	.2372
Stddev	.0014	.0005	.0055
%RSD	7.263	.4030	2.310
#1	-.0209	.1150	.2310
#2	-.0181	.1143	.2391
#3	-.0202	.1152	.2414

Zoom In Zoom Out

Sample Name: FA21555-5 Acquired: 1/22/2015 13:42:56 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1275.5	3897.6	29193.	5805.4
Stddev	26.5	63.4	59.	41.4
%RSD	2.0756	1.6264	.20117	.71248
#1	1305.9	3970.5	29128.	5801.2
#2	1262.8	3866.9	29241.	5848.7
#3	1257.7	3855.4	29211.	5766.3

Zoom In Zoom Out

Sample Name: FA21555-6 Acquired: 1/22/2015 13:47:15 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0014	67.49	.0146	.6466	.0025	F2859.	.0001	.0191
Stddev	.0005	.53	.0012	.0048	.0000	38.	.0001	.0000
%RSD	33.91	.7873	8.517	.7405	.7391	1.320	105.9	.1632
#1	-.0018	67.02	.0150	.6425	.0025	2873.	.0001	.0192
#2	-.0016	67.39	.0132	.6455	.0025	2816.	.0001	.0191
#3	-.0009	68.07	.0155	.6519	.0025	2888.	.0000	.0191

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0574	.1793	59.17	23.26	74.10	2.268	.0083	7.948
Stddev	.0001	.0010	.41	.19	.52	.002	.0002	.069
%RSD	.2231	.5447	.6977	.8308	.7082	.0716	1.988	.8621
#1	.0575	.1802	58.82	23.08	73.87	2.270	.0084	7.883
#2	.0573	.1793	59.07	23.22	73.73	2.267	.0084	7.942
#3	.0573	.1783	59.63	23.46	74.70	2.267	.0081	8.020

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0457	.1000	.0052	-.0045	3.426	.0194	F20.74	1.841
Stddev	.0004	.0008	.0022	.0012	.006	.0006	.54	.001
%RSD	.9042	.8217	42.28	26.64	.1860	2.965	2.620	.0388
#1	.0453	.1008	.0078	-.0042	3.422	.0188	20.84	1.841
#2	.0457	.0992	.0039	-.0059	3.423	.0199	20.16	1.840
#3	.0462	.1001	.0040	-.0035	3.433	.0194	21.23	1.842

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0260	.1253	.2662
Stddev	.0011	.0009	.0006
%RSD	4.199	.7271	.2333
#1	-.0249	.1259	.2656
#2	-.0261	.1257	.2661
#3	-.0271	.1242	.2669

Zoom In Zoom Out

Sample Name: FA21555-6 Acquired: 1/22/2015 13:47:15 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1198.4	3779.8	26786.	5109.6
Stddev	3.8	1.3	59.	47.9
%RSD	.31923	.03463	.21948	.93703
#1	1201.1	3780.2	26759.	5091.3
#2	1194.0	3778.4	26746.	5163.9
#3	1200.0	3780.9	26854.	5073.5

Zoom In Zoom Out

Sample Name: FA21555-7 Acquired: 1/22/2015 13:51:34 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0010	87.11	.0212	.7222	.0033	F2704.	-.0013	.0229
Stddev	.0003	.65	.0014	.0074	.0001	34.	.0001	.0001
%RSD	33.38	.7462	6.536	1.025	1.590	1.251	10.29	.4327
#1	-.0009	87.57	.0209	.7287	.0033	2669.	-.0013	.0230
#2	-.0007	87.40	.0200	.7237	.0032	2737.	-.0014	.0228
#3	-.0013	86.37	.0227	.7142	.0033	2706.	-.0011	.0229

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0732	.1155	75.94	30.41	103.1	2.170	.0073	11.56
Stddev	.0004	.0001	.45	.22	.4	.005	.0001	.09
%RSD	.5036	.1131	.5866	.7224	.3834	.2192	1.757	.7845
#1	.0734	.1154	76.22	30.58	102.9	2.176	.0073	11.62
#2	.0735	.1157	76.17	30.49	103.6	2.169	.0074	11.61
#3	.0728	.1155	75.43	30.16	102.9	2.166	.0072	11.46

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0550	.1321	.0035	-.0024	3.532	.0201	F16.37	2.409
Stddev	.0002	.0006	.0013	.0046	.007	.0001	.38	.003
%RSD	.2900	.4561	37.72	192.6	.2081	.5965	2.311	.1181
#1	.0552	.1319	.0042	.0024	3.540	.0200	16.22	2.411
#2	.0549	.1316	.0020	-.0028	3.530	.0200	16.81	2.410
#3	.0549	.1327	.0044	-.0068	3.526	.0202	16.10	2.405

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0224	.1396	.2787
Stddev	.0013	.0001	.0009
%RSD	5.618	.0473	.3325
#1	-.0224	.1395	.2796
#2	-.0211	.1396	.2789
#3	-.0237	.1396	.2777

Zoom In Zoom Out

Sample Name: FA21555-7 Acquired: 1/22/2015 13:51:34 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1223.0	3882.2	27405.	5157.0
Stddev	5.5	13.4	231.	89.6
%RSD	.44670	.34570	.84386	1.7375
#1	1216.9	3872.1	27162.	5260.3
#2	1224.5	3877.1	27431.	5099.4
#3	1227.5	3897.4	27623.	5111.5

Zoom In Zoom Out

Sample Name: FA21555-8 Acquired: 1/22/2015 13:55:54 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0003	68.56	.0168	.6256	.0027	F2566.	-.0012	.0198
Stddev	.0003	1.20	.0022	.0090	.0001	69.	.0001	.0002
%RSD	98.62	1.756	13.10	1.433	3.696	2.700	7.709	1.039
#1	-.0002	67.20	.0150	.6155	.0026	2489.	-.0011	.0195
#2	-.0001	69.01	.0162	.6287	.0027	2624.	-.0013	.0199
#3	-.0007	69.48	.0193	.6327	.0028	2586.	-.0013	.0198

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0606	.0970	60.28	20.82	94.01	1.928	.0035	5.912
Stddev	.0008	.0002	.95	.31	1.66	.006	.0002	.079
%RSD	1.309	.1871	1.572	1.465	1.768	.2879	5.194	1.333
#1	.0615	.0972	59.21	20.47	92.11	1.931	.0034	5.824
#2	.0602	.0969	60.65	20.93	94.69	1.921	.0035	5.936
#3	.0600	.0969	60.99	21.05	95.22	1.930	.0037	5.976

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0466	.0894	.0044	-.0030	2.951	.0192	F14.03	1.880
Stddev	.0003	.0004	.0028	.0016	.040	.0005	.45	.002
%RSD	.7253	.4953	62.60	51.58	1.352	2.633	3.241	.0973
#1	.0463	.0899	.0031	-.0031	2.905	.0187	13.51	1.879
#2	.0465	.0890	.0076	-.0045	2.973	.0193	14.34	1.879
#3	.0470	.0893	.0026	-.0014	2.974	.0197	14.24	1.882

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0202	.1172	.2142
Stddev	.0014	.0004	.0006
%RSD	6.905	.3091	.2626
#1	-.0194	.1169	.2136
#2	-.0219	.1171	.2147
#3	-.0195	.1176	.2143

Zoom In Zoom Out

Sample Name: FA21555-8 Acquired: 1/22/2015 13:55:54 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1208.6	3713.2	26645.	4986.1
Stddev	4.1	21.9	159.	98.0
%RSD	.34303	.59001	.59534	1.9654
#1	1211.5	3737.2	26535.	5097.8
#2	1203.8	3694.3	26826.	4946.1
#3	1210.4	3708.0	26573.	4914.5

Zoom In Zoom Out

Sample Name: FA21331-1 Acquired: 1/22/2015 14:00:13 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0050	4.626	-.0017	.0130	.0008	2.806	.0000	.0037	.3315	.3104
Stddev	.0003	.010	.0006	.0001	.0001	.007	.000	.0001	.0019	.0007
%RSD	5.398	.2226	34.02	.4297	6.809	.2413	259.7	3.669	.5762	.2123
#1	.0050	4.615	-.0024	.0130	.0009	2.813	.0001	.0038	.3294	.3098
#2	.0047	4.636	-.0013	.0130	.0008	2.806	-.0001	.0036	.3330	.3111
#3	.0052	4.626	-.0015	.0129	.0008	2.799	-.0001	.0038	.3323	.3103

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.854	.1229	.9674	.0534	.0083	7.675	.1264	.1412	.0033	.0040
Stddev	.005	.0108	.0070	.0002	.0002	.026	.0002	.0012	.0004	.0009
%RSD	.1764	8.801	.7246	.3482	2.291	.3370	.1798	.8279	11.26	22.14
#1	2.860	.1331	.9609	.0532	.0084	7.649	.1264	.1421	.0036	.0044
#2	2.852	.1240	.9748	.0535	.0082	7.675	.1261	.1399	.0029	.0046
#3	2.850	.1115	.9664	.0535	.0081	7.700	.1265	.1415	.0035	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4850	.3422	.0093	.0401	-.0048	.0025	.1170
Stddev	.0006	.0005	.0000	.0002	.0007	.0001	.0003
%RSD	.1176	.1401	.2653	.3750	14.30	5.806	.2529
#1	.4852	.3423	.0093	.0402	-.0054	.0025	.1173
#2	.4843	.3417	.0094	.0401	-.0041	.0027	.1167
#3	.4853	.3426	.0093	.0399	-.0050	.0024	.1171

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1502.8	4173.6	31593.	5537.6
Stddev	3.1	8.9	108.	14.8
%RSD	.20561	.21305	.34315	.26777
#1	1499.9	4163.6	31707.	5547.4
#2	1502.5	4180.6	31582.	5520.5
#3	1506.1	4176.7	31491.	5544.8

Zoom In Zoom Out

Sample Name: FA21547-1 Acquired: 1/22/2015 14:04:18 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0029	76.51	.0185	F102.4	-.0006	131.1	.0003	-.0004	.0311
Stddev	.0037	.19	.0041	.9	.0006	.5	.0003	.0003	.0024
%RSD	129.6	.2474	22.19	.8651	99.35	.4042	100.1	71.36	7.811
#1	.0038	76.71	.0138	101.5	.0001	131.7	.0005	-.0002	.0315
#2	.0060	76.33	.0216	103.3	-.0010	130.8	.0001	-.0002	.0285
#3	-.0012	76.49	.0201	102.3	-.0007	130.8	.0001	-.0007	.0334

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0405	26.28	7.769	338.4	.6637	-.0168	6.048	.0451	.0449
Stddev	.0019	.08	.372	2.1	.0014	.0006	.090	.0012	.0087
%RSD	4.781	.3102	4.783	.6074	.2140	3.856	1.496	2.770	19.44
#1	.0394	26.37	8.089	340.4	.6645	-.0168	6.142	.0461	.0479
#2	.0393	26.22	7.361	336.3	.6646	-.0175	5.962	.0437	.0517
#3	.0427	26.25	7.856	338.4	.6621	-.0162	6.039	.0454	.0350

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0137	.0262	2.252	.0408	4.339	7.533	.0009	.0491	F259.7
Stddev	.0036	.0192	.002	.0004	.015	.005	.0140	.0027	1.3
%RSD	26.04	73.28	.0959	.8747	.3545	.0618	1582.	5.443	.4913
#1	-.0177	.0459	2.253	.0412	4.357	7.529	-.0132	.0464	261.2
#2	-.0126	.0252	2.250	.0409	4.330	7.538	.0011	.0517	259.2
#3	-.0108	.0075	2.254	.0405	4.331	7.531	.0148	.0491	258.8

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1526.6	4287.2	32248.	5664.7
Stddev	2.6	6.9	59.	48.1
%RSD	.17194	.16084	.18239	.84896
#1	1526.1	4279.2	32249.	5629.6
#2	1524.3	4290.5	32188.	5719.5
#3	1529.5	4291.8	32306.	5645.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/22/2015 14:08:43 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0096	.2077	.0088	.2197	.0053	1.046	.0052	.0523	.0107	.0274
Stddev	.0003	.0020	.0014	.0004	.0001	.003	.0000	.0001	.0003	.0004
%RSD	3.409	.9394	15.53	.1906	1.479	.2971	.6083	.1612	2.675	1.410
#1	.0095	.2094	.0092	.2198	.0053	1.044	.0051	.0523	.0108	.0269
#2	.0100	.2082	.0073	.2192	.0054	1.044	.0051	.0523	.0104	.0275
#3	.0094	.2056	.0099	.2200	.0053	1.049	.0052	.0524	.0109	.0276

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3033	11.96	5.177	.0165	.0460	11.37	.0407	.0043	.0044	.0105
Stddev	.0061	.06	.040	.0000	.0000	.01	.0001	.0005	.0021	.0012
%RSD	2.014	.4891	.7627	.2897	.0796	.0441	.3221	11.05	46.82	11.15
#1	.3103	12.03	5.219	.0165	.0460	11.36	.0406	.0038	.0058	.0113
#2	.2994	11.92	5.141	.0164	.0460	11.36	.0408	.0044	.0020	.0110
#3	.3001	11.93	5.170	.0164	.0460	11.37	.0406	.0047	.0054	.0091

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0312	.0474	.0112	.0099	.0096	.0503	.0228
Stddev	.0004	.0001	.0000	.0002	.0003	.0004	.0002
%RSD	1.403	.2150	.2898	1.645	3.594	.7102	.9021
#1	.0313	.0475	.0112	.0098	.0094	.0503	.0229
#2	.0316	.0474	.0111	.0101	.0100	.0506	.0229
#3	.0308	.0473	.0112	.0097	.0094	.0499	.0226

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1564.7	4387.4	32508.	5603.3
Stddev	1.8	7.3	82.	22.9
%RSD	.11537	.16584	.25348	.40946
#1	1565.6	4393.0	32457.	5587.5
#2	1565.9	4389.9	32465.	5629.6
#3	1562.6	4379.2	32603.	5592.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/22/2015 14:13:42 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	F508.0	.0014	.0002	-.0001	474.1	-.0020	-.0007	-.0007
Stddev	.0003	2.0	.0007	.0001	.0000	4.0	.0000	.0002	.0001
%RSD	77.17	.3863	51.20	31.76	38.17	.8500	2.304	22.48	16.88
#1	.0001	509.1	.0020	.0002	-.0001	474.9	-.0019	-.0009	-.0008
#2	.0007	505.7	.0006	.0003	-.0001	469.7	-.0020	-.0006	-.0006
#3	.0003	509.1	.0016	.0001	.0000	477.7	-.0020	-.0006	-.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	184.5	.0568	483.6	-.0007	.0000	.0872	.0003	-.0008
Stddev	.0002	.3	.0224	.6	.0000	.000	.0136	.0001	.0009
%RSD	297.2	.1694	39.39	.1268	6.772	836.8	15.64	49.59	108.5
#1	.0002	184.3	.0701	483.2	-.0008	-.0002	.0906	.0004	.0000
#2	-.0001	184.3	.0694	483.2	-.0007	-.0002	.0722	.0002	-.0008
#3	.0001	184.9	.0310	484.3	-.0007	.0003	.0988	.0002	-.0018

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0009	-.0015	.0387	.0002	.0004	-.0006	.0004	.0007	.0006
Stddev	.0009	.0015	.0002	.0002	.0001	.0002	.0015	.0001	.0001
%RSD	101.1	97.49	.5965	113.5	11.66	28.43	389.8	13.74	18.92
#1	-.0003	-.0032	.0390	.0001	.0005	-.0005	.0005	.0006	.0008
#2	-.0019	-.0007	.0385	.0005	.0005	-.0008	-.0012	.0006	.0006
#3	-.0005	-.0006	.0386	.0001	.0004	-.0005	.0018	.0008	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1354.1	3713.8	27146.	5189.2
Stddev	3.1	7.4	106.	25.3
%RSD	.22963	.19955	.39053	.48669
#1	1350.9	3705.3	27142.	5160.7
#2	1357.1	3716.9	27041.	5198.0
#3	1354.2	3719.1	27253.	5208.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/22/2015 14:18:02 Type: Unk
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.019	496.5	1.049	.5381	.5235	459.2	.9673	.5053	.4942
Stddev	.005	11.1	.004	.0018	.0001	7.9	.0027	.0015	.0014
%RSD	.4903	2.234	.3747	.3301	.0181	1.730	.2802	.2905	.2764
#1	1.023	489.9	1.054	.5361	.5235	453.6	.9703	.5070	.4957
#2	1.021	509.3	1.047	.5391	.5234	468.3	.9664	.5046	.4939
#3	1.014	490.4	1.047	.5392	.5236	455.6	.9652	.5044	.4930

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5842	184.2	-.0104	475.7	.5325	.9622	.0785	.9829	.9887
Stddev	.0019	.6	.0189	1.8	.0023	.0026	.0099	.0034	.0064
%RSD	.3328	.3217	181.9	.3802	.4254	.2710	12.66	.3435	.6450
#1	.5836	183.6	-.0285	473.7	.5340	.9652	.0867	.9866	.9956
#2	.5864	184.8	-.0120	477.2	.5335	.9607	.0674	.9817	.9830
#3	.5827	184.2	.0093	476.1	.5299	.9606	.0815	.9802	.9876

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.073	1.014	.0532	.9399	1.093	1.067	1.047	.4967	.9702
Stddev	.003	.002	.0003	.0028	.000	.005	.001	.0009	.0033
%RSD	.2574	.2176	.5211	.2956	.0272	.4461	.1028	.1887	.3424
#1	1.076	1.014	.0534	.9428	1.093	1.071	1.048	.4964	.9740
#2	1.071	1.016	.0534	.9395	1.093	1.068	1.046	.4978	.9685
#3	1.071	1.011	.0529	.9372	1.093	1.062	1.047	.4959	.9681

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1398.2	3881.8	28168.	5319.7
Stddev	5.1	13.3	119.	52.7
%RSD	.36184	.34299	.42276	.99077
#1	1393.5	3866.4	28044.	5369.5
#2	1397.4	3889.6	28179.	5264.5
#3	1403.6	3889.3	28281.	5325.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 14:22:16 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2529	40.15	1.931	2.106	2.070	39.29	2.013	2.007	1.994
Stddev	.0007	.07	.000	.004	.001	.07	.004	.004	.004
%RSD	.2764	.1644	.0155	.1869	.0580	.1809	.1913	.1876	.1749
#1	.2521	40.21	1.932	2.110	2.071	39.33	2.016	2.010	1.992
#2	.2533	40.08	1.931	2.103	2.070	39.32	2.014	2.008	1.998
#3	.2534	40.16	1.931	2.104	2.069	39.20	2.009	2.003	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.096	41.10	F46.16	39.89	2.113	1.942	43.38	1.943	2.028
Stddev	.001	.04	.12	.02	.002	.003	.05	.004	.007
%RSD	.0305	.0882	.2583	.0442	.0954	.1409	.1098	.1910	.3502
#1	2.096	41.06	46.27	39.89	2.110	1.939	43.44	1.946	2.036
#2	2.095	41.13	46.04	39.91	2.114	1.944	43.36	1.944	2.025
#3	2.097	41.10	46.18	39.88	2.114	1.943	43.35	1.939	2.022
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			40.00						
Range			10.00%						

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.948	1.949	1.694	1.855	2.181	2.115	2.051	2.021	1.999
Stddev	.002	.005	.004	.004	.001	.002	.005	.004	.004
%RSD	.1255	.2505	.2301	.2058	.0471	.0975	.2630	.1903	.2171
#1	1.951	1.950	1.698	1.859	2.182	2.114	2.057	2.017	2.003
#2	1.948	1.953	1.695	1.856	2.181	2.113	2.051	2.025	2.000
#3	1.946	1.943	1.690	1.851	2.180	2.117	2.046	2.022	1.995
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/22/2015 14:22:16 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1495.5	4235.4	31359.	5460.2
Stddev	4.2	9.0	36.	23.4
%RSD	.28200	.21238	.11347	.42933
#1	1490.8	4230.3	31400.	5486.6
#2	1496.7	4230.0	31332.	5451.9
#3	1499.0	4245.7	31347.	5441.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/22/2015 14:26:11 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0056	-.0006	.0002	.0001	.0047	.0002	.0002
Stddev	.0004	.0058	.0004	.0000	.0001	.0029	.0000	.0001
%RSD	218.2	104.2	65.68	18.97	115.7	63.28	17.17	74.76
#1	.0001	-.0011	-.0003	.0002	.0000	.0013	.0003	.0002
#2	-.0002	.0095	-.0011	.0002	.0001	.0062	.0002	.0003
#3	.0006	.0083	-.0005	.0002	.0001	.0066	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0005	.0058	-.0082	.0218	.0001	F.0016	.0030
Stddev	.0003	.0005	.0072	.0169	.0234	.0000	.0007	.0046
%RSD	265.3	86.42	123.8	206.0	107.3	21.64	44.89	149.3
#1	.0002	.0001	.0137	-.0197	.0277	.0001	.0024	.0018
#2	-.0002	.0010	.0042	.0112	-.0040	.0001	.0015	.0081
#3	.0003	.0006	-.0004	-.0161	.0416	.0001	.0010	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F-.0013	.0011	F.0021	.0002	-.0001	.0002	.0003
Stddev	.0002	.0011	.0007	.0015	.0003	.0003	.0001	.0001
%RSD	281.9	89.61	58.81	70.03	105.4	451.6	47.44	39.89
#1	.0000	-.0013	.0010	.0023	.0004	.0003	.0001	.0004
#2	-.0002	-.0001	.0005	.0036	-.0001	-.0002	.0002	.0001
#3	.0001	-.0024	.0018	.0006	.0004	-.0003	.0001	.0003
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010		.0020				
Low Limit		-.0010		-.0020				

Zoom In
Zoom Out

Sample Name: CCB Acquired: 1/22/2015 14:26:11 Type: QC
Method: 60102007_041712(v78) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	TI1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0005	.0000	.0001
Stddev	.0002	.0005	.0000
%RSD	47.44	1354.	29.19
#1	.0004	-.0002	.0002
#2	.0003	-.0002	.0001
#3	.0007	.0006	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1546.7	4328.2	32223.	5425.5
Stddev	.9	5.7	7.	19.5
%RSD	.06044	.13058	.02176	.35943
#1	1545.9	4321.7	32217.	5427.9
#2	1546.5	4331.5	32231.	5405.0
#3	1547.8	4331.4	32222.	5443.8

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.053780	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000087	0.000000	No
			Cr	-0.002131	0.000000	No
			Mo	0.000500	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000010	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000109	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	0.000005	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000001	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000147	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000008	0.000000	No
			Mg	0.000005	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	-0.000007	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000029	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000055	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000971	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000342	0.000000	No
			Fe	-0.000012	0.000000	No
			Mo	-0.001480	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000007	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000022	0.000000	No
			Cr	0.012815	0.000000	No
			Mo	-0.000310	0.000000	No
			V	-0.001708	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000015	0.000000	No
			Ca	-0.000000	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000017	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000007	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000010	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	-0.000013	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000008	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	0.000002	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.025078	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000007	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.003709	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000016	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000032	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000814	0.697759	0.000000	1.000000
	Al 396.152 { 85}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.004342	0.150788	0.000000	1.000000
	As 189.042 {478}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.000380	0.311679	0.000000	1.000000
	Ba 455.403 { 74}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.004871	10.585932	0.000000	1.000000
	Be 313.042 {108}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000110	7.136654	0.000000	1.000000
	Ca 317.933 {106}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.004529	0.243249	0.000000	1.000000
	Cd 226.502 {449}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.000894	5.607603	0.000000	1.000000
	Co 228.616 {447}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000643	2.600941	0.000000	1.000000
	Cr 267.716 {126}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000152	0.505684	0.000000	1.000000
	Cu 324.754 {104}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.006134	0.841823	0.000000	1.000000
	Fe 259.940 {130}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.005164	0.146699	0.000000	1.000000
	In 230.606 {446}*	1/22/2015 9:42:51	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.002026	0.100068	0.000000	1.000000
	Mg 279.079 {121}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.000173	0.023768	0.000000	1.000000
	Mn 257.610 {131}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.001133	3.321152	0.000000	1.000000
	Mo 202.030 {467}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.002093	1.328331	0.000000	1.000000
	Na 589.592 { 57}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.019708	0.355453	0.000000	1.000000
	Ni 231.604 {445}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000486	1.721813	0.000000	1.000000
	Pb 220.353 {453}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.004868	1.338626	0.000000	1.000000
	Sb 206.833 {463}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000956	0.311021	0.000000	1.000000
	Se 196.090 {472}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.001045	0.233546	0.000000	1.000000
	Si 212.412 {459}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.008492	0.502030	0.000000	1.000000
	Sn 189.989 {477}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000536	0.556406	0.000000	1.000000
	Sr 407.771 { 83}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.000781	14.933583	0.000000	1.000000
	Ti 334.941 {101}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.003283	2.050818	0.000000	1.000000
	Tl 190.856 {477}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.007267	0.609928	0.000000	1.000000
	V 292.402 {115}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	-0.000325	0.731859	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	1/22/2015 9:42:51	1/22/2015 9:00:36	Linear	1/Conc	0.003902	3.814441	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999968	0.000052	0.000495	0.001649	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999987	0.001231	0.010055	0.033517	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999976	0.000175	0.000763	0.002543	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999991	0.003624	0.000198	0.000659	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999934	0.006600	0.000086	0.000287	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999947	0.004017	0.003070	0.010234	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999990	0.002044	0.000066	0.000219	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999996	0.000559	0.000152	0.000505	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999937	0.000458	0.000394	0.001315	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999993	0.000251	0.000350	0.001167	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999835	0.004289	0.002558	0.008528	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	1.000000	0.000076	0.028828	0.096094	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999917	0.000494	0.019640	0.065465	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999853	0.004586	0.000055	0.000184	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999866	0.001748	0.000187	0.000623	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999956	0.005377	0.008540	0.028468	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999999	0.000143	0.000226	0.000755	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999968	0.000863	0.000718	0.002394	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999958	0.000230	0.001237	0.004123	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999991	0.000079	0.001557	0.005191	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.991828	0.005300	0.000550	0.001832	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999902	0.000626	0.000355	0.001185	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999968	0.009588	0.000087	0.000289	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999988	0.000794	0.000156	0.000519	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999969	0.000376	0.001005	0.003349	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999995	0.000185	0.000346	0.001152	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999974	0.002233	0.000070	0.000233	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 1/23/2015 9:05:16 Type: Cal
Method: 60102007_042011(v80) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0005	.0003	-.0006	.0016	.0016	.0079	-.0008	-.0002	.0000
Stddev	.0001	.0004	.0002	.0011	.0006	.0005	.0001	.0001	.000
%RSD	11.15	132.6	25.92	71.37	40.31	6.166	17.55	41.64	132.6
#1	.0004	.0003	-.0007	.0029	.0008	.0083	-.0008	-.0002	.0000
#2	.0004	-.0001	-.0008	.0009	.0019	.0074	-.0010	-.0001	.0000
#3	.0005	.0006	-.0005	.0010	.0020	.0081	-.0007	-.0003	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0056	.0024	-.0076	.0000	.0009	.0013	-.0043	-.0004	.0003
Stddev	.0001	.0004	.0027	.0004	.0000	.0001	.0011	.0002	.0004
%RSD	2.419	16.41	36.08	12260.	2.728	10.72	25.35	41.16	146.7
#1	.0055	.0029	-.0045	.0003	.0010	.0014	-.0048	-.0006	.0007
#2	.0057	.0021	-.0098	.0002	.0009	.0012	-.0051	-.0003	.0003
#3	.0055	.0023	-.0084	-.0005	.0009	.0011	-.0031	-.0004	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0007	-.0001	.0047	.0008	.0026	.0021	-.0015	-.0004	.0019
Stddev	.0001	.0001	.0002	.0000	.0004	.0001	.0002	.0001	.0002
%RSD	16.70	222.3	4.108	5.671	16.77	4.615	11.63	22.49	9.525
#1	.0006	.0000	.0046	.0009	.0025	.0022	-.0014	-.0003	.0021
#2	.0007	-.0002	.0049	.0008	.0022	.0021	-.0017	-.0004	.0017
#3	.0008	.0000	.0046	.0008	.0031	.0020	-.0015	-.0005	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3016.6	5964.5	55512.	6573.1
Stddev	6.4	9.9	160.	18.1
%RSD	.21289	.16614	.28857	.27568
#1	3023.8	5975.8	55624.	6552.7
#2	3011.5	5959.8	55583.	6579.5
#3	3014.4	5957.8	55329.	6587.2

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 1/23/2015 9:08:59 Type: Cal
Method: 60102007_042011(v80) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0301	1.505	.0800	4.126	3.570	2.315	2.181	1.194	.2003	.3356
Stddev	.0002	.001	.0001	.008	.009	.007	.004	.001	.0000	.0005
%RSD	.5095	.0638	.1338	.2031	.2432	.3060	.1782	.1049	.0124	.1632
#1	.0302	1.504	.0800	4.125	3.578	2.323	2.177	1.193	.2003	.3362
#2	.0299	1.505	.0800	4.135	3.560	2.311	2.185	1.193	.2003	.3355
#3	.0300	1.506	.0802	4.118	3.572	2.311	2.181	1.195	.2003	.3351

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.763	.6194	.2388	1.184	.5279	2.264	.6719	.3630	.1094	.0607
Stddev	.001	.0023	.0011	.002	.0008	.003	.0011	.0006	.0007	.0002
%RSD	.0650	.3732	.4743	.1791	.1528	.1106	.1672	.1657	.6735	.2691
#1	1.762	.6170	.2399	1.185	.5273	2.261	.6715	.3630	.1087	.0606
#2	1.764	.6216	.2377	1.186	.5275	2.265	.6731	.3636	.1093	.0605
#3	1.763	.6195	.2389	1.182	.5288	2.265	.6710	.3624	.1102	.0609

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1330	.2046	5.878	.7655	.1400	.2296	1.180
Stddev	.0001	.0003	.006	.0024	.0005	.0004	.003
%RSD	.0764	.1416	.0995	.3149	.3311	.1687	.2179
#1	.1331	.2043	5.882	.7673	.1400	.2299	1.177
#2	.1330	.2047	5.881	.7663	.1405	.2298	1.182
#3	.1329	.2048	5.871	.7627	.1396	.2292	1.179

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2857.1	5927.5	54832.	6524.8
Stddev	5.0	10.6	50.	30.4
%RSD	.17360	.17843	.09126	.46529
#1	2862.8	5937.7	54833.	6490.7
#2	2855.2	5928.1	54781.	6534.8
#3	2853.4	5916.5	54881.	6548.9

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 1/23/2015 9:12:21 Type: Cal
Method: 60102007_042011(v80) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1184	5.923	.3280	16.24	14.15	8.941	8.587	4.673	.7825	1.316
Stddev	.0006	.025	.0008	.07	.02	.048	.012	.005	.0003	.007
%RSD	.4919	.4221	.2287	.4242	.1642	.5410	.1428	.1016	.0367	.5348
#1	.1190	5.946	.3273	16.26	14.15	8.979	8.573	4.668	.7824	1.324
#2	.1180	5.927	.3288	16.30	14.17	8.957	8.595	4.677	.7823	1.310
#3	.1180	5.897	.3278	16.17	14.13	8.886	8.593	4.675	.7828	1.313

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.714	2.464	.9325	4.613	2.073	9.032	2.626	1.477	.4399	.2443
Stddev	.016	.009	.0049	.010	.003	.018	.004	.004	.0013	.0004
%RSD	.2368	.3698	.5267	.2170	.1622	.2024	.1332	.2959	.2932	.1737
#1	6.731	2.470	.9353	4.613	2.069	9.052	2.623	1.476	.4389	.2439
#2	6.709	2.469	.9354	4.623	2.075	9.030	2.626	1.474	.4414	.2448
#3	6.700	2.454	.9268	4.603	2.075	9.015	2.630	1.482	.4395	.2442

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.5945	.7900	23.41	3.047	.5707	.9097	4.585
Stddev	.0004	.0013	.08	.005	.0024	.0007	.004
%RSD	.0613	.1699	.3521	.1702	.4204	.0726	.0974
#1	.5945	.7886	23.43	3.050	.5704	.9101	4.580
#2	.5942	.7903	23.47	3.049	.5685	.9100	4.586
#3	.5949	.7912	23.31	3.041	.5733	.9089	4.589

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2616.0	5696.9	52841.	6466.9
Stddev	4.4	4.2	125.	45.4
%RSD	.16960	.07289	.23600	.70171
#1	2611.4	5692.6	52702.	6414.5
#2	2620.3	5697.2	52881.	6493.5
#3	2616.3	5700.9	52941.	6492.6

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 1/23/2015 9:20:45 Type: Cal
Method: 60102007_042011(v80) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2381	11.70	.6509	31.58	27.44	17.42	16.70	9.072	1.516	2.559
Stddev	.0010	.03	.0017	.07	.10	.05	.03	.013	.003	.003
%RSD	.4056	.2147	.2600	.2093	.3632	.2951	.1850	.1409	.2267	.1143
#1	.2392	11.72	.6515	31.60	27.53	17.48	16.72	9.084	1.517	2.560
#2	.2378	11.71	.6490	31.64	27.47	17.39	16.66	9.059	1.519	2.560
#3	.2373	11.68	.6522	31.51	27.33	17.40	16.71	9.074	1.512	2.555

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	13.06	4.843	1.837	8.765	4.147	17.70	5.117	2.980	.8699	.4809
Stddev	.03	.015	.009	.026	.006	.06	.014	.013	.0021	.0010
%RSD	.2583	.3144	.4828	.2953	.1423	.3231	.2704	.4246	.2424	.2178
#1	13.08	4.855	1.848	8.794	4.151	17.72	5.118	2.993	.8708	.4813
#2	13.06	4.847	1.832	8.752	4.140	17.74	5.103	2.969	.8675	.4797
#3	13.02	4.826	1.832	8.747	4.150	17.63	5.131	2.977	.8713	.4817

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.462	1.575	44.83	5.926	1.132	1.797	8.901
Stddev	.004	.002	.22	.027	.004	.002	.017
%RSD	.2380	.1386	.4983	.4488	.3745	.1006	.1911
#1	1.463	1.577	44.95	5.899	1.137	1.797	8.920
#2	1.458	1.573	44.98	5.927	1.129	1.798	8.890
#3	1.465	1.574	44.58	5.953	1.130	1.795	8.891

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2441.0	5524.2	51808.	6376.7
Stddev	7.6	10.6	113.	18.7
%RSD	.31021	.19136	.21769	.29344
#1	2432.3	5519.9	51704.	6358.6
#2	2445.0	5536.3	51791.	6396.0
#3	2445.7	5516.6	51928.	6375.3

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/23/2015 9:25:46 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5019	79.38	4.050	3.915	3.962	78.18	3.991	3.973	3.973	3.963
Stddev	.0013	.16	.002	.007	.012	.18	.002	.002	.020	.009
%RSD	.2520	.1962	.0516	.1735	.3111	.2350	.0515	.0369	.4998	.2361
#1	.5006	79.39	4.048	3.908	3.973	78.13	3.990	3.972	3.959	3.952
#2	.5021	79.21	4.051	3.919	3.949	78.03	3.993	3.975	3.963	3.965
#3	.5031	79.52	4.053	3.919	3.965	78.38	3.990	3.973	3.995	3.970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.92	78.79	78.99	3.958	4.019	79.81	4.000	4.040	4.038	4.028
Stddev	.24	.15	.33	.006	.001	.20	.004	.011	.008	.003
%RSD	.2997	.1918	.4161	.1527	.0261	.2449	.0890	.2607	.1997	.0632
#1	79.04	78.68	79.18	3.963	4.017	80.01	3.997	4.039	4.029	4.029
#2	78.65	78.73	78.61	3.951	4.019	79.62	4.004	4.051	4.040	4.029
#3	79.08	78.97	79.18	3.961	4.019	79.80	4.000	4.030	4.044	4.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.404	4.007	3.918	4.003	4.016	3.983	3.960
Stddev	.003	.002	.012	.021	.010	.019	.003
%RSD	.0740	.0583	.3013	.5251	.2510	.4698	.0677
#1	4.401	4.005	3.929	3.989	4.007	3.964	3.961
#2	4.407	4.009	3.906	3.992	4.027	3.984	3.962
#3	4.405	4.006	3.920	4.027	4.014	4.001	3.957
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/23/2015 9:25:46 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2453.1	5518.8	51670.	6371.1
Stddev	8.6	15.1	197.	41.9
%RSD	.35158	.27360	.38033	.65807
#1	2445.8	5501.7	51819.	6357.8
#2	2450.9	5524.8	51744.	6418.1
#3	2462.6	5530.1	51448.	6337.5

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/23/2015 9:34:47 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2505	39.03	2.049	1.984	2.026	39.13	2.059	2.047	2.039	2.017
Stddev	.0017	.34	.005	.010	.017	.33	.002	.002	.005	.006
%RSD	.6772	.8713	.2530	.5224	.8407	.8438	.0866	.0813	.2419	.3004
#1	.2487	39.03	2.055	1.982	2.030	39.22	2.061	2.048	2.042	2.015
#2	.2508	39.37	2.049	1.996	2.041	39.40	2.060	2.048	2.033	2.024
#3	.2521	38.69	2.044	1.975	2.008	38.76	2.057	2.045	2.042	2.013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.82	38.76	39.05	2.090	2.022	39.60	2.068	2.012	2.050	2.041
Stddev	.39	.38	.46	.004	.001	.24	.002	.003	.007	.008
%RSD	.9673	.9692	1.184	.2123	.0320	.6182	.1118	.1396	.3356	.3723
#1	39.84	38.77	39.24	2.088	2.022	39.65	2.070	2.011	2.054	2.046
#2	40.19	39.14	39.38	2.088	2.023	39.81	2.068	2.015	2.054	2.044
#3	39.42	38.38	38.52	2.095	2.022	39.33	2.066	2.009	2.042	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.599	2.040	1.979	2.038	2.039	1.979	2.031
Stddev	.001	.003	.014	.003	.011	.006	.001
%RSD	.0357	.1273	.7185	.1630	.5454	.3223	.0679
#1	1.599	2.039	1.977	2.034	2.043	1.987	2.031
#2	1.598	2.043	1.994	2.038	2.049	1.975	2.032
#3	1.598	2.038	1.965	2.041	2.027	1.976	2.029
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/23/2015 9:34:47 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2632.5	5696.2	53070.	6527.6
Stddev	9.3	13.4	177.	45.1
%RSD	.35326	.23568	.33272	.69130
#1	2630.8	5686.3	52931.	6498.8
#2	2624.1	5690.9	53269.	6504.4
#3	2642.5	5711.5	53011.	6579.6

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/23/2015 9:40:44 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0030	.0005	-.0001	-.0001	-.0015	-.0001	-.0001	.0001	.0001
Stddev	.0002	.0042	.0003	.0003	.0001	.0009	.0001	.0001	.0001	.0000
%RSD	353.8	140.5	54.56	395.1	67.09	60.79	59.98	161.1	105.1	30.47
#1	-.0002	.0006	.0007	-.0004	-.0001	-.0010	-.0001	.0000	.0000	.0002
#2	.0001	-.0020	.0006	.0000	.0000	-.0009	.0000	-.0001	.0001	.0002
#3	.0003	-.0076	.0002	.0002	-.0001	-.0025	-.0001	-.0002	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029	.0141	-.0022	-.0002	.0006	.0064	-.0002	.0001	-.0001	.0003
Stddev	.0005	.0266	.0102	.0000	.0002	.0060	.0001	.0006	.0006	.0010
%RSD	18.52	189.2	464.6	18.80	25.88	93.62	46.11	459.7	726.5	297.8
#1	.0035	-.0153	.0087	-.0002	.0008	.0007	-.0002	-.0006	.0005	.0004
#2	.0024	.0366	-.0117	-.0001	.0006	.0059	-.0001	.0007	.0000	.0013
#3	.0029	.0210	-.0036	-.0002	.0005	.0127	-.0002	.0003	-.0007	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0002	-.0001	.0003	.0006	-.0003	-.0002
Stddev	.0001	.0001	.0000	.0001	.0006	.0003	.0000
%RSD	116.1	70.16	13.05	18.26	103.1	82.79	16.66
#1	-.0002	-.0003	-.0001	.0003	.0003	-.0006	-.0002
#2	.0000	.0000	-.0001	.0002	.0012	-.0001	-.0003
#3	-.0002	-.0002	-.0001	.0003	.0002	-.0002	-.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/23/2015 9:40:44 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3028.3	5867.4	55128.	6597.0
Stddev	8.9	10.0	106.	69.8
%RSD	.29384	.17054	.19229	1.0577
#1	3022.3	5856.0	55115.	6633.8
#2	3024.0	5871.9	55030.	6516.5
#3	3038.5	5874.4	55240.	6640.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/23/2015 9:44:36 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0100	.2054	.0116	.2054	.0052	1.024	.0053	.0548	.0108	.0267
Stddev	.0003	.0098	.0002	.0009	.0001	.006	.0000	.0002	.0002	.0002
%RSD	2.692	4.783	1.593	.4403	1.255	.5907	.1162	.3401	2.306	.9253
#1	.0097	.2034	.0118	.2064	.0051	1.031	.0053	.0548	.0111	.0269
#2	.0101	.2161	.0114	.2046	.0052	1.023	.0053	.0546	.0108	.0265
#3	.0102	.1968	.0114	.2051	.0052	1.019	.0054	.0549	.0106	.0268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3100	10.20	5.050	.0166	.0502	10.45	.0451	.0049	.0044	.0094
Stddev	.0039	.04	.024	.0001	.0002	.03	.0001	.0009	.0013	.0017
%RSD	1.274	.4002	.4739	.5146	.4299	.2635	.3157	18.52	30.29	18.01
#1	.3100	10.24	5.069	.0167	.0499	10.48	.0451	.0041	.0032	.0075
#2	.3060	10.19	5.058	.0166	.0504	10.43	.0450	.0059	.0043	.0099
#3	.3139	10.16	5.023	.0165	.0502	10.46	.0453	.0048	.0058	.0107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0339	.0529	.0099	.0103	.0107	.0498	.0214
Stddev	.0003	.0004	.0001	.0001	.0005	.0003	.0000
%RSD	.7985	.8119	.5880	1.235	5.055	.6856	.1226
#1	.0339	.0534	.0099	.0103	.0103	.0502	.0214
#2	.0336	.0526	.0099	.0104	.0113	.0495	.0214
#3	.0342	.0526	.0100	.0101	.0105	.0498	.0214
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/23/2015 9:44:36 Type: QC
Method: 60102007_042011(v80) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2939.5	5830.1	54590.	6614.7
Stddev	8.3	2.2	194.	11.8
%RSD	.28240	.03725	.35456	.17819
#1	2935.2	5829.8	54385.	6628.1
#2	2949.1	5832.4	54615.	6605.6
#3	2934.2	5828.1	54770.	6610.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/23/2015 9:53:15 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	480.3	-.0001	.0001	-.0002	450.1	-.0005	.0004	-.0001
Stddev	.0001	1.0	.0025	.0001	.0001	.6	.0001	.0000	.0001
%RSD	17.25	.2036	4568.	56.71	23.55	.1400	19.99	13.63	126.4
#1	-.0010	480.4	-.0027	.0002	-.0002	450.7	-.0004	.0004	.0000
#2	-.0007	481.2	.0023	.0001	-.0003	449.4	-.0004	.0004	.0000
#3	-.0008	479.2	.0001	.0001	-.0003	450.2	-.0006	.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	172.2	.1392	463.9	.0003	-.0002	.1225	.0004	-.0001
Stddev	.000	.9	.0077	3.0	.0001	.0002	.0228	.0002	.0020
%RSD	43.97	.5320	5.564	.6532	37.82	122.6	18.59	40.93	2237.
#1	.0000	172.8	.1312	466.0	.0002	-.0004	.0999	.0005	.0001
#2	.0000	172.6	.1398	465.3	.0004	.0000	.1222	.0006	-.0022
#3	.0000	171.2	.1467	460.4	.0003	-.0001	.1455	.0002	.0018
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0014	.0002	.0287	F.0011	-.0001	.0003	-.0014	.0000	-.0013
Stddev	.0007	.0019	.0010	.0006	.0000	.0001	.0007	.000	.0001
%RSD	49.36	926.9	3.366	54.01	14.48	28.10	52.91	624.9	7.487
#1	-.0017	-.0018	.0287	.0004	-.0001	.0003	-.0012	-.0002	-.0014
#2	-.0020	.0018	.0278	.0013	-.0001	.0004	-.0022	.0001	-.0014
#3	-.0006	.0006	.0297	.0016	-.0001	.0002	-.0007	.0001	-.0012
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/23/2015 9:53:15 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2329.8	5277.0	48502.	6300.3
Stddev	.8	15.9	17.	29.7
%RSD	.03224	.30143	.03511	.47146
#1	2329.2	5284.4	48486.	6291.5
#2	2330.6	5258.7	48500.	6276.1
#3	2329.6	5287.9	48520.	6333.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/23/2015 10:02:11 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.019	489.7	1.064	.5049	.5044	449.5	.9250	.4759	.4840	.5492
Stddev	.001	8.8	.002	.0014	.0007	4.2	.0032	.0016	.0008	.0026
%RSD	.0709	1.801	.1660	.2821	.1446	.9370	.3408	.3309	.1668	.4764
#1	1.019	492.5	1.062	.5043	.5043	454.0	.9265	.4770	.4838	.5490
#2	1.019	496.8	1.064	.5066	.5052	448.7	.9271	.4766	.4849	.5519
#3	1.018	479.8	1.066	.5039	.5038	445.7	.9213	.4741	.4833	.5467
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	178.2	.1464	472.9	.5102	.9219	.1333	.9620	.9580	1.068	1.013
Stddev	.1	.0312	1.0	.0010	.0032	.0075	.0031	.0012	.003	.004
%RSD	.0298	21.29	.2085	.1915	.3481	5.642	.3219	.1248	.2425	.4153
#1	178.2	.1668	473.4	.5093	.9232	.1249	.9631	.9592	1.067	1.017
#2	178.3	.1619	473.5	.5102	.9243	.1394	.9644	.9580	1.070	1.013
#3	178.2	.1105	471.8	.5112	.9183	.1355	.9585	.9568	1.065	1.009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0517	.9215	.9869	1.003	.9802	.4598	.9238
Stddev	.0016	.0042	.0025	.001	.0023	.0014	.0048
%RSD	3.029	.4553	.2489	.0768	.2393	.3054	.5244
#1	.0514	.9222	.9846	1.002	.9801	.4587	.9271
#2	.0503	.9253	.9895	1.004	.9825	.4593	.9261
#3	.0534	.9170	.9865	1.003	.9779	.4614	.9183
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/23/2015 10:02:11 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2287.9	5251.6	48236.	6266.0
Stddev	6.8	15.2	106.	6.2
%RSD	.29769	.28928	.21900	.09933
#1	2284.1	5245.7	48179.	6262.4
#2	2283.8	5240.3	48172.	6273.2
#3	2295.7	5268.9	48358.	6262.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 10:08:31 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2484	39.73	2.059	1.979	2.038	39.29	2.062	2.045	2.045	2.030
Stddev	.0013	.23	.001	.007	.007	.12	.001	.001	.016	.009
%RSD	.5354	.5748	.0621	.3343	.3454	.3077	.0342	.0487	.7888	.4213
#1	.2498	39.51	2.060	1.972	2.030	39.37	2.062	2.044	2.062	2.040
#2	.2472	39.71	2.058	1.979	2.042	39.36	2.062	2.046	2.042	2.026
#3	.2481	39.97	2.059	1.986	2.042	39.16	2.063	2.045	2.030	2.024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.19	39.36	39.41	2.092	2.014	40.50	2.074	2.006	2.065	2.055
Stddev	.12	.15	.12	.017	.002	.20	.001	.001	.002	.001
%RSD	.2965	.3869	.3166	.8040	.0977	.4824	.0296	.0484	.0756	.0266
#1	40.07	39.19	39.29	2.110	2.012	40.28	2.074	2.006	2.064	2.056
#2	40.31	39.46	39.54	2.090	2.014	40.63	2.074	2.005	2.067	2.055
#3	40.19	39.44	39.40	2.076	2.015	40.59	2.075	2.007	2.065	2.055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.796	2.001	1.990	2.074	2.040	1.983	2.020
Stddev	.004	.002	.008	.013	.003	.011	.002
%RSD	.2168	.0896	.4157	.6070	.1295	.5443	.0898
#1	1.801	2.000	1.982	2.088	2.037	1.996	2.018
#2	1.794	2.004	1.991	2.072	2.042	1.977	2.022
#3	1.794	2.000	1.998	2.063	2.040	1.977	2.021
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 10:08:31 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.1	5638.6	52644.	6454.4
Stddev	4.1	3.8	284.	25.2
%RSD	.15476	.06822	.54008	.38975
#1	2628.6	5641.6	52327.	6448.1
#2	2620.6	5634.3	52730.	6433.0
#3	2625.9	5639.9	52876.	6482.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 10:12:30 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0024	.0002	-.0002	.0000	.0037	.0001	.0001	.0000
Stddev	.0004	.0112	.0008	.0001	.0001	.0006	.0001	.0001	.0001
%RSD	145.5	475.7	380.1	58.37	209.7	15.54	62.17	131.2	888.0
#1	.0002	.0152	.0012	-.0003	.0001	.0034	.0002	.0001	.0001
#2	-.0001	-.0051	-.0004	-.0001	.0000	.0032	.0001	.0001	.0001
#3	.0006	-.0031	-.0001	-.0001	.0000	.0043	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0108	.0183	.0082	-.0001	F.0014	.0269	.0001	-.0001
Stddev	.0003	.0023	.0186	.0229	.0000	.0006	.0022	.0001	.0004
%RSD	211.2	21.06	102.1	278.2	19.28	43.37	8.167	106.3	367.4
#1	.0002	.0118	.0101	.0346	-.0001	.0020	.0280	.0000	.0001
#2	-.0002	.0124	.0051	-.0053	-.0001	.0013	.0244	.0002	.0001
#3	.0004	.0082	.0396	-.0046	-.0001	.0008	.0283	.0000	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	-.0001	.0011	.0000	-.0001	.0005	.0010	.0000	.0008
Stddev	.0007	.0012	.0002	.0002	.0000	.0001	.0008	.000	.0002
%RSD	53.89	1662.	15.40	2729.	37.30	19.07	79.17	453.1	21.46
#1	.0007	-.0004	.0012	.0002	.0000	.0006	.0012	-.0001	.0008
#2	.0022	-.0011	.0009	-.0001	.0000	.0004	.0018	-.0001	.0009
#3	.0013	.0013	.0012	-.0001	-.0001	.0005	.0002	.0002	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 10:12:30 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3014.5	5852.9	55063.	6583.1
Stddev	2.5	1.4	92.	15.1
%RSD	.08255	.02433	.16790	.22935
#1	3017.1	5854.2	55081.	6566.8
#2	3014.3	5853.0	55145.	6585.9
#3	3012.2	5851.3	54963.	6596.6

Zoom In Zoom Out

Sample Name: FA21545-1 Acquired: 1/23/2015 10:17:55 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	41.44	.0166	.1824	.0012	1379.	.0029	.0052	.1522	.0955
Stddev	.0008	.15	.0020	.0010	.0000	4.	.0001	.0001	.0011	.0009
%RSD	93.70	.3591	12.33	.5548	3.436	.2890	5.222	2.215	.7557	.9451
#1	.0000	41.49	.0172	.1825	.0011	1377.	.0030	.0051	.1532	.0958
#2	-.0008	41.56	.0143	.1834	.0012	1376.	.0029	.0051	.1524	.0945
#3	-.0015	41.28	.0183	.1814	.0012	1383.	.0027	.0053	.1509	.0962

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	17.87	1.760	61.39	.2185	.0057	6.181	.0390	.5843	.0069	.0023
Stddev	.03	.144	.40	.0008	.0004	.021	.0006	.0020	.0036	.0038
%RSD	.1898	8.184	.6473	.3586	7.858	.3475	1.616	.3437	52.56	165.6
#1	17.90	1.596	61.64	.2182	.0060	6.187	.0395	.5829	.0101	-.0011
#2	17.83	1.820	60.93	.2179	.0058	6.199	.0383	.5866	.0075	.0016
#3	17.88	1.865	61.59	.2194	.0052	6.157	.0392	.5833	.0030	.0063

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.912	.0253	3.690	.2201	-.0037	.1468	.4365
Stddev	.008	.0005	.009	.0005	.0023	.0013	.0015
%RSD	.1996	1.799	.2580	.2087	63.22	.9173	.3387
#1	3.908	.0257	3.699	.2206	-.0048	.1482	.4377
#2	3.908	.0254	3.693	.2197	-.0010	.1455	.4369
#3	3.921	.0248	3.680	.2200	-.0053	.1468	.4348

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2559.6	5626.1	52960.	6597.1
Stddev	1.9	6.5	139.	24.2
%RSD	.07289	.11638	.26247	.36647
#1	2559.7	5633.5	53044.	6573.3
#2	2557.7	5623.9	52800.	6596.3
#3	2561.4	5620.9	53038.	6621.6

Zoom In Zoom Out

Sample Name: FA21555-1 Acquired: 1/23/2015 10:22:26 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0025	66.67	.0112	.7559	.0003	3744.	.0068	.0233	.1080	.2856
Stddev	.0024	.51	.0028	.0048	.0009	54.	.0000	.0008	.0004	.0024
%RSD	97.55	.7591	25.05	.6410	278.9	1.429	.7238	3.602	.3344	.8513
#1	-.0042	66.23	.0144	.7605	.0009	3697.	.0068	.0237	.1076	.2843
#2	-.0035	67.22	.0091	.7563	-.0007	3802.	.0068	.0224	.1083	.2884
#3	.0003	66.55	.0101	.7508	.0007	3733.	.0067	.0239	.1080	.2841

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	72.47	16.39	90.82	1.859	.0107	4.508	.0685	.0835	.0120	.0135
Stddev	.46	.33	.74	.002	.0015	.049	.0005	.0070	.0109	.0119
%RSD	.6292	1.990	.8113	.1107	13.60	1.078	.6888	8.347	90.22	88.23
#1	72.07	16.23	90.25	1.857	.0119	4.553	.0683	.0783	.0049	.0242
#2	72.97	16.77	91.66	1.861	.0112	4.516	.0690	.0914	.0245	.0007
#3	72.38	16.18	90.57	1.859	.0091	4.456	.0682	.0808	.0067	.0155

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.241	.0185	24.30	1.705	.0004	.1158	.7274
Stddev	.001	.0002	.12	.005	.0106	.0041	.0028
%RSD	.0210	1.320	.5117	.2755	2853.	3.525	.3905
#1	4.240	.0186	24.23	1.705	-.0116	.1132	.7302
#2	4.242	.0183	24.44	1.710	.0042	.1205	.7275
#3	4.242	.0187	24.23	1.700	.0085	.1137	.7246

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2573.8	5396.9	50594.	6380.1
Stddev	3.4	8.8	91.	75.6
%RSD	.13017	.16217	.17980	1.1854
#1	2572.0	5406.2	50688.	6455.2
#2	2571.7	5388.9	50506.	6304.0
#3	2577.6	5395.5	50588.	6381.3

Zoom In Zoom Out

Sample Name: FA21555-2 Acquired: 1/23/2015 10:26:56 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	68.41	.0149	.9435	.0005	3772.	.0038	.0262	.1242	.3866
Stddev	.0004	.17	.0073	.0053	.0010	46.	.0005	.0013	.0011	.0027
%RSD	3702.	.2539	48.75	.5577	208.6	1.213	14.19	4.914	.8586	.7089
#1	.0005	68.48	.0190	.9489	.0015	3720.	.0044	.0251	.1235	.3877
#2	-.0003	68.21	.0065	.9384	.0006	3786.	.0037	.0276	.1237	.3835
#3	-.0002	68.53	.0192	.9433	-.0006	3808.	.0034	.0258	.1254	.3886

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	72.15	16.63	179.6	2.005	.0120	4.863	.0705	.0863	.0094	-.0135
Stddev	.35	.36	.5	.012	.0015	.055	.0038	.0069	.0069	.0108
%RSD	.4811	2.194	.3018	.6092	12.44	1.128	5.456	7.972	73.04	80.31
#1	72.21	16.86	179.2	2.017	.0103	4.812	.0749	.0858	.0045	-.0233
#2	71.78	16.83	179.4	2.004	.0131	4.921	.0685	.0933	.0173	-.0018
#3	72.46	16.21	180.2	1.993	.0125	4.855	.0680	.0796	.0065	-.0154

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.953	.0155	24.34	1.619	-.0033	.1167	.6400
Stddev	.017	.0024	.04	.006	.0135	.0019	.0022
%RSD	.4378	15.28	.1541	.3870	413.8	1.629	.3462
#1	3.963	.0152	24.32	1.626	-.0182	.1161	.6425
#2	3.933	.0180	24.32	1.617	.0005	.1151	.6384
#3	3.963	.0133	24.39	1.614	.0080	.1188	.6391

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2586.5	5424.5	50326.	6348.3
Stddev	4.2	7.3	298.	26.1
%RSD	.16053	.13499	.59262	.41116
#1	2583.9	5416.4	50103.	6350.4
#2	2584.4	5426.7	50211.	6373.3
#3	2591.3	5430.5	50665.	6321.2

Zoom In Zoom Out

Sample Name: FA21555-3 Acquired: 1/23/2015 10:31:26 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	72.30	.0163	.6858	.0010	3320.	-.0001	.0236	.0732	.1295
Stddev	.0009	.50	.0031	.0021	.0009	40.	.0006	.0012	.0009	.0015
%RSD	99.07	.6969	19.26	.3098	88.11	1.191	618.7	4.965	1.172	1.148
#1	-.0020	71.98	.0197	.6834	.0020	3312.	.0002	.0247	.0737	.1289
#2	-.0003	72.03	.0155	.6864	.0004	3363.	.0003	.0237	.0722	.1311
#3	-.0005	72.88	.0136	.6875	.0005	3285.	-.0008	.0224	.0736	.1283

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	68.86	21.06	90.40	2.062	.0042	12.29	.0559	.0886	.0039	.0074
Stddev	.17	.22	.43	.013	.0017	.25	.0007	.0038	.0098	.0091
%RSD	.2493	1.035	.4782	.6385	41.31	2.060	1.328	4.245	247.8	122.8
#1	68.67	20.97	90.07	2.069	.0053	11.99	.0568	.0928	.0056	-.0018
#2	69.00	21.31	90.89	2.047	.0022	12.45	.0556	.0855	.0128	.0165
#3	68.91	20.90	90.25	2.071	.0050	12.42	.0554	.0877	-.0066	.0076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.275	.0163	14.93	2.087	.0050	.1156	.3600
Stddev	.024	.0007	.05	.009	.0107	.0020	.0020
%RSD	.5562	3.997	.3088	.4563	216.0	1.697	.5473
#1	4.298	.0161	14.87	2.098	.0169	.1136	.3610
#2	4.277	.0170	14.95	2.080	.0019	.1155	.3612
#3	4.250	.0158	14.96	2.084	-.0039	.1176	.3577

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2611.6	5482.3	51150.	6423.0
Stddev	12.6	17.2	373.	27.8
%RSD	.48116	.31315	.72938	.43353
#1	2598.3	5465.1	50724.	6423.7
#2	2613.4	5482.2	51418.	6394.9
#3	2623.3	5499.5	51309.	6450.6

Zoom In Zoom Out

Sample Name: FA21555-4 Acquired: 1/23/2015 10:35:57 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0032	89.46	.0174	.9249	.0006	4978.	-.0002	.0280	.0875	.1435
Stddev	.0039	.25	.0083	.0014	.0006	25.	.0001	.0007	.0019	.0042
%RSD	124.8	.2748	47.53	.1467	105.3	.5075	62.68	2.536	2.198	2.897
#1	.0028	89.18	.0126	.9233	.0001	4958.	-.0001	.0281	.0896	.1391
#2	-.0006	89.65	.0127	.9260	.0013	5006.	-.0004	.0272	.0870	.1442
#3	.0073	89.56	.0270	.9253	.0004	4970.	-.0002	.0286	.0859	.1473

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	81.75	23.13	107.5	2.311	.0044	8.166	.0657	.0856	.0201	-.0167
Stddev	.22	.12	.4	.002	.0006	.081	.0021	.0059	.0094	.0028
%RSD	.2747	.4977	.4138	.0969	12.78	.9931	3.230	6.840	46.88	16.46
#1	81.59	23.16	107.0	2.314	.0042	8.073	.0639	.0907	.0304	-.0175
#2	81.65	23.00	107.8	2.311	.0039	8.226	.0680	.0869	.0180	-.0137
#3	82.01	23.23	107.7	2.309	.0050	8.198	.0653	.0792	.0119	-.0190

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.852	.0195	21.53	2.449	.0025	.1369	.3056
Stddev	.022	.0028	.01	.008	.0208	.0012	.0025
%RSD	.3818	14.45	.0638	.3172	830.2	.8428	.8019
#1	5.876	.0227	21.52	2.441	-.0117	.1367	.3083
#2	5.847	.0178	21.54	2.456	-.0071	.1359	.3050
#3	5.833	.0179	21.52	2.450	.0263	.1382	.3035

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2516.7	5355.9	50054.	6263.0
Stddev	6.5	18.2	37.	21.8
%RSD	.26006	.34047	.07359	.34851
#1	2510.1	5340.6	50051.	6284.3
#2	2517.0	5351.2	50018.	6263.9
#3	2523.2	5376.1	50091.	6240.7

Zoom In Zoom Out

Sample Name: FA21555-5 Acquired: 1/23/2015 10:40:27 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	84.27	.0190	.7764	.0008	4003.	.0000	.0245	.0826	.4333
Stddev	.0017	.12	.0051	.0006	.0002	27.	.0005	.0026	.0025	.0033
%RSD	341.9	.1475	27.03	.0823	22.75	.6758	1991.	10.79	3.021	.7691
#1	-.0013	84.41	.0224	.7757	.0007	4032.	.0002	.0275	.0832	.4329
#2	.0021	84.20	.0131	.7768	.0010	3998.	.0004	.0228	.0848	.4301
#3	.0008	84.19	.0216	.7768	.0007	3979.	-.0005	.0232	.0799	.4367

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	74.00	25.80	115.7	2.098	.0040	16.03	.0609	.0942	-.0029	-.0043
Stddev	.23	.16	.7	.007	.0012	.12	.0028	.0051	.0033	.0203
%RSD	.3110	.6198	.5792	.3141	29.00	.7724	4.631	5.377	112.3	473.3
#1	73.99	25.71	115.7	2.105	.0030	16.04	.0578	.0952	.0006	.0092
#2	74.23	25.71	115.0	2.092	.0038	16.15	.0634	.0987	-.0059	.0056
#3	73.77	25.99	116.3	2.096	.0052	15.90	.0615	.0887	-.0035	-.0276

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.711	.0190	24.51	2.260	.0042	.1377	.3138
Stddev	.014	.0011	.03	.004	.0086	.0008	.0007
%RSD	.2514	5.743	.1100	.1822	207.5	.6099	.2136
#1	5.725	.0186	24.54	2.258	.0136	.1385	.3145
#2	5.696	.0202	24.51	2.258	.0022	.1368	.3138
#3	5.714	.0181	24.48	2.265	-.0033	.1376	.3132

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2557.1	5425.0	50926.	6382.4
Stddev	1.6	6.0	204.	.9
%RSD	.06354	.11035	.39993	.01355
#1	2557.8	5421.2	50708.	6381.4
#2	2555.3	5431.9	51112.	6382.9
#3	2558.3	5421.9	50958.	6382.8

Zoom In Zoom Out

Sample Name: FA21555-6 Acquired: 1/23/2015 10:44:58 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0020	74.93	.0183	.6947	.0004	4218.	.0022	.0232	.0777	.2006
Stddev	.0029	.11	.0018	.0032	.0004	27.	.0003	.0002	.0021	.0023
%RSD	144.0	.1456	9.647	.4571	102.6	.6410	14.93	1.046	2.698	1.126
#1	.0043	74.80	.0204	.6982	.0008	4211.	.0025	.0232	.0773	.1991
#2	.0030	75.01	.0172	.6919	.0000	4194.	.0022	.0235	.0758	.2032
#3	-.0013	74.96	.0174	.6939	.0003	4247.	.0018	.0230	.0799	.1995

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	68.83	23.09	88.74	2.622	.0089	9.392	.0563	.1060	.0063	.0074
Stddev	.14	.17	.10	.005	.0001	.063	.0007	.0033	.0184	.0211
%RSD	.2003	.7402	.1172	.1962	.9687	.6661	1.247	3.159	292.7	286.5
#1	68.67	22.90	88.85	2.617	.0089	9.403	.0562	.1095	.0248	.0317
#2	68.90	23.19	88.65	2.626	.0088	9.447	.0570	.1055	.0060	-.0065
#3	68.92	23.19	88.72	2.624	.0089	9.324	.0556	.1029	-.0119	-.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.175	.0196	24.06	2.080	-.0052	.1368	.3284
Stddev	.002	.0008	.11	.007	.0034	.0029	.0011
%RSD	.0414	4.092	.4378	.3597	64.87	2.095	.3216
#1	5.175	.0189	24.17	2.076	-.0083	.1346	.3279
#2	5.178	.0194	23.96	2.089	-.0056	.1401	.3277
#3	5.174	.0205	24.07	2.075	-.0016	.1359	.3297

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2538.1	5344.3	50030.	6347.6
Stddev	3.7	4.9	86.	30.9
%RSD	.14412	.09158	.17130	.48631
#1	2541.1	5338.7	50109.	6383.1
#2	2534.0	5346.6	49939.	6326.7
#3	2539.2	5347.7	50042.	6333.1

Zoom In Zoom Out

Sample Name: FA21555-7 Acquired: 1/23/2015 10:49:30 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0039	98.15	.0214	.7836	.0017	3828.	.0005	.0293	.0988	.1410
Stddev	.0045	.27	.0056	.0028	.0007	56.	.0003	.0010	.0012	.0011
%RSD	114.0	.2767	26.27	.3558	38.64	1.476	57.83	3.532	1.216	.7950
#1	-.0033	98.44	.0225	.7845	.0009	3790.	.0008	.0295	.1001	.1422
#2	-.0087	97.91	.0264	.7805	.0019	3800.	.0006	.0302	.0977	.1410
#3	.0002	98.08	.0153	.7858	.0022	3893.	.0002	.0282	.0986	.1399

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	90.09	30.49	125.6	2.578	.0078	14.18	.0692	.1512	.0075	.0058
Stddev	.44	.32	1.0	.006	.0005	.23	.0017	.0095	.0105	.0095
%RSD	.4927	1.046	.7832	.2197	6.139	1.653	2.515	6.272	139.7	165.2
#1	90.52	30.80	126.4	2.571	.0084	14.38	.0672	.1611	.0194	.0127
#2	89.64	30.16	124.5	2.582	.0074	13.92	.0706	.1504	.0035	.0097
#3	90.10	30.53	125.9	2.580	.0078	14.22	.0697	.1422	-.0004	-.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.418	.0202	18.17	2.796	.0016	.1555	.3600
Stddev	.027	.0028	.07	.005	.0068	.0014	.0012
%RSD	.4960	13.80	.3881	.1865	426.1	.8918	.3250
#1	5.404	.0233	18.23	2.792	-.0026	.1568	.3587
#2	5.449	.0182	18.09	2.802	-.0020	.1540	.3603
#3	5.400	.0189	18.20	2.795	.0094	.1558	.3610

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2558.9	5423.7	50916.	6327.3
Stddev	2.8	2.7	122.	55.4
%RSD	.11072	.04985	.23877	.87486
#1	2555.9	5425.8	50974.	6317.5
#2	2559.3	5420.6	50997.	6386.9
#3	2561.6	5424.5	50776.	6277.5

Zoom In Zoom Out

Sample Name: FA21555-8 Acquired: 1/23/2015 10:54:01 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	76.80	.0173	.6887	.0010	3646.	-.0003	.0227	.0776	.1120
Stddev	.0030	.12	.0071	.0017	.0004	30.	.0003	.0002	.0006	.0017
%RSD	5609.	.1544	41.07	.2417	39.52	.8180	97.99	1.076	.7976	1.492
#1	-.0020	76.67	.0248	.6902	.0008	3612.	-.0005	.0229	.0771	.1105
#2	-.0013	76.90	.0165	.6890	.0015	3667.	.0000	.0228	.0774	.1138
#3	.0035	76.83	.0106	.6869	.0008	3658.	-.0005	.0225	.0783	.1117

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	70.84	19.71	112.8	2.222	.0020	6.769	.0549	.1017	.0059	-.0111
Stddev	.16	.01	.3	.006	.0009	.112	.0011	.0024	.0059	.0165
%RSD	.2264	.0744	.2885	.2543	42.31	1.647	2.045	2.368	100.0	148.0
#1	71.02	19.73	112.9	2.220	.0011	6.865	.0561	.1003	.0027	-.0013
#2	70.76	19.70	113.1	2.217	.0028	6.796	.0545	.1002	.0023	-.0302
#3	70.73	19.71	112.5	2.228	.0022	6.647	.0540	.1044	.0126	-.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.617	.0173	16.39	2.131	.0006	.1231	.2600
Stddev	.021	.0051	.06	.005	.0036	.0023	.0024
%RSD	.4624	29.47	.3548	.2525	617.8	1.903	.9364
#1	4.639	.0216	16.43	2.125	-.0031	.1255	.2625
#2	4.596	.0185	16.41	2.131	.0007	.1209	.2577
#3	4.616	.0117	16.32	2.136	.0041	.1230	.2599

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2571.0	5420.6	50885.	6356.5
Stddev	3.1	8.8	139.	11.5
%RSD	.11893	.16171	.27303	.18119
#1	2568.2	5412.0	50928.	6346.1
#2	2570.4	5420.2	50998.	6354.5
#3	2574.3	5429.5	50730.	6368.8

Zoom In Zoom Out

Sample Name: FA21547-1 Acquired: 1/23/2015 10:58:31 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0016	75.30	.0378	97.55	-.0103	136.0	-.0084	-.0100	.0260
Stddev	.0235	.90	.0449	.06	.0030	1.1	.0017	.0009	.0103
%RSD	1456.	1.196	118.5	.0631	29.56	.8421	19.76	8.967	39.59
#1	.0202	74.48	.0888	97.51	-.0068	135.1	-.0094	-.0097	.0281
#2	-.0266	76.26	.0206	97.62	-.0119	135.6	-.0094	-.0110	.0351
#3	.0015	75.14	.0041	97.51	-.0122	137.3	-.0065	-.0092	.0148

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0390	25.69	7.307	331.3	.6554	-.0385	5.935	.0432	.0404
Stddev	.0086	.20	1.850	2.5	.0057	.0022	.592	.0058	.0162
%RSD	21.96	.7936	25.32	.7555	.8686	5.624	9.970	13.53	39.99
#1	.0353	25.46	9.110	329.7	.6501	-.0406	5.297	.0406	.0332
#2	.0330	25.84	7.399	329.9	.6548	-.0363	6.466	.0499	.0291
#3	.0488	25.77	5.413	334.1	.6614	-.0385	6.040	.0392	.0589

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0119	-.0233	2.378	-.0006	4.032	7.499	-.0496	.0364	F276.7
Stddev	.0347	.0146	.013	.0085	.016	.032	.0099	.0047	.6
%RSD	291.9	62.69	.5627	1356.	.4030	.4206	19.88	12.89	.2311
#1	.0309	-.0089	2.380	.0032	4.022	7.477	-.0582	.0411	277.4
#2	.0330	-.0228	2.364	-.0104	4.051	7.485	-.0388	.0364	276.4
#3	-.0282	-.0381	2.390	.0053	4.024	7.536	-.0519	.0317	276.2

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2980.7	5884.7	55457.	6665.4
Stddev	2.5	8.1	301.	54.3
%RSD	.08457	.13742	.54185	.81496
#1	2977.9	5876.0	55566.	6688.9
#2	2982.7	5892.0	55688.	6704.1
#3	2981.4	5886.0	55118.	6603.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 11:02:57 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2474	40.23	2.050	2.001	2.055	39.34	2.051	2.040	2.040	2.033
Stddev	.0017	.22	.005	.008	.011	.20	.005	.005	.017	.014
%RSD	.6884	.5529	.2678	.3886	.5492	.4991	.2234	.2256	.8076	.6982
#1	.2481	40.05	2.054	1.994	2.045	39.18	2.056	2.045	2.050	2.039
#2	.2486	40.48	2.044	2.009	2.067	39.56	2.050	2.040	2.049	2.044
#3	.2454	40.17	2.052	1.999	2.052	39.28	2.047	2.036	2.021	2.017
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.52	40.30	39.69	2.067	2.011	40.95	2.059	2.003	2.048	2.043
Stddev	.25	.29	.39	.014	.002	.32	.005	.003	.006	.005
%RSD	.6076	.7291	.9799	.6618	.0954	.7912	.2249	.1480	.2957	.2468
#1	40.32	40.06	39.39	2.079	2.013	40.65	2.063	2.005	2.053	2.044
#2	40.79	40.63	40.13	2.071	2.010	41.29	2.058	2.004	2.049	2.047
#3	40.44	40.21	39.55	2.052	2.009	40.91	2.054	2.000	2.041	2.037
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.781	2.003	2.025	2.057	2.028	1.999	2.030
Stddev	.005	.006	.011	.015	.004	.015	.006
%RSD	.2770	.2770	.5389	.7230	.2014	.7299	.2816
#1	1.782	2.009	2.016	2.068	2.030	2.004	2.036
#2	1.785	2.003	2.037	2.063	2.031	2.011	2.029
#3	1.776	1.998	2.023	2.040	2.023	1.983	2.025
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 11:02:57 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2619.3	5647.9	52822.	6414.6
Stddev	3.1	11.6	316.	62.6
%RSD	.11712	.20551	.59879	.97538
#1	2616.9	5636.0	52647.	6465.4
#2	2618.2	5648.5	52631.	6344.7
#3	2622.7	5659.1	53187.	6433.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 11:14:25 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0038	.0000	.0000	.0002	.0031	.0001	.0001	.0001	.0004
Stddev	.0003	.0079	.001	.000	.0001	.0027	.0001	.0001	.0001	.0002
%RSD	258.2	209.8	1400.	112.3	64.16	87.25	71.46	152.3	106.2	37.25
#1	-.0002	.0113	.0005	.0000	.0001	.0001	.0002	.0000	.0000	.0002
#2	.0002	.0044	-.0006	-.0001	.0001	.0053	.0001	.0002	.0002	.0005
#3	.0004	-.0044	.0000	-.0001	.0003	.0040	.0000	.0000	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0014	.0182	.0064	.0000	-.0004	.0208	.0001	.0009	.0004	-.0006
Stddev	.0029	.0273	.0092	.0000	.0001	.0067	.0001	.0003	.0008	.0015
%RSD	201.5	149.8	144.2	354.2	36.04	32.20	220.1	37.29	219.8	255.6
#1	.0008	.0042	-.0023	.0000	-.0002	.0139	.0002	.0012	.0010	.0008
#2	-.0046	.0008	.0160	.0000	-.0005	.0211	-.0001	.0006	-.0005	-.0004
#3	-.0004	.0496	.0053	.0000	-.0003	.0273	.0001	.0008	.0007	-.0021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	-.0003	.0002	-.0005	-.0001	.0003	.0007
Stddev	.0006	.0001	.0001	.0001	.0008	.0002	.0000
%RSD	35.98	23.92	60.84	11.73	628.9	63.25	6.381
#1	.0021	-.0003	.0001	-.0004	-.0011	.0001	.0007
#2	.0017	-.0004	.0001	-.0006	.0001	.0005	.0007
#3	.0010	-.0003	.0003	-.0005	.0006	.0005	.0007
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 11:14:25 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3024.4	5843.5	54948.	6532.7
Stddev	15.4	24.4	301.	25.6
%RSD	.50858	.41842	.54698	.39169
#1	3007.1	5822.0	54641.	6560.2
#2	3029.3	5838.6	54961.	6528.2
#3	3036.7	5870.1	55241.	6509.6

Zoom In Zoom Out

Sample Name: MP28481-MB1 Acquired: 1/23/2015 11:18:56 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0023	-.0006	-.0002	-.0001	.0016	-.0002	-.0003	.0000	.0000
Stddev	.0001	.0087	.0005	.0001	.0000	.0009	.0000	.0000	.000	.000
%RSD	878.2	369.2	76.26	30.72	43.21	60.58	12.38	2.594	2818.	1054.
#1	-.0001	.0062	-.0002	-.0002	-.0001	.0024	-.0002	-.0003	-.0001	.0001
#2	.0001	-.0111	-.0012	-.0002	.0000	.0006	-.0002	-.0003	.0000	-.0001
#3	.0000	-.0021	-.0005	-.0001	-.0001	.0017	-.0002	-.0003	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0018	.0135	.0013	-.0002	-.0004	.0037	-.0004	.0000	-.0003	.0018
Stddev	.0022	.0758	.0134	.0000	.0001	.0061	.0001	.001	.0006	.0017
%RSD	124.6	559.6	996.7	5.540	18.38	162.5	12.87	4189.	206.7	95.13
#1	.0004	.0128	.0153	-.0002	-.0004	-.0030	-.0004	-.0008	-.0005	.0000
#2	-.0041	.0896	.0000	-.0002	-.0003	.0088	-.0005	.0002	.0004	.0034
#3	-.0017	-.0619	-.0113	-.0002	-.0004	.0054	-.0004	.0005	-.0007	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0281	-.0001	-.0001	-.0006	-.0012	-.0002	.0001
Stddev	.0001	.0002	.0000	.0000	.0006	.0003	.0000
%RSD	.4727	245.2	20.72	6.809	45.76	106.7	46.06
#1	.0280	.0001	-.0002	-.0006	-.0009	-.0001	.0001
#2	.0280	-.0001	-.0001	-.0006	-.0009	-.0005	.0001
#3	.0283	-.0003	-.0002	-.0006	-.0019	-.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28481-MB1 Acquired: 1/23/2015 11:18:56 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2957.9	5748.5	54452.	6472.2
Stddev	4.2	1.8	154.	40.6
%RSD	.14031	.03147	.28322	.62781
#1	2962.2	5749.0	54304.	6425.5
#2	2953.9	5750.1	54612.	6499.4
#3	2957.5	5746.5	54439.	6491.7

Zoom In Zoom Out

Sample Name: MP28481-B1 Acquired: 1/23/2015 11:23:28 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0506	28.17	2.165	2.108	.0546	25.88	.0538	.5436	.2201	.2713
Stddev	.0002	.07	.005	.005	.0003	.07	.0001	.0006	.0009	.0014
%RSD	.3671	.2362	.2346	.2217	.6069	.2891	.1047	.1040	.3863	.4985
#1	.0508	28.24	2.161	2.105	.0550	25.92	.0538	.5429	.2210	.2703
#2	.0507	28.13	2.164	2.113	.0544	25.92	.0537	.5440	.2201	.2728
#3	.0504	28.12	2.171	2.105	.0545	25.79	.0537	.5439	.2193	.2708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.55	26.06	25.60	.5544	.5196	26.56	.5603	.5154	.5411	2.133
Stddev	.07	.10	.09	.0005	.0004	.07	.0002	.0002	.0033	.006
%RSD	.2462	.3844	.3670	.0819	.0687	.2535	.0330	.0373	.6149	.2627
#1	27.62	26.16	25.70	.5548	.5193	26.64	.5601	.5153	.5432	2.128
#2	27.54	26.07	25.53	.5539	.5200	26.54	.5604	.5153	.5430	2.130
#3	27.48	25.96	25.55	.5544	.5195	26.51	.5604	.5157	.5373	2.139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0376	.5385	.5154	.5367	2.080	.5060	.5302
Stddev	.0005	.0008	.0012	.0004	.003	.0005	.0011
%RSD	1.234	.1560	.2262	.0726	.1502	.1010	.2033
#1	.0381	.5376	.5162	.5366	2.076	.5064	.5294
#2	.0371	.5389	.5159	.5371	2.082	.5054	.5298
#3	.0376	.5391	.5140	.5364	2.081	.5061	.5314
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28481-B1 Acquired: 1/23/2015 11:23:28 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2699.2	5601.3	52540.	6395.9
Stddev	2.6	2.4	102.	16.0
%RSD	.09453	.04349	.19427	.24983
#1	2700.5	5601.7	52536.	6390.7
#2	2700.8	5603.6	52645.	6383.1
#3	2696.3	5598.7	52441.	6413.8

Zoom In Zoom Out

Sample Name: FA21532-3F Acquired: 1/23/2015 11:27:41 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.6268	.0009	.0105	-.0002	12.86	-.0003	.0003	.0017	.0001
Stddev	.0001	.0051	.0005	.0001	.0001	.08	.0001	.0000	.0002	.0001
%RSD	65.70	.8190	52.71	1.367	35.39	.5911	26.37	8.841	14.43	56.41
#1	-.0001	.6312	.0015	.0103	-.0002	12.83	-.0003	.0004	.0018	.0000
#2	.0000	.6280	.0006	.0106	-.0002	12.95	-.0002	.0003	.0014	.0002
#3	-.0001	.6212	.0007	.0105	-.0001	12.81	-.0003	.0003	.0018	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.910	.1735	1.661	.0231	.0008	14.29	.0014	.0005	.0004	.0006
Stddev	.017	.0246	.013	.0001	.0001	.02	.0001	.0004	.0007	.0009
%RSD	.5929	14.21	.7664	.3689	10.93	.1714	8.663	79.39	184.0	147.7
#1	2.919	.1990	1.655	.0232	.0008	14.32	.0014	.0006	.0008	.0016
#2	2.920	.1716	1.653	.0232	.0007	14.29	.0014	.0009	-.0004	.0002
#3	2.890	.1498	1.676	.0230	.0007	14.27	.0016	.0001	.0008	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.853	-.0001	.0860	.0013	-.0005	.0034	.0068
Stddev	.003	.0002	.0003	.0001	.0013	.0002	.0000
%RSD	.0634	163.8	.2930	7.309	238.6	6.286	.3666
#1	4.854	-.0004	.0857	.0013	-.0013	.0032	.0068
#2	4.856	.0000	.0862	.0014	.0010	.0035	.0068
#3	4.850	-.0001	.0860	.0013	-.0013	.0036	.0068

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2870.8	5718.3	54120.	6516.8
Stddev	6.9	8.3	153.	69.4
%RSD	.24208	.14493	.28267	1.0657
#1	2878.4	5712.5	54273.	6499.1
#2	2869.2	5714.6	53967.	6457.9
#3	2864.7	5727.8	54122.	6593.4

Zoom In Zoom Out

Sample Name: MP28481-D1 Acquired: 1/23/2015 11:32:08 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.6092	.0003	.0099	-.0001	12.73	-.0002	.0003	.0016	-.0001
Stddev	.0001	.0064	.0009	.0002	.0000	.03	.0000	.0000	.0002	.0002
%RSD	241.6	1.047	276.8	1.617	20.80	.2504	17.38	8.201	9.436	374.2
#1	.0000	.6112	.0014	.0098	-.0002	12.76	-.0002	.0003	.0017	-.0002
#2	.0000	.6021	-.0001	.0101	-.0001	12.71	-.0002	.0003	.0015	-.0001
#3	.0002	.6144	-.0003	.0099	-.0001	12.71	-.0002	.0003	.0017	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.867	.1609	1.638	.0226	.0004	14.08	.0013	.0000	.0008	.0007
Stddev	.010	.0199	.009	.0001	.0001	.07	.0002	.0005	.0007	.0002
%RSD	.3531	12.35	.5516	.4395	14.38	.5265	14.11	29870.	84.55	27.52
#1	2.878	.1385	1.635	.0226	.0005	14.16	.0015	-.0005	.0014	.0006
#2	2.861	.1765	1.630	.0225	.0005	14.03	.0011	.0000	.0008	.0006
#3	2.861	.1675	1.648	.0226	.0004	14.04	.0013	.0005	.0001	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.748	-.0004	.0855	.0008	-.0011	.0033	.0068
Stddev	.004	.0004	.0001	.0000	.0019	.0001	.0000
%RSD	.0929	87.70	.1476	1.489	169.3	2.790	.5703
#1	4.744	-.0007	.0856	.0008	-.0015	.0032	.0068
#2	4.747	-.0006	.0856	.0009	-.0028	.0033	.0068
#3	4.753	.0000	.0854	.0008	.0009	.0034	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2876.7	5735.2	53987.	6516.9
Stddev	6.4	4.5	431.	49.5
%RSD	.22362	.07769	.79741	.75937
#1	2876.4	5734.1	54122.	6461.2
#2	2883.2	5740.1	54334.	6555.6
#3	2870.4	5731.4	53505.	6534.0

Zoom In Zoom Out

Sample Name: MP28481-SD1 Acquired: 1/23/2015 11:36:34 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.5952	.0015	.0095	-.0011	13.69	-.0009	-.0004	.0016	.0017
Stddev	.0006	.0204	.0008	.0013	.0001	.08	.0001	.0005	.0009	.0012
%RSD	613.2	3.427	55.27	13.41	11.85	.5510	16.62	111.4	58.10	70.63
#1	.0006	.5982	.0011	.0109	-.0013	13.61	-.0007	-.0002	.0021	.0031
#2	-.0004	.5734	.0010	.0091	-.0010	13.68	-.0010	-.0001	.0021	.0013
#3	-.0005	.6139	.0025	.0085	-.0011	13.76	-.0009	-.0009	.0005	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.929	.1723	1.674	.0224	-.0023	14.69	.0009	-.0007	.0023	-.0042
Stddev	.007	.0215	.076	.0002	.0012	.07	.0011	.0008	.0004	.0036
%RSD	.2522	12.49	4.518	.7501	51.49	.4589	117.9	125.9	15.53	85.29
#1	2.937	.1620	1.605	.0225	-.0023	14.75	.0002	.0003	.0020	-.0057
#2	2.923	.1578	1.663	.0222	-.0035	14.62	.0021	-.0011	.0022	-.0069
#3	2.927	.1970	1.755	.0224	-.0011	14.69	.0003	-.0011	.0027	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.947	-.0043	.0874	-.0030	-.0051	.0023	.0094
Stddev	.010	.0004	.0002	.0008	.0039	.0008	.0002
%RSD	.1979	9.667	.2732	26.53	75.83	34.85	2.187
#1	4.956	-.0046	.0874	-.0035	-.0084	.0023	.0092
#2	4.937	-.0044	.0871	-.0021	-.0008	.0015	.0095
#3	4.950	-.0038	.0876	-.0033	-.0060	.0030	.0096

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2972.2	5840.5	54749.	6505.4
Stddev	4.6	3.9	103.	23.0
%RSD	.15557	.06600	.18781	.35324
#1	2977.4	5844.8	54647.	6494.5
#2	2968.8	5839.6	54746.	6531.8
#3	2970.2	5837.2	54853.	6489.9

Zoom In Zoom Out

Sample Name: MP28481-PS1 Acquired: 1/23/2015 11:41:04 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0513	3.197	.1100	.2718	.0539	17.56	.0549	.0556	.0573	.1085
Stddev	.0005	.014	.0008	.0006	.0001	.06	.0001	.0000	.0003	.0002
%RSD	.9096	.4348	.7415	.2069	.1659	.3575	.1801	.0584	.5185	.1620
#1	.0509	3.213	.1090	.2711	.0540	17.63	.0550	.0555	.0570	.1086
#2	.0518	3.187	.1105	.2719	.0539	17.55	.0548	.0555	.0575	.1087
#3	.0511	3.192	.1104	.2722	.0539	17.50	.0549	.0556	.0573	.1083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.888	10.26	6.392	.0790	.1078	24.55	.1153	.0519	.1088	.1061
Stddev	.008	.07	.005	.0002	.0002	.03	.0002	.0001	.0009	.0005
%RSD	.1374	.7304	.0825	.3058	.2124	.1291	.1440	.1786	.8645	.4474
#1	5.879	10.28	6.392	.0788	.1076	24.51	.1151	.0519	.1077	.1064
#2	5.895	10.18	6.397	.0790	.1078	24.58	.1154	.0518	.1095	.1064
#3	5.891	10.32	6.387	.0793	.1080	24.56	.1152	.0520	.1091	.1056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.753	.0526	.1343	.1096	.1032	.0544	.2727
Stddev	.003	.0001	.0003	.0001	.0009	.0001	.0003
%RSD	.0625	.2371	.2431	.1207	.8923	.1778	.1114
#1	4.753	.0527	.1344	.1096	.1023	.0543	.2729
#2	4.750	.0525	.1340	.1095	.1031	.0545	.2729
#3	4.756	.0527	.1346	.1098	.1042	.0545	.2723

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2809.7	5730.2	53917.	6546.5
Stddev	3.1	7.5	63.	62.1
%RSD	.11011	.13006	.11609	.94904
#1	2807.6	5721.7	53859.	6490.1
#2	2813.2	5733.1	53983.	6536.3
#3	2808.1	5735.8	53909.	6613.1

Zoom In Zoom Out

Sample Name: MP28481-S1 Acquired: 1/23/2015 11:45:22 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0500	28.38	2.118	2.075	.0545	37.57	.0518	.5270	.2176	.2679
Stddev	.0003	.08	.002	.005	.0001	.18	.0001	.0004	.0005	.0008
%RSD	.5396	.2825	.1029	.2547	.1832	.4706	.1944	.0830	.2248	.2849
#1	.0497	28.43	2.117	2.081	.0545	37.74	.0520	.5270	.2173	.2671
#2	.0501	28.29	2.117	2.071	.0544	37.39	.0518	.5265	.2174	.2679
#3	.0502	28.43	2.121	2.073	.0546	37.57	.0518	.5274	.2182	.2686

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	30.00	25.90	26.75	.5629	.5118	40.28	.5428	.5066	.5297	2.075
Stddev	.10	.04	.18	.0011	.0004	.05	.0004	.0015	.0009	.003
%RSD	.3293	.1633	.6546	.1996	.0834	.1161	.0693	.2959	.1669	.1405
#1	30.10	25.94	26.90	.5638	.5118	40.33	.5431	.5049	.5300	2.072
#2	29.91	25.86	26.56	.5616	.5123	40.23	.5424	.5078	.5303	2.078
#3	29.99	25.89	26.79	.5634	.5114	40.28	.5428	.5070	.5287	2.076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.783	.5245	.5963	.5340	2.048	.5003	.5178
Stddev	.004	.0012	.0009	.0006	.004	.0010	.0015
%RSD	.0904	.2360	.1518	.1038	.1827	.1932	.2898
#1	4.787	.5255	.5974	.5342	2.043	.5014	.5184
#2	4.785	.5231	.5957	.5334	2.049	.4997	.5161
#3	4.778	.5248	.5959	.5345	2.050	.4996	.5190

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2677.9	5658.8	52780.	6470.7
Stddev	3.5	.6	271.	26.5
%RSD	.12964	.01028	.51399	.40896
#1	2681.9	5658.1	52599.	6442.2
#2	2675.5	5658.9	53092.	6494.6
#3	2676.3	5659.3	52650.	6475.2

Zoom In Zoom Out

Sample Name: MP28481-S2 Acquired: 1/23/2015 11:49:34 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0497	28.33	2.098	2.070	.0538	37.74	.0516	.5251	.2162	.2676
Stddev	.0004	.01	.003	.010	.0001	.12	.0001	.0004	.0010	.0011
%RSD	.8478	.0309	.1402	.4921	.1143	.3168	.2656	.0720	.4663	.4058
#1	.0500	28.33	2.095	2.079	.0538	37.64	.0515	.5249	.2166	.2686
#2	.0492	28.34	2.101	2.059	.0538	37.72	.0517	.5249	.2150	.2676
#3	.0499	28.33	2.097	2.071	.0539	37.87	.0518	.5256	.2169	.2664

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	29.81	25.73	26.79	.5591	.5068	39.74	.5398	.5051	.5232	2.051
Stddev	.09	.06	.14	.0008	.0004	.03	.0006	.0009	.0022	.003
%RSD	.3045	.2219	.5153	.1500	.0817	.0741	.1085	.1704	.4230	.1493
#1	29.71	25.75	26.63	.5589	.5063	39.77	.5392	.5047	.5247	2.048
#2	29.88	25.78	26.88	.5583	.5070	39.75	.5404	.5044	.5207	2.053
#3	29.85	25.67	26.86	.5600	.5071	39.71	.5398	.5060	.5243	2.053

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.727	.5215	.5906	.5289	2.035	.5008	.5166
Stddev	.005	.0006	.0013	.0009	.003	.0005	.0003
%RSD	.1086	.1090	.2140	.1638	.1614	.0946	.0553
#1	4.725	.5222	.5916	.5292	2.031	.5013	.5165
#2	4.722	.5213	.5892	.5279	2.038	.5005	.5170
#3	4.732	.5211	.5910	.5295	2.035	.5005	.5164

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2680.7	5683.0	53010.	6477.4
Stddev	4.1	6.9	193.	39.3
%RSD	.15431	.12055	.36480	.60636
#1	2676.6	5675.1	52894.	6522.6
#2	2680.6	5687.4	53233.	6458.8
#3	2684.8	5686.5	52902.	6451.0

Zoom In Zoom Out

Sample Name: FA21532-1F Acquired: 1/23/2015 11:53:44 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.2598	.0002	.0080	-.0002	38.31	-.0002	-.0001	.0013	.0005
Stddev	.000	.0085	.0006	.0001	.0001	.03	.0000	.0001	.0002	.0003
%RSD	2749.	3.279	371.4	1.342	30.67	.0892	10.43	64.21	16.58	59.70
#1	-.0003	.2501	.0009	.0080	-.0001	38.27	-.0002	-.0002	.0011	.0004
#2	.0003	.2661	.0000	.0081	-.0002	38.33	-.0002	-.0001	.0014	.0007
#3	.0000	.2631	-.0004	.0079	-.0002	38.32	-.0002	.0000	.0014	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.836	.5093	1.753	.0307	.0131	13.06	.0026	.0008	.0008	.0011
Stddev	.008	.0240	.020	.0001	.0002	.04	.0001	.0003	.0003	.0003
%RSD	.4263	4.713	1.147	.4775	1.221	.3411	5.009	33.38	40.03	32.08
#1	1.828	.5367	1.747	.0308	.0132	13.02	.0025	.0006	.0009	.0008
#2	1.843	.4994	1.736	.0306	.0131	13.11	.0027	.0006	.0004	.0010
#3	1.839	.4918	1.775	.0308	.0129	13.05	.0025	.0011	.0010	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.172	-.0003	.2060	.0010	-.0010	.0030	.0070
Stddev	.016	.0001	.0006	.0000	.0015	.0002	.0000
%RSD	.3033	26.19	.2880	2.511	158.4	6.649	.5034
#1	5.155	-.0003	.2054	.0011	-.0001	.0028	.0069
#2	5.175	-.0004	.2065	.0010	-.0001	.0029	.0070
#3	5.186	-.0003	.2060	.0010	-.0027	.0032	.0070

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2846.3	5683.7	53548.	6452.4
Stddev	6.0	7.4	222.	12.3
%RSD	.21076	.13102	.41386	.19053
#1	2839.4	5690.7	53575.	6458.2
#2	2850.6	5684.5	53755.	6438.2
#3	2848.8	5675.9	53314.	6460.6

Zoom In Zoom Out

Sample Name: FA21532-2F Acquired: 1/23/2015 11:58:10 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.2600	-.0003	.0074	-.0002	38.74	-.0002	-.0001	.0012	.0001
Stddev	.0001	.0049	.0007	.0001	.0000	.11	.0000	.0000	.0002	.0003
%RSD	127.0	1.868	217.7	1.936	8.374	.2856	20.01	13.12	17.84	398.8
#1	.0000	.2636	-.0006	.0075	-.0002	38.65	-.0003	-.0001	.0013	.0002
#2	-.0001	.2545	.0005	.0076	-.0003	38.70	-.0002	-.0001	.0010	-.0003
#3	-.0002	.2619	-.0009	.0073	-.0003	38.86	-.0002	-.0001	.0014	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.831	.4626	1.785	.0308	.0130	13.24	.0026	-.0002	.0006	.0010
Stddev	.009	.0249	.017	.0001	.0001	.05	.0001	.0007	.0003	.0017
%RSD	.4711	5.388	.9305	.1797	.3958	.4051	3.894	379.3	49.56	180.9
#1	1.827	.4598	1.803	.0307	.0130	13.19	.0025	-.0003	.0009	.0023
#2	1.825	.4888	1.781	.0308	.0131	13.30	.0027	-.0009	.0007	-.0010
#3	1.841	.4392	1.771	.0308	.0131	13.23	.0027	.0006	.0003	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.246	-.0002	.2092	.0007	-.0008	.0028	.0070
Stddev	.016	.0002	.0003	.0000	.0011	.0001	.0001
%RSD	.3059	98.60	.1252	1.383	136.0	2.623	.8515
#1	5.249	.0000	.2091	.0007	-.0020	.0029	.0071
#2	5.228	-.0003	.2095	.0007	-.0006	.0027	.0070
#3	5.260	-.0003	.2090	.0007	.0002	.0029	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2847.9	5682.4	53649.	6513.2
Stddev	3.6	14.0	75.	20.1
%RSD	.12606	.24610	.14062	.30863
#1	2847.4	5685.0	53621.	6535.8
#2	2851.7	5694.9	53734.	6506.5
#3	2844.6	5667.3	53591.	6497.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 12:02:36 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2499	40.25	2.052	1.993	2.051	39.50	2.059	2.048	2.058	2.045
Stddev	.0010	.16	.007	.005	.008	.19	.004	.002	.003	.006
%RSD	.3895	.4000	.3488	.2613	.3712	.4756	.2128	.1171	.1478	.2790
#1	.2490	40.43	2.060	1.997	2.060	39.67	2.064	2.050	2.061	2.047
#2	.2509	40.14	2.051	1.987	2.048	39.30	2.059	2.050	2.055	2.050
#3	.2499	40.18	2.046	1.996	2.045	39.52	2.055	2.046	2.058	2.039
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.28	40.30	39.68	2.087	2.018	40.72	2.066	2.014	2.054	2.051
Stddev	.16	.19	.25	.005	.001	.17	.004	.005	.003	.001
%RSD	.3871	.4618	.6267	.2270	.0236	.4287	.1822	.2705	.1219	.0264
#1	40.46	40.51	39.95	2.092	2.019	40.91	2.070	2.017	2.057	2.051
#2	40.20	40.16	39.46	2.082	2.018	40.65	2.067	2.008	2.053	2.050
#3	40.19	40.24	39.63	2.087	2.018	40.59	2.063	2.018	2.053	2.051
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.788	2.013	2.015	2.070	2.041	2.015	2.042
Stddev	.001	.003	.005	.004	.008	.003	.006
%RSD	.0526	.1393	.2417	.1684	.3864	.1584	.2953
#1	1.787	2.016	2.020	2.073	2.032	2.018	2.048
#2	1.789	2.012	2.011	2.067	2.044	2.011	2.042
#3	1.788	2.010	2.013	2.071	2.047	2.015	2.036
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 12:02:36 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2619.2	5660.9	52695.	6432.0
Stddev	9.6	6.3	142.	54.5
%RSD	.36564	.11090	.26857	.84771
#1	2629.3	5667.1	52793.	6377.6
#2	2618.0	5660.9	52758.	6486.7
#3	2610.3	5654.5	52532.	6431.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 12:06:46 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0033	.0006	-.0002	.0002	.0051	.0001	.0000	.0004	.0002
Stddev	.0003	.0078	.0002	.0001	.0000	.0013	.0000	.0001	.0004	.0001
%RSD	315.7	238.4	27.90	51.83	7.338	25.77	30.77	267.7	101.7	71.04
#1	-.0002	-.0050	.0006	-.0002	.0002	.0065	.0001	.0001	.0003	.0003
#2	.0001	.0053	.0008	-.0003	.0002	.0050	.0001	.0000	.0000	.0002
#3	.0004	-.0102	.0005	-.0001	.0002	.0038	.0001	.0000	.0007	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0077	.0641	.0052	.0000	.0009	.0264	.0002	.0001	.0003	-.0007
Stddev	.0008	.0028	.0100	.0000	.0002	.0028	.0001	.0007	.0003	.0016
%RSD	9.836	4.422	194.8	420.1	26.02	10.55	80.38	547.9	99.60	244.6
#1	.0084	.0617	.0158	.0000	.0011	.0264	.0002	.0009	.0000	.0012
#2	.0078	.0672	-.0042	.0000	.0008	.0292	.0000	-.0002	.0006	-.0013
#3	.0069	.0635	.0040	.0000	.0006	.0237	.0002	-.0004	.0003	-.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	-.0003	.0001	.0004	-.0002	.0002	.0007
Stddev	.0003	.0001	.0000	.0001	.0015	.0002	.0001
%RSD	18.56	29.47	19.74	21.89	673.1	160.5	7.734
#1	.0020	-.0003	.0002	.0005	-.0015	.0004	.0007
#2	.0021	-.0004	.0001	.0003	-.0006	.0000	.0007
#3	.0015	-.0002	.0001	.0004	.0014	.0000	.0008
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 12:06:46 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3010.8	5873.5	54681.	6448.4
Stddev	5.8	9.5	157.	41.9
%RSD	.19389	.16256	.28789	.64905
#1	3004.3	5865.5	54786.	6426.5
#2	3012.2	5871.1	54757.	6496.7
#3	3015.7	5884.1	54500.	6422.1

Zoom In Zoom Out

Sample Name: FA21532-4F Acquired: 1/23/2015 12:11:17 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	7.664	.0027	.0205	.0001	34.97	-.0002	.0004	.0109	.0019
Stddev	.0003	.013	.0005	.0001	.0001	.05	.0000	.0000	.0001	.0001
%RSD	2969.	.1730	18.00	.4643	99.40	.1559	24.18	6.164	1.188	4.579
#1	-.0003	7.650	.0031	.0206	.0000	34.97	-.0002	.0004	.0110	.0018
#2	-.0001	7.665	.0022	.0204	.0001	34.92	-.0001	.0004	.0107	.0020
#3	.0004	7.677	.0027	.0206	.0001	35.03	-.0002	.0004	.0109	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.031	.6625	1.659	.0207	.0075	14.15	.0058	.0064	.0011	.0012
Stddev	.005	.0196	.037	.0001	.0001	.01	.0002	.0004	.0005	.0006
%RSD	.2407	2.963	2.223	.3295	1.976	.0472	3.194	6.252	45.25	48.15
#1	2.037	.6756	1.701	.0206	.0076	14.15	.0056	.0067	.0015	.0018
#2	2.027	.6720	1.631	.0207	.0073	14.16	.0059	.0059	.0013	.0006
#3	2.030	.6400	1.646	.0206	.0075	14.15	.0058	.0065	.0005	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.733	-.0003	.2073	.0077	-.0020	.0133	.0041
Stddev	.004	.0003	.0002	.0001	.0003	.0001	.0001
%RSD	.0559	95.89	.1079	.6736	16.12	.6880	2.556
#1	6.731	.0000	.2073	.0077	-.0020	.0132	.0040
#2	6.737	-.0003	.2075	.0077	-.0022	.0134	.0041
#3	6.730	-.0005	.2070	.0076	-.0016	.0134	.0042

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2838.1	5804.7	54495.	6589.5
Stddev	3.4	14.2	105.	19.0
%RSD	.11990	.24486	.19225	.28803
#1	2837.0	5798.4	54447.	6567.9
#2	2835.4	5794.7	54615.	6597.6
#3	2841.9	5820.9	54423.	6603.2

Zoom In Zoom Out

Sample Name: FA21532-5F Acquired: 1/23/2015 12:15:45 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	2.577	.0008	.0153	.0000	4.838	-.0003	.0006	.0055	.0006
Stddev	.0001	.010	.0002	.0002	.000	.049	.0000	.0001	.0002	.0002
%RSD	78.63	.3784	27.65	1.236	122.6	1.005	12.27	8.916	3.685	27.23
#1	-.0002	2.588	.0009	.0155	-.0001	4.892	-.0003	.0006	.0056	.0005
#2	-.0002	2.573	.0005	.0152	-.0001	4.824	-.0002	.0007	.0057	.0005
#3	.0000	2.569	.0009	.0153	.0000	4.798	-.0003	.0006	.0053	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.445	.3719	1.939	.0188	-.0005	17.11	.0025	.0016	.0004	.0004
Stddev	.033	.0053	.014	.0001	.0001	.08	.0001	.0003	.0007	.0007
%RSD	.5179	1.429	.7354	.3445	12.08	.4864	4.260	18.82	175.9	156.6
#1	6.484	.3695	1.955	.0188	-.0005	17.20	.0026	.0013	.0007	.0007
#2	6.424	.3780	1.930	.0189	-.0006	17.08	.0024	.0017	.0009	-.0003
#3	6.428	.3683	1.931	.0188	-.0005	17.05	.0024	.0018	-.0004	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.380	-.0004	.0391	.0028	-.0022	.0093	.0091
Stddev	.007	.0002	.0003	.0000	.0010	.0004	.0000
%RSD	.1396	56.04	.8665	1.089	45.52	3.783	.3982
#1	5.381	-.0007	.0394	.0028	-.0024	.0091	.0091
#2	5.372	-.0002	.0392	.0028	-.0011	.0097	.0091
#3	5.387	-.0004	.0387	.0028	-.0031	.0090	.0091

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2885.2	5826.0	54851.	6568.5
Stddev	2.6	2.6	30.	77.1
%RSD	.08896	.04486	.05552	1.1737
#1	2888.0	5828.7	54818.	6480.8
#2	2884.4	5825.8	54878.	6599.5
#3	2883.1	5823.4	54857.	6625.3

Zoom In Zoom Out

Sample Name: FA21532-6F Acquired: 1/23/2015 12:20:11 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0285	.0001	.0038	-.0002	73.71	-.0002	-.0002	.0003	.0009
Stddev	.0003	.0015	.0010	.0000	.0001	.09	.0000	.0000	.0001	.0004
%RSD	3255.	5.360	876.6	.3783	60.16	.1239	12.06	10.17	34.19	46.89
#1	.0003	.0294	-.0009	.0038	-.0004	73.79	-.0002	-.0001	.0004	.0010
#2	.0000	.0267	.0011	.0037	-.0001	73.74	-.0002	-.0002	.0002	.0004
#3	-.0003	.0293	.0001	.0038	-.0002	73.61	-.0002	-.0002	.0003	.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0106	.6839	1.278	.0017	.0109	9.173	.0006	.0002	.0020	.0000
Stddev	.0006	.0275	.019	.0000	.0001	.047	.0002	.0003	.0002	.0003
%RSD	5.660	4.021	1.498	1.417	.5541	.5149	27.94	113.3	11.33	3804.
#1	.0101	.7021	1.296	.0017	.0109	9.133	.0004	.0004	.0022	.0003
#2	.0113	.6523	1.281	.0017	.0110	9.162	.0008	.0004	.0019	-.0001
#3	.0104	.6973	1.258	.0017	.0108	9.225	.0006	-.0001	.0018	-.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.012	-.0003	.4424	.0003	-.0020	.0019	.0012
Stddev	.011	.0003	.0019	.0001	.0010	.0002	.0001
%RSD	.1780	127.3	.4204	22.28	48.90	10.63	5.081
#1	6.002	.0000	.4402	.0002	-.0012	.0022	.0012
#2	6.011	-.0001	.4435	.0004	-.0016	.0018	.0011
#3	6.023	-.0006	.4435	.0004	-.0031	.0018	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2802.5	5647.3	53271.	6413.4
Stddev	6.1	15.0	175.	25.6
%RSD	.21758	.26508	.32798	.39956
#1	2803.5	5659.8	53217.	6384.1
#2	2808.1	5651.3	53130.	6424.6
#3	2796.0	5630.7	53467.	6431.6

Zoom In Zoom Out

Sample Name: FA21590-1 Acquired: 1/23/2015 12:24:40 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0161	-.0011	.0785	-.0002	F643.3	.0001	.0036	.0008
Stddev	.0005	.0136	.0011	.0003	.0001	.8	.0001	.0000	.0004
%RSD	97.71	84.54	94.20	.3212	39.72	.1303	100.2	.2190	42.25
#1	.0000	.0115	-.0009	.0782	-.0002	644.1	.0000	.0037	.0009
#2	.0010	.0314	-.0023	.0786	-.0004	642.4	.0001	.0036	.0005
#3	.0006	.0054	-.0002	.0787	-.0002	643.4	.0000	.0036	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0013	.3181	31.27	F643.9	F4.276	.0021	F646.4	.0014	.0034
Stddev	.0003	.0040	.21	1.7	.014	.0001	22.2	.0002	.0004
%RSD	23.54	1.272	.6758	.2563	.3371	3.754	3.435	11.14	12.29
#1	-.0010	.3146	31.51	642.8	4.293	.0022	660.2	.0012	.0029
#2	-.0012	.3225	31.16	643.1	4.269	.0021	658.2	.0015	.0038
#3	-.0016	.3172	31.13	645.8	4.267	.0020	620.8	.0014	.0034

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0038	.0027	9.539	-.0001	F9.429	-.0031	.0014	-.0008	.0009
Stddev	.0019	.0005	.012	.0005	.210	.0003	.0026	.0004	.0000
%RSD	49.43	18.73	.1216	969.0	2.231	11.04	177.7	55.40	3.015
#1	.0052	.0031	9.527	.0005	9.486	-.0027	.0044	-.0011	.0008
#2	.0045	.0028	9.550	-.0003	9.605	-.0034	.0002	-.0010	.0008
#3	.0016	.0021	9.540	-.0004	9.196	-.0032	-.0003	-.0003	.0009

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1905.3	4336.0	39995.	5836.1
Stddev	7.1	2.4	79.	7.4
%RSD	.37363	.05422	.19849	.12696
#1	1903.9	4338.7	40001.	5835.8
#2	1913.0	4334.6	39913.	5828.9
#3	1899.0	4334.7	40071.	5843.7

Zoom In Zoom Out

Sample Name: FA21590-2 Acquired: 1/23/2015 12:29:40 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0019	.0399	-.0024	.1558	-.0003	F1183.	.0004	.0083	.0020
Stddev	.0000	.0169	.0016	.0003	.0000	6.	.0001	.0003	.0003
%RSD	2.568	42.31	67.97	.2164	9.059	.4670	14.84	3.863	12.91
#1	.0019	.0209	-.0029	.1556	-.0003	1182.	.0004	.0082	.0021
#2	.0020	.0456	-.0006	.1562	-.0003	1178.	.0004	.0081	.0022
#3	.0019	.0531	-.0038	.1557	-.0003	1189.	.0003	.0087	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0029	.2130	48.49	F1010.	F10.86	.0024	F626.4	.0038	.0073
Stddev	.0001	.0039	.15	3.	.02	.0001	5.9	.0001	.0006
%RSD	4.863	1.839	.3023	.3212	.1527	3.542	.9372	2.790	8.330
#1	-.0028	.2105	48.60	1009.	10.87	.0023	632.0	.0037	.0066
#2	-.0028	.2109	48.33	1007.	10.87	.0025	620.3	.0038	.0077
#3	-.0030	.2175	48.56	1013.	10.84	.0024	626.8	.0039	.0076

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0047	.0038	10.44	-.0002	F16.20	-.0078	.0068	-.0042	-.0001
Stddev	.0021	.0017	.18	.0004	.19	.0005	.0011	.0002	.0001
%RSD	44.55	45.90	1.686	223.3	1.197	5.985	15.59	3.670	135.1
#1	.0045	.0055	10.34	-.0006	16.24	-.0074	.0080	-.0044	.0000
#2	.0027	.0021	10.33	-.0001	15.98	-.0083	.0064	-.0041	-.0002
#3	.0068	.0037	10.64	.0001	16.36	-.0077	.0060	-.0042	.0000

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1786.4	4104.8	38598.	5704.9
Stddev	22.0	57.6	134.	25.5
%RSD	1.2336	1.4039	.34644	.44740
#1	1802.3	4144.1	38446.	5700.6
#2	1795.7	4131.8	38647.	5732.3
#3	1761.3	4038.7	38700.	5681.8

Zoom In Zoom Out

Sample Name: FA21590-3 Acquired: 1/23/2015 12:34:38 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0008	.0061	-.0026	.0706	-.0003	F924.9	.0004	.0063	.0010
Stddev	.0008	.0084	.0007	.0002	.0001	12.4	.0001	.0001	.0005
%RSD	94.56	139.2	28.79	.2359	18.20	1.340	15.53	2.000	47.27
#1	.0008	-.0030	-.0033	.0704	-.0003	910.6	.0003	.0064	.0012
#2	.0000	.0074	-.0018	.0708	-.0003	932.2	.0003	.0063	.0013
#3	.0016	.0137	-.0027	.0707	-.0002	932.0	.0004	.0062	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0029	-.0047	40.94	F907.5	F8.025	.0022	F610.6	.0023	.0046
Stddev	.0002	.0030	.28	6.8	.004	.0000	5.3	.0005	.0012
%RSD	6.227	63.89	.6738	.7532	.0435	2.092	.8745	20.76	25.60
#1	-.0027	-.0080	40.62	899.8	8.028	.0022	615.8	.0029	.0060
#2	-.0030	-.0021	41.09	910.0	8.027	.0023	611.1	.0019	.0037
#3	-.0031	-.0040	41.11	912.7	8.021	.0022	605.1	.0022	.0042

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0050	.0058	10.07	-.0004	F13.83	-.0067	.0055	-.0018	-.0005
Stddev	.0020	.0015	.01	.0004	.30	.0001	.0016	.0004	.0001
%RSD	41.09	25.35	.0718	98.92	2.198	.8113	29.02	22.73	13.10
#1	.0046	.0055	10.07	-.0002	13.58	-.0068	.0073	-.0014	-.0005
#2	.0031	.0046	10.08	-.0001	13.74	-.0067	.0051	-.0022	-.0006
#3	.0072	.0075	10.07	-.0009	14.17	-.0067	.0042	-.0018	-.0004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1814.5	4179.3	38726.	5721.0
Stddev	5.7	3.1	71.	39.7
%RSD	.31578	.07337	.18372	.69322
#1	1817.6	4182.8	38644.	5765.6
#2	1818.1	4177.7	38775.	5707.6
#3	1807.9	4177.3	38758.	5689.8

Zoom In Zoom Out

Sample Name: FA21590-4 Acquired: 1/23/2015 12:39:38 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	.0147	-.0011	.1260	-.0003	496.9	-.0001	.0035	.0005
Stddev	.0003	.0081	.0015	.0002	.0001	1.2	.0000	.0001	.0002
%RSD	28.49	54.64	137.5	.1897	31.49	.2464	22.85	1.838	46.70
#1	.0007	.0066	-.0023	.1262	-.0002	495.7	-.0001	.0036	.0008
#2	.0012	.0150	.0005	.1257	-.0004	496.8	-.0001	.0035	.0004
#3	.0008	.0227	-.0014	.1260	-.0003	498.2	-.0001	.0034	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0011	.1454	25.41	445.6	F4.743	.0023	F558.0	.0016	.0026
Stddev	.0001	.0040	.05	.4	.025	.0001	9.2	.0002	.0007
%RSD	5.725	2.767	.1910	.0950	.5364	3.275	1.643	15.62	27.91
#1	-.0011	.1501	25.38	445.4	4.772	.0022	561.6	.0019	.0021
#2	-.0010	.1437	25.46	446.1	4.726	.0024	547.6	.0015	.0035
#3	-.0012	.1426	25.38	445.4	4.730	.0024	564.9	.0014	.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0023	.0005	10.19	-.0005	F6.393	-.0015	.0006	-.0018	.0006
Stddev	.0008	.0018	.01	.0003	.079	.0002	.0025	.0003	.0000
%RSD	34.42	358.9	.0820	56.39	1.237	9.903	391.5	17.23	4.927
#1	.0030	.0023	10.20	-.0007	6.404	-.0015	.0022	-.0019	.0006
#2	.0015	.0004	10.18	-.0006	6.466	-.0017	.0020	-.0015	.0007
#3	.0025	-.0013	10.20	-.0002	6.309	-.0014	-.0022	-.0021	.0006

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2019.8	4529.5	41942.	5986.2
Stddev	2.4	2.3	123.	14.7
%RSD	.11859	.05122	.29440	.24537
#1	2020.2	4529.5	41825.	5972.1
#2	2017.2	4527.2	41928.	6001.4
#3	2022.0	4531.8	42071.	5985.1

Zoom In Zoom Out

Sample Name: FA21590-5 Acquired: 1/23/2015 12:44:39 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0010	-.0015	.0004	.2839	-.0004	F868.1	.0000	.0074	.0013
Stddev	.0002	.0185	.0012	.0002	.0000	5.3	.000	.0002	.0001
%RSD	16.21	1252.	280.0	.0720	11.54	.6121	124.8	2.054	5.039
#1	.0008	-.0206	.0010	.2840	-.0003	864.4	-.0001	.0075	.0013
#2	.0011	-.0002	-.0010	.2840	-.0004	865.7	-.0001	.0072	.0014
#3	.0011	.0164	.0012	.2837	-.0003	874.2	.0000	.0074	.0014

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0021	.6847	37.36	F648.1	F7.437	.0032	F544.8	.0021	.0051
Stddev	.0002	.0049	.07	3.4	.012	.0003	3.6	.0001	.0010
%RSD	8.522	.7133	.1971	.5295	.1546	9.412	.6617	6.533	20.19
#1	-.0021	.6808	37.35	644.9	7.439	.0030	547.0	.0022	.0062
#2	-.0023	.6831	37.44	647.6	7.446	.0035	540.6	.0020	.0050
#3	-.0020	.6902	37.30	651.7	7.424	.0030	546.8	.0021	.0041

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0035	.0052	10.20	-.0005	F10.56	-.0036	.0043	-.0028	.0009
Stddev	.0008	.0027	.00	.0004	.05	.0001	.0019	.0003	.0001
%RSD	23.52	52.25	.0450	75.30	.4463	3.527	42.97	9.036	6.035
#1	.0026	.0077	10.20	-.0007	10.61	-.0038	.0053	-.0029	.0009
#2	.0042	.0054	10.20	-.0001	10.54	-.0035	.0022	-.0025	.0009
#3	.0038	.0023	10.20	-.0007	10.52	-.0036	.0056	-.0029	.0008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1978.2	4441.8	41484.	5924.5
Stddev	4.1	2.2	110.	43.8
%RSD	.20902	.05046	.26586	.73904
#1	1976.0	4440.5	41379.	5955.5
#2	1983.0	4444.4	41599.	5943.5
#3	1975.7	4440.5	41476.	5874.4

Zoom In Zoom Out

Sample Name: FA21590-6 Acquired: 1/23/2015 12:49:38 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	.0124	-.0003	.2476	-.0003	F617.2	-.0002	.0040	.0009
Stddev	.0003	.0081	.0006	.0013	.0000	4.9	.0000	.0002	.0002
%RSD	43.96	65.65	235.7	.5433	7.058	.7877	21.10	4.719	26.82
#1	.0010	.0074	.0002	.2461	-.0003	611.6	-.0003	.0041	.0009
#2	.0004	.0080	.0000	.2479	-.0003	620.2	-.0002	.0038	.0007
#3	.0005	.0217	-.0010	.2487	-.0003	619.8	-.0002	.0041	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0009	.5802	26.07	360.7	F5.729	.0036	F455.9	.0014	.0034
Stddev	.0001	.0029	.17	2.5	.017	.0000	3.4	.0001	.0007
%RSD	12.86	.5017	.6530	.6998	.2991	1.230	.7440	9.837	19.75
#1	-.0008	.5795	25.88	358.0	5.709	.0036	453.8	.0015	.0041
#2	-.0009	.5777	26.15	360.9	5.740	.0035	454.1	.0014	.0033
#3	-.0011	.5834	26.19	363.1	5.737	.0035	459.9	.0013	.0027

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0028	.0037	10.30	-.0002	F6.397	-.0010	.0028	-.0024	.0000
Stddev	.0006	.0021	.02	.0005	.087	.0002	.0012	.0002	.0001
%RSD	19.99	56.58	.1921	317.0	1.356	17.93	40.86	6.772	182.5
#1	.0025	.0019	10.27	-.0008	6.420	-.0009	.0041	-.0024	.0001
#2	.0024	.0032	10.31	.0000	6.301	-.0009	.0018	-.0022	.0000
#3	.0034	.0060	10.30	.0002	6.469	-.0012	.0026	-.0025	.0000

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2125.7	4687.7	43812.	6082.6
Stddev	3.0	5.3	127.	46.1
%RSD	.14228	.11397	.28966	.75815
#1	2128.8	4693.9	43869.	6127.0
#2	2125.4	4684.7	43667.	6085.8
#3	2122.8	4684.5	43901.	6035.0

Zoom In Zoom Out

Sample Name: FA21590-7 Acquired: 1/23/2015 12:54:39 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0011	.0108	.0012	.1027	-.0003	F918.1	-.0002	.0034	.0015
Stddev	.0003	.0079	.0011	.0005	.0001	9.5	.0000	.0002	.0002
%RSD	29.19	72.70	88.45	.4896	16.55	1.035	5.737	5.274	15.84
#1	.0008	.0160	.0013	.1022	-.0003	921.5	-.0002	.0036	.0015
#2	.0012	.0148	.0022	.1026	-.0004	907.4	-.0002	.0032	.0012
#3	.0015	.0018	.0001	.1032	-.0003	925.5	-.0002	.0035	.0017

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0013	1.127	30.79	367.2	F8.823	.0019	F531.0	.0016	.0054
Stddev	.0001	.006	.17	1.5	.035	.0002	5.3	.0001	.0014
%RSD	6.889	.5481	.5528	.3999	.3939	10.72	.9945	8.250	26.33
#1	-.0012	1.120	30.59	365.6	8.863	.0020	533.0	.0017	.0070
#2	-.0013	1.131	30.87	367.4	8.797	.0020	525.1	.0015	.0045
#3	-.0013	1.129	30.90	368.6	8.811	.0017	535.1	.0017	.0047

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0045	.0039	10.24	-.0002	F7.565	-.0039	.0052	-.0032	-.0005
Stddev	.0006	.0003	.02	.0003	.118	.0001	.0005	.0002	.0000
%RSD	13.33	8.214	.2370	123.5	1.559	3.328	10.56	5.736	4.415
#1	.0045	.0040	10.27	-.0001	7.470	-.0038	.0052	-.0032	-.0006
#2	.0039	.0035	10.22	.0000	7.697	-.0040	.0057	-.0031	-.0005
#3	.0051	.0042	10.23	-.0006	7.529	-.0040	.0046	-.0034	-.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2017.4	4510.7	42006.	6035.7
Stddev	6.3	12.0	187.	51.4
%RSD	.31216	.26633	.44483	.85079
#1	2010.3	4502.0	41791.	6073.9
#2	2022.4	4524.4	42133.	6055.8
#3	2019.4	4505.7	42093.	5977.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 12:59:36 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2502	40.16	2.055	2.010	1.988	39.18	2.062	2.051	2.048	2.041
Stddev	.0004	.22	.004	.011	.008	.25	.002	.001	.005	.003
%RSD	.1733	.5385	.2124	.5389	.3909	.6387	.0739	.0649	.2355	.1517
#1	.2506	40.38	2.050	2.023	1.993	39.47	2.060	2.052	2.054	2.040
#2	.2504	39.95	2.058	2.005	1.979	39.04	2.063	2.051	2.047	2.038
#3	.2498	40.14	2.057	2.003	1.991	39.04	2.062	2.049	2.045	2.044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.72	40.20	38.47	2.083	2.021	37.24	2.072	2.012	2.060	2.058
Stddev	.14	.26	.22	.003	.002	.16	.003	.003	.003	.003
%RSD	.3567	.6426	.5730	.1571	.0726	.4198	.1410	.1455	.1332	.1411
#1	38.84	40.40	38.65	2.087	2.019	37.31	2.069	2.010	2.057	2.056
#2	38.57	39.91	38.22	2.082	2.022	37.06	2.074	2.015	2.062	2.062
#3	38.75	40.28	38.54	2.081	2.020	37.34	2.073	2.011	2.062	2.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.792	2.014	2.016	2.071	2.038	2.007	2.034
Stddev	.001	.002	.013	.002	.003	.001	.003
%RSD	.0342	.0888	.6594	.0822	.1277	.0689	.1366
#1	1.791	2.016	2.031	2.072	2.038	2.006	2.035
#2	1.793	2.015	2.006	2.072	2.040	2.008	2.037
#3	1.792	2.013	2.010	2.069	2.035	2.008	2.031
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 12:59:36 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2620.4	5654.0	52878.	6545.7
Stddev	2.3	4.9	80.	39.6
%RSD	.08690	.08625	.15115	.60492
#1	2618.5	5649.3	52959.	6509.0
#2	2619.7	5659.1	52799.	6587.6
#3	2623.0	5653.6	52877.	6540.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 13:03:46 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0001	.0002	.0000	.0001	.0181	.0001	.0001	.0003	.0002
Stddev	.0004	.0092	.0009	.000	.0000	.0013	.0000	.0001	.0002	.0002
%RSD	282.7	7872.	499.4	850.9	28.77	7.128	15.34	159.8	60.78	122.7
#1	.0004	.0081	.0012	.0000	.0001	.0190	.0001	.0002	.0004	-.0001
#2	-.0003	.0022	.0001	-.0001	.0001	.0187	.0001	.0000	.0003	.0004
#3	.0004	-.0100	-.0007	.0000	.0002	.0166	.0001	.0000	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0090	.0588	-.0052	.0001	.0008	.1667	.0000	-.0003	.0003	-.0006
Stddev	.0022	.0324	.0063	.0000	.0004	.0107	.0002	.0005	.0009	.0013
%RSD	24.39	55.21	122.2	30.31	46.97	6.425	523.6	166.7	340.6	214.7
#1	.0108	.0912	-.0044	.0002	.0012	.1776	-.0001	-.0007	.0012	.0001
#2	.0096	.0587	-.0118	.0002	.0009	.1562	.0000	-.0005	.0003	.0002
#3	.0065	.0263	.0007	.0001	.0004	.1664	.0002	.0003	-.0007	-.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	-.0006	.0002	.0005	.0002	.0000	.0008
Stddev	.0036	.0001	.0001	.0001	.0008	.0001	.0000
%RSD	86.58	24.24	41.57	16.26	451.5	1286.	5.645
#1	.0022	-.0007	.0001	.0006	-.0002	-.0001	.0008
#2	.0084	-.0006	.0002	.0006	-.0004	.0000	.0009
#3	.0020	-.0004	.0001	.0004	.0011	.0001	.0008
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 13:03:46 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3008.2	5861.6	54908.	6550.6
Stddev	10.9	16.3	15.	32.8
%RSD	.36295	.27746	.02667	.49996
#1	2999.0	5858.9	54913.	6524.0
#2	3020.2	5879.1	54919.	6540.7
#3	3005.3	5846.9	54891.	6587.2

Zoom In Zoom Out

Sample Name: FA21590-8 Acquired: 1/23/2015 13:08:18 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0142	-.0015	.0439	-.0003	F622.2	-.0003	.0022	.0007
Stddev	.0005	.0120	.0003	.0003	.0001	8.2	.0000	.0002	.0001
%RSD	103.8	84.63	21.60	.5983	20.57	1.313	14.48	6.875	10.00
#1	-.0001	.0026	-.0018	.0442	-.0003	625.1	-.0002	.0024	.0007
#2	.0009	.0135	-.0012	.0439	-.0003	628.5	-.0003	.0021	.0008
#3	.0008	.0265	-.0014	.0437	-.0002	612.9	-.0003	.0023	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0007	.1901	12.61	235.1	2.665	.0010	F588.9	.0008	.0020
Stddev	.0002	.0019	.04	.8	.003	.0004	16.8	.0001	.0006
%RSD	26.64	1.009	.3374	.3296	.1037	37.72	2.852	11.41	31.93
#1	-.0009	.1923	12.59	235.0	2.669	.0013	596.0	.0009	.0022
#2	-.0005	.1888	12.57	236.0	2.664	.0013	600.9	.0007	.0026
#3	-.0007	.1893	12.65	234.4	2.664	.0006	569.7	.0007	.0013

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0021	.0045	9.005	-.0004	F4.369	-.0018	.0004	-.0012	.0001
Stddev	.0009	.0015	.023	.0002	.053	.0004	.0012	.0001	.0000
%RSD	42.36	33.24	.2565	53.76	1.224	23.85	322.9	9.314	24.82
#1	.0020	.0032	8.979	-.0002	4.427	-.0013	.0008	-.0012	.0001
#2	.0031	.0042	9.022	-.0006	4.322	-.0019	.0014	-.0010	.0001
#3	.0013	.0061	9.015	-.0003	4.358	-.0022	-.0010	-.0012	.0001

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2010.9	4527.3	41890.	6038.2
Stddev	4.1	11.4	42.	50.5
%RSD	.20572	.25231	.10043	.83675
#1	2014.1	4540.1	41879.	6035.4
#2	2012.4	4523.9	41936.	5989.2
#3	2006.2	4518.0	41854.	6090.1

Zoom In Zoom Out

Sample Name: FA21591-1 Acquired: 1/23/2015 13:13:11 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0082	.0128	.0461	-.0003	283.6	-.0002	.0017	.0008
Stddev	.0003	.0104	.0004	.0005	.0000	1.8	.0001	.0001	.0001
%RSD	129.6	126.5	3.254	1.157	12.13	.6372	31.35	4.446	12.42
#1	-.0001	-.0021	.0125	.0462	-.0002	281.5	-.0001	.0017	.0009
#2	.0006	.0188	.0126	.0466	-.0003	284.8	-.0003	.0018	.0008
#3	.0003	.0081	.0133	.0455	-.0002	284.5	-.0002	.0017	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0001	.7937	8.974	240.5	.3883	.0000	F578.1	.0007	.0007
Stddev	.0002	.0043	.059	1.4	.0008	.000	8.1	.0004	.0010
%RSD	256.6	.5376	.6609	.5659	.1963	685.5	1.400	66.97	156.7
#1	.0002	.7914	8.939	239.3	.3890	.0000	584.7	.0011	.0019
#2	-.0002	.7986	9.043	242.0	.3884	-.0001	580.4	.0002	.0001
#3	.0002	.7911	8.941	240.2	.3875	.0001	569.0	.0007	.0000

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0007	7.634	-.0005	2.359	-.0007	-.0029	-.0002	.0015
Stddev	.0007	.0014	.013	.0002	.010	.0002	.0012	.0004	.0000
%RSD	36.10	202.6	.1656	52.62	.4161	23.47	42.20	257.3	2.697
#1	.0019	.0015	7.643	-.0007	2.360	-.0008	-.0036	.0003	.0015
#2	.0025	.0014	7.641	-.0005	2.368	-.0005	-.0015	-.0005	.0015
#3	.0012	-.0009	7.620	-.0002	2.349	-.0006	-.0037	-.0003	.0015

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2025.2	4579.9	41855.	6049.4
Stddev	.4	13.9	67.	39.1
%RSD	.02208	.30314	.16093	.64555
#1	2025.0	4568.3	41799.	6089.4
#2	2024.9	4576.0	41836.	6011.4
#3	2025.7	4595.3	41930.	6047.5

Zoom In Zoom Out

Sample Name: FA21591-2 Acquired: 1/23/2015 13:17:56 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0346	-.0008	.0394	-.0001	237.3	-.0002	-.0002	.0010
Stddev	.0001	.0153	.0001	.0003	.0000	.3	.0000	.0000	.0001
%RSD	91.54	44.36	11.62	.7884	25.55	.1111	22.97	10.94	12.96
#1	.0001	.0296	-.0007	.0392	-.0001	237.0	-.0002	-.0002	.0009
#2	.0001	.0518	-.0008	.0398	-.0002	237.5	-.0001	-.0001	.0009
#3	.0000	.0223	-.0008	.0393	-.0001	237.4	-.0002	-.0002	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0006	.0312	6.649	217.8	.0049	.0001	F564.7	.0005	.0004
Stddev	.0003	.0006	.044	.5	.0000	.0003	6.2	.0003	.0006
%RSD	47.65	1.972	.6695	.2425	.6344	412.3	1.095	53.56	144.6
#1	.0003	.0316	6.605	217.5	.0049	.0004	570.5	.0004	-.0002
#2	.0007	.0315	6.694	218.4	.0049	-.0002	565.3	.0008	.0006
#3	.0007	.0305	6.649	217.4	.0049	.0001	558.2	.0003	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0007	.0042	7.298	-.0001	2.075	.0007	-.0032	.0014	.0007
Stddev	.0010	.0022	.017	.0001	.009	.0005	.0009	.0002	.0001
%RSD	145.9	51.35	.2315	154.9	.4081	68.72	27.45	14.73	12.64
#1	-.0001	.0020	7.289	.0000	2.071	.0006	-.0034	.0016	.0006
#2	.0004	.0063	7.289	-.0001	2.084	.0003	-.0023	.0014	.0008
#3	.0018	.0043	7.318	-.0001	2.069	.0013	-.0041	.0012	.0008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2070.2	4668.1	42567.	6093.7
Stddev	2.3	9.1	154.	13.8
%RSD	.11140	.19475	.36126	.22596
#1	2071.6	4673.7	42408.	6097.0
#2	2067.5	4672.9	42578.	6078.5
#3	2071.4	4657.6	42714.	6105.5

Zoom In Zoom Out

Sample Name: FA21589-1 Acquired: 1/23/2015 13:22:43 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0015	169.5	.0491	.4284	.0064	21.29	-.0002	.0256
Stddev	.0002	.4	.0011	.0009	.0001	.02	.0002	.0001
%RSD	11.89	.2317	2.224	.2084	1.872	.0736	99.14	.2890
#1	-.0013	169.5	.0490	.4294	.0064	21.28	-.0001	.0255
#2	-.0017	169.8	.0481	.4278	.0066	21.28	-.0001	.0256
#3	-.0016	169.0	.0503	.4279	.0063	21.31	-.0004	.0257

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2063	.0663	284.3	3.687	5.473	2.278	.0146	2.558
Stddev	.0002	.0006	3.4	.028	.016	.010	.0002	.010
%RSD	.0953	.8533	1.182	.7533	.2866	.4534	1.590	.3892
#1	.2063	.0666	283.2	3.661	5.475	2.285	.0147	2.560
#2	.2065	.0656	281.6	3.683	5.489	2.266	.0143	2.567
#3	.2061	.0666	288.0	3.717	5.457	2.283	.0147	2.547

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0691	.1385	F-.0078	.0009	47.10	.0053	.1139	.5417
Stddev	.0003	.0011	.0010	.0021	.10	.0002	.0003	.0001
%RSD	.4759	.8231	12.31	247.7	.2194	2.876	.2453	.0244
#1	.0695	.1372	-.0086	.0032	47.09	.0052	.1141	.5416
#2	.0688	.1392	-.0081	-.0008	47.01	.0054	.1138	.5417
#3	.0691	.1392	-.0067	.0002	47.21	.0054	.1136	.5419

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0078	.2794	.3755
Stddev	.0013	.0001	.0009
%RSD	17.23	.0494	.2312
#1	-.0069	.2795	.3746
#2	-.0094	.2795	.3763
#3	-.0071	.2793	.3756

Zoom In Zoom Out

Sample Name: FA21589-1 Acquired: 1/23/2015 13:22:43 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2758.7	6266.3	57920.	7267.8
Stddev	4.4	12.9	26.	17.0
%RSD	.16100	.20647	.04456	.23372
#1	2761.2	6271.3	57915.	7287.4
#2	2753.6	6275.9	57897.	7257.9
#3	2761.4	6251.6	57948.	7258.0

Zoom In Zoom Out

Sample Name: FA21589-2 Acquired: 1/23/2015 13:27:18 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0016	103.6	.0182	.9891	.0146	77.19	-.0003	.0366
Stddev	.0003	.2	.0001	.0036	.0001	.40	.0000	.0001
%RSD	16.31	.2051	.6383	.3598	.7603	.5183	7.264	.1414
#1	-.0018	103.4	.0182	.9863	.0145	76.82	-.0003	.0366
#2	-.0015	103.8	.0181	.9931	.0147	77.61	-.0004	.0367
#3	-.0013	103.6	.0183	.9878	.0146	77.14	-.0004	.0366

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2095	.0537	107.4	3.448	6.447	.2110	.0039	13.20
Stddev	.0010	.0001	.3	.022	.032	.0010	.0002	.01
%RSD	.4850	.1255	.2717	.6363	.4914	.4971	4.649	.0862
#1	.2088	.0538	107.0	3.423	6.427	.2100	.0040	13.21
#2	.2107	.0537	107.6	3.466	6.429	.2121	.0040	13.21
#3	.2091	.0536	107.5	3.454	6.483	.2109	.0037	13.19

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0417	.6248	-.0042	.0029	68.81	.0023	.5105	.0433
Stddev	.0002	.0024	.0013	.0011	.17	.0002	.0016	.0001
%RSD	.4438	.3794	30.94	37.57	.2472	9.304	.3136	.2106
#1	.0419	.6234	-.0027	.0036	69.01	.0024	.5090	.0433
#2	.0416	.6235	-.0049	.0016	68.71	.0021	.5122	.0434
#3	.0416	.6276	-.0050	.0034	68.72	.0024	.5103	.0432

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0126	.2023	.0786
Stddev	.0013	.0007	.0002
%RSD	10.27	.3591	.1943
#1	-.0131	.2018	.0788
#2	-.0136	.2032	.0785
#3	-.0112	.2021	.0786

Zoom In Zoom Out

Sample Name: FA21589-2 Acquired: 1/23/2015 13:27:18 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2670.1	7786.1	72395.	9116.7
Stddev	4.9	12.8	334.	49.3
%RSD	.18384	.16381	.46084	.54038
#1	2672.4	7771.6	72769.	9173.5
#2	2673.5	7791.4	72128.	9090.1
#3	2664.5	7795.4	72289.	9086.4

Zoom In Zoom Out

Sample Name: FA21589-3 Acquired: 1/23/2015 13:31:37 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0011	171.5	.0277	.4437	.0027	53.35	-.0005	.0106	.1927	.0664
Stddev	.0004	.3	.0012	.0003	.0000	.25	.0001	.0001	.0003	.0004
%RSD	39.56	.1800	4.434	.0732	1.506	.4602	9.854	.9259	.1442	.5564
#1	-.0014	171.7	.0268	.4433	.0027	53.44	-.0005	.0107	.1927	.0667
#2	-.0006	171.1	.0273	.4439	.0027	53.07	-.0005	.0106	.1930	.0660
#3	-.0012	171.6	.0291	.4438	.0027	53.54	-.0006	.0105	.1925	.0664

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	220.6	4.475	6.762	2.196	.0034	1.728	.0508	.1037	-.0046	-.0010
Stddev	.7	.026	.029	.014	.0002	.003	.0002	.0009	.0009	.0008
%RSD	.3179	.5866	.4212	.6568	4.648	.1903	.4435	.8234	20.32	88.42
#1	220.8	4.449	6.791	2.179	.0036	1.724	.0510	.1027	-.0055	-.0019
#2	219.8	4.502	6.734	2.204	.0033	1.730	.0509	.1041	-.0036	-.0002
#3	221.2	4.474	6.761	2.205	.0033	1.728	.0506	.1043	-.0046	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	36.88	.0053	.1954	.4169	-.0073	.2288	.4668
Stddev	.06	.0005	.0002	.0014	.0014	.0005	.0007
%RSD	.1612	8.720	.0907	.3459	18.69	.2187	.1430
#1	36.91	.0056	.1952	.4173	-.0070	.2292	.4672
#2	36.81	.0048	.1955	.4153	-.0061	.2283	.4660
#3	36.93	.0055	.1956	.4181	-.0088	.2289	.4672

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2756.1	6196.7	57525.	7206.9
Stddev	4.0	9.8	84.	62.9
%RSD	.14661	.15860	.14558	.87331
#1	2751.5	6185.3	57620.	7143.0
#2	2759.1	6202.4	57493.	7268.9
#3	2757.7	6202.3	57462.	7208.9

Zoom In Zoom Out

Sample Name: FA21589-4 Acquired: 1/23/2015 13:36:06 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	88.73	.0121	.5056	.0033	84.40	-.0004	.0068	.1869	.0395
Stddev	.0002	.15	.0009	.0019	.0000	.18	.0001	.0001	.0009	.0000
%RSD	50.25	.1746	7.208	.3732	.6314	.2079	23.49	.8920	.4821	.0932
#1	-.0004	88.65	.0130	.5037	.0033	84.60	-.0003	.0068	.1870	.0396
#2	-.0003	88.91	.0112	.5075	.0033	84.31	-.0004	.0068	.1878	.0395
#3	-.0007	88.63	.0123	.5055	.0033	84.28	-.0005	.0067	.1860	.0396

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	111.7	4.604	5.858	.4259	.0041	16.10	.0277	.2517	-.0032	.0009
Stddev	.2	.001	.031	.0009	.0001	.07	.0002	.0007	.0015	.0011
%RSD	.1560	.0229	.5279	.2133	1.962	.4504	.6514	.2675	48.02	129.0
#1	111.7	4.604	5.893	.4259	.0040	16.04	.0279	.2525	-.0015	-.0002
#2	111.9	4.605	5.838	.4268	.0042	16.18	.0275	.2514	-.0046	.0007
#3	111.5	4.603	5.841	.4250	.0042	16.07	.0278	.2512	-.0035	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	48.28	.0120	.3856	.0949	-.0050	.2115	.1198
Stddev	.09	.0001	.0011	.0003	.0003	.0008	.0001
%RSD	.1822	1.227	.2803	.3183	5.960	.4002	.1054
#1	48.36	.0122	.3849	.0952	-.0049	.2123	.1197
#2	48.19	.0119	.3868	.0949	-.0054	.2116	.1198
#3	48.31	.0121	.3850	.0946	-.0048	.2106	.1200

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2714.6	6109.2	56984.	7106.8
Stddev	.6	6.8	244.	25.6
%RSD	.02093	.11051	.42853	.36082
#1	2715.0	6102.5	57004.	7077.4
#2	2714.8	6116.0	56730.	7118.3
#3	2713.9	6109.0	57217.	7124.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/23/2015 13:40:26 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0101	.2169	.0110	.2100	.0050	1.027	.0052	.0545	.0106	.0267
Stddev	.0005	.0031	.0004	.0003	.0000	.001	.0000	.0003	.0002	.0002
%RSD	4.848	1.438	3.560	.1482	1.008	.0645	.1265	.5724	1.509	.7875
#1	.0097	.2146	.0114	.2098	.0049	1.027	.0052	.0548	.0107	.0265
#2	.0099	.2155	.0111	.2099	.0050	1.027	.0052	.0545	.0104	.0269
#3	.0106	.2204	.0106	.2104	.0049	1.028	.0052	.0542	.0107	.0267

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3342	10.56	4.933	.0165	.0496	10.38	.0444	.0048	.0044	.0101
Stddev	.0041	.05	.021	.0000	.0004	.07	.0001	.0003	.0008	.0006
%RSD	1.233	.4476	.4231	.1595	.7468	.6800	.2757	5.894	17.97	6.297
#1	.3347	10.51	4.922	.0165	.0500	10.30	.0446	.0046	.0035	.0104
#2	.3380	10.60	4.919	.0165	.0496	10.39	.0443	.0048	.0051	.0093
#3	.3298	10.57	4.957	.0164	.0493	10.44	.0444	.0051	.0046	.0105

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0405	.0527	.0100	.0096	.0097	.0502	.0216
Stddev	.0012	.0004	.0001	.0000	.0003	.0005	.0002
%RSD	2.849	.8173	.9166	.3040	2.744	.9808	1.045
#1	.0414	.0532	.0101	.0096	.0094	.0500	.0218
#2	.0409	.0524	.0100	.0097	.0098	.0498	.0215
#3	.0392	.0525	.0100	.0096	.0099	.0507	.0214

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2960.0	5881.2	54485.	6562.5
Stddev	12.3	24.4	137.	22.4
%RSD	.41665	.41435	.25176	.34182
#1	2949.1	5859.6	54575.	6587.9
#2	2957.6	5876.5	54552.	6554.4
#3	2973.4	5907.6	54327.	6545.2

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/23/2015 13:44:50 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	492.0	.0008	.0001	-.0003	445.6	-.0003	.0004	-.0001	-.0007
Stddev	.0001	6.3	.0009	.0000	.0001	5.1	.0001	.0001	.0001	.0001
%RSD	7.463	1.289	110.9	32.84	30.75	1.145	30.49	23.35	76.53	11.43
#1	-.0007	498.6	.0018	.0001	-.0003	451.4	-.0004	.0005	-.0001	-.0008
#2	-.0008	486.0	.0007	.0002	-.0002	443.7	-.0003	.0003	-.0002	-.0006
#3	-.0009	491.2	.0000	.0001	-.0003	441.8	-.0002	.0004	-.0001	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	167.1	.1318	453.8	.0003	-.0009	.2598	.0003	-.0033	-.0017	-.0026
Stddev	1.4	.0155	4.7	.0000	.0002	.0150	.0003	.0022	.0016	.0021
%RSD	.8336	11.75	1.025	7.904	22.02	5.760	121.3	67.38	94.37	78.80
#1	168.6	.1458	458.3	.0003	-.0010	.2733	.0006	-.0059	-.0035	-.0049
#2	167.0	.1345	454.1	.0002	-.0010	.2623	.0002	-.0020	-.0010	-.0010
#3	165.8	.1152	449.0	.0003	-.0007	.2437	.0000	-.0021	-.0005	-.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0318	.0014	-.0001	.0002	.0002	.0004	-.0013
Stddev	.0005	.0006	.0000	.0000	.0014	.0002	.0001
%RSD	1.429	45.21	29.66	22.29	826.2	58.16	9.927
#1	.0316	.0021	-.0002	.0003	-.0009	.0005	-.0014
#2	.0314	.0012	-.0001	.0002	.0018	.0005	-.0013
#3	.0323	.0009	-.0001	.0002	-.0004	.0001	-.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2320.4	5276.4	48406.	6233.3
Stddev	5.9	5.2	92.	35.3
%RSD	.25476	.09929	.18947	.56610
#1	2327.2	5276.7	48358.	6198.0
#2	2316.2	5281.4	48348.	6233.1
#3	2317.9	5270.9	48512.	6268.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/23/2015 13:49:28 Type: Unk
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.031	499.7	1.064	.5177	.4951	443.6	.9248	.4780	.4895
Stddev	.003	5.9	.003	.0011	.0014	1.3	.0004	.0003	.0008
%RSD	.2408	1.172	.2498	.2162	.2826	.3016	.0415	.0633	.1671
#1	1.028	498.0	1.064	.5172	.4937	444.7	.9245	.4782	.4894
#2	1.031	506.2	1.067	.5190	.4965	443.9	.9247	.4782	.4904
#3	1.033	494.8	1.062	.5169	.4951	442.1	.9252	.4777	.4888

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5585	172.9	.0651	462.8	.5091	.9315	.2032	.9591	.9623
Stddev	.0013	.6	.0329	1.5	.0011	.0010	.0106	.0004	.0034
%RSD	.2403	.3556	50.57	.3337	.2087	.1066	5.225	.0403	.3495
#1	.5589	172.4	.0705	461.3	.5101	.9318	.2137	.9587	.9628
#2	.5570	173.6	.0949	464.4	.5080	.9322	.2035	.9595	.9587
#3	.5596	172.8	.0298	462.6	.5094	.9303	.1925	.9590	.9654

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.066	1.013	.0523	.9323	1.012	1.007	.9772	.4720	.9374
Stddev	.003	.002	.0016	.0010	.004	.003	.0023	.0014	.0014
%RSD	.2661	.2013	3.016	.1030	.3948	.2586	.2336	.3013	.1540
#1	1.069	1.012	.0530	.9315	1.009	1.009	.9756	.4704	.9358
#2	1.064	1.016	.0535	.9320	1.017	1.004	.9798	.4726	.9380
#3	1.064	1.012	.0505	.9333	1.010	1.009	.9762	.4730	.9384

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2267.8	5221.7	47625.	6174.3
Stddev	3.5	5.9	164.	32.7
%RSD	.15379	.11332	.34396	.53024
#1	2271.9	5218.9	47616.	6209.4
#2	2265.9	5217.7	47793.	6144.5
#3	2265.7	5228.5	47466.	6169.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 13:53:57 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2499	40.88	2.048	2.042	2.005	39.26	2.050	2.045	2.051	2.055
Stddev	.0002	.09	.006	.005	.002	.18	.009	.007	.004	.004
%RSD	.0932	.2244	.2809	.2434	.1049	.4604	.4328	.3408	.1876	.2037
#1	.2498	40.80	2.048	2.036	2.003	39.06	2.052	2.049	2.047	2.055
#2	.2498	40.98	2.054	2.043	2.007	39.29	2.058	2.050	2.053	2.059
#3	.2502	40.87	2.043	2.046	2.004	39.42	2.041	2.037	2.055	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.09	41.57	38.69	2.075	2.021	40.74	2.058	2.005	2.055	2.051
Stddev	.06	.12	.12	.005	.005	.06	.007	.014	.005	.006
%RSD	.1573	.2882	.3075	.2602	.2616	.1503	.3289	.6847	.2509	.3048
#1	39.03	41.44	38.65	2.069	2.020	40.78	2.059	2.008	2.055	2.051
#2	39.15	41.67	38.59	2.076	2.026	40.77	2.065	2.016	2.060	2.056
#3	39.10	41.60	38.82	2.080	2.016	40.67	2.051	1.989	2.050	2.044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.793	2.012	2.055	2.069	2.031	2.018	2.030
Stddev	.004	.010	.004	.005	.015	.002	.011
%RSD	.2454	.5129	.1952	.2664	.7134	.1120	.5271
#1	1.795	2.016	2.051	2.063	2.034	2.015	2.035
#2	1.796	2.019	2.055	2.073	2.044	2.019	2.038
#3	1.788	2.000	2.059	2.072	2.015	2.019	2.018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/23/2015 13:53:57 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2619.3	5653.5	52599.	6387.4
Stddev	10.3	11.7	89.	20.4
%RSD	.39311	.20675	.16878	.31973
#1	2613.1	5645.2	52656.	6410.0
#2	2613.6	5648.4	52644.	6370.2
#3	2631.2	5666.9	52497.	6382.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 13:58:08 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	-.0001	.0000	.0001	.0077	.0000	-.0001	.0001	.0002
Stddev	.000	.001	.0007	.000	.0001	.0015	.0000	.0001	.0001	.0002
%RSD	764.5	3257.	647.2	499.7	101.3	19.13	67.36	137.1	137.8	79.37
#1	-.0002	.0008	-.0006	-.0001	.0001	.0090	.0000	.0000	.0002	.0003
#2	.0000	-.0015	.0007	.0001	.0001	.0079	.0001	-.0001	.0000	.0003
#3	.0001	.0006	-.0004	-.0001	.0000	.0061	.0000	-.0002	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0124	.0218	.0033	-.0001	.0007	.0497	-.0001	-.0001	.0000	-.0002
Stddev	.0010	.0392	.0021	.0000	.0002	.0068	.0002	.0003	.0005	.0005
%RSD	8.183	179.8	64.71	19.09	35.51	13.77	145.2	239.3	2404.	258.2
#1	.0129	.0598	.0012	-.0001	.0009	.0569	.0001	.0000	.0006	.0003
#2	.0132	-.0184	.0054	-.0001	.0006	.0490	-.0003	-.0005	-.0002	-.0003
#3	.0113	.0240	.0032	-.0001	.0004	.0432	-.0001	.0001	-.0003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020	-.0004	-.0001	.0001	.0002	-.0001	.0005
Stddev	.0003	.0003	.0001	.0001	.0006	.0000	.0001
%RSD	13.97	70.82	80.14	122.3	404.7	49.30	16.25
#1	.0019	-.0001	-.0001	.0002	.0008	-.0001	.0006
#2	.0023	-.0003	.0000	.0001	.0000	.0000	.0005
#3	.0018	-.0007	-.0001	.0000	-.0004	-.0001	.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/23/2015 13:58:08 Type: QC
Method: 60102007_042011(v81) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3017.0	5874.9	55143.	6522.7
Stddev	9.5	19.2	296.	24.9
%RSD	.31574	.32635	.53748	.38123
#1	3013.7	5878.7	54843.	6551.2
#2	3009.6	5854.2	55436.	6505.1
#3	3027.8	5891.9	55152.	6511.8

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	2	V	-0.007608	0.000000	No
			Fe	0.000010	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.040330	0.000000	No
As 189.042 {478}	X	4	Fe	-0.000093	0.000000	No
			Cr	-0.000129	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000005	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000008	0.000000	No
Be 313.042 {108}	X	2	V	0.000042	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000081	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	4	Al	0.000001	0.000000	No
			Fe	-0.000009	0.000000	No
			Ca	-0.000000	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	X	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000124	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000001	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000023	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	X	8	Al	0.000239	0.000000	No
			Fe	-0.000038	0.000000	No
			Mo	-0.001466	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000200	0.000000	No
			Ca	-0.000009	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	X	11	Fe	0.000062	0.000000	No
			Cr	0.006369	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.002569	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	-0.000005	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000006	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000000	0.000000	No
Se 196.090 {472}	X	12	Fe	0.000002	0.000000	No
			Ca	0.000004	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000025	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	X	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	X	None				
Sr 407.771 { 83}	X	1	Ca	0.000003	0.000000	No
Ti 334.941 {101}	X	1	Ca	-0.000017	0.000000	No
Tl 190.856 {477}	X	10	Co	0.003248	0.000000	No
			Fe	0.000032	0.000000	No
			Al	-0.000022	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000001	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	X	5	Fe	-0.000006	0.000000	No
			Cr	-0.001960	0.000000	No
			Mo	-0.004535	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	X	None				
Y 360.073 { 94}*	X	None				
Y 371.030 { 91}*	X	None				
Zn 206.200 {463}	X	5	Cr	-0.001305	0.000000	No
			Al	0.000000	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000020	0.000000	No
			As	0.001105	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000463	0.503916	0.000000	1.000000
	Al 396.152 { 85}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000313	0.146870	0.000000	1.000000
	As 189.042 {478}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000639	0.163435	0.000000	1.000000
	Ba 455.403 { 74}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.001719	7.990716	0.000000	1.000000
	Be 313.042 {108}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.001679	6.948866	0.000000	1.000000
	Ca 317.933 {106}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.008018	0.220430	0.000000	1.000000
	Cd 226.502 {449}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000761	4.218859	0.000000	1.000000
	Co 228.616 {447}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000189	2.296126	0.000000	1.000000
	Cr 267.716 {126}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000018	0.384529	0.000000	1.000000
	Cu 324.754 {104}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.005566	0.646996	0.000000	1.000000
	Fe 259.940 {130}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.002528	0.165572	0.000000	1.000000
	In 230.606 {446}*	1/23/2015 10:01:41	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.007557	0.061144	0.000000	1.000000
	Mg 279.079 {121}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000011	0.023143	0.000000	1.000000
	Mn 257.610 {131}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000999	2.239815	0.000000	1.000000
	Mo 202.030 {467}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.001257	1.037558	0.000000	1.000000
	Na 589.592 { 57}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.004282	0.223119	0.000000	1.000000
	Ni 231.604 {445}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000404	1.294274	0.000000	1.000000
	Pb 220.353 {453}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000267	0.739351	0.000000	1.000000
	Sb 206.833 {463}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000706	0.219050	0.000000	1.000000
	Se 196.090 {472}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000052	0.120999	0.000000	1.000000
	Si 212.412 {459}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.004651	0.328412	0.000000	1.000000
	Sn 189.989 {477}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.000848	0.394919	0.000000	1.000000
	Sr 407.771 { 83}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.002813	11.400438	0.000000	1.000000
	Ti 334.941 {101}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.002147	1.497758	0.000000	1.000000
	Tl 190.856 {477}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.001533	0.283272	0.000000	1.000000
	V 292.402 {115}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	-0.000437	0.454899	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	1/23/2015 10:01:41	1/23/2015 9:24:15	Linear	1/Conc	0.001932	2.254722	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999994	0.000017	0.000343	0.001143	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999964	0.002007	0.007730	0.025767	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999987	0.000067	0.000838	0.002792	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999875	0.010175	0.000179	0.000598	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999871	0.008971	0.000074	0.000247	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999843	0.006287	0.002824	0.009414	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999874	0.005394	0.000049	0.000164	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999846	0.003250	0.000100	0.000334	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999820	0.000587	0.000261	0.000870	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999908	0.000703	0.000234	0.000779	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999753	0.005928	0.001985	0.006616	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999936	0.001115	0.030538	0.101793	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999934	0.000427	0.017721	0.059069	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999595	0.005135	0.000042	0.000139	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999990	0.000366	0.000134	0.000446	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999944	0.003805	0.008870	0.029568	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999868	0.001692	0.000180	0.000601	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999973	0.000435	0.000630	0.002099	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999988	0.000086	0.000991	0.003303	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999973	0.000072	0.001650	0.005499	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.993392	0.003114	0.000467	0.001556	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999957	0.000295	0.000295	0.000982	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999768	0.019768	0.000080	0.000266	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999906	0.001650	0.000105	0.000351	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999989	0.000105	0.001012	0.003373	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999969	0.000286	0.000275	0.000917	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999827	0.003376	0.000070	0.000234	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 1/28/2015 10:05:10 Type: Cal
Method: 60102007_042011(v90) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0011	.0010	-.0005	.0033	.0054	.0076	.0034	.0019	.0002
Stddev	.0000	.0017	.0001	.0013	.0003	.0003	.0001	.0002	.0000
%RSD	.9769	164.5	18.89	39.71	5.534	3.759	3.124	9.246	26.07
#1	.0010	.0026	-.0005	.0046	.0058	.0075	.0034	.0017	.0002
#2	.0011	-.0008	-.0006	.0032	.0052	.0080	.0035	.0021	.0002
#3	.0011	.0013	-.0004	.0020	.0054	.0075	.0034	.0019	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0063	.0079	.0052	.0001	.0019	.0109	-.0039	.0011	.0014
Stddev	.0002	.0004	.0022	.0006	.0001	.0029	.0035	.0002	.0002
%RSD	3.377	5.393	42.35	500.2	6.491	26.45	88.47	21.15	14.40
#1	.0060	.0083	.0063	-.0004	.0020	.0138	.0001	.0009	.0012
#2	.0064	.0076	.0027	.0007	.0019	.0107	-.0057	.0011	.0015
#3	.0064	.0077	.0066	.0001	.0018	.0081	-.0061	.0013	.0016

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0009	.0000	.0052	.0014	.0069	.0080	-.0010	-.0006	.0048
Stddev	.0002	.000	.0002	.0002	.0010	.0004	.0003	.0001	.0001
%RSD	27.39	292.1	4.066	11.60	14.11	4.830	29.44	12.00	1.109
#1	.0010	.0000	.0054	.0015	.0072	.0084	-.0009	-.0006	.0049
#2	.0010	.0000	.0051	.0015	.0058	.0080	-.0013	-.0005	.0049
#3	.0006	-.0001	.0050	.0012	.0077	.0076	-.0008	-.0006	.0048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3066.9	5847.8	52152.	5157.0
Stddev	.8	13.9	152.	36.0
%RSD	.02528	.23825	.29081	.69773
#1	3067.8	5841.4	52325.	5198.4
#2	3066.4	5838.3	52045.	5132.7
#3	3066.5	5863.8	52084.	5140.0

Sample Name: LowStd Acquired: 1/28/2015 10:08:50 Type: Cal
Method: 60102007_042011(v90) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0337	1.581	.0976	3.966	3.777	2.471	2.599	1.321	.2329	.3549
Stddev	.0004	.008	.0000	.003	.012	.005	.004	.002	.0005	.0009
%RSD	1.288	.5199	.0284	.0782	.3230	.2049	.1426	.1710	.2155	.2621
#1	.0336	1.582	.0976	3.968	3.768	2.474	2.599	1.321	.2324	.3541
#2	.0341	1.588	.0977	3.967	3.791	2.473	2.603	1.323	.2334	.3559
#3	.0333	1.572	.0976	3.963	3.772	2.465	2.595	1.318	.2329	.3547

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.681	.7039	.2327	1.412	.5660	2.560	.8069	.4356	.1267	.0716
Stddev	.004	.0019	.0022	.002	.0004	.002	.0015	.0011	.0003	.0003
%RSD	.2084	.2702	.9428	.1454	.0671	.0619	.1887	.2582	.2223	.3715
#1	1.681	.7060	.2323	1.410	.5663	2.561	.8080	.4345	.1269	.0718
#2	1.684	.7027	.2351	1.413	.5660	2.561	.8075	.4368	.1264	.0717
#3	1.677	.7028	.2307	1.414	.5656	2.558	.8052	.4356	.1269	.0713

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1518	.2277	6.200	.8942	.1655	.2783	1.486
Stddev	.0002	.0003	.025	.0015	.0005	.0006	.004
%RSD	.1366	.1528	.3972	.1637	.3044	.2071	.2430
#1	.1521	.2278	6.186	.8946	.1657	.2777	1.488
#2	.1517	.2280	6.229	.8954	.1660	.2788	1.488
#3	.1517	.2273	6.186	.8926	.1650	.2784	1.481

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2847.0	5763.5	50893.	5144.2
Stddev	1.2	5.8	207.	63.1
%RSD	.04268	.10021	.40658	1.2265
#1	2847.4	5763.1	51126.	5105.8
#2	2845.7	5757.9	50822.	5109.7
#3	2848.0	5769.4	50731.	5217.0

Sample Name: MidStd Acquired: 1/28/2015 10:12:36 Type: Cal
Method: 60102007_042011(v90) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1302	6.357	.4041	16.03	15.39	9.850	10.46	5.282	.9316	1.412
Stddev	.0007	.015	.0004	.05	.02	.030	.01	.005	.0036	.007
%RSD	.5014	.2291	.0997	.3213	.1618	.3089	.1051	.1013	.3851	.5066
#1	.1299	6.354	.4043	16.01	15.36	9.833	10.47	5.286	.9292	1.410
#2	.1297	6.373	.4037	16.09	15.41	9.885	10.45	5.276	.9357	1.406
#3	.1309	6.345	.4044	15.99	15.39	9.832	10.46	5.283	.9299	1.420

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6.575	2.827	.9315	5.621	2.276	10.44	3.216	1.806	.5167	.2935
Stddev	.014	.012	.0047	.021	.002	.01	.004	.003	.0005	.0003
%RSD	.2087	.4094	.5038	.3650	.0744	.0953	.1372	.1589	.0936	.0886
#1	6.565	2.819	.9304	5.607	2.278	10.43	3.221	1.809	.5172	.2937
#2	6.591	2.822	.9367	5.644	2.274	10.43	3.212	1.803	.5163	.2935
#3	6.570	2.840	.9275	5.611	2.276	10.45	3.214	1.807	.5166	.2932

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.6574	.9027	25.39	3.604	.6795	1.136	5.959
Stddev	.0008	.0008	.06	.009	.0004	.005	.019
%RSD	.1191	.0921	.2241	.2592	.0629	.4197	.3181
#1	.6582	.9026	25.32	3.595	.6799	1.132	5.977
#2	.6567	.9020	25.42	3.614	.6791	1.141	5.939
#3	.6573	.9036	25.42	3.603	.6795	1.135	5.962

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2582.3	5507.4	49079.	5062.1
Stddev	1.8	5.8	102.	14.2
%RSD	.06841	.10567	.20722	.28041
#1	2580.6	5504.3	49144.	5076.0
#2	2582.3	5514.1	48962.	5062.8
#3	2584.1	5503.7	49132.	5047.6

Sample Name: HighStd Acquired: 1/28/2015 10:21:32 Type: Cal
Method: 60102007_042011(v90) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2579	12.48	.8001	30.85	29.65	19.22	20.19	10.19	1.798	2.722
Stddev	.0003	.04	.0021	.10	.05	.07	.04	.01	.001	.019
%RSD	.1034	.3086	.2636	.3335	.1711	.3686	.1841	.1255	.0657	.7131
#1	.2578	12.44	.8022	30.79	29.60	19.16	20.23	10.20	1.797	2.700
#2	.2582	12.47	.8001	30.79	29.65	19.21	20.20	10.19	1.799	2.736
#3	.2578	12.52	.7980	30.97	29.70	19.30	20.16	10.18	1.799	2.730

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	12.65	5.559	1.810	10.65	4.505	20.32	6.227	3.625	1.013	.5750
Stddev	.05	.021	.007	.06	.008	.04	.017	.007	.003	.0011
%RSD	.3854	.3701	.3729	.5513	.1738	.1725	.2702	.1961	.2632	.1850
#1	12.60	5.548	1.802	10.71	4.513	20.29	6.246	3.630	1.016	.5762
#2	12.65	5.546	1.811	10.60	4.504	20.30	6.220	3.629	1.012	.5743
#3	12.70	5.582	1.816	10.63	4.498	20.36	6.214	3.617	1.011	.5745

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.674	1.770	49.17	7.005	1.341	2.269	11.59
Stddev	.004	.001	.74	.067	.003	.014	.03
%RSD	.2362	.0677	1.501	.9617	.2298	.6001	.2274
#1	1.679	1.771	49.82	7.072	1.344	2.254	11.62
#2	1.674	1.770	48.37	6.937	1.339	2.279	11.59
#3	1.671	1.769	49.32	7.005	1.339	2.275	11.57

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2373.7	5267.0	47473.	5000.3
Stddev	3.0	6.4	135.	31.6
%RSD	.12587	.12197	.28492	.63238
#1	2374.3	5264.3	47457.	5031.4
#2	2370.5	5262.4	47616.	5001.5
#3	2376.4	5274.3	47347.	4968.1

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/28/2015 10:26:39 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4861	77.57	3.877	3.864	3.857	77.86	3.838	3.821	3.814	3.839
Stddev	.0011	.38	.017	.010	.015	.22	.013	.011	.006	.004
%RSD	.2217	.4938	.4372	.2647	.3840	.2855	.3424	.2882	.1596	.1171
#1	.4873	77.94	3.890	3.872	3.872	78.11	3.850	3.832	3.819	3.845
#2	.4853	77.61	3.858	3.866	3.856	77.77	3.824	3.810	3.807	3.836
#3	.4856	77.18	3.882	3.853	3.843	77.70	3.841	3.822	3.815	3.837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	76.72	78.19	76.91	3.822	3.864	77.38	3.843	3.882	3.865	3.861
Stddev	.36	.25	.26	.027	.009	.38	.016	.021	.010	.006
%RSD	.4708	.3173	.3408	.7011	.2469	.4902	.4140	.5306	.2483	.1463
#1	77.08	78.46	77.22	3.815	3.872	77.68	3.858	3.900	3.871	3.865
#2	76.70	78.16	76.76	3.800	3.854	77.51	3.826	3.859	3.854	3.855
#3	76.36	77.96	76.77	3.852	3.866	76.95	3.846	3.886	3.871	3.864
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.281	3.842	3.910	3.869	3.861	3.884	3.849
Stddev	.010	.014	.025	.047	.014	.011	.022
%RSD	.2373	.3725	.6456	1.214	.3526	.2769	.5828
#1	4.292	3.858	3.932	3.866	3.876	3.889	3.867
#2	4.271	3.830	3.916	3.824	3.848	3.872	3.824
#3	4.280	3.838	3.882	3.918	3.860	3.891	3.857
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/28/2015 10:26:39 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2447.4	5413.4	48542.	5066.5
Stddev	10.3	12.7	102.	16.8
%RSD	.42169	.23425	.21103	.33127
#1	2437.6	5402.1	48496.	5047.5
#2	2458.2	5427.1	48659.	5073.1
#3	2446.5	5410.9	48470.	5079.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/28/2015 10:33:16 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2410	38.10	1.943	1.962	1.946	39.62	1.917	1.941	1.922	1.883
Stddev	.0001	.05	.001	.006	.001	.05	.002	.001	.005	.003
%RSD	.0523	.1309	.0544	.2882	.0471	.1307	.1090	.0473	.2849	.1407
#1	.2410	38.04	1.943	1.956	1.945	39.60	1.917	1.941	1.917	1.886
#2	.2412	38.12	1.944	1.961	1.945	39.59	1.920	1.942	1.922	1.882
#3	.2409	38.14	1.942	1.968	1.947	39.68	1.916	1.940	1.928	1.881
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.64	39.55	37.66	1.983	1.820	39.02	1.993	1.895	1.923	1.940
Stddev	.05	.08	.15	.003	.001	.03	.003	.001	.006	.005
%RSD	.1286	.1993	.3985	.1467	.0796	.0776	.1274	.0462	.3270	.2473
#1	38.58	39.49	37.54	1.980	1.818	38.99	1.990	1.895	1.916	1.935
#2	38.67	39.64	37.83	1.982	1.821	39.05	1.995	1.896	1.925	1.942
#3	38.65	39.52	37.61	1.986	1.820	39.02	1.993	1.894	1.929	1.944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0326	1.932	1.909	1.918	1.978	1.846	1.951
Stddev	.0008	.003	.001	.003	.003	.007	.004
%RSD	2.431	.1688	.0482	.1362	.1531	.3744	.1857
#1	.0334	1.930	1.908	1.916	1.979	1.841	1.949
#2	.0318	1.936	1.908	1.917	1.975	1.844	1.955
#3	.0326	1.930	1.910	1.921	1.981	1.854	1.949
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/28/2015 10:33:16 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2649.7	5586.1	49727.	5186.4
Stddev	4.0	14.3	234.	6.3
%RSD	.15182	.25614	.46967	.12087
#1	2650.9	5594.1	49931.	5179.2
#2	2645.2	5569.6	49472.	5190.7
#3	2653.0	5594.7	49778.	5189.2

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/28/2015 10:39:24 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0138	.0004	-.0004	-.0005	-.0167	-.0003	-.0004
Stddev	.0002	.0091	.0006	.0002	.0000	.0002	.0003	.0004
%RSD	139.1	65.81	179.7	47.91	9.571	1.315	91.92	82.78
#1	.0000	-.0243	.0007	-.0003	-.0004	-.0169	.0000	.0000
#2	-.0004	-.0077	-.0004	-.0006	-.0005	-.0165	-.0005	-.0007
#3	-.0001	-.0095	.0008	-.0002	-.0005	-.0167	-.0005	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0001	-.0247	.0814	.0007	-.0002	F-.0037	.0080
Stddev	.0002	.0003	.0020	.0526	.0217	.0002	.0013	.0070
%RSD	104.6	641.7	7.921	64.59	3330.	99.48	36.45	87.32
#1	-.0004	.0003	-.0247	.0209	-.0169	-.0003	-.0022	.0080
#2	-.0003	-.0003	-.0227	.1159	.0249	-.0003	-.0039	.0010
#3	.0000	.0002	-.0266	.1075	-.0061	.0000	-.0049	.0150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0010	-.0002	-.0005	-.0012	-.0002	-.0004	-.0013
Stddev	.0005	.0003	.0004	.0010	.0002	.0003	.0000	.0000
%RSD	234.9	29.32	222.5	185.9	13.31	142.6	4.705	2.323
#1	.0003	-.0012	-.0003	-.0012	-.0014	.0001	-.0004	-.0012
#2	-.0006	-.0007	-.0006	-.0009	-.0012	-.0005	-.0004	-.0013
#3	-.0003	-.0011	.0003	.0006	-.0010	-.0004	-.0004	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/28/2015 10:39:24 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0005	.0000	-.0006
Stddev	.0005	.000	.0003
%RSD	103.1	31240.	47.36
#1	.0004	-.0004	-.0003
#2	.0010	.0000	-.0007
#3	.0000	.0004	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3101.8	5836.4	52319.	5265.4
Stddev	3.9	6.5	110.	6.8
%RSD	.12671	.11205	.20997	.12917
#1	3106.1	5841.2	52297.	5273.2
#2	3098.4	5829.0	52221.	5260.5
#3	3101.0	5839.2	52438.	5262.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/28/2015 10:43:09 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0099	.1812	.0102	.1988	.0044	1.013	.0043	.0517	.0100
Stddev	.0000	.0134	.0002	.0015	.0000	.001	.0001	.0000	.0005
%RSD	.3327	7.397	2.174	.7354	.2904	.1252	2.236	.0222	4.567
#1	.0100	.1906	.0103	.1998	.0044	1.012	.0043	.0517	.0097
#2	.0099	.1717	.0100	.1977	.0044	1.014	.0042	.0517	.0104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0253	.2679	10.15	4.873	.0156	.0406	10.13	.0423	.0042
Stddev	.0002	.0071	.08	.011	.0002	.0004	.02	.0004	.0006
%RSD	.7423	2.644	.7429	.2304	.9944	.9560	.2325	.8830	14.86
#1	.0254	.2729	10.20	4.881	.0157	.0403	10.15	.0420	.0037
#2	.0251	.2629	10.10	4.865	.0155	.0408	10.11	.0426	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0041	.0085	.0471	.0500	.0096	F.0072	.0090	.0488	.0209
Stddev	.0005	.0002	.0011	.0003	.0000	.0000	.0002	.0004	.0002
%RSD	12.26	2.022	2.315	.5235	.0008	.3319	2.101	.8273	.9193
#1	.0037	.0087	.0478	.0498	.0096	.0072	.0089	.0485	.0208
#2	.0044	.0084	.0463	.0502	.0096	.0072	.0092	.0491	.0211
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.0100			
Range						-20.00%			

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/28/2015 10:43:09 Type: QC
Method: 60102007_042011(v90) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2973.9	5795.3	51445.	5294.0
Stddev	4.6	9.3	180.	22.1
%RSD	.15543	.15963	.34966	.41664
#1	2977.2	5801.8	51572.	5278.4
#2	2970.6	5788.7	51318.	5309.6

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/28/2015 10:50:15 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	503.3	-.0001	.0001	-.0008	490.9	-.0002	-.0006	.0006	.0000
Stddev	.0002	4.0	.0015	.0003	.0001	8.0	.0001	.0001	.0004	.000
%RSD	388.3	.8031	1190.	334.5	8.576	1.636	36.01	10.18	72.30	815.3
#1	.0002	500.8	.0007	-.0002	-.0007	481.6	-.0001	-.0006	.0011	.0001
#2	-.0002	501.1	.0007	.0001	-.0008	495.3	-.0002	-.0005	.0003	-.0004
#3	.0001	508.0	-.0018	.0003	-.0008	495.7	-.0001	-.0006	.0005	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	186.7	.3615	490.6	.0004	.0004	.2715	-.0004	.0001	-.0018	.0000
Stddev	.3	.0338	.6	.0000	.0003	.0144	.0001	.0026	.0029	.0015
%RSD	.1364	9.336	.1124	6.692	80.61	5.309	35.24	2099.	164.0	13790.
#1	186.7	.3295	490.8	.0004	.0007	.2581	-.0005	.0006	.0016	-.0018
#2	186.4	.3584	491.0	.0004	.0002	.2696	-.0005	.0025	-.0032	.0009
#3	187.0	.3967	490.0	.0004	.0002	.2867	-.0002	-.0027	-.0037	.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0815	.0001	-.0003	-.0001	.0000	.0000	-.0024
Stddev	.0009	.0005	.0001	.0004	.0014	.000	.0001
%RSD	1.165	395.8	18.98	445.0	3316.	343.4	3.174
#1	.0825	.0007	-.0003	-.0005	-.0015	.0000	-.0023
#2	.0807	-.0001	-.0004	.0002	.0010	-.0002	-.0025
#3	.0813	-.0002	-.0003	.0000	.0006	.0001	-.0024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/28/2015 10:50:15 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2262.8	4941.0	43098.	4790.9
Stddev	3.6	7.1	21.	5.2
%RSD	.15935	.14385	.04946	.10931
#1	2258.7	4934.6	43113.	4793.3
#2	2265.6	4948.7	43106.	4784.9
#3	2264.1	4939.8	43073.	4794.4

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/28/2015 10:58:08 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9833	479.9	1.044	.4892	.4942	462.5	.9156	.4653	.4779	.5236
Stddev	.0031	5.1	.001	.0014	.0034	2.3	.0015	.0005	.0009	.0011
%RSD	.3168	1.053	.1222	.2899	.6884	.4918	.1626	.1061	.1973	.2008
#1	.9811	484.3	1.042	.4905	.4981	464.8	.9139	.4647	.4769	.5247
#2	.9869	474.4	1.045	.4877	.4924	462.4	.9168	.4654	.4782	.5235
#3	.9819	481.0	1.043	.4894	.4920	460.2	.9160	.4657	.4788	.5226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	179.0	.2829	458.0	.5032	.9272	.2355	.9514	.9275	1.039	1.002
Stddev	1.0	.0265	2.5	.0009	.0008	.0097	.0015	.0054	.001	.004
%RSD	.5695	9.375	.5379	.1747	.0888	4.138	.1576	.5847	.1144	.3671
#1	179.8	.3099	460.0	.5023	.9270	.2344	.9497	.9272	1.037	.9974
#2	179.2	.2568	458.7	.5041	.9282	.2457	.9526	.9331	1.039	1.004
#3	177.8	.2821	455.3	.5031	.9266	.2263	.9520	.9223	1.039	1.004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0739	.9060	1.020	1.008	.9460	.4696	.9432
Stddev	.0011	.0009	.005	.001	.0095	.0007	.0031
%RSD	1.501	.0992	.5215	.0535	1.003	.1436	.3313
#1	.0735	.9060	1.025	1.008	.9472	.4700	.9402
#2	.0751	.9052	1.019	1.008	.9548	.4688	.9464
#3	.0730	.9070	1.015	1.007	.9359	.4700	.9431
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/28/2015 10:58:08 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2320.8	5127.4	44908.	5008.2
Stddev	5.5	10.3	21.	27.6
%RSD	.23879	.20078	.04569	.55050
#1	2325.0	5139.3	44901.	4978.1
#2	2314.5	5122.0	44892.	5014.3
#3	2322.8	5121.0	44931.	5032.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 11:06:33 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2477	39.43	2.104	1.967	2.036	40.54	2.107	2.076	2.046	2.020
Stddev	.0004	.13	.019	.009	.004	.16	.018	.018	.002	.006
%RSD	.1457	.3195	.9221	.4497	.1995	.3894	.8541	.8657	.0903	.2853
#1	.2476	39.55	2.081	1.976	2.040	40.69	2.087	2.055	2.044	2.015
#2	.2475	39.43	2.113	1.967	2.032	40.57	2.118	2.085	2.048	2.019
#3	.2481	39.30	2.116	1.958	2.035	40.37	2.117	2.088	2.046	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.01	40.95	38.75	2.101	2.043	40.53	2.131	2.042	2.109	2.084
Stddev	.10	.07	.23	.002	.018	.12	.016	.011	.017	.018
%RSD	.2543	.1740	.5873	.0729	.8802	.2881	.7593	.5556	.7998	.8764
#1	40.11	41.03	39.00	2.099	2.023	40.66	2.112	2.030	2.089	2.063
#2	40.01	40.94	38.70	2.101	2.054	40.49	2.141	2.052	2.116	2.092
#3	39.91	40.89	38.56	2.102	2.054	40.43	2.140	2.046	2.121	2.096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.770	2.034	2.067	2.088	2.080	2.064	2.135
Stddev	.015	.015	.006	.003	.013	.008	.018
%RSD	.8193	.7165	.2847	.1507	.6230	.3738	.8355
#1	1.754	2.017	2.073	2.085	2.065	2.055	2.114
#2	1.775	2.042	2.068	2.090	2.085	2.066	2.148
#3	1.782	2.044	2.061	2.090	2.090	2.070	2.142
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 11:06:33 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2575.1	5386.0	48999.	5160.5
Stddev	17.1	45.8	7.	48.7
%RSD	.66248	.85111	.01385	.94294
#1	2594.8	5438.9	48998.	5113.2
#2	2563.8	5358.9	49007.	5158.0
#3	2566.8	5360.2	48994.	5210.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 11:13:03 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0160	-.0005	-.0004	-.0002	-.0007	-.0003	-.0003
Stddev	.0003	.0115	.0001	.0001	.0000	.0011	.0001	.0001
%RSD	119.5	71.67	12.11	23.77	5.597	145.5	34.31	23.31
#1	.0001	.0266	-.0005	-.0004	-.0001	-.0007	-.0004	-.0004
#2	.0007	.0175	-.0005	-.0004	-.0002	.0003	-.0002	-.0003
#3	.0000	.0038	-.0006	-.0003	-.0002	-.0019	-.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0006	-.0132	.0016	-.0090	.0000	F-.0054	.0473
Stddev	.0001	.0001	.0049	.0095	.0076	.000	.0007	.0053
%RSD	63.13	20.35	36.73	602.6	84.66	24.66	12.84	11.28
#1	.0000	.0007	-.0080	.0120	-.0176	.0000	-.0047	.0412
#2	.0002	.0005	-.0141	-.0066	-.0035	.0000	-.0054	.0513
#3	.0002	.0005	-.0175	-.0007	-.0057	.0000	-.0061	.0492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F-.0011	-.0001	.0002	-.0001	-.0007	.0001	F-.0021
Stddev	.0003	.0000	.0004	.0004	.0003	.0004	.0002	.0002
%RSD	142.1	1.544	305.0	207.8	387.1	59.46	339.3	7.715
#1	-.0004	-.0011	.0003	.0000	-.0002	-.0002	.0000	-.0019
#2	.0001	-.0011	-.0001	.0006	-.0002	-.0008	.0003	-.0021
#3	-.0002	-.0011	-.0005	-.0001	.0002	-.0009	-.0001	-.0022
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail
High Limit		.0010						.0020
Low Limit		-.0010						-.0020

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 11:13:03 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0011	.0002	-.0003
Stddev	.0009	.0002	.0001
%RSD	78.37	84.39	36.11
#1	.0020	.0001	-.0004
#2	.0003	.0001	-.0002
#3	.0010	.0004	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3115.3	5778.3	52107.	5222.0
Stddev	5.6	8.7	45.	22.7
%RSD	.17884	.14992	.08554	.43436
#1	3119.5	5786.4	52115.	5218.1
#2	3109.0	5769.2	52058.	5246.4
#3	3117.5	5779.5	52146.	5201.5

Zoom In Zoom Out

Sample Name: FA21642-18 Acquired: 1/28/2015 11:17:02 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	1.036	-.0001	F8.253	-.0015	7.568	-.0004	-.0017	.0598
Stddev	.0002	.010	.0025	.031	.0000	.042	.0000	.0002	.0003
%RSD	40.40	.9790	1699.	.3772	1.529	.5483	11.37	11.85	.4898
#1	.0007	1.048	.0025	8.242	-.0015	7.549	-.0004	-.0016	.0601
#2	.0006	1.030	-.0025	8.229	-.0015	7.539	-.0004	-.0015	.0596
#3	.0003	1.030	-.0004	8.288	-.0015	7.615	-.0004	-.0019	.0597

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0208	2.902	.3880	.1701	.0220	-.0154	.8085	.0017	.2725
Stddev	.0008	.025	.0513	.0289	.0002	.0002	.0062	.0002	.0024
%RSD	3.933	.8557	13.23	17.01	.8540	1.541	.7615	10.09	.8933
#1	.0200	2.915	.3843	.1618	.0222	-.0151	.8130	.0015	.2697
#2	.0208	2.874	.4411	.1462	.0218	-.0155	.8109	.0017	.2741
#3	.0216	2.918	.3386	.2023	.0220	-.0156	.8015	.0018	.2736

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0011	-.0017	.8293	.0204	.0881	3.698	-.0049	.0055	.1254
Stddev	.0007	.0033	.0010	.0007	.0001	.013	.0014	.0006	.0001
%RSD	65.54	199.9	.1254	3.197	.1696	.3586	28.18	10.66	.0576
#1	-.0019	.0004	.8299	.0209	.0881	3.707	-.0043	.0062	.1254
#2	-.0005	.0001	.8281	.0197	.0880	3.682	-.0065	.0051	.1253
#3	-.0009	-.0055	.8298	.0206	.0883	3.704	-.0040	.0053	.1254

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2995.3	5672.8	51527.	5223.6
Stddev	5.6	9.6	145.	50.9
%RSD	.18575	.16854	.28110	.97360
#1	2989.0	5662.5	51454.	5183.2
#2	2997.7	5674.3	51433.	5280.7
#3	2999.4	5681.5	51694.	5206.9

Zoom In Zoom Out

Sample Name: FA21646-7 Acquired: 1/28/2015 11:21:24 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0054	113.8	.5202	F113.3	-.0185	151.6	-.0056	-.0218	.0821
Stddev	.0008	.7	.0097	.3	.0037	.8	.0028	.0043	.0041
%RSD	13.96	.6553	1.868	.2754	19.74	.4955	50.28	19.81	5.008
#1	.0045	113.6	.5134	113.6	-.0218	152.1	-.0083	-.0263	.0856
#2	.0058	114.7	.5313	113.2	-.0192	152.0	-.0026	-.0214	.0830
#3	.0058	113.3	.5158	113.1	-.0146	150.8	-.0060	-.0177	.0776

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5122	4.398	77.21	15.88	.1706	-.1870	225.0	.0433	.3615
Stddev	.0099	.027	.81	.16	.0011	.0021	.9	.0049	.0084
%RSD	1.936	.6122	1.049	.9931	.6525	1.098	.3888	11.29	2.313
#1	.5008	4.419	76.35	16.05	.1697	-.1853	224.7	.0489	.3537
#2	.5174	4.407	77.34	15.85	.1702	-.1864	225.9	.0399	.3603
#3	.5184	4.368	77.95	15.74	.1718	-.1893	224.3	.0412	.3704

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0328	.1043	3.385	.1017	2.560	.9183	-.0270	.1051	90.45
Stddev	.0022	.0155	.017	.0052	.004	.0052	.0077	.0021	.22
%RSD	6.564	14.85	.5127	5.067	.1690	.5612	28.73	1.965	.2474
#1	.0340	.0954	3.387	.0962	2.556	.9241	-.0357	.1074	90.48
#2	.0340	.1222	3.401	.1064	2.565	.9163	-.0210	.1046	90.21
#3	.0303	.0954	3.367	.1025	2.560	.9143	-.0242	.1033	90.65

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2995.3	5804.5	52128.	5286.8
Stddev	3.5	5.8	19.	41.4
%RSD	.11529	.09936	.03637	.78341
#1	2994.4	5806.2	52109.	5259.9
#2	2999.1	5809.3	52147.	5266.0
#3	2992.3	5798.1	52127.	5334.5

Zoom In Zoom Out

Sample Name: FA21646-8 Acquired: 1/28/2015 11:25:46 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0161	150.9	.1072	F222.2	-.0176	125.9	-.0015	-.0317	.0922
Stddev	.0015	1.0	.0048	2.9	.0014	.2	.0009	.0014	.0036
%RSD	9.304	.6590	4.521	1.314	8.074	.1205	57.13	4.460	3.860
#1	.0172	151.3	.1060	221.3	-.0160	125.9	-.0020	-.0323	.0963
#2	.0168	151.6	.1030	219.7	-.0186	125.7	-.0005	-.0301	.0897
#3	.0144	149.8	.1125	225.4	-.0182	126.0	-.0021	-.0328	.0907

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6192	3.719	129.8	23.44	.2004	-.1952	427.8	.0205	.3543
Stddev	.0070	.075	1.3	.64	.0007	.0028	1.1	.0013	.0149
%RSD	1.132	2.030	.9677	2.716	.3337	1.453	.2636	6.315	4.196
#1	.6196	3.727	131.2	23.32	.2001	-.1952	429.0	.0220	.3518
#2	.6260	3.639	128.7	24.13	.1999	-.1980	427.6	.0198	.3408
#3	.6120	3.790	129.7	22.87	.2012	-.1924	426.8	.0197	.3702

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0564	.0633	3.644	.0930	6.936	.1072	-.0221	.0463	F178.8
Stddev	.0163	.0416	.005	.0057	.012	.0026	.0208	.0043	.3
%RSD	28.94	65.70	.1481	6.169	.1771	2.450	93.78	9.243	.1933
#1	.0735	.0845	3.638	.0993	6.950	.1052	-.0379	.0426	178.6
#2	.0549	.0154	3.648	.0880	6.932	.1061	-.0299	.0454	179.2
#3	.0409	.0901	3.645	.0917	6.926	.1102	.0014	.0510	178.7

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2927.0	5730.6	51280.	5256.4
Stddev	2.4	9.8	217.	21.1
%RSD	.08074	.17101	.42240	.40213
#1	2924.3	5738.1	51528.	5232.0
#2	2928.0	5719.5	51125.	5269.2
#3	2928.7	5734.2	51188.	5267.9

Zoom In Zoom Out

Sample Name: FA21646-9 Acquired: 1/28/2015 11:30:16 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0013	209.0	.0796	96.66	-.0171	441.3	-.0163	-.0229	.0949	.3284
Stddev	.0097	1.0	.0276	.25	.0018	1.6	.0005	.0026	.0059	.0038
%RSD	754.6	.4717	34.68	.2607	10.79	.3723	3.072	11.21	6.254	1.163
#1	.0111	208.9	.0739	96.56	-.0191	440.0	-.0158	-.0200	.0943	.3240
#2	-.0083	210.0	.1096	96.94	-.0155	443.1	-.0164	-.0250	.1011	.3301
#3	.0011	208.1	.0553	96.47	-.0168	440.7	-.0168	-.0237	.0893	.3310

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	34.04	76.64	10.13	.3543	-.1928	193.0	.0117	.2133	.0524	.0399
Stddev	.18	.62	.25	.0007	.0006	.8	.0010	.0280	.0082	.0403
%RSD	.5347	.8119	2.425	.1884	.3352	.3925	8.489	13.15	15.59	100.9
#1	33.84	76.98	9.929	.3535	-.1921	192.3	.0128	.2447	.0576	.0241
#2	34.20	75.93	10.40	.3547	-.1928	193.8	.0110	.1906	.0430	.0100
#3	34.07	77.03	10.05	.3547	-.1934	192.9	.0112	.2047	.0566	.0858

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.703	.0377	4.284	1.240	-.0414	.0971	80.16
Stddev	.007	.0022	.019	.002	.0025	.0022	.28
%RSD	.2015	5.807	.4358	.1703	5.941	2.218	.3538
#1	3.701	.0364	4.272	1.238	-.0392	.0996	80.47
#2	3.712	.0365	4.305	1.242	-.0440	.0960	79.91
#3	3.698	.0402	4.274	1.240	-.0408	.0958	80.10

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2878.8	5617.1	50463.	5192.2
Stddev	4.1	6.9	49.	20.4
%RSD	.14231	.12266	.09746	.39340
#1	2874.3	5610.6	50468.	5207.3
#2	2882.2	5624.3	50412.	5169.0
#3	2880.0	5616.5	50510.	5200.4

Zoom In Zoom Out

Sample Name: FA21646-10 Acquired: 1/28/2015 11:34:38 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0200	194.1	.0939	75.69	-.0185	457.5	-.0114	-.0197	.0898	.4466
Stddev	.0094	.3	.0058	.14	.0006	1.5	.0008	.0004	.0032	.0060
%RSD	47.04	.1296	6.216	.1829	3.093	.3315	7.215	1.782	3.549	1.336
#1	.0097	194.0	.0941	75.71	-.0190	456.3	-.0108	-.0201	.0885	.4398
#2	.0281	194.0	.0880	75.54	-.0185	456.9	-.0123	-.0194	.0934	.4494
#3	.0221	194.4	.0997	75.82	-.0179	459.2	-.0111	-.0197	.0875	.4507

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	23.35	69.83	11.33	.2944	-.1903	164.4	.0246	.2999	.0843	.0705
Stddev	.13	.54	.46	.0019	.0038	.3	.0054	.0167	.0238	.0009
%RSD	.5555	.7731	4.018	.6340	1.992	.1810	21.77	5.582	28.26	1.344
#1	23.20	69.28	10.82	.2965	-.1862	164.2	.0308	.3094	.0889	.0714
#2	23.43	69.83	11.68	.2932	-.1911	164.2	.0212	.2806	.1054	.0706
#3	23.42	70.36	11.50	.2934	-.1936	164.7	.0218	.3098	.0585	.0695

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.407	.0697	4.251	.9457	-.0338	.1184	65.52
Stddev	.014	.0055	.021	.0007	.0397	.0029	.22
%RSD	.4050	7.838	.4879	.0713	117.5	2.448	.3308
#1	3.397	.0736	4.271	.9465	-.0151	.1182	65.50
#2	3.423	.0720	4.230	.9455	-.0069	.1213	65.32
#3	3.401	.0634	4.253	.9452	-.0795	.1155	65.75

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2920.9	5683.6	50886.	5268.1
Stddev	4.8	10.9	160.	47.5
%RSD	.16278	.19094	.31403	.90160
#1	2921.3	5684.4	50924.	5322.9
#2	2925.4	5694.0	50711.	5240.0
#3	2915.9	5672.3	51023.	5241.4

Zoom In Zoom Out

Sample Name: FA21646-3 Acquired: 1/28/2015 11:38:59 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	3.881	.0074	.1365	-.0082	122.7	-.0055	.2315	25.23	1.033
Stddev	.0056	.067	.0040	.0014	.0006	1.0	.0006	.0003	.02	.005
%RSD	334.1	1.712	53.52	1.035	7.168	.7804	11.66	.1249	.0956	.4444
#1	.0026	3.853	.0038	.1356	-.0075	121.8	-.0047	.2312	25.21	1.032
#2	-.0043	3.834	.0067	.1382	-.0083	123.7	-.0059	.2318	25.25	1.029
#3	.0067	3.957	.0117	.1359	-.0087	122.6	-.0057	.2315	25.23	1.038

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	136.0	.9110	6.786	2.829	2.007	2.435	15.24	.0479	.1284	.0046
Stddev	.6	.0032	.116	.004	.004	.082	.03	.0058	.0036	.0176
%RSD	.4592	.3522	1.706	.1337	.1782	3.380	.1679	12.14	2.792	384.1
#1	135.5	.9107	6.911	2.828	2.006	2.340	15.22	.0540	.1247	.0013
#2	136.7	.9079	6.765	2.833	2.011	2.488	15.27	.0425	.1319	.0236
#3	135.9	.9143	6.682	2.826	2.004	2.476	15.24	.0471	.1286	-.0112

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.926	.1882	.1537	.1949	-.0347	.0566	2.344
Stddev	.008	.0007	.0010	.0005	.0092	.0017	.008
%RSD	.2887	.3749	.6663	.2733	26.49	2.926	.3531
#1	2.934	.1875	.1525	.1944	-.0405	.0555	2.336
#2	2.927	.1884	.1541	.1954	-.0241	.0585	2.353
#3	2.917	.1889	.1545	.1948	-.0396	.0558	2.342

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2947.5	5483.5	50541.	5192.9
Stddev	3.5	3.4	188.	71.6
%RSD	.11928	.06131	.37238	1.3797
#1	2943.5	5487.4	50712.	5225.3
#2	2950.1	5481.7	50339.	5110.8
#3	2949.0	5481.5	50572.	5242.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 11:43:19 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2537	40.32	2.151	2.006	2.109	41.97	2.150	2.110	2.100	2.065
Stddev	.0007	.13	.008	.003	.007	.17	.006	.004	.011	.005
%RSD	.2906	.3332	.3616	.1269	.3554	.4007	.2731	.2015	.5333	.2436
#1	.2529	40.43	2.145	2.008	2.116	42.10	2.144	2.105	2.087	2.060
#2	.2543	40.17	2.147	2.005	2.101	41.78	2.152	2.113	2.102	2.069
#3	.2540	40.37	2.159	2.003	2.110	42.02	2.155	2.112	2.109	2.067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.12	42.36	39.29	2.168	2.075	41.90	2.183	2.074	2.158	2.133
Stddev	.14	.08	.27	.009	.005	.14	.006	.007	.006	.011
%RSD	.3447	.1913	.6824	.4275	.2506	.3361	.2745	.3352	.2866	.5204
#1	41.23	42.45	39.51	2.158	2.069	41.97	2.176	2.067	2.152	2.120
#2	40.96	42.28	38.99	2.170	2.077	41.74	2.184	2.073	2.164	2.139
#3	41.17	42.35	39.38	2.176	2.079	41.99	2.188	2.081	2.158	2.139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.811	2.060	2.155	2.161	2.112	2.134	2.185
Stddev	.003	.004	.003	.010	.005	.013	.008
%RSD	.1838	.2009	.1225	.4476	.2300	.5954	.3617
#1	1.809	2.056	2.156	2.150	2.109	2.120	2.178
#2	1.815	2.064	2.151	2.165	2.110	2.138	2.185
#3	1.809	2.061	2.156	2.168	2.118	2.145	2.193
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 11:43:19 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2548.9	5298.3	48005.	5059.6
Stddev	9.6	21.1	195.	56.6
%RSD	.37618	.39856	.40659	1.1188
#1	2559.4	5322.7	48197.	5064.1
#2	2546.6	5287.2	48012.	5113.8
#3	2540.6	5285.1	47807.	5000.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 11:47:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0142	.0002	.0000	.0001	.0070	.0003	.0002
Stddev	.0005	.0040	.0004	.0003	.0001	.0032	.0002	.0001
%RSD	144.6	28.38	246.8	6203.	71.54	46.58	55.40	87.19
#1	.0007	.0183	-.0003	.0000	.0001	.0099	.0001	.0000
#2	.0005	.0141	.0004	.0003	.0001	.0035	.0004	.0003
#3	-.0002	.0103	.0004	-.0003	.0000	.0075	.0003	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0014	-.0087	.0041	.0146	.0002	F-.0046	.0528
Stddev	.0000	.0002	.0017	.0350	.0112	.0000	.0008	.0073
%RSD	.7443	11.43	19.75	845.7	76.69	9.391	16.91	13.91
#1	.0003	.0012	-.0071	.0441	.0275	.0002	-.0038	.0583
#2	.0003	.0015	-.0105	-.0211	.0081	.0002	-.0046	.0445
#3	.0003	.0014	-.0084	-.0106	.0081	.0002	-.0054	.0557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0006	.0006	.0002	.0017	-.0002	.0003	-.0014
Stddev	.0002	.0003	.0002	.0010	.0004	.0001	.0000	.0002
%RSD	55.60	43.77	30.91	528.9	23.78	48.71	9.221	13.43
#1	.0003	-.0004	.0004	-.0010	.0013	-.0001	.0004	-.0012
#2	.0006	-.0004	.0006	.0008	.0021	-.0002	.0003	-.0013
#3	.0002	-.0009	.0008	.0007	.0016	-.0003	.0003	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 11:47:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0002	.0002	.0003
Stddev	.0013	.0001	.0002
%RSD	639.0	31.77	69.17
#1	.0006	.0001	.0001
#2	.0012	.0002	.0003
#3	-.0012	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3027.8	5595.5	50424.	5090.1
Stddev	7.6	22.3	132.	22.5
%RSD	.24966	.39864	.26176	.44134
#1	3019.2	5570.2	50353.	5111.2
#2	3031.0	5603.9	50576.	5092.5
#3	3033.3	5612.4	50342.	5066.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 12:21:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2551	41.32	2.061	2.076	2.097	41.50	2.090	2.086	2.086	2.069
Stddev	.0005	.09	.010	.008	.010	.26	.008	.007	.001	.000
%RSD	.1920	.2097	.5033	.3899	.4598	.6307	.3623	.3175	.0627	.0181
#1	.2555	41.27	2.072	2.078	2.095	41.40	2.098	2.093	2.085	2.070
#2	.2546	41.26	2.058	2.067	2.089	41.31	2.090	2.086	2.087	2.069
#3	.2553	41.42	2.052	2.082	2.108	41.80	2.082	2.079	2.087	2.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.77	41.56	41.64	2.110	2.057	41.59	2.087	2.046	2.062	2.057
Stddev	.23	.13	.20	.005	.009	.14	.010	.011	.015	.015
%RSD	.5415	.3111	.4866	.2449	.4135	.3315	.4740	.5543	.7051	.7134
#1	41.67	41.56	41.44	2.109	2.065	41.64	2.098	2.058	2.077	2.073
#2	41.61	41.43	41.64	2.106	2.056	41.44	2.086	2.045	2.062	2.052
#3	42.03	41.69	41.84	2.116	2.048	41.71	2.078	2.036	2.048	2.045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.752	2.065	2.081	2.086	2.068	2.054	2.091
Stddev	.010	.005	.006	.002	.015	.002	.008
%RSD	.5600	.2310	.2802	.0868	.7108	.1174	.3965
#1	1.761	2.070	2.081	2.085	2.081	2.052	2.100
#2	1.754	2.066	2.075	2.084	2.069	2.054	2.092
#3	1.742	2.060	2.086	2.088	2.052	2.057	2.083
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 12:21:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2535.3	5243.3	47268.	4985.3
Stddev	6.5	16.4	317.	46.7
%RSD	.25714	.31352	.67055	.93611
#1	2530.5	5234.1	47403.	5000.8
#2	2532.7	5233.6	47496.	5022.2
#3	2542.7	5262.3	46906.	4932.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 12:40:43 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0050	.0005	.0003	-.0001	.0057	-.0002	-.0003
Stddev	.0005	.0006	.0007	.0003	.0000	.0027	.0000	.0001
%RSD	181.9	13.06	126.6	97.51	61.32	46.31	12.24	29.90
#1	-.0001	.0052	-.0002	.0001	.0000	.0086	-.0002	-.0003
#2	.0001	.0042	.0011	.0007	-.0001	.0034	-.0002	-.0004
#3	-.0008	.0055	.0007	.0002	-.0001	.0051	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0000	-.0010	.0539	-.0046	-.0001	.0003	-.0001
Stddev	.0001	.0002	.0055	.0186	.0026	.0000	.0001	.0041
%RSD	148.6	814.2	547.6	34.54	56.66	5.576	44.84	6299.
#1	-.0002	-.0003	.0040	.0553	-.0071	-.0002	.0004	-.0038
#2	-.0002	.0002	-.0068	.0718	-.0046	-.0001	.0003	.0044
#3	.0001	.0002	-.0002	.0347	-.0020	-.0001	.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0002	.0014	F-.0022	.0024	.0002	-.0001	.0002
Stddev	.0001	.0003	.0016	.0004	.0002	.0002	.0000	.0000
%RSD	14.65	165.4	111.0	18.45	6.425	93.29	22.12	6.915
#1	-.0004	-.0001	.0006	-.0018	.0025	.0005	-.0001	.0002
#2	-.0005	.0001	.0004	-.0026	.0024	.0001	-.0001	.0002
#3	-.0004	.0006	.0033	-.0023	.0022	.0001	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit				.0020				
Low Limit				-.0020				

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 12:40:43 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0011	-.0005	.0021
Stddev	.0002	.0001	.0001
%RSD	17.93	16.23	4.107
#1	-.0013	-.0006	.0020
#2	-.0009	-.0005	.0021
#3	-.0012	-.0005	.0021
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2993.9	5554.4	50042.	5016.8
Stddev	9.3	26.6	80.	28.7
%RSD	.31014	.47843	.15898	.57181
#1	2987.1	5539.6	50088.	5006.8
#2	2990.1	5538.5	50087.	4994.4
#3	3004.5	5585.1	49950.	5049.1

Zoom In Zoom Out

Sample Name: MP28497-MB1 Acquired: 1/28/2015 12:45:33 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0057	-.0013	.0001	-.0003	.0111	-.0003	-.0003	.0005	.0003
Stddev	.0002	.0047	.0003	.0002	.0000	.0007	.0001	.0000	.0001	.0002
%RSD	33.23	83.00	20.57	177.7	15.46	6.076	22.01	9.356	20.24	76.71
#1	-.0005	.0103	-.0010	.0001	-.0002	.0116	-.0004	-.0003	.0005	.0002
#2	-.0003	.0009	-.0015	.0003	-.0003	.0113	-.0002	-.0003	.0004	.0006
#3	-.0006	.0059	-.0015	-.0001	-.0003	.0103	-.0003	-.0003	.0005	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0225	.0420	.0085	.0000	.0003	.0008	-.0001	.0000	.0022	.0012
Stddev	.0007	.0350	.0089	.000	.0002	.0073	.0001	.000	.0006	.0003
%RSD	3.063	83.35	104.5	146.4	52.42	957.5	130.8	935.4	29.42	21.86
#1	.0233	.0044	-.0008	.0000	.0004	-.0076	-.0001	.0003	.0028	.0011
#2	.0223	.0737	.0169	.0000	.0005	.0053	.0000	-.0003	.0015	.0009
#3	.0219	.0478	.0094	.0000	.0001	.0046	-.0002	.0000	.0022	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0186	.0228	-.0002	.0004	-.0017	-.0005	.0019
Stddev	.0001	.0002	.0000	.0001	.0005	.0001	.0001
%RSD	.3444	.8492	10.59	21.47	31.38	25.24	4.416
#1	.0186	.0228	-.0002	.0005	-.0017	-.0004	.0018
#2	.0186	.0226	-.0002	.0005	-.0012	-.0006	.0020
#3	.0187	.0230	-.0002	.0003	-.0023	-.0006	.0018
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28497-MB1 Acquired: 1/28/2015 12:45:33 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3063.6	5695.1	51870.	5257.7
Stddev	2.2	6.3	123.	31.5
%RSD	.07202	.11014	.23738	.59905
#1	3063.5	5691.7	51984.	5225.6
#2	3061.4	5691.3	51888.	5288.6
#3	3065.8	5702.4	51739.	5258.9

Zoom In Zoom Out

Sample Name: MP28497-B1 Acquired: 1/28/2015 12:50:02 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0473	26.98	1.976	2.087	.0518	25.23	.0502	.5114	.2090	.2579
Stddev	.0002	.01	.005	.003	.0003	.04	.0001	.0007	.0003	.0011
%RSD	.4949	.0456	.2435	.1503	.5903	.1399	.1104	.1408	.1210	.4186
#1	.0471	26.98	1.980	2.086	.0522	25.26	.0503	.5108	.2091	.2577
#2	.0476	26.99	1.971	2.090	.0516	25.19	.0502	.5114	.2091	.2590
#3	.0472	26.97	1.976	2.084	.0517	25.24	.0503	.5122	.2087	.2569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.31	24.86	25.06	.5185	.4931	25.09	.5148	.4865	.4855	1.962
Stddev	.06	.07	.10	.0011	.0009	.02	.0006	.0021	.0017	.005
%RSD	.2178	.2883	.4091	.2040	.1862	.0691	.1180	.4362	.3513	.2610
#1	26.35	24.83	25.17	.5181	.4939	25.10	.5153	.4889	.4849	1.961
#2	26.33	24.81	25.04	.5197	.4921	25.09	.5149	.4850	.4841	1.957
#3	26.24	24.94	24.97	.5177	.4933	25.07	.5141	.4854	.4874	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0175	.5356	.4999	.5051	1.955	.4806	.4999
Stddev	.0005	.0012	.0004	.0010	.008	.0026	.0006
%RSD	2.779	.2205	.0855	.1913	.4113	.5362	.1172
#1	.0178	.5369	.5001	.5047	1.963	.4797	.5006
#2	.0169	.5346	.5001	.5062	1.955	.4835	.4994
#3	.0177	.5354	.4994	.5044	1.947	.4786	.4998
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28497-B1 Acquired: 1/28/2015 12:50:02 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2745.9	5532.0	49838.	5141.3
Stddev	4.9	3.3	219.	29.0
%RSD	.17840	.06017	.43998	.56349
#1	2740.9	5532.1	49772.	5142.3
#2	2746.1	5535.2	49660.	5169.8
#3	2750.7	5528.6	50083.	5111.9

Zoom In Zoom Out

Sample Name: FA21642-24 Acquired: 1/28/2015 12:54:14 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0024	14.70	.1282	.0116	.0009	12.81	.0027	-.0012	.0765	-.0015
Stddev	.0005	.01	.0011	.0007	.0001	.03	.0004	.0001	.0006	.0004
%RSD	19.63	.0666	.8402	5.786	9.581	.2379	14.80	6.651	.8281	28.88
#1	-.0021	14.71	.1288	.0112	.0008	12.85	.0032	-.0012	.0772	-.0019
#2	-.0023	14.71	.1289	.0112	.0008	12.81	.0027	-.0012	.0760	-.0015
#3	-.0030	14.69	.1270	.0123	.0009	12.79	.0024	-.0013	.0763	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	346.4	.0440	.3860	.0214	.0211	.0711	.0038	1.202	.0001	.0157
Stddev	3.0	.0252	.0056	.0001	.0000	.0072	.0002	.004	.0021	.0008
%RSD	.8622	57.27	1.451	.2743	.1605	10.07	4.450	.3012	2671.	4.794
#1	343.1	.0267	.3800	.0214	.0212	.0629	.0040	1.206	.0011	.0163
#2	347.1	.0324	.3871	.0214	.0211	.0755	.0037	1.201	.0015	.0148
#3	349.0	.0729	.3910	.0213	.0211	.0750	.0036	1.199	-.0024	.0160

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7429	.0180	.0207	.0761	-.0074	.4506	.1024
Stddev	.0021	.0001	.0001	.0002	.0002	.0004	.0005
%RSD	.2810	.5824	.6424	.1974	2.966	.0973	.5343
#1	.7445	.0181	.0206	.0763	-.0075	.4510	.1030
#2	.7435	.0181	.0208	.0761	-.0075	.4506	.1023
#3	.7405	.0179	.0207	.0760	-.0071	.4501	.1019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2931.5	6764.6	60331.	6339.9
Stddev	7.1	16.6	223.	18.8
%RSD	.24186	.24481	.36924	.29707
#1	2923.7	6747.5	60415.	6344.3
#2	2933.3	6765.8	60079.	6319.3
#3	2937.5	6780.6	60500.	6356.2

Zoom In Zoom Out

Sample Name: MP28497-D1 Acquired: 1/28/2015 12:58:40 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	3.233	.0138	.0052	.0000	16.59	-.0001	-.0006	.0203	.0003
Stddev	.0005	.010	.0007	.0001	.000	.04	.0000	.0002	.0002	.0003
%RSD	78.50	.3057	5.414	1.733	160.7	.2177	58.25	26.60	1.217	93.67
#1	-.0005	3.243	.0145	.0053	.0000	16.63	-.0001	-.0006	.0203	.0000
#2	-.0003	3.233	.0139	.0053	-.0001	16.57	.0000	-.0004	.0206	.0004
#3	-.0013	3.223	.0130	.0051	.0000	16.57	-.0001	-.0008	.0201	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	53.37	.0828	.1447	.0065	.0028	.0717	.0006	.2369	.0018	.0023
Stddev	.11	.0406	.0199	.0000	.0002	.0082	.0002	.0012	.0002	.0020
%RSD	.2112	48.97	13.77	.5524	5.317	11.46	23.60	.5220	11.34	90.85
#1	53.47	.0571	.1625	.0065	.0027	.0740	.0008	.2379	.0017	.0018
#2	53.38	.0618	.1232	.0064	.0030	.0785	.0006	.2372	.0016	.0005
#3	53.25	.1296	.1486	.0065	.0028	.0626	.0006	.2355	.0020	.0045

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7179	.0207	.0160	.0802	-.0025	.0962	.1006
Stddev	.0020	.0003	.0001	.0002	.0015	.0007	.0002
%RSD	.2784	1.358	.8073	.2669	57.37	.7756	.2237
#1	.7202	.0205	.0161	.0799	-.0042	.0962	.1004
#2	.7166	.0210	.0159	.0803	-.0016	.0955	.1007
#3	.7170	.0205	.0161	.0803	-.0018	.0970	.1008

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2984.8	5918.8	53870.	5453.8
Stddev	5.8	8.8	34.	17.3
%RSD	.19358	.14911	.06391	.31654
#1	2978.8	5909.3	53889.	5446.1
#2	2985.2	5926.7	53891.	5441.8
#3	2990.3	5920.4	53830.	5473.6

Zoom In Zoom Out

Sample Name: MP28497-SD1 Acquired: 1/28/2015 13:03:01 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0053	17.31	.1544	.0141	-.0001	15.73	.0016	-.0036	.0905	.0023
Stddev	.0017	.07	.0024	.0015	.0005	.08	.0004	.0007	.0003	.0012
%RSD	32.23	.4049	1.561	10.58	312.7	.5308	26.65	20.20	.2837	54.12
#1	-.0062	17.23	.1545	.0128	.0004	15.63	.0021	-.0029	.0902	.0009
#2	-.0034	17.36	.1520	.0138	-.0004	15.78	.0014	-.0044	.0906	.0027
#3	-.0065	17.34	.1568	.0158	-.0004	15.78	.0013	-.0036	.0907	.0032

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	435.5	.1202	.4933	.0239	.0226	.3263	-.0015	1.287	-.0025	.0150
Stddev	2.6	.1817	.1414	.0002	.0005	.0092	.0006	.004	.0013	.0020
%RSD	.6075	151.1	28.66	1.008	2.008	2.820	40.16	.3048	52.65	13.54
#1	432.5	.1005	.4606	.0239	.0231	.3233	-.0020	1.282	-.0018	.0171
#2	437.4	-.0508	.3711	.0242	.0225	.3366	-.0016	1.289	-.0016	.0146
#3	436.7	.3110	.6481	.0237	.0222	.3190	-.0008	1.289	-.0040	.0131

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9134	.0199	.0237	.0870	-.0178	.5286	.1297
Stddev	.0063	.0004	.0000	.0007	.0043	.0018	.0004
%RSD	.6880	2.047	.1418	.7624	24.16	.3318	.3175
#1	.9202	.0199	.0237	.0864	-.0197	.5268	.1296
#2	.9079	.0203	.0237	.0877	-.0129	.5288	.1293
#3	.9119	.0195	.0237	.0869	-.0209	.5303	.1301

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2961.6	5820.1	52763.	5424.3
Stddev	4.9	12.0	64.	24.7
%RSD	.16465	.20636	.12167	.45586
#1	2967.2	5815.5	52689.	5449.4
#2	2959.0	5833.7	52803.	5423.6
#3	2958.5	5811.0	52797.	5400.0

Zoom In Zoom Out

Sample Name: MP28497-PS1 Acquired: 1/28/2015 13:07:22 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0382	16.36	.2069	.2200	.0419	16.48	.0434	.0396	.1161	.0835
Stddev	.0004	.06	.0010	.0012	.0002	.03	.0004	.0002	.0005	.0011
%RSD	1.040	.3765	.4847	.5356	.3942	.1631	.9225	.5146	.4102	1.275
#1	.0386	16.43	.2062	.2211	.0420	16.50	.0435	.0394	.1163	.0829
#2	.0378	16.33	.2064	.2187	.0420	16.49	.0429	.0396	.1163	.0847
#3	.0380	16.32	.2080	.2203	.0417	16.45	.0437	.0398	.1155	.0828

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	341.8	8.033	4.149	.0625	.1004	8.584	.0865	1.229	.0758	.0927
Stddev	4.4	.050	.022	.0001	.0002	.030	.0003	.004	.0009	.0009
%RSD	1.277	.6189	.5199	.1032	.1928	.3528	.3361	.3177	1.188	1.023
#1	340.2	8.076	4.147	.0625	.1003	8.615	.0868	1.224	.0769	.0936
#2	346.7	8.045	4.172	.0624	.1002	8.581	.0864	1.229	.0754	.0917
#3	338.5	7.979	4.129	.0626	.1006	8.555	.0862	1.232	.0752	.0929

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7395	.0568	.0603	.1543	.0816	.4769	.2991
Stddev	.0012	.0004	.0000	.0002	.0008	.0011	.0001
%RSD	.1617	.6565	.0683	.1598	.9768	.2256	.0501
#1	.7409	.0571	.0603	.1541	.0819	.4762	.2990
#2	.7390	.0564	.0603	.1546	.0807	.4781	.2990
#3	.7386	.0569	.0603	.1542	.0822	.4764	.2992

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2883.4	6706.9	60209.	6338.0
Stddev	9.7	6.4	160.	50.6
%RSD	.33736	.09489	.26509	.79826
#1	2893.5	6706.0	60321.	6335.2
#2	2882.5	6713.6	60026.	6288.9
#3	2874.1	6701.0	60280.	6390.0

Zoom In Zoom Out

Sample Name: MP28497-S1 Acquired: 1/28/2015 13:11:46 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0441	30.53	1.858	1.950	.0485	37.61	.0471	.4747	.2294	.2447
Stddev	.0009	.02	.002	.002	.0001	.08	.0001	.0007	.0006	.0004
%RSD	2.039	.0627	.1220	.0810	.2123	.2082	.1606	.1400	.2765	.1547
#1	.0439	30.52	1.860	1.951	.0484	37.55	.0470	.4752	.2295	.2448
#2	.0450	30.53	1.859	1.949	.0486	37.58	.0471	.4750	.2299	.2451
#3	.0433	30.56	1.856	1.949	.0485	37.70	.0470	.4740	.2287	.2443

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	126.1	23.49	23.09	.4915	.4567	23.76	.4806	.8418	.3759	1.817
Stddev	.1	.04	.05	.0010	.0004	.06	.0003	.0017	.0011	.002
%RSD	.0601	.1723	.2342	.2011	.0894	.2623	.0646	.2022	.3022	.0874
#1	126.2	23.53	23.05	.4918	.4563	23.83	.4803	.8426	.3758	1.815
#2	126.0	23.45	23.15	.4923	.4571	23.70	.4809	.8430	.3748	1.816
#3	126.2	23.49	23.07	.4904	.4568	23.74	.4806	.8399	.3770	1.818

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.112	.4916	.4867	.4985	1.921	.5849	.5415
Stddev	.002	.0012	.0010	.0003	.004	.0011	.0005
%RSD	.1733	.2495	.2150	.0658	.1837	.1804	.0929
#1	1.114	.4908	.4878	.4981	1.924	.5851	.5409
#2	1.111	.4930	.4865	.4986	1.921	.5859	.5417
#3	1.110	.4911	.4858	.4987	1.917	.5838	.5419

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2727.2	5891.3	52699.	5584.1
Stddev	7.1	5.4	235.	43.8
%RSD	.25866	.09247	.44587	.78357
#1	2720.4	5885.0	52594.	5633.3
#2	2726.5	5894.1	52535.	5549.5
#3	2734.5	5894.8	52968.	5569.4

Zoom In Zoom Out

Sample Name: MP28497-S2 Acquired: 1/28/2015 13:15:57 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0430	30.06	1.841	1.917	.0478	36.10	.0467	.4701	.2216	.2410
Stddev	.0004	.03	.005	.003	.0001	.11	.0001	.0003	.0007	.0002
%RSD	.9426	.1093	.2595	.1555	.1113	.3064	.2717	.0699	.3074	.0728
#1	.0434	30.07	1.835	1.917	.0478	36.01	.0466	.4697	.2219	.2412
#2	.0431	30.02	1.844	1.920	.0479	36.07	.0469	.4703	.2220	.2409
#3	.0426	30.08	1.842	1.914	.0479	36.22	.0467	.4703	.2208	.2410

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	119.2	23.21	22.93	.4877	.4503	23.49	.4794	.7770	.3713	1.799
Stddev	.2	.06	.15	.0019	.0009	.04	.0010	.0013	.0012	.002
%RSD	.1841	.2439	.6491	.3868	.2018	.1880	.2074	.1624	.3309	.0807
#1	119.1	23.16	23.04	.4884	.4493	23.53	.4782	.7756	.3700	1.801
#2	119.1	23.19	22.76	.4891	.4504	23.44	.4798	.7771	.3715	1.798
#3	119.5	23.27	23.00	.4856	.4511	23.49	.4801	.7782	.3724	1.799

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.155	.4867	.4794	.4928	1.866	.5888	.5590
Stddev	.000	.0029	.0010	.0004	.001	.0020	.0007
%RSD	.0321	.5878	.2013	.0737	.0691	.3370	.1246
#1	1.155	.4860	.4786	.4932	1.865	.5900	.5582
#2	1.155	.4842	.4805	.4927	1.866	.5898	.5595
#3	1.156	.4898	.4792	.4925	1.867	.5865	.5593

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2784.6	5873.4	52412.	5530.6
Stddev	4.3	9.7	213.	53.8
%RSD	.15492	.16489	.40551	.97248
#1	2783.7	5874.0	52522.	5574.0
#2	2780.8	5863.5	52167.	5547.4
#3	2789.3	5882.8	52548.	5470.4

Zoom In Zoom Out

Sample Name: FA21679-2 Acquired: 1/28/2015 13:20:07 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	16.96	.0029	.0913	.0002	8.115	-.0004	.0008	.0297	.0039
Stddev	.0003	.04	.0004	.0004	.0000	.025	.0000	.0000	.0002	.0001
%RSD	61.63	.2556	15.20	.4565	11.93	.3032	10.23	4.114	.8338	3.220
#1	-.0007	17.00	.0026	.0912	.0003	8.125	-.0004	.0008	.0297	.0040
#2	-.0004	16.98	.0028	.0909	.0002	8.133	-.0003	.0009	.0294	.0038
#3	-.0002	16.92	.0034	.0917	.0002	8.087	-.0004	.0008	.0299	.0038

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.10	.5985	.7876	.0390	.0024	.1977	.0131	.0143	.0027	.0023
Stddev	.02	.0219	.0216	.0001	.0001	.0059	.0003	.0002	.0003	.0013
%RSD	.2076	3.660	2.739	.2835	2.915	2.994	2.412	1.340	9.655	56.30
#1	10.12	.6238	.7888	.0389	.0024	.2001	.0135	.0141	.0027	.0028
#2	10.09	.5873	.8086	.0391	.0023	.2021	.0128	.0145	.0024	.0008
#3	10.08	.5846	.7655	.0391	.0024	.1910	.0130	.0143	.0029	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.280	.0199	.1634	.2447	-.0001	.0109	.0182
Stddev	.004	.0001	.0005	.0002	.0010	.0001	.0001
%RSD	.3152	.2678	.3232	.0951	1350.	1.232	.6451
#1	1.284	.0199	.1638	.2449	.0005	.0110	.0183
#2	1.280	.0198	.1628	.2445	.0005	.0110	.0181
#3	1.276	.0199	.1636	.2448	-.0012	.0108	.0183

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3037.1	5865.9	52959.	5492.4
Stddev	6.7	16.8	195.	31.7
%RSD	.22127	.28711	.36905	.57643
#1	3030.0	5851.8	52872.	5481.0
#2	3043.4	5884.5	53183.	5468.0
#3	3037.9	5861.3	52823.	5528.2

Zoom In Zoom Out

Sample Name: FA21679-3 Acquired: 1/28/2015 13:24:28 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	35.37	.0217	.2688	.0013	24.97	.0019	.0030	.0649	.1780
Stddev	.0001	.17	.0005	.0008	.0000	.07	.0000	.0001	.0004	.0001
%RSD	23.67	.4726	2.301	.2976	3.000	.2733	1.690	2.910	.5713	.0739
#1	-.0006	35.28	.0222	.2690	.0014	25.05	.0020	.0029	.0651	.1779
#2	-.0005	35.56	.0212	.2695	.0013	24.97	.0019	.0031	.0650	.1781
#3	-.0008	35.28	.0217	.2679	.0014	24.91	.0020	.0030	.0644	.1779

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.55	.8438	1.758	.0670	.0161	.1909	.0424	.0955	.0010	.0013
Stddev	.03	.0227	.028	.0004	.0002	.0059	.0001	.0003	.0003	.0007
%RSD	.3272	2.694	1.589	.5956	1.123	3.083	.2805	.3004	26.34	54.35
#1	10.54	.8694	1.777	.0674	.0159	.1955	.0423	.0956	.0007	.0005
#2	10.59	.8258	1.771	.0667	.0162	.1929	.0425	.0952	.0012	.0019
#3	10.52	.8363	1.726	.0667	.0161	.1842	.0425	.0957	.0011	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.345	.0230	.3316	.5365	-.0019	.0242	.9156
Stddev	.003	.0002	.0007	.0024	.0004	.0002	.0012
%RSD	.2295	.8500	.2015	.4417	22.67	.9994	.1318
#1	1.341	.0231	.3314	.5393	-.0021	.0244	.9157
#2	1.347	.0227	.3324	.5349	-.0014	.0243	.9168
#3	1.347	.0230	.3311	.5355	-.0021	.0239	.9144

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2940.1	6134.9	55142.	5645.9
Stddev	1.9	15.7	307.	31.0
%RSD	.06363	.25555	.55627	.54908
#1	2942.1	6142.5	54832.	5660.3
#2	2938.5	6116.8	55149.	5610.3
#3	2939.7	6145.3	55445.	5667.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 13:28:47 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2492	40.24	1.970	2.042	1.997	40.05	2.005	2.017	2.001	2.019
Stddev	.0004	.16	.001	.009	.013	.18	.001	.001	.010	.002
%RSD	.1652	.3972	.0573	.4290	.6704	.4536	.0495	.0289	.4911	.1204
#1	.2493	40.23	1.969	2.041	1.990	39.93	2.006	2.016	2.013	2.020
#2	.2487	40.08	1.971	2.033	1.989	39.97	2.004	2.017	1.995	2.016
#3	.2495	40.40	1.972	2.051	2.012	40.26	2.005	2.017	1.996	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.91	39.77	40.39	2.025	1.983	40.42	1.995	1.977	1.979	1.980
Stddev	.28	.20	.11	.007	.002	.22	.001	.006	.006	.002
%RSD	.7012	.5046	.2674	.3566	.1207	.5427	.0558	.3150	.2949	.0754
#1	39.81	39.83	40.31	2.033	1.982	40.39	1.996	1.981	1.973	1.979
#2	39.70	39.55	40.36	2.020	1.982	40.22	1.994	1.970	1.983	1.980
#3	40.23	39.94	40.51	2.022	1.986	40.65	1.995	1.980	1.983	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.683	2.004	1.984	1.987	2.004	1.946	1.994
Stddev	.003	.001	.013	.005	.002	.006	.004
%RSD	.1596	.0487	.6431	.2523	.0979	.3270	.2070
#1	1.680	2.004	1.980	1.993	2.002	1.953	1.998
#2	1.684	2.003	1.974	1.986	2.003	1.945	1.990
#3	1.685	2.005	1.999	1.984	2.006	1.941	1.994
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 13:28:47 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2625.8	5473.8	49155.	5068.6
Stddev	2.8	11.3	188.	16.6
%RSD	.10496	.20613	.38174	.32660
#1	2628.9	5486.8	48976.	5050.3
#2	2624.6	5467.8	49350.	5072.7
#3	2623.8	5466.7	49138.	5082.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 13:47:26 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0087	.0005	.0006	.0002	.0040	.0001	.0001	.0002	.0001
Stddev	.0003	.0073	.0002	.0005	.0000	.0015	.0000	.0000	.0002	.0001
%RSD	80.07	83.73	38.47	81.25	9.499	38.23	22.95	18.03	98.46	45.70
#1	-.0001	.0014	.0005	.0002	.0003	.0023	.0001	.0001	.0004	.0001
#2	-.0006	.0160	.0004	.0011	.0002	.0053	.0001	.0001	.0003	.0002
#3	-.0004	.0087	.0007	.0004	.0003	.0044	.0001	.0001	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0064	.0041	.0034	.0002	-.0001	.0038	.0000	.0002	.0009	-.0017
Stddev	.0014	.0089	.0100	.0000	.0000	.0083	.0001	.0006	.0006	.0003
%RSD	21.53	216.8	292.6	21.85	31.66	222.2	221.5	318.1	61.24	17.47
#1	.0048	-.0045	.0088	.0002	-.0001	.0132	-.0001	.0003	.0003	-.0020
#2	.0069	.0133	-.0081	.0002	-.0001	-.0026	.0001	-.0005	.0010	-.0014
#3	.0074	.0035	.0096	.0001	-.0001	.0006	.0001	.0008	.0014	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0004	.0001	.0000	.0000	.0003
Stddev	.0001	.000	.0001	.0000	.001	.0003	.0000
%RSD	423.1	1561.	31.65	39.76	24480.	1337.	11.30
#1	.0001	.0002	.0004	.0001	-.0004	-.0002	.0004
#2	-.0001	.0000	.0004	.0001	-.0005	.0004	.0003
#3	.0001	-.0002	.0002	.0001	.0010	-.0002	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 13:47:26 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3072.1	5684.1	51385.	5214.7
Stddev	10.9	16.5	234.	38.6
%RSD	.35421	.29020	.45503	.74016
#1	3084.7	5703.1	51187.	5242.4
#2	3065.6	5675.0	51643.	5170.6
#3	3066.2	5674.1	51325.	5231.1

Zoom In Zoom Out

Sample Name: FA21679-4 Acquired: 1/28/2015 13:51:45 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	27.28	.0023	.0812	.0008	4.550	.0013	.0003	.0409	.0054
Stddev	.0003	.02	.0005	.0007	.0000	.007	.0000	.0000	.0005	.0001
%RSD	35.87	.0887	21.61	.8094	3.747	.1626	3.897	13.62	1.299	2.518
#1	-.0010	27.29	.0024	.0810	.0007	4.545	.0012	.0003	.0409	.0056
#2	-.0008	27.25	.0028	.0819	.0008	4.546	.0013	.0003	.0404	.0053
#3	-.0005	27.30	.0018	.0806	.0008	4.559	.0013	.0003	.0415	.0054

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7632	.1874	.2845	.0025	-.0001	.1325	.0072	.0160	.0017	.0007
Stddev	.0065	.0217	.0310	.0000	.0001	.0035	.0002	.0003	.0003	.0017
%RSD	.8505	11.58	10.88	1.921	79.99	2.632	3.075	1.993	14.87	240.7
#1	.7560	.2050	.2925	.0024	-.0001	.1307	.0074	.0164	.0017	.0020
#2	.7685	.1631	.2503	.0025	.0000	.1365	.0070	.0161	.0015	-.0012
#3	.7653	.1941	.3106	.0025	-.0002	.1303	.0071	.0157	.0020	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.273	.0138	.2117	.2147	-.0021	.0058	.1539
Stddev	.003	.0002	.0005	.0002	.0005	.0001	.0002
%RSD	.1984	1.541	.2500	.1112	25.26	1.408	.1471
#1	1.276	.0139	.2121	.2147	-.0021	.0057	.1541
#2	1.271	.0138	.2118	.2150	-.0016	.0058	.1537
#3	1.274	.0135	.2111	.2145	-.0027	.0058	.1538

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2952.7	6077.1	54830.	5600.0
Stddev	1.5	7.0	221.	42.5
%RSD	.04918	.11540	.40272	.75874
#1	2954.3	6070.2	55061.	5611.5
#2	2951.4	6076.8	54620.	5635.6
#3	2952.4	6084.3	54810.	5553.0

Zoom In Zoom Out

Sample Name: FA21679-5 Acquired: 1/28/2015 13:56:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	20.92	.0028	.1032	.0005	105.6	-.0003	.0009	.0445	.0084
Stddev	.0003	.05	.0006	.0003	.0000	.3	.0000	.0001	.0004	.0003
%RSD	40.42	.2326	21.68	.2883	8.105	.2651	7.373	9.957	.8642	3.339
#1	-.0005	20.97	.0033	.1035	.0005	105.9	-.0003	.0010	.0449	.0083
#2	-.0010	20.88	.0021	.1033	.0005	105.6	-.0003	.0009	.0442	.0087
#3	-.0005	20.90	.0029	.1029	.0005	105.4	-.0003	.0008	.0443	.0081

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.15	.7553	1.874	.0616	.0038	1.019	.0131	.0245	.0008	-.0003
Stddev	.04	.0014	.009	.0003	.0001	.015	.0001	.0003	.0011	.0007
%RSD	.3514	.1862	.4905	.4763	2.006	1.433	.5006	1.125	143.6	259.3
#1	10.19	.7548	1.884	.0620	.0038	1.030	.0131	.0247	.0007	.0004
#2	10.13	.7542	1.873	.0615	.0037	1.024	.0130	.0247	-.0003	-.0001
#3	10.13	.7569	1.866	.0615	.0039	1.002	.0131	.0242	.0019	-.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.436	.0184	.3750	.2496	-.0030	.0134	.0546
Stddev	.004	.0003	.0010	.0010	.0004	.0002	.0002
%RSD	.2989	1.641	.2651	.3921	11.87	1.607	.2756
#1	1.431	.0181	.3761	.2506	-.0032	.0133	.0545
#2	1.438	.0185	.3745	.2495	-.0026	.0136	.0545
#3	1.440	.0187	.3742	.2486	-.0033	.0132	.0547

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2778.9	5822.7	51892.	5374.6
Stddev	5.8	3.2	294.	16.0
%RSD	.20980	.05532	.56619	.29697
#1	2772.2	5820.2	51553.	5359.1
#2	2781.2	5821.6	52051.	5373.7
#3	2783.2	5826.3	52071.	5391.0

Zoom In Zoom Out

Sample Name: FA21679-6 Acquired: 1/28/2015 14:00:26 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	13.80	.0024	.0831	.0001	19.50	-.0004	.0015	.0289	.0044
Stddev	.0002	.02	.0009	.0004	.0001	.06	.0000	.0001	.0002	.0001
%RSD	22.55	.1169	37.21	.5084	61.75	.3081	10.72	6.366	.8407	2.094
#1	-.0006	13.78	.0017	.0835	.0001	19.46	-.0004	.0016	.0290	.0044
#2	-.0009	13.81	.0020	.0831	.0001	19.57	-.0004	.0014	.0290	.0045
#3	-.0006	13.81	.0034	.0827	.0002	19.47	-.0004	.0014	.0286	.0044

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.378	.3673	1.320	.0235	.0021	.0660	.0122	.0147	.0002	-.0006
Stddev	.015	.0109	.003	.0000	.0001	.0081	.0000	.0003	.0005	.0014
%RSD	.3497	2.964	.2094	.1088	7.075	12.20	.1408	1.772	329.6	224.0
#1	4.363	.3789	1.322	.0235	.0020	.0647	.0123	.0144	.0003	.0010
#2	4.377	.3573	1.321	.0235	.0023	.0587	.0122	.0148	-.0004	-.0010
#3	4.394	.3657	1.317	.0236	.0021	.0747	.0122	.0149	.0006	-.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.289	.0214	.2277	.2182	-.0026	.0069	.0101
Stddev	.004	.0001	.0009	.0008	.0015	.0002	.0002
%RSD	.2899	.6880	.4159	.3656	57.42	2.196	1.653
#1	1.293	.0214	.2267	.2180	-.0037	.0067	.0100
#2	1.289	.0212	.2277	.2191	-.0032	.0070	.0103
#3	1.285	.0215	.2286	.2176	-.0009	.0070	.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2916.9	5871.5	52969.	5415.2
Stddev	2.3	16.7	296.	25.3
%RSD	.08031	.28425	.55850	.46806
#1	2915.8	5854.7	53307.	5444.1
#2	2919.6	5871.5	52758.	5404.4
#3	2915.4	5888.1	52842.	5397.0

Zoom In Zoom Out

Sample Name: FA21679-7 Acquired: 1/28/2015 14:04:47 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	13.79	.0025	.0845	.0003	160.7	-.0003	.0007	.0364	.0112
Stddev	.0005	.01	.0010	.0003	.0001	.3	.0000	.0001	.0003	.0001
%RSD	55.24	.0438	39.47	.3566	17.99	.2070	6.894	7.855	.8687	.9719
#1	-.0008	13.78	.0020	.0849	.0003	160.5	-.0003	.0007	.0361	.0112
#2	-.0016	13.79	.0019	.0843	.0003	161.1	-.0003	.0006	.0367	.0113
#3	-.0005	13.78	.0037	.0844	.0002	160.5	-.0003	.0007	.0364	.0111

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.301	.4115	1.679	.0520	.0035	1.731	.0069	.0322	.0013	-.0005
Stddev	.034	.0037	.010	.0002	.0001	.008	.0002	.0004	.0005	.0012
%RSD	.4700	.9024	.6187	.3584	3.874	.4652	2.750	1.291	39.37	244.1
#1	7.273	.4157	1.676	.0519	.0036	1.725	.0068	.0318	.0018	.0009
#2	7.339	.4088	1.671	.0522	.0035	1.740	.0071	.0321	.0010	-.0011
#3	7.292	.4100	1.691	.0519	.0034	1.726	.0067	.0326	.0010	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.121	.0196	.5977	.1677	-.0035	.0074	.0521
Stddev	.002	.0003	.0013	.0008	.0008	.0001	.0000
%RSD	.1812	1.596	.2237	.4885	24.25	1.455	.0657
#1	1.123	.0199	.5974	.1668	-.0042	.0073	.0521
#2	1.121	.0193	.5991	.1680	-.0038	.0075	.0521
#3	1.119	.0196	.5965	.1683	-.0025	.0074	.0521

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2701.8	5665.4	50852.	5336.1
Stddev	8.4	6.1	160.	34.8
%RSD	.31035	.10707	.31491	.65193
#1	2699.8	5658.6	50861.	5355.0
#2	2711.0	5667.1	50688.	5295.9
#3	2694.6	5670.4	51008.	5357.2

Zoom In Zoom Out

Sample Name: FA21679-8 Acquired: 1/28/2015 14:09:08 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	21.47	.0044	.1046	.0012	5.661	-.0003	.0022	.0528	.0039
Stddev	.0000	.10	.0004	.0005	.0001	.015	.0000	.0001	.0004	.0002
%RSD	4.249	.4473	9.237	.4551	4.535	.2661	11.46	5.337	.8098	5.310
#1	-.0008	21.56	.0039	.1041	.0012	5.664	-.0003	.0023	.0533	.0036
#2	-.0008	21.48	.0047	.1049	.0013	5.674	-.0002	.0022	.0526	.0040
#3	-.0008	21.37	.0046	.1048	.0012	5.644	-.0002	.0021	.0526	.0040

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.545	.4693	.9020	.0449	.0028	.1092	.0118	.0189	-.0004	.0008
Stddev	.019	.0614	.0051	.0002	.0000	.0017	.0001	.0003	.0004	.0006
%RSD	.2971	13.07	.5651	.3914	1.052	1.565	.7494	1.791	88.53	75.92
#1	6.541	.5284	.8989	.0451	.0028	.1076	.0118	.0186	.0000	.0002
#2	6.566	.4736	.9079	.0447	.0028	.1110	.0119	.0190	-.0008	.0008
#3	6.527	.4059	.8992	.0448	.0028	.1089	.0117	.0192	-.0004	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9486	.0155	.1528	.1870	-.0019	.0095	.0245
Stddev	.0049	.0003	.0002	.0005	.0004	.0002	.0001
%RSD	.5171	1.943	.1065	.2439	21.98	2.206	.2386
#1	.9542	.0158	.1528	.1875	-.0016	.0095	.0246
#2	.9464	.0152	.1530	.1867	-.0023	.0098	.0245
#3	.9452	.0155	.1526	.1869	-.0016	.0094	.0245

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2953.6	6649.6	60038.	6112.5
Stddev	.5	10.4	188.	17.8
%RSD	.01806	.15570	.31306	.29200
#1	2954.2	6643.3	59829.	6097.5
#2	2953.2	6644.0	60194.	6132.2
#3	2953.4	6661.6	60090.	6107.6

Zoom In Zoom Out

Sample Name: FA21648-1 Acquired: 1/28/2015 14:13:29 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0009	4.840	.0188	.1256	.0002	F1996.	-.0002	.0004
Stddev	.0006	.016	.0005	.0003	.0001	22.	.0000	.0001
%RSD	67.21	.3293	2.494	.2635	26.56	1.090	29.13	25.55
#1	-.0003	4.829	.0184	.1259	.0003	1976.	-.0002	.0003
#2	-.0014	4.858	.0193	.1252	.0002	2019.	-.0001	.0004
#3	-.0009	4.834	.0186	.1256	.0002	1993.	-.0002	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0322	.0014	19.55	.9938	7.654	.0872	.0103	16.68
Stddev	.0003	.0002	.01	.0645	.046	.0002	.0001	.02
%RSD	.9620	11.58	.0468	6.494	.6024	.2031	1.213	.1440
#1	.0320	.0015	19.54	.9215	7.707	.0872	.0103	16.68
#2	.0321	.0012	19.55	1.014	7.633	.0874	.0104	16.70
#3	.0326	.0015	19.56	1.046	7.622	.0870	.0101	16.66

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0033	.0154	.0080	F-.0106	1.312	.0186	F10.60	.0703
Stddev	.0001	.0007	.0008	.0009	.003	.0003	.15	.0006
%RSD	3.928	4.333	9.350	8.753	.2623	1.559	1.380	.8207
#1	.0034	.0162	.0072	-.0113	1.316	.0186	10.46	.0697
#2	.0032	.0152	.0083	-.0110	1.309	.0188	10.75	.0709
#3	.0032	.0149	.0087	-.0095	1.311	.0183	10.58	.0702

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0054	.0266	.0031
Stddev	.0017	.0005	.0001
%RSD	31.67	1.799	2.900
#1	-.0042	.0266	.0032
#2	-.0074	.0271	.0030
#3	-.0047	.0262	.0030

Zoom In Zoom Out

Sample Name: FA21648-1 Acquired: 1/28/2015 14:13:29 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2111.5	4892.2	43921.	5052.5
Stddev	1.1	8.0	81.	17.2
%RSD	.05031	.16453	.18476	.34044
#1	2110.8	4883.6	43897.	5068.6
#2	2112.7	4893.5	43854.	5054.4
#3	2110.9	4899.5	44011.	5034.4

Zoom In Zoom Out

Sample Name: FA21648-2 Acquired: 1/28/2015 14:18:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0012	6.324	.0174	.1339	.0006	F1995.	-.0002	.0007
Stddev	.0005	.009	.0005	.0005	.0001	3.	.0000	.0001
%RSD	40.24	.1465	2.806	.3892	9.287	.1577	18.55	13.11
#1	-.0015	6.332	.0179	.1345	.0006	1996.	-.0002	.0007
#2	-.0014	6.325	.0175	.1335	.0006	1992.	-.0002	.0006
#3	-.0006	6.314	.0169	.1339	.0007	1998.	-.0002	.0008

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0369	.0022	19.61	.9581	3.845	.0654	.0102	20.76
Stddev	.0003	.0001	.07	.0336	.022	.0002	.0001	.08
%RSD	.7506	4.891	.3556	3.503	.5763	.3247	.5912	.3627
#1	.0368	.0022	19.69	.9953	3.825	.0656	.0102	20.84
#2	.0366	.0020	19.57	.9301	3.869	.0652	.0103	20.69
#3	.0372	.0022	19.57	.9488	3.841	.0655	.0102	20.76

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0047	.0255	.0062	F-.0110	1.294	.0148	F11.89	.0752
Stddev	.0001	.0007	.0008	.0008	.001	.0001	.08	.0001
%RSD	1.340	2.618	12.11	7.742	.0828	.9461	.6855	.1195
#1	.0046	.0259	.0063	-.0104	1.295	.0149	11.97	.0751
#2	.0047	.0259	.0054	-.0106	1.294	.0147	11.81	.0752
#3	.0047	.0247	.0069	-.0119	1.293	.0149	11.90	.0753

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0088	.0344	.0102
Stddev	.0017	.0000	.0001
%RSD	19.75	.1127	.9310
#1	-.0081	.0343	.0101
#2	-.0108	.0344	.0101
#3	-.0075	.0344	.0103

Zoom In Zoom Out

Sample Name: FA21648-2 Acquired: 1/28/2015 14:18:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2028.6	5968.1	53502.	6267.6
Stddev	4.0	11.2	150.	30.2
%RSD	.19676	.18781	.27944	.48118
#1	2024.7	5955.2	53578.	6232.8
#2	2028.5	5974.4	53599.	6283.8
#3	2032.7	5974.7	53330.	6286.2

Zoom In Zoom Out

Sample Name: FA21648-3 Acquired: 1/28/2015 14:22:41 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0007	6.143	.0240	.1304	.0002	F2285.	-.0002	.0010
Stddev	.0003	.008	.0012	.0004	.0000	28.	.0001	.0002
%RSD	41.38	.1341	5.157	.2747	18.59	1.217	28.52	19.66
#1	-.0006	6.142	.0254	.1307	.0002	2295.	-.0002	.0011
#2	-.0005	6.151	.0233	.1300	.0002	2254.	-.0001	.0011
#3	-.0010	6.135	.0232	.1305	.0002	2307.	-.0002	.0008

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0431	.0018	26.24	.8146	5.156	.0964	.0147	22.20
Stddev	.0004	.0004	.07	.0143	.028	.0002	.0003	.06
%RSD	.8988	20.67	.2554	1.749	.5494	.2035	2.088	.2818
#1	.0436	.0020	26.23	.7982	5.163	.0963	.0151	22.16
#2	.0428	.0021	26.32	.8225	5.124	.0967	.0145	22.27
#3	.0430	.0014	26.19	.8231	5.179	.0963	.0147	22.17

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0050	.0206	.0091	F-.0128	1.511	.0177	F12.50	.0927
Stddev	.0001	.0011	.0008	.0009	.004	.0002	.06	.0006
%RSD	1.457	5.339	8.548	6.975	.2621	1.085	.5135	.6350
#1	.0051	.0218	.0099	-.0119	1.515	.0175	12.55	.0929
#2	.0050	.0202	.0084	-.0127	1.508	.0176	12.43	.0920
#3	.0049	.0197	.0091	-.0137	1.509	.0179	12.53	.0931

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0065	.0368	.0018
Stddev	.0010	.0001	.0001
%RSD	14.74	.2102	7.377
#1	-.0054	.0367	.0018
#2	-.0072	.0369	.0019
#3	-.0069	.0367	.0017

Zoom In Zoom Out

Sample Name: FA21648-3 Acquired: 1/28/2015 14:22:41 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2054.0	4899.9	44199.	5091.5
Stddev	3.7	14.7	32.	23.8
%RSD	.18200	.30028	.07217	.46747
#1	2051.8	4883.0	44170.	5071.5
#2	2058.3	4908.4	44195.	5117.8
#3	2051.8	4908.5	44233.	5085.1

Zoom In Zoom Out

Sample Name: FA21555-9 Acquired: 1/28/2015 14:27:17 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0008	63.71	.0181	.6405	.0021	F2692.	.0014	.0191
Stddev	.0005	.30	.0012	.0035	.0001	11.	.0000	.0003
%RSD	65.70	.4703	6.803	.5482	3.070	.4093	1.851	1.479
#1	-.0005	63.99	.0189	.6445	.0021	2691.	.0015	.0194
#2	-.0005	63.39	.0167	.6385	.0021	2682.	.0014	.0189
#3	-.0013	63.74	.0187	.6383	.0020	2704.	.0015	.0190

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0576	.0819	54.04	17.02	82.35	1.656	.0081	5.666
Stddev	.0003	.0004	.24	.07	.35	.005	.0001	.031
%RSD	.5263	.5147	.4491	.4282	.4208	.3129	1.123	.5488
#1	.0579	.0821	54.16	17.10	82.46	1.658	.0081	5.684
#2	.0573	.0814	53.76	16.96	81.96	1.651	.0080	5.630
#3	.0575	.0822	54.21	17.01	82.63	1.661	.0081	5.683

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0424	.0670	.0078	F-.0144	2.082	.0182	F13.71	1.523
Stddev	.0002	.0006	.0007	.0017	.003	.0005	.21	.005
%RSD	.3751	.8219	9.577	11.58	.1273	2.561	1.524	.3262
#1	.0422	.0663	.0070	-.0163	2.080	.0185	13.47	1.525
#2	.0423	.0674	.0085	-.0131	2.080	.0176	13.80	1.517
#3	.0425	.0671	.0080	-.0138	2.085	.0184	13.86	1.527

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0088	.0973	.1830
Stddev	.0009	.0003	.0005
%RSD	9.812	.3287	.2737
#1	-.0079	.0971	.1835
#2	-.0096	.0971	.1830
#3	-.0090	.0977	.1825

Zoom In Zoom Out

Sample Name: FA21555-9 Acquired: 1/28/2015 14:27:17 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1966.2	4696.6	42853.	5032.8
Stddev	4.0	7.0	133.	47.0
%RSD	.20411	.14919	.30929	.93331
#1	1966.4	4688.5	42863.	5034.8
#2	1970.2	4700.7	42981.	5078.8
#3	1962.2	4700.5	42716.	4984.9

Zoom In Zoom Out

Sample Name: FA21555-10 Acquired: 1/28/2015 14:31:51 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0002	55.40	.0193	.5924	.0018	F2753.	.0014	.0180
Stddev	.0001	.12	.0001	.0012	.0001	13.	.0001	.0001
%RSD	22.95	.2201	.2774	.1947	4.324	.4699	4.396	.4480
#1	-.0002	55.40	.0193	.5913	.0018	2757.	.0013	.0179
#2	-.0003	55.52	.0192	.5936	.0017	2763.	.0015	.0180
#3	-.0003	55.28	.0194	.5925	.0018	2738.	.0015	.0181

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0516	.0817	54.28	14.26	68.49	1.536	.0076	3.279
Stddev	.0005	.0004	.18	.09	.30	.002	.0001	.004
%RSD	.8848	.5252	.3238	.6098	.4436	.1283	1.144	.1213
#1	.0514	.0819	54.30	14.24	68.67	1.534	.0075	3.274
#2	.0521	.0819	54.44	14.36	68.65	1.536	.0077	3.282
#3	.0514	.0812	54.09	14.19	68.14	1.538	.0076	3.280

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0401	.0609	.0094	F-.0144	1.837	.0175	F14.00	1.146
Stddev	.0001	.0008	.0007	.0024	.007	.0001	.09	.001
%RSD	.2125	1.360	7.731	16.51	.3637	.5000	.6556	.1091
#1	.0400	.0612	.0095	-.0123	1.830	.0175	13.91	1.145
#2	.0401	.0616	.0086	-.0170	1.843	.0175	14.09	1.145
#3	.0400	.0600	.0101	-.0138	1.837	.0174	14.01	1.147

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0081	.0819	.1621
Stddev	.0016	.0001	.0019
%RSD	19.47	.0930	1.173
#1	-.0064	.0820	.1642
#2	-.0095	.0819	.1606
#3	-.0085	.0819	.1614

Zoom In Zoom Out

Sample Name: FA21555-10 Acquired: 1/28/2015 14:31:51 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1985.6	4676.2	42973.	5108.9
Stddev	6.3	10.2	110.	20.9
%RSD	.31713	.21855	.25491	.40945
#1	1981.9	4669.6	42855.	5093.5
#2	1982.0	4671.0	43072.	5100.5
#3	1992.9	4688.0	42991.	5132.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 14:36:25 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2519	40.88	2.032	2.126	1.998	39.65	2.033	2.059	2.011	2.086
Stddev	.0009	.15	.002	.008	.008	.16	.004	.001	.001	.007
%RSD	.3538	.3714	.0900	.3887	.4085	.4126	.2022	.0245	.0599	.3371
#1	.2510	40.73	2.032	2.116	1.988	39.46	2.030	2.059	2.010	2.086
#2	.2528	41.04	2.034	2.131	2.003	39.73	2.031	2.059	2.012	2.079
#3	.2520	40.88	2.031	2.130	2.002	39.75	2.037	2.060	2.012	2.093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.52	41.07	38.92	2.032	2.039	41.46	2.035	1.989	2.061	2.054
Stddev	.17	.24	.35	.004	.002	.17	.004	.004	.002	.003
%RSD	.4234	.5907	.9031	.1861	.1042	.4136	.1837	.1929	.1179	.1638
#1	39.35	40.84	38.60	2.030	2.037	41.28	2.031	1.985	2.059	2.052
#2	39.68	41.33	39.30	2.031	2.040	41.63	2.034	1.989	2.063	2.053
#3	39.54	41.05	38.88	2.037	2.040	41.47	2.039	1.992	2.061	2.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.751	2.027	2.061	2.032	2.028	1.988	1.985
Stddev	.002	.004	.008	.005	.006	.007	.009
%RSD	.1167	.1897	.3823	.2454	.3058	.3550	.4435
#1	1.749	2.026	2.052	2.028	2.025	1.984	1.978
#2	1.752	2.024	2.067	2.030	2.025	1.983	1.984
#3	1.752	2.031	2.062	2.037	2.036	1.996	1.995
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 14:36:25 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2588.6	5367.4	49380.	5316.0
Stddev	4.4	8.4	85.	54.5
%RSD	.16962	.15733	.17267	1.0248
#1	2593.6	5377.0	49454.	5352.4
#2	2585.1	5361.0	49399.	5253.4
#3	2587.2	5364.4	49287.	5342.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 14:40:37 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0170	.0003	.0005	.0003	.0274	.0004	.0004	.0005
Stddev	.0002	.0089	.0002	.0001	.0001	.0020	.0000	.0001	.0000
%RSD	79.19	52.36	73.43	25.73	34.91	7.281	9.901	18.84	6.773
#1	-.0002	.0253	.0003	.0005	.0002	.0290	.0004	.0004	.0005
#2	-.0001	.0183	.0006	.0007	.0004	.0252	.0004	.0005	.0005
#3	-.0005	.0076	.0001	.0004	.0004	.0281	.0003	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0160	.0760	-.0058	.0003	F.0016	.0224	.0003	.0006
Stddev	.0002	.0026	.0261	.0131	.0000	.0004	.0022	.0001	.0004
%RSD	68.28	16.13	34.36	226.2	13.92	24.26	10.00	41.09	65.92
#1	.0001	.0180	.0512	-.0208	.0003	.0020	.0236	.0004	.0010
#2	.0003	.0170	.1033	.0032	.0003	.0017	.0239	.0002	.0002
#3	.0006	.0131	.0734	.0002	.0003	.0012	.0199	.0004	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0002	.0007	.0003	.0005	.0009	.0004	.0001	.0003
Stddev	.0005	.0010	.0002	.0002	.0000	.0001	.0006	.0001	.0000
%RSD	31.18	474.0	30.84	89.40	4.607	7.728	153.4	96.86	5.744
#1	.0024	-.0010	.0009	.0003	.0005	.0009	.0001	.0002	.0003
#2	.0013	.0009	.0005	.0005	.0005	.0009	.0012	.0002	.0004
#3	.0016	.0007	.0008	.0000	.0005	.0008	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 14:40:37 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3064.8	5630.5	51834.	5294.0
Stddev	1.4	7.0	91.	24.6
%RSD	.04640	.12375	.17560	.46432
#1	3066.0	5626.4	51939.	5283.3
#2	3065.3	5638.5	51777.	5276.5
#3	3063.2	5626.5	51787.	5322.1

Zoom In Zoom Out

Sample Name: FA21555-11 Acquired: 1/28/2015 14:45:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0002	83.41	.0253	.7233	.0030	F2428.	.0028	.0249
Stddev	.0002	.29	.0004	.0024	.0000	31.	.0001	.0002
%RSD	70.85	.3434	1.532	.3316	1.140	1.281	2.635	.6263
#1	-.0003	83.70	.0255	.7261	.0030	2458.	.0028	.0250
#2	-.0004	83.41	.0249	.7217	.0029	2429.	.0029	.0247
#3	-.0001	83.12	.0256	.7222	.0030	2396.	.0027	.0249

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0739	.1175	71.94	21.17	108.9	2.115	.0100	4.288
Stddev	.0002	.0006	.42	.06	.8	.001	.0002	.025
%RSD	.3096	.4849	.5907	.2647	.7212	.0630	2.139	.5728
#1	.0739	.1179	72.42	21.23	109.8	2.117	.0100	4.314
#2	.0736	.1177	71.79	21.16	108.7	2.114	.0102	4.265
#3	.0741	.1168	71.61	21.12	108.3	2.115	.0098	4.286

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0581	.1011	.0080	F-.0109	2.621	.0184	F14.62	1.871
Stddev	.0002	.0007	.0008	.0009	.004	.0004	.06	.002
%RSD	.2707	.6876	9.602	8.477	.1606	2.303	.4380	.0864
#1	.0581	.1010	.0088	-.0100	2.622	.0180	14.62	1.872
#2	.0582	.1018	.0073	-.0109	2.616	.0188	14.69	1.869
#3	.0579	.1004	.0078	-.0119	2.624	.0183	14.57	1.871

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0072	.1263	.2715
Stddev	.0003	.0003	.0020
%RSD	4.805	.2658	.7192
#1	-.0072	.1266	.2737
#2	-.0068	.1260	.2708
#3	-.0075	.1264	.2700

Zoom In Zoom Out

Sample Name: FA21555-11 Acquired: 1/28/2015 14:45:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2000.1	4834.0	45206.	5361.9
Stddev	4.2	7.4	73.	54.5
%RSD	.20928	.15409	.16166	1.0158
#1	1996.1	4825.4	45146.	5303.8
#2	1999.9	4838.1	45185.	5370.3
#3	2004.4	4838.6	45287.	5411.8

Zoom In Zoom Out

Sample Name: FA21644-2 Acquired: 1/28/2015 14:49:40 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0035	31.83	.0039	1.113	.0001	90.82	.0531	.1708	.2429
Stddev	.0005	.04	.0002	.002	.0000	.07	.0001	.0001	.0005
%RSD	14.03	.1159	4.269	.1482	51.00	.0725	.2057	.0684	.2121
#1	.0037	31.87	.0040	1.114	.0000	90.74	.0529	.1706	.2424
#2	.0037	31.82	.0040	1.113	.0001	90.85	.0531	.1708	.2431
#3	.0029	31.80	.0037	1.111	.0001	90.86	.0531	.1709	.2434

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	3.445	46.68	.6295	5.696	.3576	.0258	.2426	.0682	.6134
Stddev	.008	.05	.0215	.029	.0008	.0002	.0071	.0001	.0023
%RSD	.2431	.1037	3.410	.5082	.2352	.6064	2.920	.1875	.3742
#1	3.449	46.74	.6472	5.664	.3569	.0256	.2377	.0681	.6113
#2	3.436	46.65	.6357	5.702	.3585	.0258	.2507	.0683	.6159
#3	3.451	46.66	.6056	5.721	.3573	.0259	.2394	.0680	.6132

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0081	.0025	3.645	.1122	.3099	2.557	-.0036	.0412	F47.64
Stddev	.0004	.0021	.009	.0003	.0008	.004	.0012	.0002	.15
%RSD	5.303	83.31	.2343	.2931	.2707	.1511	34.80	.4641	.3177
#1	.0085	.0012	3.637	.1123	.3107	2.553	-.0031	.0413	47.48
#2	.0079	.0015	3.643	.1119	.3099	2.561	-.0050	.0410	47.78
#3	.0077	.0050	3.654	.1125	.3090	2.558	-.0026	.0412	47.65

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2811.3	5611.0	52014.	5524.0
Stddev	7.6	2.1	124.	27.8
%RSD	.27108	.03760	.23768	.50337
#1	2814.6	5613.4	52140.	5520.7
#2	2802.6	5610.1	51893.	5553.3
#3	2816.7	5609.4	52008.	5498.0

Zoom In Zoom Out

Sample Name: FA21630-1 Acquired: 1/28/2015 14:54:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0118	15.46	.0482	2.604	-.0008	*****	-.0002	.0063
Stddev	.0008	.06	.0003	.008	.0001	-----	.0000	.0003
%RSD	6.600	.4190	.6663	.3149	7.572	-----	21.39	4.301
#1	.0116	15.48	.0480	2.605	-.0008	-----	-.0001	.0064
#2	.0111	15.51	.0485	2.612	-.0007	-----	-.0002	.0060
#3	.0126	15.38	.0480	2.595	-.0008	-----	-.0002	.0065

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0613	F160.8	10.18	.8728	F1709.	.4819	.0065	1.067
Stddev	.0008	.4	.06	.0467	7.	.0006	.0001	.005
%RSD	1.236	.2744	.5587	5.350	.4342	.1152	2.237	.4354
#1	.0620	161.2	10.14	.9230	1705.	.4815	.0064	1.071
#2	.0605	160.8	10.25	.8308	1717.	.4817	.0066	1.068
#3	.0614	160.3	10.16	.8645	1704.	.4826	.0064	1.062

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	F7.549	.7224	-.0022	-.0004	4.937	.0869	F70.90	F-.1295
Stddev	.014	.0052	.0023	.0032	.010	.0005	.41	.0004
%RSD	.1798	.7250	103.7	789.4	.2109	.6257	.5827	.2924
#1	7.544	.7271	-.0028	-.0024	4.934	.0862	71.28	-.1294
#2	7.539	.7168	-.0042	-.0020	4.928	.0872	70.95	-.1300
#3	7.564	.7233	.0003	.0033	4.948	.0872	70.46	-.1292

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0066	.0221	F6.265
Stddev	.0015	.0001	.013
%RSD	22.97	.5139	.2061
#1	-.0048	.0220	6.262
#2	-.0074	.0222	6.254
#3	-.0075	.0220	6.280

Zoom In Zoom Out

Sample Name: FA21630-1 Acquired: 1/28/2015 14:54:06 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1664.2	3175.3	35277.	4440.5
Stddev	1.4	4.6	61.	16.2
%RSD	.08526	.14490	.17334	.36558
#1	1662.9	3179.7	35218.	4455.1
#2	1664.0	3175.7	35272.	4423.0
#3	1665.7	3170.5	35340.	4443.3

Zoom In Zoom Out

Sample Name: FA21665-1 Acquired: 1/28/2015 14:58:43 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	10.27	.0546	3.597	-.0003	F1084.	.1363	.0012	.2971
Stddev	.0001	.03	.0003	.003	.0000	13.	.0002	.0001	.0006
%RSD	27.40	.3111	.6029	.0689	2.374	1.230	.1615	6.537	.1952
#1	.0005	10.30	.0543	3.599	-.0003	1089.	.1361	.0012	.2964
#2	.0003	10.28	.0550	3.595	-.0002	1095.	.1362	.0012	.2975
#3	.0004	10.23	.0545	3.598	-.0003	1069.	.1366	.0011	.2973

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2045	3.417	.9401	18.96	.2324	.4525	4.652	.0151	2.109
Stddev	.0015	.017	.0183	.14	.0002	.0008	.009	.0002	.005
%RSD	.7242	.5033	1.950	.7562	.0735	.1717	.2015	1.026	.2443
#1	.2028	3.429	.9570	18.95	.2322	.4517	4.646	.0151	2.106
#2	.2057	3.426	.9426	19.11	.2325	.4524	4.663	.0150	2.106
#3	.2049	3.398	.9206	18.83	.2325	.4533	4.648	.0153	2.115

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F10.32	-.0037	.3826	2.993	.7083	.1008	-.0079	.0076	F7.401
Stddev	.02	.0003	.0012	.004	.0032	.0002	.0005	.0003	.016
%RSD	.2207	9.174	.3164	.1482	.4505	.1789	6.349	3.713	.2100
#1	10.29	-.0038	.3823	2.990	.7119	.1008	-.0077	.0075	7.388
#2	10.32	-.0040	.3839	2.991	.7066	.1010	-.0076	.0075	7.397
#3	10.34	-.0034	.3816	2.998	.7063	.1007	-.0085	.0080	7.418

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2302.6	4911.9	45069.	5098.9
Stddev	3.7	1.6	52.	52.1
%RSD	.16180	.03316	.11433	1.0214
#1	2298.4	4913.3	45037.	5094.7
#2	2304.0	4910.1	45040.	5049.1
#3	2305.5	4912.3	45128.	5153.0

Zoom In Zoom Out

Sample Name: FA21665-2 Acquired: 1/28/2015 15:03:09 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	21.95	.0229	1.279	-.0002	F555.8	.0219	.0001	.0138
Stddev	.0006	.06	.0002	.005	.0000	6.1	.0001	.0001	.0001
%RSD	237.0	.2728	.9682	.3722	13.68	1.102	.4088	51.51	1.040
#1	-.0007	22.01	.0231	1.280	-.0002	562.2	.0219	.0001	.0136
#2	-.0005	21.89	.0228	1.283	-.0002	555.0	.0218	.0002	.0138
#3	.0004	21.95	.0227	1.274	-.0001	550.0	.0220	.0001	.0139

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1257	1.702	.3885	16.45	.1310	.7210	3.542	.0143	.1051
Stddev	.0008	.008	.0269	.04	.0002	.0014	.009	.0000	.0010
%RSD	.6032	.4719	6.924	.2317	.1861	.1966	.2402	.2387	.9312
#1	.1259	1.701	.4181	16.45	.1308	.7222	3.534	.0143	.1056
#2	.1263	1.711	.3656	16.49	.1310	.7195	3.543	.0142	.1057
#3	.1248	1.695	.3818	16.41	.1312	.7214	3.551	.0143	.1039

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F11.24	-.0010	.1962	.9757	.3445	.0189	-.0057	.0027	3.952
Stddev	.01	.0020	.0002	.0011	.0003	.0002	.0003	.0003	.005
%RSD	.0456	199.9	.1099	.1088	.0956	1.272	5.580	10.74	.1200
#1	11.24	.0007	.1964	.9753	.3443	.0191	-.0059	.0029	3.952
#2	11.24	-.0005	.1960	.9749	.3449	.0188	-.0054	.0027	3.957
#3	11.25	-.0032	.1963	.9769	.3444	.0187	-.0059	.0024	3.947

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2469.7	5196.6	47847.	5221.5
Stddev	2.5	6.1	99.	32.9
%RSD	.09958	.11687	.20681	.63051
#1	2472.4	5198.2	47891.	5190.4
#2	2469.1	5189.8	47734.	5256.0
#3	2467.5	5201.7	47917.	5218.0

Sample Name: FA21665-3 Acquired: 1/28/2015 15:07:37 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	32.62	.0511	F10.96	-.0001	F1211.	.0603	.0019	.0496
Stddev	.0002	.15	.0012	.35	.0001	9.	.0002	.0001	.0007
%RSD	103.4	.4581	2.287	3.189	75.63	.7739	.2889	3.444	1.326
#1	.0000	32.77	.0506	10.66	-.0001	1200.	.0604	.0019	.0503
#2	-.0004	32.62	.0524	11.34	.0000	1215.	.0603	.0020	.0491
#3	-.0003	32.47	.0502	10.87	-.0001	1217.	.0601	.0019	.0493

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.496	3.825	.8772	33.50	.3825	.3597	8.619	.0095	.4276
Stddev	.004	.022	.0170	.25	.0017	.0007	.019	.0002	.0024
%RSD	.2479	.5877	1.940	.7529	.4531	.1836	.2238	2.343	.5684
#1	1.494	3.824	.8935	33.40	.3838	.3604	8.623	.0097	.4268
#2	1.493	3.848	.8784	33.79	.3831	.3596	8.636	.0093	.4303
#3	1.500	3.803	.8596	33.32	.3805	.3591	8.598	.0095	.4257

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F15.10	-.0046	.3619	1.860	1.918	.1451	-.0064	.0090	F7.753
Stddev	.03	.0011	.0013	.005	.006	.0002	.0007	.0002	.037
%RSD	.2289	23.58	.3561	.2597	.3032	.1643	10.93	2.432	.4805
#1	15.12	-.0056	.3630	1.860	1.920	.1451	-.0066	.0092	7.762
#2	15.11	-.0047	.3605	1.866	1.923	.1453	-.0070	.0089	7.785
#3	15.06	-.0035	.3623	1.856	1.912	.1449	-.0056	.0088	7.712

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2253.2	4935.5	45055.	5103.5
Stddev	3.2	9.2	194.	29.6
%RSD	.14199	.18577	.43108	.57945
#1	2256.9	4932.7	44918.	5116.0
#2	2250.8	4928.0	44970.	5069.8
#3	2252.0	4945.7	45277.	5124.8

Sample Name: FA21665-4 Acquired: 1/28/2015 15:12:11 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	8.805	.0376	3.984	-.0002	F1068.	.2016	.0011	.0455
Stddev	.0001	.008	.0005	.007	.0001	4.	.0003	.0002	.0002
%RSD	46.23	.0909	1.391	.1825	41.24	.4012	.1649	15.90	.5039
#1	-.0001	8.805	.0371	3.982	-.0002	1068.	.2014	.0011	.0457
#2	-.0002	8.798	.0381	3.992	-.0001	1063.	.2020	.0013	.0454
#3	-.0004	8.814	.0374	3.977	-.0003	1071.	.2015	.0010	.0453

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3752	3.752	1.262	24.43	.4063	.3744	8.110	.0081	.7040
Stddev	.0002	.016	.031	.10	.0016	.0003	.003	.0002	.0011
%RSD	.0482	.4256	2.488	.3893	.3984	.0905	.0346	2.568	.1542
#1	.3752	3.769	1.239	24.50	.4046	.3746	8.110	.0079	.7044
#2	.3751	3.751	1.298	24.32	.4079	.3746	8.113	.0081	.7048
#3	.3754	3.737	1.249	24.48	.4064	.3740	8.108	.0083	.7028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F19.36	-.0047	.3319	.9587	.7361	.0570	-.0088	.0124	3.675
Stddev	.02	.0004	.0002	.0001	.0021	.0001	.0016	.0002	.005
%RSD	.0874	8.228	.0700	.0102	.2865	.1901	18.12	1.248	.1383
#1	19.35	-.0051	.3317	.9588	.7355	.0569	-.0105	.0122	3.670
#2	19.38	-.0048	.3321	.9586	.7384	.0571	-.0084	.0124	3.680
#3	19.35	-.0043	.3320	.9587	.7343	.0570	-.0074	.0125	3.675

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2297.2	4886.0	44749.	5093.5
Stddev	1.3	6.9	189.	31.0
%RSD	.05874	.14113	.42326	.60888
#1	2295.9	4882.9	44910.	5058.3
#2	2298.6	4881.2	44540.	5116.7
#3	2297.1	4893.9	44797.	5105.5

Sample Name: MP28500-MB1 Acquired: 1/28/2015 15:16:36 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0025	-.0014	.0004	-.0003	.0664	-.0005	-.0006	-.0001
Stddev	.0001	.0032	.0006	.0001	.0001	.0276	.0000	.0001	.0002
%RSD	9.572	128.9	41.47	26.87	24.98	41.58	10.29	10.74	180.4
#1	-.0006	.0054	-.0010	.0004	-.0003	.0983	-.0005	-.0006	.0000
#2	-.0007	.0029	-.0020	.0006	-.0003	.0491	-.0004	-.0006	-.0004
#3	-.0006	-.0009	-.0011	.0004	-.0002	.0519	-.0005	-.0007	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	-.0025	.0038	-.0003	-.0005	-.0120	-.0006	-.0001
Stddev	.0003	.002	.0156	.0095	.0000	.0001	.0042	.0001	.0002
%RSD	6442.	15720.	636.1	248.4	5.735	23.54	34.79	22.48	212.0
#1	.0003	.0024	-.0050	.0142	-.0003	-.0004	-.0150	-.0007	-.0003
#2	.0001	-.0020	-.0167	-.0043	-.0003	-.0004	-.0137	-.0005	-.0002
#3	-.0004	-.0005	.0143	.0015	-.0003	-.0006	-.0072	-.0008	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0127	.0008	.0294	-.0002	-.0001	-.0006	-.0026	-.0004	.0004
Stddev	.0031	.0010	.0001	.0004	.0001	.0001	.0003	.0001	.0000
%RSD	24.29	117.7	.3997	201.9	129.6	16.07	10.78	29.06	10.10
#1	.0155	.0019	.0292	-.0001	.0000	-.0005	-.0023	-.0003	.0004
#2	.0131	.0006	.0295	.0002	-.0001	-.0007	-.0026	-.0004	.0004
#3	.0094	.0000	.0294	-.0007	-.0001	-.0005	-.0028	-.0005	.0003
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025								
Low Limit	-.0025								

Sample Name: MP28500-MB1 Acquired: 1/28/2015 15:16:36 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3131.2	5750.4	53996.	5476.1
Stddev	3.0	12.7	378.	12.6
%RSD	.09462	.22073	.69966	.22954
#1	3127.8	5735.8	53661.	5487.7
#2	3132.6	5759.2	53921.	5462.8
#3	3133.2	5756.1	54405.	5477.8

Zoom In Zoom Out

Sample Name: MP28500-B1 Acquired: 1/28/2015 15:21:07 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0482	27.55	1.983	2.183	.0505	24.51	.0499	.5143	.2048	.2638
Stddev	.0007	.04	.002	.005	.0003	.01	.0001	.0008	.0010	.0005
%RSD	1.401	.1327	.1087	.2522	.5752	.0307	.1579	.1594	.4696	.1983
#1	.0487	27.52	1.980	2.177	.0502	24.50	.0499	.5149	.2047	.2644
#2	.0474	27.59	1.983	2.185	.0507	24.51	.0498	.5134	.2039	.2633
#3	.0485	27.55	1.984	2.188	.0506	24.51	.0499	.5148	.2058	.2638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.64	26.84	24.13	.5097	.4840	26.75	.5133	.4804	.5063	1.976
Stddev	.04	.04	.05	.0016	.0002	.08	.0006	.0013	.0011	.006
%RSD	.1453	.1647	.1993	.3099	.0353	.2898	.1254	.2762	.2092	.2884
#1	25.62	26.79	24.14	.5084	.4840	26.69	.5128	.4791	.5057	1.970
#2	25.68	26.88	24.08	.5091	.4839	26.84	.5131	.4818	.5057	1.975
#3	25.61	26.85	24.18	.5114	.4842	26.71	.5140	.4804	.5076	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0298	.5014	.4974	.4882	1.968	.4740	.4859
Stddev	.0000	.0009	.0008	.0011	.006	.0013	.0011
%RSD	.1049	.1761	.1511	.2312	.3013	.2805	.2339
#1	.0298	.5016	.4967	.4872	1.962	.4728	.4851
#2	.0298	.5005	.4982	.4880	1.973	.4737	.4854
#3	.0299	.5022	.4973	.4894	1.970	.4754	.4872
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28500-B1 Acquired: 1/28/2015 15:21:07 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2784.8	5592.7	51229.	5289.0
Stddev	3.6	4.0	203.	24.9
%RSD	.12922	.07204	.39639	.47029
#1	2785.0	5588.9	51295.	5275.2
#2	2781.1	5592.2	51391.	5274.1
#3	2788.3	5597.0	51001.	5317.7

Zoom In Zoom Out

Sample Name: FA21596-1 Acquired: 1/28/2015 15:25:20 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	.0052	-.0011	.0095	-.0003	9.253	-.0005	-.0005	-.0001	.0000
Stddev	.0006	.0057	.0002	.0001	.0000	.009	.0000	.0000	.0003	.0003
%RSD	58.82	109.0	14.87	1.207	1.844	.1031	5.044	7.946	187.2	720.7
#1	-.0004	-.0011	-.0013	.0094	-.0003	9.249	-.0005	-.0005	.0000	-.0001
#2	-.0015	.0069	-.0009	.0096	-.0003	9.264	-.0005	-.0004	.0000	.0003
#3	-.0010	.0099	-.0011	.0095	-.0003	9.246	-.0005	-.0005	-.0004	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0299	.5979	.3622	.0045	.0002	3.506	-.0003	-.0002	.0029	-.0002
Stddev	.0023	.0203	.0165	.0000	.0001	.018	.0001	.0005	.0012	.0013
%RSD	7.695	3.393	4.565	.4555	49.56	.4995	21.80	230.1	41.17	554.6
#1	.0326	.6171	.3806	.0045	.0003	3.524	-.0003	-.0007	.0026	.0013
#2	.0285	.5767	.3487	.0045	.0003	3.490	-.0004	-.0003	.0019	-.0009
#3	.0287	.5999	.3572	.0045	.0001	3.504	-.0002	.0003	.0042	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5332	.0001	.0268	.0000	-.0020	-.0002	.0062
Stddev	.0011	.0002	.0000	.0001	.0006	.0001	.0000
%RSD	.2067	294.9	.1527	161.3	29.91	61.90	.2721
#1	.5344	.0003	.0268	.0000	-.0026	-.0003	.0062
#2	.5323	-.0002	.0268	.0001	-.0014	-.0003	.0062
#3	.5329	.0002	.0268	.0000	-.0020	-.0001	.0063

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3046.9	5715.5	53317.	5406.8
Stddev	1.6	1.8	268.	12.8
%RSD	.05351	.03190	.50265	.23676
#1	3047.5	5716.8	53364.	5393.2
#2	3045.1	5713.4	53558.	5408.4
#3	3048.2	5716.2	53028.	5418.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 15:29:47 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2519	40.95	1.992	2.156	1.958	38.95	1.998	2.036	1.988	2.072
Stddev	.0007	.05	.003	.009	.003	.09	.004	.002	.003	.009
%RSD	.2693	.1294	.1717	.4326	.1514	.2257	.1765	.1006	.1566	.4310
#1	.2526	40.98	1.989	2.150	1.957	38.97	1.994	2.034	1.987	2.078
#2	.2518	40.98	1.996	2.166	1.961	39.02	2.001	2.037	1.986	2.077
#3	.2513	40.89	1.990	2.150	1.956	38.85	1.997	2.038	1.992	2.062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.16	42.26	38.95	1.998	2.017	42.27	1.991	1.965	2.026	2.018
Stddev	.03	.05	.20	.002	.004	.09	.004	.005	.002	.007
%RSD	.0728	.1093	.5185	.1202	.1782	.2235	.1812	.2752	.1063	.3360
#1	39.20	42.29	39.17	1.997	2.013	42.27	1.987	1.959	2.024	2.013
#2	39.16	42.28	38.91	1.997	2.019	42.36	1.995	1.968	2.028	2.026
#3	39.14	42.21	38.77	2.001	2.019	42.17	1.990	1.969	2.027	2.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.719	2.012	2.031	1.988	2.008	1.937	1.940
Stddev	.003	.002	.007	.001	.006	.004	.005
%RSD	.1899	.1027	.3699	.0367	.2860	.1821	.2463
#1	1.717	2.010	2.026	1.988	2.001	1.941	1.936
#2	1.723	2.012	2.040	1.988	2.012	1.936	1.946
#3	1.718	2.014	2.027	1.987	2.010	1.935	1.939
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 15:29:47 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2607.5	5436.4	49738.	5191.8
Stddev	3.0	4.7	162.	38.0
%RSD	.11453	.08564	.32586	.73218
#1	2610.8	5441.8	49828.	5149.4
#2	2606.6	5433.4	49834.	5222.9
#3	2605.1	5434.1	49550.	5203.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 15:33:59 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0068	.0006	.0005	.0003	.0183	.0000	.0000	.0003
Stddev	.0001	.0020	.0002	.0001	.0001	.0234	.0000	.0001	.0001
%RSD	29.58	28.71	38.51	12.22	31.44	127.6	52.18	336.6	33.55
#1	-.0004	.0089	.0008	.0005	.0003	.0025	.0001	.0000	.0003
#2	-.0004	.0066	.0004	.0004	.0003	.0451	.0000	-.0001	.0002
#3	-.0007	.0050	.0006	.0005	.0002	.0073	.0000	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0119	.0534	.0004	.0002	F.0014	.0037	-.0001	.0006
Stddev	.0002	.0050	.0226	.0038	.0000	.0003	.0045	.0001	.0005
%RSD	151.9	41.92	42.24	1010.	9.442	22.26	122.7	173.0	85.74
#1	.0003	.0172	.0373	.0047	.0001	.0017	.0039	.0000	.0001
#2	.0001	.0114	.0792	-.0009	.0002	.0013	.0081	.0000	.0007
#3	-.0001	.0072	.0437	-.0026	.0001	.0011	-.0009	-.0001	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0022	-.0011	.0002	.0001	.0004	.0009	.0000	.0001	.0000
Stddev	.0003	.0009	.0003	.0000	.0001	.0001	.0002	.0002	.000
%RSD	12.01	85.70	108.3	44.62	18.08	7.521	499.5	197.1	812.3
#1	.0024	-.0021	.0000	.0001	.0003	.0010	-.0002	.0002	-.0001
#2	.0024	-.0003	.0002	.0001	.0004	.0009	.0002	.0001	.0001
#3	.0019	-.0009	.0005	.0000	.0003	.0008	.0002	-.0001	.0000
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 15:33:59 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3085.7	5711.0	52524.	5250.6
Stddev	8.8	3.0	142.	38.2
%RSD	.28607	.05302	.27117	.72767
#1	3077.5	5714.2	52687.	5221.2
#2	3084.7	5710.7	52460.	5236.9
#3	3095.0	5708.1	52425.	5293.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 15:55:27 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2522	40.73	2.035	2.048	2.054	40.57	2.056	2.060	2.063	2.058
Stddev	.0012	.03	.003	.010	.003	.07	.003	.002	.005	.010
%RSD	.4586	.0757	.1575	.5052	.1389	.1826	.1416	.1094	.2309	.4757
#1	.2509	40.72	2.038	2.050	2.051	40.60	2.058	2.062	2.059	2.048
#2	.2530	40.71	2.031	2.038	2.054	40.49	2.052	2.058	2.068	2.060
#3	.2528	40.77	2.036	2.058	2.057	40.63	2.056	2.059	2.062	2.067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.05	40.83	41.05	2.075	2.036	40.94	2.046	2.021	2.033	2.041
Stddev	.07	.09	.08	.005	.002	.02	.004	.002	.004	.005
%RSD	.1745	.2266	.1870	.2236	.0786	.0605	.1792	.0998	.1959	.2462
#1	40.96	40.73	40.97	2.071	2.037	40.97	2.050	2.022	2.037	2.047
#2	41.07	40.86	41.12	2.080	2.035	40.93	2.043	2.019	2.034	2.040
#3	41.10	40.91	41.08	2.074	2.034	40.93	2.046	2.022	2.029	2.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.729	2.037	2.045	2.047	2.041	2.024	2.048
Stddev	.006	.006	.004	.006	.004	.007	.006
%RSD	.3260	.3055	.1731	.3090	.1932	.3447	.2746
#1	1.736	2.044	2.044	2.039	2.044	2.017	2.051
#2	1.727	2.032	2.043	2.052	2.036	2.030	2.042
#3	1.725	2.035	2.050	2.049	2.042	2.025	2.052
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 15:55:27 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2591.5	5397.4	49473.	5100.7
Stddev	4.6	7.5	103.	30.3
%RSD	.17784	.13817	.20824	.59459
#1	2589.2	5391.0	49588.	5089.6
#2	2596.8	5405.6	49444.	5077.4
#3	2588.4	5395.5	49388.	5135.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 15:59:39 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0019	-.0002	.0001	.0000	.0049	.0000	-.0001	-.0001
Stddev	.0001	.0037	.0007	.0001	.000	.0046	.0001	.0001	.0001
%RSD	49.12	197.5	290.1	124.7	432.5	93.43	286.3	144.9	64.66
#1	-.0004	.0030	-.0009	.0000	-.0001	.0056	.0000	.0000	.0000
#2	-.0003	-.0022	-.0003	.0001	.0001	.0000	.0000	-.0002	-.0002
#3	-.0001	.0049	.0005	.0001	.0000	.0092	.0001	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0159	.0834	.0036	.0001	F.0026	.0071	-.0001	.0005
Stddev	.0001	.0019	.0401	.0228	.0000	.0004	.0081	.0002	.0006
%RSD	37.32	11.65	48.10	631.4	33.91	13.93	113.4	414.1	107.5
#1	-.0002	.0180	.0374	.0018	.0001	.0031	-.0015	-.0003	.0011
#2	-.0005	.0143	.1017	.0272	.0001	.0025	.0084	.0000	.0002
#3	-.0003	.0155	.1111	-.0182	.0001	.0024	.0145	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0012	.0014	.0007	.0001	.0017	.0004	.0003	.0015
Stddev	.0012	.0014	.0002	.0001	.0001	.0002	.0006	.0001	.0001
%RSD	148.0	116.2	12.90	14.51	56.66	8.858	153.6	27.11	7.540
#1	.0004	.0004	.0012	.0006	.0002	.0019	.0004	.0004	.0014
#2	.0022	-.0022	.0014	.0007	.0000	.0017	-.0002	.0002	.0015
#3	-.0001	-.0017	.0016	.0007	.0002	.0016	.0011	.0003	.0016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 15:59:39 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3063.4	5678.9	52130.	5161.3
Stddev	14.0	27.3	81.	39.9
%RSD	.45767	.48108	.15550	.77284
#1	3065.4	5692.8	52206.	5183.9
#2	3076.3	5696.4	52138.	5184.8
#3	3048.4	5647.4	52045.	5115.3

Zoom In Zoom Out

Sample Name: MP28500-D1 Acquired: 1/28/2015 16:03:27 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0004	-.0008	.0092	-.0001	9.686	-.0002	-.0002	.0001	.0002
Stddev	.0001	.0041	.0007	.0001	.0000	.034	.0001	.0000	.0001	.0004
%RSD	76.10	1075.	86.24	1.203	35.82	.3529	33.52	14.75	72.00	221.9
#1	.0000	-.0017	-.0008	.0091	-.0001	9.696	-.0002	-.0002	.0001	.0006
#2	-.0003	-.0023	-.0015	.0093	-.0001	9.714	-.0002	-.0003	.0001	-.0001
#3	-.0002	.0051	-.0001	.0092	-.0002	9.648	-.0001	-.0002	.0002	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0360	.6198	.4372	.0049	.0016	3.509	.0001	.0004	.0007	-.0003
Stddev	.0016	.0153	.0123	.0000	.0001	.018	.0002	.0001	.0005	.0015
%RSD	4.441	2.470	2.819	.5897	6.368	.5230	171.1	29.59	77.54	588.2
#1	.0341	.6350	.4488	.0049	.0017	3.506	.0003	.0004	.0002	-.0014
#2	.0371	.6044	.4387	.0049	.0016	3.529	.0000	.0006	.0005	.0015
#3	.0367	.6201	.4243	.0049	.0015	3.493	.0000	.0003	.0013	-.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5472	.0006	.0278	.0012	-.0009	.0002	.0071
Stddev	.0030	.0002	.0001	.0001	.0018	.0001	.0000
%RSD	.5400	31.63	.4528	10.43	207.6	90.26	.5203
#1	.5496	.0004	.0279	.0012	.0003	.0000	.0071
#2	.5481	.0008	.0279	.0013	.0001	.0003	.0071
#3	.5439	.0006	.0277	.0011	-.0029	.0001	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3034.1	5698.8	52772.	5374.6
Stddev	3.8	17.5	201.	26.1
%RSD	.12520	.30630	.38098	.48529
#1	3030.0	5678.7	52915.	5381.4
#2	3037.4	5709.4	52860.	5345.7
#3	3034.9	5708.3	52542.	5396.5

Zoom In Zoom Out

Sample Name: MP28500-SD1 Acquired: 1/28/2015 16:07:55 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0013	.0044	-.0011	.0098	-.0008	9.705	-.0009	-.0012	.0000	.0016
Stddev	.0013	.0402	.0016	.0010	.0001	.056	.0002	.0008	.000	.0001
%RSD	100.3	911.0	142.2	10.56	7.186	.5757	23.31	70.51	613.6	5.516
#1	-.0007	-.0206	.0005	.0087	-.0007	9.752	-.0007	-.0008	-.0001	.0017
#2	-.0004	.0508	-.0011	.0107	-.0008	9.719	-.0011	-.0006	.0001	.0017
#3	-.0028	-.0170	-.0028	.0100	-.0008	9.643	-.0009	-.0021	-.0001	.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0112	.2976	.3966	.0041	.0006	3.329	-.0008	.0019	-.0031	.0010
Stddev	.0022	.0900	.0058	.0002	.0003	.031	.0012	.0018	.0046	.0060
%RSD	19.30	30.24	1.450	4.561	41.93	.9308	150.3	91.47	150.5	607.9
#1	.0120	.3301	.4032	.0042	.0005	3.354	-.0002	.0038	-.0057	.0031
#2	.0129	.1958	.3936	.0043	.0005	3.338	.0000	.0002	.0023	.0057
#3	.0088	.3668	.3929	.0039	.0009	3.294	-.0022	.0018	-.0057	-.0058

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5238	.0001	.0261	.0005	-.0018	.0004	.0150
Stddev	.0027	.0006	.0003	.0001	.0011	.0002	.0001
%RSD	.5110	498.5	1.214	26.62	64.26	53.79	.8772
#1	.5241	.0004	.0263	.0004	-.0026	.0002	.0152
#2	.5210	-.0006	.0261	.0006	-.0022	.0006	.0149
#3	.5264	.0006	.0257	.0004	-.0005	.0003	.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3093.2	5757.5	53153.	5361.6
Stddev	4.4	6.1	299.	23.2
%RSD	.14105	.10622	.56308	.43271
#1	3098.2	5752.3	53363.	5335.7
#2	3091.1	5764.2	52810.	5368.6
#3	3090.2	5755.9	53285.	5380.5

Zoom In Zoom Out

Sample Name: MP28500-S1 Acquired: 1/28/2015 16:12:25 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0498	28.01	2.074	2.145	.0542	35.40	.0518	.5264	.2160	.2730
Stddev	.0005	.02	.008	.005	.0003	.04	.0002	.0015	.0006	.0012
%RSD	.9352	.0591	.3737	.2430	.5986	.1183	.3371	.2831	.2980	.4423
#1	.0493	28.01	2.066	2.146	.0543	35.44	.0516	.5250	.2154	.2716
#2	.0498	28.00	2.075	2.139	.0538	35.36	.0519	.5263	.2167	.2737
#3	.0502	28.03	2.082	2.149	.0544	35.41	.0520	.5280	.2161	.2737

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.45	26.79	26.17	.5387	.5000	29.88	.5341	.5001	.5187	2.065
Stddev	.10	.14	.15	.0012	.0018	.12	.0022	.0013	.0021	.003
%RSD	.3625	.5353	.5679	.2218	.3557	.3983	.4092	.2621	.4059	.1192
#1	27.53	26.94	26.29	.5382	.4979	30.01	.5319	.4989	.5171	2.063
#2	27.34	26.65	26.01	.5401	.5007	29.78	.5341	.5000	.5180	2.063
#3	27.48	26.78	26.22	.5379	.5012	29.85	.5363	.5015	.5211	2.068

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5512	.5160	.5413	.5150	2.026	.5020	.5175
Stddev	.0022	.0020	.0021	.0008	.004	.0014	.0024
%RSD	.4021	.3947	.3854	.1493	.2037	.2741	.4562
#1	.5491	.5141	.5435	.5147	2.024	.5015	.5155
#2	.5535	.5158	.5394	.5159	2.023	.5035	.5168
#3	.5508	.5181	.5410	.5144	2.030	.5009	.5201

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2738.1	5532.0	50567.	5315.3
Stddev	5.7	11.7	160.	31.4
%RSD	.20803	.21181	.31640	.59084
#1	2734.7	5540.8	50607.	5279.1
#2	2744.7	5536.4	50392.	5331.0
#3	2735.0	5518.7	50704.	5335.7

Zoom In Zoom Out

Sample Name: MP28500-S2 Acquired: 1/28/2015 16:16:37 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0488	27.64	2.056	2.107	.0533	35.18	.0513	.5197	.2132	.2693
Stddev	.0005	.03	.003	.008	.0001	.08	.0001	.0005	.0008	.0011
%RSD	1.067	.0908	.1296	.3671	.1912	.2297	.2058	.0922	.3799	.3924
#1	.0494	27.66	2.053	2.115	.0532	35.28	.0512	.5192	.2138	.2682
#2	.0484	27.65	2.056	2.107	.0533	35.13	.0514	.5202	.2135	.2694
#3	.0487	27.61	2.059	2.100	.0534	35.14	.0513	.5198	.2123	.2703

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.12	26.72	25.63	.5324	.4946	29.62	.5298	.4952	.5141	2.046
Stddev	.04	.09	.03	.0011	.0009	.08	.0008	.0018	.0017	.002
%RSD	.1326	.3300	.1239	.2017	.1751	.2671	.1577	.3638	.3314	.1151
#1	27.16	26.62	25.63	.5332	.4953	29.65	.5293	.4935	.5147	2.043
#2	27.09	26.80	25.60	.5328	.4949	29.67	.5293	.4950	.5122	2.047
#3	27.12	26.72	25.66	.5312	.4937	29.53	.5307	.4971	.5154	2.048

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5545	.5101	.5403	.5128	2.005	.4980	.5136
Stddev	.0013	.0007	.0009	.0003	.004	.0004	.0007
%RSD	.2261	.1315	.1645	.0607	.2234	.0838	.1329
#1	.5530	.5098	.5403	.5132	2.010	.4984	.5128
#2	.5553	.5109	.5413	.5127	2.001	.4979	.5139
#3	.5551	.5097	.5395	.5126	2.006	.4976	.5141

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2747.7	5526.4	50918.	5284.6
Stddev	3.4	.9	145.	22.1
%RSD	.12401	.01655	.28469	.41788
#1	2744.6	5526.1	50752.	5267.0
#2	2751.4	5527.5	50981.	5277.5
#3	2747.3	5525.7	51021.	5309.4

Zoom In Zoom Out

Sample Name: FA21612-1L Acquired: 1/28/2015 16:20:49 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.1293	-.0015	.0193	.0001	25.50	.0541	.0159	.0068
Stddev	.0002	.0047	.0004	.0000	.0001	.05	.0001	.0001	.0001
%RSD	220.3	3.629	26.21	.1172	70.04	.1851	.1666	.5475	1.067
#1	.0001	.1289	-.0017	.0193	.0001	25.54	.0541	.0160	.0067
#2	-.0002	.1248	-.0017	.0193	.0001	25.50	.0540	.0158	.0068
#3	-.0002	.1341	-.0010	.0193	.0000	25.45	.0542	.0159	.0068

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0159	.5514	.9293	6.611	.2177	.0047	F121.1	.0086	.0029
Stddev	.0001	.0036	.0222	.019	.0004	.0002	.4	.0001	.0005
%RSD	.3707	.6474	2.392	.2898	.1611	5.168	.3408	1.058	18.80
#1	.0160	.5555	.9442	6.603	.2179	.0050	121.5	.0087	.0023
#2	.0159	.5498	.9398	6.633	.2179	.0046	121.1	.0086	.0030
#3	.0159	.5488	.9037	6.597	.2173	.0046	120.7	.0085	.0034

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0044	.0006	1.302	.0006	.2989	.0040	-.0007	-.0003	.0920
Stddev	.0014	.0012	.004	.0001	.0005	.0004	.0001	.0002	.0002
%RSD	31.52	213.9	.2978	25.77	.1603	10.53	14.69	96.71	.2074
#1	.0050	.0004	1.304	.0007	.2994	.0037	-.0007	-.0001	.0921
#2	.0028	.0018	1.298	.0004	.2984	.0045	-.0008	-.0005	.0917
#3	.0054	-.0006	1.305	.0006	.2990	.0038	-.0007	-.0001	.0921

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2750.7	5454.0	49691.	5254.9
Stddev	4.3	12.2	136.	33.3
%RSD	.15525	.22393	.27285	.63359
#1	2747.1	5440.6	49599.	5250.0
#2	2749.6	5456.7	49626.	5224.3
#3	2755.4	5464.6	49846.	5290.4

Zoom In Zoom Out

Sample Name: FA21634-1 Acquired: 1/28/2015 16:25:14 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0381	-.0012	.0121	.0000	2.903	.0239	.0040	.0007
Stddev	.000	.0085	.0006	.0001	.000	.009	.0001	.0002	.0001
%RSD	595.6	22.33	46.61	.8521	118.0	.3083	.4344	4.411	13.64
#1	.0002	.0381	-.0014	.0120	-.0001	2.897	.0240	.0039	.0007
#2	-.0003	.0296	-.0017	.0122	.0000	2.898	.0238	.0039	.0006
#3	.0000	.0465	-.0006	.0120	-.0001	2.913	.0240	.0042	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0593	.0378	7.852	.0848	.0035	.0002	F135.5	2.487	.0100
Stddev	.0002	.0018	.052	.0027	.0000	.0002	.4	.007	.0002
%RSD	.2967	4.640	.6627	3.233	.5614	133.1	.3021	.2828	1.857
#1	.0592	.0369	7.912	.0870	.0035	.0000	136.0	2.484	.0098
#2	.0595	.0398	7.815	.0817	.0035	.0001	135.3	2.482	.0101
#3	.0592	.0367	7.829	.0855	.0035	.0004	135.3	2.495	.0100

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0005	.0000	.1222	.0012	.0042	.0063	-.0015	.0001	.0509
Stddev	.0006	.0012	.0020	.0003	.0001	.0002	.0005	.0000	.0002
%RSD	110.8	2601.	1.657	20.12	1.845	3.350	33.85	32.12	.3111
#1	.0005	.0011	.1224	.0015	.0043	.0061	-.0017	.0001	.0509
#2	.0000	.0002	.1201	.0011	.0041	.0062	-.0009	.0001	.0508
#3	.0012	-.0012	.1241	.0011	.0042	.0065	-.0018	.0001	.0511

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2728.7	5401.6	49088.	5185.3
Stddev	10.8	18.3	91.	55.1
%RSD	.39544	.33875	.18535	1.0623
#1	2737.9	5407.7	49071.	5211.4
#2	2731.3	5416.0	49187.	5222.4
#3	2716.8	5381.0	49007.	5122.0

Zoom In Zoom Out

Sample Name: FA21647-3L Acquired: 1/28/2015 16:29:41 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0404	-.0013	.0080	-.0001	.8289	-.0002	.0009	.0006
Stddev	.000	.0011	.0003	.0002	.0001	.0007	.0000	.0001	.0002
%RSD	954.2	2.711	23.69	2.068	127.5	.0890	5.369	8.957	31.66
#1	.0003	.0416	-.0011	.0082	.0000	.8286	-.0002	.0008	.0006
#2	-.0003	.0399	-.0017	.0080	-.0002	.8283	-.0002	.0010	.0008
#3	-.0002	.0396	-.0012	.0078	-.0002	.8297	-.0002	.0009	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0097	.0214	.4388	.5291	.2407	-.0002	F131.9	.0013	-.0002
Stddev	.0002	.0033	.0227	.0224	.0007	.0001	.4	.0002	.0005
%RSD	2.320	15.45	5.184	4.228	.2859	53.75	.2754	14.44	317.1
#1	.0095	.0186	.4585	.5464	.2411	-.0003	132.3	.0012	-.0004
#2	.0099	.0206	.4441	.5038	.2411	-.0002	131.6	.0015	-.0005
#3	.0096	.0251	.4139	.5370	.2399	-.0001	131.7	.0011	.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	-.0011	.1851	.0002	.0091	-.0001	-.0008	-.0002	.0020
Stddev	.0010	.0008	.0007	.0002	.0001	.0001	.0008	.0001	.0001
%RSD	547.1	74.04	.3540	114.4	.9330	100.7	103.3	59.49	3.799
#1	.0013	-.0003	.1846	.0003	.0092	-.0002	-.0017	-.0003	.0020
#2	-.0003	-.0012	.1849	.0002	.0091	.0000	-.0006	-.0001	.0020
#3	-.0005	-.0019	.1858	.0000	.0092	-.0001	-.0001	-.0001	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2761.8	5502.1	49458.	5219.0
Stddev	4.0	12.1	165.	26.2
%RSD	.14421	.21910	.33421	.50125
#1	2758.5	5489.4	49557.	5231.3
#2	2760.7	5513.5	49550.	5236.7
#3	2766.3	5503.3	49267.	5188.9

Zoom In Zoom Out

Sample Name: FA21585-7 Acquired: 1/28/2015 16:34:09 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.1460	.0949	.1322	.1918	.1674	18.10	.1737	.0016	.2234
Stddev	.0008	.0021	.0006	.0006	.0009	.04	.0004	.0000	.0010
%RSD	.5732	2.256	.4207	.3246	.5260	.2320	.2279	1.466	.4670
#1	.1469	.0938	.1327	.1911	.1664	18.06	.1733	.0016	.2234
#2	.1453	.0935	.1323	.1920	.1674	18.14	.1739	.0016	.2224
#3	.1459	.0973	.1316	.1923	.1682	18.11	.1740	.0016	.2244

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0028	.0531	1.056	.9367	.2593	-.0001	F129.4	.1217	.2363
Stddev	.0002	.0013	.013	.0290	.0010	.0000	.4	.0002	.0013
%RSD	7.149	2.365	1.264	3.093	.3726	67.92	.3249	.1250	.5644
#1	.0028	.0536	1.042	.9040	.2594	.0000	129.1	.1217	.2351
#2	.0027	.0540	1.059	.9471	.2582	.0000	129.3	.1215	.2378
#3	.0031	.0517	1.068	.9591	.2602	-.0001	129.9	.1218	.2360

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2411	.1830	.3038	.0002	.0668	.0015	-.0016	.0003	.0863
Stddev	.0009	.0015	.0021	.0001	.0003	.0001	.0006	.0002	.0002
%RSD	.3849	.8447	.6783	30.67	.4242	6.766	36.14	58.00	.2097
#1	.2413	.1824	.3061	.0003	.0665	.0015	-.0017	.0002	.0861
#2	.2418	.1848	.3025	.0001	.0669	.0016	-.0021	.0005	.0863
#3	.2400	.1818	.3026	.0003	.0670	.0014	-.0010	.0002	.0865

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2753.0	5534.2	49997.	5226.3
Stddev	2.8	3.5	200.	13.8
%RSD	.10256	.06397	.40049	.26372
#1	2756.0	5538.0	49860.	5219.2
#2	2752.6	5531.0	50227.	5217.5
#3	2750.4	5533.8	49904.	5242.2

Zoom In Zoom Out

Sample Name: FA21676-1 Acquired: 1/28/2015 16:38:31 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.8044	.0449	.0296	-.0001	1.597	.0050	.0007	.0130
Stddev	.0001	.0086	.0003	.0002	.0001	.005	.0000	.0001	.0001
%RSD	118.7	1.075	.5822	.5426	50.28	.2988	.2166	20.82	.9410
#1	.0002	.8143	.0447	.0298	-.0001	1.602	.0050	.0006	.0131
#2	.0000	.7986	.0452	.0294	-.0001	1.593	.0049	.0008	.0129
#3	.0002	.8002	.0448	.0297	-.0002	1.597	.0050	.0005	.0130

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2259	1.051	5.845	.3247	.0392	.0097	F141.0	.0146	.0290
Stddev	.0004	.008	.077	.0260	.0001	.0001	.8	.0003	.0005
%RSD	.1903	.7310	1.316	7.994	.1576	.7290	.5857	1.909	1.758
#1	.2255	1.057	5.837	.3415	.0393	.0096	141.8	.0144	.0286
#2	.2264	1.042	5.772	.3379	.0392	.0097	140.2	.0144	.0295
#3	.2258	1.053	5.925	.2948	.0392	.0097	141.1	.0149	.0287

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0416	.0403	.2270	.0171	.0143	.0078	-.0023	.0380	1.786
Stddev	.0006	.0013	.0009	.0003	.0000	.0001	.0010	.0001	.006
%RSD	1.432	3.316	.4151	1.643	.2255	1.247	44.29	.1998	.3278
#1	.0421	.0388	.2281	.0173	.0143	.0078	-.0031	.0380	1.780
#2	.0417	.0408	.2263	.0168	.0143	.0078	-.0012	.0380	1.792
#3	.0409	.0413	.2265	.0172	.0143	.0079	-.0027	.0381	1.787

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2743.9	5484.1	49937.	5246.9
Stddev	2.2	2.0	228.	68.7
%RSD	.08017	.03695	.45633	1.3096
#1	2743.2	5484.7	49819.	5185.3
#2	2742.1	5481.8	49793.	5321.0
#3	2746.4	5485.8	50200.	5234.3

Zoom In Zoom Out

Sample Name: FA21676-2 Acquired: 1/28/2015 16:42:54 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	1.244	.0108	.0176	.0000	1.273	.0015	.0004	.0069
Stddev	.0003	.008	.0010	.0002	.000	.042	.0001	.0000	.0001
%RSD	264.2	.6140	8.817	1.001	125.6	3.272	3.685	7.189	1.579
#1	.0001	1.253	.0098	.0177	.0000	1.321	.0015	.0003	.0070
#2	-.0004	1.238	.0109	.0174	.0000	1.249	.0014	.0004	.0070
#3	.0001	1.241	.0117	.0177	-.0001	1.248	.0015	.0004	.0068

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0916	4.876	3.897	.3228	.0698	.0048	F137.9	.0064	.0099
Stddev	.0006	.014	.023	.0078	.0003	.0002	.2	.0003	.0005
%RSD	.6999	.2786	.5932	2.411	.4581	3.465	.1381	3.950	5.287
#1	.0921	4.888	3.895	.3159	.0695	.0050	138.1	.0065	.0101
#2	.0918	4.862	3.876	.3312	.0701	.0046	137.8	.0067	.0103
#3	.0908	4.879	3.922	.3211	.0697	.0049	137.8	.0062	.0093

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0157	.0151	.3100	.0062	.0082	.0092	-.0026	.0128	1.735
Stddev	.0010	.0025	.0011	.0003	.0002	.0001	.0008	.0001	.007
%RSD	6.645	16.63	.3602	5.612	2.574	.9413	29.10	.4336	.4277
#1	.0160	.0139	.3113	.0062	.0084	.0092	-.0018	.0128	1.743
#2	.0145	.0179	.3093	.0059	.0081	.0092	-.0029	.0129	1.729
#3	.0165	.0133	.3095	.0066	.0080	.0093	-.0032	.0128	1.734

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2770.0	5496.8	49708.	5232.5
Stddev	5.2	14.9	41.	11.5
%RSD	.18931	.27020	.08263	.21969
#1	2764.1	5479.8	49755.	5243.6
#2	2771.6	5507.4	49679.	5233.4
#3	2774.2	5503.1	49690.	5220.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 16:47:17 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2501	40.28	2.030	2.032	2.039	40.33	2.045	2.040	2.066	2.038
Stddev	.0012	.26	.003	.015	.012	.30	.004	.004	.013	.018
%RSD	.4694	.6342	.1657	.7176	.5923	.7489	.2024	.2178	.6492	.8600
#1	.2514	40.29	2.033	2.039	2.040	40.37	2.049	2.045	2.082	2.058
#2	.2493	40.53	2.027	2.041	2.051	40.61	2.041	2.036	2.059	2.031
#3	.2495	40.02	2.029	2.015	2.027	40.01	2.046	2.039	2.058	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.62	40.85	40.40	2.082	2.006	40.29	2.040	2.012	2.021	2.041
Stddev	.24	.30	.28	.015	.002	.24	.006	.002	.008	.006
%RSD	.5955	.7425	.6816	.7220	.1113	.5912	.2787	.1056	.4079	.3149
#1	40.67	40.76	40.36	2.099	2.008	40.33	2.046	2.010	2.025	2.044
#2	40.83	41.18	40.70	2.073	2.004	40.51	2.035	2.013	2.012	2.033
#3	40.35	40.60	40.15	2.074	2.007	40.03	2.039	2.014	2.027	2.045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.722	2.012	2.044	2.052	2.022	2.033	2.043
Stddev	.006	.003	.014	.017	.003	.012	.004
%RSD	.3587	.1256	.6620	.8361	.1369	.5637	.2076
#1	1.728	2.014	2.046	2.072	2.022	2.047	2.048
#2	1.716	2.009	2.057	2.044	2.020	2.027	2.039
#3	1.720	2.014	2.030	2.040	2.025	2.027	2.044
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 16:47:17 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2644.3	5507.9	50073.	5172.9
Stddev	3.5	15.7	353.	29.5
%RSD	.13175	.28509	.70595	.57094
#1	2645.9	5494.7	49700.	5178.2
#2	2646.7	5525.2	50117.	5141.1
#3	2640.3	5503.8	50403.	5199.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 16:51:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0029	-.0002	.0002	.0003	.0108	.0003	.0002	.0003
Stddev	.000	.0022	.0002	.0001	.0001	.0035	.0000	.0000	.0001
%RSD	2444.	74.06	117.7	71.99	17.34	32.03	7.812	6.554	36.79
#1	.0000	.0039	-.0004	.0001	.0002	.0128	.0003	.0003	.0003
#2	-.0003	.0045	-.0001	.0002	.0003	.0128	.0003	.0002	.0003
#3	.0003	.0004	.0000	.0003	.0003	.0068	.0002	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0201	.0030	.0259	.0003	F.0017	.0415	.0002	.0004
Stddev	.0001	.0025	.0257	.0167	.0000	.0003	.0053	.0002	.0001
%RSD	43.13	12.48	859.1	64.27	7.593	17.27	12.83	101.3	20.35
#1	-.0002	.0228	.0238	.0451	.0003	.0020	.0475	.0002	.0005
#2	-.0001	.0198	.0108	.0146	.0003	.0015	.0376	.0000	.0004
#3	-.0001	.0178	-.0257	.0182	.0003	.0015	.0392	.0004	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	.0013	.0005	.0003	.0015	.0006	.0004	.0009
Stddev	.0002	.0009	.0004	.0002	.0001	.0002	.0006	.0002	.0001
%RSD	113.3	343.1	29.36	30.19	17.90	10.52	102.6	62.33	8.003
#1	.0000	-.0004	.0017	.0006	.0004	.0016	.0008	.0003	.0008
#2	.0004	.0012	.0010	.0003	.0003	.0014	.0011	.0002	.0010
#3	.0002	.0000	.0012	.0006	.0003	.0014	-.0001	.0006	.0009
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 16:51:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3118.9	5767.3	53119.	5201.7
Stddev	9.3	15.5	337.	23.3
%RSD	.29962	.26791	.63360	.44845
#1	3116.2	5764.8	52899.	5222.6
#2	3111.3	5753.3	52952.	5205.9
#3	3129.4	5783.9	53507.	5176.6

Zoom In Zoom Out

Sample Name: FA21676-3 Acquired: 1/28/2015 16:55:59 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.1252	.0075	.0222	.0000	3.125	.0034	.0001	.0039
Stddev	.0004	.0072	.0006	.0002	.000	.082	.0000	.0001	.0001
%RSD	831.6	5.787	7.533	.8017	393.8	2.630	1.438	172.0	3.128
#1	-.0001	.1177	.0076	.0223	-.0002	3.078	.0033	.0000	.0040
#2	-.0003	.1259	.0069	.0220	-.0002	3.076	.0034	.0000	.0038
#3	.0005	.1321	.0080	.0223	.0002	3.219	.0034	.0002	.0038

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7111	.8493	5.369	.4545	.0406	.0110	F135.6	.0024	.0259
Stddev	.0007	.0009	.027	.0323	.0001	.0002	.8	.0001	.0004
%RSD	.0938	.1086	.5067	7.109	.2785	1.757	.5681	2.296	1.598
#1	.7103	.8483	5.383	.4181	.0407	.0111	136.1	.0024	.0255
#2	.7112	.8493	5.385	.4799	.0405	.0108	136.0	.0024	.0262
#3	.7117	.8501	5.337	.4654	.0407	.0111	134.7	.0025	.0261

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0082	.0051	.0774	.0078	.0101	.0022	-.0011	.0026	F7.235
Stddev	.0008	.0019	.0020	.0000	.0006	.0001	.0010	.0002	.016
%RSD	10.14	36.82	2.525	.3660	5.479	3.297	92.52	7.479	.2237
#1	.0092	.0031	.0795	.0077	.0098	.0022	-.0003	.0026	7.253
#2	.0078	.0054	.0771	.0078	.0098	.0023	-.0022	.0028	7.230
#3	.0077	.0067	.0756	.0078	.0107	.0021	-.0007	.0025	7.222

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2756.2	5509.3	49746.	5185.0
Stddev	1.4	1.8	154.	26.7
%RSD	.04902	.03293	.30886	.51446
#1	2755.5	5511.3	49775.	5158.2
#2	2755.4	5509.0	49883.	5211.5
#3	2757.8	5507.7	49580.	5185.3

Zoom In Zoom Out

Sample Name: MP28500-D2 Acquired: 1/28/2015 17:00:26 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(Y_3600)
Avg	.0000	.1429	-.0017	.0181	-.0002	26.05	.0380	.0168	.0074
Stddev	.0004	.0043	.0005	.0002	.0001	.04	.0001	.0001	.0002
%RSD	1280.	2.993	30.81	1.056	31.78	.1398	.2686	.5793	3.120
#1	-.0004	.1468	-.0015	.0183	-.0002	26.08	.0379	.0168	.0076
#2	.0001	.1435	-.0013	.0179	-.0001	26.06	.0380	.0168	.0075
#3	.0003	.1384	-.0023	.0180	-.0002	26.01	.0381	.0169	.0072

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0073	.8265	.8529	6.888	.2246	.0045	F125.3	.0071	.0026
Stddev	.0002	.0033	.0207	.037	.0017	.0000	.8	.0001	.0008
%RSD	2.787	.4018	2.426	.5319	.7380	.5087	.6643	1.245	28.95
#1	.0071	.8302	.8470	6.853	.2255	.0046	125.9	.0070	.0035
#2	.0074	.8240	.8759	6.884	.2257	.0045	125.7	.0071	.0023
#3	.0074	.8251	.8358	6.926	.2227	.0045	124.4	.0072	.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0042	.0005	1.296	.0005	.3029	.0036	-.0016	.0000	.0977
Stddev	.0011	.0020	.008	.0002	.0023	.0004	.0005	.0001	.0004
%RSD	25.31	426.9	.6107	42.37	.7544	10.88	31.43	301.5	.4099
#1	.0030	.0026	1.290	.0006	.3049	.0040	-.0012	.0001	.0973
#2	.0045	.0002	1.295	.0003	.3035	.0032	-.0022	.0000	.0977
#3	.0051	-.0014	1.305	.0008	.3004	.0036	-.0015	.0000	.0981

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2744.5	5497.7	50308.	5252.6
Stddev	2.6	5.8	312.	55.6
%RSD	.09454	.10480	.61967	1.0592
#1	2744.0	5502.0	50146.	5305.0
#2	2747.2	5491.2	50111.	5194.2
#3	2742.1	5500.1	50668.	5258.6

Zoom In Zoom Out

Sample Name: MP28500-D3 Acquired: 1/28/2015 17:04:50 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.8094	.0438	.0301	-.0001	1.428	.0049	.0005	.0125
Stddev	.0002	.0026	.0005	.0002	.0000	.009	.0000	.0001	.0001
%RSD	228.8	.3157	1.096	.8201	57.41	.6143	.9861	20.58	.8720
#1	-.0003	.8094	.0441	.0302	.0000	1.418	.0049	.0004	.0125
#2	-.0001	.8069	.0439	.0303	-.0001	1.433	.0049	.0006	.0126
#3	.0001	.8120	.0432	.0298	-.0001	1.434	.0048	.0005	.0124

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2232	1.029	5.792	.2818	.0386	.0094	F138.7	.0142	.0288
Stddev	.0004	.009	.036	.0247	.0001	.0003	.1	.0000	.0003
%RSD	.1621	.9074	.6232	8.754	.2015	2.660	.0583	.2644	.9878
#1	.2233	1.040	5.750	.2810	.0385	.0096	138.6	.0142	.0285
#2	.2228	1.023	5.812	.3069	.0386	.0094	138.6	.0143	.0288
#3	.2236	1.024	5.813	.2576	.0386	.0091	138.8	.0142	.0290

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0410	.0407	.2208	.0173	.0140	.0078	-.0015	.0375	1.746
Stddev	.0001	.0004	.0006	.0001	.0000	.0001	.0007	.0001	.004
%RSD	.3270	.8938	.2932	.5589	.3477	.8822	49.21	.1896	.2508
#1	.0411	.0408	.2216	.0174	.0139	.0078	-.0008	.0375	1.751
#2	.0408	.0403	.2207	.0172	.0140	.0077	-.0013	.0374	1.745
#3	.0411	.0411	.2203	.0172	.0139	.0078	-.0023	.0375	1.742

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2760.0	5512.7	49990.	5294.6
Stddev	6.6	8.1	99.	17.4
%RSD	.24003	.14690	.19726	.32853
#1	2757.9	5508.7	49882.	5314.5
#2	2767.5	5522.1	50075.	5282.2
#3	2754.8	5507.4	50013.	5287.3

Zoom In Zoom Out

Sample Name: MP28500-MB2 Acquired: 1/28/2015 17:09:14 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0015	-.0011	-.0004	-.0002	.0002	-.0002	-.0003	.0000	-.0006
Stddev	.0004	.0094	.0003	.0003	.0000	.0026	.0000	.0001	.000	.0001
%RSD	288.5	612.6	26.39	81.00	15.92	1151.	3.461	30.80	1155.	18.51
#1	-.0006	.0010	-.0014	-.0007	-.0002	-.0007	-.0002	-.0002	.0002	-.0005
#2	.0002	-.0076	-.0008	-.0001	-.0002	-.0018	-.0002	-.0003	-.0001	-.0006
#3	-.0001	.0112	-.0010	-.0003	-.0002	.0032	-.0002	-.0003	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	-.0298	.0214	-.0001	-.0002	.0570	-.0004	-.0002	.0001	-.0006
Stddev	.0004	.0088	.0092	.0000	.0001	.0047	.0002	.0003	.0005	.0007
%RSD	21.27	29.69	43.05	16.52	69.46	8.162	45.81	133.9	728.7	121.4
#1	.0015	-.0245	.0127	-.0001	-.0001	.0623	-.0004	.0000	-.0001	-.0013
#2	.0016	-.0400	.0204	-.0001	-.0004	.0552	-.0002	-.0002	.0006	.0001
#3	.0022	-.0249	.0310	-.0001	-.0001	.0535	-.0005	-.0005	-.0004	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0364	.0000	-.0002	-.0002	-.0004	-.0001	.0007
Stddev	.0010	.000	.0000	.0000	.0007	.0001	.0000
%RSD	2.804	949.0	28.21	15.23	172.6	116.6	3.619
#1	.0362	-.0001	-.0002	-.0002	-.0012	-.0002	.0007
#2	.0355	.0002	-.0002	-.0002	-.0001	.0000	.0006
#3	.0375	-.0002	-.0001	-.0002	.0001	-.0001	.0007
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28500-MB2 Acquired: 1/28/2015 17:09:14 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3131.1	5843.2	53671.	5260.7
Stddev	1.4	4.6	99.	19.8
%RSD	.04313	.07937	.18434	.37583
#1	3129.6	5840.3	53771.	5272.6
#2	3131.5	5848.6	53669.	5271.7
#3	3132.2	5840.8	53573.	5237.9

Zoom In Zoom Out

Sample Name: MP28500-B2 Acquired: 1/28/2015 17:13:44 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0490	28.26	2.054	2.127	.0543	25.95	.0517	.5245	.2190	.2734
Stddev	.0002	.10	.003	.009	.0002	.09	.0000	.0003	.0004	.0008
%RSD	.4572	.3572	.1481	.4075	.3557	.3284	.0357	.0577	.2016	.2846
#1	.0492	28.17	2.057	2.123	.0541	25.90	.0517	.5248	.2185	.2730
#2	.0487	28.26	2.051	2.121	.0545	25.91	.0518	.5246	.2194	.2743
#3	.0491	28.37	2.053	2.137	.0544	26.05	.0518	.5242	.2191	.2729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.58	26.54	26.24	.5366	.4990	26.50	.5297	.5023	.5081	2.037
Stddev	.11	.12	.19	.0001	.0003	.11	.0004	.0018	.0009	.002
%RSD	.3994	.4475	.7140	.0185	.0689	.4333	.0737	.3632	.1779	.0742
#1	27.47	26.40	26.15	.5367	.4989	26.37	.5294	.5044	.5091	2.035
#2	27.57	26.62	26.11	.5367	.4994	26.60	.5301	.5011	.5073	2.037
#3	27.69	26.59	26.45	.5365	.4987	26.53	.5297	.5016	.5080	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0421	.5202	.5179	.5178	2.010	.5076	.5169
Stddev	.0005	.0007	.0016	.0006	.003	.0021	.0004
%RSD	1.076	.1331	.3151	.1101	.1303	.4132	.0771
#1	.0422	.5203	.5161	.5171	2.008	.5062	.5166
#2	.0416	.5195	.5188	.5181	2.008	.5100	.5174
#3	.0425	.5209	.5190	.5182	2.013	.5065	.5169
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28500-B2 Acquired: 1/28/2015 17:13:44 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2771.7	5593.6	50581.	5159.9
Stddev	5.0	4.3	74.	7.1
%RSD	.17868	.07749	.14622	.13669
#1	2771.7	5595.4	50664.	5162.8
#2	2766.8	5588.7	50559.	5165.0
#3	2776.7	5596.8	50521.	5151.9

Zoom In Zoom Out

Sample Name: MP28500-MB3 Acquired: 1/28/2015 17:17:58 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0037	-.0012	.0013	-.0001	.0717	-.0002	-.0003	-.0001
Stddev	.0006	.0088	.0002	.0001	.0000	.0161	.0000	.0000	.0003
%RSD	2959.	238.9	17.41	11.21	25.97	22.53	19.01	8.176	241.0
#1	.0004	-.0100	-.0014	.0014	-.0001	.0643	-.0001	-.0003	-.0002
#2	-.0006	-.0073	-.0012	.0014	-.0001	.0902	-.0002	-.0003	-.0003
#3	.0003	.0063	-.0010	.0012	-.0001	.0605	-.0002	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0040	.1864	.0027	-.0001	-.0001	F134.4	-.0003	.0005
Stddev	.0002	.0019	.0167	.0182	.0000	.0001	.4	.0002	.0001
%RSD	447.1	48.42	8.960	674.1	3.249	83.82	.2645	55.08	10.10
#1	-.0002	.0036	.2005	.0217	-.0001	.0000	134.5	-.0004	.0005
#2	.0002	.0061	.1909	.0010	-.0001	-.0001	134.0	-.0004	.0006
#3	-.0001	.0023	.1680	-.0146	-.0001	-.0001	134.7	-.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0001	.0335	.0003	.0000	.0001	-.0001	-.0002	.0019
Stddev	.0004	.0002	.0013	.0001	.0001	.0001	.0007	.0001	.0001
%RSD	98.89	135.7	3.944	31.74	1279.	208.1	1110.	56.13	4.443
#1	.0001	.0003	.0326	.0004	.0001	.0000	.0008	-.0001	.0019
#2	.0009	-.0001	.0329	.0002	.0000	.0002	-.0003	-.0003	.0020
#3	.0004	.0002	.0351	.0004	-.0001	.0000	-.0006	-.0002	.0019
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28500-MB3 Acquired: 1/28/2015 17:17:58 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2764.3	5494.8	49512.	5095.1
Stddev	3.2	3.1	158.	68.1
%RSD	.11577	.05703	.31945	1.3372
#1	2765.0	5498.4	49655.	5108.3
#2	2767.2	5492.6	49540.	5155.6
#3	2760.9	5493.4	49342.	5021.3

Zoom In Zoom Out

Sample Name: MP28500-B3 Acquired: 1/28/2015 17:22:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486	27.23	2.031	2.066	.0521	25.36	.0505	.5060	.2116
Stddev	.0006	.07	.004	.009	.0001	.10	.0001	.0008	.0008
%RSD	1.163	.2462	.1747	.4173	.2321	.3827	.2490	.1497	.3778
#1	.0480	27.30	2.033	2.074	.0522	25.44	.0507	.5060	.2123
#2	.0488	27.22	2.032	2.067	.0520	25.39	.0506	.5068	.2118
#3	.0491	27.16	2.027	2.057	.0521	25.25	.0504	.5053	.2107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2575	26.52	25.84	25.13	.5215	.4827	F151.6	.5125	.4911
Stddev	.0010	.11	.10	.14	.0007	.0007	.8	.0016	.0005
%RSD	.4070	.4171	.3945	.5509	.1307	.1479	.5458	.3054	.0966
#1	.2581	26.64	25.86	25.27	.5223	.4835	152.5	.5134	.4907
#2	.2582	26.50	25.93	25.11	.5214	.4826	151.5	.5135	.4910
#3	.2563	26.43	25.73	25.00	.5209	.4821	150.8	.5107	.4916
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4959	2.027	.0345	.5017	.5007	.5025	1.937	.4921	.5108
Stddev	.0016	.007	.0014	.0022	.0025	.0009	.003	.0010	.0006
%RSD	.3145	.3569	4.029	.4461	.5023	.1780	.1401	.1953	.1134
#1	.4971	2.035	.0361	.5042	.5034	.5034	1.937	.4932	.5109
#2	.4941	2.025	.0341	.4999	.5001	.5024	1.935	.4918	.5114
#3	.4964	2.020	.0334	.5009	.4984	.5016	1.940	.4913	.5102
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28500-B3 Acquired: 1/28/2015 17:22:29 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2654.1	5490.8	49478.	5138.7
Stddev	5.2	6.1	195.	18.0
%RSD	.19741	.11146	.39359	.35054
#1	2651.1	5483.7	49278.	5130.1
#2	2660.1	5494.0	49487.	5126.7
#3	2651.0	5494.6	49667.	5159.4

Zoom In Zoom Out

Sample Name: MP28500-MB4 Acquired: 1/28/2015 17:26:43 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0038	-.0013	.0022	-.0001	.1056	-.0001	-.0003	.0000
Stddev	.0005	.0075	.0005	.0001	.0001	.0014	.0000	.0001	.000
%RSD	174.4	200.2	34.63	3.998	70.37	1.315	21.31	26.82	1583.
#1	-.0007	-.0093	-.0018	.0023	-.0001	.1063	-.0001	-.0004	-.0001
#2	.0002	.0048	-.0009	.0022	-.0002	.1040	-.0002	-.0003	.0000
#3	-.0003	-.0068	-.0014	.0021	-.0001	.1065	-.0001	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0060	.1369	.0292	-.0001	.0000	F126.0	-.0002	-.0002
Stddev	.0001	.0033	.0439	.0119	.0000	.000	.1	.0002	.0006
%RSD	86.29	54.32	32.08	40.78	13.59	6152.	.0601	74.37	241.5
#1	.0002	.0067	.1189	.0170	.0000	.0000	125.9	-.0004	-.0007
#2	.0000	.0089	.1870	.0409	-.0001	.0001	126.1	-.0003	.0004
#3	.0001	.0025	.1048	.0298	.0000	-.0001	125.9	.0000	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0006	.0304	.0002	.0001	.0000	.0005	.0000	.0020
Stddev	.0005	.0022	.0001	.0001	.0000	.0001	.0004	.0001	.0000
%RSD	89.19	386.0	.4418	38.24	28.63	235.3	87.81	2866.	2.187
#1	.0011	-.0009	.0304	.0003	.0002	.0002	.0007	.0001	.0021
#2	.0006	-.0005	.0304	.0001	.0002	.0000	.0000	-.0001	.0020
#3	.0001	.0031	.0302	.0003	.0001	.0000	.0007	.0001	.0020
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28500-MB4 Acquired: 1/28/2015 17:26:43 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2783.8	5523.9	49787.	5096.2
Stddev	9.0	10.4	269.	35.9
%RSD	.32343	.18800	.53984	.70447
#1	2794.2	5528.6	49883.	5137.6
#2	2777.8	5512.0	49994.	5073.8
#3	2779.4	5531.2	49483.	5077.3

Zoom In Zoom Out

Sample Name: MP28500-B4 Acquired: 1/28/2015 17:31:14 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0495	27.34	2.033	2.068	.0524	25.33	.0506	.5073	.2123
Stddev	.0006	.12	.001	.012	.0000	.04	.0001	.0003	.0004
%RSD	1.139	.4305	.0672	.5662	.0512	.1573	.1865	.0647	.2008
#1	.0490	27.48	2.034	2.080	.0524	25.36	.0506	.5076	.2127
#2	.0495	27.29	2.032	2.069	.0524	25.35	.0507	.5073	.2118
#3	.0501	27.27	2.032	2.056	.0525	25.29	.0505	.5070	.2123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2594	26.49	25.89	25.10	.5228	.4847	F147.7	.5126	.4935
Stddev	.0002	.06	.18	.08	.0010	.0003	.9	.0007	.0006
%RSD	.0751	.2263	.6868	.3376	.1828	.0670	.5956	.1428	.1212
#1	.2593	26.56	26.07	25.02	.5237	.4851	148.7	.5128	.4930
#2	.2593	26.47	25.71	25.09	.5218	.4846	147.4	.5132	.4942
#3	.2596	26.45	25.89	25.18	.5228	.4844	147.1	.5118	.4934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4961	2.031	.0339	.5022	.4999	.5019	1.940	.4928	.5104
Stddev	.0008	.002	.0005	.0016	.0022	.0014	.005	.0017	.0006
%RSD	.1648	.1164	1.523	.3278	.4336	.2790	.2682	.3504	.1085
#1	.4954	2.034	.0334	.5024	.5022	.5035	1.935	.4946	.5107
#2	.4960	2.029	.0341	.5038	.4995	.5008	1.945	.4912	.5108
#3	.4970	2.031	.0344	.5005	.4979	.5013	1.940	.4927	.5098
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28500-B4 Acquired: 1/28/2015 17:31:14 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2657.4	5500.5	49219.	5092.6
Stddev	4.0	12.1	9.	26.8
%RSD	.15170	.22051	.01739	.52693
#1	2657.6	5488.9	49214.	5110.2
#2	2653.2	5499.6	49215.	5105.8
#3	2661.2	5513.1	49229.	5061.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/28/2015 17:35:29 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0102	.2108	.0095	.2071	.0052	1.036	.0051	.0530	.0104	.0261
Stddev	.0007	.0033	.0005	.0007	.0000	.013	.0000	.0003	.0002	.0002
%RSD	6.412	1.548	5.487	.3186	.3576	1.241	.4733	.5465	2.188	.8857
#1	.0101	.2145	.0094	.2076	.0052	1.049	.0050	.0526	.0102	.0259
#2	.0108	.2082	.0100	.2074	.0052	1.034	.0051	.0532	.0104	.0261
#3	.0095	.2098	.0090	.2064	.0051	1.024	.0050	.0530	.0106	.0263

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3199	10.41	5.182	.0161	.0483	10.43	.0424	.0050	.0046	.0088
Stddev	.0032	.07	.009	.0001	.0002	.03	.0003	.0007	.0003	.0016
%RSD	1.002	.7022	.1721	.3380	.3349	.2623	.8208	14.14	6.256	18.21
#1	.3210	10.43	5.173	.0160	.0485	10.46	.0426	.0042	.0043	.0104
#2	.3225	10.47	5.185	.0161	.0482	10.41	.0426	.0054	.0047	.0089
#3	.3163	10.33	5.190	.0161	.0483	10.42	.0420	.0054	.0048	.0072

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0686	.0520	.0100	.0102	.0123	.0490	.0220
Stddev	.0003	.0005	.0001	.0001	.0013	.0004	.0001
%RSD	.3696	.9922	.5226	1.120	10.34	.8042	.5587
#1	.0688	.0519	.0101	.0100	.0129	.0492	.0218
#2	.0688	.0526	.0101	.0102	.0108	.0485	.0220
#3	.0683	.0516	.0100	.0102	.0131	.0491	.0221

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2987.1	5734.6	51952.	5121.1
Stddev	5.9	7.2	71.	45.3
%RSD	.19886	.12552	.13716	.88525
#1	2987.5	5741.2	51872.	5075.0
#2	2980.9	5726.9	52007.	5122.5
#3	2992.8	5735.6	51978.	5165.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 17:39:53 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2506	40.94	2.020	2.056	2.052	40.39	2.044	2.042	2.064	2.051
Stddev	.0009	.01	.007	.003	.004	.07	.001	.002	.006	.008
%RSD	.3505	.0288	.3696	.1669	.1787	.1757	.0457	.0744	.2832	.3904
#1	.2510	40.96	2.016	2.052	2.056	40.34	2.043	2.044	2.066	2.052
#2	.2496	40.93	2.016	2.058	2.050	40.36	2.043	2.041	2.057	2.043
#3	.2511	40.94	2.029	2.059	2.049	40.47	2.044	2.042	2.068	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.85	41.10	41.00	2.069	2.010	40.89	2.029	2.020	2.009	2.035
Stddev	.04	.12	.11	.004	.001	.08	.002	.001	.005	.001
%RSD	.0942	.2861	.2658	.1681	.0370	.2048	.1176	.0621	.2595	.0612
#1	40.89	41.05	41.12	2.070	2.010	40.96	2.028	2.021	2.011	2.034
#2	40.83	41.23	40.96	2.066	2.010	40.91	2.027	2.018	2.003	2.036
#3	40.82	41.02	40.92	2.072	2.011	40.80	2.032	2.020	2.013	2.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.711	2.022	2.051	2.040	2.029	2.024	2.039
Stddev	.001	.002	.004	.006	.004	.005	.004
%RSD	.0826	.0763	.1860	.3048	.1742	.2267	.1738
#1	1.709	2.020	2.052	2.040	2.028	2.026	2.037
#2	1.712	2.023	2.055	2.034	2.033	2.019	2.037
#3	1.711	2.022	2.047	2.047	2.026	2.027	2.043
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 17:39:53 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2623.2	5500.2	49941.	5087.6
Stddev	4.2	2.9	232.	31.5
%RSD	.16198	.05210	.46505	.61886
#1	2624.1	5503.5	49850.	5103.4
#2	2618.6	5498.5	50205.	5051.4
#3	2626.9	5498.6	49768.	5108.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 17:44:03 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0022	.0005	.0003	.0003	.0100	.0003	.0003	.0006
Stddev	.0003	.0052	.0004	.0000	.0001	.0006	.0000	.0001	.0002
%RSD	434.4	241.0	71.35	14.06	25.34	5.875	12.37	31.05	41.46
#1	.0003	.0062	.0002	.0003	.0003	.0095	.0003	.0003	.0009
#2	-.0003	-.0037	.0005	.0004	.0004	.0106	.0003	.0002	.0004
#3	.0001	.0041	.0010	.0004	.0002	.0099	.0003	.0003	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0241	.0066	.0257	.0003	F.0017	.0300	.0003	.0003
Stddev	.0002	.0044	.0214	.0132	.0000	.0004	.0071	.0002	.0002
%RSD	108.3	18.33	325.7	51.48	3.468	24.32	23.78	81.16	57.48
#1	-.0003	.0287	-.0095	.0219	.0004	.0022	.0267	.0005	.0002
#2	-.0001	.0239	-.0017	.0405	.0004	.0016	.0382	.0002	.0005
#3	.0000	.0198	.0309	.0148	.0003	.0014	.0251	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0010	.0013	.0007	.0003	.0016	.0016	.0002	.0009
Stddev	.001	.0018	.0000	.0003	.0001	.0001	.0001	.0003	.0000
%RSD	13500.	180.1	3.737	40.58	26.20	6.610	8.401	109.0	2.536
#1	-.0001	.0010	.0013	.0009	.0002	.0017	.0016	.0002	.0009
#2	.0005	-.0016	.0012	.0004	.0002	.0015	.0018	.0005	.0009
#3	-.0005	-.0025	.0013	.0008	.0004	.0016	.0015	.0000	.0009
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 17:44:03 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3126.7	5805.9	52865.	5162.5
Stddev	2.2	12.2	315.	26.7
%RSD	.07133	.21001	.59629	.51760
#1	3124.2	5798.5	52630.	5193.3
#2	3128.1	5820.0	53223.	5146.2
#3	3127.9	5799.3	52742.	5147.9

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/28/2015 17:48:32 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	499.4	-.0006	.0010	-.0001	465.0	.0011	.0004	.0009	.0003
Stddev	.0004	1.0	.0019	.0002	.0001	5.7	.0001	.0000	.0002	.0004
%RSD	400.5	.1963	331.2	20.18	38.92	1.228	11.75	3.450	24.97	151.8
#1	-.0004	499.4	-.0019	.0009	-.0001	470.0	.0012	.0004	.0006	-.0001
#2	.0004	498.5	-.0014	.0009	-.0002	458.8	.0010	.0004	.0010	.0007
#3	-.0002	500.5	.0016	.0012	-.0001	466.2	.0011	.0004	.0010	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	182.5	.0657	493.8	.0008	.0087	.1460	.0005	-.0049	.0013	.0009
Stddev	1.7	.0190	5.0	.0000	.0004	.0025	.0001	.0006	.0012	.0045
%RSD	.9576	28.90	1.003	5.422	4.924	1.699	21.80	11.87	94.68	478.8
#1	181.0	.0858	489.6	.0008	.0090	.1443	.0004	-.0051	.0002	.0014
#2	184.4	.0481	499.3	.0008	.0089	.1448	.0006	-.0053	.0011	.0051
#3	182.1	.0632	492.6	.0008	.0082	.1489	.0004	-.0042	.0027	-.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0783	.0014	.0002	.0032	.0006	.0000	-.0018
Stddev	.0013	.0003	.0001	.0001	.0020	.001	.0002
%RSD	1.716	19.23	38.75	3.448	336.5	1658.	8.629
#1	.0778	.0017	.0002	.0033	-.0010	-.0001	-.0020
#2	.0798	.0011	.0003	.0031	.0029	-.0005	-.0017
#3	.0773	.0015	.0001	.0032	-.0001	.0005	-.0018

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2336.7	5055.6	45156.	4856.6
Stddev	2.2	2.7	68.	34.7
%RSD	.09360	.05280	.15050	.71448
#1	2338.1	5058.6	45176.	4871.3
#2	2334.2	5054.5	45212.	4817.0
#3	2337.9	5053.6	45081.	4881.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/28/2015 17:53:11 Type: Unk
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.013	493.2	1.036	.5103	.5013	466.2	.9111	.4681	.4872
Stddev	.004	8.6	.003	.0030	.0025	3.7	.0025	.0009	.0036
%RSD	.4193	1.745	.2484	.5809	.4959	.7849	.2729	.1891	.7301
#1	1.011	486.5	1.039	.5086	.4985	469.6	.9115	.4687	.4840
#2	1.010	503.0	1.034	.5137	.5032	466.7	.9084	.4671	.4867
#3	1.018	490.2	1.035	.5085	.5022	462.3	.9133	.4686	.4910

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.5393	182.6	.0119	483.5	.5037	.9412	.1013	.9365	.9341
Stddev	.0032	1.0	.0119	2.9	.0033	.0022	.0078	.0028	.0073
%RSD	.5860	.5298	100.7	.5992	.6461	.2347	7.733	.3020	.7793
#1	.5387	181.9	.0073	480.4	.5010	.9420	.0961	.9374	.9425
#2	.5364	183.7	.0254	486.1	.5028	.9387	.0974	.9334	.9310
#3	.5427	182.3	.0029	484.0	.5073	.9429	.1103	.9388	.9289

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.031	.9955	.0730	.9203	1.019	1.006	.9501	.4692	.9301
Stddev	.000	.0036	.0009	.0034	.005	.007	.0012	.0038	.0026
%RSD	.0116	.3567	1.228	.3705	.5180	.7012	.1293	.8157	.2836
#1	1.031	.9965	.0740	.9230	1.016	1.001	.9514	.4662	.9315
#2	1.031	.9915	.0723	.9165	1.025	1.003	.9490	.4679	.9270
#3	1.031	.9984	.0728	.9215	1.016	1.014	.9498	.4735	.9317

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2303.4	5061.8	45010.	4872.0
Stddev	5.8	10.2	239.	37.2
%RSD	.25389	.20122	.53000	.76311
#1	2296.9	5064.0	45254.	4893.8
#2	2305.2	5070.8	44999.	4829.0
#3	2308.1	5050.8	44777.	4893.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 17:57:40 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2491	40.18	2.012	2.010	2.031	40.39	2.044	2.038	2.049	2.020
Stddev	.0002	.02	.006	.002	.011	.22	.002	.003	.002	.001
%RSD	.0718	.0603	.3238	.0814	.5347	.5488	.1095	.1312	.1005	.0704
#1	.2493	40.16	2.005	2.009	2.023	40.22	2.041	2.035	2.048	2.022
#2	.2489	40.18	2.013	2.010	2.027	40.32	2.044	2.039	2.052	2.020
#3	.2492	40.21	2.018	2.012	2.043	40.64	2.046	2.041	2.048	2.019
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.31	40.69	40.46	2.072	2.004	40.54	2.036	2.012	2.011	2.016
Stddev	.16	.14	.18	.003	.004	.09	.005	.005	.009	.002
%RSD	.4031	.3507	.4328	.1474	.1963	.2163	.2339	.2409	.4331	.0925
#1	40.23	40.65	40.44	2.068	1.999	40.55	2.030	2.009	2.002	2.014
#2	40.20	40.57	40.29	2.074	2.005	40.45	2.037	2.009	2.012	2.018
#3	40.50	40.85	40.64	2.073	2.007	40.62	2.040	2.017	2.019	2.016
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.710	2.013	2.024	2.031	2.028	2.007	2.050
Stddev	.005	.004	.007	.001	.004	.001	.004
%RSD	.3204	.2113	.3385	.0474	.2011	.0426	.2035
#1	1.704	2.009	2.021	2.032	2.025	2.008	2.046
#2	1.713	2.015	2.019	2.031	2.026	2.007	2.049
#3	1.715	2.017	2.032	2.030	2.032	2.006	2.054
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/28/2015 17:57:40 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2627.0	5473.4	49854.	5023.4
Stddev	2.4	7.5	58.	16.4
%RSD	.09035	.13616	.11680	.32647
#1	2624.8	5481.3	49921.	5007.2
#2	2629.5	5466.5	49832.	5040.0
#3	2626.7	5472.3	49810.	5023.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 18:01:51 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0066	-.0004	.0003	.0004	.0146	.0003	.0004	.0005
Stddev	.0001	.0053	.0009	.0002	.0001	.0039	.0001	.0001	.0002
%RSD	60.04	81.07	252.1	67.86	16.80	26.35	17.47	29.19	28.05
#1	.0001	.0105	-.0010	.0002	.0003	.0188	.0003	.0004	.0007
#2	.0002	.0086	.0007	.0002	.0004	.0140	.0004	.0002	.0004
#3	.0003	.0005	-.0009	.0006	.0003	.0111	.0003	.0004	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0318	-.0178	.0229	.0004	F.0020	.0081	.0003	.0006
Stddev	.0002	.0016	.0306	.0270	.0000	.0004	.0092	.0001	.0008
%RSD	179.5	5.167	172.0	118.3	8.140	20.29	114.4	25.53	148.8
#1	.0002	.0337	-.0424	.0540	.0004	.0024	.0173	.0003	.0003
#2	.0002	.0309	.0165	.0094	.0004	.0020	.0080	.0004	-.0001
#3	-.0001	.0307	-.0276	.0052	.0004	.0016	-.0011	.0003	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0010	.0004	.0007	.0004	.0015	.0010	.0004	.0009
Stddev	.0002	.0011	.0006	.0002	.0001	.0001	.0006	.0002	.0001
%RSD	48.84	109.7	133.2	31.45	14.81	10.20	59.37	64.27	5.746
#1	.0008	-.0015	.0010	.0008	.0004	.0016	.0004	.0005	.0009
#2	.0004	-.0016	.0005	.0007	.0005	.0015	.0009	.0001	.0010
#3	.0003	.0003	-.0002	.0004	.0004	.0013	.0016	.0005	.0009
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/28/2015 18:01:51 Type: QC
Method: 60102007_042011(v91) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3118.9	5782.6	52798.	5089.3
Stddev	.9	3.2	110.	30.6
%RSD	.02975	.05576	.20777	.60117
#1	3119.3	5782.1	52895.	5054.9
#2	3119.7	5779.7	52820.	5113.3
#3	3117.9	5786.1	52679.	5099.8

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	2	V	-0.007608	0.000000	No
			Fe	0.000008	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.040330	0.000000	No
As 189.042 {478}	X	4	Fe	-0.000093	0.000000	No
			Cr	-0.000129	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000005	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000005	0.000000	No
Be 313.042 {108}	X	2	V	0.000042	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000074	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	-0.000001	0.000000	No
Cr 267.716 {126}	X	4	Al	0.000001	0.000000	No
			Fe	-0.000009	0.000000	No
			Ca	-0.000000	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	X	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000147	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000047	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000024	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	X	8	Al	0.000212	0.000000	No
			Fe	0.000081	0.000000	No
			Mo	-0.001466	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000200	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	X	11	Fe	0.000048	0.000000	No
			Cr	0.006369	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.002569	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	-0.000005	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000006	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000000	0.000000	No
Se 196.090 {472}	X	12	Fe	-0.000044	0.000000	No
			Ca	0.000009	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000025	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	0.000001	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	X	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	X	None				
Sr 407.771 { 83}	X	1	Ca	0.000003	0.000000	No
Ti 334.941 {101}	X	1	Ca	-0.000022	0.000000	No
Tl 190.856 {477}	X	10	Co	0.003248	0.000000	No
			Fe	0.000023	0.000000	No
			Al	-0.000022	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	0.000001	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000001	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	X	5	Fe	0.000006	0.000000	No
			Cr	-0.001960	0.000000	No
			Mo	-0.004535	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	X	None				
Y 360.073 { 94}*	X	None				
Y 371.030 { 91}*	X	None				
Zn 206.200 {463}	X	5	Cr	-0.001305	0.000000	No
			Al	0.000000	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000020	0.000000	No
			As	0.001105	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001057	0.547788	0.000000	1.000000
	Al 396.152 { 85}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001062	0.156708	0.000000	1.000000
	As 189.042 {478}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	-0.000503	0.200814	0.000000	1.000000
	Ba 455.403 { 74}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.003386	7.819784	0.000000	1.000000
	Be 313.042 {108}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.005499	7.509450	0.000000	1.000000
	Ca 317.933 {106}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.007682	0.242472	0.000000	1.000000
	Cd 226.502 {449}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.003484	5.106060	0.000000	1.000000
	Co 228.616 {447}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001950	2.579697	0.000000	1.000000
	Cr 267.716 {126}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.000186	0.455892	0.000000	1.000000
	Cu 324.754 {104}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.006273	0.690081	0.000000	1.000000
	Fe 259.940 {130}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.007929	0.160624	0.000000	1.000000
	In 230.606 {446}*	1/28/2015 10:57:07	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.005190	0.069799	0.000000	1.000000
	Mg 279.079 {121}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.000119	0.022873	0.000000	1.000000
	Mn 257.610 {131}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001972	2.719282	0.000000	1.000000
	Mo 202.030 {467}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.010864	1.126332	0.000000	1.000000
	Na 589.592 { 57}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	-0.003888	0.256364	0.000000	1.000000
	Ni 231.604 {445}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001104	1.575671	0.000000	1.000000
	Pb 220.353 {453}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001410	0.897765	0.000000	1.000000
	Sb 206.833 {463}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.000891	0.255679	0.000000	1.000000
	Se 196.090 {472}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	-0.000022	0.144824	0.000000	1.000000
	Si 212.412 {459}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.005116	0.372613	0.000000	1.000000
	Sn 189.989 {477}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.001368	0.445581	0.000000	1.000000
	Sr 407.771 { 83}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.006969	12.420490	0.000000	1.000000
	Ti 334.941 {101}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.008025	1.766723	0.000000	1.000000
	Tl 190.856 {477}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	-0.000972	0.335705	0.000000	1.000000
	V 292.402 {115}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	-0.000574	0.570625	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	1/28/2015 10:57:07	1/28/2015 10:25:02	Linear	1/Conc	0.004852	2.925762	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999990	0.000023	0.000382	0.001272	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999963	0.002190	0.009273	0.030911	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999970	0.000126	0.000768	0.002560	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999839	0.011300	0.000236	0.000786	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999856	0.010258	0.000084	0.000282	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999930	0.004626	0.003179	0.010597	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999864	0.006785	0.000046	0.000155	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999847	0.003638	0.000102	0.000341	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999852	0.000631	0.000267	0.000889	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999869	0.000898	0.000268	0.000892	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999778	0.005456	0.002448	0.008159	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999973	0.000822	0.034781	0.115937	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999901	0.000519	0.021880	0.072933	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999640	0.005882	0.000042	0.000139	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999986	0.000479	0.000140	0.000467	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999922	0.005144	0.010065	0.033551	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999872	0.002028	0.000170	0.000567	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999940	0.000793	0.000560	0.001868	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999957	0.000191	0.000969	0.003229	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999952	0.000114	0.001570	0.005232	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.992020	0.003887	0.000469	0.001562	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999952	0.000351	0.000295	0.000985	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999893	0.014648	0.000094	0.000313	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999921	0.001789	0.000109	0.000363	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999974	0.000195	0.000905	0.003017	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999989	0.000216	0.000267	0.000890	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999916	0.003049	0.000062	0.000206	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 1/29/2015 8:59:32 Type: Cal
Method: 60102007_041712(v92) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0010	-.0053	-.0003	.0022	.0000	.0031	-.0009	.0009	.0001
Stddev	.0003	.0020	.0001	.0004	.0002	.0007	.0002	.0001	.0001
%RSD	30.71	37.58	27.08	20.74	23100.	21.19	25.05	16.10	87.88
#1	.0011	-.0075	-.0004	.0021	-.0002	.0034	-.0007	.0007	.0002
#2	.0012	-.0049	-.0002	.0017	.0003	.0036	-.0011	.0009	.0000
#3	.0006	-.0036	-.0004	.0026	-.0001	.0024	-.0008	.0009	.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0062	.0016	.0067	-.0003	.0003	.0006	-.0172	-.0011	-.0067
Stddev	.0002	.0005	.0015	.0005	.0001	.0000	.0009	.0002	.0006
%RSD	2.957	34.11	21.88	168.9	29.12	5.906	5.235	19.66	8.660
#1	.0060	.0017	.0081	.0000	.0004	.0006	-.0183	-.0013	-.0073
#2	.0064	.0021	.0066	-.0008	.0003	.0005	-.0168	-.0009	-.0067
#3	.0063	.0010	.0052	.0000	.0002	.0006	-.0166	-.0013	-.0061

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0007	-.0022	.0085	.0004	-.0001	.0021	-.0065	-.0006	.0048
Stddev	.0004	.0005	.0002	.0001	.0011	.0001	.0010	.0002	.0002
%RSD	60.15	21.08	2.762	22.62	961.6	4.114	14.81	27.21	3.222
#1	.0010	-.0023	.0083	.0003	.0002	.0020	-.0063	-.0008	.0050
#2	.0002	-.0026	.0088	.0005	-.0013	.0021	-.0076	-.0004	.0047
#3	.0008	-.0017	.0084	.0005	.0008	.0021	-.0057	-.0005	.0049

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1756.2	4626.7	35109.	5915.4
Stddev	4.3	3.4	26.	21.3
%RSD	.24375	.07369	.07402	.35932
#1	1753.0	4625.8	35135.	5895.8
#2	1761.1	4630.5	35083.	5912.4
#3	1754.6	4623.9	35110.	5938.0

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 1/29/2015 9:03:19 Type: Cal
Method: 60102007_041712(v92) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0413	1.561	.1575	5.388	3.517	2.476	2.907	1.319	.2829	.4360
Stddev	.0003	.002	.0006	.006	.002	.002	.002	.001	.0008	.0004
%RSD	.7544	.1092	.3812	.1191	.0616	.0878	.0692	.0623	.2830	.0884
#1	.0410	1.561	.1578	5.396	3.519	2.475	2.909	1.319	.2837	.4364
#2	.0412	1.560	.1568	5.384	3.515	2.474	2.905	1.318	.2821	.4359
#3	.0416	1.563	.1578	5.385	3.517	2.478	2.907	1.320	.2830	.4357

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.416	1.159	.2358	1.775	.6470	4.021	.8775	.6513	.1543	.1181
Stddev	.001	.003	.0010	.003	.0011	.005	.0013	.0017	.0006	.0003
%RSD	.0700	.2244	.4379	.1687	.1765	.1197	.1480	.2660	.3587	.2645
#1	1.416	1.156	.2348	1.774	.6459	4.016	.8769	.6507	.1549	.1184
#2	1.415	1.159	.2359	1.773	.6482	4.023	.8766	.6533	.1539	.1177
#3	1.417	1.162	.2368	1.778	.6467	4.025	.8790	.6500	.1540	.1181

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2042	.2876	7.591	1.033	.2737	.3884	2.029
Stddev	.0005	.0007	.009	.002	.0011	.0015	.002
%RSD	.2209	.2537	.1143	.1581	.4161	.3923	.1040
#1	.2046	.2884	7.590	1.031	.2749	.3901	2.031
#2	.2043	.2871	7.600	1.034	.2726	.3874	2.027
#3	.2037	.2872	7.583	1.034	.2735	.3877	2.028

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1697.3	4489.8	33280.	5717.4
Stddev	5.8	6.2	169.	47.7
%RSD	.34166	.13846	.50860	.83424
#1	1699.6	4493.3	33431.	5766.0
#2	1690.7	4482.6	33312.	5715.4
#3	1701.6	4493.5	33097.	5670.6

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 1/29/2015 9:07:06 Type: Cal
Method: 60102007_041712(v92) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1629	6.005	.6419	21.04	13.60	9.410	11.62	5.289	1.103	1.714
Stddev	.0008	.136	.0012	.43	.29	.211	.03	.014	.005	.008
%RSD	.4810	2.267	.1863	2.060	2.141	2.247	.2361	.2697	.4412	.4810
#1	.1636	5.849	.6433	20.55	13.27	9.167	11.65	5.304	1.109	1.722
#2	.1631	6.062	.6413	21.19	13.73	9.509	11.61	5.286	1.100	1.713
#3	.1620	6.103	.6411	21.37	13.81	9.554	11.59	5.276	1.100	1.706

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.352	4.468	.8984	7.017	2.616	15.49	3.509	2.647	.6258	.4852
Stddev	.117	.087	.0161	.043	.003	.33	.007	.002	.0015	.0006
%RSD	2.193	1.956	1.789	.6082	.0970	2.110	.1997	.0562	.2376	.1319
#1	5.218	4.368	.8800	7.066	2.614	15.11	3.517	2.648	.6272	.4857
#2	5.399	4.506	.9060	6.989	2.616	15.63	3.506	2.648	.6258	.4855
#3	5.439	4.530	.9093	6.995	2.619	15.71	3.504	2.646	.6243	.4845

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.180	1.152	29.93	4.163	1.140	1.516	7.928
Stddev	.003	.003	.64	.024	.005	.006	.020
%RSD	.2155	.2280	2.133	.5748	.4004	.3997	.2567
#1	1.183	1.155	29.20	4.191	1.135	1.523	7.950
#2	1.180	1.151	30.20	4.150	1.143	1.513	7.922
#3	1.179	1.151	30.39	4.148	1.143	1.512	7.911

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1602.5	4278.4	32259.	5703.7
Stddev	.8	7.2	135.	98.1
%RSD	.05034	.16864	.41850	1.7197
#1	1603.1	4270.5	32103.	5816.9
#2	1602.8	4280.1	32325.	5651.7
#3	1601.6	4284.7	32347.	5642.6

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 1/29/2015 9:10:57 Type: Cal
Method: 60102007_041712(v92) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3223	12.25	1.285	42.12	26.84	18.99	22.80	10.47	2.163	3.366
Stddev	.0004	.15	.010	.53	.32	.23	.15	.07	.006	.003
%RSD	.1118	1.199	.7972	1.264	1.210	1.205	.6670	.6990	.2872	.0933
#1	.3220	12.15	1.296	41.79	26.60	18.86	22.98	10.55	2.156	3.364
#2	.3227	12.18	1.278	41.84	26.70	18.85	22.69	10.42	2.163	3.363
#3	.3222	12.42	1.280	42.74	27.21	19.25	22.74	10.43	2.168	3.369

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.45	9.085	1.804	13.30	5.305	31.14	6.966	5.268	1.258	.9679
Stddev	.12	.107	.025	.04	.037	.35	.054	.032	.011	.0086
%RSD	1.193	1.174	1.365	.2869	.7044	1.122	.7800	.5991	.8515	.8833
#1	10.37	9.007	1.789	13.34	5.348	30.91	7.028	5.305	1.271	.9778
#2	10.37	9.040	1.791	13.29	5.279	30.97	6.933	5.250	1.252	.9636
#3	10.59	9.206	1.832	13.26	5.289	31.54	6.936	5.250	1.252	.9625

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.300	2.359	58.42	8.107	2.261	3.068	15.71
Stddev	.019	.019	.95	.032	.014	.009	.10
%RSD	.8064	.8119	1.625	.3905	.5954	.2838	.6416
#1	2.322	2.381	57.79	8.135	2.276	3.059	15.82
#2	2.289	2.346	57.95	8.113	2.253	3.068	15.64
#3	2.291	2.349	59.51	8.073	2.253	3.076	15.66

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1550.0	4156.5	31868.	5631.5
Stddev	7.7	25.4	26.	69.6
%RSD	.49540	.61225	.08296	1.2354
#1	1541.4	4127.2	31893.	5644.7
#2	1552.2	4169.1	31841.	5693.5
#3	1556.3	4173.2	31870.	5556.2

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/29/2015 9:16:19 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5000	79.72	4.004	3.966	3.948	79.24	3.975	3.992	3.934	3.992
Stddev	.0026	.08	.010	.003	.002	.08	.006	.006	.010	.017
%RSD	.5243	.0943	.2522	.0668	.0485	.1046	.1551	.1577	.2650	.4203
#1	.5014	79.64	4.015	3.963	3.950	79.16	3.981	3.999	3.946	4.011
#2	.5017	79.74	4.002	3.967	3.947	79.23	3.975	3.992	3.928	3.979
#3	.4970	79.79	3.995	3.968	3.946	79.33	3.969	3.986	3.928	3.985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.36	79.55	79.09	3.890	4.041	78.30	3.984	4.008	4.025	3.998
Stddev	.16	.08	.20	.026	.007	.12	.008	.003	.010	.009
%RSD	.1978	.1052	.2582	.6617	.1671	.1477	.1979	.0861	.2570	.2268
#1	78.54	79.51	79.32	3.919	4.049	78.23	3.992	4.004	4.036	4.008
#2	78.24	79.50	79.02	3.872	4.037	78.24	3.984	4.010	4.022	3.995
#3	78.30	79.65	78.94	3.878	4.037	78.44	3.976	4.009	4.016	3.991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.077	4.018	4.006	3.947	4.011	4.003	3.972
Stddev	.005	.008	.070	.020	.006	.009	.006
%RSD	.1229	.2001	1.760	.5136	.1444	.2375	.1447
#1	4.082	4.027	4.014	3.924	4.008	4.013	3.977
#2	4.078	4.017	3.931	3.960	4.007	3.995	3.971
#3	4.072	4.011	4.072	3.958	4.017	4.000	3.966
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 1/29/2015 9:16:19 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1555.0	4180.9	32212.	5692.8
Stddev	.9	7.6	54.	40.2
%RSD	.05891	.18200	.16753	.70611
#1	1555.3	4174.2	32178.	5647.2
#2	1553.9	4179.4	32184.	5723.1
#3	1555.7	4189.2	32274.	5708.2

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/29/2015 9:22:14 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2446	39.55	1.979	2.047	1.992	40.42	1.925	1.966	1.956	1.936
Stddev	.0001	.04	.004	.005	.003	.03	.003	.003	.006	.003
%RSD	.0273	.1116	.1879	.2522	.1478	.0744	.1406	.1443	.3024	.1674
#1	.2445	39.50	1.979	2.041	1.990	40.39	1.926	1.967	1.956	1.938
#2	.2447	39.56	1.982	2.049	1.990	40.42	1.928	1.968	1.950	1.937
#3	.2446	39.58	1.975	2.051	1.995	40.45	1.922	1.963	1.962	1.932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.60	39.97	38.96	1.975	1.847	40.08	2.009	1.939	1.961	1.979
Stddev	.11	.10	.11	.002	.003	.05	.003	.004	.003	.004
%RSD	.2686	.2511	.2699	.0873	.1782	.1184	.1419	.1983	.1462	.1954
#1	39.52	39.89	39.07	1.976	1.844	40.03	2.008	1.937	1.960	1.975
#2	39.55	39.93	38.86	1.973	1.850	40.12	2.012	1.937	1.964	1.982
#3	39.72	40.08	38.94	1.976	1.846	40.08	2.006	1.943	1.958	1.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0193	1.972	1.949	1.904	2.004	1.872	1.958
Stddev	.0005	.003	.005	.001	.006	.001	.002
%RSD	2.360	.1480	.2462	.0741	.3238	.0665	.0831
#1	.0197	1.969	1.943	1.906	2.000	1.872	1.957
#2	.0193	1.975	1.951	1.904	2.002	1.872	1.960
#3	.0188	1.972	1.952	1.903	2.012	1.874	1.957
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 1/29/2015 9:22:14 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1653.1	4356.7	33430.	5893.3
Stddev	4.2	6.5	164.	42.1
%RSD	.25302	.14935	.49020	.71376
#1	1657.7	4363.3	33376.	5884.8
#2	1652.0	4350.3	33613.	5938.9
#3	1649.5	4356.4	33299.	5856.1

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/29/2015 9:29:30 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0008	-.0001	-.0001	.0000	-.0001	.0000	-.0002	.0001	.0003
Stddev	.0003	.0058	.0005	.0002	.000	.0014	.000	.0001	.0002	.0001
%RSD	439.3	752.4	446.8	122.2	249.3	2086.	737.0	91.41	239.2	21.88
#1	.0000	.0055	.0003	.0000	-.0001	-.0016	-.0001	-.0002	.0000	.0003
#2	.0003	-.0060	.0001	.0000	.0000	.0001	.0001	-.0002	-.0001	.0003
#3	-.0002	-.0018	-.0007	-.0003	.0000	.0013	.0000	.0000	.0003	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024	.0276	.0208	.0000	.0004	.0323	.0000	.0008	-.0004	.0017
Stddev	.0016	.0037	.0060	.000	.0002	.0026	.000	.0003	.0006	.0013
%RSD	66.15	13.27	28.86	111.0	36.71	8.072	4790.	33.83	169.2	79.02
#1	.0042	.0247	.0254	.0000	.0006	.0309	.0001	.0005	.0003	.0031
#2	.0012	.0317	.0140	.0000	.0003	.0353	-.0001	.0009	-.0007	.0006
#3	.0018	.0265	.0231	.0000	.0004	.0307	.0000	.0011	-.0007	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0000	.0000	.0005	.0007	.0004	-.0004
Stddev	.0004	.0003	.000	.0001	.0003	.0004	.0000
%RSD	117.7	989.4	201.8	14.98	46.85	102.1	8.147
#1	-.0008	.0003	.0000	.0005	.0007	.0004	-.0003
#2	-.0002	-.0001	-.0001	.0004	.0011	.0008	-.0004
#3	.0000	-.0002	.0000	.0005	.0004	.0000	-.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 1/29/2015 9:29:30 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1747.3	4542.2	34988.	5926.0
Stddev	4.0	6.4	140.	45.0
%RSD	.23134	.14062	.39885	.75927
#1	1744.7	4537.5	35140.	5921.0
#2	1745.2	4539.6	34960.	5973.2
#3	1752.0	4549.5	34865.	5883.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/29/2015 9:33:06 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0097	.2231	.0102	.2102	.0052	1.068	.0050	.0507	.0107	.0266
Stddev	.0010	.0071	.0005	.0064	.0002	.039	.0000	.0000	.0001	.0001
%RSD	9.883	3.200	4.897	3.041	2.929	3.659	.5539	.0542	.5535	.3753
#1	.0104	.2180	.0106	.2148	.0053	1.095	.0050	.0507	.0106	.0265
#2	.0091	.2281	.0098	.2057	.0051	1.040	.0050	.0507	.0107	.0266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3119	10.39	5.221	.0157	.0469	10.68	.0414	.0049	.0045	.0115
Stddev	.0103	.28	.199	.0000	.0001	.35	.0003	.0009	.0003	.0003
%RSD	3.294	2.739	3.802	.0535	.1316	3.314	.7534	17.66	7.720	2.714
#1	.3191	10.59	5.362	.0157	.0470	10.93	.0412	.0056	.0047	.0117
#2	.3046	10.19	5.081	.0157	.0469	10.43	.0416	.0043	.0042	.0113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0689	.0501	.0103	.0099	.0080	.0498	.0213
Stddev	.0005	.0003	.0004	.0001	.0001	.0001	.0001
%RSD	.7132	.6503	4.368	.7836	.8843	.1017	.2721
#1	.0686	.0503	.0106	.0100	.0080	.0497	.0214
#2	.0693	.0498	.0099	.0099	.0081	.0498	.0213
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/29/2015 9:33:06 Type: QC
Method: 60102007_041712(v92) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1706.2	4442.5	33663.	5730.7
Stddev	2.8	2.5	11.	156.1
%RSD	.16304	.05529	.03374	2.7238
#1	1708.2	4440.8	33655.	5620.3
#2	1704.3	4444.3	33671.	5841.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/29/2015 9:42:31 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	498.4	.0000	-.0003	.0000	480.6	.0000	.0002	.0000	.0000
Stddev	.0000	11.3	.0001	.0001	.000	2.5	.0001	.0001	.0001	.0006
%RSD	3.015	2.260	2430.	35.24	249.4	.5098	171.2	50.72	268.8	2028.
#1	.0006	510.9	-.0001	-.0002	.0001	483.4	.0000	.0003	.0001	.0005
#2	.0006	495.5	.0002	-.0003	-.0001	479.5	.0001	.0001	.0000	-.0006
#3	.0006	489.0	-.0001	-.0004	-.0001	478.9	.0001	.0003	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	179.5	.1718	481.4	.0000	-.0004	.2056	.0000	.0003	.0003	.0004
Stddev	.8	.0313	2.7	.000	.0004	.0210	.0001	.0046	.0026	.0021
%RSD	.4223	18.25	.5571	1623.	81.80	10.23	5625.	1371.	754.9	585.1
#1	180.4	.1372	484.4	-.0001	-.0002	.1820	.0000	-.0038	-.0019	.0022
#2	179.2	.1983	480.5	.0001	-.0008	.2127	.0001	-.0005	.0032	-.0019
#3	178.9	.1799	479.3	-.0001	-.0003	.2222	-.0001	.0052	-.0003	.0008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0848	.0005	.0000	.0001	.0007	.0003	-.0003
Stddev	.0032	.0003	.000	.0001	.0009	.0003	.0002
%RSD	3.784	60.25	81.19	133.1	129.6	84.31	87.84
#1	.0824	.0006	-.0001	.0002	-.0003	.0000	-.0005
#2	.0884	.0007	.0000	.0001	.0008	.0004	-.0003
#3	.0836	.0002	.0000	.0000	.0014	.0005	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/29/2015 9:42:31 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1544.1	3910.0	29978.	5619.5
Stddev	3.7	3.8	176.	74.5
%RSD	.23680	.09717	.58657	1.3264
#1	1545.7	3912.9	30161.	5536.0
#2	1546.7	3911.4	29964.	5643.4
#3	1539.9	3905.7	29810.	5679.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/29/2015 9:49:47 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9853	505.6	1.105	.5137	.4992	478.6	.9607	.5064	.5028	.5543
Stddev	.0007	3.1	.002	.0017	.0007	8.6	.0023	.0010	.0020	.0010
%RSD	.0750	.6216	.1361	.3235	.1323	1.799	.2380	.1935	.3922	.1792
#1	.9845	509.2	1.105	.5122	.4985	488.6	.9600	.5064	.5040	.5532
#2	.9860	504.5	1.107	.5134	.4995	474.2	.9632	.5073	.5005	.5545
#3	.9854	503.2	1.104	.5155	.4997	473.2	.9588	.5053	.5039	.5551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.3	.1007	474.9	.5008	1.006	.1613	1.030	.9416	1.127	1.069
Stddev	.3	.0156	.6	.0009	.002	.0047	.003	.0015	.004	.007
%RSD	.1755	15.46	.1354	.1837	.1805	2.903	.2560	.1568	.3810	.6765
#1	180.0	.1158	474.3	.5009	1.006	.1665	1.030	.9403	1.125	1.063
#2	180.4	.0847	474.9	.4998	1.008	.1599	1.033	.9432	1.132	1.077
#3	180.6	.1016	475.6	.5016	1.004	.1575	1.028	.9414	1.125	1.067
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0739	1.031	1.018	1.005	.9935	.4895	.9712
Stddev	.0009	.002	.004	.002	.0015	.0014	.0020
%RSD	1.229	.2369	.3741	.1824	.1530	.2828	.2027
#1	.0728	1.029	1.014	1.004	.9934	.4900	.9710
#2	.0745	1.034	1.019	1.005	.9951	.4880	.9732
#3	.0744	1.031	1.022	1.007	.9921	.4906	.9693
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/29/2015 9:49:47 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1520.5	3871.1	29859.	5647.2
Stddev	2.4	7.8	77.	12.7
%RSD	.16040	.20149	.25889	.22472
#1	1520.2	3875.0	29834.	5637.0
#2	1518.3	3862.2	29946.	5661.4
#3	1523.1	3876.3	29798.	5643.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 9:56:19 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2423	39.70	1.994	1.987	1.945	39.63	1.955	1.956	1.987	1.944
Stddev	.0006	.33	.006	.013	.015	.33	.006	.005	.005	.003
%RSD	.2433	.8188	.3119	.6406	.7622	.8325	.3003	.2752	.2392	.1404
#1	.2429	39.62	2.001	1.982	1.941	39.59	1.961	1.962	1.986	1.941
#2	.2417	40.06	1.992	2.002	1.962	39.97	1.955	1.955	1.982	1.946
#3	.2424	39.43	1.989	1.979	1.933	39.32	1.949	1.951	1.992	1.946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.80	39.12	38.72	1.963	1.946	40.17	1.984	1.898	1.980	1.994
Stddev	.28	.28	.28	.002	.002	.30	.007	.006	.005	.007
%RSD	.7236	.7071	.7315	.1103	.0797	.7590	.3550	.3371	.2722	.3611
#1	38.69	39.08	38.68	1.963	1.947	40.13	1.991	1.898	1.986	2.002
#2	39.11	39.41	39.03	1.960	1.947	40.49	1.982	1.905	1.978	1.991
#3	38.58	38.86	38.47	1.964	1.944	39.88	1.978	1.892	1.976	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.072	1.975	1.967	1.926	1.907	1.929	1.936
Stddev	.005	.006	.013	.002	.001	.004	.007
%RSD	.2548	.3263	.6334	.0799	.0279	.1889	.3485
#1	2.078	1.981	1.962	1.924	1.907	1.929	1.943
#2	2.069	1.974	1.981	1.927	1.908	1.925	1.937
#3	2.070	1.968	1.957	1.927	1.907	1.933	1.930
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 9:56:19 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1640.9	4271.8	33488.	5830.2
Stddev	6.1	11.7	86.	82.3
%RSD	.37088	.27412	.25566	1.4123
#1	1641.1	4262.1	33510.	5850.3
#2	1634.7	4268.5	33560.	5739.6
#3	1646.9	4284.8	33393.	5900.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 10:04:52 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0111	-.0001	.0001	.0002	.0111	.0001	.0001	.0000	.0007
Stddev	.0003	.0036	.0011	.0001	.0001	.0036	.0001	.0000	.000	.0004
%RSD	497.2	32.37	839.9	54.64	56.37	32.59	73.04	23.48	905.9	53.08
#1	.0000	.0114	.0012	.0002	.0002	.0092	.0001	.0001	.0001	.0006
#2	-.0002	.0145	-.0007	.0002	.0002	.0152	.0001	.0001	.0000	.0011
#3	.0003	.0073	-.0009	.0000	.0001	.0088	.0000	.0001	-.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0067	.0207	.0113	.0002	-.0002	.0329	.0003	.0009	.0005	.0006
Stddev	.0030	.0047	.0199	.0000	.0001	.0070	.0004	.0005	.0005	.0015
%RSD	45.57	22.71	176.0	18.88	43.39	21.25	146.5	48.09	106.1	239.1
#1	.0095	.0203	-.0030	.0002	-.0001	.0337	-.0001	.0006	.0003	-.0002
#2	.0069	.0255	.0029	.0001	-.0002	.0395	.0002	.0008	.0011	.0024
#3	.0035	.0162	.0341	.0002	-.0003	.0256	.0007	.0015	.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0002	.0002	-.0003	.0002	.0004	-.0001
Stddev	.0003	.0002	.0001	.0000	.0013	.0002	.0000
%RSD	105.7	130.6	64.87	6.657	741.8	47.31	35.94
#1	.0000	.0001	.0003	-.0003	-.0008	.0002	-.0001
#2	.0003	-.0003	.0002	-.0003	-.0004	.0004	-.0001
#3	.0006	-.0003	.0001	-.0003	.0017	.0006	-.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 10:04:52 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1719.0	4458.6	34565.	5874.9
Stddev	3.0	11.3	172.	24.1
%RSD	.17491	.25331	.49798	.41103
#1	1722.1	4460.1	34748.	5851.1
#2	1718.8	4469.1	34540.	5899.4
#3	1716.0	4446.7	34407.	5874.1

Zoom In Zoom Out

Sample Name: FA21642-18 Acquired: 1/29/2015 10:08:57 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0009	1.137	-.0011	9.656	-.0004	8.303	.0015	-.0017	.0632	.0239
Stddev	.0014	.021	.0018	.028	.0002	.020	.0003	.0004	.0009	.0013
%RSD	168.1	1.804	169.9	.2882	53.61	.2406	16.44	25.02	1.363	5.386
#1	.0025	1.153	.0009	9.662	-.0003	8.281	.0014	-.0021	.0631	.0252
#2	.0004	1.145	-.0027	9.681	-.0003	8.320	.0014	-.0016	.0623	.0239
#3	-.0003	1.114	-.0015	9.626	-.0007	8.309	.0018	-.0013	.0641	.0226

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.054	.8235	.2457	.0233	-.0007	1.982	.0033	.2975	-.0007	.0094
Stddev	.006	.0890	.0594	.0001	.0001	.023	.0007	.0048	.0029	.0043
%RSD	.2073	10.81	24.19	.3910	16.10	1.161	21.63	1.620	421.5	45.92
#1	3.050	.7942	.2031	.0232	-.0006	2.008	.0030	.3009	-.0039	.0050
#2	3.050	.9235	.3135	.0233	-.0008	1.969	.0041	.2997	.0001	.0136
#3	3.061	.7527	.2203	.0234	-.0007	1.968	.0027	.2920	.0018	.0096

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7970	.0234	.0951	3.568	-.0041	.0067	.1358
Stddev	.0018	.0015	.0002	.004	.0047	.0003	.0004
%RSD	.2219	6.542	.2162	.1107	115.3	4.725	.2935
#1	.7978	.0248	.0949	3.572	-.0057	.0070	.1362
#2	.7950	.0235	.0950	3.564	-.0079	.0067	.1354
#3	.7982	.0218	.0953	3.568	.0012	.0063	.1358

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1699.7	4423.8	34729.	5950.1
Stddev	2.9	13.3	86.	38.1
%RSD	.17273	.30027	.24681	.64085
#1	1700.6	4425.5	34783.	5991.2
#2	1696.5	4409.8	34773.	5943.3
#3	1702.1	4436.2	34630.	5915.8

Zoom In Zoom Out

Sample Name: FA21648-2 Acquired: 1/29/2015 10:13:04 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0009	8.247	.0142	.1706	.0013	F3094.	-.0026	.0001	.0463
Stddev	.0014	.030	.0014	.0011	.0002	10.	.0001	.0002	.0012
%RSD	148.8	.3648	10.07	.6498	14.35	.3194	4.730	202.1	2.546
#1	-.0014	8.238	.0129	.1713	.0011	3091.	-.0025	.0000	.0453
#2	-.0020	8.223	.0157	.1694	.0013	3106.	-.0026	.0000	.0462
#3	.0006	8.281	.0140	.1713	.0015	3087.	-.0027	.0003	.0476

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0098	26.32	1.201	5.291	.0844	.0035	28.23	.0069	.0293
Stddev	.0009	.11	.075	.164	.0003	.0011	.05	.0007	.0015
%RSD	9.128	.3997	6.207	3.089	.3284	30.61	.1943	9.823	5.055
#1	.0107	26.27	1.141	5.134	.0847	.0027	28.22	.0061	.0310
#2	.0090	26.44	1.178	5.460	.0842	.0031	28.29	.0072	.0286
#3	.0097	26.25	1.285	5.280	.0843	.0047	28.18	.0073	.0283

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0030	-.0004	1.862	.0174	16.08	.0995	.0036	.0468	.0244
Stddev	.0025	.0039	.013	.0012	.08	.0003	.0070	.0008	.0016
%RSD	82.28	905.2	.7030	6.605	.4833	.2599	193.3	1.708	6.491
#1	.0052	-.0037	1.877	.0180	16.08	.0998	.0024	.0459	.0262
#2	.0036	.0038	1.857	.0182	16.16	.0993	-.0027	.0469	.0233
#3	.0003	-.0014	1.852	.0161	16.01	.0994	.0112	.0475	.0237

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1605.5	4474.2	34213.	6148.6
Stddev	3.0	5.0	67.	25.9
%RSD	.18761	.11196	.19600	.42085
#1	1606.3	4474.2	34263.	6178.5
#2	1608.0	4479.2	34137.	6133.8
#3	1602.1	4469.2	34240.	6133.5

Zoom In Zoom Out

Sample Name: FA21648-1 Acquired: 1/29/2015 10:22:09 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	5.383	.0097	.1373	.0012	2611.	-.0032	-.0002	.0353	.0136
Stddev	.0042	.046	.0037	.0014	.0004	21.	.0004	.0009	.0009	.0025
%RSD	510.1	.8555	37.95	1.032	33.24	.8121	12.20	517.1	2.508	18.35
#1	-.0056	5.398	.0133	.1370	.0016	2635.	-.0032	.0000	.0359	.0128
#2	.0020	5.332	.0097	.1388	.0011	2604.	-.0036	-.0011	.0356	.0115
#3	.0011	5.420	.0060	.1360	.0008	2594.	-.0028	.0006	.0343	.0163

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	22.08	.4581	8.909	.0951	-.0092	19.21	.0022	-.0064	-.0176	.0006
Stddev	.05	.2930	.177	.0012	.0015	.04	.0019	.0091	.0061	.0182
%RSD	.2292	63.97	1.992	1.305	16.71	.2071	83.78	141.8	34.62	3259.
#1	22.04	.2371	9.081	.0964	-.0077	19.17	.0026	.0012	-.0151	-.0189
#2	22.14	.3466	8.919	.0940	-.0107	19.23	.0039	-.0040	-.0245	.0171
#3	22.06	.7905	8.727	.0949	-.0091	19.23	.0002	-.0164	-.0131	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.566	.0181	12.06	.0858	.0139	.0330	.0125
Stddev	.002	.0022	.02	.0008	.0079	.0023	.0001
%RSD	.1096	12.11	.1895	.9122	56.89	7.034	1.152
#1	1.565	.0159	12.06	.0863	.0227	.0308	.0126
#2	1.565	.0203	12.08	.0849	.0071	.0354	.0125
#3	1.568	.0181	12.04	.0862	.0121	.0328	.0123

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.0	4254.9	33045.	5736.0
Stddev	4.0	1.7	138.	16.9
%RSD	.24467	.04044	.41634	.29524
#1	1634.3	4256.8	32887.	5728.1
#2	1641.3	4253.4	33127.	5724.4
#3	1641.3	4254.4	33123.	5755.4

Zoom In Zoom Out

Sample Name: FA21648-3 Acquired: 1/29/2015 10:26:24 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0046	6.546	.0160	.1372	.0009	2927.	-.0028	-.0008	.0451	.0163
Stddev	.0023	.028	.0047	.0017	.0004	31.	.0007	.0012	.0005	.0014
%RSD	49.58	.4203	29.02	1.257	48.88	1.056	23.79	160.9	1.149	8.671
#1	.0024	6.577	.0126	.1379	.0008	2940.	-.0021	-.0021	.0457	.0171
#2	.0044	6.536	.0142	.1385	.0013	2892.	-.0030	-.0006	.0447	.0170
#3	.0069	6.524	.0213	.1352	.0005	2950.	-.0034	.0004	.0448	.0146

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	28.54	2.783	5.939	.1049	-.0047	28.48	.0047	.0216	-.0064	.0016
Stddev	.22	.364	.106	.0007	.0014	.16	.0012	.0032	.0087	.0060
%RSD	.7548	13.09	1.788	.6674	30.48	.5481	26.08	14.96	134.7	381.8
#1	28.71	2.369	6.057	.1041	-.0055	28.66	.0035	.0245	-.0100	-.0008
#2	28.30	3.055	5.906	.1050	-.0030	28.37	.0046	.0222	-.0127	.0084
#3	28.63	2.926	5.853	.1054	-.0056	28.42	.0059	.0181	.0035	-.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.752	.0157	13.72	.1093	.0107	.0433	.0297
Stddev	.011	.0044	.03	.0009	.0050	.0012	.0006
%RSD	.6026	28.03	.2225	.8568	46.31	2.773	1.920
#1	1.754	.0203	13.72	.1101	.0104	.0445	.0292
#2	1.740	.0115	13.69	.1083	.0059	.0421	.0296
#3	1.760	.0153	13.75	.1094	.0158	.0432	.0303

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.4	4241.7	33126.	5846.7
Stddev	5.3	17.5	19.	15.4
%RSD	.32503	.41293	.05839	.26356
#1	1633.6	4221.8	33111.	5864.5
#2	1644.1	4254.9	33148.	5837.3
#3	1640.6	4248.4	33120.	5838.3

Zoom In Zoom Out

Sample Name: FA21648-2 Acquired: 1/29/2015 10:30:37 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0027	8.654	.0145	.1799	.0015	3372.	-.0021	.0003	.0519	.0164
Stddev	.0029	.103	.0052	.0020	.0010	18.	.0001	.0013	.0034	.0013
%RSD	108.3	1.192	36.06	1.084	62.62	.5384	6.834	439.1	6.609	8.147
#1	.0002	8.765	.0145	.1816	.0018	3354.	-.0021	.0009	.0558	.0177
#2	-.0028	8.561	.0197	.1804	.0005	3371.	-.0022	.0011	.0492	.0151
#3	-.0056	8.636	.0093	.1778	.0023	3391.	-.0019	-.0012	.0507	.0163

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.44	1.413	5.705	.0891	-.0059	30.51	.0061	.0233	-.0118	-.0005
Stddev	.07	.455	.175	.0005	.0024	.15	.0045	.0013	.0076	.0079
%RSD	.2690	32.20	3.061	.5708	40.98	.4961	74.87	5.625	64.51	1651.
#1	27.52	1.768	5.907	.0887	-.0078	30.60	.0079	.0240	-.0058	-.0064
#2	27.40	1.570	5.608	.0897	-.0032	30.59	.0093	.0217	-.0092	.0085
#3	27.40	.9002	5.601	.0888	-.0067	30.33	.0009	.0240	-.0203	-.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.004	.0142	17.08	.1124	.0111	.0479	.0275
Stddev	.006	.0019	.05	.0010	.0175	.0029	.0001
%RSD	.2981	13.18	.2818	.8569	157.4	6.152	.4762
#1	2.011	.0128	17.12	.1132	-.0080	.0483	.0276
#2	1.999	.0135	17.09	.1127	.0151	.0447	.0276
#3	2.003	.0163	17.02	.1113	.0262	.0506	.0274

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1624.2	4340.8	33614.	5931.8
Stddev	.8	3.9	68.	17.4
%RSD	.04668	.09049	.20115	.29363
#1	1624.2	4341.6	33647.	5912.4
#2	1624.9	4344.3	33536.	5937.3
#3	1623.4	4336.5	33659.	5945.9

Zoom In Zoom Out

Sample Name: FA21555-9 Acquired: 1/29/2015 10:34:52 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	68.29	.0084	.6687	.0022	3720.	-.0021	.0209	.0629	.0990
Stddev	.0020	.05	.0053	.0023	.0002	73.	.0006	.0014	.0028	.0035
%RSD	1658.	.0733	63.36	.3376	9.362	1.957	26.17	6.922	4.396	3.503
#1	-.0016	68.31	.0136	.6668	.0024	3776.	-.0027	.0207	.0597	.1029
#2	-.0009	68.33	.0030	.6712	.0021	3747.	-.0017	.0196	.0642	.0962
#3	.0022	68.24	.0086	.6682	.0021	3638.	-.0018	.0224	.0647	.0980

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	61.10	17.79	94.81	1.844	-.0130	7.238	.0477	.0577	-.0005	.0023
Stddev	.16	.27	.72	.004	.0017	.059	.0007	.0084	.0167	.0222
%RSD	.2580	1.543	.7602	.2304	13.21	.8081	1.391	14.54	3166.	952.6
#1	61.21	17.47	95.15	1.845	-.0145	7.180	.0470	.0646	.0136	.0189
#2	61.18	17.95	95.30	1.848	-.0136	7.238	.0479	.0601	-.0190	-.0229
#3	60.92	17.94	93.98	1.839	-.0111	7.297	.0483	.0484	.0037	.0110

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.814	.0159	15.45	1.616	.0039	.1136	.2242
Stddev	.018	.0034	.02	.004	.0006	.0033	.0011
%RSD	.6535	21.49	.1331	.2681	16.22	2.877	.4747
#1	2.803	.0124	15.43	1.615	.0046	.1164	.2248
#2	2.835	.0160	15.46	1.621	.0037	.1145	.2249
#3	2.803	.0192	15.47	1.612	.0033	.1100	.2230

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1634.8	4218.0	32702.	5758.3
Stddev	10.4	24.4	11.	69.0
%RSD	.63528	.57960	.03457	1.1981
#1	1629.8	4211.9	32698.	5691.1
#2	1627.9	4197.2	32693.	5754.8
#3	1646.7	4244.9	32715.	5829.0

Zoom In Zoom Out

Sample Name: FA21555-10 Acquired: 1/29/2015 10:39:05 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0022	58.98	.0067	.6114	.0028	3863.	-.0025	.0198	.0560	.0951
Stddev	.0027	.43	.0007	.0046	.0011	72.	.0003	.0014	.0037	.0023
%RSD	122.1	.7337	9.861	.7530	40.91	1.876	12.82	6.828	6.529	2.384
#1	.0010	58.51	.0066	.6061	.0024	3780.	-.0029	.0198	.0602	.0956
#2	.0003	59.36	.0060	.6145	.0041	3914.	-.0023	.0211	.0545	.0927
#3	.0053	59.08	.0074	.6137	.0019	3896.	-.0023	.0184	.0533	.0971

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	61.36	14.35	79.30	1.725	-.0152	4.736	.0464	.0616	-.0071	.0037
Stddev	.40	.38	.51	.009	.0008	.100	.0023	.0033	.0081	.0079
%RSD	.6557	2.657	.6465	.4986	5.218	2.119	5.034	5.424	114.0	211.3
#1	60.90	13.92	78.72	1.720	-.0145	4.646	.0490	.0641	.0018	-.0051
#2	61.55	14.65	79.70	1.720	-.0161	4.845	.0457	.0630	-.0139	.0065
#3	61.64	14.49	79.48	1.735	-.0150	4.717	.0445	.0578	-.0092	.0098

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.557	.0133	15.55	1.229	.0115	.0959	.2082
Stddev	.008	.0060	.11	.003	.0075	.0017	.0010
%RSD	.3193	45.31	.7039	.2242	65.37	1.758	.4588
#1	2.562	.0152	15.42	1.228	.0197	.0978	.2091
#2	2.561	.0181	15.62	1.227	.0099	.0952	.2072
#3	2.547	.0065	15.60	1.233	.0049	.0946	.2084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1641.9	4235.7	33074.	5877.0
Stddev	1.4	5.8	201.	51.9
%RSD	.08328	.13751	.60668	.88361
#1	1640.5	4232.2	33232.	5936.5
#2	1643.2	4242.4	33143.	5840.5
#3	1642.0	4232.4	32848.	5854.2

Zoom In Zoom Out

Sample Name: FA21555-11 Acquired: 1/29/2015 10:43:18 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0018	92.10	.0158	.7800	.0036	3506.	-.0017	.0275	.0868	.1327
Stddev	.0023	.35	.0036	.0012	.0004	64.	.0008	.0013	.0013	.0010
%RSD	126.1	.3748	22.64	.1561	12.51	1.828	46.30	4.909	1.480	.7849
#1	.0017	91.70	.0183	.7814	.0032	3442.	-.0014	.0289	.0883	.1338
#2	-.0004	92.30	.0175	.7795	.0035	3506.	-.0027	.0273	.0862	.1323
#3	.0041	92.30	.0117	.7791	.0041	3570.	-.0012	.0262	.0860	.1318

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	85.37	22.04	132.2	2.466	-.0124	5.459	.0691	.0910	-.0066	.0193
Stddev	.34	.14	.3	.004	.0021	.024	.0020	.0070	.0019	.0028
%RSD	.3957	.6160	.2438	.1630	17.03	.4304	2.945	7.669	28.95	14.61
#1	84.98	22.00	132.1	2.468	-.0148	5.460	.0693	.0916	-.0044	.0173
#2	85.57	22.20	132.0	2.469	-.0111	5.481	.0670	.0837	-.0076	.0181
#3	85.55	21.94	132.6	2.462	-.0113	5.434	.0710	.0976	-.0078	.0225

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.611	.0194	17.06	2.026	.0074	.1521	.3414
Stddev	.010	.0014	.01	.003	.0181	.0009	.0011
%RSD	.2876	7.218	.0375	.1461	244.8	.5857	.3183
#1	3.601	.0201	17.06	2.024	.0275	.1531	.3426
#2	3.621	.0178	17.07	2.025	.0024	.1516	.3408
#3	3.611	.0203	17.07	2.029	-.0077	.1515	.3406

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.8	4219.6	32824.	5793.8
Stddev	2.6	2.8	90.	23.7
%RSD	.15829	.06559	.27550	.40919
#1	1625.9	4222.8	32816.	5808.1
#2	1620.9	4218.0	32737.	5806.9
#3	1624.6	4218.0	32918.	5766.5

Zoom In Zoom Out

Sample Name: FA21644-2 Acquired: 1/29/2015 10:47:31 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0031	33.80	-.0077	1.124	.0000	99.81	.0539	.1718	.2578
Stddev	.0012	.15	.0013	.004	.0003	.34	.0003	.0015	.0008
%RSD	37.86	.4454	17.00	.3549	799.9	.3386	.4827	.8643	.3013
#1	.0040	33.94	-.0064	1.127	.0002	100.2	.0540	.1726	.2570
#2	.0018	33.64	-.0090	1.126	.0002	99.62	.0542	.1700	.2585
#3	.0035	33.81	-.0078	1.120	-.0003	99.62	.0536	.1726	.2580

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	3.433	49.75	1.435	6.420	.3769	.0149	1.874	.0725	.6363
Stddev	.001	.12	.155	.118	.0013	.0011	.016	.0014	.0125
%RSD	.0232	.2447	10.82	1.841	.3477	7.148	.8665	1.957	1.967
#1	3.432	49.88	1.335	6.554	.3778	.0161	1.855	.0739	.6498
#2	3.434	49.64	1.356	6.330	.3775	.0143	1.881	.0711	.6251
#3	3.433	49.72	1.614	6.377	.3754	.0142	1.885	.0724	.6339

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0027	.0121	3.845	.1131	.3251	2.557	.0020	.0452	F63.37
Stddev	.0063	.0090	.004	.0021	.0006	.003	.0093	.0012	.09
%RSD	235.7	74.22	.0951	1.847	.1729	.0988	462.1	2.566	.1398
#1	.0098	.0135	3.846	.1107	.3255	2.558	.0126	.0465	63.42
#2	.0001	.0204	3.841	.1142	.3253	2.558	-.0020	.0447	63.42
#3	-.0019	.0025	3.848	.1144	.3244	2.554	-.0046	.0443	63.27

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1711.4	4401.0	34737.	6005.0
Stddev	1.6	7.9	54.	54.7
%RSD	.09223	.18010	.15631	.91168
#1	1713.2	4408.6	34762.	5951.4
#2	1710.9	4392.8	34674.	6060.8
#3	1710.1	4401.6	34773.	6002.9

Zoom In Zoom Out

Sample Name: FA21630-1 Acquired: 1/29/2015 10:51:36 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0076	15.78	.0290	2.633	-.0015	6514.	-.0054	.0035	.0793
Stddev	.0022	.10	.0190	.018	.0015	139.	.0023	.0030	.0066
%RSD	28.32	.6454	65.53	.6805	99.20	2.132	41.91	85.21	8.289
#1	.0080	15.89	.0077	2.653	-.0027	6526.	-.0034	.0039	.0820
#2	.0053	15.70	.0442	2.618	.0002	6646.	-.0079	.0062	.0718
#3	.0096	15.75	.0351	2.628	-.0019	6369.	-.0049	.0003	.0841

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	F189.7	11.80	.4387	2016.	.5396	-.0473	1.665	8.078	.4218
Stddev	.3	.07	.6839	6.	.0008	.0053	.161	.020	.0427
%RSD	.1551	.6250	155.9	.3037	.1456	11.16	9.674	.2490	10.11
#1	190.1	11.73	-.0735	2022.	.5404	-.0415	1.505	8.063	.4537
#2	189.5	11.87	1.215	2015.	.5388	-.0518	1.665	8.101	.4384
#3	189.7	11.81	.1742	2010.	.5396	-.0485	1.827	8.071	.3734

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0220	-.0122	12.08	.0899	87.85	.0483	.0250	.0261	6.763
Stddev	.0743	.0341	.06	.0106	.49	.0024	.0141	.0067	.014
%RSD	337.6	280.0	.5112	11.74	.5596	5.034	56.51	25.82	.1989
#1	.0372	.0121	12.11	.0777	87.70	.0511	.0405	.0273	6.749
#2	-.1054	.0025	12.12	.0968	88.40	.0471	.0128	.0188	6.775
#3	.0022	-.0512	12.01	.0951	87.46	.0466	.0218	.0321	6.767

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1596.9	4076.1	32229.	5620.3
Stddev	1.7	7.3	145.	38.5
%RSD	.10371	.17959	.45124	.68440
#1	1598.8	4083.7	32216.	5582.1
#2	1596.0	4069.1	32381.	5619.8
#3	1595.9	4075.4	32091.	5659.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 10:55:58 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2481	40.47	2.052	2.033	1.945	40.04	2.002	2.007	2.040	1.990
Stddev	.0009	.14	.004	.009	.007	.14	.004	.005	.012	.004
%RSD	.3644	.3545	.1991	.4675	.3758	.3425	.2186	.2393	.6081	.2031
#1	.2475	40.38	2.057	2.024	1.941	40.02	2.006	2.012	2.033	1.985
#2	.2477	40.41	2.050	2.033	1.941	39.91	2.002	2.006	2.033	1.991
#3	.2491	40.64	2.050	2.043	1.954	40.18	1.997	2.003	2.054	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.56	39.97	38.51	2.006	2.000	41.25	2.042	1.938	2.039	2.052
Stddev	.17	.09	.13	.007	.002	.11	.004	.006	.005	.005
%RSD	.4345	.2268	.3410	.3496	.0746	.2679	.1801	.3370	.2292	.2588
#1	38.44	39.91	38.47	2.002	1.999	41.20	2.046	1.945	2.043	2.055
#2	38.48	39.93	38.39	2.001	2.002	41.18	2.040	1.937	2.041	2.056
#3	38.75	40.08	38.65	2.014	2.000	41.38	2.040	1.932	2.034	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.132	2.040	1.999	1.964	1.956	1.975	1.985
Stddev	.005	.004	.008	.005	.005	.011	.003
%RSD	.2565	.1892	.3931	.2560	.2742	.5356	.1666
#1	2.137	2.044	1.992	1.959	1.955	1.968	1.989
#2	2.132	2.038	1.998	1.963	1.962	1.970	1.984
#3	2.126	2.038	2.008	1.969	1.952	1.987	1.983
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 10:55:58 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1588.4	4116.7	32468.	5716.7
Stddev	2.7	5.9	267.	14.4
%RSD	.17058	.14254	.82322	.25199
#1	1585.4	4110.2	32544.	5701.2
#2	1589.1	4121.5	32688.	5729.8
#3	1590.6	4118.6	32170.	5719.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 10:59:54 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0087	-.0003	.0003	.0003	.0137	.0002	-.0001	.0000
Stddev	.0003	.0174	.0009	.0001	.0000	.0019	.0000	.0002	.000
%RSD	78.95	201.2	315.3	41.55	8.203	13.47	8.141	226.8	635.8
#1	.0003	-.0069	.0003	.0002	.0003	.0156	.0002	-.0002	.0001
#2	.0001	.0053	.0002	.0002	.0003	.0137	.0002	-.0001	-.0002
#3	.0008	.0275	-.0013	.0004	.0003	.0119	.0001	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0226	.0025	.0080	.0002	F.0014	.0306	.0001	.0007
Stddev	.0005	.0042	.0156	.0170	.0001	.0005	.0051	.0000	.0007
%RSD	61.08	18.70	619.4	213.4	30.62	35.66	16.52	29.80	98.25
#1	.0013	.0273	.0131	.0276	.0003	.0019	.0253	.0001	.0013
#2	.0011	.0215	-.0154	-.0031	.0002	.0014	.0312	.0001	.0008
#3	.0003	.0190	.0099	-.0005	.0002	.0009	.0353	.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0018	.0004	.0005	.0003	.0012	.0000	.0004	-.0001
Stddev	.0008	.0004	.0004	.0002	.0001	.0000	.0008	.0002	.0001
%RSD	53.90	22.80	101.4	35.33	16.90	3.410	1793.	43.69	112.1
#1	.0018	.0013	.0002	.0007	.0004	.0012	.0005	.0005	-.0001
#2	.0022	.0020	.0001	.0004	.0004	.0012	.0006	.0005	-.0001
#3	.0006	.0020	.0008	.0004	.0003	.0011	-.0009	.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 10:59:54 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1703.5	4360.4	34454.	5809.5
Stddev	2.2	2.3	105.	23.4
%RSD	.12804	.05270	.30505	.40252
#1	1705.2	4361.5	34570.	5815.0
#2	1701.0	4361.9	34426.	5829.6
#3	1704.2	4357.8	34365.	5783.8

Zoom In Zoom Out

Sample Name: FA21665-1 Acquired: 1/29/2015 11:04:03 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0011	11.18	.0528	3.821	.0003	1293.	.1616	.0017	.3505	.2106
Stddev	.0018	.06	.0059	.009	.0001	10.	.0013	.0008	.0032	.0005
%RSD	167.0	.5284	11.25	.2259	40.76	.7728	.8285	47.90	.9214	.2557
#1	.0027	11.17	.0500	3.811	.0002	1292.	.1601	.0025	.3519	.2110
#2	-.0009	11.13	.0597	3.823	.0004	1283.	.1623	.0016	.3468	.2100
#3	.0015	11.24	.0488	3.828	.0003	1303.	.1625	.0009	.3528	.2109

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.736	.8762	21.16	.2500	.4747	5.372	.0175	2.476	10.98	.0015
Stddev	.014	.0836	.12	.0001	.0041	.027	.0004	.020	.10	.0021
%RSD	.3602	9.544	.5478	.0343	.8728	.5103	2.190	.7972	.9216	143.5
#1	3.750	.8827	21.27	.2500	.4700	5.342	.0171	2.456	10.86	.0035
#2	3.723	.7895	21.04	.2501	.4773	5.379	.0178	2.476	11.04	.0016
#3	3.735	.9564	21.17	.2499	.4769	5.395	.0176	2.496	11.04	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3946	3.569	.7514	.1079	-.0021	.0096	8.962
Stddev	.0006	.022	.0017	.0007	.0015	.0007	.062
%RSD	.1617	.6178	.2228	.6316	72.26	7.216	.6914
#1	.3945	3.543	.7503	.1086	-.0004	.0096	8.890
#2	.3953	3.583	.7506	.1072	-.0026	.0089	9.002
#3	.3941	3.580	.7533	.1080	-.0033	.0103	8.993

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.0	4154.7	32489.	5854.7
Stddev	10.1	24.7	72.	19.7
%RSD	.62424	.59370	.22048	.33694
#1	1627.3	4183.1	32440.	5835.0
#2	1612.9	4139.3	32571.	5854.7
#3	1607.9	4141.6	32455.	5874.5

Zoom In Zoom Out

Sample Name: FA21665-2 Acquired: 1/29/2015 11:08:14 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	23.37	.0230	1.305	.0003	621.3	.0234	.0002	.0171
Stddev	.0006	.05	.0008	.003	.0001	7.1	.0002	.0002	.0003
%RSD	218.8	.2144	3.344	.2186	17.85	1.145	.8000	86.79	1.813
#1	-.0002	23.31	.0238	1.302	.0003	616.8	.0235	.0000	.0169
#2	.0010	23.37	.0230	1.305	.0003	617.6	.0233	.0002	.0175
#3	.0001	23.41	.0223	1.308	.0002	629.5	.0236	.0003	.0171

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1304	2.172	.3585	17.75	.1435	.7581	3.834	.0169	.1128
Stddev	.0011	.010	.0510	.04	.0004	.0015	.002	.0004	.0006
%RSD	.8613	.4798	14.23	.2105	.2541	.1970	.0535	2.205	.5555
#1	.1294	2.161	.3560	17.71	.1431	.7565	3.834	.0173	.1124
#2	.1302	2.182	.3088	17.76	.1438	.7584	3.832	.0165	.1125
#3	.1316	2.174	.4107	17.79	.1437	.7595	3.836	.0169	.1135

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F11.93	.0009	.1927	1.062	.3612	.0184	.0013	.0053	4.422
Stddev	.03	.0012	.0018	.001	.0009	.0003	.0042	.0004	.003
%RSD	.2655	130.1	.9256	.1276	.2448	1.815	326.1	6.807	.0569
#1	11.89	.0020	.1909	1.061	.3609	.0183	.0053	.0055	4.424
#2	11.95	-.0003	.1945	1.063	.3606	.0181	.0016	.0054	4.424
#3	11.95	.0010	.1928	1.063	.3622	.0187	-.0031	.0049	4.419

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1604.9	4140.1	32159.	5772.9
Stddev	3.4	1.9	160.	40.6
%RSD	.21086	.04636	.49820	.70292
#1	1601.0	4138.7	32344.	5806.6
#2	1606.5	4142.3	32057.	5784.2
#3	1607.2	4139.4	32076.	5727.8

Zoom In Zoom Out

Sample Name: FA21665-3 Acquired: 1/29/2015 11:12:24 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0010	36.45	.0459	11.30	.0001	1460.	.0690	.0026	.0664
Stddev	.0016	.02	.0025	.01	.0004	3.	.0001	.0005	.0013
%RSD	169.3	.0630	5.426	.0889	304.2	.2238	.1574	18.81	1.931
#1	.0008	36.47	.0488	11.29	-.0003	1461.	.0690	.0021	.0669
#2	-.0006	36.43	.0444	11.31	.0002	1463.	.0689	.0026	.0649
#3	.0027	36.45	.0446	11.30	.0004	1457.	.0691	.0031	.0674

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.514	4.195	1.033	37.28	.4113	.4309	10.08	.0128	.5591
Stddev	.005	.007	.033	.02	.0004	.0014	.08	.0008	.0048
%RSD	.3596	.1608	3.218	.0514	.1032	.3211	.7606	6.017	.8611
#1	1.508	4.202	1.002	37.25	.4116	.4317	9.994	.0136	.5635
#2	1.514	4.189	1.027	37.29	.4115	.4293	10.10	.0121	.5540
#3	1.519	4.194	1.068	37.29	.4108	.4318	10.14	.0126	.5600

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F16.90	.0012	.3739	2.439	2.098	.1884	.0038	.0119	9.356
Stddev	.04	.0036	.0008	.002	.004	.0002	.0070	.0007	.009
%RSD	.2294	293.0	.2204	.0903	.2042	.0825	182.8	6.221	.1019
#1	16.86	-.0023	.3745	2.439	2.094	.1884	.0038	.0124	9.349
#2	16.91	.0049	.3742	2.437	2.098	.1886	.0109	.0121	9.352
#3	16.93	.0011	.3730	2.441	2.102	.1883	-.0031	.0110	9.367

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1595.7	4122.5	32384.	5816.0
Stddev	1.2	4.4	53.	2.9
%RSD	.07770	.10620	.16370	.04915
#1	1594.9	4127.2	32384.	5813.7
#2	1597.1	4122.0	32437.	5815.2
#3	1595.1	4118.5	32331.	5819.2

Zoom In Zoom Out

Sample Name: FA21665-4 Acquired: 1/29/2015 11:16:35 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0015	9.625	.0334	4.280	.0002	1329.	.2308	.0011	.0509
Stddev	.0011	.039	.0029	.009	.0001	11.	.0001	.0001	.0007
%RSD	69.98	.4078	8.526	.2171	80.79	.8067	.0337	12.85	1.305
#1	.0027	9.670	.0333	4.274	.0002	1340.	.2307	.0010	.0504
#2	.0006	9.602	.0364	4.291	.0000	1319.	.2308	.0012	.0506
#3	.0012	9.601	.0307	4.276	.0002	1327.	.2308	.0012	.0516

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3811	4.141	1.325	27.75	.4351	.4066	9.557	.0112	.8038
Stddev	.0008	.014	.100	.14	.0013	.0008	.021	.0005	.0029
%RSD	.2209	.3486	7.508	.4982	.3083	.1864	.2177	4.484	.3635
#1	.3820	4.126	1.303	27.90	.4343	.4060	9.578	.0107	.8004
#2	.3811	4.155	1.434	27.71	.4343	.4062	9.557	.0110	.8056
#3	.3803	4.142	1.239	27.63	.4366	.4074	9.537	.0117	.8054

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	F20.47	-.0002	.3347	1.152	.7970	.0610	-.0001	.0151	4.305
Stddev	.03	.0037	.0041	.002	.0014	.0004	.0009	.0013	.001
%RSD	.1330	2104.	1.214	.1779	.1735	.5953	693.6	8.418	.0193
#1	20.44	.0038	.3300	1.152	.7956	.0606	-.0009	.0139	4.306
#2	20.48	-.0036	.3371	1.153	.7983	.0611	-.0003	.0164	4.305
#3	20.49	-.0008	.3369	1.149	.7972	.0613	.0008	.0151	4.304

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1600.0	4124.8	32459.	5750.1
Stddev	2.6	4.3	156.	21.9
%RSD	.15993	.10312	.48180	.38007
#1	1600.2	4129.1	32526.	5726.2
#2	1597.4	4124.7	32570.	5755.2
#3	1602.5	4120.6	32280.	5769.0

Zoom In Zoom Out

Sample Name: MP28500-MB1 Acquired: 1/29/2015 11:20:44 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0140	-.0016	.0003	-.0001	.0423	.0000	-.0003	.0000
Stddev	.0006	.0089	.0007	.0002	.0001	.0015	.0000	.0002	.0001
%RSD	414.4	63.22	43.40	74.63	122.3	3.536	58.27	46.15	201.0
#1	-.0005	.0039	-.0023	.0001	-.0001	.0411	.0000	-.0005	.0001
#2	.0008	.0181	-.0009	.0006	.0000	.0418	.0000	-.0003	.0001
#3	.0002	.0201	-.0016	.0002	-.0001	.0440	.0001	-.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0050	-.0039	.0221	.0001	-.0003	.0258	-.0002	.0004
Stddev	.0001	.0020	.0139	.0153	.0000	.0001	.0011	.0001	.0005
%RSD	14.78	39.63	355.7	69.25	51.63	25.78	4.221	26.94	142.9
#1	.0008	.0069	-.0055	.0376	.0001	-.0003	.0252	-.0002	.0001
#2	.0007	.0050	-.0170	.0217	.0001	-.0003	.0271	-.0002	.0000
#3	.0009	.0030	.0107	.0070	.0001	-.0004	.0253	-.0003	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0040	.0007	.0265	-.0003	.0000	-.0004	-.0033	.0003	.0008
Stddev	.0014	.0006	.0003	.0004	.000	.0000	.0011	.0003	.0000
%RSD	35.52	76.30	.9901	175.8	236.1	9.448	32.83	85.79	4.077
#1	.0056	.0009	.0263	-.0007	.0000	-.0004	-.0044	.0002	.0008
#2	.0029	.0012	.0268	-.0002	.0000	-.0004	-.0023	.0006	.0007
#3	.0034	.0001	.0265	.0002	.0000	-.0003	-.0031	.0002	.0008
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025								
Low Limit	-.0025								

Zoom In Zoom Out

Sample Name: MP28500-MB1 Acquired: 1/29/2015 11:20:44 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1673.4	4321.7	34558.	5880.6
Stddev	11.5	28.2	81.	10.5
%RSD	.68852	.65325	.23345	.17868
#1	1674.9	4324.0	34651.	5886.3
#2	1684.1	4348.7	34505.	5868.4
#3	1661.2	4292.4	34519.	5886.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 11:24:54 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2468	40.34	2.038	2.020	1.926	39.76	1.992	1.999	2.033	1.995
Stddev	.0005	.05	.003	.005	.004	.05	.002	.002	.006	.005
%RSD	.2136	.1273	.1525	.2555	.2048	.1211	.1151	.1035	.2928	.2670
#1	.2472	40.28	2.035	2.015	1.925	39.71	1.993	2.001	2.037	1.995
#2	.2462	40.38	2.038	2.020	1.922	39.78	1.989	1.997	2.035	2.001
#3	.2469	40.35	2.041	2.025	1.930	39.80	1.993	2.000	2.026	1.990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.09	39.88	38.02	1.993	1.992	41.18	2.026	1.922	2.037	2.042
Stddev	.13	.01	.09	.004	.007	.06	.002	.001	.001	.004
%RSD	.3335	.0236	.2269	.1775	.3404	.1495	.0892	.0671	.0469	.1927
#1	37.98	39.87	37.97	1.996	1.987	41.14	2.028	1.921	2.037	2.038
#2	38.06	39.87	37.97	1.993	1.990	41.25	2.024	1.921	2.036	2.045
#3	38.23	39.89	38.12	1.989	2.000	41.15	2.025	1.923	2.038	2.044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.127	2.019	1.992	1.959	1.950	1.977	1.968
Stddev	.001	.005	.003	.001	.007	.005	.003
%RSD	.0569	.2544	.1418	.0512	.3680	.2476	.1461
#1	2.128	2.025	1.990	1.959	1.943	1.980	1.970
#2	2.125	2.015	1.990	1.959	1.949	1.979	1.965
#3	2.127	2.017	1.995	1.957	1.957	1.971	1.969
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 11:24:54 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.6	4170.4	32729.	5811.5
Stddev	3.6	7.5	55.	4.8
%RSD	.22246	.17958	.16949	.08229
#1	1606.7	4161.9	32672.	5816.7
#2	1611.6	4173.4	32733.	5807.3
#3	1613.6	4176.0	32783.	5810.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 11:28:50 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0047	-.0001	.0003	.0002	.0096	.0001	.0000	.0000
Stddev	.0002	.0139	.0009	.0001	.0001	.0013	.0001	.0001	.0001
%RSD	31.15	296.4	815.0	38.89	22.53	13.98	65.53	137.0	391.3
#1	.0007	.0028	.0001	.0002	.0003	.0088	.0002	.0000	.0001
#2	.0005	.0195	-.0011	.0003	.0002	.0112	.0002	.0001	-.0001
#3	.0004	-.0081	.0007	.0004	.0002	.0088	.0000	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0207	-.0209	.0222	.0002	F.0013	.0263	.0000	.0003
Stddev	.0002	.0077	.0060	.0089	.0001	.0006	.0074	.000	.0009
%RSD	31.92	37.32	28.87	39.97	33.54	44.96	28.00	738.0	282.6
#1	.0006	.0281	-.0257	.0172	.0002	.0020	.0250	.0000	-.0001
#2	.0010	.0215	-.0229	.0324	.0002	.0012	.0343	.0002	-.0003
#3	.0007	.0126	-.0141	.0169	.0001	.0008	.0197	-.0003	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0007	.0006	.0005	.0001	.0012	-.0009	.0003	-.0001
Stddev	.0017	.0003	.0002	.0001	.0001	.0002	.0009	.0002	.0000
%RSD	82.14	46.06	25.76	12.14	79.04	15.21	103.1	66.33	48.86
#1	.0035	.0006	.0007	.0006	.0001	.0012	-.0006	.0003	-.0001
#2	.0026	.0011	.0005	.0005	.0002	.0014	-.0019	.0006	-.0001
#3	.0002	.0004	.0008	.0005	.0000	.0011	-.0002	.0001	-.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 11:28:50 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1665.5	4316.1	33559.	5776.1
Stddev	4.8	4.8	32.	26.8
%RSD	.28686	.11227	.09636	.46432
#1	1665.9	4312.1	33592.	5747.9
#2	1670.1	4321.5	33558.	5779.3
#3	1660.6	4314.7	33527.	5801.2

Zoom In Zoom Out

Sample Name: MP28504-MB1 Acquired: 1/29/2015 11:55:57 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0092	-.0014	.0000	.0000	.0072	.0000	-.0004	-.0004	.0004
Stddev	.0003	.0157	.0010	.0001	.0000	.0044	.0000	.0002	.0001	.0001
%RSD	490.2	171.7	70.11	481.5	130.4	61.03	137.5	52.47	20.87	13.77
#1	-.0001	-.0054	-.0026	-.0001	.0000	.0039	.0000	-.0004	-.0003	.0005
#2	-.0003	.0071	-.0006	.0002	.0000	.0123	.0000	-.0002	-.0004	.0004
#3	.0002	.0258	-.0011	.0000	.0000	.0056	.0000	-.0005	-.0004	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0061	-.0349	.0027	.0000	-.0004	.0121	-.0002	.0000	.0013	.0004
Stddev	.0023	.0105	.0061	.0000	.0001	.0103	.0001	.000	.0007	.0013
%RSD	37.95	30.23	230.2	111.6	14.78	84.88	55.03	873.0	51.59	314.5
#1	-.0039	-.0465	-.0044	.0000	-.0004	.0240	-.0001	-.0005	.0017	-.0006
#2	-.0085	-.0260	.0063	.0000	-.0004	.0069	-.0003	.0002	.0017	.0018
#3	-.0059	-.0321	.0062	.0000	-.0005	.0055	-.0002	.0002	.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0259	-.0001	-.0001	-.0004	-.0030	.0004	-.0002
Stddev	.0003	.0002	.0000	.0000	.0003	.0002	.0001
%RSD	1.273	397.8	33.87	9.632	11.28	41.84	37.54
#1	.0256	.0002	-.0001	-.0004	-.0034	.0006	-.0001
#2	.0263	-.0001	-.0001	-.0004	-.0030	.0004	-.0002
#3	.0258	-.0003	-.0001	-.0003	-.0027	.0003	-.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28504-MB1 Acquired: 1/29/2015 11:55:57 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1683.7	4344.6	34834.	5995.7
Stddev	4.4	22.7	153.	13.5
%RSD	.25951	.52148	.43944	.22502
#1	1687.7	4363.4	34777.	6007.7
#2	1684.4	4351.0	34719.	5998.3
#3	1679.1	4319.5	35008.	5981.1

Zoom In Zoom Out

Sample Name: MP28504-B1 Acquired: 1/29/2015 12:00:08 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0495	28.83	2.113	2.145	.0517	26.55	.0507	.5144	.2142	.2601
Stddev	.0002	.05	.001	.005	.0000	.03	.0002	.0006	.0004	.0008
%RSD	.4811	.1823	.0669	.2419	.0708	.1080	.3230	.1133	.1866	.2976
#1	.0495	28.87	2.112	2.144	.0516	26.59	.0506	.5137	.2140	.2596
#2	.0493	28.85	2.115	2.151	.0517	26.54	.0509	.5149	.2147	.2596
#3	.0498	28.77	2.112	2.140	.0517	26.54	.0507	.5146	.2140	.2609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.37	26.10	25.31	.5144	.4974	27.32	.5347	.4965	.5215	2.082
Stddev	.02	.06	.14	.0001	.0009	.06	.0010	.0030	.0025	.005
%RSD	.0806	.2123	.5498	.0127	.1769	.2140	.1864	.6043	.4716	.2366
#1	26.35	26.17	25.46	.5144	.4964	27.35	.5337	.4996	.5188	2.077
#2	26.39	26.06	25.27	.5145	.4982	27.35	.5357	.4961	.5220	2.086
#3	26.36	26.08	25.19	.5144	.4976	27.25	.5346	.4937	.5237	2.085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0314	.5312	.5110	.4945	2.035	.4963	.5116
Stddev	.0006	.0017	.0008	.0002	.002	.0005	.0005
%RSD	1.799	.3274	.1479	.0411	.0824	.0919	.0933
#1	.0311	.5298	.5111	.4946	2.037	.4958	.5112
#2	.0321	.5331	.5116	.4942	2.034	.4967	.5121
#3	.0311	.5305	.5101	.4946	2.035	.4963	.5114
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28504-B1 Acquired: 1/29/2015 12:00:08 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1613.7	4164.5	32857.	5770.5
Stddev	4.8	10.3	54.	37.6
%RSD	.29792	.24621	.16450	.65137
#1	1610.8	4165.3	32813.	5733.3
#2	1611.1	4153.8	32841.	5808.4
#3	1619.2	4174.3	32917.	5770.0

Zoom In Zoom Out

Sample Name: FA21679-10 Acquired: 1/29/2015 12:04:05 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	1.208	.0001	.0052	.0000	40.40	-.0001	.0000	.0064	.0019
Stddev	.0003	.011	.0010	.0001	.000	.13	.0000	.0002	.0002	.0001
%RSD	188.5	.8706	1872.	1.830	776.7	.3269	43.80	16080.	3.063	4.210
#1	.0004	1.219	.0001	.0052	.0000	40.52	-.0001	.0002	.0063	.0018
#2	-.0001	1.198	.0010	.0051	-.0001	40.26	-.0001	.0000	.0066	.0019
#3	.0001	1.206	-.0009	.0052	.0001	40.43	-.0001	-.0002	.0062	.0019

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9454	2.972	1.585	.0102	.0064	4.786	.0024	-.0017	.0011	.0033
Stddev	.0025	.024	.022	.0000	.0002	.021	.0003	.0004	.0006	.0012
%RSD	.2671	.7978	1.406	.4345	3.646	.4438	12.86	25.03	57.74	36.13
#1	.9482	2.974	1.608	.0101	.0066	4.810	.0028	-.0012	.0013	.0045
#2	.9433	2.948	1.563	.0102	.0066	4.769	.0023	-.0020	.0004	.0022
#3	.9447	2.995	1.585	.0102	.0062	4.780	.0022	-.0020	.0015	.0031

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.066	-.0001	.1232	.0421	-.0005	.0060	.0045
Stddev	.015	.0003	.0004	.0016	.0008	.0002	.0001
%RSD	.4997	372.1	.3231	3.685	171.2	4.041	2.653
#1	3.083	-.0004	.1236	.0404	.0004	.0059	.0047
#2	3.063	-.0002	.1229	.0434	-.0005	.0059	.0044
#3	3.053	.0003	.1230	.0426	-.0013	.0063	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1652.3	4246.6	33740.	5812.8
Stddev	5.0	3.7	24.	14.7
%RSD	.30247	.08646	.07033	.25335
#1	1656.1	4250.7	33729.	5796.4
#2	1654.1	4245.2	33768.	5825.0
#3	1646.7	4243.8	33725.	5817.0

Zoom In Zoom Out

Sample Name: MP28504-D1 Acquired: 1/29/2015 12:08:12 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	1.228	-.0002	.0053	.0000	40.70	-.0001	.0000	.0067	.0018
Stddev	.0002	.019	.0009	.0001	.000	.13	.0000	.0001	.0002	.0003
%RSD	51.77	1.514	369.5	1.175	231.9	.3213	27.95	1059.	2.611	16.35
#1	.0005	1.223	-.0008	.0053	.0000	40.83	-.0001	.0002	.0069	.0016
#2	.0004	1.213	.0008	.0053	.0000	40.56	.0000	-.0001	.0066	.0017
#3	.0001	1.249	-.0007	.0052	-.0001	40.70	-.0001	.0000	.0067	.0021

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9372	3.038	1.574	.0103	.0059	4.839	.0023	-.0006	.0011	.0029
Stddev	.0010	.021	.032	.0001	.0001	.031	.0002	.0003	.0005	.0008
%RSD	.1052	.7000	2.026	.7131	1.592	.6444	7.452	50.05	43.16	27.73
#1	.9379	3.032	1.580	.0102	.0059	4.874	.0021	-.0007	.0009	.0036
#2	.9361	3.061	1.540	.0103	.0058	4.816	.0024	-.0002	.0008	.0030
#3	.9375	3.020	1.603	.0104	.0060	4.826	.0024	-.0007	.0017	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.109	-.0002	.1247	.0433	-.0012	.0064	.0044
Stddev	.018	.0002	.0001	.0009	.0005	.0002	.0001
%RSD	.5937	61.65	.0990	2.005	43.41	3.737	1.481
#1	3.129	-.0001	.1248	.0439	-.0012	.0066	.0043
#2	3.105	-.0003	.1245	.0423	-.0007	.0064	.0044
#3	3.093	-.0004	.1247	.0437	-.0018	.0061	.0044

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1655.4	4262.4	33444.	5835.7
Stddev	3.5	6.0	148.	43.1
%RSD	.21247	.14162	.44199	.73866
#1	1657.5	4259.7	33583.	5787.7
#2	1651.3	4258.1	33289.	5871.1
#3	1657.2	4269.3	33459.	5848.3

Zoom In Zoom Out

Sample Name: MP28504-SD1 Acquired: 1/29/2015 12:12:18 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0021	1.154	-.0020	.0070	.0001	40.22	-.0001	-.0006	.0046	.0049
Stddev	.0002	.042	.0039	.0004	.0005	.06	.0003	.0006	.0011	.0015
%RSD	8.642	3.643	200.2	5.599	391.9	.1425	321.0	107.1	23.50	30.32
#1	.0020	1.132	.0025	.0067	-.0004	40.16	-.0002	.0001	.0054	.0062
#2	.0020	1.126	-.0037	.0069	.0004	40.28	.0002	-.0009	.0034	.0033
#3	.0023	1.202	-.0047	.0075	.0004	40.21	-.0003	-.0010	.0050	.0052

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8802	3.020	1.606	.0097	.0042	4.813	.0025	.0015	-.0096	.0060
Stddev	.0116	.115	.070	.0002	.0005	.049	.0007	.0056	.0049	.0039
%RSD	1.321	3.818	4.340	1.599	12.53	1.023	29.49	378.4	51.69	65.17
#1	.8863	3.001	1.685	.0096	.0040	4.834	.0032	-.0035	-.0087	.0047
#2	.8875	3.143	1.552	.0098	.0048	4.849	.0026	.0004	-.0051	.0104
#3	.8668	2.915	1.580	.0098	.0038	4.757	.0017	.0076	-.0149	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.977	-.0016	.1222	.0371	.0005	.0070	.0038
Stddev	.028	.0008	.0003	.0030	.0038	.0007	.0003
%RSD	.9547	48.22	.2490	7.968	751.1	10.53	8.322
#1	3.008	-.0008	.1223	.0389	.0044	.0062	.0039
#2	2.970	-.0023	.1224	.0337	-.0031	.0076	.0034
#3	2.952	-.0017	.1218	.0387	.0002	.0073	.0040

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1700.2	4384.5	34348.	5948.2
Stddev	2.9	4.1	161.	13.8
%RSD	.17334	.09381	.47007	.23126
#1	1701.4	4384.5	34442.	5950.4
#2	1702.4	4388.7	34441.	5960.7
#3	1696.8	4380.5	34162.	5933.4

Zoom In Zoom Out

Sample Name: MP28504-PS1 Acquired: 1/29/2015 12:16:26 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0491	3.838	.1079	.2724	.0526	44.52	.0524	.0527	.0609	.1079
Stddev	.0006	.015	.0007	.0004	.0001	.11	.0001	.0001	.0004	.0005
%RSD	1.172	.3959	.6110	.1291	.2534	.2515	.1206	.2422	.5975	.4720
#1	.0491	3.854	.1077	.2728	.0527	44.62	.0524	.0528	.0607	.1076
#2	.0496	3.835	.1086	.2722	.0525	44.54	.0524	.0527	.0613	.1085
#3	.0485	3.824	.1073	.2723	.0525	44.40	.0525	.0525	.0607	.1077

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.888	13.29	6.273	.0635	.1081	15.75	.1098	.0488	.1051	.1067
Stddev	.015	.06	.033	.0001	.0002	.05	.0003	.0005	.0013	.0022
%RSD	.3791	.4321	.5313	.1236	.2198	.3434	.2344	1.053	1.233	2.070
#1	3.871	13.34	6.311	.0634	.1079	15.81	.1097	.0482	.1036	.1051
#2	3.897	13.29	6.253	.0635	.1084	15.74	.1096	.0491	.1062	.1056
#3	3.896	13.22	6.255	.0634	.1081	15.70	.1101	.0491	.1054	.1092

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.035	.0509	.1741	.1434	.1022	.0574	.2653
Stddev	.008	.0003	.0006	.0007	.0011	.0004	.0003
%RSD	.2505	.6145	.3425	.4581	1.109	.6971	.1313
#1	3.039	.0510	.1743	.1439	.1031	.0575	.2651
#2	3.039	.0511	.1746	.1426	.1009	.0578	.2657
#3	3.026	.0505	.1734	.1436	.1026	.0570	.2651

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1640.8	4281.1	33057.	5845.6
Stddev	2.5	6.2	127.	39.7
%RSD	.15313	.14421	.38491	.67833
#1	1643.2	4279.3	33028.	5889.4
#2	1638.2	4276.0	32946.	5835.4
#3	1641.0	4287.9	33196.	5812.1

Zoom In Zoom Out

Sample Name: MP28504-S1 Acquired: 1/29/2015 12:20:27 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0516	30.39	2.140	2.177	.0532	67.30	.0516	.5242	.2234	.2715
Stddev	.0005	.11	.004	.008	.0002	.21	.0001	.0009	.0011	.0011
%RSD	.9416	.3531	.1677	.3570	.4615	.3080	.2826	.1646	.4876	.3926
#1	.0516	30.51	2.141	2.186	.0534	67.52	.0514	.5238	.2222	.2707
#2	.0511	30.32	2.137	2.172	.0531	67.11	.0516	.5236	.2238	.2727
#3	.0521	30.33	2.144	2.174	.0529	67.26	.0517	.5252	.2243	.2711

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.98	30.01	27.18	.5385	.5176	32.38	.5398	.5110	.5301	2.114
Stddev	.09	.06	.19	.0007	.0013	.10	.0008	.0015	.0009	.003
%RSD	.3146	.2121	.6953	.1340	.2586	.2973	.1492	.2972	.1748	.1450
#1	28.08	30.08	27.40	.5389	.5167	32.49	.5398	.5100	.5310	2.110
#2	27.96	30.00	27.07	.5389	.5170	32.30	.5390	.5103	.5291	2.116
#3	27.91	29.95	27.08	.5376	.5192	32.36	.5406	.5128	.5301	2.115

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.204	.5352	.6592	.5605	2.093	.5165	.5235
Stddev	.012	.0013	.0021	.0046	.004	.0007	.0010
%RSD	.3883	.2462	.3123	.8199	.1732	.1302	.1935
#1	3.212	.5342	.6615	.5572	2.096	.5157	.5228
#2	3.210	.5348	.6583	.5657	2.089	.5170	.5231
#3	3.190	.5367	.6577	.5585	2.094	.5166	.5247

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.5	4202.2	32476.	5780.0
Stddev	3.5	7.9	87.	35.8
%RSD	.21887	.18709	.26803	.61955
#1	1609.7	4209.0	32476.	5738.7
#2	1607.1	4203.9	32389.	5799.8
#3	1602.8	4193.6	32563.	5801.6

Zoom In Zoom Out

Sample Name: MP28504-S2 Acquired: 1/29/2015 12:24:24 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0503	29.68	2.095	2.144	.0518	65.65	.0504	.5126	.2178	.2626
Stddev	.0002	.05	.002	.000	.0001	.09	.0001	.0004	.0007	.0002
%RSD	.4790	.1702	.0901	.0168	.1514	.1406	.1051	.0739	.3344	.0850
#1	.0503	29.65	2.097	2.144	.0518	65.62	.0503	.5125	.2170	.2625
#2	.0501	29.66	2.093	2.144	.0519	65.57	.0504	.5123	.2183	.2628
#3	.0506	29.74	2.096	2.145	.0519	65.75	.0504	.5131	.2182	.2624

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.43	29.05	26.56	.5258	.5060	31.58	.5301	.5013	.5210	2.068
Stddev	.01	.06	.13	.0006	.0004	.06	.0009	.0010	.0014	.004
%RSD	.0358	.1899	.4981	.1092	.0847	.1969	.1775	.1974	.2738	.1783
#1	27.42	29.02	26.45	.5259	.5056	31.58	.5306	.5002	.5218	2.072
#2	27.44	29.02	26.71	.5252	.5060	31.52	.5290	.5020	.5194	2.067
#3	27.43	29.11	26.53	.5263	.5065	31.65	.5306	.5018	.5220	2.065

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.133	.5244	.6421	.5425	2.052	.5003	.5120
Stddev	.014	.0007	.0002	.0013	.005	.0010	.0002
%RSD	.4454	.1243	.0379	.2395	.2487	.1917	.0402
#1	3.117	.5236	.6419	.5425	2.046	.4996	.5118
#2	3.142	.5247	.6424	.5413	2.056	.4998	.5122
#3	3.141	.5247	.6421	.5439	2.055	.5014	.5119

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.4	4195.6	32726.	5782.3
Stddev	1.6	5.7	9.	13.0
%RSD	.09782	.13696	.02822	.22455
#1	1604.6	4190.2	32736.	5796.3
#2	1607.3	4195.0	32719.	5780.1
#3	1607.3	4201.7	32722.	5770.6

Zoom In Zoom Out

Sample Name: FA21679-11 Acquired: 1/29/2015 12:28:20 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	6.614	.0003	.0453	.0004	119.5	.0002	.0003	.0248	.0028
Stddev	.0006	.038	.0005	.0001	.0001	.2	.0000	.0001	.0002	.0002
%RSD	493.5	.5762	175.7	.2694	26.36	.1927	11.17	34.81	.6608	7.807
#1	-.0004	6.570	.0006	.0454	.0005	119.4	.0002	.0002	.0246	.0031
#2	.0000	6.642	.0006	.0452	.0003	119.4	.0001	.0004	.0247	.0029
#3	.0007	6.629	-.0003	.0453	.0004	119.8	.0002	.0004	.0249	.0026

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.404	2.442	4.150	.0119	.0051	11.55	.0036	.0028	.0008	.0025
Stddev	.015	.018	.027	.0001	.0002	.01	.0002	.0010	.0007	.0020
%RSD	.6113	.7180	.6479	1.016	3.316	.1272	4.754	34.04	89.37	80.34
#1	2.387	2.453	4.129	.0118	.0049	11.54	.0038	.0017	.0004	.0006
#2	2.414	2.422	4.180	.0118	.0052	11.55	.0036	.0034	.0005	.0047
#3	2.411	2.452	4.140	.0120	.0052	11.57	.0035	.0033	.0017	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.283	-.0002	.5568	.1474	.0009	.0094	.4847
Stddev	.021	.0002	.0011	.0033	.0012	.0002	.0005
%RSD	.2523	78.72	.2049	2.259	136.2	2.474	.1066
#1	8.262	-.0001	.5556	.1489	.0003	.0093	.4852
#2	8.282	-.0001	.5572	.1436	.0023	.0097	.4849
#3	8.304	-.0004	.5578	.1498	.0001	.0094	.4842

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1636.9	4428.8	34626.	6120.8
Stddev	4.4	21.6	194.	39.2
%RSD	.27056	.48853	.56153	.63990
#1	1640.4	4425.3	34538.	6148.7
#2	1638.3	4452.0	34849.	6137.6
#3	1631.9	4409.2	34492.	6076.0

Zoom In Zoom Out

Sample Name: FA21679-12 Acquired: 1/29/2015 12:32:25 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	29.72	.0055	.1560	.0010	28.40	.0002	.0024	.1310	.0220
Stddev	.0003	.02	.0006	.0004	.0001	.02	.0000	.0001	.0002	.0000
%RSD	5819.	.0812	10.23	.2603	5.870	.0800	15.64	4.145	.1713	.1926
#1	.0004	29.69	.0050	.1555	.0010	28.38	.0002	.0025	.1309	.0220
#2	-.0001	29.72	.0061	.1563	.0010	28.42	.0002	.0024	.1312	.0221
#3	-.0003	29.74	.0056	.1561	.0011	28.40	.0002	.0023	.1308	.0221

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.16	3.170	5.103	.0390	.0119	21.91	.0276	.0208	-.0002	.0009
Stddev	.02	.027	.048	.0000	.0002	.04	.0001	.0002	.0010	.0014
%RSD	.1563	.8410	.9358	.0674	1.279	.2023	.2749	.9491	419.8	151.3
#1	12.14	3.142	5.070	.0390	.0121	21.86	.0276	.0206	.0006	-.0004
#2	12.17	3.195	5.158	.0390	.0118	21.95	.0277	.0210	.0000	.0008
#3	12.17	3.173	5.081	.0390	.0119	21.91	.0276	.0208	-.0013	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.80	.0005	.5255	.0798	-.0009	.0343	.0801
Stddev	.04	.0001	.0010	.0004	.0023	.0005	.0002
%RSD	.2117	21.28	.1948	.4781	263.8	1.353	.2949
#1	19.75	.0005	.5256	.0797	.0014	.0348	.0798
#2	19.82	.0006	.5264	.0802	-.0033	.0339	.0801
#3	19.83	.0004	.5244	.0794	-.0007	.0342	.0803

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1651.4	4595.1	36114.	6392.9
Stddev	1.3	1.9	59.	7.6
%RSD	.08005	.04073	.16306	.11892
#1	1651.2	4597.1	36145.	6394.0
#2	1652.8	4594.7	36046.	6384.8
#3	1650.2	4593.5	36151.	6399.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 12:36:28 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2497	40.31	2.043	2.031	1.958	39.78	2.010	2.014	2.034	2.017
Stddev	.0004	.18	.004	.006	.006	.16	.003	.004	.007	.005
%RSD	.1409	.4343	.1838	.2984	.3014	.3914	.1673	.1726	.3479	.2548
#1	.2499	40.11	2.045	2.024	1.952	39.61	2.014	2.018	2.034	2.020
#2	.2499	40.39	2.039	2.031	1.958	39.87	2.007	2.011	2.042	2.020
#3	.2493	40.44	2.045	2.037	1.964	39.88	2.010	2.014	2.028	2.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.82	40.16	38.48	2.023	2.002	40.91	2.028	1.953	2.044	2.048
Stddev	.14	.10	.08	.003	.004	.13	.004	.006	.002	.001
%RSD	.3687	.2368	.2178	.1304	.2265	.3233	.1770	.2960	.0799	.0487
#1	38.68	40.06	38.45	2.025	1.999	40.75	2.032	1.960	2.045	2.049
#2	38.82	40.16	38.42	2.022	2.001	40.98	2.025	1.951	2.042	2.047
#3	38.96	40.25	38.58	2.020	2.007	40.98	2.027	1.949	2.043	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.134	2.011	2.023	1.994	1.980	1.986	1.987
Stddev	.002	.003	.005	.002	.006	.004	.004
%RSD	.0901	.1264	.2605	.0932	.2818	.2071	.1794
#1	2.136	2.014	2.018	1.993	1.985	1.988	1.991
#2	2.133	2.009	2.023	1.996	1.974	1.988	1.985
#3	2.133	2.011	2.029	1.992	1.982	1.981	1.985
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 12:36:28 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1598.1	4176.6	32429.	5740.8
Stddev	2.3	2.7	57.	11.9
%RSD	.14380	.06539	.17677	.20655
#1	1595.7	4173.5	32401.	5753.6
#2	1600.2	4178.4	32495.	5738.7
#3	1598.3	4178.0	32391.	5730.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 12:40:24 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0094	-.0003	.0002	.0002	.0066	.0001	.0001	-.0001
Stddev	.000	.0051	.0006	.0002	.0001	.0024	.0000	.0002	.0002
%RSD	240.9	54.72	168.2	85.79	28.92	36.42	53.51	288.5	262.2
#1	.0000	.0141	-.0003	.0003	.0002	.0039	.0000	.0002	.0002
#2	.0000	.0101	.0002	.0000	.0001	.0073	.0000	.0002	-.0003
#3	-.0001	.0039	-.0010	.0003	.0001	.0085	.0001	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0224	.0169	.0021	.0001	F.0013	.0406	-.0001	F.0011
Stddev	.0002	.0061	.0305	.0160	.0000	.0006	.0075	.0003	.0007
%RSD	45.26	27.29	180.1	748.4	4.026	46.50	18.55	387.1	64.69
#1	.0005	.0287	.0479	.0024	.0002	.0019	.0345	-.0004	.0003
#2	.0004	.0219	-.0131	-.0140	.0001	.0014	.0490	.0001	.0016
#3	.0002	.0165	.0159	.0180	.0001	.0007	.0383	.0001	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	F.0023	.0022	.0000	.0002	.0011	.0001	.0004	-.0001
Stddev	.0007	.0021	.0020	.0002	.0001	.0002	.0005	.0001	.0000
%RSD	44.77	92.29	90.30	1162.	36.19	18.92	433.2	29.01	34.63
#1	.0019	.0028	.0044	.0002	.0002	.0013	-.0003	.0003	-.0001
#2	.0019	.0040	.0015	-.0002	.0001	.0010	.0006	.0004	-.0001
#3	.0007	.0000	.0006	.0001	.0002	.0009	.0001	.0005	-.0002
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 12:40:24 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1683.2	4363.7	33970.	5815.1
Stddev	3.7	1.4	84.	63.2
%RSD	.21989	.03240	.24682	1.0862
#1	1686.9	4364.0	34063.	5757.2
#2	1679.5	4362.1	33947.	5882.4
#3	1683.1	4364.9	33901.	5805.5

Zoom In Zoom Out

Sample Name: FA21669-7F Acquired: 1/29/2015 12:44:34 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0703	-.0015	.0158	.0000	42.56	-.0001	-.0001	.0007	.0010
Stddev	.0005	.0076	.0006	.0001	.000	.03	.0000	.0002	.0002	.0001
%RSD	415.5	10.78	37.65	.5752	347.1	.0704	19.39	150.1	28.51	5.186
#1	-.0007	.0778	-.0015	.0159	.0000	42.57	-.0001	.0001	.0008	.0009
#2	.0001	.0706	-.0010	.0157	.0000	42.53	-.0001	-.0004	.0005	.0010
#3	.0003	.0626	-.0021	.0157	.0000	42.59	-.0001	-.0001	.0008	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0268	5.289	4.686	.0026	.0001	18.97	-.0002	-.0008	.0014	.0022
Stddev	.0019	.025	.005	.0000	.0001	.02	.0001	.0004	.0008	.0005
%RSD	7.109	.4743	.1133	1.246	58.62	.1016	95.63	47.76	53.95	21.73
#1	.0256	5.300	4.688	.0025	.0000	18.96	-.0003	-.0008	.0006	.0017
#2	.0290	5.260	4.680	.0026	.0002	18.95	.0000	-.0011	.0021	.0024
#3	.0258	5.307	4.690	.0026	.0001	18.99	-.0002	-.0004	.0016	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8823	-.0002	.1194	.0017	-.0011	.0017	.0316
Stddev	.0010	.0002	.0004	.0002	.0015	.0002	.0007
%RSD	.1112	149.0	.3491	9.518	143.0	9.438	2.215
#1	.8823	.0001	.1195	.0017	-.0001	.0017	.0308
#2	.8813	-.0002	.1190	.0015	-.0003	.0019	.0320
#3	.8833	-.0004	.1198	.0018	-.0028	.0016	.0320

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1654.1	4290.8	33083.	5832.4
Stddev	1.5	11.6	200.	56.4
%RSD	.09256	.26929	.60359	.96714
#1	1655.7	4292.8	33259.	5897.3
#2	1652.6	4301.3	33124.	5805.0
#3	1653.9	4278.4	32866.	5794.9

Zoom In Zoom Out

Sample Name: FA21669-8F Acquired: 1/29/2015 12:48:41 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0479	.0205	.0389	.0000	189.3	-.0003	.0001	.0014	.0008
Stddev	.0001	.0056	.0008	.0002	.000	1.1	.0001	.0001	.0002	.0001
%RSD	76.13	11.67	3.833	.5745	427.4	.5810	19.72	95.48	12.05	12.00
#1	-.0001	.0513	.0213	.0392	.0000	189.3	-.0004	.0000	.0016	.0007
#2	-.0003	.0511	.0198	.0389	.0000	188.1	-.0004	.0002	.0013	.0008
#3	-.0001	.0415	.0205	.0387	-.0001	190.3	-.0003	.0001	.0013	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.826	18.51	8.448	.2610	-.0007	14.48	.0002	-.0019	.0006	.0024
Stddev	.039	.11	.071	.0012	.0002	.07	.0002	.0004	.0003	.0012
%RSD	.5653	.5825	.8370	.4430	26.01	.5099	79.47	20.67	55.53	50.07
#1	6.803	18.49	8.433	.2597	-.0008	14.50	.0000	-.0014	.0004	.0018
#2	6.804	18.42	8.386	.2614	-.0007	14.40	.0003	-.0022	.0010	.0017
#3	6.870	18.63	8.525	.2619	-.0005	14.54	.0003	-.0020	.0005	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.661	-.0005	.3441	.0019	-.0007	.0025	.0139
Stddev	.001	.0004	.0018	.0001	.0009	.0002	.0001
%RSD	.0387	90.49	.5262	5.324	131.7	8.429	.3747
#1	3.659	-.0008	.3439	.0020	-.0001	.0025	.0139
#2	3.660	.0000	.3424	.0019	-.0002	.0028	.0139
#3	3.662	-.0006	.3460	.0018	-.0017	.0024	.0138

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.3	4207.7	32888.	5726.5
Stddev	3.1	5.7	39.	26.2
%RSD	.19462	.13578	.11894	.45798
#1	1617.4	4202.7	32854.	5716.4
#2	1618.7	4214.0	32931.	5756.2
#3	1612.8	4206.5	32879.	5706.8

Zoom In Zoom Out

Sample Name: FA21669-9F Acquired: 1/29/2015 12:52:46 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0157	-.0016	.0186	-.0001	47.24	-.0001	-.0002	.0004	.0010
Stddev	.0001	.0131	.0009	.0001	.0001	.18	.0001	.0000	.0002	.0002
%RSD	23.94	83.78	57.34	.4349	143.4	.3811	63.80	23.54	56.67	14.67
#1	.0005	.0150	-.0007	.0187	.0000	47.35	.0000	-.0001	.0002	.0009
#2	.0003	.0291	-.0016	.0187	-.0002	47.34	-.0001	-.0002	.0004	.0012
#3	.0004	.0029	-.0026	.0186	-.0001	47.03	-.0001	-.0002	.0006	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0141	3.558	5.176	.0008	.0007	28.67	-.0002	-.0022	.0002	.0013
Stddev	.0025	.018	.024	.0000	.0000	.13	.0002	.0008	.0007	.0019
%RSD	17.96	.5130	.4595	5.864	4.303	.4647	75.39	33.86	410.5	146.9
#1	.0170	3.575	5.200	.0008	.0007	28.77	.0000	-.0022	-.0006	.0035
#2	.0131	3.539	5.152	.0008	.0008	28.71	-.0004	-.0030	.0005	.0000
#3	.0122	3.561	5.177	.0009	.0007	28.52	-.0003	-.0015	.0007	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.295	-.0005	.1502	.0013	-.0016	.0020	.0331
Stddev	.003	.0004	.0007	.0001	.0013	.0004	.0001
%RSD	.2011	92.74	.4333	9.036	81.75	21.56	.2379
#1	1.294	.0000	.1510	.0013	-.0028	.0021	.0331
#2	1.293	-.0006	.1500	.0014	-.0002	.0015	.0331
#3	1.298	-.0008	.1497	.0012	-.0017	.0024	.0332

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1651.3	4296.0	33196.	5711.5
Stddev	3.4	4.1	83.	28.5
%RSD	.20889	.09463	.25136	.49831
#1	1652.5	4298.0	33291.	5694.8
#2	1647.4	4291.4	33159.	5695.4
#3	1654.0	4298.7	33137.	5744.4

Zoom In Zoom Out

Sample Name: FA21539-1 Acquired: 1/29/2015 12:56:53 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.2252	.0041	.0170	-.0001	7.876	.0000	-.0003	-.0001	.0031
Stddev	.0003	.0033	.0001	.0001	.0001	.042	.0000	.0001	.0001	.0002
%RSD	76.77	1.474	3.288	.7432	59.68	.5273	149.6	34.38	138.4	7.408
#1	.0001	.2233	.0042	.0168	.0000	7.830	.0001	-.0004	-.0001	.0029
#2	.0003	.2290	.0042	.0171	-.0001	7.909	.0000	-.0002	.0000	.0029
#3	.0006	.2232	.0040	.0170	-.0001	7.889	.0000	-.0003	-.0002	.0033

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0496	1.008	2.564	.0668	.0045	10.77	.0000	.0002	.0003	.0008
Stddev	.0015	.017	.031	.0002	.0001	.03	.0002	.0008	.0004	.0007
%RSD	3.078	1.640	1.199	.2839	2.823	.2611	837.4	397.2	121.6	84.17
#1	.0511	.9912	2.558	.0666	.0044	10.75	-.0002	.0004	.0007	.0016
#2	.0496	1.008	2.597	.0669	.0044	10.80	.0001	-.0007	.0002	.0003
#3	.0480	1.024	2.536	.0669	.0046	10.75	.0002	.0009	.0000	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.635	-.0003	.0311	.0003	-.0029	.0011	.0083
Stddev	.005	.0004	.0000	.0000	.0010	.0004	.0000
%RSD	.2051	131.2	.0775	9.055	34.10	34.16	.1905
#1	2.630	-.0001	.0311	.0003	-.0028	.0013	.0083
#2	2.634	.0000	.0311	.0003	-.0040	.0007	.0083
#3	2.641	-.0007	.0311	.0003	-.0020	.0013	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1676.1	4361.0	33748.	5784.7
Stddev	1.7	3.1	209.	45.6
%RSD	.10253	.07202	.61969	.78785
#1	1677.5	4364.4	33783.	5836.5
#2	1674.2	4358.2	33524.	5750.6
#3	1676.7	4360.4	33937.	5767.1

Zoom In Zoom Out

Sample Name: FA21539-2 Acquired: 1/29/2015 13:01:00 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0244	-.0002	.0348	.0000	6.180	.0001	.0013	.0003	.0717
Stddev	.0001	.0072	.0004	.0003	.000	.015	.0000	.0001	.0003	.0004
%RSD	123.8	29.72	152.6	.7937	69.50	.2465	30.97	10.52	107.0	.4936
#1	.0000	.0193	-.0002	.0346	.0000	6.188	.0001	.0015	.0005	.0720
#2	.0001	.0327	-.0006	.0347	-.0001	6.162	.0001	.0013	.0004	.0717
#3	.0002	.0212	.0001	.0351	.0000	6.189	.0001	.0012	-.0001	.0713

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2002	1.366	2.488	.0752	-.0002	11.28	.0311	.0205	.0011	.0011
Stddev	.0005	.006	.016	.0002	.0001	.04	.0002	.0007	.0008	.0016
%RSD	.2294	.4752	.6254	.2281	58.25	.3152	.7755	3.289	78.56	148.9
#1	.2007	1.361	2.502	.0753	-.0001	11.30	.0313	.0212	.0002	.0018
#2	.1998	1.373	2.492	.0754	-.0001	11.24	.0309	.0204	.0018	.0021
#3	.2002	1.364	2.471	.0751	-.0003	11.31	.0312	.0199	.0012	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.227	.0009	.0207	.0001	-.0025	.0005	.2139
Stddev	.004	.0002	.0001	.0001	.0005	.0001	.0002
%RSD	.1615	24.01	.4373	73.12	20.36	30.69	.1150
#1	2.223	.0009	.0207	.0000	-.0020	.0005	.2138
#2	2.230	.0007	.0207	.0001	-.0025	.0006	.2142
#3	2.228	.0011	.0208	.0002	-.0031	.0003	.2137

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1677.5	4374.5	33569.	5770.6
Stddev	3.6	10.4	100.	41.5
%RSD	.21488	.23743	.29665	.71966
#1	1677.6	4367.5	33479.	5815.4
#2	1673.8	4369.6	33551.	5763.0
#3	1681.0	4386.5	33676.	5733.4

Zoom In Zoom Out

Sample Name: FA21539-3 Acquired: 1/29/2015 13:05:08 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0758	.0003	.0174	.0000	9.037	.0001	.0012	.0000	.1170
Stddev	.0001	.0021	.0007	.0001	.000	.041	.0000	.0002	.000	.0003
%RSD	60.02	2.705	223.5	.5223	1617.	.4561	22.34	15.66	1917.	.2866
#1	.0002	.0754	-.0004	.0174	-.0001	9.033	.0001	.0010	-.0003	.1171
#2	.0001	.0740	.0003	.0175	.0001	9.080	.0001	.0011	.0001	.1173
#3	.0003	.0780	.0010	.0174	.0000	8.998	.0001	.0014	.0001	.1166

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.038	1.565	2.585	.0327	.0000	10.87	.0180	.0428	.0006	.0014
Stddev	.015	.022	.008	.0001	.000	.02	.0000	.0004	.0003	.0013
%RSD	.7251	1.412	.3027	.2830	490.6	.1555	.2346	.8207	47.04	91.86
#1	2.022	1.586	2.594	.0326	.0000	10.88	.0180	.0432	.0007	.0002
#2	2.051	1.566	2.579	.0327	-.0002	10.88	.0180	.0425	.0008	.0012
#3	2.040	1.542	2.582	.0328	.0001	10.85	.0181	.0427	.0003	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.009	.0002	.0226	.0012	-.0018	.0009	.5533
Stddev	.004	.0002	.0001	.0001	.0013	.0002	.0012
%RSD	.1998	81.77	.4603	8.972	72.99	17.85	.2233
#1	2.006	.0004	.0225	.0013	-.0011	.0009	.5524
#2	2.008	.0000	.0227	.0011	-.0009	.0007	.5528
#3	2.014	.0003	.0226	.0012	-.0033	.0010	.5547

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1677.0	4383.1	34095.	5851.1
Stddev	2.1	6.8	120.	12.3
%RSD	.12573	.15510	.35112	.21019
#1	1675.5	4389.2	34007.	5854.8
#2	1679.4	4384.5	34046.	5837.4
#3	1676.2	4375.8	34231.	5861.1

Zoom In Zoom Out

Sample Name: FA21671-1 Acquired: 1/29/2015 13:09:15 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0006	2.898	.0017	.1321	.0001	44.82	.0025	.0048	.0186	.1351
Stddev	.0003	.010	.0010	.0003	.0000	.10	.0000	.0001	.0002	.0003
%RSD	44.77	.3521	59.23	.2116	19.13	.2126	.7703	2.384	1.083	.2346
#1	.0008	2.904	.0016	.1318	.0001	44.73	.0025	.0047	.0188	.1351
#2	.0007	2.886	.0007	.1321	.0001	44.92	.0025	.0047	.0186	.1354
#3	.0003	2.903	.0027	.1324	.0001	44.82	.0026	.0049	.0184	.1348

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.257	12.15	2.600	.1518	.0244	14.64	.0266	.1670	.0065	.0016
Stddev	.006	.04	.016	.0001	.0004	.02	.0002	.0006	.0001	.0015
%RSD	.0898	.3242	.6088	.0475	1.731	.1543	.7859	.3421	1.617	93.43
#1	7.252	12.11	2.588	.1519	.0240	14.62	.0265	.1664	.0064	-.0001
#2	7.264	12.18	2.594	.1519	.0246	14.66	.0269	.1670	.0066	.0025
#3	7.254	12.17	2.618	.1518	.0248	14.64	.0265	.1675	.0066	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.693	.0058	.1602	.0287	-.0019	.0279	1.287
Stddev	.004	.0002	.0005	.0002	.0003	.0002	.003
%RSD	.1662	2.998	.3031	.5790	15.94	.8434	.2290
#1	2.688	.0060	.1598	.0285	-.0016	.0282	1.284
#2	2.695	.0057	.1599	.0287	-.0022	.0277	1.287
#3	2.696	.0058	.1607	.0288	-.0017	.0280	1.290

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1652.7	4338.7	33486.	5809.7
Stddev	5.6	4.1	27.	31.6
%RSD	.34003	.09509	.08127	.54384
#1	1659.1	4337.1	33460.	5797.6
#2	1649.0	4343.4	33484.	5785.9
#3	1649.9	4335.6	33515.	5845.5

Zoom In Zoom Out

Sample Name: FA21671-2 Acquired: 1/29/2015 13:13:19 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	3.215	.0011	.0543	.0000	64.29	.0009	.0069	.0137	.1144
Stddev	.0003	.036	.0003	.0001	.0001	.15	.0000	.0000	.0004	.0004
%RSD	41.45	1.110	30.57	.2018	695.9	.2310	1.070	.3304	3.255	.3584
#1	.0012	3.175	.0015	.0541	.0001	64.12	.0009	.0069	.0135	.1140
#2	.0008	3.245	.0008	.0543	.0001	64.39	.0009	.0069	.0142	.1145
#3	.0005	3.225	.0010	.0543	-.0001	64.35	.0009	.0070	.0134	.1148

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.788	9.887	5.117	.0568	.0288	32.01	.0125	.0564	.0021	.0006
Stddev	.011	.012	.022	.0002	.0002	.06	.0002	.0007	.0006	.0012
%RSD	.2839	.1239	.4249	.4226	.6452	.1788	1.632	1.197	28.62	189.2
#1	3.776	9.901	5.106	.0567	.0286	31.95	.0126	.0556	.0020	.0013
#2	3.791	9.880	5.142	.0570	.0289	32.06	.0127	.0569	.0015	.0013
#3	3.796	9.880	5.103	.0565	.0288	32.01	.0123	.0565	.0027	-.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.096	.0023	.2178	.1222	-.0004	.0154	.4567
Stddev	.002	.0001	.0004	.0034	.0020	.0003	.0004
%RSD	.0343	3.783	.1720	2.762	531.8	1.960	.0936
#1	5.096	.0023	.2174	.1189	.0017	.0157	.4565
#2	5.094	.0022	.2182	.1256	-.0006	.0152	.4572
#3	5.098	.0024	.2178	.1222	-.0023	.0152	.4565

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1665.0	4355.7	33367.	5830.8
Stddev	4.5	1.7	106.	42.3
%RSD	.26900	.03889	.31814	.72590
#1	1663.3	4357.3	33363.	5834.0
#2	1670.0	4353.9	33263.	5786.9
#3	1661.6	4356.0	33475.	5871.4

Zoom In Zoom Out

Sample Name: FA21711-6F Acquired: 1/29/2015 13:17:23 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.3170	.0003	.0359	.0000	38.98	-.0001	-.0001	.0042	.0013
Stddev	.0002	.0077	.0003	.0000	.000	.11	.0000	.0000	.0004	.0003
%RSD	142.9	2.420	125.4	.1092	4238.	.2894	21.94	2.517	8.731	20.86
#1	.0002	.3230	.0006	.0359	.0000	39.10	-.0001	-.0001	.0043	.0011
#2	-.0001	.3195	-.0001	.0359	-.0001	38.89	-.0001	-.0001	.0045	.0012
#3	.0002	.3083	.0004	.0360	.0000	38.94	-.0001	-.0001	.0038	.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0076	33.97	.3141	.0027	.0010	21.68	.0015	-.0021	-.0007	.0010
Stddev	.0012	.13	.0003	.0000	.0001	.08	.0000	.0009	.0010	.0013
%RSD	15.43	.3812	.1084	1.548	10.40	.3669	3.012	43.13	132.6	121.9
#1	.0078	34.11	.3137	.0028	.0009	21.77	.0015	-.0011	-.0019	.0003
#2	.0063	33.86	.3142	.0027	.0011	21.62	.0015	-.0023	-.0001	.0003
#3	.0086	33.93	.3144	.0027	.0010	21.66	.0015	-.0028	-.0002	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.533	.0001	.3783	.0045	-.0018	.0030	.0070
Stddev	.002	.0003	.0005	.0001	.0011	.0001	.0000
%RSD	.1032	233.4	.1320	2.871	63.06	3.645	.3390
#1	1.533	.0002	.3788	.0046	-.0009	.0029	.0069
#2	1.531	.0003	.3778	.0044	-.0015	.0031	.0070
#3	1.534	-.0002	.3784	.0045	-.0030	.0030	.0070

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1637.7	4308.1	32831.	5766.8
Stddev	1.8	9.1	21.	24.4
%RSD	.10692	.21040	.06322	.42297
#1	1636.0	4298.6	32823.	5751.3
#2	1639.5	4316.7	32855.	5794.9
#3	1637.5	4308.9	32816.	5754.1

Zoom In Zoom Out

Sample Name: FA21711-7F Acquired: 1/29/2015 13:21:31 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	22.08	.0068	.0383	-.0001	26.40	-.0001	.0004	.0014	.0013
Stddev	.0001	.05	.0006	.0002	.0001	.02	.0000	.0000	.0002	.0002
%RSD	19.10	.2197	8.086	.5714	84.58	.0942	28.84	10.29	17.82	14.82
#1	.0005	22.02	.0062	.0383	.0000	26.38	-.0001	.0003	.0012	.0015
#2	.0004	22.08	.0069	.0381	-.0001	26.43	-.0001	.0004	.0017	.0013
#3	.0006	22.12	.0073	.0386	-.0001	26.41	-.0001	.0004	.0013	.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0229	50.57	.1460	.0006	.0278	30.93	.0091	-.0019	-.0001	.0012
Stddev	.0037	.11	.0040	.0001	.0001	.04	.0002	.0006	.0007	.0010
%RSD	15.98	.2219	2.755	8.141	.3772	.1432	1.690	31.22	678.3	83.44
#1	.0264	50.49	.1416	.0007	.0277	30.88	.0090	-.0015	-.0004	.0012
#2	.0232	50.70	.1494	.0006	.0279	30.97	.0092	-.0026	.0007	.0022
#3	.0191	50.52	.1469	.0006	.0279	30.95	.0089	-.0016	-.0006	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9162	-.0006	.4243	.0157	-.0015	.0061	.0057
Stddev	.0008	.0001	.0009	.0001	.0006	.0002	.0001
%RSD	.0826	17.24	.2188	.6317	41.25	3.505	1.728
#1	.9161	-.0005	.4243	.0156	-.0008	.0061	.0057
#2	.9170	-.0007	.4253	.0158	-.0019	.0063	.0058
#3	.9155	-.0007	.4234	.0157	-.0018	.0059	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1654.3	4346.0	33257.	5842.5
Stddev	5.6	10.7	62.	35.0
%RSD	.33569	.24622	.18679	.59959
#1	1659.5	4356.1	33188.	5882.8
#2	1648.5	4334.8	33276.	5819.4
#3	1655.0	4347.1	33308.	5825.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 13:25:36 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2435	39.51	1.998	2.009	1.929	39.05	1.975	1.974	1.976	1.961
Stddev	.0007	.02	.003	.002	.003	.09	.001	.002	.005	.003
%RSD	.2883	.0486	.1405	.0789	.1639	.2256	.0692	.0913	.2558	.1376
#1	.2433	39.53	1.997	2.010	1.931	39.08	1.976	1.975	1.971	1.959
#2	.2443	39.52	2.001	2.008	1.930	39.12	1.974	1.975	1.980	1.964
#3	.2429	39.49	1.995	2.007	1.925	38.95	1.973	1.972	1.979	1.961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.39	39.28	38.04	1.985	1.961	39.98	1.986	1.935	1.994	2.008
Stddev	.11	.10	.18	.004	.007	.06	.002	.003	.006	.006
%RSD	.2760	.2594	.4674	.2149	.3531	.1540	.0997	.1411	.3237	.3118
#1	38.47	39.36	38.13	1.980	1.953	40.01	1.987	1.934	1.991	2.007
#2	38.42	39.32	38.15	1.988	1.965	40.02	1.987	1.933	2.002	2.014
#3	38.27	39.17	37.83	1.986	1.965	39.91	1.983	1.938	1.990	2.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.080	1.964	1.999	1.954	1.962	1.932	1.958
Stddev	.003	.002	.003	.003	.003	.001	.001
%RSD	.1563	.1006	.1499	.1281	.1287	.0461	.0539
#1	2.081	1.965	2.002	1.951	1.960	1.931	1.959
#2	2.082	1.964	1.998	1.956	1.965	1.933	1.957
#3	2.076	1.961	1.996	1.955	1.963	1.932	1.958
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 13:25:36 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1630.4	4284.2	33231.	5759.6
Stddev	4.0	4.6	96.	39.8
%RSD	.24508	.10768	.29021	.69127
#1	1631.3	4284.9	33342.	5728.8
#2	1633.8	4288.4	33176.	5745.6
#3	1626.0	4279.3	33175.	5804.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 13:29:32 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0049	-.0004	.0002	.0002	.0077	.0001	-.0001	.0000
Stddev	.001	.0053	.0005	.0002	.0000	.0004	.0001	.0002	.0004
%RSD	15960.	106.9	114.0	71.24	20.00	5.299	63.67	282.0	923.4
#1	-.0005	-.0011	-.0009	.0004	.0002	.0073	.0001	.0001	.0003
#2	.0005	.0074	-.0003	.0001	.0002	.0080	.0002	-.0001	-.0004
#3	.0000	.0086	.0000	.0002	.0002	.0079	.0001	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0248	-.0068	.0097	.0001	F.0015	.0359	.0001	F.0012
Stddev	.0002	.0068	.0246	.0083	.0000	.0005	.0086	.0001	.0004
%RSD	117.8	27.45	363.7	85.21	33.22	31.48	24.01	247.3	31.82
#1	.0001	.0305	.0051	.0149	.0001	.0020	.0282	.0001	.0017
#2	.0000	.0265	-.0350	.0142	.0001	.0014	.0452	.0002	.0009
#3	.0004	.0173	.0096	.0002	.0001	.0011	.0344	-.0001	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0013	.0013	.0001	.0001	.0012	.0004	.0003	-.0002
Stddev	.0011	.0009	.0005	.0002	.0001	.0001	.0006	.0001	.0000
%RSD	52.43	66.52	37.16	189.4	58.56	11.87	152.3	46.92	28.63
#1	.0034	.0023	.0011	-.0001	.0001	.0012	-.0003	.0004	-.0001
#2	.0015	.0011	.0009	.0003	.0001	.0014	.0008	.0003	-.0002
#3	.0014	.0006	.0018	.0001	.0002	.0012	.0007	.0002	-.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 13:29:32 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1724.6	4499.9	34868.	5870.9
Stddev	6.1	13.6	56.	26.5
%RSD	.35274	.30298	.16177	.45165
#1	1731.6	4515.7	34822.	5900.9
#2	1720.9	4492.8	34851.	5850.4
#3	1721.1	4491.4	34931.	5861.5

Zoom In Zoom Out

Sample Name: FA21711-8F Acquired: 1/29/2015 13:33:44 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.5482	.0003	.0072	.0000	78.87	-.0001	.0000	.0021	.0054
Stddev	.0003	.0035	.0006	.0002	.000	.46	.0001	.0001	.0001	.0001
%RSD	94.78	.6295	161.6	2.703	584.5	.5812	113.4	4537.	4.641	1.439
#1	.0007	.5519	.0009	.0070	.0000	79.38	-.0001	-.0001	.0020	.0054
#2	.0001	.5475	.0004	.0074	.0001	78.71	.0000	.0000	.0020	.0053
#3	.0002	.5451	-.0002	.0072	-.0001	78.51	.0000	.0001	.0021	.0055

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3580	18.02	5.809	.0275	.0156	12.57	.0005	-.0027	.0005	.0021
Stddev	.0067	.10	.031	.0001	.0002	.08	.0002	.0009	.0003	.0008
%RSD	1.884	.5344	.5305	.2479	1.487	.6070	41.39	32.24	51.86	38.96
#1	.3647	18.13	5.844	.0275	.0157	12.66	.0007	-.0019	.0005	.0020
#2	.3581	17.98	5.787	.0276	.0154	12.55	.0003	-.0036	.0002	.0030
#3	.3512	17.95	5.796	.0276	.0158	12.51	.0005	-.0027	.0007	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.945	-.0002	.1377	.0174	-.0012	.0077	.0060
Stddev	.002	.0001	.0005	.0005	.0008	.0003	.0000
%RSD	.0855	53.53	.3556	3.089	64.88	3.541	.3777
#1	1.946	-.0001	.1382	.0172	-.0016	.0080	.0060
#2	1.943	-.0003	.1377	.0169	-.0017	.0075	.0060
#3	1.947	-.0003	.1372	.0180	-.0003	.0076	.0060

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1656.3	4322.0	32914.	5721.1
Stddev	4.2	3.7	57.	89.7
%RSD	.25170	.08599	.17248	1.5672
#1	1661.0	4326.2	32901.	5617.7
#2	1655.0	4320.3	32977.	5770.1
#3	1653.0	4319.4	32866.	5775.6

Zoom In Zoom Out

Sample Name: FA21567-1 Acquired: 1/29/2015 13:37:50 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0175	.0047	1.685	.0000	192.5	-.0002	.0008	.0008	.0032
Stddev	.0003	.0089	.0003	.001	.000	.3	.0001	.0001	.0003	.0003
%RSD	2646.	50.85	6.653	.0437	402.6	.1738	34.70	6.947	41.19	10.21
#1	.0002	.0205	.0048	1.685	.0000	192.1	-.0002	.0008	.0007	.0029
#2	.0001	.0075	.0049	1.686	.0000	192.8	-.0001	.0007	.0005	.0034
#3	-.0003	.0245	.0043	1.684	.0000	192.6	-.0002	.0008	.0012	.0034

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8249	8.585	41.79	.9744	-.0001	31.37	.0023	-.0015	.0000	.0004
Stddev	.0048	.021	.03	.0028	.0000	.08	.0002	.0009	.001	.0004
%RSD	.5834	.2416	.0663	.2861	23.37	.2429	7.815	59.17	3483.	104.7
#1	.8220	8.561	41.77	.9715	-.0002	31.29	.0024	-.0021	.0009	.0001
#2	.8222	8.597	41.78	.9747	-.0001	31.44	.0023	-.0005	-.0005	.0009
#3	.8304	8.597	41.82	.9770	-.0001	31.37	.0021	-.0019	-.0005	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.31	-.0004	1.742	.0015	.0003	.0044	.0104
Stddev	.01	.0001	.004	.0002	.0014	.0001	.0001
%RSD	.0614	12.70	.2136	13.02	451.0	3.110	.9828
#1	15.31	-.0005	1.738	.0013	-.0011	.0043	.0104
#2	15.31	-.0004	1.743	.0016	.0003	.0045	.0103
#3	15.32	-.0004	1.745	.0017	.0017	.0046	.0104

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.8	4238.8	31981.	5612.4
Stddev	6.3	5.5	38.	19.8
%RSD	.39023	.12898	.11928	.35190
#1	1609.8	4232.6	32023.	5590.1
#2	1618.9	4241.1	31948.	5627.6
#3	1606.8	4242.8	31972.	5619.6

Zoom In Zoom Out

Sample Name: FA21567-5 Acquired: 1/29/2015 13:41:56 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0157	.0003	1.263	-.0001	201.4	-.0002	-.0004	.0004	.0012
Stddev	.0005	.0047	.0005	.004	.0001	1.4	.0001	.0000	.0004	.0004
%RSD	131.5	30.09	199.0	.3104	153.7	.7066	39.29	12.90	95.67	28.97
#1	.0005	.0210	-.0001	1.268	.0000	200.0	-.0003	-.0004	.0002	.0008
#2	-.0002	.0138	.0008	1.260	.0000	201.5	-.0002	-.0003	.0001	.0012
#3	.0007	.0121	.0000	1.262	-.0001	202.8	-.0001	-.0004	.0008	.0015

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.558	7.843	35.38	2.948	-.0012	22.68	.0000	-.0008	.0002	.0012
Stddev	.016	.043	.04	.019	.0002	.04	.000	.0001	.0014	.0025
%RSD	.2799	.5518	.1122	.6371	18.99	.1883	1898.	12.20	835.0	209.6
#1	5.574	7.883	35.41	2.930	-.0014	22.73	-.0003	-.0008	-.0014	-.0017
#2	5.542	7.850	35.34	2.949	-.0011	22.66	.0001	-.0009	.0006	.0031
#3	5.557	7.797	35.40	2.967	-.0010	22.65	.0002	-.0007	.0013	.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	19.10	-.0005	1.509	.0012	-.0003	.0017	.0029
Stddev	.04	.0002	.005	.0001	.0012	.0002	.0001
%RSD	.1912	37.60	.3387	8.759	350.8	13.26	2.355
#1	19.06	-.0007	1.515	.0013	.0003	.0020	.0029
#2	19.12	-.0004	1.506	.0011	.0004	.0015	.0030
#3	19.13	-.0004	1.506	.0012	-.0017	.0017	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1604.9	4235.1	31971.	5612.0
Stddev	3.4	2.8	126.	36.4
%RSD	.21152	.06508	.39398	.64799
#1	1604.6	4238.3	32089.	5651.6
#2	1601.7	4233.7	31838.	5580.1
#3	1608.4	4233.4	31986.	5604.2

Zoom In Zoom Out

Sample Name: FA21603-1 Acquired: 1/29/2015 13:46:16 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.3712	-.0023	.0553	.0002	26.84	.0003	.0008	.0005	.0007
Stddev	.000	.0118	.0008	.0000	.0001	.03	.0001	.0001	.0002	.0004
%RSD	547.6	3.188	36.09	.0316	21.17	.1067	22.87	15.77	53.20	57.46
#1	.0002	.3836	-.0022	.0553	.0003	26.80	.0003	.0006	.0006	.0011
#2	-.0002	.3600	-.0015	.0553	.0002	26.86	.0003	.0009	.0006	.0006
#3	-.0001	.3699	-.0031	.0553	.0003	26.85	.0004	.0007	.0002	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0524	1.844	4.774	.0201	-.0007	17.11	.0004	-.0011	-.0008	.0018
Stddev	.0023	.010	.011	.0001	.0001	.01	.0002	.0003	.0010	.0014
%RSD	4.342	.5249	.2244	.3205	21.02	.0459	45.16	29.67	120.1	74.80
#1	.0548	1.836	4.785	.0202	-.0007	17.11	.0004	-.0014	-.0016	.0002
#2	.0523	1.854	4.773	.0201	-.0005	17.12	.0003	-.0007	-.0012	.0026
#3	.0502	1.841	4.764	.0200	-.0008	17.11	.0006	-.0012	.0003	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.884	-.0004	.0859	.0011	-.0019	.0007	.0210
Stddev	.002	.0002	.0002	.0002	.0009	.0003	.0003
%RSD	.1169	56.19	.2078	16.85	47.58	47.79	1.328
#1	1.884	-.0001	.0861	.0009	-.0010	.0003	.0210
#2	1.881	-.0006	.0860	.0012	-.0027	.0009	.0208
#3	1.885	-.0006	.0857	.0012	-.0019	.0008	.0213

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1663.9	4361.5	33271.	5631.6
Stddev	.6	3.9	8.	19.1
%RSD	.03599	.09056	.02497	.33929
#1	1663.4	4357.3	33262.	5647.3
#2	1663.6	4365.2	33278.	5637.2
#3	1664.5	4362.1	33274.	5610.4

Zoom In Zoom Out

Sample Name: FA21603-2 Acquired: 1/29/2015 13:50:23 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0545	-.0019	.0286	.0000	90.50	-.0001	.0000	.0003	.0001
Stddev	.0004	.0030	.0008	.0003	.0000	.24	.0000	.0003	.0002	.0001
%RSD	76.03	5.461	39.28	1.175	2474.	.2664	48.50	1134.	65.92	96.53
#1	.0001	.0574	-.0027	.0290	.0000	90.75	-.0002	.0001	.0001	.0000
#2	.0006	.0514	-.0012	.0283	.0000	90.26	-.0001	.0002	.0005	.0000
#3	.0009	.0547	-.0019	.0286	.0000	90.49	-.0001	-.0003	.0003	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1826	1.461	6.179	.0423	-.0015	33.62	.0006	-.0022	-.0011	.0006
Stddev	.0006	.031	.043	.0001	.0002	.13	.0001	.0010	.0012	.0003
%RSD	.3311	2.104	.7031	.1258	15.27	.3836	14.53	44.88	110.2	53.96
#1	.1825	1.496	6.226	.0422	-.0017	33.76	.0007	-.0015	-.0023	.0003
#2	.1820	1.436	6.170	.0423	-.0015	33.52	.0005	-.0033	.0002	.0009
#3	.1832	1.452	6.141	.0423	-.0013	33.58	.0006	-.0018	-.0012	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.633	-.0003	.1686	.0020	-.0008	.0021	.0048
Stddev	.004	.0003	.0008	.0002	.0002	.0003	.0001
%RSD	.0649	91.42	.4626	8.295	26.36	13.94	1.963
#1	5.630	-.0001	.1695	.0020	-.0006	.0021	.0047
#2	5.637	-.0006	.1680	.0018	-.0011	.0019	.0049
#3	5.634	-.0002	.1684	.0022	-.0008	.0025	.0049

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1653.2	4326.0	32626.	5642.7
Stddev	2.8	5.2	165.	30.4
%RSD	.17023	.12054	.50489	.53962
#1	1650.3	4327.9	32768.	5617.1
#2	1656.0	4320.2	32665.	5634.7
#3	1653.2	4330.1	32445.	5676.4

Zoom In Zoom Out

Sample Name: FA21603-3 Acquired: 1/29/2015 13:54:30 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0006	.1955	.0157	.1058	.0000	334.3	.0015	.0051
Stddev	.0003	.0018	.0118	.0006	.0001	3.4	.0013	.0033
%RSD	53.93	.9438	75.07	.5496	715.4	1.029	81.85	65.98
#1	.0002	.1942	.0054	.1064	.0000	332.8	.0003	.0018
#2	.0007	.1948	.0132	.1052	.0001	338.2	.0014	.0048
#3	.0008	.1976	.0285	.1057	.0000	331.9	.0028	.0085

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0034	.0003	2.732	3.278	11.99	.1438	.0089	F229.0
Stddev	.0001	.0001	.013	.033	.06	.0005	.0080	3.2
%RSD	3.826	44.17	.4816	1.004	.5193	.3445	89.57	1.393
#1	.0034	.0002	2.728	3.254	12.02	.1442	.0016	232.3
#2	.0035	.0004	2.722	3.264	12.03	.1440	.0077	228.9
#3	.0032	.0003	2.747	3.315	11.92	.1432	.0175	225.9

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0324	.0167	.0067	.0222	13.30	.0364	.5403	.0013
Stddev	.0051	.0122	.0064	.0175	.14	.0181	.0016	.0000
%RSD	15.69	73.29	96.31	79.07	1.066	49.63	.2996	.6255
#1	.0277	.0051	.0018	.0084	13.43	.0197	.5411	.0013
#2	.0318	.0155	.0043	.0162	13.31	.0340	.5384	.0013
#3	.0378	.0295	.0140	.0419	13.15	.0556	.5414	.0013

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0185	.1062	.0189
Stddev	.0091	.0006	.0011
%RSD	49.11	.5448	5.661
#1	-.0097	.1068	.0179
#2	-.0179	.1062	.0187
#3	-.0279	.1057	.0200

Zoom In Zoom Out

Sample Name: FA21603-3 Acquired: 1/29/2015 13:54:30 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1468.5	4116.2	31524.	5704.3
Stddev	13.2	23.6	192.	10.5
%RSD	.89783	.57327	.61037	.18389
#1	1477.6	4139.5	31737.	5692.2
#2	1453.3	4092.3	31470.	5711.2
#3	1474.5	4116.7	31364.	5709.4

Zoom In Zoom Out

Sample Name: FA21603-4 Acquired: 1/29/2015 13:58:50 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1013	-.0014	.0651	.0001	35.42	.0000	.0004	.0007	.0007
Stddev	.000	.0025	.0006	.0001	.0001	.06	.0000	.0000	.0001	.0002
%RSD	954.6	2.508	45.63	.1954	113.3	.1580	36.40	11.67	14.49	27.66
#1	.0001	.1020	-.0021	.0653	.0001	35.48	.0000	.0003	.0006	.0010
#2	-.0003	.1034	-.0011	.0651	.0000	35.39	.0000	.0004	.0007	.0006
#3	.0001	.0985	-.0009	.0650	.0002	35.38	.0000	.0004	.0007	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1304	1.887	6.602	.0190	-.0009	25.97	.0008	.0006	-.0013	.0026
Stddev	.0035	.006	.077	.0000	.0001	.06	.0001	.0008	.0005	.0011
%RSD	2.719	.3404	1.164	.2101	12.11	.2176	15.67	136.8	42.39	44.51
#1	.1345	1.889	6.656	.0190	-.0008	26.04	.0009	.0013	-.0018	.0013
#2	.1289	1.879	6.514	.0189	-.0009	25.94	.0007	-.0002	-.0013	.0031
#3	.1279	1.892	6.636	.0190	-.0010	25.94	.0007	.0005	-.0007	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.251	-.0007	.1262	.0012	-.0017	.0018	.0137
Stddev	.002	.0003	.0001	.0001	.0012	.0002	.0002
%RSD	.0704	53.46	.0852	10.28	70.83	13.10	1.460
#1	3.252	-.0003	.1262	.0013	-.0027	.0016	.0140
#2	3.254	-.0008	.1262	.0011	-.0022	.0020	.0137
#3	3.249	-.0009	.1260	.0011	-.0003	.0018	.0136

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.7	4399.4	33150.	5709.8
Stddev	1.9	11.7	108.	66.2
%RSD	.11509	.26699	.32500	1.1597
#1	1671.6	4386.7	33084.	5665.1
#2	1674.3	4410.0	33275.	5785.8
#3	1675.3	4401.5	33092.	5678.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 14:15:11 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2445	39.08	1.956	1.996	1.940	38.49	1.970	1.961	1.953	1.985
Stddev	.0006	.04	.003	.001	.004	.03	.002	.003	.008	.003
%RSD	.2656	.0916	.1632	.0475	.1821	.0857	.1242	.1695	.4033	.1313
#1	.2452	39.05	1.956	1.997	1.942	38.50	1.970	1.962	1.962	1.988
#2	.2444	39.08	1.958	1.996	1.936	38.46	1.972	1.963	1.951	1.983
#3	.2439	39.12	1.952	1.995	1.943	38.52	1.967	1.957	1.946	1.983
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.57	39.90	37.75	1.998	1.946	39.62	1.940	1.952	1.963	1.970
Stddev	.06	.03	.04	.004	.003	.00	.004	.002	.005	.006
%RSD	.1429	.0684	.1083	.2006	.1476	.0105	.1949	.1162	.2347	.3117
#1	38.57	39.91	37.76	2.002	1.944	39.63	1.943	1.949	1.963	1.975
#2	38.51	39.87	37.70	1.998	1.949	39.62	1.941	1.953	1.967	1.972
#3	38.62	39.91	37.79	1.994	1.946	39.62	1.936	1.953	1.958	1.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.037	1.905	2.036	1.984	1.994	1.933	1.948
Stddev	.005	.003	.001	.003	.005	.004	.003
%RSD	.2485	.1537	.0414	.1247	.2490	.2099	.1437
#1	2.041	1.907	2.035	1.987	1.990	1.937	1.947
#2	2.039	1.907	2.036	1.984	1.999	1.930	1.951
#3	2.031	1.902	2.037	1.982	1.993	1.931	1.946
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 14:15:11 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1647.4	4410.1	33336.	5778.3
Stddev	6.4	7.8	144.	46.2
%RSD	.38778	.17693	.43295	.79998
#1	1654.8	4416.1	33174.	5732.3
#2	1643.4	4401.3	33382.	5777.8
#3	1644.0	4413.0	33451.	5824.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 14:19:08 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0124	-.0004	.0003	.0001	.0051	.0001	-.0001	.0000
Stddev	.0001	.0117	.0004	.0002	.0001	.0023	.0000	.0001	.000
%RSD	33.52	93.84	95.44	61.67	135.2	43.70	18.19	100.5	29940.
#1	.0004	.0097	.0000	.0005	.0000	.0076	.0001	-.0002	-.0001
#2	.0003	.0024	-.0004	.0002	.0000	.0033	.0000	.0000	.0001
#3	.0002	.0252	-.0007	.0002	.0002	.0045	.0001	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0202	-.0393	.0088	.0001	F.0014	.0306	.0001	F.0011
Stddev	.0005	.0060	.0199	.0209	.0000	.0004	.0028	.0002	.0005
%RSD	125.1	29.66	50.69	237.1	19.50	26.61	9.115	143.5	46.47
#1	.0005	.0243	-.0623	.0304	.0001	.0018	.0275	.0003	.0012
#2	.0008	.0230	-.0287	.0076	.0001	.0014	.0312	.0001	.0015
#3	-.0001	.0133	-.0270	-.0114	.0001	.0010	.0330	-.0001	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0010	.0006	-.0003	.0001	.0010	-.0002	.0004	-.0001
Stddev	.0008	.0015	.0003	.0000	.0000	.0001	.0005	.0003	.0000
%RSD	44.68	148.0	40.36	4.956	71.87	8.801	325.9	59.59	34.59
#1	.0011	.0025	.0008	-.0003	.0001	.0011	.0001	.0003	-.0002
#2	.0026	.0011	.0008	-.0003	.0001	.0009	.0002	.0003	-.0001
#3	.0015	-.0005	.0003	-.0003	.0000	.0010	-.0008	.0007	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 14:19:08 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1698.1	4503.8	34119.	5668.0
Stddev	5.0	7.7	90.	44.5
%RSD	.29255	.17173	.26457	.78452
#1	1693.7	4498.0	34097.	5627.4
#2	1703.5	4512.6	34219.	5661.1
#3	1697.2	4500.7	34042.	5715.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 15:04:01 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2489	39.67	1.970	2.033	1.976	38.94	1.998	1.987	1.978	2.017
Stddev	.0002	.09	.004	.004	.004	.04	.002	.002	.003	.003
%RSD	.0943	.2251	.1834	.2164	.1904	.0961	.0798	.1169	.1393	.1240
#1	.2486	39.75	1.973	2.037	1.975	38.95	1.997	1.986	1.975	2.014
#2	.2489	39.68	1.966	2.033	1.981	38.98	1.996	1.985	1.979	2.018
#3	.2491	39.57	1.971	2.028	1.974	38.91	1.999	1.989	1.980	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.27	40.62	38.41	2.038	1.971	40.32	1.964	1.988	1.978	1.984
Stddev	.11	.05	.24	.001	.006	.14	.001	.007	.001	.003
%RSD	.2800	.1346	.6344	.0477	.3074	.3371	.0341	.3641	.0643	.1623
#1	39.20	40.63	38.37	2.037	1.965	40.46	1.964	1.984	1.978	1.985
#2	39.40	40.67	38.68	2.039	1.971	40.32	1.963	1.996	1.979	1.980
#3	39.22	40.56	38.19	2.037	1.977	40.19	1.965	1.983	1.977	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.055	1.921	2.075	2.025	2.028	1.958	1.976
Stddev	.002	.003	.003	.001	.003	.003	.002
%RSD	.0975	.1507	.1225	.0494	.1531	.1614	.0822
#1	2.053	1.922	2.076	2.025	2.025	1.956	1.974
#2	2.054	1.918	2.078	2.025	2.031	1.962	1.976
#3	2.057	1.924	2.073	2.026	2.028	1.956	1.977
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 15:04:01 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1623.3	4360.2	32751.	5630.1
Stddev	5.2	8.2	48.	26.2
%RSD	.32257	.18802	.14653	.46566
#1	1628.9	4369.0	32714.	5630.1
#2	1618.5	4358.9	32805.	5603.9
#3	1622.5	4352.8	32732.	5656.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 15:07:58 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0086	-.0002	.0003	.0000	.0075	.0000	-.0001	.0002
Stddev	.0002	.0071	.0002	.0002	.0000	.0030	.0000	.0001	.0002
%RSD	75.04	83.14	94.52	78.59	84.51	39.82	370.9	112.5	106.3
#1	-.0001	.0164	-.0002	.0001	.0000	.0108	.0000	-.0001	.0004
#2	-.0002	.0072	-.0004	.0004	.0000	.0064	.0001	.0000	.0000
#3	-.0005	.0023	.0000	.0005	.0000	.0052	.0000	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0201	-.0185	-.0008	.0001	F.0013	.0236	.0000	.0005
Stddev	.0001	.0062	.0284	.0164	.0001	.0004	.0047	.000	.0006
%RSD	40.75	30.69	153.4	2015.	125.4	26.05	19.69	32.72	134.5
#1	.0003	.0271	-.0272	.0180	.0000	.0017	.0199	.0000	-.0002
#2	.0001	.0178	.0132	-.0124	.0000	.0012	.0222	.0000	.0011
#3	.0002	.0154	-.0416	-.0080	.0001	.0011	.0288	.0000	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0002	.0007	-.0002	.0000	.0013	.0001	.0001	-.0001
Stddev	.0011	.0013	.0004	.0004	.0000	.0003	.0007	.0002	.0000
%RSD	113.3	762.5	48.54	173.2	910.1	20.35	542.4	145.3	46.18
#1	.0022	.0011	.0011	.0000	.0001	.0014	.0001	.0003	.0000
#2	.0004	.0008	.0004	.0000	.0000	.0014	-.0005	.0000	-.0001
#3	.0003	-.0014	.0007	-.0006	.0000	.0010	.0008	.0000	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 15:07:58 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1709.3	4555.0	33855.	5649.1
Stddev	1.3	.4	136.	47.1
%RSD	.07495	.00923	.40311	.83388
#1	1707.9	4555.1	33985.	5601.4
#2	1709.5	4555.3	33713.	5695.6
#3	1710.4	4554.5	33868.	5650.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 1/29/2015 15:20:36 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0094	.2143	.0091	.2085	.0050	1.009	.0050	.0501	.0100	.0255
Stddev	.0003	.0037	.0008	.0003	.0000	.006	.0000	.0001	.0003	.0004
%RSD	2.699	1.711	8.756	.1566	.6138	.6103	.5794	.2777	2.821	1.446
#1	.0096	.2130	.0086	.2082	.0050	1.006	.0050	.0502	.0099	.0254
#2	.0091	.2115	.0087	.2088	.0050	1.016	.0050	.0499	.0103	.0259
#3	.0095	.2185	.0100	.2086	.0049	1.005	.0050	.0501	.0097	.0252

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2982	10.36	4.970	.0157	.0460	10.44	.0397	.0053	.0052	.0103
Stddev	.0029	.03	.019	.0001	.0002	.02	.0001	.0014	.0005	.0019
%RSD	.9758	.2582	.3751	.3850	.3941	.1627	.2104	27.00	9.176	18.48
#1	.3010	10.34	4.978	.0157	.0461	10.45	.0397	.0062	.0047	.0082
#2	.2985	10.39	4.984	.0158	.0461	10.45	.0397	.0036	.0056	.0109
#3	.2952	10.34	4.949	.0156	.0458	10.42	.0398	.0059	.0053	.0118

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0669	.0470	.0104	.0095	.0083	.0481	.0212
Stddev	.0006	.0004	.0001	.0000	.0004	.0005	.0000
%RSD	.8634	.8617	.5935	.4697	4.750	1.076	.1384
#1	.0675	.0474	.0103	.0095	.0081	.0477	.0212
#2	.0664	.0465	.0104	.0094	.0080	.0487	.0213
#3	.0666	.0470	.0103	.0095	.0087	.0479	.0212

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1711.4	4593.5	33975.	5658.5
Stddev	4.3	5.8	185.	35.6
%RSD	.25147	.12716	.54588	.62969
#1	1714.3	4599.1	34027.	5699.2
#2	1713.4	4594.0	33770.	5632.7
#3	1706.4	4587.4	34130.	5643.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 1/29/2015 15:24:43 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	F507.0	.0004	-.0002	.0000	473.6	-.0009	.0006	.0001
Stddev	.0007	2.6	.0010	.0002	.000	6.3	.0002	.0002	.0003
%RSD	254.5	.5200	270.7	95.50	173.2	1.327	17.51	30.93	410.5
#1	.0003	504.1	.0009	.0000	-.0001	469.9	-.0008	.0006	.0001
#2	-.0004	507.5	-.0008	-.0002	-.0001	470.0	-.0011	.0008	-.0002
#3	.0010	509.3	.0011	-.0004	.0000	480.8	-.0008	.0004	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	181.2	.4289	476.4	-.0011	-.0005	.1558	.0009	-.0025
Stddev	.0006	.2	.0153	1.0	.0001	.0003	.0081	.0002	.0011
%RSD	469.9	.1288	3.568	.2128	11.60	62.65	5.221	18.26	44.35
#1	.0003	181.1	.4440	475.6	-.0011	-.0009	.1646	.0008	-.0013
#2	-.0008	181.5	.4134	477.5	-.0010	-.0005	.1544	.0009	-.0027
#3	.0001	181.1	.4294	476.0	-.0013	-.0002	.1485	.0011	-.0035

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0018	-.0004	.0827	-.0002	.0002	-.0001	-.0044	.0007	-.0003
Stddev	.0016	.0009	.0002	.0005	.0001	.0002	.0016	.0003	.0001
%RSD	92.63	215.3	.2104	233.1	64.53	327.1	36.95	51.77	28.66
#1	-.0001	.0006	.0828	-.0003	.0002	-.0002	-.0051	.0009	-.0003
#2	.0025	-.0007	.0829	-.0007	.0003	-.0001	-.0056	.0003	-.0004
#3	.0029	-.0011	.0825	.0003	.0001	.0002	-.0026	.0008	-.0002

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1522.7	3990.4	29115.	5321.6
Stddev	4.7	4.3	30.	23.4
%RSD	.30630	.10891	.10235	.43961
#1	1517.5	3985.4	29129.	5344.9
#2	1524.2	3992.2	29081.	5298.1
#3	1526.5	3993.5	29135.	5321.7

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 1/29/2015 15:29:04 Type: Unk
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.022	F512.2	1.087	.5361	.5167	473.5	.9882	.5173	.4994
Stddev	.001	2.4	.002	.0009	.0011	2.5	.0009	.0009	.0008
%RSD	.0637	.4777	.1960	.1653	.2067	.5269	.0945	.1829	.1546
#1	1.023	510.5	1.087	.5353	.5174	470.9	.9871	.5166	.4998
#2	1.021	511.1	1.089	.5371	.5172	475.8	.9887	.5168	.4985
#3	1.022	515.0	1.085	.5360	.5155	473.7	.9888	.5184	.4999

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5838	186.2	.2874	476.3	.5277	1.023	.1075	1.017	.9988
Stddev	.0009	.1	.0361	.7	.0003	.001	.0079	.001	.0021
%RSD	.1582	.0399	12.56	.1509	.0592	.1345	7.334	.0761	.2068
#1	.5849	186.2	.3110	476.3	.5275	1.021	.1166	1.016	1.001
#2	.5835	186.2	.2459	477.0	.5280	1.023	.1038	1.017	.9985
#3	.5831	186.1	.3053	475.6	.5275	1.024	.1022	1.017	.9969

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.123	1.058	.0742	.9899	1.105	1.080	1.067	.4992	.9941
Stddev	.002	.002	.0008	.0035	.001	.002	.004	.0008	.0010
%RSD	.1916	.2048	1.031	.3488	.0581	.1912	.3257	.1578	.0994
#1	1.126	1.056	.0746	.9864	1.105	1.082	1.071	.4998	.9930
#2	1.123	1.057	.0733	.9933	1.106	1.078	1.065	.4983	.9950
#3	1.122	1.060	.0747	.9902	1.104	1.080	1.065	.4994	.9943

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1495.2	3964.9	28650.	5244.9
Stddev	3.0	4.7	23.	15.0
%RSD	.20356	.11848	.08148	.28579
#1	1493.3	3970.3	28632.	5262.2
#2	1498.7	3961.7	28677.	5236.3
#3	1493.7	3962.8	28642.	5236.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 15:33:18 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2545	39.70	2.010	2.063	2.001	38.91	2.049	2.040	1.993	2.065
Stddev	.0005	.24	.007	.014	.014	.22	.003	.004	.003	.006
%RSD	.2060	.5969	.3565	.6624	.7088	.5726	.1314	.1866	.1702	.2991
#1	.2541	39.49	2.003	2.049	1.987	38.74	2.048	2.036	1.989	2.059
#2	.2542	39.65	2.012	2.061	2.000	38.83	2.048	2.040	1.993	2.065
#3	.2551	39.96	2.017	2.077	2.015	39.17	2.053	2.044	1.996	2.072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.91	41.15	38.55	2.088	2.020	40.71	2.001	2.040	2.025	2.026
Stddev	.28	.25	.26	.006	.009	.23	.004	.003	.006	.003
%RSD	.6965	.6020	.6661	.2693	.4423	.5678	.2040	.1627	.2873	.1414
#1	39.61	40.95	38.32	2.082	2.011	40.53	1.997	2.043	2.020	2.022
#2	39.94	41.08	38.52	2.089	2.022	40.63	2.001	2.041	2.025	2.027
#3	40.16	41.43	38.83	2.094	2.029	40.97	2.005	2.037	2.031	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.100	1.946	2.124	2.086	2.079	1.988	2.019
Stddev	.006	.007	.016	.009	.005	.004	.003
%RSD	.3088	.3433	.7387	.4050	.2422	.1939	.1297
#1	2.094	1.939	2.107	2.078	2.078	1.983	2.019
#2	2.098	1.945	2.126	2.086	2.085	1.990	2.017
#3	2.107	1.953	2.138	2.095	2.075	1.990	2.022
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 1/29/2015 15:33:18 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1602.4	4316.5	32212.	5546.6
Stddev	1.4	7.6	139.	47.2
%RSD	.08767	.17597	.43283	.85180
#1	1603.0	4320.7	32334.	5591.1
#2	1600.8	4321.0	32241.	5551.8
#3	1603.4	4307.7	32060.	5497.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 1/29/2015 15:37:14 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0004	-.0007	.0003	.0000	.0084	.0000	.0000	-.0006
Stddev	.0002	.0021	.0006	.0001	.000	.0030	.0001	.000	.0003
%RSD	164.3	572.3	88.47	25.80	321.5	35.80	240.7	93.48	47.48
#1	-.0001	.0020	-.0010	.0002	.0000	.0114	.0000	-.0001	-.0005
#2	.0001	-.0011	.0000	.0002	-.0001	.0083	.0000	.0000	-.0009
#3	.0004	-.0020	-.0012	.0003	.0001	.0054	.0002	.0000	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0292	.0370	.0065	.0000	F.0016	.0142	-.0001	F.0011
Stddev	.0001	.0093	.0049	.0232	.0000	.0007	.0050	.0001	.0012
%RSD	22.70	31.71	13.26	355.9	184.1	44.27	35.26	140.5	109.7
#1	.0004	.0394	.0338	-.0078	.0001	.0023	.0162	-.0002	.0012
#2	.0006	.0271	.0346	.0333	.0000	.0015	.0179	.0000	-.0002
#3	.0004	.0212	.0427	-.0059	.0000	.0009	.0085	.0000	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0023	.0017	.0004	.0000	.0001	.0009	-.0005	.0003	-.0002
Stddev	.0008	.0019	.0005	.0003	.0000	.0002	.0002	.0002	.0001
%RSD	35.74	106.5	138.9	706.2	28.77	23.08	35.50	60.69	46.96
#1	.0025	-.0001	.0006	.0004	.0001	.0010	-.0006	.0005	-.0001
#2	.0031	.0036	-.0002	.0000	.0001	.0011	-.0006	.0003	-.0002
#3	.0014	.0017	.0007	-.0003	.0000	.0007	-.0003	.0001	-.0001
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In
Zoom Out

Sample Name: CCB Acquired: 1/29/2015 15:37:14 Type: QC
Method: 60102007_041712(v93) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1674.7	4466.8	33202.	5497.2
Stddev	1.5	6.9	45.	40.3
%RSD	.09104	.15356	.13514	.73390
#1	1673.2	4468.1	33241.	5542.5
#2	1674.7	4472.9	33211.	5465.1
#3	1676.3	4459.4	33153.	5484.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.053780	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000088	0.000000	No
			Cr	-0.002131	0.000000	No
			Mo	0.000500	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000012	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000105	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000002	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000001	0.000000	No
			Fe	-0.000017	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000157	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000008	0.000000	No
			Mg	0.000005	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000000	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000020	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000044	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000971	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000342	0.000000	No
			Fe	0.000027	0.000000	No
			Mo	-0.001480	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000007	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000016	0.000000	No
			Cr	0.012815	0.000000	No
			Mo	-0.000310	0.000000	No
			V	-0.001708	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000035	0.000000	No
			Ca	-0.000000	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000017	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000007	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000010	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000003	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	0.000002	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.025078	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000007	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.003709	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000016	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000028	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000984	0.699106	0.000000	1.000000
	Al 396.152 { 85}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.005295	0.152137	0.000000	1.000000
	As 189.042 {478}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.000341	0.321822	0.000000	1.000000
	Ba 455.403 { 74}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.002252	10.541959	0.000000	1.000000
	Be 313.042 {108}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000129	6.762557	0.000000	1.000000
	Ca 317.933 {106}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.003220	0.237437	0.000000	1.000000
	Cd 226.502 {449}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.000836	5.730050	0.000000	1.000000
	Co 228.616 {447}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000871	2.621698	0.000000	1.000000
	Cr 267.716 {126}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000110	0.546058	0.000000	1.000000
	Cu 324.754 {104}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.006234	0.848424	0.000000	1.000000
	Fe 259.940 {130}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.001697	0.132379	0.000000	1.000000
	In 230.606 {446}*	1/29/2015 9:49:09	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.006673	0.113011	0.000000	1.000000
	Mg 279.079 {121}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.000270	0.022609	0.000000	1.000000
	Mn 257.610 {131}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000425	3.397961	0.000000	1.000000
	Mo 202.030 {467}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000554	1.318508	0.000000	1.000000
	Na 589.592 { 57}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.017121	0.390004	0.000000	1.000000
	Ni 231.604 {445}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.001123	1.746678	0.000000	1.000000
	Pb 220.353 {453}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.006698	1.311893	0.000000	1.000000
	Sb 206.833 {463}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000668	0.313295	0.000000	1.000000
	Se 196.090 {472}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.002218	0.242764	0.000000	1.000000
	Si 212.412 {459}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.008439	0.552483	0.000000	1.000000
	Sn 189.989 {477}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000438	0.584170	0.000000	1.000000
	Sr 407.771 { 83}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.000124	14.757434	0.000000	1.000000
	Ti 334.941 {101}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.002079	2.046125	0.000000	1.000000
	Tl 190.856 {477}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.006536	0.583225	0.000000	1.000000
	V 292.402 {115}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	-0.000583	0.770192	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	1/29/2015 9:49:09	1/29/2015 9:14:14	Linear	1/Conc	0.004881	3.945686	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999994	0.000023	0.000471	0.001571	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999932	0.002867	0.009758	0.032525	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999989	0.000119	0.000704	0.002345	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999980	0.005322	0.000193	0.000642	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999914	0.007125	0.000088	0.000292	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999920	0.004826	0.003052	0.010174	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999956	0.004315	0.000061	0.000203	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999988	0.001036	0.000142	0.000473	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999905	0.000607	0.000356	0.001187	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999961	0.000599	0.000337	0.001125	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999744	0.004826	0.002690	0.008965	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999954	0.001749	0.025348	0.084493	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999917	0.000470	0.019761	0.065870	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999617	0.007579	0.000052	0.000173	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999965	0.000888	0.000179	0.000597	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999945	0.006583	0.007693	0.025643	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999993	0.000539	0.000211	0.000702	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999995	0.000326	0.000680	0.002266	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999981	0.000157	0.001171	0.003902	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999994	0.000066	0.001438	0.004795	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.996097	0.004018	0.000476	0.001587	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999932	0.000549	0.000324	0.001080	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999905	0.016388	0.000086	0.000285	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999925	0.002013	0.000150	0.000498	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999978	0.000302	0.000980	0.003268	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999975	0.000440	0.000321	0.001069	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999963	0.002716	0.000064	0.000214	OK.	1.000000	0.000000	1	0

DOD

Accutest Laboratories SE Metals Digestion Log Soil

MP #: 28478 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 1/22/15 8:39
HotBlock I.D. 5
Thermometer I.D. 204
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 92/91
Balance I.D. ADVPRO3

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC 861	0.50	10
ACC 841	0.25	10
MET 5036	0.25	10

Filter Lot#: 140730082
Dig. Tube Lot# MP2492

Added B:	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	145881	0000086288	0000088821	J997-4F015

Sample #		Wt., g	Final Volume(ml)	Comments
Method Blank(MB)		1.00	50.0	
Spike Blank(SB)		1.00		
Matrix Spike(MS)		1.13		
Matrix Spike Dup(MSD)		1.12		
Duplicate(DUP)		1.09		
1 QC C FA21510-1	D 5	1.08		
2 FA21510-1	2	1.18		
3 2		1.18		
4 3		1.15		
5 4		1.03		
6 5		1.19		
7 6		1.24		
8 FA21527-1	5	1.34		
9 FA21545-1		1.20		
10 2		1.22		
11 FA21331-1	1	1.36		Grit Blast
12 FA21555-1		1.06		
13 2		1.14		
14 3		1.07		
15 4		1.21		
16 5		1.05		
17 6		1.10		
18 7		1.09		
19 8		1.04		
20 FA21547-1		1.04		paint chips
21 E				
22 E				DB
23 E				
24 E		1/22/15		

Analyst: [signature] Date: 1/22/15

QC Review: [signature] Date: 1.22.15

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

DOD1

Accutest Laboratories SE Metals Digestion Log Soil

MP #: 28497 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 1/28/15 8:26

HotBlock I.D. 6

Thermometer I.D. 60071

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 94/93

Balance I.D. ADVPRO3

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC 861	0.50	10
ACC 841	0.25	10
* MET 2E 5036	0.25	10

Filter Lot#: 140730082

Dig. Tube Lot#: MP2492

Added B:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	145881	0000086288	0000088821	J997-4F015

Sample #	Wt., g	Final Volume(ml)	Comments
Method Blank(MB)	1.00	50.0	
Spike Blank(SB)	1.00		
Matrix Spike(MS)	1.01		
Matrix Spike Dup(MSD)	1.04		
Duplicate(DUP)	1.05		
1 QC C FA21642-24 D 3	1.13		
2 FA21679-2 7	1.21		
3 3 9	1.18		
4 4 7	1.14		
5 5 7	1.13		
6 6 8	1.15		
7 7 8	1.16		
8 8 6	1.13		
9 FA21648-1 6	1.17		Crushed shells present
10 2 5	1.43		↓
11 3 6	1.27		
12 FA21555-9 1	1.15		
13 10 1	1.12		
14 11 1	1.14		
15 FA21644-2 2	1.15		sludge
16 FA21630-1 1	1.26		MEC spill
17 FA21665-1	1.23		pellets
18 2	1.24		
19 3	1.45		
20 4	1.41		
21 E			
22 E			
23 E			
24 E			

DB 1/28/15

Analyst: [signature] Date: 1/28/15

QC Review: [signature] Date: 1-28-15

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

43

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: FA21555-1 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFH588A

Wet Weight (Total)	7.82	g
Tare Weight	1	g
Dry Weight (Total)	6.55	g
Solids, Percent	81.4	%

Sample: FA21555-2 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFH588S

Wet Weight (Total)	8.53	g
Tare Weight	1	g
Dry Weight (Total)	7.13	g
Solids, Percent	81.4	%

Sample: FA21555-3 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFI589A

Wet Weight (Total)	8.39	g
Tare Weight	.99	g
Dry Weight (Total)	6.94	g
Solids, Percent	80.4	%

Sample: FA21555-4 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFI589D

Wet Weight (Total)	8.31	g
Tare Weight	1.06	g
Dry Weight (Total)	6.85	g
Solids, Percent	79.9	%

Sample: FA21555-5 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFJ589A

Wet Weight (Total)	8.29	g
Tare Weight	.99	g
Dry Weight (Total)	6.81	g
Solids, Percent	79.7	%

Sample: FA21555-6 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFI590A

Wet Weight (Total)	7.77	g
Tare Weight	1.01	g
Dry Weight (Total)	6.42	g
Solids, Percent	80	%

Percent Solids Raw Data Summary

Job Number: FA21555
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: FA21555-7 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFB589A

Wet Weight (Total)	8.13	g
Tare Weight	1.07	g
Dry Weight (Total)	6.82	g
Solids, Percent	81.4	%

Sample: FA21555-8 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFB589C

Wet Weight (Total)	7.33	g
Tare Weight	1.03	g
Dry Weight (Total)	6.13	g
Solids, Percent	81	%

Sample: FA21555-9 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFB588A

Wet Weight (Total)	8.14	g
Tare Weight	1	g
Dry Weight (Total)	6.72	g
Solids, Percent	80.1	%

Sample: FA21555-10 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFA588A

Wet Weight (Total)	8.95	g
Tare Weight	1.02	g
Dry Weight (Total)	7.32	g
Solids, Percent	79.4	%

Sample: FA21555-11 **Analyzed:** 24-JAN-15 by TF **Method:** SM19 2540G
ClientID: ML865SOFD589A

Wet Weight (Total)	8.48	g
Tare Weight	1.01	g
Dry Weight (Total)	6.99	g
Solids, Percent	80.1	%

Southeast
ACCUTEST LABORATORIES

02/25/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA22032

Sampling Date: 02/10/15

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **431**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10

Table of Contents

Section 1: Sample Summary 4
Section 2: Case Narrative/Conformance Summary 5
Section 3: Summary of Hits 9
Section 4: Sample Results 11
4.1: FA22032-1: ML865SOS10A1A 12
4.2: FA22032-2: SR864SOSDA2A 14
4.3: FA22032-3: SR864SOSG1A 16
4.4: FA22032-4: SR864SOSG2A 18
4.5: FA22032-5: SR864SOSDA2C 20
4.6: FA22032-6: SR864SOSG1S 22
4.7: FA22032-7: SR864SOSG2D 24
Section 5: Misc. Forms 26
5.1: Chain of Custody 27
5.2: QC Evaluation: DOD QSM5 Limits 30
Section 6: GC Semi-volatiles - QC Data Summaries 34
6.1: Method Blank Summary 35
6.2: Blank Spike Summary 37
6.3: Matrix Spike/Matrix Spike Duplicate Summary 38
6.4: Surrogate Recovery Summaries 39
6.5: GC Surrogate Retention Time Summaries 40
6.6: Initial and Continuing Calibration Summaries 43
Section 7: GC Semi-volatiles - Raw Data 63
7.1: Samples 64
7.2: Method Blanks 88
7.3: Blank Spikes 94
7.4: Matrix Spike/Matrix Spike Duplicates 97
7.5: Initial and Continuing Calibarations 103
7.6: Instrument Run Logs 169
7.7: Prep Logs 175
Section 8: Metals Analysis - QC Data Summaries 176
8.1: Inst QC MA12213: Al,Sb,Cr,Cu,Fe,Pb,Zn 177
8.2: Inst QC MA12216: Sb,Cr,Pb,Zn 193
8.3: Inst QC MA12218: Al,Sb,Cr,Cu,Fe,Pb,Zn 213
8.4: Inst QC MA12220: Sb,Cr,Pb,Zn 229
8.5: Prep QC MP28549: Al,Sb,Cr,Cu,Fe,Pb,Zn 249
8.6: Prep QC MP28558: Al,Sb,Cr,Cu,Fe,Pb,Zn 255
8.7: IDL and Linear Range Summaries 261
Section 9: Metals Analysis - Raw Data 265
9.1: Raw Data MA12213 266
9.2: Raw Data MA12216 299
9.3: Raw Data MA12218 344
9.4: Raw Data MA12220 378

Table of Contents

9.5: Prep Logs 427
Section 10: General Chemistry - QC Data Summaries 429
10.1: Percent Solids Raw Data Summary 430

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA22032

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA22032-1	02/10/15	08:30	RM	02/11/15	SO	Soil	ML865SOS10A1A
FA22032-2	02/10/15	09:00	RM	02/11/15	SO	Soil	SR864SOSDA2A
FA22032-3	02/10/15	09:10	RM	02/11/15	SO	Soil	SR864SOSG1A
FA22032-4	02/10/15	09:15	RM	02/11/15	SO	Soil	SR864SOSG2A
FA22032-5	02/10/15	09:25	RM	02/11/15	SO	Soil	SR864SOSDA2C
FA22032-6	02/10/15	09:30	RM	02/11/15	SO	Soil	SR864SOSG1S
FA22032-7	02/10/15	09:40	RM	02/11/15	SO	Soil	SR864SOSG2D

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA22032

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 2/25/2015 2:42:32 PM

7 Sample(s) were collected on 02/10/2015 and were received at Accutest SE on 02/11/2015 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA22032. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8330A

Matrix: SO **Batch ID:** OP55030

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22032-1MS, FA22032-1MSD were used as the QC samples indicated.

FA22032-1: Confirmation run.

FA22032-1: All hits confirmed by reanalysis on a dissimilar column.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28549

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22009-2DUP, FA22009-2MS, FA22009-2MSD, FA22009-2PS, FA22009-2SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Copper, Zinc are outside control limits for sample MP28549-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Copper are outside control limits for sample MP28549-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28549-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

FA22032-1 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-1 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-3 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-2 for Zinc: Elevated reporting limit(s) due to matrix interference.

Metals By Method SW846 6010C

Matrix: SO **Batch ID:** MP28558

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA22051-3DUP, FA22051-3MS, FA22051-3MSD, FA22051-3PS, FA22051-3SDL were used as the QC samples for metals.

Matrix Spike Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

Matrix Spike Duplicate Recovery(s) for Antimony, Iron are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

RPD(s) for Duplicate for Chromium, Copper, Iron, Zinc, Antimony are outside control limits for sample MP28558-D1. High RPD due to possible sample non-homogeneity.

RPD(s) for Serial Dilution for Antimony, Copper, Zinc are outside control limits for sample MP28558-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

MP28558-PS1 for Aluminum: Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.
MP28558-D1 for Antimony: RPD acceptable due to low duplicate and sample concentrations.

FA22032-6 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-6 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Lead: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Chromium: Elevated reporting limit(s) due to matrix interference.

FA22032-4 for Antimony: Elevated reporting limit(s) due to matrix interference.

FA22032-7 for Zinc: Elevated reporting limit(s) due to matrix interference.

FA22032-5 for Zinc: Elevated reporting limit(s) due to matrix interference.

Wet Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN65164

Sample(s) FA22032-1DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65196

Sample(s) FA22022-3DUP was used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN65197

Sample(s) FA22022-6DUP was used as the QC samples for Solids, Percent.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Date: February 25, 2015

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA22032-1	GCSEMI	BB046108.D	3,4-Dinitrotoluene, RDX
FA22032-2	GCSEMI	BB046111.D	3,4-Dinitrotoluene
FA22032-3	GCSEMI	BB046112.D	3,4-Dinitrotoluene
FA22032-4	GCSEMI	BB046114.D	3,4-Dinitrotoluene
FA22032-6	GCSEMI	BB046129.D	3,4-Dinitrotoluene
FA22032-7	GCSEMI	BB046130.D	3,4-Dinitrotoluene
GBB1235-CC1235	GCSEMI	BB045822.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene,
GBB1235-IC1235	GCSEMI	BB045814.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX,
GBB1235-IC1235	GCSEMI	BB045815.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, m-Nitrotoluene, MNX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, TNX
GBB1235-IC1235	GCSEMI	BB045816.D	2,4-Dinitrotoluene, HMX, PETN
GBB1235-IC1235	GCSEMI	BB045817.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,4-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1235-IC1235	GCSEMI	BB045819.D	PETN
GBB1235-IC1235	GCSEMI	BB045820.D	PETN
GBB1235-ICC1235	GCSEMI	BB045818.D	PETN
GBB1235-ICV1235	GCSEMI	BB045821.D	HMX, PETN
GBB1236-CC1235	GCSEMI	BB045835.D	m-Nitrotoluene, PETN
GBB1236-CC1235	GCSEMI	BB045843.D	PETN
GBB1236-ECC1235	GCSEMI	BB045846.D	Nitroglycerine, PETN
GBB1237-CC1235	GCSEMI	BB045848.D	PETN
GBB1237-CC1235	GCSEMI	BB045855.D	PETN
GBB1237-CC1235	GCSEMI	BB045867.D	PETN
GBB1237-CC1235	GCSEMI	BB045879.D	PETN
GBB1237-ECC1235	GCSEMI	BB045882.D	PETN
GBB1238-CC1235	GCSEMI	BB045885.D	m-Nitrotoluene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1238-CC1235	GCSEMI	BB045896.D	PETN
GBB1238-ECC1235	GCSEMI	BB045907.D	PETN
GBB1239-CC1235	GCSEMI	BB045920.D	PETN
GBB1239-CC1235	GCSEMI	BB045929.D	PETN
GBB1239-CC1235	GCSEMI	BB045941.D	PETN
GBB1239-ECC1235	GCSEMI	BB045948.D	PETN
GBB1240-CC1235	GCSEMI	BB045960.D	m-Nitrotoluene, PETN
GBB1240-ECC1235	GCSEMI	BB045969.D	PETN
GBB1241-CC1235	GCSEMI	BB045971.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1241-CC1235	GCSEMI	BB045982.D	PETN
GBB1241-CC1235	GCSEMI	BB045993.D	PETN
GBB1241-ECC1235	GCSEMI	BB046002.D	PETN
GBB1242-CC1235	GCSEMI	BB046004.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1242-ECC1235	GCSEMI	BB046008.D	PETN
GBB1243-CC1235	GCSEMI	BB046010.D	2,4-Dinitrotoluene, 2,6-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN, TNX
GBB1243-CC1235	GCSEMI	BB046021.D	PETN
GBB1243-ECC1235	GCSEMI	BB046033.D	PETN

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
GBB1244-CC1235	GCSEMI	BB046043.D	PETN
GBB1244-CC1235	GCSEMI	BB046054.D	PETN
GBB1244-ECC1235	GCSEMI	BB046064.D	PETN
GBB1245-ECC1235	GCSEMI	BB046069.D	m-Nitrotoluene, PETN
GBB1246-CC1235	GCSEMI	BB046071.D	2,6-Dinitrotoluene, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1246-CC1235	GCSEMI	BB046082.D	PETN
GBB1246-ECC1235	GCSEMI	BB046094.D	PETN
GBB1247-ECC1235	GCSEMI	BB046102.D	PETN
GBB1248-CC1235	GCSEMI	BB046115.D	PETN
GBB1248-CC1235	GCSEMI	BB046126.D	PETN
GBB1248-ECC1235	GCSEMI	BB046131.D	PETN
GGG2344-CC2344	GCSEMI	GG058138.D	3,4-Dinitrotoluene, 3,5-Dinitroaniline, DNX, HMX, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, TNX
GGG2344-IC2344	GCSEMI	GG058130.D	2,6-Dinitrotoluene, DNX, HMX, Nitroglycerine, p-Nitrotoluene, PETN
GGG2344-IC2344	GCSEMI	GG058131.D	DNX, HMX, Nitroglycerine, PETN, RDX,
GGG2344-IC2344	GCSEMI	GG058132.D	3,4-Dinitrotoluene, DNX, HMX, Nitroglycerine, PETN, TNX
GGG2344-IC2344	GCSEMI	GG058133.D	DNX, HMX, PETN, TNX
GGG2344-IC2344	GCSEMI	GG058135.D	PETN
GGG2344-IC2344	GCSEMI	GG058136.D	PETN
GGG2344-ICC2344	GCSEMI	GG058134.D	PETN
GGG2344-ICV2344	GCSEMI	GG058137.D	PETN
GGG2345-CC2344	GCSEMI	GG058151.D	PETN
GGG2345-CC2344	GCSEMI	GG058162.D	PETN
GGG2345-CC2344	GCSEMI	GG058172.D	PETN
GGG2345-ECC2344	GCSEMI	GG058175.D	PETN
GGG2346-CC2344	GCSEMI	GG058177.D	PETN
GGG2346-ECC2344	GCSEMI	GG058187.D	PETN
GGG2348-CC2344	GCSEMI	GG058196.D	PETN
GGG2348-CC2344	GCSEMI	GG058207.D	PETN
GGG2348-CC2344	GCSEMI	GG058219.D	PETN
GGG2348-ECC2344	GCSEMI	GG058228.D	PETN
GGG2349-CC2344	GCSEMI	GG058230.D	PETN
GGG2349-CC2344	GCSEMI	GG058241.D	PETN
GGG2349-CC2344	GCSEMI	GG058253.D	PETN
GGG2349-ECC2344	GCSEMI	GG058261.D	PETN
GGG2350-CC2344	GCSEMI	GG058263.D	PETN
GGG2350-CC2344	GCSEMI	GG058273.D	PETN
GGG2350-ECC2344	GCSEMI	GG058278.D	PETN
GGG2351-CC2344	GCSEMI	GG058280.D	PETN
GGG2351-CC2344	GCSEMI	GG058284.D	PETN
GGG2351-ECC2344	GCSEMI	GG058296.D	PETN
GGG2352-CC2344	GCSEMI	GG058298.D	PETN
GGG2352-ECC2344	GCSEMI	GG058306.D	PETN
GGG2353-CC2344	GCSEMI	GG058308.D	PETN
GGG2353-ECC2344	GCSEMI	GG058318.D	PETN
GGG2361-CC2344	GCSEMI	GG058408.D	PETN, RDX
GGG2361-ECC2344	GCSEMI	GG058412.D	PETN
GGG2362-CC2344	GCSEMI	GG058415.D	PETN
GGG2362-ECC2344	GCSEMI	GG058425.D	PETN
OP55030-BS	GCSEMI	BB046106.D	RDX
OP55030-MB	GCSEMI	BB046107.D	3,4-Dinitrotoluene
OP55030-MB	GCSEMI	GG058409.D	3,4-Dinitrotoluene
OP55030-MS	GCSEMI	BB046109.D	HMX

93 Manual Integrations were found for FA22032

Summary of Hits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA22032-1	**ML865SOS10A1A**					
RDX [a]		108 J	170	86	ug/kg	SW846 8330A
Aluminum		4640	11	2.7	mg/kg	SW846 6010C
Chromium [b]		4.4 J	5.5	1.1	mg/kg	SW846 6010C
Copper		6.5	1.4	0.11	mg/kg	SW846 6010C
Iron		4330	16	2.7	mg/kg	SW846 6010C
Lead [b]		3.3 J	11	2.2	mg/kg	SW846 6010C
Zinc [b]		15.1	11	2.7	mg/kg	SW846 6010C
FA22032-2	**SR864SOSDA2A**					
Aluminum		7560	10	2.5	mg/kg	SW846 6010C
Chromium [b]		8.5	2.5	0.51	mg/kg	SW846 6010C
Copper		8.3	1.3	0.10	mg/kg	SW846 6010C
Iron		6580	15	2.5	mg/kg	SW846 6010C
Lead [b]		6.7	5.1	1.0	mg/kg	SW846 6010C
Zinc [b]		27.3	5.1	1.3	mg/kg	SW846 6010C
FA22032-3	**SR864SOSG1A**					
Aluminum		6690	10	2.5	mg/kg	SW846 6010C
Antimony [b]		0.66 J	10	2.5	mg/kg	SW846 6010C
Chromium [b]		6.8	5.0	1.0	mg/kg	SW846 6010C
Copper		7.0	1.2	0.10	mg/kg	SW846 6010C
Iron		5570	15	2.5	mg/kg	SW846 6010C
Lead [b]		4.2 J	10	2.0	mg/kg	SW846 6010C
Zinc [b]		21.1	10	2.5	mg/kg	SW846 6010C
FA22032-4	**SR864SOSG2A**					
Aluminum		8670	11	2.8	mg/kg	SW846 6010C
Chromium [b]		10.0	2.8	0.55	mg/kg	SW846 6010C
Copper		7.9	1.4	0.11	mg/kg	SW846 6010C
Iron		7540	17	2.8	mg/kg	SW846 6010C
Lead [b]		7.2	5.5	1.1	mg/kg	SW846 6010C
Zinc [b]		29.8	5.5	1.4	mg/kg	SW846 6010C
FA22032-5	**SR864SOSDA2C**					
Aluminum		7710	10	2.5	mg/kg	SW846 6010C
Chromium [b]		8.7	2.5	0.51	mg/kg	SW846 6010C
Copper		9.6	1.3	0.10	mg/kg	SW846 6010C
Iron		6670	15	2.5	mg/kg	SW846 6010C
Lead [b]		6.7	5.1	1.0	mg/kg	SW846 6010C

Summary of Hits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Zinc [b]		27.3	5.1	1.3	mg/kg	SW846 6010C
FA22032-6	**SR864SOSG1S**					
Aluminum		7020	11	2.6	mg/kg	SW846 6010C
Chromium [b]		8.1	5.3	1.1	mg/kg	SW846 6010C
Copper		7.3	1.3	0.11	mg/kg	SW846 6010C
Iron		6160	16	2.6	mg/kg	SW846 6010C
Lead [b]		5.1 J	11	2.1	mg/kg	SW846 6010C
Zinc [b]		23.9	11	2.6	mg/kg	SW846 6010C
FA22032-7	**SR864SOSG2D**					
Aluminum		5390	11	2.9	mg/kg	SW846 6010C
Chromium [b]		6.6	5.7	1.1	mg/kg	SW846 6010C
Copper		15.1	1.4	0.11	mg/kg	SW846 6010C
Iron		6350	17	2.9	mg/kg	SW846 6010C
Lead [b]		4.6 J	11	2.3	mg/kg	SW846 6010C
Zinc [b]		17.8	11	2.9	mg/kg	SW846 6010C

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Elevated reporting limit(s) due to matrix interference.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: ML865SOS10A1A
Lab Sample ID: FA22032-1 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.4
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	BB046108.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2 [b]	GG058410.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

	Initial Weight	Final Volume
Run #1	2.32 g	20.0 ml
Run #2	2.32 g	20.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	170 U	170	170	170	ug/kg	
121-82-4	RDX	108	170	86	69	ug/kg	J
99-65-0	1,3-Dinitrobenzene	86 U	170	86	69	ug/kg	
606-20-2	2,6-Dinitrotoluene	86 U	170	86	70	ug/kg	
121-14-2	2,4-Dinitrotoluene	86 U	170	86	69	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	86 U	170	86	71	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	86 U	170	86	69	ug/kg	
98-95-3	Nitrobenzene	86 U	170	86	69	ug/kg	
88-72-2	o-Nitrotoluene	86 U	170	86	69	ug/kg	
99-08-1	m-Nitrotoluene	86 U	170	86	73	ug/kg	
99-99-0	p-Nitrotoluene	86 U	170	86	69	ug/kg	
479-45-8	Tetryl	86 U	170	86	69	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	86 U	170	86	69	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	86 U	170	86	69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%	108%	72-134%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ML865SOS10A1A
Lab Sample ID: FA22032-1
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 79.4

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	4640	11	2.7	1.9	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.7 U	11	2.7	0.71	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	4.4 J	5.5	1.1	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	6.5	1.4	0.11	0.055	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	4330	16	2.7	0.93	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	3.3 J	11	2.2	0.55	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	15.1	11	2.7	1.6	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2A
Lab Sample ID: FA22032-2 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 86.1
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046111.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.40 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	83 U	170	83	67	ug/kg	
121-82-4	RDX	83 U	170	83	67	ug/kg	
99-65-0	1,3-Dinitrobenzene	83 U	170	83	67	ug/kg	
606-20-2	2,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
121-14-2	2,4-Dinitrotoluene	83 U	170	83	67	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	83 U	170	83	68	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	83 U	170	83	67	ug/kg	
98-95-3	Nitrobenzene	83 U	170	83	67	ug/kg	
88-72-2	o-Nitrotoluene	83 U	170	83	67	ug/kg	
99-08-1	m-Nitrotoluene	83 U	170	83	70	ug/kg	
99-99-0	p-Nitrotoluene	83 U	170	83	67	ug/kg	
479-45-8	Tetryl	83 U	170	83	67	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	83 U	170	83	67	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	83 U	170	83	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSDA2A
Lab Sample ID: FA22032-2
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.1

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7560	10	2.5	1.8	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.5	2.5	0.51	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	8.3	1.3	0.10	0.051	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6580	15	2.5	0.87	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG1A
Lab Sample ID: FA22032-3 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 82.8
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046112.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.04 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	98 U	200	98	78	ug/kg	
121-82-4	RDX	98 U	200	98	78	ug/kg	
99-65-0	1,3-Dinitrobenzene	98 U	200	98	78	ug/kg	
606-20-2	2,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
121-14-2	2,4-Dinitrotoluene	98 U	200	98	78	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	98 U	200	98	80	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	98 U	200	98	78	ug/kg	
98-95-3	Nitrobenzene	98 U	200	98	78	ug/kg	
88-72-2	o-Nitrotoluene	98 U	200	98	78	ug/kg	
99-08-1	m-Nitrotoluene	98 U	200	98	83	ug/kg	
99-99-0	p-Nitrotoluene	98 U	200	98	78	ug/kg	
479-45-8	Tetryl	98 U	200	98	78	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	98 U	200	98	78	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	98 U	200	98	78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG1A
Lab Sample ID: FA22032-3
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 82.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	6690	10	2.5	1.7	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	0.66 J	10	2.5	0.65	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.8	5.0	1.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.0	1.2	0.10	0.050	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	5570	15	2.5	0.85	mg/kg	1	02/12/15	02/12/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.2 J	10	2.0	0.50	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	21.1	10	2.5	1.5	mg/kg	10	02/12/15	02/13/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12213
(2) Instrument QC Batch: MA12216
(3) Prep QC Batch: MP28549

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG2A
Lab Sample ID: FA22032-4 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 86.0
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046114.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.16 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	74	ug/kg	
121-82-4	RDX	93 U	190	93	74	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	74	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	74	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	74	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	74	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	74	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	78	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	74	ug/kg	
479-45-8	Tetryl	93 U	190	93	74	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	74	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	74	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG2A
Lab Sample ID: FA22032-4
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.0

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	8670	11	2.8	1.9	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.4 U	5.5	1.4	0.36	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	10.0	2.8	0.55	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.9	1.4	0.11	0.055	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	7540	17	2.8	0.94	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	7.2	5.5	1.1	0.28	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	29.8	5.5	1.4	0.83	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSDA2C
Lab Sample ID: FA22032-5 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 86.8
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046128.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.13 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	94 U	190	94	75	ug/kg	
121-82-4	RDX	94 U	190	94	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	94 U	190	94	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
121-14-2	2,4-Dinitrotoluene	94 U	190	94	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	94 U	190	94	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	94 U	190	94	75	ug/kg	
98-95-3	Nitrobenzene	94 U	190	94	75	ug/kg	
88-72-2	o-Nitrotoluene	94 U	190	94	75	ug/kg	
99-08-1	m-Nitrotoluene	94 U	190	94	79	ug/kg	
99-99-0	p-Nitrotoluene	94 U	190	94	75	ug/kg	
479-45-8	Tetryl	94 U	190	94	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	94 U	190	94	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	94 U	190	94	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	109%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSDA2C
Lab Sample ID: FA22032-5
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 86.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7710	10	2.5	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	1.3 U	5.1	1.3	0.33	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.7	2.5	0.51	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	9.6	1.3	0.10	0.051	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6670	15	2.5	0.86	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	6.7	5.1	1.0	0.25	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	27.3	5.1	1.3	0.76	mg/kg	5	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG1S
Lab Sample ID: FA22032-6 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 83.8
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046129.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.10 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	95 U	190	95	76	ug/kg	
121-82-4	RDX	95 U	190	95	76	ug/kg	
99-65-0	1,3-Dinitrobenzene	95 U	190	95	76	ug/kg	
606-20-2	2,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
121-14-2	2,4-Dinitrotoluene	95 U	190	95	76	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	95 U	190	95	78	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	95 U	190	95	76	ug/kg	
98-95-3	Nitrobenzene	95 U	190	95	76	ug/kg	
88-72-2	o-Nitrotoluene	95 U	190	95	76	ug/kg	
99-08-1	m-Nitrotoluene	95 U	190	95	81	ug/kg	
99-99-0	p-Nitrotoluene	95 U	190	95	76	ug/kg	
479-45-8	Tetryl	95 U	190	95	76	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	95 U	190	95	76	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	95 U	190	95	76	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG1S
Lab Sample ID: FA22032-6
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 83.8

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7020	11	2.6	1.8	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.6 U	11	2.6	0.69	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	8.1	5.3	1.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	7.3	1.3	0.11	0.053	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6160	16	2.6	0.90	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	5.1 J	11	2.1	0.53	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	23.9	11	2.6	1.6	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: SR864SOSG2D
Lab Sample ID: FA22032-7 **Date Sampled:** 02/10/15
Matrix: SO - Soil **Date Received:** 02/11/15
Method: SW846 8330A SW846 8330A **Percent Solids:** 79.5
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB046130.D	1	02/21/15	KL	02/19/15	OP55030	GBB1248
Run #2							

	Initial Weight	Final Volume
Run #1	2.14 g	20.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	93 U	190	93	75	ug/kg	
121-82-4	RDX	93 U	190	93	75	ug/kg	
99-65-0	1,3-Dinitrobenzene	93 U	190	93	75	ug/kg	
606-20-2	2,6-Dinitrotoluene	93 U	190	93	76	ug/kg	
121-14-2	2,4-Dinitrotoluene	93 U	190	93	75	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	93 U	190	93	77	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	93 U	190	93	75	ug/kg	
98-95-3	Nitrobenzene	93 U	190	93	75	ug/kg	
88-72-2	o-Nitrotoluene	93 U	190	93	75	ug/kg	
99-08-1	m-Nitrotoluene	93 U	190	93	79	ug/kg	
99-99-0	p-Nitrotoluene	93 U	190	93	75	ug/kg	
479-45-8	Tetryl	93 U	190	93	75	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	93 U	190	93	75	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	93 U	190	93	75	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		72-134%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SR864SOSG2D
Lab Sample ID: FA22032-7
Matrix: SO - Soil
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 02/10/15
Date Received: 02/11/15
Percent Solids: 79.5

Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5390	11	2.9	2.0	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Antimony [a]	2.9 U	11	2.9	0.74	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Chromium [a]	6.6	5.7	1.1	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Copper	15.1	1.4	0.11	0.057	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Iron	6350	17	2.9	0.97	mg/kg	1	02/16/15	02/16/15	LM	SW846 6010C [1]	SW846 3050B [3]
Lead [a]	4.6 J	11	2.3	0.57	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]
Zinc [a]	17.8	11	2.9	1.7	mg/kg	10	02/16/15	02/17/15	LM	SW846 6010C [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA12218
(2) Instrument QC Batch: MA12220
(3) Prep QC Batch: MP28558

(a) Elevated reporting limit(s) due to matrix interference.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5 Limits

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA22032 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM Remediations, Inc.
Address: 5811 University Heights Blvd. Suite 101
City: San Antonio State: TX Zip: 78249
Project Contact: Ivana Ruivivar E-mail: i.ruivivar@fpm-remediations.com
Phone#: 210-495-7744, ext. 13
Sampler(s) Name(s) (Printed): Robert Martin

Project Information

Project Name: NM-AZ PBR
Street: Holloman AFB
City: Alamogordo State: NM
Project #: 1029-13-01-H-SR864205
Fax #: 210-495-9544
Client Purchase Order #: Holloman AFB

Analytical Information

Metals
LC8330 Exp

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Collection DATE	Collection TIME	Sampled By:	Matrix	Total # of Bottles	Container Information								Metals	LC8330 Exp	LAB USE ONLY
							OTHER	NONE	HCl	NaOH	ENCB	H2SO4	NaOH+ZnAc	DI WATER	MEOH		
1	ML86550SDA1A	2/10	0830	RMM	Soil	1									X	X	
2	SR86450SDA2A	2/10	0900	RMM	Soil	1									X	X	
3	SR86450SG1A	2/10	0910	RMM	Soil	1									X	X	
4	SR86450SG2A	2/10	0915	RMM	Soil	1									X	X	
5	SR86450SDA2C	2/10	0925	RMM	Soil	1									X	X	
6	SR86450SG1S	2/10	0930	RMM	Soil	1									X	X	
7	SR86450SG2D	2/10	0940	RMM	Soil	1									X	X	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- 10 Days Standard
- 7 Day RUSH
- 5 Day RUSH
- 3 Day EMERGENCY
- 2 Day EMERGENCY
- 1 Day EMERGENCY
- OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- COMMERCIAL "A" (RESULTS ONLY)
- COMMERCIAL "B" (RESULTS PLUS QC)
- REDT1 (EPA LEVEL 3)
- FULT1 (EPA LEVEL 4)
- EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Robert Martin	2/10 1545	2 EX	3 FE 021115	930	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.8

5.1.5

FA22032: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA22032 CLIENT: FPM PROJECT: NM-A2 PBR

DATE/TIME RECEIVED: 02-11-15 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8650 0185 4431

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 3 CORR. FACTOR -0.2
- [ ] OBSERVED TEMPS: 3.0
- [ ] CORRECTED TEMPS: 2.8

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE RW 02-11-15 REVIEWER SIGNATURE/DATE 2-11-15

NF 10/14 receipt confirmation 102914.xls

5.1 5

FA22032: Chain of Custody
Page 2 of 3

FA22032: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP55030	SW846 8330A						
OP55030-BS	2691-41-0	HMX	BSP	REC	105	%	77-122
OP55030-BS	121-82-4	RDX	BSP	REC	97	%	82-124
OP55030-BS	99-65-0	1,3-Dinitrobenzene	BSP	REC	91	%	84-124
OP55030-BS	606-20-2	2,6-Dinitrotoluene	BSP	REC	104	%	86-119
OP55030-BS	121-14-2	2,4-Dinitrotoluene	BSP	REC	102	%	82-123
OP55030-BS	35572-78-2	2-amino-4,6-Dinitrotoluene	BSP	REC	107	%	87-121
OP55030-BS	19406-51-0	4-amino-2,6-Dinitrotoluene	BSP	REC	106	%	84-124
OP55030-BS	98-95-3	Nitrobenzene	BSP	REC	104	%	80-128
OP55030-BS	88-72-2	o-Nitrotoluene	BSP	REC	100	%	84-120
OP55030-BS	99-08-1	m-Nitrotoluene	BSP	REC	104	%	79-127
OP55030-BS	99-99-0	p-Nitrotoluene	BSP	REC	98	%	83-122
OP55030-BS	479-45-8	Tetryl	BSP	REC	107	%	66-138
OP55030-BS	99-35-4	1,3,5-Trinitrobenzene	BSP	REC	103	%	81-123
OP55030-BS	118-96-7	2,4,6-Trinitrotoluene	BSP	REC	94	%	75-125
OP55030-MS	2691-41-0	HMX	MS	REC	103	%	77-122
OP55030-MS	121-82-4	RDX	MS	REC	90	%	82-124
OP55030-MS	99-65-0	1,3-Dinitrobenzene	MS	REC	91	%	84-124
OP55030-MS	606-20-2	2,6-Dinitrotoluene	MS	REC	105	%	86-119
OP55030-MS	121-14-2	2,4-Dinitrotoluene	MS	REC	102	%	82-123
OP55030-MS	35572-78-2	2-amino-4,6-Dinitrotoluene	MS	REC	107	%	87-121
OP55030-MS	19406-51-0	4-amino-2,6-Dinitrotoluene	MS	REC	106	%	84-124
OP55030-MS	98-95-3	Nitrobenzene	MS	REC	105	%	80-128
OP55030-MS	88-72-2	o-Nitrotoluene	MS	REC	101	%	84-120
OP55030-MS	99-08-1	m-Nitrotoluene	MS	REC	105	%	79-127
OP55030-MS	99-99-0	p-Nitrotoluene	MS	REC	99	%	83-122
OP55030-MS	479-45-8	Tetryl	MS	REC	103	%	66-138
OP55030-MS	99-35-4	1,3,5-Trinitrobenzene	MS	REC	103	%	81-123
OP55030-MS	118-96-7	2,4,6-Trinitrotoluene	MS	REC	94	%	75-125
OP55030-MSD	2691-41-0	HMX	MSD	REC	109	%	77-122
OP55030-MSD	2691-41-0	HMX	MSD	RPD	7	%	30
OP55030-MSD	121-82-4	RDX	MSD	REC	90	%	82-124
OP55030-MSD	121-82-4	RDX	MSD	RPD	2	%	30
OP55030-MSD	99-65-0	1,3-Dinitrobenzene	MSD	REC	93	%	84-124
OP55030-MSD	99-65-0	1,3-Dinitrobenzene	MSD	RPD	4	%	30
OP55030-MSD	606-20-2	2,6-Dinitrotoluene	MSD	REC	111	%	86-119
OP55030-MSD	606-20-2	2,6-Dinitrotoluene	MSD	RPD	8	%	30
OP55030-MSD	121-14-2	2,4-Dinitrotoluene	MSD	REC	107	%	82-123
OP55030-MSD	121-14-2	2,4-Dinitrotoluene	MSD	RPD	6	%	30
OP55030-MSD	35572-78-2	2-amino-4,6-Dinitrotoluene	MSD	REC	109	%	87-121
OP55030-MSD	35572-78-2	2-amino-4,6-Dinitrotoluene	MSD	RPD	3	%	30
OP55030-MSD	19406-51-0	4-amino-2,6-Dinitrotoluene	MSD	REC	109	%	84-124
OP55030-MSD	19406-51-0	4-amino-2,6-Dinitrotoluene	MSD	RPD	5	%	30

* Sample used for QC is not from job FA22032

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
OP55030-MSD	98-95-3	Nitrobenzene	MSD	REC	106	%	80-128
OP55030-MSD	98-95-3	Nitrobenzene	MSD	RPD	2	%	30
OP55030-MSD	88-72-2	o-Nitrotoluene	MSD	REC	104	%	84-120
OP55030-MSD	88-72-2	o-Nitrotoluene	MSD	RPD	4	%	30
OP55030-MSD	99-08-1	m-Nitrotoluene	MSD	REC	108	%	79-127
OP55030-MSD	99-08-1	m-Nitrotoluene	MSD	RPD	4	%	30
OP55030-MSD	99-99-0	p-Nitrotoluene	MSD	REC	100	%	83-122
OP55030-MSD	99-99-0	p-Nitrotoluene	MSD	RPD	3	%	30
OP55030-MSD	479-45-8	Tetryl	MSD	REC	106	%	66-138
OP55030-MSD	479-45-8	Tetryl	MSD	RPD	4	%	30
OP55030-MSD	99-35-4	1,3,5-Trinitrobenzene	MSD	REC	105	%	81-123
OP55030-MSD	99-35-4	1,3,5-Trinitrobenzene	MSD	RPD	4	%	30
OP55030-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	REC	96	%	75-125
OP55030-MSD	118-96-7	2,4,6-Trinitrotoluene	MSD	RPD	4	%	30
MP28549	SW846 6010C						
MP28549-B1	7429-90-5	Aluminum	BSP	REC	104.4	%	74-119
MP28549-B1	7440-36-0	Antimony	BSP	REC	98.8	%	79-114
MP28549-B1	7440-47-3	Chromium	BSP	REC	107	%	85-113
MP28549-B1	7440-50-8	Copper	BSP	REC	106.4	%	81-117
MP28549-B1	7439-89-6	Iron	BSP	REC	105.4	%	81-118
MP28549-B1	7439-92-1	Lead	BSP	REC	100	%	81-112
MP28549-B1	7440-66-6	Zinc	BSP	REC	103.6	%	82-113
MP28549-S1*	7429-90-5	Aluminum	MS	REC	81.5	%	74-119
MP28549-S1*	7440-36-0	Antimony	MS	REC	40.9 [a]	%	79-114
MP28549-S1*	7440-47-3	Chromium	MS	REC	96.5	%	85-113
MP28549-S1*	7440-50-8	Copper	MS	REC	103.6	%	81-117
MP28549-S1*	7439-89-6	Iron	MS	REC	101	%	81-118
MP28549-S1*	7439-92-1	Lead	MS	REC	98.4	%	81-112
MP28549-S1*	7440-66-6	Zinc	MS	REC	95.4	%	82-113
MP28549-S2*	7429-90-5	Aluminum	MSD	REC	87.2	%	74-119
MP28549-S2*	7429-90-5	Aluminum	MSD	RPD	2.6	%	20
MP28549-S2*	7440-36-0	Antimony	MSD	REC	42.9 [a]	%	79-114
MP28549-S2*	7440-36-0	Antimony	MSD	RPD	15.7	%	20
MP28549-S2*	7440-47-3	Chromium	MSD	REC	98.7	%	85-113
MP28549-S2*	7440-47-3	Chromium	MSD	RPD	6.3	%	20
MP28549-S2*	7440-50-8	Copper	MSD	REC	104.7	%	81-117
MP28549-S2*	7440-50-8	Copper	MSD	RPD	11.7	%	20
MP28549-S2*	7439-89-6	Iron	MSD	REC	100.5	%	81-118
MP28549-S2*	7439-89-6	Iron	MSD	RPD	8.3	%	20
MP28549-S2*	7439-92-1	Lead	MSD	REC	98.3	%	81-112
MP28549-S2*	7439-92-1	Lead	MSD	RPD	9.2	%	20
MP28549-S2*	7440-66-6	Zinc	MSD	REC	95.2	%	82-113
MP28549-S2*	7440-66-6	Zinc	MSD	RPD	10.7	%	20

* Sample used for QC is not from job FA22032

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP28549-D1*	7429-90-5	Aluminum	DUP	RPD	1.6	%	20
MP28549-D1*	7440-36-0	Antimony	DUP	RPD	0	%	20
MP28549-D1*	7440-47-3	Chromium	DUP	RPD	.9	%	20
MP28549-D1*	7440-50-8	Copper	DUP	RPD	25 [b]	%	20
MP28549-D1*	7439-89-6	Iron	DUP	RPD	3.8	%	20
MP28549-D1*	7439-92-1	Lead	DUP	RPD	4.2	%	20
MP28549-D1*	7440-66-6	Zinc	DUP	RPD	200 [b]	%	20
MP28558	SW846 6010C						
MP28558-B1	7429-90-5	Aluminum	BSP	REC	104.4	%	74-119
MP28558-B1	7440-36-0	Antimony	BSP	REC	98.8	%	79-114
MP28558-B1	7440-47-3	Chromium	BSP	REC	106	%	85-113
MP28558-B1	7440-50-8	Copper	BSP	REC	104	%	81-117
MP28558-B1	7439-89-6	Iron	BSP	REC	105.4	%	81-118
MP28558-B1	7439-92-1	Lead	BSP	REC	98.4	%	81-112
MP28558-B1	7440-66-6	Zinc	BSP	REC	102.8	%	82-113
MP28558-S1*	7429-90-5	Aluminum	MS	REC	116.2	%	74-119
MP28558-S1*	7440-36-0	Antimony	MS	REC	35.8 [a]	%	79-114
MP28558-S1*	7440-47-3	Chromium	MS	REC	103.1	%	85-113
MP28558-S1*	7440-50-8	Copper	MS	REC	101.4	%	81-117
MP28558-S1*	7439-89-6	Iron	MS	REC	19 [a]	%	81-118
MP28558-S1*	7439-92-1	Lead	MS	REC	95.5	%	81-112
MP28558-S1*	7440-66-6	Zinc	MS	REC	95.9	%	82-113
MP28558-S2*	7429-90-5	Aluminum	MSD	REC	93.2	%	74-119
MP28558-S2*	7429-90-5	Aluminum	MSD	RPD	4	%	20
MP28558-S2*	7440-36-0	Antimony	MSD	REC	39.4 [a]	%	79-114
MP28558-S2*	7440-36-0	Antimony	MSD	RPD	12.6	%	20
MP28558-S2*	7440-47-3	Chromium	MSD	REC	99.7	%	85-113
MP28558-S2*	7440-47-3	Chromium	MSD	RPD	0	%	20
MP28558-S2*	7440-50-8	Copper	MSD	REC	101.6	%	81-117
MP28558-S2*	7440-50-8	Copper	MSD	RPD	3.4	%	20
MP28558-S2*	7439-89-6	Iron	MSD	REC	21.7 [a]	%	81-118
MP28558-S2*	7439-89-6	Iron	MSD	RPD	2.2	%	20
MP28558-S2*	7439-92-1	Lead	MSD	REC	94.5	%	81-112
MP28558-S2*	7439-92-1	Lead	MSD	RPD	2	%	20
MP28558-S2*	7440-66-6	Zinc	MSD	REC	95.8	%	82-113
MP28558-S2*	7440-66-6	Zinc	MSD	RPD	3	%	20
MP28558-D1*	7429-90-5	Aluminum	DUP	RPD	7.1	%	20
MP28558-D1*	7440-36-0	Antimony	DUP	RPD	96.3 [b]	%	20
MP28558-D1*	7440-47-3	Chromium	DUP	RPD	23.5 [c]	%	20
MP28558-D1*	7440-50-8	Copper	DUP	RPD	165.8 [c]	%	20
MP28558-D1*	7439-89-6	Iron	DUP	RPD	37.2 [c]	%	20
MP28558-D1*	7439-92-1	Lead	DUP	RPD	5	%	20
MP28558-D1*	7440-66-6	Zinc	DUP	RPD	82.8 [c]	%	20

* Sample used for QC is not from job FA22032

QC Evaluation: DOD QSM5 Limits

Job Number: FA22032
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 02/10/15

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.
(b) RPD acceptable due to low duplicate and sample concentrations.
(c) High RPD due to possible sample non-homogeneity.

* Sample used for QC is not from job FA22032

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-MB	BB046107.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	200	80	ug/kg	
121-82-4	RDX	ND	200	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	ND	200	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	82	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	200	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	200	80	ug/kg	
98-95-3	Nitrobenzene	ND	200	80	ug/kg	
88-72-2	o-Nitrotoluene	ND	200	80	ug/kg	
99-08-1	m-Nitrotoluene	ND	200	85	ug/kg	
99-99-0	p-Nitrotoluene	ND	200	80	ug/kg	
479-45-8	Tetryl	ND	200	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	ND	200	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	200	80	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	105%	72-134%

Method Blank Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-MB	GG058409.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	200	80	ug/kg	
121-82-4	RDX	ND	200	80	ug/kg	
99-65-0	1,3-Dinitrobenzene	ND	200	80	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	200	82	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	200	80	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	200	82	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	200	80	ug/kg	
98-95-3	Nitrobenzene	ND	200	80	ug/kg	
88-72-2	o-Nitrotoluene	ND	200	80	ug/kg	
99-08-1	m-Nitrotoluene	ND	200	85	ug/kg	
99-99-0	p-Nitrotoluene	ND	200	80	ug/kg	
479-45-8	Tetryl	ND	200	80	ug/kg	
99-35-4	1,3,5-Trinitrobenzene	ND	200	80	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	200	80	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	109%	72-134%

Blank Spike Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-BS	BB046106.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	5000	5270	105	64-159
121-82-4	RDX	5000	4840	97	78-120
99-65-0	1,3-Dinitrobenzene	5000	4570	91	80-125
606-20-2	2,6-Dinitrotoluene	5000	5180	104	75-143
121-14-2	2,4-Dinitrotoluene	5000	5120	102	80-130
35572-78-2	2-amino-4,6-Dinitrotoluene	5000	5330	107	79-122
19406-51-0	4-amino-2,6-Dinitrotoluene	5000	5290	106	76-124
98-95-3	Nitrobenzene	5000	5220	104	77-139
88-72-2	o-Nitrotoluene	5000	5020	100	84-126
99-08-1	m-Nitrotoluene	5000	5210	104	84-129
99-99-0	p-Nitrotoluene	5000	4910	98	83-132
479-45-8	Tetryl	5000	5360	107	63-135
99-35-4	1,3,5-Trinitrobenzene	5000	5140	103	81-133
118-96-7	2,4,6-Trinitrotoluene	5000	4720	94	69-124

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	100%	72-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55030-MS	BB046109.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
OP55030-MSD	BB046110.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
FA22032-1 [a]	BB046108.D	1	02/20/15	KL	02/19/15	OP55030	GBB1248
FA22032-1 [b]	GG058410.D	1	02/23/15	KL	02/19/15	OP55030	GGG2361

The QC reported here applies to the following samples: **Method:** SW846 8330A

FA22032-1, FA22032-2, FA22032-3, FA22032-4, FA22032-5, FA22032-6, FA22032-7

CAS No.	Compound	FA22032-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	170 U		4780	4950	103	4850	5290	109	7	64-159/17
121-82-4	RDX	108	J	4780	4410	90	4850	4500	90	2	78-120/16
99-65-0	1,3-Dinitrobenzene	170 U		4780	4350	91	4850	4510	93	4	80-125/15
606-20-2	2,6-Dinitrotoluene	170 U		4780	5010	105	4850	5410	111	8	75-143/22
121-14-2	2,4-Dinitrotoluene	170 U		4780	4890	102	4850	5180	107	6	80-130/20
35572-78-2	2-amino-4,6-Dinitrotoluene	170 U		4780	5110	107	4850	5280	109	3	79-122/20
19406-51-0	4-amino-2,6-Dinitrotoluene	170 U		4780	5060	106	4850	5310	109	5	76-124/23
98-95-3	Nitrobenzene	170 U		4780	5020	105	4850	5130	106	2	77-139/17
88-72-2	o-Nitrotoluene	170 U		4780	4840	101	4850	5060	104	4	84-126/21
99-08-1	m-Nitrotoluene	170 U		4780	5030	105	4850	5240	108	4	84-129/21
99-99-0	p-Nitrotoluene	170 U		4780	4720	99	4850	4870	100	3	83-132/25
479-45-8	Tetryl	170 U		4780	4950	103	4850	5130	106	4	63-135/25
99-35-4	1,3,5-Trinitrobenzene	170 U		4780	4910	103	4850	5110	105	4	81-133/19
118-96-7	2,4,6-Trinitrotoluene	170 U		4780	4500	94	4850	4670	96	4	69-124/18

CAS No.	Surrogate Recoveries	MS	MSD	FA22032-1	FA22032-1	Limits
610-39-9	3,4-Dinitrotoluene	101%	102%	106%	108%	72-134%

(a) All hits confirmed by reanalysis on a dissimilar column.
(b) Confirmation run.

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA22032-1	GG058410.D	108
FA22032-1	BB046108.D	106
FA22032-2	BB046111.D	107
FA22032-3	BB046112.D	104
FA22032-4	BB046114.D	107
FA22032-5	BB046128.D	109
FA22032-6	BB046129.D	107
FA22032-7	BB046130.D	104
OP55030-BS	BB046106.D	100
OP55030-MB	BB046107.D	105
OP55030-MB	GG058409.D	109
OP55030-MS	BB046109.D	101
OP55030-MSD	BB046110.D	102

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	72-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1248-CC1235	**Injection Date:**	02/20/15
Lab File ID:	BB046104.D	**Injection Time:**	13:16
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] **RT**
Check Std	11.18

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
OP55030-BS	BB046106.D	02/20/15	14:06	11.21
OP55030-MB	BB046107.D	02/20/15	14:31	11.22
FA22032-1	BB046108.D	02/20/15	14:56	11.24
OP55030-MS	BB046109.D	02/20/15	15:21	11.24
OP55030-MSD	BB046110.D	02/20/15	15:46	11.24
FA22032-2	BB046111.D	02/20/15	16:11	11.24
FA22032-3	BB046112.D	02/20/15	16:36	11.24
ZZZZZZ	BB046113.D	02/20/15	17:01	11.25
FA22032-4	BB046114.D	02/20/15	17:26	11.24

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1248-CC1235	**Injection Date:**	02/20/15
Lab File ID:	BB046126.D	**Injection Time:**	22:25
Instrument ID:	GCBB	**Method:**	SW846 8330A

	S1 [a] RT	S1 [b] RT
Check Std	11.21	11.21

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA22032-5	BB046128.D	02/20/15	23:15		11.20
FA22032-6	BB046129.D	02/20/15	23:40		11.19
FA22032-7	BB046130.D	02/21/15	00:05		11.19
GBB1248-ECC1238	BB046131.D	02/21/15	00:30	11.19	11.19

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GGG2361-CC2344	**Injection Date:**	02/23/15
Lab File ID:	GG058408.D	**Injection Time:**	10:22
Instrument ID:	GCGG	**Method:**	SW846 8330A

	S1 [a] **RT**	**S1** [b] **RT**
Check Std	16.34	16.34

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**	**S1** [b] **RT**
OP55030-MB	GG058409.D	02/23/15	11:02		16.31
FA22032-1	GG058410.D	02/23/15	11:34		16.33
ZZZZZZ	GG058411.D	02/23/15	12:06		16.33
GGG2361-ECC2344	GG058412.D	02/23/15	12:42	16.34	16.34

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICC1235
Lab FileID: BB045818.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Initial Calibration

Calibration Files
20 =BB045814.D 50 =BB045815.D 100 =BB045816.D 200 =BB045817.D
500 =BB045818.D 1000=BB045819.D 2000=BB045820.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.070	3.275	3.420	3.229	3.160	3.152	3.271	3.225	E3	3.49
2)	HMX	1.843	1.499	1.516	1.645	1.591	1.550	1.627	1.610	E3	7.22
3)	DNX	2.867	2.618	2.870	2.755	2.713	2.693	2.820	2.762	E3	3.43
4)	MNX	2.627	2.684	2.508	2.428	2.364	2.327	2.443	2.483	E3	5.33
5)	RDX	2.040	2.072	1.814	1.896	1.790	1.753	1.838	1.886	E3	6.60
6)	1,3,5-Trinitroben	4.263	4.171	4.099	4.076	3.940	3.925	4.083	4.080	E3	2.93
7)	1,3-Dinitrobenzen	5.676	5.476	5.497	5.233	5.119	5.122	5.291	5.345	E3	3.94
8)	3,5-Dinitroanilin	5.015	4.519	4.801	4.435	4.273	4.384	4.507	4.562	E3	5.65
9)	Nitrobenzene	2.736	3.629	3.077	2.939	2.997	3.029	3.063	3.067	E3	8.92
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	2.533	2.951	2.847	2.657	2.581	2.590	2.786	2.706	E3	5.80
12)	2,4,6-Trinitrotol	3.672	3.814	3.618	3.555	3.532	3.618	3.763	3.653	E3	2.85
13)	2-Amino-4,6-Dinit	2.552	3.316	2.944	2.980	3.024	3.132	3.281	3.033	E3	8.45
14)	4-Amino-2,6-Dinit	1.741	2.041	2.037	2.095	2.173	2.270	2.387	2.106	E3	9.74
15)S	3,4-Dinitrotoluen	2.389	2.541	2.235	2.095	2.036	2.093	2.170	2.223	E3	8.21
16)	2,4-Dinitrotoluen	4.109	4.720	4.937	4.585	4.576	4.632	4.774	4.619	E3	5.58
17)	2,6-Dinitrotoluen	2.235	2.518	2.691	2.646	2.567	2.636	2.700	2.570	E3	6.28
18)	o-Nitrotoluene	2.239	2.334	2.370	2.291	2.248	2.252	2.260	2.285	E3	2.17
19)	p-Nitrotoluene	3.908	3.692	3.593	3.493	3.503	3.509	3.545	3.606	E3	4.16
20)	m-Nitrotoluene	3.655	3.142	3.192	3.130	3.136	3.138	3.164	3.222	E3	5.96
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	5.130	5.086	5.148	4.922	4.828	4.809	4.989	4.987	E3	2.80
2)	HMX	4.749	4.161	4.204	4.539	4.469	4.251	4.447	4.403	E3	4.78
3)	DNX	5.133	5.013	5.025	4.485	4.411	4.269	4.485	4.689	E3	7.56
4)	MNX	3.635	3.825	3.797	3.770	3.654	3.610	3.787	3.725	E3	2.39
5)	RDX	3.353	3.086	3.134	2.973	2.838	2.810	2.942	3.019	E3	6.25
6)	1,3,5-Trinitroben	7.890	7.835	7.829	7.813	7.591	7.637	7.946	7.792	E3	1.67
7)	1,3-Dinitrobenzen	3.623	3.548	3.616	3.572	3.483	3.529	3.629	3.571	E3	1.53
8)	3,5-Dinitroanilin	7.959	7.717	7.652	7.463	7.289	7.279	7.562	7.560	E3	3.21
9)	Nitrobenzene	2.762	3.229	3.045	2.904	2.911	2.956	2.973	2.969	E3	4.84
10)	Nitroglycerin	1.243	1.278	1.254	1.228	1.222	1.225	1.279	1.247	E3	1.92
11)	Tetryl	4.175	4.586	4.380	4.244	4.179	4.190	4.543	4.328	E3	4.08
12)	2,4,6-Trinitrotol	3.675	4.464	4.332	4.165	4.151	4.290	4.520	4.228	E3	6.63
13)	2-Amino-4,6-Dinit	4.308	4.728	4.489	4.419	4.399	4.598	4.939	4.554	E3	4.81
14)	4-Amino-2,6-Dinit	3.230	3.120	3.714	4.009	4.242	4.468	4.814	3.942	E3	15.93
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9987										
	Response Ratio = 0.00000 + 4712.50791 *A										
15)S	3,4-Dinitrotoluen	2.354	2.818	3.204	3.310	3.549	3.597	3.826	3.237	E3	15.63
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9992										
	Response Ratio = 0.00000 + 3764.18145 *A										
16)	2,4-Dinitrotoluen	2.613	2.678	2.774	2.933	3.047	3.017	3.152	2.888	E3	7.01
17)	2,6-Dinitrotoluen	3.431	2.825	3.254	3.396	3.336	3.397	3.550	3.313	E3	7.04

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICC1235
Lab FileID: BB045818.D

18)	o-Nitrotoluene	2.494	3.233	3.033	3.063	3.020	3.041	3.184	3.010	E3	8.03
19)	p-Nitrotoluene	3.232	2.824	2.822	2.870	2.834	2.929	3.025	2.934	E3	5.12
20)	m-Nitrotoluene	3.694	3.661	3.432	3.533	3.571	3.649	3.769	3.615	E3	3.10
21)	PETN	1.463	1.477	1.451	1.415	1.410	1.396	1.449	1.437	E3	2.10

(#) = Out of Range

8330B_0107.M Fri Jan 23 14:49:15 2015

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICV1235
Lab FileID: BB045821.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	529.286	-5.9	108	0.00	1.08- 1.68
2	HMX	500.000	573.328	-14.7	116	0.00	1.19- 1.79
3	DNX	500.000	537.360	-7.5	109	0.00	1.46- 2.06
4	MNX	500.000	509.783	-2.0	107	0.00	2.04- 2.64
5	RDX	500.000	491.716	1.7	104	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	500.000	520.053	-4.0	108	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	457.959	8.4	96	0.00	5.51- 6.31
8	3,5-Dinitroaniline	500.000	468.838	6.2	100	0.00	5.96- 6.76
9	Nitrobenzene	500.000	524.094	-4.8	107	0.00	7.12- 7.92
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	451.877	9.6	95	0.00	9.14- 9.94
12	2,4,6-Trinitrotoluene	500.000	463.147	7.4	96	0.00	9.56-10.36
13	2-Amino-4,6-Dinitrotol	500.000	541.123	-8.2	109	0.00	10.03-10.83
14	4-Amino-2,6-Dinitrotol	500.000	555.255	-11.1	108	0.00	10.52-11.32
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	525.910	-5.2	106	0.00	11.49-12.29
17	2,6-Dinitrotoluene	500.000	547.381	-9.5	110	0.00	11.89-12.69
18	o-Nitrotoluene	500.000	515.628	-3.1	105	0.00	14.10-14.98
19	p-Nitrotoluene	500.000	502.087	-0.4	103	0.00	14.36-15.36
20	m-Nitrotoluene	500.000	543.666	-8.7	112	0.00	14.90-15.90
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	519.029	-3.8	107	0.00	1.08- 1.68
2	HMX	500.000	565.918	-13.2	112	0.00	1.19- 1.79
3	DNX	500.000	499.130	0.2	106	0.00	1.46- 2.06
4	MNX	500.000	520.625	-4.1	106	0.00	2.04- 2.64
5	RDX	500.000	497.299	0.5	106	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	500.000	526.624	-5.3	108	0.00	4.23- 5.03
7	1,3-Dinitrobenzene	500.000	469.936	6.0	96	0.00	5.51- 6.31
8	3,5-Dinitroaniline	500.000	482.526	3.5	100	0.00	5.96- 6.76
9	Nitrobenzene	500.000	530.075	-6.0	108	0.00	7.12- 7.92
10	Nitroglycerin	2500.000	2533.654	-1.3	103	0.00	8.67- 9.67
11	Tetryl	500.000	457.633	8.5	95	0.00	9.14- 9.94
12	2,4,6-Trinitrotoluene	500.000	496.730	0.7	101	0.00	9.56-10.36
13	2-Amino-4,6-Dinitrotol	500.000	546.801	-9.4	113	0.00	10.03-10.83

	----------	Amount	Calc.	%Drift			----------
14	4-Amino-2,6-Dinitrotol	500.000	495.904	0.8	110	0.00	10.52-11.32
15 S	3,4-Dinitrotoluene		----------NA----------				

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1235-ICV1235
Lab FileID: BB045821.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	500.000	534.743	-6.9	101	0.00	11.50-12.30
17	2,6-Dinitrotoluene	500.000	537.287	-7.5	107	0.00	11.89-12.69
18	o-Nitrotoluene	500.000	534.800	-7.0	107	0.00	13.98-14.98
19	p-Nitrotoluene	500.000	500.973	-0.2	104	0.00	14.36-15.36
20	m-Nitrotoluene	500.000	562.797	-12.6	114	0.00	14.90-15.90
21	PETN	2500.000	2629.624	-5.2	107	0.00	16.32-17.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045818.D 8330B_0107.M Fri Jan 23 14:49:38 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046104.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1A.ch
Acq On : 20-Feb-2015, 13:16:39 Operator: KISMETL
Sample : cc1235-500 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	500.090	-0.0	102	0.00	1.07- 1.67
2	HMX	500.000	492.230	1.6	100	0.00	1.19- 1.79
3	DNX	500.000	499.774	0.0	102	0.00	1.45- 2.05
4	MNX	500.000	485.564	2.9	102	0.00	2.02- 2.62
5	RDX	500.000	480.769	3.8	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	500.000	487.815	2.4	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	500.000	483.974	3.2	101	-0.01	5.48- 6.28
8	3,5-Dinitroaniline	500.000	462.712	7.5	99	0.00	5.92- 6.72
9	Nitrobenzene	500.000	493.410	1.3	101	-0.02	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	503.808	-0.8	106	-0.02	9.06- 9.86
12	2,4,6-Trinitrotoluene	500.000	501.136	-0.2	104	-0.02	9.49-10.29
13	2-Amino-4,6-Dinitrotol	500.000	526.398	-5.3	106	-0.02	9.94-10.74
14	4-Amino-2,6-Dinitrotol	500.000	542.231	-8.4	105	-0.02	10.42-11.22
15 S	3,4-Dinitrotoluene	500.000	484.502	3.1	106	-0.03	10.80-11.60
16	2,4-Dinitrotoluene	500.000	515.623	-3.1	104	-0.02	11.41-12.21
17	2,6-Dinitrotoluene	500.000	526.891	-5.4	106	-0.03	11.82-12.62
18	o-Nitrotoluene	500.000	499.668	0.1	102	-0.02	14.05-14.92
19	p-Nitrotoluene	500.000	494.061	1.2	102	-0.02	14.31-15.31
20	m-Nitrotoluene	500.000	489.846	2.0	101	-0.02	14.85-15.85
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	493.980	1.2	102	0.00	1.07- 1.67
2	HMX	500.000	499.754	0.0	98	0.00	1.19- 1.79
3	DNX	500.000	473.088	5.4	101	0.00	1.45- 2.05
4	MNX	500.000	498.102	0.4	102	0.00	2.02- 2.62
5	RDX	500.000	474.362	5.1	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	500.000	501.238	-0.2	103	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	500.000	511.383	-2.3	105	-0.01	5.48- 6.28
8	3,5-Dinitroaniline	500.000	486.501	2.7	101	0.00	5.92- 6.72
9	Nitrobenzene	500.000	538.153	-7.6	110	-0.02	7.08- 7.88
10	Nitroglycerin	2500.000	2493.571	0.3	102	-0.02	8.61- 9.61
11	Tetryl	500.000	505.941	-1.2	105	-0.02	9.06- 9.86
12	2,4,6-Trinitrotoluene	500.000	501.978	-0.4	102	-0.02	9.49-10.29
13	2-Amino-4,6-Dinitrotol	500.000	506.292	-1.3	105	-0.02	9.94-10.74

		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	500.000	466.670	6.7	104	-0.03	10.42-11.22
15 S	3,4-Dinitrotoluene	500.000	473.680	5.3	100	-0.03	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046104.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	500.000	538.045	-7.6	102	-0.03	11.42-12.22
17	2,6-Dinitrotoluene	500.000	522.850	-4.6	104	-0.02	11.82-12.62
18	o-Nitrotoluene	500.000	524.776	-5.0	105	-0.02	13.92-14.92
19	p-Nitrotoluene	500.000	506.617	-1.3	105	-0.02	14.31-15.31
20	m-Nitrotoluene	500.000	511.836	-2.4	104	-0.02	14.85-15.85
21	PETN	2500.000	2406.016	3.8	98	0.00	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045818.D 8330B_0107.M Mon Feb 23 10:27:19 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046115.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1A.ch
Acq On : 20-Feb-2015, 17:51:12 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	988.282	1.2	101	0.00	1.07- 1.67
2	HMX	1000.000	979.282	2.1	102	0.00	1.19- 1.79
3	DNX	1000.000	995.501	0.4	102	0.00	1.45- 2.05
4	MNX	1000.000	950.775	4.9	101	0.00	2.02- 2.62
5	RDX	1000.000	940.500	5.9	101	0.01	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	970.710	2.9	101	0.02	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	952.525	4.7	99	0.02	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	913.640	8.6	95	0.02	5.92- 6.72
9	Nitrobenzene	1000.000	974.862	2.5	99	0.02	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	988.713	1.1	103	0.04	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	983.218	1.7	99	0.03	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1039.652	-4.0	101	0.04	9.94-10.74
14	4-Amino-2,6-Dinitrotol	1000.000	1084.330	-8.4	101	0.04	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	937.434	6.3	100	0.04	10.80-11.60
16	2,4-Dinitrotoluene	1000.000	1001.507	-0.2	100	0.04	11.41-12.21
17	2,6-Dinitrotoluene	1000.000	1017.939	-1.8	99	0.03	11.82-12.62
18	o-Nitrotoluene	1000.000	978.209	2.2	99	0.02	14.05-14.92
19	p-Nitrotoluene	1000.000	968.447	3.2	100	0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	964.590	3.5	99	0.02	14.85-15.85
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	1000.000	972.868	2.7	101	0.00	1.07- 1.67
2	HMX	1000.000	986.912	1.3	102	0.00	1.19- 1.79
3	DNX	1000.000	933.693	6.6	103	0.00	1.45- 2.05
4	MNX	1000.000	985.147	1.5	102	0.00	2.02- 2.62
5	RDX	1000.000	940.741	5.9	101	0.01	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	987.404	1.3	101	0.02	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	966.302	3.4	98	0.02	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	920.733	7.9	96	0.02	5.92- 6.72
9	Nitrobenzene	1000.000	984.576	1.5	99	0.02	7.08- 7.88
10	Nitroglycerin	5000.000	4855.779	2.9	99	0.03	8.61- 9.61
11	Tetryl	1000.000	993.037	0.7	103	0.04	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	997.994	0.2	98	0.03	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1018.166	-1.8	101	0.04	9.94-10.74
	----------	Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	954.970	4.5	101	0.04	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	951.260	4.9	100	0.04	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046115.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1050.663	-5.1	101	0.04	11.42-12.22
17	2,6-Dinitrotoluene	1000.000	1025.304	-2.5	100	0.03	11.82-12.62
18	o-Nitrotoluene	1000.000	1015.494	-1.5	101	0.02	13.92-14.92
19	p-Nitrotoluene	1000.000	999.263	0.1	100	0.02	14.31-15.31
20	m-Nitrotoluene	1000.000	1001.240	-0.1	99	0.02	14.85-15.85
21	PETN	5000.000	4737.932	5.2	98	0.02	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Mon Feb 23 10:32:17 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046126.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1A.ch
Acq On : 20-Feb-2015, 22:25:47 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	986.161	1.4	101	0.00	1.07- 1.67
2	HMX	1000.000	971.279	2.9	101	0.00	1.19- 1.79
3	DNX	1000.000	989.364	1.1	101	0.00	1.45- 2.05
4	MNX	1000.000	952.215	4.8	102	0.00	2.02- 2.62
5	RDX	1000.000	945.046	5.5	102	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	977.812	2.2	102	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	954.931	4.5	100	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	910.004	9.0	95	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	990.775	0.9	100	0.00	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	993.527	0.6	104	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	987.464	1.3	100	0.00	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1043.133	-4.3	101	0.00	9.94-10.74
14	4-Amino-2,6-Dinitrotol	1000.000	1088.880	-8.9	101	0.00	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	935.991	6.4	99	0.00	10.80-11.60
16	2,4-Dinitrotoluene	1000.000	1003.519	-0.4	100	0.00	11.41-12.21
17	2,6-Dinitrotoluene	1000.000	1018.175	-1.8	99	0.00	11.82-12.62
18	o-Nitrotoluene	1000.000	986.286	1.4	100	0.00	14.05-14.92
19	p-Nitrotoluene	1000.000	971.481	2.9	100	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	972.056	2.8	100	0.00	14.85-15.85
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	960.556	3.9	100	0.00	1.07- 1.67
2	HMX	1000.000	961.325	3.9	100	0.00	1.19- 1.79
3	DNX	1000.000	912.227	8.8	100	0.00	1.45- 2.05
4	MNX	1000.000	976.536	2.3	101	0.00	2.02- 2.62
5	RDX	1000.000	941.161	5.9	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	986.387	1.4	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	987.844	1.2	100	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	942.830	5.7	98	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	1018.885	-1.9	102	0.00	7.08- 7.88
10	Nitroglycerin	5000.000	4894.551	2.1	100	0.00	8.61- 9.61
11	Tetryl	1000.000	1001.982	-0.2	103	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	1011.958	-1.2	100	0.00	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1029.923	-3.0	102	0.00	9.94-10.74

		Amount	Calc.	%Drift			
14	4-Amino-2,6-Dinitrotol	1000.000	965.738	3.4	102	0.00	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	953.550	4.6	100	0.00	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-CC1235
Lab FileID: BB046126.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1054.594	-5.5	101	0.00	11.42-12.22
17	2,6-Dinitrotoluene	1000.000	1023.137	-2.3	100	0.00	11.82-12.62
18	o-Nitrotoluene	1000.000	1020.123	-2.0	101	0.00	13.92-14.92
19	p-Nitrotoluene	1000.000	1006.715	-0.7	101	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	1024.853	-2.5	102	0.00	14.85-15.85
21	PETN	5000.000	4621.850	7.6	95	0.00	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Mon Feb 23 10:32:18 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-ECC1235
Lab FileID: BB046131.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1A.ch
Acq On : 21-Feb-2015, 00:30:32 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	988.734	1.1	101	0.00	1.07- 1.67
2	HMX	1000.000	979.203	2.1	102	0.00	1.19- 1.79
3	DNX	1000.000	992.636	0.7	102	0.00	1.45- 2.05
4	MNX	1000.000	953.143	4.7	102	0.00	2.02- 2.62
5	RDX	1000.000	938.661	6.1	101	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	974.249	2.6	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	963.445	3.7	101	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	921.747	7.8	96	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	998.537	0.1	101	0.00	7.08- 7.88
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	999.159	0.1	104	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	991.083	0.9	100	-0.01	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1046.998	-4.7	101	-0.01	9.94-10.74
14	4-Amino-2,6-Dinitrotol	1000.000	1076.564	-7.7	100	-0.01	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	944.502	5.5	100	-0.01	10.80-11.60
16	2,4-Dinitrotoluene	1000.000	999.951	0.0	100	-0.01	11.41-12.21
17	2,6-Dinitrotoluene	1000.000	1023.893	-2.4	100	-0.01	11.82-12.62
18	o-Nitrotoluene	1000.000	983.440	1.7	100	0.00	14.05-14.92
19	p-Nitrotoluene	1000.000	969.901	3.0	100	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	965.547	3.4	99	0.00	14.85-15.85
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	969.716	3.0	101	0.00	1.07- 1.67
2	HMX	1000.000	989.140	1.1	102	0.00	1.19- 1.79
3	DNX	1000.000	930.992	6.9	102	0.00	1.45- 2.05
4	MNX	1000.000	985.368	1.5	102	0.00	2.02- 2.62
5	RDX	1000.000	950.059	5.0	102	0.00	2.51- 3.31
6	1,3,5-Trinitrobenzene	1000.000	988.045	1.2	101	0.00	4.21- 5.01
7	1,3-Dinitrobenzene	1000.000	979.113	2.1	99	0.00	5.48- 6.28
8	3,5-Dinitroaniline	1000.000	945.870	5.4	98	0.00	5.92- 6.72
9	Nitrobenzene	1000.000	982.902	1.7	99	0.00	7.08- 7.88
10	Nitroglycerin	5000.000	4880.516	2.4	99	0.00	8.61- 9.61
11	Tetryl	1000.000	1001.514	-0.2	103	0.00	9.06- 9.86
12	2,4,6-Trinitrotoluene	1000.000	1004.640	-0.5	99	-0.01	9.49-10.29
13	2-Amino-4,6-Dinitrotol	1000.000	1019.520	-2.0	101	0.00	9.94-10.74

		---------- Amount	Calc.	%Drift	----------		
14	4-Amino-2,6-Dinitrotol	1000.000	947.430	5.3	100	-0.02	10.42-11.22
15 S	3,4-Dinitrotoluene	1000.000	947.555	5.2	99	-0.01	10.80-11.60

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1248-ECC1235
Lab FileID: BB046131.D

		Amount	Calc.	%Drift			
16	2,4-Dinitrotoluene	1000.000	1028.372	-2.8	98	-0.01	11.42-12.22
17	2,6-Dinitrotoluene	1000.000	1027.734	-2.8	100	0.00	11.82-12.62
18	o-Nitrotoluene	1000.000	982.654	1.7	97	0.00	13.92-14.92
19	p-Nitrotoluene	1000.000	981.948	1.8	98	0.00	14.31-15.31
20	m-Nitrotoluene	1000.000	1078.325	-7.8	107	0.00	14.85-15.85
21	PETN	5000.000	4710.088	5.8	97	0.00	16.27-17.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045819.D 8330B_0107.M Mon Feb 23 10:32:19 2015

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICC2344
Lab FileID: GG058134.D

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Initial Calibration

Calibration Files
20 =GG058130.D 50 =GG058131.D 100 =GG058132.D 200 =GG058133.D
500 =GG058134.D 1000=GG058135.D 2000=GG058136.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	1.013	0.966	0.936	0.925	0.909	0.894	0.927	0.939	E4	4.24
2)	HMX	3.546	3.190	3.306	3.203	3.143	3.063	3.153	3.229	E3	4.88
3)	DNX	7.686	7.992	8.195	7.869	7.982	7.904	8.223	7.979	E3	2.35
4)	MNX	6.627	6.446	6.551	6.411	6.233	6.182	6.463	6.416	E3	2.50
5)	1,3,5-Trinitroben	1.059	1.059	1.072	1.055	1.021	1.014	1.062	1.049	E4	2.12
6)	RDX	4.928	4.444	5.234	4.924	4.680	4.635	4.853	4.814	E3	5.30
7)	1,3-Dinitrobenzen	1.568	1.404	1.425	1.424	1.366	1.366	1.412	1.424	E4	4.79
8)	Nitrobenzene	9.244	9.131	9.108	9.163	8.872	8.894	9.059	9.067	E3	1.52
9)	2,4,6-Trinitrotol	1.036	0.965	0.956	0.973	0.934	0.933	0.973	0.967	E4	3.58
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	7.203	6.901	7.100	7.316	6.818	6.821	7.353	7.073	E3	3.23
12)S	3,4-Dinitrotoluen	6.775	5.823	5.705	5.742	5.373	5.447	5.618	5.783	E3	8.05
13)	2,6-Dinitrotoluen	9.511	6.805	7.211	7.270	6.835	6.932	7.108	7.382	E3	12.95
14)	2,4-Dinitrotoluen	1.420	1.306	1.330	1.344	1.258	1.273	1.315	1.321	E4	4.01
15)	o-Nitrotoluene	1.821	1.836	1.881	1.854	1.762	1.766	1.827	1.821	E4	2.39
16)	3,5-Dinitroanilin	1.821	1.836	1.881	1.854	1.762	1.766	1.827	1.821	E4	2.39
17)	p-Nitrotoluene	6.293	5.237	5.212	5.247	4.865	4.917	5.010	5.254	E3	9.21
18)	4-Amino-2,6-Dinit	6.958	6.837	7.203	7.143	6.639	6.681	6.958	6.917	E3	3.10
19)	m-Nitrotoluene	6.255	6.471	6.399	6.298	5.929	5.996	6.120	6.210	E3	3.26
20)	2-Amino-4,6-Dinit	9.307	9.622	9.585	9.464	9.069	9.097	9.485	9.376	E3	2.39
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.504	1.406	1.412	1.397	1.342	1.333	1.420	1.402	E4	4.04
2)	HMX	1.503	1.205	1.093	1.033	1.045	0.945	1.025	1.121	E4	16.58

---- Linear regr., Force(0,0) ---- Coefficient = 0.9982
Response Ratio = 0.00000 + 10114.95296 *A

3)	DNX	1.670	1.440	1.386	1.298	1.350	1.297	1.318	1.394	E4	9.47
4)	MNX	0.877	0.900	0.938	0.977	0.963	0.969	1.012	0.948	E4	4.92
5)	1,3,5-Trinitroben	1.755	1.787	1.848	1.845	1.813	1.808	1.897	1.822	E4	2.55
6)	RDX	8.200	8.407	9.469	8.901	8.878	8.958	9.382	8.885	E3	5.22
7)	1,3-Dinitrobenzen	1.206	1.094	1.057	1.064	1.024	1.032	1.070	1.078	E4	5.68
8)	Nitrobenzene	8.754	8.618	8.633	8.300	8.176	8.280	8.413	8.453	E3	2.57
9)	2,4,6-Trinitrotol	1.261	1.345	1.298	1.308	1.239	1.249	1.302	1.286	E4	2.94
10)	Nitroglycerin	3.543	3.431	3.615	3.582	3.361	3.406	3.535	3.496	E3	2.76
11)	Tetryl	1.303	1.228	1.244	1.312	1.200	1.215	1.317	1.260	E4	3.93
12)S	3,4-Dinitrotoluen	1.149	1.111	1.096	1.150	1.065	1.087	1.125	1.112	E4	2.85
13)	2,6-Dinitrotoluen	1.033	0.988	1.013	1.050	0.998	1.019	1.049	1.021	E4	2.36
14)	2,4-Dinitrotoluen	9.339	9.432	9.693	9.796	9.060	9.172	9.590	9.440	E3	2.87
15)	o-Nitrotoluene	2.976	3.071	3.053	2.962	2.869	2.838	2.957	2.961	E4	2.90
16)	3,5-Dinitroanilin	2.976	3.071	3.053	2.962	2.869	2.838	2.957	2.961	E4	2.90
17)	p-Nitrotoluene	7.329	9.553	8.279	8.348	8.021	7.930	8.169	8.233	E3	8.17
18)	4-Amino-2,6-Dinit	1.231	1.670	1.513	1.388	1.385	1.354	1.418	1.423	E4	9.67
19)	m-Nitrotoluene	1.069	1.246	1.216	1.030	1.027	1.012	1.048	1.093	E4	8.84
20)	2-Amino-4,6-Dinit	1.378	1.352	1.334	1.364	1.313	1.329	1.379	1.350	E4	1.88

Initial Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICC2344
Lab FileID: GG058134.D

```
21)  PETN              1.986 3.185 3.491 3.453 3.533 3.603 3.769 3.288 E3  18.26
            ---- Linear regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 3722.92772 *A

--------------------------------------------------------------------------------
(#) = Out of Range

          8330_RPB2.M        Mon Jan 26 10:17:03 2015
```

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICV2344
Lab FileID: GG058137.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0123RPB2\GG058137.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0123RPB2\GG058137.D\dad1A.ch
Acq On : 23-Jan-2015, 15:00:38 Operator: kismetl
Sample : icv2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	511.391	-2.3	106	-0.01	5.13- 6.13
2	HMX	500.000	546.012	-9.2	112	0.00	5.67- 6.67
3	DNX	500.000	540.209	-8.0	108	-0.02	5.85- 6.85
4	MNX	500.000	516.193	-3.2	106	-0.02	7.21- 8.21
5	1,3,5-Trinitrobenzene	500.000	520.818	-4.2	107	-0.01	8.15- 9.15
6	RDX	500.000	512.005	-2.4	105	-0.03	8.70- 9.70
7	1,3-Dinitrobenzene	500.000	460.751	7.8	96	-0.02	10.80-11.80
8	Nitrobenzene	500.000	525.347	-5.1	107	-0.02	11.83-12.83
9	2,4,6-Trinitrotoluene	500.000	437.679	12.5	91	-0.02	12.87-13.87
10	Nitroglycerin	----------NA----------					
11	Tetryl	500.000	460.091	8.0	95	-0.02	14.60-15.60
12 S	3,4-Dinitrotoluene	----------NA----------					
13	2,6-Dinitrotoluene	500.000	522.720	-4.5	113	-0.02	16.18-17.18
14	2,4-Dinitrotoluene	500.000	503.053	-0.6	106	-0.02	16.99-17.99
15	o-Nitrotoluene	500.000	495.883	0.8	103	-0.03	18.58-19.58
16	3,5-Dinitroaniline	500.000	495.883	0.8	103	-0.03	18.58-19.58
17	p-Nitrotoluene	500.000	494.691	1.1	107	0.00	20.13-21.13
18	4-Amino-2,6-Dinitrotol	500.000	502.069	-0.4	105	-0.03	20.67-21.67
19	m-Nitrotoluene	500.000	535.933	-7.2	112	0.00	21.70-22.70
20	2-Amino-4,6-Dinitrotol	500.000	513.305	-2.7	106	-0.03	23.34-24.34
21	PETN	----------NA----------					

***** Signal #2 *****

1	TNX	500.000	510.269	-2.1	107	-0.01	5.13- 6.13
	---------- Amount	Calc.	%Drift	----------			
2	HMX	500.000	575.360	-15.1#	111	-0.01	5.67- 6.67
	---------- Amount	Calc.	%Drift	----------			
3	DNX	500.000	498.200	0.4	103	-0.02	5.85- 6.85
4	MNX	500.000	535.821	-7.2	105	-0.02	7.21- 8.21
5	1,3,5-Trinitrobenzene	500.000	533.767	-6.8	107	-0.01	8.15- 9.15
6	RDX	500.000	529.100	-5.8	106	-0.03	8.70- 9.70
7	1,3-Dinitrobenzene	500.000	456.291	8.7	96	-0.03	10.80-11.80
8	Nitrobenzene	500.000	528.854	-5.8	109	-0.03	11.83-12.83
9	2,4,6-Trinitrotoluene	500.000	447.996	10.4	93	-0.02	12.87-13.87
10	Nitroglycerin	2500.000	2522.228	-0.9	105	-0.02	13.74-14.74
11	Tetryl	500.000	480.949	3.8	101	-0.02	14.60-15.60
12 S	3,4-Dinitrotoluene	----------NA----------					
13	2,6-Dinitrotoluene	500.000	593.333	-18.7#	121	-0.02	16.18-17.18

Initial Calibration Verification

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2344-ICV2344
Lab FileID: GG058137.D

14	2,4-Dinitrotoluene	500.000	516.613	-3.3	108	-0.02	16.99-17.99
15	o-Nitrotoluene	500.000	497.991	0.4	103	-0.03	18.57-19.57
16	3,5-Dinitroaniline	500.000	497.991	0.4	103	-0.03	18.57-19.57
17	p-Nitrotoluene	500.000	515.249	-3.0	106	0.00	20.13-21.13
18	4-Amino-2,6-Dinitrotol	500.000	513.409	-2.7	105	-0.03	20.67-21.67
19	m-Nitrotoluene	500.000	542.230	-8.4	115	0.00	21.70-22.70
20	2-Amino-4,6-Dinitrotol	500.000	514.778	-3.0	106	-0.03	23.34-24.34

		Amount	Calc.	%Drift			
21	PETN	2500.000	2525.198	-1.0	106	0.00	25.27-26.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG058134.D 8330_RPB2.M Mon Jan 26 10:17:28 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-CC2344
Lab FileID: GG058408.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0223RPB2\GG058408.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058408.D\dad1A.ch
Acq On : 23-Feb-2015, 10:22:02 Operator: kismetl
Sample : cc2344-500 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	484.675	3.1	100	0.00	5.13- 6.13
2	HMX	500.000	462.241	7.6	95	0.00	5.70- 6.70
3	DNX	500.000	513.372	-2.7	103	0.00	5.87- 6.87
4	MNX	500.000	490.117	2.0	101	0.00	7.22- 8.22
5	1,3,5-Trinitrobenzene	500.000	498.071	0.4	102	0.00	8.15- 9.15
6	RDX	500.000	483.832	3.2	100	0.01	8.72- 9.72
7	1,3-Dinitrobenzene	500.000	494.130	1.2	103	0.02	10.81-11.81
8	Nitrobenzene	500.000	481.968	3.6	99	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	500.000	496.840	0.6	103	0.02	12.87-13.87
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	500.000	480.233	4.0	100	0.02	14.63-15.63
12 S	3,4-Dinitrotoluene	500.000	472.933	5.4	102	0.03	15.80-16.80
13	2,6-Dinitrotoluene	500.000	482.711	3.5	104	0.02	16.22-17.22
14	2,4-Dinitrotoluene	500.000	493.517	1.3	104	0.02	17.03-18.03
15	o-Nitrotoluene	500.000	479.423	4.1	99	0.00	18.61-19.61
16	3,5-Dinitroaniline	500.000	479.423	4.1	99	0.00	18.61-19.61
17	p-Nitrotoluene	500.000	461.188	7.8	100	0.01	20.17-21.17
18	4-Amino-2,6-Dinitrotol	500.000	505.550	-1.1	105	0.02	20.76-21.76
19	m-Nitrotoluene	500.000	474.874	5.0	99	0.00	21.75-22.75
20	2-Amino-4,6-Dinitrotol	500.000	498.004	0.4	103	0.00	23.44-24.44
21	PETN	----------	NA	----------			

***** Signal #2 *****

1	TNX	500.000	489.947	2.0	102	0.00	5.13- 6.13
	----------	Amount	Calc.	%Drift	----------		
2	HMX	500.000	522.819	-4.6	101	0.00	5.70- 6.70
	----------	Amount	Calc.	%Drift	----------		
3	DNX	500.000	522.835	-4.6	108	0.00	5.87- 6.87
4	MNX	500.000	523.136	-4.6	103	0.00	7.22- 8.22
5	1,3,5-Trinitrobenzene	500.000	509.871	-2.0	102	0.00	8.15- 9.15
6	RDX	500.000	503.823	-0.8	101	0.01	8.72- 9.72
7	1,3-Dinitrobenzene	500.000	497.776	0.4	105	0.02	10.81-11.81
8	Nitrobenzene	500.000	496.371	0.7	103	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	500.000	509.821	-2.0	106	0.02	12.87-13.87
10	Nitroglycerin	2500.000	2542.910	-1.7	106	0.02	13.76-14.76
11	Tetryl	500.000	516.005	-3.2	108	0.01	14.64-15.64
12 S	3,4-Dinitrotoluene	500.000	532.108	-6.4	111	0.03	15.80-16.80
13	2,6-Dinitrotoluene	500.000	543.147	-8.6	111	0.01	16.22-17.22

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-CC2344
Lab FileID: GG058408.D

14	2,4-Dinitrotoluene	500.000	528.169	-5.6	110	0.02	17.03-18.03
15	o-Nitrotoluene	500.000	490.901	1.8	101	0.00	18.60-19.60
16	3,5-Dinitroaniline	500.000	490.901	1.8	101	0.00	18.60-19.60
17	p-Nitrotoluene	500.000	475.048	5.0	98	0.01	20.17-21.17
18	4-Amino-2,6-Dinitrotol	500.000	490.510	1.9	101	0.02	20.76-21.76
19	m-Nitrotoluene	500.000	447.045	10.6	95	0.00	21.74-22.74
20	2-Amino-4,6-Dinitrotol	500.000	490.556	1.9	101	0.00	23.44-24.44

		Amount	Calc.	%Drift			
21	PETN	2500.000	2416.493	3.3	102	0.00	25.35-26.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG058134.D 8330_RPB2.M Tue Feb 24 09:31:22 2015

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-ECC2344
Lab FileID: GG058412.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0223RPB2\GG058412.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058412.D\dad1A.ch
Acq On : 23-Feb-2015, 12:42:53 Operator: kismetl
Sample : ecc2344-1000 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	950.734	4.9	100	0.01	5.13- 6.13
2	HMX	1000.000	896.548	10.3	95	0.01	5.70- 6.70
3	DNX	1000.000	1016.840	-1.7	103	0.00	5.87- 6.87
4	MNX	1000.000	972.676	2.7	101	0.02	7.22- 8.22
5	1,3,5-Trinitrobenzene	1000.000	985.097	1.5	102	0.00	8.15- 9.15
6	RDX	1000.000	970.379	3.0	101	0.02	8.72- 9.72
7	1,3-Dinitrobenzene	1000.000	965.973	3.4	101	0.02	10.81-11.81
8	Nitrobenzene	1000.000	991.231	0.9	101	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	1000.000	980.454	2.0	102	0.02	12.87-13.87
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	992.527	0.7	103	0.02	14.63-15.63
12 S	3,4-Dinitrotoluene	1000.000	927.230	7.3	98	0.04	15.80-16.80
13	2,6-Dinitrotoluene	1000.000	944.785	5.5	101	0.02	16.22-17.22
14	2,4-Dinitrotoluene	1000.000	965.485	3.5	100	0.02	17.03-18.03
15	o-Nitrotoluene	1000.000	947.470	5.3	98	0.00	18.61-19.61
16	3,5-Dinitroaniline	1000.000	947.470	5.3	98	0.00	18.61-19.61
17	p-Nitrotoluene	1000.000	937.639	6.2	100	0.00	20.17-21.17
18	4-Amino-2,6-Dinitrotol	1000.000	968.348	3.2	100	0.00	20.76-21.76
19	m-Nitrotoluene	1000.000	971.031	2.9	101	0.00	21.75-22.75
20	2-Amino-4,6-Dinitrotol	1000.000	978.769	2.1	101	0.00	23.44-24.44
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	970.399	3.0	102	0.01	5.13- 6.13
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	972.554	2.7	104	0.01	5.70- 6.70
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	999.604	0.0	107	0.00	5.87- 6.87
4	MNX	1000.000	1013.019	-1.3	99	0.02	7.22- 8.22
5	1,3,5-Trinitrobenzene	1000.000	1012.462	-1.2	102	0.00	8.15- 9.15
6	RDX	1000.000	1007.632	-0.8	100	0.02	8.72- 9.72
7	1,3-Dinitrobenzene	1000.000	967.705	3.2	101	0.02	10.81-11.81
8	Nitrobenzene	1000.000	991.921	0.8	101	0.02	11.82-12.82
9	2,4,6-Trinitrotoluene	1000.000	976.330	2.4	101	0.02	12.87-13.87
10	Nitroglycerin	5000.000	4872.114	2.6	100	0.03	13.76-14.76
11	Tetryl	1000.000	993.668	0.6	103	0.02	14.64-15.64
12 S	3,4-Dinitrotoluene	1000.000	975.861	2.4	100	0.04	15.80-16.80
13	2,6-Dinitrotoluene	1000.000	998.994	0.1	100	0.02	16.22-17.22

Continuing Calibration Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2361-ECC2344
Lab FileID: GG058412.D

		Amount	Calc.	%Drift			
14	2,4-Dinitrotoluene	1000.000	991.859	0.8	102	0.02	17.03-18.03
15	o-Nitrotoluene	1000.000	952.878	4.7	99	0.00	18.60-19.60
16	3,5-Dinitroaniline	1000.000	952.878	4.7	99	0.00	18.60-19.60
17	p-Nitrotoluene	1000.000	1005.059	-0.5	104	0.00	20.17-21.17
18	4-Amino-2,6-Dinitrotol	1000.000	976.094	2.4	103	0.00	20.76-21.76
19	m-Nitrotoluene	1000.000	971.470	2.9	105	0.00	21.74-22.74
20	2-Amino-4,6-Dinitrotol	1000.000	976.761	2.3	99	0.00	23.44-24.44
		Amount	Calc.	%Drift			
21	PETN	5000.000	4682.444	6.4	97	0.00	25.35-26.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG058135.D 8330_RPB2.M Tue Feb 24 09:31:49 2015

6.6.10

6

Southeast

ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1A.ch
Acq On : 20-Feb-2015, 14:56:35 Operator: KISMETL
Sample : FA22032-1 Inst : G1315B
Misc : OP55030,GBB1248,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:57 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.23	1179840	2031023	530.821m	539.566m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.16%	107.91%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.92	2.91	23625	44761	12.525m	14.825m
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

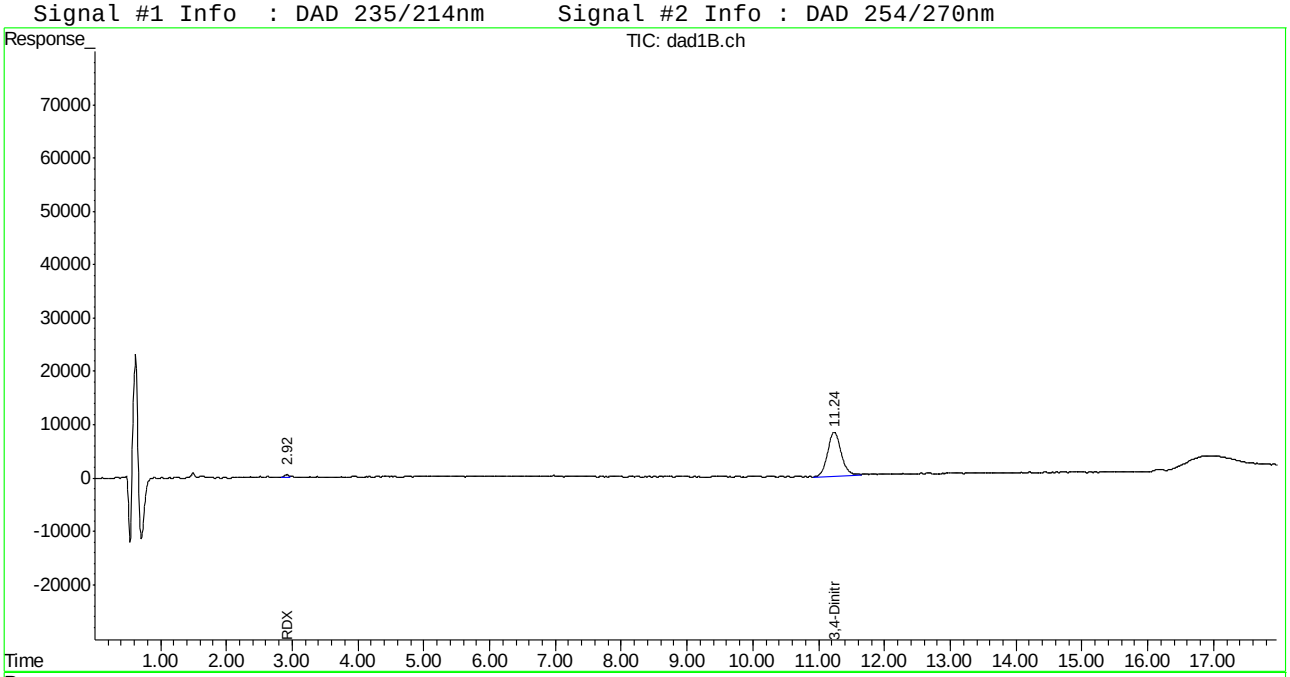
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046108.D 8330B_0107.M Wed Feb 25 10:57:27 2015 Page 1

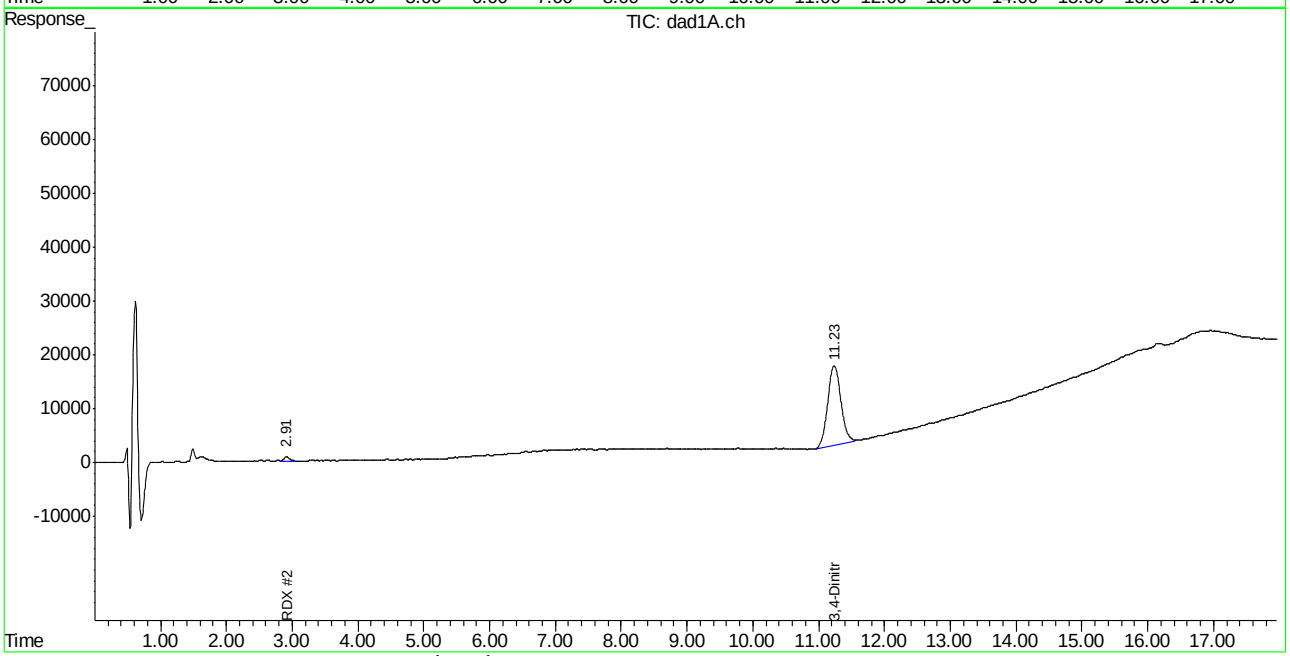
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046108.D\dad1A.ch
Acq On : 20-Feb-2015, 14:56:35 Operator: KISMETL
Sample : FA22032-1 Inst : G1315B
Misc : OP55030,GBB1248,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 25 10:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





BB046108.D 8330B_0107.M Wed Feb 25 10:57:27 2015 Page 2

Manual Integration Approval Summary

Sample Number: FA22032-1
Lab FileID: BB046108.D
Injection Time: 02/20/15 14:56
Method: SW846 8330A
Analyst approved: 02/25/15 11:01 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	2	2.91	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.23	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058410.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0223RPB2\GG058410.D\dad1A.ch
Acq On : 23-Feb-2015, 11:34:44 Operator: kismetl
Sample : FA22032-1cf Inst : G1315B
Misc : OP55030,GGG2361,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:47 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.33	16.33	3124511	6086081	540.251	547.320
	Spiked Amount 500.000	Range 72 - 145		Recovery =		108.05%	109.46%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
6)	RDX	9.23	9.26	59741	97636	12.410	10.989m
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

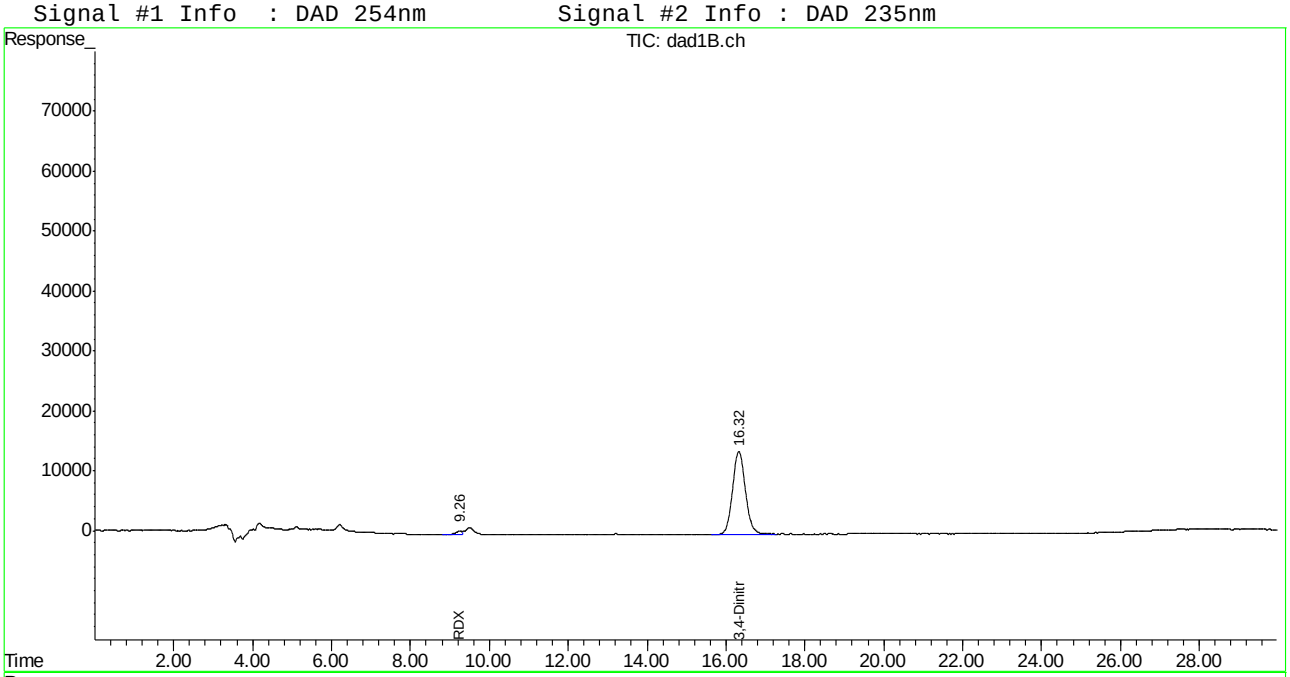
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058410.D 8330RPB.M Wed Feb 25 10:31:27 2015 Page 1

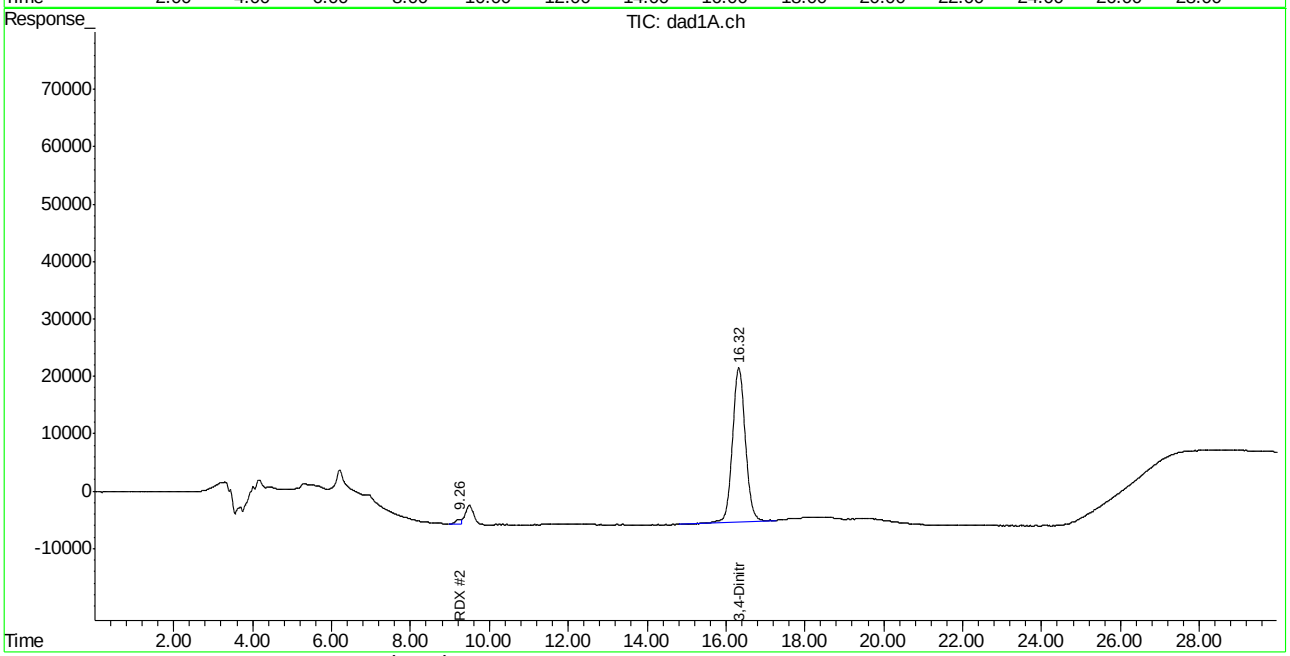
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058410.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0223RPB2\GG058410.D\dad1A.ch
Acq On : 23-Feb-2015, 11:34:44 Operator: kismetl
Sample : FA22032-1cf Inst : G1315B
Misc : OP55030,GGG2361,2.32,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:17 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: FA22032-1
Lab FileID: GG058410.D
Injection Time: 02/23/15 11:34
Method: SW846 8330A
Analyst approved: 02/25/15 11:01 Kismet Lugo
Supervisor approved: 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	2	9.26	Missed peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1A.ch
Acq On : 20-Feb-2015, 16:11:25 Operator: KISMETL
Sample : FA22032-2 Inst : G1315B
Misc : OP55030,GBB1248,2.40,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:00 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1191074	2053346	535.875m	545.496
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.18%	109.10%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	9.12	0	83012	N.D. d	66.570m
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

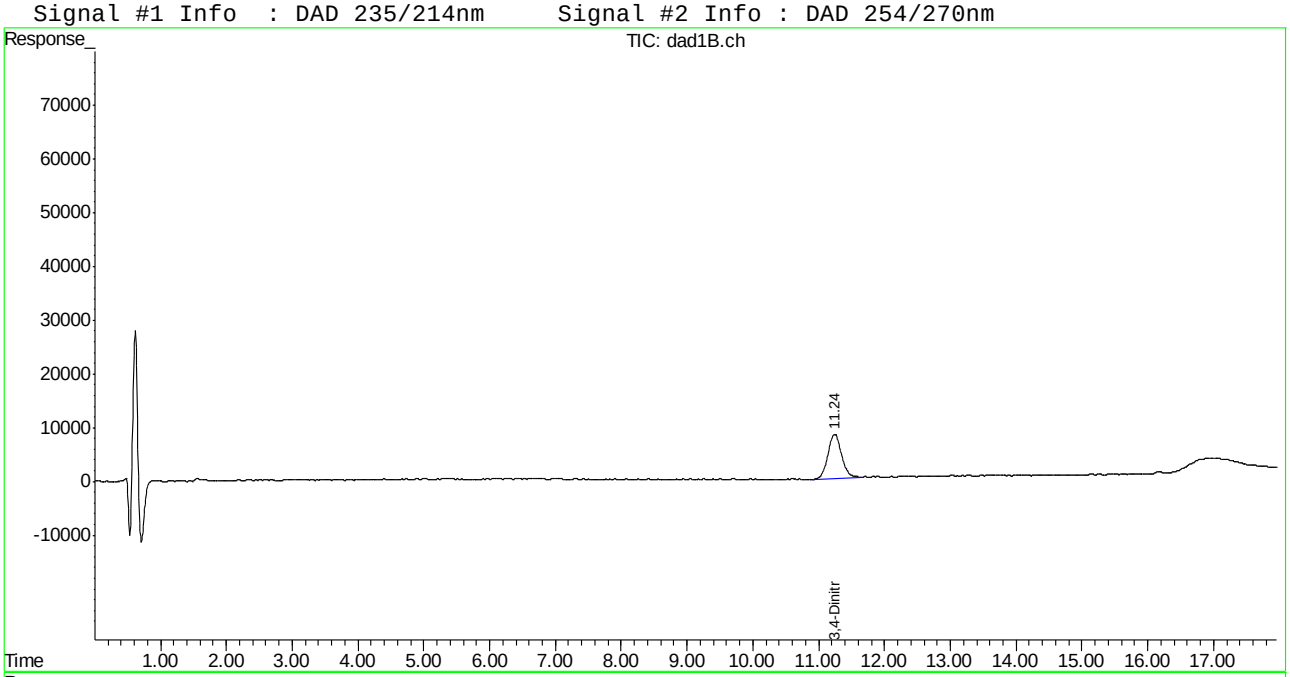
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046111.D 8330B_0107.M Mon Feb 23 10:33:48 2015

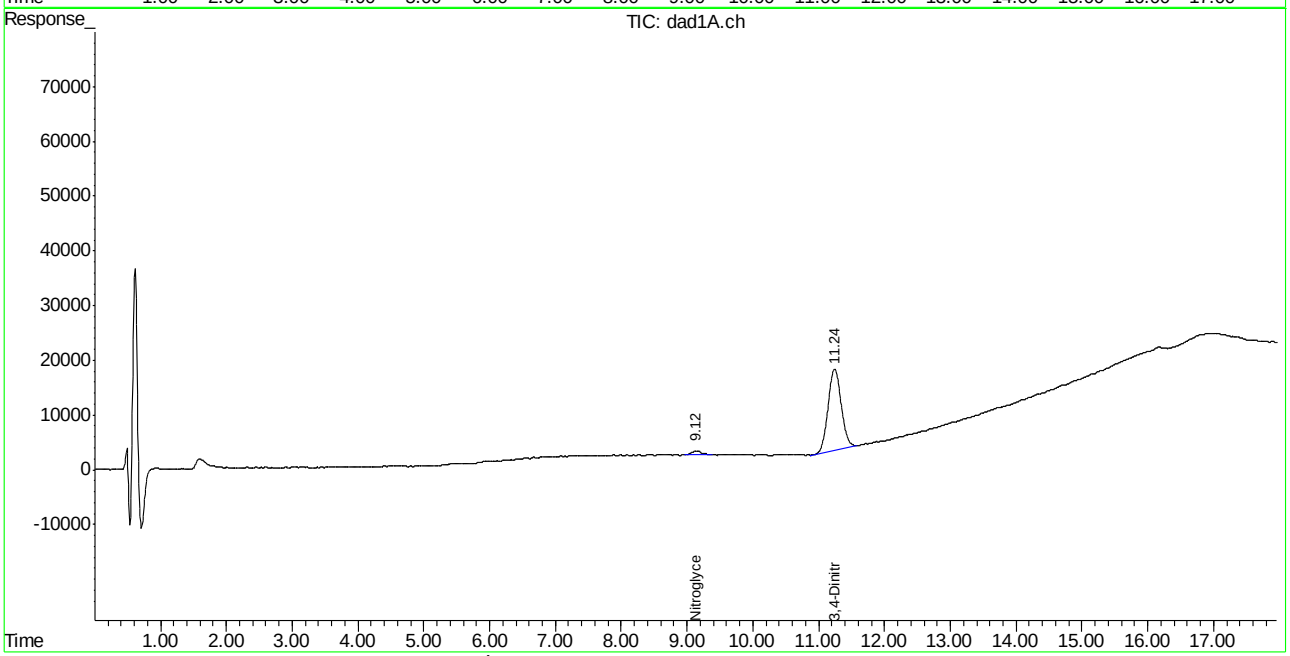
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046111.D\dad1A.ch
Acq On : 20-Feb-2015, 16:11:25 Operator: KISMETL
Sample : FA22032-2 Inst : G1315B
Misc : OP55030,GBB1248,2.40,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:48 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA22032-2
Lab FileID: BB046111.D
Injection Time: 02/20/15 16:11
Method: SW846 8330A
Analyst approved: 02/23/15 14:42 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitroglycerine	55-63-0	2	9.12	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1A.ch
Acq On : 20-Feb-2015, 16:36:23 Operator: KISMETL
Sample : FA22032-3 Inst : G1315B
Misc : OP55030,GBB1248,2.04,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:01 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1152620	2036963	518.574m	541.144m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		103.71%	108.23%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

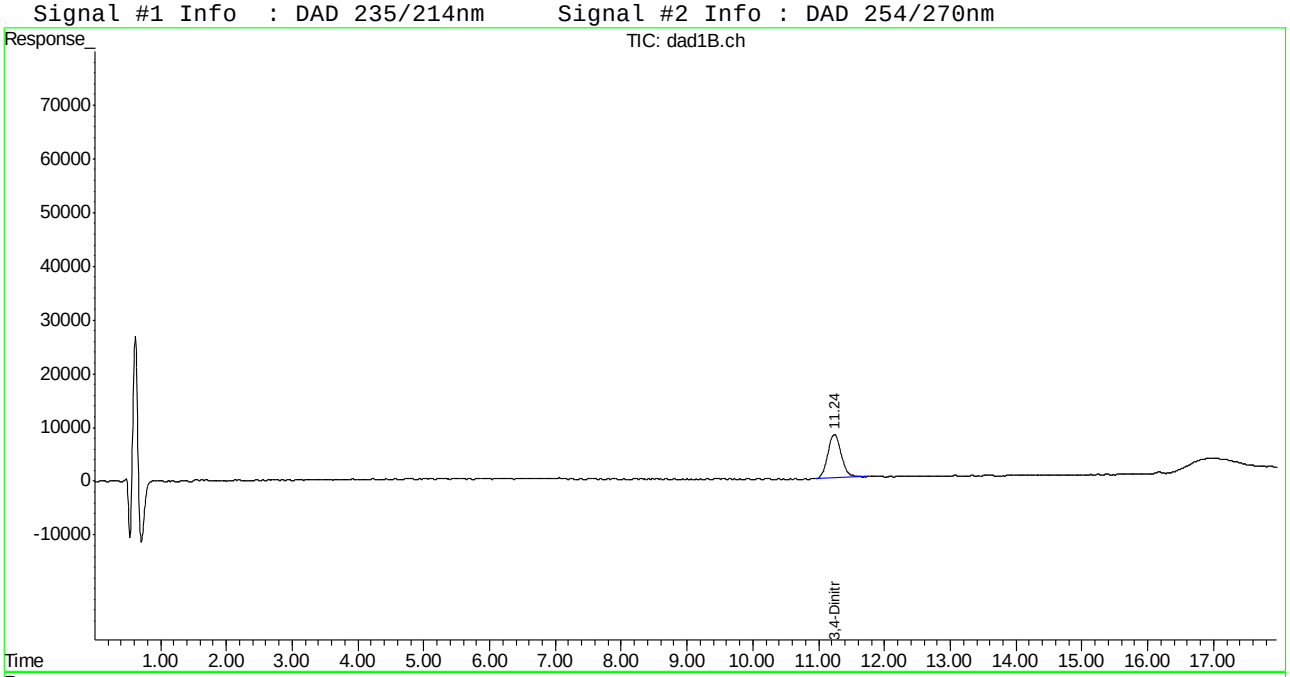
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046112.D 8330B_0107.M Mon Feb 23 10:33:49 2015 Page 1

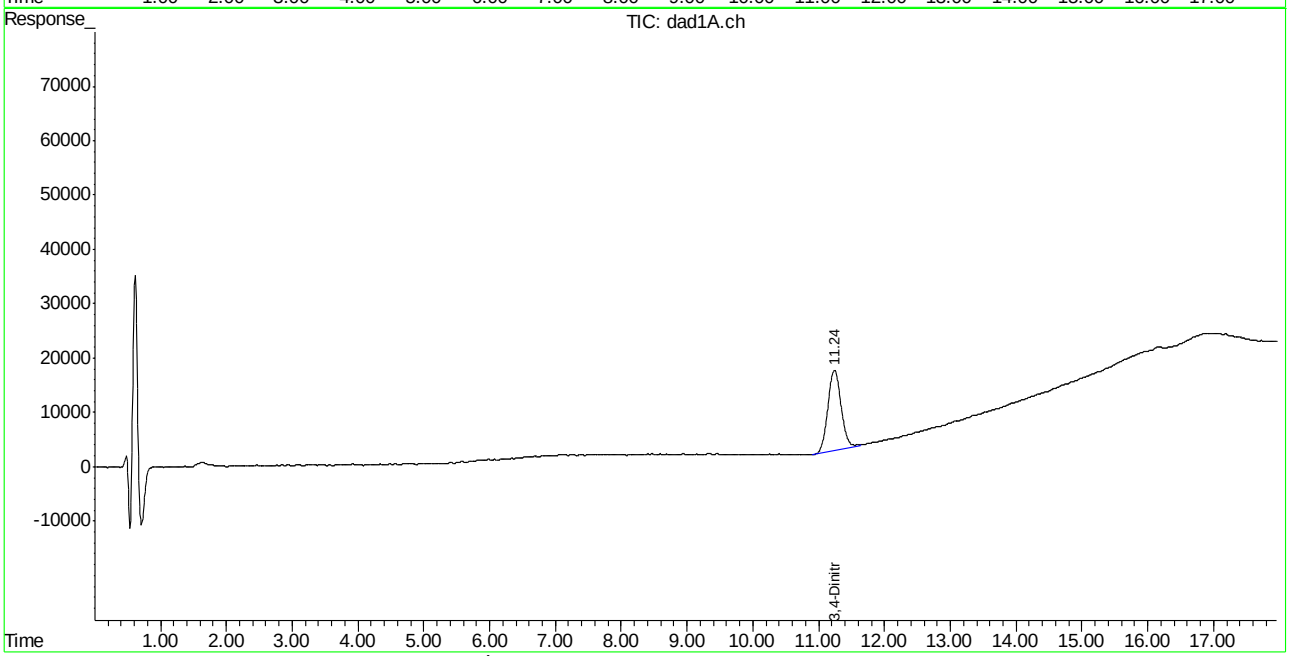
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046112.D\dad1A.ch
Acq On : 20-Feb-2015, 16:36:23 Operator: KISMETL
Sample : FA22032-3 Inst : G1315B
Misc : OP55030,GBB1248,2.04,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:49 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA22032-3	**Method:**	SW846 8330A
Lab FileID:	BB046112.D	**Analyst approved:**	02/23/15 14:42 Kismet Lugo
Injection Time:	02/20/15 16:36	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1A.ch
Acq On : 20-Feb-2015, 17:26:15 Operator: KISMETL
Sample : FA22032-4 Inst : G1315B
Misc : OP55030,GBB1248,2.16,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:03 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1192257	2056890	536.407m	546.438
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.28%	109.29%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

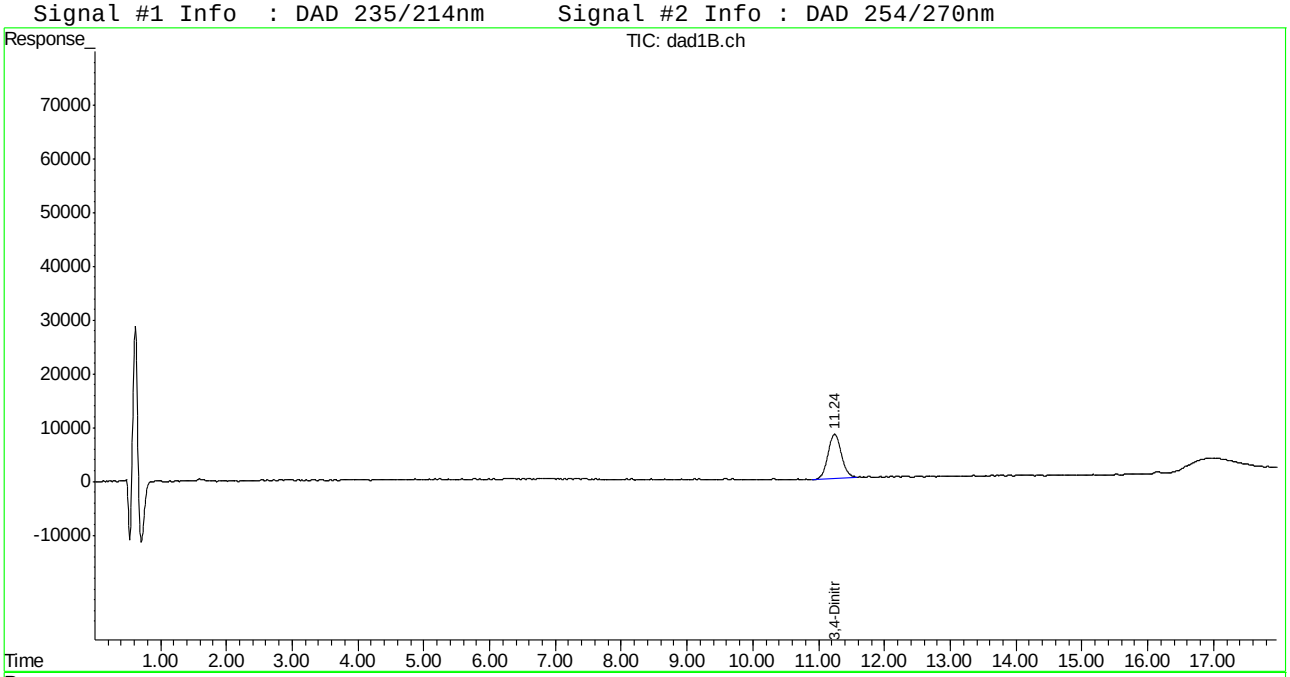
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046114.D 8330B_0107.M Mon Feb 23 10:33:51 2015 Page 1

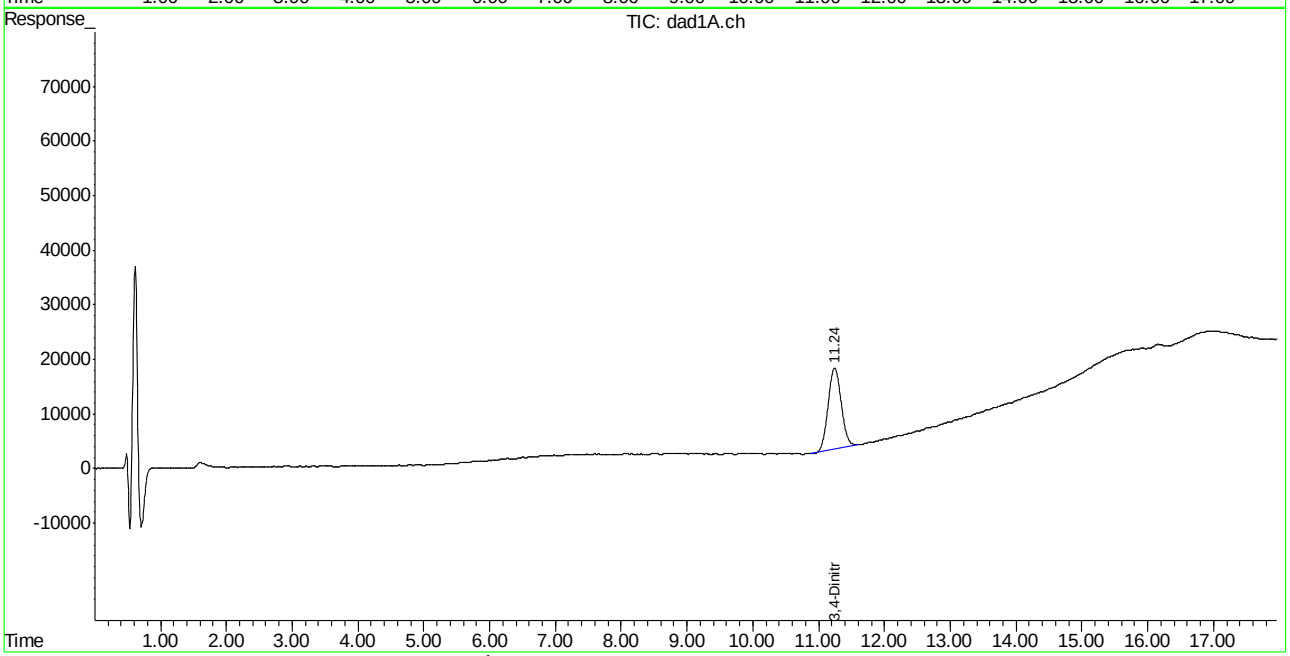
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046114.D\dad1A.ch
Acq On : 20-Feb-2015, 17:26:15 Operator: KISMETL
Sample : FA22032-4 Inst : G1315B
Misc : OP55030,GBB1248,2.16,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:51 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA22032-4	**Method:**	SW846 8330A
Lab FileID:	BB046114.D	**Analyst approved:**	02/23/15 14:42 Kismet Lugo
Injection Time:	02/20/15 17:26	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.24	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1A.ch
Acq On : 20-Feb-2015, 23:15:39 Operator: KISMETL
Sample : FA22032-5 Inst : G1315B
Misc : OP55030,GBB1248,2.13,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:17 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.20	11.20	1208519	2084487	543.724	553.769m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	108.74%	110.75%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	9.12	0	782482	N.D. d	627.494
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

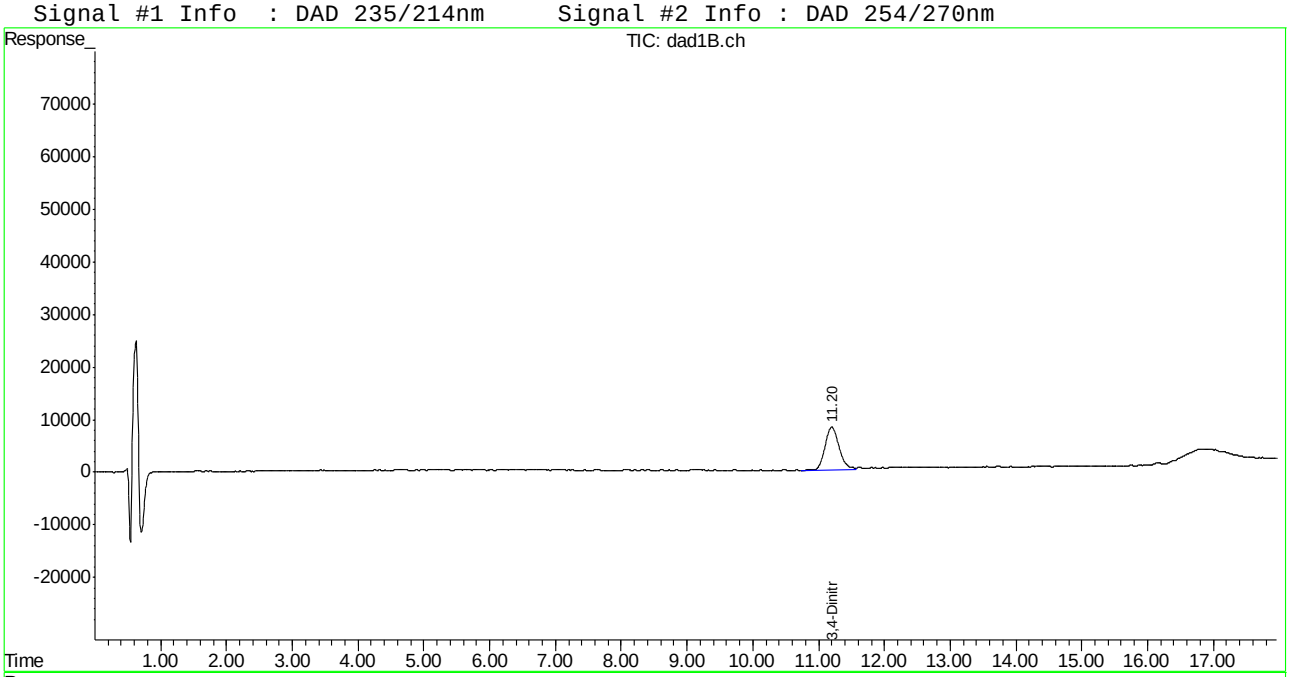
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046128.D 8330B_0107.M Mon Feb 23 10:34:05 2015 Page 1

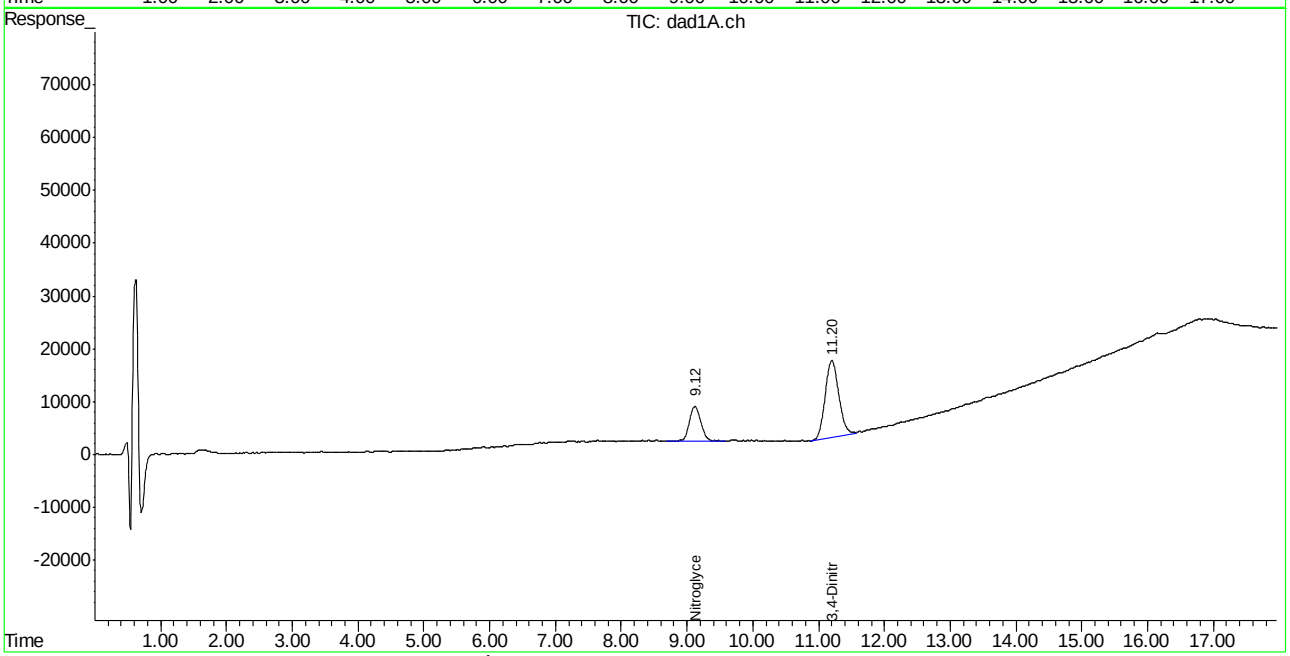
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046128.D\dad1A.ch
Acq On : 20-Feb-2015, 23:15:39 Operator: KISMETL
Sample : FA22032-5 Inst : G1315B
Misc : OP55030,GBB1248,2.13,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:52 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA22032-5	**Method:**	SW846 8330A
Lab FileID:	BB046128.D	**Analyst approved:**	02/23/15 14:42 Kismet Lugo
Injection Time:	02/20/15 23:15	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.20	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1A.ch
Acq On : 20-Feb-2015, 23:40:35 Operator: KISMETL
Sample : FA22032-6 Inst : G1315B
Misc : OP55030,GBB1248,2.10,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:18 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.19	11.20	1184214	2026462	532.788m	538.354
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.56%	107.67%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

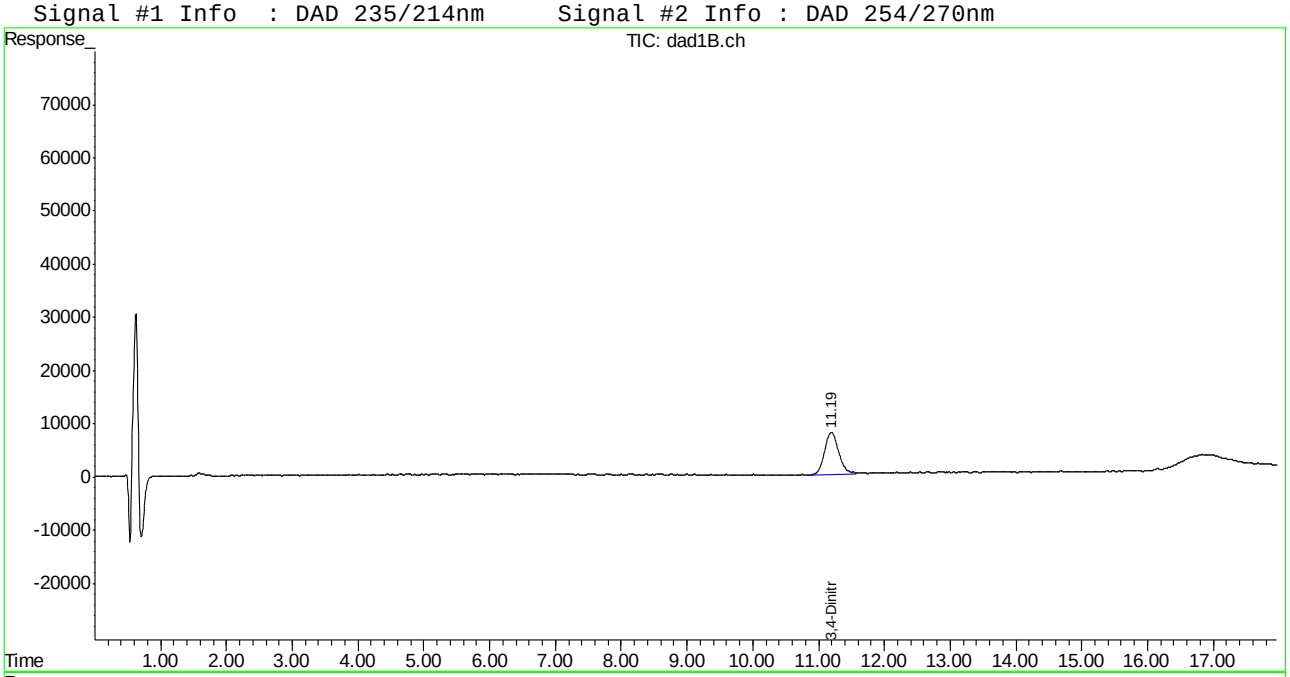
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046129.D 8330B_0107.M Mon Feb 23 10:34:06 2015 Page 1

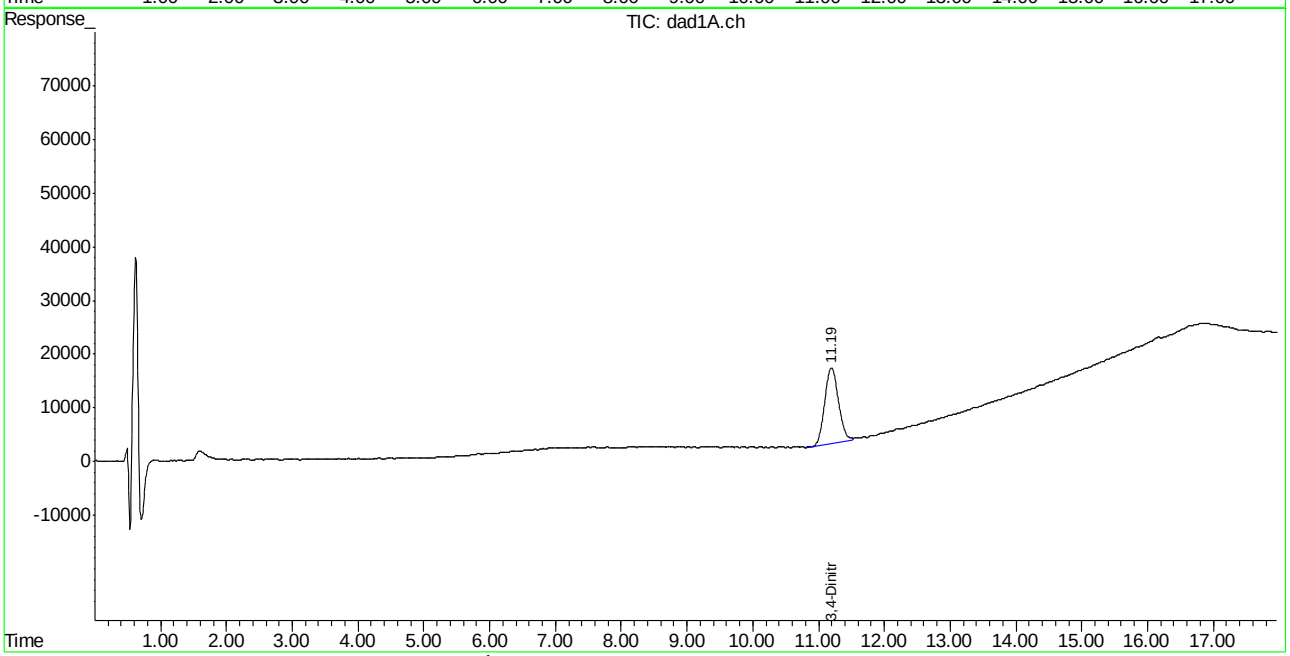
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046129.D\dad1A.ch
Acq On : 20-Feb-2015, 23:40:35 Operator: KISMETL
Sample : FA22032-6 Inst : G1315B
Misc : OP55030,GBB1248,2.10,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:53 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES
FA22032

Manual Integration Approval Summary

Sample Number: FA22032-6
Lab FileID: BB046129.D
Injection Time: 02/20/15 23:40
Method: SW846 8330A
Analyst approved: 02/23/15 14:42 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.19	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1A.ch
Acq On : 21-Feb-2015, 00:05:35 Operator: KISMETL
Sample : FA22032-7 Inst : G1315B
Misc : OP55030,GBB1248,2.14,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:19 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.19	11.19	1154222	2014639	519.295m	535.213m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		103.86%	107.04%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

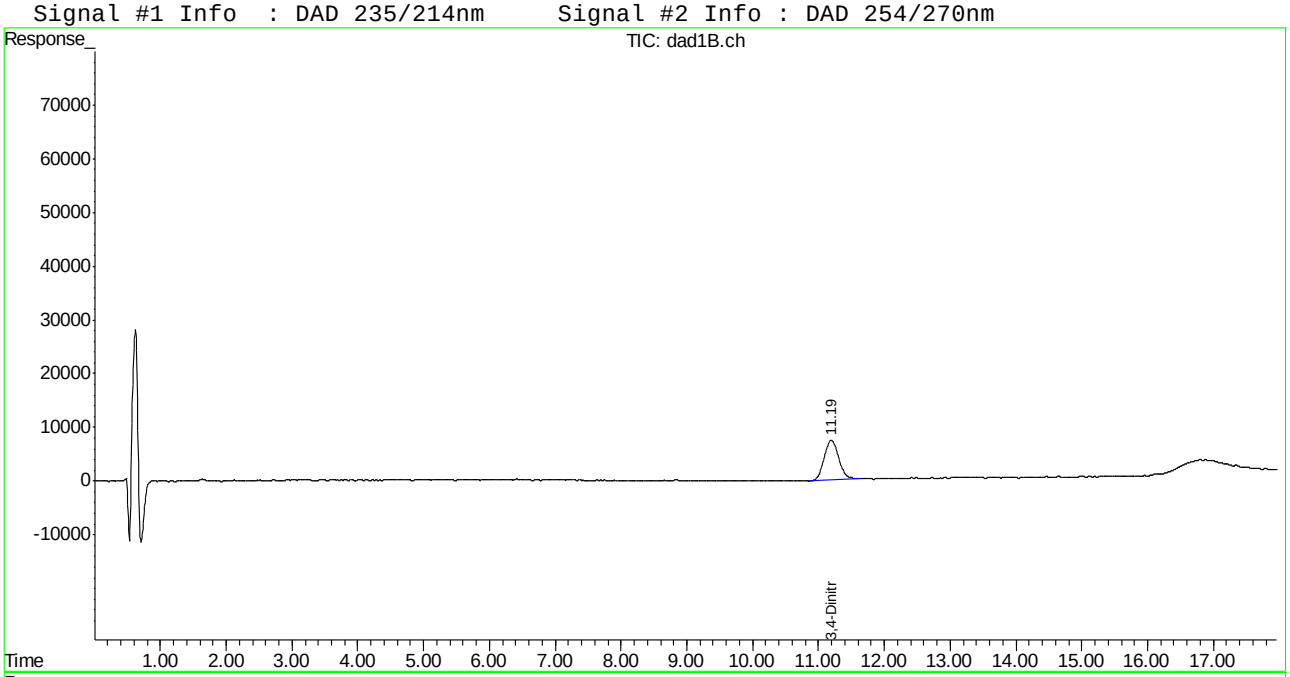
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046130.D 8330B_0107.M Mon Feb 23 10:34:07 2015 Page 1

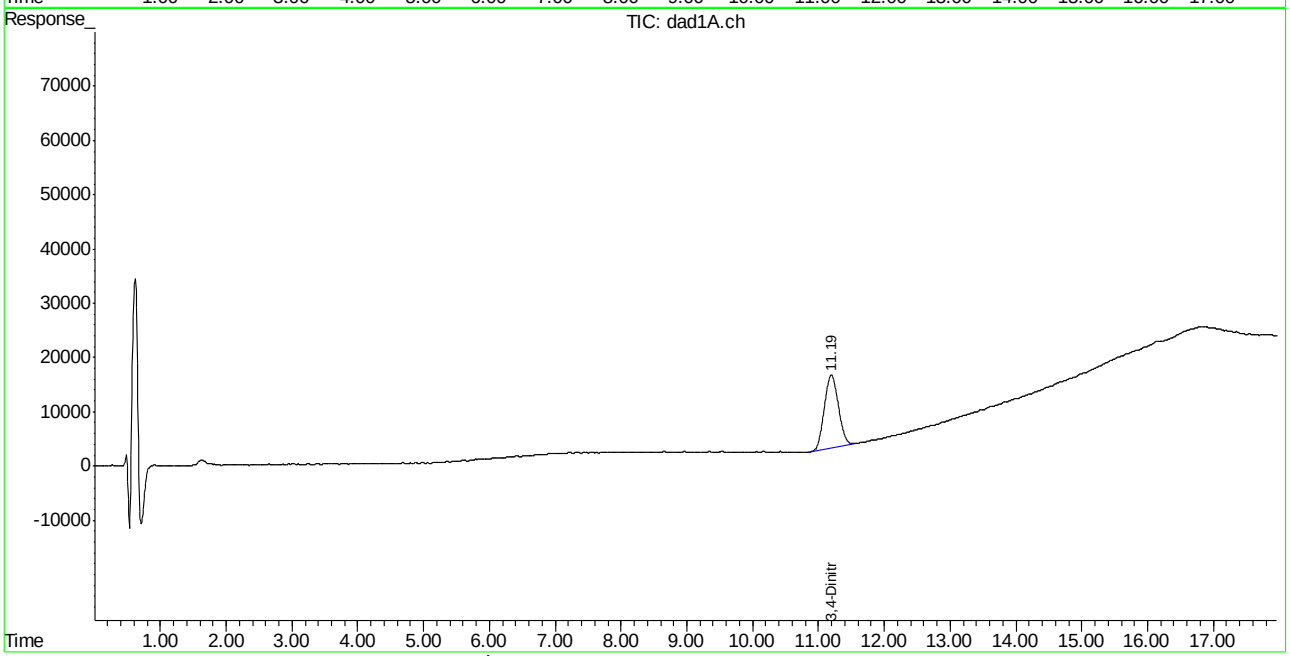
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046130.D\dad1A.ch
Acq On : 21-Feb-2015, 00:05:35 Operator: KISMETL
Sample : FA22032-7 Inst : G1315B
Misc : OP55030,GBB1248,2.14,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:54 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: FA22032-7
Lab FileID: BB046130.D
Injection Time: 02/21/15 00:05
Method: SW846 8330A
Analyst approved: 02/23/15 14:42 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.19	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.19	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1A.ch
Acq On : 20-Feb-2015, 14:31:34 Operator: KISMETL
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.22	11.23	1165180	2058758	524.225m	546.934m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		104.85%	109.39%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

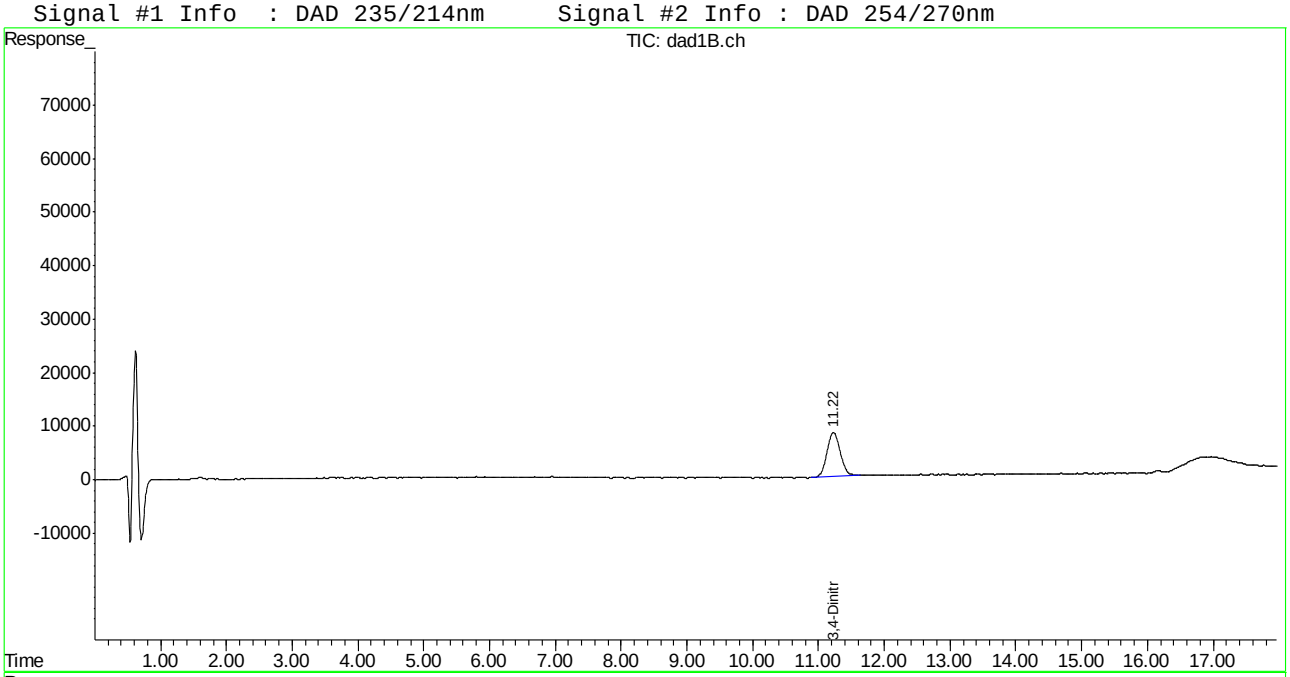
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046107.D 8330B_0107.M Mon Feb 23 10:33:44 2015 Page 1

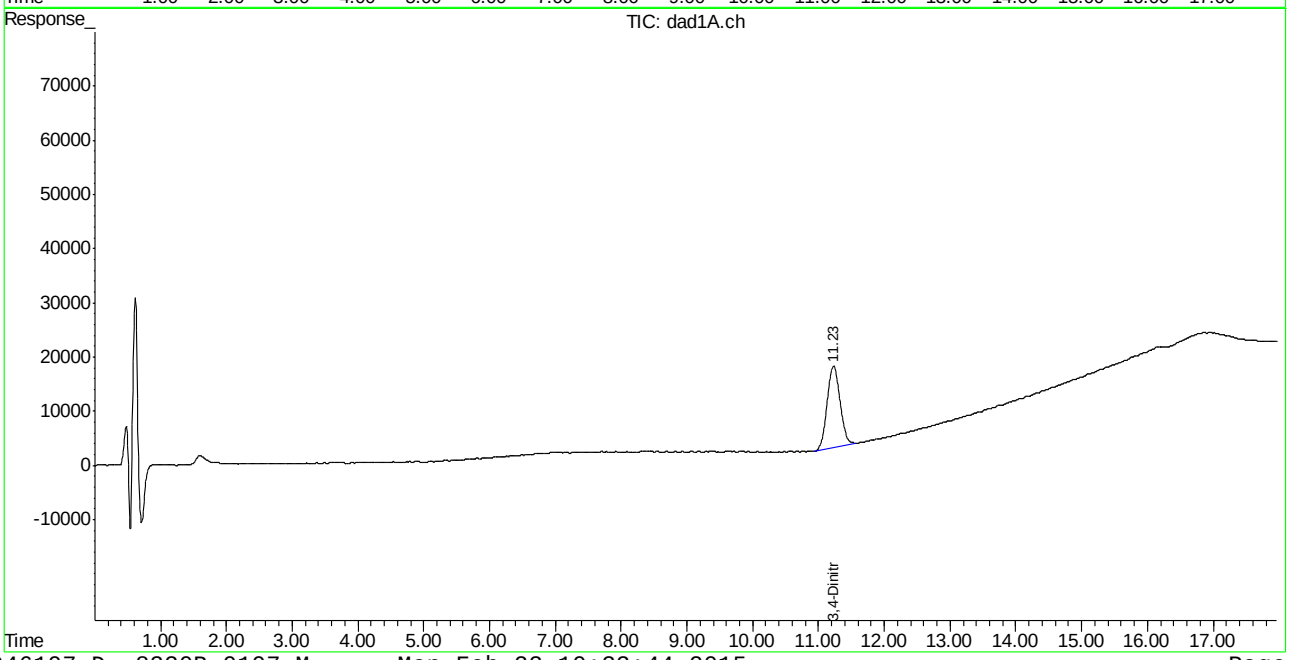
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046107.D\dad1A.ch
Acq On : 20-Feb-2015, 14:31:34 Operator: KISMETL
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:48 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP55030-MB
Lab FileID: BB046107.D
Injection Time: 02/20/15 14:31
Method: SW846 8330A
Analyst approved: 02/23/15 14:39 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.22	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.23	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058409.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0223RPB2\GG058409.D\dad1A.ch
Acq On : 23-Feb-2015, 11:02:41 Operator: kismetl
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:46 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.31	16.31	3149593	6147169	544.587	552.814m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	108.92%	110.56%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
6)	RDX	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D. d	N.D. d
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

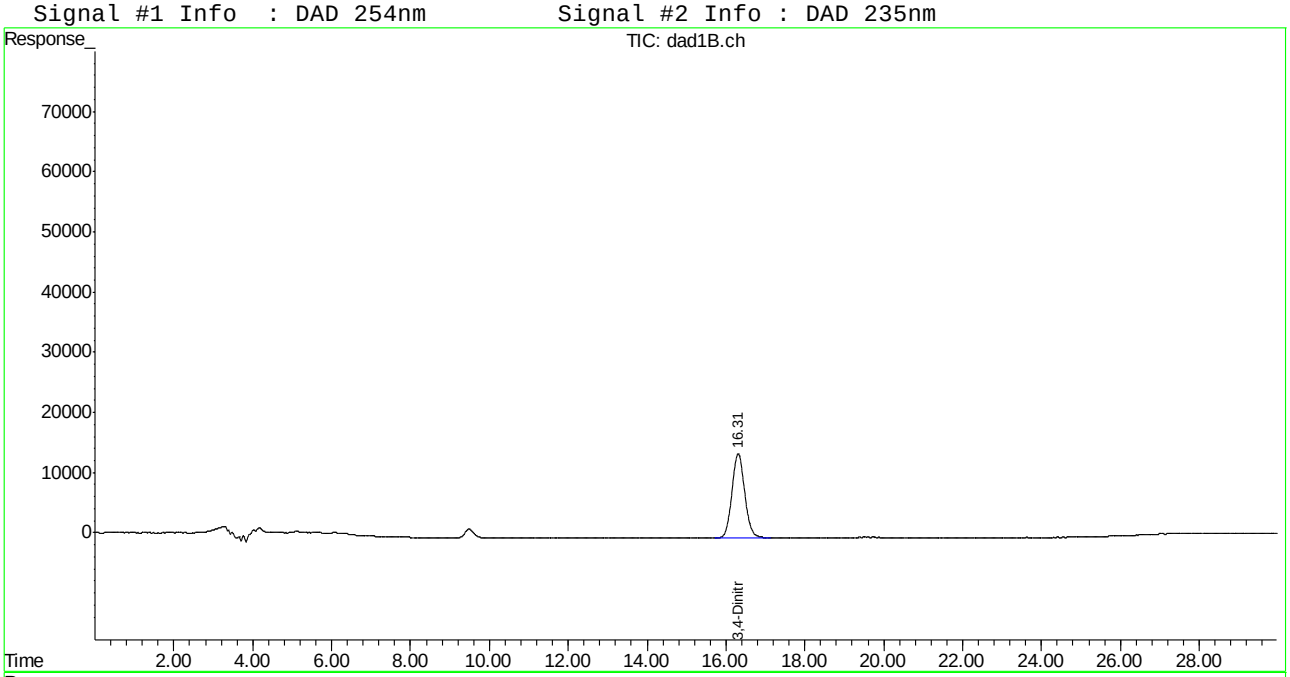
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058409.D 8330RPB.M Wed Feb 25 10:31:26 2015 Page 1

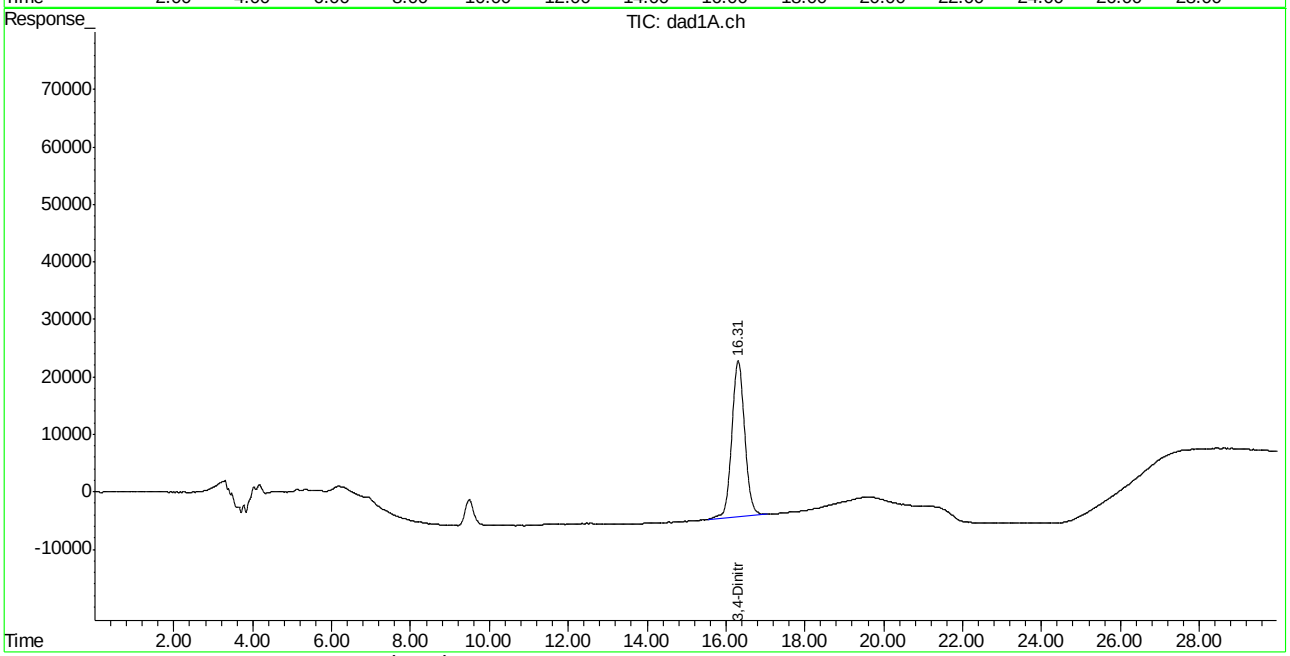
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058409.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0223RPB2\GG058409.D\dad1A.ch
Acq On : 23-Feb-2015, 11:02:41 Operator: kismetl
Sample : op55030-mb Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:15 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: OP55030-MB
Lab FileID: GG058409.D
Injection Time: 02/23/15 11:02
Method: SW846 8330A
Analyst approved: 02/25/15 10:45 Kismet Lugo
Supervisor approved: 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	16.31	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1A.ch
Acq On : 20-Feb-2015, 14:06:35 Operator: KISMETL
Sample : op55030-bs Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:55 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.21	11.22	1106495	1874429	497.822	497.965
	Spiked Amount 500.000	Range 72 - 134		Recovery =		99.56%	99.59%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	848133	2369885	526.768	538.283
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.90	2.91	912421	1497005	483.744m	495.822
6)	1,3,5-Trinitrobe	4.61	4.61	2096738	4081545	513.965	523.836
7)	1,3-Dinitrobenze	5.88	5.88	2440378	1719404	456.589	481.452
8)	3,5-Dinitroanili	6.32	6.31	1989277	3347059	436.052	442.719m
9)	Nitrobenzene	7.47	7.47	1601696	1541534	522.208	519.294m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.47	9.47	1451324	2234616	536.300	516.302
12)	2,4,6-Trinitroto	9.90	9.90	1725193	2026963	472.246	479.391
13)	2-Amino-4,6-Dini	10.35	10.35	1617044	2316587	533.190	508.640
14)	4-Amino-2,6-Dini	10.83	10.83	1114140	2160796	528.951	458.524
16)	2,4-Dinitrotolue	11.82	11.83	2365682	1524216	512.163	527.838
17)	2,6-Dinitrotolue	12.23	12.23	1330774	1742872	517.728	526.095
18)	o-Nitrotoluene	14.42	14.42	1147096	1568616	502.040	521.200m
19)	p-Nitrotoluene	14.81	14.81	1769107	1461091	490.568	498.053
20)	m-Nitrotoluene	15.35	15.35	1679891	1992022	521.348	550.977
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

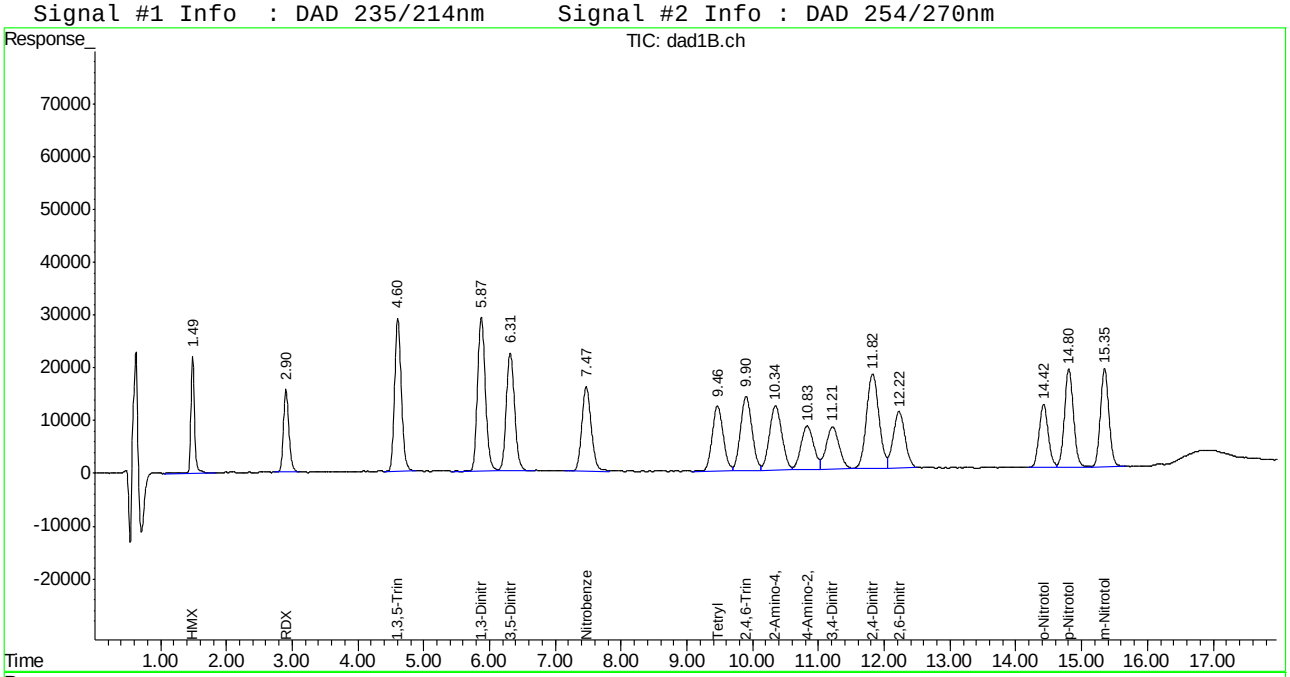
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046106.D 8330B_0107.M Mon Feb 23 10:33:43 2015

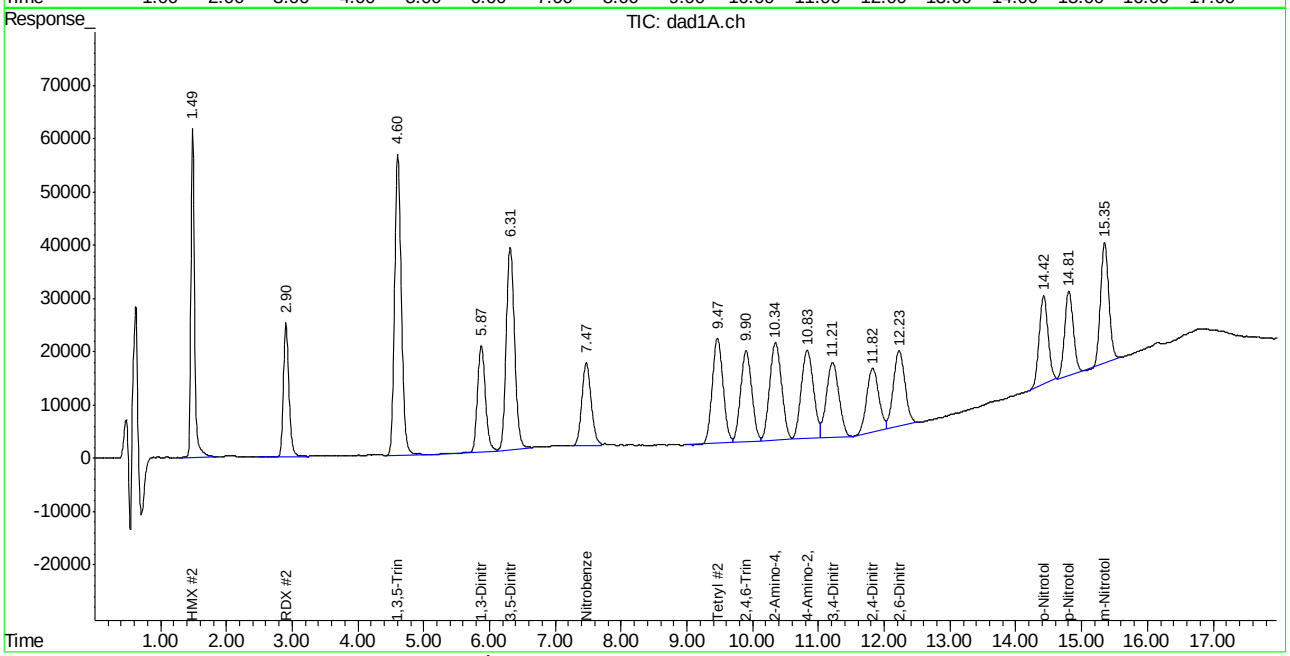
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046106.D\dad1A.ch
Acq On : 20-Feb-2015, 14:06:35 Operator: KISMETL
Sample : op55030-bs Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:47 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: OP55030-BS
Lab FileID: BB046106.D
Injection Time: 02/20/15 14:06
Method: SW846 8330A
Analyst approved: 02/23/15 14:39 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	1	2.90	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.42	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1A.ch
Acq On : 20-Feb-2015, 15:21:31 Operator: KISMETL
Sample : op55030-ms Inst : G1315B
Misc : OP55030,GBB1248,2.09,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:58 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1123090	1916930	505.288	509.256
	Spiked Amount 500.000	Range 72 - 134		Recovery =		101.06%	101.85%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	833561	2449410	517.718m	556.345
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.91	2.91	868585	1377032	460.503	456.086
6)	1,3,5-Trinitrobe	4.61	4.61	2092868	4039017	513.017	518.378
7)	1,3-Dinitrobenze	5.89	5.89	2428948	1649423	454.450	461.857
8)	3,5-Dinitroanili	6.33	6.32	1948457	3298746	427.104	436.329m
9)	Nitrobenzene	7.48	7.48	1610131	1546115	524.958	520.838m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.48	9.49	1400707	2176023	517.596	502.765
12)	2,4,6-Trinitroto	9.92	9.92	1719273	2013773	470.625	476.271
13)	2-Amino-4,6-Dini	10.37	10.37	1619350	2318454	533.951	509.050
14)	4-Amino-2,6-Dini	10.85	10.85	1113227	2144934	528.517	455.158
16)	2,4-Dinitrotolue	11.84	11.85	2362140	1521374	511.396	526.854
17)	2,6-Dinitrotolue	12.25	12.25	1346007	1749140	523.654	527.987
18)	o-Nitrotoluene	14.44	14.44	1156166	1583782	506.009	526.239m
19)	p-Nitrotoluene	14.82	14.82	1777541	1465878	492.906	499.685
20)	m-Nitrotoluene	15.36	15.37	1692435	1945365	525.241	538.072
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

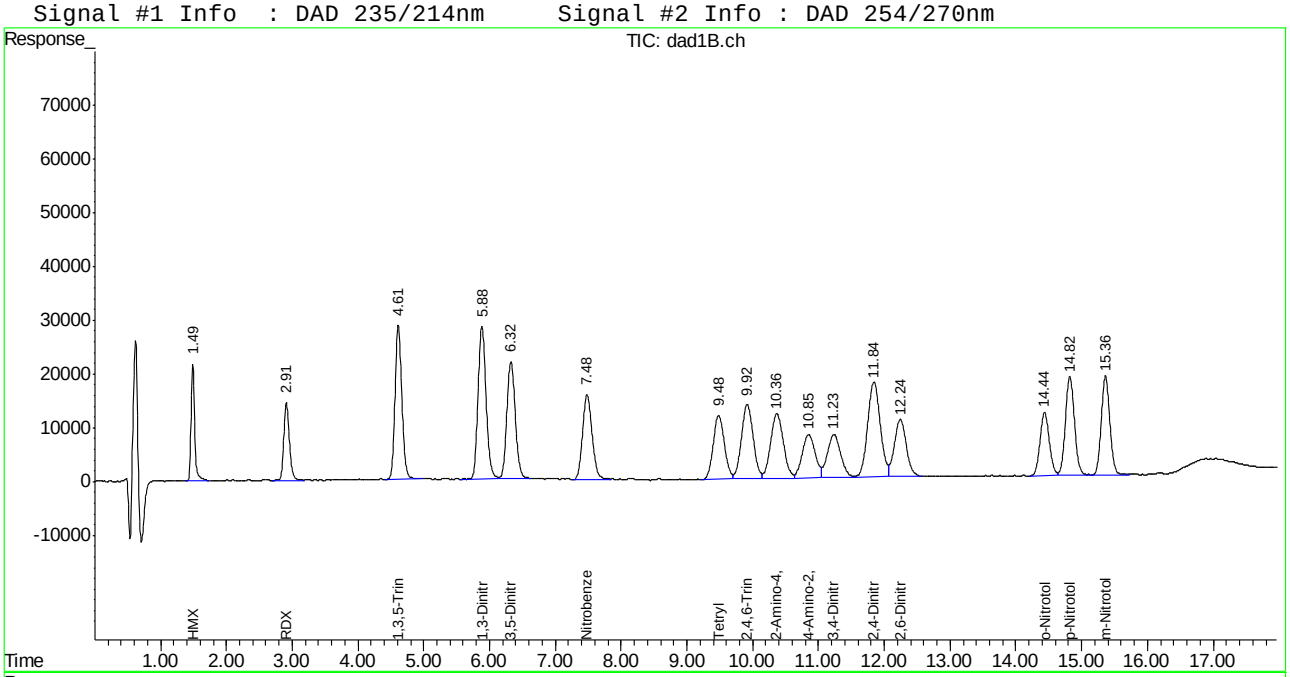
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046109.D 8330B_0107.M Mon Feb 23 10:33:46 2015

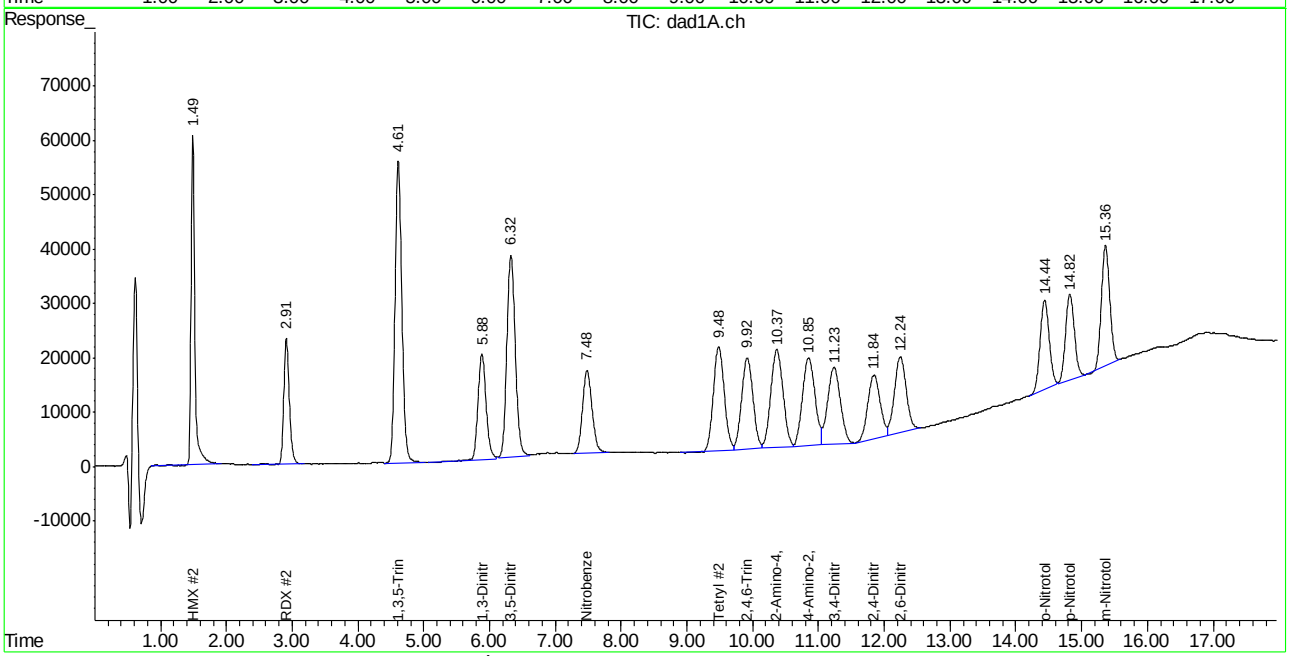
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046109.D\dad1A.ch
Acq On : 20-Feb-2015, 15:21:31 Operator: KISMETL
Sample : op55030-ms Inst : G1315B
Misc : OP55030,GBB1248,2.09,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:58 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP55030-MS
Lab FileID: BB046109.D
Injection Time: 02/20/15 15:21
Method: SW846 8330A
Analyst approved: 02/25/15 11:02 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.32	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.48	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.44	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1A.ch
Acq On : 20-Feb-2015, 15:46:27 Operator: KISMETL
Sample : op55030-msd Inst : G1315B
Misc : OP55030,GBB1248,2.06,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:59 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.24	11.24	1138759	1867064	512.338	496.008
	Spiked Amount 500.000	Range 72 - 134		Recovery =		102.47%	99.20%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.49	1.49	876608	2427963	544.454	551.474
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.91	2.91	874705	1410118	463.748	467.044m
6)	1,3,5-Trinitrobe	4.62	4.62	2147082	4104570	526.306	526.791
7)	1,3-Dinitrobenze	5.89	5.89	2482528	1664310	464.475	466.025
8)	3,5-Dinitroanili	6.33	6.33	2001621	3369953	438.758	445.747m
9)	Nitrobenzene	7.49	7.48	1620848	1559766	528.452	525.436m
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	9.49	9.49	1430538	2296327	528.619	530.560
12)	2,4,6-Trinitroto	9.92	9.92	1756357	2081513	480.777	492.292
13)	2-Amino-4,6-Dini	10.37	10.37	1650071	2374713	544.080	521.402
14)	4-Amino-2,6-Dini	10.86	10.85	1151159	2201547	546.526	467.171
16)	2,4-Dinitrotolue	11.85	11.85	2462959	1557969	533.223	539.527
17)	2,6-Dinitrotolue	12.24	12.25	1433112	1784885	557.542	538.777
18)	o-Nitrotoluene	14.44	14.44	1190517	1576120	521.044	523.694m
19)	p-Nitrotoluene	14.82	14.83	1808281	1498523	501.431	510.813
20)	m-Nitrotoluene	15.37	15.37	1737885	1999265	539.347	552.980
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

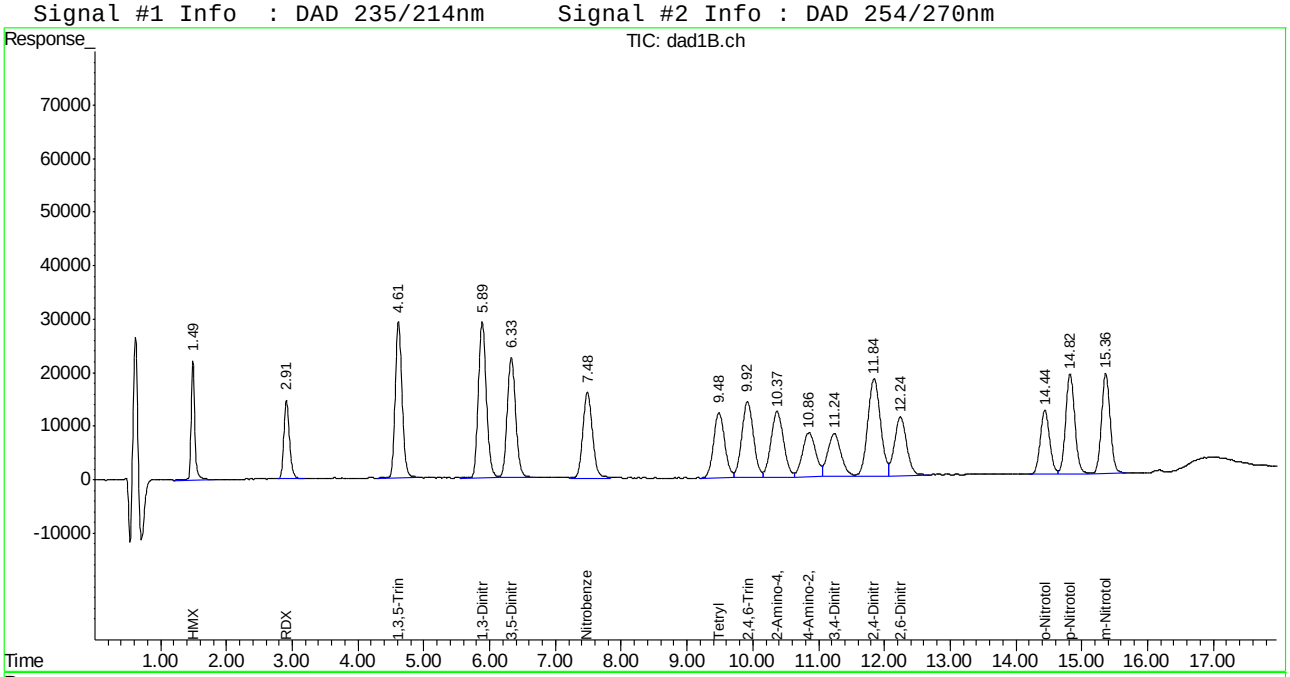
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046110.D 8330B_0107.M Mon Feb 23 10:33:47 2015 Page 1

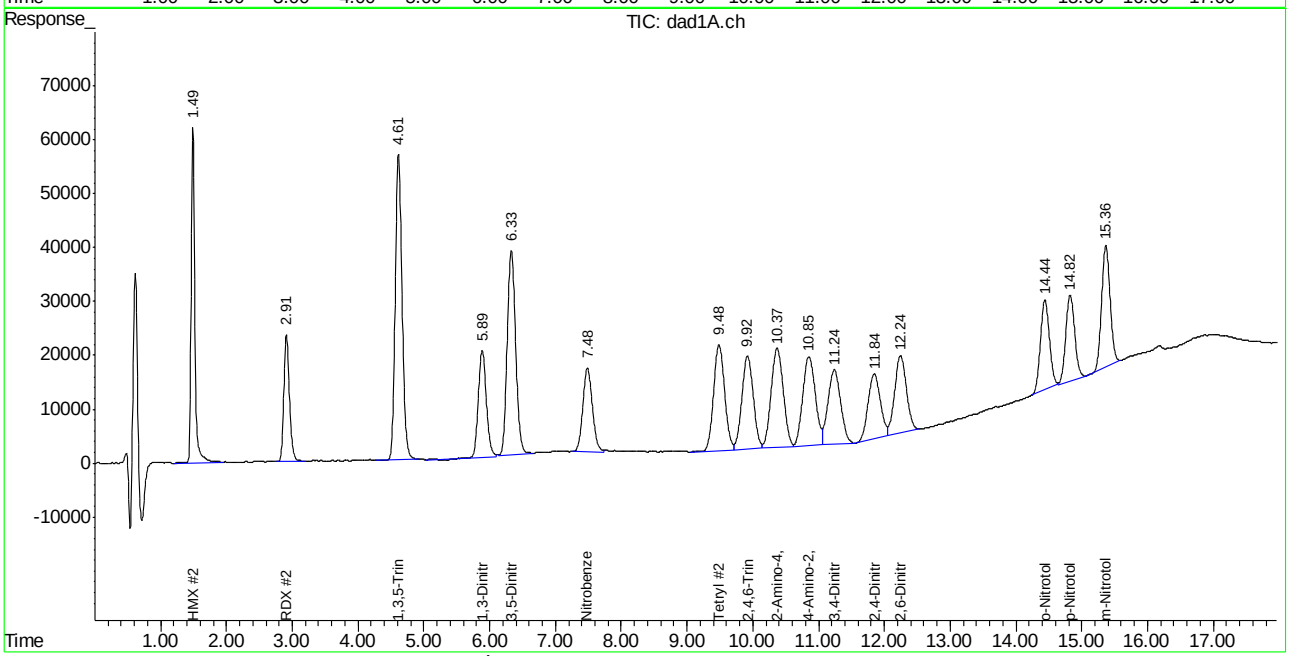
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046110.D\dad1A.ch
Acq On : 20-Feb-2015, 15:46:27 Operator: KISMETL
Sample : op55030-msd Inst : G1315B
Misc : OP55030,GBB1248,2.06,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 8:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP55030-MSD
Lab FileID: BB046110.D
Injection Time: 02/20/15 15:46
Method: SW846 8330A
Analyst approved: 02/25/15 11:02 Kismet Lugo
Supervisor approved: 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
RDX	121-82-4	2	2.91	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.33	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.48	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.44	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1A.ch
Acq On : 23-Jan-2015, 08:15:29 Operator: KISMETL
Sample : ic1235-20 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:39 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.28	11.28	47776	47072	21.093m	14.351m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.22%#	2.87%#
	Target Compounds						
1)	TNX	1.38	1.38	61405	102591	19.261m	21.746m
2)	HMX	1.50	1.50	36865	94986	22.597	21.087
3)	DNX	1.75	1.75	57337	102668	19.420m	21.934m
4)	MNX	2.33	2.34	52533	72696	20.782m	19.520
5)	RDX	2.94	2.93	40810	67053	21.221m	22.724m
6)	1,3,5-Trinitrobe	4.63	4.63	85269	157803	20.989m	19.884m
7)	1,3-Dinitrobenze	5.91	5.92	113524	72452	21.801m	19.519m
8)	3,5-Dinitroanili	6.35	6.36	100297	159178	21.621m	19.632m
9)	Nitrobenzene	7.51	7.51	54710	55238	17.106	17.696m
10)	Nitroglycerin	0.00	9.17	0	124338	N.D.	104.809m#
11)	Tetryl	9.53	9.53	50655	83490	17.608m	17.705m
12)	2,4,6-Trinitroto	9.95	9.97	73440	73501	20.779m	18.151m
13)	2-Amino-4,6-Dini	10.45	10.45	51038	86163	16.652m	20.346m
14)	4-Amino-2,6-Dini	10.90	10.92	34830	64599	16.127m	14.945m
16)	2,4-Dinitrotolue	11.87	11.94	82175	52269	18.130m	20.624m
17)	2,6-Dinitrotolue	12.26	12.29	44703	68629	16.861m	21.770m
18)	o-Nitrotoluene	14.49	14.56	44783	49876	20.061m	16.201m
19)	p-Nitrotoluene	14.88	14.89	78161	64632	22.105m	22.937m
20)	m-Nitrotoluene	15.39	15.42	73102	73881	22.980m	20.184m
21)	PETN	0.00	16.91	0	146280	N.D. d	99.091m

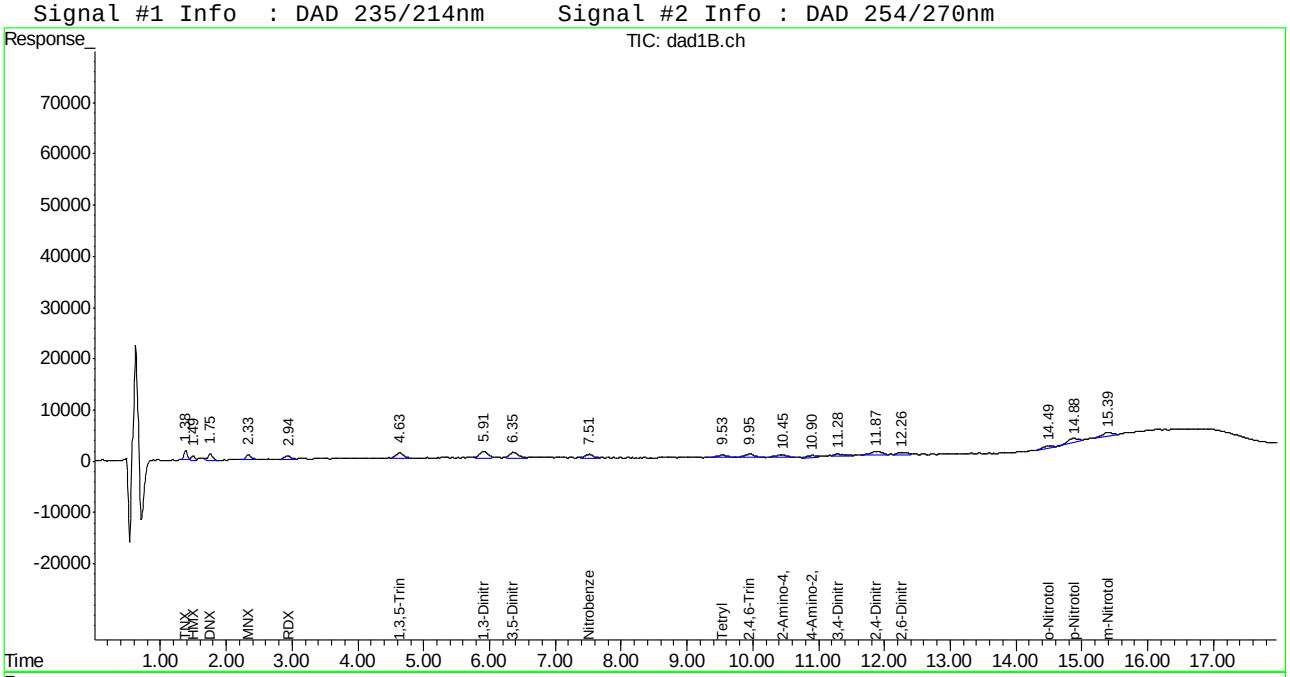
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045814.D 8330B_0107.M Fri Jan 23 14:50:20 2015 Page 1

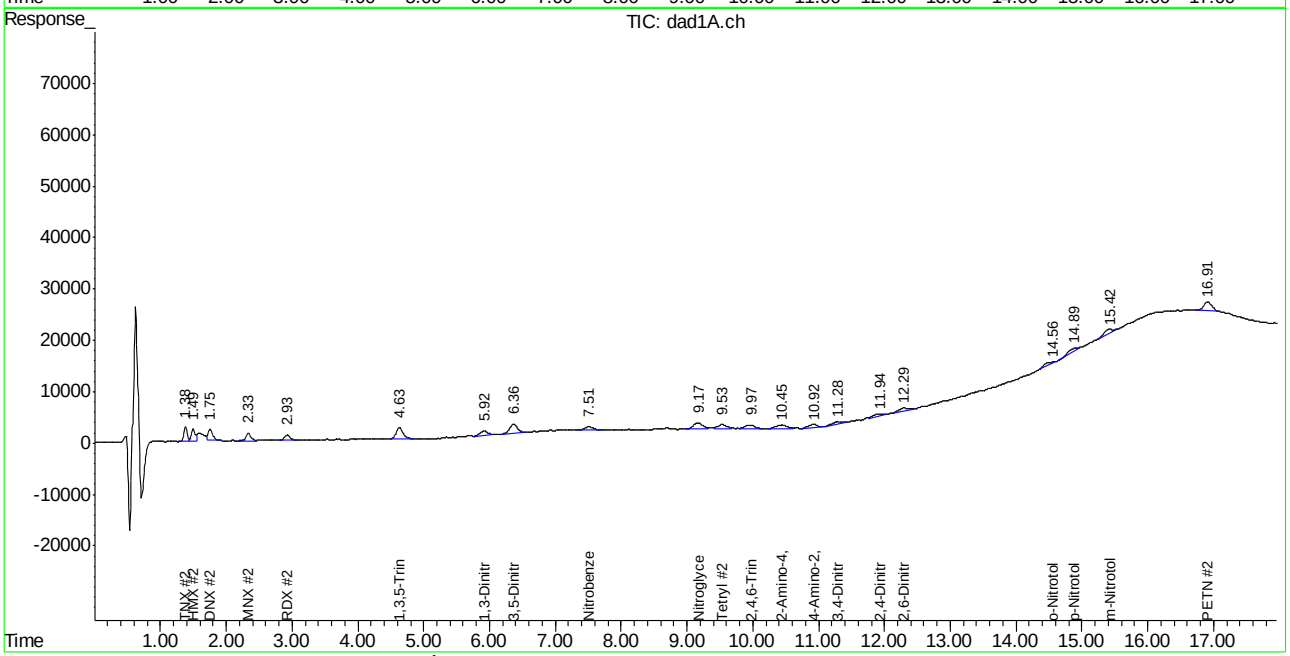
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045814.D\dad1A.ch
Acq On : 23-Jan-2015, 08:15:29 Operator: KISMETL
Sample : ic1235-20 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:56 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045814.D
Injection Time: 01/23/15 08:15
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.38	Poorly defined baseline
TNX		2	1.38	Poorly defined baseline
DNX		1	1.75	Poorly defined baseline
DNX		2	1.75	Poorly defined baseline
MNX		1	2.33	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
RDX	121-82-4	1	2.94	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.63	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.63	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.91	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.17	Poorly defined baseline
Tetryl	479-45-8	1	9.53	Poorly defined baseline
Tetryl	479-45-8	2	9.53	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.95	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.97	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.45	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.45	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.90	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.92	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.28	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.28	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.87	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.94	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.26	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.49	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.56	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.88	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.89	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.42	Poorly defined baseline
PETN	78-11-5	2	16.91	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1A.ch
Acq On : 23-Jan-2015, 08:40:25 Operator: KISMETL
Sample : ic1235-50 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:40 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	127054	140895	56.095m	42.843m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	11.22%#	8.57%#
	Target Compounds						
1)	TNX	1.38	1.38	163728	254307	51.358m	53.905m
2)	HMX	1.49	1.49	74960	208056	45.947	46.189m
3)	DNX	1.76	1.76	130915	250671	44.341	53.553
4)	MNX	2.33	2.33	134204	191257	53.091m	51.356m
5)	RDX	2.93	2.93	103584	154295	53.864m	52.290m
6)	1,3,5-Trinitrobe	4.63	4.63	208536	391762	51.331	49.364m
7)	1,3-Dinitrobenze	5.91	5.91	273809	177376	52.582	47.786m
8)	3,5-Dinitroanili	6.36	6.36	225926	385855	48.703	47.590
9)	Nitrobenzene	7.52	7.51	181473	161452	56.739	51.723
10)	Nitroglycerin	0.00	9.17	0	319397	N.D.	269.231m#
11)	Tetryl	9.54	9.53	147528	229292	51.282	48.625
12)	2,4,6-Trinitroto	9.96	9.95	190689	223195	53.954	55.118
13)	2-Amino-4,6-Dini	10.45	10.44	165810	236408	54.098	55.687
14)	4-Amino-2,6-Dini	10.90	10.90	102040	155981	47.246m	36.086m
16)	2,4-Dinitrotolue	11.89	11.90	236012	133893	52.069m	52.831m
17)	2,6-Dinitrotolue	12.28	12.29	125905	141246	47.489m	44.806m
18)	o-Nitrotoluene	14.47	14.48	116724	161640	52.286m	52.504m
19)	p-Nitrotoluene	14.86	14.87	184619	141194	52.213m	50.048
20)	m-Nitrotoluene	15.39	15.40	157080	183046	49.379m	50.007m
21)	PETN	0.00	16.92	0	369167	N.D.	250.077m#

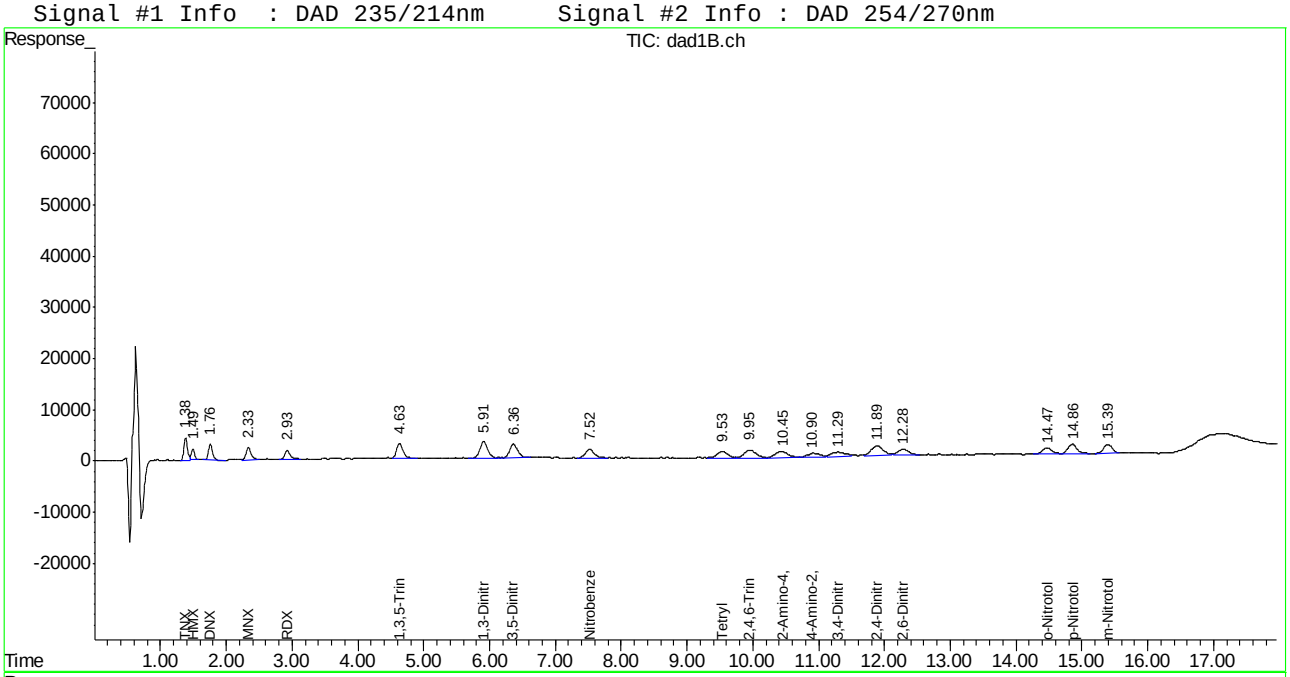
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045815.D 8330B_0107.M Fri Jan 23 14:50:21 2015 Page 1

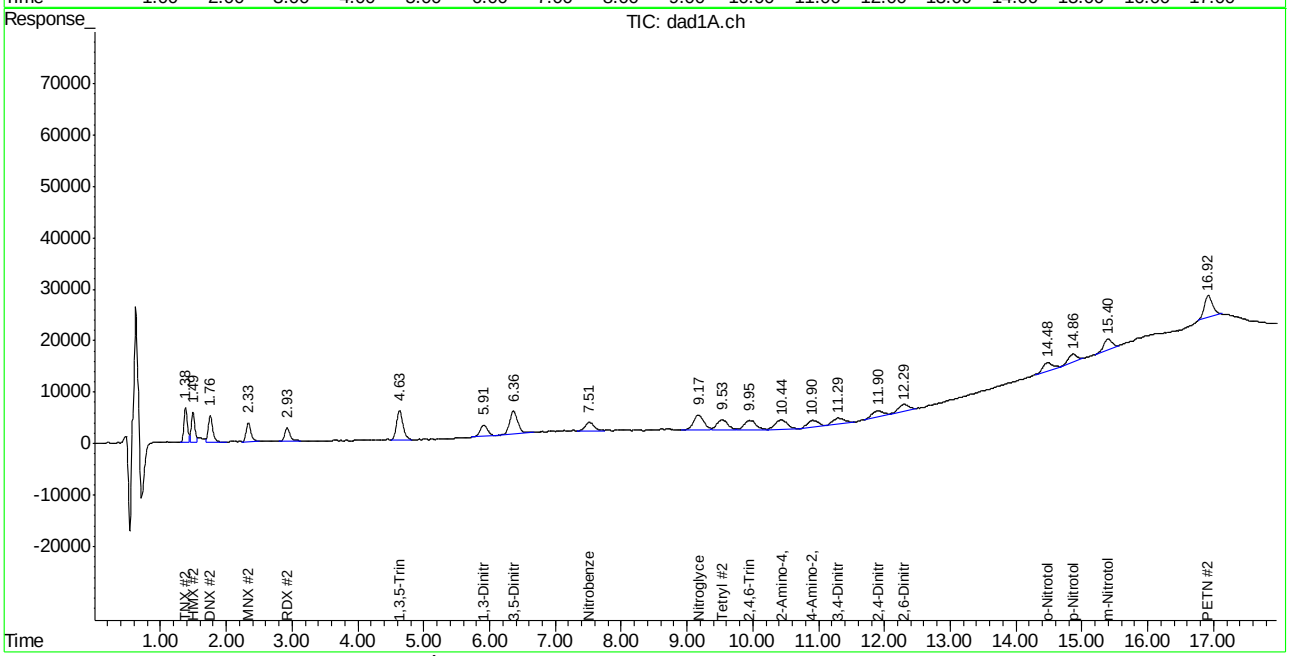
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045815.D\dad1A.ch
Acq On : 23-Jan-2015, 08:40:25 Operator: KISMETL
Sample : ic1235-50 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:27 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045815.D
Injection Time: 01/23/15 08:40
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.38	Poorly defined baseline
TNX		2	1.38	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
MNX		1	2.33	Poorly defined baseline
MNX		2	2.33	Poorly defined baseline
RDX	121-82-4	1	2.93	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.63	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.91	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.17	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.90	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.90	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.29	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.29	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.90	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.28	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.48	Missed peak
p-Nitrotoluene	99-99-0	1	14.86	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.40	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1A.ch
Acq On : 23-Jan-2015, 09:05:23 Operator: KISMETL
Sample : ic1235-100 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:41 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.28	11.29	223517	320429	98.683	96.954
Spiked Amount	500.000	Range 70 - 136		Recovery =		19.74%#	19.39%#
	Target Compounds						
1)	TNX	1.38	1.38	342000	514829	107.279	109.128m
2)	HMX	1.49	1.49	151558	420408	92.900m	93.331m
3)	DNX	1.76	1.76	286960	502499	97.194	107.352
4)	MNX	2.34	2.34	250814	379692	99.222	101.953
5)	RDX	2.93	2.93	181404	313393	94.331	106.207
6)	1,3,5-Trinitrobe	4.64	4.64	409860	782856	100.886	98.644
7)	1,3-Dinitrobenze	5.91	5.91	549723	361578	105.569	97.410m
8)	3,5-Dinitroanili	6.37	6.36	480128	765245	103.501	94.382m
9)	Nitrobenzene	7.52	7.52	307709	304528	96.207	97.560m
10)	Nitroglycerin	0.00	9.17	0	627033	N.D. d	528.548
11)	Tetryl	9.54	9.54	284681	437982	98.958	92.881
12)	2,4,6-Trinitroto	9.96	9.96	361844	433219	102.382	106.984
13)	2-Amino-4,6-Dini	10.43	10.43	294424	448887	96.061	105.376
14)	4-Amino-2,6-Dini	10.92	10.91	203665	371394	94.301	85.922
16)	2,4-Dinitrotolue	11.89	11.89	493701	277438	108.921m	109.472m
17)	2,6-Dinitrotolue	12.29	12.30	269119	325412	101.506	103.227
18)	o-Nitrotoluene	14.48	14.47	236955	303268	106.144	98.508m
19)	p-Nitrotoluene	14.86	14.86	359271	282150	101.606	99.796
20)	m-Nitrotoluene	15.39	15.40	319240	343176	100.354	93.753
21)	PETN	0.00	16.92	0	725413	N.D.	491.402m#

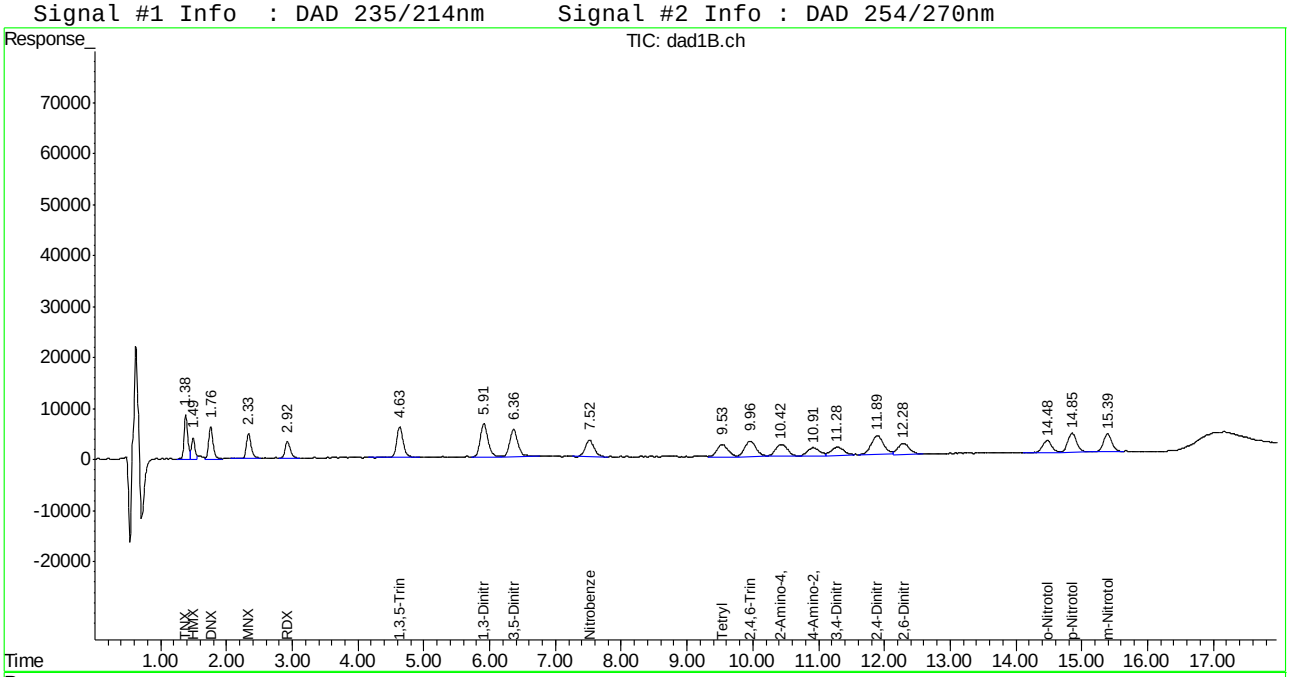
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045816.D 8330B_0107.M Fri Jan 23 14:50:22 2015 Page 1

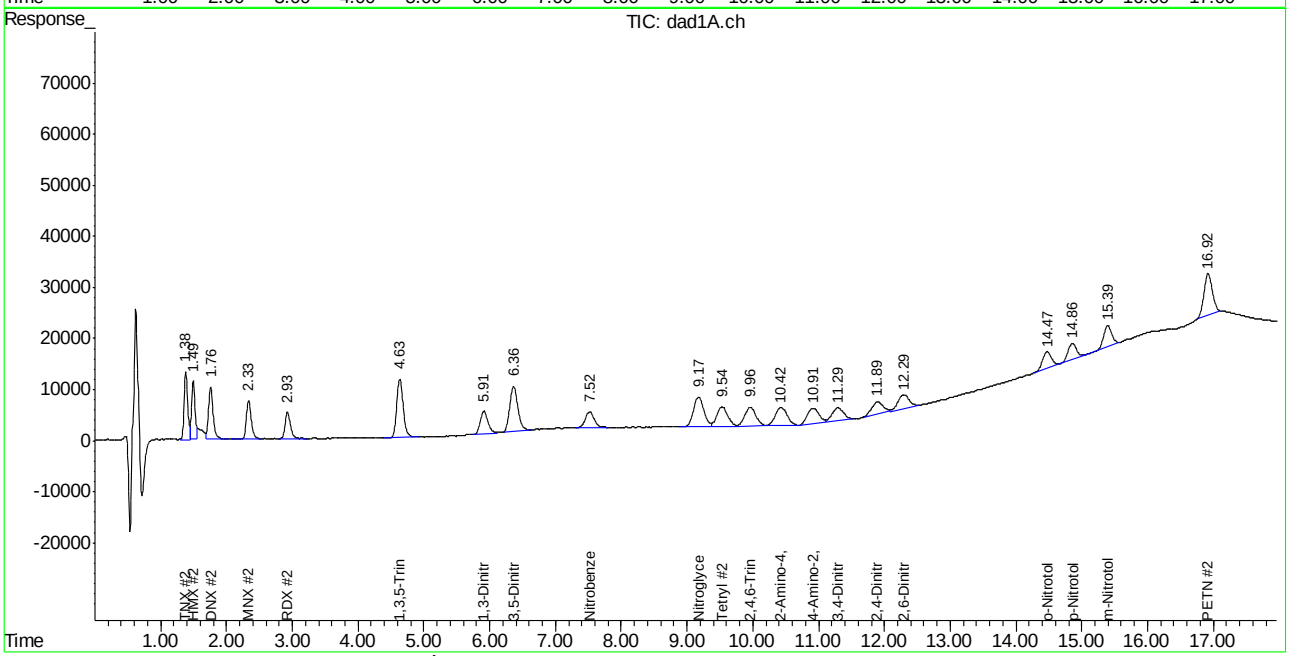
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045816.D\dad1A.ch
Acq On : 23-Jan-2015, 09:05:23 Operator: KISMETL
Sample : ic1235-100 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:29 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045816.D
Injection Time: 01/23/15 09:05
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	1.38	Poorly defined baseline
HMX	2691-41-0	1	1.49	Overlapping peak
HMX	2691-41-0	2	1.49	Overlapping peak
1,3-Dinitrobenzene	99-65-0	2	5.91	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.52	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.89	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.89	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Missed peak
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1A.ch
Acq On : 23-Jan-2015, 09:30:20 Operator: KISMETL
Sample : ic1235-200 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:42 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.30	419047	662047	185.009m	198.484
	Spiked Amount 500.000	Range 70 - 136		Recovery =		37.00%#	39.70%#
	Target Compounds						
1)	TNX	1.38	1.38	645817	984396	202.580	208.661
2)	HMX	1.50	1.50	328914	907718	201.612	201.514
3)	DNX	1.76	1.76	550912	897084	186.595	191.650
4)	MNX	2.34	2.34	485670	753900	192.131	202.434
5)	RDX	2.93	2.93	379186	594539	197.178	201.486
6)	1,3,5-Trinitrobe	4.64	4.64	815197	1562512	200.659	196.886
7)	1,3-Dinitrobenze	5.92	5.92	1046565	714362	200.983	192.451m
8)	3,5-Dinitroanili	6.37	6.37	887026	1492668	191.215	184.100m
9)	Nitrobenzene	7.52	7.52	587897	580779	183.810	186.061m
10)	Nitroglycerin	0.00	9.18	0	1228177	N.D.	1035.273 #
11)	Tetryl	9.54	9.54	531459	848775	184.741	179.997
12)	2,4,6-Trinitroto	9.96	9.97	710966	833064	201.164	205.726
13)	2-Amino-4,6-Dini	10.44	10.44	595950	883848	194.439	206.057
14)	4-Amino-2,6-Dini	10.93	10.93	418976	801733	193.994	185.482
16)	2,4-Dinitrotolue	11.90	11.90	916943	586608	202.297m	231.465m
17)	2,6-Dinitrotolue	12.29	12.30	529195	679283	199.602m	215.482
18)	o-Nitrotoluene	14.47	14.48	458184	612611	205.243m	198.990m
19)	p-Nitrotoluene	14.85	14.86	698685	574070	197.596m	202.154
20)	m-Nitrotoluene	15.39	15.40	625916	706517	196.759m	193.015
21)	PETN	0.00	16.92	0	1414697	N.D.	958.331m#

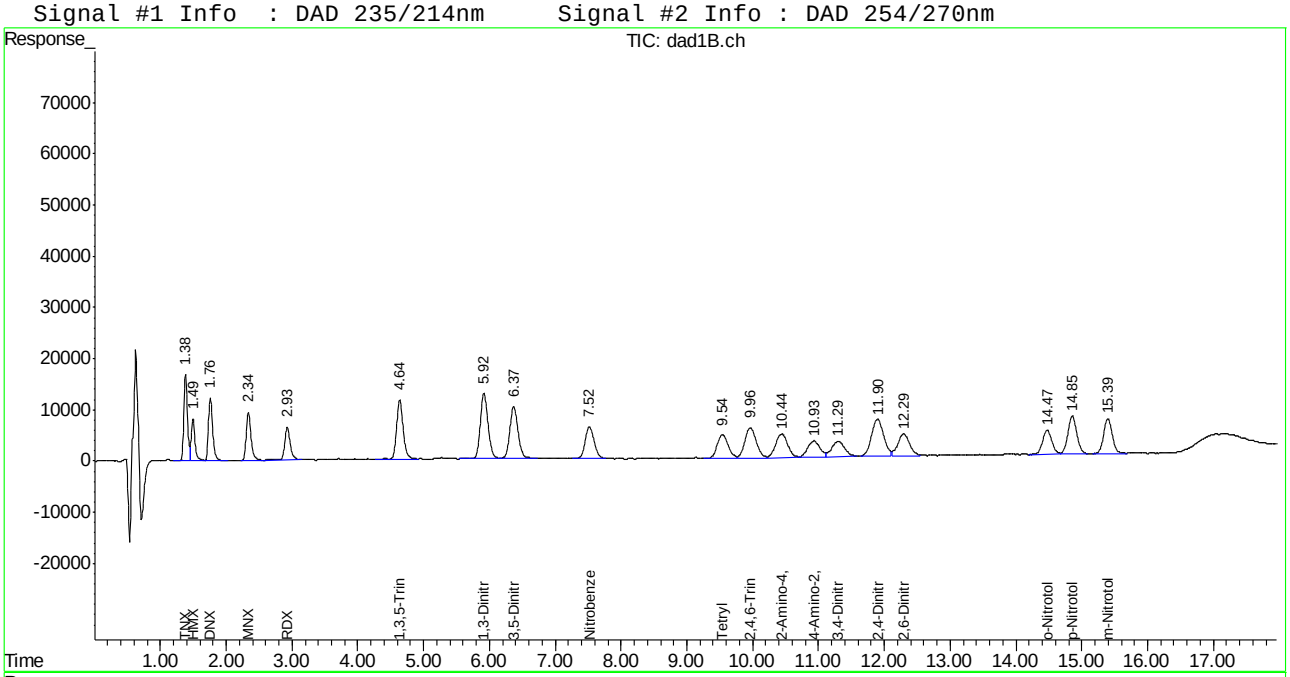
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045817.D 8330B_0107.M Fri Jan 23 14:50:23 2015 Page 1

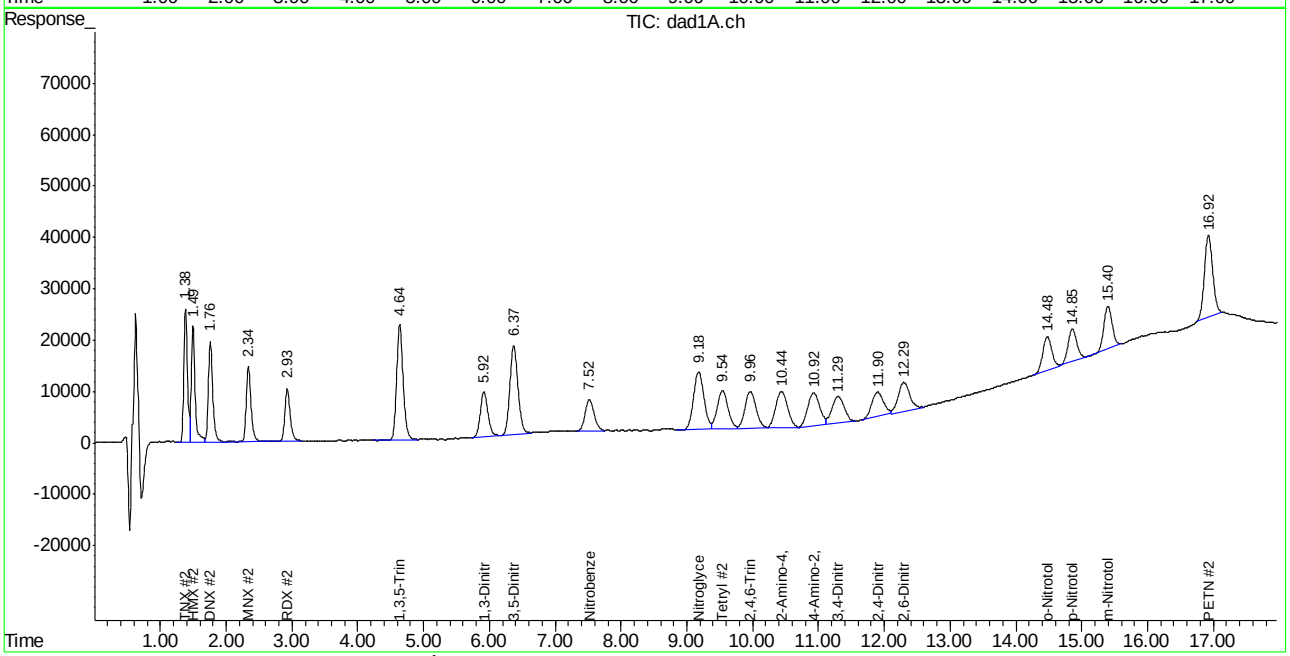
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045817.D\dad1A.ch
Acq On : 23-Jan-2015, 09:30:20 Operator: KISMETL
Sample : ic1235-200 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:31 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045817.D
Injection Time: 01/23/15 09:30
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.92	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.37	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.52	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.29	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.90	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.90	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	12.29	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.48	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.85	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.39	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1A.ch
Acq On : 23-Jan-2015, 09:55:16 Operator: KISMETL
Sample : icc1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:43 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	1017850	1774675	449.381	517.180
	Spiked Amount 500.000	Range 70 - 136		Recovery =		89.88%	103.44%
	Target Compounds						
1)	TNX	1.38	1.38	1579981	2414118	495.609	511.718
2)	HMX	1.49	1.49	795478	2234251	487.599	496.005
3)	DNX	1.76	1.76	1356349	2205261	459.397	471.126
4)	MNX	2.34	2.34	1181790	1826964	467.516	490.567
5)	RDX	2.93	2.93	894778	1419161	465.288	480.947
6)	1,3,5-Trinitrobe	4.64	4.64	1969901	3795702	484.886	478.280
7)	1,3-Dinitrobenze	5.91	5.91	2559287	1741625	491.487	469.200
8)	3,5-Dinitroanili	6.37	6.37	2136678	3644710	460.601	449.525
9)	Nitrobenzene	7.52	7.52	1498292	1455731	468.451	466.364
10)	Nitroglycerin	0.00	9.18	0	3055086	N.D. d	2575.236
11)	Tetryl	9.54	9.54	1290324	2089632	448.530	443.141
12)	2,4,6-Trinitroto	9.96	9.96	1766223	2075678	499.742	512.591
13)	2-Amino-4,6-Dini	10.43	10.43	1511769	2199677	493.239	502.648
14)	4-Amino-2,6-Dini	10.92	10.92	1086430	2121041	503.039	490.706
16)	2,4-Dinitrotolue	11.89	11.89	2287858	1523372	504.749	601.094
17)	2,6-Dinitrotolue	12.29	12.29	1283271	1667968	484.025	529.112
18)	o-Nitrotoluene	14.47	14.47	1123944	1509912	503.470	490.453m
19)	p-Nitrotoluene	14.86	14.86	1751347	1417064	495.302	492.846
20)	m-Nitrotoluene	15.40	15.40	1567788	1785271	492.839	487.723
21)	PETN	0.00	16.92	0	3525351	N.D. d	2388.109m

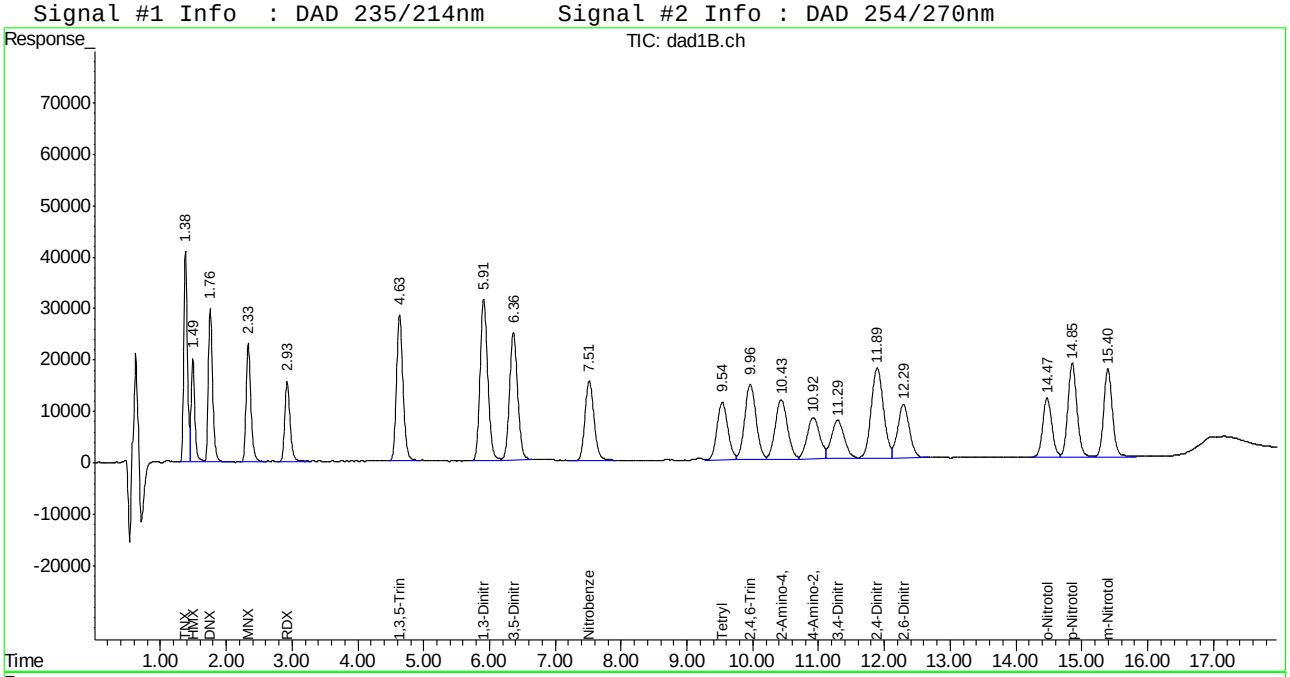
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045818.D 8330B_0107.M Fri Jan 23 14:50:24 2015 Page 1

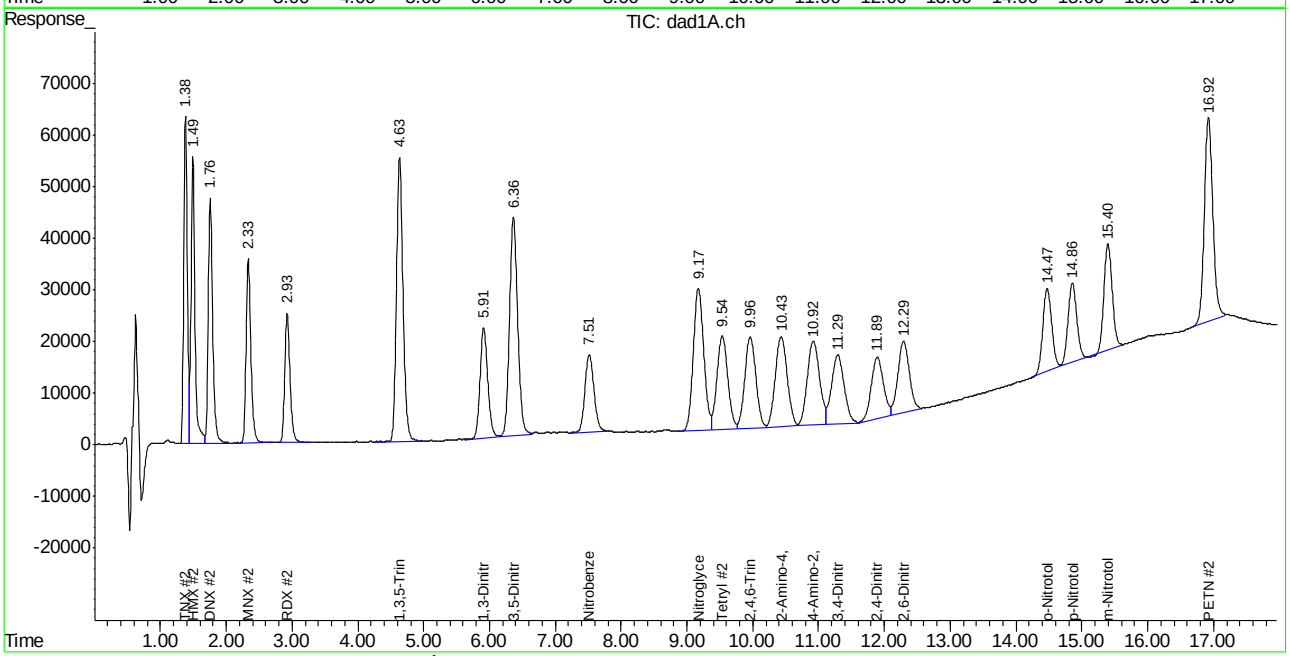
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045818.D\dad1A.ch
Acq On : 23-Jan-2015, 09:55:16 Operator: KISMETL
Sample : icc1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:32 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-ICC1235 **Method:** SW846 8330A
Lab FileID: BB045818.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 09:55 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1A.ch
Acq On : 23-Jan-2015, 10:20:12 Operator: KISMETL
Sample : ic1235-1000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:44 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.30	2093074	3597419	924.093	1005.321
	Spiked Amount 500.000	Range 70 - 136		Recovery =		184.82%#	201.06%#
	Target Compounds						
1)	TNX	1.38	1.38	3151820	4809440	988.665	1019.451
2)	HMX	1.49	1.50	1549694	4250596	949.905	943.635
3)	DNX	1.76	1.76	2692893	4268569	912.086	911.925
4)	MNX	2.34	2.34	2326982	3609530	920.554	969.213
5)	RDX	2.93	2.93	1753066	2809601	911.602	952.161
6)	1,3,5-Trinitrobe	4.63	4.64	3924810	7637435	966.081	962.361
7)	1,3-Dinitrobenze	5.91	5.91	5121609	3529154	983.557	950.765
8)	3,5-Dinitroanili	6.37	6.36	4383626	7278881	944.974	897.750m
9)	Nitrobenzene	7.52	7.51	3028770	2955506	946.964	946.838m
10)	Nitroglycerin	0.00	9.17	0	6125686	N.D. d	5163.551
11)	Tetryl	9.54	9.54	2589682	4190433	900.200	888.650
12)	2,4,6-Trinitroto	9.97	9.97	3617711	4289718	1023.609	1059.350
13)	2-Amino-4,6-Dini	10.43	10.43	3132395	4598167	1021.995	1015.848
14)	4-Amino-2,6-Dini	10.92	10.92	2270320	4467902	1051.203	1033.655
16)	2,4-Dinitrotolue	11.89	11.90	4632178	3016536	1021.955	1190.269
17)	2,6-Dinitrotolue	12.29	12.29	2636335	3396797	994.374	1077.531
18)	o-Nitrotoluene	14.48	14.47	2252092	3040803	1008.823	987.721m
19)	p-Nitrotoluene	14.86	14.86	3509463	2929185	992.518	997.381
20)	m-Nitrotoluene	15.40	15.40	3137505	3649217	986.285	996.940
21)	PETN	0.00	16.92	0	6978906	N.D. d	4727.583m

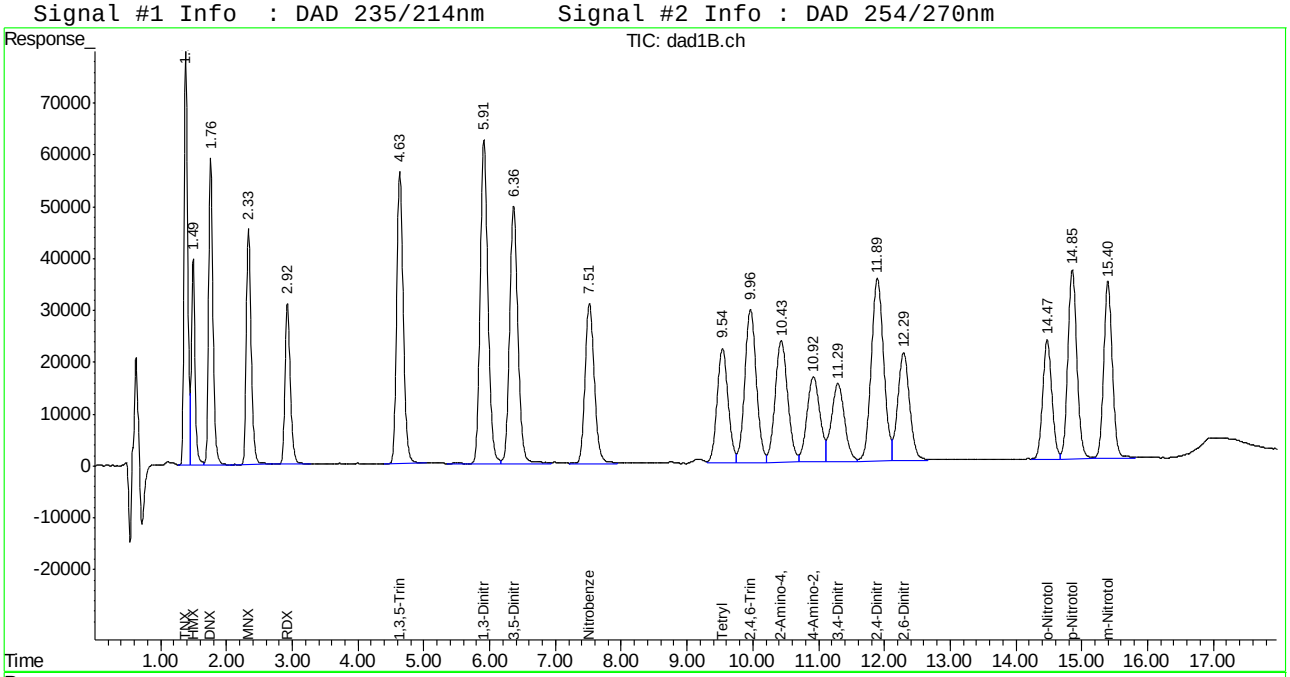
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045819.D 8330B_0107.M Fri Jan 23 14:50:25 2015 Page 1

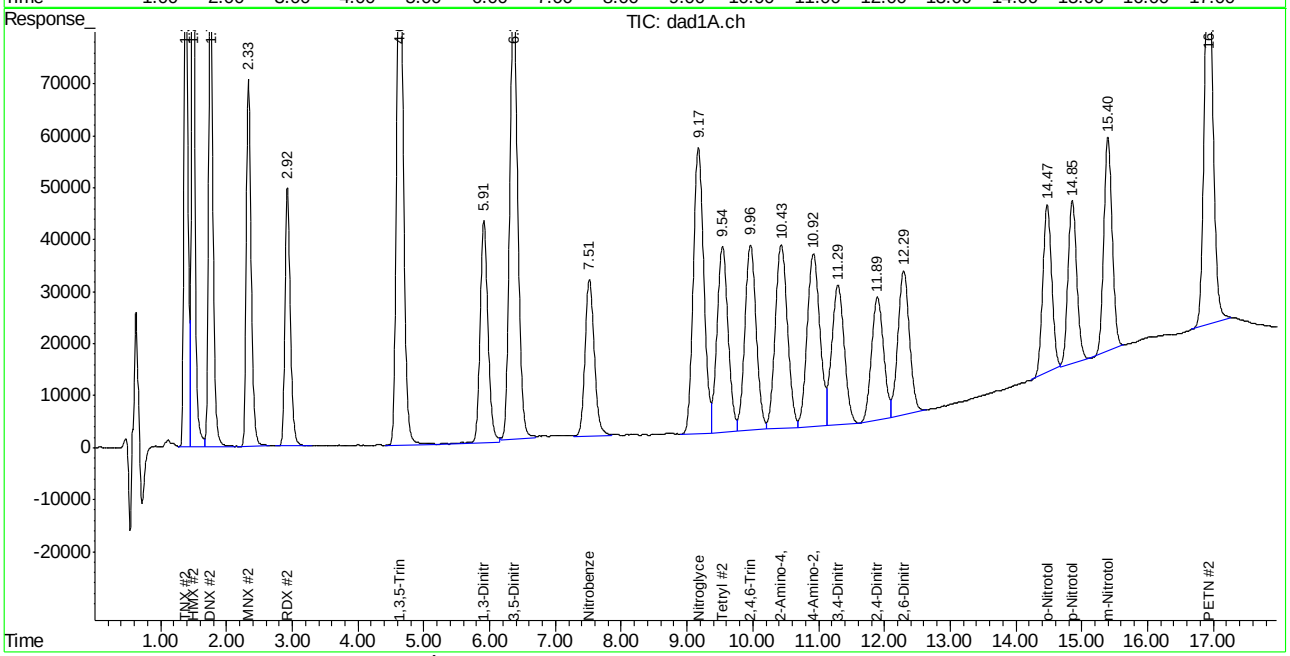
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045819.D\dad1A.ch
Acq On : 23-Jan-2015, 10:20:12 Operator: KISMETL
Sample : ic1235-1000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:33 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1235-IC1235 **Method:** SW846 8330A
Lab FileID: BB045819.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 10:20 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

BB045820.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1A.ch
Acq On : 23-Jan-2015, 10:45:07 Operator: KISMETL
Sample : ic1235-2000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 13:50:45 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.29	11.29	4339319	7651941	1915.812	1976.832
	Spiked Amount 500.000	Range 70 - 136		Recovery =		383.16%#	395.37%#
	Target Compounds						
1)	TNX	1.38	1.38	6541013	9977549	2051.789	2114.929
2)	HMX	1.49	1.49	3254466	8893092	1994.867	1974.272
3)	DNX	1.76	1.76	5640488	8970353	1910.441	1916.401
4)	MNX	2.34	2.34	4885390	7573854	1932.659	2033.694
5)	RDX	2.93	2.93	3676805	5883122	1911.954	1993.762
6)	1,3,5-Trinitrobe	4.63	4.63	8166660	15892279	2010.201	2002.519
7)	1,3-Dinitrobenze	5.91	5.91	10582042	7257799	2032.183	1955.275
8)	3,5-Dinitroanili	6.36	6.36	9014679	15123011	1943.285	1865.215m
9)	Nitrobenzene	7.51	7.51	6126452	5945040	1915.474	1904.577m
10)	Nitroglycerin	0.00	9.17	0	12785798	N.D. d	10777.588
11)	Tetryl	9.54	9.54	5571011	9086155	1936.540	1926.867
12)	2,4,6-Trinitroto	9.97	9.97	7525920	9039833	2129.413	2232.397
13)	2-Amino-4,6-Dini	10.43	10.43	6562744	9878743	2141.202	2046.107
14)	4-Amino-2,6-Dini	10.92	10.92	4774526	9627480	2210.701	2227.331
16)	2,4-Dinitrotolue	11.89	11.89	9548837	6303219	2106.673	2487.132
17)	2,6-Dinitrotolue	12.29	12.29	5399207	7100603	2036.476	2252.452
18)	o-Nitrotoluene	14.48	14.47	4519998	6368740	2024.729	2068.708m
19)	p-Nitrotoluene	14.86	14.86	7089919	6049141	2005.113	1978.949
20)	m-Nitrotoluene	15.40	15.40	6327401	7538005	1989.039	2059.328
21)	PETN	0.00	16.92	0	14488827	N.D. d	9814.881m

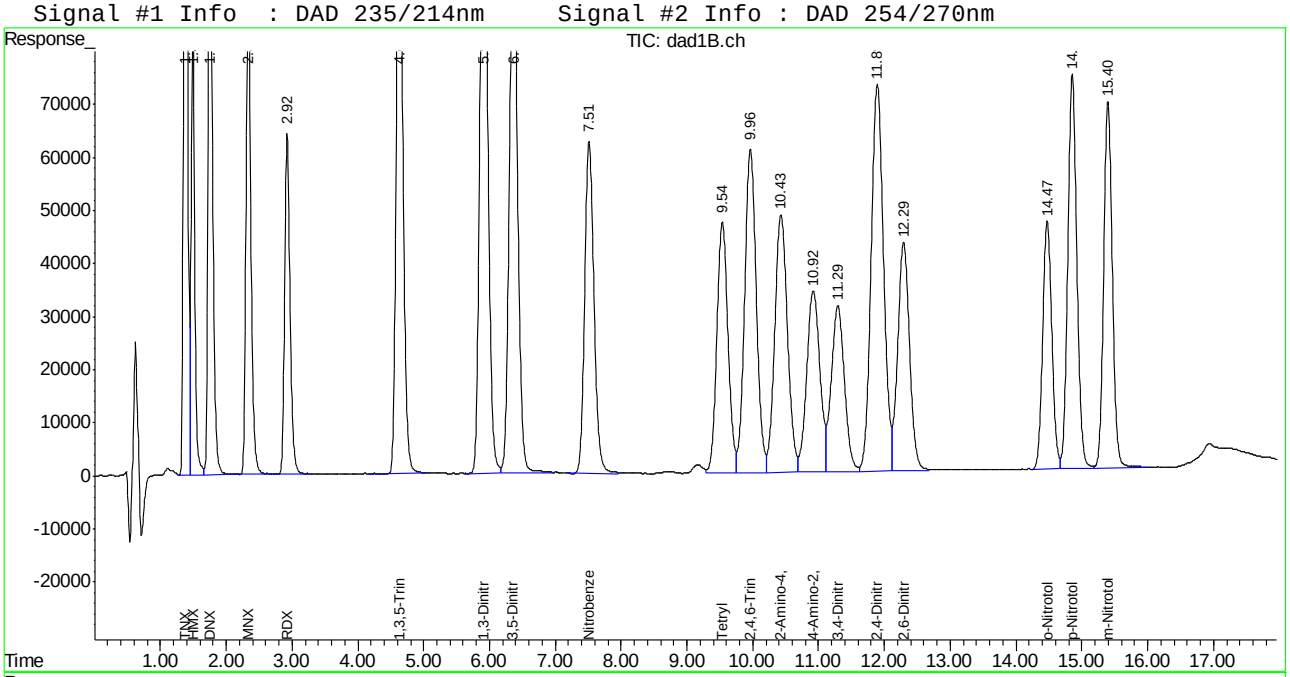
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045820.D 8330B_0107.M Fri Jan 23 14:50:26 2015 Page 1

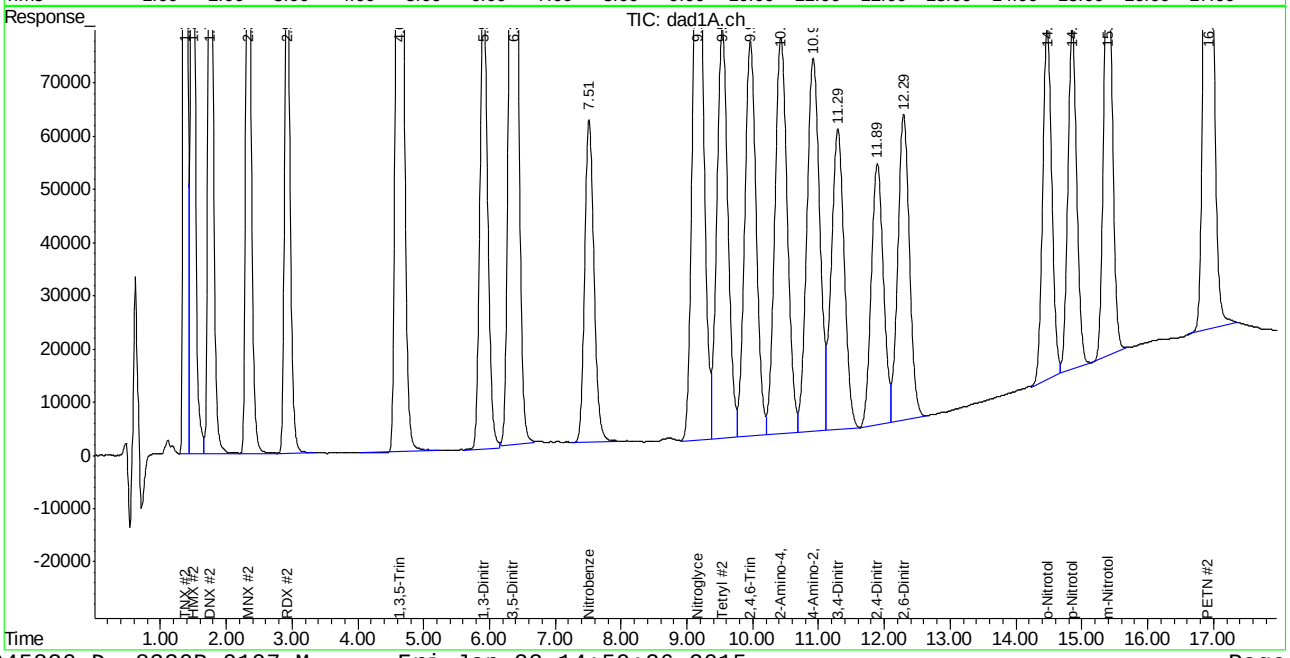
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045820.D\dad1A.ch
Acq On : 23-Jan-2015, 10:45:07 Operator: KISMETL
Sample : ic1235-2000 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:34 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 13:50:24 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1235-IC1235
Lab FileID: BB045820.D
Injection Time: 01/23/15 10:45
Method: SW846 8330A
Analyst approved: 01/23/15 14:54 Kismet Lugo
Supervisor approved: 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 09:40

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:38:07 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.38	1.38	1707035	2588651	529.286	519.029
2)	HMX	1.49	1.49	923099	2491555	573.328m	565.918m
3)	DNX	1.76	1.75	1484274	2340316	537.360	499.130
4)	MNX	2.33	2.33	1265753	1939459	509.783	520.625
5)	RDX	2.92	2.92	927458	1501464	491.716	497.299
6)	1,3,5-Trinitrobe	4.63	4.63	2121574	4103269	520.053	526.624
7)	1,3-Dinitrobenze	5.91	5.91	2447703	1678277	457.959	469.936
8)	3,5-Dinitroanili	6.36	6.36	2138846	3648010	468.838	482.526m
9)	Nitrobenzene	7.51	7.51	1607482	1573535	524.094	530.075m
10)	Nitroglycerin	0.00	9.18	0	3159453	N.D. d	2533.654
11)	Tetryl	9.54	9.54	1222859	1980687	451.877	457.633
12)	2,4,6-Trinitroto	9.96	9.96	1691954	2100276	463.147	496.730
13)	2-Amino-4,6-Dini	10.43	10.43	1641103	2490389	541.123	546.801
14)	4-Amino-2,6-Dini	10.92	10.91	1169545	2336951	555.255	495.904
16)	2,4-Dinitrotolue	11.89	11.89	2429182	1544153	525.910	534.743
17)	2,6-Dinitrotolue	12.29	12.29	1406995	1779950	547.381	537.287
18)	o-Nitrotoluene	14.47	14.47	1178143	1609545	515.628	534.800m
19)	p-Nitrotoluene	14.86	14.86	1810650	1469658	502.087	500.973
20)	m-Nitrotoluene	15.40	15.39	1751802	2034758	543.666	562.797m
21)	PETN	0.00	16.92	0	3779066	N.D. d	2629.624m

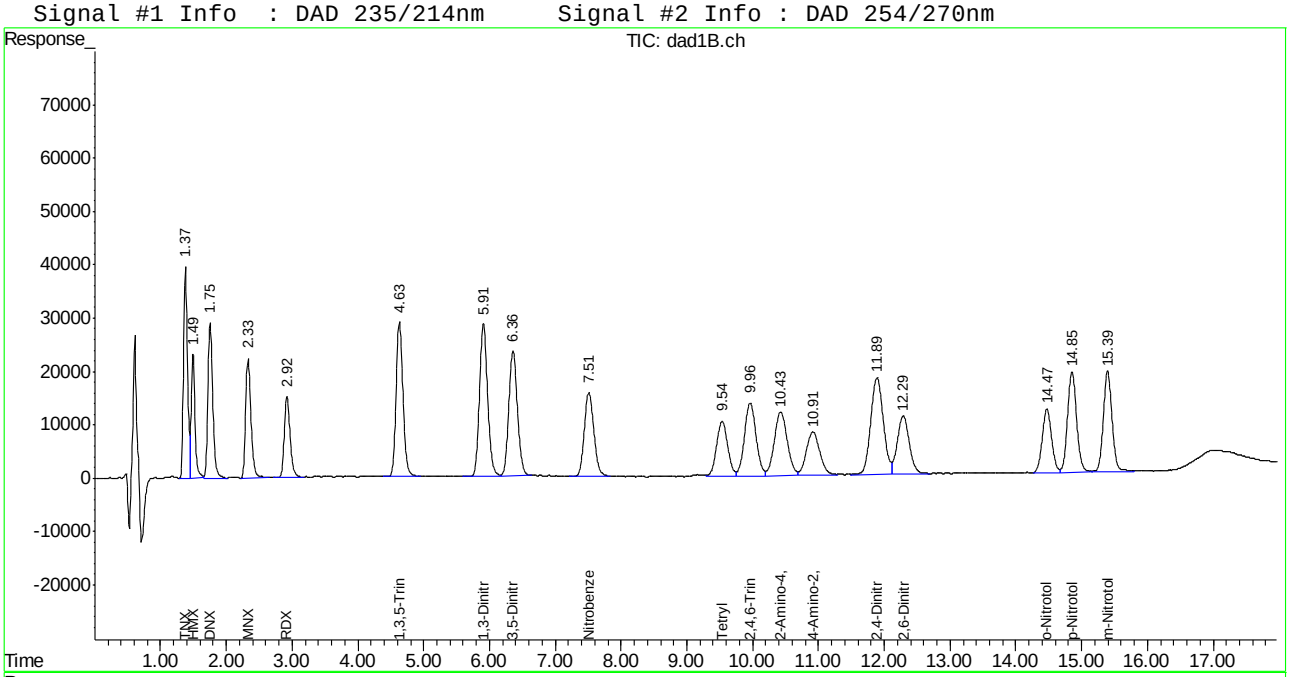
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045821.D 8330B_0107.M Fri Jan 23 14:50:27 2015 Page 1

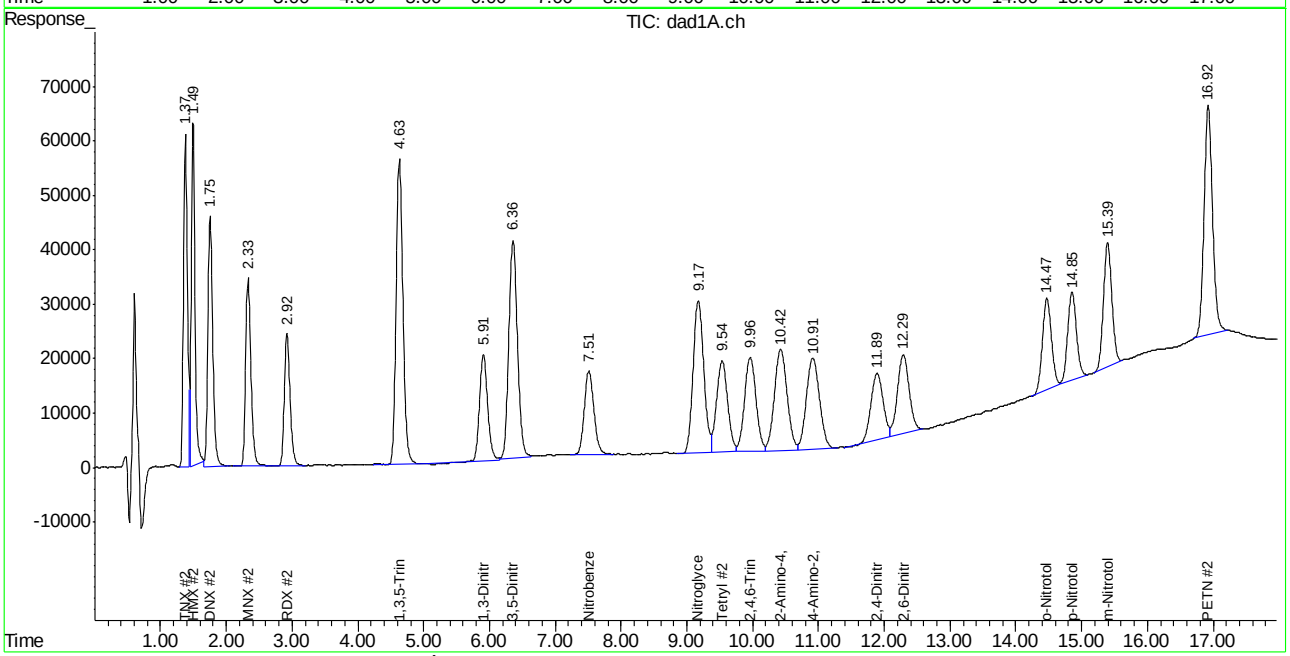
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\0123BPL\BB045821.D\dad1A.ch
Acq On : 23-Jan-2015, 11:10:47 Operator: KISMETL
Sample : icv1235-500 Inst : G1315B
Misc : OP54642,GBB1235,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 23 14:39 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Jan 23 14:37:34 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GBB1235-ICV1235 **Method:** SW846 8330A
Lab FileID: BB045821.D **Analyst approved:** 01/23/15 14:54 Kismet Lugo
Injection Time: 01/23/15 11:10 **Supervisor approved:** 01/26/15 09:40 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.49	Poorly defined baseline
HMX	2691-41-0	2	1.49	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.36	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.51	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.47	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.39	Poorly defined baseline
PETN	78-11-5	2	16.92	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1A.ch
Acq On : 20-Feb-2015, 13:16:39 Operator: KISMETL
Sample : cc1235-500 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:25:53 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.18	11.18	1076890	1783017	484.502	473.680
	Spiked Amount 500.000	Range 72 - 134		Recovery =		96.90%	94.74%
	Target Compounds						
1)	TNX	1.37	1.37	1612874	2463723	500.090	493.980
2)	HMX	1.48	1.48	792524	2200256	492.230	499.754
3)	DNX	1.75	1.75	1380457	2218208	499.774	473.088
4)	MNX	2.32	2.32	1205620	1855554	485.564	498.102
5)	RDX	2.90	2.90	906810	1432212	480.769	474.362
6)	1,3,5-Trinitrobe	4.60	4.60	1990058	3905466	487.815	501.238
7)	1,3-Dinitrobenze	5.87	5.87	2586744	1826294	483.974	511.383
8)	3,5-Dinitroanili	6.31	6.31	2110901	3678059	462.712	486.501
9)	Nitrobenzene	7.46	7.46	1513367	1597516	493.410	538.153
10)	Nitroglycerin	0.00	9.10	0	3109470	N.D. d	2493.571
11)	Tetryl	9.44	9.44	1363395	2189772	503.808	505.941
12)	2,4,6-Trinitroto	9.87	9.87	1830733	2122465	501.136	501.978
13)	2-Amino-4,6-Dini	10.32	10.32	1596444	2305892	526.398	506.292
14)	4-Amino-2,6-Dini	10.80	10.80	1142112	2199188	542.231	466.670
16)	2,4-Dinitrotolue	11.79	11.79	2381666	1553688	515.623	538.045
17)	2,6-Dinitrotolue	12.19	12.19	1354327	1732121	526.891	522.850
18)	o-Nitrotoluene	14.40	14.40	1141676	1579376	499.668	524.776m
19)	p-Nitrotoluene	14.79	14.79	1781704	1486215	494.061	506.617
20)	m-Nitrotoluene	15.33	15.33	1578384	1850510	489.846	511.836
21)	PETN	0.00	16.86	0	3457717	N.D. d	2406.016

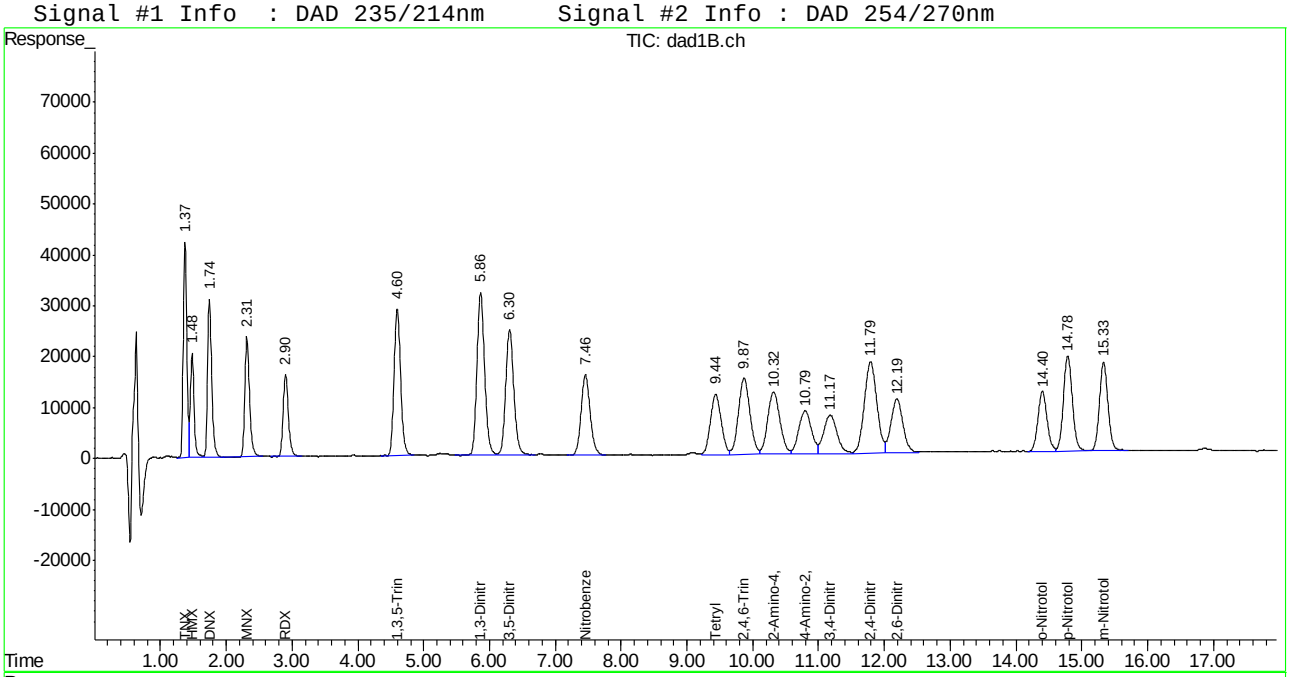
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046104.D 8330B_0107.M Mon Feb 23 10:33:41 2015 Page 1

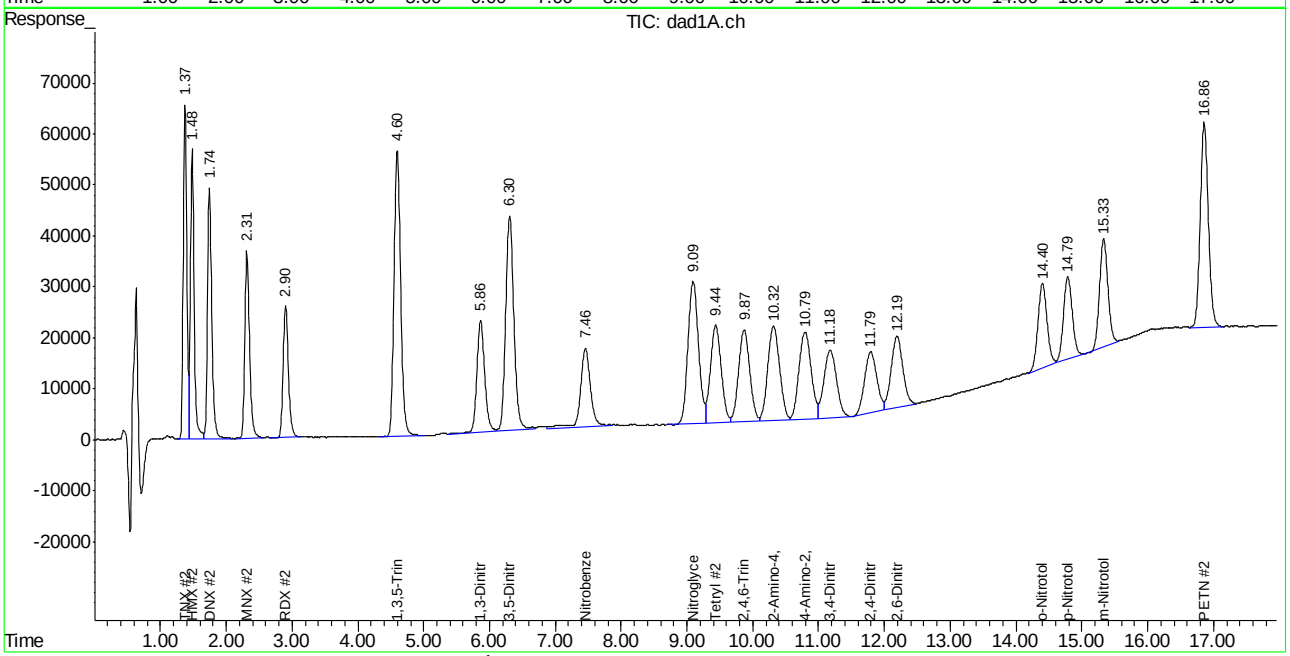
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046104.D\dad1A.ch
Acq On : 20-Feb-2015, 13:16:39 Operator: KISMETL
Sample : cc1235-500 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:38 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	GBB1248-CC1235	**Method:**	SW846 8330A
Lab FileID:	BB046104.D	**Analyst approved:**	02/23/15 14:38 Kismet Lugo
Injection Time:	02/20/15 13:16	**Supervisor approved:**	02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.40	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1A.ch
Acq On : 20-Feb-2015, 17:51:12 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:04 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.25	11.25	2083608	3580717	937.434	951.260
Spiked Amount	500.000	Range	72 - 134	Recovery	=	187.49%#	190.25%#
	Target Compounds						
1)	TNX	1.38	1.38	3187372	4852170	988.282	972.868
2)	HMX	1.49	1.49	1576713	4345057	979.282	986.912
3)	DNX	1.76	1.76	2749735	4377887	995.501	933.693
4)	MNX	2.33	2.33	2360704	3669920	950.775	985.147
5)	RDX	2.92	2.92	1773939	2840324	940.500	940.741
6)	1,3,5-Trinitrobe	4.62	4.62	3960043	7693500	970.710	987.404
7)	1,3-Dinitrobenze	5.90	5.90	5091060	3450942	952.525	966.302
8)	3,5-Dinitroanili	6.34	6.34	4168040	6960960	913.640	920.733
9)	Nitrobenzene	7.49	7.49	2990060	2922730	974.862	984.576
10)	Nitroglycerin	0.00	9.14	0	6055131	N.D. d	4855.779
11)	Tetryl	9.49	9.49	2675636	4297980	988.713	993.037
12)	2,4,6-Trinitroto	9.92	9.92	3591860	4219726	983.218	997.994
13)	2-Amino-4,6-Dini	10.38	10.38	3153026	4637210	1039.652	1018.166
14)	4-Amino-2,6-Dini	10.86	10.86	2283947	4500303	1084.330	954.970
16)	2,4-Dinitrotolue	11.85	11.85	4625969	3033954	1001.507	1050.663
17)	2,6-Dinitrotolue	12.25	12.25	2616524	3396673	1017.939	1025.304
18)	o-Nitrotoluene	14.45	14.44	2235080	3056253	978.209	1015.494m
19)	p-Nitrotoluene	14.83	14.83	3492457	2931443	968.447	999.263
20)	m-Nitrotoluene	15.37	15.37	3108106	3619919	964.590	1001.240
21)	PETN	0.00	16.89	0	6808943	N.D. d	4737.932m

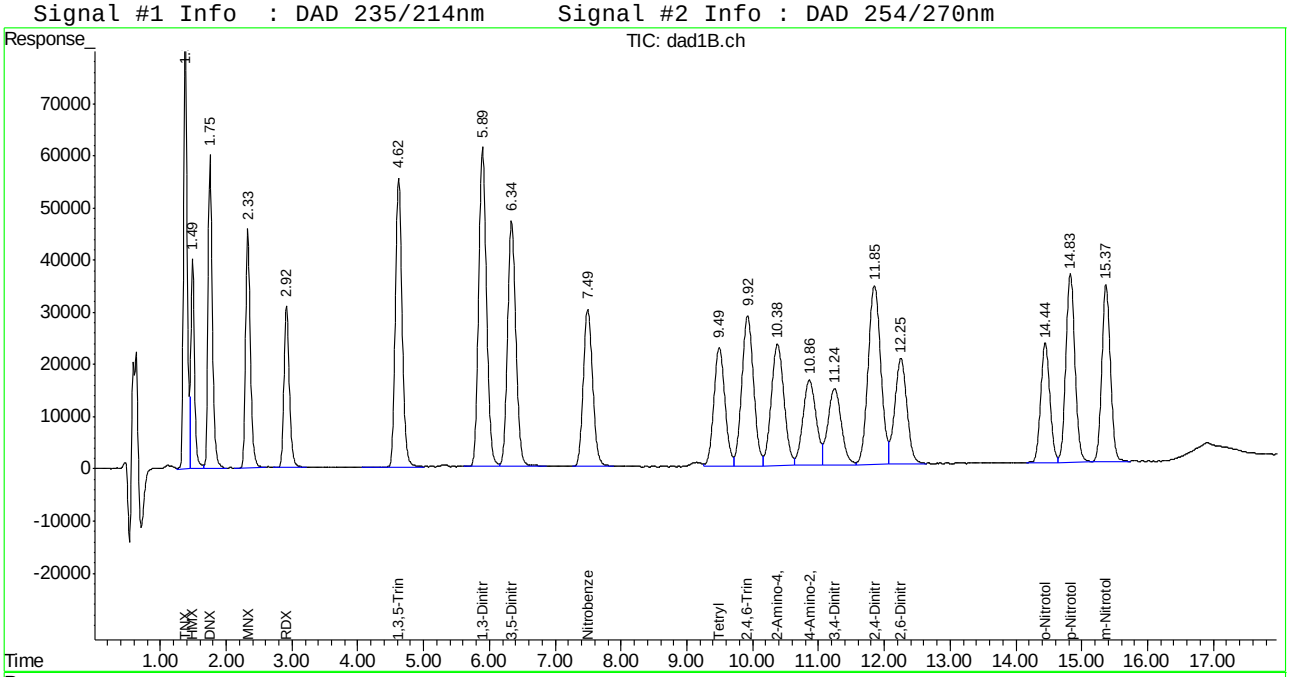
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046115.D 8330B_0107.M Mon Feb 23 10:33:52 2015 Page 1

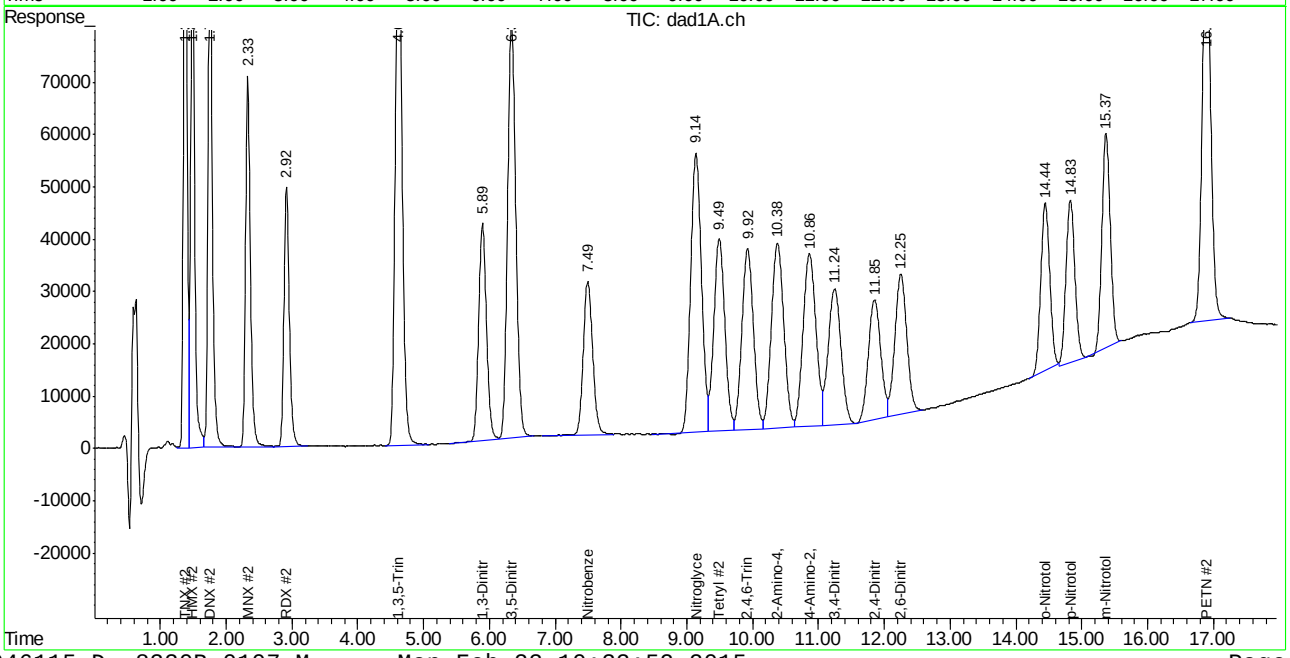
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046115.D\dad1A.ch
Acq On : 20-Feb-2015, 17:51:12 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:40 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1248-CC1235 **Method:** SW846 8330A
Lab FileID: BB046115.D **Analyst approved:** 02/23/15 14:38 Kismet Lugo
Injection Time: 02/20/15 17:51 **Supervisor approved:** 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.44	Poorly defined baseline
PETN	78-11-5	2	16.89	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1A.ch
Acq On : 20-Feb-2015, 22:25:47 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:15 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.21	11.21	2080399	3589337	935.991	953.550
Spiked Amount	500.000	Range	72 - 134	Recovery	=	187.20%#	190.71%#
	Target Compounds						
1)	TNX	1.38	1.38	3180534	4790763	986.161	960.556
2)	HMX	1.49	1.49	1563827	4232404	971.279	961.325
3)	DNX	1.75	1.75	2732783	4277237	989.364	912.227
4)	MNX	2.32	2.32	2364278	3637843	952.215	976.536
5)	RDX	2.91	2.91	1782513	2841591	945.046	941.161
6)	1,3,5-Trinitrobe	4.61	4.61	3989016	7685578	977.812	986.387
7)	1,3-Dinitrobenze	5.88	5.88	5103919	3527874	954.931	987.844
8)	3,5-Dinitroanili	6.32	6.32	4151452	7128017	910.004	942.830
9)	Nitrobenzene	7.48	7.48	3038868	3024576	990.775	1018.885
10)	Nitroglycerin	0.00	9.12	0	6103479	N.D. d	4894.551
11)	Tetryl	9.46	9.46	2688664	4336694	993.527	1001.982
12)	2,4,6-Trinitroto	9.89	9.89	3607371	4278766	987.464	1011.958
13)	2-Amino-4,6-Dini	10.34	10.34	3163584	4690754	1043.133	1029.923
14)	4-Amino-2,6-Dini	10.82	10.82	2293531	4551047	1088.880	965.738
16)	2,4-Dinitrotolue	11.82	11.82	4635259	3045304	1003.519	1054.594
17)	2,6-Dinitrotolue	12.22	12.22	2617129	3389495	1018.175	1023.137
18)	o-Nitrotoluene	14.43	14.42	2253534	3070185	986.286	1020.123m
19)	p-Nitrotoluene	14.81	14.81	3503396	2953304	971.481	1006.715
20)	m-Nitrotoluene	15.35	15.35	3132164	3705292	972.056	1024.853
21)	PETN	0.00	16.87	0	6642121	N.D. d	4621.850m

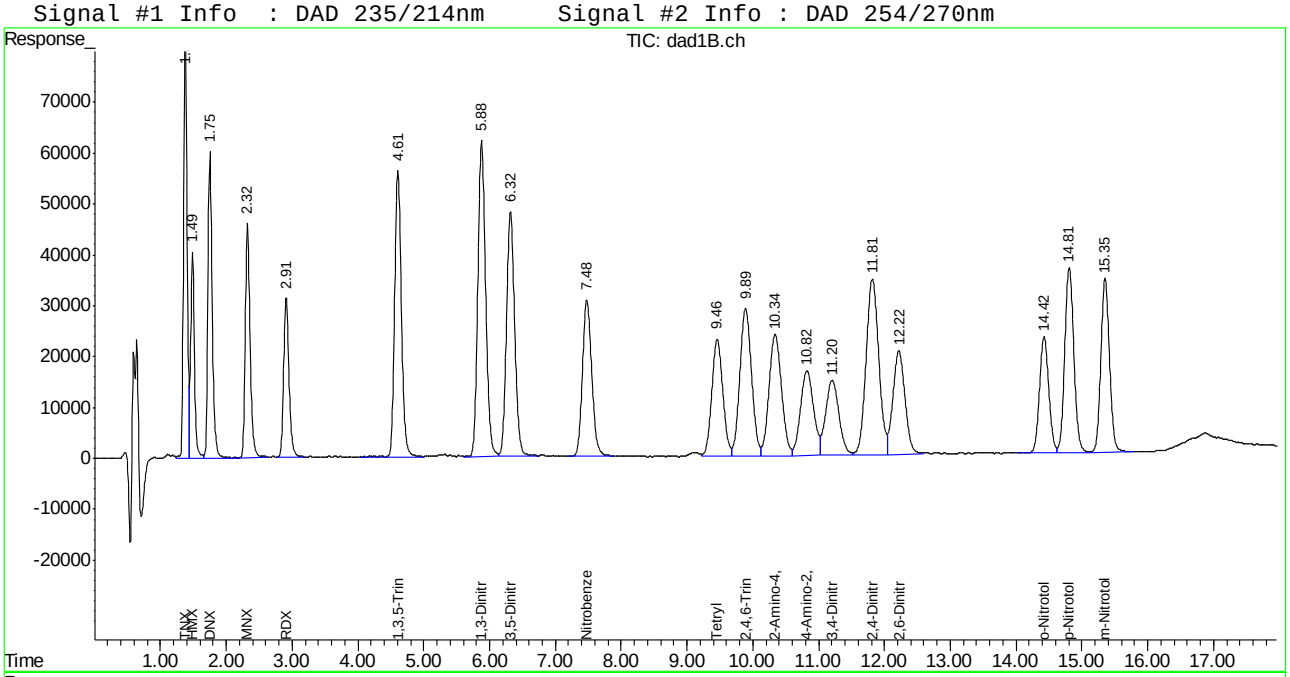
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046126.D 8330B_0107.M Mon Feb 23 10:34:03 2015 Page 1

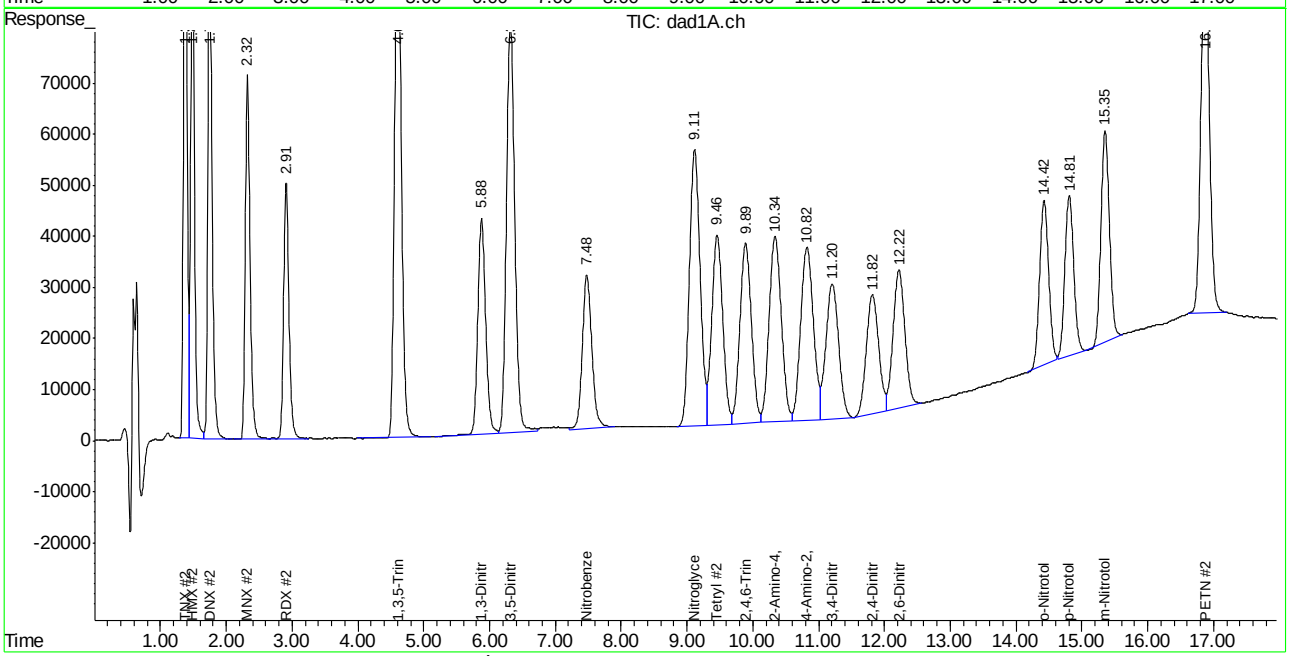
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046126.D\dad1A.ch
Acq On : 20-Feb-2015, 22:25:47 Operator: KISMETL
Sample : cc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:43 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1248-CC1235 **Method:** SW846 8330A
Lab FileID: BB046126.D **Analyst approved:** 02/23/15 14:38 Kismet Lugo
Injection Time: 02/20/15 22:25 **Supervisor approved:** 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	2	14.42	Poorly defined baseline
PETN	78-11-5	2	16.87	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1A.ch
Acq On : 21-Feb-2015, 00:30:32 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 07:26:20 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.19	11.19	2099316	3566768	944.502	947.555
	Spiked Amount 500.000	Range 72 - 134		Recovery =		188.90%#	189.51%#
	Target Compounds						
1)	TNX	1.38	1.38	3188831	4836452	988.734	969.716
2)	HMX	1.48	1.49	1576585	4354866	979.203	989.140
3)	DNX	1.75	1.75	2741819	4365220	992.636	930.992
4)	MNX	2.32	2.32	2366582	3670742	953.143	985.368
5)	RDX	2.91	2.91	1770470	2868457	938.661	950.059
6)	1,3,5-Trinitrobe	4.60	4.60	3974479	7698491	974.249	988.045
7)	1,3-Dinitrobenze	5.87	5.87	5149423	3496692	963.445	979.113
8)	3,5-Dinitroanili	6.31	6.31	4205025	7151001	921.747	945.870
9)	Nitrobenzene	7.48	7.47	3062674	2917759	998.537	982.902m
10)	Nitroglycerin	0.00	9.11	0	6085978	N.D. d	4880.516
11)	Tetryl	9.45	9.45	2703903	4334668	999.159	1001.514
12)	2,4,6-Trinitroto	9.88	9.88	3620591	4247827	991.083	1004.640
13)	2-Amino-4,6-Dini	10.33	10.33	3175306	4643377	1046.998	1019.520
14)	4-Amino-2,6-Dini	10.81	10.81	2267589	4464774	1076.564	947.430
16)	2,4-Dinitrotolue	11.80	11.81	4618781	2969586	999.951	1028.372
17)	2,6-Dinitrotolue	12.21	12.21	2631827	3404725	1023.893	1027.734
18)	o-Nitrotoluene	14.42	14.42	2247031	2957417	983.440	982.654m
19)	p-Nitrotoluene	14.80	14.80	3497699	2880650	969.901	981.948m
20)	m-Nitrotoluene	15.35	15.34	3111192	3898616	965.547	1078.325m
21)	PETN	0.00	16.86	0	6768929	N.D. d	4710.088m

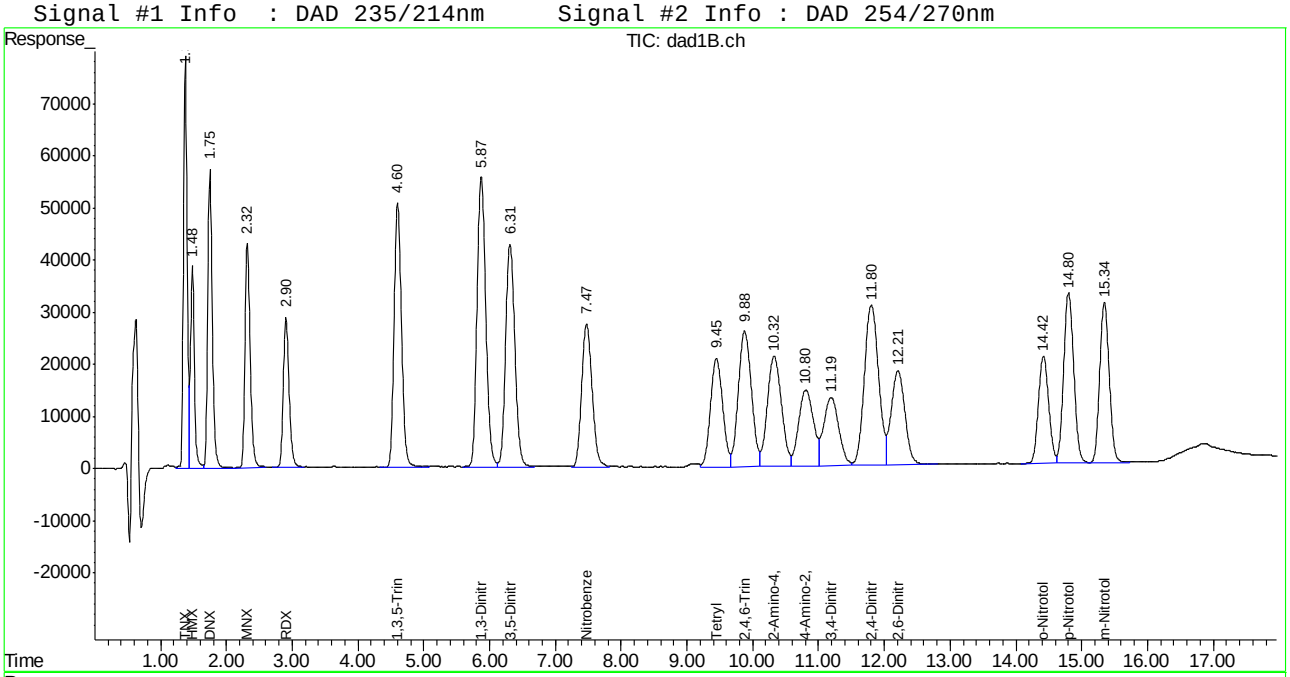
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB046131.D 8330B_0107.M Mon Feb 23 10:34:08 2015 Page 1

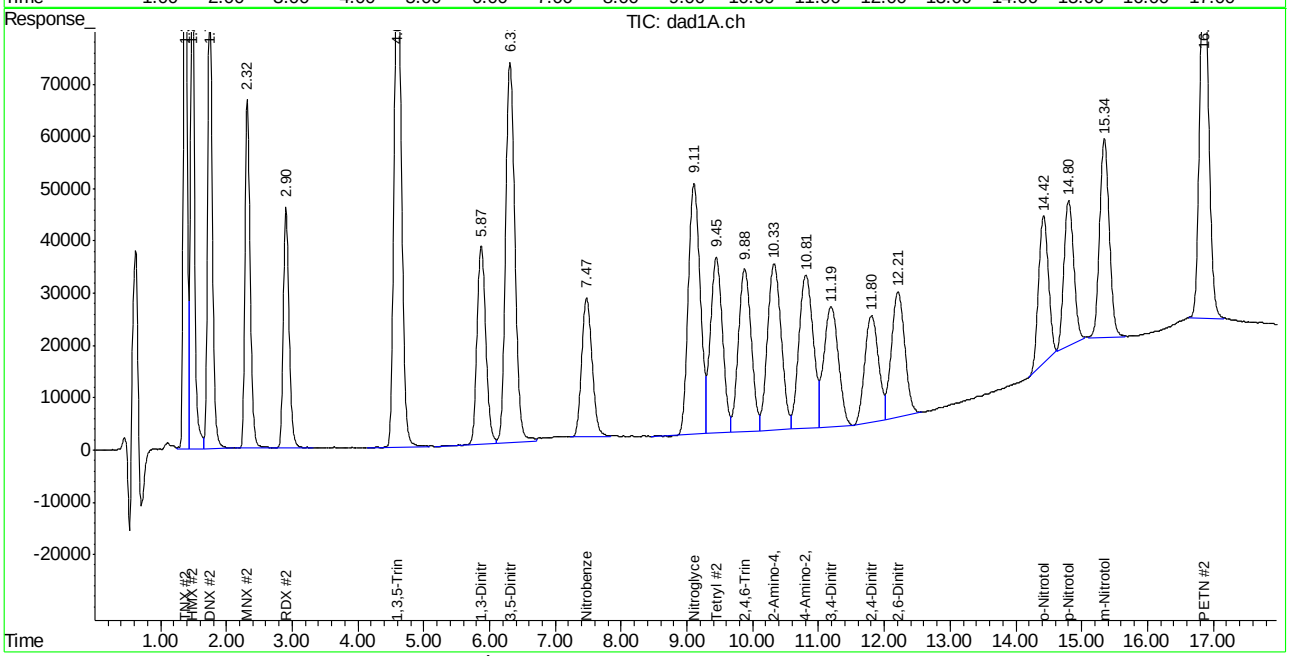
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\0220BPL\BB046131.D\dad1A.ch
Acq On : 21-Feb-2015, 00:30:32 Operator: KISMETL
Sample : ecc1235-1000 Inst : G1315B
Misc : OP55030,GBB1248,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Feb 23 7:46 2015 Quant Results File: 8330B_0107.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B_0107.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Feb 23 07:25:31 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES
FA22032

Manual Integration Approval Summary

Sample Number: GBB1248-ECC1235 **Method:** SW846 8330A
Lab FileID: BB046131.D **Analyst approved:** 02/23/15 14:38 Kismet Lugo
Injection Time: 02/21/15 00:30 **Supervisor approved:** 02/25/15 13:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitrobenzene	98-95-3	2	7.47	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.42	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.80	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.34	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058130.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0123RPB2\GG058130.D\dad1A.ch
Acq On : 23-Jan-2015, 11:05:35 Operator: kismetl
Sample : ic2344-20 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:32 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.26	16.26	135504	229764	23.666	20.538
Spiked Amount	500.000	Range	70 - 136	Recovery	=	4.73%#	4.11%#
	Target Compounds						
1)	TNX	5.63	5.63	202622	300782	22.048	21.418m
2)	HMX	6.17	6.17	70919	300598	22.484m	29.147m
3)	DNX	6.35	6.35	153711	333915	19.280m	24.612m
4)	MNX	7.71	7.71	132547	175318	21.006	18.999m
5)	1,3,5-Trinitrobe	8.65	8.65	211785	351038	20.488	19.389
6)	RDX	9.21	9.20	98556	164005	20.902	18.675
7)	1,3-Dinitrobenze	11.31	11.32	313525	241268	22.597	22.422
8)	Nitrobenzene	12.33	12.33	184875	175089	20.522	21.048m
9)	2,4,6-Trinitroto	13.37	13.38	207176	252168	21.338	19.960m
10)	Nitroglycerin	0.00	14.24	0	354252	N.D.	103.159m#
11)	Tetryl	15.09	15.10	144068	260546	19.012	19.097
13)	2,6-Dinitrotolue	16.71	16.70	190220	206531	27.304m	20.381
14)	2,4-Dinitrotolue	17.50	17.50	283923	186787	21.783	19.754m
15)	o-Nitrotoluene	19.13	19.11	364262	595156	19.761	20.099
16)	3,5-Dinitroanili	19.13	19.11	364262	595156	19.761	20.099
17)	p-Nitrotoluene	20.67	20.67	125860	146589	25.306m	18.289m
18)	4-Amino-2,6-Dini	21.22	21.21	139151	246285	20.649	17.232m
19)	m-Nitrotoluene	22.21	22.24	125093	213892	20.417	20.260m
20)	2-Amino-4,6-Dini	23.90	23.90	186138	275536	20.669	21.006
21)	PETN	0.00	25.78	0	198599	N.D.	167.478m#

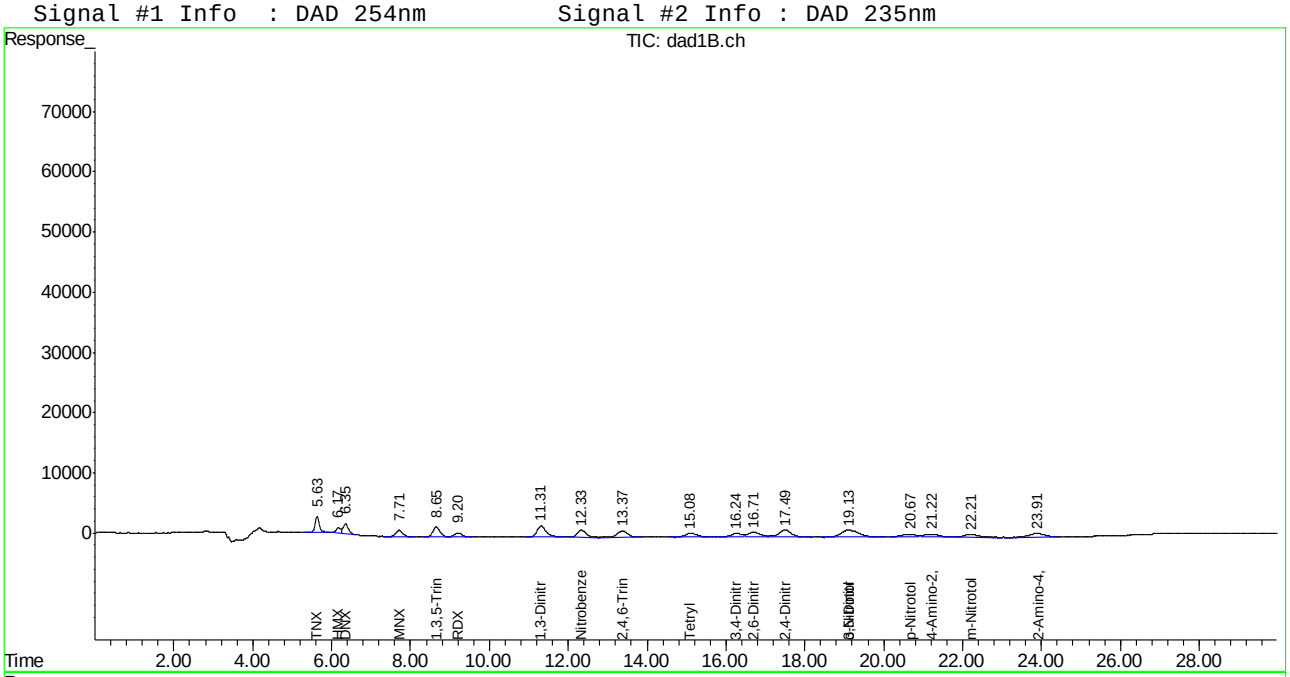
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058130.D 8330_RPB2.M Mon Jan 26 10:24:04 2015 Page 1

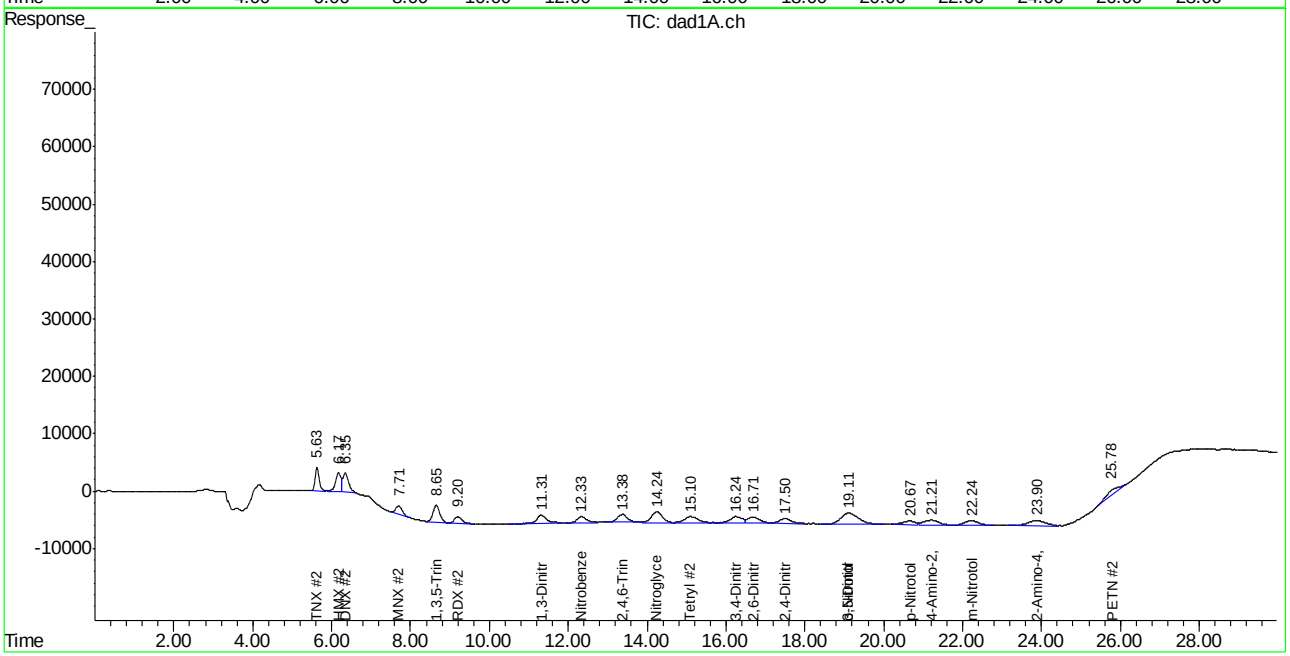
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058130.D\dad1B.ch Vial: 3
Signal #2 : G:\DATA\0123RPB2\GG058130.D\dad1A.ch
Acq On : 23-Jan-2015, 11:05:35 Operator: kismetl
Sample : ic2344-20 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:07 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058130.D
Injection Time: 01/23/15 11:05
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.17	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		1	6.35	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
MNX		2	7.71	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.33	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.38	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.24	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	16.71	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.50	Missed peak
p-Nitrotoluene	99-99-0	1	20.67	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.67	Missed peak
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	22.24	Missed peak
PETN	78-11-5	2	25.78	Missed peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058131.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0123RPB2\GG058131.D\dad1A.ch
Acq On : 23-Jan-2015, 11:37:38 Operator: kismetl
Sample : ic2344-50 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:33 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.28	16.28	291169	555661	50.852	49.668
Spiked Amount	500.000	Range	70 - 136	Recovery	=	10.17%#	9.93%#
	Target Compounds						
1)	TNX	5.63	5.63	483150	702979	52.573m	50.057m
2)	HMX	6.18	6.18	159513	602466	50.571m	58.416m
3)	DNX	6.36	6.36	399600	719887	50.122m	53.061m
4)	MNX	7.72	7.72	322282	450196	51.075	48.787m
5)	1,3,5-Trinitrobe	8.66	8.66	529530	893312	51.226	49.340
6)	RDX	9.22	9.22	222198	420374	47.124m	47.868m
7)	1,3-Dinitrobenze	11.32	11.33	701918	547243	50.591	50.858
8)	Nitrobenzene	12.35	12.35	456572	430879	50.681	51.797
9)	2,4,6-Trinitroto	13.39	13.38	482585	672338	49.704	53.219
10)	Nitroglycerin	0.00	14.25	0	857676	N.D.	249.758m#
11)	Tetryl	15.12	15.12	345073	613953	45.537	45.001
13)	2,6-Dinitrotolue	16.71	16.71	340261	493951	48.841	48.743
14)	2,4-Dinitrotolue	17.51	17.51	652805	471606	50.083	49.877
15)	o-Nitrotoluene	19.14	19.13	917855	1535333	49.792	51.848
16)	3,5-Dinitroanili	19.14	19.13	917855	1535333	49.792	51.848
17)	p-Nitrotoluene	20.66	20.65	261851	477650	52.649	59.592m
18)	4-Amino-2,6-Dini	21.22	21.23	341838	835200	50.727	58.437m
19)	m-Nitrotoluene	22.24	22.22	323563	622926	52.810	59.003m
20)	2-Amino-4,6-Dini	23.88	23.89	481120	675824	53.425	51.523
21)	PETN	0.00	25.85	0	796148	N.D. d	671.390m

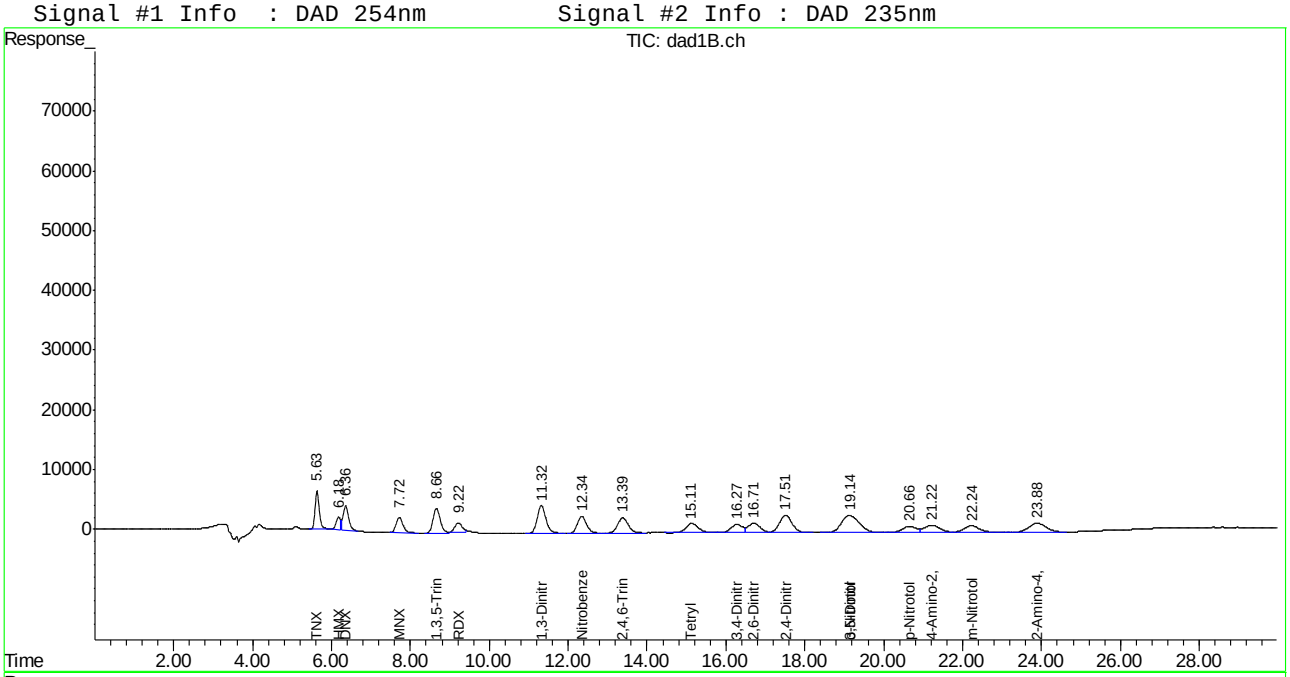
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058131.D 8330_RPB2.M Mon Jan 26 10:24:05 2015 Page 1

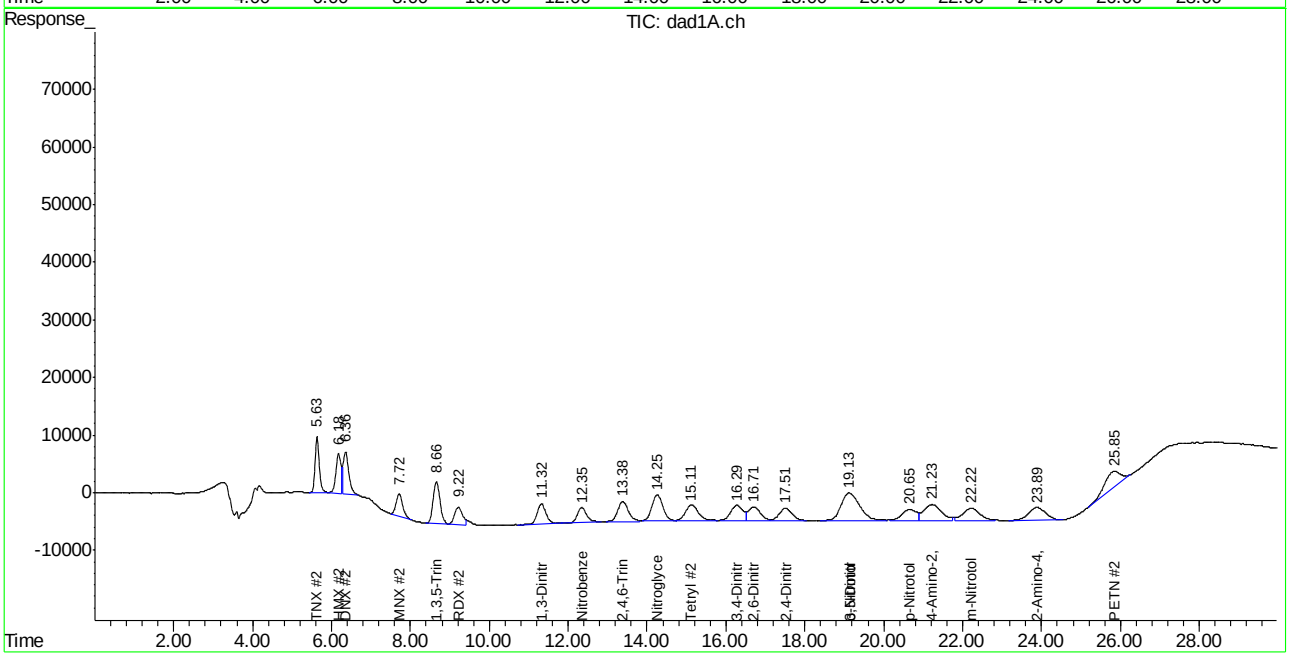
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058131.D\dad1B.ch Vial: 4
Signal #2 : G:\DATA\0123RPB2\GG058131.D\dad1A.ch
Acq On : 23-Jan-2015, 11:37:38 Operator: kismetl
Sample : ic2344-50 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:12 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058131.D
Injection Time: 01/23/15 11:37
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.63	Poorly defined baseline
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.18	Poorly defined baseline
HMX	2691-41-0	2	6.18	Poorly defined baseline
DNX		1	6.36	Poorly defined baseline
DNX		2	6.36	Poorly defined baseline
MNX		2	7.72	Poorly defined baseline
RDX	121-82-4	1	9.22	Overlapping peak
RDX	121-82-4	2	9.22	Overlapping peak
Nitroglycerine	55-63-0	2	14.25	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.65	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.23	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	22.22	Poorly defined baseline
PETN	78-11-5	2	25.85	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058132.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0123RPB2\GG058132.D\dad1A.ch
Acq On : 23-Jan-2015, 12:09:40 Operator: kismetl
Sample : ic2344-100 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:34 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.26	16.26	570491	1096428	99.636	98.004m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	19.93%#	19.60%#
	Target Compounds						
1)	TNX	5.63	5.63	936410	1412492	101.893m	100.580m
2)	HMX	6.17	6.17	330607	1093228	104.814m	106.002m
3)	DNX	6.36	6.35	819461	1386484	102.786m	102.194m
4)	MNX	7.71	7.71	655134	937729	103.825	101.620m
5)	1,3,5-Trinitrobe	8.66	8.66	1072182	1848390	103.722	102.093
6)	RDX	9.21	9.20	523410	946913	111.005	107.826
7)	1,3-Dinitrobenze	11.31	11.31	1424812	1056926	102.694	98.225
8)	Nitrobenzene	12.34	12.33	910836	863273	101.106	103.775m
9)	2,4,6-Trinitroto	13.37	13.37	956177	1298486	98.482	102.782m
10)	Nitroglycerin	0.00	14.25	0	1807626	N.D.	526.387m#
11)	Tetryl	15.12	15.11	710035	1243727	93.698	91.162m
13)	2,6-Dinitrotolue	16.69	16.69	721087	1012997	103.505	99.963m
14)	2,4-Dinitrotolue	17.50	17.49	1330049	969303	102.042	102.513m
15)	o-Nitrotoluene	19.10	19.09	1880593	3052609	102.019	103.087
16)	3,5-Dinitroanili	19.10	19.09	1880593	3052609	102.019	103.087
17)	p-Nitrotoluene	20.63	20.63	521161	827851	104.787	103.284
18)	4-Amino-2,6-Dini	21.19	21.19	720332	1513130	106.894	105.871
19)	m-Nitrotoluene	22.20	22.20	639927	1215711	104.444	115.151
20)	2-Amino-4,6-Dini	23.86	23.86	958538	1334497	106.438	101.739
21)	PETN	0.00	25.79	0	1745446	N.D. d	1471.931m

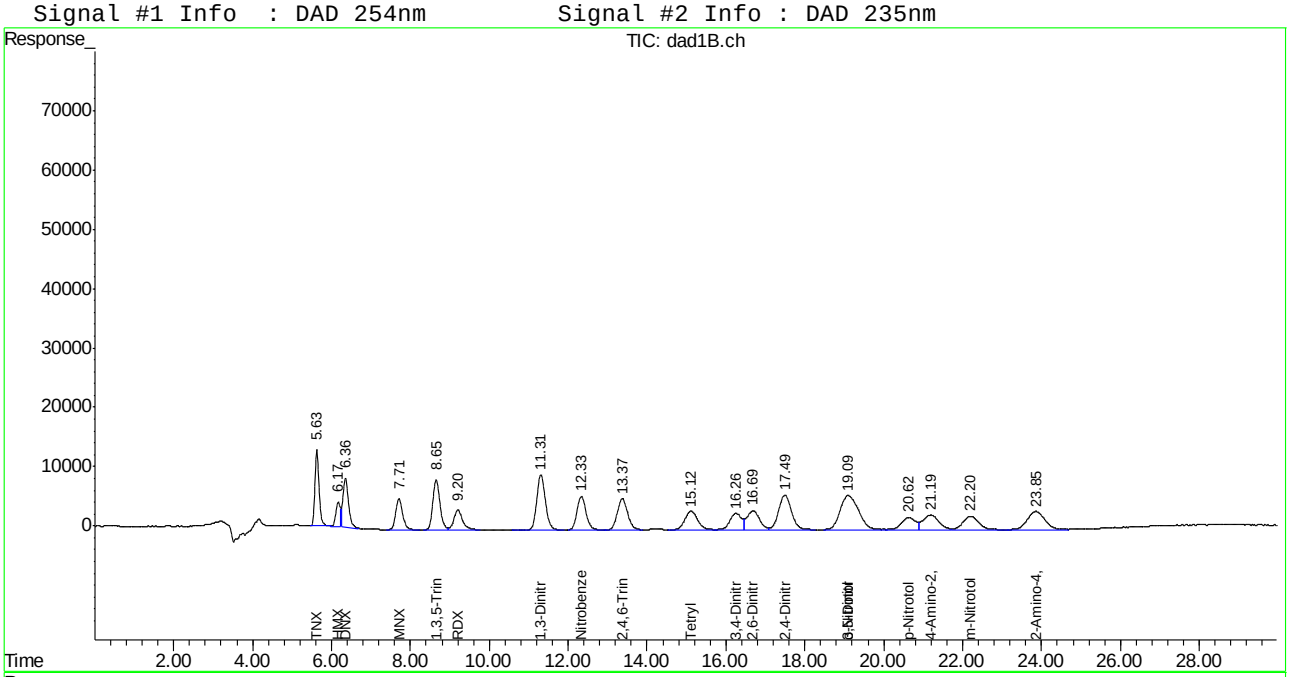
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058132.D 8330_RPB2.M Mon Jan 26 10:24:06 2015 Page 1

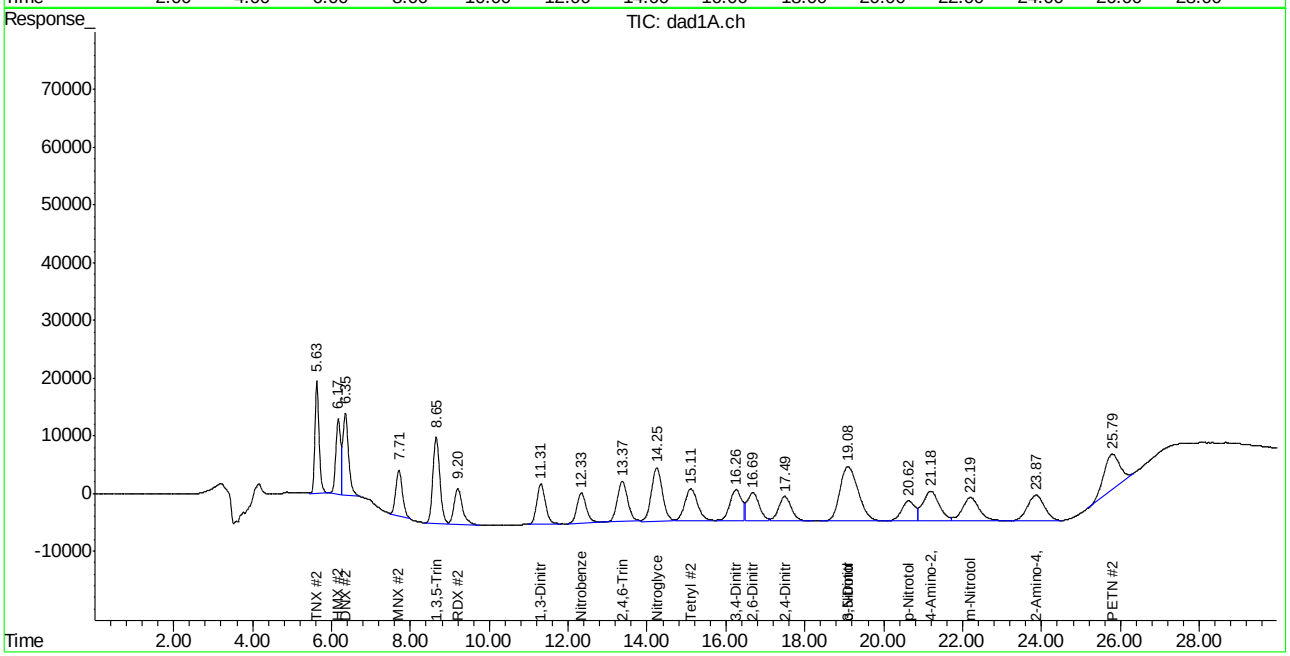
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058132.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\0123RPB2\GG058132.D\dad1A.ch
Acq On : 23-Jan-2015, 12:09:40 Operator: kismetl
Sample : ic2344-100 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:16 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058132.D
Injection Time: 01/23/15 12:09
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.63	Poorly defined baseline
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.17	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
DNX		1	6.36	Poorly defined baseline
MNX		2	7.71	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.33	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.37	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.25	Poorly defined baseline
Tetryl	479-45-8	2	15.11	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.26	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.69	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.49	Poorly defined baseline
PETN	78-11-5	2	25.79	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058133.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0123RPB2\GG058133.D\dad1A.ch
Acq On : 23-Jan-2015, 12:41:45 Operator: kismetl
Sample : ic2344-200 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:35 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.26	16.25	1148438	2299678	200.574	205.557
Spiked Amount	500.000	Range	70 - 136	Recovery	=	40.11%#	41.11%#
	Target Compounds						
1)	TNX	5.63	5.63	1849359	2793346	201.233m	198.906m
2)	HMX	6.17	6.17	640643	2065990	203.107m	200.323m
3)	DNX	6.35	6.35	1573846	2595464	197.409m	191.305m
4)	MNX	7.71	7.71	1282288	1953152	203.215	211.659m
5)	1,3,5-Trinitrobe	8.66	8.66	2110036	3690543	204.123	203.840
6)	RDX	9.20	9.20	984814	1780116	208.859	202.703
7)	1,3-Dinitrobenze	11.30	11.30	2848919	2127739	205.337	197.740
8)	Nitrobenzene	12.33	12.33	1832558	1659932	203.420	199.543
9)	2,4,6-Trinitroto	13.37	13.37	1945601	2615720	200.389	207.049
10)	Nitroglycerin	0.00	14.24	0	3581991	N.D. d	1043.087
11)	Tetryl	15.11	15.11	1463289	2623789	193.099	192.318
13)	2,6-Dinitrotolue	16.69	16.69	1454046	2100872	208.715	207.315
14)	2,4-Dinitrotolue	17.50	17.50	2687153	1959256	206.159	207.209
15)	o-Nitrotoluene	19.10	19.09	3707826	5924848	201.144	200.083
16)	3,5-Dinitroanili	19.10	19.09	3707826	5924848	201.144	200.083
17)	p-Nitrotoluene	20.64	20.64	1049325	1669549	210.982	208.296
18)	4-Amino-2,6-Dini	21.19	21.19	1428679	2775065	212.010	194.166
19)	m-Nitrotoluene	22.21	22.21	1259687	2059648	205.597	195.088
20)	2-Amino-4,6-Dini	23.86	23.86	1892708	2727177	210.170	207.914
21)	PETN	0.00	25.79	0	3453440	N.D. d	2912.278m

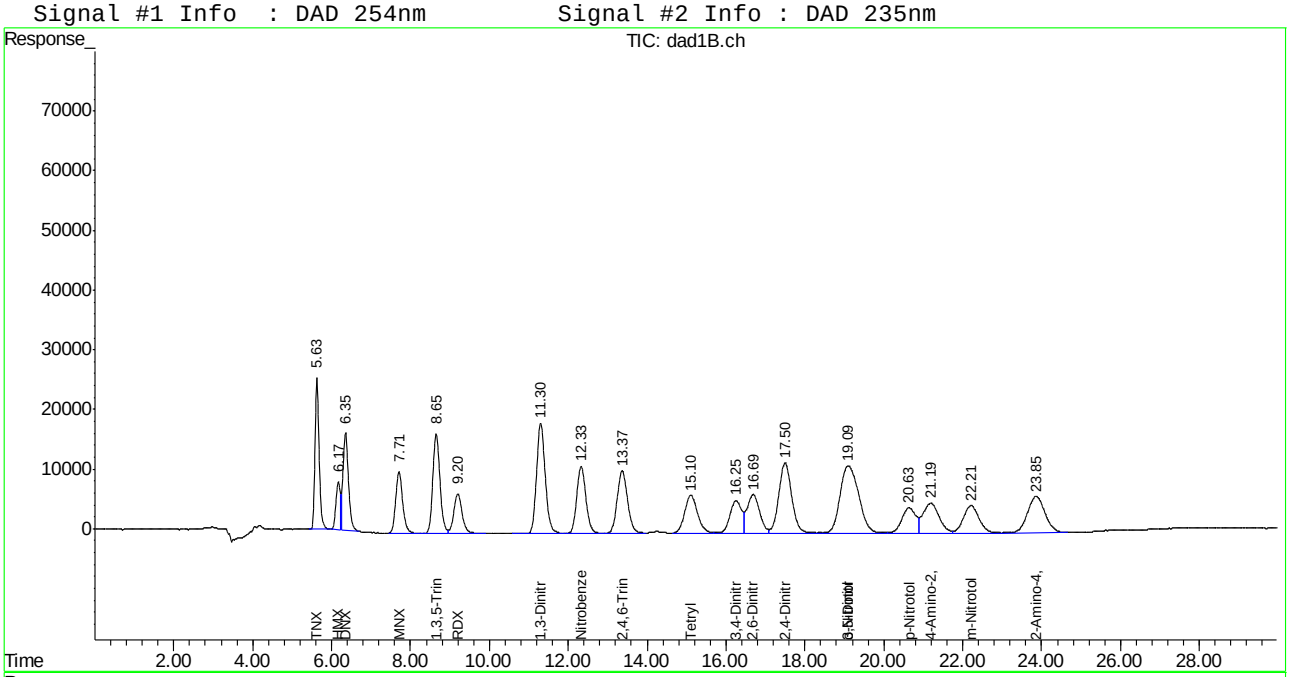
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058133.D 8330_RPB2.M Mon Jan 26 10:24:07 2015 Page 1

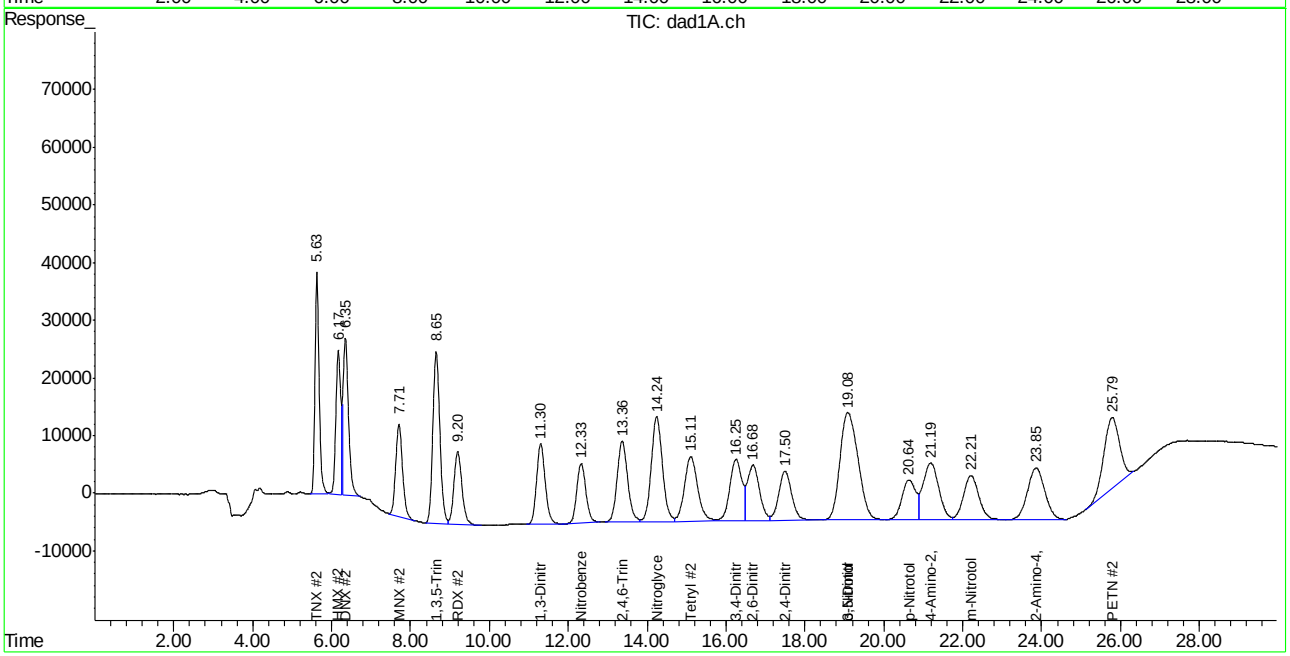
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058133.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\0123RPB2\GG058133.D\dad1A.ch
Acq On : 23-Jan-2015, 12:41:45 Operator: kismetl
Sample : ic2344-200 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:18 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058133.D
Injection Time: 01/23/15 12:41
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.63	Poorly defined baseline
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	1	6.17	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		1	6.35	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
MNX		2	7.71	Poorly defined baseline
PETN	78-11-5	2	25.79	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058134.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0123RPB2\GG058134.D\dad1A.ch
Acq On : 23-Jan-2015, 13:24:24 Operator: kismetl
Sample : icc2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 13:59:36 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.24	16.24	2686715	5325586	469.233	476.028
	Spiked Amount 500.000	Range 70 - 136		Recovery =		93.85%	95.21%
	Target Compounds						
1)	TNX	5.63	5.62	4546151	6712200	494.677	477.957m
2)	HMX	6.17	6.17	1571336	5223120	498.169	506.446
3)	DNX	6.35	6.35	3990939	6748031	500.586	497.380m
4)	MNX	7.70	7.70	3116272	4816601	493.862	521.964
5)	1,3,5-Trinitrobe	8.65	8.65	5105824	9063347	493.933	500.598
6)	RDX	9.19	9.19	2340007	4439130	496.269	505.487
7)	1,3-Dinitrobenze	11.30	11.30	6829886	5121619	492.267	475.975
8)	Nitrobenzene	12.32	12.32	4435753	4087994	492.383	491.424
9)	2,4,6-Trinitroto	13.36	13.36	4668876	6193358	480.874	490.239
10)	Nitroglycerin	0.00	14.23	0	8403103	N.D. d	2447.010
11)	Tetryl	15.09	15.09	3409154	5999575	449.880	439.756
13)	2,6-Dinitrotolue	16.67	16.67	3417724	4988598	490.582	492.276
14)	2,4-Dinitrotolue	17.47	17.47	6289685	4529979	482.547	479.087
15)	o-Nitrotoluene	19.06	19.05	8808523	14343730	477.850	484.390
16)	3,5-Dinitroanili	19.06	19.05	8808523	14343730	477.850	484.390
17)	p-Nitrotoluene	20.61	20.61	2432744	4010295	489.138	500.331
18)	4-Amino-2,6-Dini	21.15	21.15	3319341	6926699	492.577	484.648
19)	m-Nitrotoluene	22.18	22.18	2964735	5134605	483.882	486.346
20)	2-Amino-4,6-Dini	23.82	23.82	4534623	6564422	503.533	500.458
21)	PETN	0.00	25.76	0	8832484	N.D. d	7448.416m

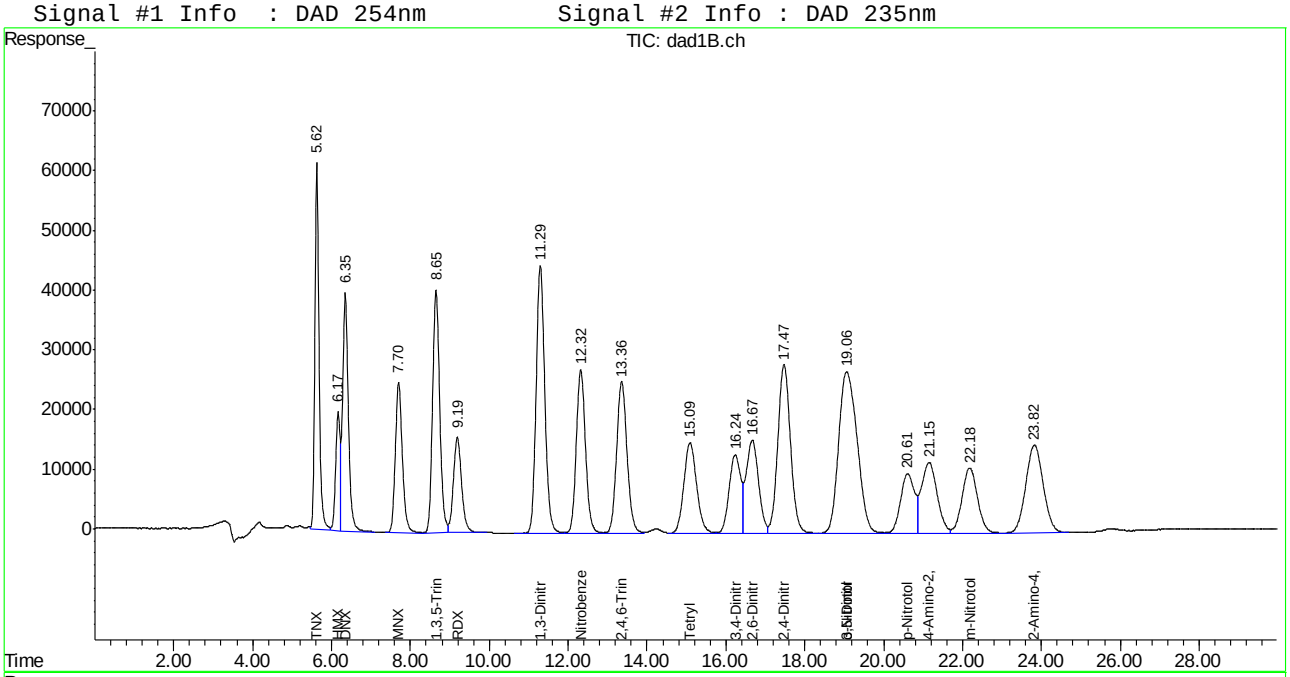
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

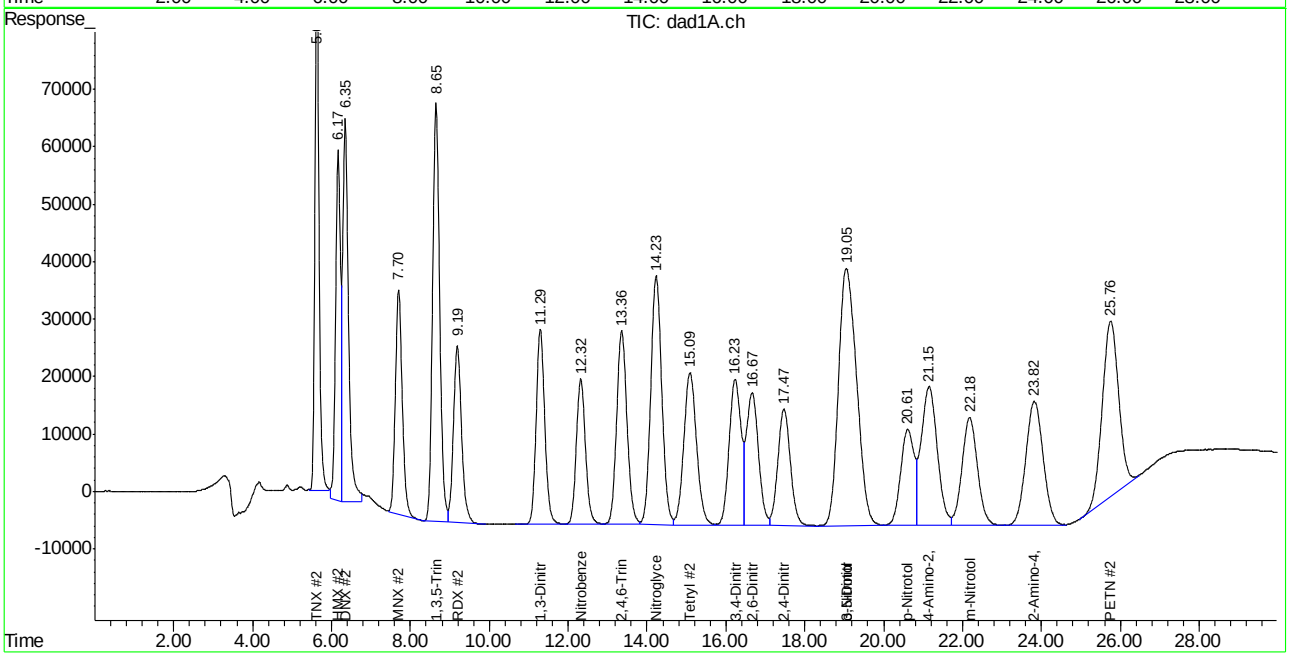
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058134.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\0123RPB2\GG058134.D\dad1A.ch
Acq On : 23-Jan-2015, 13:24:24 Operator: kismetl
Sample : icc2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:22 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-ICC2344 **Method:** SW846 8330A
Lab FileID: GG058134.D **Analyst approved:** 01/26/15 10:28 Kismet Lugo
Injection Time: 01/23/15 13:24 **Supervisor approved:** 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.62	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
PETN	78-11-5	2	25.76	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058135.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0123RPB2\GG058135.D\dad1A.ch
Acq On : 23-Jan-2015, 13:56:28 Operator: kismetl
Sample : ic2344-1000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:46:07 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.25	16.25	5447323	10870955	951.372	971.702
	Spiked Amount 500.000	Range 70 - 136		Recovery =		190.27%#	194.34%#
	Target Compounds						
1)	TNX	5.63	5.63	8941708	13326461	972.968	948.940m
2)	HMX	6.17	6.17	3063429	9453062	971.216	916.591m
3)	DNX	6.36	6.35	7903726	12966594	991.370	955.735m
4)	MNX	7.71	7.71	6181895	9686833	979.698	1049.740
5)	1,3,5-Trinitrobe	8.65	8.65	10136065	18084780	980.555	998.880
6)	RDX	9.20	9.20	4634686	8957707	982.924	1020.021
7)	1,3-Dinitrobenze	11.30	11.30	13661621	10316998	984.667	958.805
8)	Nitrobenzene	12.33	12.33	8893612	8279653	987.220	995.310
9)	2,4,6-Trinitroto	13.37	13.37	9328101	12491616	960.755	988.782
10)	Nitroglycerin	0.00	14.24	0	17031236	N.D. d	4959.550
11)	Tetryl	15.10	15.10	6820887	12149351	900.100	890.521
13)	2,6-Dinitrotolue	16.68	16.68	6932374	10185100	995.077	1005.069
14)	2,4-Dinitrotolue	17.49	17.49	12734075	9171832	976.963	970.006
15)	o-Nitrotoluene	19.08	19.07	17662635	28382845	958.172	958.493
16)	3,5-Dinitroanili	19.08	19.07	17662635	28382845	958.172	958.493
17)	p-Nitrotoluene	20.63	20.63	4917478	7929714	988.729	989.325
18)	4-Amino-2,6-Dini	21.17	21.17	6680908	13541075	991.420	947.444
19)	m-Nitrotoluene	22.20	22.20	5996418	10120530	978.690	958.609
20)	2-Amino-4,6-Dini	23.83	23.83	9097215	13286577	1010.172	1012.941
21)	PETN	0.00	25.76	0	18013024	N.D. d	15190.345m

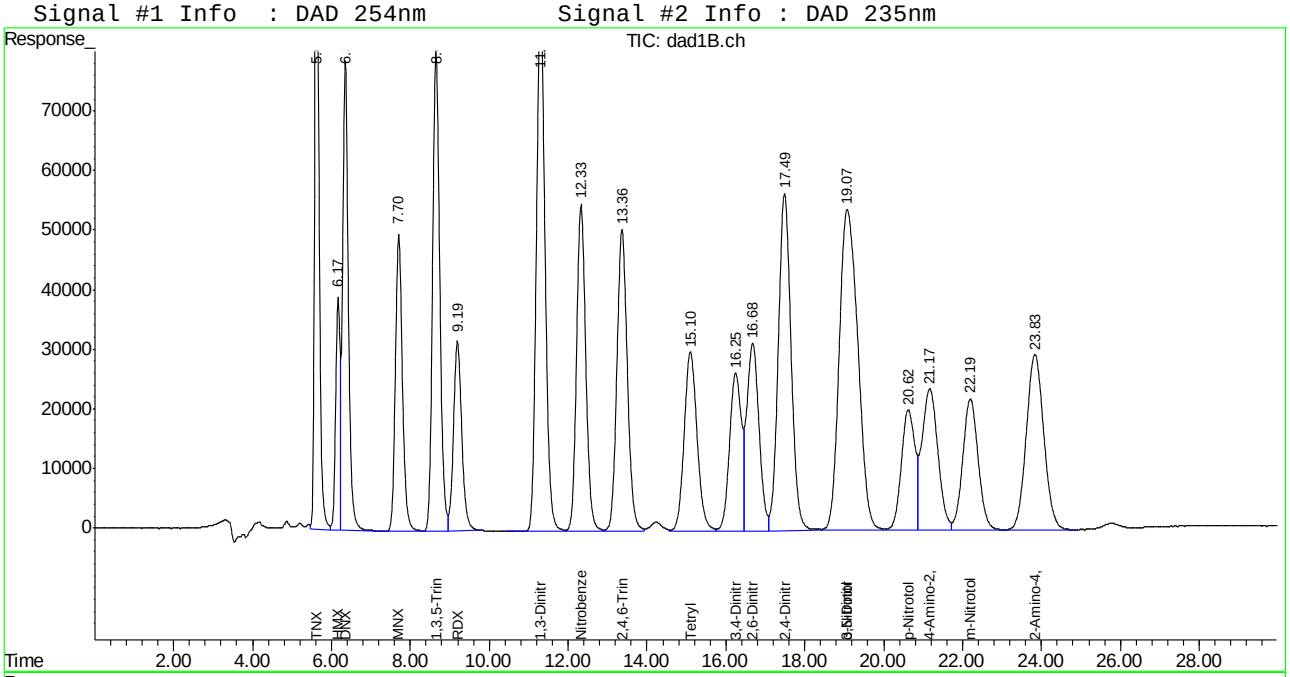
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058135.D 8330_RPB2.M Mon Jan 26 10:24:09 2015 Page 1

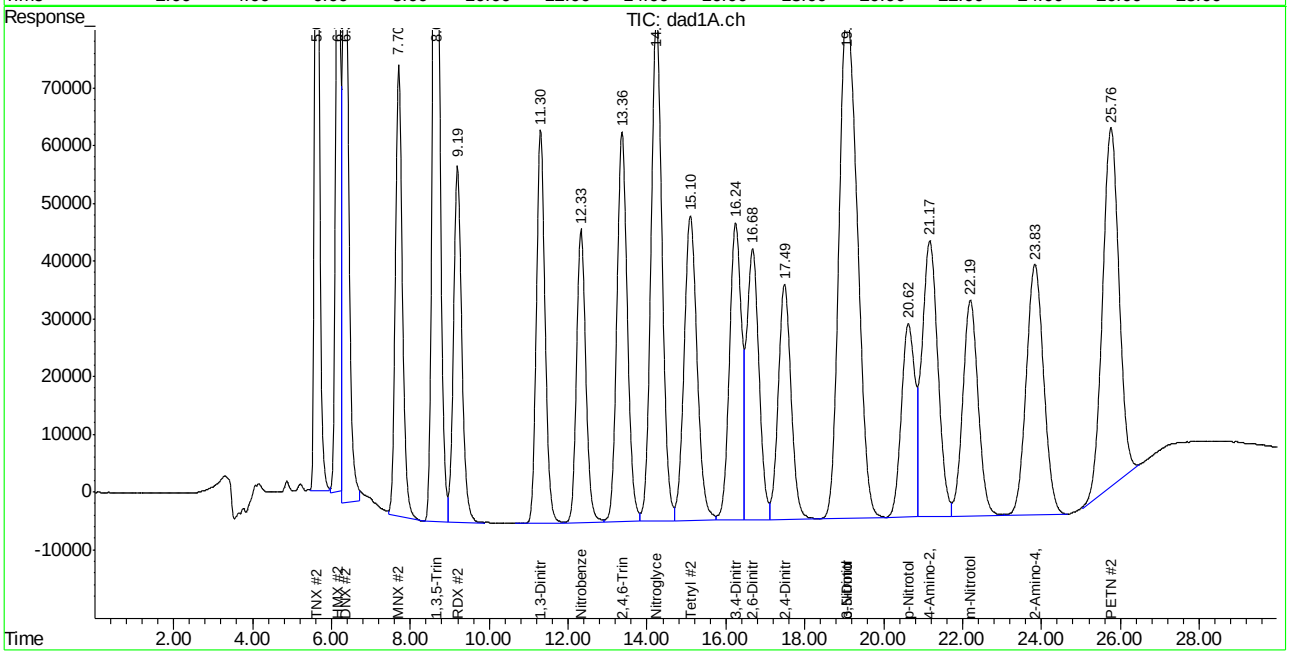
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058135.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\0123RPB2\GG058135.D\dad1A.ch
Acq On : 23-Jan-2015, 13:56:28 Operator: kismetl
Sample : ic2344-1000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:47 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2344-IC2344 **Method:** SW846 8330A
Lab FileID: GG058135.D **Analyst approved:** 01/26/15 10:28 Kismet Lugo
Injection Time: 01/23/15 13:56 **Supervisor approved:** 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.63	Poorly defined baseline
HMX	2691-41-0	2	6.17	Poorly defined baseline
DNX		2	6.35	Poorly defined baseline
PETN	78-11-5	2	25.76	Poorly defined baseline

GG058136.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058136.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\0123RPB2\GG058136.D\dad1A.ch
Acq On : 23-Jan-2015, 14:28:33 Operator: kismetl
Sample : ic2344-2000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 14:59:27 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.25	16.25	11235431	22504438	1962.261	2011.563
	Spiked Amount 500.000	Range 70 - 136		Recovery =		392.45%#	402.31%#
	Target Compounds						
1)	TNX	5.63	5.63	18538143	28401035	2017.179	2022.358
2)	HMX	6.17	6.17	6306668	20507653	1999.437	1988.470
3)	DNX	6.35	6.35	16446519	26358406	2062.898	1942.811m
4)	MNX	7.70	7.70	12925741	20237500	2048.452	2193.093
5)	1,3,5-Trinitrobe	8.65	8.65	21243881	37947946	2055.116	2095.986
6)	RDX	9.19	9.19	9706148	18763982	2058.480	2136.669
7)	1,3-Dinitrobenze	11.30	11.30	28248357	21400459	2036.012	1988.842
8)	Nitrobenzene	12.32	12.32	18118734	16826656	2011.239	2022.759
9)	2,4,6-Trinitroto	13.36	13.36	19451571	26030814	2003.430	2060.486
10)	Nitroglycerin	0.00	14.24	0	35347929	N.D. d	10293.430
11)	Tetryl	15.10	15.10	14706625	26340921	1940.721	1930.732
13)	2,6-Dinitrotolue	16.68	16.68	14215978	20978272	2040.571	2070.143
14)	2,4-Dinitrotolue	17.49	17.49	26296006	19179393	2017.440	2028.398
15)	o-Nitrotoluene	19.07	19.06	36531658	59146736	1981.790	1997.394
16)	3,5-Dinitroanili	19.07	19.06	36531658	59146736	1981.790	1997.394
17)	p-Nitrotoluene	20.63	20.63	10019454	16338952	2014.554	2038.476
18)	4-Amino-2,6-Dini	21.16	21.17	13915867	28362926	2065.059	1984.501
19)	m-Nitrotoluene	22.20	22.20	12240229	20954284	1997.757	1984.775
20)	2-Amino-4,6-Dini	23.83	23.83	18970837	27571441	2106.558	2101.988
21)	PETN	0.00	25.77	0	37686645	N.D. d	31781.069m

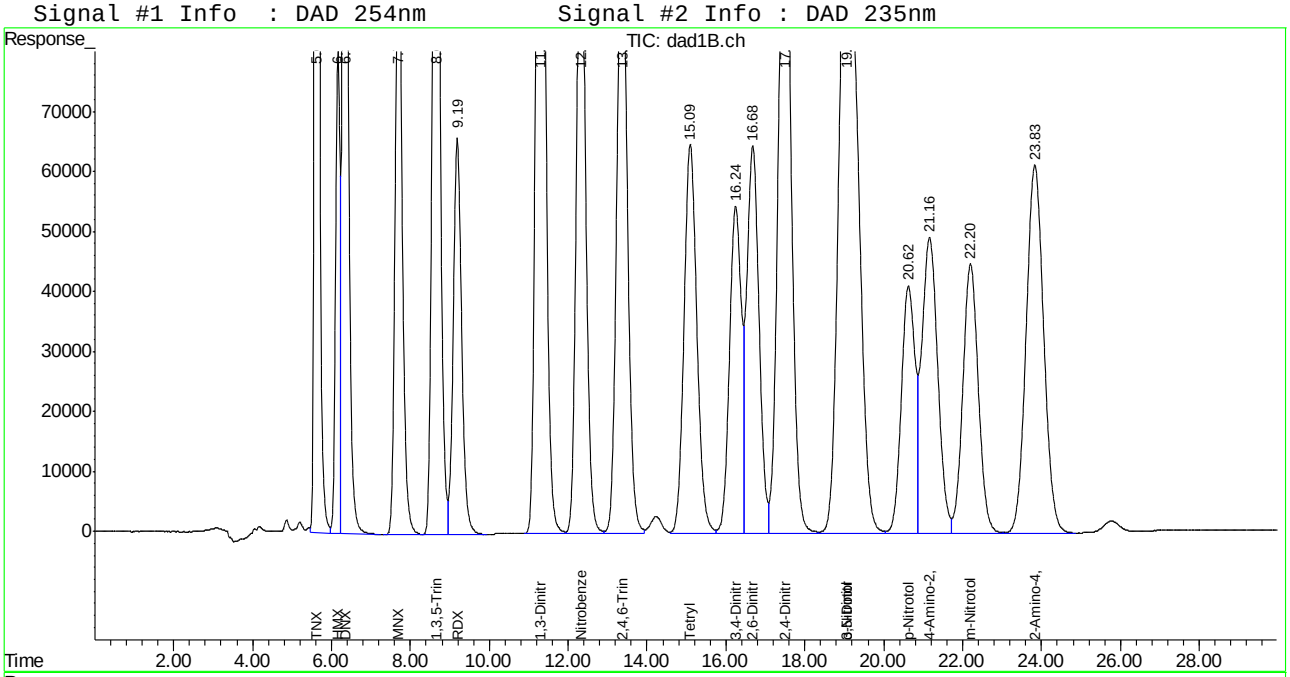
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058136.D 8330_RPB2.M Mon Jan 26 10:24:10 2015 Page 1

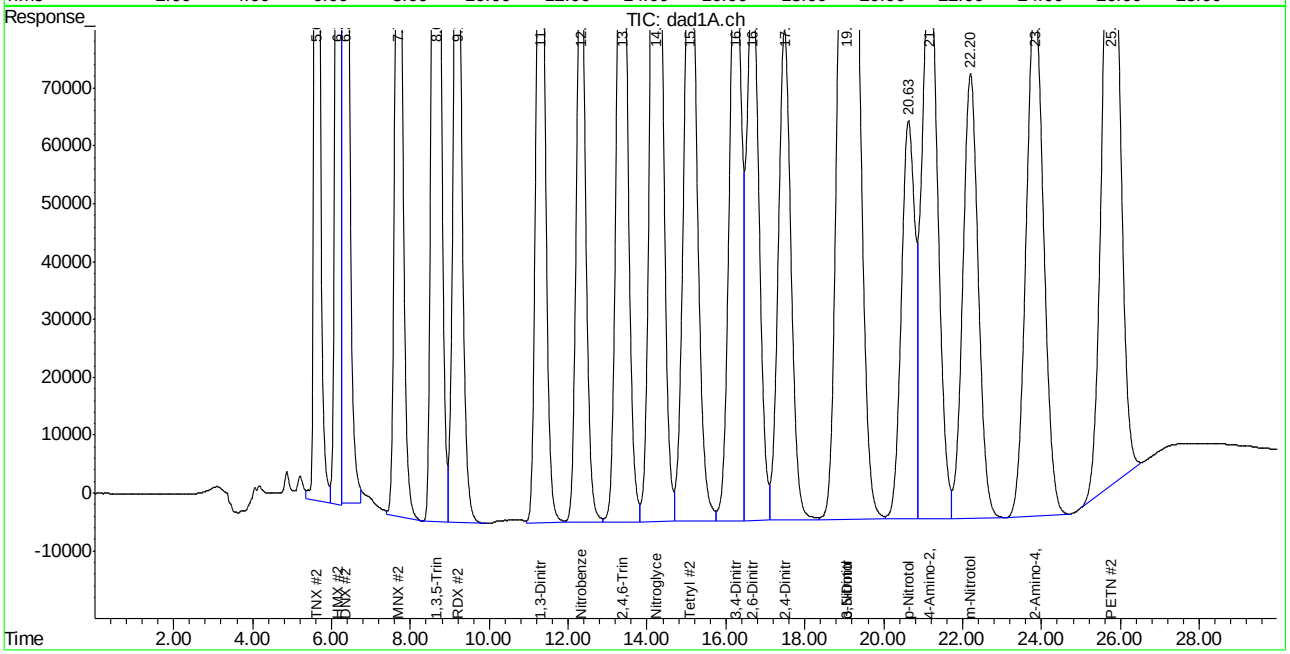
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058136.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\0123RPB2\GG058136.D\dad1A.ch
Acq On : 23-Jan-2015, 14:28:33 Operator: kismetl
Sample : ic2344-2000 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 23 15:00 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 13:59:16 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-IC2344
Lab FileID: GG058136.D
Injection Time: 01/23/15 14:28
Method: SW846 8330A
Analyst approved: 01/26/15 10:28 Kismet Lugo
Supervisor approved: 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
DNX		2	6.35	Poorly defined baseline
PETN	78-11-5	2	25.77	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/26/15 12:49

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058137.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0123RPB2\GG058137.D\dad1A.ch
Acq On : 23-Jan-2015, 15:00:38 Operator: kismetl
Sample : icv2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 26 09:33:40 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.62	5.61	4800362	7154094	511.391	510.269m
2)	HMX	6.16	6.16	1763222	5819736	546.012	575.360m
3)	DNX	6.34	6.33	4310117	6944726	540.209	498.200m
4)	MNX	7.68	7.68	3311977	5078940	516.193	535.821
5)	1,3,5-Trinitrobe	8.64	8.64	5462753	9725256	520.818	533.767
6)	RDX	9.17	9.17	2464771	4701082	512.005	529.100
7)	1,3-Dinitrobenze	11.28	11.28	6559314	4919909	460.751	456.291
8)	Nitrobenzene	12.30	12.30	4763461	4470580	525.347	528.854
9)	2,4,6-Trinitroto	13.35	13.35	4232479	5760743	437.679	447.996
10)	Nitroglycerin	0.00	14.22	0	8817979	N.D. d	2522.228
11)	Tetryl	15.08	15.08	3254432	6058686	460.091	480.949
13)	2,6-Dinitrotolue	16.66	16.66	3858649	6059741	522.720	593.333
14)	2,4-Dinitrotolue	17.47	17.47	6643888	4876989	503.053	516.613
15)	o-Nitrotoluene	19.05	19.04	9029382	14744681	495.883	497.991
16)	3,5-Dinitroanili	19.05	19.04	9029382	14744681	495.883	497.991
17)	p-Nitrotoluene	20.62	20.62	2599311	4241861	494.691	515.249
18)	4-Amino-2,6-Dini	21.14	21.15	3472778	7305131	502.069	513.409
19)	m-Nitrotoluene	22.19	22.19	3328115	5923892	535.933	542.230
20)	2-Amino-4,6-Dini	23.81	23.81	4812604	6947682	513.305	514.778
21)	PETN	0.00	25.78	0	9401129	N.D. d	2525.198m

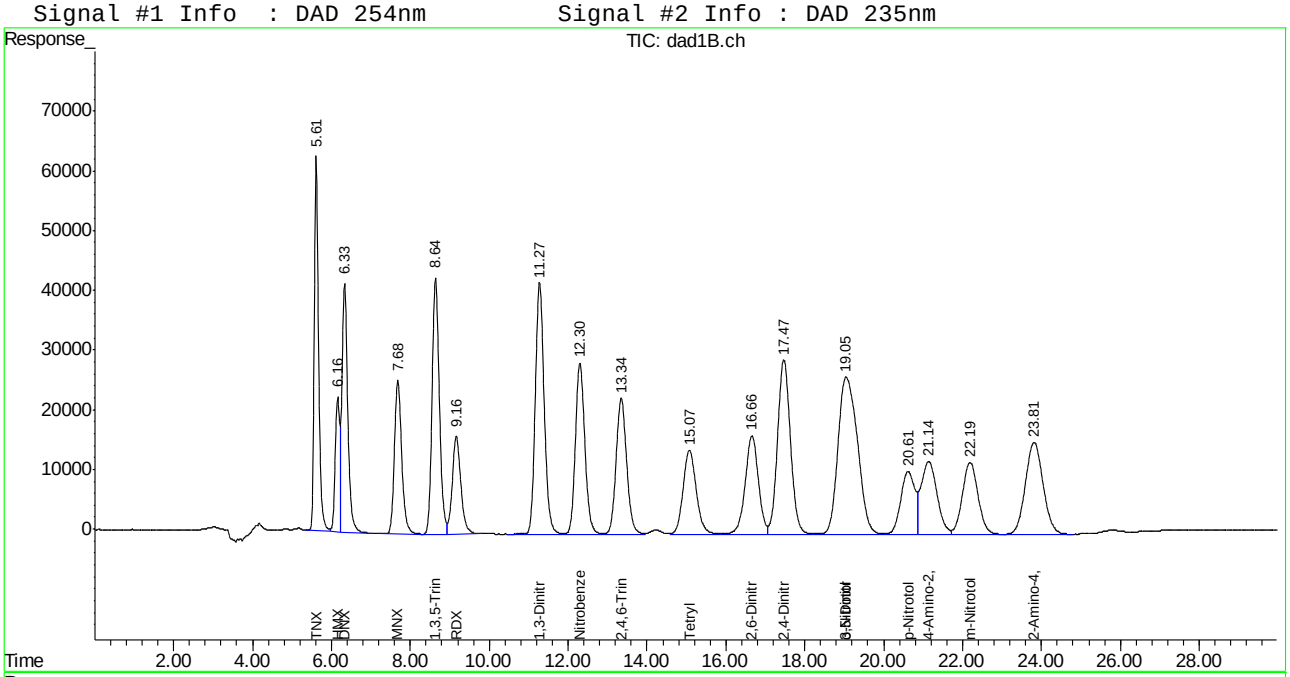
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

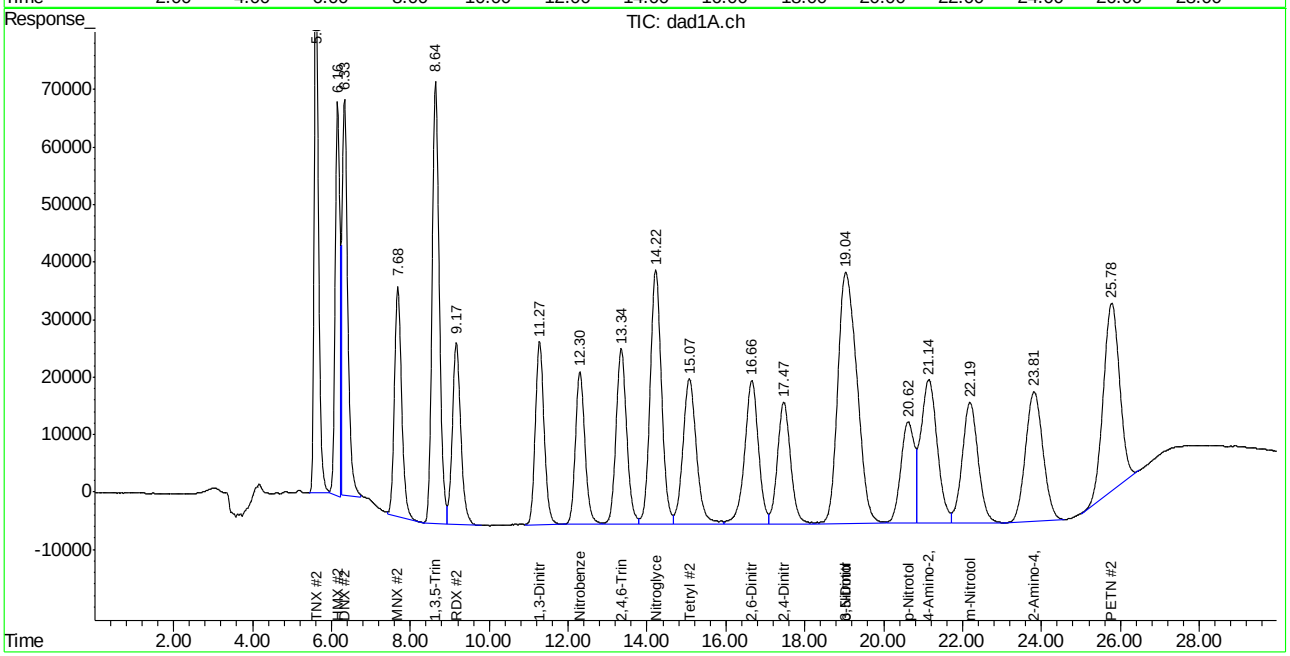
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0123RPB2\GG058137.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\0123RPB2\GG058137.D\dad1A.ch
Acq On : 23-Jan-2015, 15:00:38 Operator: kismetl
Sample : icv2344-500 Inst : G1315B
Misc : OP54642,GGG2344,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 26 9:36 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Jan 23 15:03:49 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2344-ICV2344 **Method:** SW846 8330A
Lab FileID: GG058137.D **Analyst approved:** 01/26/15 10:28 Kismet Lugo
Injection Time: 01/23/15 15:00 **Supervisor approved:** 01/26/15 12:49 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.61	Poorly defined baseline
HMX	2691-41-0	2	6.16	Poorly defined baseline
DNX		2	6.33	Poorly defined baseline
PETN	78-11-5	2	25.78	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058408.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058408.D\dad1A.ch
Acq On : 23-Feb-2015, 10:22:02 Operator: kismetl
Sample : cc2344-500 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:45 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.34	16.34	2735187	5916919	472.933	532.108
	Spiked Amount 500.000	Range 72 - 145		Recovery =		94.59%	106.42%
	Target Compounds						
1)	TNX	5.64	5.64	4549576	6869183	484.675	489.947m
2)	HMX	6.21	6.21	1492701	5288287	462.241	522.819
3)	DNX	6.38	6.38	4095999	7288138	513.372	522.835
4)	MNX	7.73	7.73	3144670	4958710	490.117	523.136
5)	1,3,5-Trinitrobe	8.65	8.65	5224160	9289860	498.071	509.871
6)	RDX	9.23	9.23	2329144	4476493	483.832m	503.823m
7)	1,3-Dinitrobenze	11.33	11.33	7034500	5367213	494.130	497.776
8)	Nitrobenzene	12.34	12.35	4370133	4195991	481.968	496.371
9)	2,4,6-Trinitroto	13.39	13.39	4804575	6555742	496.840	509.821
10)	Nitroglycerin	0.00	14.28	0	8890284	N.D. d	2542.910
11)	Tetryl	15.15	15.15	3396908	6500300	480.233	516.005
13)	2,6-Dinitrotolue	16.74	16.73	3563311	5547186	482.711	543.147
14)	2,4-Dinitrotolue	17.55	17.55	6517949	4986086	493.517	528.169m
15)	o-Nitrotoluene	19.12	19.11	8729657	14534759	479.423	490.901
16)	3,5-Dinitroanili	19.12	19.11	8729657	14534759	479.423	490.901
17)	p-Nitrotoluene	20.68	20.68	2423273	3910900	461.188	475.048
18)	4-Amino-2,6-Dini	21.27	21.27	3496859	6979318	505.550	490.510
19)	m-Nitrotoluene	22.25	22.25	2948945	4883993	474.874	447.045
20)	2-Amino-4,6-Dini	23.94	23.94	4669149	6620769	498.004	490.556
21)	PETN	0.00	25.86	0	8996428	N.D. d	2416.493m

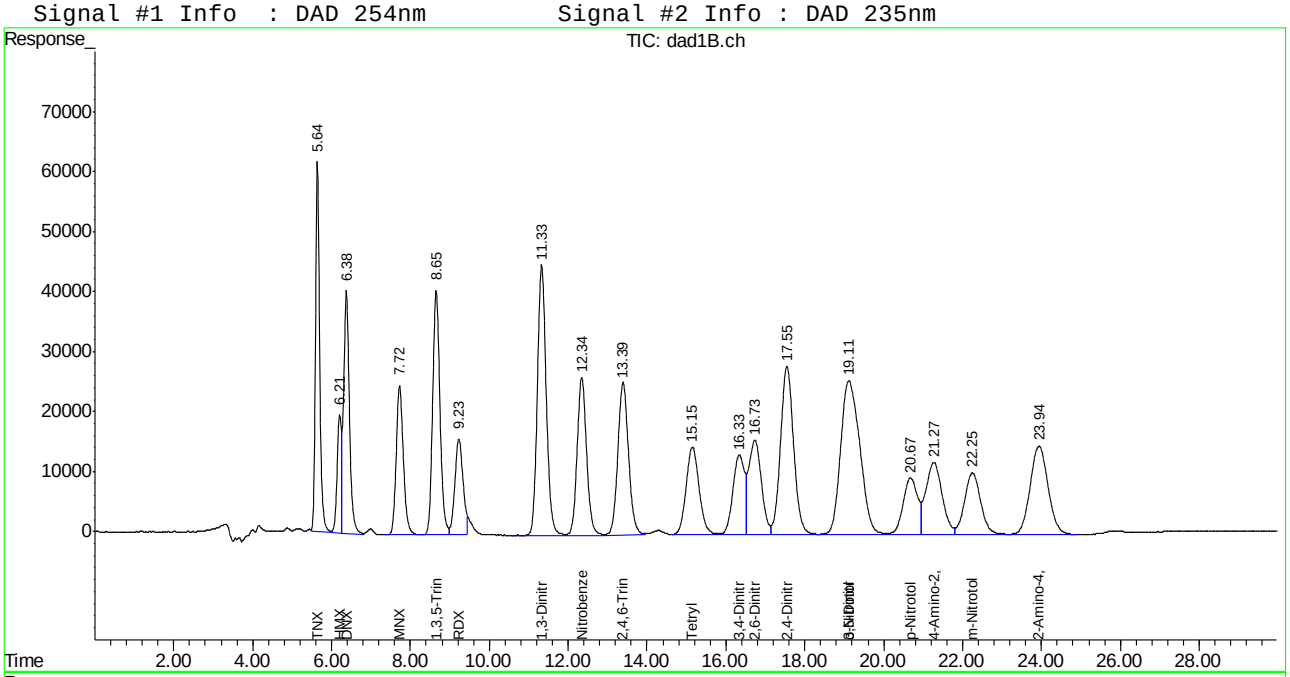
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058408.D 8330RPB.M Wed Feb 25 10:31:25 2015 Page 1

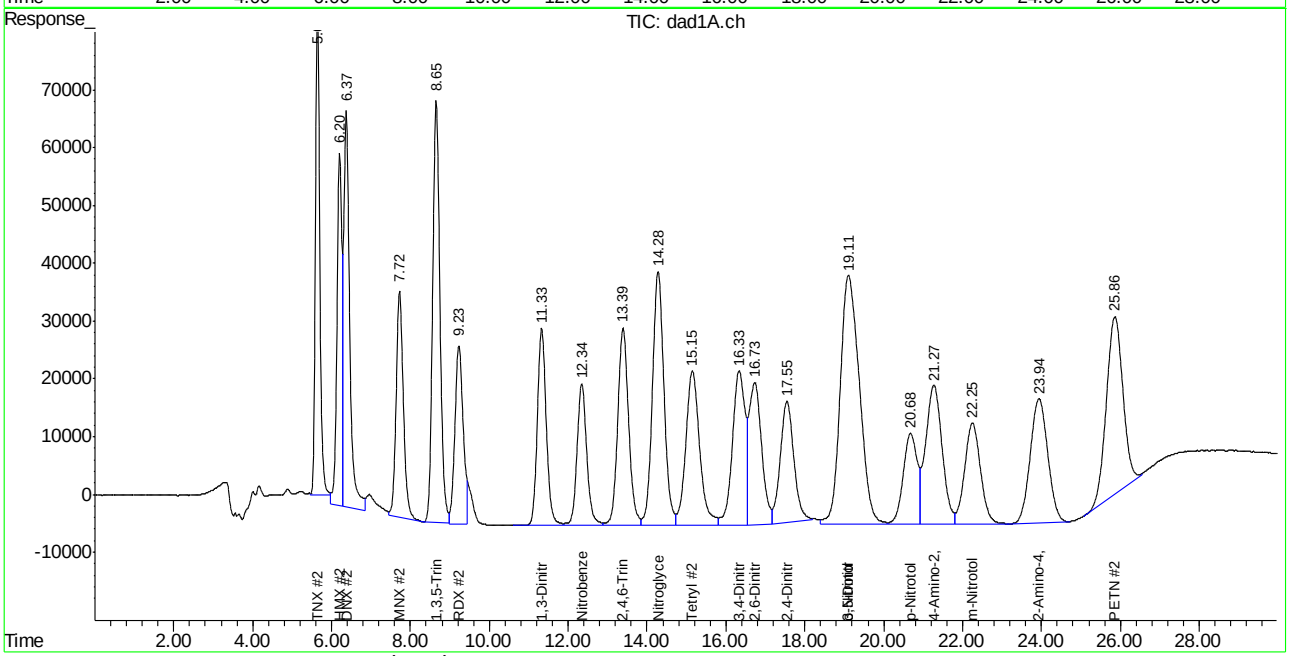
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058408.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058408.D\dad1A.ch
Acq On : 23-Feb-2015, 10:22:02 Operator: kismetl
Sample : cc2344-500 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:07 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA22032

Manual Integration Approval Summary

Sample Number: GGG2361-CC2344 **Method:** SW846 8330A
Lab FileID: GG058408.D **Analyst approved:** 02/25/15 10:45 Kismet Lugo
Injection Time: 02/23/15 10:22 **Supervisor approved:** 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.64	Poorly defined baseline
RDX	121-82-4	1	9.23	Overlapping peak
RDX	121-82-4	2	9.23	Overlapping peak
2,4-Dinitrotoluene	121-14-2	2	17.55	Poorly defined baseline
PETN	78-11-5	2	25.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
02/25/15 13:54

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058412.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058412.D\dad1A.ch
Acq On : 23-Feb-2015, 12:42:53 Operator: kismetl
Sample : ecc2344-1000 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 09:03:49 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.34	16.34	5362587	10851362	927.230	975.861
Spiked Amount	500.000	Range	72 - 145	Recovery	=	185.45%#	195.17%#
	Target Compounds						
1)	TNX	5.65	5.65	8924411	13605232	950.734	970.399
2)	HMX	6.21	6.21	2895200	9837335	896.548	972.554
3)	DNX	6.38	6.38	8112971	13934123	1016.840	999.604
4)	MNX	7.74	7.74	6240840	9602216	972.676	1013.019
5)	1,3,5-Trinitrobe	8.66	8.66	10332472	18447078	985.097	1012.462
6)	RDX	9.24	9.24	4671360	8952871	970.379	1007.632
7)	1,3-Dinitrobenze	11.33	11.33	13751724	10434173	965.973	967.705
8)	Nitrobenzene	12.34	12.34	8987754	8385045	991.231	991.921
9)	2,4,6-Trinitroto	13.39	13.39	9481262	12554537	980.454	976.330
10)	Nitroglycerin	0.00	14.29	0	17033431	N.D. d	4872.114
11)	Tetryl	15.16	15.16	7020595	12517599	992.527	993.668
13)	2,6-Dinitrotolue	16.74	16.73	6974279	10202778	944.785	998.994
14)	2,4-Dinitrotolue	17.54	17.54	12751287	9363467	965.485	991.859
15)	o-Nitrotoluene	19.11	19.10	17252188	28213161	947.470	952.878
16)	3,5-Dinitroanili	19.11	19.10	17252188	28213161	947.470	952.878
17)	p-Nitrotoluene	20.67	20.67	4926749	8274285	937.639	1005.059
18)	4-Amino-2,6-Dini	21.26	21.27	6697999	13888530	968.348	976.094
19)	m-Nitrotoluene	22.25	22.25	6030054	10613355	971.031	971.470
20)	2-Amino-4,6-Dini	23.94	23.94	9176668	13182821	978.769	976.761
21)	PETN	0.00	25.84	0	17432400	N.D. d	4682.444m

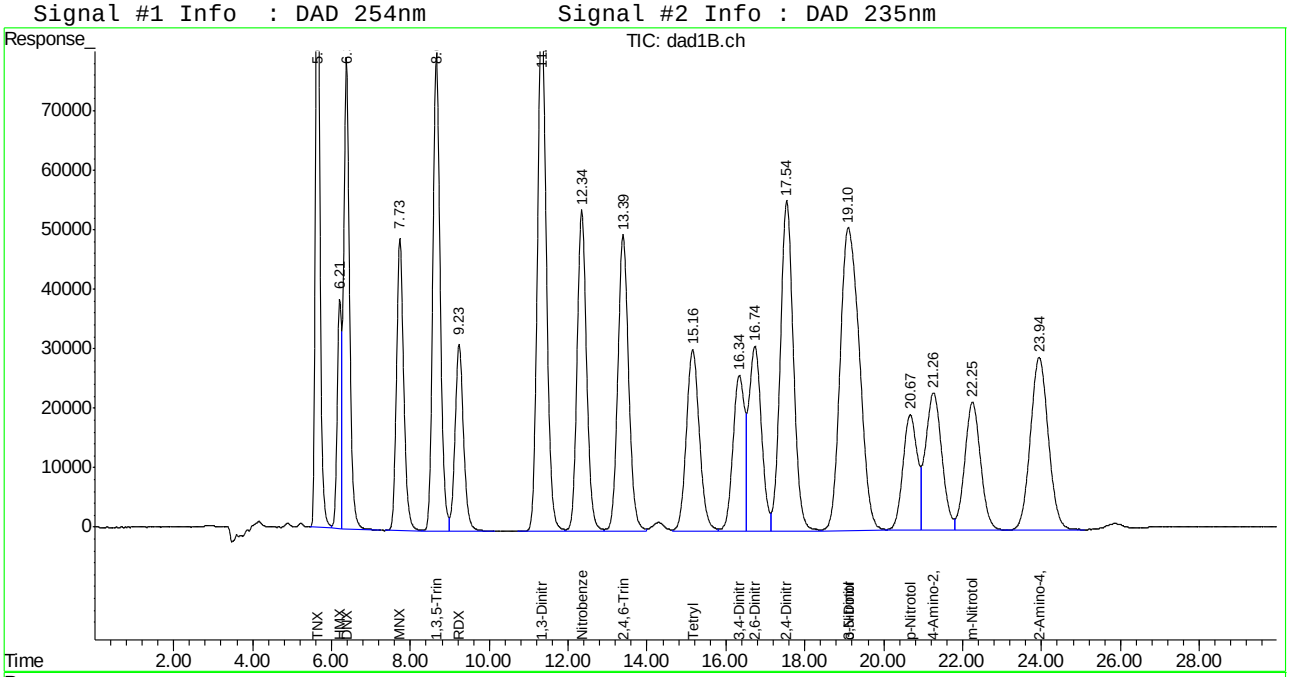
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058412.D 8330RPB.M Wed Feb 25 10:31:29 2015 Page 1

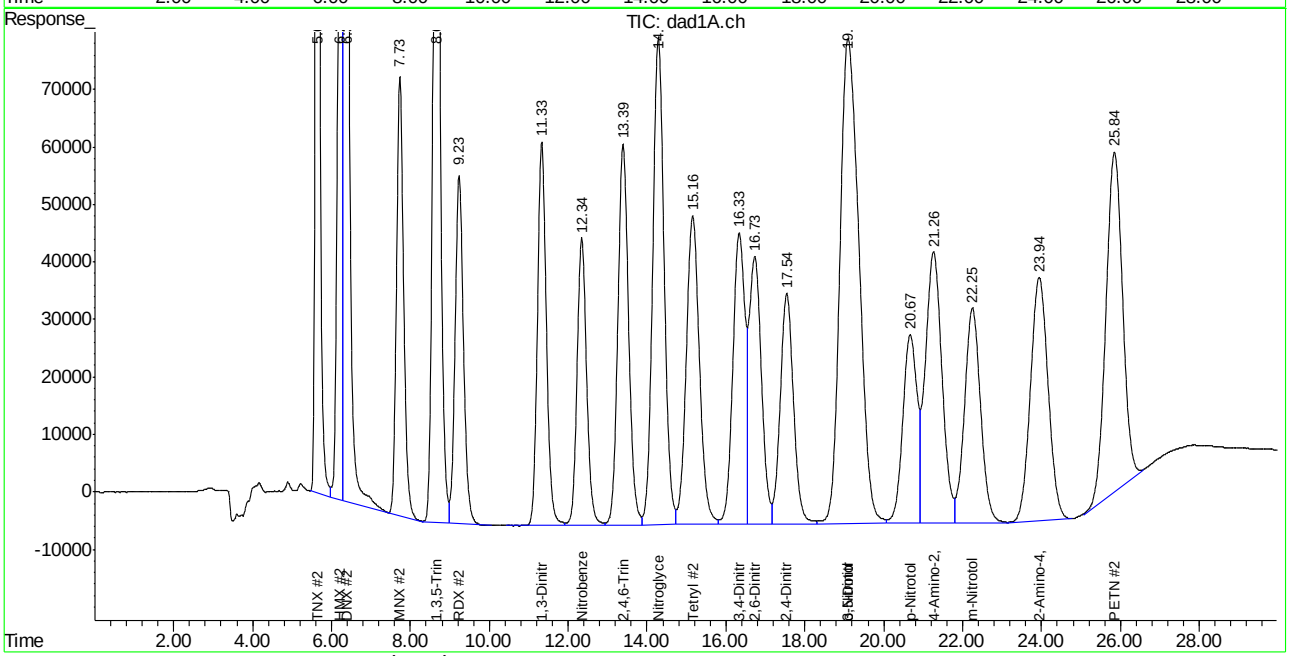
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0223RPB2\GG058412.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0223RPB2\GG058412.D\dad1A.ch
Acq On : 23-Feb-2015, 12:42:53 Operator: kismetl
Sample : ecc2344-1000 Inst : G1315B
Misc : OP55030,GGG2361,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Feb 24 9:13 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Feb 06 13:54:09 2015
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2361-ECC2344 **Method:** SW846 8330A
Lab FileID: GG058412.D **Analyst approved:** 02/25/15 10:45 Kismet Lugo
Injection Time: 02/23/15 12:42 **Supervisor approved:** 02/25/15 13:54 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
PETN	78-11-5	2	25.84	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330-0107 M
CALIB. DATE:	01/07/15
RUN BATCH: GBB	1235

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	254

JL 01/23/15

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045812	1	solvent	8330	—	—		ND
BB 13	2	~~cc 1235-500~~ cc 1235-1000		LC509	1:1	PDB	Pass
BB 14	3	ic 1235-20			50+450 or 50+450	PDB	✓
BB 15	4	ic 1235-50			10+390	PDB oMP52	✓
BB 16	5	ic 1235-100			20+475	HMX or PDB oMP52	✓
BB 17	6	ic 1235-200			50+450	PDB	✓
BB 18	7	icc 1235-500			1:4	PDB	✓
BB 19	8	ic 1235-1000			1:1	PDB	✓
BB 20	9	ic 1235-2000			1x	PDB	✓ Pass
BB 21	10	icv 1235-500		LC497 E4944 LC498 E5029 *		PDB	✓ Pass
BB 22	3	cc 1235-20		LC509	50+450 or 50+450	PDB	✓ Pass 4AJ52
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

* LC 497 25ml
LC 510 25ml + 920
E 4944 10ml
E 5029 20ml

Analyst's Signature: Kimit Lyo

ACCUTEST LABORATORIES SE

DATE:	02/20/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	8330_0107M
CALIB. DATE:	01/23/15
RUN BATCH: GBB	1248

ANALYST:	TC
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	270

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 046103	1	solvent	8330	—	—		ND
BB 04	2	cc1235-500		LC511	1:4	PDB	Pass
BB 05	4	test		—	10+390		✓ RM
BB 06	5	OP55030-bs		OP55030	1x	PDB	✓
BB 07	6	OP55030-MB				PDB	ND
BB 08	7	FA22032-1				PDB	✓
BB 09	8	OP55030-MS				PDB	✓
BB 10	9	OP55030-MSD				PDB	✓
BB 11	10	FA22032-2				PDB	✓ POSS NG
BB 12	11	FA22032-3				PDB	ND
BB 13	12	FA21585-18				PDB	✓
BB 14	13	FA22032-4				PDB	ND
BB 15	3	cc1235-1000		LC511	1:1	PDB	Pass
BB 16	1	ccb		—	—		ND
BB 17	14	FA21417-1		OP55030	1x	PDB	✓
BB 18	15	FA21417-1				PDB	✓
BB 19	16	FA21417-1				PDB	✓
BB 20	17	FA21417-1				PDB	✓
BB 21	18	FA21417-1				PDB	✓
BB 22	19	FA21417-1				PDB	✓

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	02/20/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 B
PROC. METHOD:	8330-0107.M
CALIB. DATE:	01/23/15
RUN BATCH: GBB	1248

ANALYST:	KL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	270

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 046123	20	FA 21417-1	8330	OP54030	1x	PDB	✓
BB 24	21	mdl check				PDB	✓
BB 25	22	rl check				PDB	✓
BB 26	3	CC1235-1000		LC511	1:1	PDB	Pass
BB 27	1	cal		—	—		ND
BB 28	23	FA 22035-5		OP54030	1x	PDB	✓ poss NG
BB 29	24	FA 22035-6				PDB	ND
BB 30	25	FA 22035-7				PDB	ND
BB 31	26	ccc 1235-1000		LC511	1:1	PDB	Pass
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

KL 02/23/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyp

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	01/23/15
RUN BATCH: GGG	2344

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	120

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058128	1	solvent	8330	—	—		ND
GG 29	2	CC2342-1000		LC509	1:1		PETNT
GG 30	3	iC 2344-20			50+450 BF 50+450	BDB 2,4 PN 4A MN PETN MP SL	✓
GG 31	4	iC 2344-50			10+390	RDX OP PDB	✓
GG 32	5	iC 2344-100			25+475	PDB	✓
GG 33	6	iC 2344-200			50+450	PDB	✓
GG 34	7	ICC 2344-500	↓		1:4	PDB	✓
GG 35	8	iC 2344-1000			1:1	PDB	✓
GG 36	9	iC 2344-2000		↓	1x	PDB	✓
GG 37	10	ICV 2344-500		LC497 E4944 LC510 E5029 *		PDB	Pam 2,6 ↑ SL HMX ↑ SL
GG 38	3	CC2344-20		LC509	50+450 BF 50+450	PDB	PETN ↓ HMX-DN ↑ SL
GG 39	11	OP54641-MB		OP54641	1x		ND
GG 40	12	C39975-1A Ct					ND let DNC
GG 41	13	C39975-3ACt					ND let DNC
GG 42	14	C39975-4ACt					ND let, PETN DNC
GG 43	15	C39990-1ACt					ND RDX let 3rd MN (1x) PETN primary
GG 44	16	C39990-2ACt			↓		ND NB let, PETN
GG 45	17	C39990-2ACt			1:4		ND
GG 46	18	C39990-3ACt			1x		ND let PETN
GG 47	19	C39990-3ACt	↓	↓	1:4		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PIL Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: Kimmit Lye

* LC497 25ml, LC510 25ml, E4944 4ml } +920 ** C37975-1A-4A, C37990-1A-4A

ACCUTEST LABORATORIES SE

DATE:	01/23/15
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	01/23/15
RUN BATCH: GGG	2344

ANALYST:	JL
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	120

JL 01/26/15

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058148	20	~~C37990-4Act~~	8330	OP54641	1X		ND 1,3, 4t, PETN DWC
GG 49	21	ccc2344-1000	↓	LC509	1:1	PDD	Pass
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

JL 01/26/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

Analyst's Signature: Kristi Lyo

ACCUTEST LABORATORIES SE

DATE:	02/23/15
COLUMN TYPE:	Bond RP
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC3-GG

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	01/23/15
RUN BATCH: GGG	2361

ANALYST:	MC
ACETONITRILE LOT #:	2916
MEOH LOT #:	81052
HEAD PRESSURE:	190

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058407	1	solvent	8330	—	—		ND
GG 08	2	cc2344-500		LC511	1:4	RDX08, PDB	Pass
GG 09	4	op55030-mb		op55030	1x	PDB	ND
GG 10	5	FA22032-1ct				RDX MP 52	✓ HMX[18]
GG 11	6	FA21585-18ct				PDB RDX08 SUMOP52	✓ MI for ON
GG 12	2	ccc2344-1000		LC511	1:1	PDB	Pass
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

MC 02/24/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE **EXP SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B or Method (circle)

Date/Time: 02/19/15 1430 Started {mm/dd/yy 24:00}
MB 03/20/15

Therm. ID: 90752772 Corr. Factor (±℃): -1
Bath Temp. (High) ℃: 13 / 11 {obs/corr}

Date/Time: 02/20/15 1000 Finished {mm/dd/yy 24:00}

Ultrasonic Bath ID (8330A or 8332): UB 1
Shaker Table ID (8330B): _____

Batch#: OP55030 Ext. By: MB Vialed By: MB Balance ID: ADUPRO 5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 55030 MB	X	2.00	0.5 ml		20 ml	
OP 55030 BS	X	2.00		0.5 ml		
FA22032-1	1	2.32				
-2	1	2.40				
-3	1	2.04				
-4	1	2.16				
-5	1	2.13				
-6	1	2.10				
-7	1	2.14				
MDL 1	X	2.00	40 ml	20+20 16 ml		FA21417-1
2	X					-2
3	X					-3
4	X					FA21418-1
5	X					
6	X					
7	X					
MDL VER. 1	X		20 ml	10+10 8 ml		
RL VER.	X		80 ml	40+40 32 ml		
FA21585-1B	1	2.00	0.5 ml			
				20		
			MB 02/19/15			
FA22032-1 MS	1	2.09	0.5 ml	0.5 ml	20 ml	
-1 MSD	1	2.06	↓	↓	↓	
DUP						
TRP						

Comments: ES092 100 ppm 08/13/15 8332 MDL SPIKE

Surr. ID: ES036I Conc: 20 ppm Exp. Date: 06/23/15 Inj. By: MB Ver. By MB

Spk.1 ID: ES04a Conc: 20 ppm Exp. Date: 06/05/15 Inj. By: MB Ver. By MB

Spk.2 ID: ES02a Conc: 25 ppm Exp. Date: 06/11/15 Inj. By: MB Ver. By MB

Acetonitrile Lot # 066640 Methanol Lot # / Water Lot# 076032 HPLC

Syringe Filter Lot# 130925007 Reagent # CS1 Reagent # /

MB 03/20/15

Relinquished By: [signature] Date: 02/20/15

Accepted By: [signature] Date: 2/20/15

Southeast ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:58	MA12213-STD1	1		STDA
10:02	MA12213-STD2	1		STDB
10:05	MA12213-STD3	1		STDC
10:08	MA12213-STD4	1		STDD
10:13	MA12213-HSTD1	1		
10:20	MA12213-ICV1	1		
10:31	MA12213-ICB1	1		
10:35	MA12213-CRIA1	1		
10:41	MA12213-ICSA1	1		
10:48	MA12213-ICSAB1	1		
10:54	MA12213-CCV1	1		
11:03	MA12213-CCB1	1		
11:07	ZZZZZZ	1		
11:12	ZZZZZZ	1		
11:16	ZZZZZZ	1		
11:20	MP28546-MB1	1		
11:25	MP28546-B1	1		
11:29	FA22044-1	1		(sample used for QC only; not part of login FA22032)
11:33	MP28546-D1	1		
11:38	MP28546-SD1	5		
11:42	MP28546-PS1	1		
11:47	MP28546-S1	1		
11:51	MA12213-CCV2	1		
11:55	MA12213-CCB2	1		
11:59	MP28546-S2	1		
12:04	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:21	ZZZZZZ	1		
12:26	ZZZZZZ	1		
12:30	ZZZZZZ	1		
12:34	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:39	ZZZZZZ	1		
12:43	MA12213-CCV3	1		
12:47	MA12213-CCB3	1		
12:52	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:18	ZZZZZZ	1		
13:23	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:36	MA12213-CCV4	1		
13:40	MA12213-CCB4	1		
14:04	MA12213-CCV5	1		
14:11	MA12213-CCB5	1		
14:50	MP28549-MB1	1		
14:55	MP28549-B1	1		
14:59	MA12213-CCV6	1		
15:03	MA12213-CCB6	1		
15:08	FA22009-2	1		(sample used for QC only; not part of login FA22032)
15:12	MP28549-D1	1		
15:16	MP28549-SD1	5		
15:21	MP28549-PS1	1		
15:25	MP28549-S1	1		
15:29	MP28549-S2	1		
15:34	ZZZZZZ	1		
15:38	ZZZZZZ	1		
15:42	ZZZZZZ	1		
15:47	ZZZZZZ	1		
15:51	MA12213-CCV7	1		
15:55	MA12213-CCB7	1		
16:00	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:04	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:13	ZZZZZZ	1		
16:18	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:26	ZZZZZZ	5		
16:31	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	MA12213-CCV8	1		
16:48	MA12213-CCB8	1		
16:53	ZZZZZZ	1		
16:57	ZZZZZZ	1		
17:02	FA22032-1	1		
17:06	FA22032-2	1		
17:11	FA22032-3	1		
---------->	Last reportable sample/prep for job FA22032			
17:16	MA12213-CRIA2	1		
17:20	MA12213-ICSA2	1		
17:25	MA12213-ICSAB2	1		
17:29	MA12213-CCV9	1		
17:33	MA12213-CCB9	1		
---------->	Last reportable CCB for job FA22032			

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:58	MA12213-STD1	6755	58753	5106	3504
10:02	MA12213-STD2	6648	57961	5103	3282
10:05	MA12213-STD3	6361	55930	5027	2994
10:08	MA12213-STD4	6113	54422	5117	2775
10:13	MA12213-HSTD1	6116	55000	4950	2782
10:20	MA12213-ICV1	6256	55411	4993	2965
10:31	MA12213-ICB1	6549 R	58178 R	5122 R	3458 R
10:35	MA12213-CRIA1	6487	56745	5056	3326
10:41	MA12213-ICSA1	5793	49651	4860	2649
10:48	MA12213-ICSAB1	5720	49660	4741	2591
10:54	MA12213-CCV1	6215	55186	5031	2969
11:03	MA12213-CCB1	6478	57685	5019	3466
11:07	ZZZZZZ	6216	55336	5034	3172
11:12	ZZZZZZ	6242	54960	5045	3185
11:16	ZZZZZZ	6109	54937	4906	3067
11:20	MP28546-MB1	6520	57998	4957	3409
11:25	MP28546-B1	6318	55635	4912	3083
11:29	FA22044-1	6480	57314	4987	3313
11:33	MP28546-D1	6447	57029	4970	3308
11:38	MP28546-SD1	6502	57725	4997	3394
11:42	MP28546-PS1	6448	56509	4990	3235
11:47	MP28546-S1	6316	55427	4973	3065
11:51	MA12213-CCV2	6251	55026	4902	2956
11:55	MA12213-CCB2	6603	57949	4926	3437
11:59	MP28546-S2	6390	55332	4889	3059
12:04	ZZZZZZ	6584	58271	4901	3403
12:08	ZZZZZZ	6608	58783	4992	3440
12:12	ZZZZZZ	6609	58638	4978	3437
12:17	ZZZZZZ	6628	58786	5028	3447
12:21	ZZZZZZ	6666	58917	4949	3441
12:26	ZZZZZZ	6679	58799	4892	3441
12:30	ZZZZZZ	6731	59215	4943	3455
12:34	ZZZZZZ	6736	59439	4979	3458

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:39	ZZZZZZ	6736	59429	5003	3468
12:43	MA12213-CCV3	6379	55750	4951	2985
12:47	MA12213-CCB3	6678	58747	4980	3462
12:52	ZZZZZZ	6771	59188	4891	3454
12:56	ZZZZZZ	6624	58080	4938	3324
13:01	ZZZZZZ	7185	62828	5324	3335
13:05	ZZZZZZ	9635 !	83753 !	7168 !	3275
13:09	ZZZZZZ	7855	68338	5892	3220
13:14	ZZZZZZ	6724	59352	4990	3393
13:18	ZZZZZZ	6610	57286	4875	3217
13:23	ZZZZZZ	6749	59136	4907	3444
13:27	ZZZZZZ	6767	59341	4912	3459
13:36	MA12213-CCV4	6417	55685	4876	2964
13:40	MA12213-CCB4	6763	58898	4883	3454
14:04	MA12213-CCV5	6453	56137	4827	2975
14:11	MA12213-CCB5	6754	58960	4938	3479
14:50	MP28549-MB1	6923	60629	4984	3527
14:55	MP28549-B1	6639	57678	4874	3145
14:59	MA12213-CCV6	6549	56541	4827	2998
15:03	MA12213-CCB6	6876	59898	4878	3487
15:08	FA22009-2	7098	60121	5025	3298
15:12	MP28549-D1	7073	60428	5104	3299
15:16	MP28549-SD1	6946	59658	4961	3440
15:21	MP28549-PS1	7049	60365	5066	3215
15:25	MP28549-S1	7035	59121	5045	3094
15:29	MP28549-S2	7005	58615	5053	3097
15:34	ZZZZZZ	7069	60429	5138	3284
15:38	ZZZZZZ	7003	60052	5064	3285
15:42	ZZZZZZ	7126	60163	5054	3245
15:47	ZZZZZZ	6983	61056	4992	3446
15:51	MA12213-CCV7	6560	56610	4789	3006
15:55	MA12213-CCB7	6900	60772	4947	3496
16:00	ZZZZZZ	6945	60790	4924	3500

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12213
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:04	ZZZZZZ	6979	60941	4979	3522
16:09	ZZZZZZ	6978	60899	4986	3527
16:13	ZZZZZZ	7077	61073	5061	3397
16:18	ZZZZZZ	7184	60974	5118	3406
16:22	ZZZZZZ	6943	60603	4940	3482
16:26	ZZZZZZ	8613 !	72985 !	6143	3304
16:31	ZZZZZZ	7022	60452	4999	3352
16:35	ZZZZZZ	6993	60379	4921	3367
16:39	ZZZZZZ	6675	56879	4904	2843
16:44	MA12213-CCV8	6590	56882	4711	3003
16:48	MA12213-CCB8	6912	59883	4753	3482
16:53	ZZZZZZ	8562 !	72939 !	6287	2844
16:57	ZZZZZZ	6985	60812	4917	3440
17:02	FA22032-1	5856	50546	4695	2295
17:06	FA22032-2	6868	59962	5484	2426
17:11	FA22032-3	6420	55306	5073	2333
17:16	MA12213-CRIA2	6826	59554	4774	3365
17:20	MA12213-ICSA2	6157	51659	4440	2673
17:25	MA12213-ICSAB2	6184	51759	4452	2649
17:29	MA12213-CCV9	6568	57270	4662	2989
17:33	MA12213-CCB9	6933	59640	4678	3487

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12213 Units: ug/l

Time: / Sample ID:			10:31 ICB1		11:03 CCB1		11:55 CCB2		12:47 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	4.1	<200	7.8	<200	15.7	<200	17.4	<200
Antimony	6.0	1	0.0	<6.0	0.10	<6.0	0.80	<6.0	1.4	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.10	<10	0.10	<10	0.20	<10	0.30	<10
Cobalt	50	.2	anr							
Copper	25	1	0.10	<25	0.40	<25	0.0	<25	0.40	<25
Iron	300	17	-4.9	<300	18.7	<300	24.7	<300	28.3	<300
Lead	5.0	1	-0.30	<5.0	0.20	<5.0	0.40	<5.0	0.70	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.0	<20	0.0	<20	0.10	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12213 Units: ug/l

Time: / Sample ID:			13:40 CCB4		14:11 CCB5		15:03 CCB6		15:55 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	19.9	<200	12.7	<200	9.1	<200	19.1	<200
Antimony	6.0	1	1.5	<6.0	1.1	<6.0	2.2	<6.0	0.80	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.90	<10	-0.10	<10	0.20	<10	0.20	<10
Cobalt	50	.2	anr							
Copper	25	1	0.40	<25	0.10	<25	0.10	<25	0.10	<25
Iron	300	17	26.8	<300	22.6	<300	30.7	<300	25.7	<300
Lead	5.0	1	1.1	<5.0	0.20	<5.0	0.80	<5.0	0.20	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3								
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.70	<20	0.0	<20	0.30	<20	0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12213 Units: ug/l

Time:			16:48		17:33	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	9.2	<200	22.4	<200
Antimony	6.0	1	0.0	<6.0	0.60	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2	anr			
Cadmium	5.0	.2	anr			
Calcium	1000	50	anr			
Chromium	10	1	-0.10	<10	0.20	<10
Cobalt	50	.2	anr			
Copper	25	1	0.10	<25	0.20	<25
Iron	300	17	26.6	<300	34.5	<300
Lead	5.0	1	0.20	<5.0	0.20	<5.0
Magnesium	5000	35	anr			
Manganese	15	.5	anr			
Molybdenum	50	.3				
Nickel	40	.4	anr			
Potassium	10000	200	anr			
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	0.50	<20	0.70	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		10:20			10:54			11:51	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41400	103.5	40000	40200	100.5	40000	40300	100.8
Antimony	2000	1980	99.0	2000	2060	103.0	2000	2020	101.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1960	98.0	2000	2030	101.5	2000	2040	102.0
Cobalt	anr								
Copper	2000	1930	96.5	2000	2010	100.5	2000	2000	100.0
Iron	40000	41200	103.0	40000	40800	102.0	40000	40800	102.0
Lead	2000	1960	98.0	2000	2010	100.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2030	101.5	2000	2080	104.0	2000	2080	104.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		12:43			13:36			14:04	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41400	103.5	40000	41800	104.5	40000	40300	100.8
Antimony	2000	2020	101.0	2000	1980	99.0	2000	1990	99.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2050	102.5	2000	2050	102.5	2000	2000	100.0
Cobalt	anr								
Copper	2000	2060	103.0	2000	2060	103.0	2000	2000	100.0
Iron	40000	41300	103.3	40000	41400	103.5	40000	40700	101.8
Lead	2000	2010	100.5	2000	2000	100.0	2000	1970	98.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2020	101.0	2000	1980	99.0	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		14:59			15:51			16:44	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	40000	100.0	40000	40900	102.3	40000	41200	103.0
Antimony	2000	1950	97.5	2000	1960	98.0	2000	1940	97.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1990	99.5	2000	2000	100.0	2000	1990	99.5
Cobalt	anr								
Copper	2000	1990	99.5	2000	2020	101.0	2000	2020	101.0
Iron	40000	40200	100.5	40000	40800	102.0	40000	40700	101.8
Lead	2000	1950	97.5	2000	1950	97.5	2000	1940	97.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1960	98.0	2000	1950	97.5	2000	1920	96.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12213 Units: ug/l

Time:		17:29	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Aluminum	40000	41400	103.5
Antimony	2000	1950	97.5
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	1970	98.5
Cobalt	anr		
Copper	2000	2030	101.5
Iron	40000	40200	100.5
Lead	2000	1950	97.5
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	1910	95.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12213 Units: ug/l

Time:		10:13	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	80000	79700	99.6
Antimony	4000	3960	99.0
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3890	97.3
Cobalt	anr		
Copper	4000	3880	97.0
Iron	80000	78700	98.4
Lead	4000	3990	99.8
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3970	99.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12213 Units: ug/l

Time:			10:35		17:16	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	216	108.0	233	116.5
Antimony	10	5.0	5.3	106.0	3.6	72.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.6	106.0	9.6	96.0
Cobalt	100	50	anr			
Copper	50	25	26.8	107.2	25.6	102.4
Iron	600	300	323	107.7	356	118.7
Lead	10	5.0	4.6	92.0	3.9	78.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50				
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	23.2	116.0	20.9	104.5

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021215M1.ICP Date Analyzed: 02/12/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12213 Units: ug/l

Time:			10:41		10:48		17:20		17:25	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	500000	100.0	508000	101.6	506000	101.2	512000	102.4
Antimony		1000	0.10		1070	107.0	-3.1		992	99.2
Arsenic		1000	-0.80		1080	108.0	-0.30		992	99.2
Barium		500	0.80		517	103.4	0.30		547	109.4
Beryllium		500	-0.20		515	103.0	-0.30		487	97.4
Cadmium		1000	0.0		951	95.1	-2.2		876	87.6
Calcium	500000	500000	492000	98.4	484000	96.8	464000	92.8	454000	90.8
Chromium		500	0.10		497	99.4	-0.20		478	95.6
Cobalt		500	0.0		486	97.2	-1.6		463	92.6
Copper		500	0.0		542	108.4	0.80		553	110.6
Iron	200000	200000	188000	94.0	184000	92.0	181000	90.5	180000	90.0
Lead		1000	-0.10		970	97.0	-4.3		919	91.9
Magnesium	500000	500000	485000	97.0	482000	96.4	490000	98.0	490000	98.0
Manganese		500	0.0		524	104.8	-0.60		484	96.8
Molybdenum		1000	0.0		934	93.4	1.1		898	89.8
Nickel		1000	0.0		993	99.3	-0.10		897	89.7
Potassium			632		287		268		127	
Selenium		1000	-0.30		1030	103.0	-0.10		978	97.8
Silver		1000	0.20		1040	104.0	-0.40		1030	103.0
Sodium			337		214		137		90.8	
Strontium		1000	0.20		1030	103.0	0.20		985	98.5
Thallium		1000	-0.10		988	98.8	-2.6		930	93.0
Tin		1000	1.2		946	94.6	0.90		916	91.6
Titanium		1000	0.10		1030	103.0	0.60		954	95.4
Vanadium		500	0.0		487	97.4	0.70		452	90.4
Zinc		1000	-1.1		990	99.0	-2.2		882	88.2

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:28	MA12216-STD1	1		STDA
09:36	MA12216-STD2	1		STDB
09:39	MA12216-STD3	1		STDC
09:42	MA12216-STD4	1		STDD
09:46	MA12216-HSTD1	1		
09:53	MA12216-ICV1	1		
10:00	MA12216-ICB1	1		
10:08	MA12216-CRIA1	1		
10:15	MA12216-CCV1	1		
10:21	MA12216-CCB1	1		
10:44	MA12216-CCV2	1		
10:50	MA12216-CCB2	1		
10:55	MA12216-ICSA1	1		
11:01	MA12216-ICSAB1	1		
11:06	MA12216-CCV3	1		
11:12	MA12216-CCB3	1		
12:54	MA12216-CCV4	1		
13:00	MA12216-CCB4	1		
13:04	ZZZZZZ	10		
13:08	ZZZZZZ	2		
13:12	ZZZZZZ	2		
13:16	FA22032-1	10		
13:20	FA22032-2	5		
13:24	FA22032-3	10		
---------->	Last reportable sample/prep for job FA22032			
13:28	MP28551-MB1	1		
13:33	MP28551-B1	1		
13:37	FA22049-1	1		(sample used for QC only; not part of login FA22032)
13:41	MP28551-D1	1		
13:45	MA12216-CCV5	1		
13:49	MA12216-CCB5	1		
13:53	MP28551-SD1	5		
13:57	MP28551-PS1	1		
14:01	MP28551-S1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:05	MP28551-S2	1		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	MA12216-CCV6	1		
14:38	MA12216-CCB6	1		
14:42	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:50	ZZZZZZ	1		
14:54	ZZZZZZ	25		
14:59	ZZZZZZ	1		
15:03	ZZZZZZ	10		
15:07	ZZZZZZ	1		
15:11	ZZZZZZ	10		
15:15	ZZZZZZ	20		
15:19	ZZZZZZ	100		
15:24	MA12216-CCV7	1		
15:27	MA12216-CCB7	1		
15:36	ZZZZZZ	20		
15:44	MP28553-MB1	1		
15:49	MP28553-B1	1		
15:53	FA22018-2	1		(sample used for QC only; not part of login FA22032)
15:57	MP28553-D1	1		
16:01	MP28553-SD1	5		
16:05	MP28553-S1	1		
16:09	MP28553-S2	1		
16:13	MA12216-CCV8	1		
16:17	MA12216-CCB8	1		
16:21	FA22018-1	1		(sample used for QC only; not part of login FA22032)
16:25	MP28553-D2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:30	MP28553-MB2	1		
16:34	MP28553-B2	1		
16:38	MP28552-MB1	1		
16:42	MP28552-B1	1		
16:46	FA21977-1L	1		(sample used for QC only; not part of login FA22032)
16:50	MP28552-D1	1		
16:54	MP28552-SD1	5		
16:59	MP28552-S1	1		
17:03	MA12216-CCV9	1		
17:07	MA12216-CCB9	1		
17:11	MP28552-S2	1		
17:15	MP28552-MB2	1		
17:19	MP28552-B2	1		
17:23	MP28554-MB1	1		
17:27	MP28554-B1	1		
17:31	FA22073-13	1		(sample used for QC only; not part of login FA22032)
17:35	MP28554-D1	1		
17:40	MP28554-SD1	5		
17:44	MP28554-PS1	1		
17:48	MP28554-S1	1		
17:52	MA12216-CCV10	1		
17:56	MA12216-CCB10	1		
18:00	MP28554-S2	1		
18:04	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:12	ZZZZZZ	1		
18:16	ZZZZZZ	1		
18:21	ZZZZZZ	2		
18:25	ZZZZZZ	1		
18:29	ZZZZZZ	1		
18:33	ZZZZZZ	1		
18:37	ZZZZZZ	1		
18:41	MA12216-CCV11	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:45	MA12216-CCB11	1		
18:50	ZZZZZZ	1		
18:54	ZZZZZZ	1		
18:58	ZZZZZZ	1		
19:02	ZZZZZZ	1		
19:06	ZZZZZZ	1		
19:10	ZZZZZZ	1		
19:19	ZZZZZZ	1		
19:23	MA12216-CRIA2	1		
19:27	MA12216-ICSA2	1		
19:31	MA12216-CCV12	1		
19:35	MA12216-CCB12	1		
19:39	MA12216-ICSAB2	1		
19:43	MA12216-CCV13	1		
19:47	MA12216-CCB13	1		

----------> Last reportable CCB for job FA22032
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:28	MA12216-STD1	4879	31798	2295	1677
09:36	MA12216-STD2	4719	31655	2353	1650
09:39	MA12216-STD3	4703	31696	2407	1647
09:42	MA12216-STD4	4353	30173	2308	1522
09:46	MA12216-HSTD1	4465	31338	2382	1564
09:53	MA12216-ICV1	4563	32261	2422	1632
10:00	MA12216-ICB1	4626 R	33404 R	2478 R	1666 R
10:08	MA12216-CRIA1	4538	33068	2453	1655
10:15	MA12216-CCV1	4376	32329	2455	1602
10:21	MA12216-CCB1	4610	34273	2521	1686
10:44	MA12216-CCV2	4316	32375	2475	1594
10:50	MA12216-CCB2	4532	33760	2522	1674
10:55	MA12216-ICSA1	3928	28845	2352	1486
11:01	MA12216-ICSAB1	4037	29199	2371	1503
11:06	MA12216-CCV3	4566	33212	2515	1661
11:12	MA12216-CCB3	4632	33622	2467	1680
12:54	MA12216-CCV4	4409	29856	2177	1559
13:00	MA12216-CCB4	4458	29947	2152	1576
13:04	ZZZZZZ	5385	36136	2623	1691
13:08	ZZZZZZ	4410	29300	2194	1531
13:12	ZZZZZZ	5169	34401	2606	1564
13:16	FA22032-1	4470	29858	2175	1577
13:20	FA22032-2	4531	30308	2255	1545
13:24	FA22032-3	4512	30198	2200	1583
13:28	MP28551-MB1	4490	30498	2152	1577
13:33	MP28551-B1	4528	30371	2186	1599
13:37	FA22049-1	4583	31050	2200	1621
13:41	MP28551-D1	4565	30840	2176	1619
13:45	MA12216-CCV5	4460	30371	2188	1571
13:49	MA12216-CCB5	4555	31328	2214	1608
13:53	MP28551-SD1	4572	30892	2167	1611
13:57	MP28551-PS1	4544	30660	2140	1603
14:01	MP28551-S1	4457	29570	2132	1569

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:05	MP28551-S2	4483	29477	2122	1574
14:09	ZZZZZZ	4558	30014	2146	1605
14:13	ZZZZZZ	4624	30478	2144	1622
14:17	ZZZZZZ	4655	30714	2179	1641
14:22	ZZZZZZ	4586	30366	2131	1611
14:26	ZZZZZZ	4704	31667	2207	1653
14:30	ZZZZZZ	4717	32036	2276	1652
14:34	MA12216-CCV6	4531	30540	2184	1599
14:38	MA12216-CCB6	4752	32156	2245	1667
14:42	ZZZZZZ	4744	32179	2263	1657
14:46	ZZZZZZ	4731	32065	2247	1670
14:50	ZZZZZZ	4523	30730	2137	1601
14:54	ZZZZZZ	4471	30213	2108	1583
14:59	ZZZZZZ	4521	29754	2125	1595
15:03	ZZZZZZ	4611	30375	2163	1626
15:07	ZZZZZZ	4553	30024	2116	1594
15:11	ZZZZZZ	4766	31779	2224	1672
15:15	ZZZZZZ	4853	32101	2233	1708
15:19	ZZZZZZ	4856	32135	2240	1699
15:24	MA12216-CCV7	4459	29698	2124	1564
15:27	MA12216-CCB7	4639	30878	2154	1622
15:36	ZZZZZZ	4584	30128	2119	1607
15:44	MP28553-MB1	4605	30722	2121	1602
15:49	MP28553-B1	4533	29744	2116	1593
15:53	FA22018-2	4541	29569	2083	1581
15:57	MP28553-D1	4518	29417	2098	1575
16:01	MP28553-SD1	4691	31056	2150	1644
16:05	MP28553-S1	4492	29529	2119	1573
16:09	MP28553-S2	4488	29484	2096	1570
16:13	MA12216-CCV8	4467	29793	2100	1565
16:17	MA12216-CCB8	4579	30527	2109	1602
16:21	FA22018-1	4551	30175	2110	1592
16:25	MP28553-D2	4504	29552	2066	1567

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:30	MP28553-MB2	4603	29803	2095	1609
16:34	MP28553-B2	4540	29523	2086	1580
16:38	MP28552-MB1	4640	31073	2119	1615
16:42	MP28552-B1	4501	29631	2080	1576
16:46	FA21977-1L	4591	30651	2119	1604
16:50	MP28552-D1	4660	30922	2145	1624
16:54	MP28552-SD1	4629	31057	2124	1621
16:59	MP28552-S1	4578	30531	2123	1610
17:03	MA12216-CCV9	4385	29108	2069	1544
17:07	MA12216-CCB9	4663	31167	2133	1635
17:11	MP28552-S2	4545	29923	2120	1596
17:15	MP28552-MB2	4755	31688	2161	1671
17:19	MP28552-B2	4530	30277	2105	1592
17:23	MP28554-MB1	4827	32298	2179	1687
17:27	MP28554-B1	4673	30910	2144	1639
17:31	FA22073-13	4430	29654	2026	1566
17:35	MP28554-D1	4505	29848	2056	1592
17:40	MP28554-SD1	4603	30400	2091	1623
17:44	MP28554-PS1	4502	29615	2062	1583
17:48	MP28554-S1	4433	29082	2062	1557
17:52	MA12216-CCV10	4456	29610	2053	1564
17:56	MA12216-CCB10	4627	31117	2093	1623
18:00	MP28554-S2	4476	29912	2124	1583
18:04	ZZZZZZ	4624	31164	2120	1619
18:08	ZZZZZZ	4545	30869	2088	1607
18:12	ZZZZZZ	4550	30121	2064	1602
18:16	ZZZZZZ	4583	30183	2059	1621
18:21	ZZZZZZ	4582	29978	2039	1615
18:25	ZZZZZZ	4655	30750	2087	1626
18:29	ZZZZZZ	4771	31142	2142	1686
18:33	ZZZZZZ	4567	30259	2103	1611
18:37	ZZZZZZ	4570	30397	2074	1621
18:41	MA12216-CCV11	4418	31336	2116	1554

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12216
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:45	MA12216-CCB11	4623	30825	2062	1624
18:50	ZZZZZZ	4612	30661	2103	1629
18:54	ZZZZZZ	4553	30617	2073	1613
18:58	ZZZZZZ	4645	31475	2101	1642
19:02	ZZZZZZ	4585	30913	2103	1619
19:06	ZZZZZZ	4597	30941	2082	1624
19:10	ZZZZZZ	4560	30514	2039	1602
19:19	ZZZZZZ	4585	30298	2075	1617
19:23	MA12216-CRIA2	4648	30750	2085	1639
19:27	MA12216-ICSA2	4252	27738	2063	1542
19:31	MA12216-CCV12	4617	30379	2097	1629
19:35	MA12216-CCB12	4614	30556	2049	1622
19:39	MA12216-ICSAB2	4043	26519	1950	1455
19:43	MA12216-CCV13	4494	29875	2044	1586
19:47	MA12216-CCB13	4613	30707	2037	1624

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time: / Sample ID:			10:00 ICB1		10:21 CCB1		10:50 CCB2		11:12 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	-1.7	<6.0	-0.50	<6.0	0.60	<6.0	1.8	<6.0
Arsenic	10	1.3	anr							
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	-0.30	<10	0.30	<10	0.50	<10	0.20	<10
Cobalt	50	.2								
Copper	25	1								
Iron	300	17	anr							
Lead	5.0	1	-1.4	<5.0	-0.10	<5.0	1.5	<5.0	0.30	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7								
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	-0.20	<20	0.30	<20	0.60	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time: / Sample ID:			13:00 CCB4		13:49 CCB5		14:38 CCB6		15:27 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	2.3	<6.0	2.1	<6.0	2.1	<6.0	0.90	<6.0
Arsenic	10	1.3	anr							
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	-0.20	<10	0.20	<10	-0.10	<10	-0.10	<10
Cobalt	50	.2								
Copper	25	1								
Iron	300	17	anr							
Lead	5.0	1	0.30	<5.0	0.80	<5.0	0.0	<5.0	0.30	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7								
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	0.40	<20	0.50	<20	0.40	<20	0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time: / Sample ID:			16:17 CCB8		17:07 CCB9		17:56 CCB10		18:45 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14								
Antimony	6.0	1	1.6	<6.0	1.7	<6.0	1.4	<6.0	1.1	<6.0
Arsenic	10	1.3	anr							
Barium	200	1								
Beryllium	4.0	.2								
Cadmium	5.0	.2	anr							
Calcium	1000	50								
Chromium	10	1	0.30	<10	0.10	<10	0.0	<10	-0.10	<10
Cobalt	50	.2								
Copper	25	1								
Iron	300	17	anr							
Lead	5.0	1	-0.30	<5.0	-0.50	<5.0	-0.10	<5.0	0.60	<5.0
Magnesium	5000	35								
Manganese	15	.5								
Molybdenum	50	.3								
Nickel	40	.4								
Potassium	10000	200								
Selenium	10	2.4	anr							
Silver	10	.7								
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1								
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5								
Zinc	20	3	0.30	<20	0.60	<20	0.80	<20	1.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12216 Units: ug/l

Time:			19:35		19:47	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14				
Antimony	6.0	1	1.1	<6.0	0.60	<6.0
Arsenic	10	1.3	anr			
Barium	200	1				
Beryllium	4.0	.2				
Cadmium	5.0	.2	anr			
Calcium	1000	50				
Chromium	10	1	-0.20	<10	-0.20	<10
Cobalt	50	.2				
Copper	25	1				
Iron	300	17	anr			
Lead	5.0	1	-0.50	<5.0	-0.30	<5.0
Magnesium	5000	35				
Manganese	15	.5				
Molybdenum	50	.3				
Nickel	40	.4				
Potassium	10000	200				
Selenium	10	2.4	anr			
Silver	10	.7				
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1				
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5				
Zinc	20	3	0.70	<20	0.80	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		09:53			10:15			10:44	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1940	97.0	2000	2070	103.5	2000	1970	98.5
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	1830	91.5	2000	1830	91.5	2000	2070	103.5
Cobalt									
Copper									
Iron	anr								
Lead	2000	1890	94.5	2000	1920	96.0	2000	1980	99.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	1930	96.5	2000	2000	100.0	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		11:06			12:54			13:45	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1850	92.5	2000	1960	98.0	2000	1940	97.0
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2050	102.5	2000	2020	101.0	2000	1990	99.5
Cobalt									
Copper									
Iron	anr								
Lead	2000	1910	95.5	2000	1970	98.5	2000	1960	98.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	1910	95.5	2000	1980	99.0	2000	1970	98.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		14:34			15:24			16:13	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1930	96.5	2000	1960	98.0	2000	1960	98.0
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2000	100.0	2000	2070	103.5	2000	2070	103.5
Cobalt									
Copper									
Iron	anr								
Lead	2000	1940	97.0	2000	1990	99.5	2000	2000	100.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	1960	98.0	2000	1990	99.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		17:03			17:52			18:41	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	2000	1990	99.5	2000	1960	98.0	2000	1980	99.0
Arsenic	anr								
Barium									
Beryllium									
Cadmium	anr								
Calcium									
Chromium	2000	2110	105.5	2000	2090	104.5	2000	1940	97.0
Cobalt									
Copper									
Iron	anr								
Lead	2000	2020	101.0	2000	2000	100.0	2000	2010	100.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver									
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	2000	2030	101.5	2000	2000	100.0	2000	2030	101.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12216 Units: ug/l

Time:		19:31			19:43	
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	2000	1880	94.0	2000	1950	97.5
Arsenic	anr					
Barium						
Beryllium						
Cadmium	anr					
Calcium						
Chromium	2000	2020	101.0	2000	2050	102.5
Cobalt						
Copper						
Iron	anr					
Lead	2000	1900	95.0	2000	1960	98.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver						
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	2000	1920	96.0	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12216 Units: ug/l

Time:		09:46	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum			
Antimony	4000	3970	99.3
Arsenic	anr		
Barium			
Beryllium			
Cadmium	anr		
Calcium			
Chromium	4000	3810	95.3
Cobalt			
Copper			
Iron	anr		
Lead	4000	3910	97.8
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silver			
Sodium	anr		
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc	4000	3880	97.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12216 Units: ug/l

Time:			10:08		19:23	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200				
Antimony	10	5.0	4.2	84.0	5.6	112.0
Arsenic	20	10	anr			
Barium	400	200				
Beryllium	10	5.0				
Cadmium	10	5.0	anr			
Calcium	2000	1000				
Chromium	20	10	8.9	89.0	10.3	103.0
Cobalt	100	50				
Copper	50	25				
Iron	600	300	anr			
Lead	10	5.0	3.6	72.0	4.1	82.0
Magnesium	10000	5000				
Manganese	30	15				
Molybdenum	100	50				
Nickel	80	40				
Potassium	20000	10000				
Selenium	20	10	anr			
Silver	20	10				
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10				
Tin	100	50				
Titanium	20	10				
Vanadium	100	50				
Zinc	40	20	20.8	104.0	21.0	105.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021315M1.ICP Date Analyzed: 02/13/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12216 Units: ug/l

Time:			10:55		11:01		19:27		19:39	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	519000	103.8	518000	103.6	484000	96.8	518000	103.6
Antimony		1000	0.10		1070	107.0	0.20		1090	109.0
Arsenic		1000	-1.3		1040	104.0	-0.30		1070	107.0
Barium		500	-0.20		517	103.4	-0.20		525	105.0
Beryllium		500	0.0		518	103.6	0.10		513	102.6
Cadmium		1000	0.0		964	96.4	-1.3		976	97.6
Calcium	500000	500000	496000	99.2	488000	97.6	464000	92.8	488000	97.6
Chromium		500	-0.40		524	104.8	-0.60		520	104.0
Cobalt		500	0.70		504	100.8	0.60		511	102.2
Copper		500	0.0		579	115.8	-2.9		572	114.4
Iron	200000	200000	190000	95.0	184000	92.0	172000	86.0	181000	90.5
Lead		1000	-0.20		977	97.7	-5.9		978	97.8
Magnesium	500000	500000	498000	99.6	484000	96.8	455000	91.0	478000	95.6
Manganese		500	0.40		520	104.0	0.30		522	104.4
Molybdenum		1000	0.0		952	95.2	0.0		965	96.5
Nickel		1000	-0.20		994	99.4	0.90		1010	101.0
Potassium			231		238		83.2		18.2	
Selenium		1000	0.10		1020	102.0	2.3		1040	104.0
Silver		1000	0.80		1020	102.0	0.20		1010	101.0
Sodium			197		197		146		100	
Strontium		1000	0.10		1030	103.0	0.10		1040	104.0
Thallium		1000	-1.8		1010	101.0	0.40		1020	102.0
Tin		1000	0.50		966	96.6	1.1		994	99.4
Titanium		1000	0.10		1050	105.0	0.20		1040	104.0
Vanadium		500	-0.10		502	100.4	0.40		503	100.6
Zinc		1000	0.30		978	97.8	0.0		994	99.4

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:04	MA12218-STD1	1		STDA
10:08	MA12218-STD2	1		STDB
10:11	MA12218-STD3	1		STDC
10:15	MA12218-STD4	1		STDD
10:18	MA12218-HSTD1	1		
10:25	MA12218-ICV1	1		
10:31	MA12218-ICB1	1		
10:36	MA12218-CRIA1	1		
10:43	MA12218-ICSA1	1		
10:50	MA12218-ICSAB1	1		
10:58	MA12218-CCV1	1		
11:03	MA12218-CCB1	1		
11:31	MA12218-CCV2	1		
11:37	MA12218-CCB2	1		
11:42	ZZZZZZ	25		
11:47	ZZZZZZ	1		
11:51	ZZZZZZ	2		
11:55	MP28556-MB1	1		
12:00	MP28556-B1	1		
12:04	FA22100-1	1		(sample used for QC only; not part of login FA22032)
12:08	MP28556-D1	1		
12:13	MP28556-SD1	5		
12:17	MP28556-PS1	1		
12:22	MP28556-S1	1		
12:26	MA12218-CCV3	1		
12:30	MA12218-CCB3	1		
12:34	MP28556-S2	1		
12:39	ZZZZZZ	1		
12:43	ZZZZZZ	1		
12:47	ZZZZZZ	1		
12:52	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:00	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:05	ZZZZZZ	1		
13:09	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:18	MA12218-CCV4	1		
13:22	MA12218-CCB4	1		
13:27	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:35	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:57	ZZZZZZ	1		
14:01	ZZZZZZ	1		
14:07	MP28556-MB2A	1		
14:11	MA12218-CCV5	1		
14:15	MA12218-CCB5	1		
14:40	MA12218-CCV6	1		
14:49	MA12218-CCB6	1		
14:53	MP28558-MB1	1		
14:57	MP28558-B1	1		
15:01	FA22051-3	1		(sample used for QC only; not part of login FA22032)
15:06	MP28558-D1	1		
15:10	MP28558-SD1	5		
15:14	MP28558-PS1	1		
15:19	MP28558-S1	1		
15:23	MP28558-S2	1		
15:27	ZZZZZZ	1		
15:31	ZZZZZZ	1		
15:36	MA12218-CCV7	1		
15:40	MA12218-CCB7	1		
15:44	ZZZZZZ	1		
15:49	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:53	ZZZZZZ	1		
15:58	ZZZZZZ	1		
16:02	ZZZZZZ	1		
16:06	ZZZZZZ	1		
16:11	FA22032-4	1		
16:16	FA22032-5	1		
16:20	FA22032-6	1		
16:25	FA22032-7	1		
---------->	Last reportable sample/prep for job FA22032			
16:30	MA12218-CCV8	1		
16:34	MA12218-CCB8	1		
16:38	ZZZZZZ	1		
16:43	ZZZZZZ	1		
16:47	ZZZZZZ	1		
16:51	ZZZZZZ	1		
16:56	ZZZZZZ	1		
17:00	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:09	MA12218-CRIA2	1		
17:13	MA12218-ICSA2	1		
17:18	MA12218-ICSAB2	1		
17:22	MA12218-CCV9	1		
17:26	MA12218-CCB9	1		
---------->	Last reportable CCB for job FA22032			
17:31	MA12218-CCV10	1		
17:35	MA12218-CCB10	1		

Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:04	MA12218-STD1	6350	54517	4242	3148
10:08	MA12218-STD2	6251	53046	4182	2991
10:11	MA12218-STD3	6059	51937	4183	2740
10:15	MA12218-STD4	5880	51014	4159	2563
10:18	MA12218-HSTD1	5844	50621	4145	2554
10:25	MA12218-ICV1	5981	51385	4163	2725
10:31	MA12218-ICB1	6115 R	52840 R	4100 R	3090 R
10:36	MA12218-CRIA1	6136	52270	4152	3021
10:43	MA12218-ICSA1	5620	47051	4045	2460
10:50	MA12218-ICSAB1	5488	46708	3922	2378
10:58	MA12218-CCV1	5870	49829	4031	2685
11:03	MA12218-CCB1	6233	53399	4185	3135
11:31	MA12218-CCV2	6112	52117	4170	2758
11:37	MA12218-CCB2	6260	53049	4083	3114
11:42	ZZZZZZ	6117	51408	4045	2890
11:47	ZZZZZZ	6134	52368	4169	2867
11:51	ZZZZZZ	5926	50809	4003	2768
11:55	MP28556-MB1	6274	53639	3997	3081
12:00	MP28556-B1	6309	53531	4168	2918
12:04	FA22100-1	6118	52035	4095	2898
12:08	MP28556-D1	6106	51929	4074	2892
12:13	MP28556-SD1	6236	52795	3987	3030
12:17	MP28556-PS1	6134	51974	4104	2857
12:22	MP28556-S1	6114	51792	4141	2772
12:26	MA12218-CCV3	6144	51907	4025	2740
12:30	MA12218-CCB3	6355	53993	4039	3116
12:34	MP28556-S2	6088	51243	4029	2750
12:39	ZZZZZZ	6318	53873	4022	3041
12:43	ZZZZZZ	6326	53681	4099	3008
12:47	ZZZZZZ	6282	53199	3981	3022
12:52	ZZZZZZ	6326	53407	3998	3036
12:56	ZZZZZZ	6355	53543	4003	3058
13:00	ZZZZZZ	6297	53456	4001	3043

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:05	ZZZZZZ	6195	52925	4015	2977
13:09	ZZZZZZ	6119	52186	3926	2922
13:14	ZZZZZZ	6151	52214	4041	2828
13:18	MA12218-CCV4	6118	51578	4017	2701
13:22	MA12218-CCB4	6386	54060	4065	3127
13:27	ZZZZZZ	6113	51778	4000	2905
13:31	ZZZZZZ	6105	51503	3915	2837
13:35	ZZZZZZ	6146	51992	3953	2896
13:40	ZZZZZZ	5986	50580	3919	2744
13:44	ZZZZZZ	6037	51153	4047	2768
13:48	ZZZZZZ	5993	50415	3905	2752
13:53	ZZZZZZ	6086	51000	3882	2750
13:57	ZZZZZZ	5974	50220	3874	2693
14:01	ZZZZZZ	6329	53669	3971	3079
14:07	MP28556-MB2A	6264	53383	3962	3029
14:11	MA12218-CCV5	6097	51216	3864	2679
14:15	MA12218-CCB5	6350	53198	3921	3075
14:40	MA12218-CCV6	6139	51284	3935	2695
14:49	MA12218-CCB6	6312	53065	3934	3051
14:53	MP28558-MB1	6383	53841	3972	3080
14:57	MP28558-B1	6171	51791	3906	2779
15:01	FA22051-3	6417	53212	4017	2868
15:06	MP28558-D1	6407	53418	4119	2836
15:10	MP28558-SD1	6458	53528	3987	3010
15:14	MP28558-PS1	6391	52686	3962	2803
15:19	MP28558-S1	6448	52290	4015	2720
15:23	MP28558-S2	6392	52139	4005	2706
15:27	ZZZZZZ	7149	59186	4502	2764
15:31	ZZZZZZ	6524	54003	3960	2956
15:36	MA12218-CCV7	6170	50733	3839	2684
15:40	MA12218-CCB7	6409	53333	3927	3080
15:44	ZZZZZZ	6471	54071	3926	2999
15:49	ZZZZZZ	6559	54156	3999	2931

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12218
Parameters: Al,Sb,Cr,Cu,Fe,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:53	ZZZZZZ	6476	54207	4005	2994
15:58	ZZZZZZ	6462	53879	3920	3018
16:02	ZZZZZZ	6496	53915	3910	3021
16:06	ZZZZZZ	5517	46464	3842	2003
16:11	FA22032-4	6458	53195	4364	2194
16:16	FA22032-5	6358	52936	4294	2156
16:20	FA22032-6	6005	50234	4047	2114
16:25	FA22032-7	5628	47400	3857	2097
16:30	MA12218-CCV8	6141	50754	3768	2664
16:34	MA12218-CCB8	6380	52904	3764	3043
16:38	ZZZZZZ	6452	53975	3883	3056
16:43	ZZZZZZ	6395	53722	3900	3026
16:47	ZZZZZZ	6376	53604	3822	3000
16:51	ZZZZZZ	6405	53760	3840	3032
16:56	ZZZZZZ	6298	52689	3829	2974
17:00	ZZZZZZ	6483	54360	3954	2996
17:04	ZZZZZZ	7743 !	62812	4675	2654
17:09	MA12218-CRIA2	6338	53152	3768	2966
17:13	MA12218-ICSA2	5709	46384	3634	2370
17:18	MA12218-ICSAB2	5677	46088	3590	2328
17:22	MA12218-CCV9	6182	51089	3779	2670
17:26	MA12218-CCB9	6385	53311	3778	3040
17:31	MA12218-CCV10	6168	51061	3738	2662
17:35	MA12218-CCB10	6355	52835	3722	3020

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12218 Units: ug/l

Time: / Sample ID:			10:31 ICB1		11:03 CCB1		11:37 CCB2		12:30 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	-0.90	<200	-7.0	<200	15.1	<200	4.9	<200
Antimony	6.0	1	-0.50	<6.0	-0.70	<6.0	-0.90	<6.0	-0.10	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	-0.30	<10	0.0	<10	-0.10	<10	0.30	<10
Cobalt	50	.2	anr							
Copper	25	1	0.30	<25	0.30	<25	-0.40	<25	-0.70	<25
Iron	300	17	-17	<300	-6.0	<300	20.9	<300	30.7	<300
Lead	5.0	1	-0.80	<5.0	-1.3	<5.0	0.10	<5.0	-0.30	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-1.2	<20	-0.90	<20	-0.10	<20	0.20	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12218 Units: ug/l

Time: / Sample ID:			13:22 CCB4		14:15 CCB5		14:49 CCB6		15:40 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	8.9	<200	25.5	<200	14.9	<200	9.6	<200
Antimony	6.0	1	-0.20	<6.0	1.4	<6.0	1.2	<6.0	0.90	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.40	<10	0.60	<10	1.0	<10	0.70	<10
Cobalt	50	.2	anr							
Copper	25	1	-0.30	<25	-0.10	<25	0.80	<25	0.50	<25
Iron	300	17	28.7	<300	36.4	<300	25.6	<300	33.0	<300
Lead	5.0	1	-0.40	<5.0	0.90	<5.0	0.90	<5.0	0.70	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.30	<20	1.0	<20	0.90	<20	0.80	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12218 Units: ug/l

Time: / Sample ID:			16:34 CCB8		17:26 CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	7.3	<200	37.9	<200
Antimony	6.0	1	1.6	<6.0	0.0	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2	anr			
Cadmium	5.0	.2	anr			
Calcium	1000	50	anr			
Chromium	10	1	1.1	<10	0.70	<10
Cobalt	50	.2	anr			
Copper	25	1	0.80	<25	0.30	<25
Iron	300	17	38.3	<300	44.5	<300
Lead	5.0	1	1.3	<5.0	0.30	<5.0
Magnesium	5000	35	anr			
Manganese	15	.5	anr			
Molybdenum	50	.3	anr			
Nickel	40	.4	anr			
Potassium	10000	200	anr			
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	1.4	<20	1.1	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		10:25			10:58			11:31	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41200	103.0	40000	41600	104.0	40000	39700	99.3
Antimony	2000	1970	98.5	2000	2100	105.0	2000	2000	100.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	1990	99.5	2000	2130	106.5	2000	2000	100.0
Cobalt	anr								
Copper	2000	1940	97.0	2000	2080	104.0	2000	1980	99.0
Iron	40000	41400	103.5	40000	42200	105.5	40000	40300	100.8
Lead	2000	1970	98.5	2000	2070	103.5	2000	1980	99.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2040	102.0	2000	2160	108.0	2000	2020	101.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		12:26			13:18			14:11	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41000	102.5	40000	42200	105.5	40000	42600	106.5
Antimony	2000	1990	99.5	2000	2010	100.5	2000	1980	99.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2020	101.0	2000	2060	103.0	2000	2060	103.0
Cobalt	anr								
Copper	2000	2030	101.5	2000	2090	104.5	2000	2090	104.5
Iron	40000	41100	102.8	40000	42000	105.0	40000	42200	105.5
Lead	2000	2000	100.0	2000	2030	101.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2000	100.0	2000	1990	99.5	2000	1970	98.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		14:40			15:36			16:30	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	41000	102.5	40000	41800	104.5	40000	41700	104.3
Antimony	2000	2060	103.0	2000	2020	101.0	2000	2010	100.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2080	104.0	2000	2090	104.5	2000	2070	103.5
Cobalt	anr								
Copper	2000	2060	103.0	2000	2080	104.0	2000	2070	103.5
Iron	40000	41800	104.5	40000	42000	105.0	40000	41000	102.5
Lead	2000	2030	101.5	2000	2020	101.0	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2080	104.0	2000	2040	102.0	2000	2020	101.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12218 Units: ug/l

Time:		17:22	
Sample ID:	CCV	CCV9	
Metal	True	Results	% Rec
Aluminum	40000	41700	104.3
Antimony	2000	2010	100.5
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	2000	2060	103.0
Cobalt	anr		
Copper	2000	2080	104.0
Iron	40000	40800	102.0
Lead	2000	2000	100.0
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12218 Units: ug/l

Time:		10:18	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	80000	79100	98.9
Antimony	4000	3990	99.8
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3950	98.8
Cobalt	anr		
Copper	4000	3950	98.8
Iron	80000	78500	98.1
Lead	4000	4030	100.8
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3980	99.5

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12218 Units: ug/l

Time:			10:36		17:09	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	199	99.5	238	119.0
Antimony	10	5.0	4.2	84.0	4.4	88.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.5	105.0	10.8	108.0
Cobalt	100	50	anr			
Copper	50	25	27.1	108.4	26.9	107.6
Iron	600	300	286	95.3	355	118.3
Lead	10	5.0	4.5	90.0	5.5	110.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.6	108.0	21.6	108.0

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SA021615M1.ICP Date Analyzed: 02/16/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12218 Units: ug/l

Time:			10:43		10:50		17:13		17:18	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	508000	101.6	511000	102.2	513000	102.6	523000	104.6
Antimony		1000	0.0		1080	108.0	-0.50		1030	103.0
Arsenic		1000	0.0		1090	109.0	1.5		1030	103.0
Barium		500	0.0		527	105.4	1.0		544	108.8
Beryllium		500	-0.60		525	105.0	-0.10		507	101.4
Cadmium		1000	0.0		965	96.5	-0.50		920	92.0
Calcium	500000	500000	495000	99.0	499000	99.8	479000	95.8	474000	94.8
Chromium		500	0.0		505	101.0	0.60		498	99.6
Cobalt		500	0.0		493	98.6	1.1		482	96.4
Copper		500	-1.3		553	110.6	0.0		560	112.0
Iron	200000	200000	190000	95.0	188000	94.0	185000	92.5	184000	92.0
Lead		1000	0.0		999	99.9	-1.0		966	96.6
Magnesium	500000	500000	489000	97.8	491000	98.2	489000	97.8	492000	98.4
Manganese		500	-0.40		526	105.2	-0.50		505	101.0
Molybdenum		1000	0.0		950	95.0	11.2		936	93.6
Nickel		1000	0.0		1010	101.0	1.7		948	94.8
Potassium			123		177		255		158	
Selenium		1000	0.90		1050	105.0	1.7		996	99.6
Silver		1000	0.10		1060	106.0	-0.60		1050	105.0
Sodium			159		163		171		116	
Strontium		1000	-0.30		1040	104.0	0.20		1020	102.0
Thallium		1000	-1.1		1000	100.0	-3.1		967	96.7
Tin		1000	-0.60		960	96.0	1.3		948	94.8
Titanium		1000	-1.3		1040	104.0	1.5		996	99.6
Vanadium		500	0.10		496	99.2	1.1		475	95.0
Zinc		1000	-3.0		1010	101.0	-1.6		938	93.8

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:38	MA12220-STD1	1		STDA
09:41	MA12220-STD2	1		STDB
09:48	MA12220-STD3	1		STDD
09:54	MA12220-STD4	1		STDC
09:58	MA12220-HSTD1	1		
10:04	MA12220-ICV1	1		
10:10	MA12220-ICB1	1		
10:14	MA12220-CRIA1	1		
10:24	MA12220-ICSA1	1		
10:31	MA12220-ICSAB1	1		
10:35	MA12220-CCV1	1		
10:44	MA12220-CCB1	1		
10:48	MP28555-MB1	1		
10:52	MP28555-B1	1		
10:56	FA21871-1	1		(sample used for QC only; not part of login FA22032)
11:00	MP28555-D1	1		
11:04	MP28555-SD1	5		
11:09	MP28555-S1	1		
11:12	MP28555-S2	1		
11:16	ZZZZZZ	1		
11:21	ZZZZZZ	1		
11:25	ZZZZZZ	1		
11:29	MA12220-CCV2	1		
11:33	MA12220-CCB2	1		
11:37	MP28556-S1	2		
11:41	MP28556-S2	2		
11:45	ZZZZZZ	10		
11:49	FA22032-4	5		
11:53	FA22032-5	5		
12:05	FA22032-6	10		
12:09	FA22032-7	10		
---------->	Last reportable sample/prep for job FA22032			
12:13	MP28559-MB1	1		
12:17	MP28559-B1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:26	MA12220-CCV3	1		
12:32	MA12220-CCB3	1		
12:55	MA12220-CCV4	1		
13:06	MA12220-CCB4	1		
13:10	FA22140-1	1		(sample used for QC only; not part of login FA22032)
13:14	MP28559-D1	1		
13:18	MP28559-SD1	5		
13:23	MP28559-PS1	1		
13:27	MP28559-S1	1		
13:31	MP28559-S2	1		
13:35	ZZZZZZ	1		
13:39	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:47	ZZZZZZ	4		
13:51	MA12220-CCV5	1		
14:00	MA12220-CCB5	1		
14:05	ZZZZZZ	10		
14:09	ZZZZZZ	1		
14:13	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:22	ZZZZZZ	4		
14:26	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:34	ZZZZZZ	1		
14:43	ZZZZZZ	1		
14:47	MA12220-CCV6	1		
14:51	MA12220-CCB6	1		
14:55	ZZZZZZ	1		
14:59	ZZZZZZ	1		
15:03	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:36	MA12220-CCV7	1		
15:40	MA12220-CCB7	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:05	MP28563-MB1	1		
16:09	MP28563-B1	1		
16:13	FA22014-2L	1		(sample used for QC only; not part of login FA22032)
16:17	MP28563-D1	1		
16:21	MP28563-SD1	5		
16:25	MA12220-CCV8	1		
16:29	MA12220-CCB8	1		
16:33	MP28563-S1	1		
16:37	MP28563-S2	1		
16:42	FA22014-1L	1		(sample used for QC only; not part of login FA22032)
16:46	ZZZZZZ	1		
16:50	ZZZZZZ	1		
16:54	ZZZZZZ	1		
16:58	ZZZZZZ	1		
17:02	ZZZZZZ	1		
17:06	ZZZZZZ	1		
17:11	ZZZZZZ	1		
17:15	MA12220-CCV9	1		
17:19	MA12220-CCB9	1		
17:23	ZZZZZZ	1		
17:27	MP28563-D2	1		
17:31	MP28563-MB2	1		
17:35	MP28563-B2	1		
17:40	MP28563-MB3	1		
17:44	MP28563-B3	1		
17:48	MP28561-MB1	1		
17:52	MP28561-B1	1		
17:56	FA22095-4	1		(sample used for QC only; not part of login FA22032)
18:00	MP28561-D1	1		
18:04	MA12220-CCV10	1		
18:08	MA12220-CCB10	1		
18:12	MP28561-SD1	5		
18:16	MP28561-PS1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:20	MP28561-S1	1		
18:24	MP28561-S2	1		
18:28	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:36	ZZZZZZ	1		
18:40	ZZZZZZ	1		
18:45	ZZZZZZ	1		
18:49	ZZZZZZ	1		
18:53	MA12220-CCV11	1		
18:57	MA12220-CCB11	1		
19:01	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:13	ZZZZZZ	1		
19:17	ZZZZZZ	1		
19:25	ZZZZZZ	1		
19:34	ZZZZZZ	1		
19:42	MA12220-CCV12	1		
19:46	MA12220-CCB12	1		
19:50	ZZZZZZ	1		
19:54	ZZZZZZ	1		
19:58	ZZZZZZ	1		
20:02	MA12220-CRIA2	1		
20:06	MA12220-ICSA2	1		
20:10	MA12220-ICSAB2	1		
20:15	MA12220-CCV13	1		
20:19	MA12220-CCB13	1		

----------> Last reportable CCB for job FA22032
Refer to raw data for calibration curve and standards.

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:38	MA12220-STD1	4993	34221	4305	1706
09:41	MA12220-STD2	4866	33359	4218	1678
09:48	MA12220-STD3	4563	31706	4245	1557
09:54	MA12220-STD4	4723	32413	4211	1615
09:58	MA12220-HSTD1	4558	31574	4191	1560
10:04	MA12220-ICV1	4746	31835	4157	1624
10:10	MA12220-ICB1	4910 R	33961 R	4259 R	1691 R
10:14	MA12220-CRIA1	4903	33677	4260	1690
10:24	MA12220-ICSA1	4373	29511	4073	1539
10:31	MA12220-ICSAB1	4343	29109	4099	1526
10:35	MA12220-CCV1	4692	32103	4157	1613
10:44	MA12220-CCB1	4893	33763	4207	1688
10:48	MP28555-MB1	4880	33185	4154	1672
10:52	MP28555-B1	4771	32353	4199	1630
10:56	FA21871-1	4815	32304	4169	1640
11:00	MP28555-D1	4830	32022	4185	1644
11:04	MP28555-SD1	4923	32842	4211	1677
11:09	MP28555-S1	4761	31690	4142	1613
11:12	MP28555-S2	4751	31495	4136	1610
11:16	ZZZZZZ	4857	32117	4167	1646
11:21	ZZZZZZ	4792	32239	4180	1639
11:25	ZZZZZZ	4814	32782	4231	1652
11:29	MA12220-CCV2	4664	31915	4178	1611
11:33	MA12220-CCB2	4854	33434	4232	1675
11:37	MP28556-S1	4810	32610	4224	1655
11:41	MP28556-S2	4592	32272	4188	1537
11:45	ZZZZZZ	4768	31492	4121	1616
11:49	FA22032-4	4814	31735	4241	1594
11:53	FA22032-5	4797	32131	4297	1588
12:05	FA22032-6	4784	31614	4125	1617
12:09	FA22032-7	4792	31324	4065	1621
12:13	MP28559-MB1	4898	32857	4113	1662
12:17	MP28559-B1	4796	31633	4083	1637

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:26	MA12220-CCV3	4688	31048	3968	1592
12:32	MA12220-CCB3	4883	32586	4059	1669
12:55	MA12220-CCV4	4662	30719	3950	1583
13:06	MA12220-CCB4	4870	32043	4003	1656
13:10	FA22140-1	4778	30736	4008	1614
13:14	MP28559-D1	4774	30728	4017	1606
13:18	MP28559-SD1	4898	31808	4023	1655
13:23	MP28559-PS1	4759	30360	3939	1599
13:27	MP28559-S1	4692	29591	3920	1565
13:31	MP28559-S2	4673	29933	3918	1566
13:35	ZZZZZZ	4891	31840	4027	1658
13:39	ZZZZZZ	4896	31575	3966	1651
13:43	ZZZZZZ	4907	31748	3964	1648
13:47	ZZZZZZ	4801	30780	3866	1616
13:51	MA12220-CCV5	4684	30053	3859	1576
14:00	MA12220-CCB5	4884	31363	3880	1639
14:05	ZZZZZZ	4860	31034	3923	1624
14:09	ZZZZZZ	4880	31079	3948	1639
14:13	ZZZZZZ	4895	30862	3926	1640
14:18	ZZZZZZ	4726	29709	3837	1577
14:22	ZZZZZZ	4940	31336	3920	1657
14:26	ZZZZZZ	4852	30901	3911	1629
14:30	ZZZZZZ	4923	30837	3894	1641
14:34	ZZZZZZ	4871	30420	3826	1618
14:43	ZZZZZZ	4811	30376	3855	1610
14:47	MA12220-CCV6	4787	30223	3841	1606
14:51	MA12220-CCB6	4996	31352	3849	1662
14:55	ZZZZZZ	4905	30655	3816	1634
14:59	ZZZZZZ	4795	30146	3824	1610
15:03	ZZZZZZ	4892	30931	3817	1645
15:11	ZZZZZZ	4879	30792	3818	1631
15:36	MA12220-CCV7	4781	30643	3882	1613
15:40	MA12220-CCB7	4953	32301	3961	1670

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:05	MP28563-MB1	4982	31833	3926	1654
16:09	MP28563-B1	4865	30159	3864	1626
16:13	FA22014-2L	4940	30242	3830	1638
16:17	MP28563-D1	4928	30613	3862	1640
16:21	MP28563-SD1	5004	31125	3837	1668
16:25	MA12220-CCV8	4794	29782	3820	1609
16:29	MA12220-CCB8	4995	30812	3827	1664
16:33	MP28563-S1	4827	29813	3814	1601
16:37	MP28563-S2	4848	29981	3822	1610
16:42	FA22014-1L	4895	30052	3793	1630
16:46	ZZZZZZ	4922	29954	3824	1634
16:50	ZZZZZZ	4910	30368	3795	1632
16:54	ZZZZZZ	4932	30280	3806	1639
16:58	ZZZZZZ	4921	30015	3793	1634
17:02	ZZZZZZ	4939	30133	3783	1640
17:06	ZZZZZZ	4945	30274	3779	1636
17:11	ZZZZZZ	4922	30252	3791	1629
17:15	MA12220-CCV9	4809	29824	3744	1610
17:19	MA12220-CCB9	4995	31008	3799	1673
17:23	ZZZZZZ	4961	31323	3850	1656
17:27	MP28563-D2	4899	30322	3759	1631
17:31	MP28563-MB2	4926	30180	3802	1636
17:35	MP28563-B2	4839	29274	3747	1606
17:40	MP28563-MB3	4986	31152	3814	1654
17:44	MP28563-B3	4859	30411	3783	1628
17:48	MP28561-MB1	4987	31331	3902	1660
17:52	MP28561-B1	4866	30085	3779	1620
17:56	FA22095-4	5016	31340	3932	1695
18:00	MP28561-D1	4987	31206	3956	1687
18:04	MA12220-CCV10	4818	29852	3728	1617
18:08	MA12220-CCB10	5062	31459	3805	1694
18:12	MP28561-SD1	5035	31329	3849	1695
18:16	MP28561-PS1	4989	30956	3929	1674

INTERNAL STANDARD SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
Analyst: LM Run ID: MA12220
Parameters: Sb,Cr,Pb,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:20	MP28561-S1	4895	29785	3832	1636
18:24	MP28561-S2	4867	29700	3820	1628
18:28	ZZZZZZ	4973	30654	3893	1675
18:32	ZZZZZZ	5082	31357	4001	1697
18:36	ZZZZZZ	5062	31469	4002	1690
18:40	ZZZZZZ	5068	32106	3925	1675
18:45	ZZZZZZ	4734	30626	3811	1553
18:49	ZZZZZZ	5067	31775	3915	1685
18:53	MA12220-CCV11	4803	30241	3737	1617
18:57	MA12220-CCB11	4996	31439	3780	1679
19:01	ZZZZZZ	6734 !	41886	5292	1690
19:09	ZZZZZZ	4983	31238	3901	1678
19:13	ZZZZZZ	5169	32093	4049	1673
19:17	ZZZZZZ	5013	31240	3906	1679
19:25	ZZZZZZ	4990	31540	3931	1681
19:34	ZZZZZZ	5074	31934	3992	1680
19:42	MA12220-CCV12	4853	30578	3729	1629
19:46	MA12220-CCB12	5001	31541	3779	1684
19:50	ZZZZZZ	5031	31634	3957	1677
19:54	ZZZZZZ	5089	31896	3992	1684
19:58	ZZZZZZ	5022	31830	3967	1674
20:02	MA12220-CRIA2	4995	31692	3821	1688
20:06	MA12220-ICSA2	4424	27656	3597	1534
20:10	MA12220-ICSAB2	4413	27285	3591	1522
20:15	MA12220-CCV13	4776	29991	3676	1610
20:19	MA12220-CCB13	4958	31612	3763	1677

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time: / Sample ID:			10:10 ICB1		10:44 CCB1		11:33 CCB2		12:32 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	1.1	<6.0	0.0	<6.0	0.80	<6.0	0.20	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.0	<10	0.20	<10	0.20	<10	0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.40	<5.0	0.30	<5.0	0.20	<5.0	0.10	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	-0.10	<20	0.40	<20	0.50	<20	0.40	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time: / Sample ID:			13:06 CCB4		14:00 CCB5		14:51 CCB6		15:40 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	0.90	<6.0	1.1	<6.0	1.6	<6.0	1.8	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	0.10	<10	-0.30	<10	0.10	<10	0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	0.30	<5.0	0.30	<5.0	-0.40	<5.0	0.10	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.60	<20	-0.20	<20	-0.10	<20	-0.10	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time: / Sample ID:			16:29 CCB8		17:19 CCB9		18:08 CCB10		18:57 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	2.8	<6.0	2.4	<6.0	2.5	<6.0	1.5	<6.0
Arsenic	10	1.3	anr							
Barium	200	1	anr							
Beryllium	4.0	.2	anr							
Cadmium	5.0	.2	anr							
Calcium	1000	50	anr							
Chromium	10	1	-0.10	<10	0.30	<10	0.10	<10	0.10	<10
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	17	anr							
Lead	5.0	1	-0.10	<5.0	-0.10	<5.0	-0.60	<5.0	0.0	<5.0
Magnesium	5000	35	anr							
Manganese	15	.5	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	200	anr							
Selenium	10	2.4	anr							
Silver	10	.7	anr							
Sodium	10000	500	anr							
Strontium	10	.5								
Thallium	10	1.1	anr							
Tin	50	.9								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	0.20	<20	0.30	<20	0.30	<20	0.30	<20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: result < RL Run ID: MA12220 Units: ug/l

Time:			19:46		20:19	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	anr			
Antimony	6.0	1	1.8	<6.0	1.7	<6.0
Arsenic	10	1.3	anr			
Barium	200	1	anr			
Beryllium	4.0	.2	anr			
Cadmium	5.0	.2	anr			
Calcium	1000	50	anr			
Chromium	10	1	0.0	<10	0.10	<10
Cobalt	50	.2	anr			
Copper	25	1	anr			
Iron	300	17	anr			
Lead	5.0	1	0.90	<5.0	-1.0	<5.0
Magnesium	5000	35	anr			
Manganese	15	.5	anr			
Molybdenum	50	.3	anr			
Nickel	40	.4	anr			
Potassium	10000	200	anr			
Selenium	10	2.4	anr			
Silver	10	.7	anr			
Sodium	10000	500	anr			
Strontium	10	.5				
Thallium	10	1.1	anr			
Tin	50	.9				
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	0.20	<20	0.0	<20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		10:04			10:35			11:29	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1920	96.0	2000	2030	101.5	2000	2060	103.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2010	100.5	2000	2070	103.5	2000	2090	104.5
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	2020	101.0	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1970	98.5	2000	2050	102.5	2000	2090	104.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		12:26			12:55			13:51	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1930	96.5	2000	1970	98.5	2000	1950	97.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2070	103.5	2000	2010	100.5	2000	2080	104.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1990	99.5	2000	1980	99.0	2000	2000	100.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	2000	100.0	2000	1990	99.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		14:47			15:36			16:25	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1900	95.0	2000	1920	96.0	2000	1910	95.5
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2090	104.5	2000	2050	102.5	2000	2140	107.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1970	98.5	2000	1970	98.5	2000	1970	98.5
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1970	98.5	2000	1970	98.5	2000	1980	99.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		17:15			18:04			18:53	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	2000	1900	95.0	2000	1900	95.0	2000	1900	95.0
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Cadmium	anr								
Calcium	anr								
Chromium	2000	2140	107.0	2000	2130	106.5	2000	2100	105.0
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1980	99.0	2000	1980	99.0	2000	1980	99.0
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	2000	1980	99.0	2000	1990	99.5	2000	1990	99.5

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 90 to 110 % Recovery Run ID: MA12220 Units: ug/l

Time:		19:42			20:15	
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	2000	1890	94.5	2000	1940	97.0
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Cadmium	anr					
Calcium	anr					
Chromium	2000	2070	103.5	2000	2130	106.5
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	2000	1970	98.5	2000	1990	99.5
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	2000	1970	98.5	2000	2000	100.0

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 95 to 105 % Recovery Run ID: MA12220 Units: ug/l

Time:		09:58	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	4000	3990	99.8
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Cadmium	anr		
Calcium	anr		
Chromium	4000	3940	98.5
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	4000	3950	98.8
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	4000	3930	98.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA12220 Units: ug/l

Time:			10:14		20:02	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	4.5	90.0	4.9	98.0
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Cadmium	10	5.0	anr			
Calcium	2000	1000	anr			
Chromium	20	10	10.2	102.0	10.9	109.0
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	4.1	82.0	4.4	88.0
Magnesium	10000	5000	anr			
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10	anr			
Tin	100	50				
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	21.0	105.0	21.5	107.5

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: SB021715M1.ICP Date Analyzed: 02/17/15 Methods: SW846 6010C
QC Limits: 80 to 120 % Recovery Run ID: MA12220 Units: ug/l

Time:			10:24		10:31		20:06		20:10	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1		ICSA2		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec	Results	% Rec	Results	% Rec
Aluminum	500000	500000	491000	98.2	500000	100.0	514000	102.8	523000	104.6
Antimony		1000	0.10		1090	109.0	0.80		1070	107.0
Arsenic		1000	0.50		1070	107.0	1.5		1050	105.0
Barium		500	0.10		508	101.6	0.40		516	103.2
Beryllium		500	-0.10		506	101.2	0.0		512	102.4
Cadmium		1000	0.0		965	96.5	-0.90		972	97.2
Calcium	500000	500000	472000	94.4	472000	94.4	487000	97.4	487000	97.4
Chromium		500	0.0		503	100.6	-0.20		531	106.2
Cobalt		500	0.70		506	101.2	0.90		508	101.6
Copper		500	-1.3		561	112.2	-2.9		571	114.2
Iron	200000	200000	182000	91.0	180000	90.0	184000	92.0	182000	91.0
Lead		1000	-0.10		967	96.7	-4.6		979	97.9
Magnesium	500000	500000	479000	95.8	476000	95.2	480000	96.0	479000	95.8
Manganese		500	0.20		512	102.4	0.10		524	104.8
Molybdenum		1000	0.0		962	96.2	2.8		958	95.8
Nickel		1000	0.80		1010	101.0	1.1		999	99.9
Potassium			219		97.0		202		72.8	
Selenium		1000	0.0		1040	104.0	1.9		1020	102.0
Silver		1000	0.50		992	99.2	0.40		1010	101.0
Sodium			169		134		142		105	
Strontium		1000	0.0		1000	100.0	0.10		1040	104.0
Thallium		1000	0.80		1000	100.0	-0.20		1000	100.0
Tin		1000	-0.30		995	99.5	0.60		970	97.0
Titanium		1000	-1.2		1020	102.0	0.20		1050	105.0
Vanadium		500	0.30		495	99.0	0.40		502	100.4
Zinc		1000	0.0		983	98.3	-0.20		992	99.2

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/12/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8	0.24	<10
Antimony	1.0	.05	.065	-0.035	<1.0
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	-0.0050	<0.50
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	-0.020	<1.3
Iron	15	.85	.85	0.81	<15
Lead	1.0	.05	.05	-0.030	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.050	<1.0

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			02/12/15					02/12/15	
Metal	FA22009-2 Original	DUP	RPD	QC Limits	FA22009-2 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	7370	7490	1.6	0-20	7370	8510	1400	81.5	80-120
Antimony	0.0	0.0	NC	0-20	0.0	10.6	25.9	40.9N(b)	80-120
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	11.6	11.7	0.9	0-20	11.6	21.6	10.4	96.5	80-120
Cobalt									
Copper	0.28	0.36	25.0 (a)	0-20	0.28	13.7	13	103.6	80-120
Iron	380	366	3.8	0-20	380	1740	1350	101.0	80-120
Lead	4.7	4.9	4.2	0-20	4.7	30.2	25.9	98.4	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	0.0	0.20	200.0(a)	0-20	0.0	24.7	25.9	95.4	80-120

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/12/15

Metal	FA22009-2 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	7370	8730	1560	87.2	2.6	20
Antimony	0.0	12.4	28.9	42.9N(a)	15.7	20
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	11.6	23.0	11.6	98.7	6.3	20
Cobalt						
Copper	0.28	15.4	14.4	104.7	11.7	20
Iron	380	1890	1500	100.5	8.3	20
Lead	4.7	33.1	28.9	98.3	9.2	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	0.0	27.5	28.9	95.2	10.7	20

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 02/12/15

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1410	1350	104.4	80-120
Antimony	24.7	25	98.8	80-120
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	10.7	10	107.0	80-120
Cobalt				
Copper	13.3	12.5	106.4	80-120
Iron	1370	1300	105.4	80-120
Lead	25.0	25	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	25.9	25	103.6	80-120

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/12/15

Metal	FA22009-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	126000	130000	2.8	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	198	206	3.7	0-10
Cobalt				
Copper	4.80	6.60	37.5 (a)	0-10
Iron	6510	6600	1.3	0-10
Lead	80.4	81.9	1.9	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	0.00	0.00	NC	0-10

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28549
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/12/15

Metal	Sample ml	Final ml	FA22009-2 Raw	FA22009-2 Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10	126400	123872	121000	0.2	125	2500	-114.9*a	80-120
Antimony	9.8	10			93.9	0.2	5	100	93.9	80-120
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium	9.8	10	198.3	194.334	239	0.2	2.5	50	89.3	80-120
Cobalt										
Copper	9.8	10	4.8	4.704	105.4	0.2	5	100	100.7	80-120
Iron	9.8	10	6514	6383.72	8971	0.2	150	3000	86.2	80-120
Lead	9.8	10	80.4	78.792	128.1	0.2	2.5	50	98.6	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10			243	0.2	12.5	250	97.2	80-120

Associated samples MP28549: FA22032-1, FA22032-2, FA22032-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/16/15

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	1.8	0.48	<10
Antimony	1.0	.05	.065	-0.0050	<1.0
Arsenic	0.50	.065	.1		
Barium	10	.05	.05		
Beryllium	0.25	.01	.025		
Cadmium	0.20	.01	.025		
Calcium	250	2.5	2.5		
Chromium	0.50	.05	.05	0.030	<0.50
Cobalt	2.5	.01	.025		
Copper	1.3	.05	.05	0.0	<1.3
Iron	15	.85	.85	1.2	<15
Lead	1.0	.05	.05	-0.020	<1.0
Magnesium	250	1.8	1.8		
Manganese	0.75	.025	.025		
Molybdenum	2.5	.015	.025		
Nickel	2.0	.02	.025		
Potassium	500	10	10		
Selenium	1.0	.12	.12		
Silver	0.50	.035	.041		
Sodium	500	25	25		
Strontium	0.50	.025	.025		
Thallium	0.50	.055	.055		
Tin	2.5	.045	.045		
Titanium	0.50	.025	.025		
Vanadium	2.5	.025	.025		
Zinc	1.0	.15	.15	0.075	<1.0

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date:			02/16/15					02/16/15	
Metal	FA22051-3 Original	DUP	RPD	QC Limits	FA22051-3 Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	4680	4360	7.1	0-20	4680	6080	1200	116.2	80-120
Antimony	0.22	0.077	96.3 (a)	0-20	0.22	8.2	22.3	35.8N(c)	80-120
Arsenic	anr								
Barium	anr								
Beryllium									
Cadmium	anr								
Calcium									
Chromium	3.0	3.8	23.5*(b)	0-20	3.0	12.2	8.92	103.1	80-120
Cobalt									
Copper	0.29	3.1	165.8*(b	0-20	0.29	11.6	11.2	101.4	80-120
Iron	1620	2360	37.2*(b)	0-20	1620	1840	1160	19.0N(c)	80-120
Lead	3.9	4.1	5.0	0-20	3.9	25.2	22.3	95.5	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	1.7	4.1	82.8*(b)	0-20	1.7	23.1	22.3	95.9	80-120

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) RPD acceptable due to low duplicate and sample concentrations.
(b) High RPD due to possible sample non-homogeneity.
(c) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558 Methods: SW846 6010C
Matrix Type: SOLID Units: mg/kg

Prep Date: 02/16/15

Metal	FA22051-3 Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	4680	5840	1250	93.2	4.0	20
Antimony	0.22	9.3	23.1	39.4N(a)	12.6	20
Arsenic	anr					
Barium	anr					
Beryllium						
Cadmium	anr					
Calcium						
Chromium	3.0	12.2	9.22	99.7	0.0	20
Cobalt						
Copper	0.29	12.0	11.5	101.6	3.4	20
Iron	1620	1880	1200	21.7N(a)	2.2	20
Lead	3.9	25.7	23.1	94.5	2.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	1.7	23.8	23.1	95.8	3.0	20

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: mg/kg

Prep Date: 02/16/15

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	1410	1350	104.4	80-120
Antimony	24.7	25	98.8	80-120
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	10.6	10	106.0	80-120
Cobalt				
Copper	13.0	12.5	104.0	80-120
Iron	1370	1300	105.4	80-120
Lead	24.6	25	98.4	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	25.7	25	102.8	80-120

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/16/15

Metal	FA22051-3 Original	SDL 1:5	%DIF	QC Limits
Aluminum	98800	102000	2.9	0-10
Antimony	4.60	0.00	100.0(a)	0-10
Arsenic	anr			
Barium	anr			
Beryllium				
Cadmium	anr			
Calcium				
Chromium	63.5	65.5	3.1	0-10
Cobalt				
Copper	6.20	7.50	21.0 (a)	0-10
Iron	34200	35100	2.6	0-10
Lead	82.7	85.1	2.9	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	36.2	43.6	20.4 (a)	0-10

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FA22032
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

QC Batch ID: MP28558
Matrix Type: SOLID

Methods: SW846 6010C
Units: ug/l

Prep Date: 02/16/15

Metal	Sample ml	Final ml	FA22051-3 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum	9.8	10	98830	96853.4	98800	0.2	125	2500	77.9*(a)	80-120
Antimony	9.8	10	4.6	4.508	98	0.2	5	100	93.5	80-120
Arsenic										
Barium										
Beryllium										
Cadmium										
Calcium										
Chromium	9.8	10	63.5	62.23	113.1	0.2	2.5	50	101.7	80-120
Cobalt										
Copper	9.8	10	6.2	6.076	110.2	0.2	5	100	104.1	80-120
Iron	9.8	10	34180	33496.4	35990	0.2	150	3000	83.1	80-120
Lead	9.8	10	82.7	81.046	129.7	0.2	2.5	50	97.3	80-120
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc	9.8	10	36.2	35.476	283.3	0.2	12.5	250	99.1	80-120

Associated samples MP28558: FA22032-4, FA22032-5, FA22032-6, FA22032-7

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested
(a) Spike recovery indicates matrix interference and/or outside control limits due to high level in sample relative to spike amount.

Instrument Detection Limits

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12213,MA12218

Instrument Detection Limits

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 01/27/15

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	1
Beryllium	.2
Cadmium	.2
Calcium	50
Chromium	1
Cobalt	.2
Copper	1
Iron	17
Lead	1
Magnesium	35
Manganese	.5
Molybdenum	.3
Nickel	.4
Potassium	200
Selenium	2.4
Silicon	5
Silver	.7
Sodium	500
Strontium	.5
Sulfur	5
Thallium	1.1
Tin	.9
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA12216,MA12220

Instrument Linear Ranges

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE1 **Effective Date:** 08/13/13

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA12213,MA12218

Instrument Linear Ranges

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Instrument ID: SSTRACE2 **Effective Date:** 10/22/10

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA12216,MA12220

Southeast ACCUTEST LABORATORIES

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/12/2015 9:58:23 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0009	-.0004	-.0004	-.0015	.0007	.0026	-.0012	-.0004	-.0001
Stddev	.0002	.0005	.0002	.0017	.0001	.0007	.0002	.0002	.0001
%RSD	26.21	132.7	38.09	113.7	12.72	25.68	18.23	42.93	81.18
#1	.0007	.0000	-.0002	-.0024	.0007	.0019	-.0014	-.0002	.0000
#2	.0012	-.0010	-.0005	-.0026	.0008	.0033	-.0012	-.0006	-.0002
#3	.0008	-.0001	-.0004	.0005	.0006	.0027	-.0010	-.0005	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0057	.0017	-.0036	.0000	.0004	.0034	-.0101	-.0002	.0001
Stddev	.0001	.0001	.0036	.0004	.0000	.0004	.0012	.0001	.0007
%RSD	2.118	7.550	99.75	1125.	9.415	10.41	11.48	52.97	536.7
#1	.0056	.0018	.0004	.0002	.0003	.0037	-.0094	-.0003	.0002
#2	.0058	.0016	-.0063	-.0005	.0004	.0034	-.0114	-.0001	-.0006
#3	.0058	.0017	-.0048	.0004	.0004	.0030	-.0094	-.0003	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0006	-.0004	.0043	.0008	.0002	.0028	-.0015	-.0006	.0020
Stddev	.0001	.0000	.0000	.0000	.0013	.0001	.0002	.0001	.0001
%RSD	16.44	12.61	1.151	6.098	694.6	2.205	16.61	19.65	4.902
#1	.0006	-.0003	.0043	.0007	-.0005	.0028	-.0017	-.0005	.0019
#2	.0005	-.0004	.0043	.0008	.0017	.0027	-.0012	-.0007	.0020
#3	.0007	-.0004	.0044	.0007	-.0006	.0028	-.0015	-.0006	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3503.9	6755.1	58753.	5106.1
Stddev	16.6	28.1	567.	37.9
%RSD	.47250	.41652	.96504	.74234
#1	3491.0	6734.3	59406.	5143.8
#2	3498.1	6744.0	58470.	5068.0
#3	3522.6	6787.2	58384.	5106.6

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/12/2015 10:02:05 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0295	1.440	.0912	3.642	3.404	1.864	2.442	1.213	.2173	.3164
Stddev	.0001	.003	.0001	.008	.009	.005	.003	.001	.0005	.0006
%RSD	.3321	.2181	.1071	.2151	.2504	.2660	.1374	.1134	.2270	.1881
#1	.0296	1.436	.0912	3.651	3.408	1.859	2.440	1.212	.2169	.3160
#2	.0295	1.440	.0911	3.637	3.394	1.865	2.440	1.213	.2178	.3170
#3	.0294	1.443	.0913	3.638	3.410	1.869	2.446	1.214	.2170	.3160

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.522	.6588	.2031	1.319	.5229	2.408	.7544	.4089	.1156	.0657
Stddev	.008	.0046	.0021	.002	.0004	.005	.0018	.0009	.0004	.0001
%RSD	.5473	.6971	1.009	.1513	.0674	.2301	.2374	.2153	.3260	.1327
#1	1.518	.6543	.2013	1.318	.5226	2.405	.7524	.4087	.1153	.0656
#2	1.516	.6586	.2026	1.321	.5233	2.405	.7558	.4098	.1154	.0658
#3	1.532	.6635	.2053	1.317	.5228	2.415	.7549	.4081	.1160	.0658

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1382	.2095	5.940	.8372	.1526	.2645	1.422
Stddev	.0002	.0002	.015	.0024	.0006	.0005	.003
%RSD	.1704	.1114	.2459	.2891	.4140	.2046	.1998
#1	.1382	.2094	5.923	.8347	.1522	.2639	1.420
#2	.1379	.2094	5.948	.8395	.1523	.2646	1.421
#3	.1384	.2098	5.949	.8373	.1533	.2650	1.425

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3282.1	6647.7	57961.	5102.7
Stddev	10.6	10.6	146.	44.1
%RSD	.32233	.15891	.25251	.86463
#1	3284.4	6652.1	57851.	5153.2
#2	3270.6	6635.7	57905.	5083.6
#3	3291.4	6655.4	58127.	5071.4

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/12/2015 10:05:36 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1145	5.612	.3719	14.28	13.38	7.266	9.650	4.763	.8462	1.229
Stddev	.0003	.014	.0004	.04	.04	.029	.020	.010	.0024	.001
%RSD	.2482	.2440	.1059	.2492	.2644	.3943	.2033	.2052	.2866	.0650
#1	.1141	5.617	.3716	14.26	13.39	7.288	9.630	4.752	.8467	1.228
#2	.1146	5.623	.3724	14.32	13.41	7.276	9.649	4.764	.8435	1.230
#3	.1146	5.597	.3718	14.26	13.34	7.234	9.670	4.772	.8483	1.230

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.821	2.643	.7908	5.182	2.068	9.513	2.957	1.660	.4630	.2666
Stddev	.027	.011	.0065	.014	.006	.012	.006	.008	.0013	.0006
%RSD	.4601	.3996	.8279	.2765	.2918	.1224	.1962	.4997	.2704	.2347
#1	5.828	2.650	.7933	5.184	2.062	9.521	2.954	1.654	.4617	.2660
#2	5.844	2.648	.7957	5.167	2.069	9.519	2.954	1.656	.4631	.2666
#3	5.792	2.631	.7834	5.196	2.074	9.500	2.964	1.670	.4642	.2672

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7901	.8129	23.78	3.337	.6205	1.042	5.553
Stddev	.0010	.0011	.04	.007	.0016	.003	.012
%RSD	.1304	.1347	.1691	.2103	.2590	.2857	.2161
#1	.7892	.8117	23.82	3.339	.6203	1.044	5.544
#2	.7900	.8133	23.79	3.330	.6191	1.039	5.548
#3	.7912	.8138	23.74	3.343	.6222	1.043	5.566

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2993.7	6360.5	55930.	5026.8
Stddev	12.2	12.1	141.	18.6
%RSD	.40881	.18989	.25257	.36950
#1	3004.9	6374.1	56073.	5017.8
#2	2995.7	6356.8	55927.	5014.5
#3	2980.6	6350.8	55790.	5048.2

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/12/2015 10:08:56 Type: Cal
Method: 60102007_042011(v115) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2262	10.84	.7473	27.54	25.83	14.11	18.92	9.365	1.663	2.430
Stddev	.0004	.31	.0011	.69	.68	.39	.02	.010	.005	.003
%RSD	.1622	2.873	.1481	2.508	2.620	2.792	.1051	.1085	.3295	.1251
#1	.2262	10.53	.7460	26.85	25.14	13.70	18.90	9.354	1.658	2.428
#2	.2259	10.85	.7478	27.52	25.88	14.14	18.93	9.370	1.664	2.429
#3	.2266	11.15	.7480	28.23	26.49	14.48	18.94	9.372	1.669	2.434

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.95	5.131	1.510	9.939	4.099	18.26	5.818	3.378	.9323	.5340
Stddev	.31	.129	.043	.038	.004	.45	.011	.007	.0012	.0016
%RSD	2.845	2.520	2.867	.3814	.1106	2.492	.1926	.1974	.1280	.3057
#1	10.64	5.005	1.465	9.917	4.094	17.79	5.805	3.377	.9309	.5322
#2	10.97	5.126	1.515	9.917	4.100	18.27	5.824	3.371	.9331	.5350
#3	11.26	5.263	1.551	9.983	4.103	18.70	5.826	3.385	.9327	.5350

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.890	1.588	45.68	6.454	1.245	2.122	10.92
Stddev	.002	.000	1.18	.047	.004	.008	.02
%RSD	.1083	.0112	2.578	.7227	.3368	.3952	.2284
#1	1.888	1.587	44.48	6.405	1.243	2.113	10.90
#2	1.892	1.588	45.73	6.459	1.241	2.122	10.92
#3	1.891	1.588	46.83	6.497	1.249	2.130	10.95

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2775.0	6113.2	54422.	5117.2
Stddev	1.8	7.2	267.	164.6
%RSD	.06575	.11736	.49072	3.2168
#1	2774.5	6121.3	54622.	5277.1
#2	2777.0	6107.6	54526.	5126.2
#3	2773.5	6110.8	54119.	4948.3

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/12/2015 10:13:56 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4910	79.70	3.954	3.979	3.978	79.53	3.948	3.941	3.885	3.880
Stddev	.0066	.26	.004	.015	.006	.11	.011	.014	.070	.065
%RSD	1.346	.3204	.0926	.3672	.1421	.1438	.2838	.3462	1.808	1.664
#1	.4962	79.60	3.950	3.978	3.974	79.53	3.941	3.934	3.951	3.936
#2	.4836	79.50	3.955	3.965	3.976	79.41	3.941	3.931	3.811	3.809
#3	.4933	79.99	3.957	3.994	3.985	79.64	3.960	3.956	3.893	3.894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.65	79.21	79.27	3.895	3.942	78.07	3.952	3.987	3.956	3.923
Stddev	.20	.18	.28	.072	.012	.15	.015	.012	.016	.012
%RSD	.2480	.2261	.3472	1.854	.3149	.1896	.3760	.2951	.3948	.2973
#1	78.59	79.17	79.21	3.967	3.935	78.01	3.943	3.974	3.946	3.918
#2	78.49	79.04	79.04	3.822	3.934	77.97	3.945	3.989	3.949	3.916
#3	78.87	79.40	79.57	3.897	3.956	78.24	3.970	3.997	3.974	3.937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.328	3.936	3.971	3.869	3.983	3.918	3.967
Stddev	.017	.009	.002	.071	.018	.070	.010
%RSD	.3905	.2345	.0367	1.837	.4639	1.775	.2464
#1	4.319	3.931	3.969	3.933	3.962	3.983	3.960
#2	4.317	3.931	3.970	3.793	3.988	3.845	3.963
#3	4.348	3.947	3.972	3.881	3.998	3.926	3.978
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/12/2015 10:13:56 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2782.4	6116.0	55000.	4949.9
Stddev	11.3	27.2	967.	53.9
%RSD	.40687	.44406	1.7585	1.0882
#1	2791.8	6129.1	54113.	4933.6
#2	2785.5	6134.0	56031.	5010.1
#3	2769.8	6084.7	54856.	4906.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/12/2015 10:20:04 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2485	41.41	1.991	2.097	2.021	42.34	1.974	2.006	1.964	1.926
Stddev	.0009	.96	.018	.047	.041	.89	.017	.016	.012	.014
%RSD	.3535	2.323	.8978	2.217	2.004	2.094	.8470	.8085	.6212	.7244
#1	.2478	41.77	1.995	2.107	2.034	42.64	1.980	2.012	1.952	1.913
#2	.2483	42.15	1.971	2.138	2.054	43.05	1.955	1.988	1.963	1.925
#3	.2495	40.32	2.006	2.047	1.976	41.35	1.986	2.018	1.977	1.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.23	42.06	40.80	2.028	1.901	41.75	2.054	1.960	1.978	1.983
Stddev	.91	.83	.90	.012	.016	.96	.017	.016	.018	.013
%RSD	2.204	1.967	2.197	.5926	.8164	2.301	.8182	.8384	.8992	.6458
#1	41.50	42.24	41.06	2.018	1.906	42.09	2.058	1.962	1.977	1.981
#2	41.98	42.79	41.54	2.025	1.883	42.49	2.035	1.943	1.960	1.971
#3	40.22	41.16	39.80	2.042	1.912	40.66	2.068	1.975	1.996	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0214	2.041	1.985	1.966	2.041	1.879	2.030
Stddev	.0006	.016	.046	.012	.014	.010	.017
%RSD	2.584	.7994	2.304	.5875	.6667	.5133	.8367
#1	.0220	2.048	2.000	1.957	2.043	1.871	2.038
#2	.0210	2.023	2.021	1.963	2.026	1.877	2.011
#3	.0211	2.053	1.933	1.979	2.053	1.890	2.042
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/12/2015 10:20:04 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2965.1	6256.2	55411.	4992.7
Stddev	20.9	43.3	240.	97.5
%RSD	.70579	.69151	.43394	1.9527
#1	2961.5	6242.7	55481.	4958.2
#2	2987.5	6304.5	55608.	4917.1
#3	2946.1	6221.2	55143.	5102.7

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/12/2015 10:31:22 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0041	.0001	.0002	.0000	.0022	.0001	.0000	.0001	.0001
Stddev	.000	.0084	.0003	.0002	.000	.0003	.0000	.000	.0002	.0002
%RSD	787.1	204.3	290.0	88.14	2030.	11.63	12.26	385.5	106.3	280.7
#1	-.0004	.0136	-.0002	.0003	.0000	.0024	.0001	-.0001	.0003	.0002
#2	.0002	-.0024	.0001	.0003	.0000	.0019	.0001	.0000	.0001	.0000
#3	.0001	.0012	.0005	.0000	.0000	.0022	.0001	.0000	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0049	.0665	-.0012	.0001	-.0005	.0221	.0001	-.0003	.0000	.0015
Stddev	.0036	.0526	.0139	.0000	.0002	.0035	.0000	.0006	.0011	.0012
%RSD	72.67	79.22	1123.	5.939	37.99	15.73	39.99	202.7	6241.	79.51
#1	-.0041	.1246	.0109	.0001	-.0003	.0190	.0000	.0002	.0000	.0006
#2	-.0088	.0219	.0017	.0001	-.0005	.0259	.0001	-.0009	-.0011	.0029
#3	-.0018	.0529	-.0164	.0001	-.0008	.0215	.0001	-.0002	.0011	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0000	.0000	.0001	.0007	.0000	.0000
Stddev	.0004	.0003	.0001	.0001	.0008	.0002	.0001
%RSD	1052.	1550.	153.5	142.7	120.9	3842.	104.8
#1	.0005	-.0003	.0000	.0001	.0008	.0002	.0000
#2	-.0003	.0003	.0001	.0002	.0014	-.0001	.0001
#3	-.0001	.0000	.0000	.0000	-.0002	-.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/12/2015 10:31:22 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3457.8	6548.5	58178.	5122.3
Stddev	8.5	13.5	224.	151.9
%RSD	.24647	.20570	.38532	2.9650
#1	3460.5	6563.4	58150.	5069.0
#2	3464.6	6544.9	57969.	5004.2
#3	3448.2	6537.2	58415.	5293.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/12/2015 10:35:20 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0103	.2163	.0095	.2077	.0052	1.073	.0053	.0536	.0106	.0268
Stddev	.0005	.0051	.0001	.0006	.0000	.005	.0000	.0003	.0000	.0003
%RSD	4.375	2.377	1.528	.2844	.9022	.4585	.8414	.4905	.0658	1.125
#1	.0108	.2221	.0096	.2073	.0053	1.069	.0053	.0533	.0106	.0270
#2	.0101	.2124	.0093	.2075	.0052	1.079	.0053	.0537	.0106	.0265
#3	.0100	.2143	.0096	.2084	.0052	1.071	.0053	.0538	.0106	.0270
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3228	10.61	5.195	.0166	.0476	10.65	.0440	.0046	.0053	.0107
Stddev	.0027	.05	.056	.0000	.0002	.04	.0003	.0003	.0007	.0011
%RSD	.8359	.4512	1.071	.1297	.5098	.4222	.5976	5.983	13.23	10.58
#1	.3240	10.58	5.133	.0166	.0474	10.60	.0437	.0046	.0059	.0103
#2	.3197	10.58	5.210	.0166	.0479	10.65	.0441	.0044	.0055	.0120
#3	.3247	10.66	5.241	.0166	.0476	10.69	.0442	.0049	.0046	.0099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0621	.0529	.0106	.0101	.0111	.0507	.0232
Stddev	.0001	.0004	.0001	.0001	.0002	.0001	.0001
%RSD	.2064	.7988	.8487	.7507	2.163	.2891	.3585
#1	.0620	.0525	.0106	.0101	.0114	.0506	.0231
#2	.0622	.0533	.0105	.0101	.0111	.0509	.0232
#3	.0621	.0530	.0106	.0100	.0109	.0506	.0233
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/12/2015 10:35:20 Type: QC
Method: 60102007_042011(v115) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3325.5	6487.3	56745.	5055.6
Stddev	15.0	25.2	81.	32.3
%RSD	.45251	.38781	.14296	.63933
#1	3342.0	6516.3	56713.	5053.3
#2	3322.0	6472.0	56685.	5089.0
#3	3312.5	6473.5	56838.	5024.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/12/2015 10:41:01 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	500.3	-.0008	.0008	-.0002	491.9	.0000	.0000	.0001
Stddev	.0001	10.8	.0013	.0002	.0000	15.1	.0004	.0014	.0002
%RSD	28.67	2.167	163.1	31.17	26.70	3.073	934.0	3081.	170.1
#1	.0001	507.2	.0000	.0006	-.0002	507.9	-.0003	.0017	.0003
#2	.0003	487.8	-.0001	.0011	-.0001	477.8	.0005	-.0009	-.0001
#3	.0003	506.0	-.0022	.0007	-.0002	489.9	-.0001	-.0007	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	187.5	.6324	484.7	.0000	.0000	.3370	.0000	-.0001
Stddev	.000	4.9	.0205	12.9	.0000	.000	.0158	.0004	.0027
%RSD	898.3	2.616	3.248	2.665	149.3	6613.	4.690	3536.	2080.
#1	.0003	190.9	.6561	494.4	.0000	.0005	.3188	.0002	-.0015
#2	-.0004	181.9	.6188	470.0	.0001	-.0002	.3451	-.0004	.0030
#3	.0000	189.7	.6225	489.6	.0000	-.0003	.3472	.0003	-.0019
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0003	.0859	F.0012	.0002	.0001	-.0001	.0000	-.0011
Stddev	.0003	.0020	.0012	.0005	.0001	.0002	.0018	.0004	.0003
%RSD	572.6	627.7	1.400	40.24	34.03	421.8	1534.	5985.	26.10
#1	-.0002	-.0018	.0863	.0007	.0001	.0003	.0008	-.0002	-.0014
#2	.0004	-.0012	.0868	.0017	.0002	-.0002	-.0022	.0005	-.0008
#3	-.0001	.0020	.0845	.0012	.0002	.0000	.0011	-.0002	-.0012
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/12/2015 10:41:01 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2648.5	5792.5	49651.	4859.6
Stddev	19.8	49.8	303.	109.1
%RSD	.74843	.86027	.61036	2.2453
#1	2641.2	5767.9	49478.	4778.4
#2	2633.4	5759.8	50001.	4983.7
#3	2670.9	5849.9	49474.	4816.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/12/2015 10:48:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.042	508.1	1.076	.5170	.5152	483.6	.9505	.4862	.4968	.5422
Stddev	.003	7.2	.003	.0109	.0108	14.7	.0016	.0007	.0035	.0021
%RSD	.3124	1.414	.2308	2.115	2.089	3.043	.1697	.1531	.7038	.3941
#1	1.040	515.7	1.077	.5213	.5182	496.0	.9522	.4864	.4934	.5401
#2	1.040	506.9	1.078	.5252	.5242	487.5	.9501	.4867	.5004	.5420
#3	1.046	501.5	1.073	.5046	.5033	467.3	.9490	.4853	.4967	.5444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	184.3	.2865	482.2	.5237	.9343	.2137	.9930	.9697	1.072	1.030
Stddev	3.7	.0207	9.8	.0020	.0011	.0076	.0017	.0020	.002	.004
%RSD	2.020	7.208	2.027	.3763	.1203	3.552	.1687	.2108	.1662	.3529
#1	185.9	.2961	486.7	.5230	.9348	.2107	.9943	.9715	1.074	1.034
#2	187.0	.2628	489.0	.5260	.9350	.2080	.9936	.9702	1.073	1.029
#3	180.1	.3007	471.0	.5222	.9330	.2223	.9911	.9675	1.070	1.027
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0399	.9459	1.034	1.030	.9878	.4867	.9903
Stddev	.0010	.0030	.020	.002	.0047	.0020	.0019
%RSD	2.433	.3178	1.974	.2250	.4802	.4179	.1893
#1	.0409	.9477	1.040	1.027	.9826	.4854	.9924
#2	.0390	.9475	1.051	1.032	.9919	.4891	.9898
#3	.0398	.9424	1.011	1.030	.9889	.4857	.9888
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/12/2015 10:48:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2590.8	5720.4	49660.	4740.6
Stddev	5.4	6.4	168.	62.8
%RSD	.20785	.11115	.33826	1.3243
#1	2596.9	5715.8	49660.	4700.7
#2	2586.7	5717.6	49492.	4708.1
#3	2588.7	5727.6	49828.	4813.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 10:54:57 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2528	40.24	2.058	2.016	2.039	40.65	2.068	2.050	2.030	2.008
Stddev	.0022	.84	.015	.039	.035	.70	.010	.010	.017	.015
%RSD	.8809	2.077	.7259	1.936	1.736	1.721	.4847	.4673	.8407	.7648
#1	.2503	40.52	2.074	2.022	2.050	40.90	2.079	2.060	2.013	1.991
#2	.2534	40.91	2.056	2.051	2.067	41.20	2.066	2.048	2.029	2.009
#3	.2547	39.31	2.045	1.974	1.999	39.86	2.060	2.041	2.047	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.82	41.28	39.77	2.095	2.040	41.13	2.081	2.005	2.062	2.051
Stddev	.79	.75	.69	.015	.009	.75	.012	.009	.014	.008
%RSD	1.926	1.808	1.745	.7256	.4438	1.824	.5667	.4501	.6534	.4101
#1	40.99	41.43	39.93	2.080	2.049	41.33	2.094	2.012	2.074	2.060
#2	41.51	41.94	40.37	2.096	2.041	41.76	2.080	2.008	2.065	2.052
#3	39.97	40.47	39.01	2.111	2.031	40.30	2.070	1.995	2.047	2.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.873	2.048	2.082	2.087	2.047	2.014	2.083
Stddev	.011	.010	.040	.018	.009	.017	.011
%RSD	.5772	.4694	1.932	.8401	.4220	.8622	.5490
#1	1.882	2.058	2.093	2.070	2.055	2.000	2.096
#2	1.875	2.048	2.115	2.087	2.049	2.009	2.079
#3	1.861	2.039	2.037	2.105	2.038	2.033	2.074
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 10:54:57 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2969.2	6215.0	55186.	5031.0
Stddev	10.2	19.1	323.	89.2
%RSD	.34382	.30729	.58482	1.7735
#1	2960.8	6199.0	55493.	5012.7
#2	2966.4	6209.8	55215.	4952.3
#3	2980.6	6236.2	54850.	5127.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:03:29 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0078	.0000	.0001	.0000	.0065	.0001	-.0001	.0001
Stddev	.0005	.0065	.000	.0002	.0001	.0041	.0001	.0001	.0001
%RSD	125.0	84.12	11200.	160.6	1562.	63.19	48.27	155.3	128.0
#1	.0009	.0050	-.0003	.0001	.0000	.0068	.0001	.0000	.0001
#2	-.0001	.0030	.0004	.0002	.0001	.0022	.0002	.0000	.0002
#3	.0004	.0153	-.0001	-.0001	-.0001	.0104	.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0187	.1089	-.0058	.0001	F.0025	.0419	.0000	.0002
Stddev	.0002	.0054	.0200	.0303	.0000	.0014	.0261	.000	.0005
%RSD	64.57	29.02	18.38	524.7	35.74	56.40	62.39	132.1	305.3
#1	.0001	.0238	.0961	-.0331	.0001	.0040	.0181	.0000	.0003
#2	.0006	.0194	.0985	.0268	.0000	.0022	.0377	-.0001	-.0004
#3	.0004	.0130	.1319	-.0111	.0001	.0013	.0699	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0011	.0001	.0000	.0001	.0009	.0015	-.0001	.0000
Stddev	.0004	.0011	.0002	.000	.0001	.0002	.0010	.0001	.0001
%RSD	436.8	107.2	182.3	311.1	115.4	18.39	70.73	124.5	342.8
#1	.0002	.0023	.0003	.0001	.0002	.0010	.0003	.0000	.0001
#2	-.0004	.0006	.0000	-.0001	.0000	.0009	.0023	-.0001	.0000
#3	.0004	.0002	.0000	-.0001	.0001	.0007	.0017	-.0002	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:03:29 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3466.4	6477.8	57685.	5019.2
Stddev	15.2	32.7	321.	10.7
%RSD	.43844	.50547	.55674	.21292
#1	3464.8	6462.7	57909.	5015.2
#2	3482.3	6515.3	57830.	5011.1
#3	3452.0	6455.3	57317.	5031.3

Zoom In Zoom Out

Sample Name: FA21941-2 Acquired: 2/12/2015 11:07:47 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.1359	-.0008	.0234	-.0001	72.57	.0000	.0000	.0010	.0004
Stddev	.0006	.0075	.0006	.0004	.0000	.28	.000	.000	.0002	.0002
%RSD	213.2	5.531	78.15	1.520	77.06	.3832	219.9	570.1	22.97	62.75
#1	-.0003	.1428	-.0001	.0238	.0000	72.87	.0000	.0000	.0010	.0006
#2	.0003	.1279	-.0012	.0233	.0000	72.32	-.0001	.0001	.0013	.0004
#3	.0008	.1370	-.0011	.0231	-.0001	72.53	.0000	-.0002	.0008	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1739	4.159	6.638	.0093	-.0007	17.86	.0004	-.0002	.0010	.0027
Stddev	.0009	.028	.024	.0000	.0003	.05	.0000	.0006	.0006	.0022
%RSD	.5257	.6633	.3547	.2602	44.03	.2997	11.42	371.4	63.81	78.90
#1	.1746	4.189	6.661	.0093	-.0003	17.92	.0004	-.0008	.0007	.0005
#2	.1729	4.135	6.614	.0093	-.0008	17.81	.0005	.0003	.0006	.0028
#3	.1743	4.153	6.639	.0093	-.0008	17.86	.0004	.0000	.0018	.0048

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.9605	.0004	.2708	.0022	.0004	.0017	.0114
Stddev	.0026	.0003	.0009	.0000	.0011	.0002	.0000
%RSD	.2754	89.67	.3434	.3017	258.1	10.64	.1461
#1	.9581	.0007	.2717	.0022	.0013	.0019	.0114
#2	.9633	.0000	.2698	.0022	.0009	.0015	.0114
#3	.9601	.0004	.2708	.0023	-.0009	.0016	.0114

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3172.1	6216.0	55336.	5034.1
Stddev	5.3	7.8	144.	16.0
%RSD	.16630	.12477	.26023	.31728
#1	3166.6	6223.5	55201.	5015.8
#2	3177.1	6208.0	55320.	5044.7
#3	3172.4	6216.6	55488.	5042.0

Zoom In Zoom Out

Sample Name: FA21941-5 Acquired: 2/12/2015 11:12:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.1303	.0175	.0328	-.0002	72.16	.0001	.0002	.0009	.0008
Stddev	.0001	.0087	.0010	.0002	.0000	.25	.0001	.0000	.0003	.0005
%RSD	70.36	6.671	5.879	.6788	14.86	.3530	146.4	23.71	28.55	65.89
#1	.0003	.1230	.0183	.0329	-.0002	72.36	.0001	.0001	.0008	.0013
#2	.0000	.1279	.0179	.0326	-.0002	71.87	.0000	.0002	.0007	.0006
#3	.0001	.1399	.0163	.0330	-.0001	72.24	.0000	.0002	.0012	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.550	4.544	8.803	.0121	.0025	20.95	.0002	-.0001	.0003	.0024
Stddev	.008	.053	.021	.0000	.0002	.08	.0001	.0002	.0017	.0016
%RSD	.2189	1.162	.2335	.3406	8.341	.3589	24.28	314.4	496.0	68.55
#1	3.558	4.605	8.783	.0121	.0027	20.94	.0002	-.0001	-.0008	.0040
#2	3.544	4.509	8.824	.0121	.0024	20.88	.0002	-.0003	-.0005	.0008
#3	3.546	4.517	8.802	.0120	.0023	21.03	.0003	.0002	.0023	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.185	-.0001	.2985	.0014	-.0007	.0020	.0004
Stddev	.018	.0001	.0003	.0001	.0008	.0001	.0000
%RSD	1.545	82.47	.0994	4.321	110.8	6.152	9.594
#1	1.197	.0000	.2987	.0014	-.0014	.0021	.0005
#2	1.195	-.0001	.2987	.0014	.0001	.0020	.0004
#3	1.164	-.0002	.2982	.0015	-.0008	.0019	.0004

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3184.7	6241.6	54960.	5045.0
Stddev	31.9	66.1	109.	22.2
%RSD	1.0009	1.0587	.19792	.44092
#1	3168.4	6205.8	55046.	5064.0
#2	3164.3	6201.1	54838.	5050.6
#3	3221.5	6317.9	54995.	5020.6

Zoom In Zoom Out

Sample Name: FA21941-6 Acquired: 2/12/2015 11:16:31 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.1442	-.0012	.0290	-.0002	131.0	-.0001	.0000	.0011	.0026
Stddev	.0004	.0126	.0005	.0007	.0000	.7	.0000	.0000	.0002	.0007
%RSD	340.2	8.750	39.86	2.349	8.530	.5468	87.33	2683.	20.47	27.49
#1	.0004	.1477	-.0007	.0284	-.0002	130.2	-.0001	.0000	.0009	.0030
#2	-.0004	.1547	-.0016	.0297	-.0002	131.3	.0000	-.0001	.0013	.0030
#3	.0004	.1302	-.0013	.0288	-.0002	131.6	-.0001	.0000	.0010	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1819	5.991	14.95	.0333	-.0021	22.48	.0003	-.0001	.0011	.0022
Stddev	.0021	.050	.12	.0014	.0000	.11	.0001	.0007	.0003	.0010
%RSD	1.167	.8305	.8029	4.148	1.687	.4685	34.46	651.9	27.40	45.93
#1	.1802	5.938	14.82	.0340	-.0022	22.36	.0004	-.0007	.0010	.0030
#2	.1812	6.036	14.99	.0342	-.0021	22.50	.0004	.0007	.0014	.0011
#3	.1843	6.000	15.05	.0317	-.0022	22.57	.0002	-.0003	.0008	.0026

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.649	-.0002	.4461	.0025	-.0002	.0013	.0021
Stddev	.032	.0004	.0020	.0002	.0006	.0002	.0001
%RSD	1.211	261.9	.4399	6.515	372.9	18.35	3.173
#1	2.679	-.0002	.4439	.0026	-.0002	.0015	.0022
#2	2.615	-.0005	.4470	.0026	-.0008	.0014	.0021
#3	2.652	.0003	.4476	.0023	.0004	.0010	.0021

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3067.0	6109.4	54937.	4905.7
Stddev	20.2	48.7	1934.	48.9
%RSD	.65934	.79672	3.5203	.99756
#1	3045.7	6067.0	53867.	4960.3
#2	3086.0	6162.5	53774.	4865.8
#3	3069.2	6098.7	57169.	4891.0

Zoom In Zoom Out

Sample Name: MP28546-MB1 Acquired: 2/12/2015 11:20:53 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0004	-.0014	.0000	.0000	.0625	-.0001	-.0002	-.0001	-.0001
Stddev	.0001	.0076	.0007	.0001	.000	.0025	.0000	.0001	.0001	.0001
%RSD	40.70	1941.	48.57	234.0	177.0	3.983	63.69	74.54	137.5	119.3
#1	.0004	.0091	-.0007	.0000	.0000	.0596	-.0001	.0000	.0000	.0000
#2	.0002	-.0027	-.0020	.0000	.0000	.0642	.0000	-.0002	.0000	-.0003
#3	.0003	-.0052	-.0014	.0001	-.0001	.0636	-.0001	-.0003	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0038	.0550	-.0073	.0000	-.0024	.0644	-.0001	.0002	.0000	.0010
Stddev	.0036	.0145	.0127	.0000	.0001	.0091	.0002	.0005	.000	.0018
%RSD	95.26	26.32	173.8	58.46	2.674	14.11	305.0	226.6	5183.	174.5
#1	-.0001	.0618	.0055	.0001	-.0025	.0741	.0001	.0009	.0001	-.0001
#2	-.0040	.0384	-.0198	.0000	-.0024	.0631	-.0003	.0000	.0003	.0031
#3	-.0073	.0649	-.0076	.0000	-.0024	.0560	.0000	-.0002	-.0005	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226	-.0001	.0001	-.0007	-.0003	-.0002	.0004
Stddev	.0002	.0003	.0000	.0001	.0015	.0002	.0001
%RSD	1.072	237.6	20.02	7.748	476.4	81.21	13.45
#1	.0229	.0002	.0001	-.0007	-.0018	-.0002	.0004
#2	.0224	-.0003	.0002	-.0007	-.0003	.0000	.0003
#3	.0225	-.0003	.0002	-.0008	.0012	-.0003	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28546-MB1 Acquired: 2/12/2015 11:20:53 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3409.0	6520.3	57998.	4957.4
Stddev	4.7	9.2	266.	28.9
%RSD	.13874	.14079	.45860	.58215
#1	3414.3	6521.1	57853.	4975.2
#2	3405.1	6510.8	58305.	4972.8
#3	3407.6	6529.1	57836.	4924.1

Zoom In Zoom Out

Sample Name: MP28546-B1 Acquired: 2/12/2015 11:25:21 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0519	29.42	2.132	2.197	.0558	27.23	.0538	.5429	.2225	.2716
Stddev	.0007	.10	.001	.009	.0001	.05	.0001	.0007	.0009	.0010
%RSD	1.286	.3513	.0516	.4326	.2462	.1966	.2515	.1336	.4070	.3595
#1	.0511	29.47	2.131	2.200	.0560	27.25	.0537	.5423	.2221	.2706
#2	.0524	29.30	2.132	2.186	.0557	27.17	.0539	.5437	.2218	.2716
#3	.0521	29.49	2.133	2.204	.0558	27.28	.0537	.5427	.2235	.2726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.44	27.45	26.95	.5559	.5244	27.56	.5552	.5176	.5297	2.104
Stddev	.06	.05	.17	.0004	.0007	.05	.0011	.0026	.0009	.001
%RSD	.2131	.1996	.6239	.0728	.1262	.1829	.1999	.5088	.1638	.0399
#1	28.45	27.38	27.14	.5557	.5236	27.54	.5541	.5166	.5288	2.105
#2	28.37	27.47	26.81	.5557	.5248	27.51	.5563	.5206	.5305	2.103
#3	28.49	27.49	26.92	.5564	.5248	27.61	.5552	.5156	.5299	2.104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0270	.5549	.5474	.5453	2.089	.5196	.5473
Stddev	.0001	.0006	.0013	.0002	.008	.0008	.0028
%RSD	.3556	.1090	.2406	.0308	.3957	.1634	.5195
#1	.0271	.5542	.5480	.5453	2.082	.5187	.5454
#2	.0271	.5552	.5459	.5454	2.098	.5199	.5506
#3	.0269	.5552	.5483	.5451	2.088	.5203	.5459
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28546-B1 Acquired: 2/12/2015 11:25:21 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3083.3	6317.8	55635.	4911.7
Stddev	5.0	9.3	51.	16.9
%RSD	.16338	.14713	.09218	.34385
#1	3089.1	6328.2	55661.	4898.4
#2	3080.0	6315.3	55667.	4930.7
#3	3080.9	6310.1	55575.	4906.0

Zoom In Zoom Out

Sample Name: FA22044-1 Acquired: 2/12/2015 11:29:33 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2116	.0001	.0130	.0000	.7917	.0000	.0002	.0012	.0000
Stddev	.0001	.0121	.0008	.0003	.000	.0069	.000	.0001	.0001	.0002
%RSD	63.53	5.695	1275.	1.972	444.2	.8689	79.39	48.18	4.775	404.7
#1	.0001	.2173	.0009	.0127	.0000	.7861	.0000	.0003	.0012	-.0001
#2	.0001	.2198	.0000	.0132	-.0001	.7994	.0000	.0001	.0013	.0000
#3	.0002	.1978	-.0007	.0131	.0001	.7896	-.0001	.0002	.0013	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5278	1.163	.8122	.0019	-.0019	16.54	.0003	-.0001	.0002	.0029
Stddev	.0094	.092	.0684	.0000	.0002	.22	.0002	.0001	.0009	.0007
%RSD	1.786	7.945	8.420	.9232	8.494	1.309	82.33	106.4	389.0	25.73
#1	.5218	1.086	.7822	.0019	-.0017	16.50	.0005	-.0002	-.0004	.0030
#2	.5387	1.266	.8905	.0019	-.0020	16.77	.0002	-.0001	.0012	.0036
#3	.5229	1.138	.7640	.0019	-.0020	16.34	.0001	.0000	-.0002	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.166	-.0001	.0158	.0055	.0027	.0020	.0071
Stddev	.004	.0001	.0002	.0004	.0008	.0003	.0001
%RSD	.1207	113.4	1.484	7.787	30.95	15.07	1.265
#1	3.164	.0000	.0157	.0056	.0037	.0022	.0072
#2	3.165	-.0002	.0161	.0058	.0026	.0022	.0071
#3	3.171	-.0001	.0156	.0050	.0020	.0017	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3313.2	6479.7	57314.	4986.6
Stddev	3.8	14.7	130.	71.2
%RSD	.11546	.22744	.22629	1.4270
#1	3314.6	6481.9	57222.	4981.5
#2	3316.1	6493.2	57257.	4918.2
#3	3308.8	6464.0	57462.	5060.3

Zoom In Zoom Out

Sample Name: MP28546-D1 Acquired: 2/12/2015 11:33:57 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1880	-.0008	.0117	-.0001	.7767	-.0001	.0000	.0015	-.0002
Stddev	.0002	.0051	.0005	.0003	.0001	.0084	.0000	.0001	.0001	.0002
%RSD	301.8	2.720	62.93	2.986	53.25	1.080	42.72	202.4	4.572	97.24
#1	-.0003	.1859	-.0013	.0119	-.0001	.7708	-.0001	.0000	.0015	-.0001
#2	.0000	.1938	-.0003	.0118	-.0001	.7863	.0000	.0002	.0015	.0000
#3	.0001	.1842	-.0009	.0113	-.0002	.7729	-.0001	.0000	.0014	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.5132	1.096	.8095	.0017	-.0023	16.64	.0000	-.0003	.0001	.0007
Stddev	.0030	.055	.0147	.0000	.0001	.11	.0001	.0002	.0007	.0017
%RSD	.5864	4.970	1.818	2.018	2.778	.6617	348.1	49.32	632.4	240.4
#1	.5099	1.034	.7993	.0016	-.0023	16.53	.0002	-.0005	.0007	.0023
#2	.5140	1.122	.8264	.0017	-.0022	16.75	.0000	-.0004	.0002	.0010
#3	.5158	1.133	.8030	.0017	-.0023	16.66	-.0001	-.0001	-.0006	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.194	-.0001	.0157	.0041	.0007	.0018	.0093
Stddev	.002	.0002	.0000	.0002	.0004	.0001	.0001
%RSD	.0622	221.8	.2402	4.126	51.66	6.849	.9054
#1	3.195	-.0002	.0157	.0039	.0007	.0017	.0092
#2	3.191	.0001	.0157	.0042	.0011	.0017	.0093
#3	3.195	-.0002	.0157	.0042	.0004	.0019	.0093

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3308.3	6447.1	57029.	4969.7
Stddev	3.4	11.8	282.	41.0
%RSD	.10362	.18306	.49470	.82462
#1	3311.9	6444.0	57331.	5011.0
#2	3305.1	6460.2	56985.	4929.0
#3	3307.8	6437.2	56772.	4969.2

Zoom In Zoom Out

Sample Name: MP28546-SD1 Acquired: 2/12/2015 11:38:23 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0021	.1965	-.0012	.0120	-.0010	1.040	-.0003	.0000	.0014	.0003
Stddev	.0017	.0475	.0019	.0008	.0002	.014	.0001	.000	.0020	.0017
%RSD	78.73	24.17	163.3	6.752	23.67	1.372	21.37	1107.	138.8	540.7
#1	.0029	.1964	-.0030	.0124	-.0009	1.028	-.0002	-.0001	-.0009	-.0006
#2	.0033	.2440	.0009	.0125	-.0008	1.036	-.0003	.0002	.0024	.0022
#3	.0002	.1490	-.0014	.0110	-.0012	1.056	-.0003	-.0001	.0028	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.4707	1.320	.7265	.0015	-.0141	16.40	.0003	-.0003	-.0036	.0039
Stddev	.0159	.123	.0686	.0001	.0004	.05	.0009	.0034	.0036	.0046
%RSD	3.377	9.314	9.436	9.169	2.770	.2979	275.5	1083.	101.5	116.7
#1	.4679	1.187	.7736	.0014	-.0139	16.45	-.0002	-.0006	-.0046	.0090
#2	.4878	1.344	.7581	.0015	-.0146	16.36	.0014	.0032	.0005	.0026
#3	.4564	1.430	.6479	.0017	-.0139	16.38	-.0002	-.0035	-.0066	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.127	-.0018	.0147	.0002	.0001	.0002	.0079
Stddev	.014	.0006	.0003	.0004	.0057	.0003	.0004
%RSD	.4336	30.76	1.924	178.6	4138.	140.0	5.379
#1	3.141	-.0019	.0150	.0005	-.0032	.0005	.0083
#2	3.114	-.0024	.0145	-.0003	-.0030	.0003	.0075
#3	3.126	-.0013	.0145	.0005	.0067	-.0001	.0079

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3393.5	6501.6	57725.	4997.1
Stddev	5.0	6.6	240.	13.6
%RSD	.14845	.10107	.41627	.27139
#1	3387.9	6494.6	57627.	4983.3
#2	3395.1	6507.6	57549.	4997.7
#3	3397.6	6502.7	57998.	5010.4

Zoom In Zoom Out

Sample Name: MP28546-PS1 Acquired: 2/12/2015 11:42:50 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0529	2.875	.1080	.2855	.0551	6.180	.0556	.0555	.0573	.1081
Stddev	.0005	.027	.0017	.0003	.0003	.018	.0008	.0008	.0005	.0003
%RSD	.8944	.9402	1.554	.0925	.5219	.2967	1.384	1.435	.8734	.2336
#1	.0526	2.859	.1060	.2852	.0554	6.195	.0547	.0545	.0568	.1080
#2	.0534	2.906	.1089	.2858	.0552	6.186	.0561	.0560	.0573	.1079
#3	.0525	2.860	.1090	.2855	.0548	6.160	.0560	.0559	.0578	.1084

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.679	11.68	5.829	.0593	.1052	27.09	.1144	.0512	.1069	.1057
Stddev	.014	.06	.073	.0003	.0018	.03	.0013	.0013	.0021	.0014
%RSD	.3905	.5332	1.259	.4996	1.711	.1287	1.164	2.539	1.959	1.294
#1	3.685	11.74	5.806	.0592	.1032	27.11	.1128	.0497	.1045	.1051
#2	3.689	11.69	5.911	.0591	.1067	27.12	.1152	.0518	.1078	.1048
#3	3.663	11.62	5.770	.0596	.1056	27.06	.1151	.0521	.1084	.1073

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.151	.0538	.0694	.1152	.1050	.0549	.2856
Stddev	.044	.0012	.0001	.0004	.0024	.0004	.0042
%RSD	1.387	2.208	.1847	.3286	2.270	.6875	1.458
#1	3.100	.0524	.0692	.1155	.1024	.0545	.2809
#2	3.176	.0544	.0695	.1148	.1070	.0552	.2889
#3	3.176	.0545	.0693	.1153	.1058	.0548	.2870

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3235.1	6447.6	56509.	4989.9
Stddev	55.7	89.6	212.	19.8
%RSD	1.7208	1.3892	.37459	.39644
#1	3299.0	6550.5	56659.	5002.6
#2	3196.8	6387.1	56602.	4967.1
#3	3209.7	6405.2	56267.	4999.9

Zoom In Zoom Out

Sample Name: MP28546-S1 Acquired: 2/12/2015 11:47:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0502	29.14	2.138	2.165	.0551	27.92	.0537	.5370	.2221	.2679
Stddev	.0009	.11	.003	.005	.0002	.19	.0002	.0005	.0006	.0012
%RSD	1.775	.3884	.1505	.2498	.3785	.6672	.2802	.0870	.2621	.4484
#1	.0511	29.17	2.139	2.170	.0554	28.05	.0538	.5373	.2225	.2680
#2	.0501	29.01	2.135	2.165	.0550	27.70	.0535	.5365	.2214	.2666
#3	.0494	29.23	2.141	2.160	.0550	28.00	.0538	.5373	.2223	.2690

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	28.66	28.56	27.25	.5575	.5207	43.71	.5548	.5185	.5284	2.038
Stddev	.11	.15	.16	.0007	.0008	.19	.0006	.0001	.0008	.003
%RSD	.3681	.5149	.5873	.1343	.1618	.4447	.1170	.0232	.1591	.1284
#1	28.71	28.61	27.41	.5578	.5214	43.77	.5548	.5186	.5291	2.041
#2	28.54	28.40	27.09	.5566	.5198	43.50	.5541	.5185	.5275	2.036
#3	28.73	28.68	27.24	.5580	.5210	43.88	.5554	.5184	.5286	2.037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	3.240	.5487	.5614	.5549	2.085	.5234	.5562
Stddev	.004	.0011	.0014	.0017	.006	.0033	.0019
%RSD	.1152	.2065	.2538	.2978	.2750	.6239	.3426
#1	3.245	.5499	.5625	.5559	2.090	.5260	.5557
#2	3.238	.5476	.5598	.5530	2.079	.5197	.5546
#3	3.239	.5485	.5619	.5557	2.085	.5244	.5583

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3064.7	6316.3	55427.	4972.5
Stddev	1.6	11.1	173.	36.4
%RSD	.05326	.17561	.31178	.73213
#1	3066.6	6323.0	55583.	4956.3
#2	3063.8	6322.4	55455.	5014.2
#3	3063.7	6303.5	55241.	4946.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 11:51:17 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2540	40.33	2.027	2.009	2.035	40.68	2.062	2.045	2.039	1.997
Stddev	.0012	.08	.009	.006	.004	.10	.007	.005	.007	.001
%RSD	.4690	.1874	.4540	.3007	.2213	.2494	.3249	.2391	.3354	.0639
#1	.2547	40.28	2.033	2.009	2.031	40.59	2.063	2.045	2.036	1.996
#2	.2547	40.30	2.032	2.002	2.036	40.66	2.069	2.050	2.047	1.998
#3	.2526	40.42	2.016	2.014	2.040	40.79	2.055	2.040	2.036	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.79	41.30	40.27	2.104	2.030	40.79	2.066	2.007	2.024	2.019
Stddev	.11	.06	.11	.006	.006	.08	.009	.006	.009	.006
%RSD	.2744	.1378	.2822	.2992	.2872	.2035	.4095	.2821	.4526	.3144
#1	40.70	41.31	40.22	2.104	2.027	40.82	2.067	2.010	2.028	2.014
#2	40.76	41.35	40.19	2.110	2.036	40.86	2.074	2.010	2.030	2.026
#3	40.91	41.24	40.40	2.098	2.026	40.70	2.057	2.000	2.014	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.843	2.054	2.067	2.088	2.046	2.009	2.077
Stddev	.006	.006	.001	.005	.004	.008	.010
%RSD	.3533	.2795	.0260	.2253	.2196	.3992	.4742
#1	1.847	2.053	2.068	2.085	2.050	2.005	2.078
#2	1.846	2.060	2.067	2.094	2.048	2.019	2.086
#3	1.835	2.049	2.066	2.086	2.041	2.004	2.066
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 11:51:17 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2955.8	6250.9	55026.	4902.4
Stddev	8.1	23.4	256.	28.5
%RSD	.27539	.37379	.46485	.58210
#1	2953.7	6256.3	54963.	4933.7
#2	2948.9	6225.3	54808.	4877.7
#3	2964.8	6271.1	55308.	4896.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:55:27 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0157	.0005	.0002	.0003	.0076	.0002	.0002	.0002
Stddev	.0003	.0053	.0005	.0002	.0001	.0011	.0000	.0000	.0002
%RSD	107.0	33.98	106.8	80.33	32.47	14.53	16.20	21.96	113.6
#1	.0004	.0211	.0010	.0003	.0003	.0068	.0002	.0002	.0004
#2	.0006	.0157	-.0001	.0003	.0002	.0072	.0002	.0001	-.0001
#3	-.0001	.0104	.0005	.0000	.0002	.0089	.0002	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0247	.1727	-.0161	.0003	F.0027	.0610	.0002	.0004
Stddev	.0003	.0045	.0227	.0176	.0000	.0017	.0038	.0002	.0006
%RSD	980.0	18.38	13.17	108.8	13.69	62.90	6.299	65.63	158.4
#1	.0003	.0286	.1829	-.0363	.0003	.0045	.0650	.0001	-.0003
#2	-.0003	.0257	.1885	-.0042	.0003	.0026	.0607	.0004	.0007
#3	.0001	.0197	.1466	-.0080	.0002	.0011	.0573	.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0013	.0008	.0002	.0002	.0015	F.0023	-.0001	.0001
Stddev	.0007	.0008	.0004	.0003	.0000	.0002	.0009	.0001	.0000
%RSD	93.20	57.25	55.38	169.2	15.07	12.37	41.27	159.8	18.07
#1	.0015	.0005	.0012	.0005	.0002	.0016	.0032	-.0002	.0001
#2	.0008	.0018	.0008	-.0001	.0003	.0015	.0013	-.0001	.0002
#3	.0000	.0017	.0003	.0001	.0002	.0013	.0023	.0001	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 11:55:27 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3436.6	6603.0	57949.	4926.0
Stddev	18.2	49.0	213.	7.9
%RSD	.53043	.74243	.36678	.16016
#1	3415.8	6546.5	57818.	4935.1
#2	3449.6	6632.8	57835.	4921.4
#3	3444.5	6629.8	58194.	4921.5

Zoom In Zoom Out

Sample Name: MP28546-S2 Acquired: 2/12/2015 11:59:55 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0515	29.88	2.101	2.226	.0558	27.89	.0531	.5357	.2237	.2713
Stddev	.0005	.14	.009	.009	.0004	.09	.0001	.0011	.0008	.0008
%RSD	1.062	.4726	.4476	.3885	.6716	.3126	.2814	.1961	.3370	.3101
#1	.0516	29.93	2.103	2.229	.0563	27.94	.0531	.5367	.2244	.2719
#2	.0509	29.98	2.110	2.233	.0555	27.94	.0532	.5358	.2229	.2704
#3	.0520	29.72	2.091	2.216	.0558	27.79	.0529	.5346	.2238	.2718

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	29.03	28.60	28.18	.5522	.5228	44.03	.5430	.5172	.5209	2.024
Stddev	.10	.15	.18	.0017	.0017	.14	.0020	.0026	.0026	.006
%RSD	.3445	.5180	.6431	.3121	.3178	.3082	.3693	.5032	.4952	.2745
#1	29.07	28.64	28.08	.5542	.5242	44.07	.5443	.5143	.5238	2.030
#2	29.11	28.73	28.39	.5510	.5233	44.13	.5441	.5181	.5189	2.024
#3	28.92	28.44	28.08	.5515	.5210	43.87	.5407	.5192	.5200	2.019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.189	.5511	.5619	.5493	2.073	.5198	.5433
Stddev	.007	.0023	.0036	.0011	.005	.0016	.0023
%RSD	.2349	.4122	.6328	.2066	.2479	.3084	.4226
#1	3.197	.5537	.5629	.5506	2.076	.5215	.5437
#2	3.188	.5493	.5649	.5487	2.067	.5184	.5454
#3	3.182	.5503	.5580	.5486	2.075	.5194	.5409

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3059.0	6390.3	55332.	4888.7
Stddev	4.2	21.5	189.	8.0
%RSD	.13843	.33688	.34210	.16345
#1	3063.8	6382.4	55149.	4888.0
#2	3056.2	6373.8	55527.	4881.1
#3	3056.9	6414.6	55320.	4897.0

Zoom In Zoom Out

Sample Name: FA22006-1 Acquired: 2/12/2015 12:04:06 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0329	-.0004	.0030	.0000	.1371	.0000	.0001	.0006	.0000
Stddev	.0002	.0039	.0004	.0001	.000	.0018	.0001	.0002	.0002	.0002
%RSD	651.1	11.90	99.12	3.436	300.6	1.282	1303.	210.9	40.06	928.7
#1	-.0002	.0290	.0001	.0029	-.0002	.1351	.0000	.0003	.0003	-.0001
#2	.0003	.0327	-.0006	.0031	.0000	.1385	.0000	.0001	.0008	.0002
#3	.0000	.0368	-.0006	.0030	.0000	.1377	-.0001	-.0001	.0006	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0242	.4627	.0433	.0040	-.0019	.4371	.0005	.0004	.0012	.0034
Stddev	.0015	.0485	.0067	.0000	.0002	.0066	.0002	.0010	.0011	.0008
%RSD	6.174	10.47	15.46	.1193	10.31	1.509	42.40	224.4	89.92	23.61
#1	.0225	.4834	.0363	.0040	-.0017	.4320	.0006	-.0005	.0023	.0038
#2	.0248	.4973	.0497	.0040	-.0018	.4347	.0007	.0014	.0014	.0025
#3	.0254	.4073	.0438	.0040	-.0021	.4445	.0003	.0005	.0000	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3941	.0002	.0008	.0005	.0036	.0005	.0267
Stddev	.0006	.0003	.0001	.0002	.0013	.0002	.0005
%RSD	.1497	147.9	15.95	36.87	36.46	45.36	1.799
#1	.3945	.0004	.0008	.0007	.0047	.0004	.0272
#2	.3934	.0004	.0008	.0006	.0040	.0003	.0265
#3	.3944	-.0002	.0010	.0003	.0021	.0007	.0263

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3403.4	6583.5	58271.	4900.8
Stddev	3.6	15.7	62.	56.4
%RSD	.10678	.23778	.10633	1.1499
#1	3399.2	6575.4	58342.	4930.4
#2	3405.4	6601.6	58234.	4835.9
#3	3405.6	6573.6	58236.	4936.3

Zoom In Zoom Out

Sample Name: FA22006-2 Acquired: 2/12/2015 12:08:32 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0105	-.0011	.0025	-.0001	.1365	.0000	.0000	.0007	-.0001
Stddev	.0003	.0064	.0004	.0002	.0001	.0035	.0000	.000	.0002	.0001
%RSD	152.5	60.53	37.01	8.407	61.55	2.577	54.12	502.9	34.02	205.5
#1	-.0001	.0121	-.0007	.0028	-.0002	.1401	.0000	.0000	.0007	.0000
#2	.0005	.0159	-.0015	.0025	-.0001	.1362	.0000	.0000	.0004	.0000
#3	.0003	.0035	-.0011	.0024	.0000	.1331	.0000	.0000	.0008	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0014	.3544	.0372	.0044	-.0024	.1581	.0008	.0003	.0009	.0033
Stddev	.0033	.0075	.0261	.0000	.0001	.0189	.0000	.0004	.0003	.0014
%RSD	234.6	2.107	69.95	.0844	2.483	11.97	5.895	126.2	36.61	41.98
#1	.0007	.3495	.0317	.0044	-.0023	.1534	.0008	.0007	.0005	.0045
#2	-.0015	.3630	.0144	.0044	-.0024	.1790	.0008	-.0001	.0009	.0035
#3	.0050	.3508	.0656	.0044	-.0024	.1420	.0008	.0004	.0011	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3818	-.0003	.0008	-.0007	.0006	.0001	.0290
Stddev	.0009	.0003	.0000	.0001	.0008	.0001	.0001
%RSD	.2282	81.20	2.578	16.26	128.5	115.1	.3071
#1	.3808	-.0001	.0008	-.0007	.0001	.0002	.0290
#2	.3823	-.0006	.0008	-.0007	.0015	.0000	.0290
#3	.3822	-.0003	.0008	-.0005	.0002	.0000	.0289

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.4	6608.3	58783.	4992.3
Stddev	3.0	13.1	147.	42.8
%RSD	.08818	.19892	.25073	.85719
#1	3443.6	6614.5	58822.	4960.9
#2	3439.8	6617.1	58907.	5041.0
#3	3437.6	6593.2	58620.	4974.9

Zoom In Zoom Out

Sample Name: FA22006-3 Acquired: 2/12/2015 12:12:57 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0232	.2961	.0042	-.0002	.1517	-.0001	.0000	.0005	-.0003
Stddev	.0001	.0031	.0009	.0002	.0000	.0031	.0000	.000	.0001	.0001
%RSD	86.98	13.56	.3125	3.622	25.36	2.075	64.41	559.4	26.38	36.91
#1	-.0002	.0263	.2958	.0044	-.0002	.1499	.0000	.0000	.0006	-.0002
#2	-.0001	.0233	.2971	.0041	-.0001	.1499	.0000	-.0001	.0003	-.0003
#3	.0000	.0200	.2953	.0041	-.0002	.1554	-.0001	.0001	.0006	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0076	.3365	.0685	.0064	-.0026	.1606	.0011	.0002	.0005	.0029
Stddev	.0014	.0517	.0052	.0000	.0001	.0084	.0003	.0007	.0005	.0011
%RSD	18.64	15.35	7.662	.5020	4.599	5.231	28.23	423.3	101.9	37.47
#1	.0082	.3624	.0704	.0064	-.0024	.1614	.0013	-.0003	.0009	.0016
#2	.0060	.2770	.0725	.0064	-.0026	.1518	.0007	-.0002	.0000	.0034
#3	.0086	.3700	.0625	.0064	-.0027	.1685	.0012	.0009	.0005	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3887	-.0005	.0008	-.0007	.0001	-.0002	.0274
Stddev	.0009	.0001	.0001	.0001	.0009	.0001	.0001
%RSD	.2194	11.32	12.11	9.340	1180.	40.83	.2416
#1	.3889	-.0006	.0007	-.0008	.0006	-.0003	.0274
#2	.3894	-.0006	.0009	-.0007	-.0009	-.0002	.0275
#3	.3878	-.0005	.0009	-.0008	.0005	-.0001	.0273

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3436.8	6608.7	58638.	4978.3
Stddev	6.6	8.3	161.	43.1
%RSD	.19136	.12625	.27520	.86483
#1	3431.3	6603.6	58496.	5020.6
#2	3444.1	6604.1	58604.	4934.5
#3	3435.0	6618.3	58813.	4979.7

Zoom In Zoom Out

Sample Name: FA22006-4 Acquired: 2/12/2015 12:17:21 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0266	.3323	.0043	-.0002	.1810	.0000	.0000	.0004	-.0001
Stddev	.0002	.0148	.0016	.0001	.0000	.0027	.000	.0001	.0001	.0002
%RSD	838.2	55.78	.4941	1.527	24.71	1.501	106.1	171.1	23.50	131.5
#1	-.0002	.0437	.3339	.0044	-.0001	.1833	.0000	.0000	.0003	-.0003
#2	.0001	.0176	.3306	.0043	-.0002	.1818	.0000	.0000	.0005	.0000
#3	.0002	.0185	.3325	.0042	-.0002	.1780	.0000	.0001	.0003	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0025	.3525	.0954	.0075	-.0026	.1656	.0012	.0000	.0000	.0028
Stddev	.0012	.0236	.0205	.0001	.0001	.0083	.0001	.0001	.0006	.0012
%RSD	48.69	6.696	21.46	.7782	4.710	5.020	12.93	297.1	3367.	44.54
#1	-.0011	.3797	.1136	.0074	-.0025	.1729	.0013	.0001	-.0002	.0013
#2	-.0034	.3366	.0732	.0075	-.0026	.1565	.0010	.0000	-.0004	.0035
#3	-.0030	.3414	.0992	.0075	-.0027	.1673	.0012	-.0001	.0007	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3666	-.0004	.0010	-.0008	-.0006	-.0003	.0301
Stddev	.0009	.0002	.0001	.0001	.0009	.0003	.0001
%RSD	.2404	42.85	12.39	11.58	154.0	129.1	.4280
#1	.3676	-.0002	.0011	-.0007	-.0013	-.0005	.0302
#2	.3661	-.0005	.0010	-.0008	.0004	.0001	.0300
#3	.3660	-.0005	.0009	-.0009	-.0007	-.0004	.0300

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3446.8	6627.7	58786.	5028.2
Stddev	1.3	4.6	290.	46.8
%RSD	.03846	.06898	.49412	.93125
#1	3447.0	6622.5	58939.	5058.1
#2	3448.0	6629.8	58451.	4974.2
#3	3445.3	6630.8	58969.	5052.2

Zoom In Zoom Out

Sample Name: FA22006-5 Acquired: 2/12/2015 12:21:45 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1103	1.469	.0068	-.0001	.1704	.0000	.0001	.0003	.0000
Stddev	.000	.0032	.005	.0002	.0001	.0037	.000	.0001	.0001	.000
%RSD	1087.	2.887	.3535	3.412	65.17	2.173	2914.	118.9	53.44	1097.
#1	.0000	.1067	1.472	.0071	-.0002	.1717	.0000	.0001	.0002	-.0001
#2	-.0003	.1114	1.472	.0067	.0000	.1662	.0000	.0000	.0004	-.0001
#3	.0003	.1127	1.463	.0067	-.0002	.1733	.0000	.0002	.0002	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0173	.3279	.0696	.0092	-.0027	.3249	.0015	.0000	.0007	.0014
Stddev	.0046	.0471	.0091	.0000	.0001	.0128	.0001	.000	.0004	.0010
%RSD	26.31	14.36	13.12	.4037	3.043	3.928	6.620	1441.	61.45	68.38
#1	.0163	.3346	.0705	.0092	-.0026	.3117	.0015	.0001	.0005	.0012
#2	.0223	.2778	.0600	.0092	-.0027	.3371	.0013	.0002	.0011	.0006
#3	.0134	.3713	.0782	.0092	-.0027	.3258	.0015	-.0003	.0003	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3770	-.0001	.0010	-.0006	-.0010	-.0001	.0346
Stddev	.0015	.0002	.0000	.0001	.0007	.0001	.0002
%RSD	.3850	161.8	3.681	18.54	69.64	80.04	.4458
#1	.3777	-.0003	.0010	-.0006	-.0013	.0000	.0346
#2	.3780	-.0003	.0010	-.0005	-.0014	-.0002	.0347
#3	.3754	.0001	.0010	-.0007	-.0002	-.0001	.0344

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.9	6665.8	58917.	4949.1
Stddev	4.3	9.2	138.	61.4
%RSD	.12539	.13760	.23347	1.2399
#1	3444.5	6659.8	59047.	4987.9
#2	3442.0	6661.3	58773.	4981.0
#3	3436.1	6676.4	58930.	4878.4

Zoom In Zoom Out

Sample Name: FA22006-6 Acquired: 2/12/2015 12:26:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.1025	1.342	.0064	.0000	.1481	-.0001	.0001	.0003	-.0003
Stddev	.0006	.0104	.004	.0001	.000	.0012	.0000	.0001	.0001	.0002
%RSD	353.4	10.15	.2896	2.296	1504.	.7923	18.73	113.6	31.88	73.36
#1	.0000	.0976	1.344	.0064	.0000	.1490	-.0001	.0001	.0004	-.0001
#2	-.0004	.0955	1.338	.0066	-.0001	.1468	.0000	.0000	.0004	-.0003
#3	.0009	.1145	1.345	.0063	.0001	.1486	-.0001	.0002	.0002	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0147	.3270	.0662	.0087	-.0028	.1044	.0014	.0003	.0001	.0013
Stddev	.0019	.0302	.0113	.0000	.0001	.0158	.0001	.0003	.0006	.0014
%RSD	12.84	9.230	17.11	.1010	2.785	15.18	9.025	107.1	571.2	108.6
#1	.0131	.3511	.0761	.0087	-.0028	.1069	.0015	.0004	-.0001	.0016
#2	.0168	.2931	.0687	.0087	-.0028	.0875	.0013	.0004	.0008	.0024
#3	.0143	.3368	.0538	.0087	-.0027	.1189	.0012	-.0001	-.0004	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3676	-.0003	.0009	-.0007	-.0012	-.0002	.0353
Stddev	.0010	.0002	.0000	.0001	.0004	.0001	.0003
%RSD	.2832	79.27	3.244	7.559	33.59	45.65	.7551
#1	.3683	-.0005	.0009	-.0008	-.0015	-.0002	.0356
#2	.3664	-.0002	.0009	-.0007	-.0008	-.0004	.0351
#3	.3681	-.0001	.0008	-.0007	-.0012	-.0002	.0351

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.8	6678.5	58799.	4892.2
Stddev	9.6	6.6	66.	23.8
%RSD	.28012	.09886	.11205	.48701
#1	3431.5	6671.4	58775.	4919.7
#2	3440.0	6684.5	58748.	4877.5
#3	3450.8	6679.5	58873.	4879.3

Zoom In Zoom Out

Sample Name: FA22006-7 Acquired: 2/12/2015 12:30:33 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.6229	F6.581	.0090	.0000	.2368	-.0001	.0002	.0005
Stddev	.0008	.0149	.010	.0003	.0001	.0061	.0000	.0001	.0003
%RSD	1268.	2.387	.1484	2.801	401.9	2.582	16.14	62.13	64.69
#1	-.0002	.6223	6.592	.0092	.0000	.2340	-.0001	.0003	.0004
#2	.0010	.6381	6.575	.0090	-.0001	.2438	-.0001	.0001	.0002
#3	-.0006	.6084	6.576	.0087	.0001	.2327	-.0001	.0001	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0434	.3609	.0774	.0155	-.0025	.1291	.0017	.0003
Stddev	.0004	.0017	.0206	.0206	.0001	.0000	.0109	.0001	.0005
%RSD	337.0	3.963	5.721	26.58	.8663	1.490	8.420	4.002	169.6
#1	.0001	.0434	.3731	.0840	.0154	-.0025	.1372	.0017	.0007
#2	-.0005	.0417	.3371	.0940	.0157	-.0025	.1332	.0017	-.0003
#3	.0001	.0451	.3725	.0544	.0154	-.0026	.1167	.0018	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0009	.3754	-.0005	.0013	-.0006	-.0008	-.0001	.0300
Stddev	.0004	.0011	.0013	.0003	.0000	.0000	.0009	.0000	.0001
%RSD	117.5	121.8	.3403	58.34	3.364	3.058	112.2	46.72	.3294
#1	.0003	.0017	.3754	-.0008	.0012	-.0006	.0000	-.0001	.0300
#2	.0008	.0014	.3767	-.0003	.0013	-.0006	-.0018	-.0001	.0301
#3	-.0001	-.0004	.3742	-.0004	.0013	-.0006	-.0006	.0000	.0299

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3455.1	6730.6	59215.	4942.8
Stddev	2.6	4.7	295.	28.3
%RSD	.07539	.06953	.49839	.57332
#1	3454.4	6726.8	59482.	4974.8
#2	3458.0	6729.3	58898.	4920.9
#3	3452.9	6735.9	59264.	4932.7

Zoom In Zoom Out

Sample Name: FA22006-8 Acquired: 2/12/2015 12:34:56 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	.5781	F6.837	.0087	.0000	.2458	.0000	.0001	.0003
Stddev	.0002	.0185	.017	.0002	.000	.0044	.000	.0000	.0001
%RSD	34.85	3.197	.2454	2.635	131.2	1.782	36.68	33.98	28.54
#1	-.0008	.5950	6.824	.0087	.0000	.2484	.0000	.0001	.0002
#2	-.0005	.5809	6.856	.0085	-.0001	.2408	.0000	.0001	.0004
#3	-.0004	.5584	6.831	.0090	.0000	.2483	.0000	.0002	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0004	.0371	.3413	.0712	.0134	-.0027	.1377	.0014	.0003
Stddev	.0002	.0025	.0299	.0116	.0000	.0001	.0100	.0001	.0006
%RSD	55.26	6.729	8.758	16.28	.3625	4.441	7.284	9.154	189.5
#1	-.0004	.0375	.3141	.0586	.0134	-.0026	.1323	.0015	.0005
#2	-.0001	.0344	.3733	.0815	.0133	-.0026	.1315	.0013	.0008
#3	-.0005	.0393	.3365	.0736	.0134	-.0028	.1492	.0016	-.0004

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0001	.0012	.3690	-.0003	.0013	-.0006	-.0007	-.0001	.0333
Stddev	.0013	.0002	.0009	.0001	.0001	.0000	.0008	.0002	.0000
%RSD	1021.	18.54	.2356	31.73	4.390	7.250	105.5	161.3	.0680
#1	-.0011	.0012	.3682	-.0004	.0013	-.0007	-.0016	-.0003	.0333
#2	.0015	.0014	.3699	-.0003	.0014	-.0006	-.0006	.0001	.0333
#3	.0000	.0010	.3688	-.0003	.0013	-.0007	.0000	-.0002	.0334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3457.5	6736.4	59439.	4979.3
Stddev	3.4	5.1	171.	27.0
%RSD	.09859	.07512	.28727	.54179
#1	3457.3	6735.9	59262.	4948.2
#2	3454.2	6731.6	59603.	4993.9
#3	3461.0	6741.7	59452.	4995.9

Zoom In Zoom Out

Sample Name: FA22006-9 Acquired: 2/12/2015 12:39:20 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	1.065	F8.565	.0093	.0000	.1728	-.0001	.0001	.0005
Stddev	.0004	.007	.014	.0002	.0000	.0008	.0000	.0002	.0000
%RSD	68.62	.7046	.1636	1.883	13.01	.4868	34.48	108.4	3.217
#1	-.0003	1.073	8.561	.0094	.0000	.1737	-.0001	.0000	.0005
#2	-.0003	1.064	8.581	.0091	.0000	.1727	.0000	.0003	.0005
#3	-.0009	1.058	8.555	.0095	.0000	.1721	-.0001	.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0565	.4011	.0666	.0139	-.0026	.1307	.0016	.0006
Stddev	.0001	.0008	.0123	.0342	.0001	.0001	.0055	.0001	.0005
%RSD	138.4	1.493	3.076	51.40	.4966	2.694	4.240	6.545	90.17
#1	.0000	.0559	.3925	.0306	.0139	-.0027	.1366	.0015	.0010
#2	-.0002	.0575	.3954	.0987	.0139	-.0026	.1256	.0017	.0000
#3	-.0001	.0561	.4152	.0704	.0138	-.0026	.1298	.0017	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0010	.3997	-.0007	.0010	-.0006	-.0006	-.0001	.0271
Stddev	.0006	.0006	.0007	.0001	.0001	.0001	.0007	.0002	.0000
%RSD	216.7	63.69	.1813	21.53	5.284	7.856	118.7	224.7	.0357
#1	.0009	.0004	.4004	-.0008	.0011	-.0006	-.0006	.0001	.0271
#2	.0001	.0016	.3998	-.0005	.0010	-.0006	-.0013	-.0003	.0271
#3	-.0002	.0010	.3989	-.0007	.0010	-.0007	.0001	.0000	.0271

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3467.9	6735.8	59429.	5003.1
Stddev	5.8	12.2	115.	19.8
%RSD	.16610	.18122	.19386	.39610
#1	3471.2	6741.3	59392.	5025.0
#2	3471.3	6721.8	59338.	4997.7
#3	3461.3	6744.2	59559.	4986.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 12:43:42 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2595	41.38	2.014	2.085	2.043	40.61	2.036	2.045	2.051	2.059
Stddev	.0003	.14	.013	.010	.006	.15	.016	.016	.011	.006
%RSD	.1219	.3473	.6672	.4952	.2791	.3586	.7955	.7776	.5174	.2899
#1	.2593	41.40	2.018	2.090	2.044	40.74	2.043	2.051	2.050	2.058
#2	.2598	41.22	2.026	2.073	2.036	40.45	2.048	2.058	2.041	2.054
#3	.2593	41.51	2.000	2.092	2.047	40.65	2.018	2.027	2.062	2.066

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.34	41.32	41.39	2.073	2.039	41.38	2.028	2.005	2.017	2.038
Stddev	.14	.21	.28	.015	.013	.13	.015	.019	.014	.015
%RSD	.3272	.5091	.6771	.7237	.6242	.3215	.7298	.9501	.6805	.7155
#1	41.46	41.42	41.64	2.077	2.043	41.49	2.032	2.014	2.021	2.043
#2	41.19	41.08	41.08	2.057	2.050	41.23	2.041	2.017	2.027	2.049
#3	41.35	41.47	41.44	2.086	2.025	41.42	2.012	1.983	2.001	2.021

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.837	2.064	2.066	2.066	2.025	1.994	2.020
Stddev	.014	.018	.008	.007	.013	.006	.017
%RSD	.7328	.8469	.3732	.3333	.6389	.2929	.8503
#1	1.840	2.072	2.070	2.069	2.026	1.998	2.027
#2	1.849	2.076	2.057	2.059	2.038	1.987	2.032
#3	1.822	2.044	2.071	2.071	2.012	1.998	2.000

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 12:43:42 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2984.6	6379.1	55750.	4950.8
Stddev	24.7	44.8	374.	76.5
%RSD	.82639	.70299	.67088	1.5453
#1	2977.4	6370.3	55836.	4883.9
#2	2964.4	6339.3	56073.	5034.2
#3	3012.1	6427.7	55340.	4934.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 12:47:55 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0174	.0009	.0007	.0005	.0108	.0004	.0003	.0003
Stddev	.0003	.0095	.0005	.0002	.0002	.0012	.0000	.0001	.0002
%RSD	137.5	54.53	51.10	31.83	36.61	10.82	10.39	19.81	74.53
#1	.0000	.0167	.0004	.0008	.0007	.0112	.0005	.0004	.0001
#2	-.0006	.0083	.0014	.0007	.0004	.0118	.0005	.0003	.0005
#3	-.0001	.0272	.0010	.0004	.0003	.0095	.0004	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0283	.1229	-.0008	.0005	F.0025	.0562	.0004	.0007
Stddev	.0001	.0064	.0094	.0139	.0000	.0014	.0110	.0001	.0004
%RSD	27.47	22.68	7.611	1663.	3.099	58.94	19.48	25.25	55.08
#1	.0002	.0354	.1236	.0152	.0005	.0040	.0669	.0005	.0005
#2	.0004	.0268	.1319	-.0093	.0005	.0023	.0450	.0003	.0004
#3	.0004	.0228	.1133	-.0084	.0005	.0011	.0568	.0003	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0000	.0007	.0005	.0005	F.0021	.0017	.0004	.0003
Stddev	.0002	.0007	.0004	.0001	.0000	.0003	.0003	.0001	.0001
%RSD	16.31	2540.	51.62	18.51	6.434	13.00	18.09	13.14	24.72
#1	.0016	-.0007	.0004	.0005	.0005	.0024	.0017	.0004	.0004
#2	.0012	.0007	.0006	.0006	.0005	.0020	.0013	.0004	.0004
#3	.0013	.0000	.0012	.0005	.0005	.0019	.0019	.0003	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 12:47:55 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3461.9	6678.0	58747.	4980.0
Stddev	16.0	33.8	122.	22.7
%RSD	.46215	.50636	.20843	.45597
#1	3462.3	6671.6	58616.	5001.6
#2	3445.6	6647.9	58858.	4956.3
#3	3477.6	6714.6	58767.	4982.0

Zoom In Zoom Out

Sample Name: FA22006-10 Acquired: 2/12/2015 12:52:23 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.9857	F8.108	.0092	.0000	.1535	.0000	.0003	.0004
Stddev	.0003	.0070	.122	.0003	.0001	.0022	.0000	.0001	.0001
%RSD	64.37	.7052	1.502	3.742	1688.	1.412	49.96	34.24	33.47
#1	.0004	.9789	7.968	.0095	.0000	.1542	.0000	.0003	.0004
#2	.0002	.9854	8.178	.0088	-.0001	.1553	.0000	.0003	.0003
#3	.0007	.9928	8.179	.0093	.0001	.1511	.0000	.0002	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0733	.3759	.0841	.0127	-.0016	.1527	.0018	.0001
Stddev	.0000	.0071	.0381	.0092	.0000	.0002	.0058	.0001	.0002
%RSD	47.97	9.699	10.13	10.89	.2536	10.10	3.802	6.418	151.3
#1	-.0001	.0793	.3441	.0908	.0127	-.0015	.1494	.0017	.0003
#2	-.0001	.0751	.3656	.0737	.0127	-.0016	.1594	.0017	.0001
#3	.0000	.0655	.4181	.0879	.0127	-.0018	.1493	.0019	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0012	.0012	.3979	.0001	.0009	.0002	-.0005	.0001	.0249
Stddev	.0003	.0011	.0061	.0001	.0001	.0001	.0004	.0001	.0003
%RSD	26.25	94.59	1.538	78.10	6.180	49.89	74.95	52.44	1.263
#1	.0010	.0013	.3908	.0001	.0010	.0004	-.0001	.0002	.0245
#2	.0016	.0000	.4009	.0000	.0009	.0002	-.0008	.0001	.0249
#3	.0011	.0022	.4018	.0001	.0009	.0002	-.0007	.0001	.0252

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3454.2	6771.0	59188.	4891.4
Stddev	48.7	80.6	212.	12.2
%RSD	1.4105	1.1900	.35755	.24868
#1	3510.4	6864.0	59006.	4905.4
#2	3427.3	6724.5	59420.	4883.5
#3	3424.8	6724.3	59138.	4885.3

Zoom In Zoom Out

Sample Name: FA22007-1 Acquired: 2/12/2015 12:56:47 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.4322	.0051	.0075	-.0001	21.29	.0002	.0007	.0036	.0233
Stddev	.0002	.0028	.0006	.0001	.0001	.14	.0000	.0001	.0002	.0001
%RSD	66.70	.6493	12.18	1.833	68.00	.6696	19.64	17.29	4.659	.5569
#1	.0002	.4309	.0057	.0074	-.0001	21.26	.0001	.0006	.0035	.0234
#2	.0002	.4303	.0050	.0074	-.0001	21.16	.0001	.0007	.0038	.0232
#3	.0006	.4354	.0045	.0076	.0000	21.45	.0002	.0009	.0036	.0232

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.4070	1.438	.7472	.0104	-.0009	3.955	.0025	.0073	.0034	.0029
Stddev	.0030	.039	.0223	.0001	.0001	.028	.0001	.0003	.0010	.0015
%RSD	.7398	2.702	2.988	.5020	13.00	.6969	4.479	4.131	28.05	49.57
#1	.4051	1.470	.7218	.0104	-.0007	3.951	.0026	.0073	.0030	.0040
#2	.4054	1.395	.7561	.0105	-.0009	3.929	.0025	.0070	.0027	.0036
#3	.4105	1.450	.7638	.0104	-.0010	3.984	.0024	.0076	.0045	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.650	.0002	.1198	.0391	-.0008	.0065	.0662
Stddev	.012	.0001	.0007	.0008	.0017	.0002	.0001
%RSD	.3277	82.47	.5784	2.028	207.0	2.958	.0898
#1	3.655	.0002	.1200	.0394	-.0019	.0067	.0662
#2	3.658	.0003	.1191	.0383	-.0017	.0064	.0663
#3	3.636	.0000	.1204	.0398	.0011	.0063	.0663

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3324.0	6624.1	58080.	4938.0
Stddev	4.8	10.0	183.	29.8
%RSD	.14446	.15031	.31441	.60356
#1	3329.4	6635.6	58215.	4954.7
#2	3322.2	6619.1	58153.	4955.8
#3	3320.3	6617.7	57872.	4903.6

Zoom In Zoom Out

Sample Name: FA22021-1 Acquired: 2/12/2015 13:01:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	6.917	.0058	.1875	.0004	9.285	.0011	.0040	.0040	.0245
Stddev	.0006	.029	.0006	.0010	.0001	.033	.0000	.0001	.0002	.0003
%RSD	162.7	.4175	10.45	.5428	31.58	.3513	2.048	1.972	5.323	1.209
#1	.0002	6.943	.0059	.1886	.0003	9.319	.0011	.0039	.0042	.0243
#2	-.0003	6.886	.0063	.1866	.0005	9.282	.0011	.0041	.0039	.0245
#3	-.0009	6.922	.0051	.1871	.0004	9.254	.0012	.0040	.0038	.0249

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.915	4.283	1.792	1.469	-.0015	1.172	.0033	.0143	.0007	.0032
Stddev	.032	.048	.021	.003	.0001	.004	.0001	.0003	.0008	.0007
%RSD	.3551	1.130	1.192	.2082	3.719	.3374	3.741	1.785	119.7	20.58
#1	8.948	4.338	1.810	1.466	-.0014	1.176	.0033	.0140	.0006	.0040
#2	8.912	4.248	1.768	1.469	-.0015	1.173	.0033	.0143	.0015	.0030
#3	8.885	4.261	1.797	1.472	-.0015	1.168	.0035	.0146	-.0001	.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.467	.0001	.0535	.1525	-.0007	.0120	.0761
Stddev	.006	.0004	.0002	.0004	.0004	.0001	.0001
%RSD	.1123	415.1	.4062	.2440	53.23	.5600	.1607
#1	5.463	.0002	.0538	.1521	-.0012	.0119	.0760
#2	5.474	.0005	.0534	.1525	-.0006	.0119	.0762
#3	5.463	-.0004	.0534	.1528	-.0004	.0120	.0762

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3335.4	7185.3	62828.	5324.0
Stddev	2.0	8.6	216.	24.1
%RSD	.05935	.11903	.34436	.45343
#1	3337.3	7176.6	62969.	5328.3
#2	3335.4	7185.7	62937.	5345.7
#3	3333.4	7193.7	62579.	5298.0

Zoom In Zoom Out

Sample Name: FA22021-2 Acquired: 2/12/2015 13:05:29 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	17.88	.0134	.4206	.0012	.2936	.0008	.0666	.0054	.0551
Stddev	.0006	.02	.0003	.0004	.0001	.0014	.0000	.0001	.0002	.0002
%RSD	93.68	.1349	2.097	.0962	5.163	.4639	4.787	.1654	3.662	.2775
#1	.0000	17.90	.0136	.4203	.0012	.2925	.0008	.0666	.0052	.0553
#2	-.0011	17.86	.0134	.4210	.0011	.2931	.0008	.0665	.0054	.0550
#3	-.0008	17.87	.0131	.4203	.0012	.2951	.0008	.0667	.0056	.0551

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	21.15	5.272	2.667	2.921	-.0025	7.637	.0015	.0425	-.0013	.0027
Stddev	.02	.026	.013	.018	.0001	.015	.0000	.0003	.0004	.0015
%RSD	.0805	.4850	.4871	.6089	4.696	.1993	3.218	.6024	31.15	55.76
#1	21.17	5.299	2.681	2.939	-.0024	7.654	.0015	.0427	-.0012	.0015
#2	21.15	5.248	2.667	2.921	-.0027	7.635	.0016	.0422	-.0017	.0044
#3	21.13	5.270	2.655	2.904	-.0025	7.623	.0015	.0426	-.0009	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	12.85	.0009	.0073	.2878	.0005	.0213	.0812
Stddev	.02	.0001	.0001	.0003	.0014	.0001	.0001
%RSD	.1546	12.40	1.433	.1077	280.4	.6693	.1782
#1	12.83	.0010	.0073	.2880	.0006	.0213	.0813
#2	12.86	.0009	.0074	.2875	-.0009	.0212	.0812
#3	12.87	.0008	.0072	.2880	.0018	.0215	.0810

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3275.3	9634.6	83753.	7168.3
Stddev	8.7	3.5	207.	60.9
%RSD	.26418	.03624	.24658	.84893
#1	3265.4	9635.0	83660.	7128.5
#2	3279.6	9637.9	83990.	7138.0
#3	3281.0	9631.0	83610.	7238.3

Zoom In Zoom Out

Sample Name: FA22021-3 Acquired: 2/12/2015 13:09:58 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	8.548	.0080	.2285	.0004	1.280	.0002	.0183	.0019	.0147
Stddev	.0001	.060	.0004	.0014	.0001	.014	.0000	.0001	.0003	.0001
%RSD	32.26	.7066	5.461	.6258	20.88	1.088	9.814	.6279	14.03	.3927
#1	-.0004	8.586	.0075	.2295	.0004	1.281	.0002	.0184	.0021	.0148
#2	-.0004	8.580	.0081	.2269	.0004	1.294	.0002	.0182	.0016	.0147
#3	-.0002	8.479	.0084	.2292	.0005	1.266	.0002	.0183	.0020	.0147

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.16	47.16	1.814	1.165	-.0026	11.83	.0016	.0316	-.0001	.0021
Stddev	.07	.29	.033	.006	.0001	.09	.0001	.0004	.0006	.0011
%RSD	.5589	.6223	1.830	.5274	5.506	.7244	4.648	1.269	405.0	53.94
#1	12.22	47.33	1.810	1.171	-.0025	11.87	.0015	.0312	-.0007	.0014
#2	12.19	47.32	1.849	1.166	-.0026	11.89	.0016	.0320	.0005	.0034
#3	12.09	46.82	1.783	1.159	-.0028	11.73	.0017	.0315	-.0002	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.501	-.0002	.0097	.0500	-.0001	.0084	.1280
Stddev	.008	.0002	.0000	.0002	.0003	.0001	.0005
%RSD	.1228	115.6	.2309	.4987	266.3	.6244	.4189
#1	6.500	-.0004	.0097	.0502	-.0004	.0083	.1285
#2	6.493	-.0002	.0097	.0499	.0000	.0084	.1274
#3	6.509	.0000	.0097	.0497	.0001	.0084	.1282

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3220.1	7855.2	68338.	5892.4
Stddev	7.9	18.0	510.	80.9
%RSD	.24479	.22878	.74661	1.3738
#1	3211.9	7850.2	67883.	5869.2
#2	3227.6	7875.1	68243.	5825.6
#3	3220.8	7840.2	68890.	5982.4

Zoom In Zoom Out

Sample Name: FA22021-4 Acquired: 2/12/2015 13:14:20 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	1.433	-.0001	.2100	.0000	1.896	.0001	.0702	.0012	.0025
Stddev	.0003	.017	.0005	.0005	.000	.015	.0000	.0002	.0001	.0001
%RSD	90.66	1.202	914.3	.2144	590.7	.8106	24.64	.2497	7.837	3.013
#1	.0000	1.443	.0005	.2103	.0000	1.913	.0001	.0704	.0013	.0026
#2	.0004	1.413	-.0005	.2103	-.0001	1.883	.0002	.0700	.0011	.0025
#3	.0006	1.442	-.0001	.2095	.0000	1.893	.0001	.0702	.0012	.0025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.9298	4.031	.5009	2.711	-.0029	2.791	.0033	.0555	.0003	.0038
Stddev	.0098	.052	.0379	.014	.0001	.012	.0001	.0004	.0003	.0006
%RSD	1.054	1.296	7.568	.5177	5.135	.4343	1.746	.7871	131.7	15.88
#1	.9371	4.089	.5412	2.695	-.0030	2.778	.0034	.0557	-.0001	.0046
#2	.9186	4.015	.4659	2.722	-.0029	2.792	.0033	.0559	.0006	.0035
#3	.9335	3.989	.4957	2.716	-.0027	2.802	.0033	.0550	.0003	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.830	-.0002	.0134	.0311	-.0005	.0010	.1640
Stddev	.008	.0002	.0001	.0065	.0010	.0001	.0004
%RSD	.1973	156.2	.8509	20.81	191.8	14.41	.2200
#1	3.822	-.0004	.0133	.0283	.0006	.0011	.1641
#2	3.837	.0001	.0135	.0384	-.0011	.0009	.1636
#3	3.832	-.0001	.0133	.0265	-.0010	.0009	.1643

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3392.9	6724.3	59352.	4990.4
Stddev	3.6	11.4	219.	55.7
%RSD	.10566	.16985	.36860	1.1163
#1	3388.7	6711.2	59487.	4926.1
#2	3394.6	6732.1	59470.	5020.0
#3	3395.3	6729.6	59100.	5025.1

Zoom In Zoom Out

Sample Name: FA22021-5 Acquired: 2/12/2015 13:18:52 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	1.848	.0004	.3449	-.0001	24.28	-.0001	.0008	.0149	.0000
Stddev	.0004	.014	.0008	.0007	.0001	.10	.0001	.0001	.0001	.0003
%RSD	115.2	.7504	215.9	.2010	57.89	.4003	72.69	16.55	.5218	631.6
#1	.0001	1.852	.0009	.3457	-.0001	24.28	.0000	.0007	.0148	-.0003
#2	.0008	1.832	-.0005	.3444	.0000	24.18	-.0001	.0009	.0149	.0001
#3	.0001	1.859	.0007	.3446	-.0002	24.37	-.0002	.0007	.0149	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2401	17.06	2.386	1.965	.0056	21.78	.0001	.0007	.0010	.0025
Stddev	.0041	.10	.027	.009	.0002	.07	.0002	.0002	.0008	.0007
%RSD	1.723	.5861	1.133	.4837	3.753	.3417	191.7	31.05	81.79	26.50
#1	.2428	17.14	2.415	1.956	.0058	21.80	-.0001	.0007	.0006	.0021
#2	.2353	16.95	2.361	1.963	.0055	21.70	.0002	.0004	.0020	.0021
#3	.2422	17.10	2.383	1.975	.0054	21.85	.0002	.0009	.0005	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.819	.0000	.2184	.0076	-.0006	.0066	.0086
Stddev	.007	.0002	.0005	.0008	.0012	.0002	.0000
%RSD	.1757	2657.	.2472	10.35	192.0	3.012	.0471
#1	3.825	.0000	.2178	.0073	.0001	.0067	.0086
#2	3.812	.0002	.2183	.0071	-.0019	.0064	.0086
#3	3.820	-.0002	.2189	.0086	.0000	.0066	.0086

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3216.8	6609.6	57286.	4874.7
Stddev	2.0	10.5	185.	29.9
%RSD	.06245	.15916	.32308	.61246
#1	3215.0	6597.9	57499.	4904.9
#2	3216.3	6612.6	57194.	4874.0
#3	3218.9	6618.3	57165.	4845.2

Zoom In Zoom Out

Sample Name: FA22048-2 Acquired: 2/12/2015 13:23:15 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0025	-.0010	-.0001	-.0001	.0035	-.0001	-.0001	.0000	-.0004
Stddev	.0003	.0060	.0004	.0002	.0001	.0091	.0000	.0000	.000	.0004
%RSD	124.8	237.7	44.25	177.0	51.68	263.6	34.13	15.31	731.7	104.8
#1	.0001	.0066	-.0014	-.0001	-.0001	.0135	-.0001	-.0001	.0001	-.0005
#2	-.0003	.0053	-.0012	-.0004	-.0002	.0012	-.0001	-.0001	-.0001	-.0007
#3	-.0006	-.0044	-.0005	.0001	-.0001	-.0043	.0000	-.0001	.0000	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0072	.0884	-.0061	.0003	-.0028	.0248	-.0001	-.0002	-.0002	.0009
Stddev	.0015	.0230	.0212	.0000	.0002	.0085	.0003	.0003	.0009	.0006
%RSD	20.29	26.04	345.2	12.79	6.674	34.47	354.6	160.2	344.0	70.43
#1	-.0068	.1072	-.0271	.0003	-.0027	.0284	.0002	.0001	.0006	.0010
#2	-.0087	.0952	-.0067	.0003	-.0030	.0309	-.0003	-.0003	-.0002	.0002
#3	-.0059	.0627	.0154	.0003	-.0027	.0150	-.0002	-.0003	-.0011	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0255	-.0005	-.0001	-.0012	-.0008	-.0002	.0010
Stddev	.0005	.0003	.0001	.0000	.0007	.0001	.0000
%RSD	2.107	71.54	102.8	3.736	89.40	75.15	.7014
#1	.0261	-.0008	.0000	-.0012	-.0008	-.0003	.0010
#2	.0252	-.0001	-.0001	-.0012	-.0015	-.0003	.0010
#3	.0252	-.0005	-.0001	-.0011	-.0001	.0000	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3444.2	6748.9	59136.	4907.1
Stddev	6.6	5.5	274.	24.4
%RSD	.19188	.08111	.46270	.49766
#1	3436.8	6746.7	58821.	4879.0
#2	3446.6	6744.9	59313.	4919.2
#3	3449.3	6755.1	59274.	4923.1

Zoom In Zoom Out

Sample Name: FA22048-3A Acquired: 2/12/2015 13:27:44 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0050	-.0011	.0024	-.0002	.0738	-.0001	-.0001	.0001	-.0002
Stddev	.0005	.0122	.0004	.0001	.0001	.0025	.0001	.0000	.0001	.0002
%RSD	894.0	244.0	38.34	5.729	30.66	3.391	64.99	33.73	110.5	96.65
#1	.0003	-.0033	-.0011	.0023	-.0003	.0754	-.0002	-.0001	.0002	.0000
#2	.0003	-.0007	-.0014	.0025	-.0001	.0751	-.0001	-.0002	.0000	-.0002
#3	-.0005	.0191	-.0006	.0025	-.0002	.0709	.0000	-.0001	.0001	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0077	.0213	-.0120	.0001	-.0027	.5574	-.0001	-.0002	.0003	.0023
Stddev	.0017	.0057	.0127	.0000	.0001	.0109	.0002	.0002	.0002	.0020
%RSD	22.69	26.99	105.4	68.80	3.685	1.949	115.8	105.7	74.51	88.86
#1	-.0084	.0194	-.0235	.0001	-.0028	.5528	-.0003	.0000	.0001	.0045
#2	-.0090	.0167	.0016	.0001	-.0027	.5497	-.0001	-.0003	.0002	.0007
#3	-.0057	.0277	-.0142	.0000	-.0027	.5699	.0000	-.0002	.0005	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0258	-.0004	.0003	-.0012	.0002	-.0001	.0004
Stddev	.0002	.0001	.0001	.0001	.0014	.0001	.0000
%RSD	.7110	22.27	18.76	5.882	667.7	101.2	11.82
#1	.0256	-.0003	.0003	-.0012	.0012	.0000	.0004
#2	.0259	-.0005	.0004	-.0011	.0008	-.0002	.0004
#3	.0258	-.0004	.0003	-.0012	-.0014	-.0002	.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3458.8	6767.1	59341.	4911.8
Stddev	7.5	4.5	76.	13.5
%RSD	.21598	.06683	.12800	.27479
#1	3454.4	6766.1	59318.	4904.1
#2	3454.5	6772.0	59425.	4927.4
#3	3467.4	6763.1	59279.	4904.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 13:36:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2602	41.78	1.975	2.119	2.030	40.14	2.017	2.045	2.045	2.063
Stddev	.0012	.77	.029	.037	.042	.81	.026	.027	.001	.006
%RSD	.4788	1.847	1.458	1.764	2.061	2.015	1.289	1.319	.0252	.2836
#1	.2588	42.35	1.971	2.150	2.058	40.68	2.016	2.044	2.045	2.057
#2	.2605	42.09	1.949	2.128	2.051	40.54	1.992	2.018	2.045	2.063
#3	.2612	40.90	2.006	2.077	1.982	39.21	2.044	2.072	2.046	2.068
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.37	40.88	42.35	2.044	2.041	41.20	1.995	2.002	1.984	2.007
Stddev	.84	.83	.75	.009	.030	.82	.029	.030	.028	.023
%RSD	2.026	2.037	1.767	.4422	1.483	1.993	1.442	1.501	1.405	1.142
#1	41.98	41.64	42.96	2.033	2.037	41.82	1.991	2.002	1.985	2.005
#2	41.72	41.03	42.58	2.050	2.013	41.52	1.969	1.971	1.956	1.984
#3	40.42	39.99	41.51	2.048	2.073	40.27	2.026	2.031	2.012	2.030
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.809	2.081	2.036	2.029	2.025	1.957	1.983
Stddev	.025	.029	.042	.004	.024	.006	.027
%RSD	1.402	1.372	2.051	.2169	1.163	.3283	1.358
#1	1.805	2.082	2.066	2.025	2.026	1.956	1.976
#2	1.786	2.051	2.054	2.033	2.001	1.964	1.960
#3	1.836	2.108	1.988	2.029	2.048	1.951	2.012
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 13:36:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2964.3	6416.9	55685.	4876.2
Stddev	37.7	81.0	91.	66.4
%RSD	1.2716	1.2626	.16259	1.3616
#1	2962.6	6423.8	55630.	4807.7
#2	3002.9	6494.2	55636.	4880.8
#3	2927.5	6332.6	55790.	4940.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 13:40:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0199	.0003	.0008	.0007	.0158	.0009	.0009	.0009
Stddev	.0002	.0135	.0005	.0002	.0001	.0037	.0002	.0001	.0001
%RSD	73.99	67.83	172.9	23.54	11.27	23.32	23.23	11.27	11.55
#1	.0002	.0044	.0007	.0010	.0008	.0134	.0007	.0008	.0010
#2	.0005	.0285	.0002	.0009	.0007	.0200	.0011	.0009	.0009
#3	.0001	.0269	-.0002	.0006	.0007	.0139	.0009	.0009	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0268	.1503	-.0160	.0008	F.0029	.0360	.0009	F.0011
Stddev	.0004	.0065	.0118	.0181	.0001	.0015	.0115	.0002	.0004
%RSD	96.28	24.26	7.880	113.5	7.397	52.82	31.88	23.14	31.86
#1	.0000	.0340	.1388	-.0327	.0007	.0044	.0231	.0007	.0011
#2	.0004	.0251	.1497	-.0184	.0008	.0030	.0449	.0011	.0008
#3	.0007	.0213	.1625	.0033	.0007	.0013	.0401	.0009	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	F.0020	.0016	.0009	.0008	.0017	.0018	.0005	.0007
Stddev	.0004	.0012	.0006	.0002	.0000	.0001	.0011	.0001	.0002
%RSD	27.94	61.40	38.69	19.71	5.107	8.375	57.57	17.56	22.21
#1	.0015	.0030	.0012	.0009	.0008	.0019	.0029	.0004	.0006
#2	.0019	.0024	.0023	.0010	.0007	.0017	.0019	.0006	.0009
#3	.0011	.0006	.0013	.0007	.0008	.0016	.0008	.0005	.0007
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 13:40:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3453.5	6762.8	58898.	4882.5
Stddev	21.1	52.0	211.	24.0
%RSD	.61059	.76827	.35794	.49130
#1	3453.7	6773.5	58762.	4899.5
#2	3432.3	6706.4	58792.	4855.0
#3	3474.5	6808.6	59141.	4892.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:04:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2504	40.33	1.987	2.024	2.006	39.93	2.011	2.017	2.001	2.001
Stddev	.0009	.19	.008	.012	.009	.20	.007	.006	.002	.007
%RSD	.3429	.4604	.4073	.5743	.4654	.4904	.3436	.3107	.1108	.3718
#1	.2497	40.11	1.978	2.011	1.995	39.70	2.004	2.010	2.003	1.993
#2	.2501	40.42	1.989	2.033	2.013	40.05	2.013	2.018	2.002	2.001
#3	.2513	40.45	1.994	2.027	2.009	40.03	2.017	2.022	1.999	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	40.18	40.81	2.025	2.023	40.29	2.003	1.973	1.994	2.001
Stddev	.16	.13	.12	.006	.006	.18	.009	.007	.010	.009
%RSD	.3883	.3121	.2880	.2895	.2919	.4581	.4338	.3658	.5124	.4760
#1	40.48	40.07	40.78	2.018	2.017	40.08	1.994	1.966	1.983	1.990
#2	40.78	40.31	40.94	2.029	2.024	40.40	2.006	1.972	1.996	2.005
#3	40.71	40.15	40.71	2.027	2.028	40.39	2.010	1.980	2.003	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.817	2.026	2.008	2.018	1.999	1.948	1.996
Stddev	.009	.006	.011	.006	.001	.006	.009
%RSD	.4805	.3092	.5360	.3197	.0459	.3165	.4532
#1	1.808	2.022	1.995	2.012	1.999	1.942	1.986
#2	1.818	2.024	2.015	2.018	1.999	1.948	1.998
#3	1.825	2.033	2.013	2.025	2.000	1.955	2.003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:04:54 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2975.0	6453.0	56137.	4826.7
Stddev	9.0	22.2	170.	17.8
%RSD	.30130	.34422	.30261	.36921
#1	2984.4	6477.5	55953.	4812.2
#2	2974.3	6447.2	56168.	4821.3
#3	2966.5	6434.2	56288.	4846.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 14:11:25 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0127	.0004	.0004	.0003	.0078	.0001	.0001	-.0001
Stddev	.0005	.0059	.0000	.0001	.0001	.0045	.0002	.0002	.0002
%RSD	546.5	46.13	5.047	33.59	16.05	57.73	387.3	262.3	132.5
#1	.0003	.0122	.0004	.0003	.0004	.0030	-.0001	-.0001	.0000
#2	.0004	.0188	.0004	.0005	.0004	.0119	.0000	.0001	-.0003
#3	-.0005	.0071	.0004	.0003	.0003	.0086	.0003	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0226	.1381	.0084	.0001	F.0067	.0378	.0000	.0002
Stddev	.0002	.0024	.0402	.0072	.0000	.0018	.0040	.0002	.0010
%RSD	126.2	10.72	29.11	86.17	22.12	26.22	10.67	738.5	398.5
#1	.0002	.0241	.1784	.0066	.0001	.0085	.0419	-.0002	-.0008
#2	.0002	.0239	.0980	.0164	.0001	.0065	.0377	.0001	.0010
#3	-.0001	.0198	.1377	.0022	.0001	.0050	.0338	.0002	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0006	-.0001	.0009	.0003	F.0027	.0007	.0000	.0000
Stddev	.0003	.0014	.0002	.0003	.0000	.0002	.0004	.0002	.0002
%RSD	25.31	243.7	289.0	36.01	9.819	5.665	52.82	642.9	563.8
#1	.0009	-.0010	-.0003	.0012	.0003	.0028	.0011	.0003	-.0001
#2	.0015	.0009	.0002	.0010	.0003	.0026	.0006	-.0002	.0000
#3	.0010	.0018	-.0001	.0005	.0003	.0025	.0004	.0001	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 14:11:25 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3478.9	6754.4	58960.	4938.1
Stddev	46.5	100.1	53.	26.2
%RSD	1.3380	1.4815	.08960	.53141
#1	3456.6	6694.3	58905.	4960.9
#2	3447.8	6698.9	58963.	4943.9
#3	3532.4	6869.9	59011.	4909.4

Zoom In Zoom Out

Sample Name: MP28549-MB1 Acquired: 2/12/2015 14:50:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0047	-.0013	-.0001	-.0003	.0330	-.0007	-.0007	-.0001	-.0004
Stddev	.0006	.0032	.0003	.0002	.0000	.0041	.0000	.0001	.0002	.0001
%RSD	172.6	68.69	21.02	149.4	16.72	12.41	3.478	10.92	187.7	21.31
#1	-.0010	.0080	-.0015	.0001	-.0003	.0376	-.0007	-.0008	-.0001	-.0003
#2	-.0001	.0046	-.0014	-.0003	-.0003	.0301	-.0007	-.0007	.0001	-.0005
#3	.0001	.0015	-.0010	-.0002	-.0002	.0311	-.0007	-.0007	-.0004	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0161	.1446	-.0147	-.0001	-.0009	.0442	-.0007	-.0006	-.0007	-.0006
Stddev	.0015	.0098	.0033	.0000	.0000	.0017	.0002	.0006	.0002	.0005
%RSD	9.054	6.787	22.19	36.60	1.177	3.850	24.32	95.89	21.47	94.51
#1	.0151	.1488	-.0128	-.0001	-.0009	.0461	-.0008	-.0008	-.0009	-.0004
#2	.0177	.1333	-.0185	-.0001	-.0009	.0428	-.0005	-.0011	-.0006	-.0002
#3	.0154	.1515	-.0129	-.0002	-.0009	.0438	-.0009	.0001	-.0007	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0143	.0232	-.0001	-.0001	.0007	-.0007	.0010
Stddev	.0002	.0002	.0000	.0001	.0008	.0003	.0000
%RSD	1.210	1.041	39.61	49.06	111.9	42.88	3.251
#1	.0141	.0229	-.0001	-.0001	.0000	-.0004	.0010
#2	.0143	.0233	-.0001	-.0002	.0006	-.0010	.0010
#3	.0144	.0233	-.0001	-.0001	.0016	-.0006	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28549-MB1 Acquired: 2/12/2015 14:50:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3526.9	6922.8	60629.	4983.5
Stddev	7.5	14.4	173.	20.6
%RSD	.21282	.20769	.28521	.41419
#1	3533.8	6937.5	60744.	5005.5
#2	3518.9	6908.8	60712.	4964.6
#3	3528.0	6921.9	60430.	4980.3

Zoom In Zoom Out

Sample Name: MP28549-B1 Acquired: 2/12/2015 14:55:12 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0488	28.25	2.039	2.142	.0536	25.86	.0507	.5217	.2146	.2661
Stddev	.0004	.13	.009	.015	.0001	.09	.0001	.0005	.0008	.0001
%RSD	.7971	.4643	.4299	.6833	.2568	.3506	.2376	.0930	.3545	.0527
#1	.0485	28.38	2.049	2.149	.0538	25.96	.0506	.5221	.2144	.2660
#2	.0492	28.25	2.036	2.151	.0535	25.79	.0506	.5212	.2139	.2662
#3	.0486	28.11	2.032	2.125	.0535	25.82	.0508	.5217	.2154	.2660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.32	26.21	26.18	.5273	.5081	26.31	.5273	.4995	.4940	2.024
Stddev	.07	.13	.15	.0002	.0009	.10	.0004	.0021	.0004	.004
%RSD	.2695	.4871	.5726	.0444	.1698	.3779	.0827	.4270	.0734	.1734
#1	27.40	26.35	26.33	.5272	.5084	26.39	.5277	.5013	.4936	2.027
#2	27.31	26.17	26.16	.5272	.5088	26.34	.5269	.4971	.4943	2.021
#3	27.25	26.10	26.03	.5276	.5072	26.19	.5273	.5001	.4943	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106	.5566	.5199	.5222	2.002	.4973	.5177
Stddev	.0005	.0022	.0017	.0012	.002	.0021	.0012
%RSD	4.496	.3883	.3233	.2345	.1123	.4300	.2381
#1	.0100	.5585	.5219	.5235	1.999	.4981	.5179
#2	.0108	.5542	.5191	.5219	2.003	.4989	.5164
#3	.0109	.5570	.5188	.5211	2.002	.4949	.5188
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28549-B1 Acquired: 2/12/2015 14:55:12 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3145.4	6639.0	57678.	4874.2
Stddev	4.3	2.6	78.	44.0
%RSD	.13825	.03980	.13576	.90286
#1	3143.9	6636.0	57767.	4828.6
#2	3150.3	6640.4	57649.	4916.5
#3	3142.0	6640.7	57618.	4877.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:59:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2501	40.04	1.942	2.011	1.982	39.36	1.979	1.991	1.988	1.985
Stddev	.0028	.60	.030	.027	.030	.61	.031	.031	.013	.012
%RSD	1.107	1.491	1.554	1.362	1.529	1.547	1.545	1.539	.6363	.5916
#1	.2482	40.61	1.930	2.038	2.012	39.98	1.964	1.976	1.982	1.986
#2	.2488	39.41	1.976	1.983	1.951	38.76	2.015	2.026	1.979	1.974
#3	.2532	40.09	1.919	2.012	1.984	39.36	1.960	1.971	2.002	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.17	39.83	40.49	1.986	1.981	40.07	1.968	1.948	1.952	1.959
Stddev	.56	.39	.45	.009	.032	.57	.031	.031	.031	.033
%RSD	1.382	.9812	1.117	.4636	1.604	1.422	1.584	1.579	1.565	1.675
#1	40.70	40.27	40.96	1.981	1.964	40.66	1.953	1.930	1.942	1.944
#2	39.59	39.52	40.05	1.981	2.017	39.53	2.004	1.983	1.987	1.996
#3	40.21	39.70	40.46	1.997	1.961	40.01	1.948	1.930	1.928	1.936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.777	2.007	1.982	1.992	1.971	1.921	1.956
Stddev	.027	.030	.030	.013	.034	.013	.030
%RSD	1.522	1.489	1.524	.6720	1.699	.6812	1.537
#1	1.769	1.990	2.011	1.985	1.954	1.917	1.940
#2	1.808	2.042	1.951	1.983	2.009	1.911	1.991
#3	1.755	1.990	1.984	2.007	1.949	1.936	1.937
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 14:59:26 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2998.2	6548.9	56541.	4827.3
Stddev	41.8	83.8	428.	36.2
%RSD	1.3946	1.2801	.75649	.74997
#1	3020.4	6590.4	56907.	4797.4
#2	2950.0	6452.4	56646.	4817.0
#3	3024.2	6603.8	56071.	4867.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 15:03:45 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0091	.0001	.0003	.0005	.0142	.0004	.0004	.0002
Stddev	.0004	.0090	.0011	.0002	.0001	.0086	.0003	.0003	.0000
%RSD	1779.	99.72	835.2	58.58	13.35	60.92	81.84	65.72	17.97
#1	.0004	.0066	-.0010	.0005	.0004	.0114	.0001	.0002	.0003
#2	-.0002	.0191	.0011	.0003	.0005	.0238	.0007	.0007	.0002
#3	-.0002	.0015	.0003	.0001	.0004	.0073	.0004	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0307	.1745	-.0037	.0003	F.0054	.0430	.0003	.0008
Stddev	.0004	.0060	.0781	.0090	.0000	.0016	.0133	.0002	.0005
%RSD	786.8	19.46	44.75	245.6	1.470	29.72	30.97	77.09	60.77
#1	-.0004	.0359	.1017	-.0049	.0003	.0070	.0549	.0001	.0006
#2	.0005	.0322	.1647	.0059	.0003	.0053	.0286	.0006	.0013
#3	.0001	.0242	.2569	-.0121	.0003	.0038	.0456	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0022	-.0014	.0002	.0010	.0006	F.0026	F.0028	.0003	.0003
Stddev	.0008	.0006	.0003	.0000	.0001	.0002	.0005	.0003	.0003
%RSD	34.92	40.93	171.8	4.571	19.50	8.124	16.44	109.0	113.4
#1	.0023	-.0008	.0001	.0009	.0006	.0028	.0023	.0006	.0000
#2	.0029	-.0019	-.0001	.0010	.0007	.0025	.0029	.0004	.0006
#3	.0014	-.0014	.0006	.0010	.0005	.0024	.0032	-.0001	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit	.0020					.0020	.0020		
Low Limit	-.0020					-.0020	-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 15:03:45 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3486.9	6876.4	59898.	4878.2
Stddev	18.2	28.1	365.	33.3
%RSD	.52329	.40822	.60948	.68188
#1	3466.7	6845.0	59498.	4879.8
#2	3502.1	6899.0	60214.	4844.1
#3	3491.9	6885.3	59982.	4910.6

Zoom In Zoom Out

Sample Name: FA22009-2 Acquired: 2/12/2015 15:08:14 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	126.4	.0841	.0214	.0004	.2802	-.0008	.0007	.1983	.0048
Stddev	.0002	1.9	.0015	.0005	.0001	.0040	.0000	.0002	.0013	.0001
%RSD	122.0	1.509	1.831	2.364	16.53	1.410	4.737	21.52	.6615	2.118
#1	-.0001	125.7	.0830	.0208	.0005	.2794	-.0008	.0006	.1970	.0047
#2	.0004	124.9	.0834	.0216	.0004	.2768	-.0008	.0007	.1996	.0047
#3	.0002	128.5	.0858	.0218	.0004	.2845	-.0008	.0009	.1984	.0049

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.514	.2556	.3019	.0025	.0024	.0902	.0222	.0804	-.0002	.0036
Stddev	.115	.0207	.0124	.0000	.0002	.0051	.0004	.0020	.0004	.0003
%RSD	1.767	8.102	4.109	.5493	7.107	5.638	1.763	2.537	161.1	7.350
#1	6.455	.2389	.2939	.0025	.0022	.0937	.0218	.0781	.0001	.0035
#2	6.440	.2492	.3162	.0025	.0023	.0844	.0222	.0815	-.0002	.0040
#3	6.646	.2788	.2955	.0024	.0025	.0925	.0225	.0817	-.0006	.0035

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.060	.0219	.0533	.6631	-.0006	.0524	.0018
Stddev	.017	.0004	.0008	.0049	.0007	.0006	.0000
%RSD	1.556	1.954	1.541	.7450	119.3	1.149	2.111
#1	1.047	.0214	.0530	.6581	-.0011	.0517	.0018
#2	1.053	.0221	.0527	.6680	.0002	.0527	.0017
#3	1.078	.0223	.0542	.6631	-.0010	.0527	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3298.0	7097.9	60121.	5024.5
Stddev	46.3	89.2	394.	107.7
%RSD	1.4033	1.2572	.65480	2.1429
#1	3337.6	7173.9	60387.	5057.6
#2	3309.2	7120.1	59668.	5111.7
#3	3247.1	6999.7	60306.	4904.1

Zoom In Zoom Out

Sample Name: MP28549-D1 Acquired: 2/12/2015 15:12:36 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	121.6	.0784	.0212	.0004	.3097	-.0006	.0009	.1896	.0058
Stddev	.0003	.4	.0016	.0003	.0001	.0028	.0001	.0001	.0007	.0001
%RSD	242.9	.3367	2.011	1.518	15.60	.9181	14.63	14.54	.3545	2.494
#1	.0002	121.2	.0783	.0215	.0003	.3129	-.0007	.0008	.1899	.0057
#2	-.0001	121.6	.0769	.0209	.0004	.3075	-.0006	.0009	.1900	.0057
#3	-.0004	122.1	.0801	.0212	.0004	.3088	-.0006	.0011	.1888	.0059

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.937	.3734	.3348	.0027	.0020	.2895	.0253	.0798	.0004	.0016
Stddev	.021	.0332	.0206	.0000	.0002	.0127	.0004	.0016	.0009	.0018
%RSD	.3552	8.880	6.148	1.226	7.343	4.388	1.744	2.066	236.7	117.9
#1	5.919	.3825	.3290	.0027	.0021	.3008	.0254	.0815	.0008	.0036
#2	5.933	.4011	.3178	.0027	.0019	.2757	.0248	.0782	-.0006	.0010
#3	5.960	.3367	.3577	.0027	.0022	.2921	.0257	.0799	.0010	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.216	.0218	.0520	.6356	-.0007	.0497	.0032
Stddev	.018	.0003	.0005	.0020	.0010	.0004	.0001
%RSD	1.465	1.277	1.011	.3181	140.7	.7103	2.574
#1	1.226	.0220	.0516	.6358	-.0018	.0499	.0032
#2	1.196	.0215	.0518	.6375	-.0003	.0499	.0031
#3	1.227	.0220	.0526	.6335	.0000	.0493	.0033

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3299.3	7073.3	60428.	5103.9
Stddev	43.2	93.0	259.	25.1
%RSD	1.3088	1.3143	.42868	.49176
#1	3268.6	7019.4	60416.	5093.5
#2	3348.7	7180.6	60175.	5132.5
#3	3280.6	7019.8	60693.	5085.7

Zoom In Zoom Out

Sample Name: MP28549-SD1 Acquired: 2/12/2015 15:16:58 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	130.0	.0853	.0214	-.0007	.8472	-.0038	-.0022	.2056	.0066
Stddev	.0017	.2	.0043	.0011	.0001	.0126	.0001	.0005	.0019	.0013
%RSD	618.3	.1581	5.037	4.981	9.575	1.482	2.807	20.97	.9058	19.07
#1	.0023	130.1	.0886	.0210	-.0007	.8330	-.0036	-.0024	.2064	.0060
#2	-.0009	130.1	.0869	.0226	-.0008	.8517	-.0039	-.0024	.2035	.0081
#3	-.0005	129.8	.0805	.0206	-.0006	.8569	-.0038	-.0016	.2070	.0058

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.596	.9157	.3414	.0013	-.0028	.9513	.0227	.0819	-.0055	-.0087
Stddev	.019	.0633	.1701	.0001	.0002	.0260	.0002	.0010	.0050	.0041
%RSD	.2843	6.908	49.82	6.070	7.759	2.729	.9469	1.259	91.32	46.80
#1	6.588	.9537	.2801	.0014	-.0026	.9705	.0226	.0808	-.0084	-.0134
#2	6.583	.9507	.5336	.0013	-.0029	.9218	.0230	.0828	.0003	-.0067
#3	6.617	.8426	.2104	.0013	-.0030	.9616	.0226	.0820	-.0083	-.0060

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.146	.0201	.0543	.6961	-.0010	.0527	.0075
Stddev	.009	.0007	.0001	.0025	.0019	.0003	.0002
%RSD	.8119	3.358	.1456	.3619	189.4	.6424	2.236
#1	1.146	.0193	.0543	.6954	-.0018	.0531	.0075
#2	1.155	.0202	.0543	.6940	.0012	.0524	.0076
#3	1.137	.0206	.0544	.6989	-.0025	.0527	.0073

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3439.6	6946.4	59658.	4960.5
Stddev	7.6	25.6	188.	17.0
%RSD	.22176	.36919	.31468	.34304
#1	3439.7	6958.9	59821.	4976.4
#2	3432.0	6916.9	59701.	4942.5
#3	3447.2	6963.4	59452.	4962.5

Zoom In Zoom Out

Sample Name: MP28549-PS1 Acquired: 2/12/2015 15:21:24 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0479	121.0	.1770	.2752	.0503	5.205	.0480	.0502	.2390	.1054
Stddev	.0000	.4	.0006	.0017	.0002	.033	.0000	.0001	.0005	.0003
%RSD	.0501	.3576	.3112	.6333	.4439	.6415	.0231	.1906	.1886	.2771
#1	.0480	121.5	.1765	.2770	.0504	5.239	.0480	.0503	.2393	.1051
#2	.0479	120.8	.1769	.2735	.0500	5.205	.0480	.0501	.2384	.1057
#3	.0479	120.8	.1776	.2751	.0504	5.172	.0480	.0502	.2392	.1055

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.971	9.848	5.028	.0530	.0977	10.45	.1206	.1281	.0939	.0946
Stddev	.037	.054	.030	.0001	.0001	.04	.0004	.0009	.0006	.0014
%RSD	.4148	.5479	.6014	.2633	.0558	.3924	.3144	.6989	.5902	1.490
#1	9.011	9.910	5.018	.0530	.0977	10.49	.1209	.1289	.0942	.0932
#2	8.967	9.823	5.061	.0528	.0977	10.41	.1206	.1283	.0932	.0945
#3	8.937	9.810	5.003	.0531	.0976	10.44	.1202	.1272	.0942	.0960

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.036	.0697	.0980	.7277	.0960	.0958	.2430
Stddev	.000	.0003	.0005	.0014	.0009	.0006	.0004
%RSD	.0367	.3819	.5100	.1988	.9354	.6049	.1578
#1	1.037	.0695	.0985	.7285	.0952	.0965	.2434
#2	1.036	.0700	.0979	.7261	.0970	.0957	.2427
#3	1.037	.0697	.0976	.7287	.0959	.0954	.2428

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3215.0	7049.1	60365.	5065.7
Stddev	3.4	7.4	232.	43.5
%RSD	.10581	.10567	.38367	.85956
#1	3218.8	7056.0	60190.	5015.4
#2	3212.1	7050.3	60627.	5091.8
#3	3214.1	7041.2	60276.	5089.8

Zoom In Zoom Out

Sample Name: MP28549-S1 Acquired: 2/12/2015 15:25:41 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0480	164.3	1.948	2.136	.0522	25.16	.0464	.4861	.4175	.2653
Stddev	.0006	.2	.035	.003	.0003	.01	.0009	.0095	.0011	.0009
%RSD	1.268	.0954	1.823	.1389	.5825	.0484	1.979	1.953	.2751	.3523
#1	.0478	164.5	1.960	2.139	.0520	25.15	.0467	.4901	.4185	.2658
#2	.0486	164.2	1.908	2.137	.0525	25.16	.0453	.4752	.4178	.2659
#3	.0475	164.2	1.976	2.133	.0520	25.17	.0471	.4929	.4162	.2642

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	33.58	25.71	25.99	.5033	.4479	25.92	.5107	.5833	.2052	1.862
Stddev	.07	.02	.12	.0014	.0086	.01	.0095	.0105	.0047	.034
%RSD	.2008	.0916	.4429	.2789	1.911	.0565	1.863	1.804	2.276	1.829
#1	33.65	25.73	26.12	.5031	.4513	25.93	.5143	.5890	.2058	1.871
#2	33.53	25.68	25.90	.5048	.4382	25.94	.5000	.5712	.2003	1.824
#3	33.54	25.72	25.94	.5020	.4542	25.91	.5179	.5898	.2096	1.891

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.434	.5040	.5686	.9877	1.935	.5238	.4766
Stddev	.027	.0110	.0016	.0006	.031	.0010	.0087
%RSD	1.914	2.184	.2771	.0601	1.607	.1860	1.821
#1	1.447	.5078	.5704	.9871	1.946	.5248	.4801
#2	1.403	.4916	.5674	.9883	1.900	.5236	.4667
#3	1.453	.5127	.5681	.9877	1.960	.5229	.4829

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3094.3	7035.1	59121.	5044.6
Stddev	46.4	114.0	195.	6.1
%RSD	1.5000	1.6204	.32905	.12155
#1	3077.6	6991.0	58926.	5039.5
#2	3146.7	7164.6	59124.	5043.0
#3	3058.5	6949.8	59315.	5051.4

Zoom In Zoom Out

Sample Name: MP28549-S2 Acquired: 2/12/2015 15:29:54 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0479	151.2	1.937	2.117	.0519	25.14	.0464	.4853	.3977	.2661
Stddev	.0007	.6	.017	.009	.0006	.10	.0004	.0043	.0026	.0013
%RSD	1.421	.4023	.8672	.4240	1.129	.3968	.8489	.8763	.6440	.4960
#1	.0476	151.5	1.924	2.117	.0522	25.25	.0461	.4817	.3957	.2655
#2	.0474	151.6	1.931	2.126	.0523	25.09	.0463	.4842	.3968	.2652
#3	.0487	150.5	1.956	2.108	.0513	25.08	.0468	.4900	.4006	.2676

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	32.64	25.69	25.88	.5063	.4494	25.72	.5089	.5728	.2144	1.862
Stddev	.13	.04	.13	.0022	.0044	.12	.0045	.0060	.0014	.016
%RSD	.3981	.1521	.4940	.4324	.9705	.4485	.8906	1.056	.6694	.8594
#1	32.75	25.72	25.74	.5047	.4458	25.75	.5057	.5668	.2129	1.852
#2	32.67	25.70	25.98	.5054	.4480	25.81	.5070	.5726	.2145	1.855
#3	32.50	25.64	25.93	.5088	.4542	25.59	.5141	.5789	.2158	1.881

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.443	.5031	.5578	.9436	1.935	.5228	.4767
Stddev	.013	.0036	.0019	.0032	.018	.0024	.0032
%RSD	.8786	.7134	.3322	.3421	.9571	.4548	.6689
#1	1.433	.5000	.5587	.9408	1.918	.5212	.4739
#2	1.438	.5023	.5591	.9430	1.932	.5216	.4759
#3	1.457	.5070	.5557	.9471	1.954	.5255	.4801

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3097.2	7004.8	58615.	5052.8
Stddev	26.6	51.2	291.	37.9
%RSD	.85803	.73052	.49616	.74909
#1	3118.5	7045.1	58861.	5014.9
#2	3105.6	7022.1	58690.	5052.9
#3	3067.4	6947.2	58294.	5090.6

Zoom In Zoom Out

Sample Name: FA22009-5 Acquired: 2/12/2015 15:34:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	150.1	.3578	.0275	.0005	.5412	-.0008	.0013	.1795	.0023
Stddev	.0003	.1	.0023	.0001	.0001	.0052	.0000	.0001	.0011	.0002
%RSD	170.5	.0775	.6335	.4649	23.54	.9670	2.109	4.483	.6089	8.820
#1	.0002	150.2	.3551	.0277	.0004	.5448	-.0008	.0013	.1807	.0022
#2	-.0005	150.1	.3590	.0274	.0004	.5437	-.0008	.0014	.1787	.0022
#3	-.0003	150.0	.3591	.0276	.0006	.5352	-.0008	.0013	.1790	.0025

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.414	.4417	.4162	.0063	.0034	.2155	.0314	.0586	.0019	.0055
Stddev	.032	.0596	.0069	.0000	.0002	.0126	.0003	.0007	.0010	.0016
%RSD	.3351	13.50	1.669	.4520	4.896	5.864	.8070	1.195	52.30	29.56
#1	9.445	.3862	.4107	.0063	.0034	.2011	.0312	.0587	.0029	.0040
#2	9.382	.5047	.4138	.0063	.0035	.2249	.0315	.0578	.0019	.0072
#3	9.416	.4341	.4240	.0064	.0032	.2205	.0317	.0592	.0009	.0052

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.191	.0213	.0440	.7637	.0033	.0688	.0045
Stddev	.004	.0005	.0002	.0025	.0011	.0003	.0000
%RSD	.2938	2.180	.5343	.3214	34.34	.3807	.6809
#1	1.189	.0208	.0439	.7664	.0045	.0691	.0044
#2	1.189	.0215	.0438	.7617	.0028	.0686	.0045
#3	1.195	.0217	.0442	.7629	.0025	.0687	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3284.2	7068.7	60429.	5137.8
Stddev	2.5	19.3	113.	10.0
%RSD	.07563	.27349	.18771	.19371
#1	3282.6	7083.7	60306.	5132.9
#2	3283.0	7075.4	60530.	5149.3
#3	3287.1	7046.9	60451.	5131.3

Zoom In Zoom Out

Sample Name: FA22009-6 Acquired: 2/12/2015 15:38:28 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	127.4	.3097	.0247	.0004	.3642	-.0009	.0007	.1541	.0026
Stddev	.0001	.4	.0007	.0003	.0001	.0013	.0000	.0001	.0001	.0001
%RSD	154.0	.3268	.2195	1.375	25.19	.3488	4.391	16.82	.0572	3.473
#1	.0002	126.9	.3090	.0246	.0003	.3656	-.0009	.0008	.1541	.0027
#2	-.0001	127.6	.3104	.0251	.0005	.3640	-.0009	.0008	.1541	.0025
#3	.0001	127.7	.3096	.0244	.0004	.3631	-.0010	.0006	.1540	.0027

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.08	.2933	.3841	.0054	.0026	.1298	.0271	.0491	-.0001	.0038
Stddev	.04	.0125	.0148	.0000	.0001	.0096	.0001	.0010	.0006	.0008
%RSD	.3128	4.266	3.851	.8522	2.230	7.423	.2830	2.125	535.9	20.17
#1	12.05	.2812	.3794	.0054	.0026	.1349	.0272	.0488	-.0005	.0043
#2	12.08	.2925	.4007	.0054	.0026	.1187	.0271	.0483	.0006	.0029
#3	12.12	.3061	.3723	.0053	.0027	.1359	.0270	.0503	-.0005	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.184	.0213	.0383	.7326	.0004	.0750	.0052
Stddev	.005	.0004	.0001	.0010	.0003	.0002	.0000
%RSD	.4156	1.947	.3754	.1387	57.79	.2775	.6883
#1	1.190	.0216	.0383	.7335	.0002	.0752	.0052
#2	1.183	.0213	.0382	.7328	.0006	.0750	.0051
#3	1.180	.0208	.0385	.7315	.0005	.0748	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3285.4	7003.1	60052.	5064.4
Stddev	9.1	20.1	115.	6.2
%RSD	.27645	.28638	.19175	.12242
#1	3277.8	6981.8	60184.	5071.5
#2	3295.4	7005.7	59974.	5059.9
#3	3283.0	7021.6	59999.	5061.8

Zoom In Zoom Out

Sample Name: FA22009-9 Acquired: 2/12/2015 15:42:48 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	172.4	.1890	.0395	.0001	.3855	-.0008	-.0001	.1642	.0103
Stddev	.0002	.3	.0010	.0004	.0001	.0059	.0000	.0001	.0010	.0002
%RSD	34.75	.1746	.5082	.8943	57.95	1.536	5.716	152.4	.5843	1.587
#1	-.0009	172.2	.1899	.0395	.0002	.3844	-.0008	-.0001	.1639	.0104
#2	-.0005	172.3	.1892	.0392	.0001	.3919	-.0008	.0001	.1634	.0101
#3	-.0005	172.7	.1880	.0399	.0001	.3802	-.0009	-.0002	.1652	.0103

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.598	.3252	.9394	.0040	.0054	.1474	.0095	.1062	.0001	.0089
Stddev	.003	.0735	.0274	.0000	.0001	.0063	.0001	.0003	.0009	.0004
%RSD	.1128	22.59	2.916	.5923	1.350	4.284	1.165	.3060	614.8	4.408
#1	2.599	.3268	.9673	.0040	.0055	.1543	.0096	.1065	.0001	.0089
#2	2.600	.3978	.9125	.0040	.0053	.1420	.0094	.1061	.0010	.0084
#3	2.594	.2509	.9386	.0040	.0054	.1458	.0095	.1059	-.0007	.0092

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.510	.0173	.1116	.8348	.0005	.0370	.0037
Stddev	.004	.0004	.0004	.0020	.0011	.0002	.0001
%RSD	.2416	2.200	.3211	.2438	208.6	.4587	2.269
#1	1.514	.0174	.1116	.8355	.0006	.0371	.0036
#2	1.511	.0168	.1113	.8324	.0015	.0369	.0037
#3	1.506	.0175	.1120	.8363	-.0006	.0368	.0038

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3245.1	7125.9	60163.	5053.5
Stddev	9.1	4.3	247.	22.1
%RSD	.27956	.06015	.41030	.43714
#1	3248.4	7130.7	60252.	5037.1
#2	3252.1	7124.6	60354.	5044.7
#3	3234.9	7122.4	59884.	5078.6

Sample Name: FA22009-12 Acquired: 2/12/2015 15:47:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	13.24	.0050	.0142	-.0002	1.414	-.0007	-.0004	.0191	.0038
Stddev	.0003	.03	.0003	.0001	.0001	.007	.0000	.0001	.0000	.0002
%RSD	403.7	.2167	6.558	1.045	31.92	.5111	6.810	14.80	.1358	4.434
#1	.0003	13.26	.0051	.0143	-.0003	1.416	-.0008	-.0005	.0190	.0040
#2	-.0003	13.25	.0046	.0140	-.0001	1.405	-.0007	-.0004	.0191	.0037
#3	-.0001	13.21	.0052	.0142	-.0002	1.419	-.0007	-.0004	.0191	.0037

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.406	.0856	.5587	.0070	.0007	.1583	.0010	.0310	.0004	.0031
Stddev	.005	.0378	.0246	.0000	.0001	.0179	.0000	.0005	.0003	.0007
%RSD	.3944	44.15	4.396	.3865	10.98	11.34	4.367	1.759	70.41	24.00
#1	1.412	.1277	.5595	.0070	.0008	.1559	.0010	.0306	.0005	.0025
#2	1.402	.0742	.5828	.0070	.0006	.1773	.0009	.0316	.0001	.0039
#3	1.403	.0548	.5337	.0069	.0007	.1417	.0010	.0308	.0006	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1180	.0203	.0351	.5610	-.0011	.0073	.0017
Stddev	.0004	.0000	.0002	.0018	.0004	.0003	.0000
%RSD	.3258	.2141	.6284	.3215	40.71	4.051	.3724
#1	.1178	.0204	.0352	.5627	-.0014	.0075	.0017
#2	.1179	.0203	.0349	.5612	-.0012	.0074	.0017
#3	.1185	.0203	.0353	.5591	-.0006	.0069	.0017

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3445.9	6982.6	61056.	4991.8
Stddev	2.5	8.8	212.	8.7
%RSD	.07198	.12552	.34797	.17360
#1	3448.6	6989.3	60929.	4981.9
#2	3445.6	6985.8	60938.	4997.9
#3	3443.7	6972.6	61301.	4995.7

Sample Name: CCV Acquired: 2/12/2015 15:51:31 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2515	40.91	1.956	2.066	1.999	39.67	1.979	2.001	1.997	2.024
Stddev	.0009	.09	.018	.001	.007	.17	.016	.016	.004	.003
%RSD	.3630	.2140	.8987	.0527	.3478	.4242	.7948	.7825	.1977	.1445
#1	.2525	40.83	1.944	2.068	1.993	39.48	1.972	1.992	2.000	2.020
#2	.2512	41.00	1.976	2.066	2.007	39.80	1.997	2.019	1.993	2.026
#3	.2507	40.89	1.947	2.066	1.998	39.74	1.969	1.992	1.999	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.83	40.49	41.28	1.998	1.999	40.72	1.960	1.953	1.963	1.976
Stddev	.13	.04	.28	.006	.017	.11	.014	.023	.013	.014
%RSD	.3214	.1010	.6839	.3100	.8301	.2734	.7304	1.168	.6614	.6897
#1	40.71	40.52	40.97	2.002	1.988	40.59	1.951	1.943	1.951	1.968
#2	40.97	40.44	41.51	1.990	2.018	40.79	1.977	1.979	1.977	1.992
#3	40.82	40.49	41.37	2.001	1.991	40.77	1.953	1.937	1.960	1.969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.787	2.023	1.999	1.991	1.965	1.930	1.945
Stddev	.012	.018	.003	.002	.021	.002	.015
%RSD	.6795	.9066	.1304	.1222	1.041	.0827	.7818
#1	1.777	2.017	1.996	1.992	1.954	1.931	1.937
#2	1.801	2.044	2.000	1.988	1.988	1.928	1.962
#3	1.783	2.009	2.001	1.993	1.952	1.931	1.935
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 2/12/2015 15:51:31 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3005.8	6560.2	56610.	4789.4
Stddev	29.8	41.7	294.	49.5
%RSD	.99236	.63498	.51926	1.0327
#1	3015.4	6582.2	56673.	4843.2
#2	2972.3	6512.2	56867.	4745.8
#3	3029.6	6586.3	56289.	4779.4

Sample Name: CCB Acquired: 2/12/2015 15:55:43 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0191	.0001	.0004	.0005	.0135	.0001	.0001	.0002
Stddev	.0001	.0038	.0006	.0000	.0001	.0023	.0001	.0001	.0002
%RSD	75.47	19.69	515.1	8.405	16.65	16.97	72.43	99.16	74.14
#1	.0000	.0200	.0007	.0004	.0005	.0131	.0000	.0000	.0003
#2	.0003	.0149	-.0006	.0005	.0006	.0160	.0001	.0001	.0000
#3	.0002	.0222	.0003	.0004	.0004	.0115	.0001	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0257	.1592	.0190	.0003	F.0042	.0274	.0001	.0002
Stddev	.0002	.0046	.0412	.0252	.0000	.0016	.0086	.0002	.0005
%RSD	319.0	17.85	25.87	132.2	13.07	37.33	31.41	122.4	246.8
#1	.0002	.0295	.2066	.0328	.0004	.0059	.0226	.0001	-.0002
#2	.0002	.0270	.1393	-.0100	.0004	.0039	.0223	.0003	.0001
#3	-.0002	.0206	.1318	.0344	.0003	.0028	.0374	.0000	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0004	.0000	.0005	.0006	.0017	.0008	.0002	.0001
Stddev	.0008	.0009	.0002	.0003	.0001	.0002	.0005	.0001	.0001
%RSD	103.2	248.3	943.1	69.75	9.851	13.36	63.58	43.55	101.8
#1	.0015	-.0008	.0001	.0008	.0005	.0019	.0009	.0001	.0000
#2	.0011	-.0010	-.0002	.0003	.0007	.0018	.0003	.0003	.0001
#3	-.0001	.0007	.0002	.0002	.0006	.0014	.0013	.0002	.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 15:55:43 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3495.5	6900.0	60772.	4947.4
Stddev	8.0	11.6	1342.	40.8
%RSD	.22843	.16760	2.2087	.82447
#1	3500.0	6913.3	60153.	4988.2
#2	3500.3	6894.0	59851.	4947.4
#3	3486.3	6892.6	62312.	4906.6

Zoom In Zoom Out

Sample Name: FA22009-15 Acquired: 2/12/2015 16:00:12 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.1628	.0004	.0022	-.0003	.1623	-.0007	-.0007	.0005	.0005
Stddev	.0001	.0088	.0003	.0002	.0001	.0037	.0000	.0001	.0000	.0002
%RSD	31.38	5.424	79.03	7.622	30.36	2.295	4.406	15.69	3.194	41.66
#1	-.0005	.1529	.0006	.0021	-.0003	.1608	-.0007	-.0006	.0005	.0003
#2	-.0004	.1656	.0006	.0024	-.0002	.1595	-.0007	-.0008	.0005	.0004
#3	-.0003	.1699	.0000	.0021	-.0003	.1665	-.0007	-.0008	.0005	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1222	.0968	.0277	.0010	.0002	.1632	-.0004	.0170	-.0001	-.0008
Stddev	.0023	.0260	.0093	.0000	.0002	.0010	.0002	.0005	.0000	.0012
%RSD	1.861	26.84	33.78	3.099	98.91	.6036	41.55	2.724	49.14	142.1
#1	.1244	.1103	.0331	.0010	.0003	.1623	-.0006	.0170	-.0001	.0004
#2	.1224	.1133	.0169	.0010	.0000	.1631	-.0004	.0174	.0000	-.0019
#3	.1198	.0669	.0330	.0010	.0001	.1642	-.0002	.0165	-.0001	-.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0631	.0215	.0008	.0969	-.0007	.0002	.0018
Stddev	.0002	.0002	.0000	.0003	.0009	.0001	.0001
%RSD	.3226	.7908	3.873	.2931	132.0	70.21	3.581
#1	.0633	.0216	.0008	.0966	.0002	.0003	.0018
#2	.0629	.0215	.0009	.0971	-.0006	.0001	.0017
#3	.0631	.0213	.0008	.0971	-.0017	.0002	.0018

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3499.7	6944.7	60790.	4924.2
Stddev	10.7	20.1	332.	17.9
%RSD	.30557	.28905	.54561	.36275
#1	3499.9	6947.1	60810.	4926.4
#2	3510.3	6963.4	61110.	4940.9
#3	3488.9	6923.4	60448.	4905.3

Zoom In Zoom Out

Sample Name: FA22009-19 Acquired: 2/12/2015 16:04:40 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.2283	.0002	.0030	-.0002	.0926	.0004	-.0007	.0010	.0022
Stddev	.0002	.0064	.0008	.0003	.0001	.0025	.0000	.0001	.0002	.0001
%RSD	138.8	2.807	439.6	9.601	25.94	2.676	1.487	7.902	14.85	3.036
#1	.0000	.2333	-.0004	.0033	-.0003	.0899	.0004	-.0007	.0012	.0022
#2	-.0005	.2306	-.0001	.0031	-.0002	.0947	.0004	-.0008	.0009	.0022
#3	-.0001	.2211	.0011	.0027	-.0002	.0932	.0004	-.0007	.0011	.0021

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2762	.0528	.0152	.0023	-.0003	.0860	-.0001	.0023	.0008	-.0003
Stddev	.0025	.0265	.0137	.0000	.0001	.0176	.0000	.0005	.0007	.0006
%RSD	.9164	50.18	89.89	.3018	44.36	20.43	29.03	20.34	89.48	191.5
#1	.2776	.0803	.0241	.0023	-.0003	.0831	-.0001	.0027	.0003	.0000
#2	.2778	.0275	.0221	.0023	-.0004	.0700	-.0001	.0018	.0016	-.0010
#3	.2733	.0504	-.0005	.0023	-.0002	.1048	-.0002	.0024	.0005	.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0433	.0212	.0006	.1221	-.0013	.0004	.0034
Stddev	.0008	.0005	.0001	.0003	.0007	.0001	.0001
%RSD	1.913	2.358	13.69	.2115	52.90	23.86	2.864
#1	.0436	.0215	.0005	.1218	-.0018	.0004	.0034
#2	.0440	.0214	.0006	.1222	-.0015	.0005	.0035
#3	.0424	.0206	.0006	.1223	-.0005	.0003	.0033

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3521.6	6979.0	60941.	4979.4
Stddev	32.8	66.1	234.	39.0
%RSD	.93207	.94754	.38338	.78257
#1	3506.8	6946.1	61138.	4982.2
#2	3498.9	6935.8	60683.	4939.1
#3	3559.3	7055.2	61001.	5016.9

Zoom In Zoom Out

Sample Name: FA22009-22 Acquired: 2/12/2015 16:09:10 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.2845	.0011	.0014	-.0003	.1193	-.0007	-.0007	.0009	.0002
Stddev	.0002	.0044	.0004	.0001	.0001	.0025	.0000	.0000	.0001	.0002
%RSD	459.6	1.546	37.74	9.811	17.51	2.088	4.033	1.814	11.70	75.69
#1	.0003	.2795	.0009	.0013	-.0003	.1200	-.0007	-.0007	.0009	.0000
#2	-.0001	.2878	.0009	.0013	-.0003	.1214	-.0008	-.0008	.0010	.0003
#3	-.0001	.2862	.0016	.0016	-.0004	.1166	-.0007	-.0007	.0008	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1699	.0816	.0423	.0010	-.0005	.1158	-.0004	.0248	.0006	-.0014
Stddev	.0019	.0161	.0220	.0000	.0001	.0089	.0002	.0002	.0008	.0008
%RSD	1.121	19.71	52.00	.3464	19.01	7.695	43.38	.6637	130.4	55.53
#1	.1678	.0705	.0669	.0010	-.0004	.1217	-.0004	.0246	.0003	-.0023
#2	.1702	.1001	.0353	.0010	-.0004	.1202	-.0002	.0249	.0015	-.0008
#3	.1715	.0743	.0246	.0010	-.0005	.1055	-.0006	.0248	.0000	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0559	.0214	.0007	.1487	-.0010	.0005	.0015
Stddev	.0006	.0005	.0000	.0003	.0002	.0001	.0001
%RSD	1.088	2.373	6.456	.1812	21.11	24.07	4.651
#1	.0562	.0218	.0006	.1484	-.0012	.0006	.0016
#2	.0552	.0209	.0007	.1489	-.0010	.0004	.0014
#3	.0563	.0216	.0007	.1487	-.0008	.0004	.0015

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3527.3	6977.5	60899.	4986.3
Stddev	27.5	54.3	279.	35.5
%RSD	.77900	.77848	.45857	.71193
#1	3513.3	6948.2	60886.	4995.5
#2	3558.9	7040.2	61184.	4947.1
#3	3509.6	6944.2	60626.	5016.3

Zoom In Zoom Out

Sample Name: FA22009-25 Acquired: 2/12/2015 16:13:39 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	40.71	.0108	.0975	-.0001	.3385	-.0010	-.0004	.0566	.0093
Stddev	.0000	.22	.0003	.0004	.0000	.0053	.0000	.0000	.0008	.0002
%RSD	8.124	.5318	2.375	.3949	23.49	1.551	2.166	10.13	1.372	2.556
#1	-.0005	40.52	.0108	.0972	-.0001	.3328	-.0010	-.0004	.0559	.0095
#2	-.0005	40.66	.0111	.0979	-.0002	.3431	-.0010	-.0005	.0564	.0093
#3	-.0006	40.94	.0106	.0975	-.0001	.3397	-.0010	-.0004	.0574	.0090

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	20.89	.1050	.0793	.0132	.0023	.1555	.0053	.0339	-.0008	-.0001
Stddev	.11	.0130	.0087	.0001	.0000	.0024	.0003	.0005	.0009	.0006
%RSD	.5376	12.37	10.93	.6314	1.614	1.550	4.906	1.400	110.3	795.3
#1	20.76	.0972	.0697	.0131	.0023	.1527	.0051	.0335	-.0007	.0005
#2	20.93	.0979	.0865	.0132	.0023	.1567	.0056	.0340	.0000	-.0006
#3	20.97	.1200	.0817	.0133	.0023	.1570	.0051	.0344	-.0018	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.568	.0211	.1921	.3607	-.0029	.0350	.0127
Stddev	.008	.0003	.0015	.0005	.0008	.0001	.0001
%RSD	.4955	1.247	.7558	.1479	27.05	.4016	.6998
#1	1.574	.0213	.1905	.3602	-.0022	.0348	.0128
#2	1.570	.0208	.1925	.3612	-.0028	.0350	.0126
#3	1.559	.0211	.1934	.3608	-.0038	.0351	.0127

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3396.8	7076.5	61073.	5060.9
Stddev	10.2	32.4	323.	22.2
%RSD	.30066	.45784	.52880	.43817
#1	3389.5	7047.4	61330.	5059.9
#2	3392.6	7070.7	61178.	5039.3
#3	3408.5	7111.4	60710.	5083.6

Zoom In Zoom Out

Sample Name: FA22009-26 Acquired: 2/12/2015 16:18:01 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	48.27	.0131	.1125	-.0002	.3936	-.0011	-.0004	.0673	.0144
Stddev	.0004	2.72	.0007	.0060	.0000	.0216	.0001	.0001	.0006	.0002
%RSD	78.42	5.630	5.423	5.352	19.15	5.486	12.38	20.92	.8690	1.270
#1	-.0002	50.06	.0123	.1165	-.0002	.4022	-.0012	-.0005	.0679	.0146
#2	-.0009	45.15	.0137	.1056	-.0002	.3690	-.0009	-.0004	.0668	.0144
#3	-.0003	49.61	.0133	.1154	-.0001	.4096	-.0011	-.0003	.0673	.0143

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	22.90	.1584	.1316	.0156	.0030	.1348	.0066	.0393	-.0013	.0000
Stddev	1.25	.0379	.0098	.0002	.0001	.0019	.0001	.0020	.0009	.000
%RSD	5.438	23.91	7.448	1.027	2.285	1.435	1.156	5.061	69.40	6902.
#1	23.72	.1946	.1429	.0157	.0029	.1326	.0066	.0379	-.0023	.0005
#2	21.47	.1190	.1257	.0154	.0030	.1360	.0065	.0416	-.0004	-.0003
#3	23.51	.1615	.1261	.0157	.0030	.1358	.0067	.0385	-.0013	-.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.839	.0210	.2181	.4075	-.0020	.0412	.0181
Stddev	.033	.0004	.0124	.0013	.0005	.0005	.0003
%RSD	1.786	1.827	5.668	.3092	24.10	1.221	1.832
#1	1.816	.0207	.2260	.4089	-.0025	.0414	.0179
#2	1.877	.0214	.2038	.4064	-.0015	.0407	.0185
#3	1.825	.0209	.2244	.4073	-.0019	.0416	.0180

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3405.6	7184.3	60974.	5117.7
Stddev	42.1	92.8	345.	260.2
%RSD	1.2371	1.2919	.56641	5.0850
#1	3439.8	7255.9	60584.	4941.0
#2	3358.5	7079.4	61099.	5416.5
#3	3418.3	7217.5	61240.	4995.5

Zoom In Zoom Out

Sample Name: FA22009-29 Acquired: 2/12/2015 16:22:24 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	1.321	.0073	.0027	-.0003	.2117	-.0007	-.0007	.0023	.0007
Stddev	.000	.016	.0011	.0002	.0000	.0026	.0000	.0001	.0003	.0001
%RSD	2317.	1.195	14.62	7.859	9.114	1.246	6.342	10.83	11.76	10.24
#1	-.0003	1.303	.0083	.0029	-.0002	.2147	-.0007	-.0006	.0022	.0007
#2	-.0002	1.333	.0074	.0025	-.0003	.2097	-.0007	-.0007	.0022	.0008
#3	.0004	1.328	.0062	.0027	-.0003	.2106	-.0007	-.0007	.0027	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.900	.0316	.0276	.0029	-.0008	.1361	-.0004	.0021	.0015	-.0003
Stddev	.003	.0202	.0204	.0000	.0001	.0076	.0001	.0004	.0010	.0009
%RSD	.1508	64.03	73.89	1.144	13.87	5.570	34.29	17.06	63.81	325.2
#1	1.899	.0109	.0510	.0030	-.0009	.1445	-.0005	.0017	.0012	.0000
#2	1.898	.0326	.0137	.0029	-.0008	.1338	-.0003	.0023	.0007	.0004
#3	1.903	.0512	.0181	.0029	-.0007	.1299	-.0003	.0023	.0026	-.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3557	.0214	.0038	.0971	-.0010	.0019	.0028
Stddev	.0032	.0001	.0001	.0003	.0009	.0002	.0001
%RSD	.8918	.3972	2.211	.2656	88.76	9.051	3.109
#1	.3523	.0214	.0039	.0971	-.0002	.0021	.0027
#2	.3586	.0215	.0038	.0974	-.0020	.0017	.0029
#3	.3561	.0215	.0038	.0969	-.0009	.0018	.0029

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3482.1	6943.0	60603.	4939.9
Stddev	20.9	51.3	150.	11.5
%RSD	.60099	.73956	.24697	.23236
#1	3506.1	7001.7	60688.	4952.2
#2	3467.3	6906.3	60430.	4929.4
#3	3473.0	6921.0	60691.	4938.1

Zoom In Zoom Out

Sample Name: FA22015-2 Acquired: 2/12/2015 16:26:52 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0049	346.9	.0811	5.188	.0331	23.25	-.0140	.0179
Stddev	.0035	7.3	.0035	.108	.0005	.43	.0011	.0003
%RSD	70.19	2.113	4.273	2.089	1.606	1.848	8.152	1.430
#1	-.0086	352.1	.0808	5.267	.0335	23.57	-.0152	.0180
#2	-.0017	350.1	.0847	5.232	.0333	23.41	-.0139	.0181
#3	-.0045	338.5	.0778	5.064	.0325	22.76	-.0129	.0176

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	1.316	.0398	968.9	6.989	8.980	.5004	.0228	.9917
Stddev	.004	.0026	20.2	.216	.276	.0009	.0005	.0696
%RSD	.3225	6.466	2.080	3.089	3.068	.1756	2.405	7.023
#1	1.318	.0408	984.3	7.078	9.144	.4995	.0228	.9560
#2	1.311	.0418	976.3	7.147	9.135	.5006	.0233	1.072
#3	1.318	.0369	946.1	6.743	8.662	.5012	.0222	.9471

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.1651	.2575	F-.0294	.0106	2.580	.0295	2.490	1.227
Stddev	.0015	.0085	.0044	.0081	.024	.0016	.054	.001
%RSD	.8888	3.292	15.01	76.49	.9159	5.466	2.162	.1056
#1	.1652	.2479	-.0255	.0199	2.578	.0288	2.527	1.228
#2	.1664	.2640	-.0286	.0053	2.605	.0314	2.516	1.226
#3	.1635	.2606	-.0342	.0065	2.557	.0284	2.429	1.227

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0427	1.601	.1406
Stddev	.0069	.004	.0011
%RSD	16.10	.2608	.7985
#1	-.0362	1.597	.1404
#2	-.0499	1.599	.1418
#3	-.0419	1.605	.1395

Zoom In Zoom Out

Sample Name: FA22015-2 Acquired: 2/12/2015 16:26:52 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3303.6	8612.9	72985.	6143.1
Stddev	32.8	66.0	72.	97.1
%RSD	.99237	.76608	.09918	1.5812
#1	3313.3	8627.5	73011.	6042.5
#2	3267.1	8540.8	72903.	6150.2
#3	3330.5	8670.3	73040.	6236.4

Zoom In Zoom Out

Sample Name: FA22020-1 Acquired: 2/12/2015 16:31:13 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	48.24	.0076	.0893	.0002	11.19	-.0007	.0020	.0409	.0375
Stddev	.0005	.17	.0002	.0002	.0001	.05	.0001	.0001	.0002	.0004
%RSD	115.9	.3613	2.523	.2195	56.56	.4424	9.294	5.599	.4008	.9479
#1	.0001	48.40	.0076	.0894	.0003	11.25	-.0007	.0021	.0411	.0378
#2	-.0004	48.26	.0078	.0894	.0001	11.16	-.0007	.0021	.0407	.0371
#3	-.0009	48.05	.0074	.0891	.0001	11.16	-.0008	.0019	.0410	.0375

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	24.74	1.851	3.595	.4308	.0014	.2634	.0139	.0339	-.0016	.0017
Stddev	.09	.031	.043	.0016	.0001	.0049	.0002	.0002	.0011	.0008
%RSD	.3695	1.651	1.187	.3621	4.221	1.878	1.092	.7202	68.18	46.96
#1	24.79	1.822	3.644	.4320	.0014	.2684	.0139	.0341	-.0011	.0009
#2	24.80	1.883	3.567	.4313	.0014	.2585	.0141	.0336	-.0009	.0017
#3	24.64	1.850	3.574	.4290	.0013	.2632	.0138	.0340	-.0028	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.352	.0240	.0707	.5605	-.0024	.0582	.1999
Stddev	.011	.0003	.0004	.0020	.0005	.0003	.0010
%RSD	.8230	1.067	.5793	.3537	20.40	.4703	.4767
#1	1.358	.0241	.0712	.5616	-.0021	.0585	.2005
#2	1.358	.0237	.0705	.5616	-.0021	.0580	.2003
#3	1.339	.0241	.0704	.5582	-.0029	.0581	.1988

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3351.8	7021.5	60452.	4998.9
Stddev	14.6	37.1	223.	34.4
%RSD	.43557	.52810	.36903	.68785
#1	3339.2	6990.3	60312.	4966.0
#2	3348.4	7011.8	60334.	5034.6
#3	3367.8	7062.5	60709.	4996.1

Zoom In Zoom Out

Sample Name: FA22020-2 Acquired: 2/12/2015 16:35:36 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	33.65	.0104	.0864	.0000	10.70	.0000	.0019	.0573	.0487
Stddev	.0004	.77	.0004	.0020	.000	.22	.000	.0001	.0004	.0005
%RSD	156.9	2.287	3.733	2.346	116.1	2.014	209.1	6.261	.7418	.9499
#1	-.0007	33.45	.0100	.0858	.0000	10.63	.0000	.0020	.0577	.0488
#2	-.0001	34.50	.0104	.0887	.0000	10.95	-.0001	.0020	.0569	.0481
#3	.0000	33.01	.0107	.0847	.0000	10.54	.0000	.0018	.0572	.0490

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	15.13	1.071	1.806	.2072	.0009	.1360	.0149	.0621	-.0009	.0014
Stddev	.33	.070	.044	.0007	.0000	.0034	.0002	.0008	.0004	.0012
%RSD	2.165	6.544	2.455	.3413	5.685	2.482	1.466	1.245	40.94	89.68
#1	15.04	1.068	1.771	.2074	.0008	.1397	.0152	.0625	-.0013	.0012
#2	15.50	1.143	1.856	.2064	.0009	.1332	.0149	.0612	-.0007	.0027
#3	14.86	1.003	1.790	.2078	.0008	.1351	.0147	.0626	-.0007	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.294	.0234	.0645	.4970	-.0022	.0427	.4739
Stddev	.004	.0001	.0014	.0011	.0011	.0003	.0018
%RSD	.3061	.5518	2.204	.2217	49.19	.7884	.3766
#1	1.299	.0233	.0642	.4975	-.0015	.0430	.4759
#2	1.293	.0235	.0660	.4958	-.0017	.0426	.4724
#3	1.291	.0235	.0633	.4978	-.0035	.0424	.4734

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3366.7	6992.8	60379.	4920.5
Stddev	10.3	17.8	120.	76.3
%RSD	.30456	.25449	.19918	1.5508
#1	3356.5	6972.6	60315.	4982.3
#2	3377.0	7006.2	60517.	4835.2
#3	3366.7	6999.7	60304.	4943.9

Zoom In Zoom Out

Sample Name: FA22020-3 Acquired: 2/12/2015 16:39:56 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0016	48.99	.0247	.2747	.0015	F571.6	.0090	.0137	.3225
Stddev	.0005	.92	.0006	.0063	.0000	11.1	.0001	.0002	.0008
%RSD	30.72	1.878	2.361	2.284	2.477	1.948	1.560	1.615	.2509
#1	.0021	49.40	.0243	.2776	.0015	577.8	.0089	.0135	.3227
#2	.0011	49.63	.0246	.2791	.0015	578.2	.0090	.0138	.3232
#3	.0016	47.93	.0254	.2675	.0016	558.7	.0091	.0139	.3216

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3461	45.73	3.217	37.22	.8565	.0049	.8104	.0952	.1706
Stddev	.0009	.87	.093	.51	.0021	.0001	.0119	.0007	.0029
%RSD	.2543	1.910	2.886	1.375	.2507	1.791	1.466	.7828	1.683
#1	.3453	46.06	3.182	37.50	.8578	.0048	.7967	.0945	.1677
#2	.3470	46.38	3.322	37.53	.8576	.0050	.8180	.0951	.1708
#3	.3459	44.74	3.147	36.63	.8540	.0048	.8165	.0960	.1734

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0034	.0039	1.642	.0364	.8942	.6449	-.0018	.1271	F4.653
Stddev	.0005	.0016	.013	.0002	.0195	.0017	.0024	.0008	.042
%RSD	15.18	42.11	.7892	.5031	2.176	.2606	135.5	.6420	.9061
#1	.0032	.0053	1.627	.0363	.8993	.6454	.0010	.1276	4.608
#2	.0030	.0043	1.646	.0363	.9105	.6463	-.0030	.1275	4.661
#3	.0040	.0021	1.652	.0366	.8726	.6430	-.0034	.1261	4.691

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2843.4	6674.6	56879.	4904.0
Stddev	29.2	55.5	81.	77.5
%RSD	1.0262	.83106	.14305	1.5809
#1	2877.0	6737.6	56790.	4838.7
#2	2828.8	6653.3	56896.	4883.7
#3	2824.4	6633.0	56950.	4989.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 16:44:23 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2513	41.20	1.924	2.086	1.991	39.50	1.960	1.991	1.986	2.021
Stddev	.0009	.27	.006	.010	.013	.25	.002	.002	.003	.005
%RSD	.3702	.6467	.3338	.4598	.6643	.6322	.1206	.1148	.1700	.2742
#1	.2522	41.50	1.917	2.097	2.006	39.78	1.957	1.988	1.988	2.019
#2	.2515	41.09	1.930	2.079	1.982	39.38	1.962	1.993	1.987	2.027
#3	.2504	41.00	1.924	2.082	1.986	39.32	1.960	1.992	1.982	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.72	40.37	41.58	1.954	1.988	40.79	1.935	1.941	1.941	1.965
Stddev	.26	.30	.15	.020	.004	.27	.004	.004	.005	.006
%RSD	.6451	.7369	.3550	1.005	.2081	.6610	.1950	.1874	.2531	.3281
#1	41.02	40.70	41.71	1.941	1.984	41.10	1.932	1.944	1.937	1.958
#2	40.63	40.29	41.62	1.945	1.989	40.59	1.939	1.937	1.946	1.971
#3	40.51	40.12	41.42	1.977	1.992	40.69	1.934	1.942	1.939	1.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.768	2.018	1.991	1.972	1.956	1.908	1.921
Stddev	.003	.003	.009	.004	.003	.005	.003
%RSD	.1794	.1584	.4301	.2251	.1293	.2666	.1705
#1	1.764	2.014	2.000	1.973	1.957	1.913	1.920
#2	1.769	2.021	1.984	1.976	1.958	1.907	1.925
#3	1.770	2.018	1.987	1.967	1.953	1.903	1.919
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 16:44:23 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3002.7	6589.8	56882.	4710.9
Stddev	10.3	9.0	109.	55.3
%RSD	.34413	.13662	.19219	1.1734
#1	2998.4	6598.1	56798.	4652.5
#2	3014.5	6591.1	57006.	4717.7
#3	2995.2	6580.2	56843.	4762.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 16:48:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0092	-.0006	.0000	.0004	.0246	-.0002	-.0002	-.0001
Stddev	.0004	.0022	.0006	.0003	.0001	.0056	.0000	.0001	.0002
%RSD	947.4	24.05	104.6	1060.	14.38	22.91	9.292	35.73	198.0
#1	-.0004	.0073	-.0011	.0004	.0004	.0280	-.0002	-.0002	.0000
#2	.0003	.0087	-.0008	-.0001	.0003	.0181	-.0002	-.0002	-.0003
#3	.0003	.0117	.0001	-.0002	.0004	.0277	-.0002	-.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0266	.1851	-.0086	.0002	F.0038	.0389	-.0002	.0002
Stddev	.0004	.0028	.0815	.0216	.0000	.0014	.0059	.0001	.0003
%RSD	689.6	10.62	44.01	249.9	19.50	37.41	15.24	61.02	151.5
#1	.0003	.0299	.2787	.0137	.0002	.0054	.0450	-.0001	.0005
#2	.0003	.0254	.1464	-.0294	.0002	.0034	.0331	-.0002	.0000
#3	-.0004	.0246	.1302	-.0103	.0001	.0026	.0385	-.0003	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0004	.0012	.0005	.0004	.0015	-.0002	.0001	.0005
Stddev	.000	.0006	.0002	.0001	.0001	.0001	.0003	.0001	.0001
%RSD	713.2	139.0	17.68	27.59	26.18	9.273	186.7	142.7	11.00
#1	.0001	-.0011	.0015	.0005	.0005	.0016	-.0004	.0000	.0005
#2	.0002	-.0001	.0012	.0003	.0003	.0015	-.0003	.0002	.0004
#3	-.0004	.0000	.0010	.0005	.0005	.0014	.0002	.0000	.0005
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 16:48:41 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3482.2	6912.1	59883.	4753.0
Stddev	12.6	9.2	142.	70.4
%RSD	.36129	.13264	.23676	1.4813
#1	3489.0	6921.6	59721.	4792.7
#2	3467.7	6903.3	59942.	4794.6
#3	3489.8	6911.4	59985.	4671.7

Zoom In Zoom Out

Sample Name: FA22020-4 Acquired: 2/12/2015 16:53:10 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	118.1	.0177	.4524	.0111	360.6	-.0005	.0103	.0923
Stddev	.0001	3.1	.0006	.0102	.0003	16.0	.0001	.0001	.0028
%RSD	17.09	2.598	3.376	2.258	2.352	4.427	14.06	1.016	3.056
#1	.0005	114.6	.0172	.4408	.0108	343.3	-.0004	.0103	.0936
#2	.0007	120.3	.0184	.4600	.0113	374.8	-.0005	.0103	.0942
#3	.0006	119.3	.0176	.4565	.0112	363.8	-.0005	.0105	.0890

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0165	25.68	14.36	30.30	F4.492	.0025	2.626	.0144	.1195
Stddev	.0005	.75	.35	.97	.107	.0002	.069	.0001	.0016
%RSD	3.264	2.901	2.415	3.211	2.384	9.668	2.621	.8723	1.323
#1	.0167	24.83	13.96	29.21	4.553	.0027	2.547	.0145	.1212
#2	.0170	26.24	14.57	31.10	4.555	.0023	2.675	.0145	.1181
#3	.0159	25.97	14.55	30.58	4.369	.0023	2.655	.0143	.1191

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0011	.0036	1.370	.0154	.6974	1.999	-.0005	.1511	.0939
Stddev	.0014	.0008	.006	.0002	.0162	.066	.0011	.0050	.0005
%RSD	127.7	21.37	.4405	1.513	2.316	3.278	238.8	3.306	.5269
#1	.0004	.0035	1.376	.0157	.6788	2.029	-.0014	.1535	.0941
#2	-.0022	.0045	1.372	.0152	.7081	2.043	-.0007	.1544	.0942
#3	-.0014	.0029	1.364	.0153	.7054	1.923	.0007	.1453	.0933

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2844.1	8562.0	72939.	6287.3
Stddev	15.8	23.7	1957.	194.2
%RSD	.55499	.27704	2.6825	3.0885
#1	2842.0	8550.6	72006.	6505.4
#2	2829.5	8546.2	71622.	6133.2
#3	2860.9	8589.3	75187.	6223.3

Zoom In Zoom Out

Sample Name: FA22020-5 Acquired: 2/12/2015 16:57:46 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	8.956	.0007	.0273	-.0002	.4710	-.0008	.0000	.0117	.0028
Stddev	.0003	.060	.0004	.0004	.0001	.0079	.0000	.000	.0000	.0002
%RSD	47.47	.6739	51.75	1.442	26.01	1.673	3.212	376.4	.1504	7.204
#1	-.0004	8.914	.0008	.0274	-.0003	.4759	-.0008	.0000	.0117	.0026
#2	-.0011	9.025	.0003	.0276	-.0003	.4751	-.0008	-.0001	.0117	.0029
#3	-.0007	8.928	.0011	.0268	-.0002	.4619	-.0008	.0000	.0116	.0029

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.483	.4788	.6845	.0245	-.0003	.2724	.0031	.0141	-.0006	-.0019
Stddev	.008	.0150	.0251	.0001	.0001	.0081	.0001	.0011	.0010	.0001
%RSD	.1851	3.133	3.666	.4384	24.48	2.982	2.407	7.734	187.0	3.467
#1	4.476	.4669	.6768	.0246	-.0004	.2786	.0031	.0136	.0002	-.0020
#2	4.492	.4956	.6642	.0245	-.0002	.2632	.0032	.0134	-.0001	-.0019
#3	4.480	.4739	.7126	.0243	-.0004	.2754	.0031	.0154	-.0017	-.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.018	.0217	.0066	.5355	-.0018	.0147	.0162
Stddev	.003	.0001	.0001	.0007	.0009	.0001	.0001
%RSD	.3065	.6785	1.875	.1241	50.49	.6470	.5305
#1	1.021	.0216	.0065	.5362	-.0015	.0148	.0162
#2	1.020	.0216	.0067	.5356	-.0028	.0147	.0161
#3	1.015	.0219	.0066	.5349	-.0011	.0146	.0162

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3440.2	6985.4	60812.	4916.6
Stddev	4.5	4.5	223.	45.9
%RSD	.12984	.06432	.36607	.93405
#1	3444.7	6989.7	60589.	4924.1
#2	3440.1	6986.0	60815.	4958.3
#3	3435.8	6980.7	61034.	4867.3

Zoom In Zoom Out

Sample Name: FA22032-1 Acquired: 2/12/2015 17:02:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	84.66	.0224	.7223	.0037	F2741.	.0005	.0262	.0773
Stddev	.0002	.55	.0002	.0048	.0001	12.	.0001	.0003	.0003
%RSD	50.33	.6475	1.045	.6618	3.020	.4307	26.44	1.186	.4150
#1	.0005	84.08	.0224	.7177	.0038	2728.	.0006	.0264	.0777
#2	.0002	84.74	.0227	.7220	.0036	2752.	.0003	.0258	.0771
#3	.0005	85.16	.0222	.7273	.0037	2744.	.0005	.0264	.0773

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1185	79.16	21.68	67.99	1.678	.0057	2.949	.0603	.0921
Stddev	.0004	.41	.14	.42	.005	.0005	.008	.0009	.0025
%RSD	.3544	.5134	.6230	.6185	.3223	9.312	.2601	1.551	2.737
#1	.1189	78.75	21.53	67.51	1.685	.0062	2.945	.0609	.0930
#2	.1181	79.17	21.73	68.24	1.674	.0052	2.958	.0592	.0892
#3	.1184	79.56	21.79	68.23	1.676	.0056	2.945	.0609	.0940

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0092	-.0046	2.374	.0196	F15.26	1.596	.0054	.1234	.2266
Stddev	.0006	.0007	.040	.0006	.21	.004	.0008	.0006	.0035
%RSD	7.027	16.09	1.674	3.227	1.360	.2516	15.01	.4950	1.531
#1	.0094	-.0051	2.394	.0201	15.03	1.600	.0052	.1229	.2288
#2	.0098	-.0051	2.329	.0189	15.32	1.592	.0063	.1233	.2226
#3	.0085	-.0038	2.401	.0197	15.43	1.596	.0047	.1241	.2283

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2294.6	5855.8	50546.	4694.5
Stddev	31.7	69.4	121.	43.9
%RSD	1.3826	1.1856	.23871	.93512
#1	2281.0	5818.0	50407.	4744.7
#2	2330.9	5935.9	50627.	4663.4
#3	2272.0	5813.4	50604.	4675.4

Zoom In Zoom Out

Sample Name: FA22032-2 Acquired: 2/12/2015 17:06:43 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	148.5	.0384	1.441	.0061	F1768.	.0009	.0454	.1304
Stddev	.0005	5.9	.0005	.057	.0002	58.	.0003	.0005	.0060
%RSD	222.3	3.992	1.241	3.962	3.679	3.262	38.62	1.051	4.638
#1	.0001	141.6	.0389	1.375	.0059	1703.	.0013	.0454	.1234
#2	.0007	151.8	.0379	1.471	.0063	1815.	.0006	.0449	.1339
#3	-.0002	151.9	.0385	1.477	.0061	1784.	.0009	.0458	.1339

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1628	129.2	45.12	105.1	3.465	.0063	3.028	.0999	.1413
Stddev	.0075	5.0	1.85	3.8	.145	.0001	.116	.0010	.0019
%RSD	4.614	3.832	4.098	3.645	4.177	1.848	3.818	.9718	1.360
#1	.1541	123.5	42.98	100.7	3.298	.0062	2.894	.0994	.1418
#2	.1674	132.1	46.17	107.6	3.537	.0064	3.098	.0994	.1392
#3	.1669	132.0	46.20	107.1	3.560	.0062	3.091	.1011	.1430

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0042	-.0006	2.159	.0201	F9.152	2.798	.0014	.2099	.3878
Stddev	.0023	.0010	.027	.0001	.166	.125	.0022	.0097	.0046
%RSD	54.55	160.2	1.243	.4989	1.811	4.466	160.5	4.643	1.182
#1	.0065	-.0003	2.141	.0200	8.973	2.654	.0025	.1986	.3865
#2	.0044	-.0017	2.148	.0201	9.183	2.869	.0029	.2156	.3840
#3	.0019	.0002	2.190	.0202	9.300	2.871	-.0012	.2154	.3929

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2425.7	6868.0	59962.	5484.2
Stddev	31.7	73.7	2431.	184.4
%RSD	1.3065	1.0734	4.0546	3.3624
#1	2450.6	6920.6	62763.	5695.7
#2	2436.5	6899.6	58713.	5356.7
#3	2390.0	6783.7	58408.	5400.2

Zoom In Zoom Out

Sample Name: FA22032-3 Acquired: 2/12/2015 17:11:26 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	134.0	.0350	1.370	.0050	F2271.	.0003	.0384	.1150
Stddev	.0000	1.2	.0012	.015	.0001	30.	.0001	.0003	.0005
%RSD	10.01	.8953	3.333	1.102	2.283	1.328	40.44	.8543	.4515
#1	.0004	132.8	.0360	1.353	.0052	2244.	.0004	.0386	.1145
#2	.0003	135.2	.0337	1.382	.0050	2303.	.0002	.0380	.1155
#3	.0003	133.9	.0352	1.374	.0049	2267.	.0004	.0386	.1149

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1408	111.7	37.32	87.67	2.828	.0059	2.668	.0866	.1131
Stddev	.0005	1.0	.32	.98	.009	.0002	.027	.0008	.0019
%RSD	.3200	.8731	.8593	1.117	.3254	2.964	1.001	.9615	1.637
#1	.1406	111.0	37.05	86.92	2.818	.0061	2.645	.0866	.1147
#2	.1413	112.8	37.68	88.78	2.836	.0058	2.697	.0858	.1111
#3	.1405	111.3	37.25	87.31	2.832	.0058	2.661	.0875	.1137

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0045	-.0011	2.497	.0186	F11.03	2.690	.0022	.1821	.3225
Stddev	.0005	.0006	.017	.0003	.18	.009	.0018	.0005	.0023
%RSD	11.37	50.97	.6843	1.400	1.607	.3296	78.63	.2915	.7014
#1	.0051	-.0010	2.501	.0188	10.83	2.680	.0041	.1815	.3227
#2	.0043	-.0007	2.478	.0183	11.14	2.695	.0006	.1825	.3202
#3	.0041	-.0018	2.511	.0187	11.13	2.695	.0020	.1823	.3247

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2332.7	6420.4	55306.	5073.4
Stddev	14.8	33.6	308.	69.2
%RSD	.63411	.52396	.55658	1.3635
#1	2325.3	6412.6	55605.	5136.0
#2	2349.8	6457.3	55322.	4999.1
#3	2323.1	6391.4	54990.	5085.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/12/2015 17:16:09 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0097	.2330	.0087	.2148	.0047	1.683	.0044	.0517	.0096	.0256
Stddev	.0005	.0069	.0009	.0018	.0001	.028	.0001	.0006	.0004	.0005
%RSD	4.710	2.948	10.39	.8208	1.488	1.671	1.308	1.217	4.035	2.095
#1	.0095	.2388	.0094	.2133	.0046	1.715	.0045	.0524	.0092	.0250
#2	.0102	.2254	.0090	.2143	.0047	1.675	.0043	.0515	.0099	.0258
#3	.0093	.2347	.0077	.2167	.0048	1.660	.0044	.0511	.0097	.0260

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3555	10.63	5.172	.0156	.0473	10.50	.0408	.0039	.0036	.0068
Stddev	.0012	.08	.066	.0001	.0008	.08	.0006	.0007	.0006	.0011
%RSD	.3450	.7628	1.268	.5635	1.681	.7697	1.429	19.14	16.09	15.65
#1	.3556	10.54	5.121	.0155	.0482	10.42	.0414	.0031	.0038	.0076
#2	.3567	10.65	5.149	.0156	.0470	10.50	.0405	.0046	.0040	.0072
#3	.3543	10.70	5.246	.0157	.0467	10.58	.0403	.0039	.0029	.0056

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0606	.0516	.0125	.0111	.0090	.0467	.0209
Stddev	.0004	.0007	.0000	.0001	.0004	.0005	.0002
%RSD	.6548	1.360	.0599	.9444	4.582	1.020	.7320
#1	.0609	.0523	.0125	.0111	.0094	.0462	.0211
#2	.0608	.0518	.0125	.0112	.0087	.0472	.0209
#3	.0602	.0509	.0125	.0110	.0089	.0467	.0208

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3364.5	6826.4	59554.	4774.1
Stddev	28.8	54.5	381.	63.3
%RSD	.85670	.79847	.64001	1.3256
#1	3333.3	6765.0	59971.	4845.1
#2	3370.1	6845.3	59469.	4753.3
#3	3390.1	6869.0	59223.	4723.8

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/12/2015 17:20:32 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0004	F506.0	-.0003	.0003	-.0003	464.4	-.0022	-.0016	-.0002
Stddev	.0008	4.7	.0010	.0002	.0000	10.3	.0001	.0001	.0001
%RSD	226.8	.9233	336.9	65.00	7.477	2.219	4.955	4.775	36.46
#1	-.0013	500.6	-.0014	.0001	-.0003	476.3	-.0023	-.0015	-.0003
#2	.0001	508.5	.0007	.0006	-.0003	458.3	-.0023	-.0016	-.0001
#3	.0001	508.9	-.0002	.0003	-.0002	458.6	-.0021	-.0016	-.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0008	181.3	.2683	489.9	-.0006	.0011	.1370	-.0001	-.0043
Stddev	.0001	.4	.0465	1.5	.0001	.0001	.0066	.0001	.0018
%RSD	15.64	.2287	17.32	.3135	12.57	6.141	4.824	88.46	42.77
#1	.0010	181.4	.2743	490.4	-.0007	.0012	.1444	-.0001	-.0022
#2	.0008	181.6	.3115	491.2	-.0005	.0011	.1351	-.0002	-.0055
#3	.0007	180.8	.2191	488.2	-.0006	.0010	.1315	.0000	-.0051

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0031	-.0001	.0794	.0009	.0002	.0006	-.0026	.0007	-.0022
Stddev	.0015	.0010	.0014	.0003	.0001	.0002	.0014	.0003	.0001
%RSD	48.54	1256.	1.823	33.09	52.39	31.85	54.44	37.31	2.812
#1	-.0049	.0010	.0791	.0006	.0002	.0008	-.0039	.0008	-.0022
#2	-.0023	-.0001	.0781	.0011	.0001	.0005	-.0029	.0004	-.0023
#3	-.0022	-.0011	.0809	.0012	.0003	.0004	-.0011	.0009	-.0023

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2672.7	6157.0	51659.	4439.6
Stddev	7.9	14.5	237.	4.5
%RSD	.29399	.23558	.45946	.10161
#1	2677.0	6160.8	51743.	4435.1
#2	2677.4	6169.3	51843.	4439.6
#3	2663.6	6141.0	51391.	4444.2

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/12/2015 17:25:07 Type: Unk
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.032	F511.8	.9924	.5468	.4871	453.7	.8764	.4633	.4783
Stddev	.002	7.8	.0131	.0021	.0006	5.1	.0126	.0064	.0026
%RSD	.1453	1.533	1.315	.3924	.1307	1.127	1.435	1.386	.5411
#1	1.033	520.9	1.001	.5456	.4876	457.6	.8839	.4672	.4787
#2	1.030	506.7	.9992	.5456	.4864	447.9	.8834	.4669	.4755
#3	1.031	507.9	.9773	.5493	.4872	455.5	.8619	.4559	.4806

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5530	179.7	.1273	489.5	.4843	.8984	.0908	.8968	.9192
Stddev	.0020	.7	.0376	2.9	.0033	.0136	.0145	.0122	.0109
%RSD	.3591	.3666	29.54	.5892	.6769	1.511	16.00	1.359	1.182
#1	.5551	179.9	.0982	490.3	.4838	.9062	.0936	.9034	.9273
#2	.5512	179.0	.1698	486.3	.4812	.9062	.1037	.9041	.9235
#3	.5528	180.2	.1140	492.0	.4877	.8827	.0751	.8827	.9069

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.9919	.9779	.0373	.9157	.9854	.9541	.9297	.4521	.8821
Stddev	.0150	.0111	.0011	.0138	.0009	.0034	.0129	.0030	.0126
%RSD	1.510	1.136	3.011	1.511	.0949	.3604	1.389	.6641	1.432
#1	.9979	.9846	.0384	.9248	.9853	.9544	.9377	.4530	.8890
#2	1.003	.9841	.0373	.9225	.9845	.9506	.9367	.4488	.8897
#3	.9748	.9651	.0362	.8998	.9864	.9574	.9148	.4546	.8675

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2648.6	6184.1	51759.	4452.2
Stddev	28.3	72.2	404.	38.0
%RSD	1.0671	1.1672	.78059	.85352
#1	2630.3	6142.2	51735.	4427.7
#2	2634.4	6142.6	52174.	4496.0
#3	2681.2	6267.4	51367.	4433.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 17:29:36 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2523	41.42	1.935	2.125	1.948	39.17	1.961	2.001	1.973	2.031
Stddev	.0014	.21	.024	.008	.007	.10	.023	.024	.013	.006
%RSD	.5682	.5129	1.215	.3684	.3577	.2610	1.161	1.206	.6803	.3069
#1	.2507	41.31	1.936	2.117	1.943	39.16	1.964	2.006	1.958	2.025
#2	.2528	41.67	1.910	2.133	1.956	39.27	1.936	1.975	1.983	2.037
#3	.2535	41.29	1.957	2.126	1.945	39.07	1.981	2.023	1.979	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.22	41.46	40.85	1.947	2.006	41.51	1.933	1.945	1.952	1.977
Stddev	.13	.21	.09	.027	.024	.22	.024	.024	.020	.026
%RSD	.3302	.4977	.2150	1.408	1.189	.5216	1.251	1.219	1.034	1.320
#1	40.13	41.26	40.92	1.915	2.011	41.30	1.937	1.952	1.958	1.982
#2	40.37	41.67	40.75	1.962	1.980	41.73	1.907	1.919	1.929	1.948
#3	40.17	41.45	40.87	1.963	2.027	41.48	1.955	1.964	1.968	2.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.776	2.023	2.008	1.954	1.956	1.894	1.911
Stddev	.024	.024	.010	.010	.027	.014	.024
%RSD	1.351	1.163	.4899	.5271	1.401	.7147	1.231
#1	1.783	2.027	2.000	1.942	1.965	1.878	1.911
#2	1.750	1.998	2.019	1.960	1.925	1.904	1.887
#3	1.796	2.045	2.006	1.960	1.978	1.898	1.934
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/12/2015 17:29:36 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2989.3	6568.0	57270.	4661.5
Stddev	30.7	62.8	364.	13.5
%RSD	1.0281	.95567	.63641	.28975
#1	2981.7	6561.4	57660.	4645.9
#2	3023.1	6633.8	56939.	4668.6
#3	2963.1	6508.8	57211.	4670.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 17:33:51 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0224	-.0008	.0004	.0004	.0293	-.0001	.0000	.0002
Stddev	.0006	.0060	.0006	.0002	.0000	.0028	.0000	.0000	.0002
%RSD	297.9	26.88	68.72	50.97	7.283	9.646	38.43	82.66	89.23
#1	.0003	.0278	-.0002	.0002	.0004	.0326	-.0001	.0001	.0001
#2	-.0008	.0159	-.0010	.0006	.0004	.0277	.0000	.0000	.0003
#3	-.0001	.0235	-.0013	.0003	.0004	.0277	-.0001	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0345	.1472	.0276	.0003	F.0039	.0276	-.0001	.0002
Stddev	.0002	.0067	.0526	.0270	.0001	.0015	.0098	.0001	.0004
%RSD	65.22	19.50	35.76	97.93	22.02	37.54	35.42	85.79	179.9
#1	.0004	.0423	.1900	.0367	.0004	.0055	.0385	-.0001	.0003
#2	.0002	.0303	.1632	.0488	.0003	.0038	.0247	.0000	.0006
#3	.0001	.0310	.0884	-.0028	.0003	.0025	.0196	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0006	.0014	.0006	.0005	.0013	.0007	.0000	.0007
Stddev	.0013	.0017	.0003	.0005	.0000	.0001	.0013	.0002	.0000
%RSD	223.0	277.7	19.19	82.74	8.622	6.597	181.6	1104.	4.040
#1	.0017	.0026	.0013	.0002	.0005	.0014	-.0006	-.0001	.0006
#2	-.0008	-.0003	.0017	.0011	.0006	.0013	.0019	.0002	.0007
#3	.0008	-.0004	.0011	.0004	.0005	.0013	.0008	.0000	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/12/2015 17:33:51 Type: QC
Method: 60102007_042011(v116) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3486.8	6933.0	59640.	4677.6
Stddev	43.4	78.1	178.	17.6
%RSD	1.2445	1.1268	.29857	.37523
#1	3475.7	6905.4	59564.	4660.0
#2	3450.1	6872.5	59513.	4677.8
#3	3534.7	7021.2	59844.	4695.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	2	V	-0.007608	0.000000	No
			Fe	0.000007	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.040330	0.000000	No
As 189.042 {478}	X	4	Fe	-0.000093	0.000000	No
			Cr	-0.000129	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000005	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000006	0.000000	No
Be 313.042 {108}	X	2	V	0.000042	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000076	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000007	0.000000	No
Cr 267.716 {126}	X	4	Al	0.000001	0.000000	No
			Fe	-0.000011	0.000000	No
			Ca	-0.000000	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	X	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000154	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000013	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000014	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	-0.000000	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	X	8	Al	0.000216	0.000000	No
			Fe	0.000070	0.000000	No
			Mo	-0.001466	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000275	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	X	11	Fe	0.000058	0.000000	No
			Cr	0.006369	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.002569	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	-0.000005	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000006	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000000	0.000000	No
Se 196.090 {472}	X	12	Fe	-0.000010	0.000000	No
			Ca	0.000004	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000025	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	0.000001	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	X	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	X	None				
Sr 407.771 { 83}	X	1	Ca	0.000003	0.000000	No
Ti 334.941 {101}	X	1	Ca	-0.000017	0.000000	No
Tl 190.856 {477}	X	10	Co	0.003248	0.000000	No
			Fe	0.000045	0.000000	No
			Al	-0.000022	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000001	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	X	5	Fe	0.000004	0.000000	No
			Cr	-0.001960	0.000000	No
			Mo	-0.004535	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	X	None				
Y 360.073 { 94}*	X	None				
Y 371.030 { 91}*	X	None				
Zn 206.200 {463}	X	5	Cr	-0.001305	0.000000	No
			Al	0.000000	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000020	0.000000	No
			As	0.001105	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000894	0.481054	0.000000	1.000000
	Al 396.152 { 85}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000328	0.137366	0.000000	1.000000
	As 189.042 {478}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000405	0.186670	0.000000	1.000000
	Ba 455.403 { 74}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.001332	6.993433	0.000000	1.000000
	Be 313.042 {108}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000865	6.557844	0.000000	1.000000
	Ca 317.933 {106}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.002729	0.178674	0.000000	1.000000
	Cd 226.502 {449}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.001117	4.764754	0.000000	1.000000
	Co 228.616 {447}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000396	2.357697	0.000000	1.000000
	Cr 267.716 {126}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000094	0.419701	0.000000	1.000000
	Cu 324.754 {104}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.005746	0.611236	0.000000	1.000000
	Fe 259.940 {130}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.001823	0.140709	0.000000	1.000000
	In 230.606 {446}*	2/12/2015 10:47:57	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.003545	0.064952	0.000000	1.000000
	Mg 279.079 {121}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000051	0.019259	0.000000	1.000000
	Mn 257.610 {131}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000417	2.528714	0.000000	1.000000
	Mo 202.030 {467}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.003393	1.027929	0.000000	1.000000
	Na 589.592 { 57}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.009956	0.232376	0.000000	1.000000
	Ni 231.604 {445}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000206	1.465454	0.000000	1.000000
	Pb 220.353 {453}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000118	0.833981	0.000000	1.000000
	Sb 206.833 {463}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000611	0.233277	0.000000	1.000000
	Se 196.090 {472}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000373	0.133563	0.000000	1.000000
	Si 212.412 {459}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.004233	0.423569	0.000000	1.000000
	Sn 189.989 {477}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000759	0.401197	0.000000	1.000000
	Sr 407.771 { 83}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.000389	11.599716	0.000000	1.000000
	Ti 334.941 {101}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.002800	1.634340	0.000000	1.000000
	Tl 190.856 {477}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.001461	0.310030	0.000000	1.000000
	V 292.402 {115}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	-0.000580	0.531091	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/12/2015 10:47:57	2/12/2015 10:12:18	Linear	1/Conc	0.002013	2.751815	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999988	0.000022	0.000387	0.001291	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999787	0.004577	0.010360	0.034534	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999986	0.000080	0.000734	0.002447	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999789	0.011564	0.000257	0.000856	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999812	0.010248	0.000094	0.000313	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999837	0.005199	0.003877	0.012922	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999937	0.004330	0.000044	0.000147	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999937	0.002130	0.000099	0.000331	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999915	0.000441	0.000261	0.000869	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999975	0.000349	0.000270	0.000899	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999350	0.008177	0.002724	0.009081	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999889	0.001561	0.036149	0.120498	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999656	0.000814	0.025142	0.083808	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999744	0.004610	0.000040	0.000133	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999988	0.000407	0.000137	0.000455	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999751	0.008357	0.010825	0.036084	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999936	0.001333	0.000162	0.000539	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999945	0.000707	0.000548	0.001826	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999991	0.000081	0.000946	0.003154	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999996	0.000029	0.001517	0.005057	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.990726	0.004768	0.000366	0.001220	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999874	0.000512	0.000291	0.000971	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999806	0.018422	0.000098	0.000327	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999867	0.002147	0.000105	0.000350	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999996	0.000071	0.000885	0.002950	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999968	0.000341	0.000256	0.000855	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999930	0.002625	0.000058	0.000195	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/13/2015 9:28:55 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0025	-.0003	.0226	.0038	.0088	.0009	.0015	.0002
Stddev	.0002	.0014	.0001	.0025	.0015	.0007	.0002	.0002	.0001
%RSD	192.8	54.52	43.88	11.14	39.58	8.520	19.03	12.21	56.32
#1	.0002	.0020	-.0004	.0206	.0035	.0083	.0008	.0017	.0001
#2	.0003	.0040	-.0004	.0217	.0053	.0096	.0011	.0015	.0004
#3	-.0001	.0014	-.0002	.0254	.0024	.0084	.0009	.0013	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0050	.0043	.0065	-.0002	.0018	.0026	-.0196	.0004	-.0037
Stddev	.0003	.0004	.0055	.0008	.0001	.0004	.0073	.0000	.0012
%RSD	5.493	9.872	84.89	433.2	8.192	16.48	37.37	11.65	31.53
#1	.0048	.0046	.0084	-.0005	.0016	.0030	-.0157	.0004	-.0028
#2	.0048	.0046	.0003	.0007	.0019	.0025	-.0151	.0005	-.0032
#3	.0053	.0038	.0107	-.0008	.0017	.0022	-.0281	.0004	-.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0006	-.0008	.0091	.0004	.0045	.0040	-.0061	-.0001	.0045
Stddev	.0003	.0002	.0001	.0001	.0031	.0002	.0002	.0003	.0003
%RSD	48.50	22.94	.7228	30.94	68.54	4.013	3.722	264.2	6.740
#1	.0008	-.0009	.0092	.0004	.0055	.0041	-.0058	-.0003	.0042
#2	.0006	-.0006	.0091	.0005	.0069	.0038	-.0063	.0002	.0048
#3	.0003	-.0009	.0091	.0002	.0010	.0041	-.0061	-.0002	.0046

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1676.6	4879.0	31798.	2294.8
Stddev	1.9	3.3	148.	34.9
%RSD	.11211	.06854	.46420	1.5217
#1	1677.7	4879.9	31630.	2254.5
#2	1674.5	4881.8	31908.	2315.2
#3	1677.7	4875.3	31856.	2314.9

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/13/2015 9:36:06 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0406	1.623	.1407	5.644	3.958	2.411	2.825	1.286	.2834	.4395
Stddev	.0002	.008	.0003	.021	.013	.010	.002	.001	.0009	.0005
%RSD	.4949	.4847	.2355	.3804	.3344	.4125	.0632	.1016	.3224	.1180
#1	.0405	1.632	.1406	5.666	3.972	2.421	2.827	1.287	.2844	.4400
#2	.0409	1.616	.1411	5.623	3.946	2.402	2.824	1.284	.2831	.4390
#3	.0405	1.621	.1405	5.643	3.957	2.409	2.825	1.287	.2826	.4394

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.356	1.504	.2114	1.822	.6234	4.871	.8037	.6710	.1436	.1067
Stddev	.006	.011	.0009	.003	.0011	.020	.0007	.0008	.0006	.0005
%RSD	.4279	.7368	.4037	.1355	.1776	.3997	.0917	.1262	.4004	.4316
#1	1.362	1.511	.2122	1.824	.6221	4.887	.8043	.6711	.1431	.1064
#2	1.351	1.491	.2105	1.820	.6237	4.849	.8029	.6719	.1442	.1065
#3	1.354	1.510	.2114	1.820	.6243	4.876	.8040	.6702	.1434	.1073

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1886	.2412	8.440	1.103	.2867	.3692	1.924
Stddev	.0000	.0004	.034	.002	.0013	.0011	.002
%RSD	.0202	.1467	.4033	.1885	.4419	.2987	.0998
#1	.1886	.2408	8.472	1.105	.2853	.3704	1.926
#2	.1886	.2415	8.404	1.101	.2877	.3683	1.922
#3	.1886	.2413	8.443	1.102	.2872	.3688	1.925

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1650.3	4718.8	31655.	2352.9
Stddev	5.3	9.2	19.	11.6
%RSD	.31885	.19543	.06130	.49428
#1	1656.3	4729.3	31635.	2339.5
#2	1646.5	4715.1	31673.	2358.8
#3	1648.2	4712.0	31658.	2360.5

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/13/2015 9:39:15 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1574	6.045	.5529	21.33	14.90	8.896	10.82	4.943	1.062	1.682
Stddev	.0023	.020	.0040	.04	.05	.035	.07	.034	.010	.016
%RSD	1.450	.3293	.7274	.1888	.3613	.3945	.6870	.6962	.9646	.9725
#1	.1569	6.058	.5522	21.37	14.95	8.929	10.82	4.941	1.062	1.682
#2	.1599	6.055	.5573	21.34	14.90	8.900	10.89	4.979	1.072	1.698
#3	.1554	6.022	.5494	21.29	14.85	8.859	10.74	4.910	1.052	1.665

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	4.987	5.806	.7954	6.957	2.413	18.52	3.086	2.583	.5594	.4183
Stddev	.020	.014	.0026	.073	.016	.05	.020	.018	.0036	.0038
%RSD	.4085	.2352	.3242	1.054	.6463	.2451	.6337	.6824	.6395	.9000
#1	5.007	5.803	.7954	6.945	2.404	18.56	3.081	2.585	.5595	.4179
#2	4.989	5.821	.7979	7.036	2.431	18.53	3.107	2.599	.5629	.4223
#3	4.966	5.794	.7927	6.891	2.403	18.47	3.069	2.564	.5557	.4148

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.037	.9347	32.17	4.283	1.132	1.405	7.209
Stddev	.007	.0056	.10	.047	.007	.015	.049
%RSD	.6358	.6037	.3211	1.096	.5920	1.050	.6743
#1	1.036	.9340	32.26	4.282	1.136	1.401	7.215
#2	1.043	.9406	32.19	4.331	1.137	1.421	7.255
#3	1.030	.9294	32.06	4.237	1.125	1.392	7.158

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1646.8	4703.3	31696.	2407.2
Stddev	7.8	26.1	216.	12.9
%RSD	.47504	.55409	.67999	.53632
#1	1645.2	4705.7	31697.	2404.0
#2	1639.9	4676.0	31480.	2396.2
#3	1655.3	4728.0	31911.	2421.4

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/13/2015 9:42:22 Type: Cal
Method: 60102007_041712(v119) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3211	12.29	1.161	43.80	30.14	17.81	22.36	10.31	2.140	3.468
Stddev	.0005	.08	.002	.19	.19	.13	.04	.02	.006	.007
%RSD	.1407	.6496	.2015	.4368	.6158	.7429	.1786	.1978	.2666	.2064
#1	.3210	12.29	1.163	43.80	30.19	17.85	22.40	10.33	2.141	3.461
#2	.3216	12.21	1.159	43.61	29.94	17.66	22.32	10.29	2.145	3.476
#3	.3207	12.37	1.160	44.00	30.30	17.92	22.38	10.32	2.133	3.467

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.925	11.92	1.618	13.88	5.081	37.60	6.446	5.388	1.181	.8763
Stddev	.058	.08	.009	.12	.008	.20	.011	.006	.002	.0014
%RSD	.5858	.6703	.5514	.8511	.1523	.5371	.1705	.1112	.1551	.1614
#1	9.955	11.92	1.621	13.96	5.080	37.66	6.456	5.391	1.183	.8768
#2	9.858	11.84	1.608	13.93	5.074	37.38	6.434	5.381	1.179	.8747
#3	9.963	12.00	1.625	13.75	5.090	37.77	6.448	5.392	1.181	.8774

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.618	1.961	64.76	8.637	2.362	2.941	14.83
Stddev	.006	.003	.36	.015	.005	.003	.03
%RSD	.2484	.1354	.5490	.1704	.2218	.1159	.1738
#1	2.624	1.962	64.76	8.637	2.365	2.939	14.84
#2	2.612	1.958	64.40	8.652	2.356	2.945	14.80
#3	2.617	1.963	65.11	8.622	2.366	2.940	14.84

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1521.6	4352.5	30173.	2307.7
Stddev	2.3	8.9	191.	17.1
%RSD	.15343	.20400	.63334	.74204
#1	1520.5	4348.7	30009.	2300.5
#2	1524.2	4362.7	30128.	2327.2
#3	1520.0	4346.2	30383.	2295.3

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/13/2015 9:46:47 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4853	76.93	3.959	3.913	3.854	76.45	3.895	3.913	3.808	3.877
Stddev	.0006	.13	.004	.007	.007	.16	.010	.008	.017	.025
%RSD	.1143	.1629	.1033	.1783	.1882	.2071	.2493	.1981	.4538	.6355
#1	.4852	76.85	3.958	3.915	3.850	76.33	3.906	3.922	3.788	3.850
#2	.4847	77.08	3.956	3.918	3.862	76.63	3.891	3.910	3.819	3.882
#3	.4858	76.87	3.963	3.905	3.849	76.40	3.888	3.908	3.817	3.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	76.41	78.24	77.13	3.830	3.961	76.93	3.937	3.912	3.968	3.951
Stddev	.20	.23	.32	.016	.004	.19	.005	.012	.004	.007
%RSD	.2593	.2945	.4171	.4225	.1100	.2481	.1201	.3167	.1014	.1889
#1	76.30	78.33	76.89	3.811	3.965	76.88	3.942	3.925	3.969	3.960
#2	76.64	78.42	77.49	3.838	3.956	77.14	3.934	3.912	3.964	3.946
#3	76.29	77.98	77.00	3.840	3.960	76.77	3.934	3.900	3.972	3.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.330	3.957	3.863	3.852	3.927	3.892	3.876
Stddev	.008	.009	.007	.018	.016	.025	.011
%RSD	.1766	.2310	.1899	.4769	.4045	.6300	.2868
#1	4.338	3.967	3.866	3.831	3.945	3.863	3.889
#2	4.324	3.950	3.868	3.859	3.923	3.903	3.871
#3	4.327	3.952	3.855	3.866	3.914	3.908	3.868
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/13/2015 9:46:47 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1564.3	4464.8	31338.	2382.2
Stddev	4.3	7.5	118.	17.0
%RSD	.27776	.16831	.37723	.71252
#1	1559.7	4456.8	31472.	2397.3
#2	1564.9	4471.7	31247.	2363.8
#3	1568.3	4466.0	31297.	2385.6

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/13/2015 9:53:35 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2401	38.67	1.966	2.026	1.918	39.80	1.876	1.916	1.833	1.859
Stddev	.0004	.03	.006	.006	.008	.08	.003	.004	.009	.005
%RSD	.1854	.0892	.2977	.2746	.4275	.2035	.1543	.1905	.4666	.2823
#1	.2406	38.65	1.965	2.021	1.911	39.76	1.879	1.918	1.843	1.865
#2	.2400	38.64	1.973	2.025	1.915	39.76	1.877	1.918	1.828	1.858
#3	.2397	38.71	1.961	2.032	1.927	39.90	1.873	1.912	1.829	1.854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.28	40.16	39.25	1.905	1.830	39.37	1.989	1.887	1.940	1.959
Stddev	.07	.08	.06	.005	.002	.04	.003	.007	.005	.004
%RSD	.1902	.2047	.1434	.2397	.1109	.1025	.1574	.3810	.2350	.1774
#1	39.20	40.13	39.21	1.910	1.830	39.33	1.991	1.893	1.945	1.955
#2	39.34	40.11	39.31	1.902	1.832	39.37	1.990	1.888	1.939	1.961
#3	39.32	40.26	39.23	1.902	1.828	39.41	1.986	1.879	1.937	1.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0148	2.018	1.866	1.843	1.947	1.835	1.932
Stddev	.0003	.003	.004	.005	.008	.005	.003
%RSD	1.985	.1616	.2350	.2837	.4074	.2527	.1749
#1	.0145	2.019	1.862	1.849	1.955	1.840	1.935
#2	.0150	2.021	1.866	1.841	1.946	1.832	1.933
#3	.0150	2.015	1.870	1.839	1.940	1.833	1.929
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/13/2015 9:53:35 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1632.3	4563.3	32261.	2421.5
Stddev	3.2	5.9	131.	4.1
%RSD	.19400	.12882	.40623	.16870
#1	1629.0	4562.0	32119.	2416.8
#2	1632.4	4558.1	32377.	2424.4
#3	1635.4	4569.7	32287.	2423.2

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/13/2015 10:00:11 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0053	-.0009	-.0007	-.0004	-.0084	-.0002	-.0004
Stddev	.0000	.0257	.0005	.0003	.0001	.0028	.0001	.0002
%RSD	6.415	481.8	52.84	37.85	35.93	32.91	41.09	47.38
#1	.0005	.0152	-.0004	-.0009	-.0004	-.0113	-.0003	-.0002
#2	.0005	.0030	-.0013	-.0008	-.0005	-.0082	-.0001	-.0004
#3	.0005	-.0342	-.0011	-.0004	-.0002	-.0058	-.0003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0004	-.0136	.0230	-.0121	-.0003	-.0003	.0093
Stddev	.0002	.0003	.0048	.0260	.0135	.0000	.0002	.0102
%RSD	54.07	81.49	35.64	113.1	111.8	11.62	56.55	109.7
#1	-.0002	.0001	-.0099	.0339	-.0199	-.0003	-.0002	-.0009
#2	-.0002	.0008	-.0190	-.0067	.0035	-.0002	-.0002	.0195
#3	-.0005	.0004	-.0117	.0417	-.0198	-.0003	-.0005	.0094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F-.0014	-.0017	-.0003	-.0002	.0007	-.0002	-.0003
Stddev	.0002	.0007	.0007	.0003	.0002	.0002	.0001	.0002
%RSD	183.6	46.67	42.95	97.52	79.02	27.34	56.64	76.20
#1	.0000	-.0007	-.0025	-.0002	-.0002	.0008	-.0002	-.0003
#2	.0000	-.0016	-.0011	-.0006	-.0001	.0005	-.0004	-.0001
#3	-.0004	-.0020	-.0015	-.0001	-.0004	.0008	-.0002	-.0005
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010						
Low Limit		-.0010						

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/13/2015 10:00:11 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	.0004	.0000	-.0002
Stddev	.0016	.000	.0001
%RSD	384.1	1396.	26.14
#1	-.0014	.0003	-.0002
#2	.0015	-.0002	-.0001
#3	.0010	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1666.2	4625.6	33404.	2477.8
Stddev	9.7	25.3	633.	17.7
%RSD	.57961	.54641	1.8952	.71274
#1	1677.3	4651.4	33904.	2462.3
#2	1662.1	4624.6	32692.	2497.1
#3	1659.4	4600.8	33615.	2474.0

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/13/2015 10:08:49 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0104	.1849	.0106	.2029	.0044	.9485	.0047	.0502	.0089
Stddev	.0003	.0068	.0005	.0001	.0000	.0034	.0001	.0005	.0001
%RSD	3.170	3.704	5.174	.0447	.1118	.3576	1.283	.9411	1.183
#1	.0101	.1897	.0102	.2029	.0044	.9509	.0047	.0498	.0090
#2	.0106	.1800	.0109	.2030	.0044	.9461	.0046	.0505	.0088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0250	.2676	9.716	5.013	.0146	.0465	9.449	.0420	F.0036
Stddev	.0001	.0066	.086	.000	.0000	.0002	.056	.0006	.0006
%RSD	.2959	2.483	.8808	.0036	.0752	.4718	.5869	1.328	16.32
#1	.0249	.2723	9.776	5.013	.0146	.0464	9.489	.0416	.0032
#2	.0250	.2629	9.655	5.012	.0145	.0467	9.410	.0424	.0040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value									.0050
Range									-20.00%

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	.0112	.0396	.0536	.0095	.0082	.0095	.0479	.0208
Stddev	.0005	.0001	.0002	.0004	.0000	.0000	.0014	.0001	.0001
%RSD	11.43	1.034	.5591	.6794	.0199	.2134	14.99	.1506	.6809
#1	.0039	.0111	.0395	.0539	.0095	.0082	.0105	.0478	.0207
#2	.0045	.0112	.0398	.0533	.0095	.0082	.0085	.0479	.0209
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/13/2015 10:08:49 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1654.5	4538.4	33068.	2452.8
Stddev	2.8	10.1	131.	13.7
%RSD	.16800	.22189	.39559	.55692
#1	1652.6	4545.5	33160.	2443.2
#2	1656.5	4531.3	32975.	2462.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:15:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2457	36.56	2.092	1.975	1.903	36.75	1.990	1.995	1.827	1.927
Stddev	.0008	.01	.005	.002	.004	.03	.003	.003	.006	.004
%RSD	.3130	.0402	.2573	.0946	.2007	.0839	.1482	.1556	.3314	.2312
#1	.2451	36.57	2.097	1.977	1.907	36.78	1.992	1.998	1.821	1.925
#2	.2466	36.55	2.086	1.974	1.900	36.74	1.986	1.992	1.834	1.932
#3	.2455	36.54	2.092	1.975	1.902	36.72	1.990	1.995	1.827	1.925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.51	38.60	39.12	1.942	2.026	37.01	2.074	1.915	2.069	2.087
Stddev	.02	.02	.12	.003	.004	.01	.003	.003	.006	.003
%RSD	.0593	.0641	.2998	.1630	.2246	.0301	.1540	.1297	.2893	.1529
#1	38.50	38.60	39.25	1.938	2.024	37.00	2.077	1.913	2.074	2.090
#2	38.53	38.63	39.10	1.942	2.022	37.02	2.072	1.917	2.062	2.084
#3	38.49	38.58	39.01	1.945	2.031	37.02	2.072	1.913	2.070	2.086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.884	2.149	1.898	1.908	1.930	1.960	2.000
Stddev	.006	.002	.002	.003	.005	.004	.002
%RSD	.2974	.1064	.0986	.1549	.2653	.2118	.0909
#1	1.888	2.150	1.900	1.905	1.926	1.955	2.002
#2	1.878	2.146	1.896	1.911	1.936	1.963	1.999
#3	1.885	2.150	1.898	1.909	1.929	1.962	1.998
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:15:17 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1601.7	4376.2	32329.	2455.2
Stddev	7.3	13.3	169.	6.9
%RSD	.45857	.30451	.52234	.27987
#1	1601.5	4365.5	32490.	2463.1
#2	1594.5	4372.0	32343.	2451.8
#3	1609.2	4391.1	32153.	2450.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:21:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0041	-.0001	-.0001	.0002	.0077	.0003	.0002	.0003	.0008
Stddev	.0005	.0127	.0001	.0001	.0000	.0021	.0000	.0000	.0001	.0001
%RSD	79.60	312.5	114.3	79.76	20.93	26.90	16.57	22.01	41.03	9.670
#1	.0010	-.0101	-.0002	-.0001	.0002	.0087	.0002	.0002	.0003	.0008
#2	.0006	.0144	-.0003	.0000	.0002	.0053	.0003	.0002	.0005	.0009
#3	.0001	.0079	.0000	-.0002	.0002	.0090	.0003	.0002	.0002	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0048	.0059	.0280	.0002	-.0003	.0221	.0004	-.0001	-.0005	.0008
Stddev	.0040	.0095	.0393	.0000	.0001	.0059	.0004	.0007	.0002	.0008
%RSD	82.30	161.7	140.2	20.87	34.40	26.66	85.60	937.6	48.80	98.22
#1	-.0007	.0009	.0227	.0003	-.0002	.0283	.0006	-.0007	-.0003	.0002
#2	-.0051	.0168	-.0083	.0002	-.0003	.0166	.0007	-.0002	-.0008	.0017
#3	-.0086	-.0001	.0697	.0002	-.0004	.0214	.0000	.0006	-.0004	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0006	.0003	-.0001	.0001	.0003	.0003
Stddev	.0003	.0002	.0000	.0001	.0016	.0002	.0000
%RSD	59.17	30.52	9.962	223.8	2414.	57.68	1.103
#1	.0006	.0008	.0002	.0000	-.0015	.0004	.0003
#2	.0002	.0004	.0003	.0000	.0016	.0001	.0003
#3	.0007	.0005	.0003	-.0002	.0001	.0004	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:21:18 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1686.2	4609.7	34273.	2520.7
Stddev	1.6	5.1	107.	14.4
%RSD	.09578	.11037	.31262	.57164
#1	1687.7	4615.5	34333.	2514.6
#2	1684.5	4607.7	34150.	2537.1
#3	1686.4	4605.9	34338.	2510.2

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:44:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2543	40.68	1.974	2.006	2.032	40.96	2.005	1.995	2.067	2.041
Stddev	.0013	.14	.002	.007	.009	.17	.001	.001	.003	.006
%RSD	.4990	.3556	.1042	.3488	.4406	.4186	.0247	.0445	.1200	.3132
#1	.2548	40.56	1.974	1.998	2.022	40.79	2.006	1.995	2.065	2.036
#2	.2529	40.84	1.976	2.007	2.039	41.13	2.005	1.995	2.067	2.038
#3	.2553	40.63	1.972	2.012	2.034	40.96	2.006	1.994	2.070	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.95	40.13	40.45	2.054	1.980	40.68	1.979	1.983	1.972	1.976
Stddev	.10	.12	.10	.004	.002	.18	.003	.005	.002	.001
%RSD	.2488	.2897	.2591	.1717	.0900	.4391	.1444	.2431	.1077	.0485
#1	40.83	40.00	40.40	2.055	1.978	40.51	1.982	1.988	1.973	1.975
#2	41.01	40.16	40.38	2.050	1.982	40.87	1.979	1.978	1.973	1.977
#3	41.01	40.23	40.57	2.056	1.981	40.67	1.976	1.983	1.969	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.789	1.979	2.042	2.062	1.991	2.020	2.001
Stddev	.003	.001	.011	.003	.006	.003	.000
%RSD	.1533	.0698	.5495	.1215	.2977	.1704	.0077
#1	1.791	1.979	2.030	2.061	1.996	2.019	2.001
#2	1.791	1.980	2.052	2.060	1.984	2.017	2.001
#3	1.786	1.978	2.044	2.064	1.992	2.023	2.001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 10:44:15 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1593.7	4315.6	32375.	2475.1
Stddev	4.6	2.5	49.	4.9
%RSD	.28884	.05705	.15085	.19628
#1	1590.7	4314.3	32362.	2469.9
#2	1599.0	4314.1	32429.	2479.6
#3	1591.4	4318.4	32334.	2475.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:50:56 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0187	.0006	.0004	.0006	.0103	.0005	.0004	.0005
Stddev	.0001	.0107	.0006	.0002	.0002	.0067	.0001	.0000	.0002
%RSD	22.56	57.23	103.8	44.01	28.68	65.29	16.86	6.268	38.76
#1	.0007	.0201	.0011	.0002	.0004	.0030	.0006	.0004	.0007
#2	.0007	.0073	.0007	.0004	.0008	.0117	.0005	.0004	.0003
#3	.0004	.0286	-.0001	.0006	.0007	.0162	.0005	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0222	.0754	-.0167	.0006	F.0014	.0409	.0002	F.0015
Stddev	.0002	.0040	.0191	.0290	.0000	.0001	.0089	.0000	.0008
%RSD	38.99	18.21	25.37	173.7	7.115	5.493	21.79	6.114	56.37
#1	.0004	.0182	.0585	.0126	.0006	.0015	.0511	.0002	.0016
#2	.0008	.0263	.0962	-.0454	.0006	.0014	.0351	.0002	.0022
#3	.0006	.0222	.0716	-.0172	.0005	.0013	.0364	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit						.0010			.0010
Low Limit						-.0010			-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0008	.0016	.0009	.0007	.0013	.0010	.0006	.0006
Stddev	.0007	.0011	.0007	.0002	.0002	.0001	.0014	.0002	.0000
%RSD	126.8	143.6	45.01	25.13	28.62	6.696	133.1	33.52	6.248
#1	.0014	-.0021	.0010	.0010	.0006	.0014	-.0001	.0008	.0007
#2	.0001	-.0002	.0013	.0006	.0005	.0012	.0006	.0006	.0006
#3	.0002	-.0001	.0024	.0010	.0009	.0013	.0025	.0004	.0006
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 10:50:56 Type: QC
Method: 60102007_041712(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1673.9	4531.7	33760.	2522.0
Stddev	2.5	4.1	57.	22.6
%RSD	.15082	.09030	.16831	.89413
#1	1673.5	4529.9	33756.	2537.1
#2	1676.5	4528.8	33818.	2532.9
#3	1671.5	4536.4	33705.	2496.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 10:55:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	518.7	-.0013	-.0002	.0000	496.3	.0000	.0007	-.0004	.0000
Stddev	.0005	2.5	.0009	.0001	.000	2.7	.0001	.0002	.0002	.0002
%RSD	68.79	.4827	71.78	52.91	1848.	.5377	241.5	23.53	45.44	972.3
#1	.0008	521.4	-.0002	-.0001	-.0001	498.9	.0000	.0008	-.0006	.0000
#2	.0002	516.4	-.0018	-.0002	-.0001	493.5	.0000	.0007	-.0005	.0002
#3	.0013	518.2	-.0020	-.0001	.0002	496.6	.0001	.0005	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	189.7	.2313	498.4	.0004	.0000	.1968	-.0002	-.0002	.0001	.0001
Stddev	.6	.0450	2.6	.0001	.0001	.0111	.0001	.0026	.0012	.0028
%RSD	.3307	19.45	.5145	15.72	319.9	5.643	40.84	1189.	1371.	1872.
#1	190.3	.1805	500.6	.0003	.0001	.1936	-.0003	-.0027	-.0010	.0017
#2	189.0	.2662	495.6	.0004	.0000	.1877	-.0003	.0025	-.0001	.0019
#3	189.8	.2472	499.2	.0004	.0000	.2092	-.0001	-.0004	.0014	-.0031
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0931	.0005	.0001	.0001	-.0018	-.0001	.0003
Stddev	.0012	.0007	.0001	.0003	.0030	.0002	.0001
%RSD	1.326	128.8	172.4	647.8	169.6	202.2	31.27
#1	.0939	-.0002	.0001	-.0003	-.0051	.0000	.0004
#2	.0916	.0012	.0001	.0002	-.0007	-.0004	.0004
#3	.0936	.0006	.0000	.0003	.0005	.0001	.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 10:55:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1486.0	3927.9	28845.	2352.4
Stddev	4.1	10.2	26.	23.9
%RSD	.27704	.25891	.08907	1.0163
#1	1483.8	3925.6	28828.	2344.6
#2	1490.7	3939.0	28832.	2379.3
#3	1483.5	3919.1	28874.	2333.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/13/2015 11:01:03 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.019	518.2	1.044	.5174	.5181	488.4	.9642	.5044	.5237	.5786
Stddev	.002	.2	.001	.0007	.0004	.7	.0028	.0011	.0020	.0032
%RSD	.1765	.0301	.0743	.1449	.0702	.1451	.2952	.2172	.3774	.5473
#1	1.020	518.1	1.043	.5182	.5178	487.7	.9611	.5031	.5257	.5822
#2	1.017	518.1	1.044	.5168	.5181	488.5	.9648	.5047	.5236	.5761
#3	1.019	518.4	1.045	.5172	.5185	489.1	.9666	.5053	.5218	.5776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	183.6	.2378	484.0	.5202	.9516	.1972	.9935	.9772	1.065	1.019
Stddev	.4	.0114	1.9	.0009	.0018	.0051	.0015	.0034	.003	.002
%RSD	.1927	4.772	.3838	.1789	.1860	2.591	.1478	.3491	.2488	.2353
#1	183.4	.2333	483.9	.5210	.9501	.1988	.9920	.9750	1.063	1.016
#2	183.5	.2294	482.2	.5204	.9511	.2014	.9934	.9756	1.068	1.020
#3	184.0	.2508	485.9	.5192	.9536	.1915	.9950	.9812	1.064	1.020
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0417	.9663	1.030	1.050	1.014	.5021	.9780
Stddev	.0003	.0017	.002	.001	.001	.0017	.0030
%RSD	.6612	.1810	.1641	.1364	.1212	.3423	.3087
#1	.0420	.9643	1.031	1.052	1.015	.5040	.9745
#2	.0415	.9671	1.030	1.049	1.013	.5007	.9795
#3	.0416	.9675	1.028	1.049	1.014	.5016	.9800
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/13/2015 11:01:03 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1502.6	4036.8	29199.	2371.3
Stddev	3.5	8.7	32.	21.7
%RSD	.23008	.21481	.10935	.91314
#1	1506.6	4046.2	29232.	2385.7
#2	1500.8	4029.1	29168.	2381.8
#3	1500.5	4035.2	29196.	2346.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 11:06:16 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2451	40.17	1.844	1.924	1.963	40.13	1.911	1.896	2.050	1.983
Stddev	.0011	.13	.004	.006	.008	.10	.002	.003	.001	.004
%RSD	.4683	.3300	.2046	.3162	.3969	.2612	.1105	.1451	.0418	.1935
#1	.2464	40.24	1.841	1.927	1.968	40.16	1.910	1.895	2.049	1.987
#2	.2441	40.25	1.843	1.927	1.968	40.22	1.910	1.895	2.051	1.980
#3	.2447	40.02	1.848	1.917	1.954	40.02	1.914	1.900	2.050	1.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.48	39.19	38.64	1.986	1.867	40.42	1.850	1.908	1.854	1.851
Stddev	.14	.14	.12	.002	.006	.15	.003	.004	.005	.003
%RSD	.3439	.3503	.3201	.0988	.3134	.3806	.1477	.2350	.2974	.1331
#1	39.56	39.29	38.73	1.988	1.863	40.53	1.851	1.906	1.857	1.848
#2	39.56	39.24	38.70	1.985	1.864	40.49	1.847	1.905	1.848	1.852
#3	39.32	39.03	38.50	1.985	1.874	40.25	1.852	1.913	1.858	1.853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.677	1.831	1.998	2.006	1.920	1.941	1.906
Stddev	.003	.003	.010	.002	.002	.003	.002
%RSD	.1730	.1390	.4901	.1069	.0899	.1598	.1101
#1	1.677	1.830	2.002	2.009	1.920	1.944	1.905
#2	1.674	1.829	2.005	2.005	1.919	1.941	1.904
#3	1.680	1.834	1.987	2.005	1.922	1.938	1.908
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 11:06:16 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1660.8	4566.2	33212.	2514.8
Stddev	4.2	5.1	15.	2.1
%RSD	.25063	.11136	.04549	.08532
#1	1661.4	4568.2	33200.	2517.2
#2	1664.6	4570.0	33229.	2514.1
#3	1656.4	4560.4	33208.	2513.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 11:12:43 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0010	.0001	.0001	.0003	.0082	.0002	.0002	.0002
Stddev	.0003	.0094	.0002	.0002	.0001	.0074	.0001	.0002	.0002
%RSD	307.0	940.9	141.0	291.5	32.02	89.95	30.78	79.71	159.6
#1	.0004	-.0098	.0001	.0003	.0004	.0013	.0003	.0000	.0003
#2	.0002	.0072	.0000	.0000	.0004	.0074	.0002	.0003	-.0001
#3	-.0002	.0055	.0004	-.0001	.0002	.0160	.0002	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0235	.0996	-.0007	.0002	F.0012	.0451	.0000	.0003
Stddev	.0002	.0046	.0464	.0226	.0000	.0002	.0065	.000	.0005
%RSD	1074.	19.55	46.54	3458.	9.595	21.20	14.53	1542.	138.2
#1	.0002	.0288	.0462	-.0153	.0002	.0015	.0473	-.0001	.0009
#2	-.0002	.0217	.1288	.0254	.0002	.0011	.0502	.0000	.0000
#3	.0001	.0201	.1240	-.0121	.0003	.0010	.0377	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	-.0006	.0009	.0004	.0004	.0009	-.0015	.0003	.0003
Stddev	.0003	.0009	.0003	.0004	.0001	.0002	.0006	.0002	.0000
%RSD	15.34	149.5	33.71	106.5	32.48	18.20	40.99	73.36	12.40
#1	.0019	.0004	.0006	.0005	.0003	.0011	-.0020	.0006	.0003
#2	.0016	-.0013	.0012	.0007	.0005	.0009	-.0008	.0002	.0004
#3	.0021	-.0009	.0009	-.0001	.0006	.0008	-.0017	.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 11:12:43 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.6	4632.1	33622.	2466.6
Stddev	7.4	12.0	87.	8.9
%RSD	.43762	.25978	.25938	.36071
#1	1685.5	4645.8	33521.	2470.1
#2	1671.4	4623.5	33681.	2473.3
#3	1681.9	4626.9	33663.	2456.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 12:54:40 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2496	40.63	1.963	2.008	2.032	40.90	1.987	1.977	2.018	1.991
Stddev	.0007	.09	.001	.008	.001	.10	.003	.002	.005	.004
%RSD	.2792	.2197	.0595	.3913	.0392	.2341	.1336	.0959	.2292	.2272
#1	.2490	40.65	1.962	2.013	2.031	40.96	1.984	1.975	2.022	1.995
#2	.2503	40.71	1.964	2.012	2.033	40.95	1.988	1.978	2.018	1.992
#3	.2495	40.54	1.963	1.999	2.031	40.79	1.988	1.979	2.013	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.86	40.39	40.43	2.027	1.965	40.69	1.967	1.966	1.963	1.965
Stddev	.12	.25	.01	.002	.007	.07	.002	.001	.003	.001
%RSD	.2818	.6261	.0334	.0989	.3524	.1783	.0865	.0634	.1551	.0692
#1	40.90	40.54	40.43	2.028	1.958	40.70	1.965	1.967	1.961	1.965
#2	40.95	40.52	40.42	2.028	1.966	40.76	1.967	1.964	1.962	1.964
#3	40.73	40.10	40.44	2.025	1.972	40.62	1.968	1.967	1.967	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.783	1.971	2.041	2.016	1.976	1.971	1.984
Stddev	.004	.003	.005	.003	.004	.006	.003
%RSD	.2298	.1292	.2655	.1511	.1855	.2821	.1630
#1	1.781	1.968	2.041	2.019	1.972	1.970	1.981
#2	1.779	1.972	2.047	2.016	1.979	1.977	1.987
#3	1.787	1.973	2.036	2.013	1.976	1.966	1.985
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 12:54:40 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1559.2	4409.0	29856.	2177.0
Stddev	.8	5.7	34.	5.9
%RSD	.04866	.13004	.11242	.26953
#1	1560.1	4415.4	29855.	2174.6
#2	1558.7	4407.4	29823.	2172.8
#3	1558.8	4404.3	29890.	2183.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:00:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0031	-.0001	.0004	.0004	.0093	.0004	.0002	-.0002
Stddev	.0005	.0108	.0011	.0001	.0002	.0009	.0000	.0001	.0002
%RSD	8700.	351.9	2045.	18.66	60.10	10.24	6.180	52.56	147.3
#1	-.0005	.0043	-.0002	.0005	.0004	.0092	.0004	.0003	-.0001
#2	.0001	-.0083	.0012	.0004	.0001	.0103	.0004	.0003	.0000
#3	.0004	.0132	-.0011	.0005	.0006	.0084	.0004	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0360	.0655	.0343	.0005	F.0025	.0293	.0003	.0003
Stddev	.0002	.0021	.0208	.0488	.0001	.0004	.0134	.0000	.0013
%RSD	76.40	5.783	31.80	142.3	9.425	15.98	45.70	12.06	470.5
#1	.0002	.0337	.0437	.0466	.0005	.0029	.0438	.0003	.0018
#2	.0001	.0378	.0675	-.0195	.0006	.0024	.0172	.0003	-.0008
#3	.0004	.0364	.0852	.0757	.0005	.0021	.0270	.0003	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0023	.0012	-.0003	F.0014	.0005	.0015	.0004	.0003	.0004
Stddev	.0004	.0005	.0003	.0001	.0001	.0001	.0001	.0002	.0001
%RSD	15.45	44.73	111.9	8.982	12.83	9.356	30.57	49.16	22.02
#1	.0022	.0008	-.0003	.0013	.0005	.0014	.0004	.0004	.0005
#2	.0028	.0010	.0001	.0015	.0006	.0014	.0005	.0004	.0004
#3	.0021	.0017	-.0005	.0014	.0006	.0017	.0003	.0001	.0003
Check ?	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020			.0010					
Low Limit	-.0020			-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:00:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.2	4458.4	29947.	2152.2
Stddev	8.8	26.4	106.	14.1
%RSD	.56036	.59207	.35484	.65665
#1	1566.5	4427.9	30062.	2138.0
#2	1578.3	4472.7	29928.	2152.3
#3	1583.8	4474.5	29852.	2166.3

Zoom In Zoom Out

Sample Name: FA22015-2 Acquired: 2/13/2015 13:04:19 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0123	375.2	.0777	5.445	.0360	26.66	-.0247	.0286	1.441	.0564
Stddev	.0030	1.5	.0089	.019	.0006	.10	.0006	.0002	.005	.0022
%RSD	24.15	.3907	11.40	.3422	1.546	.3936	2.470	.5523	.3444	3.897
#1	.0146	376.1	.0755	5.456	.0354	26.59	-.0249	.0288	1.436	.0542
#2	.0090	376.0	.0701	5.455	.0365	26.78	-.0252	.0284	1.441	.0586
#3	.0134	373.5	.0874	5.424	.0361	26.61	-.0240	.0287	1.446	.0565

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1070.	7.514	9.757	.5514	.0420	.9036	.1896	.1830	-.0062	.0518
Stddev	3.	.057	.536	.0007	.0012	.0772	.0017	.0046	.0058	.0200
%RSD	.2862	.7557	5.491	.1237	2.955	8.549	.8940	2.535	93.28	38.61
#1	1071.	7.469	9.196	.5515	.0433	.9781	.1877	.1862	.0000	.0748
#2	1072.	7.578	10.26	.5506	.0408	.9087	.1902	.1776	-.0071	.0379
#3	1067.	7.495	9.812	.5520	.0419	.8239	.1909	.1850	-.0115	.0428

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.753	.0396	2.779	1.381	-.0320	1.767	.2115
Stddev	.006	.0033	.011	.005	.0073	.003	.0007
%RSD	.1316	8.309	.4040	.3415	22.94	.1551	.3439
#1	4.758	.0374	2.784	1.378	-.0403	1.767	.2113
#2	4.746	.0381	2.787	1.378	-.0265	1.764	.2123
#3	4.755	.0434	2.766	1.386	-.0292	1.769	.2109

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1690.6	5385.4	36136.	2622.7
Stddev	1.5	4.9	124.	7.7
%RSD	.08592	.09142	.34382	.29401
#1	1690.2	5385.4	36219.	2617.2
#2	1689.3	5390.4	36195.	2619.4
#3	1692.1	5380.5	35993.	2631.5

Zoom In Zoom Out

Sample Name: FA22020-3 Acquired: 2/13/2015 13:08:23 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0030	51.08	.0251	.2775	.0017	643.9	.0098	.0151	.3540	.3735
Stddev	.0004	.27	.0011	.0008	.0002	2.1	.0001	.0001	.0014	.0174
%RSD	12.23	.5249	4.437	.2936	9.849	.3309	.7860	.8048	.3918	4.647
#1	.0028	51.39	.0260	.2782	.0017	646.4	.0099	.0151	.3555	.3935
#2	.0034	50.95	.0238	.2779	.0019	643.0	.0097	.0150	.3527	.3629
#3	.0027	50.91	.0255	.2766	.0016	642.4	.0098	.0152	.3539	.3641

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	48.87	3.070	38.32	.9318	.0045	.6653	.1060	.1773	.0033	.0060
Stddev	.11	.034	.08	.0014	.0002	.0165	.0002	.0028	.0020	.0027
%RSD	.2245	1.098	.2102	.1480	4.226	2.474	.2228	1.564	61.31	45.78
#1	48.95	3.062	38.23	.9333	.0046	.6802	.1061	.1768	.0054	.0029
#2	48.75	3.041	38.39	.9317	.0045	.6681	.1062	.1802	.0013	.0082
#3	48.92	3.107	38.34	.9305	.0042	.6476	.1058	.1747	.0033	.0067

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.527	.0402	.9681	.7055	-.0004	.1421	5.252
Stddev	.005	.0005	.0042	.0027	.0020	.0009	.010
%RSD	.2131	1.304	.4344	.3788	506.9	.6510	.1867
#1	2.531	.0404	.9729	.7081	.0017	.1427	5.260
#2	2.529	.0406	.9655	.7028	-.0006	.1410	5.255
#3	2.521	.0396	.9658	.7056	-.0023	.1425	5.241

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1531.4	4409.6	29300.	2193.9
Stddev	1.6	7.6	80.	10.2
%RSD	.10675	.17308	.27238	.46384
#1	1529.5	4403.1	29263.	2182.3
#2	1532.0	4407.6	29246.	2201.5
#3	1532.6	4418.0	29392.	2197.9

Zoom In Zoom Out

Sample Name: FA22020-4 Acquired: 2/13/2015 13:12:26 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	141.2	.0204	.5591	.0143	489.7	-.0004	.0108	.1134	.0191
Stddev	.0008	4.5	.0007	.0162	.0003	15.9	.0001	.0001	.0004	.0011
%RSD	476.1	3.169	3.367	2.895	2.322	3.253	15.88	.5997	.3776	5.525
#1	.0007	137.6	.0211	.5467	.0141	477.7	-.0004	.0108	.1138	.0199
#2	.0004	146.2	.0198	.5774	.0147	507.8	-.0005	.0108	.1130	.0196
#3	-.0007	139.7	.0201	.5530	.0141	483.5	-.0004	.0109	.1132	.0179

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	29.52	18.33	38.73	6.437	.0020	3.144	.0178	.1210	.0009	.0043
Stddev	.91	.50	1.17	.042	.0001	.097	.0003	.0028	.0016	.0024
%RSD	3.073	2.740	3.024	.6498	6.114	3.078	1.726	2.354	176.9	55.71
#1	28.83	18.04	37.79	6.395	.0019	3.078	.0181	.1226	.0024	.0034
#2	30.54	18.91	40.04	6.435	.0021	3.256	.0178	.1177	.0011	.0071
#3	29.17	18.04	38.36	6.479	.0019	3.099	.0175	.1227	-.0008	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.547	.0199	.9092	2.774	-.0025	.2045	.1153
Stddev	.003	.0007	.0281	.001	.0023	.0010	.0001
%RSD	.0501	3.724	3.085	.0348	90.85	.4764	.1044
#1	5.547	.0195	.8876	2.774	-.0015	.2033	.1154
#2	5.550	.0208	.9409	2.773	-.0051	.2051	.1152
#3	5.545	.0195	.8992	2.775	-.0009	.2050	.1152

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1564.1	5169.4	34401.	2605.6
Stddev	3.9	8.0	108.	70.3
%RSD	.24952	.15523	.31536	2.6993
#1	1559.8	5161.0	34503.	2657.4
#2	1565.1	5170.3	34413.	2525.5
#3	1567.4	5176.9	34287.	2633.9

Zoom In Zoom Out

Sample Name: FA22032-1 Acquired: 2/13/2015 13:16:38 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	85.33	.0180	.7110	.0047	3753.	-.0028	.0276	.0808	.1186
Stddev	.0068	.48	.0014	.0011	.0017	9.	.0002	.0002	.0023	.0016
%RSD	173800.	.5611	7.606	.1520	36.51	.2378	7.369	.9068	2.816	1.331
#1	-.0004	85.81	.0166	.7098	.0067	3764.	-.0028	.0276	.0830	.1175
#2	-.0066	85.32	.0193	.7111	.0036	3749.	-.0026	.0273	.0784	.1178
#3	.0070	84.86	.0180	.7120	.0039	3747.	-.0030	.0278	.0811	.1204

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	87.46	20.40	73.57	1.856	-.0042	3.363	.0703	.0597	.0004	-.0029
Stddev	.22	.62	.44	.006	.0011	.072	.0018	.0054	.0058	.0088
%RSD	.2477	3.044	.6019	.3071	26.70	2.133	2.608	9.071	1383.	309.2
#1	87.71	19.81	74.01	1.861	-.0030	3.302	.0700	.0539	.0032	.0074
#2	87.30	21.04	73.13	1.850	-.0053	3.442	.0685	.0604	.0042	-.0077
#3	87.38	20.35	73.57	1.857	-.0044	3.344	.0722	.0647	-.0062	-.0083

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.992	.0231	17.17	1.716	.0170	.1348	.2766
Stddev	.018	.0039	.08	.005	.0218	.0037	.0022
%RSD	.6039	16.78	.4623	.2934	127.8	2.713	.7959
#1	2.972	.0187	17.26	1.722	.0359	.1306	.2740
#2	3.008	.0246	17.14	1.715	.0221	.1372	.2779
#3	2.994	.0260	17.11	1.712	-.0068	.1366	.2778

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1577.3	4470.0	29858.	2175.3
Stddev	7.4	18.7	32.	9.9
%RSD	.46629	.41836	.10791	.45652
#1	1585.7	4491.5	29829.	2185.9
#2	1573.3	4461.6	29893.	2174.0
#3	1572.8	4457.1	29853.	2166.1

Zoom In Zoom Out

Sample Name: FA22032-2 Acquired: 2/13/2015 13:20:42 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0012	174.0	.0427	1.646	.0069	F2687.	-.0015	.0566	.1666
Stddev	.0048	.7	.0030	.002	.0005	39.	.0003	.0012	.0025
%RSD	399.0	.3899	6.964	.1142	7.872	1.451	22.09	2.140	1.515
#1	.0065	173.3	.0439	1.644	.0063	2646.	-.0018	.0577	.1638
#2	-.0028	174.6	.0448	1.648	.0074	2693.	-.0015	.0570	.1674
#3	-.0002	174.1	.0393	1.645	.0069	2723.	-.0011	.0553	.1686

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1902	165.6	51.27	129.4	4.606	.0029	3.805	.1332	.1321
Stddev	.0023	.7	.10	.6	.037	.0002	.034	.0006	.0069
%RSD	1.188	.4348	.1882	.4711	.8027	5.253	.8804	.4555	5.249
#1	.1882	165.2	51.16	128.7	4.563	.0030	3.814	.1329	.1331
#2	.1896	166.5	51.32	129.7	4.630	.0028	3.834	.1339	.1385
#3	.1927	165.3	51.34	129.9	4.625	.0030	3.769	.1328	.1248

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0033	5.091	.0286	12.04	3.547	.0029	.2711	.5357
Stddev	.0034	.0064	.016	.0021	.04	.032	.0053	.0035	.0016
%RSD	382.5	193.2	.3147	7.214	.3281	.9035	180.8	1.306	.3025
#1	.0027	.0073	5.073	.0283	12.01	3.510	.0046	.2672	.5343
#2	-.0030	-.0041	5.096	.0267	12.08	3.562	-.0030	.2742	.5374
#3	.0029	.0068	5.105	.0308	12.02	3.568	.0072	.2720	.5352

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1544.7	4530.8	30308.	2254.5
Stddev	.6	8.0	233.	12.4
%RSD	.04193	.17547	.76909	.55077
#1	1543.9	4539.6	30560.	2267.2
#2	1544.9	4524.1	30099.	2253.9
#3	1545.2	4528.7	30264.	2242.4

Zoom In Zoom Out

Sample Name: FA22032-3 Acquired: 2/13/2015 13:24:55 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	143.1	.0340	1.423	.0057	3248.	-.0029	.0452	.1356	.1490
Stddev	.0027	.9	.0058	.007	.0007	27.	.0002	.0004	.0017	.0009
%RSD	313.5	.6014	16.95	.5040	12.42	.8391	7.514	.9097	1.256	.6189
#1	.0003	144.0	.0277	1.427	.0054	3279.	-.0029	.0450	.1371	.1498
#2	.0011	142.9	.0352	1.426	.0052	3240.	-.0027	.0456	.1358	.1480
#3	-.0039	142.3	.0391	1.414	.0065	3226.	-.0032	.0449	.1337	.1493

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	133.0	37.32	102.7	3.440	-.0025	3.200	.1064	.0834	.0132	.0004
Stddev	1.0	.44	.8	.001	.0015	.090	.0023	.0133	.0113	.0187
%RSD	.7792	1.185	.8015	.0207	60.00	2.807	2.199	15.94	85.74	4815.
#1	134.1	37.81	103.6	3.440	-.0008	3.175	.1047	.0697	.0091	.0056
#2	132.4	37.23	102.2	3.439	-.0037	3.300	.1054	.0843	.0045	-.0204
#3	132.3	36.94	102.2	3.440	-.0031	3.126	.1090	.0962	.0261	.0160

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.061	.0220	13.03	3.074	.0142	.2143	.4233
Stddev	.006	.0038	.09	.001	.0079	.0025	.0013
%RSD	.1538	17.39	.6992	.0333	55.58	1.184	.3035
#1	4.056	.0264	13.13	3.075	.0198	.2156	.4239
#2	4.068	.0199	13.00	3.073	.0175	.2160	.4219
#3	4.059	.0197	12.96	3.074	.0052	.2114	.4242

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1583.0	4511.5	30198.	2200.3
Stddev	3.0	1.3	33.	23.3
%RSD	.19063	.02974	.10845	1.0592
#1	1580.2	4510.0	30234.	2174.3
#2	1586.2	4512.6	30171.	2207.4
#3	1582.8	4512.1	30190.	2219.3

Zoom In Zoom Out

Sample Name: MP28551-MB1 Acquired: 2/13/2015 13:28:59 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0072	-.0006	.0000	-.0002	.0372	.0000	-.0002	-.0005	-.0002
Stddev	.0002	.0126	.0001	.0006	.0000	.0080	.000	.0001	.0001	.0001
%RSD	75.78	174.9	18.40	1226.	16.76	21.47	40.05	31.50	10.85	76.50
#1	-.0003	.0171	-.0005	.0007	-.0002	.0336	.0000	-.0002	-.0005	-.0002
#2	.0000	.0114	-.0007	-.0004	-.0002	.0463	.0000	-.0001	-.0005	-.0001
#3	-.0003	-.0069	-.0006	-.0001	-.0001	.0316	.0000	-.0002	-.0006	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0245	-.0125	.0044	.0001	.0003	.0014	.0002	-.0002	.0006	.0008
Stddev	.0036	.0509	.0149	.0000	.0001	.0047	.0002	.0003	.0011	.0012
%RSD	14.71	407.7	342.7	45.19	57.85	346.0	97.93	136.9	204.0	148.0
#1	.0281	.0395	.0154	.0000	.0002	.0029	.0000	-.0005	.0017	-.0001
#2	.0209	-.0624	-.0126	.0001	.0001	.0051	.0004	-.0001	-.0006	.0004
#3	.0245	-.0146	.0103	.0001	.0004	-.0039	.0002	.0000	.0006	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0201	.0004	.0002	.0003	-.0022	-.0002	.0007
Stddev	.0001	.0003	.0000	.0001	.0006	.0004	.0001
%RSD	.6106	85.17	10.89	38.77	28.70	272.6	16.39
#1	.0200	.0002	.0002	.0003	-.0018	.0001	.0007
#2	.0203	.0008	.0003	.0004	-.0018	.0001	.0007
#3	.0201	.0002	.0002	.0002	-.0029	-.0006	.0005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28551-MB1 Acquired: 2/13/2015 13:28:59 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.5	4489.9	30498.	2152.1
Stddev	3.1	6.9	186.	5.6
%RSD	.19401	.15327	.61123	.26157
#1	1579.9	4486.0	30676.	2147.1
#2	1574.1	4486.0	30513.	2150.9
#3	1575.3	4497.9	30304.	2158.2

Zoom In Zoom Out

Sample Name: MP28551-B1 Acquired: 2/13/2015 13:33:11 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0486	27.69	1.962	2.057	.0524	25.88	.0489	.4949	.2102	.2555
Stddev	.0002	.09	.008	.004	.0003	.05	.0001	.0016	.0008	.0011
%RSD	.4080	.3398	.3967	.1756	.5998	.2050	.3043	.3215	.3860	.4351
#1	.0484	27.76	1.962	2.061	.0524	25.90	.0488	.4943	.2094	.2551
#2	.0485	27.72	1.954	2.056	.0527	25.91	.0488	.4937	.2110	.2568
#3	.0488	27.58	1.970	2.055	.0521	25.82	.0490	.4967	.2102	.2546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.57	25.35	25.17	.5104	.4749	25.75	.5008	.4929	.4899	1.940
Stddev	.02	.02	.02	.0008	.0014	.04	.0018	.0013	.0022	.007
%RSD	.0746	.0981	.0705	.1539	.2930	.1655	.3506	.2714	.4567	.3529
#1	26.55	25.36	25.18	.5108	.4741	25.78	.4999	.4921	.4906	1.946
#2	26.56	25.37	25.15	.5110	.4740	25.78	.4996	.4922	.4874	1.932
#3	26.59	25.32	25.17	.5095	.4765	25.71	.5028	.4945	.4918	1.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0235	.4980	.5110	.4998	1.988	.4891	.5010
Stddev	.0002	.0022	.0011	.0010	.002	.0025	.0017
%RSD	.8232	.4381	.2081	.2084	.0943	.5119	.3450
#1	.0235	.4978	.5116	.5002	1.989	.4867	.5000
#2	.0233	.4960	.5117	.5007	1.986	.4917	.4999
#3	.0236	.5003	.5098	.4987	1.990	.4889	.5030
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28551-B1 Acquired: 2/13/2015 13:33:11 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1598.6	4528.3	30371.	2186.0
Stddev	4.7	11.7	86.	4.8
%RSD	.29107	.25802	.28202	.21998
#1	1599.8	4529.4	30470.	2182.7
#2	1602.5	4539.4	30325.	2191.5
#3	1593.4	4516.1	30318.	2183.7

Zoom In Zoom Out

Sample Name: FA22049-1 Acquired: 2/13/2015 13:37:08 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0427	-.0004	.0078	-.0001	30.48	.0000	-.0002	-.0002	-.0002
Stddev	.0006	.0091	.0002	.0002	.0001	.11	.000	.0001	.0001	.0004
%RSD	550.0	21.27	45.43	2.919	83.17	.3570	86.82	44.57	38.04	202.5
#1	-.0008	.0349	-.0004	.0077	-.0002	30.44	.0000	-.0001	-.0001	-.0005
#2	.0001	.0527	-.0003	.0076	-.0001	30.60	.0000	-.0002	-.0003	-.0004
#3	.0003	.0406	-.0006	.0080	.0000	30.40	.0000	-.0002	-.0003	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0440	1.278	1.099	.0005	.0012	1.468	.0002	-.0022	.0002	.0019
Stddev	.0067	.027	.029	.0000	.0000	.006	.0001	.0007	.0003	.0017
%RSD	15.34	2.124	2.678	5.844	1.468	.3978	97.56	31.36	152.0	88.30
#1	.0510	1.298	1.113	.0005	.0012	1.469	.0000	-.0014	-.0001	.0003
#2	.0435	1.289	1.065	.0005	.0012	1.473	.0002	-.0024	.0003	.0037
#3	.0375	1.247	1.118	.0004	.0012	1.462	.0002	-.0027	.0003	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4711	.0002	.0322	.0018	-.0002	.0010	.0097
Stddev	.0008	.0003	.0003	.0001	.0005	.0001	.0000
%RSD	.1640	133.1	.8637	2.983	291.3	10.37	.1617
#1	.4718	.0005	.0325	.0017	.0001	.0011	.0097
#2	.4703	-.0001	.0322	.0018	-.0007	.0011	.0097
#3	.4711	.0002	.0320	.0018	.0001	.0009	.0097

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1621.0	4583.3	31050.	2200.0
Stddev	5.6	1.7	187.	20.1
%RSD	.34656	.03664	.60261	.91232
#1	1626.0	4581.4	30942.	2211.2
#2	1614.9	4584.0	30943.	2176.8
#3	1622.2	4584.6	31266.	2211.9

Zoom In Zoom Out

Sample Name: MP28551-D1 Acquired: 2/13/2015 13:41:15 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0478	-.0009	.0076	-.0001	30.79	-.0001	-.0002	-.0004	-.0005
Stddev	.001	.0089	.0002	.0003	.0000	.09	.0001	.0001	.0003	.0002
%RSD	3348.	18.65	27.76	3.476	41.19	.3020	120.6	43.97	79.82	45.26
#1	.0006	.0551	-.0011	.0074	-.0001	30.71	.0000	-.0001	-.0003	-.0006
#2	-.0003	.0503	-.0007	.0079	-.0001	30.89	.0000	-.0003	-.0001	-.0002
#3	-.0003	.0379	-.0008	.0074	-.0001	30.76	-.0002	-.0003	-.0007	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0273	1.278	1.105	.0005	.0009	1.459	.0002	-.0007	.0007	.0021
Stddev	.0019	.017	.019	.0001	.0001	.012	.0002	.0007	.0011	.0010
%RSD	6.798	1.321	1.731	15.09	9.578	.8157	134.5	101.8	158.6	48.54
#1	.0287	1.266	1.120	.0004	.0010	1.445	.0000	.0001	-.0004	.0026
#2	.0252	1.270	1.084	.0005	.0008	1.468	.0004	-.0008	.0008	.0009
#3	.0281	1.297	1.111	.0005	.0009	1.463	.0001	-.0012	.0016	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4771	.0005	.0329	.0015	-.0008	.0012	.0096
Stddev	.0005	.0001	.0001	.0001	.0004	.0002	.0001
%RSD	.0958	17.92	.2661	3.830	52.07	14.52	1.024
#1	.4766	.0005	.0329	.0015	-.0013	.0014	.0094
#2	.4774	.0004	.0328	.0016	-.0006	.0010	.0096
#3	.4773	.0004	.0329	.0016	-.0006	.0012	.0096

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1619.1	4565.1	30840.	2175.7
Stddev	3.6	4.4	108.	5.7
%RSD	.22122	.09686	.35068	.26042
#1	1619.8	4560.2	30899.	2180.7
#2	1615.2	4566.4	30715.	2169.5
#3	1622.2	4568.8	30907.	2176.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 13:45:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2462	40.03	1.948	1.977	1.989	40.10	1.969	1.959	1.994	1.968
Stddev	.0008	.09	.002	.005	.007	.23	.001	.001	.010	.007
%RSD	.3274	.2141	.1022	.2507	.3442	.5626	.0378	.0717	.4948	.3391
#1	.2470	39.94	1.946	1.975	1.983	39.89	1.969	1.958	2.002	1.974
#2	.2454	40.03	1.948	1.974	1.988	40.06	1.969	1.958	1.997	1.968
#3	.2461	40.11	1.949	1.983	1.996	40.34	1.970	1.960	1.983	1.961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.88	39.96	39.41	2.003	1.944	40.25	1.949	1.960	1.943	1.953
Stddev	.21	.15	.20	.007	.007	.15	.001	.002	.004	.003
%RSD	.5331	.3734	.5065	.3325	.3783	.3796	.0681	.0844	.2073	.1577
#1	39.75	39.97	39.24	2.010	1.936	40.12	1.950	1.958	1.941	1.951
#2	39.77	39.81	39.36	2.002	1.944	40.22	1.947	1.960	1.941	1.952
#3	40.13	40.10	39.63	1.996	1.951	40.42	1.950	1.961	1.948	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.767	1.949	2.012	1.994	1.967	1.947	1.969
Stddev	.004	.001	.006	.008	.002	.006	.000
%RSD	.2083	.0266	.2934	.3823	.1055	.3104	.0164
#1	1.767	1.949	2.007	2.001	1.964	1.953	1.969
#2	1.762	1.949	2.012	1.994	1.967	1.945	1.969
#3	1.770	1.948	2.019	1.986	1.969	1.941	1.969
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 13:45:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1571.4	4459.5	30371.	2188.0
Stddev	2.2	4.0	125.	17.2
%RSD	.13921	.08894	.41182	.78499
#1	1573.3	4461.8	30254.	2201.7
#2	1569.0	4454.9	30357.	2193.6
#3	1571.7	4461.8	30503.	2168.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:49:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0169	.0002	.0004	.0004	.0100	.0005	.0003	.0002
Stddev	.0002	.0148	.0009	.0001	.0001	.0080	.0001	.0001	.0003
%RSD	84.50	87.24	385.9	25.29	13.45	80.66	13.41	37.81	160.2
#1	.0005	.0033	.0012	.0003	.0004	.0065	.0005	.0002	.0002
#2	.0002	.0148	.0002	.0005	.0005	.0043	.0004	.0004	-.0001
#3	.0001	.0326	-.0007	.0004	.0005	.0191	.0005	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0429	.0511	.0149	.0006	F.0038	.0194	.0004	.0008
Stddev	.0001	.0052	.0543	.0362	.0000	.0006	.0082	.0002	.0011
%RSD	14.87	12.05	106.2	243.6	4.352	16.90	41.99	58.53	142.0
#1	.0004	.0477	.0819	.0402	.0006	.0045	.0273	.0004	.0020
#2	.0005	.0374	-.0116	-.0266	.0007	.0036	.0110	.0006	.0000
#3	.0006	.0437	.0829	.0310	.0006	.0033	.0200	.0001	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0011	-.0002	.0009	.0005	.0020	.0000	.0007	.0005
Stddev	.0008	.0023	.0004	.0005	.0001	.0003	.0011	.0001	.0001
%RSD	39.77	211.3	197.8	55.57	14.73	13.20	27780.	9.339	16.45
#1	.0018	.0031	.0003	.0014	.0004	.0023	-.0007	.0008	.0005
#2	.0015	-.0014	-.0005	.0009	.0005	.0018	-.0006	.0007	.0006
#3	.0031	.0015	-.0004	.0004	.0005	.0019	.0013	.0007	.0004
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 13:49:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1608.1	4554.6	31328.	2213.6
Stddev	4.1	17.8	356.	14.7
%RSD	.25634	.38992	1.1365	.66529
#1	1608.3	4554.8	31336.	2215.6
#2	1603.9	4536.8	31680.	2227.2
#3	1612.2	4572.4	30968.	2197.9

Zoom In Zoom Out

Sample Name: MP28551-SD1 Acquired: 2/13/2015 13:53:31 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	.0537	-.0020	.0080	.0001	31.46	.0000	-.0008	-.0030	-.0016
Stddev	.0019	.0304	.0024	.0014	.0011	.15	.000	.0006	.0013	.0009
%RSD	240.7	56.57	117.9	17.12	1912.	.4922	616.7	72.90	42.28	57.32
#1	-.0002	.0862	-.0019	.0074	-.0009	31.28	-.0002	-.0012	-.0020	-.0006
#2	.0029	.0486	.0003	.0096	-.0003	31.54	.0002	-.0011	-.0045	-.0019
#3	-.0004	.0262	-.0045	.0071	.0013	31.56	-.0002	-.0001	-.0027	-.0023

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0793	1.307	1.172	.0008	.0038	1.489	.0024	-.0009	.0014	.0067
Stddev	.0088	.164	.127	.0002	.0009	.031	.0010	.0058	.0039	.0097
%RSD	11.09	12.54	10.83	23.68	22.54	2.062	39.99	638.6	285.0	143.1
#1	.0772	1.466	1.094	.0010	.0030	1.524	.0035	.0018	-.0027	.0102
#2	.0718	1.139	1.319	.0009	.0047	1.465	.0019	.0030	.0050	.0142
#3	.0890	1.317	1.104	.0006	.0037	1.479	.0018	-.0075	.0018	-.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4752	.0014	.0327	.0035	-.0048	.0006	.0111
Stddev	.0014	.0016	.0009	.0005	.0039	.0004	.0001
%RSD	.2935	121.1	2.839	13.35	81.11	67.10	1.253
#1	.4738	.0030	.0336	.0037	-.0025	.0002	.0112
#2	.4766	.0013	.0317	.0030	-.0093	.0006	.0111
#3	.4753	-.0003	.0327	.0039	-.0026	.0009	.0109

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.3	4571.5	30892.	2166.8
Stddev	2.1	6.8	53.	16.9
%RSD	.12900	.14984	.17122	.77919
#1	1612.3	4573.8	30837.	2175.3
#2	1612.6	4576.9	30942.	2177.7
#3	1608.9	4563.8	30896.	2147.4

Zoom In Zoom Out

Sample Name: MP28551-PS1 Acquired: 2/13/2015 13:57:42 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0465	2.576	.0976	.2641	.0515	34.96	.0492	.0489	.0511	.0989
Stddev	.0007	.015	.0006	.0004	.0003	.06	.0001	.0000	.0003	.0003
%RSD	1.559	.5662	.6598	.1384	.5557	.1622	.1517	.0832	.5409	.3337
#1	.0471	2.560	.0977	.2643	.0516	34.93	.0493	.0489	.0514	.0991
#2	.0457	2.587	.0968	.2643	.0512	34.92	.0493	.0489	.0511	.0985
#3	.0469	2.582	.0981	.2637	.0518	35.02	.0491	.0490	.0509	.0991

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.007	11.17	5.855	.0518	.0971	11.91	.0998	.0470	.0971	.0946
Stddev	.020	.01	.021	.0002	.0001	.02	.0004	.0011	.0018	.0016
%RSD	.6588	.0842	.3550	.2968	.1322	.1935	.3598	2.330	1.880	1.681
#1	3.012	11.16	5.842	.0520	.0971	11.89	.0999	.0474	.0953	.0962
#2	2.985	11.17	5.879	.0518	.0972	11.94	.0994	.0458	.0990	.0944
#3	3.024	11.17	5.843	.0517	.0970	11.91	.1001	.0479	.0971	.0930

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4733	.0479	.0823	.0999	.0977	.0489	.2555
Stddev	.0005	.0001	.0004	.0001	.0009	.0001	.0006
%RSD	.0975	.2081	.4870	.1132	.9711	.1612	.2475
#1	.4731	.0479	.0818	.1000	.0984	.0488	.2558
#2	.4738	.0480	.0826	.0999	.0979	.0490	.2548
#3	.4729	.0478	.0824	.0998	.0966	.0489	.2559

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1603.2	4543.5	30660.	2139.5
Stddev	6.7	12.8	161.	5.5
%RSD	.41582	.28131	.52580	.25694
#1	1598.1	4532.1	30496.	2145.6
#2	1610.7	4557.3	30818.	2138.1
#3	1600.6	4540.9	30668.	2134.9

Zoom In Zoom Out

Sample Name: MP28551-S1 Acquired: 2/13/2015 14:01:44 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0498	28.35	1.998	2.106	.0536	56.39	.0498	.5063	.2169	.2642
Stddev	.0004	.04	.001	.006	.0001	.11	.0000	.0004	.0000	.0007
%RSD	.8193	.1583	.0470	.2965	.2282	.2024	.0693	.0883	.0162	.2516
#1	.0498	28.40	1.999	2.114	.0536	56.44	.0498	.5060	.2170	.2636
#2	.0495	28.31	1.997	2.102	.0535	56.25	.0498	.5068	.2170	.2640
#3	.0503	28.35	1.997	2.103	.0537	56.47	.0499	.5062	.2169	.2649

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.94	27.11	26.54	.5256	.4855	27.83	.5096	.5044	.4997	1.972
Stddev	.04	.09	.13	.0015	.0004	.07	.0011	.0004	.0004	.004
%RSD	.1405	.3245	.4759	.2915	.0793	.2340	.2085	.0764	.0798	.2135
#1	26.97	27.21	26.40	.5254	.4859	27.90	.5103	.5043	.5002	1.977
#2	26.90	27.09	26.58	.5242	.4851	27.79	.5100	.5040	.4994	1.970
#3	26.94	27.04	26.64	.5273	.4855	27.79	.5083	.5048	.4995	1.968

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4852	.5032	.5551	.5155	2.047	.5043	.5198
Stddev	.0010	.0012	.0016	.0015	.004	.0011	.0005
%RSD	.2063	.2360	.2957	.2936	.1932	.2094	.0940
#1	.4859	.5026	.5567	.5146	2.046	.5045	.5192
#2	.4856	.5046	.5534	.5147	2.044	.5032	.5202
#3	.4840	.5025	.5550	.5173	2.051	.5053	.5200

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1569.1	4457.2	29570.	2131.9
Stddev	.7	8.2	13.	6.5
%RSD	.04268	.18476	.04308	.30266
#1	1569.6	4454.2	29571.	2138.9
#2	1569.5	4450.9	29557.	2126.2
#3	1568.4	4466.5	29583.	2130.5

Zoom In Zoom Out

Sample Name: MP28551-S2 Acquired: 2/13/2015 14:05:41 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0508	28.83	1.993	2.111	.0543	57.55	.0501	.5079	.2206	.2669
Stddev	.0005	.18	.001	.005	.0001	.17	.0001	.0006	.0002	.0008
%RSD	.9860	.6289	.0475	.2553	.2126	.3006	.1379	.1125	.0770	.2921
#1	.0503	28.63	1.993	2.112	.0544	57.40	.0500	.5085	.2208	.2668
#2	.0513	28.99	1.992	2.116	.0542	57.74	.0501	.5073	.2205	.2677
#3	.0509	28.86	1.994	2.106	.0543	57.51	.0501	.5080	.2205	.2661

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.09	27.27	26.69	.5282	.4866	28.27	.5085	.5073	.4991	1.973
Stddev	.06	.10	.22	.0003	.0001	.12	.0005	.0021	.0017	.003
%RSD	.2181	.3729	.8062	.0527	.0201	.4236	.0971	.4106	.3374	.1616
#1	27.05	27.19	26.79	.5283	.4866	28.20	.5090	.5096	.4974	1.974
#2	27.16	27.38	26.84	.5285	.4867	28.41	.5084	.5054	.5007	1.976
#3	27.06	27.23	26.44	.5279	.4865	28.21	.5081	.5070	.4992	1.970

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4929	.5020	.5621	.5207	2.058	.5086	.5215
Stddev	.0006	.0008	.0020	.0009	.004	.0002	.0003
%RSD	.1137	.1531	.3571	.1788	.1680	.0361	.0651
#1	.4932	.5024	.5603	.5216	2.061	.5086	.5219
#2	.4932	.5024	.5643	.5208	2.055	.5084	.5212
#3	.4922	.5011	.5616	.5198	2.060	.5088	.5215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1573.8	4482.6	29477.	2121.5
Stddev	5.9	12.0	21.	14.5
%RSD	.37511	.26662	.07150	.68501
#1	1567.4	4471.9	29464.	2117.9
#2	1575.2	4480.4	29467.	2109.2
#3	1578.9	4495.5	29502.	2137.6

Zoom In Zoom Out

Sample Name: FA22049-2 Acquired: 2/13/2015 14:09:39 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.6805	-.0004	.0062	.0001	70.28	.0007	.0006	.0257	-.0003
Stddev	.0004	.0050	.0003	.0001	.0001	.28	.0000	.0001	.0002	.0002
%RSD	185.8	.7356	76.55	2.210	243.6	.3930	2.896	21.54	.8758	74.61
#1	.0002	.6794	-.0001	.0061	.0000	69.96	.0007	.0007	.0259	-.0001
#2	-.0002	.6860	-.0008	.0063	.0002	70.46	.0007	.0007	.0256	-.0005
#3	-.0006	.6762	-.0004	.0064	-.0001	70.41	.0007	.0005	.0255	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0600	1.871	6.435	.0073	.0024	17.10	.0017	-.0034	.0010	.0030
Stddev	.0064	.003	.093	.0001	.0001	.06	.0003	.0009	.0006	.0006
%RSD	10.74	.1711	1.450	.8314	4.239	.3364	14.83	25.53	59.84	18.46
#1	.0627	1.873	6.359	.0072	.0023	17.03	.0017	-.0035	.0017	.0025
#2	.0647	1.872	6.539	.0073	.0025	17.14	.0020	-.0041	.0008	.0036
#3	.0527	1.867	6.406	.0074	.0024	17.12	.0015	-.0024	.0005	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.630	.0007	.1151	.0033	-.0003	.0030	.0106
Stddev	.003	.0002	.0004	.0001	.0012	.0001	.0001
%RSD	.1672	24.30	.3420	2.953	355.1	4.756	.8705
#1	1.627	.0005	.1147	.0034	.0003	.0028	.0105
#2	1.629	.0007	.1154	.0034	.0005	.0030	.0107
#3	1.633	.0008	.1154	.0032	-.0018	.0031	.0105

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1604.8	4558.0	30014.	2146.2
Stddev	5.7	2.5	86.	4.8
%RSD	.35558	.05467	.28760	.22209
#1	1606.9	4558.8	30069.	2150.3
#2	1609.3	4560.0	29914.	2141.0
#3	1598.4	4555.2	30057.	2147.3

Zoom In Zoom Out

Sample Name: FA22021-6F Acquired: 2/13/2015 14:13:46 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0137	-.0005	.0347	-.0001	3.427	-.0001	.0000	-.0005	.0279
Stddev	.001	.0080	.0003	.0002	.0001	.014	.0000	.000	.0002	.0001
%RSD	4486.	58.51	57.45	.5293	286.4	.4009	45.92	481.0	44.24	.4586
#1	.0002	.0123	-.0002	.0349	-.0002	3.412	-.0001	-.0001	-.0002	.0278
#2	.0006	.0065	-.0008	.0345	-.0001	3.439	-.0001	.0001	-.0006	.0280
#3	-.0008	.0224	-.0005	.0346	.0001	3.429	.0000	.0000	-.0006	.0279

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.188	2.133	1.928	.0344	.0004	7.090	.0002	.0033	.0019	.0022
Stddev	.005	.011	.032	.0002	.0001	.030	.0001	.0002	.0015	.0015
%RSD	.4654	.5320	1.678	.6041	23.77	.4236	65.18	6.024	76.36	69.12
#1	1.184	2.145	1.893	.0345	.0004	7.113	.0001	.0034	.0036	.0006
#2	1.194	2.133	1.935	.0342	.0005	7.056	.0003	.0035	.0010	.0036
#3	1.185	2.122	1.957	.0345	.0003	7.102	.0001	.0031	.0012	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	10.36	.0003	.0337	.0002	-.0009	.0000	.0687
Stddev	.02	.0002	.0001	.0000	.0005	.000	.0001
%RSD	.2313	80.61	.3544	15.65	51.61	151.9	.0853
#1	10.38	.0004	.0336	.0003	-.0004	.0000	.0687
#2	10.36	.0003	.0336	.0002	-.0014	.0000	.0687
#3	10.33	.0000	.0338	.0002	-.0010	-.0001	.0686

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1622.2	4623.7	30478.	2144.4
Stddev	6.3	17.2	46.	13.0
%RSD	.38601	.37226	.15036	.60562
#1	1615.1	4604.1	30442.	2142.8
#2	1624.6	4630.6	30530.	2158.1
#3	1626.9	4636.4	30462.	2132.3

Zoom In Zoom Out

Sample Name: FA22021-7F Acquired: 2/13/2015 14:17:54 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0216	-.0004	.0169	-.0001	9.143	.0000	-.0002	-.0001	.0149
Stddev	.0006	.0125	.0004	.0003	.0001	.026	.0000	.0001	.0002	.0004
%RSD	417.4	58.05	104.6	1.957	89.31	.2795	871.1	63.39	175.8	2.542
#1	.0002	.0286	-.0005	.0165	-.0001	9.140	.0000	-.0002	.0001	.0152
#2	-.0009	.0071	-.0007	.0168	.0000	9.119	.0000	-.0001	-.0001	.0150
#3	.0002	.0290	.0001	.0172	-.0002	9.170	.0000	-.0004	-.0003	.0145

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0197	2.697	3.039	.0008	.0005	14.39	.0001	-.0004	.0005	.0003
Stddev	.0033	.044	.052	.0001	.0001	.03	.0002	.0010	.0006	.0004
%RSD	16.68	1.639	1.726	6.850	12.11	.2168	337.9	222.5	121.6	134.6
#1	.0190	2.746	3.086	.0007	.0004	14.40	.0003	.0006	.0003	.0008
#2	.0168	2.684	2.983	.0008	.0005	14.36	-.0001	-.0007	.0000	.0003
#3	.0232	2.660	3.048	.0008	.0005	14.42	.0000	-.0012	.0011	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.711	.0004	.0560	.0004	-.0004	.0005	.0221
Stddev	.004	.0003	.0001	.0001	.0010	.0003	.0001
%RSD	.1298	62.00	.1442	31.78	273.6	66.94	.3948
#1	2.707	.0005	.0561	.0005	-.0015	.0002	.0220
#2	2.712	.0006	.0559	.0005	-.0002	.0005	.0222
#3	2.713	.0001	.0560	.0003	.0006	.0008	.0221

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1641.3	4655.2	30714.	2179.2
Stddev	3.6	7.7	109.	9.6
%RSD	.21752	.16599	.35556	.44110
#1	1645.4	4664.1	30589.	2179.5
#2	1639.9	4650.1	30794.	2188.7
#3	1638.7	4651.4	30758.	2169.4

Zoom In Zoom Out

Sample Name: FA22021-8F Acquired: 2/13/2015 14:22:01 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0229	-.0007	.0153	-.0001	9.395	.0000	-.0002	-.0005	.0043
Stddev	.0005	.0244	.0005	.0002	.0000	.040	.000	.0001	.0003	.0001
%RSD	168.3	106.3	74.02	1.324	35.23	.4227	4282.	38.45	48.09	2.433
#1	-.0009	.0505	-.0010	.0152	-.0001	9.409	.0000	-.0001	-.0008	.0042
#2	-.0001	.0140	-.0009	.0152	-.0001	9.351	.0000	-.0003	-.0005	.0043
#3	.0001	.0043	-.0001	.0155	-.0001	9.427	-.0001	-.0003	-.0003	.0044

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0171	2.767	3.147	.0003	.0005	14.76	.0002	-.0009	-.0001	.0014
Stddev	.0025	.028	.050	.0000	.0000	.06	.0001	.0009	.0002	.0012
%RSD	14.59	.9923	1.597	11.93	6.041	.3886	29.19	92.35	274.1	91.41
#1	.0149	2.735	3.091	.0003	.0005	14.76	.0003	-.0010	-.0001	.0004
#2	.0165	2.786	3.161	.0003	.0004	14.70	.0003	.0000	-.0003	.0009
#3	.0198	2.779	3.189	.0003	.0005	14.82	.0002	-.0018	.0002	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.697	.0004	.0564	.0005	-.0011	.0004	.0103
Stddev	.002	.0003	.0001	.0000	.0004	.0002	.0000
%RSD	.0807	80.75	.2020	4.724	38.28	46.90	.2323
#1	2.696	.0004	.0565	.0005	-.0007	.0003	.0102
#2	2.696	.0008	.0565	.0005	-.0015	.0006	.0103
#3	2.700	.0001	.0563	.0005	-.0009	.0003	.0103

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.2	4586.0	30366.	2130.5
Stddev	1.7	6.4	64.	8.0
%RSD	.10718	.13894	.21239	.37483
#1	1610.1	4585.6	30377.	2124.9
#2	1610.4	4592.5	30297.	2139.7
#3	1613.2	4579.8	30425.	2126.9

Zoom In Zoom Out

Sample Name: FA22021-9F Acquired: 2/13/2015 14:26:10 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0416	-.0005	.0034	-.0001	16.25	-.0001	-.0003	.0002	.0830
Stddev	.000	.0151	.0006	.0002	.0001	.04	.0000	.0001	.0004	.0002
%RSD	2198.	36.22	107.2	4.989	90.94	.2592	48.22	39.68	181.6	.1901
#1	.0001	.0245	-.0012	.0033	-.0001	16.30	-.0001	-.0001	.0005	.0830
#2	-.0005	.0529	-.0002	.0033	-.0002	16.24	.0000	-.0003	.0003	.0832
#3	.0004	.0475	-.0002	.0036	.0000	16.22	.0000	-.0003	-.0002	.0829

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0598	1.407	5.021	.0013	.0000	5.732	.0001	.0009	.0000	.0004
Stddev	.0042	.022	.057	.0000	.000	.026	.0001	.0010	.001	.0013
%RSD	7.053	1.534	1.125	3.424	4128.	.4559	76.42	109.9	4435.	305.8
#1	.0602	1.412	5.069	.0013	-.0002	5.762	.0001	.0004	.0006	.0014
#2	.0554	1.426	4.959	.0013	.0000	5.714	.0001	.0002	.0005	-.0010
#3	.0638	1.384	5.036	.0014	.0002	5.720	.0000	.0021	-.0012	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.414	.0009	.0426	.0029	-.0012	.0029	.0549
Stddev	.050	.0001	.0002	.0002	.0004	.0001	.0005
%RSD	.5930	12.68	.4472	6.190	35.51	4.131	.8518
#1	8.362	.0009	.0427	.0028	-.0016	.0028	.0544
#2	8.417	.0010	.0426	.0031	-.0008	.0029	.0550
#3	8.462	.0008	.0424	.0029	-.0012	.0030	.0553

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1653.4	4703.8	31667.	2206.8
Stddev	7.7	25.1	160.	14.3
%RSD	.46601	.53341	.50458	.64811
#1	1660.0	4725.3	31640.	2191.7
#2	1655.3	4710.0	31838.	2208.4
#3	1644.9	4676.2	31522.	2220.2

Zoom In Zoom Out

Sample Name: FA22052-4 Acquired: 2/13/2015 14:30:17 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	16.43	.0003	.0063	.0003	4.247	.0000	-.0002	.0210	.0034
Stddev	.0001	.09	.0002	.0002	.0000	.022	.000	.0000	.0002	.0002
%RSD	83.46	.5657	78.09	3.442	8.835	.5220	70.47	29.54	.8944	5.449
#1	-.0001	16.35	.0001	.0065	.0002	4.238	.0000	-.0002	.0212	.0033
#2	-.0001	16.53	.0002	.0065	.0003	4.273	-.0001	-.0001	.0209	.0033
#3	-.0003	16.42	.0006	.0061	.0003	4.232	.0000	-.0001	.0209	.0036

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.940	5.446	.8022	.0126	.0010	5.361	.0019	.0070	.0006	.0025
Stddev	.009	.062	.0339	.0000	.0002	.010	.0003	.0006	.0005	.0005
%RSD	.4763	1.138	4.225	.3820	19.70	.1928	15.83	7.986	77.59	18.60
#1	1.930	5.376	.7772	.0125	.0012	5.353	.0021	.0072	.0001	.0027
#2	1.940	5.467	.8408	.0126	.0008	5.373	.0020	.0063	.0010	.0029
#3	1.949	5.494	.7885	.0126	.0009	5.357	.0015	.0074	.0006	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.538	.0007	.0098	.0134	-.0007	.0069	.0135
Stddev	.007	.0002	.0001	.0001	.0006	.0002	.0001
%RSD	.1640	25.75	.8694	.5560	87.66	2.383	.7299
#1	4.532	.0008	.0098	.0135	.0000	.0070	.0134
#2	4.536	.0005	.0099	.0134	-.0011	.0070	.0135
#3	4.546	.0009	.0097	.0134	-.0010	.0067	.0136

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1652.0	4716.8	32036.	2275.5
Stddev	2.7	5.6	66.	3.6
%RSD	.16354	.11865	.20735	.15933
#1	1653.6	4722.8	32007.	2275.3
#2	1653.5	4716.0	31989.	2272.0
#3	1648.8	4711.7	32112.	2279.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 14:34:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2460	39.99	1.928	1.974	1.986	40.19	1.955	1.942	1.998	1.967
Stddev	.0014	.13	.010	.003	.003	.05	.009	.010	.003	.005
%RSD	.5517	.3282	.5348	.1319	.1286	.1362	.4658	.5193	.1517	.2742
#1	.2473	40.07	1.935	1.973	1.985	40.15	1.961	1.948	2.002	1.973
#2	.2462	39.84	1.932	1.972	1.984	40.17	1.959	1.947	1.997	1.965
#3	.2446	40.07	1.916	1.977	1.989	40.25	1.944	1.931	1.996	1.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.82	39.96	39.41	1.999	1.929	40.38	1.929	1.943	1.927	1.938
Stddev	.09	.10	.02	.005	.006	.06	.009	.010	.007	.009
%RSD	.2303	.2446	.0552	.2334	.3284	.1375	.4838	.5143	.3653	.4719
#1	39.71	39.86	39.41	2.004	1.929	40.37	1.936	1.951	1.930	1.942
#2	39.86	39.96	39.44	1.995	1.936	40.33	1.933	1.946	1.932	1.945
#3	39.88	40.06	39.39	1.997	1.923	40.44	1.919	1.932	1.919	1.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.748	1.931	2.014	1.989	1.947	1.948	1.956
Stddev	.008	.011	.006	.006	.008	.003	.009
%RSD	.4779	.5565	.2849	.3233	.4261	.1473	.4644
#1	1.752	1.942	2.015	1.997	1.948	1.951	1.962
#2	1.754	1.931	2.008	1.986	1.954	1.946	1.960
#3	1.739	1.920	2.020	1.985	1.938	1.946	1.945
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 14:34:25 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1598.6	4530.8	30540.	2184.4
Stddev	4.6	16.4	33.	1.3
%RSD	.28797	.36115	.10916	.05770
#1	1595.5	4517.2	30526.	2183.4
#2	1596.4	4526.2	30516.	2185.8
#3	1603.9	4548.9	30578.	2183.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 14:38:22 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0022	.0005	.0002	.0003	.0053	.0003	.0002	-.0001
Stddev	.0005	.0140	.0004	.0004	.0001	.0021	.0001	.0001	.0005
%RSD	215.8	641.7	95.17	194.4	16.79	39.86	26.90	27.46	554.3
#1	-.0006	-.0005	.0001	.0001	.0003	.0077	.0004	.0003	.0003
#2	-.0004	-.0103	.0009	.0006	.0004	.0046	.0004	.0002	.0002
#3	.0003	.0173	.0004	-.0001	.0003	.0037	.0002	.0003	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0404	-.0008	.0349	.0004	F.0035	.0133	.0006	.0000
Stddev	.0001	.0108	.0226	.0631	.0000	.0007	.0066	.0002	.0002
%RSD	133.4	26.74	2997.	180.5	7.761	19.96	49.53	34.00	920.5
#1	.0000	.0529	.0211	.0207	.0004	.0043	.0209	.0004	-.0001
#2	.0001	.0347	.0007	.1039	.0004	.0033	.0106	.0005	.0000
#3	.0001	.0337	-.0240	-.0198	.0005	.0030	.0085	.0008	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0021	.0018	-.0005	F.0010	.0004	.0018	.0011	.0007	.0004
Stddev	.0007	.0013	.0000	.0002	.0001	.0002	.0013	.0001	.0000
%RSD	32.83	69.36	6.073	18.71	20.45	11.61	110.8	12.24	11.15
#1	.0028	.0015	-.0005	.0012	.0003	.0020	.0022	.0007	.0004
#2	.0014	.0032	-.0005	.0011	.0004	.0017	-.0003	.0008	.0004
#3	.0022	.0007	-.0006	.0008	.0005	.0016	.0015	.0006	.0004
Check ?	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020			.0010					
Low Limit	-.0020			-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 14:38:22 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1667.4	4752.2	32156.	2245.1
Stddev	6.3	10.1	76.	8.3
%RSD	.37690	.21287	.23538	.36766
#1	1669.3	4759.6	32073.	2254.5
#2	1672.6	4756.3	32172.	2239.0
#3	1660.4	4740.7	32222.	2241.8

Zoom In Zoom Out

Sample Name: FA22052-4F Acquired: 2/13/2015 14:42:33 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	17.96	.0010	.0071	.0003	4.335	.0000	-.0001	.0233	.0040
Stddev	.0003	.02	.0008	.0000	.0001	.014	.000	.0001	.0002	.0001
%RSD	99.92	.1279	77.30	.6142	39.00	.3248	73.79	55.66	.9299	1.945
#1	.0000	17.98	.0002	.0071	.0005	4.330	-.0001	-.0001	.0234	.0041
#2	-.0006	17.96	.0017	.0071	.0003	4.324	.0000	.0000	.0231	.0040
#3	-.0003	17.94	.0012	.0072	.0002	4.351	.0000	-.0001	.0235	.0040

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.097	5.571	.8120	.0132	.0017	5.452	.0023	.0078	.0001	.0037
Stddev	.014	.013	.0183	.0000	.0003	.017	.0003	.0007	.0014	.0018
%RSD	.6429	.2283	2.254	.1419	18.17	.3077	11.85	8.975	1788.	48.12
#1	2.108	5.567	.7938	.0132	.0019	5.468	.0020	.0078	-.0014	.0030
#2	2.082	5.561	.8304	.0132	.0019	5.452	.0022	.0071	.0003	.0057
#3	2.101	5.586	.8118	.0132	.0014	5.434	.0026	.0085	.0014	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.583	.0008	.0106	.0146	-.0003	.0072	.0115
Stddev	.009	.0004	.0000	.0001	.0002	.0003	.0001
%RSD	.1918	46.82	.1909	.9123	50.35	4.494	.9509
#1	4.578	.0004	.0105	.0147	-.0005	.0072	.0115
#2	4.577	.0011	.0106	.0147	-.0004	.0075	.0114
#3	4.593	.0009	.0106	.0145	-.0001	.0069	.0116

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1656.8	4744.2	32179.	2263.3
Stddev	2.5	6.6	66.	12.1
%RSD	.15149	.13843	.20512	.53604
#1	1659.1	4750.5	32105.	2249.3
#2	1654.2	4744.8	32200.	2271.2
#3	1657.1	4737.4	32233.	2269.4

Zoom In Zoom Out

Sample Name: FA22073-1 Acquired: 2/13/2015 14:46:40 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0671	-.0007	.0117	-.0001	25.90	.0000	-.0002	.0000	.0001
Stddev	.000	.0065	.0005	.0002	.0001	.08	.0000	.0001	.000	.0004
%RSD	1022.	9.751	73.06	1.862	119.0	.3038	1578.	42.97	10050.	356.8
#1	.0000	.0706	-.0006	.0118	-.0003	25.87	.0000	-.0002	-.0003	.0000
#2	.0000	.0710	-.0002	.0119	-.0001	25.99	.0000	-.0002	.0003	.0006
#3	.0000	.0595	-.0012	.0115	.0000	25.84	.0000	-.0001	-.0001	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1260	20.56	5.587	.0250	.0005	1.199	.0004	-.0015	.0003	.0010
Stddev	.0046	.02	.017	.0000	.0001	.024	.0003	.0008	.0004	.0017
%RSD	3.669	.0876	.3093	.1565	25.04	1.978	71.93	53.85	148.0	161.6
#1	.1237	20.56	5.574	.0251	.0004	1.174	.0008	-.0007	.0001	-.0008
#2	.1313	20.58	5.580	.0250	.0006	1.203	.0002	-.0022	.0000	.0025
#3	.1230	20.54	5.607	.0250	.0004	1.221	.0003	-.0015	.0007	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.799	.0005	.0674	.0018	.0001	.0008	.0067
Stddev	.008	.0004	.0003	.0000	.0011	.0004	.0000
%RSD	.2996	73.21	.3729	1.870	893.6	47.61	.6911
#1	2.809	.0005	.0674	.0018	.0010	.0006	.0067
#2	2.794	.0009	.0677	.0018	.0005	.0012	.0067
#3	2.795	.0002	.0672	.0018	-.0011	.0005	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1670.0	4730.8	32065.	2246.5
Stddev	3.1	11.1	129.	10.1
%RSD	.18746	.23455	.40278	.44889
#1	1666.7	4718.5	31948.	2239.0
#2	1673.0	4740.2	32044.	2242.6
#3	1670.3	4733.6	32203.	2258.0

Zoom In Zoom Out

Sample Name: FA22073-2 Acquired: 2/13/2015 14:50:49 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.4840	-.0008	.0212	.0001	45.10	.0000	-.0002	.0012	.0007
Stddev	.000	.0218	.0004	.0002	.0001	.28	.000	.0002	.0001	.0002
%RSD	3506.	4.510	45.80	.9923	124.8	.6163	195.0	92.24	12.45	26.84
#1	.0002	.4597	-.0008	.0212	.0001	44.78	.0000	-.0001	.0011	.0008
#2	.0001	.4902	-.0004	.0210	.0000	45.29	-.0001	-.0004	.0014	.0005
#3	-.0003	.5020	-.0011	.0214	.0001	45.23	.0000	.0000	.0011	.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1954	2.971	3.954	.0093	.0005	.8254	.0010	-.0016	.0008	.0010
Stddev	.0047	.020	.031	.0000	.0001	.0113	.0002	.0008	.0014	.0010
%RSD	2.417	.6703	.7855	.2073	11.01	1.373	18.33	52.19	178.4	108.7
#1	.2008	2.948	3.919	.0093	.0005	.8129	.0012	-.0023	.0003	.0003
#2	.1927	2.983	3.979	.0092	.0005	.8350	.0010	-.0017	-.0003	.0022
#3	.1926	2.982	3.964	.0093	.0004	.8284	.0008	-.0007	.0024	.0004

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.989	.0001	.1490	.0155	-.0011	.0036	.0143
Stddev	.003	.0003	.0007	.0011	.0010	.0001	.0001
%RSD	.1361	271.5	.4880	7.383	92.12	2.142	.3513
#1	1.991	.0004	.1482	.0145	.0001	.0036	.0144
#2	1.986	.0000	.1493	.0167	-.0018	.0037	.0143
#3	1.990	-.0001	.1496	.0154	-.0017	.0036	.0143

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1601.4	4522.6	30730.	2137.3
Stddev	3.7	5.7	89.	20.0
%RSD	.23396	.12668	.28895	.93787
#1	1600.4	4526.8	30735.	2160.0
#2	1605.6	4525.1	30816.	2129.7
#3	1598.3	4516.1	30638.	2122.1

Zoom In Zoom Out

Sample Name: FA22073-3 Acquired: 2/13/2015 14:54:56 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0104	.1426	-.0005	.9027	.0008	1778.	-.0027	-.0024	-.0008	-.0035
Stddev	.0039	.5403	.0069	.0088	.0035	6.	.0008	.0010	.0096	.0152
%RSD	37.22	379.0	1370.	.9797	462.8	.3294	28.74	39.47	1135.	429.0
#1	-.0133	.3754	-.0020	.9124	.0003	1776.	-.0018	-.0035	-.0118	.0055
#2	-.0060	.5275	.0070	.9006	.0044	1784.	-.0033	-.0022	.0033	-.0210
#3	-.0118	-.4751	-.0065	.8952	-.0025	1773.	-.0029	-.0016	.0060	.0049

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.180	10.93	253.9	.4997	-.0210	900.7	.0016	-.0851	.0004	-.0231
Stddev	.122	.44	.9	.0024	.0043	4.1	.0031	.0203	.0110	.0186
%RSD	1.490	3.994	.3732	.4892	20.54	.4541	185.6	23.89	2839.	80.36
#1	8.198	11.07	253.9	.4971	-.0187	898.6	.0035	-.0632	-.0014	-.0430
#2	8.050	11.29	254.9	.5003	-.0184	905.4	.0033	-.0887	-.0096	-.0204
#3	8.292	10.45	253.0	.5019	-.0260	898.1	-.0019	-.1034	.0121	-.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.446	.0065	9.192	.0388	.0529	.0026	.0340
Stddev	.076	.0048	.039	.0008	.0046	.0076	.0011
%RSD	.8088	73.93	.4263	2.184	8.705	292.2	3.300
#1	9.396	.0013	9.177	.0398	.0561	.0108	.0353
#2	9.407	.0108	9.237	.0382	.0476	.0011	.0335
#3	9.534	.0074	9.163	.0385	.0550	-.0041	.0332

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1582.8	4470.6	30213.	2108.0
Stddev	11.4	20.3	86.	22.9
%RSD	.72256	.45474	.28474	1.0859
#1	1588.1	4481.2	30310.	2130.2
#2	1590.7	4483.4	30145.	2084.4
#3	1569.7	4447.1	30185.	2109.5

Zoom In Zoom Out

Sample Name: FA22073-4 Acquired: 2/13/2015 14:59:05 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0087	-.0008	.0264	.0000	112.7	.0000	-.0004	.0000	.0003
Stddev	.0004	.0093	.0002	.0002	.0002	.4	.000	.0001	.000	.0002
%RSD	134.2	106.1	21.91	.9311	4071.	.3612	235.6	27.94	789.6	51.16
#1	.0002	.0118	-.0008	.0267	.0002	112.2	.0000	-.0003	-.0002	.0001
#2	-.0005	-.0017	-.0010	.0264	.0000	112.7	.0000	-.0005	.0002	.0004
#3	-.0004	.0160	-.0006	.0262	-.0002	113.0	-.0001	-.0003	-.0002	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0054	3.181	17.19	.0005	-.0007	58.94	-.0001	-.0015	.0006	.0003
Stddev	.0053	.040	.04	.0001	.0001	.20	.0001	.0003	.0001	.0008
%RSD	97.85	1.251	.2381	14.44	18.43	.3360	136.4	23.50	20.69	318.6
#1	.0008	3.142	17.17	.0006	-.0006	58.72	-.0002	-.0017	.0004	-.0004
#2	.0042	3.221	17.16	.0005	-.0009	59.01	.0000	-.0016	.0007	.0012
#3	.0112	3.179	17.23	.0005	-.0008	59.10	-.0001	-.0011	.0006	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	15.30	.0003	.7284	.0014	-.0006	.0000	.0336
Stddev	.01	.0001	.0023	.0001	.0022	.000	.0001
%RSD	.0582	26.03	.3173	8.521	344.1	391.0	.4322
#1	15.30	.0002	.7259	.0015	-.0013	-.0001	.0338
#2	15.31	.0003	.7288	.0015	.0018	-.0001	.0336
#3	15.30	.0004	.7305	.0013	-.0024	.0001	.0335

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1594.8	4521.0	29754.	2125.1
Stddev	4.5	5.3	152.	5.8
%RSD	.28053	.11741	.50983	.27178
#1	1589.9	4518.3	29641.	2130.9
#2	1595.8	4517.7	29695.	2125.1
#3	1598.7	4527.2	29927.	2119.3

Zoom In Zoom Out

Sample Name: FA22073-5 Acquired: 2/13/2015 15:03:13 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0024	-.0785	.0090	.4516	.0003	849.0	-.0001	-.0005	-.0035	-.0057
Stddev	.0023	.1129	.0139	.0016	.0006	4.5	.0002	.0011	.0012	.0017
%RSD	95.61	143.8	154.8	.3652	205.9	.5321	171.3	208.9	35.09	30.57
#1	-.0050	-.1935	.0178	.4518	.0004	844.4	-.0001	-.0009	-.0044	-.0059
#2	-.0005	.0321	.0162	.4498	-.0003	849.1	.0001	-.0014	-.0021	-.0038
#3	-.0017	-.0740	-.0070	.4530	.0008	853.5	-.0003	.0007	-.0040	-.0073

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.141	9.955	127.9	.1313	-.0075	353.5	-.0004	-.0314	.0055	-.0101
Stddev	.007	.378	.3	.0005	.0024	1.6	.0003	.0050	.0069	.0124
%RSD	.6017	3.799	.2666	.3573	32.02	.4515	68.36	15.98	123.8	122.9
#1	1.133	10.36	128.1	.1314	-.0096	352.1	-.0002	-.0337	.0102	-.0042
#2	1.147	9.902	128.1	.1307	-.0049	353.1	-.0007	-.0257	.0087	-.0018
#3	1.141	9.607	127.5	.1316	-.0081	355.2	-.0003	-.0349	-.0023	-.0244

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.603	.0002	7.515	.0161	.0164	-.0005	.0045
Stddev	.026	.0048	.047	.0040	.0083	.0020	.0009
%RSD	.2710	2950.	.6309	24.77	50.64	360.2	19.29
#1	9.593	.0010	7.465	.0136	.0071	.0001	.0047
#2	9.583	-.0050	7.521	.0141	.0232	-.0028	.0036
#3	9.632	.0045	7.560	.0207	.0189	.0010	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1625.6	4610.6	30375.	2163.4
Stddev	.2	11.3	71.	9.3
%RSD	.01521	.24539	.23521	.43056
#1	1625.5	4602.8	30456.	2166.7
#2	1625.8	4623.5	30351.	2170.7
#3	1625.4	4605.4	30319.	2152.9

Zoom In Zoom Out

Sample Name: FA22073-6 Acquired: 2/13/2015 15:07:22 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0256	-.0003	.0062	-.0001	9.680	-.0001	.0000	-.0001	.0039
Stddev	.000	.0060	.0003	.0003	.0001	.078	.0000	.0001	.0002	.0004
%RSD	1769.	23.29	102.1	5.424	77.90	.8099	18.07	173.7	240.4	10.67
#1	.0001	.0198	.0000	.0062	-.0001	9.605	-.0001	.0001	.0001	.0037
#2	-.0003	.0254	-.0004	.0065	-.0002	9.761	-.0001	.0000	-.0002	.0044
#3	.0001	.0317	-.0006	.0058	.0000	9.672	-.0001	.0000	-.0001	.0037

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.163	44.16	4.883	.0293	.0010	5.618	.0010	-.0005	.0002	.0025
Stddev	.014	.41	.063	.0000	.0000	.036	.0001	.0004	.0004	.0008
%RSD	1.177	.9397	1.287	.0898	4.034	.6382	8.297	83.30	256.0	30.42
#1	1.155	43.70	4.847	.0294	.0011	5.592	.0010	.0000	-.0001	.0023
#2	1.179	44.50	4.956	.0293	.0010	5.659	.0010	-.0007	.0006	.0019
#3	1.155	44.28	4.847	.0293	.0011	5.603	.0011	-.0006	.0000	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.604	.0006	.0375	.0011	-.0005	.0003	.0151
Stddev	.004	.0005	.0002	.0001	.0005	.0002	.0001
%RSD	.2355	78.37	.6409	9.827	102.5	61.85	.6869
#1	1.609	.0006	.0373	.0010	-.0011	.0005	.0152
#2	1.603	.0011	.0377	.0012	-.0002	.0001	.0151
#3	1.602	.0001	.0374	.0011	-.0002	.0004	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1593.5	4552.9	30024.	2115.5
Stddev	1.9	8.8	35.	23.1
%RSD	.11826	.19370	.11671	1.0901
#1	1594.3	4543.8	30051.	2135.6
#2	1591.3	4553.7	30037.	2090.3
#3	1594.7	4561.3	29985.	2120.5

Zoom In Zoom Out

Sample Name: FA22073-7 Acquired: 2/13/2015 15:11:30 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0014	.0410	-.0024	.1189	.0012	117.6	-.0005	-.0010	-.0030	-.0060
Stddev	.0041	.0646	.0024	.0009	.0007	.2	.0000	.0022	.0040	.0015
%RSD	290.4	157.6	102.4	.7869	56.20	.1840	8.368	210.1	133.0	24.98
#1	-.0060	.0871	-.0026	.1181	.0016	117.6	-.0005	.0001	-.0040	-.0063
#2	.0018	.0687	.0002	.1188	.0004	117.4	-.0006	-.0035	-.0064	-.0073
#3	.0000	-.0329	-.0046	.1199	.0015	117.8	-.0005	.0004	.0014	-.0044

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.884	13.76	14.50	.0403	.0000	201.8	.0017	-.0011	-.0010	.0164
Stddev	.012	.06	.17	.0004	.0017	.7	.0013	.0050	.0080	.0027
%RSD	.6234	.4212	1.197	1.086	12890.	.3682	76.68	443.7	846.5	16.33
#1	1.896	13.72	14.67	.0399	-.0018	202.1	.0024	.0009	.0041	.0188
#2	1.883	13.72	14.49	.0401	.0002	201.0	.0002	-.0068	.0032	.0135
#3	1.873	13.82	14.33	.0408	.0016	202.4	.0025	.0026	-.0102	.0169

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.550	.0011	1.714	.0054	.0115	.0014	.0144
Stddev	.014	.0035	.010	.0025	.0067	.0041	.0006
%RSD	.3848	313.2	.5835	46.82	57.88	301.2	4.108
#1	3.535	-.0005	1.715	.0043	.0038	.0000	.0140
#2	3.551	-.0013	1.704	.0036	.0152	-.0019	.0141
#3	3.562	.0051	1.724	.0083	.0155	.0060	.0151

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1671.9	4765.7	31779.	2223.7
Stddev	7.3	14.6	29.	3.3
%RSD	.43712	.30542	.09134	.14666
#1	1678.6	4781.3	31750.	2220.3
#2	1672.8	4763.1	31808.	2226.7
#3	1664.1	4752.6	31778.	2224.2

Zoom In Zoom Out

Sample Name: FA22073-8 Acquired: 2/13/2015 15:15:41 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0037	.1902	.0137	.1478	-.0004	92.77	.0000	-.0025	-.0128	-.0122
Stddev	.0069	.4691	.0046	.0036	.0018	.53	.0014	.0015	.0086	.0008
%RSD	185.9	246.7	33.78	2.419	423.0	.5696	3969.	61.54	67.50	6.269
#1	-.0023	.6834	.0185	.1450	.0009	93.38	-.0014	-.0039	-.0168	-.0127
#2	.0024	-.2503	.0093	.1466	-.0025	92.40	.0013	-.0009	-.0186	-.0126
#3	-.0113	.1373	.0134	.1518	.0004	92.53	.0002	-.0027	-.0029	-.0113

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.905	12.02	13.96	.0376	.0009	474.4	-.0007	-.0163	.0206	.0361
Stddev	.037	.41	.60	.0004	.0034	1.1	.0019	.0122	.0070	.0208
%RSD	.7471	3.424	4.316	1.000	365.2	.2269	275.0	75.09	34.13	57.46
#1	4.864	11.61	13.33	.0380	-.0028	474.5	.0014	-.0082	.0168	.0515
#2	4.918	12.03	14.53	.0373	.0038	473.2	-.0024	-.0304	.0164	.0125
#3	4.933	12.43	14.03	.0375	.0018	475.4	-.0011	-.0103	.0288	.0444

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.424	.0057	1.070	.0042	.0026	-.0025	.0152
Stddev	.036	.0053	.002	.0015	.0013	.0044	.0004
%RSD	.8143	93.90	.1477	36.29	48.43	176.3	2.922
#1	4.391	.0104	1.068	.0054	.0039	-.0074	.0148
#2	4.419	-.0001	1.071	.0045	.0027	.0008	.0152
#3	4.463	.0067	1.071	.0025	.0013	-.0008	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1707.5	4853.3	32101.	2232.5
Stddev	8.4	22.9	151.	10.5
%RSD	.49299	.47181	.47164	.46929
#1	1714.7	4869.9	31948.	2240.6
#2	1709.6	4862.9	32250.	2236.2
#3	1698.2	4827.2	32105.	2220.6

Zoom In Zoom Out

Sample Name: FA22073-9 Acquired: 2/13/2015 15:19:51 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0345	-.1746	.0313	.2717	-.0093	594.5	.0005	-.0124	-.0447	-.0779
Stddev	.0222	1.429	.0481	.0422	.0062	1.4	.0057	.0158	.0211	.0145
%RSD	64.22	818.4	153.4	15.55	67.19	.2330	1228.	127.9	47.11	18.62
#1	-.0585	-1.574	.0524	.2294	-.0080	594.9	-.0061	.0018	-.0324	-.0731
#2	-.0303	-.2317	-.0237	.2718	-.0161	595.6	.0035	-.0094	-.0327	-.0942
#3	-.0148	1.282	.0652	.3139	-.0038	592.9	.0040	-.0295	-.0690	-.0664

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.602	176.1	78.58	.0626	-.0100	2700.	.0075	-.0692	-.0358	.1424
Stddev	.253	2.6	2.48	.0021	.0022	4.	.0064	.0657	.0615	.0941
%RSD	7.026	1.480	3.160	3.331	21.60	.1404	86.26	95.02	171.8	66.06
#1	3.832	179.1	76.00	.0628	-.0091	2700.	.0047	-.0407	.0179	.2095
#2	3.642	175.2	80.95	.0647	-.0084	2704.	.0148	-.0225	-.0224	.0349
#3	3.331	174.1	78.79	.0605	-.0124	2697.	.0029	-.1443	-.1028	.1829

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.026	.0084	23.01	.0195	.1448	-.0300	.0170
Stddev	.069	.0088	.03	.0043	.1101	.0325	.0034
%RSD	.9823	105.2	.1120	22.15	76.01	108.1	20.06
#1	6.947	.0180	22.98	.0197	.0605	-.0547	.0181
#2	7.051	.0063	23.03	.0151	.1045	-.0421	.0198
#3	7.078	.0008	23.02	.0237	.2693	.0067	.0132

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1698.5	4856.2	32135.	2240.2
Stddev	.5	10.2	174.	2.9
%RSD	.03018	.20924	.54188	.13030
#1	1698.0	4867.7	31980.	2241.9
#2	1699.0	4848.6	32323.	2236.9
#3	1698.6	4852.3	32102.	2241.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 15:24:01 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2519	41.13	1.950	2.007	2.029	41.18	1.994	1.982	2.071	2.024
Stddev	.0013	.37	.001	.015	.017	.41	.001	.002	.002	.001
%RSD	.5022	.9035	.0655	.7569	.8571	.9935	.0709	.1022	.0932	.0681
#1	.2532	40.76	1.951	1.992	2.010	40.73	1.994	1.982	2.071	2.024
#2	.2518	41.12	1.950	2.005	2.031	41.28	1.996	1.985	2.070	2.023
#3	.2507	41.51	1.949	2.023	2.045	41.53	1.994	1.981	2.073	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.52	40.73	39.85	2.050	1.965	41.43	1.954	1.988	1.955	1.962
Stddev	.34	.40	.24	.001	.006	.34	.001	.002	.001	.005
%RSD	.8500	.9875	.6071	.0574	.3035	.8260	.0719	.1125	.0251	.2682
#1	40.17	40.36	39.58	2.051	1.958	41.08	1.953	1.986	1.955	1.961
#2	40.53	40.66	39.94	2.050	1.967	41.46	1.955	1.987	1.954	1.968
#3	40.85	41.16	40.03	2.048	1.969	41.76	1.953	1.990	1.955	1.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.773	1.945	2.063	2.048	1.998	1.993	1.991
Stddev	.002	.004	.019	.001	.004	.002	.002
%RSD	.0829	.1778	.9241	.0559	.2246	.0809	.1075
#1	1.772	1.944	2.044	2.049	1.994	1.994	1.990
#2	1.773	1.949	2.064	2.047	2.003	1.991	1.994
#3	1.774	1.943	2.082	2.049	1.998	1.994	1.990
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 15:24:01 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1564.1	4458.6	29698.	2123.5
Stddev	2.5	5.2	35.	20.8
%RSD	.16246	.11576	.11736	.98026
#1	1567.0	4464.5	29660.	2139.6
#2	1563.0	4455.9	29729.	2130.9
#3	1562.3	4455.3	29704.	2100.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 15:27:58 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0182	.0006	.0003	.0002	.0048	.0003	.0001	-.0001
Stddev	.0004	.0159	.0002	.0003	.0001	.0055	.0001	.0001	.0004
%RSD	150.6	87.45	28.23	103.8	52.39	113.7	46.73	97.80	341.2
#1	-.0001	.0245	.0005	.0005	.0001	.0102	.0004	.0003	.0001
#2	-.0007	.0001	.0009	.0000	.0001	.0050	.0003	.0001	-.0005
#3	.0000	.0300	.0006	.0004	.0003	-.0007	.0002	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0433	.0400	-.0105	.0004	F.0036	.0241	.0004	.0003
Stddev	.0001	.0123	.0491	.0450	.0000	.0006	.0162	.0001	.0008
%RSD	175.4	28.52	122.8	427.4	9.817	18.02	67.16	37.38	254.6
#1	-.0001	.0569	.0899	-.0408	.0004	.0042	.0426	.0004	.0007
#2	.0000	.0399	-.0083	-.0320	.0003	.0036	.0170	.0005	-.0006
#3	-.0001	.0329	.0384	.0412	.0004	.0029	.0127	.0002	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0019	-.0007	F.0012	.0004	.0017	-.0004	.0004	.0004
Stddev	.0006	.0016	.0006	.0002	.0001	.0002	.0002	.0003	.0000
%RSD	72.06	83.87	83.81	17.10	18.82	10.90	45.23	98.04	5.790
#1	.0008	.0007	.0000	.0013	.0003	.0019	-.0003	.0007	.0004
#2	.0003	.0036	-.0012	.0014	.0003	.0017	-.0006	.0003	.0004
#3	.0016	.0012	-.0010	.0010	.0004	.0015	-.0003	.0000	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 15:27:58 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1622.4	4638.6	30878.	2153.6
Stddev	5.8	7.0	142.	9.4
%RSD	.35794	.15120	.46124	.43841
#1	1620.3	4634.2	30743.	2154.8
#2	1629.0	4646.7	31027.	2162.4
#3	1618.0	4634.9	30863.	2143.6

Zoom In Zoom Out

Sample Name: FA22073-10 Acquired: 2/13/2015 15:32:11 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0007	.0135	-.0011	.1667	.0002	231.0	-.0002	-.0004	.0006
Stddev	.0018	.0184	.0006	.0010	.0001	1.3	.0000	.0002	.0001
%RSD	259.7	135.7	55.49	.6173	32.23	.5685	14.62	44.26	20.37
#1	.0009	.0299	-.0017	.1657	.0003	230.4	-.0002	-.0002	.0005
#2	-.0002	.0170	-.0009	.1668	.0002	230.2	-.0003	-.0005	.0008
#3	-.0027	-.0063	-.0006	.1678	.0003	232.6	-.0002	-.0004	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	1.958	39.61	26.89	.0883	.0000	F1429.	-.0004	-.0031
Stddev	.0010	.004	.33	.14	.0016	.000	9.	.0006	.0022
%RSD	387.0	.2259	.8255	.5086	1.782	2433.	.6019	140.7	69.82
#1	.0012	1.959	39.27	26.73	.0894	.0002	1435.	-.0011	-.0007
#2	.0004	1.953	39.64	26.97	.0890	-.0004	1419.	-.0002	-.0049
#3	-.0008	1.961	39.92	26.96	.0865	.0001	1432.	.0000	-.0037

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	-.0013	9.185	.0004	6.020	.0040	.0032	.0003	.0062
Stddev	.0040	.0027	.033	.0005	.023	.0002	.0015	.0002	.0001
%RSD	1575.	201.9	.3605	123.8	.3890	4.000	46.34	74.24	1.120
#1	-.0031	-.0044	9.149	.0002	6.004	.0042	.0015	.0005	.0061
#2	.0043	.0005	9.191	.0010	6.009	.0040	.0041	.0005	.0063
#3	-.0020	-.0001	9.214	.0001	6.047	.0040	.0040	.0000	.0062

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1492.8	4367.0	27912.	2031.6
Stddev	6.6	16.8	384.	20.3
%RSD	.44468	.38416	1.3746	1.0014
#1	1496.5	4385.3	27650.	2046.6
#2	1496.7	4363.5	27733.	2039.7
#3	1485.1	4352.3	28352.	2008.4

Zoom In Zoom Out

Sample Name: FA22073-11 Acquired: 2/13/2015 15:36:28 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0063	.1213	-.0083	.5642	-.0003	1650.	-.0018	-.0025	-.0023	-.0075
Stddev	.0034	.1282	.0152	.0018	.0041	4.	.0003	.0008	.0080	.0068
%RSD	53.74	105.7	182.1	.3130	1576.	.2200	19.28	31.03	347.1	90.29
#1	-.0091	.2629	.0089	.5661	.0033	1653.	-.0017	-.0034	-.0053	-.0002
#2	-.0025	.0879	-.0140	.5627	.0007	1646.	-.0022	-.0024	.0068	-.0136
#3	-.0072	.0132	-.0199	.5636	-.0048	1651.	-.0015	-.0018	-.0083	-.0088

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5009	7.726	146.0	.1894	-.0112	757.9	.0020	-.0320	.0140	-.0161
Stddev	.0595	.284	.5	.0007	.0030	.8	.0009	.0140	.0129	.0174
%RSD	11.88	3.680	.3100	.3698	27.08	.1023	43.62	43.75	92.43	107.8
#1	.5658	7.402	146.3	.1888	-.0111	758.7	.0020	-.0414	.0112	.0015
#2	.4882	7.932	146.3	.1893	-.0083	757.2	.0029	-.0387	.0027	-.0332
#3	.4488	7.844	145.5	.1902	-.0143	757.9	.0011	-.0159	.0281	-.0167

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.482	-.0011	6.457	.0294	.0428	.0017	.0084
Stddev	.028	.0095	.032	.0024	.0195	.0027	.0004
%RSD	.2898	840.9	.4992	8.197	45.52	161.5	5.115
#1	9.455	-.0015	6.495	.0314	.0319	.0028	.0088
#2	9.483	.0086	6.439	.0267	.0312	-.0014	.0079
#3	9.510	-.0104	6.439	.0301	.0653	.0036	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.8	4584.1	30128.	2119.2
Stddev	4.6	11.8	96.	5.8
%RSD	.28539	.25796	.31951	.27499
#1	1611.7	4597.4	30038.	2122.5
#2	1605.9	4580.2	30230.	2122.7
#3	1602.7	4574.7	30116.	2112.5

Zoom In Zoom Out

Sample Name: FA22073-12 Acquired: 2/13/2015 15:40:38 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 50.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0128	.1470	.0098	.0903	-.0068	142.8	-.0014	-.0100	-.0326	-.0268
Stddev	.0199	.1880	.0067	.0157	.0062	.7	.0022	.0038	.0112	.0027
%RSD	156.2	127.9	68.09	17.34	90.71	.5183	154.2	38.29	34.47	10.12
#1	-.0346	.0130	.0053	.0908	-.0052	142.0	-.0006	-.0141	-.0324	-.0295
#2	.0046	.3619	.0176	.1058	-.0016	143.4	.0003	-.0065	-.0439	-.0240
#3	-.0083	.0662	.0067	.0744	-.0136	143.1	-.0039	-.0094	-.0215	-.0271

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.6394	4.832	16.08	.0238	.0114	67.62	-.0040	-.0112	.0483	.0338
Stddev	.1911	1.164	1.68	.0015	.0018	1.12	.0065	.0154	.0207	.0376
%RSD	29.89	24.09	10.44	6.517	15.35	1.653	163.5	137.4	42.82	111.2
#1	.4890	6.169	15.19	.0244	.0094	68.57	-.0002	.0030	.0674	.0490
#2	.8544	4.045	15.03	.0249	.0125	67.89	-.0002	-.0090	.0264	-.0090
#3	.5747	4.281	18.02	.0220	.0124	66.39	-.0114	-.0277	.0510	.0615

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	6.946	.0120	.6548	.0138	-.0147	-.0062	.0165
Stddev	.034	.0219	.0097	.0094	.0243	.0038	.0016
%RSD	.4933	183.4	1.486	68.39	166.0	61.01	9.443
#1	6.976	.0160	.6438	.0246	-.0423	-.0019	.0157
#2	6.909	-.0117	.6624	.0081	-.0050	-.0090	.0183
#3	6.953	.0316	.6580	.0086	.0033	-.0077	.0154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.6	4626.0	30774.	2108.0
Stddev	.7	4.2	26.	9.9
%RSD	.04583	.09150	.08302	.46799
#1	1623.9	4626.8	30785.	2111.7
#2	1624.1	4629.8	30793.	2096.8
#3	1622.7	4621.5	30745.	2115.5

Zoom In Zoom Out

Sample Name: MP28553-MB1 Acquired: 2/13/2015 15:44:50 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0077	-.0011	.0002	-.0001	.0129	.0000	-.0002	-.0007	-.0007
Stddev	.0005	.0093	.0005	.0003	.0001	.0087	.000	.0001	.0003	.0001
%RSD	167.7	121.0	48.39	204.6	50.78	67.63	37.23	59.06	41.52	19.12
#1	.0003	.0094	-.0017	.0001	-.0002	.0222	.0000	-.0002	-.0010	-.0008
#2	-.0005	-.0024	-.0010	-.0001	-.0001	.0113	.0000	-.0001	-.0006	-.0006
#3	-.0006	.0160	-.0007	.0005	.0000	.0050	.0000	-.0003	-.0005	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0056	.0030	.0000	.0003	.0806	-.0001	-.0006	.0001	.0004
Stddev	.0050	.0075	.0262	.0000	.0001	.0201	.0001	.0005	.0004	.0004
%RSD	299.9	135.3	862.5	84.90	44.55	24.93	110.8	90.71	270.2	117.4
#1	-.0021	.0067	.0332	.0001	.0002	.0939	.0000	-.0002	-.0003	.0006
#2	.0074	-.0025	-.0110	.0000	.0003	.0905	-.0001	-.0003	.0002	.0007
#3	-.0002	.0125	-.0131	.0000	.0005	.0575	-.0001	-.0012	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0179	.0005	.0000	-.0001	-.0014	.0000	.0005
Stddev	.0003	.0004	.0000	.0001	.0006	.0001	.0001
%RSD	1.565	91.75	113.4	146.8	44.51	957.5	15.55
#1	.0181	.0002	.0000	-.0001	-.0020	.0001	.0006
#2	.0176	.0002	.0000	.0001	-.0016	.0000	.0004
#3	.0180	.0009	.0000	-.0002	-.0007	-.0001	.0004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28553-MB1 Acquired: 2/13/2015 15:44:50 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1601.8	4604.6	30722.	2120.8
Stddev	2.2	5.0	22.	12.6
%RSD	.13437	.10835	.07117	.59581
#1	1599.6	4600.1	30734.	2109.6
#2	1601.7	4603.8	30735.	2134.5
#3	1603.9	4610.0	30697.	2118.2

Zoom In Zoom Out

Sample Name: MP28553-B1 Acquired: 2/13/2015 15:49:02 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0492	28.46	1.949	2.073	.0534	26.45	.0492	.4999	.2174	.2622
Stddev	.0002	.12	.002	.017	.0004	.07	.0001	.0003	.0002	.0005
%RSD	.4743	.4044	.0882	.8209	.8389	.2741	.2061	.0640	.1149	.2057
#1	.0495	28.45	1.949	2.079	.0531	26.43	.0493	.4998	.2171	.2624
#2	.0491	28.59	1.947	2.086	.0539	26.54	.0492	.5002	.2176	.2616
#3	.0491	28.36	1.950	2.054	.0531	26.40	.0492	.4996	.2175	.2626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.64	25.52	25.08	.5197	.4771	26.49	.4998	.4974	.4885	1.927
Stddev	.14	.20	.15	.0016	.0007	.10	.0005	.0004	.0008	.003
%RSD	.5217	.7710	.5793	.3092	.1550	.3713	.1045	.0820	.1701	.1554
#1	26.69	25.66	25.08	.5203	.4764	26.54	.4994	.4978	.4895	1.930
#2	26.75	25.61	25.22	.5179	.4779	26.56	.4995	.4975	.4881	1.925
#3	26.48	25.30	24.93	.5210	.4770	26.38	.5004	.4970	.4880	1.925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0209	.4939	.5252	.5117	2.017	.4982	.5054
Stddev	.0003	.0015	.0031	.0013	.004	.0023	.0003
%RSD	1.669	.3008	.5849	.2604	.1987	.4564	.0661
#1	.0208	.4945	.5273	.5127	2.021	.4986	.5051
#2	.0206	.4949	.5267	.5102	2.018	.4958	.5053
#3	.0213	.4922	.5217	.5123	2.013	.5003	.5058
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28553-B1 Acquired: 2/13/2015 15:49:02 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1593.1	4533.2	29744.	2115.7
Stddev	3.9	3.0	76.	8.7
%RSD	.24627	.06707	.25522	.41146
#1	1591.1	4532.8	29810.	2125.3
#2	1590.6	4530.3	29762.	2108.4
#3	1597.6	4536.3	29661.	2113.3

Zoom In Zoom Out

Sample Name: FA22018-2 Acquired: 2/13/2015 15:53:01 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	-.0159	-.0007	.0359	.0000	5.184	-.0001	-.0002	.0026
Stddev	.0003	.0047	.0006	.0002	.000	.051	.0001	.0001	.0002
%RSD	153.7	29.24	89.38	.5267	408.2	.9810	81.15	71.81	9.444
#1	.0005	-.0105	-.0014	.0358	.0000	5.130	.0000	-.0003	.0029
#2	.0002	-.0185	-.0001	.0357	-.0001	5.193	-.0001	-.0003	.0026
#3	-.0001	-.0187	-.0006	.0361	.0000	5.231	-.0001	.0000	.0024

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0003	.0384	.1569	38.02	.0001	.0390	F141.8	.0001	.0009
Stddev	.0007	.0041	.0199	.15	.0000	.0003	.8	.0002	.0009
%RSD	219.7	10.74	12.66	.3883	4.664	.6936	.5772	172.8	104.2
#1	.0011	.0392	.1473	37.88	.0001	.0393	140.9	.0001	.0019
#2	-.0001	.0421	.1437	38.02	.0001	.0390	142.3	.0003	.0002
#3	-.0001	.0340	.1798	38.17	.0001	.0387	142.4	-.0001	.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0020	.0499	.0007	.0079	.0005	.0011	.0000	.0012
Stddev	.0003	.0014	.0031	.0002	.0000	.0002	.0005	.000	.0000
%RSD	104.4	66.16	6.247	27.76	.1694	33.57	44.66	899.9	1.839
#1	.0000	.0029	.0486	.0006	.0079	.0006	.0009	.0000	.0011
#2	.0005	.0005	.0535	.0007	.0079	.0006	.0007	.0003	.0012
#3	.0004	.0027	.0477	.0010	.0079	.0003	.0016	-.0004	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1581.2	4540.7	29569.	2083.2
Stddev	2.3	2.6	291.	16.8
%RSD	.14400	.05721	.98527	.80641
#1	1579.6	4540.0	29347.	2101.1
#2	1580.2	4538.5	29460.	2080.9
#3	1583.8	4543.6	29899.	2067.7

Zoom In Zoom Out

Sample Name: MP28553-D1 Acquired: 2/13/2015 15:57:11 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	-.0031	.0001	.0357	.0000	5.169	-.0001	-.0002	.0022
Stddev	.0002	.0181	.0012	.0004	.000	.011	.0001	.0001	.0003
%RSD	238.0	584.2	1853.	1.048	169.7	.2154	151.1	75.48	13.61
#1	-.0001	-.0103	-.0012	.0353	-.0001	5.156	-.0001	-.0002	.0019
#2	.0003	-.0166	.0002	.0359	-.0001	5.176	-.0002	.0000	.0022
#3	.0000	.0175	.0012	.0359	.0000	5.174	.0000	-.0003	.0025

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	.0208	.1352	37.98	.0001	.0391	F140.8	.0000	.0005
Stddev	.0002	.0050	.0292	.17	.0001	.0004	.3	.000	.0006
%RSD	90.89	24.13	21.62	.4561	118.8	.8985	.2034	308.4	123.9
#1	.0001	.0197	.1620	37.86	.0001	.0390	140.6	-.0002	-.0002
#2	.0005	.0263	.1040	38.18	.0000	.0388	140.6	.0001	.0010
#3	.0001	.0165	.1396	37.91	.0001	.0395	141.1	-.0001	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0012	.0499	.0005	.0078	.0003	-.0012	-.0003	.0012
Stddev	.0015	.0013	.0004	.0003	.0001	.0001	.0005	.0001	.0001
%RSD	250.9	106.5	.8338	71.45	1.206	32.33	43.83	41.20	6.342
#1	-.0012	.0007	.0497	.0009	.0078	.0004	-.0015	-.0001	.0013
#2	.0013	.0027	.0495	.0004	.0078	.0002	-.0006	-.0003	.0012
#3	.0017	.0003	.0503	.0002	.0079	.0003	-.0015	-.0003	.0012

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1575.1	4518.4	29417.	2097.6
Stddev	7.3	10.8	21.	5.4
%RSD	.46340	.23830	.07219	.25823
#1	1583.2	4530.9	29419.	2091.4
#2	1572.8	4512.5	29437.	2099.6
#3	1569.2	4512.0	29394.	2101.7

Zoom In Zoom Out

Sample Name: MP28553-SD1 Acquired: 2/13/2015 16:01:23 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0027	-.0290	.0001	.0374	-.0011	5.623	-.0001	-.0010	.0018	-.0014
Stddev	.0027	.0670	.0030	.0013	.0002	.008	.0003	.0006	.0021	.0011
%RSD	103.0	231.2	2609.	3.391	15.15	.1494	206.1	55.52	112.9	74.97
#1	-.0003	-.0726	.0009	.0372	-.0010	5.628	-.0005	-.0005	.0027	-.0023
#2	-.0057	-.0625	.0026	.0388	-.0010	5.613	.0001	-.0009	.0033	-.0002
#3	-.0020	.0482	-.0032	.0363	-.0013	5.627	-.0001	-.0016	-.0005	-.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0252	-.0528	38.75	.0000	.0393	148.1	.0007	-.0008	.0050	.0090
Stddev	.0287	.2055	.36	.000	.0001	.3	.0010	.0033	.0027	.0012
%RSD	114.0	388.9	.9383	1666.	.2373	.1807	143.7	401.4	54.03	13.77
#1	-.0064	.1808	38.40	.0000	.0392	147.9	.0004	.0018	.0056	.0102
#2	.0322	-.2055	38.73	-.0001	.0393	147.9	-.0001	-.0045	.0075	.0090
#3	.0498	-.1337	39.13	.0001	.0394	148.4	.0018	.0003	.0021	.0077

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0436	.0022	.0082	.0002	.0041	-.0004	.0020
Stddev	.0039	.0016	.0008	.0002	.0027	.0015	.0003
%RSD	8.920	74.13	9.279	108.8	65.55	354.3	15.42
#1	.0443	.0005	.0074	.0000	.0014	.0013	.0016
#2	.0394	.0024	.0083	.0004	.0068	-.0016	.0021
#3	.0471	.0038	.0089	.0001	.0042	-.0010	.0022

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1643.7	4691.3	31056.	2150.4
Stddev	1.3	9.2	25.	12.4
%RSD	.07812	.19521	.08159	.57624
#1	1644.7	4700.4	31074.	2164.3
#2	1642.2	4691.4	31027.	2146.1
#3	1644.0	4682.1	31067.	2140.7

Zoom In Zoom Out

Sample Name: MP28553-S1 Acquired: 2/13/2015 16:05:36 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0503	28.59	2.011	2.143	.0535	31.54	.0498	.5045	.2192
Stddev	.0007	.15	.004	.007	.0003	.16	.0002	.0014	.0002
%RSD	1.348	.5105	.1839	.3322	.5801	.4944	.3213	.2813	.0811
#1	.0506	28.53	2.007	2.137	.0533	31.47	.0496	.5029	.2191
#2	.0495	28.75	2.013	2.151	.0539	31.72	.0499	.5049	.2193
#3	.0507	28.48	2.014	2.140	.0534	31.43	.0498	.5056	.2194

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2654	26.85	27.06	63.59	.5194	.5258	F166.7	.5055	.5059
Stddev	.0003	.12	.14	.33	.0012	.0022	.7	.0019	.0018
%RSD	.0998	.4315	.5073	.5209	.2384	.4268	.4454	.3754	.3491
#1	.2656	26.80	26.93	63.51	.5184	.5232	166.3	.5033	.5038
#2	.2651	26.99	27.20	63.96	.5208	.5267	167.6	.5067	.5070
#3	.2655	26.78	27.06	63.31	.5189	.5275	166.3	.5066	.5068

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5028	2.008	.0519	.5049	.5380	.5158	2.063	.5044	.5092
Stddev	.0025	.007	.0010	.0010	.0014	.0005	.012	.0009	.0018
%RSD	.4922	.3693	1.993	.1937	.2676	.1008	.5663	.1828	.3566
#1	.5001	2.000	.0525	.5042	.5371	.5164	2.050	.5043	.5071
#2	.5034	2.013	.0507	.5046	.5397	.5153	2.073	.5035	.5104
#3	.5050	2.011	.0525	.5061	.5372	.5159	2.065	.5053	.5101

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1573.0	4492.4	29529.	2118.8
Stddev	7.8	16.9	65.	14.5
%RSD	.49608	.37718	.21900	.68381
#1	1581.7	4511.8	29587.	2128.4
#2	1566.8	4485.1	29459.	2102.2
#3	1570.5	4480.3	29541.	2126.0

Zoom In Zoom Out

Sample Name: MP28553-S2 Acquired: 2/13/2015 16:09:34 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0502	28.28	1.990	2.129	.0531	31.19	.0493	.5007	.2179
Stddev	.0001	.06	.002	.005	.0002	.08	.0001	.0004	.0008
%RSD	.2099	.1980	.0990	.2429	.4186	.2682	.2158	.0774	.3834
#1	.0501	28.33	1.990	2.135	.0531	31.28	.0492	.5009	.2187
#2	.0503	28.22	1.992	2.126	.0529	31.11	.0493	.5003	.2171
#3	.0502	28.30	1.988	2.126	.0533	31.19	.0494	.5010	.2178

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2626	26.59	26.95	62.95	.5154	.5211	F164.9	.5016	.5029
Stddev	.0005	.04	.11	.16	.0010	.0002	.2	.0003	.0026
%RSD	.1834	.1333	.3991	.2478	.1994	.0379	.1127	.0622	.5079
#1	.2632	26.60	27.07	63.12	.5164	.5209	165.0	.5018	.5038
#2	.2623	26.55	26.89	62.82	.5143	.5211	164.9	.5017	.4999
#3	.2624	26.61	26.87	62.91	.5153	.5212	164.7	.5012	.5048

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4967	1.986	.0509	.4992	.5326	.5105	2.044	.4999	.5047
Stddev	.0012	.003	.0003	.0009	.0009	.0009	.005	.0005	.0003
%RSD	.2476	.1723	.6524	.1718	.1757	.1694	.2438	.1004	.0519
#1	.4978	1.982	.0511	.5002	.5332	.5110	2.044	.5004	.5044
#2	.4969	1.988	.0512	.4991	.5331	.5095	2.039	.4994	.5049
#3	.4954	1.988	.0506	.4985	.5315	.5110	2.049	.5000	.5048

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1569.5	4488.2	29484.	2096.2
Stddev	3.9	4.4	52.	10.0
%RSD	.24688	.09763	.17781	.47505
#1	1566.4	4483.9	29428.	2096.6
#2	1573.9	4488.0	29532.	2106.0
#3	1568.2	4492.7	29492.	2086.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 16:13:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2514	41.42	1.958	2.027	2.039	41.40	1.999	1.987	2.070	2.016
Stddev	.0008	.13	.004	.002	.005	.09	.002	.002	.005	.002
%RSD	.3116	.3074	.1922	.0866	.2328	.2143	.0755	.0897	.2509	.1015
#1	.2520	41.56	1.959	2.026	2.041	41.50	1.999	1.987	2.064	2.014
#2	.2505	41.41	1.953	2.029	2.041	41.33	1.998	1.986	2.071	2.016
#3	.2515	41.30	1.960	2.027	2.033	41.36	2.001	1.989	2.074	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.69	41.37	40.04	2.054	1.970	41.72	1.961	1.996	1.959	1.970
Stddev	.05	.05	.23	.003	.005	.08	.001	.004	.004	.003
%RSD	.1164	.1198	.5715	.1320	.2503	.1812	.0691	.1887	.2122	.1518
#1	40.74	41.32	40.29	2.051	1.965	41.80	1.960	2.000	1.961	1.973
#2	40.69	41.42	39.98	2.055	1.970	41.68	1.959	1.993	1.955	1.969
#3	40.65	41.36	39.84	2.056	1.975	41.67	1.962	1.996	1.962	1.967
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.775	1.947	2.081	2.050	2.004	1.985	1.997
Stddev	.003	.002	.004	.001	.003	.002	.002
%RSD	.1515	.1102	.1846	.0638	.1566	.0824	.0744
#1	1.773	1.948	2.084	2.049	2.003	1.987	1.998
#2	1.774	1.944	2.082	2.049	2.002	1.984	1.996
#3	1.778	1.948	2.076	2.052	2.008	1.985	1.997
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 16:13:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1565.2	4466.6	29793.	2099.9
Stddev	1.6	3.2	22.	9.0
%RSD	.10429	.07129	.07509	.43010
#1	1564.1	4464.2	29816.	2089.7
#2	1567.0	4470.2	29792.	2107.0
#3	1564.4	4465.4	29771.	2103.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 16:17:26 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0154	.0002	.0003	.0004	.0027	.0003	.0002	.0003
Stddev	.0001	.0038	.0007	.0003	.0001	.0019	.0000	.0001	.0005
%RSD	50.24	24.69	431.8	136.4	30.30	71.27	8.387	31.18	140.6
#1	-.0001	.0110	.0010	.0001	.0002	.0037	.0003	.0002	.0003
#2	-.0001	.0175	-.0002	.0000	.0004	.0005	.0003	.0001	.0009
#3	-.0002	.0178	-.0003	.0006	.0004	.0040	.0002	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0441	-.0264	.0036	.0004	F.0035	.0505	.0003	-.0003
Stddev	.0003	.0159	.0179	.0407	.0000	.0010	.0021	.0001	.0011
%RSD	251.8	36.03	67.79	1132.	6.478	27.48	4.206	24.09	383.9
#1	.0003	.0614	-.0098	.0484	.0004	.0045	.0513	.0002	.0009
#2	.0001	.0409	-.0454	-.0311	.0005	.0034	.0481	.0003	-.0012
#3	-.0002	.0301	-.0241	-.0065	.0004	.0026	.0521	.0003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0014	-.0006	F.0010	.0004	.0019	.0011	.0003	.0003
Stddev	.0015	.0008	.0002	.0000	.0001	.0002	.0005	.0002	.0001
%RSD	89.49	57.33	29.74	4.511	26.94	10.61	42.48	52.91	17.42
#1	.0032	.0023	-.0004	.0011	.0003	.0021	.0016	.0001	.0004
#2	.0003	.0013	-.0008	.0010	.0005	.0020	.0009	.0004	.0003
#3	.0015	.0007	-.0006	.0010	.0005	.0017	.0007	.0005	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 16:17:26 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1601.5	4579.1	30527.	2109.0
Stddev	4.0	12.6	78.	27.0
%RSD	.24903	.27554	.25539	1.2811
#1	1597.3	4569.3	30437.	2096.9
#2	1605.2	4593.4	30578.	2090.1
#3	1601.9	4574.8	30565.	2140.0

Zoom In Zoom Out

Sample Name: FA22018-1 Acquired: 2/13/2015 16:21:40 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.0006	-.0001	.0445	.0000	5.236	.0000	-.0002	.0021
Stddev	.0004	.0156	.0005	.0000	.000	.015	.000	.0001	.0002
%RSD	625.5	2584.	432.2	.0402	319.7	.2936	315.7	58.53	10.19
#1	-.0004	.0184	.0003	.0445	.0001	5.220	.0000	-.0003	.0021
#2	.0000	-.0104	.0000	.0445	-.0001	5.251	-.0001	-.0002	.0018
#3	.0003	-.0062	-.0006	.0445	-.0001	5.239	.0000	-.0001	.0023

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0082	.1666	32.56	.0001	.0224	F148.2	-.0001	.0000
Stddev	.0001	.0067	.0210	.06	.0000	.0001	.2	.0001	.000
%RSD	30.64	81.48	12.59	.1713	52.53	.4853	.1485	83.84	1391.
#1	.0005	.0142	.1451	32.54	.0001	.0225	148.3	-.0002	-.0004
#2	.0004	.0010	.1869	32.52	.0001	.0223	148.4	-.0001	.0001
#3	.0003	.0096	.1679	32.63	.0000	.0223	148.0	.0000	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0021	.0278	.0006	.0083	.0005	-.0012	-.0001	.0007
Stddev	.0017	.0010	.0003	.0000	.0001	.0002	.0005	.0002	.0000
%RSD	87.61	46.30	1.048	6.367	1.543	39.45	39.08	160.9	1.663
#1	.0036	.0021	.0281	.0006	.0084	.0007	-.0018	-.0001	.0007
#2	.0002	.0031	.0275	.0006	.0084	.0006	-.0010	.0001	.0007
#3	.0020	.0012	.0277	.0006	.0082	.0003	-.0010	-.0003	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1592.1	4550.9	30175.	2110.2
Stddev	2.1	9.0	68.	4.4
%RSD	.13481	.19740	.22663	.20672
#1	1591.5	4540.6	30254.	2105.2
#2	1590.4	4555.6	30126.	2112.2
#3	1594.5	4556.6	30146.	2113.2

Zoom In Zoom Out

Sample Name: MP28553-D2 Acquired: 2/13/2015 16:25:53 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.0141	.0001	.0439	-.0001	5.330	.0000	-.0002	.0016
Stddev	.0002	.0223	.0007	.0002	.0001	.006	.000	.0001	.0006
%RSD	587.9	157.7	515.7	.4799	184.9	.1073	43.97	62.13	37.30
#1	-.0002	.0040	-.0007	.0436	-.0001	5.327	.0000	-.0002	.0024
#2	.0002	.0397	.0007	.0440	-.0001	5.326	-.0001	-.0001	.0013
#3	.0001	-.0013	.0004	.0440	.0001	5.337	.0000	-.0004	.0012

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0002	.0052	.1511	33.82	.0000	.0226	F153.3	.0000	.0009
Stddev	.0001	.0044	.0528	.10	.000	.0003	.2	.000	.0011
%RSD	66.18	85.25	34.95	.2975	176.5	1.117	.1476	2100.	123.7
#1	.0002	.0101	.1472	33.73	.0000	.0224	153.0	.0002	-.0002
#2	.0001	.0039	.2058	33.80	.0000	.0227	153.5	-.0002	.0020
#3	.0003	.0015	.1003	33.93	.0000	.0228	153.3	.0000	.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0027	.0272	.0004	.0086	.0003	.0001	-.0001	.0005
Stddev	.0004	.0007	.0007	.0003	.0001	.0002	.0007	.0001	.0001
%RSD	97.30	28.01	2.584	68.38	.9908	49.87	584.5	70.11	12.62
#1	.0000	.0019	.0272	.0005	.0086	.0005	.0005	.0000	.0005
#2	.0005	.0034	.0265	.0007	.0087	.0001	-.0007	-.0001	.0006
#3	.0008	.0028	.0279	.0001	.0085	.0003	.0005	-.0001	.0005

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1567.2	4504.2	29552.	2066.4
Stddev	5.4	7.4	57.	4.7
%RSD	.34655	.16318	.19278	.22596
#1	1567.1	4500.6	29573.	2063.0
#2	1572.7	4512.6	29488.	2064.5
#3	1561.9	4499.3	29596.	2071.7

Zoom In Zoom Out

Sample Name: MP28553-MB2 Acquired: 2/13/2015 16:30:05 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0013	-.0003	.0022	-.0001	.0672	-.0001	-.0002	-.0003
Stddev	.0001	.0181	.0007	.0002	.0001	.0012	.0000	.0001	.0003
%RSD	107.3	1406.	264.7	9.018	113.4	1.818	36.21	64.82	96.03
#1	-.0001	-.0127	-.0008	.0021	-.0001	.0685	-.0001	-.0001	-.0002
#2	.0000	.0217	-.0006	.0021	-.0002	.0673	-.0001	-.0004	-.0001
#3	-.0002	-.0051	.0006	.0024	.0000	.0660	.0000	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	.0027	.1142	.0338	.0001	.0005	F143.1	.0000	.0024
Stddev	.0003	.0027	.0191	.0499	.0000	.0002	.9	.0001	.0010
%RSD	71.70	98.66	16.73	147.6	27.29	35.75	.6263	172.1	42.18
#1	-.0005	.0057	.0959	.0632	.0001	.0006	144.0	.0001	.0032
#2	-.0008	.0021	.1127	-.0238	.0001	.0004	143.0	.0001	.0013
#3	-.0001	.0004	.1340	.0621	.0002	.0004	142.2	.0000	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0016	.0226	.0009	.0001	.0001	-.0010	-.0003	.0016
Stddev	.0005	.0006	.0001	.0001	.0001	.0001	.0012	.0001	.0000
%RSD	36.94	41.86	.6540	16.67	111.2	96.16	119.9	28.40	2.822
#1	.0009	.0013	.0228	.0009	.0000	.0000	.0003	-.0002	.0016
#2	.0019	.0011	.0226	.0007	.0001	.0002	-.0021	-.0004	.0016
#3	.0012	.0023	.0225	.0010	.0000	.0001	-.0012	-.0003	.0016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28553-MB2 Acquired: 2/13/2015 16:30:05 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1609.3	4603.0	29803.	2095.3
Stddev	3.1	8.6	98.	22.2
%RSD	.18959	.18780	.32943	1.0591
#1	1607.5	4593.9	29914.	2070.7
#2	1612.8	4611.2	29729.	2101.2
#3	1607.5	4603.8	29765.	2113.9

Zoom In Zoom Out

Sample Name: MP28553-B2 Acquired: 2/13/2015 16:34:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0493	28.30	1.950	2.074	.0531	26.32	.0490	.4971	.2158
Stddev	.0003	.07	.001	.003	.0001	.10	.0001	.0002	.0013
%RSD	.5282	.2319	.0538	.1357	.2145	.3803	.1878	.0396	.5862
#1	.0495	28.33	1.951	2.076	.0532	26.32	.0491	.4973	.2173
#2	.0493	28.35	1.949	2.076	.0531	26.42	.0491	.4969	.2151
#3	.0490	28.23	1.950	2.071	.0530	26.22	.0489	.4970	.2150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2604	26.45	26.56	24.81	.5136	.4774	F166.6	.4953	.5036
Stddev	.0010	.07	.17	.21	.0010	.0006	.8	.0009	.0017
%RSD	.3779	.2681	.6471	.8546	.1957	.1291	.4732	.1717	.3448
#1	.2616	26.42	26.67	24.82	.5148	.4779	166.8	.4963	.5043
#2	.2599	26.53	26.66	25.02	.5133	.4767	167.4	.4950	.5049
#3	.2598	26.39	26.37	24.60	.5129	.4774	165.8	.4947	.5017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4861	1.945	.0245	.4926	.5264	.5128	2.036	.4959	.5036
Stddev	.0006	.002	.0003	.0005	.0024	.0014	.005	.0010	.0001
%RSD	.1183	.0988	1.187	.0941	.4546	.2788	.2633	.2045	.0193
#1	.4864	1.943	.0248	.4925	.5265	.5144	2.041	.4970	.5035
#2	.4865	1.945	.0242	.4931	.5288	.5125	2.035	.4949	.5037
#3	.4855	1.947	.0246	.4921	.5240	.5116	2.031	.4959	.5037
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28553-B2 Acquired: 2/13/2015 16:34:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1579.9	4540.1	29523.	2086.1
Stddev	2.8	3.8	92.	25.8
%RSD	.17934	.08377	.31020	1.2382
#1	1578.4	4542.4	29418.	2078.9
#2	1578.1	4535.7	29585.	2064.6
#3	1583.2	4542.2	29566.	2114.8

Zoom In Zoom Out

Sample Name: MP28552-MB1 Acquired: 2/13/2015 16:38:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	.0019	-.0010	.0003	.0000	.0199	-.0001	-.0002	-.0004	-.0008
Stddev	.0004	.0074	.0003	.0003	.0002	.0023	.0000	.0001	.0002	.0001
%RSD	56.37	381.4	34.96	95.36	682.4	11.40	53.75	34.89	59.39	7.999
#1	-.0013	-.0061	-.0010	.0007	.0000	.0213	-.0001	-.0002	-.0007	-.0008
#2	-.0004	.0034	-.0013	.0000	-.0002	.0173	-.0001	-.0001	-.0002	-.0007
#3	-.0007	.0085	-.0006	.0003	.0002	.0212	.0000	-.0003	-.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0233	-.0249	.0086	.0002	.0005	.1299	.0001	-.0010	.0017	.0022
Stddev	.0068	.0422	.0389	.0000	.0000	.0072	.0002	.0004	.0009	.0012
%RSD	29.16	169.1	453.5	6.613	4.343	5.574	317.7	38.25	51.25	54.99
#1	.0262	-.0273	.0522	.0002	.0005	.1363	-.0002	-.0006	.0021	.0032
#2	.0281	-.0659	-.0224	.0002	.0005	.1220	.0003	-.0014	.0023	.0009
#3	.0155	.0184	-.0042	.0002	.0005	.1314	.0001	-.0011	.0007	.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0196	.0005	.0001	.0002	-.0011	-.0004	.0009
Stddev	.0001	.0002	.0002	.0001	.0019	.0001	.0000
%RSD	.5430	42.19	286.4	62.50	178.5	26.50	2.894
#1	.0194	.0007	.0002	.0003	-.0007	-.0004	.0009
#2	.0196	.0006	.0001	.0001	.0006	-.0003	.0009
#3	.0196	.0003	-.0001	.0001	-.0031	-.0005	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28552-MB1 Acquired: 2/13/2015 16:38:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1615.4	4639.7	31073.	2119.2
Stddev	3.9	5.0	106.	1.8
%RSD	.24072	.10878	.34078	.08667
#1	1611.1	4636.1	30982.	2119.5
#2	1616.6	4645.5	31190.	2117.3
#3	1618.6	4637.6	31048.	2120.9

Zoom In Zoom Out

Sample Name: MP28552-B1 Acquired: 2/13/2015 16:42:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0492	28.73	1.971	2.096	.0532	26.65	.0498	.5049	.2187	.2630
Stddev	.0005	.08	.002	.002	.0002	.10	.0000	.0007	.0012	.0004
%RSD	1.105	.2741	.1216	.0745	.4012	.3655	.0100	.1382	.5331	.1452
#1	.0493	28.69	1.970	2.095	.0534	26.71	.0497	.5043	.2176	.2626
#2	.0486	28.67	1.971	2.095	.0532	26.54	.0498	.5047	.2186	.2633
#3	.0496	28.82	1.974	2.098	.0530	26.71	.0497	.5056	.2199	.2630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.84	26.06	25.34	.5240	.4862	26.74	.5056	.5061	.4949	1.952
Stddev	.04	.04	.18	.0009	.0008	.04	.0006	.0007	.0008	.001
%RSD	.1618	.1576	.7296	.1650	.1626	.1510	.1094	.1327	.1635	.0486
#1	26.86	26.11	25.54	.5233	.4853	26.77	.5050	.5068	.4940	1.951
#2	26.79	26.02	25.18	.5239	.4867	26.69	.5060	.5059	.4955	1.952
#3	26.87	26.06	25.29	.5250	.4866	26.74	.5059	.5055	.4952	1.952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0243	.5029	.5332	.5194	2.044	.5011	.5107
Stddev	.0005	.0005	.0007	.0010	.004	.0020	.0007
%RSD	2.249	.0939	.1323	.1910	.1897	.3892	.1352
#1	.0240	.5026	.5340	.5183	2.042	.4989	.5103
#2	.0241	.5026	.5329	.5196	2.043	.5016	.5103
#3	.0250	.5034	.5328	.5203	2.049	.5027	.5115
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28552-B1 Acquired: 2/13/2015 16:42:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1576.0	4501.0	29631.	2080.2
Stddev	2.6	4.6	142.	13.2
%RSD	.16302	.10135	.48044	.63291
#1	1574.2	4500.6	29795.	2066.8
#2	1578.9	4505.7	29554.	2093.1
#3	1574.8	4496.6	29543.	2080.5

Zoom In Zoom Out

Sample Name: FA21997-1L Acquired: 2/13/2015 16:46:32 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	1.565	.0241	.0046	.0000	1.228	-.0001	-.0004	.0019	.0008
Stddev	.0007	.016	.0007	.0003	.000	.010	.0001	.0000	.0004	.0002
%RSD	1304.	1.026	3.078	5.663	476.9	.8045	58.59	11.47	21.07	29.67
#1	-.0008	1.547	.0234	.0048	.0001	1.239	.0000	-.0004	.0024	.0008
#2	.0000	1.578	.0238	.0048	-.0002	1.225	-.0002	-.0004	.0018	.0005
#3	.0006	1.569	.0249	.0043	.0000	1.220	-.0001	-.0003	.0016	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2593	.2270	.4713	.0027	.0009	4.827	.0007	.0992	.0330	.0013
Stddev	.0110	.0415	.0251	.0001	.0001	.030	.0003	.0004	.0000	.0020
%RSD	4.234	18.28	5.327	3.677	17.34	.6153	36.63	.3772	.0433	150.6
#1	.2720	.1930	.4991	.0026	.0010	4.861	.0008	.0988	.0330	.0036
#2	.2538	.2148	.4504	.0028	.0008	4.806	.0009	.0996	.0331	.0005
#3	.2522	.2732	.4643	.0026	.0007	4.813	.0004	.0993	.0331	-.0001

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.550	.0005	.0023	.1077	-.0001	.0022	.0057
Stddev	.006	.0003	.0001	.0023	.0005	.0003	.0002
%RSD	.3621	64.01	3.378	2.155	485.5	11.43	2.761
#1	1.555	.0002	.0023	.1093	.0000	.0019	.0058
#2	1.552	.0009	.0024	.1051	-.0006	.0025	.0056
#3	1.544	.0004	.0022	.1089	.0003	.0023	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1604.3	4591.4	30651.	2118.5
Stddev	2.9	17.3	34.	5.3
%RSD	.18204	.37728	.11155	.25052
#1	1601.4	4582.1	30646.	2112.3
#2	1604.1	4580.7	30619.	2121.7
#3	1607.3	4611.4	30687.	2121.3

Zoom In Zoom Out

Sample Name: MP28552-D1 Acquired: 2/13/2015 16:50:45 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	1.501	.0234	.0043	-.0001	1.206	-.0001	-.0003	.0018	.0011
Stddev	.0002	.009	.0015	.0004	.0001	.018	.0000	.0001	.0004	.0003
%RSD	46.53	.5709	6.401	10.21	62.73	1.448	44.29	35.41	20.75	26.94
#1	-.0006	1.510	.0224	.0039	-.0001	1.188	.0000	-.0004	.0019	.0008
#2	-.0003	1.493	.0251	.0041	-.0002	1.223	-.0001	-.0002	.0020	.0014
#3	-.0007	1.501	.0228	.0047	-.0001	1.207	-.0001	-.0004	.0013	.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2412	.1952	.4158	.0026	.0005	4.777	.0006	.0984	.0341	.0022
Stddev	.0051	.0208	.0372	.0000	.0000	.020	.0001	.0007	.0010	.0011
%RSD	2.125	10.68	8.938	1.251	10.29	.4131	16.01	.7052	2.817	49.09
#1	.2357	.1881	.4156	.0026	.0004	4.780	.0006	.0976	.0330	.0032
#2	.2459	.2186	.3788	.0026	.0005	4.796	.0006	.0985	.0346	.0023
#3	.2420	.1788	.4531	.0026	.0005	4.757	.0005	.0990	.0348	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.462	.0005	.0024	.1004	-.0020	.0024	.0053
Stddev	.013	.0003	.0002	.0015	.0024	.0002	.0000
%RSD	.8718	55.84	9.350	1.520	119.9	9.240	.6307
#1	1.475	.0002	.0027	.1017	-.0033	.0027	.0052
#2	1.462	.0006	.0023	.0987	.0008	.0023	.0053
#3	1.450	.0007	.0023	.1008	-.0035	.0022	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.9	4660.3	30922.	2145.3
Stddev	3.8	5.1	130.	6.7
%RSD	.23163	.10981	.41925	.31345
#1	1622.6	4659.9	30786.	2145.6
#2	1628.1	4665.6	30938.	2138.4
#3	1621.0	4655.4	31044.	2151.9

Zoom In Zoom Out

Sample Name: MP28552-SD1 Acquired: 2/13/2015 16:54:57 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	1.555	.0247	.0047	-.0010	1.558	-.0003	-.0011	-.0005	-.0014
Stddev	.0019	.096	.0028	.0027	.0004	.035	.0001	.0009	.0024	.0004
%RSD	414.8	6.162	11.37	57.66	35.90	2.262	32.86	81.53	452.2	28.21
#1	.0016	1.608	.0272	.0042	-.0013	1.599	-.0003	-.0002	.0018	-.0016
#2	-.0009	1.613	.0217	.0076	-.0006	1.539	-.0002	-.0019	-.0004	-.0017
#3	-.0022	1.444	.0254	.0023	-.0011	1.537	-.0003	-.0011	-.0030	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.2476	.1996	.3454	.0026	.0007	5.014	.0010	.1009	.0338	.0056
Stddev	.0112	.2187	.1272	.0002	.0004	.110	.0017	.0027	.0035	.0034
%RSD	4.526	109.6	36.81	9.243	51.28	2.199	162.3	2.684	10.39	60.60
#1	.2353	.2414	.3162	.0023	.0005	5.116	.0018	.1007	.0298	.0095
#2	.2503	.3944	.2354	.0028	.0011	5.029	-.0009	.1037	.0365	.0030
#3	.2573	-.0371	.4846	.0028	.0005	4.897	.0022	.0983	.0350	.0044

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.602	.0019	.0025	.1117	-.0046	.0021	.0064
Stddev	.017	.0008	.0004	.0041	.0057	.0004	.0002
%RSD	1.055	41.45	17.47	3.644	124.8	20.45	3.067
#1	1.617	.0013	.0021	.1095	-.0101	.0016	.0063
#2	1.605	.0016	.0029	.1092	.0013	.0023	.0067
#3	1.583	.0028	.0024	.1164	-.0049	.0024	.0064

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1621.1	4628.8	31057.	2123.8
Stddev	1.7	13.9	35.	47.4
%RSD	.10730	.30036	.11138	2.2309
#1	1623.0	4638.6	31097.	2096.9
#2	1620.6	4635.0	31037.	2096.0
#3	1619.7	4612.9	31037.	2178.5

Zoom In Zoom Out

Sample Name: MP28552-S1 Acquired: 2/13/2015 16:59:09 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0486	28.87	1.964	2.054	.0515	26.70	.0483	.4911	.2101	.2539
Stddev	.0004	.04	.004	.004	.0002	.04	.0002	.0005	.0007	.0006
%RSD	.7926	.1245	.1997	.1858	.3436	.1316	.4382	.0926	.3394	.2327
#1	.0491	28.84	1.965	2.056	.0516	26.67	.0481	.4907	.2101	.2541
#2	.0484	28.91	1.967	2.056	.0517	26.68	.0484	.4916	.2094	.2544
#3	.0484	28.88	1.960	2.049	.0513	26.74	.0485	.4912	.2108	.2533

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.28	25.84	25.12	.5104	.4755	30.23	.4971	.5866	.5148	1.912
Stddev	.03	.04	.05	.0015	.0002	.08	.0005	.0017	.0029	.004
%RSD	.1150	.1406	.2154	.3012	.0475	.2552	.1023	.2874	.5707	.1966
#1	26.24	25.80	25.09	.5122	.4758	30.30	.4973	.5850	.5171	1.911
#2	26.30	25.88	25.10	.5095	.4753	30.15	.4974	.5883	.5159	1.915
#3	26.29	25.83	25.18	.5096	.4755	30.26	.4965	.5864	.5115	1.908

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.471	.4951	.5152	.5973	1.988	.4854	.5007
Stddev	.003	.0012	.0004	.0014	.007	.0014	.0005
%RSD	.1864	.2505	.0776	.2395	.3678	.2781	.0928
#1	1.472	.4959	.5150	.5988	1.991	.4867	.5006
#2	1.473	.4958	.5150	.5960	1.994	.4840	.5013
#3	1.468	.4937	.5157	.5970	1.980	.4854	.5004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.2	4578.4	30531.	2122.7
Stddev	4.8	7.5	88.	10.0
%RSD	.29563	.16357	.28925	.46917
#1	1610.2	4577.1	30456.	2112.4
#2	1605.5	4571.6	30629.	2132.3
#3	1615.0	4586.4	30509.	2123.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:03:08 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2571	41.80	1.990	2.055	2.058	41.75	2.035	2.022	2.112	2.061
Stddev	.0011	.04	.008	.005	.005	.07	.007	.005	.011	.008
%RSD	.4214	.0940	.4009	.2387	.2310	.1782	.3515	.2721	.5208	.4052
#1	.2572	41.82	1.996	2.059	2.060	41.77	2.041	2.026	2.106	2.053
#2	.2559	41.76	1.992	2.049	2.052	41.67	2.037	2.024	2.106	2.060
#3	.2581	41.83	1.981	2.056	2.060	41.82	2.027	2.016	2.125	2.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.01	41.83	40.58	2.096	1.999	42.18	1.997	2.017	1.992	1.996
Stddev	.04	.08	.26	.005	.004	.12	.006	.007	.008	.006
%RSD	.1088	.1992	.6314	.2565	.1789	.2839	.2962	.3683	.3894	.3094
#1	41.00	41.86	40.36	2.093	1.998	42.22	2.002	2.021	1.999	2.000
#2	40.97	41.73	40.52	2.093	2.003	42.04	1.998	2.021	1.994	1.999
#3	41.06	41.89	40.86	2.102	1.996	42.27	1.991	2.008	1.984	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.808	1.992	2.100	2.089	2.026	2.035	2.033
Stddev	.005	.010	.004	.006	.005	.009	.008
%RSD	.2707	.4897	.2049	.2859	.2394	.4249	.3818
#1	1.813	2.000	2.104	2.085	2.027	2.031	2.039
#2	1.808	1.994	2.096	2.087	2.030	2.030	2.036
#3	1.803	1.981	2.101	2.096	2.020	2.045	2.024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:03:08 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1544.4	4385.1	29108.	2068.9
Stddev	4.8	13.6	59.	14.1
%RSD	.30912	.31072	.20256	.68214
#1	1539.5	4370.6	29169.	2079.4
#2	1544.8	4386.9	29102.	2074.4
#3	1549.0	4397.7	29052.	2052.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:07:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F.0540	.0006	.0005	.0003	F.2267	.0002	.0001	.0001
Stddev	.0002	.0050	.0004	.0003	.0002	.0401	.0001	.0001	.0003
%RSD	118.8	9.241	69.91	51.49	65.41	17.70	31.92	105.5	367.9
#1	-.0003	.0592	.0010	.0004	.0003	.2573	.0003	.0002	.0001
#2	.0000	.0537	.0002	.0004	.0001	.2416	.0002	.0000	-.0002
#3	-.0002	.0492	.0005	.0009	.0004	.1813	.0002	.0000	.0003
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250				.1000			
Low Limit		-.0250				-.1000			

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0459	.0087	.0307	.0005	F.0036	.0538	.0004	-.0005
Stddev	.0001	.0120	.0395	.0438	.0001	.0009	.0142	.0001	.0006
%RSD	107.6	26.17	456.7	142.3	9.642	25.86	26.40	17.92	117.7
#1	-.0002	.0586	-.0370	-.0136	.0006	.0045	.0698	.0005	-.0006
#2	.0000	.0445	.0326	.0738	.0005	.0035	.0427	.0004	.0001
#3	-.0002	.0347	.0304	.0320	.0005	.0027	.0489	.0005	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0015	-.0006	.0008	.0005	.0019	.0005	.0002	.0006
Stddev	.0007	.0023	.0005	.0002	.0002	.0002	.0002	.0001	.0002
%RSD	42.91	157.6	84.37	28.62	35.44	10.59	51.54	38.26	35.62
#1	.0018	.0041	-.0008	.0009	.0007	.0020	.0003	.0002	.0009
#2	.0024	-.0003	-.0010	.0009	.0004	.0021	.0003	.0001	.0006
#3	.0009	.0007	.0000	.0005	.0004	.0017	.0008	.0002	.0004
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:07:04 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1635.4	4662.7	31167.	2132.8
Stddev	4.3	10.0	81.	11.5
%RSD	.26115	.21429	.25993	.53760
#1	1637.7	4671.7	31086.	2145.9
#2	1638.0	4664.5	31169.	2127.8
#3	1630.5	4652.0	31248.	2124.6

Zoom In Zoom Out

Sample Name: MP28552-S2 Acquired: 2/13/2015 17:11:17 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0496	29.67	1.988	2.078	.0528	27.33	.0495	.5009	.2192	.2637
Stddev	.0003	.08	.002	.007	.0001	.09	.0000	.0007	.0004	.0007
%RSD	.6238	.2803	.0960	.3241	.2080	.3334	.0501	.1408	.1844	.2527
#1	.0492	29.71	1.988	2.082	.0527	27.35	.0495	.5008	.2196	.2643
#2	.0498	29.58	1.986	2.071	.0529	27.24	.0494	.5003	.2190	.2638
#3	.0496	29.73	1.990	2.082	.0529	27.42	.0495	.5017	.2188	.2630

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.66	25.97	25.36	.5218	.4806	31.06	.5026	.5960	.5221	1.943
Stddev	.05	.15	.07	.0011	.0004	.10	.0007	.0020	.0027	.003
%RSD	.1947	.5913	.2783	.2049	.0778	.3282	.1458	.3368	.5124	.1459
#1	26.62	26.00	25.33	.5230	.4804	31.10	.5020	.5942	.5197	1.942
#2	26.63	25.80	25.31	.5209	.4804	30.94	.5024	.5958	.5250	1.942
#3	26.72	26.11	25.44	.5214	.4810	31.13	.5034	.5982	.5215	1.947

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.496	.4981	.5259	.6098	2.020	.5008	.5109
Stddev	.004	.0003	.0018	.0020	.004	.0003	.0014
%RSD	.2855	.0583	.3498	.3242	.2202	.0531	.2661
#1	1.500	.4978	.5256	.6109	2.019	.5011	.5099
#2	1.491	.4981	.5243	.6109	2.016	.5006	.5103
#3	1.498	.4983	.5279	.6075	2.025	.5007	.5124

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1596.3	4544.5	29923.	2119.7
Stddev	3.2	1.5	53.	7.5
%RSD	.20020	.03389	.17823	.35395
#1	1595.6	4543.4	29863.	2121.1
#2	1599.7	4546.2	29967.	2126.3
#3	1593.5	4543.7	29938.	2111.5

Zoom In Zoom Out

Sample Name: MP28552-MB2 Acquired: 2/13/2015 17:15:18 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0212	-.0006	.0005	-.0001	.0387	.0000	-.0001	.0001
Stddev	.0008	.0030	.0005	.0002	.0002	.0023	.000	.0000	.0001
%RSD	136.7	14.18	78.62	44.06	194.4	5.946	162.9	14.34	227.3
#1	.0003	.0208	-.0008	.0005	.0001	.0411	.0000	-.0002	.0002
#2	-.0007	.0184	-.0001	.0002	-.0002	.0365	-.0001	-.0002	.0001
#3	-.0014	.0244	-.0010	.0007	-.0002	.0386	.0000	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0278	.0337	.0659	.0005	.0008	F3.990	.0003	.0002
Stddev	.0002	.0040	.0105	.0365	.0000	.0002	.030	.0003	.0003
%RSD	36.63	14.53	31.12	55.43	7.857	28.87	.7642	101.3	158.5
#1	-.0003	.0324	.0416	.0661	.0006	.0010	3.987	.0004	.0005
#2	-.0007	.0260	.0218	.0293	.0005	.0008	3.961	.0000	.0000
#3	-.0007	.0249	.0377	.1023	.0005	.0006	4.022	.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0023	.0570	.0007	.0000	.0005	-.0010	.0001	.0040
Stddev	.0003	.0006	.0018	.0004	.000	.0001	.0016	.0002	.0000
%RSD	32.12	25.62	3.095	56.64	887.2	27.83	159.0	244.5	1.106
#1	.0012	.0017	.0567	.0007	.0000	.0006	.0004	.0001	.0040
#2	.0010	.0029	.0554	.0003	-.0001	.0006	-.0028	-.0001	.0040
#3	.0006	.0023	.0588	.0011	.0000	.0004	-.0007	.0002	.0040
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28552-MB2 Acquired: 2/13/2015 17:15:18 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1670.6	4754.9	31688.	2161.2
Stddev	6.3	22.2	154.	7.8
%RSD	.37777	.46726	.48649	.36045
#1	1668.4	4739.9	31513.	2158.3
#2	1677.7	4780.4	31747.	2170.1
#3	1665.6	4744.4	31804.	2155.3

Zoom In Zoom Out

Sample Name: MP28552-B2 Acquired: 2/13/2015 17:19:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0497	28.54	2.008	2.101	.0531	26.55	.0505	.5115	.2177
Stddev	.0005	.12	.021	.004	.0001	.13	.0006	.0058	.0034
%RSD	1.002	.4241	1.058	.1945	.2563	.4955	1.112	1.128	1.568
#1	.0496	28.48	2.033	2.099	.0530	26.47	.0511	.5181	.2165
#2	.0492	28.68	1.997	2.105	.0532	26.70	.0501	.5079	.2150
#3	.0502	28.47	1.996	2.098	.0532	26.47	.0503	.5084	.2215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2626	26.76	26.20	25.36	.5226	.4910	F30.77	.5129	.5107
Stddev	.0039	.14	.13	.20	.0085	.0049	.10	.0062	.0057
%RSD	1.496	.5175	.4906	.7867	1.633	.9906	.3372	1.217	1.112
#1	.2628	26.69	26.25	25.14	.5224	.4966	30.72	.5201	.5172
#2	.2585	26.92	26.30	25.53	.5141	.4878	30.89	.5092	.5065
#3	.2664	26.67	26.06	25.41	.5312	.4887	30.70	.5095	.5085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5034	1.988	.0713	.5098	.5286	.5153	2.066	.5004	.5201
Stddev	.0063	.025	.0033	.0051	.0017	.0094	.021	.0081	.0052
%RSD	1.256	1.263	4.610	.9996	.3298	1.815	1.001	1.619	.9911
#1	.5106	2.017	.0742	.5157	.5280	.5146	2.090	.5013	.5261
#2	.4986	1.973	.0720	.5062	.5306	.5063	2.053	.4919	.5172
#3	.5010	1.974	.0677	.5076	.5273	.5249	2.055	.5080	.5172
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28552-B2 Acquired: 2/13/2015 17:19:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1591.8	4530.4	30277.	2104.7
Stddev	16.0	45.8	363.	7.3
%RSD	1.0048	1.0104	1.1987	.34823
#1	1573.4	4477.6	30260.	2101.7
#2	1602.5	4558.4	30648.	2099.3
#3	1599.6	4555.2	29923.	2113.0

Zoom In Zoom Out

Sample Name: MP28554-MB1 Acquired: 2/13/2015 17:23:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0043	-.0007	-.0001	.0000	.0142	.0000	-.0003	-.0002	-.0007
Stddev	.0003	.0024	.0005	.0003	.000	.0061	.000	.0001	.0005	.0002
%RSD	84.04	55.45	78.27	493.0	502.7	42.57	52.39	28.33	206.9	24.60
#1	-.0007	.0043	-.0006	.0002	-.0001	.0095	.0000	-.0002	-.0007	-.0005
#2	.0000	.0019	-.0013	-.0004	-.0002	.0211	.0000	-.0004	.0003	-.0008
#3	-.0005	.0067	-.0002	.0000	.0002	.0121	.0000	-.0003	-.0003	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0234	-.0263	.0092	.0001	.0006	.0208	.0000	-.0002	-.0004	.0019
Stddev	.0077	.0346	.0286	.0000	.0001	.0084	.0001	.0006	.0005	.0007
%RSD	32.96	131.7	311.8	40.57	9.758	40.21	7969.	328.6	134.6	34.24
#1	.0322	.0072	.0240	.0001	.0007	.0224	.0001	-.0008	-.0006	.0027
#2	.0199	-.0619	.0273	.0001	.0006	.0283	-.0001	.0004	.0002	.0016
#3	.0181	-.0242	-.0238	.0000	.0006	.0118	-.0001	-.0002	-.0007	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0173	.0007	.0000	.0003	-.0006	.0002	.0007
Stddev	.0004	.0002	.0001	.0001	.0011	.0003	.0000
%RSD	2.508	33.77	1768.	20.82	180.1	130.1	2.802
#1	.0168	.0009	.0000	.0003	.0005	.0000	.0007
#2	.0175	.0008	-.0001	.0002	-.0007	.0005	.0006
#3	.0176	.0004	.0001	.0003	-.0017	.0001	.0007
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28554-MB1 Acquired: 2/13/2015 17:23:31 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1687.3	4826.5	32298.	2179.1
Stddev	2.5	10.3	126.	22.0
%RSD	.14807	.21431	.39000	1.0091
#1	1686.7	4821.4	32443.	2197.2
#2	1690.1	4838.4	32214.	2154.6
#3	1685.2	4819.6	32237.	2185.5

Zoom In Zoom Out

Sample Name: MP28554-B1 Acquired: 2/13/2015 17:27:46 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0482	27.15	1.898	2.027	.0513	25.31	.0477	.4822	.2090	.2517
Stddev	.0003	.11	.004	.004	.0002	.13	.0002	.0009	.0009	.0016
%RSD	.6630	.4087	.1888	.2121	.4208	.5186	.3800	.1911	.4292	.6233
#1	.0485	27.03	1.901	2.028	.0511	25.16	.0479	.4832	.2096	.2534
#2	.0484	27.25	1.897	2.022	.0515	25.37	.0475	.4820	.2094	.2513
#3	.0479	27.18	1.894	2.031	.0512	25.39	.0477	.4814	.2079	.2504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	25.55	24.99	24.22	.5030	.4632	25.44	.4861	.4840	.4737	1.881
Stddev	.08	.07	.08	.0020	.0013	.10	.0008	.0012	.0021	.004
%RSD	.3086	.2872	.3296	.4015	.2836	.4075	.1709	.2493	.4345	.1851
#1	25.47	25.06	24.16	.5053	.4647	25.32	.4867	.4827	.4760	1.885
#2	25.57	24.92	24.18	.5022	.4623	25.46	.4852	.4843	.4723	1.881
#3	25.62	24.98	24.31	.5016	.4626	25.53	.4865	.4850	.4727	1.878
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0216	.4821	.5077	.4938	1.957	.4820	.4890
Stddev	.0003	.0014	.0021	.0019	.000	.0032	.0009
%RSD	1.415	.2801	.4067	.3757	.0034	.6691	.1766
#1	.0219	.4836	.5055	.4957	1.957	.4857	.4899
#2	.0213	.4813	.5081	.4935	1.957	.4805	.4883
#3	.0216	.4813	.5096	.4920	1.957	.4798	.4886
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28554-B1 Acquired: 2/13/2015 17:27:46 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1639.4	4673.0	30910.	2143.7
Stddev	2.9	8.0	171.	9.1
%RSD	.17571	.17132	.55324	.42615
#1	1636.2	4664.2	30716.	2153.5
#2	1641.9	4679.7	31040.	2142.4
#3	1639.9	4675.2	30973.	2135.3

Zoom In Zoom Out

Sample Name: FA22073-13 Acquired: 2/13/2015 17:31:46 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0434	-.0009	.1769	.0001	134.8	-.0001	-.0002	.0000	.0004
Stddev	.000	.0369	.0010	.0010	.0001	.7	.0000	.0001	.000	.0001
%RSD	3990.	85.02	107.6	.5882	122.1	.5267	69.45	46.64	605.7	15.90
#1	-.0002	.0585	-.0019	.1765	.0000	134.7	.0000	-.0003	-.0003	.0004
#2	.0005	.0014	-.0010	.1781	.0001	135.5	-.0001	-.0001	.0000	.0005
#3	-.0003	.0705	.0001	.1762	.0000	134.1	-.0001	-.0002	.0002	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1479	4.117	22.18	.0194	-.0002	47.51	.0023	-.0033	.0001	.0005
Stddev	.0069	.042	.21	.0002	.0001	.29	.0002	.0007	.0013	.0018
%RSD	4.670	1.014	.9357	.8243	64.05	.6186	10.24	20.97	1393.	346.5
#1	.1470	4.136	21.99	.0194	-.0001	47.49	.0020	-.0028	.0013	.0002
#2	.1553	4.145	22.40	.0195	-.0002	47.82	.0024	-.0030	-.0013	.0025
#3	.1416	4.069	22.16	.0192	-.0003	47.23	.0025	-.0041	.0003	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.051	.0005	.9487	.0024	.0014	-.0001	.0083
Stddev	.015	.0001	.0055	.0000	.0013	.0002	.0001
%RSD	.1651	29.64	.5762	1.873	93.76	257.2	.9015
#1	9.063	.0004	.9485	.0023	.0021	-.0002	.0084
#2	9.055	.0007	.9543	.0024	-.0001	-.0002	.0084
#3	9.034	.0004	.9434	.0023	.0022	.0002	.0083

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1566.1	4429.7	29654.	2026.4
Stddev	2.3	6.5	161.	13.0
%RSD	.14612	.14710	.54293	.64132
#1	1564.6	4422.6	29597.	2024.1
#2	1565.0	4431.2	29529.	2014.7
#3	1568.7	4435.4	29836.	2040.4

Zoom In Zoom Out

Sample Name: MP28554-D1 Acquired: 2/13/2015 17:35:56 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0306	-.0001	.1709	-.0001	131.4	-.0001	-.0004	.0000	.0004
Stddev	.0003	.0046	.0009	.0010	.0000	.4	.0000	.0001	.000	.0001
%RSD	104.8	15.09	715.4	.5935	65.07	.3138	23.07	13.09	2141.	37.78
#1	.0003	.0286	.0005	.1699	.0000	131.4	-.0001	-.0004	.0000	.0002
#2	.0007	.0274	.0003	.1708	-.0001	131.0	-.0001	-.0004	-.0001	.0005
#3	.0000	.0359	-.0012	.1719	-.0001	131.8	-.0001	-.0005	.0001	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1358	3.970	21.58	.0190	-.0005	46.38	.0024	-.0027	-.0003	.0012
Stddev	.0056	.027	.07	.0000	.0001	.09	.0002	.0012	.0011	.0008
%RSD	4.156	.6907	.3439	.2558	14.97	.1904	7.292	47.05	326.0	69.72
#1	.1362	3.938	21.57	.0190	-.0005	46.40	.0024	-.0015	-.0013	.0014
#2	.1299	3.984	21.51	.0189	-.0004	46.28	.0026	-.0040	-.0005	.0003
#3	.1412	3.987	21.65	.0190	-.0004	46.45	.0022	-.0025	.0008	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.882	.0002	.9213	.0022	.0009	.0003	.0079
Stddev	.006	.0004	.0022	.0001	.0011	.0002	.0001
%RSD	.0635	235.1	.2349	6.423	119.0	73.45	.6771
#1	8.888	-.0003	.9207	.0024	.0010	.0005	.0079
#2	8.880	.0004	.9195	.0021	-.0002	.0001	.0079
#3	8.878	.0004	.9237	.0022	.0020	.0002	.0078

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1592.4	4505.0	29848.	2056.4
Stddev	2.6	9.0	22.	3.4
%RSD	.16388	.20001	.07393	.16387
#1	1589.9	4498.6	29831.	2054.2
#2	1595.1	4515.3	29873.	2060.2
#3	1592.2	4501.1	29842.	2054.6

Zoom In Zoom Out

Sample Name: MP28554-SD1 Acquired: 2/13/2015 17:40:06 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0012	.0514	.0015	.1751	-.0001	139.6	-.0001	-.0009	-.0029	-.0013
Stddev	.0007	.0514	.0012	.0014	.0003	.4	.0002	.0006	.0019	.0019
%RSD	57.62	100.0	78.63	.8242	523.4	.3075	175.7	62.62	63.92	150.0
#1	.0019	.0117	.0004	.1766	-.0002	139.7	.0000	-.0009	-.0039	-.0032
#2	.0007	.1095	.0013	.1737	.0003	139.2	-.0004	-.0003	-.0008	-.0011
#3	.0009	.0331	.0027	.1749	-.0003	140.0	.0000	-.0015	-.0041	.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1223	3.791	22.94	.0199	-.0016	48.26	.0020	-.0056	.0025	.0085
Stddev	.0081	.144	.31	.0003	.0006	.15	.0004	.0032	.0009	.0035
%RSD	6.599	3.811	1.352	1.748	37.49	.3131	19.31	56.41	37.60	41.93
#1	.1285	3.937	22.70	.0197	-.0022	48.36	.0023	-.0090	.0020	.0048
#2	.1253	3.649	22.83	.0203	-.0017	48.09	.0022	-.0052	.0019	.0119
#3	.1132	3.788	23.29	.0196	-.0010	48.34	.0016	-.0027	.0035	.0086

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.036	.0009	.9677	.0056	.0069	.0000	.0094
Stddev	.011	.0016	.0024	.0005	.0077	.0003	.0001
%RSD	.1200	190.5	.2456	8.206	110.8	1610.	1.230
#1	9.044	-.0010	.9705	.0062	.0157	-.0003	.0096
#2	9.041	.0019	.9660	.0053	.0017	.0002	.0093
#3	9.024	.0017	.9667	.0054	.0034	.0001	.0094

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1622.6	4602.6	30400.	2090.8
Stddev	1.5	4.2	156.	14.6
%RSD	.09342	.09229	.51283	.69806
#1	1621.7	4601.3	30226.	2094.2
#2	1621.8	4607.4	30448.	2103.3
#3	1624.4	4599.2	30527.	2074.7

Zoom In Zoom Out

Sample Name: MP28554-PS1 Acquired: 2/13/2015 17:44:18 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0484	2.674	.1002	.4277	.0528	134.9	.0501	.0497	.0539	.1050
Stddev	.0002	.016	.0005	.0023	.0001	.4	.0002	.0002	.0001	.0003
%RSD	.4898	.6097	.5459	.5271	.1160	.2815	.3043	.3700	.2218	.3030
#1	.0486	2.668	.0996	.4256	.0527	134.4	.0500	.0499	.0539	.1053
#2	.0485	2.660	.1002	.4276	.0528	135.1	.0502	.0496	.0540	.1048
#3	.0481	2.692	.1007	.4301	.0528	135.1	.0502	.0495	.0538	.1048

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.103	14.29	25.90	.0709	.0973	56.65	.1019	.0462	.0997	.0962
Stddev	.021	.10	.13	.0001	.0001	.08	.0001	.0010	.0006	.0002
%RSD	.6928	.7175	.4908	.1277	.1141	.1433	.0583	2.077	.6063	.2423
#1	3.079	14.17	25.84	.0708	.0972	56.55	.1020	.0453	.0999	.0962
#2	3.110	14.33	25.82	.0708	.0973	56.70	.1019	.0462	.0990	.0964
#3	3.120	14.37	26.05	.0710	.0974	56.68	.1019	.0472	.1002	.0959

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.779	.0483	.9600	.1038	.1013	.0504	.2591
Stddev	.007	.0000	.0024	.0003	.0017	.0003	.0001
%RSD	.0747	.0474	.2499	.2732	1.649	.6804	.0506
#1	8.772	.0483	.9575	.1037	.1001	.0502	.2590
#2	8.784	.0483	.9623	.1042	.1032	.0501	.2592
#3	8.782	.0483	.9603	.1037	.1005	.0508	.2591

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1583.0	4501.5	29615.	2062.4
Stddev	1.6	4.5	169.	7.0
%RSD	.10320	.09944	.56980	.33810
#1	1584.9	4498.3	29739.	2065.7
#2	1582.4	4499.5	29683.	2067.1
#3	1581.8	4506.6	29423.	2054.4

Zoom In Zoom Out

Sample Name: MP28554-S1 Acquired: 2/13/2015 17:48:23 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0505	28.50	1.990	2.254	.0532	158.0	.0493	.4999	.2172	.2657
Stddev	.0002	.15	.004	.014	.0006	.8	.0001	.0006	.0013	.0010
%RSD	.3656	.5204	.2140	.6076	1.154	.5232	.2322	.1226	.6098	.3660
#1	.0503	28.59	1.994	2.259	.0538	158.6	.0493	.5001	.2170	.2658
#2	.0507	28.58	1.985	2.263	.0531	158.2	.0491	.4992	.2187	.2667
#3	.0505	28.33	1.991	2.238	.0526	157.0	.0493	.5004	.2160	.2647

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	26.38	30.51	46.14	.5376	.4853	73.28	.5021	.4998	.4975	1.966
Stddev	.15	.24	.19	.0015	.0003	.42	.0010	.0012	.0001	.005
%RSD	.5771	.7946	.4157	.2748	.0545	.5749	.2058	.2423	.0295	.2362
#1	26.51	30.64	46.22	.5379	.4855	73.57	.5013	.5010	.4976	1.970
#2	26.42	30.67	46.28	.5390	.4850	73.46	.5016	.4998	.4974	1.961
#3	26.21	30.23	45.92	.5360	.4854	72.79	.5032	.4986	.4974	1.967

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.124	.5014	1.454	.5201	2.038	.5033	.5090
Stddev	.014	.0020	.007	.0007	.005	.0017	.0004
%RSD	.1526	.4032	.4878	.1334	.2264	.3366	.0871
#1	9.134	.5024	1.459	.5206	2.041	.5046	.5093
#2	9.109	.4991	1.457	.5204	2.032	.5041	.5085
#3	9.131	.5027	1.446	.5193	2.040	.5014	.5093

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1557.4	4432.5	29082.	2062.4
Stddev	5.8	9.4	114.	24.9
%RSD	.37542	.21210	.39218	1.2061
#1	1550.8	4422.0	29049.	2047.7
#2	1559.3	4440.1	28988.	2048.3
#3	1562.0	4435.4	29209.	2091.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:52:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2528	41.57	1.960	2.027	2.036	41.61	2.005	1.992	2.085	2.029
Stddev	.0008	.18	.004	.004	.006	.12	.002	.003	.004	.002
%RSD	.3256	.4419	.2186	.1859	.3054	.2906	.1137	.1375	.2013	.0848
#1	.2535	41.73	1.960	2.031	2.043	41.74	2.005	1.993	2.086	2.028
#2	.2519	41.37	1.956	2.023	2.031	41.51	2.003	1.988	2.088	2.031
#3	.2528	41.60	1.965	2.027	2.034	41.57	2.008	1.994	2.080	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	41.51	39.98	2.061	1.972	41.98	1.965	1.996	1.964	1.972
Stddev	.09	.20	.10	.007	.009	.14	.002	.006	.007	.001
%RSD	.2196	.4765	.2436	.3303	.4310	.3280	.0899	.3249	.3549	.0353
#1	40.76	41.70	40.06	2.069	1.964	42.11	1.966	1.989	1.960	1.971
#2	40.64	41.31	40.01	2.059	1.972	41.84	1.964	1.996	1.960	1.971
#3	40.58	41.52	39.87	2.056	1.981	42.00	1.967	2.002	1.972	1.972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.782	1.954	2.083	2.059	2.003	1.999	2.003
Stddev	.002	.003	.008	.005	.004	.004	.002
%RSD	.1210	.1500	.3653	.2678	.2130	.2113	.0860
#1	1.781	1.952	2.091	2.063	1.999	2.001	2.003
#2	1.780	1.954	2.076	2.061	2.003	1.994	2.002
#3	1.784	1.957	2.083	2.053	2.007	2.002	2.005
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 17:52:23 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1564.3	4456.2	29610.	2053.2
Stddev	5.1	5.4	67.	11.6
%RSD	.32762	.12118	.22476	.56568
#1	1570.1	4460.3	29580.	2040.3
#2	1562.8	4458.2	29563.	2062.8
#3	1560.2	4450.1	29686.	2056.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:56:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0103	.0004	.0002	.0003	.0180	.0003	.0003	.0000
Stddev	.0001	.0136	.0003	.0001	.0001	.0019	.0001	.0001	.0001
%RSD	32.47	132.0	76.13	33.98	37.60	10.71	27.46	35.06	2287.
#1	-.0002	.0220	.0008	.0001	.0004	.0158	.0003	.0004	.0001
#2	-.0004	.0136	.0001	.0002	.0002	.0193	.0002	.0002	-.0001
#3	-.0005	-.0047	.0004	.0002	.0003	.0190	.0002	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0437	.0380	-.0073	.0005	F.0036	.0512	.0004	-.0001
Stddev	.0003	.0129	.0393	.0491	.0001	.0009	.0095	.0003	.0004
%RSD	179.1	29.58	103.3	676.1	9.714	24.40	18.48	57.35	543.5
#1	.0000	.0577	.0648	.0377	.0005	.0045	.0427	.0007	.0004
#2	.0000	.0411	.0564	.0002	.0005	.0036	.0614	.0003	-.0003
#3	.0006	.0323	-.0071	-.0597	.0006	.0027	.0496	.0003	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	.0010	.0004	F.0010	.0003	F.0021	.0012	.0003	.0008
Stddev	.0008	.0017	.0001	.0004	.0001	.0002	.0005	.0000	.0001
%RSD	54.62	164.4	33.45	37.38	29.00	7.643	44.87	9.479	18.47
#1	.0021	-.0007	.0004	.0013	.0002	.0022	.0012	.0003	.0010
#2	.0014	.0026	.0006	.0012	.0004	.0021	.0007	.0002	.0008
#3	.0006	.0012	.0003	.0006	.0003	.0019	.0017	.0003	.0007
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 17:56:19 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1622.7	4626.5	31117.	2093.0
Stddev	4.4	11.7	372.	5.3
%RSD	.27165	.25196	1.1957	.25457
#1	1625.1	4626.3	30897.	2087.2
#2	1625.3	4638.3	30907.	2094.1
#3	1617.6	4615.0	31546.	2097.7

Zoom In Zoom Out

Sample Name: MP28554-S2 Acquired: 2/13/2015 18:00:33 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0489	27.16	1.962	2.167	.0506	150.5	.0482	.4882	.2071	.2562
Stddev	.0001	.03	.009	.003	.0002	.0	.0004	.0024	.0007	.0013
%RSD	.1976	.1099	.4849	.1443	.4713	.0258	.8857	.4956	.3376	.4993
#1	.0490	27.16	1.953	2.164	.0506	150.5	.0478	.4861	.2079	.2576
#2	.0488	27.19	1.960	2.170	.0508	150.5	.0481	.4875	.2070	.2561
#3	.0490	27.13	1.972	2.166	.0503	150.5	.0487	.4908	.2065	.2550

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	25.27	29.43	44.61	.5179	.4768	69.98	.4940	.4855	.4899	1.939
Stddev	.04	.07	.17	.0018	.0029	.09	.0025	.0026	.0011	.005
%RSD	.1563	.2256	.3923	.3535	.6036	.1353	.5156	.5271	.2162	.2565
#1	25.26	29.46	44.41	.5200	.4744	70.09	.4923	.4844	.4892	1.934
#2	25.23	29.48	44.74	.5171	.4760	69.92	.4929	.4837	.4894	1.939
#3	25.31	29.35	44.68	.5165	.4800	69.92	.4970	.4885	.4912	1.944

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.006	.4958	1.390	.4994	1.983	.4886	.4972
Stddev	.048	.0035	.003	.0012	.011	.0013	.0023
%RSD	.5325	.7158	.1948	.2324	.5624	.2676	.4572
#1	8.965	.4925	1.387	.5007	1.977	.4899	.4952
#2	8.995	.4953	1.392	.4985	1.976	.4873	.4966
#3	9.059	.4995	1.391	.4991	1.996	.4886	.4997

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1582.5	4476.0	29912.	2124.2
Stddev	6.8	19.6	93.	11.6
%RSD	.42988	.43844	.31227	.54622
#1	1587.0	4493.9	29811.	2114.0
#2	1585.8	4479.2	29995.	2121.7
#3	1574.7	4455.0	29930.	2136.8

Zoom In Zoom Out

Sample Name: FA22073-14 Acquired: 2/13/2015 18:04:30 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0755	-.0001	.0022	.0000	2.559	.0000	.0000	-.0003	.0013
Stddev	.0003	.0130	.0003	.0001	.0002	.012	.000	.000	.0001	.0003
%RSD	1106.	17.27	298.6	6.287	901.9	.4723	28.00	366.5	36.90	20.86
#1	-.0002	.0610	-.0001	.0023	-.0002	2.547	.0000	-.0001	-.0004	.0016
#2	.0004	.0861	-.0004	.0022	.0002	2.571	-.0001	-.0001	-.0003	.0010
#3	-.0001	.0795	.0002	.0021	.0000	2.559	.0000	.0001	-.0002	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1377	2.920	.8693	.0076	.0007	.8114	.0004	-.0004	.0008	.0020
Stddev	.0040	.025	.0343	.0000	.0000	.0068	.0002	.0008	.0017	.0009
%RSD	2.928	.8562	3.951	.0167	3.131	.8411	52.13	175.3	202.0	42.95
#1	.1423	2.943	.9041	.0076	.0007	.8180	.0002	-.0001	.0016	.0014
#2	.1360	2.924	.8354	.0076	.0007	.8118	.0005	.0001	-.0011	.0016
#3	.1348	2.893	.8685	.0076	.0007	.8043	.0005	-.0013	.0020	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2846	.0011	.0069	.0022	.0005	.0003	.0163
Stddev	.0004	.0003	.0002	.0001	.0010	.0003	.0000
%RSD	.1535	27.85	2.885	2.441	192.2	103.1	.2851
#1	.2847	.0007	.0071	.0022	.0008	.0004	.0164
#2	.2842	.0013	.0067	.0023	-.0006	.0000	.0163
#3	.2850	.0011	.0068	.0021	.0014	.0007	.0163

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1619.3	4624.0	31164.	2120.1
Stddev	3.3	5.7	74.	12.5
%RSD	.20197	.12333	.23639	.59009
#1	1619.2	4619.7	31237.	2106.4
#2	1616.1	4621.8	31090.	2122.9
#3	1622.7	4630.5	31165.	2130.9

Zoom In Zoom Out

Sample Name: FA22073-15 Acquired: 2/13/2015 18:08:41 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0354	.0002	.0150	-.0001	17.24	.0000	-.0001	.0003	.0018
Stddev	.0007	.0106	.0002	.0002	.0000	.06	.000	.0001	.0006	.0003
%RSD	287.1	29.83	110.4	1.501	25.66	.3367	893.1	74.24	203.9	14.52
#1	.0008	.0475	.0004	.0150	-.0002	17.18	-.0002	-.0001	-.0004	.0021
#2	-.0006	.0280	.0001	.0148	-.0001	17.23	.0000	-.0002	.0007	.0018
#3	.0005	.0307	.0001	.0153	-.0001	17.30	.0001	.0000	.0004	.0016

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1437	20.00	5.353	.0201	.0009	2.359	.0013	-.0006	.0010	.0015
Stddev	.0055	.09	.090	.0001	.0000	.008	.0001	.0010	.0006	.0017
%RSD	3.810	.4434	1.683	.2519	3.371	.3229	11.26	162.8	57.55	115.2
#1	.1500	20.00	5.349	.0201	.0009	2.360	.0014	-.0013	.0004	-.0004
#2	.1401	19.91	5.265	.0200	.0009	2.350	.0012	-.0012	.0016	.0029
#3	.1410	20.09	5.445	.0201	.0009	2.365	.0012	.0006	.0010	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.340	.0004	.0494	.0017	-.0018	.0026	.0077
Stddev	.005	.0001	.0003	.0000	.0012	.0003	.0000
%RSD	.3463	18.87	.6490	.2869	66.35	10.02	.6364
#1	1.335	.0003	.0495	.0017	-.0029	.0024	.0077
#2	1.341	.0003	.0491	.0017	-.0020	.0026	.0077
#3	1.344	.0004	.0497	.0017	-.0005	.0029	.0076

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.5	4544.6	30869.	2088.4
Stddev	6.6	6.5	91.	21.3
%RSD	.41071	.14325	.29561	1.0223
#1	1599.0	4537.6	30766.	2112.9
#2	1611.5	4550.5	30901.	2073.7
#3	1609.1	4545.6	30940.	2078.7

Zoom In Zoom Out

Sample Name: FA22073-16 Acquired: 2/13/2015 18:12:49 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0994	-.0004	.0339	-.0001	32.55	-.0001	-.0001	.0004	-.0001
Stddev	.001	.0095	.0004	.0005	.0001	.13	.0001	.0001	.0002	.0002
%RSD	1327.	9.584	123.2	1.425	101.0	.3965	146.5	149.5	52.25	137.0
#1	.0005	.0971	-.0002	.0334	-.0001	32.41	-.0001	.0001	.0005	-.0002
#2	.0001	.1098	.0000	.0342	.0000	32.58	.0000	-.0002	.0005	.0001
#3	-.0008	.0912	-.0008	.0343	-.0001	32.66	-.0001	-.0002	.0001	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7263	32.84	4.806	.0333	.0007	8.342	.0018	-.0015	-.0008	.0007
Stddev	.0098	.08	.062	.0001	.0002	.037	.0002	.0014	.0009	.0008
%RSD	1.351	.2527	1.295	.3530	22.31	.4472	13.87	91.94	116.7	106.6
#1	.7157	32.75	4.765	.0333	.0008	8.308	.0017	-.0003	-.0013	.0010
#2	.7350	32.92	4.776	.0335	.0008	8.337	.0020	-.0030	-.0013	.0013
#3	.7281	32.86	4.878	.0333	.0005	8.382	.0016	-.0012	.0003	-.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.842	.0008	.1956	.0045	-.0001	.0013	.0100
Stddev	.004	.0002	.0008	.0005	.0017	.0002	.0002
%RSD	.1310	32.35	.3841	10.92	1494.	19.54	1.516
#1	2.845	.0005	.1959	.0050	.0018	.0015	.0102
#2	2.838	.0009	.1948	.0044	-.0005	.0011	.0099
#3	2.844	.0009	.1963	.0040	-.0016	.0011	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1602.0	4550.3	30121.	2064.4
Stddev	4.6	11.3	107.	12.5
%RSD	.28490	.24878	.35613	.60604
#1	1597.1	4537.3	30244.	2078.8
#2	1602.5	4557.7	30072.	2058.4
#3	1606.2	4555.9	30047.	2056.0

Zoom In Zoom Out

Sample Name: FA22073-17 Acquired: 2/13/2015 18:16:57 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0116	-.0001	.0050	.0001	68.03	.0000	-.0002	.0005	-.0005
Stddev	.0003	.0201	.0011	.0001	.0001	.30	.000	.0001	.0003	.0002
%RSD	193.7	173.5	868.0	2.108	73.47	.4403	135.7	59.32	47.67	42.47
#1	.0001	-.0115	.0005	.0049	.0002	67.91	-.0001	-.0002	.0008	-.0007
#2	.0004	.0212	.0006	.0049	.0000	67.81	-.0001	-.0004	.0004	-.0003
#3	-.0001	.0250	-.0014	.0051	.0001	68.37	.0000	-.0001	.0004	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0034	.5363	4.471	.0000	.0087	8.222	.0001	-.0036	.0014	.0017
Stddev	.0084	.0210	.072	.0000	.0002	.025	.0001	.0008	.0004	.0018
%RSD	243.9	3.909	1.603	59.04	2.837	.3020	38.88	21.60	29.38	106.4
#1	.0115	.5121	4.548	.0000	.0085	8.193	.0001	-.0040	.0009	.0006
#2	-.0053	.5468	4.407	.0000	.0090	8.235	.0002	-.0027	.0017	.0007
#3	.0041	.5500	4.459	.0000	.0088	8.237	.0002	-.0042	.0016	.0037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.809	.0003	.2455	.0014	-.0001	.0050	.0052
Stddev	.001	.0003	.0006	.0003	.0005	.0003	.0000
%RSD	.0397	86.44	.2412	18.39	364.0	5.953	.6897
#1	2.809	.0005	.2450	.0011	.0002	.0047	.0051
#2	2.809	.0003	.2454	.0016	.0001	.0052	.0051
#3	2.811	.0000	.2461	.0016	-.0008	.0052	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1621.2	4583.2	30183.	2059.2
Stddev	2.4	4.1	132.	12.2
%RSD	.14699	.08845	.43757	.59471
#1	1623.9	4578.6	30128.	2048.8
#2	1619.7	4584.8	30087.	2072.7
#3	1619.9	4586.3	30333.	2056.2

Zoom In Zoom Out

Sample Name: FA22073-18 Acquired: 2/13/2015 18:21:07 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0066	-.0005	.1022	-.0002	98.71	-.0001	-.0004	-.0001	-.0005
Stddev	.0003	.0194	.0013	.0007	.0002	.74	.0001	.0001	.0004	.0002
%RSD	149.1	295.6	281.6	.6972	105.7	.7456	99.86	40.87	388.3	46.46
#1	.0005	.0017	-.0012	.1030	-.0001	99.27	-.0002	-.0002	.0001	-.0005
#2	.0002	.0279	.0010	.1019	-.0001	98.99	.0000	-.0005	.0001	-.0008
#3	-.0001	-.0100	-.0012	.1016	-.0004	97.88	-.0002	-.0003	-.0005	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5012	4.432	12.85	.0181	-.0009	78.49	.0000	-.0034	.0021	.0036
Stddev	.0047	.124	.00	.0003	.0003	.56	.000	.0018	.0016	.0025
%RSD	.9361	2.789	.0323	1.628	33.40	.7110	7317.	53.80	80.02	68.78
#1	.5022	4.528	12.85	.0178	-.0006	78.90	-.0001	-.0054	.0019	.0010
#2	.4961	4.475	12.86	.0182	-.0009	78.71	-.0002	-.0031	.0005	.0060
#3	.5053	4.293	12.86	.0183	-.0012	77.85	.0003	-.0017	.0038	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.052	.0002	.3853	.0028	.0017	.0000	.0057
Stddev	.022	.0001	.0034	.0002	.0033	.001	.0001
%RSD	.2746	21.66	.8734	8.034	193.5	7895.	1.338
#1	8.077	.0002	.3880	.0029	-.0013	-.0002	.0056
#2	8.036	.0003	.3864	.0029	.0053	-.0006	.0058
#3	8.042	.0002	.3816	.0025	.0012	.0007	.0057

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1615.4	4581.5	29978.	2038.9
Stddev	5.0	13.2	379.	11.5
%RSD	.30931	.28917	1.2657	.56198
#1	1609.7	4566.5	30394.	2040.6
#2	1619.0	4586.1	29891.	2026.6
#3	1617.5	4591.8	29650.	2049.4

Zoom In Zoom Out

Sample Name: FA22073-19 Acquired: 2/13/2015 18:25:17 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0895	-.0003	.0154	.0000	3.370	-.0001	-.0002	-.0001	.0016
Stddev	.0003	.0153	.0003	.0003	.000	.020	.0000	.0001	.0004	.0002
%RSD	152.2	17.15	98.19	1.915	377.9	.5818	89.91	73.52	384.5	12.49
#1	-.0004	.0718	-.0001	.0152	-.0002	3.348	.0000	-.0002	.0002	.0016
#2	-.0004	.0974	-.0007	.0152	-.0001	3.380	-.0001	-.0003	-.0005	.0017
#3	.0002	.0992	-.0002	.0157	.0001	3.383	-.0001	-.0001	.0000	.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.076	4.409	2.726	.0759	.0001	.5083	.0018	-.0002	.0003	.0027
Stddev	.009	.031	.056	.0004	.0001	.0083	.0001	.0002	.0012	.0011
%RSD	.8229	.6995	2.062	.5290	78.01	1.634	6.135	96.66	370.6	41.85
#1	1.075	4.383	2.718	.0758	.0001	.5091	.0020	.0000	-.0007	.0015
#2	1.085	4.402	2.786	.0756	.0003	.5161	.0018	-.0004	.0001	.0037
#3	1.067	4.443	2.674	.0763	.0001	.4996	.0018	-.0002	.0017	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8419	.0009	.0194	.0020	-.0013	.0005	.0128
Stddev	.0011	.0003	.0004	.0002	.0008	.0002	.0000
%RSD	.1288	33.84	1.809	7.471	64.00	35.50	.1708
#1	.8411	.0012	.0192	.0020	-.0019	.0003	.0128
#2	.8415	.0006	.0198	.0019	-.0016	.0005	.0128
#3	.8431	.0009	.0193	.0022	-.0003	.0006	.0128

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1626.2	4654.8	30750.	2086.8
Stddev	4.6	3.1	173.	8.8
%RSD	.28547	.06740	.56175	.42267
#1	1620.9	4652.1	30727.	2090.9
#2	1628.1	4654.1	30933.	2092.8
#3	1629.5	4658.3	30590.	2076.7

Zoom In Zoom Out

Sample Name: FA22073-20 Acquired: 2/13/2015 18:29:26 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.1529	-.0008	.0290	-.0001	44.40	.0000	-.0002	.0001	.0007
Stddev	.0002	.0247	.0010	.0004	.0000	.63	.000	.0001	.0004	.0001
%RSD	49.06	16.12	127.0	1.488	33.85	1.412	118.8	38.75	287.9	20.03
#1	-.0003	.1808	-.0008	.0294	-.0001	44.99	.0000	-.0001	-.0003	.0006
#2	-.0003	.1441	.0002	.0286	-.0001	43.74	-.0001	-.0002	.0003	.0008
#3	-.0007	.1339	-.0018	.0290	-.0001	44.47	.0000	-.0003	.0004	.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5330	7.920	3.616	.0209	.0003	13.85	.0012	-.0027	.0005	.0007
Stddev	.0140	.134	.027	.0000	.0001	.22	.0002	.0001	.0018	.0010
%RSD	2.627	1.689	.7408	.1996	48.70	1.598	20.37	5.553	338.3	139.7
#1	.5466	8.074	3.611	.0210	.0004	14.07	.0011	-.0028	.0000	.0009
#2	.5186	7.831	3.592	.0209	.0001	13.63	.0010	-.0026	-.0010	-.0004
#3	.5337	7.855	3.645	.0209	.0002	13.87	.0014	-.0025	.0026	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.483	.0005	.1559	.0017	-.0007	.0007	.0080
Stddev	.036	.0002	.0026	.0001	.0013	.0002	.0001
%RSD	.7957	43.74	1.646	8.245	177.9	29.56	.9488
#1	4.523	.0006	.1582	.0016	.0001	.0004	.0081
#2	4.472	.0006	.1532	.0016	-.0023	.0008	.0080
#3	4.454	.0002	.1563	.0018	-.0001	.0008	.0080

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1686.3	4770.5	31142.	2142.3
Stddev	9.2	28.7	165.	25.5
%RSD	.54632	.60204	.53082	1.1886
#1	1676.5	4738.2	30952.	2113.7
#2	1687.4	4780.4	31256.	2162.4
#3	1694.9	4793.0	31217.	2150.8

Zoom In Zoom Out

Sample Name: FA22073-21 Acquired: 2/13/2015 18:33:35 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.0255	-.0006	.0482	.0000	13.79	.0000	.0000	-.0004	-.0002
Stddev	.0003	.0080	.0008	.0005	.0001	.02	.000	.0001	.0002	.0006
%RSD	56.65	31.49	132.8	1.074	230.5	.1378	67.06	272.8	58.81	390.3
#1	-.0005	.0346	-.0012	.0476	-.0001	13.79	.0000	.0000	-.0002	-.0002
#2	-.0003	.0194	-.0009	.0485	.0001	13.77	-.0001	.0000	-.0006	-.0008
#3	-.0010	.0224	.0003	.0485	.0001	13.81	.0000	.0001	-.0004	.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0414	8.568	1.918	.0025	.0024	28.76	.0010	-.0009	.0058	.0009
Stddev	.0085	.023	.018	.0000	.0001	.06	.0002	.0001	.0005	.0014
%RSD	20.56	.2669	.9374	.4289	5.848	.1963	15.57	11.78	8.155	158.8
#1	.0402	8.551	1.914	.0025	.0024	28.70	.0008	-.0009	.0055	-.0007
#2	.0336	8.561	1.902	.0024	.0023	28.79	.0011	-.0010	.0055	.0018
#3	.0505	8.594	1.938	.0025	.0026	28.79	.0010	-.0008	.0063	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.697	.0007	.3879	.0006	-.0004	.0000	.0071
Stddev	.004	.0003	.0007	.0001	.0006	.000	.0000
%RSD	.1387	45.61	.1713	14.37	145.5	836.9	.5439
#1	2.693	.0004	.3871	.0005	.0002	-.0003	.0071
#2	2.696	.0007	.3882	.0006	-.0010	.0004	.0071
#3	2.701	.0010	.3884	.0007	-.0004	-.0002	.0070

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1611.1	4567.4	30259.	2103.4
Stddev	4.6	9.4	65.	5.7
%RSD	.28833	.20506	.21333	.27312
#1	1608.8	4565.5	30333.	2098.1
#2	1616.5	4577.6	30218.	2102.5
#3	1608.1	4559.2	30225.	2109.5

Zoom In Zoom Out

Sample Name: FA22073-22 Acquired: 2/13/2015 18:37:45 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0144	-.0006	.0052	-.0002	68.58	.0000	-.0003	.0005	-.0007
Stddev	.0006	.0074	.0004	.0001	.0001	.11	.000	.0001	.0001	.0006
%RSD	162.0	51.36	76.41	1.881	80.64	.1561	65.21	33.99	28.75	84.99
#1	-.0003	.0165	-.0002	.0052	-.0002	68.57	-.0001	-.0004	.0005	-.0013
#2	.0009	.0062	-.0005	.0051	-.0003	68.48	-.0001	-.0002	.0004	-.0007
#3	.0006	.0206	-.0011	.0053	.0000	68.69	.0000	-.0003	.0006	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0023	.4992	4.490	.0001	.0087	8.275	.0001	-.0017	-.0004	.0016
Stddev	.0005	.0095	.080	.0000	.0002	.017	.0001	.0013	.0020	.0006
%RSD	23.42	1.901	1.789	15.31	2.207	.2082	243.9	76.75	555.2	35.50
#1	.0017	.5099	4.438	.0001	.0085	8.255	.0001	-.0004	.0006	.0010
#2	.0025	.4918	4.583	.0001	.0089	8.288	-.0001	-.0030	-.0026	.0019
#3	.0027	.4959	4.450	.0001	.0087	8.280	.0001	-.0016	.0009	.0020

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.867	.0002	.2478	.0013	-.0006	.0050	.0056
Stddev	.003	.0002	.0004	.0001	.0019	.0000	.0000
%RSD	.1093	90.52	.1670	9.097	295.6	.9272	.4295
#1	2.869	.0004	.2481	.0014	.0003	.0051	.0056
#2	2.868	.0001	.2479	.0012	.0006	.0050	.0056
#3	2.863	.0001	.2473	.0013	-.0028	.0050	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1620.5	4569.5	30397.	2074.4
Stddev	2.1	4.9	53.	10.5
%RSD	.12905	.10671	.17374	.50622
#1	1618.1	4564.7	30416.	2076.4
#2	1621.8	4574.5	30337.	2083.8
#3	1621.7	4569.3	30437.	2063.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 18:41:55 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2365	39.81	1.979	1.953	1.954	39.90	2.025	2.011	1.943	1.895
Stddev	.0119	.03	.007	.004	.004	.01	.006	.004	.098	.095
%RSD	5.045	.0665	.3764	.1772	.2150	.0337	.2921	.2120	5.022	5.004
#1	.2429	39.84	1.970	1.956	1.958	39.91	2.018	2.006	1.989	1.944
#2	.2439	39.79	1.981	1.949	1.955	39.89	2.028	2.013	2.010	1.955
#3	.2227	39.80	1.985	1.955	1.950	39.89	2.029	2.014	1.831	1.786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.96	40.05	38.46	1.925	1.989	40.44	1.984	2.009	1.983	1.987
Stddev	.08	.06	.18	.097	.012	.08	.005	.009	.003	.005
%RSD	.2056	.1575	.4714	5.023	.5790	.1929	.2703	.4433	.1542	.2597
#1	38.87	40.07	38.37	1.976	1.976	40.52	1.978	2.000	1.980	1.982
#2	39.00	39.99	38.34	1.985	1.993	40.44	1.986	2.010	1.986	1.988
#3	39.02	40.11	38.67	1.814	1.997	40.36	1.988	2.018	1.983	1.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.799	1.981	2.005	1.919	2.009	1.875	2.025
Stddev	.004	.006	.003	.093	.011	.099	.005
%RSD	.2510	.3213	.1660	4.851	.5515	5.275	.2727
#1	1.794	1.974	2.009	1.966	1.997	1.928	2.018
#2	1.802	1.985	2.002	1.979	2.014	1.937	2.028
#3	1.802	1.984	2.004	1.811	2.017	1.761	2.028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 18:41:55 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1554.2	4417.7	31336.	2116.3
Stddev	6.3	11.9	1291.	12.7
%RSD	.40396	.26881	4.1190	.60048
#1	1560.8	4430.7	30780.	2130.6
#2	1553.6	4414.8	30416.	2111.9
#3	1548.3	4407.5	32811.	2106.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 18:45:53 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0166	.0009	.0002	.0002	.0118	.0004	.0003	-.0001
Stddev	.0002	.0104	.0003	.0002	.0001	.0065	.0001	.0002	.0002
%RSD	333.4	62.87	30.73	125.7	24.47	54.50	24.25	71.94	200.4
#1	.0000	.0232	.0012	.0004	.0003	.0044	.0005	.0002	-.0001
#2	.0000	.0046	.0008	.0002	.0002	.0155	.0005	.0005	.0001
#3	.0002	.0220	.0006	-.0001	.0002	.0157	.0003	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0456	-.0166	.0235	.0007	F.0038	.0294	.0005	.0006
Stddev	.0003	.0110	.0101	.0152	.0001	.0008	.0099	.0002	.0010
%RSD	85.96	24.21	60.54	64.62	9.933	22.23	33.82	40.18	152.1
#1	.0002	.0574	-.0115	.0105	.0006	.0045	.0378	.0007	.0015
#2	.0002	.0439	-.0102	.0402	.0008	.0039	.0184	.0004	.0007
#3	.0008	.0355	-.0282	.0199	.0007	.0029	.0319	.0003	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0013	.0004	F.0014	.0003	F.0025	.0004	.0004	.0010
Stddev	.0003	.0010	.0001	.0002	.0001	.0001	.0005	.0002	.0000
%RSD	30.79	75.29	35.44	11.09	34.53	4.245	127.9	47.41	2.837
#1	.0009	.0004	.0004	.0015	.0003	.0024	-.0001	.0006	.0010
#2	.0015	.0023	.0002	.0014	.0002	.0026	.0010	.0002	.0010
#3	.0009	.0011	.0004	.0012	.0004	.0023	.0005	.0004	.0010
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 18:45:53 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1623.8	4623.1	30825.	2061.6
Stddev	2.1	3.1	130.	8.2
%RSD	.13127	.06633	.42033	.39680
#1	1623.9	4623.6	30764.	2052.3
#2	1625.9	4625.9	30974.	2065.2
#3	1621.7	4619.8	30737.	2067.5

Zoom In Zoom Out

Sample Name: FA22073-23 Acquired: 2/13/2015 18:50:06 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0538	-.0004	.0123	.0001	27.10	-.0001	-.0002	.0003	.0002
Stddev	.0002	.0020	.0005	.0003	.0002	.14	.0000	.0001	.0002	.0002
%RSD	40.78	3.781	103.6	2.697	257.4	.5116	43.17	21.63	67.35	73.06
#1	.0007	.0552	-.0002	.0125	.0001	26.94	.0000	-.0003	.0002	.0000
#2	.0004	.0514	-.0001	.0119	.0002	27.14	-.0001	-.0003	.0001	.0004
#3	.0004	.0546	-.0010	.0124	-.0001	27.21	-.0001	-.0002	.0005	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1472	21.53	5.790	.0266	.0009	1.267	.0003	-.0015	.0013	.0016
Stddev	.0037	.13	.072	.0002	.0001	.013	.0002	.0008	.0007	.0012
%RSD	2.522	.6005	1.246	.6732	16.21	1.033	44.21	53.78	57.43	76.09
#1	.1434	21.39	5.843	.0265	.0010	1.272	.0005	-.0022	.0019	.0011
#2	.1509	21.55	5.708	.0267	.0007	1.252	.0002	-.0015	.0015	.0007
#3	.1474	21.65	5.820	.0264	.0009	1.276	.0003	-.0007	.0005	.0030

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.873	.0003	.0709	.0021	-.0007	.0006	.0070
Stddev	.002	.0006	.0007	.0002	.0007	.0004	.0001
%RSD	.0695	185.3	.9953	8.643	99.88	63.80	.7322
#1	2.874	.0000	.0703	.0020	-.0005	.0009	.0070
#2	2.871	.0010	.0708	.0023	-.0014	.0008	.0070
#3	2.874	.0000	.0717	.0020	-.0001	.0002	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1628.5	4612.2	30661.	2102.7
Stddev	2.9	2.1	176.	7.5
%RSD	.18039	.04599	.57450	.35664
#1	1626.5	4613.2	30662.	2102.2
#2	1631.9	4613.6	30484.	2095.5
#3	1627.1	4609.7	30837.	2110.5

Zoom In Zoom Out

Sample Name: FA22073-24 Acquired: 2/13/2015 18:54:14 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.3886	-.0001	.0215	-.0001	45.78	.0000	-.0001	.0009	.0011
Stddev	.0002	.0156	.0004	.0005	.0002	.08	.000	.0001	.0001	.0001
%RSD	97.71	4.013	348.1	2.529	174.0	.1834	168.0	189.5	9.243	9.523
#1	.0000	.3718	.0000	.0210	.0000	45.87	.0000	.0000	.0008	.0010
#2	-.0002	.3915	-.0005	.0215	-.0004	45.70	.0000	.0000	.0008	.0011
#3	-.0004	.4026	.0002	.0221	-.0001	45.78	-.0001	-.0002	.0009	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1913	2.993	4.025	.0100	.0004	.8260	.0010	-.0030	.0007	.0017
Stddev	.0059	.018	.012	.0001	.0001	.0055	.0001	.0006	.0010	.0008
%RSD	3.087	.6134	.2862	.5234	16.21	.6656	12.27	19.32	130.6	49.84
#1	.1980	3.013	4.012	.0100	.0004	.8197	.0009	-.0028	.0015	.0016
#2	.1869	2.977	4.026	.0101	.0003	.8288	.0010	-.0036	.0010	.0009
#3	.1889	2.989	4.035	.0100	.0004	.8295	.0011	-.0025	-.0003	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.945	.0002	.1515	.0114	-.0004	.0036	.0125
Stddev	.002	.0002	.0004	.0005	.0006	.0004	.0000
%RSD	.1036	67.30	.2616	4.054	183.5	10.65	.2326
#1	1.947	.0002	.1511	.0117	-.0011	.0038	.0125
#2	1.943	.0001	.1516	.0116	.0000	.0031	.0125
#3	1.945	.0004	.1518	.0109	.0000	.0038	.0125

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.1	4553.1	30617.	2073.3
Stddev	1.1	1.7	53.	5.0
%RSD	.07115	.03664	.17154	.23961
#1	1611.8	4551.2	30563.	2069.1
#2	1613.4	4554.4	30621.	2078.8
#3	1614.0	4553.6	30668.	2072.0

Zoom In Zoom Out

Sample Name: FA22084-1 Acquired: 2/13/2015 18:58:22 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	.0113	-.0002	.0003	-.0001	.3165	-.0001	-.0002	.0007	-.0007
Stddev	.0003	.0236	.0005	.0001	.0001	.0048	.0001	.0001	.0001	.0001
%RSD	95.32	208.6	311.2	22.98	69.94	1.512	118.5	66.41	15.02	15.02
#1	.0000	.0081	.0004	.0003	-.0001	.3210	-.0001	-.0003	.0008	-.0007
#2	-.0003	-.0105	-.0006	.0003	-.0001	.3115	.0000	-.0001	.0007	-.0006
#3	-.0006	.0364	-.0003	.0002	.0000	.3169	-.0001	-.0003	.0006	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0156	-.0023	.1015	.0003	.0005	1.820	.0002	-.0008	.0006	.0021
Stddev	.0056	.0443	.0055	.0000	.0000	.012	.0002	.0006	.0007	.0021
%RSD	35.92	1895.	5.454	3.385	8.858	.6803	76.59	75.08	111.4	101.3
#1	.0094	.0126	.0956	.0003	.0005	1.817	.0001	-.0010	.0010	.0011
#2	.0173	.0326	.1065	.0003	.0004	1.810	.0004	-.0013	-.0002	.0006
#3	.0202	-.0522	.1024	.0003	.0005	1.834	.0001	-.0001	.0011	.0045

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.442	.0007	.0003	.0006	-.0010	.0021	.0056
Stddev	.001	.0003	.0002	.0001	.0005	.0003	.0000
%RSD	.0924	46.54	54.00	11.64	44.88	13.76	.3698
#1	1.444	.0004	.0005	.0005	-.0014	.0021	.0055
#2	1.441	.0007	.0001	.0007	-.0012	.0018	.0056
#3	1.442	.0010	.0004	.0006	-.0005	.0023	.0056

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1641.5	4645.2	31475.	2100.8
Stddev	1.2	6.8	130.	10.0
%RSD	.07157	.14727	.41401	.47400
#1	1642.4	4642.6	31414.	2106.6
#2	1641.9	4653.0	31625.	2106.5
#3	1640.2	4640.0	31386.	2089.3

Zoom In Zoom Out

Sample Name: FA22084-2 Acquired: 2/13/2015 19:02:34 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0319	-.0008	.0004	-.0001	.2351	.0000	-.0001	.0001	-.0003
Stddev	.0005	.0085	.0005	.0002	.0000	.0082	.000	.0000	.0001	.0001
%RSD	403.8	26.75	54.49	50.36	25.93	3.479	31.55	17.63	110.8	28.77
#1	.0003	.0261	-.0005	.0004	-.0001	.2305	.0000	-.0001	.0001	-.0004
#2	.0005	.0280	-.0014	.0006	-.0001	.2445	-.0001	-.0001	.0000	-.0002
#3	-.0005	.0417	-.0007	.0002	-.0001	.2301	.0000	-.0001	.0003	-.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0060	.0397	.2303	.0007	.0003	1.110	.0003	-.0006	.0006	.0008
Stddev	.0011	.0231	.0215	.0000	.0000	.028	.0002	.0010	.0002	.0007
%RSD	17.78	58.31	9.346	1.530	14.32	2.511	78.95	161.2	26.57	78.31
#1	.0047	.0247	.2082	.0008	.0003	1.079	.0003	-.0003	.0008	.0004
#2	.0066	.0663	.2512	.0008	.0003	1.132	.0004	.0002	.0005	.0006
#3	.0065	.0280	.2314	.0007	.0003	1.120	.0000	-.0017	.0005	.0016

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.285	.0005	.0007	.0001	-.0008	.0007	.0070
Stddev	.004	.0004	.0001	.0001	.0008	.0002	.0001
%RSD	.2874	83.07	16.33	145.4	97.69	26.57	.9332
#1	1.281	.0005	.0006	.0001	.0001	.0009	.0071
#2	1.284	.0008	.0006	.0000	-.0013	.0008	.0070
#3	1.289	.0001	.0008	.0002	-.0012	.0005	.0070

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1619.3	4584.6	30913.	2103.3
Stddev	4.4	19.3	145.	26.5
%RSD	.27209	.42109	.47037	1.2604
#1	1623.9	4599.5	30973.	2130.7
#2	1618.6	4591.4	30748.	2077.8
#3	1615.2	4562.8	31020.	2101.3

Zoom In Zoom Out

Sample Name: FA22084-3 Acquired: 2/13/2015 19:06:47 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3176	-.0011	.0044	.0001	27.64	.0016	.0011	-.0002	-.0005
Stddev	.0006	.0145	.0011	.0004	.0000	.16	.0001	.0001	.0003	.0002
%RSD	529.3	4.564	100.0	8.601	73.23	.5902	3.249	10.14	137.5	38.17
#1	-.0003	.3205	-.0004	.0040	.0000	27.59	.0016	.0010	-.0004	-.0007
#2	.0005	.3019	-.0005	.0046	.0001	27.82	.0015	.0010	.0001	-.0003
#3	-.0006	.3305	-.0023	.0048	.0000	27.51	.0015	.0012	-.0005	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0094	.8979	6.263	.0154	-.0001	16.32	.0043	-.0024	.0008	.0011
Stddev	.0016	.0155	.061	.0000	.0001	.08	.0000	.0006	.0003	.0008
%RSD	17.07	1.730	.9689	.2466	126.5	.5161	1.074	23.41	36.03	66.52
#1	.0081	.8858	6.196	.0154	-.0001	16.32	.0042	-.0022	.0011	.0003
#2	.0088	.8926	6.282	.0155	-.0002	16.40	.0043	-.0019	.0009	.0017
#3	.0112	.9154	6.313	.0154	.0000	16.23	.0043	-.0030	.0005	.0014

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.693	.0006	.0172	.0011	-.0003	.0004	.0135
Stddev	.001	.0002	.0001	.0001	.0008	.0001	.0000
%RSD	.0296	28.99	.5186	4.944	316.5	34.84	.3174
#1	1.693	.0005	.0172	.0011	-.0006	.0004	.0136
#2	1.693	.0005	.0173	.0011	-.0009	.0005	.0135
#3	1.692	.0008	.0171	.0010	.0007	.0002	.0135

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1623.7	4597.0	30941.	2082.2
Stddev	1.7	5.7	165.	15.6
%RSD	.10653	.12429	.53222	.74904
#1	1622.1	4592.4	30823.	2096.0
#2	1625.5	4603.4	30871.	2065.3
#3	1623.3	4595.2	31129.	2085.4

Zoom In Zoom Out

Sample Name: FA22084-4 Acquired: 2/13/2015 19:10:56 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	3.381	.0000	.0060	.0005	18.00	.0007	.0020	.0001	.0001
Stddev	.0005	.158	.0005	.0007	.0001	.85	.0000	.0001	.0004	.0003
%RSD	326.7	4.686	4585.	11.61	23.79	4.742	4.364	3.972	667.8	492.3
#1	-.0007	3.246	-.0002	.0053	.0005	17.27	.0007	.0019	.0005	.0001
#2	.0003	3.555	.0006	.0067	.0006	18.94	.0007	.0020	.0000	-.0002
#3	-.0001	3.342	-.0004	.0060	.0004	17.80	.0007	.0020	-.0003	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0265	.2573	18.49	.0687	-.0001	28.49	.0034	-.0015	.0000	.0023
Stddev	.0031	.0355	.79	.0002	.0002	1.27	.0001	.0005	.002	.0007
%RSD	11.65	13.81	4.268	.3076	147.3	4.439	3.936	34.63	6567.	29.60
#1	.0234	.2208	17.77	.0688	-.0003	27.37	.0033	-.0020	.0002	.0016
#2	.0296	.2918	19.33	.0685	.0001	29.86	.0033	-.0015	-.0016	.0025
#3	.0264	.2592	18.35	.0689	-.0003	28.23	.0036	-.0010	.0014	.0029

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	1.107	.0004	.0099	.0010	-.0008	.0001	.0172
Stddev	.002	.0003	.0004	.0001	.0009	.0002	.0001
%RSD	.2085	75.66	4.125	12.03	113.7	197.0	.3679
#1	1.107	.0001	.0095	.0008	.0002	.0002	.0172
#2	1.104	.0003	.0103	.0011	-.0014	.0003	.0172
#3	1.109	.0007	.0098	.0009	-.0011	-.0002	.0173

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1602.4	4559.5	30514.	2039.0
Stddev	1.3	7.2	145.	80.4
%RSD	.08317	.15726	.47615	3.9448
#1	1602.7	4562.3	30550.	2110.4
#2	1603.6	4564.9	30637.	1951.9
#3	1601.0	4551.4	30353.	2054.7

Zoom In Zoom Out

Sample Name: FA22084-5 Acquired: 2/13/2015 19:15:04 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	.5263	-.0008	.0238	.0002	199.2	.0049	.0041	.0007
Stddev	.0001	.0081	.0011	.0004	.0001	.6	.0001	.0000	.0004
%RSD	23.46	1.543	145.8	1.614	31.17	.3182	1.105	1.185	54.06
#1	-.0006	.5169	-.0021	.0235	.0003	198.9	.0049	.0041	.0009
#2	-.0004	.5304	.0000	.0237	.0003	198.7	.0050	.0041	.0003
#3	-.0004	.5316	-.0003	.0243	.0001	199.9	.0048	.0041	.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	.0209	2.415	38.15	.0608	-.0010	F86.57	.0150	-.0024
Stddev	.0001	.0062	.017	.18	.0001	.0000	.20	.0002	.0012
%RSD	17.52	29.89	.7069	.4756	.2028	3.544	.2274	1.397	51.45
#1	-.0004	.0204	2.422	38.08	.0608	-.0010	86.54	.0152	-.0029
#2	-.0005	.0149	2.396	38.02	.0607	-.0011	86.40	.0149	-.0032
#3	-.0006	.0273	2.428	38.36	.0610	-.0011	86.79	.0148	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0019	.0001	2.158	.0003	.1332	.0022	.0009	.0022	.0250
Stddev	.0010	.0009	.003	.0004	.0005	.0001	.0010	.0004	.0000
%RSD	50.31	988.9	.1342	148.3	.4078	6.958	110.3	17.02	.1553
#1	.0030	.0008	2.161	.0005	.1328	.0023	.0000	.0018	.0250
#2	.0015	.0003	2.156	.0006	.1329	.0021	.0020	.0026	.0249
#3	.0012	-.0008	2.157	-.0002	.1338	.0020	.0008	.0022	.0249

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1579.8	4512.7	29734.	2053.7
Stddev	.8	2.9	95.	14.2
%RSD	.04821	.06318	.31948	.68928
#1	1578.9	4510.1	29769.	2070.0
#2	1580.1	4515.8	29627.	2044.0
#3	1580.4	4512.3	29808.	2047.2

Zoom In Zoom Out

Sample Name: FA22084-6 Acquired: 2/13/2015 19:19:11 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	4.138	.0005	.1436	.0007	36.88	.0003	.0011	.0008	.0003
Stddev	.0003	.025	.0003	.0008	.0002	.11	.0000	.0001	.0004	.0001
%RSD	70.67	.5965	60.63	.5495	35.02	.2994	11.08	10.64	51.07	38.34
#1	-.0002	4.167	.0003	.1444	.0009	36.87	.0003	.0012	.0010	.0002
#2	-.0007	4.125	.0008	.1437	.0004	36.99	.0003	.0010	.0004	.0004
#3	-.0002	4.123	.0003	.1428	.0007	36.77	.0004	.0010	.0012	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0549	1.990	1.609	.0256	-.0003	24.70	.0041	-.0021	.0009	.0018
Stddev	.0038	.007	.060	.0001	.0001	.07	.0003	.0010	.0008	.0025
%RSD	6.949	.3551	3.755	.4875	16.27	.2666	6.558	46.76	85.24	137.0
#1	.0549	1.983	1.603	.0257	-.0003	24.66	.0044	-.0013	.0017	-.0005
#2	.0511	1.997	1.552	.0256	-.0004	24.77	.0039	-.0018	.0007	.0015
#3	.0587	1.989	1.672	.0255	-.0003	24.65	.0041	-.0032	.0002	.0045

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.389	.0002	.1762	.0019	.0001	.0003	.0233
Stddev	.004	.0004	.0005	.0001	.0004	.0004	.0000
%RSD	.0922	141.2	.3101	3.555	756.2	122.1	.1109
#1	4.393	.0004	.1765	.0019	.0003	.0000	.0233
#2	4.385	-.0001	.1765	.0019	-.0004	.0007	.0233
#3	4.388	.0005	.1756	.0018	.0003	.0002	.0233

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1617.1	4584.8	30298.	2075.1
Stddev	4.5	5.4	65.	11.8
%RSD	.27869	.11779	.21492	.57089
#1	1611.9	4578.6	30228.	2065.0
#2	1619.1	4588.3	30309.	2072.1
#3	1620.3	4587.5	30356.	2088.1

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/13/2015 19:23:18 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0091	.2127	.0098	.2041	.0050	1.081	.0049	.0497	.0103	.0255
Stddev	.0003	.0176	.0007	.0008	.0001	.010	.0000	.0001	.0002	.0003
%RSD	3.385	8.274	7.006	.4010	1.953	.9040	.6638	.1230	2.300	1.112
#1	.0093	.2218	.0106	.2050	.0051	1.092	.0049	.0497	.0101	.0253
#2	.0092	.2238	.0097	.2038	.0049	1.078	.0049	.0497	.0105	.0254
#3	.0087	.1924	.0092	.2035	.0049	1.074	.0049	.0498	.0103	.0258

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3091	10.20	5.037	.0155	.0460	10.47	.0398	.0041	.0056	.0101
Stddev	.0017	.15	.053	.0000	.0002	.08	.0001	.0005	.0002	.0006
%RSD	.5470	1.429	1.048	.2510	.3930	.7787	.1299	13.25	4.111	6.092
#1	.3072	10.37	5.084	.0155	.0460	10.56	.0398	.0047	.0054	.0106
#2	.3102	10.09	4.980	.0155	.0458	10.45	.0397	.0038	.0059	.0103
#3	.3099	10.14	5.047	.0156	.0462	10.40	.0398	.0036	.0055	.0094

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0393	.0487	.0104	.0099	.0095	.0484	.0210
Stddev	.0004	.0005	.0001	.0001	.0014	.0001	.0000
%RSD	.9233	.9856	.6664	1.442	14.84	.2379	.0422
#1	.0389	.0482	.0104	.0099	.0089	.0483	.0210
#2	.0395	.0490	.0104	.0101	.0086	.0485	.0209
#3	.0394	.0490	.0103	.0098	.0112	.0485	.0210

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1638.6	4647.8	30750.	2084.7
Stddev	2.5	5.3	64.	7.7
%RSD	.15021	.11487	.20782	.36772
#1	1640.9	4651.2	30816.	2077.1
#2	1639.0	4650.5	30745.	2092.4
#3	1636.0	4641.7	30689.	2084.7

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 19:27:25 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0002	484.1	-.0003	-.0002	.0001	463.5	-.0013	.0006
Stddev	.0003	.9	.0006	.0003	.0001	1.0	.0001	.0000
%RSD	108.8	.1930	195.7	139.2	128.4	.2081	7.500	6.199
#1	.0000	484.5	.0003	.0001	.0001	464.2	-.0013	.0006
#2	.0003	483.0	-.0004	-.0002	.0000	462.4	-.0015	.0007
#3	.0005	484.7	-.0009	-.0005	.0001	463.8	-.0013	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	-.0006	-.0029	172.2	.0832	454.7	.0003	.0000	.1456
Stddev	.0002	.0004	.0	.0326	.8	.0000	.000	.0041
%RSD	38.91	14.99	.0284	39.18	.1823	5.489	561.8	2.832
#1	-.0008	-.0034	172.2	.0942	453.8	.0002	.0002	.1424
#2	-.0004	-.0029	172.3	.0465	454.8	.0003	-.0001	.1441
#3	-.0004	-.0025	172.2	.1089	455.5	.0003	-.0003	.1503

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0009	F-.0059	.0002	.0023	.0854	.0011	.0001	.0002
Stddev	.0002	.0023	.0015	.0017	.0006	.0007	.0001	.0001
%RSD	20.37	38.99	723.3	72.50	.7281	63.78	38.60	26.65
#1	.0008	-.0082	-.0007	.0016	.0861	.0012	.0001	.0002
#2	.0007	-.0059	-.0006	.0043	.0853	.0017	.0001	.0002
#3	.0011	-.0036	.0020	.0012	.0848	.0003	.0002	.0003

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0004	.0000
Stddev	.0032	.0005	.0001
%RSD	835.7	133.2	771.6
#1	-.0015	.0008	.0001
#2	.0040	-.0002	.0001
#3	-.0014	.0005	-.0001

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/13/2015 19:27:25 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1541.8	4251.7	27738.	2063.3
Stddev	4.4	11.0	77.	13.9
%RSD	.28854	.25890	.27610	.67373
#1	1543.9	4255.3	27682.	2047.3
#2	1544.9	4260.4	27826.	2069.8
#3	1536.7	4239.3	27707.	2072.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:31:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2439	39.92	1.880	1.952	1.950	39.87	1.925	1.910	2.016	1.968
Stddev	.0011	.09	.005	.004	.002	.03	.007	.006	.007	.006
%RSD	.4667	.2308	.2945	.2135	.1209	.0817	.3582	.3334	.3352	.3244
#1	.2447	40.02	1.886	1.952	1.952	39.90	1.932	1.917	2.017	1.971
#2	.2426	39.88	1.878	1.948	1.948	39.84	1.924	1.908	2.008	1.960
#3	.2444	39.85	1.875	1.957	1.950	39.87	1.918	1.904	2.021	1.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.88	40.00	38.42	1.987	1.886	40.57	1.884	1.898	1.882	1.886
Stddev	.07	.08	.24	.005	.002	.07	.007	.009	.009	.006
%RSD	.1849	.2072	.6219	.2613	.0826	.1784	.3503	.4535	.4700	.3356
#1	38.85	40.06	38.68	1.992	1.888	40.64	1.891	1.907	1.892	1.893
#2	38.83	39.90	38.35	1.982	1.885	40.57	1.880	1.899	1.879	1.884
#3	38.97	40.04	38.22	1.988	1.886	40.50	1.879	1.890	1.875	1.881
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.710	1.885	2.010	1.981	1.909	1.947	1.922
Stddev	.006	.006	.002	.007	.002	.004	.007
%RSD	.3294	.3363	.0937	.3500	.1227	.1890	.3523
#1	1.716	1.893	2.011	1.987	1.911	1.950	1.929
#2	1.708	1.884	2.008	1.973	1.907	1.943	1.922
#3	1.705	1.880	2.011	1.983	1.908	1.948	1.915
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:31:30 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1629.0	4616.7	30379.	2097.2
Stddev	2.7	7.1	53.	2.4
%RSD	.16660	.15417	.17556	.11410
#1	1628.7	4611.7	30319.	2096.8
#2	1626.5	4613.6	30396.	2095.1
#3	1631.9	4624.9	30421.	2099.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:35:27 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0077	-.0001	.0005	.0001	.0200	.0002	.0002	-.0002
Stddev	.001	.0056	.0008	.0002	.0002	.0007	.0001	.0001	.0002
%RSD	1338.	72.26	965.4	40.49	203.2	3.571	95.27	72.70	128.0
#1	.0002	.0045	-.0004	.0004	-.0001	.0202	.0003	.0001	.0000
#2	.0003	.0142	.0008	.0008	.0001	.0192	.0001	.0003	-.0001
#3	-.0006	.0046	-.0008	.0004	.0003	.0205	.0001	.0001	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	F.0545	.0361	.0366	.0004	F.0036	.0273	.0004	-.0005
Stddev	.0002	.0075	.0507	.0136	.0000	.0011	.0071	.0001	.0007
%RSD	92.82	13.77	140.4	37.14	9.682	30.17	25.93	28.00	161.0
#1	.0000	.0624	.0029	.0243	.0004	.0047	.0354	.0003	.0004
#2	-.0004	.0534	.0110	.0343	.0003	.0035	.0222	.0005	-.0007
#3	-.0004	.0475	.0945	.0511	.0004	.0025	.0242	.0004	-.0010
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0009	.0001	.0010	.0003	.0019	.0001	.0001	.0007
Stddev	.0014	.0017	.0001	.0005	.0001	.0002	.0004	.0003	.0000
%RSD	128.5	185.3	110.9	51.88	28.10	8.510	389.0	226.6	5.462
#1	.0020	.0022	.0002	.0014	.0003	.0021	.0005	.0001	.0008
#2	.0017	.0016	.0000	.0011	.0002	.0019	-.0002	-.0001	.0007
#3	-.0005	-.0010	.0001	.0004	.0003	.0018	.0000	.0005	.0007
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:35:27 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1621.5	4614.1	30556.	2048.5
Stddev	2.3	5.8	129.	12.6
%RSD	.14243	.12538	.42148	.61497
#1	1624.1	4615.5	30687.	2034.7
#2	1619.9	4607.8	30430.	2059.5
#3	1620.3	4619.1	30552.	2051.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/13/2015 19:39:39 Type: Unk
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.010	F518.2	1.068	.5246	.5126	488.2	.9755	.5106	.5200
Stddev	.002	2.0	.003	.0015	.0013	1.8	.0007	.0005	.0018
%RSD	.1591	.3848	.2448	.2877	.2574	.3702	.0759	.0930	.3553
#1	1.011	516.0	1.065	.5232	.5111	486.1	.9756	.5104	.5180
#2	1.010	518.7	1.069	.5244	.5129	489.3	.9747	.5103	.5217
#3	1.008	519.9	1.069	.5262	.5137	489.2	.9762	.5112	.5202

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5719	180.7	.0182	477.9	.5221	.9653	.1004	1.013	.9778
Stddev	.0025	.6	.0266	1.4	.0003	.0016	.0151	.000	.0052
%RSD	.4353	.3167	146.0	.2846	.0589	.1704	15.00	.0240	.5284
#1	.5694	180.1	.0022	476.3	.5224	.9643	.0835	1.013	.9836
#2	.5744	181.0	.0035	478.5	.5218	.9645	.1052	1.013	.9736
#3	.5719	181.1	.0490	478.8	.5222	.9672	.1124	1.013	.9763

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.086	1.037	.0417	.9935	1.041	1.042	1.018	.5034	.9939
Stddev	.002	.000	.0006	.0009	.003	.001	.003	.0018	.0006
%RSD	.2138	.0354	1.450	.0891	.2963	.0899	.2626	.3561	.0609
#1	1.086	1.037	.0411	.9926	1.037	1.042	1.021	.5013	.9943
#2	1.083	1.037	.0415	.9943	1.041	1.040	1.017	.5043	.9932
#3	1.088	1.037	.0423	.9937	1.043	1.042	1.016	.5045	.9941

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1455.1	4043.0	26519.	1949.9
Stddev	4.8	2.5	19.	9.4
%RSD	.32909	.06283	.07066	.48187
#1	1450.1	4040.2	26540.	1960.2
#2	1455.5	4045.2	26512.	1941.9
#3	1459.7	4043.6	26505.	1947.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:43:36 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2499	40.56	1.945	1.992	1.974	40.46	1.984	1.969	2.051	2.008
Stddev	.0004	.09	.002	.004	.004	.13	.003	.003	.006	.003
%RSD	.1493	.2190	.1142	.2253	.1963	.3095	.1241	.1704	.2926	.1339
#1	.2500	40.46	1.943	1.996	1.970	40.34	1.983	1.967	2.057	2.011
#2	.2502	40.62	1.944	1.994	1.975	40.46	1.983	1.967	2.052	2.008
#3	.2495	40.60	1.947	1.987	1.978	40.59	1.987	1.973	2.045	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.49	41.02	39.21	2.032	1.949	41.41	1.947	1.962	1.946	1.954
Stddev	.10	.09	.13	.002	.006	.06	.002	.002	.001	.003
%RSD	.2405	.2077	.3423	.0782	.3137	.1432	.0851	.0983	.0590	.1369
#1	39.39	41.11	39.13	2.033	1.943	41.35	1.946	1.960	1.945	1.953
#2	39.58	41.00	39.36	2.031	1.949	41.41	1.946	1.964	1.945	1.952
#3	39.49	40.94	39.12	2.031	1.955	41.47	1.949	1.963	1.947	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.765	1.952	2.042	2.027	1.968	1.989	1.984
Stddev	.004	.006	.004	.003	.004	.003	.003
%RSD	.2249	.3065	.1952	.1629	.2211	.1390	.1400
#1	1.764	1.950	2.039	2.030	1.965	1.990	1.982
#2	1.762	1.947	2.042	2.025	1.965	1.991	1.984
#3	1.770	1.958	2.047	2.025	1.973	1.986	1.987
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/13/2015 19:43:36 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1586.1	4493.9	29875.	2044.3
Stddev	3.4	7.2	85.	6.7
%RSD	.21490	.16017	.28444	.32717
#1	1588.6	4502.2	29785.	2047.1
#2	1582.2	4489.6	29886.	2036.6
#3	1587.5	4489.9	29954.	2049.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:47:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0070	.0009	.0001	.0003	.0208	.0002	.0000	-.0002
Stddev	.0004	.0133	.0007	.0002	.0001	.0040	.0000	.0001	.0001
%RSD	691.9	188.5	74.99	208.3	36.66	19.46	17.45	311.6	49.24
#1	-.0003	.0130	.0014	.0001	.0002	.0176	.0002	.0002	-.0002
#2	.0001	-.0082	.0012	.0003	.0004	.0254	.0002	.0000	-.0003
#3	.0004	.0163	.0001	-.0001	.0004	.0195	.0002	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F.0515	.0325	.0164	.0004	F.0038	.0199	.0005	-.0003
Stddev	.0004	.0095	.0491	.0209	.0000	.0010	.0072	.0002	.0001
%RSD	585.5	18.35	150.9	126.9	3.031	26.87	35.92	36.69	27.14
#1	.0000	.0619	-.0235	.0405	.0004	.0050	.0278	.0006	-.0003
#2	.0003	.0494	.0681	.0041	.0004	.0036	.0138	.0003	-.0002
#3	-.0005	.0433	.0529	.0047	.0004	.0029	.0181	.0005	-.0004
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0002	-.0001	F.0012	.0005	F.0021	.0003	-.0001	.0008
Stddev	.0015	.0005	.0004	.0001	.0000	.0002	.0015	.0002	.0000
%RSD	260.4	227.1	330.8	4.869	7.948	9.539	494.9	307.1	4.773
#1	.0022	.0002	.0003	.0012	.0004	.0023	.0018	.0002	.0008
#2	-.0003	-.0003	-.0004	.0013	.0005	.0021	-.0012	-.0003	.0008
#3	-.0002	.0008	-.0003	.0012	.0005	.0019	.0003	-.0001	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/13/2015 19:47:33 Type: QC
Method: 60102007_041712(v120) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1624.2	4612.5	30707.	2036.5
Stddev	5.3	6.9	24.	5.6
%RSD	.32659	.14920	.07804	.27550
#1	1627.4	4608.7	30731.	2036.2
#2	1627.1	4620.4	30707.	2042.3
#3	1618.0	4608.4	30683.	2031.1

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.053780	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000071	0.000000	No
			Cr	-0.002131	0.000000	No
			Mo	0.000500	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000009	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000099	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000002	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000001	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000182	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000008	0.000000	No
			Mg	0.000005	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000018	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000054	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000971	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000276	0.000000	No
			Fe	0.000129	0.000000	No
			Mo	-0.001480	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000044	0.000000	No
			Cr	0.012815	0.000000	No
			Mo	-0.000310	0.000000	No
			V	-0.001708	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000031	0.000000	No
			Ca	-0.000000	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000017	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000009	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000009	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000003	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	0.000002	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.025078	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000012	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.003709	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000016	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000027	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000112	0.692763	0.000000	1.000000
	Al 396.152 { 85}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.002570	0.153039	0.000000	1.000000
	As 189.042 {478}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000311	0.286271	0.000000	1.000000
	Ba 455.403 { 74}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.022685	10.876842	0.000000	1.000000
	Be 313.042 {108}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.003891	7.536276	0.000000	1.000000
	Ca 317.933 {106}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.008914	0.223776	0.000000	1.000000
	Cd 226.502 {449}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000935	5.527194	0.000000	1.000000
	Co 228.616 {447}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.001485	2.539967	0.000000	1.000000
	Cr 267.716 {126}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000239	0.536126	0.000000	1.000000
	Cu 324.754 {104}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004954	0.860801	0.000000	1.000000
	Fe 259.940 {130}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004419	0.125039	0.000000	1.000000
	In 230.606 {446}*	2/13/2015 11:00:43	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.006465	0.147784	0.000000	1.000000
	Mg 279.079 {121}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000184	0.020198	0.000000	1.000000
	Mn 257.610 {131}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.001840	3.484847	0.000000	1.000000
	Mo 202.030 {467}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.002556	1.248094	0.000000	1.000000
	Na 589.592 { 57}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.019474	0.469618	0.000000	1.000000
	Ni 231.604 {445}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000397	1.589976	0.000000	1.000000
	Pb 220.353 {453}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.003658	1.321036	0.000000	1.000000
	Sb 206.833 {463}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000558	0.289420	0.000000	1.000000
	Se 196.090 {472}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000807	0.215957	0.000000	1.000000
	Si 212.412 {459}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.008990	0.576023	0.000000	1.000000
	Sn 189.989 {477}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.000376	0.482420	0.000000	1.000000
	Sr 407.771 { 83}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004712	16.205375	0.000000	1.000000
	Ti 334.941 {101}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004008	2.156028	0.000000	1.000000
	Tl 190.856 {477}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.006064	0.599878	0.000000	1.000000
	V 292.402 {115}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	-0.000095	0.730141	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/13/2015 11:00:43	2/13/2015 9:45:25	Linear	1/Conc	0.004542	3.684325	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999949	0.000065	0.000510	0.001698	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999841	0.004406	0.016990	0.056633	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999760	0.000503	0.000732	0.002439	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999880	0.013561	0.000336	0.001120	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999885	0.009219	0.000136	0.000452	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999775	0.007640	0.005534	0.018445	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999872	0.007137	0.000058	0.000194	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999814	0.003948	0.000135	0.000450	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999862	0.000717	0.000381	0.001271	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999887	0.001037	0.000352	0.001175	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999727	0.004710	0.004955	0.016516	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999919	0.003031	0.040083	0.133611	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999876	0.000511	0.038026	0.126752	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999918	0.003603	0.000054	0.000179	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999724	0.002363	0.000174	0.000581	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999907	0.010315	0.011980	0.039934	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999803	0.002541	0.000213	0.000710	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999820	0.002037	0.000687	0.002290	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999691	0.000580	0.001170	0.003899	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999792	0.000355	0.001479	0.004929	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.988220	0.007322	0.000418	0.001394	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999767	0.000839	0.000361	0.001204	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999926	0.015882	0.000138	0.000461	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999976	0.001198	0.000151	0.000503	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999842	0.000838	0.000974	0.003247	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999777	0.001235	0.000355	0.001183	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999845	0.005232	0.000063	0.000212	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/16/2015 10:04:40 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0012	.0020	-.0003	.0010	.0034	.0059	.0034	.0016	.0001
Stddev	.0004	.0003	.0000	.0026	.0009	.0010	.0014	.0007	.0001
%RSD	34.84	16.56	10.84	265.0	25.58	17.27	42.71	45.82	69.72
#1	.0012	.0017	-.0003	.0023	.0030	.0066	.0018	.0008	.0002
#2	.0008	.0020	-.0003	-.0020	.0044	.0065	.0046	.0022	.0001
#3	.0016	.0023	-.0003	.0027	.0028	.0047	.0037	.0018	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0052	.0064	-.0081	-.0002	.0013	.0123	-.0124	.0014	.0011
Stddev	.0000	.0007	.0025	.0008	.0000	.0028	.0021	.0005	.0004
%RSD	.8692	10.84	31.21	422.7	2.773	22.75	16.97	39.07	39.44
#1	.0052	.0070	-.0065	-.0010	.0012	.0153	-.0149	.0010	.0010
#2	.0052	.0064	-.0110	-.0001	.0013	.0121	-.0111	.0020	.0016
#3	.0053	.0057	-.0068	.0005	.0013	.0097	-.0113	.0012	.0007

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0011	-.0001	.0056	.0015	.0048	.0062	-.0009	-.0006	.0048
Stddev	.0003	.0001	.0002	.0002	.0020	.0005	.0002	.0001	.0008
%RSD	26.17	57.65	3.736	13.87	41.55	8.686	24.48	8.863	17.12
#1	.0008	-.0002	.0054	.0012	.0071	.0068	-.0011	-.0006	.0042
#2	.0013	-.0001	.0056	.0016	.0037	.0061	-.0007	-.0006	.0058
#3	.0012	-.0001	.0058	.0016	.0036	.0058	-.0008	-.0007	.0045

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3148.3	6350.3	54517.	4241.6
Stddev	4.0	8.1	211.	42.4
%RSD	.12552	.12830	.38621	.99897
#1	3150.1	6359.2	54754.	4199.2
#2	3143.8	6348.6	54442.	4241.6
#3	3151.0	6343.1	54353.	4284.0

Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/16/2015 10:08:24 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0280	1.379	.0815	3.502	3.166	1.778	2.263	1.127	.2070	.2925
Stddev	.0005	.004	.0006	.011	.012	.005	.013	.007	.0004	.0021
%RSD	1.780	.2563	.7558	.2990	.3799	.2777	.5782	.6010	.1702	.7065
#1	.0284	1.378	.0821	3.511	3.173	1.782	2.276	1.134	.2066	.2910
#2	.0275	1.376	.0809	3.505	3.153	1.772	2.249	1.120	.2070	.2917
#3	.0280	1.382	.0815	3.490	3.174	1.779	2.264	1.128	.2073	.2949

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.430	.6096	.2038	1.259	.4837	2.239	.7031	.3912	.1048	.0574
Stddev	.002	.0032	.0013	.005	.0028	.007	.0040	.0021	.0007	.0002
%RSD	.1344	.5208	.6491	.3628	.5868	.3326	.5715	.5281	.6797	.3027
#1	1.430	.6060	.2048	1.257	.4865	2.239	.7068	.3929	.1054	.0576
#2	1.427	.6108	.2023	1.256	.4809	2.231	.6988	.3889	.1040	.0573
#3	1.431	.6119	.2042	1.265	.4836	2.246	.7037	.3917	.1050	.0573

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1270	.1942	5.380	.7944	.1482	.2507	1.333
Stddev	.0008	.0012	.009	.0032	.0015	.0008	.007
%RSD	.6576	.6078	.1751	.4031	.9942	.3349	.5442
#1	.1280	.1955	5.374	.7923	.1496	.2500	1.339
#2	.1265	.1932	5.374	.7929	.1467	.2505	1.325
#3	.1266	.1940	5.391	.7981	.1483	.2516	1.336

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2991.2	6251.0	53046.	4181.8
Stddev	21.2	27.8	110.	24.5
%RSD	.70901	.44476	.20797	.58671
#1	2976.0	6227.5	53099.	4162.1
#2	3015.4	6281.7	53120.	4209.3
#3	2982.3	6243.8	52919.	4174.0

Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/16/2015 10:11:47 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1098	5.498	.3379	14.01	12.75	7.093	9.104	4.512	.8234	1.160
Stddev	.0003	.032	.0015	.07	.08	.031	.039	.022	.0013	.002
%RSD	.2475	.5784	.4586	.4712	.5992	.4335	.4299	.4877	.1533	.1933
#1	.1095	5.482	.3376	13.99	12.71	7.070	9.096	4.507	.8247	1.162
#2	.1100	5.477	.3365	13.96	12.71	7.080	9.069	4.492	.8234	1.160
#3	.1097	5.534	.3396	14.09	12.84	7.128	9.146	4.536	.8222	1.158

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.616	2.515	.8043	5.014	1.952	9.099	2.788	1.633	.4268	.2374
Stddev	.035	.005	.0034	.004	.007	.045	.013	.002	.0020	.0009
%RSD	.6196	.2052	.4206	.0821	.3865	.4957	.4609	.1382	.4707	.3685
#1	5.601	2.509	.8036	5.016	1.950	9.065	2.785	1.631	.4272	.2372
#2	5.591	2.517	.8013	5.009	1.945	9.082	2.778	1.633	.4246	.2367
#3	5.656	2.518	.8080	5.016	1.960	9.150	2.803	1.635	.4285	.2384

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.7322	.7729	22.04	3.212	.6164	1.005	5.267
Stddev	.0034	.0034	.10	.009	.0016	.003	.023
%RSD	.4603	.4404	.4629	.2665	.2539	.2652	.4327
#1	.7303	.7714	21.99	3.221	.6147	1.008	5.259
#2	.7303	.7705	21.97	3.205	.6169	1.003	5.248
#3	.7361	.7768	22.15	3.209	.6177	1.003	5.292

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2740.1	6059.0	51937.	4183.3
Stddev	4.9	13.2	170.	8.0
%RSD	.17963	.21846	.32697	.19141
#1	2743.4	6060.3	51782.	4185.9
#2	2734.4	6071.6	52118.	4189.8
#3	2742.4	6045.2	51910.	4174.4

Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/16/2015 10:15:09 Type: Cal
Method: 60102007_042011(v118) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2106	10.63	.6649	27.19	24.53	13.66	17.49	8.686	1.572	2.232
Stddev	.0005	.04	.0016	.06	.11	.08	.07	.030	.007	.007
%RSD	.2228	.4143	.2414	.2304	.4669	.6104	.4008	.3508	.4356	.3049
#1	.2109	10.62	.6645	27.22	24.46	13.61	17.43	8.662	1.580	2.238
#2	.2101	10.68	.6666	27.24	24.66	13.76	17.56	8.720	1.571	2.234
#3	.2110	10.59	.6635	27.12	24.46	13.62	17.46	8.675	1.566	2.225

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	10.60	4.872	1.548	9.395	3.783	17.68	5.361	3.248	.8348	.4639
Stddev	.04	.032	.010	.031	.015	.08	.023	.012	.0025	.0017
%RSD	.3441	.6642	.6239	.3276	.3960	.4710	.4252	.3618	.2991	.3692
#1	10.60	4.857	1.545	9.414	3.769	17.63	5.341	3.241	.8322	.4624
#2	10.64	4.909	1.559	9.410	3.799	17.77	5.386	3.262	.8372	.4658
#3	10.57	4.850	1.540	9.359	3.782	17.62	5.357	3.242	.8349	.4635

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.708	1.481	42.07	6.109	1.205	1.984	10.12
Stddev	.006	.006	.16	.025	.004	.007	.04
%RSD	.3700	.4246	.3800	.4037	.3752	.3437	.3745
#1	1.702	1.475	42.00	6.131	1.202	1.992	10.09
#2	1.714	1.487	42.25	6.114	1.210	1.982	10.17
#3	1.707	1.479	41.96	6.083	1.202	1.979	10.12

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2563.1	5879.9	51014.	4158.8
Stddev	7.5	17.7	209.	29.0
%RSD	.29346	.30065	.40988	.69770
#1	2566.8	5895.7	50853.	4154.4
#2	2554.4	5860.8	50937.	4132.2
#3	2568.0	5883.1	51250.	4189.7

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/16/2015 10:18:53 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4945	79.13	4.004	3.968	3.960	79.48	3.959	3.946	3.954	3.949
Stddev	.0015	.48	.013	.025	.023	.51	.019	.020	.011	.008
%RSD	.3086	.6063	.3352	.6396	.5858	.6437	.4854	.5017	.2774	.2112
#1	.4954	79.08	3.999	3.972	3.956	79.40	3.953	3.941	3.962	3.958
#2	.4954	79.63	3.993	3.991	3.986	80.02	3.943	3.930	3.957	3.947
#3	.4928	78.67	4.019	3.941	3.940	79.00	3.980	3.969	3.941	3.941
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	78.53	79.78	78.75	3.933	3.975	79.46	3.964	4.027	3.987	4.004
Stddev	.49	.48	.56	.040	.021	.47	.021	.016	.016	.029
%RSD	.6231	.6034	.7072	1.022	.5339	.5920	.5384	.4038	.4041	.7183
#1	78.58	79.65	78.55	3.946	3.967	79.43	3.957	4.028	3.983	3.996
#2	79.00	80.32	79.38	3.965	3.959	79.95	3.947	4.011	3.974	3.981
#3	78.02	79.38	78.32	3.888	3.999	79.01	3.988	4.043	4.005	4.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.354	3.938	3.967	3.956	3.990	4.016	3.977
Stddev	.021	.023	.023	.013	.013	.014	.022
%RSD	.4748	.5881	.5740	.3174	.3208	.3565	.5449
#1	4.352	3.935	3.966	3.967	3.992	4.029	3.970
#2	4.335	3.916	3.991	3.959	3.977	4.019	3.960
#3	4.376	3.962	3.946	3.942	4.002	4.000	4.002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/16/2015 10:18:53 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2553.7	5843.8	50621.	4145.3
Stddev	10.1	25.6	185.	35.1
%RSD	.39383	.43863	.36598	.84652
#1	2551.9	5850.2	50591.	4149.1
#2	2564.5	5865.7	50452.	4108.5
#3	2544.7	5815.6	50819.	4178.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/16/2015 10:25:31 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2484	41.17	1.990	2.071	2.020	42.66	1.968	1.992	1.993	1.940
Stddev	.0008	.12	.009	.005	.009	.21	.005	.005	.008	.001
%RSD	.3237	.2965	.4480	.2331	.4559	.4983	.2689	.2497	.4196	.0516
#1	.2487	41.15	1.997	2.070	2.022	42.68	1.967	1.992	2.000	1.941
#2	.2491	41.29	1.994	2.076	2.028	42.86	1.974	1.997	1.994	1.939
#3	.2475	41.05	1.980	2.067	2.010	42.44	1.964	1.987	1.984	1.940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.36	42.06	40.46	2.032	1.887	41.79	2.052	1.968	1.973	1.996
Stddev	.15	.13	.15	.007	.006	.16	.005	.009	.005	.008
%RSD	.3565	.3151	.3820	.3272	.3206	.3822	.2611	.4772	.2777	.4172
#1	41.32	42.01	40.37	2.036	1.889	41.80	2.053	1.968	1.976	1.999
#2	41.52	42.21	40.64	2.035	1.892	41.95	2.057	1.977	1.977	2.003
#3	41.23	41.96	40.37	2.024	1.881	41.63	2.047	1.958	1.967	1.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0217	2.026	1.983	1.974	2.031	1.925	2.036
Stddev	.0005	.007	.007	.005	.011	.009	.005
%RSD	2.367	.3515	.3674	.2738	.5454	.4929	.2303
#1	.0211	2.025	1.982	1.979	2.034	1.935	2.035
#2	.0218	2.033	1.991	1.974	2.041	1.923	2.042
#3	.0221	2.019	1.976	1.968	2.019	1.917	2.033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/16/2015 10:25:31 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2725.3	5981.0	51385.	4163.3
Stddev	10.0	17.2	295.	34.9
%RSD	.36748	.28770	.57312	.83739
#1	2733.5	5999.7	51188.	4167.6
#2	2714.1	5965.9	51244.	4126.5
#3	2728.3	5977.4	51724.	4195.9

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/16/2015 10:31:59 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	-.0009	-.0014	-.0002	-.0002	-.0082	-.0007	-.0008
Stddev	.0006	.0033	.0002	.0003	.0001	.0067	.0001	.0003
%RSD	126.5	346.6	18.24	136.6	42.95	81.76	16.96	32.67
#1	-.0002	.0028	-.0011	-.0001	-.0001	-.0066	-.0009	-.0011
#2	.0009	-.0028	-.0015	-.0006	-.0002	-.0024	-.0007	-.0006
#3	.0007	-.0028	-.0015	.0000	-.0003	-.0156	-.0006	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0003	-.0167	.0412	.0013	-.0002	F-.0039	.0060
Stddev	.0002	.0004	.0048	.0705	.0104	.0000	.0017	.0300
%RSD	54.05	134.2	28.57	171.3	829.3	19.84	42.87	501.6
#1	-.0003	.0007	-.0116	.1037	.0133	-.0002	-.0022	-.0066
#2	-.0004	-.0001	-.0176	-.0352	-.0045	-.0002	-.0040	.0402
#3	-.0001	.0002	-.0210	.0550	-.0050	-.0002	-.0055	-.0157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	-.0008	-.0005	F-.0020	.0002	-.0009	-.0002	-.0007
Stddev	.0000	.0005	.0012	.0021	.0005	.0001	.0001	.0003
%RSD	4.461	61.86	245.6	105.1	217.3	15.67	30.50	36.02
#1	-.0008	-.0009	-.0017	-.0045	.0008	-.0010	-.0002	-.0005
#2	-.0009	-.0003	.0007	-.0007	-.0001	-.0008	-.0003	-.0007
#3	-.0008	-.0014	-.0005	-.0009	.0000	-.0010	-.0001	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit				.0020				
Low Limit				-.0020				

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/16/2015 10:31:59 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0008	-.0002	-.0012
Stddev	.0011	.0003	.0001
%RSD	140.2	117.7	6.559
#1	.0003	-.0005	-.0013
#2	-.0018	-.0002	-.0011
#3	-.0008	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3089.9	6115.4	52840.	4099.5
Stddev	7.8	14.2	489.	8.2
%RSD	.25254	.23201	.92611	.19915
#1	3098.0	6126.8	52539.	4099.7
#2	3082.4	6099.5	52576.	4091.3
#3	3089.2	6119.9	53404.	4107.6

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/16/2015 10:36:51 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0106	.1993	.0092	.2094	.0048	1.066	.0045	.0536	.0105	.0271
Stddev	.0002	.0097	.0006	.0010	.0001	.007	.0001	.0001	.0003	.0002
%RSD	1.533	4.881	6.411	.4633	1.486	.6794	1.231	.1091	2.923	.8019
#1	.0108	.2089	.0086	.2083	.0049	1.071	.0045	.0535	.0104	.0273
#2	.0105	.1895	.0097	.2096	.0047	1.071	.0046	.0535	.0108	.0270
#3	.0105	.1996	.0093	.2102	.0048	1.058	.0045	.0536	.0102	.0269
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2862	10.56	5.217	.0165	.0403	10.52	.0437	.0045	.0042	.0090
Stddev	.0053	.06	.034	.0001	.0004	.01	.0001	.0005	.0009	.0005
%RSD	1.840	.6071	.6562	.8090	.8731	.1154	.3231	11.91	22.45	5.620
#1	.2889	10.62	5.190	.0164	.0404	10.53	.0436	.0039	.0050	.0085
#2	.2896	10.49	5.206	.0166	.0406	10.51	.0438	.0048	.0044	.0095
#3	.2801	10.56	5.256	.0164	.0399	10.51	.0438	.0047	.0031	.0089
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0432	.0522	.0103	.0084	.0089	.0508	.0216
Stddev	.0007	.0004	.0001	.0001	.0004	.0001	.0000
%RSD	1.576	.7824	.5180	1.083	4.074	.2118	.0819
#1	.0431	.0521	.0102	.0084	.0089	.0508	.0217
#2	.0439	.0526	.0103	.0085	.0085	.0508	.0216
#3	.0426	.0518	.0103	.0083	.0093	.0506	.0217
Check ?	None	Chk PassChk PassChk PassChk PassChk PassChk Pass					
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/16/2015 10:36:51 Type: QC
Method: 60102007_042011(v118) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3020.6	6136.0	52270.	4152.4
Stddev	5.5	11.5	291.	24.7
%RSD	.18141	.18686	.55764	.59603
#1	3014.8	6124.5	52490.	4161.8
#2	3021.5	6136.1	51940.	4171.0
#3	3025.6	6147.5	52381.	4124.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/16/2015 10:43:03 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	507.6	.0000	.0000	-.0006	495.1	.0000	.0000	.0000	-.0013
Stddev	.0004	4.9	.001	.000	.0001	4.3	.000	.0001	.000	.0003
%RSD	427.2	.9601	15830.	1025.	19.61	.8721	342.5	263.2	317.5	21.37
#1	.0000	513.2	-.0014	.0001	-.0006	495.0	-.0001	-.0001	-.0001	-.0011
#2	-.0002	504.3	.0015	-.0002	-.0005	490.9	-.0001	.0001	-.0001	-.0011
#3	.0005	505.3	-.0001	.0000	-.0007	499.5	.0001	.0001	.0001	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	189.7	.1232	488.9	-.0004	.0000	.1592	.0000	.0000	.0000	.0009
Stddev	1.5	.0134	4.8	.0000	.0004	.0093	.0002	.0006	.0012	.0057
%RSD	.8152	10.86	.9870	5.612	1882.	5.815	537.8	10250.	7553.	622.8
#1	191.5	.1282	494.4	-.0004	.0002	.1492	.0001	.0002	.0012	-.0047
#2	188.7	.1080	485.4	-.0004	.0003	.1674	-.0002	.0005	.0002	.0007
#3	188.9	.1333	486.9	-.0004	-.0004	.1611	.0002	-.0007	-.0013	.0067
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0849	-.0006	-.0003	-.0013	-.0011	.0001	-.0030
Stddev	.0013	.0004	.0001	.0001	.0014	.0003	.0001
%RSD	1.490	75.30	19.78	7.288	123.7	242.8	2.498
#1	.0842	-.0003	-.0003	-.0014	-.0016	.0004	-.0030
#2	.0842	-.0010	-.0002	-.0013	.0004	.0000	-.0031
#3	.0864	-.0003	-.0002	-.0013	-.0022	-.0001	-.0029
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/16/2015 10:43:03 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2460.0	5619.8	47051.	4044.5
Stddev	6.4	19.5	213.	49.1
%RSD	.26021	.34737	.45373	1.2151
#1	2452.7	5603.6	47115.	3989.4
#2	2464.7	5641.5	47225.	4083.9
#3	2462.7	5614.3	46812.	4060.3

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/16/2015 10:50:04 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.055	510.8	1.089	.5272	.5249	499.0	.9647	.4926	.5054	.5528
Stddev	.019	.7	.007	.0048	.0029	8.2	.0057	.0028	.0095	.0097
%RSD	1.779	.1433	.6268	.9014	.5602	1.653	.5943	.5684	1.880	1.752
#1	1.068	511.2	1.085	.5323	.5274	508.6	.9621	.4920	.5103	.5578
#2	1.064	510.0	1.097	.5266	.5255	493.9	.9713	.4956	.5114	.5590
#3	1.033	511.3	1.087	.5228	.5217	494.6	.9608	.4901	.4944	.5417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	188.2	.1769	490.9	.5257	.9499	.1627	1.006	.9993	1.081	1.045
Stddev	1.2	.0218	3.9	.0105	.0062	.0181	.007	.0074	.007	.010
%RSD	.6554	12.30	.7925	1.992	.6489	11.15	.6545	.7371	.6419	.9272
#1	189.5	.1646	494.8	.5316	.9471	.1557	1.002	.9978	1.077	1.041
#2	188.2	.1641	490.8	.5318	.9570	.1833	1.013	1.007	1.089	1.057
#3	187.0	.2021	487.0	.5136	.9456	.1491	1.002	.9928	1.077	1.039
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0406	.9602	1.041	1.036	.9995	.4962	1.009
Stddev	.0008	.0053	.006	.020	.0024	.0096	.007
%RSD	1.923	.5470	.6137	1.955	.2407	1.928	.7215
#1	.0416	.9579	1.047	1.046	1.000	.4997	1.004
#2	.0402	.9662	1.042	1.049	1.001	.5036	1.017
#3	.0402	.9565	1.034	1.013	.9967	.4854	1.005
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/16/2015 10:50:04 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2378.4	5487.5	46708.	3921.8
Stddev	14.1	30.6	710.	26.7
%RSD	.59206	.55804	1.5207	.68140
#1	2384.4	5507.9	46295.	3891.0
#2	2362.3	5452.2	46300.	3938.1
#3	2388.5	5502.2	47528.	3936.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 10:58:15 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2639	41.57	2.105	2.056	2.105	42.21	2.126	2.101	2.131	2.080
Stddev	.0014	.27	.012	.005	.010	.31	.014	.013	.011	.012
%RSD	.5284	.6418	.5633	.2454	.4725	.7312	.6481	.6219	.5063	.5674
#1	.2624	41.80	2.113	2.062	2.111	42.43	2.139	2.113	2.119	2.067
#2	.2640	41.64	2.091	2.053	2.110	42.34	2.112	2.087	2.136	2.087
#3	.2652	41.28	2.110	2.053	2.093	41.86	2.125	2.101	2.138	2.087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.20	42.28	41.16	2.197	2.091	42.06	2.138	2.067	2.104	2.100
Stddev	.20	.34	.23	.009	.012	.26	.012	.010	.015	.012
%RSD	.4654	.7976	.5648	.4262	.5865	.6184	.5739	.4935	.7078	.5699
#1	42.40	42.57	41.41	2.187	2.103	42.27	2.150	2.073	2.119	2.111
#2	42.18	42.36	41.12	2.205	2.078	42.15	2.126	2.055	2.090	2.088
#3	42.01	41.91	40.95	2.201	2.092	41.77	2.138	2.072	2.103	2.101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.910	2.101	2.137	2.169	2.102	2.112	2.155
Stddev	.011	.012	.012	.012	.011	.014	.014
%RSD	.5925	.5886	.5510	.5281	.5136	.6497	.6580
#1	1.921	2.113	2.147	2.156	2.107	2.096	2.170
#2	1.899	2.088	2.141	2.176	2.090	2.121	2.141
#3	1.910	2.102	2.124	2.175	2.110	2.117	2.154
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 10:58:15 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.4	5869.5	49829.	4030.6
Stddev	11.1	37.4	173.	28.4
%RSD	.41364	.63742	.34746	.70511
#1	2677.1	5832.0	49985.	3997.9
#2	2698.0	5906.8	49643.	4043.9
#3	2681.1	5869.8	49860.	4049.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:03:47 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0070	-.0003	.0002	.0000	-.0016	-.0006	-.0007
Stddev	.0004	.0095	.0004	.0003	.000	.0001	.0001	.0000
%RSD	56.02	135.0	141.5	167.9	160.4	4.682	12.50	4.804
#1	.0004	.0039	-.0006	.0006	.0000	-.0016	-.0007	-.0007
#2	.0005	-.0132	.0002	.0000	-.0001	-.0016	-.0006	-.0006
#3	.0011	-.0117	-.0004	.0000	.0000	-.0017	-.0005	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0003	-.0060	.0252	.0114	.0001	F-.0071	.0249
Stddev	.000	.0002	.0023	.0735	.0183	.0000	.0013	.0084
%RSD	673.7	76.63	37.74	291.0	160.2	27.09	18.18	33.50
#1	.0001	.0005	-.0050	.0771	.0140	.0001	-.0057	.0250
#2	.0000	.0001	-.0044	.0575	-.0080	.0001	-.0073	.0332
#3	-.0001	.0002	-.0086	-.0588	.0283	.0002	-.0082	.0165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	F-.0013	-.0007	F-.0021	.0005	-.0005	.0001	-.0011
Stddev	.0001	.0003	.0003	.0006	.0002	.0013	.0001	.0000
%RSD	10.07	24.50	42.40	29.55	31.33	269.3	77.60	3.612
#1	-.0007	-.0011	-.0008	-.0022	.0004	.0010	.0000	-.0011
#2	-.0007	-.0012	-.0004	-.0027	.0005	-.0009	.0002	-.0011
#3	-.0006	-.0017	-.0010	-.0014	.0007	-.0015	.0001	-.0012
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
High Limit		.0010		.0020				
Low Limit		-.0010		-.0020				

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:03:47 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0003	.0000	-.0009
Stddev	.0009	.0002	.0000
%RSD	274.0	820.8	3.184
#1	.0007	.0002	-.0009
#2	-.0009	.0000	-.0009
#3	-.0009	-.0002	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3134.8	6232.8	53399.	4184.8
Stddev	17.8	47.7	127.	50.9
%RSD	.56887	.76463	.23785	1.2154
#1	3147.6	6253.0	53356.	4221.3
#2	3114.4	6178.4	53542.	4206.5
#3	3142.3	6267.0	53299.	4126.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 11:31:10 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2508	39.73	1.998	2.007	1.994	39.81	2.018	2.010	2.001	1.981
Stddev	.0008	.15	.003	.008	.009	.26	.007	.006	.005	.001
%RSD	.3368	.3886	.1358	.4120	.4730	.6513	.3448	.2784	.2508	.0394
#1	.2498	39.75	1.997	2.013	1.998	39.85	2.019	2.011	2.006	1.981
#2	.2510	39.88	2.001	2.011	2.000	40.04	2.025	2.015	1.996	1.980
#3	.2515	39.57	1.997	1.998	1.983	39.53	2.011	2.004	2.001	1.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.31	39.95	40.02	2.036	2.008	39.68	2.019	1.980	1.995	2.000
Stddev	.13	.13	.13	.003	.006	.20	.006	.011	.006	.004
%RSD	.3248	.3348	.3361	.1445	.3234	.5093	.3068	.5557	.2925	.2107
#1	40.37	40.03	39.99	2.040	2.009	39.77	2.020	1.977	1.995	2.000
#2	40.39	40.03	40.16	2.035	2.014	39.82	2.024	1.993	2.001	2.005
#3	40.16	39.80	39.90	2.035	2.001	39.45	2.012	1.971	1.989	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.815	2.016	2.017	2.020	2.001	1.959	2.019
Stddev	.006	.004	.012	.006	.008	.008	.008
%RSD	.3327	.2156	.5886	.2897	.4114	.4119	.4142
#1	1.815	2.015	2.023	2.026	2.007	1.968	2.018
#2	1.822	2.021	2.024	2.019	2.006	1.954	2.028
#3	1.810	2.013	2.003	2.015	1.992	1.954	2.011
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 11:31:10 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2757.7	6112.3	52117.	4169.7
Stddev	7.1	12.1	115.	18.6
%RSD	.25767	.19778	.22083	.44574
#1	2762.6	6123.1	52059.	4166.6
#2	2749.5	6099.2	52250.	4189.7
#3	2760.9	6114.6	52044.	4152.9

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:37:55 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0151	-.0010	.0001	.0002	.0036	-.0001	-.0001	-.0001
Stddev	.0001	.0099	.0009	.0004	.0000	.0037	.0000	.0001	.0001
%RSD	40.65	65.62	86.06	543.4	22.31	104.0	35.63	59.54	59.09
#1	.0005	.0040	-.0011	.0003	.0001	.0052	-.0001	-.0002	-.0001
#2	.0003	.0232	-.0001	.0003	.0002	-.0007	-.0001	-.0001	.0000
#3	.0002	.0181	-.0018	-.0004	.0002	.0062	-.0001	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0209	.0593	-.0113	-.0002	F.0068	-.0043	-.0003	.0001
Stddev	.0002	.0012	.0178	.0322	.0000	.0018	.0136	.0001	.0003
%RSD	68.52	5.994	30.08	284.4	11.29	26.11	319.5	43.04	264.6
#1	-.0005	.0219	.0584	-.0485	-.0001	.0088	.0104	-.0001	.0002
#2	-.0001	.0212	.0776	.0084	-.0002	.0065	-.0165	-.0004	-.0002
#3	-.0005	.0195	.0420	.0061	-.0002	.0052	-.0068	-.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0010	.0008	.0004	.0002	F.0021	.0008	-.0001	-.0001
Stddev	.0005	.0019	.0002	.0002	.0001	.0002	.0005	.0003	.0000
%RSD	52.63	190.1	24.82	38.17	34.47	9.962	64.79	244.6	26.55
#1	-.0013	.0002	.0007	.0005	.0002	.0022	.0012	-.0002	-.0001
#2	-.0011	-.0004	.0006	.0004	.0002	.0021	.0010	.0002	-.0001
#3	-.0004	.0032	.0010	.0002	.0001	.0018	.0002	-.0003	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 11:37:55 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3114.4	6260.0	53049.	4083.4
Stddev	10.0	20.0	232.	44.3
%RSD	.31992	.31920	.43662	1.0859
#1	3103.8	6243.7	53312.	4126.2
#2	3115.9	6254.0	52874.	4086.3
#3	3123.6	6282.3	52962.	4037.7

Zoom In Zoom Out

Sample Name: FA22073-10 Acquired: 2/16/2015 11:42:49 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 25.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0058	.3676	-.0225	.1887	.0029	240.1	.0009	.0028	.0053	.0040
Stddev	.0085	.2056	.0108	.0031	.0013	1.1	.0025	.0036	.0087	.0120
%RSD	147.3	55.94	48.19	1.652	45.64	.4769	286.6	131.8	164.3	298.2
#1	.0117	.1358	-.0339	.1905	.0044	238.8	.0034	.0068	-.0044	-.0047
#2	.0095	.4388	-.0124	.1851	.0023	240.5	.0009	.0017	.0078	.0177
#3	-.0040	.5281	-.0212	.1905	.0019	240.9	-.0017	-.0003	.0126	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	2.282	37.61	29.65	.0971	.0422	1824.	-.0048	-.0021	-.0207	.0230
Stddev	.096	.33	.97	.0055	.0117	4.	.0015	.0174	.0299	.0154
%RSD	4.218	.8825	3.282	5.713	27.82	.2337	30.74	823.8	144.2	66.92
#1	2.276	37.90	28.73	.0913	.0557	1819.	-.0034	-.0108	-.0542	.0316
#2	2.381	37.25	29.57	.0977	.0372	1827.	-.0047	.0180	.0033	.0052
#3	2.189	37.68	30.67	.1024	.0338	1825.	-.0063	-.0135	-.0113	.0321

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	9.942	.0108	6.162	.0323	.0271	.0024	.0161
Stddev	.041	.0090	.028	.0036	.0188	.0065	.0017
%RSD	.4097	83.90	.4548	11.04	69.45	274.3	10.80
#1	9.899	.0180	6.132	.0282	.0480	.0005	.0180
#2	9.947	.0136	6.187	.0345	.0116	-.0030	.0157
#3	9.980	.0007	6.167	.0342	.0216	.0096	.0146

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2889.6	6117.4	51408.	4044.8
Stddev	8.6	16.6	263.	25.3
%RSD	.29695	.27211	.51243	.62663
#1	2888.6	6130.3	51710.	4045.3
#2	2898.6	6123.3	51284.	4070.0
#3	2881.5	6098.6	51228.	4019.3

Zoom In Zoom Out

Sample Name: FA22073-12 Acquired: 2/16/2015 11:47:14 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0285	-.0008	.0840	.0000	128.8	-.0001	-.0003	.0002	-.0008
Stddev	.0002	.0083	.0003	.0001	.0002	1.1	.0001	.0001	.0001	.0002
%RSD	109.8	29.26	32.68	.1354	485.7	.8907	106.2	53.92	28.67	29.24
#1	.0000	.0377	-.0010	.0841	.0000	129.2	.0000	-.0002	.0002	-.0011
#2	-.0002	.0262	-.0010	.0839	.0002	127.5	-.0002	-.0004	.0002	-.0007
#3	-.0002	.0215	-.0005	.0841	-.0001	129.6	-.0001	-.0002	.0003	-.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.4727	3.334	14.90	.0218	.0019	56.38	-.0002	-.0002	.0004	.0030
Stddev	.0029	.042	.19	.0002	.0004	.45	.0002	.0011	.0008	.0009
%RSD	.6124	1.245	1.297	1.103	20.47	.8060	118.2	632.1	193.7	29.20
#1	.4751	3.337	14.99	.0216	.0023	56.56	.0000	-.0012	.0000	.0036
#2	.4695	3.291	14.68	.0218	.0020	55.86	-.0003	-.0004	-.0001	.0020
#3	.4735	3.374	15.03	.0221	.0015	56.71	-.0002	.0010	.0013	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	7.145	.0016	.6032	.0022	.0006	.0000	.0071
Stddev	.052	.0002	.0032	.0002	.0007	.000	.0002
%RSD	.7250	12.12	.5375	8.627	108.4	341.6	2.418
#1	7.197	.0018	.6054	.0020	-.0002	-.0001	.0073
#2	7.146	.0014	.5995	.0022	.0009	-.0001	.0071
#3	7.093	.0017	.6048	.0024	.0011	.0001	.0070

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2867.4	6134.0	52368.	4169.4
Stddev	12.5	26.3	364.	46.7
%RSD	.43484	.42816	.69456	1.1205
#1	2853.0	6103.8	52766.	4158.1
#2	2875.6	6151.6	52282.	4220.7
#3	2873.6	6146.6	52054.	4129.4

Zoom In Zoom Out

Sample Name: FA22084-5 Acquired: 2/16/2015 11:51:36 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.5475	-.0037	.0252	.0002	202.0	.0050	.0041	.0017	-.0013
Stddev	.002	.0087	.0020	.0005	.0003	1.6	.0002	.0003	.0002	.0007
%RSD	148000.	1.594	53.48	2.025	183.1	.8058	3.068	6.648	10.01	49.21
#1	.0017	.5564	-.0050	.0256	.0000	200.5	.0049	.0042	.0019	-.0016
#2	-.0008	.5390	-.0047	.0246	.0006	201.7	.0051	.0037	.0015	-.0019
#3	-.0009	.5472	-.0014	.0255	.0000	203.7	.0051	.0042	.0017	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.0243	2.478	40.28	.0633	.0002	85.51	.0153	-.0016	.0003	.0022
Stddev	.0066	.090	.39	.0006	.0003	.73	.0006	.0008	.0009	.0030
%RSD	27.14	3.634	.9615	.9921	133.1	.8560	3.991	52.27	326.9	136.4
#1	.0214	2.374	39.89	.0635	.0003	84.97	.0159	-.0021	.0009	.0048
#2	.0197	2.530	40.28	.0626	-.0001	85.22	.0153	-.0006	-.0008	.0028
#3	.0319	2.530	40.66	.0638	.0004	86.34	.0146	-.0020	.0008	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.285	.0002	.1320	.0035	.0010	.0016	.0271
Stddev	.016	.0007	.0009	.0004	.0014	.0004	.0001
%RSD	.7014	299.3	.6771	10.19	149.1	23.24	.4020
#1	2.302	.0004	.1312	.0034	.0009	.0019	.0272
#2	2.271	-.0005	.1319	.0033	.0024	.0012	.0270
#3	2.281	.0008	.1330	.0040	-.0004	.0018	.0270

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2767.9	5925.7	50809.	4003.4
Stddev	13.0	47.8	435.	42.1
%RSD	.46946	.80619	.85694	1.0508
#1	2757.4	5885.0	50757.	4032.4
#2	2782.4	5978.3	51269.	4022.6
#3	2763.8	5913.9	50403.	3955.1

Zoom In Zoom Out

Sample Name: MP28556-MB1 Acquired: 2/16/2015 11:55:58 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0058	-.0016	-.0001	.0001	.0498	-.0002	-.0001	.0001	-.0010
Stddev	.0009	.0008	.0005	.0002	.0001	.0127	.0000	.0001	.0001	.0002
%RSD	260.7	13.72	30.72	189.0	50.35	25.59	20.85	47.30	198.4	15.48
#1	-.0008	.0052	-.0018	.0001	.0001	.0381	-.0002	-.0001	.0001	-.0010
#2	.0007	.0067	-.0010	-.0001	.0002	.0479	-.0002	-.0002	.0002	-.0008
#3	-.0009	.0055	-.0020	-.0002	.0001	.0634	-.0003	-.0001	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	.0661	.0108	-.0002	.0000	.0592	-.0004	-.0005	-.0009	.0019
Stddev	.0008	.0376	.0063	.0001	.000	.0193	.0002	.0002	.0012	.0006
%RSD	15.15	56.90	58.40	27.26	185.0	32.63	39.21	34.94	134.0	33.27
#1	.0051	.0470	.0154	-.0002	-.0001	.0409	-.0006	-.0004	-.0001	.0012
#2	.0057	.1095	.0036	-.0002	.0000	.0795	-.0002	-.0005	-.0003	.0022
#3	.0042	.0419	.0133	-.0001	-.0001	.0573	-.0005	-.0007	-.0022	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0240	.0003	.0001	.0003	.0003	-.0003	.0002
Stddev	.0005	.0002	.0000	.0001	.0007	.0002	.0001
%RSD	2.109	52.49	69.86	24.25	219.9	66.86	41.98
#1	.0242	.0005	.0000	.0002	-.0004	-.0005	.0001
#2	.0244	.0003	.0001	.0004	.0005	-.0001	.0002
#3	.0235	.0002	.0000	.0003	.0009	-.0002	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28556-MB1 Acquired: 2/16/2015 11:55:58 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3081.4	6274.2	53639.	3996.9
Stddev	2.0	2.6	103.	31.6
%RSD	.06522	.04087	.19267	.79114
#1	3079.1	6274.4	53750.	3971.1
#2	3082.4	6276.7	53545.	3987.3
#3	3082.7	6271.5	53622.	4032.1

Zoom In Zoom Out

Sample Name: MP28556-B1 Acquired: 2/16/2015 12:00:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0472	27.99	1.935	2.053	.0513	25.69	.0486	.4969	.2038	.2515
Stddev	.0007	.14	.004	.004	.0001	.08	.0001	.0006	.0010	.0006
%RSD	1.504	.5062	.2277	.1854	.1457	.3302	.1697	.1247	.5084	.2572
#1	.0480	27.83	1.936	2.051	.0512	25.59	.0487	.4976	.2049	.2519
#2	.0467	28.05	1.930	2.058	.0513	25.73	.0485	.4966	.2037	.2519
#3	.0469	28.10	1.939	2.051	.0513	25.75	.0487	.4965	.2028	.2508
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.08	25.60	26.10	.4991	.5018	25.65	.5005	.4750	.4798	1.927
Stddev	.06	.03	.12	.0013	.0002	.08	.0008	.0020	.0027	.004
%RSD	.2066	.1109	.4778	.2530	.0327	.3026	.1536	.4183	.5542	.2339
#1	27.03	25.63	26.00	.4998	.5019	25.56	.5014	.4736	.4829	1.923
#2	27.09	25.61	26.06	.4976	.5018	25.67	.5000	.4741	.4787	1.928
#3	27.14	25.57	26.24	.4998	.5016	25.71	.5001	.4772	.4779	1.931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0273	.5291	.5149	.5085	1.909	.4712	.4900
Stddev	.0008	.0019	.0007	.0010	.008	.0028	.0016
%RSD	2.792	.3511	.1437	.1900	.4409	.5872	.3352
#1	.0269	.5308	.5140	.5093	1.915	.4740	.4909
#2	.0268	.5294	.5152	.5074	1.900	.4685	.4881
#3	.0281	.5272	.5154	.5089	1.914	.4713	.4910
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28556-B1 Acquired: 2/16/2015 12:00:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2917.9	6309.2	53531.	4167.7
Stddev	2.9	5.6	271.	7.1
%RSD	.09978	.08834	.50659	.17050
#1	2921.0	6308.6	53403.	4175.8
#2	2917.6	6315.0	53843.	4162.8
#3	2915.2	6303.9	53348.	4164.5

Zoom In Zoom Out

Sample Name: FA22100-1 Acquired: 2/16/2015 12:04:38 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1100	-.0008	.1009	.0001	27.35	-.0002	.0002	.0012	.0022
Stddev	.0002	.0153	.0002	.0003	.0000	.02	.0001	.0002	.0001	.0002
%RSD	188.6	13.91	22.50	.3213	27.36	.0839	53.69	113.3	8.626	10.82
#1	-.0004	.0933	-.0010	.1012	.0001	27.33	-.0001	.0004	.0011	.0022
#2	-.0001	.1133	-.0009	.1011	.0001	27.37	-.0002	.0001	.0012	.0025
#3	.0001	.1234	-.0006	.1006	.0001	27.34	-.0001	.0000	.0013	.0020

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.360	5.594	1.986	.1092	.0032	63.14	.0009	-.0006	.0002	.0025
Stddev	.002	.048	.009	.0003	.0001	.14	.0002	.0004	.0002	.0005
%RSD	.0660	.8621	.4752	.2919	3.578	.2291	20.05	60.03	66.01	18.00
#1	3.361	5.607	1.997	.1095	.0033	63.09	.0010	-.0011	.0002	.0030
#2	3.362	5.541	1.979	.1091	.0031	63.30	.0007	-.0005	.0004	.0024
#3	3.358	5.635	1.984	.1089	.0032	63.02	.0010	-.0004	.0001	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6081	.0004	.3894	.0058	.0014	.0009	.0381
Stddev	.0025	.0001	.0007	.0005	.0017	.0002	.0000
%RSD	.4036	24.37	.1735	8.824	118.6	23.13	.1132
#1	.6107	.0005	.3897	.0053	.0021	.0009	.0381
#2	.6080	.0004	.3898	.0063	.0027	.0011	.0381
#3	.6058	.0003	.3886	.0057	-.0005	.0007	.0380

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2897.5	6117.6	52035.	4094.5
Stddev	4.0	7.5	219.	12.5
%RSD	.13662	.12282	.42005	.30644
#1	2893.8	6109.2	51858.	4107.4
#2	2897.0	6119.7	52279.	4082.4
#3	2901.7	6123.8	51968.	4093.7

Zoom In Zoom Out

Sample Name: MP28556-D1 Acquired: 2/16/2015 12:08:58 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.1132	-.0015	.0999	.0000	26.79	-.0002	.0000	.0013	.0021
Stddev	.0004	.0128	.0014	.0004	.0001	.13	.0000	.000	.0002	.0002
%RSD	132.3	11.28	94.36	.3970	344.1	.4845	11.23	261.5	14.25	10.86
#1	.0001	.1006	-.0031	.0999	.0001	26.74	-.0002	.0000	.0011	.0022
#2	.0000	.1130	-.0012	.0994	-.0001	26.69	-.0002	-.0001	.0012	.0022
#3	.0007	.1261	-.0003	.1002	.0000	26.93	-.0002	.0000	.0015	.0018

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.297	5.462	1.962	.1077	.0027	62.09	.0008	-.0003	.0000	.0033
Stddev	.010	.045	.034	.0003	.0001	.33	.0002	.0005	.0011	.0005
%RSD	.2939	.8248	1.718	.2348	4.967	.5383	18.96	146.7	10960.	16.72
#1	3.301	5.411	1.963	.1076	.0029	61.93	.0010	.0002	-.0008	.0028
#2	3.286	5.494	1.928	.1075	.0027	61.86	.0007	-.0006	.0013	.0031
#3	3.305	5.481	1.995	.1080	.0026	62.47	.0007	-.0006	-.0005	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.5952	.0002	.3832	.0052	-.0004	.0008	.0375
Stddev	.0017	.0001	.0024	.0008	.0017	.0002	.0000
%RSD	.2825	79.67	.6184	15.42	388.0	27.76	.0871
#1	.5939	.0003	.3825	.0053	-.0014	.0008	.0374
#2	.5945	.0002	.3813	.0043	.0015	.0010	.0375
#3	.5971	.0000	.3859	.0059	-.0014	.0005	.0374

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2892.1	6106.3	51929.	4073.6
Stddev	8.5	9.1	233.	23.8
%RSD	.29313	.14976	.44845	.58376
#1	2884.3	6104.4	51885.	4094.9
#2	2890.8	6116.3	52180.	4078.0
#3	2901.1	6098.3	51721.	4047.9

Zoom In Zoom Out

Sample Name: MP28556-SD1 Acquired: 2/16/2015 12:13:19 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0009	.1438	-.0054	.1034	.0000	26.80	-.0009	-.0009	.0005	-.0003
Stddev	.0021	.0850	.0017	.0019	.0004	.18	.0002	.0003	.0012	.0019
%RSD	230.0	59.15	30.53	1.867	2545.	.6853	16.80	31.70	225.3	695.4
#1	.0003	.2419	-.0043	.1019	.0002	26.59	-.0011	-.0008	.0012	-.0012
#2	.0003	.0910	-.0047	.1056	.0003	26.94	-.0008	-.0007	.0012	.0019
#3	-.0034	.0985	-.0073	.1027	-.0004	26.86	-.0009	-.0013	-.0008	-.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	3.182	5.305	1.818	.1021	.0002	60.05	-.0010	-.0023	.0002	.0162
Stddev	.040	.216	.092	.0004	.0009	.52	.0010	.0032	.0057	.0057
%RSD	1.251	4.070	5.077	.3746	480.3	.8630	100.8	140.0	2527.	35.53
#1	3.162	5.248	1.749	.1024	-.0005	59.48	-.0021	.0010	.0048	.0132
#2	3.228	5.544	1.784	.1021	-.0001	60.50	-.0009	-.0055	-.0062	.0228
#3	3.157	5.123	1.923	.1017	.0012	60.15	-.0001	-.0024	.0021	.0125

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.5874	.0005	.3677	.0036	.0023	-.0001	.0396
Stddev	.0067	.0016	.0032	.0004	.0034	.0005	.0005
%RSD	1.139	341.0	.8719	9.862	145.9	427.7	1.162
#1	.5929	-.0013	.3644	.0037	-.0015	-.0006	.0396
#2	.5894	.0020	.3708	.0038	.0047	.0003	.0400
#3	.5799	.0007	.3678	.0032	.0038	.0000	.0391

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3030.3	6236.4	52795.	3986.5
Stddev	6.2	17.3	89.	43.0
%RSD	.20601	.27740	.16804	1.0782
#1	3023.3	6222.2	52739.	4035.5
#2	3032.0	6231.4	52749.	3968.7
#3	3035.5	6255.7	52897.	3955.3

Zoom In Zoom Out

Sample Name: MP28556-PS1 Acquired: 2/16/2015 12:17:43 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0515	2.726	.1039	.3652	.0529	31.18	.0526	.0533	.0550	.1093
Stddev	.0010	.011	.0009	.0031	.0007	.31	.0001	.0001	.0003	.0003
%RSD	1.853	.3891	.8868	.8352	1.260	.9807	.1037	.2724	.5101	.2634
#1	.0520	2.719	.1039	.3619	.0521	30.84	.0526	.0535	.0553	.1091
#2	.0521	2.721	.1030	.3679	.0531	31.26	.0526	.0532	.0547	.1092
#3	.0504	2.738	.1048	.3659	.0534	31.43	.0525	.0532	.0551	.1096

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	6.287	15.38	6.898	.1585	.1072	71.18	.1080	.0498	.1034	.1035
Stddev	.060	.21	.064	.0005	.0002	.49	.0002	.0005	.0016	.0014
%RSD	.9565	1.393	.9235	.3116	.1451	.6840	.2216	.9365	1.555	1.357
#1	6.218	15.17	6.825	.1591	.1071	70.62	.1077	.0496	.1018	.1044
#2	6.328	15.38	6.922	.1581	.1072	71.38	.1082	.0503	.1050	.1041
#3	6.316	15.60	6.946	.1583	.1074	71.53	.1080	.0495	.1035	.1019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.6071	.0522	.4228	.1084	.1012	.0517	.2976
Stddev	.0025	.0002	.0040	.0006	.0004	.0006	.0006
%RSD	.4115	.3227	.9493	.5579	.3977	1.186	.2162
#1	.6092	.0523	.4182	.1083	.1016	.0523	.2971
#2	.6078	.0520	.4248	.1078	.1008	.0511	.2984
#3	.6044	.0523	.4255	.1090	.1011	.0518	.2974

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2856.6	6134.4	51974.	4103.8
Stddev	10.0	10.6	459.	39.5
%RSD	.35110	.17264	.88262	.96232
#1	2867.6	6138.8	51669.	4143.4
#2	2847.8	6122.4	52502.	4103.8
#3	2854.5	6142.2	51752.	4064.4

Zoom In Zoom Out

Sample Name: MP28556-S1 Acquired: 2/16/2015 12:22:00 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0493	28.21	2.003	2.183	.0519	52.07	.0496	.5039	.2070
Stddev	.0005	.02	.011	.007	.0001	.10	.0001	.0019	.0004
%RSD	1.010	.0703	.5293	.3220	.2223	.1944	.2981	.3783	.1939
#1	.0488	28.19	2.004	2.189	.0520	51.95	.0497	.5042	.2066
#2	.0491	28.23	1.991	2.175	.0518	52.12	.0494	.5019	.2070
#3	.0498	28.21	2.012	2.184	.0519	52.14	.0497	.5057	.2074

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)
Avg	.2609	30.27	31.32	27.91	.6102	.5164	F86.92	.5085	.4873
Stddev	.0007	.01	.04	.24	.0005	.0012	.13	.0030	.0013
%RSD	.2846	.0304	.1129	.8724	.0838	.2295	.1479	.5948	.2682
#1	.2612	30.28	31.35	27.74	.6098	.5167	87.01	.5077	.4858
#2	.2601	30.27	31.28	27.81	.6108	.5151	86.77	.5060	.4881
#3	.2615	30.26	31.34	28.19	.6101	.5175	86.97	.5118	.4880

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.4950	1.955	.6122	.5346	.8978	.5241	1.939	.4823	.5343
Stddev	.0010	.005	.0052	.0012	.0016	.0009	.007	.0014	.0032
%RSD	.2012	.2757	.8545	.2246	.1770	.1635	.3589	.2922	.5967
#1	.4953	1.956	.6116	.5357	.8992	.5241	1.944	.4816	.5335
#2	.4939	1.949	.6072	.5333	.8961	.5233	1.931	.4813	.5316
#3	.4958	1.960	.6177	.5349	.8981	.5250	1.943	.4839	.5378

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2772.2	6113.8	51792.	4140.8
Stddev	5.7	25.5	100.	36.8
%RSD	.20522	.41644	.19386	.88816
#1	2773.9	6123.0	51895.	4182.6
#2	2776.9	6133.5	51694.	4126.2
#3	2765.9	6085.1	51787.	4113.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 12:26:12 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2563	40.96	1.987	2.067	2.023	40.22	2.016	2.025	2.023	2.028
Stddev	.0015	.23	.007	.011	.004	.16	.006	.005	.005	.001
%RSD	.5951	.5729	.3798	.5299	.2091	.3966	.2972	.2322	.2587	.0256
#1	.2563	40.81	1.989	2.054	2.020	40.16	2.018	2.027	2.020	2.028
#2	.2578	41.23	1.993	2.073	2.027	40.40	2.020	2.029	2.029	2.027
#3	.2547	40.83	1.978	2.073	2.020	40.09	2.009	2.020	2.020	2.027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.11	40.48	41.51	2.038	2.017	40.17	2.002	1.998	1.986	2.005
Stddev	.15	.11	.03	.003	.004	.12	.007	.005	.008	.011
%RSD	.3581	.2654	.0695	.1436	.1952	.2924	.3770	.2679	.3900	.5517
#1	40.95	40.54	41.50	2.035	2.017	40.07	2.005	2.003	1.991	2.007
#2	41.25	40.55	41.54	2.038	2.021	40.30	2.007	1.998	1.989	2.015
#3	41.14	40.36	41.48	2.040	2.013	40.15	1.993	1.992	1.977	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.808	2.045	2.030	2.015	2.015	1.960	1.995
Stddev	.006	.005	.009	.003	.006	.003	.007
%RSD	.3414	.2473	.4548	.1520	.3038	.1474	.3735
#1	1.814	2.044	2.022	2.015	2.022	1.962	1.999
#2	1.807	2.050	2.040	2.012	2.013	1.956	2.000
#3	1.802	2.041	2.029	2.018	2.010	1.961	1.986
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 12:26:12 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2739.7	6143.7	51907.	4024.8
Stddev	5.4	12.4	204.	16.3
%RSD	.19617	.20230	.39257	.40562
#1	2734.6	6140.8	52142.	4006.9
#2	2739.1	6133.0	51801.	4028.6
#3	2745.3	6157.3	51779.	4038.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 12:30:24 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0049	-.0001	.0005	.0005	.0114	.0002	.0002	.0003
Stddev	.0007	.0234	.0001	.0005	.0001	.0013	.0001	.0001	.0001
%RSD	112.9	481.5	99.53	97.83	17.49	11.44	44.20	42.76	22.69
#1	.0011	.0064	.0000	.0009	.0005	.0124	.0002	.0002	.0004
#2	-.0002	.0275	-.0001	.0007	.0006	.0120	.0002	.0001	.0002
#3	.0009	-.0192	-.0002	-.0001	.0004	.0099	.0004	.0003	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0307	.0842	.0089	.0002	F.0045	.0447	.0001	-.0003
Stddev	.0003	.0083	.0205	.0235	.0000	.0015	.0043	.0002	.0008
%RSD	42.72	27.14	24.37	262.3	17.97	33.41	9.593	308.9	247.0
#1	-.0007	.0370	.0650	-.0033	.0002	.0061	.0493	.0000	-.0002
#2	-.0009	.0338	.1058	-.0059	.0002	.0042	.0408	-.0001	.0004
#3	-.0003	.0212	.0818	.0360	.0001	.0031	.0439	.0003	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0010	.0017	.0007	.0004	.0019	F.0021	.0003	.0002
Stddev	.0009	.0022	.0004	.0003	.0001	.0003	.0005	.0001	.0001
%RSD	1359.	218.2	22.09	49.82	30.28	15.76	25.82	46.12	34.58
#1	.0001	.0017	.0017	.0009	.0004	.0022	.0015	.0004	.0001
#2	-.0011	.0027	.0013	.0003	.0002	.0017	.0025	.0001	.0003
#3	.0008	-.0014	.0020	.0009	.0004	.0017	.0021	.0004	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							.0020		
Low Limit							-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 12:30:24 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3115.7	6355.1	53993.	4038.5
Stddev	6.6	12.3	254.	7.9
%RSD	.21302	.19373	.47059	.19494
#1	3108.1	6347.3	54124.	4039.9
#2	3119.8	6348.7	53700.	4030.0
#3	3119.3	6369.3	54154.	4045.6

Zoom In Zoom Out

Sample Name: MP28556-S2 Acquired: 2/16/2015 12:34:50 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	28.84	1.983	2.210	.0523	52.22	.0493	.5048	.2084
Stddev	.0016	.06	.000	.006	.0002	.17	.0001	.0008	.0002
%RSD	3.235	.1917	.0175	.2709	.4489	.3319	.1709	.1492	.1043
#1	.0515	28.78	1.983	2.203	.0523	52.20	.0492	.5056	.2085
#2	.0491	28.88	1.984	2.214	.0520	52.05	.0494	.5041	.2081
#3	.0485	28.86	1.983	2.212	.0525	52.40	.0492	.5048	.2085

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2624	30.74	31.51	28.49	.6098	.5186	F87.33	.5053	.4874
Stddev	.0002	.10	.08	.11	.0003	.0009	.15	.0003	.0032
%RSD	.0700	.3186	.2475	.3900	.0447	.1652	.1728	.0662	.6584
#1	.2626	30.64	31.59	28.42	.6101	.5195	87.16	.5057	.4896
#2	.2622	30.74	31.44	28.44	.6095	.5178	87.36	.5050	.4837
#3	.2623	30.84	31.50	28.62	.6099	.5187	87.46	.5052	.4889

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4937	1.948	.5897	.5375	.8975	.5248	1.943	.4814	.5297
Stddev	.0020	.002	.0037	.0011	.0021	.0001	.003	.0006	.0010
%RSD	.4000	.1227	.6263	.1970	.2385	.0206	.1588	.1321	.1848
#1	.4928	1.946	.5940	.5385	.8956	.5249	1.944	.4817	.5308
#2	.4960	1.946	.5881	.5364	.8972	.5247	1.940	.4807	.5293
#3	.4924	1.951	.5871	.5377	.8998	.5248	1.946	.4818	.5289

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2750.3	6087.6	51243.	4029.2
Stddev	5.9	6.2	231.	26.6
%RSD	.21612	.10141	.45072	.66128
#1	2746.5	6081.7	51071.	4026.5
#2	2757.1	6094.0	51506.	4057.1
#3	2747.2	6087.2	51153.	4004.0

Zoom In Zoom Out

Sample Name: FA22103-1F Acquired: 2/16/2015 12:39:03 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.1010	-.0013	.1314	.0003	6.850	-.0002	.0014	.0003	-.0010
Stddev	.0005	.0150	.0002	.0006	.0000	.029	.0001	.0001	.0002	.0002
%RSD	10840.	14.81	16.02	.4783	8.292	.4290	45.70	3.976	67.53	15.50
#1	-.0006	.0851	-.0016	.1310	.0003	6.876	-.0001	.0014	.0001	-.0012
#2	.0005	.1147	-.0013	.1322	.0003	6.855	-.0001	.0014	.0005	-.0009
#3	.0002	.1032	-.0011	.1311	.0004	6.818	-.0002	.0013	.0003	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0388	3.090	3.108	.0355	.0003	6.387	.0021	-.0002	-.0002	.0029
Stddev	.0041	.054	.019	.0001	.0001	.052	.0003	.0005	.0006	.0015
%RSD	10.47	1.753	.6066	.3590	30.39	.8162	12.11	243.3	282.7	51.38
#1	.0404	3.151	3.091	.0356	.0004	6.410	.0023	-.0006	.0002	.0037
#2	.0341	3.073	3.128	.0355	.0003	6.423	.0023	-.0005	.0001	.0012
#3	.0417	3.047	3.105	.0353	.0002	6.327	.0018	.0004	-.0010	.0037

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.617	.0006	.0905	.0014	.0014	.0003	.0075
Stddev	.004	.0001	.0006	.0001	.0006	.0002	.0001
%RSD	.0974	15.31	.6761	8.990	44.34	58.18	.9793
#1	4.619	.0006	.0910	.0015	.0021	.0001	.0076
#2	4.621	.0007	.0908	.0012	.0009	.0005	.0074
#3	4.612	.0006	.0898	.0014	.0013	.0002	.0075

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3041.1	6318.1	53873.	4021.9
Stddev	11.4	12.1	111.	24.2
%RSD	.37372	.19140	.20675	.60113
#1	3053.2	6320.8	53806.	4013.8
#2	3030.7	6304.8	54001.	4002.7
#3	3039.5	6328.5	53811.	4049.0

Zoom In Zoom Out

Sample Name: FA22103-2F Acquired: 2/16/2015 12:43:26 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	3.927	-.0005	.0373	.0001	4.204	-.0002	-.0001	.0049	.0024
Stddev	.0005	.026	.0004	.0007	.0001	.013	.0001	.0001	.0001	.0004
%RSD	493.2	.6658	97.34	1.947	95.79	.3131	35.12	122.0	1.957	14.64
#1	.0005	3.905	.0000	.0365	.0002	4.207	-.0002	.0000	.0048	.0025
#2	-.0004	3.920	-.0009	.0373	.0001	4.190	-.0002	-.0001	.0048	.0020
#3	-.0004	3.956	-.0004	.0380	.0000	4.216	-.0003	-.0002	.0050	.0027

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	6.468	3.283	1.301	.0132	.0002	7.235	.0004	.0027	-.0001	.0031
Stddev	.018	.063	.025	.0000	.0001	.026	.0000	.0004	.0004	.0010
%RSD	.2860	1.906	1.892	.2133	64.88	.3539	9.193	14.51	587.6	33.22
#1	6.449	3.355	1.299	.0132	.0003	7.232	.0004	.0030	-.0001	.0019
#2	6.469	3.252	1.327	.0131	.0001	7.212	.0004	.0029	.0003	.0039
#3	6.486	3.241	1.278	.0131	.0002	7.263	.0004	.0023	-.0005	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.433	.0002	.0369	.0197	.0001	.0085	.0119
Stddev	.014	.0001	.0001	.0002	.0008	.0002	.0001
%RSD	.1862	46.01	.2867	1.173	1229.	2.241	.7762
#1	7.443	.0003	.0370	.0197	-.0001	.0085	.0120
#2	7.439	.0003	.0369	.0199	-.0007	.0084	.0119
#3	7.417	.0001	.0369	.0194	.0010	.0088	.0118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3008.1	6325.8	53681.	4098.9
Stddev	3.4	9.1	117.	6.0
%RSD	.11344	.14342	.21729	.14632
#1	3011.1	6333.1	53776.	4104.5
#2	3004.4	6315.7	53551.	4099.8
#3	3008.9	6328.7	53716.	4092.6

Zoom In Zoom Out

Sample Name: FA22103-3F Acquired: 2/16/2015 12:47:45 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.2880	-.0004	.2327	.0004	5.664	-.0002	.0015	.0002	-.0009
Stddev	.0004	.0056	.0005	.0007	.0001	.036	.0001	.0001	.0001	.0004
%RSD	522.4	1.947	136.6	.3148	17.61	.6329	29.39	5.922	38.77	47.45
#1	.0003	.2883	-.0002	.2319	.0005	5.643	-.0002	.0015	.0002	-.0011
#2	-.0004	.2935	-.0009	.2329	.0004	5.643	-.0002	.0016	.0001	-.0011
#3	.0003	.2823	.0001	.2333	.0003	5.705	-.0001	.0014	.0001	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0200	2.479	5.332	.0244	-.0003	3.172	.0016	.0000	-.0004	.0024
Stddev	.0019	.044	.080	.0000	.0001	.025	.0001	.0006	.0002	.0006
%RSD	9.576	1.761	1.492	.1602	32.94	.7824	9.016	2922.	51.16	27.01
#1	.0218	2.449	5.297	.0243	-.0002	3.193	.0017	.0000	-.0002	.0020
#2	.0204	2.529	5.276	.0244	-.0003	3.144	.0015	-.0006	-.0005	.0031
#3	.0180	2.459	5.423	.0244	-.0004	3.177	.0015	.0007	-.0004	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.900	-.0003	.1015	.0001	-.0004	-.0003	.0091
Stddev	.003	.0001	.0003	.0001	.0005	.0002	.0001
%RSD	.1774	31.39	.2585	128.0	131.1	47.03	.8530
#1	1.904	-.0003	.1013	.0000	.0001	-.0003	.0092
#2	1.899	-.0002	.1013	.0001	-.0004	-.0005	.0091
#3	1.898	-.0003	.1018	.0002	-.0008	-.0002	.0090

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3022.4	6282.1	53199.	3981.0
Stddev	.8	5.3	274.	54.1
%RSD	.02556	.08490	.51553	1.3584
#1	3021.9	6278.4	53390.	4020.3
#2	3022.0	6279.6	53321.	4003.4
#3	3023.3	6288.2	52885.	3919.3

Zoom In Zoom Out

Sample Name: FA22103-4F Acquired: 2/16/2015 12:52:07 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3422	-.0020	.2734	.0006	5.165	-.0003	.0019	.0000	-.0010
Stddev	.0004	.0080	.0015	.0007	.0001	.016	.0000	.0001	.000	.0003
%RSD	350.4	2.351	77.24	.2684	11.16	.3099	9.770	5.578	384.0	26.28
#1	-.0003	.3337	-.0033	.2739	.0006	5.170	-.0003	.0019	-.0001	-.0009
#2	.0003	.3497	-.0003	.2738	.0005	5.178	-.0003	.0018	.0000	-.0008
#3	-.0003	.3432	-.0025	.2726	.0007	5.148	-.0003	.0020	.0000	-.0013

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0005	1.834	4.916	.0448	-.0005	4.495	.0036	.0003	-.0003	.0019
Stddev	.0008	.029	.037	.0001	.0001	.005	.0001	.0003	.0002	.0005
%RSD	156.7	1.563	.7476	.2173	30.21	.1024	2.160	95.02	71.43	24.14
#1	.0003	1.867	4.908	.0448	-.0006	4.493	.0037	.0006	-.0001	.0017
#2	.0014	1.820	4.956	.0447	-.0003	4.491	.0035	.0001	-.0005	.0015
#3	-.0002	1.815	4.884	.0449	-.0005	4.500	.0037	.0002	-.0002	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.034	-.0001	.1066	-.0001	-.0009	.0000	.0092
Stddev	.004	.0002	.0004	.0001	.0001	.0002	.0000
%RSD	.1106	418.8	.3689	89.39	14.69	470.3	.3486
#1	4.030	-.0001	.1066	-.0002	-.0010	.0001	.0091
#2	4.039	.0002	.1070	-.0001	-.0008	.0001	.0092
#3	4.034	-.0003	.1062	.0000	-.0010	-.0001	.0091

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3035.5	6325.9	53407.	3998.4
Stddev	9.8	16.9	170.	29.3
%RSD	.32237	.26638	.31809	.73275
#1	3033.3	6326.1	53210.	3973.3
#2	3026.9	6308.9	53505.	3991.4
#3	3046.1	6342.6	53504.	4030.6

Zoom In Zoom Out

Sample Name: FA22103-5F Acquired: 2/16/2015 12:56:30 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.2673	-.0015	.0582	.0001	4.630	-.0002	.0001	.0001	-.0008
Stddev	.0005	.0054	.0007	.0006	.0001	.029	.0000	.0001	.0002	.0004
%RSD	728.9	2.015	47.55	1.101	52.76	.6335	16.50	54.33	198.3	43.92
#1	.0002	.2612	-.0014	.0587	.0002	4.656	-.0003	.0002	-.0001	-.0004
#2	-.0007	.2695	-.0008	.0575	.0001	4.598	-.0002	.0002	.0001	-.0009
#3	.0003	.2713	-.0022	.0585	.0001	4.635	-.0002	.0001	.0003	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0171	9.894	2.128	.0071	-.0004	2.083	-.0002	.0001	-.0008	.0024
Stddev	.0057	.045	.017	.0000	.0001	.004	.0002	.0008	.0013	.0015
%RSD	33.22	.4511	.7799	.3580	29.48	.1883	78.56	1355.	173.6	61.75
#1	.0196	9.855	2.113	.0071	-.0003	2.087	-.0004	-.0008	.0004	.0024
#2	.0106	9.885	2.125	.0071	-.0004	2.079	-.0001	.0003	-.0022	.0009
#3	.0212	9.943	2.146	.0072	-.0006	2.083	-.0001	.0007	-.0005	.0038

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8795	-.0001	.0124	.0001	-.0001	.0001	.0055
Stddev	.0018	.0001	.0001	.0000	.0003	.0003	.0001
%RSD	.1999	81.68	.9461	45.11	284.1	217.9	.9351
#1	.8798	-.0002	.0125	.0000	.0002	-.0002	.0054
#2	.8776	.0000	.0123	.0000	-.0004	.0003	.0055
#3	.8811	-.0002	.0123	.0001	-.0002	.0003	.0054

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3057.9	6354.6	53543.	4003.3
Stddev	4.6	23.6	357.	9.4
%RSD	.15150	.37173	.66624	.23447
#1	3052.6	6327.5	53269.	4008.7
#2	3060.2	6366.1	53413.	3992.4
#3	3061.0	6370.4	53946.	4008.7

Zoom In Zoom Out

Sample Name: FA22103-6F Acquired: 2/16/2015 13:00:55 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.2474	-.0011	.2342	.0010	3.203	-.0002	.0045	.0001	-.0011
Stddev	.0010	.0088	.0004	.0013	.0001	.016	.0000	.0001	.0004	.0005
%RSD	170.2	3.545	37.79	.5553	7.124	.5027	17.80	2.300	616.4	44.41
#1	-.0016	.2570	-.0016	.2357	.0010	3.219	-.0002	.0045	-.0003	-.0006
#2	.0004	.2398	-.0009	.2338	.0009	3.187	-.0002	.0045	.0000	-.0016
#3	-.0005	.2455	-.0009	.2332	.0011	3.204	-.0002	.0043	.0005	-.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0103	4.751	2.920	.0183	-.0005	2.110	.0051	-.0002	.0004	.0017
Stddev	.0024	.065	.022	.0000	.0002	.008	.0003	.0007	.0011	.0012
%RSD	23.72	1.370	.7516	.0249	31.25	.3821	6.156	404.4	324.7	69.76
#1	.0086	4.809	2.945	.0183	-.0007	2.109	.0049	.0001	-.0010	.0030
#2	.0131	4.765	2.911	.0183	-.0004	2.119	.0054	.0003	.0010	.0010
#3	.0091	4.681	2.904	.0183	-.0006	2.103	.0049	-.0009	.0010	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.591	-.0001	.0593	.0000	-.0003	-.0002	.0115
Stddev	.007	.0003	.0003	.0000	.0009	.0002	.0001
%RSD	.2769	439.5	.5348	48.97	303.6	82.90	.9675
#1	2.598	.0001	.0596	.0000	-.0004	-.0003	.0116
#2	2.584	.0001	.0590	.0000	.0006	.0000	.0114
#3	2.591	-.0005	.0593	.0000	-.0011	-.0002	.0115

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3042.7	6296.9	53456.	4001.3
Stddev	8.6	.4	217.	27.3
%RSD	.28114	.00660	.40555	.68300
#1	3051.4	6296.9	53284.	3970.0
#2	3034.3	6296.5	53385.	4020.4
#3	3042.5	6297.3	53700.	4013.5

Zoom In Zoom Out

Sample Name: FA22103-7F Acquired: 2/16/2015 13:05:18 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.4055	-.0010	.2446	.0009	7.158	-.0003	.0024	.0002	-.0007
Stddev	.0006	.0073	.0005	.0008	.0001	.003	.0000	.0002	.0001	.0002
%RSD	2908.	1.810	44.55	.3186	13.32	.0433	17.30	8.693	50.88	35.92
#1	.0006	.4137	-.0006	.2454	.0009	7.157	-.0002	.0025	.0002	-.0004
#2	.0001	.3996	-.0015	.2446	.0007	7.155	-.0003	.0022	.0003	-.0008
#3	-.0006	.4031	-.0011	.2439	.0009	7.161	-.0003	.0026	.0001	-.0008

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0098	7.586	3.586	.0234	-.0005	3.243	.0033	.0004	.0001	.0010
Stddev	.0019	.047	.003	.0000	.0001	.013	.0003	.0010	.0009	.0005
%RSD	19.82	.6135	.0838	.1381	19.84	.3927	8.172	232.8	672.3	50.79
#1	.0113	7.626	3.587	.0234	-.0005	3.251	.0034	-.0004	.0006	.0014
#2	.0076	7.535	3.583	.0234	-.0007	3.228	.0036	.0002	.0006	.0004
#3	.0104	7.597	3.588	.0234	-.0005	3.250	.0030	.0015	-.0009	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.810	.0001	.0666	.0000	-.0007	-.0002	.0110
Stddev	.005	.0001	.0003	.0001	.0010	.0003	.0000
%RSD	.2815	101.8	.5138	201.6	138.7	163.1	.4288
#1	1.813	.0001	.0666	.0000	-.0016	-.0001	.0110
#2	1.812	.0000	.0670	.0000	.0004	.0000	.0110
#3	1.804	.0003	.0663	.0002	-.0010	-.0005	.0109

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2976.9	6194.6	52925.	4014.8
Stddev	1.1	7.2	62.	26.6
%RSD	.03760	.11663	.11693	.66178
#1	2977.2	6199.3	52953.	4043.3
#2	2975.6	6186.3	52854.	4010.5
#3	2977.8	6198.1	52968.	3990.7

Zoom In Zoom Out

Sample Name: FA22104-3 Acquired: 2/16/2015 13:09:40 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	.4604	.0052	.0012	-.0001	22.06	-.0002	-.0003	.0013	.0007
Stddev	.0001	.0100	.0009	.0002	.0001	.09	.0000	.0000	.0003	.0002
%RSD	17.85	2.173	17.47	15.55	105.2	.4107	17.69	15.86	25.07	31.83
#1	-.0007	.4711	.0042	.0012	.0000	22.05	-.0002	-.0003	.0015	.0009
#2	-.0007	.4512	.0059	.0014	-.0001	22.15	-.0003	-.0002	.0009	.0005
#3	-.0005	.4588	.0054	.0010	-.0002	21.97	-.0002	-.0003	.0014	.0007

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1564	1.106	1.226	.0003	.0005	5.431	-.0002	.0006	.0003	.0024
Stddev	.0022	.039	.018	.0001	.0002	.018	.0002	.0008	.0003	.0017
%RSD	1.393	3.502	1.459	20.27	32.90	.3374	117.9	130.2	100.5	72.62
#1	.1586	1.104	1.220	.0003	.0006	5.422	-.0003	.0013	.0005	.0043
#2	.1563	1.146	1.211	.0003	.0005	5.452	.0001	-.0002	.0005	.0019
#3	.1542	1.069	1.246	.0002	.0003	5.419	-.0002	.0008	.0000	.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.725	-.0001	.0378	.0012	-.0009	.0008	.0314
Stddev	.004	.0003	.0002	.0000	.0007	.0003	.0001
%RSD	.2083	180.6	.5746	2.005	76.14	33.15	.4216
#1	1.729	-.0003	.0379	.0011	-.0014	.0009	.0314
#2	1.723	-.0002	.0379	.0012	-.0013	.0005	.0312
#3	1.722	.0001	.0375	.0012	-.0001	.0010	.0315

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2922.3	6118.5	52186.	3925.6
Stddev	11.7	2.3	516.	35.3
%RSD	.40024	.03788	.98889	.89892
#1	2930.9	6120.4	52429.	3952.7
#2	2926.9	6119.1	51593.	3885.7
#3	2909.0	6115.9	52535.	3938.5

Zoom In Zoom Out

Sample Name: FA22131-1F Acquired: 2/16/2015 13:14:03 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0010	.0329	.0017	.1994	.0001	34.19	-.0004	.0003	.0006	-.0008
Stddev	.0003	.0069	.0006	.0002	.0000	.11	.0001	.0002	.0002	.0005
%RSD	31.16	21.14	32.60	.1204	53.05	.3215	14.65	47.57	36.61	70.08
#1	-.0007	.0407	.0019	.1997	.0000	34.24	-.0003	.0004	.0009	-.0008
#2	-.0013	.0305	.0021	.1992	.0001	34.06	-.0004	.0001	.0005	-.0013
#3	-.0011	.0274	.0011	.1994	.0001	34.26	-.0004	.0004	.0005	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	18.38	3.816	16.28	.0554	.0007	50.91	.0006	-.0016	.0006	.0035
Stddev	.05	.060	.05	.0002	.0001	.12	.0001	.0008	.0004	.0005
%RSD	.2507	1.570	.3287	.3461	12.17	.2353	23.85	53.81	58.35	15.00
#1	18.41	3.753	16.33	.0555	.0008	51.00	.0007	-.0021	.0008	.0030
#2	18.33	3.821	16.23	.0552	.0007	50.77	.0005	-.0006	.0008	.0040
#3	18.40	3.873	16.29	.0554	.0007	50.95	.0007	-.0020	.0002	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.297	-.0001	.4245	.0007	-.0029	.0010	.0055
Stddev	.038	.0003	.0007	.0001	.0006	.0003	.0000
%RSD	.5269	197.1	.1589	8.132	22.25	32.05	.8707
#1	7.266	-.0004	.4244	.0007	-.0036	.0008	.0055
#2	7.340	.0000	.4239	.0008	-.0024	.0008	.0056
#3	7.284	.0000	.4253	.0007	-.0026	.0013	.0055

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2827.8	6150.6	52214.	4041.4
Stddev	16.7	29.4	156.	21.0
%RSD	.58930	.47856	.29865	.51862
#1	2840.9	6168.4	52035.	4021.2
#2	2809.1	6116.7	52284.	4063.1
#3	2833.5	6166.9	52322.	4039.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 13:18:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2617	42.21	1.999	2.146	2.056	40.62	2.032	2.061	2.058	2.090
Stddev	.0002	.26	.003	.019	.017	.28	.006	.007	.010	.016
%RSD	.0654	.6167	.1374	.8646	.8476	.6992	.2826	.3223	.4640	.7656
#1	.2617	42.32	2.000	2.157	2.064	40.78	2.039	2.069	2.068	2.105
#2	.2615	42.39	1.996	2.157	2.068	40.79	2.029	2.057	2.057	2.091
#3	.2619	41.91	2.001	2.125	2.036	40.29	2.029	2.058	2.049	2.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.99	40.91	42.87	2.051	2.060	41.04	2.006	2.025	2.005	2.036
Stddev	.36	.38	.21	.010	.003	.34	.005	.008	.010	.001
%RSD	.8686	.9223	.4925	.4752	.1572	.8319	.2676	.3891	.4765	.0630
#1	42.20	41.08	43.03	2.062	2.064	41.27	2.012	2.034	2.016	2.037
#2	42.21	41.18	42.96	2.047	2.058	41.19	2.004	2.024	1.997	2.035
#3	41.57	40.48	42.63	2.043	2.059	40.65	2.003	2.018	2.002	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.831	2.092	2.056	2.031	2.036	1.973	1.991
Stddev	.003	.007	.017	.014	.006	.016	.005
%RSD	.1468	.3155	.8472	.6693	.2858	.7910	.2692
#1	1.834	2.099	2.066	2.046	2.042	1.990	1.998
#2	1.829	2.090	2.067	2.029	2.031	1.969	1.989
#3	1.830	2.086	2.036	2.019	2.036	1.960	1.988
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 13:18:25 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2701.0	6117.8	51578.	4017.2
Stddev	14.1	19.6	27.	13.2
%RSD	.52071	.32025	.05326	.32909
#1	2684.9	6095.4	51550.	4032.3
#2	2707.3	6126.8	51578.	4008.0
#3	2710.9	6131.3	51605.	4011.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 13:22:36 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0089	-.0005	.0007	.0006	.0148	.0003	.0003	.0004
Stddev	.0003	.0089	.0005	.0001	.0000	.0034	.0000	.0001	.0001
%RSD	28.10	100.2	98.21	15.84	6.146	23.29	14.61	27.98	18.42
#1	-.0011	.0081	-.0011	.0006	.0006	.0153	.0003	.0004	.0003
#2	-.0006	.0181	-.0001	.0008	.0005	.0111	.0002	.0003	.0005
#3	-.0010	.0004	-.0004	.0008	.0006	.0180	.0003	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0287	.0895	.0027	.0003	F.0038	.0162	.0001	-.0004
Stddev	.0003	.0017	.0244	.0287	.0000	.0012	.0034	.0001	.0002
%RSD	128.8	6.042	27.30	1045.	11.19	31.24	21.13	85.05	54.64
#1	.0001	.0295	.0741	.0260	.0003	.0050	.0122	.0001	-.0006
#2	-.0005	.0298	.0767	-.0294	.0003	.0036	.0183	.0000	-.0002
#3	-.0004	.0267	.1176	.0116	.0003	.0027	.0180	.0002	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0023	.0024	.0007	.0005	.0017	.0019	.0005	.0003
Stddev	.0011	.0004	.0002	.0005	.0002	.0002	.0008	.0003	.0001
%RSD	727.4	18.48	6.623	67.40	29.65	9.441	41.07	52.66	19.13
#1	.0009	.0027	.0026	.0012	.0007	.0019	.0023	.0007	.0003
#2	.0000	.0018	.0024	.0008	.0004	.0016	.0010	.0006	.0004
#3	-.0013	.0024	.0023	.0002	.0004	.0016	.0023	.0002	.0003
Check ?	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020							
Low Limit		-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 13:22:36 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3126.7	6386.1	54060.	4065.2
Stddev	9.2	18.9	279.	28.0
%RSD	.29378	.29615	.51629	.68997
#1	3119.6	6385.7	53837.	4096.5
#2	3123.5	6367.3	53969.	4042.3
#3	3137.1	6405.1	54373.	4056.9

Zoom In Zoom Out

Sample Name: FA22131-8F Acquired: 2/16/2015 13:27:02 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	.0147	-.0006	.0167	.0000	54.27	-.0002	-.0002	.0023	.0018
Stddev	.0006	.0100	.0006	.0002	.000	.72	.0000	.0000	.0001	.0001
%RSD	73.83	67.90	100.6	1.430	337.5	1.321	13.85	17.96	4.641	3.985
#1	-.0002	.0032	-.0008	.0169	.0000	54.86	-.0002	-.0002	.0022	.0017
#2	-.0013	.0198	-.0010	.0164	-.0001	53.47	-.0001	-.0002	.0023	.0018
#3	-.0007	.0211	.0001	.0168	.0000	54.48	-.0002	-.0003	.0024	.0017

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3289	3.951	5.983	.0045	.0021	10.74	.0004	-.0004	.0008	.0037
Stddev	.0044	.019	.080	.0000	.0001	.12	.0001	.0007	.0005	.0017
%RSD	1.337	.4769	1.343	.1618	4.827	1.144	15.88	197.2	68.00	44.41
#1	.3339	3.956	6.021	.0045	.0023	10.86	.0004	-.0008	.0011	.0046
#2	.3255	3.930	5.891	.0045	.0021	10.62	.0004	-.0008	.0002	.0048
#3	.3274	3.967	6.038	.0045	.0021	10.73	.0003	.0005	.0009	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.652	.0005	.5776	.0012	-.0007	.0027	.0098
Stddev	.008	.0003	.0071	.0001	.0012	.0001	.0001
%RSD	.3011	61.48	1.224	5.683	166.6	2.634	.5211
#1	2.659	.0006	.5833	.0012	-.0003	.0027	.0098
#2	2.654	.0001	.5697	.0013	-.0020	.0028	.0099
#3	2.643	.0007	.5798	.0012	.0003	.0026	.0099

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2904.5	6113.2	51778.	4000.3
Stddev	3.8	7.0	136.	20.9
%RSD	.13165	.11457	.26204	.52314
#1	2908.8	6121.3	51868.	3984.5
#2	2903.3	6108.7	51622.	4024.1
#3	2901.4	6109.6	51844.	3992.4

Zoom In Zoom Out

Sample Name: FA22110-1 Acquired: 2/16/2015 13:31:26 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0558	-.0002	.0934	.0000	48.22	-.0002	.0071	.0007	-.0004
Stddev	.0005	.0034	.0005	.0005	.0001	.26	.0000	.0001	.0001	.0006
%RSD	425.4	6.141	284.6	.5515	218.6	.5441	25.22	1.834	12.88	159.5
#1	.0002	.0593	-.0001	.0940	.0000	48.52	-.0001	.0073	.0007	-.0005
#2	-.0004	.0525	-.0007	.0930	.0000	48.01	-.0002	.0072	.0007	-.0008
#3	.0005	.0556	.0003	.0934	.0001	48.15	-.0002	.0070	.0008	.0003

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.92	1.638	6.492	1.800	.0023	38.10	.0006	-.0009	.0002	.0020
Stddev	.05	.021	.049	.003	.0001	.16	.0000	.0008	.0014	.0015
%RSD	.4297	1.311	.7528	.1378	6.385	.4116	6.982	89.31	621.2	78.63
#1	10.96	1.649	6.526	1.801	.0024	38.26	.0007	-.0012	-.0014	.0024
#2	10.87	1.651	6.436	1.802	.0025	37.94	.0006	.0000	.0011	.0032
#3	10.94	1.613	6.515	1.797	.0022	38.10	.0006	-.0015	.0010	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.079	.0002	.3836	.0020	-.0008	-.0001	.0168
Stddev	.004	.0001	.0012	.0002	.0002	.0001	.0001
%RSD	.3209	27.88	.3201	11.18	21.69	105.1	.5180
#1	1.076	.0002	.3849	.0021	-.0010	.0000	.0169
#2	1.080	.0002	.3824	.0022	-.0006	-.0002	.0168
#3	1.083	.0003	.3836	.0018	-.0009	.0000	.0167

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2837.2	6104.5	51503.	3914.9
Stddev	4.5	6.4	67.	39.2
%RSD	.16024	.10535	.13070	1.0008
#1	2832.3	6105.1	51487.	3872.9
#2	2838.0	6097.8	51445.	3921.3
#3	2841.2	6110.6	51577.	3950.5

Zoom In Zoom Out

Sample Name: FA22121-1 Acquired: 2/16/2015 13:35:47 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	.0104	-.0020	.0447	.0001	54.34	-.0002	-.0001	.0001	.0010
Stddev	.0003	.0090	.0005	.0003	.0001	.26	.0000	.0001	.0003	.0003
%RSD	75.59	86.32	26.81	.5939	183.8	.4858	11.85	114.3	318.0	29.90
#1	-.0002	.0119	-.0015	.0450	.0002	54.64	-.0002	.0000	-.0002	.0007
#2	-.0008	.0008	-.0019	.0444	-.0001	54.26	-.0002	-.0001	.0001	.0012
#3	-.0003	.0186	-.0025	.0448	.0001	54.13	-.0002	-.0002	.0003	.0012

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0428	4.793	6.902	.0008	.0014	11.15	.0018	.0003	.0010	.0035
Stddev	.0011	.018	.030	.0000	.0000	.04	.0004	.0006	.0007	.0009
%RSD	2.625	.3812	.4313	1.297	1.450	.3679	21.98	189.3	68.32	24.98
#1	.0438	4.814	6.932	.0008	.0014	11.20	.0021	-.0002	.0014	.0042
#2	.0431	4.778	6.873	.0008	.0014	11.12	.0014	.0010	.0014	.0025
#3	.0416	4.788	6.900	.0008	.0014	11.13	.0018	.0002	.0002	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.314	.0001	.4772	.0009	-.0010	.0001	.0137
Stddev	.003	.0002	.0021	.0001	.0004	.0003	.0001
%RSD	.1966	189.3	.4467	11.72	39.58	382.3	.5644
#1	1.315	.0001	.4797	.0010	-.0015	-.0001	.0137
#2	1.311	.0004	.4759	.0008	-.0008	.0004	.0136
#3	1.316	-.0001	.4761	.0009	-.0007	-.0001	.0138

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2895.9	6146.1	51992.	3952.7
Stddev	3.2	7.4	356.	27.1
%RSD	.11022	.12045	.68554	.68482
#1	2893.4	6138.8	51586.	3921.7
#2	2894.7	6145.8	52137.	3971.3
#3	2899.5	6153.6	52253.	3965.1

Zoom In Zoom Out

Sample Name: FA22150-1 Acquired: 2/16/2015 13:40:11 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.3387	-.0016	.0280	.0001	211.6	-.0002	-.0002	.0037	-.0011
Stddev	.0007	.0195	.0003	.0005	.0001	.5	.0000	.0001	.0001	.0002
%RSD	524.5	5.745	20.49	1.745	204.0	.2424	14.70	41.84	3.291	21.13
#1	-.0008	.3209	-.0020	.0276	.0002	211.9	-.0003	-.0003	.0035	-.0009
#2	.0004	.3594	-.0013	.0285	.0001	211.0	-.0002	-.0002	.0037	-.0014
#3	.0000	.3356	-.0015	.0278	-.0001	211.9	-.0002	-.0001	.0037	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.8800	9.146	10.44	.0362	.0006	14.95	.0000	-.0011	.0009	.0024
Stddev	.0068	.033	.01	.0001	.0002	.07	.000	.0007	.0004	.0009
%RSD	.7743	.3593	.1218	.2011	30.42	.4964	431.4	63.03	47.05	38.90
#1	.8765	9.169	10.43	.0362	.0007	15.00	-.0002	-.0012	.0005	.0027
#2	.8757	9.109	10.45	.0361	.0004	14.86	.0000	-.0004	.0014	.0014
#3	.8879	9.161	10.45	.0363	.0006	14.98	.0001	-.0017	.0009	.0032

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.737	.0000	2.299	.0123	-.0004	.0073	.0072
Stddev	.007	.0005	.005	.0018	.0016	.0001	.0000
%RSD	.0860	1014.	.2065	14.35	355.8	1.616	.6655
#1	7.730	-.0005	2.303	.0114	-.0003	.0072	.0072
#2	7.744	.0004	2.294	.0112	-.0021	.0072	.0071
#3	7.738	.0002	2.299	.0143	.0010	.0074	.0071

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2743.8	5986.3	50580.	3918.9
Stddev	8.7	10.8	116.	17.5
%RSD	.31656	.18111	.22906	.44729
#1	2752.4	5998.6	50709.	3910.7
#2	2743.9	5978.1	50547.	3939.1
#3	2735.1	5982.2	50484.	3907.1

Zoom In Zoom Out

Sample Name: FA22150-2 Acquired: 2/16/2015 13:44:34 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.9719	-.0006	.0506	.0002	221.1	-.0002	.0001	.0060	-.0004
Stddev	.0001	.0151	.0007	.0003	.0000	.1	.0000	.0002	.0001	.0002
%RSD	28.23	1.549	122.7	.5152	28.18	.0462	14.87	227.3	1.885	59.90
#1	-.0007	.9893	-.0011	.0505	.0001	221.2	-.0003	.0002	.0061	-.0006
#2	-.0005	.9633	.0002	.0504	.0001	221.2	-.0002	.0001	.0061	-.0005
#3	-.0004	.9632	-.0007	.0509	.0002	221.0	-.0002	-.0001	.0059	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.148	11.10	16.39	.0402	.0028	33.34	.0007	-.0010	.0006	.0015
Stddev	.023	.01	.19	.0003	.0000	.05	.0002	.0005	.0006	.0016
%RSD	.7326	.1247	1.129	.6446	1.602	.1357	34.54	46.00	97.18	109.1
#1	3.155	11.09	16.39	.0404	.0029	33.33	.0007	-.0008	.0006	.0023
#2	3.166	11.11	16.58	.0399	.0028	33.39	.0009	-.0007	.0013	-.0004
#3	3.122	11.09	16.21	.0402	.0029	33.30	.0004	-.0016	.0001	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.066	-.0003	3.492	.0459	.0001	.0077	.0077
Stddev	.036	.0003	.002	.0055	.0005	.0002	.0000
%RSD	.4487	77.24	.0650	12.07	373.0	2.489	.5733
#1	8.100	-.0006	3.493	.0523	.0007	.0077	.0078
#2	8.070	-.0003	3.493	.0422	-.0001	.0075	.0077
#3	8.028	-.0001	3.489	.0432	-.0002	.0079	.0077

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2768.4	6037.2	51153.	4046.8
Stddev	6.7	6.5	158.	21.5
%RSD	.24251	.10778	.30826	.53112
#1	2772.1	6041.8	50985.	4022.2
#2	2772.4	6039.9	51175.	4055.9
#3	2760.7	6029.7	51298.	4062.2

Zoom In Zoom Out

Sample Name: FA22150-3 Acquired: 2/16/2015 13:48:55 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.4549	-.0023	.0263	.0000	182.1	-.0002	-.0003	.0041	-.0009
Stddev	.0001	.0053	.0006	.0004	.000	.7	.0000	.0001	.0002	.0006
%RSD	63.89	1.164	27.23	1.371	4436.	.3672	13.90	20.89	5.351	65.39
#1	-.0003	.4495	-.0030	.0259	.0000	181.9	-.0002	-.0003	.0039	-.0011
#2	-.0001	.4552	-.0022	.0265	.0001	181.6	-.0002	-.0002	.0044	-.0003
#3	-.0001	.4601	-.0018	.0265	.0000	182.9	-.0002	-.0004	.0041	-.0014

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.483	7.185	11.53	.0268	.0006	12.35	-.0004	-.0006	.0004	.0022
Stddev	.003	.035	.12	.0001	.0001	.10	.0003	.0002	.0012	.0005
%RSD	.1895	.4947	1.003	.3309	12.30	.8036	84.10	38.85	306.2	24.74
#1	1.486	7.173	11.52	.0268	.0005	12.23	.0000	-.0004	.0004	.0016
#2	1.480	7.157	11.43	.0268	.0006	12.39	-.0005	-.0004	.0016	.0026
#3	1.484	7.225	11.66	.0267	.0006	12.41	-.0006	-.0008	-.0008	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.742	.0003	2.587	.0166	.0002	.0065	.0131
Stddev	.029	.0002	.009	.0024	.0005	.0001	.0001
%RSD	.3698	61.37	.3469	14.18	204.6	1.421	.7150
#1	7.771	.0001	2.583	.0182	.0000	.0066	.0130
#2	7.742	.0004	2.580	.0139	-.0001	.0064	.0132
#3	7.714	.0005	2.597	.0176	.0007	.0065	.0130

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2752.3	5992.7	50415.	3904.9
Stddev	9.2	2.8	272.	14.6
%RSD	.33508	.04694	.54020	.37494
#1	2756.7	5995.6	50296.	3919.6
#2	2758.5	5992.4	50222.	3904.8
#3	2741.7	5990.0	50726.	3890.3

Zoom In Zoom Out

Sample Name: FA22150-4 Acquired: 2/16/2015 13:53:16 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	4.550	-.0002	.0287	.0002	169.4	-.0003	.0003	.0116	.0001
Stddev	.000	.044	.0004	.0002	.0002	.1	.0000	.0001	.0002	.0003
%RSD	1999.	.9638	276.9	.8551	79.44	.0658	7.550	30.43	1.914	321.9
#1	-.0005	4.599	-.0006	.0288	.0002	169.5	-.0003	.0002	.0116	.0001
#2	.0001	4.513	.0003	.0290	.0001	169.3	-.0002	.0003	.0113	-.0002
#3	.0003	4.539	-.0001	.0285	.0004	169.3	-.0003	.0004	.0117	.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	4.050	6.275	6.758	.0447	.0028	10.43	.0018	.0008	.0010	.0035
Stddev	.021	.023	.039	.0001	.0001	.05	.0001	.0006	.0004	.0008
%RSD	.5302	.3669	.5782	.3270	3.094	.4352	6.489	78.74	38.83	21.90
#1	4.073	6.279	6.753	.0448	.0029	10.48	.0017	.0003	.0006	.0038
#2	4.030	6.295	6.799	.0447	.0027	10.41	.0020	.0006	.0010	.0041
#3	4.046	6.250	6.721	.0446	.0028	10.39	.0018	.0015	.0014	.0027

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	8.585	.0000	1.776	.1622	-.0007	.0148	.0094
Stddev	.038	.0002	.002	.0045	.0010	.0005	.0001
%RSD	.4451	427.2	.1255	2.774	140.9	3.728	.7559
#1	8.629	.0002	1.776	.1614	.0004	.0145	.0094
#2	8.557	-.0002	1.778	.1581	-.0012	.0143	.0094
#3	8.569	.0001	1.774	.1670	-.0012	.0154	.0093

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2749.8	6085.6	51000.	3881.6
Stddev	2.3	6.6	320.	27.4
%RSD	.08418	.10912	.62670	.70668
#1	2752.3	6078.9	50836.	3866.4
#2	2747.7	6092.2	50797.	3913.3
#3	2749.4	6085.5	51369.	3865.2

Zoom In Zoom Out

Sample Name: FA22150-5 Acquired: 2/16/2015 13:57:38 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	1.217	-.0009	.0361	.0000	211.8	-.0001	-.0002	.0082	.0000
Stddev	.0005	.003	.0011	.0003	.0001	.8	.0001	.0001	.0003	.0000
%RSD	704.7	.2075	125.8	.9586	639.3	.3942	53.71	54.22	3.436	78.76
#1	.0003	1.220	-.0019	.0364	.0000	212.5	-.0001	-.0003	.0079	.0000
#2	.0002	1.215	.0002	.0362	.0000	212.0	-.0001	-.0001	.0085	.0000
#3	-.0007	1.217	-.0009	.0357	-.0001	210.9	-.0002	-.0001	.0082	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	1.188	21.87	23.45	.0293	.0029	20.16	.0006	.0004	.0008	.0018
Stddev	.007	.13	.11	.0002	.0002	.05	.0002	.0001	.0005	.0005
%RSD	.5824	.5754	.4761	.8520	6.068	.2676	35.49	28.54	62.80	25.36
#1	1.187	22.00	23.57	.0291	.0031	20.21	.0008	.0005	.0003	.0014
#2	1.195	21.75	23.35	.0296	.0028	20.16	.0004	.0004	.0007	.0016
#3	1.182	21.87	23.44	.0292	.0028	20.11	.0006	.0003	.0013	.0023

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	10.20	.0000	2.647	.0378	-.0004	.0093	.0126
Stddev	.02	.000	.010	.0010	.0008	.0002	.0000
%RSD	.1765	2773.	.3765	2.678	201.9	1.783	.2383
#1	10.21	-.0005	2.654	.0386	.0005	.0095	.0126
#2	10.22	.0002	2.652	.0382	-.0005	.0091	.0126
#3	10.18	.0002	2.635	.0367	-.0011	.0093	.0127

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	2693.2	5973.7	50220.	3873.6
Stddev	6.6	3.2	197.	18.3
%RSD	.24377	.05341	.39278	.47135
#1	2686.1	5970.8	50350.	3861.2
#2	2694.4	5977.1	49993.	3864.9
#3	2699.1	5973.4	50317.	3894.5

Zoom In Zoom Out

Sample Name: FA22095-5 Acquired: 2/16/2015 14:01:58 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.0051	-.0020	.0002	.0000	.0781	-.0003	-.0002	.0000	-.0011
Stddev	.0005	.0092	.0009	.0001	.0000	.0080	.0000	.0001	.000	.0005
%RSD	93.93	180.5	42.37	59.22	193.1	10.25	17.30	37.86	1148.	49.15
#1	-.0006	.0151	-.0029	.0003	.0000	.0773	-.0002	-.0002	.0001	-.0017
#2	-.0009	-.0029	-.0021	.0001	.0000	.0864	-.0003	-.0002	.0001	-.0006
#3	.0000	.0030	-.0011	.0002	.0000	.0705	-.0003	-.0003	-.0002	-.0011

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	-.0020	.0695	-.0130	-.0002	-.0005	.0475	-.0004	-.0005	-.0005	.0005
Stddev	.0022	.0135	.0201	.0001	.0001	.0082	.0001	.0004	.0004	.0019
%RSD	110.3	19.37	154.0	32.15	29.82	17.30	17.45	95.67	95.59	361.8
#1	.0004	.0602	-.0219	-.0003	-.0004	.0382	-.0003	-.0002	-.0002	.0027
#2	-.0039	.0634	.0100	-.0002	-.0006	.0506	-.0004	-.0010	-.0003	-.0005
#3	-.0026	.0850	-.0272	-.0002	-.0004	.0537	-.0004	-.0002	-.0010	-.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	.0304	-.0003	.0006	-.0005	-.0011	.0001	.0012
Stddev	.0005	.0004	.0001	.0001	.0005	.0002	.0000
%RSD	1.610	149.9	13.93	18.70	42.27	250.1	3.475
#1	.0298	-.0006	.0007	-.0004	-.0007	.0002	.0012
#2	.0304	.0002	.0006	-.0006	-.0017	-.0002	.0012
#3	.0308	-.0004	.0005	-.0005	-.0010	.0002	.0013

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	3079.4	6328.8	53669.	3971.1
Stddev	7.2	1.1	36.	19.0
%RSD	.23468	.01749	.06699	.47802
#1	3078.6	6327.6	53630.	3988.5
#2	3072.7	6329.0	53700.	3950.9
#3	3087.0	6329.8	53678.	3973.9

Zoom In Zoom Out

Sample Name: MP28556-MB2A Acquired: 2/16/2015 14:07:00 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0057	-.0018	.0001	.0000	.0247	-.0003	-.0003	-.0002	-.0012
Stddev	.000	.0158	.0003	.0003	.0001	.0035	.0001	.0001	.0001	.0000
%RSD	690.8	278.0	16.31	505.6	3770.	14.01	24.39	19.80	62.19	2.961
#1	-.0004	.0176	-.0015	-.0001	.0000	.0287	-.0004	-.0004	-.0001	-.0012
#2	.0002	.0118	-.0017	-.0001	.0000	.0232	-.0002	-.0003	-.0003	-.0012
#3	.0000	-.0123	-.0021	.0004	-.0001	.0223	-.0003	-.0002	-.0001	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0075	-.0037	-.0269	-.0002	-.0005	.0072	-.0007	-.0002	-.0003	.0001
Stddev	.0033	.0591	.0065	.0000	.0000	.0171	.0001	.0005	.0011	.0012
%RSD	43.87	1577.	24.27	13.72	7.911	237.6	17.08	245.7	352.3	1112.
#1	.0088	-.0636	-.0294	-.0002	-.0005	-.0029	-.0007	-.0008	-.0007	.0015
#2	.0037	.0546	-.0195	-.0002	-.0006	-.0024	-.0008	.0000	.0009	-.0005
#3	.0098	-.0022	-.0319	-.0001	-.0005	.0269	-.0005	.0001	-.0012	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0253	.0000	.0002	-.0005	-.0013	-.0003	.0045
Stddev	.0003	.0004	.0001	.0001	.0006	.0002	.0001
%RSD	1.108	2763.	36.18	14.62	45.08	61.23	1.254
#1	.0252	-.0001	.0002	-.0005	-.0007	-.0005	.0044
#2	.0256	.0005	.0001	-.0005	-.0014	-.0001	.0046
#3	.0250	-.0003	.0001	-.0004	-.0018	-.0004	.0045
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28556-MB2A Acquired: 2/16/2015 14:07:00 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3028.6	6263.8	53383.	3961.7
Stddev	4.1	12.8	191.	47.4
%RSD	.13470	.20474	.35807	1.1957
#1	3024.7	6260.5	53306.	3908.4
#2	3032.8	6253.0	53243.	3998.9
#3	3028.1	6278.0	53601.	3977.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:11:27 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2633	42.60	1.968	2.182	2.055	40.32	2.019	2.059	2.055	2.087
Stddev	.0014	.14	.006	.006	.006	.15	.005	.003	.004	.007
%RSD	.5220	.3173	.3314	.2782	.2830	.3793	.2614	.1642	.1787	.3317
#1	.2644	42.48	1.976	2.175	2.050	40.21	2.024	2.062	2.057	2.089
#2	.2638	42.75	1.966	2.185	2.061	40.50	2.020	2.057	2.057	2.092
#3	.2617	42.58	1.963	2.186	2.054	40.26	2.014	2.056	2.051	2.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.21	40.68	43.52	2.041	2.054	40.98	1.989	2.013	1.978	2.013
Stddev	.15	.21	.09	.002	.002	.20	.005	.007	.005	.007
%RSD	.3581	.5224	.2161	.0929	.0750	.4882	.2571	.3305	.2442	.3268
#1	42.09	40.69	43.42	2.043	2.055	40.91	1.994	2.021	1.984	2.020
#2	42.38	40.89	43.55	2.042	2.054	41.20	1.990	2.009	1.977	2.009
#3	42.16	40.46	43.60	2.039	2.052	40.82	1.984	2.010	1.975	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.810	2.096	2.044	2.015	2.022	1.946	1.972
Stddev	.005	.002	.006	.003	.012	.005	.005
%RSD	.2980	.0707	.2739	.1235	.6153	.2532	.2524
#1	1.816	2.097	2.040	2.017	2.036	1.947	1.976
#2	1.808	2.097	2.051	2.014	2.018	1.951	1.972
#3	1.805	2.094	2.043	2.013	2.013	1.941	1.967
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:11:27 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2678.6	6097.2	51216.	3864.3
Stddev	3.7	7.4	113.	28.4
%RSD	.13628	.12154	.22137	.73570
#1	2675.3	6101.3	51227.	3861.4
#2	2678.0	6088.6	51323.	3837.5
#3	2682.6	6101.6	51097.	3894.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:15:38 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	F.0255	.0004	.0011	.0008	.0208	.0010	.0010	.0006
Stddev	.0004	.0047	.0005	.0005	.0002	.0039	.0001	.0001	.0002
%RSD	87.95	18.26	150.0	48.89	19.48	18.65	11.30	14.25	39.61
#1	.0004	.0265	.0003	.0016	.0010	.0167	.0010	.0008	.0004
#2	.0001	.0296	.0009	.0012	.0007	.0214	.0011	.0011	.0008
#3	.0010	.0205	-.0001	.0005	.0008	.0244	.0009	.0010	.0005
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250							
Low Limit		-.0250							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0364	.0830	.0258	.0006	F.0055	.0364	.0005	.0009
Stddev	.0000	.0066	.0615	.0408	.0001	.0015	.0138	.0001	.0003
%RSD	20.95	18.19	74.03	157.9	12.21	27.00	37.83	10.09	35.82
#1	-.0001	.0440	.0982	-.0171	.0005	.0070	.0282	.0006	.0005
#2	-.0001	.0331	.0154	.0641	.0007	.0054	.0287	.0006	.0009
#3	-.0001	.0321	.1355	.0305	.0006	.0041	.0523	.0005	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	F.0021	.0028	F.0014	.0009	F.0024	F.0026	.0006	.0010
Stddev	.0003	.0004	.0003	.0004	.0002	.0001	.0012	.0003	.0001
%RSD	23.57	20.64	10.84	25.74	24.74	5.619	45.76	44.19	13.91
#1	.0014	.0018	.0027	.0017	.0011	.0024	.0013	.0004	.0009
#2	.0017	.0026	.0031	.0015	.0009	.0025	.0030	.0005	.0010
#3	.0011	.0019	.0025	.0010	.0007	.0022	.0036	.0009	.0012
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit		.0020		.0010		.0020	.0020		
Low Limit		-.0020		-.0010		-.0020	-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:15:38 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3074.8	6349.7	53198.	3921.1
Stddev	6.9	8.4	264.	17.4
%RSD	.22529	.13279	.49650	.44359
#1	3082.5	6351.6	52943.	3910.1
#2	3069.1	6357.1	53470.	3941.1
#3	3072.6	6340.5	53183.	3912.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:40:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2570	41.02	2.063	2.038	2.073	41.49	2.074	2.059	2.076	2.055
Stddev	.0007	.02	.002	.006	.005	.11	.002	.002	.006	.001
%RSD	.2649	.0552	.0867	.3150	.2304	.2618	.0748	.1132	.2859	.0548
#1	.2577	41.02	2.062	2.031	2.079	41.60	2.075	2.061	2.077	2.055
#2	.2568	41.04	2.062	2.043	2.070	41.39	2.072	2.059	2.082	2.056
#3	.2564	40.99	2.065	2.042	2.071	41.49	2.074	2.056	2.070	2.054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.78	41.65	40.85	2.108	2.060	41.35	2.076	2.033	2.060	2.064
Stddev	.12	.16	.14	.004	.005	.13	.003	.007	.004	.004
%RSD	.2757	.3815	.3534	.2029	.2303	.3171	.1653	.3571	.1701	.1832
#1	41.91	41.82	40.89	2.107	2.065	41.50	2.080	2.034	2.064	2.066
#2	41.69	41.64	40.97	2.113	2.059	41.27	2.075	2.026	2.058	2.059
#3	41.73	41.50	40.69	2.104	2.056	41.27	2.073	2.040	2.058	2.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.877	2.058	2.091	2.101	2.056	2.053	2.075
Stddev	.003	.005	.004	.004	.007	.002	.004
%RSD	.1380	.2382	.1751	.2033	.3520	.0748	.1779
#1	1.878	2.063	2.095	2.098	2.047	2.051	2.079
#2	1.878	2.053	2.087	2.106	2.059	2.054	2.072
#3	1.874	2.058	2.091	2.100	2.060	2.052	2.075
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 14:40:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2694.6	6139.1	51284.	3935.1
Stddev	8.3	9.7	176.	15.2
%RSD	.30873	.15723	.34286	.38527
#1	2697.3	6131.0	51372.	3927.3
#2	2701.3	6149.8	51081.	3952.6
#3	2685.3	6136.6	51398.	3925.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:49:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0149	.0014	.0007	.0007	.0174	.0009	.0009	.0010
Stddev	.0007	.0075	.0003	.0004	.0001	.0059	.0000	.0000	.0002
%RSD	131.2	50.47	25.40	59.80	11.25	33.86	5.326	3.757	20.21
#1	.0012	.0081	.0015	.0006	.0007	.0221	.0008	.0009	.0012
#2	-.0001	.0137	.0016	.0003	.0008	.0108	.0009	.0010	.0009
#3	.0005	.0229	.0010	.0011	.0006	.0193	.0009	.0009	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0256	.0460	.0193	.0007	F.0064	.0116	F.0012	.0009
Stddev	.0001	.0028	.0236	.0182	.0000	.0015	.0143	.0002	.0002
%RSD	12.77	10.76	51.17	94.12	5.507	23.11	122.9	15.99	29.30
#1	.0008	.0271	.0350	.0378	.0006	.0079	.0280	.0011	.0008
#2	.0007	.0273	.0731	.0185	.0007	.0062	.0044	.0011	.0011
#3	.0009	.0224	.0300	.0015	.0007	.0050	.0024	.0014	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit						.0010		.0010	
Low Limit						-.0010		-.0010	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0012	F.0027	.0011	F.0016	.0007	F.0023	.0016	.0002	.0009
Stddev	.0007	.0007	.0002	.0003	.0000	.0001	.0005	.0002	.0000
%RSD	56.79	26.03	21.17	17.70	5.709	2.629	30.71	100.9	.5435
#1	.0014	.0021	.0013	.0019	.0007	.0023	.0011	.0005	.0009
#2	.0005	.0025	.0013	.0015	.0007	.0023	.0019	.0000	.0009
#3	.0018	.0035	.0009	.0013	.0007	.0022	.0020	.0001	.0009
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010		.0020			
Low Limit		-.0020		-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 14:49:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3051.0	6312.1	53065.	3933.5
Stddev	15.7	27.1	422.	11.0
%RSD	.51541	.42928	.79593	.27907
#1	3054.4	6317.5	52647.	3924.9
#2	3033.8	6282.7	53056.	3945.9
#3	3064.7	6336.0	53491.	3929.9

Zoom In Zoom Out

Sample Name: MP28558-MB1 Acquired: 2/16/2015 14:53:13 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0095	-.0008	-.0002	.0000	.0381	-.0001	-.0002	.0006	.0000
Stddev	.0003	.0125	.0001	.0003	.000	.0034	.0000	.0001	.0002	.000
%RSD	42.71	132.3	16.09	139.0	1410.	8.924	40.22	51.96	33.80	304.6
#1	-.0006	.0030	-.0010	-.0003	.0001	.0420	-.0001	-.0001	.0006	.0000
#2	-.0004	.0015	-.0009	.0001	-.0001	.0356	-.0001	-.0003	.0004	.0000
#3	-.0009	.0239	-.0007	-.0005	-.0001	.0367	-.0001	-.0001	.0008	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0240	.0502	.0071	.0002	.0014	-.0009	.0002	-.0004	-.0001	.0011
Stddev	.0031	.0110	.0280	.0000	.0003	.0146	.0001	.0012	.0005	.0030
%RSD	12.80	21.88	392.0	12.89	21.97	1592.	54.44	308.2	1071.	284.2
#1	.0261	.0394	-.0173	.0002	.0018	.0156	.0001	-.0017	-.0003	.0045
#2	.0255	.0614	.0010	.0002	.0014	-.0062	.0004	.0005	.0006	-.0005
#3	.0205	.0498	.0377	.0002	.0012	-.0121	.0002	.0000	-.0004	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0137	.0231	.0000	.0012	-.0011	-.0005	.0015
Stddev	.0002	.0002	.0001	.0001	.0008	.0002	.0001
%RSD	1.710	.9064	150.5	7.926	77.83	48.49	7.033
#1	.0140	.0232	.0000	.0013	-.0004	-.0007	.0014
#2	.0137	.0228	.0001	.0011	-.0020	-.0005	.0016
#3	.0135	.0232	.0000	.0011	-.0008	-.0002	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28558-MB1 Acquired: 2/16/2015 14:53:13 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3079.9	6382.5	53841.	3972.1
Stddev	9.6	16.0	395.	33.1
%RSD	.31030	.25106	.73393	.83285
#1	3083.3	6401.0	53862.	3955.0
#2	3069.1	6372.9	53435.	3951.1
#3	3087.3	6373.6	54225.	4010.3

Zoom In Zoom Out

Sample Name: MP28558-B1 Acquired: 2/16/2015 14:57:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0480	28.24	2.013	2.062	.0524	26.27	.0506	.5139	.2118	.2609
Stddev	.0004	.16	.005	.003	.0002	.07	.0001	.0009	.0020	.0023
%RSD	.7358	.5745	.2588	.1612	.2907	.2560	.1177	.1827	.9470	.8670
#1	.0481	28.35	2.017	2.064	.0525	26.31	.0505	.5148	.2108	.2591
#2	.0476	28.30	2.015	2.065	.0522	26.30	.0505	.5140	.2106	.2602
#3	.0483	28.05	2.007	2.059	.0524	26.19	.0506	.5130	.2142	.2635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.42	26.09	26.10	.5210	.5234	26.12	.5229	.4926	.4948	1.989
Stddev	.11	.09	.12	.0034	.0009	.10	.0018	.0009	.0003	.003
%RSD	.4155	.3263	.4458	.6506	.1716	.3662	.3462	.1779	.0596	.1242
#1	27.42	26.04	26.23	.5181	.5242	26.15	.5242	.4926	.4947	1.991
#2	27.53	26.19	26.05	.5201	.5237	26.19	.5237	.4935	.4952	1.989
#3	27.30	26.05	26.01	.5247	.5224	26.01	.5208	.4918	.4947	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138	.5677	.5314	.5357	1.976	.4950	.5130
Stddev	.0006	.0021	.0007	.0034	.009	.0033	.0009
%RSD	4.176	.3704	.1342	.6321	.4355	.6710	.1674
#1	.0135	.5695	.5311	.5325	1.985	.4917	.5135
#2	.0134	.5682	.5322	.5354	1.975	.4949	.5135
#3	.0144	.5654	.5309	.5393	1.967	.4983	.5120
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28558-B1 Acquired: 2/16/2015 14:57:42 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2779.0	6170.6	51791.	3905.7
Stddev	5.9	3.9	392.	35.5
%RSD	.21411	.06351	.75684	.90841
#1	2772.1	6167.9	52024.	3872.3
#2	2782.9	6168.9	52012.	3901.9
#3	2781.9	6175.1	51339.	3942.9

Zoom In Zoom Out

Sample Name: FA22051-3 Acquired: 2/16/2015 15:01:56 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0015	98.83	.0079	.0971	.0009	48.00	-.0004	.0024	.0635	.0062
Stddev	.0004	.17	.0014	.0004	.0001	.07	.0000	.0002	.0005	.0003
%RSD	25.80	.1737	17.58	.4047	6.868	.1503	12.62	6.526	.7159	4.603
#1	-.0010	98.80	.0090	.0966	.0009	47.92	-.0004	.0025	.0630	.0063
#2	-.0017	99.02	.0085	.0972	.0009	48.06	-.0003	.0025	.0635	.0059
#3	-.0017	98.68	.0064	.0974	.0008	48.04	-.0004	.0022	.0639	.0064

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	34.18	.8023	2.215	.0774	.0044	.1167	.0294	.0827	.0046	.0050
Stddev	.08	.0620	.010	.0001	.0001	.0187	.0001	.0006	.0016	.0023
%RSD	.2239	7.730	.4407	.1064	1.353	15.99	.2685	.7368	35.09	46.09
#1	34.12	.8159	2.207	.0774	.0044	.1048	.0295	.0834	.0064	.0076
#2	34.26	.7346	2.212	.0774	.0044	.1382	.0294	.0824	.0032	.0041
#3	34.15	.8564	2.226	.0773	.0043	.1071	.0294	.0823	.0042	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.181	.0263	.2043	.4314	-.0013	.0350	.0362
Stddev	.001	.0001	.0005	.0008	.0003	.0000	.0001
%RSD	.0695	.3689	.2273	.1849	22.91	.1236	.3487
#1	1.182	.0263	.2041	.4323	-.0009	.0349	.0361
#2	1.182	.0262	.2048	.4309	-.0013	.0349	.0363
#3	1.181	.0263	.2040	.4310	-.0015	.0350	.0361

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2868.2	6417.1	53212.	4017.0
Stddev	4.2	10.6	104.	31.1
%RSD	.14636	.16536	.19632	.77346
#1	2872.9	6429.3	53298.	4025.1
#2	2864.7	6409.6	53242.	3982.6
#3	2867.0	6412.6	53095.	4043.1

Zoom In Zoom Out

Sample Name: MP28558-D1 Acquired: 2/16/2015 15:06:15 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0007	108.1	.0136	.1315	.0011	62.90	-.0001	.0055	.0933	.0778
Stddev	.0005	.5	.0012	.0003	.0001	.36	.0001	.0002	.0001	.0003
%RSD	66.37	.4384	8.621	.2151	7.679	.5648	125.9	4.024	.1293	.4071
#1	-.0004	108.1	.0127	.1315	.0010	62.99	-.0001	.0052	.0933	.0777
#2	-.0013	107.7	.0149	.1313	.0011	62.50	.0000	.0055	.0931	.0781
#3	-.0005	108.6	.0132	.1318	.0012	63.19	.0000	.0056	.0934	.0775

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	58.39	.9157	2.450	.2397	.0082	.1679	.0552	.1028	.0019	.0046
Stddev	.24	.0387	.024	.0003	.0001	.0223	.0001	.0017	.0014	.0017
%RSD	.4030	4.227	.9654	.1368	1.353	13.29	.1867	1.607	72.70	35.95
#1	58.41	.9101	2.427	.2401	.0081	.1875	.0553	.1031	.0027	.0039
#2	58.15	.8800	2.449	.2394	.0083	.1436	.0552	.1044	.0029	.0065
#3	58.62	.9568	2.474	.2397	.0081	.1727	.0551	.1011	.0003	.0034

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.143	.0741	.2782	.4549	-.0034	.0448	.1005
Stddev	.004	.0003	.0009	.0007	.0014	.0003	.0004
%RSD	.3025	.3790	.3144	.1571	43.10	.6317	.4310
#1	1.145	.0738	.2782	.4557	-.0018	.0446	.1001
#2	1.145	.0743	.2773	.4546	-.0036	.0448	.1010
#3	1.139	.0742	.2791	.4544	-.0047	.0451	.1004

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2835.9	6407.1	53418.	4118.5
Stddev	6.8	18.3	396.	27.8
%RSD	.23868	.28520	.74104	.67465
#1	2837.5	6426.5	53096.	4118.6
#2	2828.5	6390.2	53860.	4146.2
#3	2841.7	6404.8	53298.	4090.7

Zoom In Zoom Out

Sample Name: MP28558-SD1 Acquired: 2/16/2015 15:10:34 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	101.7	.0083	.1013	.0008	49.63	-.0012	.0013	.0655	.0075
Stddev	.0012	.4	.0095	.0002	.0003	.32	.0003	.0002	.0002	.0015
%RSD	221.2	.3982	113.3	.1820	42.24	.6453	27.11	15.06	.3199	19.96
#1	.0005	101.9	.0013	.1013	.0012	49.88	-.0010	.0015	.0657	.0081
#2	-.0019	102.0	.0191	.1015	.0006	49.74	-.0015	.0012	.0654	.0086
#3	-.0002	101.3	.0047	.1011	.0006	49.27	-.0010	.0011	.0654	.0058

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	35.08	1.029	2.329	.0801	.0016	.3681	.0307	.0851	-.0039	.0104
Stddev	.17	.244	.178	.0001	.0002	.0724	.0004	.0024	.0051	.0032
%RSD	.4870	23.74	7.657	.1171	13.69	19.67	1.320	2.809	129.9	30.92
#1	35.12	1.258	2.338	.0802	.0014	.2894	.0304	.0823	-.0074	.0067
#2	35.24	.7720	2.502	.0801	.0018	.4320	.0312	.0866	.0019	.0122
#3	34.90	1.056	2.146	.0800	.0017	.3829	.0305	.0863	-.0063	.0123

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.191	.0255	.2092	.4358	-.0055	.0339	.0436
Stddev	.003	.0021	.0007	.0004	.0017	.0019	.0004
%RSD	.2430	8.103	.3516	.0865	30.63	5.533	.8849
#1	1.188	.0273	.2100	.4360	-.0037	.0321	.0440
#2	1.191	.0232	.2088	.4354	-.0070	.0358	.0432
#3	1.194	.0259	.2087	.4361	-.0058	.0337	.0435

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3009.6	6458.0	53528.	3986.5
Stddev	6.7	2.1	308.	28.1
%RSD	.22163	.03254	.57621	.70460
#1	3007.2	6458.6	53582.	3997.6
#2	3004.5	6455.7	53806.	3954.6
#3	3017.1	6459.8	53196.	4007.3

Zoom In Zoom Out

Sample Name: MP28558-PS1 Acquired: 2/16/2015 15:14:56 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0492	98.80	.1068	.3532	.0524	51.15	.0498	.0526	.1131	.1102
Stddev	.0010	.34	.0004	.0023	.0001	.19	.0001	.0001	.0008	.0002
%RSD	2.108	.3416	.3945	.6527	.2843	.3810	.2997	.1749	.7344	.2137
#1	.0498	99.07	.1064	.3557	.0526	51.34	.0496	.0525	.1140	.1103
#2	.0498	98.42	.1068	.3511	.0524	50.95	.0499	.0526	.1123	.1104
#3	.0480	98.90	.1072	.3529	.0523	51.15	.0498	.0527	.1131	.1100

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	35.99	10.63	6.932	.1266	.1014	10.60	.1307	.1297	.0980	.0996
Stddev	.15	.09	.057	.0004	.0001	.04	.0004	.0012	.0020	.0022
%RSD	.4047	.8746	.8230	.3496	.0608	.3918	.3233	.9114	2.004	2.255
#1	36.02	10.73	6.915	.1271	.1014	10.64	.1306	.1308	.0998	.0972
#2	35.83	10.55	6.996	.1263	.1013	10.56	.1312	.1285	.0959	.1017
#3	36.12	10.62	6.885	.1266	.1014	10.62	.1303	.1300	.0982	.0999

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.155	.0738	.2473	.5146	.0967	.0819	.2833
Stddev	.003	.0002	.0012	.0013	.0009	.0006	.0002
%RSD	.2366	.2446	.4712	.2470	.9125	.7035	.0642
#1	1.158	.0738	.2479	.5159	.0976	.0826	.2832
#2	1.156	.0739	.2460	.5134	.0966	.0815	.2835
#3	1.153	.0736	.2481	.5144	.0958	.0818	.2832

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2803.4	6391.1	52686.	3962.4
Stddev	4.8	13.5	340.	1.9
%RSD	.17069	.21055	.64587	.04813
#1	2808.1	6394.0	52297.	3960.2
#2	2798.5	6376.4	52932.	3963.1
#3	2803.6	6402.9	52828.	3963.8

Zoom In Zoom Out

Sample Name: MP28558-S1 Acquired: 2/16/2015 15:19:14 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0468	136.2	1.856	2.098	.0518	83.22	.0464	.4747	.2723	.2604
Stddev	.0008	.4	.003	.008	.0003	.17	.0001	.0003	.0011	.0010
%RSD	1.614	.3203	.1813	.3663	.6505	.2056	.2210	.0623	.3968	.4009
#1	.0477	136.7	1.859	2.107	.0518	83.32	.0465	.4749	.2735	.2609
#2	.0466	136.2	1.856	2.094	.0514	83.31	.0463	.4748	.2714	.2592
#3	.0462	135.8	1.853	2.093	.0521	83.02	.0464	.4744	.2720	.2611

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	41.25	26.44	27.81	.5786	.4593	25.57	.5101	.5651	.1839	1.848
Stddev	.13	.11	.34	.0017	.0002	.06	.0010	.0010	.0004	.005
%RSD	.3170	.3987	1.225	.2910	.0508	.2250	.1889	.1849	.2196	.2608
#1	41.25	26.56	28.15	.5805	.4595	25.59	.5112	.5656	.1844	1.853
#2	41.38	26.37	27.80	.5776	.4595	25.61	.5099	.5639	.1836	1.846
#3	41.12	26.38	27.47	.5776	.4591	25.50	.5093	.5657	.1837	1.844

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.271	.5078	.7306	.8982	1.890	.5091	.5175
Stddev	.004	.0006	.0013	.0033	.001	.0020	.0010
%RSD	.2798	.1133	.1773	.3670	.0663	.3869	.1956
#1	1.272	.5084	.7299	.9019	1.889	.5112	.5186
#2	1.274	.5079	.7321	.8957	1.892	.5074	.5174
#3	1.267	.5072	.7297	.8970	1.890	.5087	.5165

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2720.3	6448.1	52290.	4015.1
Stddev	3.7	11.4	176.	34.4
%RSD	.13760	.17674	.33592	.85688
#1	2717.3	6439.8	52087.	3982.3
#2	2724.5	6443.4	52395.	4012.0
#3	2719.1	6461.1	52388.	4050.9

Zoom In Zoom Out

Sample Name: MP28558-S2 Acquired: 2/16/2015 15:23:26 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0470	126.6	1.857	2.082	.0517	79.38	.0466	.4758	.2655	.2603
Stddev	.0009	.3	.003	.006	.0002	.41	.0001	.0002	.0009	.0005
%RSD	1.859	.2743	.1543	.2838	.3860	.5228	.1274	.0334	.3221	.1755
#1	.0479	126.6	1.859	2.088	.0515	79.37	.0466	.4758	.2646	.2605
#2	.0462	126.3	1.854	2.082	.0517	78.97	.0465	.4759	.2662	.2605
#3	.0469	127.0	1.858	2.076	.0519	79.80	.0466	.4756	.2658	.2597

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	40.69	26.30	27.47	.5709	.4637	25.58	.5100	.5580	.2017	1.850
Stddev	.13	.16	.09	.0015	.0006	.14	.0009	.0007	.0010	.001
%RSD	.3273	.5901	.3119	.2565	.1361	.5404	.1832	.1296	.4845	.0590
#1	40.63	26.36	27.41	.5700	.4644	25.55	.5089	.5572	.2021	1.851
#2	40.60	26.12	27.42	.5701	.4635	25.45	.5103	.5582	.2024	1.850
#3	40.84	26.40	27.56	.5726	.4632	25.73	.5107	.5586	.2006	1.848

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.385	.5158	.7082	.8670	1.892	.5067	.5157
Stddev	.001	.0006	.0016	.0016	.009	.0012	.0002
%RSD	.0877	.1244	.2279	.1885	.4580	.2460	.0301
#1	1.384	.5165	.7080	.8673	1.898	.5054	.5159
#2	1.386	.5152	.7067	.8653	1.882	.5069	.5156
#3	1.386	.5158	.7099	.8685	1.897	.5079	.5157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2705.6	6391.6	52139.	4005.3
Stddev	2.3	2.1	189.	24.3
%RSD	.08610	.03357	.36282	.60771
#1	2702.9	6393.9	52353.	4024.5
#2	2706.5	6389.7	52074.	4013.5
#3	2707.3	6391.2	51992.	3977.9

Zoom In Zoom Out

Sample Name: FA22086-1 Acquired: 2/16/2015 15:27:39 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0011	27.70	.0415	.7589	.0023	191.3	.0489	.0403	.3687
Stddev	.0004	.05	.0005	.0014	.0001	.5	.0000	.0002	.0019
%RSD	39.58	.1957	1.321	.1827	5.934	.2516	.0820	.3952	.5181
#1	-.0011	27.63	.0411	.7592	.0022	191.7	.0490	.0404	.3698
#2	-.0016	27.73	.0414	.7573	.0023	191.4	.0489	.0405	.3665
#3	-.0007	27.73	.0421	.7600	.0025	190.7	.0489	.0402	.3698

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.003	197.5	2.505	5.405	1.964	.1151	2.203	.1775	.1932
Stddev	.003	.2	.049	.039	.006	.0003	.008	.0001	.0008
%RSD	.2762	.0843	1.957	.7267	.2905	.2374	.3751	.0835	.4252
#1	1.006	197.6	2.514	5.444	1.965	.1150	2.196	.1777	.1936
#2	1.001	197.5	2.550	5.405	1.958	.1154	2.201	.1774	.1923
#3	1.003	197.3	2.453	5.365	1.969	.1148	2.212	.1774	.1937

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0103	.0181	.9989	.0420	.6619	.6877	-.0054	.1310	F6.718
Stddev	.0003	.0006	.0018	.0002	.0006	.0018	.0005	.0008	.009
%RSD	2.703	3.179	.1777	.4805	.0967	.2592	9.908	.6465	.1384
#1	.0100	.0186	1.001	.0418	.6626	.6896	-.0048	.1315	6.727
#2	.0104	.0182	.9990	.0421	.6613	.6860	-.0056	.1301	6.718
#3	.0105	.0174	.9970	.0421	.6619	.6875	-.0058	.1315	6.708

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2764.4	7149.0	59186.	4502.0
Stddev	4.1	10.3	436.	28.5
%RSD	.14685	.14400	.73723	.63398
#1	2760.6	7137.8	59177.	4504.0
#2	2768.7	7151.2	59627.	4472.5
#3	2763.9	7158.0	58754.	4529.5

Zoom In Zoom Out

Sample Name: FA22062-1 Acquired: 2/16/2015 15:31:57 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	53.04	.0025	.0795	.0003	.5239	-.0003	.0020	.0425	.0086
Stddev	.0004	.21	.0011	.0004	.0001	.0078	.0000	.0000	.0002	.0002
%RSD	288.4	.3976	44.00	.4444	27.92	1.486	6.291	1.572	.4508	2.363
#1	.0005	53.12	.0031	.0794	.0002	.5308	-.0003	.0021	.0428	.0088
#2	-.0003	53.19	.0012	.0799	.0004	.5254	-.0002	.0020	.0424	.0087
#3	.0003	52.80	.0032	.0792	.0003	.5155	-.0002	.0020	.0424	.0084

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.059	1.187	2.020	.0771	.0037	.1239	.0140	.0355	-.0002	.0037
Stddev	.047	.069	.005	.0002	.0001	.0091	.0003	.0004	.0010	.0017
%RSD	.6634	5.795	.2506	.2129	3.330	7.343	1.992	1.216	389.1	47.27
#1	7.095	1.259	2.021	.0772	.0038	.1210	.0141	.0351	-.0012	.0055
#2	7.077	1.179	2.025	.0769	.0038	.1342	.0137	.0354	-.0002	.0033
#3	7.006	1.122	2.015	.0771	.0036	.1167	.0142	.0359	.0007	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.404	.0226	.0079	.7106	-.0012	.0501	.0537
Stddev	.004	.0003	.0001	.0011	.0010	.0001	.0008
%RSD	.2589	1.112	1.393	.1557	88.36	.2905	1.409
#1	1.400	.0228	.0079	.7116	-.0018	.0500	.0530
#2	1.405	.0227	.0079	.7106	.0000	.0502	.0536
#3	1.407	.0223	.0077	.7094	-.0017	.0500	.0545

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2955.7	6523.9	54003.	3959.7
Stddev	5.0	9.6	37.	3.2
%RSD	.16871	.14689	.06907	.08120
#1	2957.8	6526.8	54032.	3958.5
#2	2950.0	6513.1	54015.	3963.4
#3	2959.2	6531.6	53961.	3957.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 15:36:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2596	41.78	2.026	2.083	2.073	41.50	2.048	2.052	2.086	2.079
Stddev	.0010	.06	.003	.001	.005	.19	.001	.002	.014	.012
%RSD	.4028	.1499	.1251	.0607	.2329	.4521	.0580	.0952	.6581	.5934
#1	.2604	41.80	2.028	2.084	2.077	41.72	2.049	2.054	2.084	2.082
#2	.2584	41.71	2.023	2.082	2.068	41.40	2.048	2.053	2.073	2.065
#3	.2601	41.84	2.026	2.083	2.074	41.40	2.047	2.050	2.100	2.089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	42.00	41.53	42.03	2.095	2.045	41.69	2.037	2.024	2.023	2.049
Stddev	.14	.14	.18	.013	.003	.22	.001	.002	.001	.002
%RSD	.3375	.3442	.4298	.6078	.1602	.5360	.0236	.1002	.0388	.1017
#1	42.14	41.69	42.24	2.093	2.041	41.95	2.038	2.025	2.023	2.049
#2	41.85	41.44	41.90	2.084	2.045	41.52	2.037	2.021	2.024	2.050
#3	42.02	41.45	41.96	2.109	2.047	41.61	2.038	2.025	2.022	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.848	2.067	2.087	2.079	2.037	2.033	2.035
Stddev	.002	.003	.008	.012	.007	.014	.003
%RSD	.1011	.1483	.3714	.5636	.3246	.6986	.1207
#1	1.847	2.068	2.095	2.077	2.029	2.032	2.038
#2	1.851	2.069	2.080	2.068	2.040	2.020	2.035
#3	1.848	2.063	2.087	2.091	2.041	2.048	2.033
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 15:36:18 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2683.8	6170.4	50733.	3838.7
Stddev	2.1	9.4	379.	22.6
%RSD	.07899	.15283	.74639	.58984
#1	2682.4	6159.7	50771.	3813.1
#2	2682.7	6173.7	51091.	3847.1
#3	2686.2	6177.7	50336.	3856.0

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 15:40:28 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0096	-.0004	.0004	.0007	.0160	.0008	.0006	.0007
Stddev	.0003	.0052	.0005	.0001	.0001	.0051	.0001	.0002	.0001
%RSD	102.6	54.36	106.8	34.01	16.10	32.02	15.78	26.11	13.09
#1	-.0002	.0094	-.0008	.0002	.0007	.0114	.0006	.0004	.0006
#2	.0000	.0149	-.0005	.0004	.0005	.0151	.0008	.0006	.0007
#3	-.0005	.0045	.0001	.0005	.0007	.0216	.0009	.0008	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0330	.0517	.0400	.0007	F.0049	.0090	F.0010	.0007
Stddev	.0003	.0040	.0154	.0112	.0000	.0013	.0034	.0002	.0004
%RSD	73.63	12.13	29.79	28.13	.9079	26.86	38.11	20.81	55.09
#1	.0003	.0375	.0440	.0510	.0007	.0062	.0054	.0012	.0004
#2	.0002	.0298	.0418	.0403	.0007	.0048	.0123	.0011	.0012
#3	.0008	.0317	.0695	.0286	.0007	.0036	.0093	.0008	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
High Limit						.0010		.0010	
Low Limit						-.0010		-.0010	

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0016	.0006	F.0012	.0007	F.0023	.0004	.0003	.0008
Stddev	.0006	.0006	.0004	.0002	.0001	.0001	.0008	.0003	.0001
%RSD	66.88	34.12	57.83	13.92	9.497	5.221	226.1	100.3	9.003
#1	.0008	.0010	.0003	.0014	.0008	.0025	.0012	.0005	.0007
#2	.0015	.0018	.0010	.0011	.0007	.0023	.0002	-.0001	.0008
#3	.0003	.0021	.0006	.0011	.0007	.0023	-.0004	.0006	.0008
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010		.0020			
Low Limit				-.0010		-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 15:40:28 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3080.4	6409.3	53333.	3926.8
Stddev	11.8	40.2	255.	23.1
%RSD	.38171	.62680	.47814	.58774
#1	3086.9	6402.2	53618.	3900.2
#2	3066.9	6373.2	53254.	3937.9
#3	3087.5	6452.6	53127.	3942.1

Zoom In Zoom Out

Sample Name: FA22062-2 Acquired: 2/16/2015 15:44:57 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0008	17.72	.0014	.0239	.0000	.5443	-.0002	.0004	.0187	.0030
Stddev	.0005	.10	.0010	.0003	.0001	.0035	.0001	.0001	.0000	.0002
%RSD	58.43	.5725	72.54	1.142	252.0	.6385	24.86	24.53	.0746	6.717
#1	-.0014	17.83	.0019	.0241	.0000	.5457	-.0002	.0003	.0187	.0029
#2	-.0006	17.63	.0002	.0236	.0000	.5469	-.0003	.0004	.0187	.0029
#3	-.0005	17.68	.0020	.0239	.0001	.5404	-.0002	.0004	.0186	.0032

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.325	.3786	.6990	.0185	.0015	.0656	.0051	.0157	-.0001	.0049
Stddev	.015	.0435	.0192	.0000	.0002	.0146	.0003	.0011	.0008	.0013
%RSD	.6509	11.48	2.748	.0646	11.06	22.27	6.076	6.800	860.3	26.17
#1	2.341	.3497	.6819	.0185	.0016	.0589	.0054	.0160	-.0007	.0052
#2	2.324	.4286	.6954	.0185	.0015	.0823	.0049	.0166	-.0005	.0035
#3	2.310	.3574	.7198	.0185	.0013	.0555	.0048	.0145	.0009	.0061

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.237	.0190	.0035	.4922	-.0028	.0205	.0168
Stddev	.003	.0002	.0000	.0012	.0016	.0001	.0001
%RSD	.2151	.9213	.4510	.2479	59.49	.7252	.3513
#1	1.239	.0191	.0035	.4936	-.0014	.0206	.0168
#2	1.238	.0190	.0035	.4916	-.0023	.0204	.0168
#3	1.234	.0188	.0035	.4914	-.0046	.0207	.0167

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2998.9	6470.9	54071.	3925.8
Stddev	12.9	17.2	214.	38.7
%RSD	.43150	.26645	.39578	.98577
#1	2984.1	6451.2	53879.	3898.3
#2	3007.7	6483.3	54032.	3970.1
#3	3005.1	6478.2	54302.	3909.0

Zoom In Zoom Out

Sample Name: FA22062-3 Acquired: 2/16/2015 15:49:22 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	74.29	.0251	.0336	.0004	1.919	-.0005	.0011	.0907	.0204
Stddev	.0005	.11	.0005	.0003	.0001	.018	.0000	.0001	.0005	.0000
%RSD	91.13	.1536	2.024	1.005	16.55	.9512	2.863	7.982	.5863	.2249
#1	-.0008	74.41	.0255	.0340	.0005	1.935	-.0006	.0010	.0913	.0204
#2	-.0010	74.18	.0252	.0334	.0005	1.899	-.0005	.0011	.0904	.0204
#3	.0000	74.28	.0245	.0334	.0003	1.924	-.0006	.0012	.0904	.0204

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	62.55	.4388	.5350	.0564	.0078	.0670	.0070	.0351	-.0003	.0029
Stddev	.23	.0577	.0141	.0002	.0000	.0169	.0001	.0007	.0008	.0022
%RSD	.3642	13.15	2.641	.3942	.0753	25.26	1.849	1.971	260.6	74.64
#1	62.81	.4475	.5480	.0566	.0078	.0516	.0072	.0354	-.0009	.0015
#2	62.37	.3772	.5371	.0564	.0078	.0851	.0069	.0357	.0005	.0018
#3	62.46	.4916	.5199	.0562	.0078	.0643	.0070	.0344	-.0005	.0054

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.555	.0236	.0135	.6316	-.0039	.1595	.0170
Stddev	.003	.0003	.0000	.0015	.0008	.0005	.0001
%RSD	.2165	1.345	.2555	.2422	21.07	.2859	.6168
#1	1.559	.0239	.0135	.6331	-.0041	.1596	.0171
#2	1.553	.0236	.0136	.6300	-.0030	.1590	.0169
#3	1.554	.0233	.0135	.6318	-.0047	.1599	.0169

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2931.4	6559.4	54156.	3999.4
Stddev	6.5	22.9	166.	8.1
%RSD	.22248	.34906	.30622	.20145
#1	2925.8	6533.3	54108.	3990.7
#2	2929.9	6568.6	54340.	4001.1
#3	2938.5	6576.2	54019.	4006.5

Zoom In Zoom Out

Sample Name: FA22062-4 Acquired: 2/16/2015 15:53:42 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0007	12.78	.0053	.0475	.0002	12.15	-.0001	.0003	.0135	.0050
Stddev	.0005	.02	.0006	.0004	.0001	.02	.0001	.0001	.0002	.0005
%RSD	72.83	.1301	10.37	.9108	71.09	.1396	82.47	17.36	1.175	10.81
#1	-.0009	12.76	.0054	.0479	.0003	12.17	-.0001	.0004	.0136	.0048
#2	-.0001	12.79	.0059	.0476	.0001	12.13	-.0001	.0004	.0133	.0046
#3	-.0010	12.79	.0048	.0471	.0001	12.15	.0000	.0003	.0134	.0056

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.783	1.292	2.130	.0706	.0012	.7398	.0043	.0595	-.0001	.0030
Stddev	.024	.020	.061	.0002	.0001	.0156	.0002	.0003	.0018	.0014
%RSD	.4184	1.571	2.883	.2354	8.376	2.105	3.600	.4926	1195.	46.87
#1	5.782	1.271	2.182	.0705	.0013	.7432	.0042	.0597	-.0022	.0015
#2	5.808	1.311	2.062	.0704	.0011	.7228	.0044	.0596	.0005	.0032
#3	5.759	1.293	2.147	.0707	.0012	.7534	.0044	.0591	.0013	.0043

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.237	.0227	.0641	.5827	-.0025	.0241	.0316
Stddev	.005	.0004	.0002	.0009	.0010	.0001	.0002
%RSD	.4308	1.766	.2490	.1581	40.86	.4176	.6040
#1	1.242	.0224	.0643	.5830	-.0028	.0243	.0318
#2	1.238	.0231	.0640	.5817	-.0013	.0241	.0316
#3	1.231	.0224	.0640	.5835	-.0033	.0241	.0315

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2994.2	6476.0	54207.	4004.9
Stddev	10.2	13.9	104.	40.3
%RSD	.34198	.21451	.19247	1.0073
#1	2983.9	6460.2	54293.	3966.7
#2	2994.2	6486.0	54237.	4000.9
#3	3004.4	6481.9	54091.	4047.1

Zoom In Zoom Out

Sample Name: FA22062-5 Acquired: 2/16/2015 15:58:03 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	10.66	.0013	.0280	.0000	.4135	-.0002	.0004	.0132	.0035
Stddev	.0005	.05	.0005	.0001	.0000	.0051	.0000	.0001	.0003	.0002
%RSD	84.96	.5044	36.50	.2667	21.40	1.244	19.96	13.32	1.965	6.336
#1	-.0008	10.72	.0008	.0279	.0000	.4076	-.0003	.0004	.0135	.0036
#2	.0000	10.62	.0013	.0280	.0000	.4169	-.0003	.0005	.0132	.0032
#3	-.0009	10.64	.0018	.0279	.0000	.4160	-.0002	.0004	.0130	.0036

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	5.415	.3708	.7526	.0288	.0004	.0578	.0093	.0131	.0001	.0028
Stddev	.016	.0316	.0380	.0001	.0001	.0049	.0001	.0008	.0010	.0013
%RSD	.2914	8.526	5.054	.4536	25.24	8.420	1.328	6.408	1103.	48.11
#1	5.406	.3407	.7095	.0287	.0004	.0526	.0093	.0122	-.0003	.0013
#2	5.405	.4037	.7666	.0289	.0004	.0622	.0094	.0139	.0013	.0039
#3	5.433	.3678	.7816	.0287	.0002	.0587	.0092	.0133	-.0007	.0031

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.048	.0234	.0041	.4097	-.0023	.0162	.0671
Stddev	.002	.0001	.0003	.0014	.0009	.0006	.0002
%RSD	.1891	.5169	6.187	.3454	40.17	3.463	.3110
#1	1.046	.0236	.0042	.4113	-.0013	.0168	.0669
#2	1.048	.0234	.0038	.4086	-.0026	.0159	.0670
#3	1.050	.0234	.0043	.4092	-.0030	.0158	.0673

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3017.8	6462.0	53879.	3920.3
Stddev	16.4	24.7	160.	46.0
%RSD	.54393	.38294	.29701	1.1724
#1	3035.7	6486.4	54064.	3896.0
#2	3014.3	6462.7	53795.	3973.3
#3	3003.5	6436.9	53779.	3891.5

Zoom In Zoom Out

Sample Name: FA22062-6 Acquired: 2/16/2015 16:02:25 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0006	14.42	.0039	.0206	.0001	.4711	-.0003	.0010	.0161	.0053
Stddev	.0001	.11	.0006	.0001	.0000	.0032	.0000	.0001	.0001	.0002
%RSD	16.25	.7455	16.00	.5353	28.96	.6846	6.246	6.524	.8030	4.440
#1	-.0005	14.46	.0044	.0207	.0001	.4737	-.0003	.0011	.0160	.0050
#2	-.0007	14.50	.0032	.0205	.0001	.4722	-.0003	.0011	.0161	.0055
#3	-.0006	14.30	.0041	.0205	.0000	.4675	-.0003	.0010	.0162	.0053

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	12.37	.3747	.8208	.0385	.0010	.0631	.0111	.0120	.0004	.0019
Stddev	.07	.0253	.0067	.0001	.0001	.0106	.0003	.0010	.0006	.0011
%RSD	.5671	6.758	.8203	.2065	6.833	16.73	2.762	8.208	143.4	56.68
#1	12.37	.3471	.8259	.0384	.0011	.0730	.0109	.0109	.0011	.0022
#2	12.44	.3969	.8233	.0385	.0010	.0643	.0108	.0124	-.0001	.0007
#3	12.30	.3801	.8131	.0386	.0010	.0520	.0114	.0128	.0003	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.7404	.0216	.0041	.4432	-.0014	.0233	.0748
Stddev	.0031	.0002	.0000	.0006	.0009	.0004	.0001
%RSD	.4204	.7906	.9514	.1325	64.23	1.812	.1361
#1	.7433	.0214	.0041	.4436	-.0021	.0234	.0749
#2	.7407	.0215	.0041	.4434	-.0004	.0237	.0748
#3	.7371	.0218	.0042	.4425	-.0019	.0229	.0747

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3020.5	6495.6	53915.	3909.5
Stddev	2.1	12.0	322.	11.6
%RSD	.06811	.18456	.59731	.29691
#1	3021.6	6498.0	54215.	3915.2
#2	3018.2	6482.6	53955.	3896.2
#3	3021.8	6506.2	53575.	3917.2

Zoom In Zoom Out

Sample Name: FA22125-4 Acquired: 2/16/2015 16:06:48 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	43.47	.0120	.2857	.0010	F3476.	.0015	.0065	.1167
Stddev	.0006	.07	.0004	.0013	.0001	27.	.0001	.0000	.0009
%RSD	3826.	.1704	3.726	.4661	5.878	.7635	9.232	.1126	.7782
#1	.0002	43.51	.0116	.2869	.0010	3506.	.0016	.0065	.1178
#2	-.0007	43.50	.0125	.2861	.0011	3466.	.0013	.0065	.1161
#3	.0006	43.38	.0118	.2843	.0010	3456.	.0014	.0065	.1163

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0141	16.24	2.817	32.06	.4703	.0048	4.242	.0326	.0886
Stddev	.0006	.03	.060	.10	.0029	.0003	.024	.0001	.0015
%RSD	4.322	.1650	2.129	.3225	.6252	5.242	.5531	.3904	1.660
#1	.0148	16.22	2.776	32.09	.4732	.0048	4.218	.0327	.0892
#2	.0137	16.27	2.789	32.14	.4673	.0050	4.264	.0324	.0897
#3	.0138	16.23	2.886	31.94	.4705	.0045	4.244	.0325	.0869

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0130	-.0042	1.631	.0183	F8.724	.3029	.0075	.1389	.0423
Stddev	.0007	.0034	.004	.0007	.049	.0015	.0022	.0007	.0001
%RSD	5.106	81.07	.2637	3.576	.5560	.4940	29.72	.5024	.1961
#1	.0137	-.0016	1.636	.0177	8.777	.3046	.0050	.1397	.0424
#2	.0125	-.0028	1.629	.0181	8.683	.3017	.0094	.1386	.0423
#3	.0126	-.0080	1.627	.0190	8.710	.3025	.0082	.1384	.0424

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2002.6	5516.5	46464.	3842.0
Stddev	6.0	15.3	239.	23.7
%RSD	.30134	.27714	.51474	.61718
#1	1999.6	5500.5	46232.	3829.8
#2	1998.7	5518.2	46710.	3826.9
#3	2009.6	5530.9	46451.	3869.3

Zoom In Zoom Out

Sample Name: FA22032-4 Acquired: 2/16/2015 16:11:24 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	156.6	.0413	1.341	.0069	F1690.	.0019	.0471	.1439
Stddev	.0008	.4	.0005	.004	.0001	30.	.0001	.0002	.0009
%RSD	855.0	.2593	1.250	.2805	1.589	1.777	4.098	.4667	.6489
#1	-.0007	156.8	.0410	1.341	.0070	1716.	.0018	.0469	.1440
#2	.0008	156.9	.0419	1.345	.0068	1696.	.0020	.0470	.1429
#3	-.0003	156.1	.0411	1.338	.0070	1657.	.0018	.0473	.1448

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1434	136.1	46.19	112.4	3.784	.0143	2.962	.1051	.1427
Stddev	.0007	.5	.22	.5	.028	.0002	.009	.0001	.0001
%RSD	.4620	.3414	.4766	.4129	.7433	1.170	.2986	.0979	.0896
#1	.1441	136.3	46.40	112.9	3.769	.0145	2.971	.1052	.1427
#2	.1428	136.5	46.20	112.3	3.766	.0144	2.953	.1050	.1426
#3	.1434	135.6	45.96	112.0	3.816	.0141	2.962	.1051	.1429

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0053	.0039	1.953	.0196	F8.259	3.378	-.0016	.2336	.4109
Stddev	.0016	.0012	.004	.0005	.099	.006	.0021	.0009	.0007
%RSD	30.77	30.86	.1849	2.559	1.198	.1899	130.8	.3706	.1657
#1	.0044	.0037	1.956	.0197	8.242	3.381	-.0039	.2345	.4107
#2	.0072	.0053	1.954	.0200	8.366	3.370	-.0008	.2328	.4117
#3	.0044	.0029	1.949	.0190	8.170	3.382	.0000	.2333	.4104

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2194.4	6457.7	53195.	4363.7
Stddev	3.2	10.9	274.	26.9
%RSD	.14414	.16953	.51419	.61539
#1	2193.5	6466.9	53131.	4339.9
#2	2191.9	6445.6	53495.	4358.4
#3	2198.0	6460.6	52959.	4392.8

Zoom In Zoom Out

Sample Name: FA22032-5 Acquired: 2/16/2015 16:16:06 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	152.6	.0429	1.409	.0067	F1859.	.0023	.0464	.1400
Stddev	.0010	.6	.0007	.006	.0000	11.	.0001	.0002	.0006
%RSD	316.2	.3635	1.627	.4576	.1608	.6070	3.902	.4107	.4101
#1	.0013	151.9	.0421	1.402	.0067	1871.	.0023	.0462	.1406
#2	-.0007	152.9	.0435	1.411	.0067	1858.	.0023	.0465	.1400
#3	.0004	152.8	.0431	1.415	.0067	1849.	.0022	.0465	.1394

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1904	132.1	44.92	105.8	3.581	.0151	3.194	.1028	.1462
Stddev	.0005	.5	.21	.4	.013	.0001	.010	.0005	.0013
%RSD	.2475	.3592	.4727	.3687	.3735	.8079	.3245	.4677	.8693
#1	.1900	131.5	44.69	105.5	3.593	.0150	3.188	.1032	.1465
#2	.1909	132.3	44.98	105.8	3.583	.0150	3.188	.1029	.1473
#3	.1903	132.4	45.10	106.2	3.567	.0152	3.206	.1023	.1448

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0053	-.0001	2.041	.0203	F9.316	3.261	-.0003	.2279	.4103
Stddev	.0013	.0021	.006	.0004	.066	.003	.0021	.0005	.0007
%RSD	24.55	1427.	.2865	1.917	.7054	.0962	603.9	.2343	.1709
#1	.0048	-.0019	2.046	.0199	9.248	3.264	-.0026	.2285	.4101
#2	.0044	.0022	2.041	.0207	9.320	3.259	.0016	.2278	.4111
#3	.0068	-.0008	2.035	.0203	9.379	3.259	.0000	.2275	.4098

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2155.6	6358.3	52936.	4293.5
Stddev	4.3	4.3	96.	16.0
%RSD	.20001	.06810	.18044	.37317
#1	2156.0	6353.9	52942.	4307.4
#2	2151.2	6358.3	53028.	4276.0
#3	2159.8	6362.6	52838.	4297.0

Zoom In Zoom Out

Sample Name: FA22032-6 Acquired: 2/16/2015 16:20:50 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	133.0	.0365	1.150	.0059	F2206.	.0019	.0416	.1213
Stddev	.0009	.4	.0010	.000	.0001	20.	.0001	.0002	.0004
%RSD	1060.	.3236	2.768	.0379	1.025	.8979	5.001	.3891	.3532
#1	.0010	132.9	.0362	1.150	.0059	2184.	.0018	.0418	.1208
#2	.0002	132.6	.0377	1.150	.0058	2222.	.0020	.0415	.1216
#3	-.0009	133.5	.0358	1.150	.0058	2212.	.0018	.0415	.1215

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1378	116.7	38.14	97.52	3.070	.0132	3.062	.0922	.1235
Stddev	.0004	.4	.12	.23	.011	.0001	.021	.0006	.0007
%RSD	.3178	.3491	.3110	.2366	.3557	.9885	.6920	.6781	.5365
#1	.1383	116.7	38.28	97.46	3.079	.0131	3.073	.0929	.1234
#2	.1375	116.3	38.09	97.33	3.058	.0133	3.037	.0921	.1242
#3	.1376	117.1	38.06	97.78	3.071	.0132	3.075	.0917	.1229

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0065	.0019	2.129	.0202	F11.36	2.739	.0022	.1961	.3560
Stddev	.0022	.0022	.005	.0003	.08	.007	.0030	.0009	.0010
%RSD	34.58	119.9	.2299	1.561	.7060	.2401	138.6	.4480	.2870
#1	.0051	-.0001	2.133	.0205	11.30	2.741	.0051	.1964	.3571
#2	.0053	.0014	2.124	.0199	11.34	2.744	-.0009	.1967	.3556
#3	.0091	.0043	2.129	.0202	11.45	2.731	.0023	.1951	.3552

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2113.9	6004.8	50234.	4047.0
Stddev	3.8	10.5	178.	28.0
%RSD	.17912	.17540	.35373	.69083
#1	2111.7	5995.2	50078.	4075.7
#2	2111.8	6003.0	50427.	4045.3
#3	2118.3	6016.1	50196.	4019.9

Zoom In Zoom Out

Sample Name: FA22032-7 Acquired: 2/16/2015 16:25:31 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0005	94.29	.0291	.8780	.0045	F2602.	.0017	.0331	.1033
Stddev	.0004	.16	.0006	.0014	.0001	44.	.0001	.0001	.0001
%RSD	69.65	.1677	2.209	.1592	3.104	1.701	4.647	.4047	.1305
#1	-.0002	94.25	.0292	.8768	.0046	2556.	.0018	.0331	.1034
#2	-.0004	94.46	.0296	.8795	.0046	2605.	.0018	.0329	.1033
#3	-.0009	94.15	.0284	.8775	.0044	2644.	.0017	.0332	.1031

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2639	111.0	24.86	71.91	2.298	.0156	2.629	.0823	.1172
Stddev	.0002	.3	.12	.09	.004	.0003	.010	.0004	.0008
%RSD	.0905	.2399	.5007	.1273	.1603	2.042	.3875	.5170	.6415
#1	.2642	111.1	24.95	71.91	2.302	.0159	2.640	.0824	.1171
#2	.2638	111.1	24.91	72.00	2.297	.0155	2.629	.0819	.1165
#3	.2638	110.7	24.72	71.82	2.295	.0153	2.620	.0827	.1180

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0085	-.0009	2.124	.0220	F13.31	1.786	.0031	.1420	.2704
Stddev	.0013	.0029	.002	.0001	.07	.003	.0032	.0004	.0003
%RSD	15.30	307.0	.0891	.3246	.5529	.1611	102.9	.2684	.1126
#1	.0083	-.0041	2.126	.0221	13.24	1.788	.0063	.1418	.2703
#2	.0074	.0016	2.124	.0220	13.30	1.786	.0000	.1425	.2708
#3	.0099	-.0003	2.122	.0219	13.39	1.783	.0029	.1418	.2702

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2097.3	5628.3	47400.	3857.1
Stddev	1.3	11.5	185.	11.8
%RSD	.06233	.20510	.38972	.30588
#1	2098.8	5634.7	47199.	3869.7
#2	2096.7	5615.0	47562.	3846.3
#3	2096.5	5635.3	47440.	3855.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 16:30:06 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2592	41.74	2.007	2.109	2.012	41.51	2.038	2.048	2.068	2.066
Stddev	.0008	.03	.008	.001	.006	.10	.003	.003	.008	.006
%RSD	.2940	.0772	.4050	.0262	.3001	.2513	.1269	.1271	.3856	.3055
#1	.2599	41.77	2.013	2.110	2.019	41.59	2.039	2.048	2.075	2.070
#2	.2593	41.72	1.998	2.109	2.007	41.54	2.036	2.045	2.070	2.069
#3	.2584	41.72	2.011	2.109	2.009	41.39	2.041	2.050	2.059	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.04	41.93	41.10	2.075	2.040	41.67	2.025	2.014	2.010	2.028
Stddev	.06	.17	.17	.006	.005	.16	.003	.003	.007	.002
%RSD	.1548	.4111	.4035	.3050	.2628	.3794	.1656	.1629	.3646	.0897
#1	41.09	42.09	40.96	2.081	2.038	41.85	2.027	2.017	2.013	2.027
#2	41.06	41.75	41.29	2.075	2.036	41.56	2.021	2.012	2.002	2.027
#3	40.97	41.94	41.07	2.068	2.046	41.60	2.026	2.011	2.016	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.837	2.066	2.079	2.058	2.029	2.005	2.019
Stddev	.004	.003	.009	.005	.001	.005	.003
%RSD	.1995	.1434	.4244	.2542	.0683	.2750	.1619
#1	1.838	2.066	2.090	2.064	2.031	2.009	2.022
#2	1.833	2.063	2.075	2.057	2.030	2.007	2.015
#3	1.840	2.069	2.073	2.054	2.028	1.998	2.019
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 16:30:06 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2664.4	6140.7	50754.	3768.2
Stddev	3.6	10.2	185.	40.6
%RSD	.13628	.16663	.36525	1.0783
#1	2665.9	6148.4	50566.	3786.3
#2	2660.2	6144.6	50757.	3721.6
#3	2667.0	6129.1	50937.	3796.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 16:34:17 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0073	.0013	.0007	.0009	F.1175	F.0015	F.0015	F.0011
Stddev	.0007	.0091	.0001	.0003	.0000	.0079	.0002	.0003	.0004
%RSD	156.3	124.7	10.18	42.05	5.577	6.760	11.58	19.62	35.61
#1	.0000	-.0027	.0015	.0010	.0009	.1262	.0016	.0018	.0009
#2	-.0012	.0096	.0013	.0004	.0009	.1106	.0016	.0016	.0008
#3	.0000	.0151	.0012	.0008	.0008	.1158	.0013	.0012	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit						.1000	.0010	.0010	.0010
Low Limit						-.1000	-.0010	-.0010	-.0010

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0383	.1975	.0384	F.0012	F.0058	.0178	F.0017	F.0013
Stddev	.0003	.0057	.0596	.0254	.0002	.0016	.0196	.0001	.0005
%RSD	36.82	14.91	30.18	66.20	19.95	27.50	110.6	4.793	41.18
#1	.0008	.0443	.1316	.0669	.0010	.0075	-.0009	.0018	.0019
#2	.0005	.0377	.2477	.0305	.0011	.0057	.0383	.0017	.0010
#3	.0010	.0329	.2131	.0179	.0015	.0043	.0159	.0016	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail
High Limit					.0010	.0010		.0010	.0010
Low Limit					-.0010	-.0010		-.0010	-.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	F.0032	.0017	F.0019	F.0013	F.0024	-.0002	.0008	.0014
Stddev	.0007	.0023	.0002	.0005	.0001	.0002	.0006	.0001	.0002
%RSD	40.96	71.74	13.36	25.35	9.441	9.834	369.5	14.25	10.70
#1	.0023	.0023	.0017	.0024	.0015	.0022	-.0008	.0007	.0016
#2	.0014	.0015	.0019	.0020	.0012	.0023	.0003	.0007	.0015
#3	.0011	.0057	.0014	.0014	.0013	.0026	.0000	.0009	.0013
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010	.0010	.0020			
Low Limit		-.0020		-.0010	-.0010	-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 16:34:17 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3042.9	6380.2	52904.	3763.5
Stddev	5.8	16.3	454.	35.5
%RSD	.19219	.25613	.85771	.94298
#1	3036.1	6367.8	52594.	3731.4
#2	3045.7	6374.2	52693.	3757.4
#3	3046.8	6398.7	53425.	3801.6

Zoom In Zoom Out

Sample Name: FA22133-1 Acquired: 2/16/2015 16:38:44 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	2.840	.0015	.0927	.0000	3.016	.0003	.0011	.0080	.0082
Stddev	.0008	.018	.0003	.0003	.0001	.021	.0000	.0000	.0004	.0001
%RSD	151.3	.6194	20.01	.3566	144.4	.6892	6.142	3.850	4.637	.7740
#1	-.0012	2.831	.0013	.0924	.0001	3.002	.0003	.0011	.0076	.0082
#2	.0004	2.860	.0012	.0931	.0001	3.040	.0003	.0011	.0084	.0083
#3	-.0007	2.828	.0018	.0927	.0000	3.006	.0003	.0010	.0081	.0082

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.022	.2885	.4492	.0172	.0016	.1534	.0075	.0883	.0001	.0024
Stddev	.013	.0529	.0246	.0001	.0002	.0134	.0001	.0004	.0007	.0006
%RSD	.3233	18.35	5.486	.6862	9.595	8.725	1.529	.4787	566.0	24.75
#1	4.007	.3443	.4388	.0172	.0018	.1525	.0076	.0880	.0009	.0031
#2	4.026	.2822	.4773	.0173	.0017	.1673	.0075	.0881	-.0002	.0024
#3	4.033	.2390	.4314	.0170	.0015	.1405	.0073	.0888	-.0004	.0019

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2104	.0222	.0350	.2954	-.0026	.0159	.0713
Stddev	.0018	.0002	.0003	.0007	.0004	.0002	.0005
%RSD	.8707	.8631	.8575	.2353	13.52	1.499	.6856
#1	.2118	.0223	.0348	.2958	-.0030	.0157	.0719
#2	.2110	.0222	.0354	.2959	-.0026	.0161	.0713
#3	.2083	.0220	.0349	.2946	-.0023	.0157	.0709

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3056.1	6451.9	53975.	3883.0
Stddev	12.0	28.3	294.	38.7
%RSD	.39138	.43903	.54393	.99574
#1	3050.0	6433.3	53638.	3916.3
#2	3048.4	6437.9	54112.	3892.0
#3	3069.9	6484.5	54174.	3840.6

Zoom In Zoom Out

Sample Name: FA22133-2 Acquired: 2/16/2015 16:43:07 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0003	3.173	.0009	.0309	.0000	5.040	.0000	.0012	.0129	.0034
Stddev	.0003	.024	.0006	.0005	.0001	.003	.000	.0001	.0002	.0001
%RSD	114.7	.7552	66.10	1.499	3603.	.0682	216.4	10.70	1.888	3.059
#1	-.0001	3.197	.0003	.0304	.0001	5.043	.0000	.0013	.0131	.0033
#2	-.0001	3.172	.0015	.0311	.0000	5.042	-.0001	.0010	.0129	.0034
#3	-.0006	3.149	.0011	.0312	.0000	5.037	.0000	.0013	.0126	.0035

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	3.011	.3035	.5737	.0245	.0011	.1316	.0065	.0528	.0007	.0037
Stddev	.009	.0321	.0204	.0001	.0002	.0064	.0002	.0008	.0016	.0011
%RSD	.3025	10.57	3.555	.2602	16.55	4.902	3.071	1.516	222.3	30.83
#1	3.021	.3263	.5707	.0245	.0014	.1264	.0066	.0528	-.0007	.0024
#2	3.008	.2668	.5550	.0244	.0010	.1388	.0066	.0536	.0025	.0045
#3	3.004	.3174	.5954	.0245	.0011	.1294	.0063	.0520	.0004	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2162	.0216	.0619	.4165	-.0018	.0149	.0613
Stddev	.0002	.0003	.0002	.0012	.0018	.0002	.0002
%RSD	.0998	1.345	.3631	.2836	94.65	1.128	.3428
#1	.2160	.0216	.0620	.4178	-.0033	.0151	.0614
#2	.2164	.0219	.0621	.4162	.0001	.0147	.0611
#3	.2163	.0213	.0616	.4155	-.0024	.0150	.0614

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3025.9	6395.3	53722.	3900.3
Stddev	6.5	4.2	242.	21.5
%RSD	.21407	.06593	.45090	.55126
#1	3032.8	6398.4	53619.	3924.5
#2	3024.8	6397.0	53548.	3883.3
#3	3020.0	6390.5	53998.	3893.1

Zoom In Zoom Out

Sample Name: FA22133-3 Acquired: 2/16/2015 16:47:28 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0005	.9825	-.0002	.0466	.0000	5.993	.0001	.0008	.0119	.0069
Stddev	.0004	.0216	.0003	.0003	.000	.016	.0000	.0001	.0002	.0000
%RSD	92.94	2.201	134.0	.5961	706.5	.2733	31.54	16.54	1.845	.2694
#1	.0000	1.007	-.0004	.0468	.0000	6.008	.0001	.0008	.0117	.0069
#2	-.0009	.9739	.0001	.0466	.0001	5.975	.0001	.0008	.0119	.0069
#3	-.0005	.9665	-.0003	.0463	-.0002	5.995	.0001	.0006	.0121	.0068

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.417	.3117	.3870	.0233	.0008	.0936	.0039	.0899	.0004	.0023
Stddev	.015	.0331	.0260	.0000	.0001	.0068	.0002	.0002	.0008	.0029
%RSD	.6113	10.61	6.719	.2137	11.06	7.293	4.576	.1715	180.1	129.0
#1	2.430	.3482	.3793	.0233	.0009	.0978	.0037	.0898	.0013	.0057
#2	2.419	.2837	.4160	.0232	.0008	.0974	.0039	.0901	-.0003	.0005
#3	2.401	.3032	.3658	.0233	.0008	.0858	.0040	.0898	.0003	.0007

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.3020	.0221	.0316	.3252	-.0026	.0117	.1312
Stddev	.0003	.0005	.0002	.0002	.0012	.0002	.0004
%RSD	.1006	2.307	.7475	.0644	45.18	1.304	.3046
#1	.3017	.0225	.0316	.3253	-.0018	.0115	.1312
#2	.3023	.0223	.0318	.3250	-.0040	.0116	.1316
#3	.3020	.0215	.0314	.3253	-.0021	.0118	.1308

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3000.2	6376.0	53604.	3821.6
Stddev	8.7	5.3	229.	26.0
%RSD	.29097	.08298	.42669	.68013
#1	2990.1	6371.9	53529.	3840.1
#2	3004.7	6374.1	53860.	3791.9
#3	3005.8	6381.9	53422.	3833.0

Zoom In Zoom Out

Sample Name: FA22133-4 Acquired: 2/16/2015 16:51:50 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	2.049	.0005	.0381	.0000	2.184	.0001	.0016	.0128	.0118
Stddev	.0003	.026	.0010	.0002	.0002	.005	.0000	.0001	.0001	.0004
%RSD	132.6	1.279	177.5	.5587	470.1	.2225	33.02	8.357	.6637	3.465
#1	-.0001	2.062	-.0005	.0379	.0002	2.188	.0001	.0016	.0127	.0122
#2	-.0005	2.066	.0009	.0381	.0001	2.185	.0001	.0014	.0129	.0120
#3	.0000	2.019	.0012	.0383	-.0002	2.178	.0001	.0016	.0127	.0114

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	11.07	.3346	.4628	.0462	.0013	.0839	.0084	.0951	.0004	.0029
Stddev	.03	.0507	.0530	.0002	.0001	.0063	.0001	.0006	.0006	.0007
%RSD	.2294	15.16	11.46	.4389	4.337	7.454	.6851	.5997	137.4	24.01
#1	11.10	.2848	.5221	.0464	.0013	.0872	.0085	.0957	-.0002	.0033
#2	11.06	.3327	.4198	.0461	.0013	.0878	.0084	.0948	.0006	.0021
#3	11.05	.3862	.4465	.0461	.0012	.0767	.0084	.0947	.0009	.0032

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.2470	.0231	.0236	.2576	-.0019	.0150	.1070
Stddev	.0010	.0004	.0002	.0010	.0005	.0003	.0003
%RSD	.4249	1.870	.6551	.3983	23.65	2.274	.2560
#1	.2461	.0229	.0238	.2588	-.0015	.0154	.1069
#2	.2467	.0228	.0236	.2571	-.0019	.0149	.1069
#3	.2482	.0236	.0235	.2570	-.0024	.0148	.1074

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	3032.0	6405.1	53760.	3839.7
Stddev	3.5	13.8	415.	15.8
%RSD	.11479	.21571	.77192	.41269
#1	3028.2	6418.8	53288.	3845.3
#2	3032.8	6405.3	53926.	3852.0
#3	3035.1	6391.2	54067.	3821.8

Zoom In Zoom Out

Sample Name: FA22133-5 Acquired: 2/16/2015 16:56:12 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0016	7.019	.0350	1.685	.0000	.4537	-.0010	.0440
Stddev	.0005	.051	.0005	.006	.0001	.0033	.0001	.0002
%RSD	29.73	.7275	1.467	.3780	10220.	.7173	12.86	.5201
#1	-.0020	7.048	.0346	1.688	.0000	.4501	-.0011	.0437
#2	-.0018	7.050	.0356	1.689	-.0001	.4564	-.0011	.0442
#3	-.0011	6.960	.0350	1.678	.0001	.4545	-.0009	.0440

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.1545	.6400	352.7	.2064	.3867	1.517	.0555	.1391
Stddev	.0006	.0020	1.3	.0333	.0329	.004	.0001	.0080
%RSD	.3723	.3088	.3601	16.15	8.518	.2705	.1723	5.763
#1	.1542	.6420	353.5	.1893	.3695	1.515	.0556	.1302
#2	.1552	.6399	353.4	.1851	.4247	1.521	.0554	.1413
#3	.1543	.6381	351.2	.2449	.3659	1.513	.0555	.1458

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.2033	.1043	.0014	.0016	.8494	.0603	.0356	.1831
Stddev	.0002	.0004	.0010	.0009	.0035	.0005	.0002	.0004
%RSD	.1221	.4284	72.97	55.48	.4118	.8691	.5953	.2153
#1	.2034	.1047	.0004	.0007	.8506	.0604	.0355	.1831
#2	.2035	.1039	.0014	.0016	.8521	.0607	.0359	.1834
#3	.2030	.1044	.0024	.0024	.8455	.0597	.0355	.1826

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0157	.0219	.1419
Stddev	.0008	.0005	.0001
%RSD	4.926	2.069	.0609
#1	-.0165	.0214	.1418
#2	-.0150	.0221	.1419
#3	-.0154	.0222	.1419

Zoom In Zoom Out

Sample Name: FA22133-5 Acquired: 2/16/2015 16:56:12 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2973.6	6298.2	52689.	3829.4
Stddev	7.6	12.0	435.	9.3
%RSD	.25725	.19098	.82545	.24267
#1	2981.2	6312.0	52906.	3827.3
#2	2973.6	6292.5	52188.	3821.4
#3	2965.9	6290.1	52972.	3839.6

Zoom In Zoom Out

Sample Name: FA22134-1 Acquired: 2/16/2015 17:00:32 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0004	18.04	.0019	.0591	.0002	6.042	.0004	.0011	.0513	.0263
Stddev	.0004	.12	.0003	.0002	.0002	.063	.0001	.0002	.0004	.0003
%RSD	93.59	.6584	17.14	.3410	84.60	1.036	21.09	14.87	.8560	1.114
#1	-.0008	18.18	.0020	.0593	.0001	6.112	.0004	.0013	.0508	.0259
#2	-.0001	17.99	.0016	.0589	.0004	6.024	.0003	.0011	.0517	.0264
#3	-.0003	17.96	.0022	.0592	.0001	5.991	.0005	.0010	.0515	.0264

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.103	.8251	1.655	.0906	.0019	.3805	.0129	2.920	.0018	.0023
Stddev	.026	.0410	.041	.0003	.0002	.0193	.0002	.009	.0015	.0014
%RSD	.6252	4.970	2.480	.3750	10.10	5.080	1.165	.3110	82.52	62.43
#1	4.130	.7778	1.683	.0902	.0021	.3986	.0131	2.911	.0012	.0015
#2	4.079	.8507	1.608	.0908	.0017	.3601	.0130	2.930	.0007	.0014
#3	4.099	.8467	1.674	.0908	.0019	.3827	.0128	2.920	.0035	.0039

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8924	.0240	.1151	.1865	-.0030	.0191	.1576
Stddev	.0031	.0002	.0012	.0004	.0008	.0003	.0004
%RSD	.3479	.6572	1.045	.2027	25.56	1.496	.2782
#1	.8921	.0242	.1165	.1861	-.0039	.0191	.1572
#2	.8956	.0239	.1145	.1866	-.0025	.0189	.1581
#3	.8894	.0239	.1143	.1868	-.0026	.0194	.1576

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2996.0	6483.3	54360.	3953.7
Stddev	10.5	25.8	213.	39.6
%RSD	.35071	.39721	.39204	1.0021
#1	3007.3	6509.0	54548.	3909.4
#2	2986.6	6457.5	54403.	3985.8
#3	2993.9	6483.4	54128.	3965.8

Zoom In Zoom Out

Sample Name: FA22036-1 Acquired: 2/16/2015 17:04:53 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0013	134.1	.1057	2.950	.0180	120.1	-.0008	.1654	.1238	.1231
Stddev	.0004	.5	.0006	.005	.0002	.7	.0000	.0001	.0005	.0006
%RSD	27.76	.4075	.6032	.1752	.9843	.5809	3.032	.0649	.3774	.4540
#1	-.0017	133.5	.1057	2.945	.0179	119.4	-.0008	.1656	.1244	.1232
#2	-.0011	134.2	.1050	2.950	.0179	120.3	-.0008	.1654	.1235	.1226
#3	-.0011	134.5	.1063	2.955	.0182	120.7	-.0008	.1654	.1236	.1237

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	78.93	6.605	30.83	1.107	.0185	21.57	.1602	.0139	-.0013	.0243
Stddev	.45	.106	.12	.002	.0001	.15	.0006	.0007	.0008	.0023
%RSD	.5660	1.598	.3969	.1526	.7310	.7073	.3915	5.055	59.61	9.607
#1	78.49	6.487	30.71	1.109	.0187	21.40	.1608	.0132	-.0007	.0216
#2	78.93	6.690	30.84	1.106	.0184	21.62	.1602	.0146	-.0010	.0259
#3	79.38	6.638	30.95	1.106	.0185	21.69	.1595	.0140	-.0021	.0253

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5535	.0152	2.660	2.039	-.0050	.1977	.0507
Stddev	.0017	.0003	.013	.006	.0016	.0006	.0002
%RSD	.3048	1.660	.4848	.2830	31.87	.3065	.3894
#1	.5551	.0150	2.647	2.046	-.0048	.1984	.0509
#2	.5536	.0154	2.660	2.035	-.0066	.1973	.0507
#3	.5517	.0151	2.673	2.036	-.0034	.1974	.0506

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2654.2	7742.5	62812.	4674.5
Stddev	5.9	21.7	202.	51.5
%RSD	.22211	.28055	.32208	1.1019
#1	2651.0	7722.9	63011.	4731.0
#2	2650.5	7738.7	62607.	4662.2
#3	2661.0	7765.8	62819.	4630.2

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/16/2015 17:09:12 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0098	.2379	.0095	.2170	.0053	1.072	.0051	.0535	.0108	.0269
Stddev	.0003	.0024	.0008	.0010	.0001	.007	.0001	.0001	.0001	.0004
%RSD	2.851	.9933	8.853	.4751	2.110	.6690	1.071	.2547	.8922	1.467
#1	.0102	.2363	.0087	.2161	.0052	1.071	.0050	.0535	.0108	.0273
#2	.0097	.2368	.0103	.2168	.0052	1.066	.0051	.0537	.0109	.0265
#3	.0096	.2406	.0094	.2181	.0054	1.080	.0051	.0534	.0107	.0270

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3545	10.53	5.286	.0162	.0491	10.54	.0428	.0055	.0044	.0106
Stddev	.0088	.03	.030	.0000	.0002	.02	.0003	.0003	.0006	.0023
%RSD	2.491	.2661	.5735	.2509	.4710	.2147	.7549	6.127	13.08	21.80
#1	.3575	10.55	5.321	.0162	.0490	10.52	.0426	.0058	.0039	.0085
#2	.3615	10.54	5.274	.0162	.0493	10.57	.0432	.0053	.0050	.0102
#3	.3446	10.50	5.264	.0161	.0489	10.54	.0427	.0052	.0043	.0131

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0420	.0539	.0109	.0117	.0084	.0490	.0216
Stddev	.0007	.0009	.0002	.0002	.0002	.0002	.0001
%RSD	1.570	1.709	1.985	1.741	2.903	.3809	.5921
#1	.0418	.0537	.0111	.0119	.0087	.0491	.0216
#2	.0427	.0549	.0109	.0118	.0083	.0488	.0218
#3	.0414	.0531	.0106	.0115	.0083	.0491	.0215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2966.1	6338.4	53152.	3768.1
Stddev	14.8	29.7	170.	30.8
%RSD	.49838	.46904	.32065	.81781
#1	2970.3	6347.8	53314.	3768.3
#2	2949.6	6305.1	52974.	3798.9
#3	2978.3	6362.3	53167.	3737.3

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/16/2015 17:13:36 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0006	F513.3	.0015	.0010	-.0001	478.8	-.0005	.0011	.0006
Stddev	.0002	3.1	.0014	.0004	.0002	2.3	.0001	.0001	.0001
%RSD	33.68	.6038	94.46	40.86	191.3	.4748	17.58	6.165	18.74
#1	-.0008	512.5	.0019	.0015	-.0002	477.7	-.0005	.0010	.0006
#2	-.0006	510.7	.0026	.0008	.0001	477.3	-.0005	.0011	.0005
#3	-.0004	516.8	-.0001	.0008	-.0001	481.4	-.0007	.0011	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	184.9	.2547	488.5	-.0005	.0112	.1711	.0017	-.0010
Stddev	.000	1.3	.0290	2.7	.0000	.0001	.0133	.0001	.0013
%RSD	577.4	.7100	11.37	.5556	7.107	.8329	7.789	7.079	135.8
#1	-.0001	184.4	.2673	487.5	-.0005	.0113	.1557	.0017	.0002
#2	.0001	183.9	.2753	486.5	-.0004	.0112	.1797	.0016	-.0008
#3	.0000	186.4	.2216	491.6	-.0005	.0111	.1778	.0019	-.0023

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0005	.0017	.0834	.0013	.0002	.0015	-.0031	.0011	-.0016
Stddev	.0029	.0019	.0011	.0003	.0001	.0001	.0009	.0001	.0000
%RSD	592.2	110.9	1.379	24.28	81.22	5.901	28.39	7.344	1.378
#1	-.0015	.0011	.0846	.0011	.0001	.0016	-.0029	.0012	-.0016
#2	-.0027	.0039	.0823	.0017	.0003	.0015	-.0024	.0010	-.0016
#3	.0028	.0002	.0832	.0012	.0001	.0014	-.0041	.0012	-.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2369.7	5709.1	46384.	3634.1
Stddev	9.9	13.5	98.	22.1
%RSD	.41734	.23558	.21087	.60798
#1	2358.2	5702.3	46274.	3630.5
#2	2375.5	5724.6	46463.	3657.8
#3	2375.3	5700.5	46413.	3614.0

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/16/2015 17:18:04 Type: Unk
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.052	F523.0	1.028	.5443	.5069	473.8	.9199	.4820	.4983
Stddev	.004	2.6	.005	.0011	.0048	5.6	.0011	.0006	.0026
%RSD	.3959	.5021	.4515	.1974	.9537	1.186	.1158	.1228	.5313
#1	1.051	526.0	1.024	.5452	.5125	477.9	.9201	.4817	.4956
#2	1.048	521.8	1.033	.5445	.5035	476.0	.9209	.4827	.4984
#3	1.056	521.2	1.026	.5431	.5049	467.4	.9188	.4816	.5009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5602	184.0	.1580	492.1	.5054	.9355	.1160	.9483	.9661
Stddev	.0018	1.0	.0875	2.5	.0025	.0008	.0023	.0014	.0032
%RSD	.3260	.5587	55.39	.5120	.4868	.0812	1.991	.1519	.3359
#1	.5604	185.2	.2325	495.0	.5026	.9346	.1178	.9487	.9698
#2	.5583	183.6	.1799	490.9	.5061	.9357	.1134	.9495	.9650
#3	.5619	183.3	.0616	490.4	.5074	.9361	.1167	.9467	.9637

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.031	.9961	.0418	.9483	1.018	.9960	.9668	.4749	.9378
Stddev	.002	.0041	.0013	.0003	.006	.0024	.0012	.0017	.0020
%RSD	.2244	.4109	3.100	.0345	.5824	.2458	.1244	.3617	.2150
#1	1.034	1.001	.0425	.9480	1.024	.9933	.9681	.4736	.9373
#2	1.030	.9929	.0403	.9483	1.013	.9968	.9657	.4769	.9400
#3	1.030	.9948	.0426	.9486	1.016	.9980	.9666	.4744	.9360

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	2328.2	5677.4	46088.	3590.1
Stddev	5.1	12.5	461.	12.4
%RSD	.22069	.22061	.99937	.34410
#1	2325.2	5676.6	46491.	3581.7
#2	2325.3	5665.3	46186.	3584.3
#3	2334.2	5690.4	45586.	3604.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 17:22:26 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2612	41.67	1.993	2.117	1.996	40.00	2.024	2.047	2.055	2.075
Stddev	.0082	.10	.005	.006	.006	.10	.007	.007	.066	.062
%RSD	3.136	.2506	.2571	.2961	.2786	.2552	.3375	.3374	3.204	2.968
#1	.2698	41.55	1.990	2.109	1.990	39.89	2.019	2.041	2.124	2.136
#2	.2535	41.76	1.991	2.121	2.001	40.01	2.020	2.044	1.994	2.013
#3	.2603	41.68	1.999	2.119	1.997	40.09	2.032	2.054	2.047	2.075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.83	41.48	41.20	2.056	2.045	41.26	2.005	2.004	2.006	2.024
Stddev	.10	.08	.17	.066	.010	.17	.009	.009	.007	.007
%RSD	.2532	.1811	.4047	3.232	.4931	.4014	.4475	.4293	.3574	.3690
#1	40.72	41.45	41.01	2.127	2.037	41.10	2.000	1.997	2.001	2.020
#2	40.93	41.56	41.28	1.995	2.041	41.43	2.001	2.001	2.003	2.019
#3	40.85	41.42	41.32	2.046	2.056	41.24	2.016	2.014	2.014	2.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.829	2.066	2.045	2.032	2.027	1.979	1.994
Stddev	.007	.004	.009	.063	.014	.057	.009
%RSD	.4065	.2091	.4148	3.111	.6741	2.902	.4614
#1	1.824	2.063	2.035	2.097	2.017	2.039	1.989
#2	1.827	2.066	2.052	1.971	2.022	1.924	1.988
#3	1.838	2.071	2.047	2.029	2.043	1.974	2.004
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/16/2015 17:22:26 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2669.7	6181.8	51089.	3778.8
Stddev	9.2	19.3	1466.	25.0
%RSD	.34348	.31182	2.8692	.66177
#1	2676.4	6193.1	49470.	3795.8
#2	2673.4	6192.8	52325.	3790.4
#3	2659.2	6159.6	51471.	3750.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 17:26:37 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	F.0379	.0001	.0011	.0007	.0367	.0006	.0005	.0007
Stddev	.0001	.0064	.0006	.0002	.0001	.0059	.0001	.0000	.0001
%RSD	27.28	16.94	564.7	17.43	11.81	15.95	12.84	5.972	14.59
#1	-.0004	.0354	.0000	.0013	.0008	.0354	.0005	.0005	.0006
#2	-.0005	.0453	.0008	.0009	.0007	.0431	.0006	.0005	.0008
#3	-.0006	.0332	-.0004	.0012	.0007	.0316	.0007	.0005	.0007
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0250							
Low Limit		-.0250							

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0445	.1060	.0221	.0007	F.0044	-.0061	.0006	.0003
Stddev	.0004	.0060	.0129	.0370	.0001	.0013	.0048	.0003	.0001
%RSD	111.2	13.42	12.13	167.8	7.855	28.77	78.48	48.03	44.72
#1	-.0001	.0476	.1192	-.0072	.0007	.0058	-.0006	.0010	.0003
#2	.0006	.0482	.0935	.0637	.0007	.0042	-.0087	.0005	.0005
#3	.0005	.0376	.1052	.0097	.0006	.0033	-.0090	.0004	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F.0031	.0022	F.0013	.0007	.0019	.0009	.0003	.0011
Stddev	.0009	.0002	.0007	.0003	.0001	.0001	.0009	.0003	.0001
%RSD	39660.	7.280	30.40	21.94	12.54	6.376	98.69	105.4	6.405
#1	-.0008	.0032	.0025	.0015	.0008	.0020	.0019	.0001	.0011
#2	-.0002	.0029	.0027	.0015	.0007	.0019	.0001	.0002	.0011
#3	.0010	.0033	.0015	.0010	.0006	.0018	.0007	.0006	.0012
Check ?	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0020		.0010					
Low Limit		-.0020		-.0010					

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/16/2015 17:26:37 Type: QC
Method: 60102007_042011(v119) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3039.5	6384.5	53311.	3778.1
Stddev	17.1	44.6	245.	18.4
%RSD	.56191	.69830	.46044	.48605
#1	3042.5	6409.0	53203.	3797.1
#2	3021.1	6333.0	53139.	3760.5
#3	3054.9	6411.4	53592.	3776.6

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	2	V	-0.007608	0.000000	No
			Fe	0.000007	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.040330	0.000000	No
As 189.042 {478}	X	4	Fe	-0.000107	0.000000	No
			Cr	-0.000129	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000005	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000006	0.000000	No
Be 313.042 {108}	X	2	V	0.000042	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000068	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	-0.000004	0.000000	No
Cr 267.716 {126}	X	4	Al	0.000001	0.000000	No
			Fe	-0.000004	0.000000	No
			Ca	-0.000000	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	X	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	-0.000154	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000062	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000023	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	-0.000000	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No
Pb 220.353 {453}	X	8	Al	0.000216	0.000000	No
			Fe	0.000080	0.000000	No
			Mo	-0.001466	0.000000	No
			Cu	0.000467	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000275	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	-0.000260	0.000000	No
Sb 206.833 {463}	X	11	Fe	0.000046	0.000000	No
			Cr	0.006369	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mo	-0.002569	0.000000	No
			V	-0.000441	0.000000	No
			Sn	-0.008695	0.000000	No
			Ti	0.000278	0.000000	No
			Ca	-0.000005	0.000000	No
			Ni	-0.000818	0.000000	No
			Al	0.000006	0.000000	No
			Mn	-0.000133	0.000000	No
			Mg	-0.000000	0.000000	No
Se 196.090 {472}	X	12	Fe	-0.000010	0.000000	No
			Ca	0.000004	0.000000	No
			Mn	0.000331	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000025	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	-0.000111	0.000000	No
			As	0.000125	0.000000	No
			Cd	-0.000250	0.000000	No
			Mg	0.000001	0.000000	No
			Cr	-0.000326	0.000000	No
Si 212.412 {459}	X	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	X	None				
Sr 407.771 { 83}	X	1	Ca	0.000003	0.000000	No
Ti 334.941 {101}	X	1	Ca	-0.000017	0.000000	No
Tl 190.856 {477}	X	10	Co	0.003248	0.000000	No
			Fe	0.000045	0.000000	No
			Al	-0.000022	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.000648	0.000000	No
			Sb	0.000167	0.000000	No
			Ca	-0.000004	0.000000	No
			Cr	0.000340	0.000000	No
			Mg	-0.000001	0.000000	No
			V	0.000015	0.000000	No
V 292.402 {115}	X	5	Fe	0.000004	0.000000	No
			Cr	-0.001960	0.000000	No
			Mo	-0.004535	0.000000	No
			Ti	0.000303	0.000000	No
			Mn	-0.000333	0.000000	No
Y 224.306 {450}*	X	None				
Y 360.073 { 94}*	X	None				
Y 371.030 { 91}*	X	None				
Zn 206.200 {463}	X	5	Cr	-0.001305	0.000000	No
			Al	0.000000	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	0.000020	0.000000	No
			As	0.001105	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001198	0.451325	0.000000	1.000000
	Al 396.152 { 85}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.002047	0.134333	0.000000	1.000000
	As 189.042 {478}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000278	0.167228	0.000000	1.000000
	Ba 455.403 { 74}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001078	6.876655	0.000000	1.000000
	Be 313.042 {108}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.003485	6.222043	0.000000	1.000000
	Ca 317.933 {106}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.005981	0.173207	0.000000	1.000000
	Cd 226.502 {449}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.003430	4.430891	0.000000	1.000000
	Co 228.616 {447}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001649	2.201103	0.000000	1.000000
	Cr 267.716 {126}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.000130	0.400413	0.000000	1.000000
	Cu 324.754 {104}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.005245	0.566511	0.000000	1.000000
	Fe 259.940 {130}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.006440	0.135584	0.000000	1.000000
	In 230.606 {446}*	2/16/2015 10:49:39	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.008092	0.061698	0.000000	1.000000
	Mg 279.079 {121}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000173	0.019668	0.000000	1.000000
	Mn 257.610 {131}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001333	2.409508	0.000000	1.000000
	Mo 202.030 {467}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.012334	0.952201	0.000000	1.000000
	Na 589.592 { 57}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.012410	0.223470	0.000000	1.000000
	Ni 231.604 {445}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001411	1.360807	0.000000	1.000000
	Pb 220.353 {453}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001120	0.806731	0.000000	1.000000
	Sb 206.833 {463}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001068	0.210780	0.000000	1.000000
	Se 196.090 {472}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000146	0.116877	0.000000	1.000000
	Si 212.412 {459}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.005534	0.384994	0.000000	1.000000
	Sn 189.989 {477}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.001492	0.375872	0.000000	1.000000
	Sr 407.771 { 83}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.004937	10.687363	0.000000	1.000000
	Ti 334.941 {101}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.006250	1.553863	0.000000	1.000000
	Tl 190.856 {477}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000884	0.302358	0.000000	1.000000
	V 292.402 {115}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	-0.000616	0.501923	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/16/2015 10:49:39	2/16/2015 10:18:23	Linear	1/Conc	0.004887	2.570053	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999862	0.000071	0.000471	0.001571	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999861	0.003622	0.012328	0.041094	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999954	0.000129	0.000887	0.002958	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999894	0.008073	0.000309	0.001028	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999832	0.009198	0.000114	0.000380	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999837	0.005042	0.004618	0.015392	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999818	0.006828	0.000053	0.000176	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999831	0.003261	0.000118	0.000395	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999732	0.000747	0.000311	0.001036	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999848	0.000792	0.000333	0.001110	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999555	0.006515	0.003283	0.010942	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999885	0.001506	0.046329	0.154431	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999792	0.000647	0.028411	0.094703	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999479	0.006268	0.000048	0.000160	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999914	0.001003	0.000161	0.000538	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999906	0.004933	0.013507	0.045023	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999801	0.002186	0.000194	0.000646	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999938	0.000727	0.000639	0.002129	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999949	0.000170	0.001149	0.003832	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999934	0.000108	0.001890	0.006301	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.991485	0.004150	0.000444	0.001478	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999788	0.000624	0.000338	0.001126	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999775	0.018265	0.000125	0.000416	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999739	0.002860	0.000127	0.000423	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999929	0.000291	0.001003	0.003342	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999979	0.000259	0.000311	0.001037	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999795	0.004196	0.000069	0.000229	OK.	1.000000	0.000000	1	0

Zoom In ▶ Zoom Out

Sample Name: Blank Acquired: 2/17/2015 9:38:04 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0023	-.0003	.0089	.0003	.0073	.0004	.0009	.0001
Stddev	.0003	.0008	.0001	.0005	.0001	.0002	.0004	.0004	.0002
%RSD	255.4	34.32	19.06	5.860	38.05	2.286	110.6	41.37	148.5
#1	.0004	.0018	-.0004	.0087	.0002	.0074	.0000	.0005	.0001
#2	.0001	.0019	-.0003	.0084	.0003	.0071	.0004	.0009	.0003
#3	-.0002	.0032	-.0003	.0094	.0003	.0075	.0008	.0012	-.0001

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0049	.0047	.0077	-.0004	.0008	.0045	-.0162	-.0001	-.0047
Stddev	.0002	.0004	.0019	.0004	.0001	.0007	.0036	.0002	.0011
%RSD	3.797	9.525	24.59	79.38	10.65	14.83	22.22	148.8	24.24
#1	.0049	.0052	.0082	-.0008	.0007	.0052	-.0173	-.0004	-.0045
#2	.0047	.0046	.0092	-.0001	.0008	.0044	-.0122	-.0001	-.0059
#3	.0051	.0043	.0056	-.0005	.0009	.0038	-.0191	.0000	-.0036

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0003	-.0009	.0084	.0008	.0020	.0043	-.0057	-.0003	.0038
Stddev	.0001	.0001	.0001	.0001	.0009	.0001	.0009	.0002	.0002
%RSD	43.18	10.05	1.458	15.10	43.20	3.180	16.15	62.44	4.990
#1	.0001	-.0009	.0084	.0007	.0019	.0045	-.0066	-.0001	.0036
#2	.0003	-.0008	.0082	.0009	.0029	.0043	-.0048	-.0004	.0039
#3	.0003	-.0010	.0085	.0009	.0012	.0042	-.0058	-.0004	.0040

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1705.8	4992.8	34221.	4305.2
Stddev	1.6	1.0	75.	61.4
%RSD	.09179	.02066	.21985	1.4261
#1	1704.1	4992.8	34249.	4263.9
#2	1707.1	4991.8	34278.	4375.7
#3	1706.2	4993.8	34136.	4275.9

◀ Zoom In ▶ Zoom Out

Sample Name: LowStd Acquired: 2/17/2015 9:41:35 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0387	1.524	.1350	5.399	3.473	2.282	2.680	1.218	.2669	.4194
Stddev	.0002	.004	.0003	.015	.007	.008	.001	.002	.0004	.0012
%RSD	.5344	.2778	.2071	.2774	.1988	.3437	.0271	.1394	.1338	.2912
#1	.0385	1.520	.1351	5.397	3.467	2.275	2.680	1.218	.2673	.4206
#2	.0389	1.526	.1347	5.384	3.472	2.281	2.680	1.217	.2668	.4194
#3	.0386	1.528	.1352	5.414	3.481	2.291	2.679	1.220	.2666	.4182

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.318	1.253	.2086	1.717	.5882	4.325	.7643	.6436	.1358	.1021
Stddev	.006	.004	.0016	.004	.0009	.011	.0005	.0015	.0004	.0002
%RSD	.4213	.3199	.7640	.2137	.1578	.2494	.0649	.2342	.2627	.2269
#1	1.313	1.249	.2068	1.720	.5879	4.315	.7649	.6421	.1360	.1020
#2	1.317	1.254	.2099	1.713	.5874	4.322	.7639	.6438	.1359	.1019
#3	1.324	1.257	.2091	1.719	.5892	4.337	.7642	.6451	.1353	.1024

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1774	.2313	7.933	1.035	.2765	.3508	1.847
Stddev	.0000	.0003	.024	.003	.0017	.0013	.001
%RSD	.0218	.1216	.2957	.2461	.6163	.3765	.0643
#1	.1775	.2309	7.924	1.038	.2769	.3521	1.848
#2	.1774	.2314	7.916	1.033	.2746	.3494	1.846
#3	.1775	.2315	7.960	1.033	.2779	.3509	1.848

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1678.0	4865.7	33359.	4217.8
Stddev	.6	3.1	111.	15.8
%RSD	.03329	.06319	.33321	.37519
#1	1677.4	4862.6	33233.	4236.0
#2	1678.5	4865.9	33400.	4207.3
#3	1677.9	4868.7	33443.	4210.2

◀ Zoom In ▶ Zoom Out

Sample Name: HighStd Acquired: 2/17/2015 9:48:05 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3087	11.79	1.100	42.35	26.90	17.19	21.36	9.791	2.079	3.343
Stddev	.0005	.01	.001	.05	.02	.01	.03	.006	.005	.005
%RSD	.1770	.1102	.1121	.1119	.0861	.0790	.1294	.0596	.2413	.1552
#1	.3093	11.80	1.101	42.29	26.90	17.19	21.37	9.792	2.078	3.346
#2	.3084	11.77	1.099	42.39	26.87	17.17	21.33	9.784	2.085	3.347
#3	.3084	11.79	1.100	42.36	26.92	17.20	21.38	9.795	2.075	3.337

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	9.754	9.834	1.578	13.16	4.772	33.45	6.068	5.267	1.114	.8363
Stddev	.017	.013	.003	.09	.003	.01	.007	.009	.002	.0007
%RSD	.1712	.1301	.1691	.6828	.0615	.0292	.1203	.1607	.1514	.0866
#1	9.769	9.848	1.581	13.12	4.770	33.46	6.072	5.277	1.114	.8370
#2	9.736	9.833	1.575	13.26	4.771	33.44	6.059	5.260	1.115	.8356
#3	9.758	9.822	1.578	13.09	4.776	33.46	6.071	5.265	1.112	.8364

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2.449	1.835	62.26	8.247	2.317	2.803	14.26
Stddev	.002	.003	.03	.006	.009	.009	.02
%RSD	.0715	.1829	.0433	.0708	.3747	.3233	.1730
#1	2.451	1.837	62.23	8.250	2.326	2.803	14.27
#2	2.448	1.831	62.27	8.250	2.315	2.812	14.23
#3	2.449	1.836	62.28	8.240	2.309	2.793	14.28

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1556.9	4562.8	31706.	4244.9
Stddev	3.2	7.0	127.	24.9
%RSD	.20507	.15413	.40106	.58649
#1	1553.2	4558.4	31699.	4216.3
#2	1558.8	4570.9	31582.	4261.5
#3	1558.6	4559.0	31836.	4256.8

◀ Zoom In ▶ Zoom Out

Sample Name: MidStd Acquired: 2/17/2015 9:54:09 Type: Cal
Method: 60102007_041712(v124) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1592	6.153	.5588	22.00	14.05	9.090	10.97	4.993	1.078	1.706
Stddev	.0007	.014	.0008	.01	.01	.012	.01	.004	.002	.003
%RSD	.4627	.2319	.1455	.0600	.0892	.1345	.0688	.0784	.2081	.1703
#1	.1599	6.168	.5596	22.01	14.06	9.102	10.97	4.997	1.077	1.707
#2	.1591	6.139	.5579	21.99	14.04	9.077	10.97	4.992	1.080	1.708
#3	.1585	6.152	.5588	21.98	14.05	9.091	10.96	4.989	1.076	1.703

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5.219	5.072	.8272	6.994	2.422	17.56	3.105	2.688	.5632	.4255
Stddev	.008	.008	.0025	.006	.004	.02	.005	.004	.0014	.0018
%RSD	.1532	.1638	.3074	.0832	.1866	.1288	.1720	.1414	.2477	.4117
#1	5.221	5.072	.8243	6.996	2.417	17.59	3.109	2.686	.5648	.4269
#2	5.211	5.064	.8285	6.999	2.422	17.54	3.099	2.693	.5626	.4236
#3	5.226	5.081	.8289	6.988	2.426	17.55	3.108	2.686	.5622	.4261

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.035	.9371	32.78	4.310	1.182	1.407	7.369
Stddev	.001	.0019	.06	.008	.002	.002	.003
%RSD	.1172	.2001	.1860	.1846	.1454	.1600	.0467
#1	1.036	.9371	32.84	4.317	1.184	1.404	7.370
#2	1.035	.9352	32.72	4.311	1.181	1.408	7.365
#3	1.034	.9390	32.77	4.301	1.180	1.408	7.371

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1614.7	4723.1	32413.	4210.6
Stddev	3.0	4.5	130.	17.3
%RSD	.18365	.09472	.40129	.41094
#1	1618.1	4725.7	32471.	4229.6
#2	1613.5	4725.7	32264.	4206.3
#3	1612.5	4717.9	32505.	4195.9

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/17/2015 9:58:43 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4959	78.62	3.968	3.939	3.920	78.02	3.950	3.966	3.937	3.978
Stddev	.0008	.24	.006	.014	.011	.27	.004	.007	.008	.005
%RSD	.1531	.3109	.1550	.3645	.2876	.3396	.1053	.1769	.1955	.1209
#1	.4967	78.56	3.974	3.941	3.921	78.01	3.950	3.966	3.936	3.982
#2	.4958	78.88	3.961	3.952	3.931	78.29	3.945	3.958	3.945	3.973
#3	.4952	78.40	3.968	3.924	3.909	77.76	3.954	3.972	3.930	3.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.62	79.03	78.52	3.918	3.969	78.51	3.950	3.948	3.985	3.961
Stddev	.27	.21	.31	.033	.005	.27	.005	.018	.007	.006
%RSD	.3439	.2622	.3921	.8339	.1340	.3411	.1287	.4505	.1802	.1408
#1	77.67	79.15	78.67	3.950	3.967	78.65	3.955	3.966	3.990	3.965
#2	77.86	79.14	78.73	3.919	3.965	78.69	3.945	3.948	3.977	3.954
#3	77.33	78.79	78.17	3.884	3.975	78.20	3.951	3.930	3.987	3.962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.359	3.968	3.916	3.938	3.962	3.999	3.933
Stddev	.006	.009	.010	.003	.011	.004	.003
%RSD	.1475	.2240	.2461	.0724	.2750	.1109	.0814
#1	4.364	3.975	3.918	3.935	3.974	4.002	3.933
#2	4.351	3.958	3.925	3.941	3.960	4.000	3.929
#3	4.361	3.971	3.906	3.939	3.952	3.994	3.936
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: HSTD Acquired: 2/17/2015 9:58:43 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1559.5	4558.4	31574.	4190.7
Stddev	6.6	4.3	129.	32.3
%RSD	.42172	.09327	.40927	.77034
#1	1555.6	4554.2	31598.	4185.9
#2	1555.9	4558.4	31435.	4161.0
#3	1567.1	4562.7	31690.	4225.1

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/17/2015 10:04:36 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	41.96	1.932	2.060	2.025	43.00	1.919	1.954	2.007	1.959
Stddev	.0010	.10	.004	.006	.006	.09	.001	.002	.004	.008
%RSD	.4022	.2473	.2072	.3005	.3081	.2183	.0614	.0963	.1986	.4030
#1	.2476	42.08	1.935	2.067	2.032	43.10	1.920	1.955	2.010	1.967
#2	.2458	41.89	1.927	2.058	2.022	42.92	1.918	1.952	2.002	1.951
#3	.2460	41.91	1.933	2.055	2.021	42.97	1.919	1.954	2.009	1.959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.31	41.95	40.78	2.000	1.834	42.39	1.968	1.947	1.921	1.929
Stddev	.09	.12	.04	.004	.003	.11	.003	.003	.001	.003
%RSD	.2240	.2861	.0874	.1877	.1407	.2537	.1503	.1390	.0729	.1766
#1	41.41	42.08	40.78	2.003	1.832	42.52	1.971	1.950	1.922	1.932
#2	41.22	41.91	40.74	1.996	1.834	42.34	1.966	1.944	1.919	1.927
#3	41.30	41.85	40.81	2.001	1.837	42.32	1.965	1.947	1.921	1.926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0173	1.951	1.980	1.953	2.009	1.897	1.967
Stddev	.0008	.003	.007	.002	.004	.009	.002
%RSD	4.451	.1291	.3347	.1073	.1840	.4687	.0931
#1	.0180	1.950	1.988	1.955	2.007	1.904	1.969
#2	.0165	1.948	1.977	1.951	2.006	1.887	1.965
#3	.0175	1.953	1.976	1.953	2.013	1.899	1.967
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICV Acquired: 2/17/2015 10:04:36 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1623.6	4745.5	31835.	4156.9
Stddev	2.3	6.2	99.	12.6
%RSD	.14013	.13038	.30988	.30365
#1	1621.9	4740.1	31911.	4142.9
#2	1626.2	4752.3	31872.	4167.4
#3	1622.7	4744.2	31724.	4160.5

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/17/2015 10:10:45 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0066	.0004	-.0002	.0000	-.0002	-.0001	.0000	.0000	.0001
Stddev	.0001	.0092	.0005	.0002	.0001	.0032	.0001	.000	.000	.0002
%RSD	54.21	140.3	123.4	90.60	153.1	1322.	104.7	62.03	4384.	251.4
#1	.0001	.0167	.0007	-.0003	.0000	.0015	.0000	-.0001	-.0002	-.0002
#2	.0003	-.0014	-.0002	-.0004	.0000	.0017	.0000	.0000	.0002	.0002
#3	.0002	.0045	.0008	.0000	.0001	-.0040	-.0001	.0000	.0000	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0062	.0021	.0047	.0001	-.0006	.0063	.0002	-.0004	.0011	.0002
Stddev	.0024	.0301	.0110	.0001	.0004	.0063	.0002	.0006	.0005	.0006
%RSD	38.39	1441.	232.3	85.10	72.14	99.25	110.4	154.9	47.61	289.1
#1	-.0052	-.0019	-.0011	.0000	-.0002	.0006	.0000	.0002	.0012	-.0004
#2	-.0044	.0339	.0174	.0001	-.0007	.0131	.0005	-.0009	.0005	.0007
#3	-.0089	-.0258	-.0021	.0001	-.0010	.0053	.0001	-.0004	.0016	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0002	-.0001	-.0002	-.0011	-.0002	-.0001
Stddev	.0003	.0003	.0000	.0001	.0019	.0003	.0001
%RSD	244.4	177.0	27.37	61.58	173.7	187.4	120.6
#1	.0004	-.0006	-.0001	-.0002	-.0020	-.0003	-.0001
#2	-.0001	.0000	-.0001	-.0003	.0011	.0002	.0000
#3	.0001	.0000	-.0001	-.0001	-.0024	-.0004	-.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICB Acquired: 2/17/2015 10:10:45 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1691.0	4909.5	33961.	4259.3
Stddev	5.5	19.7	112.	12.0
%RSD	.32304	.40121	.32931	.28062
#1	1685.9	4887.3	33847.	4249.6
#2	1690.4	4916.6	34071.	4272.7
#3	1696.7	4924.7	33966.	4255.7

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/17/2015 10:14:54 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107	.2227	.0107	.2064	.0052	1.070	.0048	.0504	.0102	.0261
Stddev	.0003	.0053	.0001	.0003	.0001	.002	.0000	.0000	.0003	.0003
%RSD	3.238	2.363	1.367	.1639	1.944	.1459	.9772	.0308	2.833	1.082
#1	.0109	.2190	.0106	.2062	.0052	1.071	.0048	.0504	.0104	.0263
#2	.0104	.2264	.0108	.2066	.0053	1.068	.0048	.0504	.0100	.0259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3013	10.31	5.213	.0156	.0451	10.45	.0408	.0041	.0045	.0102
Stddev	.0041	.00	.038	.0001	.0002	.01	.0001	.0005	.0008	.0000
%RSD	1.370	.0262	.7363	.4623	.5374	.0749	.1858	12.16	16.85	.1259
#1	.3043	10.31	5.186	.0156	.0449	10.44	.0409	.0045	.0050	.0102
#2	.2984	10.31	5.240	.0155	.0453	10.45	.0408	.0038	.0039	.0102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0391	.0499	.0104	.0091	.0088	.0486	.0210
Stddev	.0008	.0002	.0001	.0001	.0009	.0008	.0002
%RSD	2.026	.4766	1.090	.8592	9.794	1.571	.9230
#1	.0386	.0498	.0103	.0090	.0082	.0481	.0209
#2	.0397	.0501	.0105	.0091	.0094	.0491	.0212
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/17/2015 10:14:54 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1690.3	4903.2	33677.	4259.5
Stddev	3.4	3.8	109.	19.6
%RSD	.20075	.07834	.32352	.46025
#1	1692.7	4905.9	33754.	4273.4
#2	1687.9	4900.5	33600.	4245.7

Zoom In Zoom Out

Sample Name: SiSIC Acquired: 2/17/2015 10:20:18 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0145	-.0004	-.0003	-.0002	.0039	-.0003	-.0006	-.0002
Stddev	.0001	.0146	.0008	.0002	.0000	.0018	.0001	.0001	.0001
%RSD	41.94	101.0	187.3	76.74	6.389	46.61	30.46	22.41	51.82
#1	.0004	-.0022	-.0001	.0000	-.0002	.0051	-.0002	-.0007	-.0002
#2	.0002	.0203	.0001	-.0004	-.0002	.0018	-.0002	-.0007	-.0001
#3	.0002	.0252	-.0013	-.0004	-.0002	.0048	-.0004	-.0004	-.0002
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0199	-.0267	.0189	-.0001	-.0028	.0078	-.0006	-.0005
Stddev	.0001	.0036	.0152	.0118	.0000	.0001	.0036	.0001	.0013
%RSD	126.1	18.21	56.85	62.79	32.80	3.755	46.03	15.70	246.5
#1	-.0001	-.0238	-.0137	.0237	-.0001	-.0027	.0063	-.0005	.0001
#2	-.0001	-.0193	-.0230	.0054	-.0002	-.0027	.0052	-.0006	.0004
#3	.0000	-.0166	-.0434	.0275	-.0001	-.0029	.0119	-.0005	-.0020
Check ?	None	None	None	None	None	None	None	None	Chk Pass
Value									
Range									

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	-.0004	F26.72	-.0009	-.0002	-.0005	-.0005	-.0003	.0009
Stddev	.0010	.0016	.03	.0004	.0001	.0001	.0011	.0002	.0000
%RSD	290.9	365.8	.1272	39.97	69.02	19.34	220.1	83.18	1.816
#1	-.0014	.0010	26.69	-.0007	-.0001	-.0004	.0006	-.0001	.0009
#2	.0004	-.0001	26.71	-.0007	-.0001	-.0004	-.0016	-.0005	.0009
#3	.0000	-.0022	26.75	-.0013	-.0003	-.0005	-.0004	-.0001	.0009
Check ?	None	None	Chk Fail	None	None	None	None	None	None
Value			60.00						
Range			40.00						

Zoom In Zoom Out

Sample Name: SiSIC Acquired: 2/17/2015 10:20:18 Type: QC
Method: 60102007_041712(v124) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1697.0	4950.8	33770.	4283.2
Stddev	1.4	6.2	70.	17.2
%RSD	.08215	.12494	.20637	.40171
#1	1695.4	4948.0	33801.	4291.2
#2	1697.8	4946.5	33691.	4263.5
#3	1697.8	4957.9	33820.	4295.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/17/2015 10:24:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	491.0	.0005	.0001	-.0001	471.5	.0000	.0007	.0000	-.0013
Stddev	.0004	7.2	.0004	.0002	.0000	8.3	.000	.0002	.000	.0003
%RSD	79.42	1.474	71.56	262.5	19.18	1.763	582.2	27.87	3117.	21.87
#1	.0002	499.3	.0007	-.0001	-.0001	480.6	-.0002	.0009	-.0003	-.0012
#2	.0010	486.3	.0001	.0003	-.0001	464.4	.0001	.0006	.0004	-.0016
#3	.0004	487.3	.0007	.0000	-.0001	469.3	.0000	.0006	-.0001	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	182.4	.2192	478.9	.0002	.0000	.1694	.0008	-.0001	.0001	.0000
Stddev	.3	.0422	.7	.0000	.0001	.0099	.0000	.0014	.0014	.002
%RSD	.1440	19.23	.1555	32.12	329.4	5.849	4.257	1876.	932.3	25150.
#1	182.7	.1749	479.6	.0002	.0000	.1583	.0008	-.0016	-.0001	-.0024
#2	182.2	.2240	478.1	.0001	.0001	.1773	.0008	.0005	.0016	.0017
#3	182.3	.2588	479.0	.0001	.0000	.1727	.0009	.0009	-.0011	.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0932	-.0003	.0000	-.0012	.0008	.0003	.0000
Stddev	.0006	.0006	.000	.0002	.0023	.0000	.0003
%RSD	.6780	173.5	4139.	17.00	295.5	9.850	631.8
#1	.0936	-.0007	-.0001	-.0010	.0007	.0003	-.0002
#2	.0936	.0003	.0000	-.0014	-.0015	.0003	.0001
#3	.0925	-.0006	.0000	-.0012	.0031	.0003	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/17/2015 10:24:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1539.1	4372.7	29511.	4073.1
Stddev	3.6	4.2	86.	25.6
%RSD	.23667	.09647	.29281	.62950
#1	1534.9	4372.0	29412.	4044.5
#2	1541.3	4368.9	29548.	4094.2
#3	1541.2	4377.2	29573.	4080.5

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/17/2015 10:31:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9918	499.8	1.069	.5078	.5061	472.3	.9649	.5060	.5026	.5614
Stddev	.0005	5.4	.002	.0011	.0013	5.5	.0011	.0004	.0015	.0014
%RSD	.0475	1.077	.1701	.2182	.2639	1.155	.1138	.0876	.2952	.2425
#1	.9917	501.6	1.067	.5079	.5075	471.7	.9661	.5063	.5036	.5625
#2	.9923	504.0	1.071	.5089	.5060	467.2	.9647	.5061	.5033	.5617
#3	.9913	493.7	1.068	.5067	.5049	478.1	.9639	.5055	.5009	.5598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	180.1	.0970	476.4	.5122	.9623	.1342	1.013	.9674	1.089	1.039
Stddev	.5	.0132	1.0	.0001	.0007	.0076	.002	.0015	.005	.002
%RSD	.2958	13.64	.2188	.0272	.0706	5.692	.1658	.1505	.4979	.2003
#1	180.6	.0831	477.6	.5122	.9627	.1368	1.014	.9678	1.090	1.037
#2	180.1	.0985	476.0	.5123	.9626	.1256	1.013	.9658	1.093	1.041
#3	179.6	.1094	475.7	.5120	.9615	.1402	1.011	.9686	1.083	1.039
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0444	.9949	1.001	1.015	.9999	.4953	.9829
Stddev	.0004	.0013	.003	.001	.0025	.0004	.0020
%RSD	.8797	.1286	.3110	.1285	.2527	.0803	.2003
#1	.0443	.9958	1.003	1.016	1.003	.4957	.9851
#2	.0448	.9956	1.002	1.016	.9993	.4949	.9823
#3	.0440	.9935	.9976	1.014	.9978	.4954	.9813
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/17/2015 10:31:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1525.6	4342.6	29109.	4099.1
Stddev	1.9	6.0	56.	20.4
%RSD	.12765	.13737	.19401	.49780
#1	1523.5	4336.3	29162.	4080.4
#2	1527.3	4343.4	29049.	4120.8
#3	1526.1	4348.1	29116.	4095.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 10:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2565	41.41	2.032	2.054	2.056	41.41	2.041	2.036	2.066	2.047
Stddev	.0004	.14	.005	.001	.006	.14	.002	.002	.004	.004
%RSD	.1722	.3423	.2687	.0609	.3013	.3432	.0822	.1058	.2123	.2210
#1	.2570	41.55	2.026	2.055	2.062	41.55	2.041	2.034	2.070	2.050
#2	.2561	41.27	2.032	2.055	2.050	41.27	2.043	2.038	2.064	2.050
#3	.2564	41.41	2.037	2.053	2.058	41.42	2.040	2.035	2.062	2.042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.49	41.46	41.15	2.090	2.025	41.79	2.038	2.023	2.032	2.035
Stddev	.10	.15	.13	.005	.007	.13	.003	.012	.005	.005
%RSD	.2467	.3522	.3241	.2395	.3446	.3098	.1307	.6019	.2611	.2395
#1	41.59	41.62	41.23	2.096	2.018	41.93	2.035	2.036	2.025	2.030
#2	41.38	41.33	41.00	2.088	2.027	41.68	2.041	2.021	2.034	2.039
#3	41.49	41.44	41.23	2.087	2.031	41.75	2.037	2.012	2.035	2.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.843	2.042	2.084	2.069	2.030	2.031	2.045
Stddev	.004	.007	.004	.006	.007	.003	.002
%RSD	.2309	.3665	.2029	.3122	.3406	.1671	.1011
#1	1.838	2.034	2.089	2.075	2.038	2.034	2.044
#2	1.844	2.045	2.080	2.071	2.027	2.028	2.047
#3	1.847	2.048	2.083	2.062	2.025	2.029	2.043
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 10:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1612.9	4692.1	32103.	4157.1
Stddev	7.8	7.3	72.	13.9
%RSD	.48445	.15519	.22496	.33366
#1	1604.4	4698.2	32064.	4141.7
#2	1614.4	4684.0	32058.	4160.8
#3	1619.8	4694.0	32186.	4168.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 10:44:17 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0034	-.0004	-.0002	.0000	.0105	-.0001	-.0001
Stddev	.0004	.0095	.0003	.0001	.000	.0012	.0001	.0001
%RSD	984.6	282.9	65.52	34.37	229.0	11.61	48.01	105.8
#1	.0005	.0072	-.0007	-.0002	.0000	.0104	-.0001	.0000
#2	-.0002	-.0059	-.0001	-.0001	-.0001	.0118	-.0001	-.0001
#3	-.0001	-.0114	-.0005	-.0002	.0000	.0094	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	.0005	-.0106	.0044	.0000	F-.0022	.0131
Stddev	.0003	.0003	.0053	.0201	.0181	.0001	.0002	.0087
%RSD	130.4	101.7	1148.	189.4	407.6	174.8	6.916	67.00
#1	.0005	.0000	.0031	-.0129	-.0118	.0000	-.0021	.0078
#2	.0001	.0005	.0040	.0105	.0012	.0001	-.0022	.0232
#3	.0000	.0003	-.0057	-.0295	.0239	.0001	-.0024	.0082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	.0000	-.0011	.0020	.0000	.0000	-.0007
Stddev	.0001	.0004	.0009	.0009	.0003	.0003	.000	.0001
%RSD	46.11	138.4	1962.	80.03	16.39	2799.	142.6	10.13
#1	.0001	.0003	-.0008	-.0004	.0016	.0000	.0000	-.0006
#2	.0002	-.0001	.0010	-.0007	.0021	-.0002	-.0001	-.0007
#3	.0001	.0008	-.0001	-.0020	.0022	.0003	-.0001	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 10:44:17 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0011	-.0001	.0004
Stddev	.0013	.0003	.0000
%RSD	120.1	411.7	9.508
#1	-.0010	-.0004	.0005
#2	.0002	.0000	.0004
#3	-.0025	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1688.3	4893.3	33763.	4207.4
Stddev	4.8	6.2	129.	23.9
%RSD	.28244	.12649	.38274	.56832
#1	1683.0	4887.4	33734.	4188.8
#2	1692.1	4892.8	33904.	4198.9
#3	1689.9	4899.7	33650.	4234.4

Zoom In Zoom Out

Sample Name: MP28555-MB1 Acquired: 2/17/2015 10:48:27 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0091	-.0003	.0000	-.0002	-.0009	-.0003	-.0001	.0004	-.0001
Stddev	.0003	.0017	.0005	.000	.0001	.0038	.0001	.0001	.0002	.0002
%RSD	32.15	18.88	173.1	406.2	31.49	421.3	19.26	111.8	51.92	155.3
#1	.0008	-.0088	-.0005	-.0002	-.0001	-.0022	-.0003	.0000	.0006	-.0001
#2	.0013	-.0075	-.0006	.0001	-.0002	.0033	-.0004	-.0001	.0002	-.0004
#3	.0007	-.0109	.0003	.0000	-.0002	-.0038	-.0003	-.0002	.0004	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0261	-.0527	.0166	-.0001	-.0032	-.0087	.0001	-.0008	-.0004	-.0004
Stddev	.0025	.0380	.0147	.0000	.0000	.0065	.0002	.0007	.0007	.0013
%RSD	9.513	72.21	88.53	32.33	.9732	74.17	310.5	84.90	189.7	311.5
#1	-.0234	-.0461	.0229	-.0002	-.0032	-.0038	-.0001	-.0001	-.0012	.0011
#2	-.0283	-.0936	.0269	-.0002	-.0031	-.0063	.0002	-.0010	.0000	-.0012
#3	-.0266	-.0184	-.0002	-.0001	-.0032	-.0160	.0001	-.0015	.0000	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0012	-.0002	-.0015	-.0011	-.0003	-.0003
Stddev	.0004	.0003	.0001	.0000	.0004	.0001	.0001
%RSD	85.76	23.35	55.18	2.167	39.75	16.91	19.55
#1	.0002	-.0014	-.0003	-.0015	-.0006	-.0003	-.0004
#2	.0009	-.0009	-.0002	-.0015	-.0011	-.0003	-.0004
#3	.0003	-.0013	-.0001	-.0015	-.0015	-.0004	-.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28555-MB1 Acquired: 2/17/2015 10:48:27 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1671.7	4880.2	33185.	4154.2
Stddev	1.7	14.5	76.	4.7
%RSD	.10185	.29638	.22778	.11332
#1	1673.2	4896.7	33099.	4151.8
#2	1669.8	4869.4	33222.	4159.6
#3	1672.0	4874.6	33236.	4151.3

Zoom In Zoom Out

Sample Name: MP28555-B1 Acquired: 2/17/2015 10:52:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0481	28.19	1.925	2.017	.0510	26.34	.0478	.4860	.2040	.2511
Stddev	.0002	.03	.004	.002	.0003	.07	.0000	.0005	.0007	.0008
%RSD	.3243	.0971	.1940	.0759	.5452	.2518	.0801	.1062	.3378	.3186
#1	.0482	28.16	1.927	2.019	.0509	26.27	.0477	.4858	.2045	.2521
#2	.0481	28.22	1.921	2.016	.0513	26.40	.0478	.4857	.2042	.2506
#3	.0479	28.18	1.927	2.016	.0508	26.34	.0478	.4866	.2032	.2507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.20	26.01	25.83	.5004	.4928	26.51	.4927	.4847	.4779	1.889
Stddev	.08	.03	.03	.0011	.0005	.03	.0005	.0016	.0010	.003
%RSD	.2784	.1293	.1084	.2207	.0923	.0998	.1001	.3258	.2195	.1464
#1	27.13	25.97	25.83	.5017	.4923	26.53	.4928	.4853	.4789	1.886
#2	27.28	26.03	25.86	.5000	.4932	26.52	.4922	.4858	.4768	1.890
#3	27.17	26.02	25.80	.4997	.4928	26.48	.4932	.4829	.4780	1.892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0858	.5154	.5256	.5156	1.949	.4775	.4924
Stddev	.0004	.0013	.0004	.0006	.005	.0009	.0009
%RSD	.4741	.2459	.0700	.1155	.2487	.1921	.1780
#1	.0860	.5166	.5252	.5162	1.945	.4783	.4925
#2	.0853	.5141	.5260	.5154	1.954	.4776	.4915
#3	.0861	.5155	.5255	.5151	1.949	.4765	.4933
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28555-B1 Acquired: 2/17/2015 10:52:37 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1630.2	4770.7	32353.	4199.0
Stddev	3.0	5.9	117.	3.6
%RSD	.18535	.12441	.36061	.08682
#1	1627.3	4768.2	32252.	4200.1
#2	1630.1	4777.5	32325.	4195.0
#3	1633.4	4766.5	32480.	4202.0

Zoom In Zoom Out

Sample Name: FA21871-1 Acquired: 2/17/2015 10:56:34 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0260	-.0012	.1265	-.0001	28.85	-.0003	-.0004	.0004
Stddev	.0001	.0010	.0007	.0001	.0000	.08	.0000	.0001	.0004
%RSD	50.50	4.020	58.35	.0489	50.34	.2761	6.392	23.21	94.42
#1	.0001	.0272	-.0012	.1265	-.0001	28.86	-.0003	-.0005	.0001
#2	.0004	.0258	-.0018	.1265	-.0001	28.77	-.0003	-.0005	.0003
#3	.0003	.0251	-.0005	.1266	.0000	28.93	-.0003	-.0003	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0005	-.0002	4.402	11.08	.0023	-.0034	F105.2	-.0004	.0002
Stddev	.0000	.0071	.034	.08	.0000	.0003	.1	.0001	.0017
%RSD	4.926	3919.	.7668	.7508	1.519	8.081	.0773	29.15	876.8
#1	-.0006	.0079	4.364	11.01	.0023	-.0033	105.3	-.0005	-.0007
#2	-.0005	-.0037	4.426	11.05	.0022	-.0038	105.1	-.0005	.0021
#3	-.0005	-.0048	4.418	11.17	.0023	-.0033	105.2	-.0003	-.0009

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0004	.0013	22.58	-.0010	.1729	.0001	.0000	-.0001	.0018
Stddev	.0004	.0014	.04	.0003	.0001	.0000	.0004	.0001	.0000
%RSD	113.5	110.2	.1900	26.21	.0766	28.63	3238.	75.74	1.357
#1	.0004	.0004	22.53	-.0008	.1727	.0001	-.0001	-.0002	.0018
#2	-.0001	.0029	22.60	-.0008	.1729	.0001	.0005	-.0001	.0019
#3	.0008	.0006	22.61	-.0012	.1730	.0001	-.0003	.0000	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.5	4815.1	32304.	4168.9
Stddev	1.9	4.1	59.	51.9
%RSD	.11635	.08589	.18408	1.2458
#1	1637.4	4812.8	32275.	4191.3
#2	1640.0	4819.8	32372.	4205.9
#3	1641.1	4812.5	32264.	4109.6

Zoom In Zoom Out

Sample Name: MP28555-D1 Acquired: 2/17/2015 11:00:43 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.0227	-.0011	.1244	.0000	28.84	-.0003	-.0004	.0005
Stddev	.0002	.0087	.0005	.0003	.000	.12	.0000	.0001	.0001
%RSD	52.41	38.29	48.01	.2046	250.3	.4000	7.953	22.52	13.07
#1	.0003	.0129	-.0005	.1247	-.0001	28.85	-.0003	-.0005	.0005
#2	.0007	.0296	-.0012	.1243	-.0001	28.95	-.0002	-.0003	.0005
#3	.0003	.0254	-.0016	.1242	.0001	28.72	-.0003	-.0004	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0003	-.0118	4.379	11.01	.0021	-.0040	F104.1	-.0003	.0002
Stddev	.0003	.0035	.032	.09	.0000	.0002	.4	.0002	.0008
%RSD	103.3	29.42	.7325	.8370	2.259	4.060	.3588	60.48	405.9
#1	-.0006	-.0129	4.346	11.04	.0021	-.0038	104.3	-.0006	-.0005
#2	-.0002	-.0147	4.410	11.09	.0020	-.0041	104.4	-.0002	.0001
#3	.0000	-.0080	4.380	10.91	.0021	-.0041	103.7	-.0002	.0010

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0003	.0011	22.36	-.0008	.1722	-.0003	-.0030	.0000	.0020
Stddev	.0009	.0007	.02	.0003	.0005	.0001	.0009	.0001	.0001
%RSD	330.0	60.22	.1082	44.43	.3094	42.86	31.50	251.0	2.882
#1	-.0008	.0004	22.35	-.0004	.1721	-.0002	-.0040	.0000	.0021
#2	.0008	.0012	22.34	-.0008	.1728	-.0004	-.0030	.0001	.0020
#3	-.0008	.0018	22.39	-.0011	.1718	-.0004	-.0021	.0000	.0019

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1643.6	4830.0	32022.	4184.7
Stddev	.7	4.4	141.	38.7
%RSD	.04366	.09075	.44138	.92592
#1	1644.4	4834.6	32173.	4159.0
#2	1643.1	4825.8	32001.	4165.9
#3	1643.3	4829.5	31893.	4229.3

Zoom In Zoom Out

Sample Name: MP28555-SD1 Acquired: 2/17/2015 11:04:52 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0015	-.0164	-.0044	.1218	-.0009	28.94	-.0014	-.0012	-.0002	-.0018
Stddev	.0009	.0407	.0062	.0025	.0003	.12	.0001	.0005	.0017	.0012
%RSD	55.70	247.2	140.5	2.049	39.69	.4206	9.132	43.02	950.3	70.25
#1	.0025	-.0627	.0019	.1227	-.0013	29.07	-.0015	-.0006	.0006	-.0017
#2	.0008	-.0005	-.0104	.1189	-.0008	28.89	-.0013	-.0017	-.0021	-.0006
#3	.0013	.0138	-.0047	.1237	-.0006	28.84	-.0013	-.0013	.0010	-.0031

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.1603	4.083	10.74	.0014	-.0185	104.5	-.0010	-.0050	.0007	-.0025
Stddev	.0095	.118	.25	.0001	.0007	.5	.0009	.0040	.0075	.0036
%RSD	5.938	2.889	2.298	8.954	3.928	.4415	96.71	79.81	1141.	143.2
#1	-.1712	4.120	10.98	.0016	-.0180	105.0	-.0018	-.0093	.0093	.0009
#2	-.1566	3.951	10.76	.0014	-.0194	104.5	-.0013	-.0041	-.0035	-.0063
#3	-.1533	4.178	10.49	.0013	-.0182	104.1	.0001	-.0015	-.0038	-.0022

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.36	-.0061	.1685	-.0064	-.0043	-.0018	.0019
Stddev	.03	.0013	.0013	.0008	.0052	.0012	.0003
%RSD	.1315	20.72	.7483	13.11	122.5	65.81	15.02
#1	21.36	-.0066	.1699	-.0074	.0012	-.0030	.0017
#2	21.33	-.0070	.1675	-.0059	-.0092	-.0017	.0022
#3	21.39	-.0047	.1681	-.0059	-.0048	-.0006	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1677.0	4922.9	32842.	4211.4
Stddev	2.9	12.3	60.	32.5
%RSD	.17033	.25068	.18314	.77262
#1	1678.6	4931.9	32819.	4195.6
#2	1678.6	4928.0	32797.	4189.8
#3	1673.7	4908.8	32911.	4248.8

Zoom In Zoom Out

Sample Name: MP28555-S1 Acquired: 2/17/2015 11:09:02 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0489	28.32	1.923	2.132	.0513	54.77	.0475	.4841	.2059
Stddev	.0001	.04	.002	.006	.0003	.13	.0001	.0006	.0009
%RSD	.2828	.1560	.1201	.2632	.5135	.2388	.3097	.1158	.4441
#1	.0490	28.27	1.926	2.127	.0513	54.64	.0477	.4843	.2067
#2	.0487	28.36	1.922	2.138	.0516	54.91	.0474	.4834	.2060
#3	.0489	28.34	1.923	2.133	.0511	54.77	.0475	.4844	.2049

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2506	27.31	30.27	36.64	.5019	.4916	F128.9	.4882	.4856
Stddev	.0003	.07	.02	.10	.0011	.0007	.3	.0005	.0020
%RSD	.1119	.2740	.0802	.2686	.2104	.1434	.2666	.0927	.4100
#1	.2509	27.22	30.25	36.61	.5029	.4918	128.8	.4882	.4863
#2	.2503	27.35	30.30	36.55	.5021	.4909	129.2	.4878	.4834
#3	.2506	27.34	30.27	36.74	.5008	.4922	128.5	.4887	.4872

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4792	1.892	22.72	.5097	.6938	.5196	1.970	.4773	.4896
Stddev	.0006	.007	.03	.0011	.0025	.0003	.004	.0011	.0008
%RSD	.1168	.3675	.1499	.2139	.3536	.0576	.2037	.2378	.1552
#1	.4787	1.895	22.74	.5108	.6915	.5199	1.968	.4786	.4897
#2	.4798	1.884	22.68	.5086	.6964	.5193	1.968	.4764	.4887
#3	.4791	1.897	22.73	.5098	.6935	.5196	1.975	.4769	.4902

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.2	4761.2	31690.	4141.7
Stddev	3.6	9.4	171.	10.3
%RSD	.22035	.19787	.54110	.24886
#1	1612.4	4754.6	31495.	4146.6
#2	1617.0	4772.0	31756.	4129.9
#3	1610.1	4757.0	31819.	4148.7

Zoom In Zoom Out

Sample Name: MP28555-S2 Acquired: 2/17/2015 11:12:58 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0492	28.59	1.950	2.163	.0519	55.41	.0483	.4916	.2097
Stddev	.0005	.14	.006	.008	.0003	.27	.0001	.0010	.0009
%RSD	.9775	.4758	.3282	.3808	.6254	.4907	.2859	.2006	.4140
#1	.0489	28.49	1.955	2.154	.0517	55.27	.0482	.4917	.2094
#2	.0497	28.55	1.943	2.165	.0517	55.25	.0483	.4906	.2090
#3	.0489	28.75	1.951	2.170	.0522	55.73	.0485	.4926	.2106

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2550	27.57	30.58	37.01	.5100	.4983	F129.7	.4954	.4924
Stddev	.0007	.11	.15	.27	.0016	.0011	.4	.0012	.0019
%RSD	.2715	.3815	.4849	.7235	.3214	.2201	.3236	.2363	.3818
#1	.2547	27.49	30.43	36.88	.5092	.4980	129.4	.4956	.4937
#2	.2544	27.53	30.56	36.83	.5089	.4974	129.5	.4941	.4902
#3	.2557	27.69	30.73	37.32	.5119	.4995	130.2	.4965	.4932

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4876	1.914	23.04	.5166	.7025	.5268	2.002	.4872	.4965
Stddev	.0007	.006	.05	.0003	.0027	.0011	.004	.0013	.0010
%RSD	.1392	.3086	.1979	.0542	.3786	.2118	.1777	.2571	.1981
#1	.4871	1.920	23.03	.5168	.7001	.5268	1.998	.4865	.4970
#2	.4873	1.908	23.00	.5168	.7021	.5257	2.005	.4865	.4954
#3	.4884	1.915	23.09	.5163	.7054	.5279	2.003	.4887	.4972

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.3	4751.3	31495.	4135.7
Stddev	3.5	11.2	114.	44.4
%RSD	.21613	.23670	.36139	1.0739
#1	1607.7	4739.8	31496.	4145.5
#2	1609.0	4762.2	31608.	4174.3
#3	1614.3	4751.9	31380.	4087.2

Zoom In Zoom Out

Sample Name: FA21871-2 Acquired: 2/17/2015 11:16:54 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0194	-.0015	.0172	-.0001	10.93	-.0003	-.0007	.0000
Stddev	.0002	.0019	.0001	.0001	.0001	.02	.0000	.0001	.000
%RSD	62.61	9.896	6.275	.7827	49.36	.1690	10.26	8.022	638.0
#1	.0001	.0202	-.0016	.0173	-.0002	10.93	-.0003	-.0007	-.0002
#2	.0004	.0209	-.0014	.0170	-.0001	10.92	-.0003	-.0006	-.0001
#3	.0003	.0173	-.0016	.0172	-.0001	10.95	-.0003	-.0007	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0006	.0009	3.375	4.019	.0002	-.0034	F84.36	-.0004	-.0006
Stddev	.0001	.0110	.045	.046	.0000	.0002	.21	.0002	.0004
%RSD	18.71	1240.	1.341	1.142	7.230	5.768	.2488	44.83	73.18
#1	-.0007	.0119	3.353	3.985	.0002	-.0033	84.54	-.0004	-.0002
#2	-.0005	.0009	3.346	4.072	.0002	-.0032	84.13	-.0002	-.0010
#3	-.0006	-.0102	3.427	4.001	.0002	-.0036	84.42	-.0005	-.0005

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0002	.0027	21.37	-.0008	.0602	-.0002	-.0019	.0000	.0021
Stddev	.0007	.0019	.06	.0004	.0001	.0000	.0007	.000	.0000
%RSD	332.8	70.10	.2698	46.10	.1156	15.76	35.35	419.4	2.374
#1	-.0006	.0036	21.31	-.0010	.0602	-.0002	-.0024	-.0002	.0021
#2	.0007	.0040	21.37	-.0004	.0601	-.0003	-.0021	-.0001	.0020
#3	.0006	.0005	21.43	-.0010	.0602	-.0002	-.0011	.0001	.0021

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1646.2	4857.4	32117.	4166.5
Stddev	2.7	4.1	116.	31.0
%RSD	.16183	.08538	.36170	.74517
#1	1647.3	4861.9	32228.	4140.3
#2	1648.1	4856.4	32126.	4158.4
#3	1643.2	4853.8	31996.	4200.8

Zoom In Zoom Out

Sample Name: FA22025-1 Acquired: 2/17/2015 11:21:03 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.0130	-.0015	.1172	-.0001	28.54	-.0002	-.0004	.0007
Stddev	.0004	.0118	.0006	.0005	.0001	.10	.0001	.0001	.0002
%RSD	59.18	91.05	42.26	.4347	59.66	.3400	35.10	27.88	34.38
#1	.0012	.0092	-.0008	.1173	-.0001	28.48	-.0003	-.0002	.0007
#2	.0003	.0262	-.0016	.1177	-.0002	28.65	-.0002	-.0004	.0004
#3	.0007	.0035	-.0020	.1167	-.0002	28.48	-.0002	-.0004	.0009

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0002	-.0183	4.644	11.79	.0039	-.0039	F118.9	-.0003	-.0005
Stddev	.0001	.0021	.001	.06	.0000	.0000	.4	.0002	.0003
%RSD	31.53	11.36	.0227	.5087	.8840	1.216	.3494	84.87	71.56
#1	-.0001	-.0183	4.644	11.73	.0039	-.0040	119.0	-.0001	-.0001
#2	-.0003	-.0204	4.645	11.84	.0039	-.0039	119.3	-.0005	-.0005
#3	-.0002	-.0162	4.644	11.81	.0040	-.0039	118.4	-.0001	-.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0004	.0010	22.27	-.0009	.1706	-.0004	-.0016	.0000	.0010
Stddev	.0007	.0013	.02	.0005	.0007	.0001	.0005	.000	.0000
%RSD	187.5	137.8	.0714	51.22	.4150	21.16	32.65	6399.	3.520
#1	-.0002	.0025	22.29	-.0005	.1704	-.0003	-.0016	.0000	.0010
#2	-.0011	.0003	22.25	-.0014	.1713	-.0004	-.0021	.0000	.0010
#3	.0002	.0001	22.27	-.0008	.1699	-.0005	-.0011	-.0001	.0010

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.0	4792.4	32239.	4180.1
Stddev	2.1	10.4	64.	8.2
%RSD	.12838	.21719	.19793	.19556
#1	1636.7	4780.9	32299.	4180.4
#2	1639.3	4795.3	32172.	4188.2
#3	1640.9	4801.1	32247.	4171.8

Zoom In Zoom Out

Sample Name: FA22025-2 Acquired: 2/17/2015 11:25:11 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0196	-.0019	.0217	-.0001	14.81	-.0003	-.0006	.0002	-.0002
Stddev	.0005	.0048	.0005	.0001	.0001	.08	.0001	.0001	.0003	.0004
%RSD	94.52	24.25	23.95	.2468	116.6	.5544	20.08	12.78	169.9	169.2
#1	.0005	.0251	-.0023	.0217	-.0001	14.84	-.0003	-.0006	.0005	-.0004
#2	.0000	.0165	-.0014	.0217	-.0002	14.72	-.0002	-.0007	.0000	.0002
#3	.0010	.0173	-.0021	.0216	.0000	14.88	-.0003	-.0006	.0000	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0221	3.641	5.661	.0004	-.0039	62.08	-.0004	-.0004	.0009	.0007
Stddev	.0030	.022	.017	.0000	.0000	.21	.0002	.0006	.0007	.0009
%RSD	13.49	.6009	.2919	1.892	.4805	.3325	42.90	142.3	79.64	131.1
#1	.0216	3.620	5.664	.0004	-.0039	62.16	-.0002	-.0010	.0005	.0015
#2	.0194	3.663	5.644	.0004	-.0039	61.85	-.0006	.0001	.0018	.0009
#3	.0253	3.641	5.676	.0005	-.0039	62.24	-.0004	-.0003	.0005	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	21.47	-.0010	.0815	-.0008	-.0029	-.0002	.0016
Stddev	.01	.0003	.0003	.0001	.0017	.0005	.0000
%RSD	.0677	31.90	.3436	17.04	58.93	192.3	1.186
#1	21.47	-.0007	.0818	-.0009	-.0011	-.0002	.0016
#2	21.49	-.0014	.0813	-.0009	-.0033	.0002	.0015
#3	21.46	-.0011	.0814	-.0007	-.0044	-.0007	.0016

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1651.5	4813.7	32782.	4231.4
Stddev	5.2	3.3	172.	57.6
%RSD	.31454	.06947	.52358	1.3612
#1	1655.8	4816.3	32821.	4226.0
#2	1653.0	4809.9	32931.	4291.5
#3	1645.7	4814.9	32595.	4176.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 11:29:20 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2608	41.33	2.070	2.061	2.068	41.50	2.077	2.072	2.094	2.086
Stddev	.0005	.04	.001	.005	.001	.03	.001	.001	.008	.004
%RSD	.1740	.0908	.0365	.2328	.0445	.0709	.0620	.0582	.3926	.2141
#1	.2613	41.36	2.071	2.057	2.068	41.48	2.076	2.071	2.094	2.090
#2	.2606	41.34	2.069	2.060	2.068	41.53	2.076	2.073	2.103	2.086
#3	.2605	41.29	2.070	2.066	2.069	41.49	2.078	2.072	2.087	2.081

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.62	41.93	41.78	2.112	2.056	41.40	2.075	2.042	2.062	2.073
Stddev	.05	.06	.12	.005	.008	.02	.001	.009	.001	.003
%RSD	.1240	.1409	.2899	.2372	.3777	.0406	.0352	.4386	.0677	.1590
#1	41.58	41.99	41.91	2.112	2.047	41.42	2.075	2.044	2.061	2.072
#2	41.60	41.92	41.76	2.118	2.057	41.41	2.074	2.032	2.063	2.077
#3	41.68	41.88	41.67	2.108	2.063	41.39	2.076	2.050	2.064	2.070

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.888	2.094	2.088	2.088	2.045	2.086	2.085
Stddev	.001	.002	.001	.002	.006	.008	.001
%RSD	.0607	.0858	.0456	.1130	.3076	.3882	.0411
#1	1.887	2.094	2.087	2.089	2.045	2.088	2.085
#2	1.888	2.093	2.088	2.090	2.039	2.094	2.084
#3	1.889	2.096	2.089	2.086	2.052	2.078	2.085

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 11:29:20 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.6	4664.0	31915.	4177.9
Stddev	4.2	2.0	122.	12.9
%RSD	.25836	.04312	.38308	.30830
#1	1609.8	4666.1	31994.	4169.7
#2	1615.1	4663.9	31774.	4171.3
#3	1606.8	4662.1	31977.	4192.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 11:33:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0005	-.0002	-.0001	.0000	.0065	-.0001	.0001	.0002	.0003
Stddev	.0003	.0057	.0005	.0002	.000	.0013	.0001	.0001	.0003	.0004
%RSD	69.44	1040.	317.8	410.2	1467.	19.83	111.1	118.7	167.0	146.2
#1	.0004	.0045	-.0006	.0001	.0001	.0066	-.0001	.0001	.0000	-.0001
#2	.0001	-.0059	-.0002	.0001	-.0001	.0051	.0000	.0001	.0000	.0007
#3	.0006	.0030	.0004	-.0003	.0000	.0077	.0000	.0000	.0005	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0271	.0342	.0306	.0001	.0009	.0591	.0003	.0002	.0008	-.0003
Stddev	.0191	.0198	.0364	.0000	.0010	.0081	.0001	.0007	.0013	.0015
%RSD	70.38	57.69	118.9	88.91	120.0	13.75	19.43	325.0	159.3	537.3
#1	.0455	.0521	.0711	.0001	.0020	.0685	.0003	-.0002	.0018	-.0020
#2	.0282	.0376	.0204	.0000	.0007	.0542	.0003	-.0001	.0013	.0002
#3	.0075	.0130	.0004	.0001	-.0001	.0546	.0002	.0010	-.0007	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040	-.0002	.0000	.0016	-.0019	.0002	.0005
Stddev	.0007	.0003	.0000	.0002	.0005	.0004	.0001
%RSD	17.68	144.0	161.8	10.08	26.57	185.3	21.74
#1	.0047	.0001	.0000	.0016	-.0013	.0002	.0004
#2	.0040	-.0001	.0000	.0014	-.0022	.0006	.0005
#3	.0033	-.0006	.0001	.0017	-.0022	-.0002	.0006
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 11:33:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1675.4	4854.1	33434.	4231.8
Stddev	3.7	9.1	96.	38.4
%RSD	.22118	.18785	.28664	.90818
#1	1677.0	4849.8	33472.	4268.7
#2	1671.1	4847.9	33505.	4192.0
#3	1677.9	4864.5	33325.	4234.7

Zoom In Zoom Out

Sample Name: MP28556-S1 Acquired: 2/17/2015 11:37:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0500	27.98	1.979	2.121	.0514	53.11	.0488	.4967	.2074	.2559
Stddev	.0008	.03	.005	.007	.0003	.16	.0001	.0006	.0007	.0009
%RSD	1.564	.1053	.2577	.3432	.5023	.2926	.1911	.1127	.3354	.3446
#1	.0494	28.01	1.983	2.114	.0511	53.11	.0487	.4966	.2066	.2548
#2	.0496	27.96	1.974	2.128	.0515	52.95	.0488	.4961	.2080	.2564
#3	.0509	27.98	1.982	2.120	.0516	53.26	.0489	.4972	.2076	.2563

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	30.31	31.41	27.82	.6134	.4948	88.61	.5064	.4883	.4909	1.930
Stddev	.08	.03	.12	.0015	.0004	.16	.0008	.0002	.0028	.009
%RSD	.2722	.1046	.4245	.2460	.0892	.1793	.1583	.0375	.5736	.4703
#1	30.24	31.41	27.88	.6116	.4948	88.56	.5071	.4881	.4898	1.940
#2	30.30	31.38	27.69	.6142	.4943	88.49	.5056	.4884	.4941	1.926
#3	30.40	31.45	27.90	.6142	.4952	88.79	.5066	.4885	.4888	1.924

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5612	.5226	.9037	.5171	1.989	.4906	.5398
Stddev	.0018	.0016	.0024	.0009	.001	.0011	.0011
%RSD	.3188	.2983	.2674	.1668	.0379	.2166	.2107
#1	.5615	.5213	.9024	.5164	1.990	.4898	.5388
#2	.5593	.5222	.9023	.5180	1.989	.4918	.5395
#3	.5629	.5244	.9065	.5168	1.989	.4901	.5410

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1654.6	4810.0	32610.	4224.3
Stddev	2.2	3.8	86.	21.7
%RSD	.13572	.07815	.26302	.51404
#1	1652.4	4808.5	32701.	4204.9
#2	1656.9	4814.3	32599.	4247.8
#3	1654.5	4807.2	32531.	4220.2

Zoom In Zoom Out

Sample Name: MP28556-S2 Acquired: 2/17/2015 11:41:24 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 2.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0494	28.59	1.919	2.135	.0523	53.59	.0500	.4957	.2069	.2535
Stddev	.0003	.09	.021	.006	.0001	.17	.0016	.0005	.0028	.0026
%RSD	.5616	.2973	1.070	.2603	.1489	.3149	3.123	.1002	1.372	1.037
#1	.0491	28.65	1.940	2.133	.0523	53.61	.0486	.4953	.2101	.2563
#2	.0493	28.50	1.916	2.131	.0523	53.41	.0498	.4957	.2056	.2532
#3	.0497	28.63	1.899	2.142	.0524	53.74	.0517	.4963	.2049	.2510

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	30.76	31.73	28.09	.6105	.4995	88.87	.5016	.5136	.4599	1.907
Stddev	.14	.03	.07	.0037	.0082	.28	.0017	.0097	.0237	.003
%RSD	.4486	.0917	.2558	.6001	1.640	.3133	.3317	1.888	5.150	.1737
#1	30.81	31.74	28.18	.6147	.4932	88.85	.5013	.5049	.4844	1.904
#2	30.60	31.69	28.04	.6089	.4966	88.61	.5001	.5118	.4583	1.906
#3	30.86	31.75	28.06	.6079	.5088	89.16	.5034	.5240	.4371	1.911

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5599	.5391	.9087	.5169	1.941	.4798	.5333
Stddev	.0132	.0256	.0032	.0032	.066	.0069	.0029
%RSD	2.359	4.754	.3540	.6264	3.401	1.430	.5467
#1	.5468	.5154	.9080	.5204	1.993	.4870	.5360
#2	.5596	.5355	.9058	.5162	1.963	.4791	.5338
#3	.5732	.5663	.9122	.5141	1.867	.4734	.5302

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1536.9	4592.0	32272.	4188.0
Stddev	15.6	29.2	171.	18.6
%RSD	1.0136	.63622	.52942	.44441
#1	1554.7	4625.5	32297.	4185.8
#2	1525.6	4578.5	32429.	4170.7
#3	1530.5	4572.0	32090.	4207.7

Zoom In Zoom Out

Sample Name: FA22125-4 Acquired: 2/17/2015 11:45:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	44.12	.0072	.2855	.0005	4417.	-.0038	.0049	.1253	.0128
Stddev	.0033	.04	.0047	.0024	.0002	47.	.0001	.0003	.0049	.0057
%RSD	401.1	.0794	66.00	.8507	38.26	1.057	3.746	6.133	3.908	44.64
#1	-.0024	44.15	.0099	.2846	.0003	4450.	-.0037	.0049	.1238	.0160
#2	.0007	44.08	.0017	.2836	.0007	4438.	-.0037	.0045	.1308	.0162
#3	.0042	44.13	.0099	.2882	.0006	4364.	-.0039	.0051	.1213	.0062

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	17.29	2.125	35.22	.5117	-.0458	4.756	.0337	.0463	-.0035	-.0195
Stddev	.09	.287	.24	.0015	.0019	.066	.0014	.0053	.0033	.0162
%RSD	.4958	13.51	.6860	.2968	4.043	1.383	4.125	11.44	96.22	82.99
#1	17.22	1.876	34.96	.5109	-.0452	4.695	.0327	.0507	-.0045	-.0173
#2	17.39	2.060	35.26	.5134	-.0444	4.826	.0352	.0404	-.0061	-.0045
#3	17.28	2.439	35.44	.5107	-.0479	4.747	.0331	.0476	.0003	-.0366

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.977	.0033	9.135	.3346	.0133	.1492	.0462
Stddev	.009	.0026	.005	.0014	.0052	.0009	.0002
%RSD	.4294	79.39	.0534	.4042	39.45	.6086	.4547
#1	1.985	.0027	9.132	.3334	.0191	.1483	.0460
#2	1.977	.0061	9.141	.3361	.0120	.1501	.0462
#3	1.968	.0010	9.133	.3343	.0088	.1493	.0464

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.3	4767.8	31492.	4121.3
Stddev	2.8	.7	32.	23.7
%RSD	.17605	.01452	.10054	.57397
#1	1618.6	4768.3	31469.	4100.0
#2	1617.1	4767.0	31528.	4117.3
#3	1613.1	4768.0	31480.	4146.7

Zoom In Zoom Out

Sample Name: FA22032-4 Acquired: 2/17/2015 11:49:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0014	184.5	.0394	1.541	.0082	2303.	-.0016	.0557	.1812	.1711
Stddev	.0012	.1	.0020	.003	.0006	22.	.0001	.0003	.0035	.0007
%RSD	85.55	.0768	5.032	.2034	7.160	.9417	4.454	.5751	1.912	.4067
#1	.0020	184.5	.0371	1.538	.0082	2303.	-.0015	.0554	.1824	.1719
#2	.0000	184.3	.0403	1.542	.0076	2324.	-.0016	.0560	.1773	.1706
#3	.0021	184.6	.0407	1.544	.0088	2281.	-.0015	.0559	.1838	.1708

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	169.1	53.71	137.6	4.782	-.0119	3.888	.1320	.1295	-.0044	-.0040
Stddev	.4	.13	.7	.010	.0006	.023	.0007	.0031	.0020	.0100
%RSD	.2341	.2365	.5007	.2096	5.395	.5987	.5140	2.426	46.45	246.7
#1	168.7	53.64	137.1	4.782	-.0123	3.914	.1325	.1270	-.0022	-.0008
#2	169.2	53.86	137.3	4.772	-.0112	3.868	.1312	.1330	-.0063	.0039
#3	169.5	53.64	138.3	4.793	-.0122	3.882	.1323	.1284	-.0046	-.0152

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	4.846	.0190	10.24	4.073	-.0073	.2856	.5388
Stddev	.023	.0020	.01	.005	.0026	.0008	.0028
%RSD	.4679	10.68	.1383	.1265	35.25	.2861	.5186
#1	4.844	.0167	10.24	4.072	-.0049	.2853	.5391
#2	4.824	.0207	10.22	4.069	-.0100	.2850	.5358
#3	4.869	.0196	10.25	4.079	-.0070	.2865	.5414

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1594.3	4814.1	31735.	4240.8
Stddev	5.5	19.2	67.	4.6
%RSD	.34471	.39827	.21103	.10823
#1	1590.3	4812.2	31690.	4237.6
#2	1600.5	4834.1	31812.	4238.8
#3	1592.0	4795.9	31703.	4246.1

Zoom In Zoom Out

Sample Name: FA22032-5 Acquired: 2/17/2015 11:53:47 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0041	177.1	.0389	1.605	.0082	F2522.	-.0007	.0553	.1727
Stddev	.0016	.6	.0018	.005	.0004	33.	.0001	.0004	.0007
%RSD	40.18	.3210	4.671	.2850	4.362	1.317	15.31	.7209	.3946
#1	.0054	176.5	.0373	1.600	.0078	2492.	-.0008	.0556	.1728
#2	.0023	177.6	.0409	1.609	.0085	2518.	-.0006	.0553	.1733
#3	.0045	177.3	.0386	1.605	.0082	2558.	-.0007	.0549	.1720

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2262	163.6	52.25	128.4	4.567	-.0129	3.976	.1300	.1327
Stddev	.0010	.6	.16	.3	.012	.0004	.058	.0006	.0041
%RSD	.4517	.3815	.3017	.2718	.2572	3.153	1.454	.4660	3.113
#1	.2257	163.0	52.10	128.1	4.562	-.0126	3.988	.1300	.1311
#2	.2274	163.6	52.25	128.8	4.580	-.0129	4.027	.1293	.1374
#3	.2256	164.2	52.41	128.4	4.558	-.0134	3.913	.1306	.1297

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0027	-.0054	4.051	.0172	11.52	3.929	-.0016	.2825	.5410
Stddev	.0014	.0024	.007	.0015	.04	.013	.0026	.0030	.0016
%RSD	51.55	44.85	.1809	8.761	.3632	.3283	168.1	1.077	.2966
#1	-.0034	-.0028	4.044	.0189	11.48	3.917	-.0045	.2804	.5424
#2	-.0011	-.0076	4.051	.0162	11.56	3.943	-.0009	.2859	.5393
#3	-.0035	-.0059	4.058	.0165	11.53	3.926	.0006	.2811	.5413

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1588.4	4796.6	32131.	4296.8
Stddev	3.2	9.2	197.	15.6
%RSD	.20032	.19192	.61400	.36376
#1	1589.9	4795.3	32240.	4290.6
#2	1590.6	4806.3	31903.	4314.6
#3	1584.8	4788.1	32250.	4285.3

Zoom In Zoom Out

Sample Name: FA22032-6 Acquired: 2/17/2015 12:05:03 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	154.4	.0256	1.282	.0072	3139.	-.0039	.0469	.1542	.1567
Stddev	.0014	.6	.0057	.005	.0008	60.	.0002	.0023	.0008	.0039
%RSD	175.1	.3603	22.36	.3665	11.31	1.907	4.720	4.844	.5340	2.467
#1	.0021	154.2	.0318	1.277	.0063	3095.	-.0038	.0447	.1547	.1526
#2	-.0006	154.0	.0246	1.286	.0077	3114.	-.0037	.0492	.1533	.1573
#3	.0008	155.0	.0205	1.282	.0077	3207.	-.0041	.0469	.1547	.1603

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	145.3	42.62	119.8	3.838	-.0393	3.530	.1104	.0965	-.0134	.0005
Stddev	.3	.07	.6	.002	.0014	.051	.0026	.0076	.0082	.0132
%RSD	.2169	.1744	.4778	.0540	3.530	1.436	2.329	7.901	61.49	2606.
#1	145.1	42.55	119.2	3.840	-.0394	3.545	.1133	.0990	-.0195	-.0141
#2	145.7	42.61	119.9	3.836	-.0378	3.572	.1083	.0879	-.0040	.0115
#3	145.2	42.70	120.3	3.839	-.0406	3.474	.1097	.1025	-.0167	.0042

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.749	.0104	13.97	3.394	.0035	.2378	.4529
Stddev	.024	.0015	.05	.010	.0108	.0017	.0011
%RSD	.2500	14.67	.3279	.2980	308.3	.7343	.2457
#1	9.723	.0086	13.92	3.405	-.0044	.2385	.4518
#2	9.771	.0113	13.99	3.385	.0158	.2358	.4531
#3	9.754	.0112	14.01	3.392	-.0009	.2391	.4540

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.8	4784.4	31614.	4125.2
Stddev	3.4	1.0	78.	30.6
%RSD	.21073	.02021	.24768	.74243
#1	1613.6	4784.6	31533.	4156.4
#2	1620.4	4785.3	31619.	4124.0
#3	1616.4	4783.4	31690.	4095.1

Zoom In Zoom Out

Sample Name: FA22032-7 Acquired: 2/17/2015 12:09:17 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0048	96.95	.0151	.8583	.0041	3311.	-.0041	.0327	.1151	.2655
Stddev	.0013	.16	.0141	.0018	.0016	57.	.0008	.0014	.0039	.0019
%RSD	27.06	.1694	93.81	.2113	38.89	1.719	18.68	4.401	3.419	.7027
#1	.0059	96.77	.0288	.8565	.0045	3247.	-.0036	.0311	.1108	.2637
#2	.0034	97.00	.0006	.8601	.0023	3355.	-.0038	.0332	.1185	.2674
#3	.0051	97.09	.0158	.8583	.0054	3331.	-.0050	.0338	.1161	.2654

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	122.4	23.69	79.35	2.509	-.0386	3.069	.0865	.0800	.0000	-.0148
Stddev	.6	.10	.34	.002	.0006	.037	.0033	.0025	.0113	.0022
%RSD	.4735	.4228	.4274	.0937	1.650	1.215	3.867	3.103	308200.	14.89
#1	121.7	23.69	78.99	2.507	-.0385	3.066	.0903	.0787	-.0113	-.0165
#2	122.6	23.78	79.67	2.512	-.0393	3.034	.0850	.0785	.0114	-.0157
#3	122.8	23.58	79.39	2.508	-.0380	3.108	.0842	.0829	-.0002	-.0123

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	2.741	.0076	14.54	1.873	-.0035	.1486	.3111
Stddev	.005	.0045	.03	.005	.0096	.0006	.0001
%RSD	.1710	59.13	.1721	.2438	275.4	.3735	.0214
#1	2.743	.0115	14.52	1.868	-.0023	.1488	.3111
#2	2.736	.0027	14.54	1.875	-.0135	.1480	.3111
#3	2.745	.0085	14.57	1.877	.0055	.1490	.3110

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1620.8	4791.8	31324.	4065.2
Stddev	4.2	6.1	30.	24.0
%RSD	.25717	.12825	.09672	.58920
#1	1616.6	4784.8	31350.	4087.5
#2	1624.9	4794.3	31291.	4039.9
#3	1621.0	4796.3	31332.	4068.2

Zoom In Zoom Out

Sample Name: MP28559-MB1 Acquired: 2/17/2015 12:13:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0010	-.0010	-.0001	-.0002	.0394	-.0003	-.0003	-.0003	-.0003
Stddev	.0003	.0074	.0002	.0003	.0001	.0095	.0001	.0002	.0001	.0005
%RSD	284.9	703.6	22.96	286.8	65.48	24.04	16.36	60.52	29.00	153.7
#1	-.0004	.0029	-.0012	-.0004	.0000	.0474	-.0003	-.0001	-.0002	.0001
#2	-.0002	.0073	-.0012	.0002	-.0002	.0419	-.0003	-.0003	-.0002	-.0002
#3	.0003	-.0071	-.0008	-.0001	-.0003	.0289	-.0004	-.0005	-.0004	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0082	-.0490	.0312	-.0001	-.0036	.0017	-.0002	-.0008	.0005	.0005
Stddev	.0078	.0074	.0189	.0000	.0001	.0080	.0002	.0003	.0005	.0011
%RSD	94.63	15.12	60.52	24.63	3.327	484.2	122.1	43.52	97.32	204.0
#1	.0007	-.0572	.0171	-.0001	-.0037	.0069	.0001	-.0011	.0011	.0016
#2	-.0122	-.0468	.0527	-.0001	-.0037	-.0076	-.0003	-.0007	.0002	.0005
#3	-.0132	-.0429	.0238	-.0002	-.0035	.0057	-.0002	-.0005	.0003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0208	-.0013	.0000	-.0012	-.0037	.0000	.0000
Stddev	.0002	.0001	.0000	.0001	.0007	.000	.000
%RSD	.8930	7.045	979.1	7.749	18.47	324.9	34.66
#1	.0208	-.0012	.0000	-.0011	-.0041	-.0001	.0000
#2	.0206	-.0014	.0000	-.0012	-.0029	.0000	.0000
#3	.0209	-.0012	.0000	-.0013	-.0042	.0001	.0000
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28559-MB1 Acquired: 2/17/2015 12:13:29 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1662.4	4898.3	32857.	4112.7
Stddev	4.0	3.0	118.	9.5
%RSD	.23785	.06217	.36021	.23144
#1	1658.5	4899.4	32781.	4115.2
#2	1666.4	4900.7	32993.	4102.2
#3	1662.4	4894.9	32796.	4120.8

Zoom In Zoom Out

Sample Name: MP28559-B1 Acquired: 2/17/2015 12:17:40 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0505	29.26	1.961	2.060	.0527	27.18	.0494	.5018	.2185	.2626
Stddev	.0004	.04	.004	.007	.0001	.04	.0001	.0003	.0006	.0002
%RSD	.8093	.1431	.1919	.3436	.2251	.1355	.1691	.0526	.2563	.0680
#1	.0501	29.31	1.965	2.057	.0528	27.23	.0494	.5017	.2184	.2624
#2	.0505	29.23	1.957	2.055	.0526	27.16	.0493	.5017	.2179	.2626
#3	.0509	29.25	1.961	2.068	.0527	27.17	.0495	.5021	.2191	.2628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.63	27.11	26.31	.5209	.4987	27.52	.5020	.4981	.4898	1.937
Stddev	.07	.03	.07	.0010	.0001	.05	.0006	.0010	.0018	.004
%RSD	.2376	.1118	.2577	.1853	.0248	.1908	.1160	.1948	.3602	.1966
#1	27.59	27.13	26.38	.5198	.4987	27.58	.5026	.4983	.4894	1.941
#2	27.60	27.13	26.24	.5213	.4986	27.48	.5016	.4989	.4882	1.936
#3	27.70	27.08	26.30	.5216	.4988	27.51	.5016	.4970	.4917	1.933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0259	.5216	.5420	.5334	2.015	.5015	.5076
Stddev	.0004	.0002	.0005	.0005	.005	.0004	.0005
%RSD	1.511	.0404	.0902	.0996	.2460	.0896	.0903
#1	.0255	.5217	.5416	.5328	2.010	.5014	.5076
#2	.0263	.5213	.5419	.5336	2.018	.5012	.5071
#3	.0260	.5216	.5426	.5338	2.018	.5021	.5081
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28559-B1 Acquired: 2/17/2015 12:17:40 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1636.9	4795.7	31633.	4082.7
Stddev	2.7	4.4	66.	44.3
%RSD	.16308	.09192	.21013	1.0862
#1	1636.6	4790.8	31630.	4032.7
#2	1634.4	4797.1	31701.	4098.4
#3	1639.7	4799.3	31568.	4117.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:26:32 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2509	43.21	1.936	2.099	2.053	43.98	1.946	1.981	2.070	2.000
Stddev	.0004	.11	.002	.007	.009	.17	.002	.001	.010	.013
%RSD	.1648	.2486	.0931	.3285	.4169	.3823	.1061	.0455	.4978	.6610
#1	.2513	43.16	1.934	2.093	2.055	43.99	1.946	1.981	2.081	2.015
#2	.2505	43.14	1.938	2.098	2.044	43.81	1.947	1.982	2.068	1.995
#3	.2511	43.33	1.936	2.106	2.061	44.15	1.943	1.980	2.061	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	41.84	43.15	41.20	2.048	1.855	43.92	1.986	1.989	1.934	1.937
Stddev	.17	.17	.19	.008	.005	.12	.002	.007	.002	.003
%RSD	.4088	.3902	.4535	.3796	.2855	.2781	.0780	.3328	.0763	.1651
#1	41.76	43.13	41.12	2.056	1.849	43.93	1.984	1.995	1.934	1.941
#2	41.72	42.99	41.06	2.041	1.857	43.79	1.987	1.982	1.934	1.937
#3	42.03	43.33	41.41	2.045	1.859	44.03	1.987	1.990	1.936	1.934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0178	1.958	2.029	2.000	2.047	1.930	1.997
Stddev	.0002	.002	.005	.006	.006	.015	.003
%RSD	.8608	.0782	.2535	.3206	.2752	.7687	.1340
#1	.0176	1.956	2.030	2.007	2.053	1.947	1.998
#2	.0177	1.957	2.023	1.998	2.041	1.921	2.000
#3	.0179	1.959	2.033	1.995	2.047	1.922	1.994
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:26:32 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1591.7	4688.3	31048.	3968.2
Stddev	4.9	7.5	103.	22.6
%RSD	.30582	.16016	.33038	.56898
#1	1586.1	4687.9	30929.	3989.0
#2	1594.9	4681.1	31113.	3971.3
#3	1594.1	4696.1	31101.	3944.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 12:32:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0072	-.0005	.0002	-.0001	.0109	-.0002	-.0001
Stddev	.0002	.0069	.0006	.0001	.0000	.0013	.0001	.0001
%RSD	3097.	95.64	116.6	49.36	6.737	11.92	38.46	153.8
#1	.0001	.0064	-.0010	.0001	-.0001	.0123	-.0002	.0000
#2	-.0002	.0007	.0002	.0003	-.0001	.0109	-.0001	.0000
#3	.0001	.0144	-.0008	.0003	-.0001	.0096	-.0002	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0001	-.0046	.0148	.0280	.0000	F-.0020	.0122
Stddev	.0002	.0002	.0014	.0131	.0177	.0000	.0002	.0093
%RSD	196.2	218.9	29.47	88.15	63.32	67.17	9.968	76.28
#1	-.0001	-.0001	-.0031	.0266	.0478	.0001	-.0019	.0156
#2	.0001	.0003	-.0052	.0008	.0223	.0000	-.0019	.0192
#3	.0002	.0001	-.0056	.0172	.0138	.0000	-.0022	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0010	
Low Limit							-.0010	

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0001	.0002	.0000	.0022	-.0008	.0000	-.0004
Stddev	.0000	.0017	.0010	.0009	.0005	.0001	.000	.0001
%RSD	39.68	3075.	576.8	2052.	20.77	9.877	124.6	33.35
#1	-.0001	-.0008	.0002	.0003	.0017	-.0007	.0000	-.0005
#2	-.0001	-.0010	.0012	.0008	.0025	-.0007	.0000	-.0003
#3	-.0001	.0020	-.0009	-.0010	.0025	-.0009	.0000	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 12:32:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm
Avg	-.0003	-.0002	.0004
Stddev	.0006	.0000	.0001
%RSD	198.1	9.823	17.60
#1	-.0002	-.0002	.0005
#2	.0003	-.0003	.0003
#3	-.0010	-.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1669.3	4883.2	32586.	4058.8
Stddev	2.8	3.0	30.	52.9
%RSD	.16504	.06221	.09197	1.3022
#1	1670.9	4885.4	32566.	4025.2
#2	1670.9	4884.5	32620.	4119.7
#3	1666.2	4879.8	32571.	4031.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:55:48 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2465	40.37	1.970	2.006	2.018	40.61	1.986	1.977	2.008	1.975
Stddev	.0009	.17	.006	.005	.007	.20	.002	.003	.003	.002
%RSD	.3770	.4318	.2895	.2664	.3613	.4963	.0748	.1561	.1267	.1052
#1	.2461	40.40	1.967	2.011	2.021	40.69	1.986	1.975	2.011	1.974
#2	.2458	40.53	1.967	2.008	2.023	40.76	1.985	1.975	2.005	1.977
#3	.2476	40.19	1.977	2.000	2.010	40.38	1.988	1.980	2.008	1.973
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.29	40.08	40.20	2.029	1.969	40.52	1.976	1.983	1.965	1.977
Stddev	.09	.10	.28	.002	.009	.17	.003	.003	.003	.002
%RSD	.2279	.2531	.6984	.1068	.4473	.4320	.1373	.1731	.1671	.0964
#1	40.31	40.07	40.34	2.031	1.961	40.61	1.974	1.982	1.964	1.976
#2	40.36	40.19	40.38	2.027	1.969	40.63	1.975	1.980	1.962	1.975
#3	40.18	39.99	39.88	2.030	1.978	40.32	1.979	1.986	1.968	1.979
Check ?	Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass									
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.393	1.963	2.020	2.003	1.979	1.965	1.989
Stddev	.002	.003	.007	.001	.004	.002	.001
%RSD	.1322	.1430	.3516	.0462	.1829	.0933	.0453
#1	1.391	1.962	2.022	2.004	1.982	1.967	1.989
#2	1.393	1.961	2.025	2.002	1.975	1.964	1.988
#3	1.395	1.966	2.012	2.003	1.981	1.964	1.990
Check ?	None Chk PassChk PassChk PassChk PassChk PassChk Pass						
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 12:55:48 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1582.7	4662.3	30719.	3950.2
Stddev	.6	4.5	101.	30.0
%RSD	.03771	.09731	.32763	.76029
#1	1582.6	4666.3	30633.	3929.0
#2	1583.4	4663.2	30830.	3937.0
#3	1582.2	4657.4	30694.	3984.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 13:06:35 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0018	.0002	.0000	-.0001	.0078	.0000	.0000	.0001	.0001
Stddev	.0003	.0099	.0004	.0003	.0000	.0018	.0000	.0000	.0001	.0001
%RSD	107.3	561.7	287.7	546.9	66.56	23.39	142.4	197.9	165.5	126.0
#1	.0002	-.0047	-.0002	.0000	-.0001	.0060	.0000	.0000	.0000	.0002
#2	.0005	-.0031	.0006	-.0002	.0000	.0096	.0000	.0001	.0000	.0002
#3	.0000	.0131	.0000	.0003	.0000	.0076	.0000	.0000	.0002	.0000
Check ?	Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass									
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	-.0083	-.0108	.0001	.0006	.0087	.0001	.0003	.0009	.0008
Stddev	.0003	.0200	.0076	.0000	.0001	.0049	.0001	.0006	.0004	.0006
%RSD	16.66	241.6	70.47	38.39	23.18	56.95	94.89	197.3	37.42	73.52
#1	.0015	.0020	-.0031	.0001	.0007	.0122	.0001	.0006	.0008	.0001
#2	.0013	-.0314	-.0109	.0000	.0006	.0108	.0000	.0006	.0013	.0010
#3	.0018	.0045	-.0183	.0000	.0004	.0030	.0002	-.0004	.0007	.0012
Check ?	Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass									
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0005	.0000	.0004	.0000	-.0003	.0006
Stddev	.0005	.0002	.000	.0001	.0005	.0001	.0000
%RSD	36.70	42.01	32.17	21.27	6651.	32.81	4.511
#1	.0015	.0006	.0000	.0003	-.0001	-.0002	.0006
#2	.0020	.0007	.0000	.0004	.0006	-.0004	.0006
#3	.0009	.0003	.0000	.0004	-.0004	-.0002	.0006
Check ?	None Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass Chk Pass						
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 13:06:35 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1655.9	4869.7	32043.	4002.7
Stddev	2.2	7.2	96.	15.6
%RSD	.13531	.14862	.30095	.38875
#1	1658.5	4877.3	31961.	4010.6
#2	1655.0	4862.9	32150.	4012.8
#3	1654.2	4869.0	32019.	3984.8

Zoom In Zoom Out

Sample Name: FA22140-1 Acquired: 2/17/2015 13:10:46 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	.1575	.0011	.1072	-.0001	157.9	.0218	.0017	.0035
Stddev	.0003	.0031	.0004	.0005	.0000	.3	.0000	.0002	.0004
%RSD	60.00	1.970	34.62	.4283	57.72	.1708	.1316	11.11	11.67
#1	.0003	.1581	.0010	.1077	-.0001	157.7	.0217	.0016	.0033
#2	.0008	.1541	.0007	.1069	.0000	158.2	.0218	.0015	.0040
#3	.0003	.1602	.0014	.1069	-.0001	157.7	.0218	.0019	.0033

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0223	.8029	46.82	10.09	.2426	.0375	F118.7	.0243	.0444
Stddev	.0002	.0030	.07	.10	.0003	.0002	.4	.0000	.0003
%RSD	.7698	.3762	.1579	.9608	.1043	.6032	.3148	.1318	.6066
#1	.0222	.7995	46.86	9.992	.2427	.0374	119.0	.0243	.0446
#2	.0224	.8052	46.87	10.19	.2429	.0373	118.8	.0243	.0443
#3	.0222	.8041	46.74	10.08	.2424	.0377	118.3	.0244	.0441

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0191	.0020	3.248	.0018	.9337	.0132	.0007	.0012	.6385
Stddev	.0008	.0015	.001	.0003	.0012	.0010	.0003	.0001	.0009
%RSD	4.051	78.17	.0418	17.67	.1263	7.564	51.97	10.84	.1403
#1	.0182	.0008	3.249	.0021	.9341	.0144	.0008	.0012	.6387
#2	.0197	.0014	3.246	.0017	.9345	.0127	.0003	.0013	.6375
#3	.0193	.0037	3.248	.0015	.9323	.0126	.0009	.0010	.6392

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.9	4778.4	30736.	4008.2
Stddev	.4	3.5	57.	19.9
%RSD	.02213	.07384	.18497	.49761
#1	1613.9	4777.7	30673.	4022.8
#2	1613.5	4782.2	30751.	3985.5
#3	1614.2	4775.2	30784.	4016.3

Zoom In Zoom Out

Sample Name: MP28559-D1 Acquired: 2/17/2015 13:14:51 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0000	.1476	.0023	.1073	-.0001	160.1	.0220	.0017	.0036
Stddev	.0009	.0126	.0005	.0002	.0000	.5	.0001	.0002	.0004
%RSD	2523.	8.519	20.18	.1842	50.88	.2889	.3639	9.112	10.34
#1	-.0008	.1516	.0028	.1072	-.0001	159.5	.0220	.0018	.0040
#2	-.0001	.1577	.0023	.1072	-.0001	160.3	.0219	.0017	.0034
#3	.0011	.1335	.0019	.1076	.0000	160.3	.0221	.0015	.0034

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0223	.8189	47.35	10.28	.2470	.0377	F119.3	.0249	.0462
Stddev	.0002	.0080	.21	.06	.0003	.0002	.2	.0003	.0004
%RSD	1.027	.9726	.4344	.5687	.1240	.4453	.1544	1.068	.8434
#1	.0226	.8131	47.12	10.26	.2467	.0376	119.1	.0246	.0461
#2	.0222	.8156	47.43	10.24	.2472	.0376	119.5	.0249	.0466
#3	.0221	.8280	47.51	10.35	.2472	.0379	119.4	.0251	.0458

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0205	-.0006	3.292	.0019	.9472	.0125	-.0010	.0012	.6496
Stddev	.0007	.0005	.010	.0001	.0032	.0012	.0006	.0001	.0017
%RSD	3.593	84.15	.3170	6.892	.3405	9.348	57.60	10.98	.2645
#1	.0204	-.0008	3.289	.0018	.9436	.0115	-.0003	.0013	.6487
#2	.0198	-.0010	3.284	.0019	.9479	.0138	-.0014	.0013	.6485
#3	.0212	.0000	3.304	.0020	.9500	.0123	-.0012	.0010	.6516

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1606.4	4773.8	30728.	4016.5
Stddev	2.4	8.0	49.	22.3
%RSD	.15049	.16825	.15808	.55448
#1	1604.1	4772.5	30696.	4041.5
#2	1608.9	4782.4	30704.	3998.8
#3	1606.2	4766.5	30784.	4009.1

Zoom In Zoom Out

Sample Name: MP28559-SD1 Acquired: 2/17/2015 13:18:57 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.1800	.0015	.1035	-.0005	156.0	.0211	.0020	.0035	.0209
Stddev	.0016	.0552	.0021	.0023	.0002	.1	.0003	.0002	.0010	.0010
%RSD	1231.	30.68	140.4	2.204	46.22	.0745	1.518	8.182	29.82	4.556
#1	.0009	.2052	.0037	.1060	-.0003	155.9	.0208	.0022	.0045	.0198
#2	-.0019	.2181	-.0005	.1027	-.0008	156.1	.0210	.0021	.0037	.0216
#3	.0006	.1166	.0013	.1017	-.0005	156.1	.0214	.0018	.0024	.0213

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7446	45.13	10.18	.2388	.0327	117.5	.0238	.0343	.0204	.0059
Stddev	.0157	.11	.08	.0003	.0006	.3	.0018	.0029	.0096	.0016
%RSD	2.115	.2467	.7398	.1304	1.909	.2406	7.514	8.534	47.22	27.90
#1	.7538	45.01	10.23	.2390	.0334	117.3	.0259	.0367	.0219	.0065
#2	.7265	45.23	10.22	.2390	.0324	117.4	.0231	.0311	.0291	.0070
#3	.7536	45.14	10.09	.2385	.0324	117.8	.0225	.0352	.0101	.0040

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.080	.0006	.9096	.0121	.0023	-.0002	.6333
Stddev	.001	.0003	.0012	.0013	.0072	.0002	.0015
%RSD	.0253	49.86	.1299	11.15	318.3	86.48	.2415
#1	3.080	.0006	.9087	.0136	-.0021	-.0001	.6317
#2	3.081	.0003	.9092	.0110	.0106	-.0004	.6334
#3	3.080	.0009	.9109	.0117	-.0017	-.0001	.6347

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1654.9	4898.1	31808.	4023.3
Stddev	3.2	2.8	76.	24.5
%RSD	.19618	.05710	.24021	.60828
#1	1656.0	4900.1	31760.	4012.9
#2	1651.2	4894.9	31768.	4005.8
#3	1657.4	4899.3	31896.	4051.3

Zoom In Zoom Out

Sample Name: MP28559-PS1 Acquired: 2/17/2015 13:23:04 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0497	2.850	.1051	.3788	.0543	161.7	.0725	.0531	.0576
Stddev	.0002	.017	.0005	.0023	.0001	.2	.0001	.0003	.0004
%RSD	.4048	.5872	.5189	.6166	.2040	.1178	.1737	.5084	.6446
#1	.0499	2.869	.1057	.3800	.0542	161.9	.0724	.0528	.0572
#2	.0495	2.837	.1046	.3802	.0543	161.5	.0725	.0532	.0576
#3	.0497	2.844	.1049	.3761	.0544	161.7	.0727	.0533	.0579

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.1278	3.918	56.59	14.83	.2921	.1362	F127.3	.1265	.0953
Stddev	.0002	.017	.10	.08	.0006	.0001	.3	.0002	.0012
%RSD	.1543	.4268	.1783	.5268	.2157	.0389	.2738	.1398	1.224
#1	.1276	3.902	56.64	14.86	.2914	.1362	127.7	.1264	.0963
#2	.1278	3.915	56.48	14.74	.2927	.1363	127.3	.1267	.0955
#3	.1280	3.935	56.67	14.89	.2922	.1362	127.0	.1264	.0940

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1207	.1013	3.209	.0504	.9765	.1149	.1037	.0515	.8789
Stddev	.0007	.0003	.006	.0003	.0011	.0012	.0027	.0003	.0012
%RSD	.5659	.3428	.1743	.6939	.1175	1.028	2.576	.6586	.1319
#1	.1210	.1013	3.203	.0502	.9767	.1141	.1015	.0512	.8778
#2	.1211	.1010	3.212	.0508	.9775	.1144	.1066	.0515	.8788
#3	.1199	.1017	3.213	.0502	.9752	.1163	.1029	.0519	.8801

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1598.5	4759.3	30360.	3939.4
Stddev	.6	2.0	155.	29.0
%RSD	.04002	.04229	.50908	.73668
#1	1599.0	4760.9	30511.	3917.6
#2	1598.8	4757.1	30202.	3972.4
#3	1597.8	4759.9	30368.	3928.3

Zoom In Zoom Out

Sample Name: MP28559-S1 Acquired: 2/17/2015 13:27:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0516	29.92	1.994	2.185	.0539	192.2	.0715	.5007	.2184
Stddev	.0003	.13	.002	.003	.0000	.8	.0001	.0002	.0011
%RSD	.6776	.4288	.0863	.1309	.0126	.4317	.0889	.0446	.5212
#1	.0519	29.80	1.995	2.183	.0539	191.4	.0714	.5004	.2183
#2	.0517	29.90	1.995	2.184	.0539	192.2	.0715	.5009	.2174
#3	.0512	30.06	1.992	2.188	.0539	193.0	.0715	.5008	.2196

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2847	29.10	75.62	36.40	.7714	.5443	F148.8	.5221	.5528
Stddev	.0010	.06	.07	.18	.0018	.0008	.2	.0003	.0007
%RSD	.3556	.1966	.0926	.5005	.2325	.1497	.1353	.0658	.1187
#1	.2848	29.03	75.56	36.20	.7726	.5438	148.6	.5223	.5535
#2	.2836	29.12	75.60	36.46	.7693	.5439	148.7	.5218	.5527
#3	.2856	29.14	75.70	36.55	.7722	.5453	149.0	.5224	.5522

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5195	1.962	3.400	.5119	1.524	.5530	2.038	.4926	1.150
Stddev	.0022	.007	.006	.0010	.003	.0004	.002	.0016	.001
%RSD	.4319	.3736	.1838	.1897	.1678	.0794	.0876	.3206	.0967
#1	.5212	1.953	3.399	.5120	1.523	.5535	2.038	.4910	1.149
#2	.5170	1.967	3.395	.5128	1.522	.5526	2.039	.4928	1.151
#3	.5204	1.964	3.407	.5109	1.527	.5529	2.036	.4941	1.149

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1564.5	4692.1	29591.	3919.9
Stddev	4.3	8.7	87.	40.4
%RSD	.27533	.18647	.29525	1.0299
#1	1562.9	4694.6	29499.	3965.4
#2	1561.2	4682.3	29673.	3905.7
#3	1569.3	4699.2	29600.	3888.5

Zoom In Zoom Out

Sample Name: MP28559-S2 Acquired: 2/17/2015 13:31:03 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0509	29.62	2.004	2.194	.0535	188.6	.0710	.4996	.2149
Stddev	.0002	.02	.003	.004	.0002	.5	.0001	.0004	.0007
%RSD	.2987	.0724	.1433	.1639	.3628	.2554	.1495	.0860	.3210
#1	.0510	29.61	2.001	2.190	.0537	188.3	.0711	.4993	.2156
#2	.0509	29.65	2.006	2.196	.0533	189.1	.0709	.4994	.2146
#3	.0507	29.62	2.006	2.196	.0534	188.3	.0711	.5001	.2143

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.2821	29.05	74.30	36.21	.7649	.5452	F145.9	.5250	.5512
Stddev	.0007	.03	.13	.24	.0017	.0018	.4	.0013	.0018
%RSD	.2514	.1190	.1720	.6634	.2269	.3238	.2711	.2559	.3274
#1	.2824	29.03	74.32	36.02	.7669	.5444	146.0	.5260	.5504
#2	.2813	29.09	74.41	36.48	.7637	.5440	146.1	.5235	.5500
#3	.2827	29.03	74.16	36.13	.7640	.5473	145.4	.5254	.5533

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.5203	1.971	3.362	.5159	1.502	.5474	2.030	.4883	1.140
Stddev	.0008	.008	.011	.0016	.001	.0009	.009	.0034	.002
%RSD	.1566	.3916	.3320	.3018	.0834	.1628	.4613	.6955	.1777
#1	.5196	1.969	3.350	.5143	1.503	.5465	2.019	.4917	1.139
#2	.5202	1.964	3.365	.5158	1.502	.5483	2.037	.4849	1.139
#3	.5212	1.980	3.371	.5175	1.500	.5472	2.033	.4882	1.142

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1566.2	4673.4	29933.	3918.1
Stddev	4.1	10.0	85.	13.5
%RSD	.26080	.21310	.28232	.34456
#1	1570.7	4674.8	29836.	3932.8
#2	1565.3	4682.5	29987.	3906.2
#3	1562.6	4662.8	29977.	3915.3

Zoom In Zoom Out

Sample Name: FA22132-1 Acquired: 2/17/2015 13:35:01 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0134	-.0008	.0103	-.0001	34.13	-.0001	.0000	.0002	-.0002
Stddev	.0005	.0039	.0002	.0001	.0000	.15	.0000	.0000	.0001	.0003
%RSD	344.9	28.93	20.55	1.325	35.02	.4513	22.43	330.8	38.83	128.6
#1	.0005	.0096	-.0006	.0102	-.0001	34.24	-.0001	.0000	.0003	.0000
#2	.0004	.0133	-.0009	.0104	-.0002	33.95	-.0001	.0000	.0002	-.0002
#3	-.0004	.0173	-.0010	.0104	-.0001	34.19	-.0001	.0000	.0001	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.341	1.033	1.605	.0123	-.0002	5.955	-.0003	-.0028	.0004	.0013
Stddev	.005	.021	.016	.0000	.0002	.024	.0001	.0003	.0016	.0009
%RSD	.3885	2.010	.9674	.3448	70.39	.3977	49.45	9.717	373.7	71.26
#1	1.347	1.056	1.597	.0122	-.0001	5.980	-.0004	-.0025	.0022	.0019
#2	1.338	1.026	1.623	.0123	-.0002	5.933	-.0002	-.0031	-.0011	.0016
#3	1.338	1.016	1.596	.0123	-.0004	5.952	-.0003	-.0029	.0002	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8358	.0002	.0486	.0013	-.0004	.0002	.0051
Stddev	.0015	.0003	.0003	.0001	.0013	.0001	.0001
%RSD	.1821	152.4	.5295	9.727	358.8	76.61	1.790
#1	.8374	.0005	.0486	.0013	.0002	.0001	.0050
#2	.8344	.0003	.0483	.0011	.0005	.0001	.0050
#3	.8357	-.0001	.0488	.0013	-.0018	.0003	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1658.2	4890.9	31840.	4027.0
Stddev	4.8	7.6	125.	27.2
%RSD	.28913	.15589	.39181	.67446
#1	1656.6	4894.4	31776.	3998.1
#2	1663.5	4896.1	31984.	4052.0
#3	1654.3	4882.1	31761.	4030.9

Zoom In Zoom Out

Sample Name: FA22132-1F Acquired: 2/17/2015 13:39:09 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	.0073	-.0002	.0099	-.0001	34.86	-.0001	.0000	.0005	-.0005
Stddev	.0002	.0090	.0001	.0003	.0000	.04	.0000	.0001	.0002	.0001
%RSD	145.0	124.1	79.51	3.179	33.12	.1003	38.36	611.6	47.21	15.48
#1	-.0001	.0082	-.0001	.0102	-.0001	34.90	-.0001	-.0001	.0005	-.0006
#2	.0004	-.0022	-.0001	.0096	-.0001	34.83	-.0001	.0001	.0002	-.0004
#3	.0002	.0158	-.0004	.0099	-.0002	34.86	-.0001	.0000	.0007	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	1.162	.9916	1.670	.0121	-.0007	6.368	-.0005	-.0004	.0007	.0009
Stddev	.004	.0226	.022	.0001	.0002	.002	.0001	.0004	.0001	.0008
%RSD	.3439	2.278	1.345	.5569	31.96	.0349	17.67	104.7	22.45	97.77
#1	1.165	1.017	1.651	.0122	-.0005	6.367	-.0006	-.0005	.0008	.0005
#2	1.164	.9814	1.664	.0120	-.0009	6.371	-.0004	.0001	.0006	.0003
#3	1.158	.9759	1.695	.0121	-.0006	6.367	-.0005	-.0006	.0006	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.8286	.0004	.0484	.0008	.0002	.0001	.0051
Stddev	.0006	.0001	.0001	.0001	.0006	.0000	.0001
%RSD	.0696	14.19	.2468	10.04	314.4	38.20	1.905
#1	.8282	.0004	.0485	.0008	.0009	.0002	.0052
#2	.8284	.0004	.0482	.0008	-.0002	.0001	.0051
#3	.8292	.0004	.0483	.0009	-.0001	.0001	.0051

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1650.6	4895.8	31575.	3966.2
Stddev	5.6	9.9	44.	4.6
%RSD	.34047	.20208	.13843	.11515
#1	1646.5	4885.3	31540.	3961.1
#2	1648.4	4897.0	31561.	3967.6
#3	1657.0	4904.9	31624.	3969.8

Zoom In Zoom Out

Sample Name: FA22132-2F Acquired: 2/17/2015 13:43:16 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0096	-.0014	.0092	.0000	23.57	-.0001	-.0001	.0003	-.0003
Stddev	.0002	.0047	.0005	.0003	.000	.01	.0001	.0002	.0001	.0002
%RSD	399.4	49.35	36.95	3.415	65.78	.0577	63.97	149.6	34.02	74.96
#1	-.0001	.0064	-.0014	.0094	.0000	23.59	-.0001	.0000	.0003	-.0002
#2	.0000	.0074	-.0020	.0092	-.0001	23.58	-.0001	-.0003	.0004	-.0006
#3	.0002	.0151	-.0010	.0088	.0000	23.56	-.0002	-.0001	.0002	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0435	.5610	1.717	.0010	.0017	3.901	-.0003	-.0007	.0012	.0018
Stddev	.0015	.0202	.032	.0000	.0001	.009	.0002	.0008	.0016	.0006
%RSD	3.387	3.606	1.840	1.990	6.175	.2234	61.61	120.7	131.2	34.66
#1	.0452	.5717	1.705	.0010	.0018	3.900	-.0002	-.0009	-.0004	.0021
#2	.0423	.5737	1.752	.0010	.0016	3.910	-.0001	-.0013	.0028	.0022
#3	.0431	.5377	1.693	.0010	.0017	3.892	-.0005	.0002	.0014	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.6578	-.0002	.0326	.0005	-.0001	-.0004	.0052
Stddev	.0008	.0004	.0002	.0001	.0006	.0004	.0000
%RSD	.1259	193.7	.4803	14.98	563.3	119.6	.2197
#1	.6569	.0003	.0328	.0005	.0004	-.0004	.0052
#2	.6583	-.0005	.0325	.0004	-.0008	-.0008	.0052
#3	.6583	-.0005	.0325	.0004	.0001	.0001	.0052

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1648.3	4906.6	31748.	3963.7
Stddev	1.3	5.7	203.	13.0
%RSD	.08106	.11565	.64009	.32854
#1	1646.8	4903.7	31548.	3949.6
#2	1648.6	4902.9	31742.	3966.2
#3	1649.4	4913.1	31954.	3975.2

Zoom In Zoom Out

Sample Name: FA22154-1 Acquired: 2/17/2015 13:47:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0010	.2779	.0006	.0880	-.0001	445.0	-.0005	-.0003	.0017	-.0004
Stddev	.0009	.0308	.0017	.0008	.0005	.5	.0001	.0000	.0007	.0006
%RSD	86.73	11.07	304.3	.8931	468.8	.1139	14.52	13.98	40.56	135.1
#1	.0003	.2425	.0018	.0874	.0004	444.6	-.0006	-.0004	.0025	-.0005
#2	.0008	.2971	.0012	.0878	-.0002	444.9	-.0005	-.0003	.0016	-.0010
#3	.0021	.2943	-.0014	.0889	-.0005	445.5	-.0005	-.0003	.0011	.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.5306	3.941	86.85	.0608	-.0055	159.1	-.0020	-.0097	-.0047	.0036
Stddev	.0179	.053	.32	.0003	.0004	.1	.0006	.0037	.0045	.0021
%RSD	3.376	1.353	.3722	.5081	7.137	.0532	30.29	37.80	93.86	57.87
#1	.5462	3.978	86.52	.0607	-.0053	159.2	-.0022	-.0078	-.0005	.0028
#2	.5111	3.880	87.16	.0606	-.0053	159.0	-.0013	-.0073	-.0044	.0020
#3	.5346	3.964	86.87	.0612	-.0060	159.2	-.0024	-.0139	-.0094	.0059

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	9.567	-.0018	1.171	.0102	.0054	-.0001	.0065
Stddev	.012	.0002	.001	.0015	.0012	.0011	.0001
%RSD	.1282	8.820	.0540	14.21	21.84	903.3	1.445
#1	9.564	-.0019	1.170	.0090	.0041	-.0012	.0065
#2	9.557	-.0016	1.170	.0099	.0065	.0010	.0064
#3	9.581	-.0018	1.171	.0118	.0055	-.0001	.0065

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1616.2	4801.2	30780.	3866.1
Stddev	4.4	5.6	31.	13.4
%RSD	.27482	.11685	.10126	.34746
#1	1620.9	4807.6	30753.	3876.0
#2	1615.4	4798.8	30773.	3850.8
#3	1612.1	4797.2	30814.	3871.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 13:51:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2501	41.45	1.945	2.014	2.050	41.61	2.003	1.991	2.083	2.021
Stddev	.0005	.06	.006	.001	.001	.14	.003	.004	.005	.005
%RSD	.2182	.1431	.2978	.0634	.0237	.3473	.1481	.1916	.2456	.2742
#1	.2500	41.50	1.939	2.013	2.051	41.73	1.999	1.986	2.087	2.023
#2	.2497	41.46	1.948	2.015	2.050	41.64	2.004	1.992	2.077	2.015
#3	.2508	41.38	1.949	2.013	2.050	41.45	2.005	1.994	2.085	2.026
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.66	40.84	40.50	2.065	1.966	41.60	1.961	2.004	1.951	1.956
Stddev	.03	.11	.23	.007	.010	.08	.003	.003	.004	.005
%RSD	.0810	.2763	.5751	.3438	.4999	.1964	.1753	.1399	.2270	.2389
#1	40.65	40.93	40.75	2.071	1.956	41.65	1.957	2.003	1.945	1.951
#2	40.70	40.87	40.46	2.057	1.969	41.65	1.963	2.002	1.953	1.959
#3	40.64	40.71	40.29	2.067	1.975	41.51	1.963	2.007	1.953	1.959
Check ? Value Range	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.384	1.926	2.061	2.048	2.002	1.995	1.999
Stddev	.003	.001	.002	.003	.003	.008	.001
%RSD	.2447	.0330	.0798	.1628	.1235	.4081	.0718
#1	1.380	1.926	2.062	2.051	2.000	1.999	1.997
#2	1.386	1.927	2.061	2.044	2.004	1.985	2.000
#3	1.386	1.927	2.059	2.050	2.004	1.999	2.000
Check ? Value Range	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 13:51:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1575.8	4684.2	30053.	3858.6
Stddev	1.2	4.7	78.	48.3
%RSD	.07722	.10001	.25936	1.2515
#1	1574.7	4681.9	30012.	3819.7
#2	1575.5	4681.2	30143.	3843.5
#3	1577.1	4689.6	30005.	3912.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:00:49 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	-.0049	.0002	-.0001	-.0001	-.0049	-.0001	.0000	-.0003	.0002
Stddev	.0005	.0135	.0005	.0001	.0001	.0021	.0000	.0001	.0001	.0001
%RSD	255.4	275.4	268.3	65.94	80.69	42.58	17.17	308.3	36.67	31.17
#1	-.0002	.0033	.0002	.0000	-.0001	-.0031	-.0001	.0000	-.0003	.0001
#2	.0001	.0025	-.0003	-.0002	-.0001	-.0072	-.0001	.0000	-.0003	.0002
#3	.0007	-.0204	.0007	-.0001	.0000	-.0045	-.0001	.0001	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0039	-.0128	.0002	-.0001	-.0001	.0068	-.0002	.0003	.0011	.0003
Stddev	.0006	.0208	.0442	.0000	.0000	.0059	.0001	.0004	.0003	.0021
%RSD	16.59	162.9	19490.	33.55	28.12	87.22	83.31	127.0	23.76	760.5
#1	-.0042	-.0363	-.0453	-.0001	-.0001	.0026	.0000	.0002	.0012	-.0021
#2	-.0043	.0034	.0030	-.0002	-.0001	.0136	-.0002	.0008	.0008	.0020
#3	-.0031	-.0054	.0430	-.0001	-.0001	.0042	-.0003	.0000	.0012	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0001	-.0001	-.0002	-.0003	-.0003	-.0002
Stddev	.0005	.0004	.0000	.0001	.0011	.0002	.0001
%RSD	137.4	550.4	15.96	62.45	372.0	90.78	42.26
#1	-.0002	-.0001	-.0001	-.0001	-.0014	-.0001	-.0002
#2	.0007	-.0002	-.0001	-.0001	-.0002	-.0002	-.0001
#3	.0006	.0005	-.0001	-.0003	.0007	-.0005	-.0002
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:00:49 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1638.7	4883.6	31363.	3879.7
Stddev	2.2	8.4	31.	19.5
%RSD	.13542	.17271	.09821	.50143
#1	1638.9	4879.7	31331.	3857.4
#2	1636.4	4877.9	31392.	3893.2
#3	1640.8	4893.3	31367.	3888.6

Zoom In Zoom Out

Sample Name: FA22154-2 Acquired: 2/17/2015 14:05:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	1.337	.0037	.3557	.0003	1108.	-.0012	-.0004	.0137	-.0018
Stddev	.0045	.044	.0004	.0019	.0008	2.	.0005	.0014	.0015	.0017
%RSD	915.3	3.311	12.08	.5245	251.3	.1461	41.96	375.1	11.28	93.61
#1	.0036	1.293	.0042	.3539	.0012	1109.	-.0013	.0013	.0119	-.0021
#2	-.0047	1.382	.0034	.3556	-.0002	1109.	-.0007	-.0013	.0143	-.0034
#3	.0026	1.337	.0034	.3576	-.0001	1106.	-.0017	-.0011	.0148	.0000

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	10.66	5.866	334.3	.0790	-.0052	346.0	-.0023	-.0189	-.0068	.0074
Stddev	.02	.157	1.0	.0005	.0016	.5	.0007	.0052	.0138	.0127
%RSD	.1476	2.680	.2982	.6195	30.32	.1411	29.29	27.50	203.2	171.8
#1	10.67	5.853	334.4	.0795	-.0065	346.0	-.0027	-.0144	.0041	.0220
#2	10.64	6.030	335.3	.0790	-.0034	346.5	-.0026	-.0245	-.0223	-.0001
#3	10.67	5.716	333.3	.0785	-.0058	345.5	-.0015	-.0177	-.0022	.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.08	-.0066	4.062	.0429	.0165	.0056	.0149
Stddev	.02	.0037	.010	.0011	.0117	.0021	.0004
%RSD	.2233	55.69	.2441	2.469	70.95	37.10	2.832
#1	11.09	-.0060	4.070	.0441	.0270	.0032	.0146
#2	11.10	-.0033	4.065	.0421	.0186	.0069	.0153
#3	11.05	-.0106	4.051	.0424	.0039	.0067	.0147

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1623.9	4859.8	31034.	3922.6
Stddev	1.1	9.7	49.	15.6
%RSD	.06500	.20048	.15720	.39698
#1	1625.1	4866.0	31024.	3908.1
#2	1623.5	4864.9	31087.	3920.6
#3	1623.1	4848.6	30991.	3939.1

Zoom In Zoom Out

Sample Name: FA22154-3 Acquired: 2/17/2015 14:09:46 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	.0290	-.0004	.0158	.0000	83.75	-.0001	-.0001	.0006	-.0004
Stddev	.0001	.0052	.0002	.0001	.0000	.15	.0000	.0001	.0001	.0002
%RSD	45.49	17.84	48.42	.4688	77.37	.1833	32.19	57.39	9.818	54.17
#1	.0005	.0230	-.0002	.0157	.0000	83.64	-.0001	-.0002	.0007	-.0007
#2	.0002	.0324	-.0004	.0158	.0001	83.69	-.0001	.0000	.0006	-.0004
#3	.0002	.0316	-.0005	.0158	.0000	83.93	-.0001	-.0002	.0006	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.1210	1.238	24.67	.0220	.0017	27.07	-.0003	-.0005	.0012	-.0002
Stddev	.0061	.029	.07	.0000	.0001	.04	.0001	.0007	.0014	.0007
%RSD	5.055	2.340	.2759	.0846	6.914	.1412	38.04	144.8	115.1	296.3
#1	.1278	1.206	24.60	.0220	.0018	27.05	-.0004	.0003	-.0003	.0002
#2	.1159	1.262	24.67	.0220	.0016	27.05	-.0002	-.0011	.0014	-.0011
#3	.1194	1.247	24.73	.0220	.0016	27.11	-.0002	-.0008	.0025	.0002

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	11.19	-.0001	.2427	.0068	.0003	.0003	.0079
Stddev	.02	.0001	.0004	.0002	.0007	.0003	.0001
%RSD	.1598	84.91	.1645	2.942	274.3	116.0	.6443
#1	11.19	.0000	.2425	.0066	-.0001	.0000	.0079
#2	11.17	-.0001	.2425	.0070	-.0002	.0006	.0079
#3	11.20	-.0001	.2432	.0068	.0011	.0002	.0080

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1638.6	4879.5	31079.	3947.5
Stddev	4.2	15.7	193.	7.1
%RSD	.25344	.32274	.62214	.17902
#1	1635.7	4867.3	31287.	3943.1
#2	1643.3	4897.3	30905.	3943.8
#3	1636.7	4874.0	31046.	3955.7

Zoom In Zoom Out

Sample Name: FA22154-4 Acquired: 2/17/2015 14:13:54 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0001	.0758	-.0001	.0374	-.0001	71.72	-.0001	-.0002	.0006	.0019
Stddev	.0005	.0082	.0006	.0001	.0001	.12	.0001	.0001	.0001	.0001
%RSD	504.8	10.86	755.2	.3633	76.66	.1632	65.76	69.88	15.81	4.583
#1	-.0006	.0668	-.0005	.0375	-.0001	71.59	-.0001	-.0001	.0006	.0020
#2	.0004	.0778	.0006	.0372	-.0001	71.83	.0000	-.0001	.0007	.0018
#3	-.0001	.0828	-.0004	.0374	.0000	71.73	-.0001	-.0003	.0005	.0019

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2541	9.673	9.759	.0022	.0015	21.76	.0006	-.0018	.0000	.0006
Stddev	.0037	.047	.020	.0000	.0001	.02	.0002	.0006	.0006	.0006
%RSD	1.474	.4849	.2030	.8400	6.235	.1061	27.30	35.25	12380.	94.61
#1	.2527	9.620	9.737	.0022	.0014	21.74	.0006	-.0025	.0005	.0000
#2	.2514	9.708	9.771	.0022	.0014	21.79	.0008	-.0018	.0001	.0012
#3	.2584	9.691	9.770	.0022	.0016	21.77	.0004	-.0012	-.0006	.0006

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	5.312	.0000	.3477	.0058	-.0007	.0007	.0514
Stddev	.013	.0003	.0005	.0005	.0007	.0003	.0001
%RSD	.2465	2427.	.1439	8.801	104.4	37.76	.1606
#1	5.325	.0002	.3477	.0062	-.0001	.0006	.0514
#2	5.299	.0002	.3483	.0059	-.0015	.0011	.0515
#3	5.312	-.0003	.3473	.0052	-.0005	.0005	.0513

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1639.5	4895.4	30862.	3926.4
Stddev	.6	5.6	15.	25.2
%RSD	.03953	.11427	.04936	.64139
#1	1640.3	4890.0	30873.	3930.0
#2	1639.2	4901.1	30845.	3899.6
#3	1639.1	4895.2	30868.	3949.5

Zoom In Zoom Out

Sample Name: FA22154-5 Acquired: 2/17/2015 14:18:02 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0202	-.0007	.2825	.0000	320.4	-.0003	-.0001	.0000	-.0011
Stddev	.000	.0153	.0006	.0010	.0000	1.0	.0001	.0001	.0002	.0002
%RSD	857.0	75.84	86.98	.3368	148.6	.3079	16.72	82.15	385.7	18.24
#1	.0000	.0364	-.0002	.2825	.0001	320.6	-.0004	.0000	.0002	-.0013
#2	.0001	.0060	-.0014	.2835	.0001	321.3	-.0003	-.0001	-.0002	-.0010
#3	-.0002	.0181	-.0006	.2816	.0000	319.4	-.0003	-.0001	.0001	-.0009

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.9421	3.566	47.24	.0278	-.0015	68.11	-.0006	-.0016	.0006	-.0013
Stddev	.0029	.016	.10	.0001	.0002	.12	.0004	.0005	.0005	.0007
%RSD	.3064	.4463	.2088	.1821	13.47	.1832	73.17	33.57	85.76	56.30
#1	.9452	3.548	47.31	.0278	-.0014	68.07	-.0009	-.0012	.0011	-.0008
#2	.9416	3.572	47.29	.0278	-.0013	68.25	-.0007	-.0014	.0003	-.0021
#3	.9395	3.578	47.13	.0279	-.0017	68.01	-.0001	-.0022	.0003	-.0009

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	9.366	-.0001	2.303	.0008	-.0007	-.0003	.0043
Stddev	.013	.0003	.005	.0000	.0003	.0002	.0001
%RSD	.1418	374.8	.2181	3.473	41.14	53.41	1.420
#1	9.351	.0003	2.298	.0008	-.0006	-.0004	.0042
#2	9.372	-.0004	2.308	.0009	-.0004	-.0001	.0043
#3	9.376	-.0002	2.302	.0008	-.0010	-.0004	.0042

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1577.0	4725.7	29709.	3837.3
Stddev	3.9	6.3	49.	23.6
%RSD	.24535	.13306	.16381	.61582
#1	1572.7	4719.4	29655.	3812.0
#2	1578.2	4732.0	29723.	3840.9
#3	1580.2	4725.7	29749.	3858.9

Zoom In Zoom Out

Sample Name: FA22154-6 Acquired: 2/17/2015 14:22:18 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 4.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0017	.3161	.0029	.0383	-.0004	119.4	-.0001	.0006	.0012	-.0002
Stddev	.0013	.0323	.0027	.0009	.0004	.2	.0001	.0002	.0008	.0002
%RSD	75.15	10.21	91.41	2.462	112.5	.1847	43.63	31.35	71.46	118.4
#1	.0022	.2796	-.0001	.0385	-.0003	119.1	-.0002	.0007	.0021	-.0003
#2	.0002	.3405	.0037	.0391	-.0008	119.4	-.0001	.0006	.0006	.0000
#3	.0026	.3283	.0050	.0372	.0000	119.6	-.0002	.0004	.0008	-.0002

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(ln2306)	(Y_2243)	(Y_2243)
Avg	.2591	1.287	32.25	.0036	-.0012	199.1	.0004	-.0031	.0038	.0042
Stddev	.0220	.069	.10	.0001	.0005	.2	.0004	.0026	.0011	.0054
%RSD	8.488	5.332	.3029	1.767	43.57	.1013	116.0	84.58	28.92	130.3
#1	.2381	1.234	32.36	.0036	-.0016	198.9	.0001	-.0008	.0040	.0033
#2	.2820	1.262	32.22	.0037	-.0014	199.3	.0009	-.0025	.0026	.0099
#3	.2572	1.364	32.18	.0036	-.0006	199.1	.0001	-.0060	.0048	-.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(ln2306)	(Y_3600)	(Y_2243)
Avg	6.785	-.0008	.3994	.0071	.0014	.0003	.0085
Stddev	.011	.0011	.0011	.0006	.0037	.0003	.0001
%RSD	.1561	140.0	.2804	8.859	267.7	101.9	1.191
#1	6.782	-.0010	.3990	.0066	.0010	.0001	.0087
#2	6.797	.0004	.4007	.0078	.0053	.0001	.0085
#3	6.776	-.0017	.3986	.0070	-.0021	.0006	.0085

Int. Std.	ln2306	Y_2243	Y_3600	Y_3710
Avg	1657.3	4939.5	31336.	3919.5
Stddev	3.7	6.5	136.	21.4
%RSD	.22583	.13058	.43282	.54508
#1	1661.6	4946.9	31352.	3941.3
#2	1655.7	4935.5	31462.	3918.5
#3	1654.6	4936.1	31192.	3898.6

Zoom In Zoom Out

Sample Name: FA22154-7 Acquired: 2/17/2015 14:26:27 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0951	-.0002	.0332	.0000	89.90	-.0001	-.0001	.0007	-.0003
Stddev	.0003	.0057	.0005	.0002	.0001	.25	.0001	.0002	.0003	.0002
%RSD	531.6	6.043	309.2	.5229	1304.	.2730	44.13	122.1	40.55	82.07
#1	.0000	.0893	-.0003	.0330	.0000	89.68	-.0001	-.0003	.0008	.0000
#2	.0004	.1008	.0004	.0334	-.0001	89.86	-.0002	-.0002	.0004	-.0004
#3	-.0002	.0952	-.0006	.0332	.0000	90.16	-.0002	.0000	.0008	-.0005

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.7113	10.72	16.42	.1074	.0098	39.46	.0000	-.0007	.0007	.0019
Stddev	.0095	.04	.10	.0002	.0000	.07	.000	.0005	.0005	.0003
%RSD	1.338	.3614	.6193	.2256	.4783	.1813	2042.	74.05	73.35	18.42
#1	.7129	10.68	16.34	.1072	.0098	39.40	-.0002	-.0007	.0001	.0021
#2	.7199	10.73	16.40	.1074	.0097	39.43	.0004	-.0002	.0011	.0015
#3	.7011	10.75	16.54	.1076	.0098	39.54	-.0003	-.0012	.0010	.0021

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	5.612	.0000	.2814	.0036	-.0006	.0003	.0334
Stddev	.008	.0001	.0007	.0004	.0006	.0002	.0001
%RSD	.1348	239.8	.2375	10.77	95.26	87.38	.4195
#1	5.604	.0000	.2808	.0040	-.0009	.0005	.0333
#2	5.612	.0000	.2814	.0032	.0001	.0001	.0336
#3	5.619	.0002	.2821	.0035	-.0009	.0001	.0334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.0	4852.0	30901.	3911.0
Stddev	3.2	6.6	105.	11.5
%RSD	.19489	.13570	.34049	.29467
#1	1629.3	4849.9	31016.	3908.8
#2	1632.1	4859.4	30810.	3923.5
#3	1625.7	4846.7	30875.	3900.8

Zoom In Zoom Out

Sample Name: FA22154-8 Acquired: 2/17/2015 14:30:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.3346	.0069	.0225	-.0001	33.06	-.0004	.0000	.0010	.0017
Stddev	.0003	.0149	.0005	.0003	.0001	.09	.0001	.000	.0003	.0002
%RSD	420.3	4.443	7.879	1.552	94.43	.2752	14.80	311.8	25.47	9.872
#1	.0003	.3193	.0066	.0221	.0000	33.09	-.0004	.0001	.0008	.0016
#2	-.0002	.3354	.0066	.0227	-.0001	33.13	-.0003	.0000	.0013	.0017
#3	.0001	.3490	.0075	.0227	-.0002	32.96	-.0004	-.0001	.0009	.0019

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	13.13	5.732	5.703	.0212	.0014	19.82	.0003	-.0015	.0011	.0002
Stddev	.03	.027	.037	.0001	.0001	.04	.0002	.0001	.0005	.0010
%RSD	.1933	.4673	.6530	.3432	9.698	.1950	49.25	7.174	49.55	591.9
#1	13.14	5.707	5.729	.0213	.0015	19.85	.0003	-.0016	.0006	-.0007
#2	13.14	5.760	5.660	.0212	.0014	19.84	.0005	-.0015	.0017	.0012
#3	13.10	5.728	5.720	.0212	.0012	19.78	.0002	-.0013	.0011	.0000

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.894	-.0001	.1277	.0127	-.0011	.0016	.0694
Stddev	.011	.0002	.0002	.0011	.0005	.0000	.0002
%RSD	.2849	111.2	.1261	9.012	43.53	2.150	.2219
#1	3.898	-.0003	.1275	.0127	-.0008	.0016	.0693
#2	3.903	-.0001	.1279	.0116	-.0009	.0015	.0693
#3	3.882	.0000	.1277	.0139	-.0017	.0016	.0695

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1641.1	4922.7	30837.	3893.7
Stddev	2.6	3.7	44.	43.4
%RSD	.16023	.07617	.14153	1.1138
#1	1640.7	4922.4	30790.	3857.2
#2	1643.9	4926.6	30877.	3882.3
#3	1638.7	4919.2	30844.	3941.6

Zoom In Zoom Out

Sample Name: FA22154-9 Acquired: 2/17/2015 14:34:43 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.3339	.0147	.0470	.0001	126.1	-.0003	.0010	.0010	-.0001
Stddev	.0003	.0093	.0005	.0002	.0001	.3	.0000	.0001	.0002	.0001
%RSD	158.9	2.797	3.145	.5010	81.90	.2613	9.491	8.831	20.36	130.2
#1	.0002	.3334	.0153	.0470	.0001	126.2	-.0003	.0009	.0008	.0000
#2	-.0003	.3248	.0145	.0473	.0000	126.4	-.0003	.0010	.0012	-.0003
#3	-.0004	.3435	.0144	.0468	.0001	125.8	-.0003	.0011	.0010	-.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.742	2.672	12.20	.0431	.0004	28.15	.0005	-.0025	.0015	.0005
Stddev	.015	.023	.04	.0001	.0001	.09	.0002	.0016	.0007	.0010
%RSD	.1687	.8465	.2960	.2450	31.93	.3369	45.07	62.90	45.82	203.5
#1	8.752	2.663	12.21	.0430	.0004	28.23	.0002	-.0008	.0011	.0002
#2	8.748	2.698	12.22	.0430	.0005	28.17	.0007	-.0029	.0011	.0016
#3	8.725	2.656	12.16	.0432	.0003	28.05	.0005	-.0038	.0023	-.0003

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.362	.0000	.2945	.0065	-.0001	.0089	.0074
Stddev	.013	.000	.0007	.0003	.0012	.0001	.0001
%RSD	.3954	158.3	.2423	4.270	911.3	1.378	.7051
#1	3.377	-.0001	.2949	.0068	-.0015	.0088	.0074
#2	3.359	.0000	.2951	.0063	.0004	.0090	.0073
#3	3.351	.0000	.2937	.0064	.0007	.0088	.0074

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1617.9	4870.8	30420.	3826.2
Stddev	.2	3.0	159.	24.6
%RSD	.01294	.06180	.52130	.64402
#1	1617.7	4873.9	30357.	3846.2
#2	1618.1	4867.9	30600.	3833.7
#3	1617.9	4870.7	30303.	3798.7

Zoom In Zoom Out

Sample Name: FA22154-10 Acquired: 2/17/2015 14:38:50 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	.0227	-.0001	.0378	.0000	146.3	-.0001	-.0002	.0003
Stddev	.0005	.0029	.0005	.0001	.000	.6	.0000	.0001	.0004
%RSD	68.86	12.94	762.2	.1866	631.4	.3887	18.56	63.57	173.4
#1	.0004	.0201	-.0004	.0377	-.0001	145.9	-.0001	-.0004	.0005
#2	.0005	.0259	.0005	.0378	.0001	146.0	-.0001	-.0001	-.0003
#3	.0013	.0221	-.0003	.0378	.0000	146.9	-.0002	-.0002	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0008	1.046	4.080	26.13	.0150	.0001	F343.1	-.0001	-.0021
Stddev	.0002	.004	.065	.11	.0001	.0002	.5	.0001	.0006
%RSD	26.00	.4064	1.585	.4026	.5432	124.5	.1470	78.09	28.72
#1	-.0006	1.041	4.020	26.08	.0150	.0001	343.5	-.0001	-.0018
#2	-.0010	1.049	4.071	26.06	.0149	.0003	342.5	-.0003	-.0017
#3	-.0007	1.047	4.148	26.25	.0150	.0000	343.3	-.0001	-.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	-.0001	.0004	9.298	-.0006	.6928	.0013	.0012	-.0001	.0084
Stddev	.0002	.0014	.012	.0005	.0019	.0002	.0008	.0003	.0001
%RSD	138.4	330.3	.1280	95.03	.2802	17.10	62.85	193.8	.8077
#1	-.0003	.0005	9.289	-.0011	.6927	.0015	.0009	.0001	.0084
#2	.0001	-.0010	9.292	.0000	.6910	.0014	.0021	-.0002	.0085
#3	-.0002	.0018	9.311	-.0006	.6948	.0011	.0007	-.0004	.0084

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1580.6	4785.2	29603.	3778.9
Stddev	6.8	9.6	45.	25.5
%RSD	.42870	.20150	.15303	.67368
#1	1572.8	4774.6	29614.	3803.0
#2	1584.9	4787.8	29641.	3781.5
#3	1584.0	4793.4	29553.	3752.2

Zoom In Zoom Out

Sample Name: FA22154-11 Acquired: 2/17/2015 14:43:05 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	.0225	-.0001	.0278	.0000	153.5	-.0002	-.0002	.0005	-.0002
Stddev	.0004	.0055	.0004	.0002	.0000	.2	.0000	.0001	.0004	.0003
%RSD	1051.	24.60	514.3	.5416	596.5	.1534	9.078	43.96	75.94	134.9
#1	.0003	.0162	.0001	.0276	.0000	153.2	-.0002	-.0001	.0010	.0000
#2	-.0004	.0264	.0002	.0279	.0000	153.7	-.0002	-.0002	.0005	-.0001
#3	.0002	.0250	-.0005	.0279	.0000	153.4	-.0002	-.0002	.0001	-.0006

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3718	1.989	24.68	.0218	-.0015	47.88	-.0002	-.0019	.0004	.0010
Stddev	.0037	.004	.08	.0001	.0002	.06	.0001	.0007	.0016	.0020
%RSD	.9960	.2214	.3429	.3316	12.26	.1260	56.56	38.40	407.6	191.9
#1	.3733	1.994	24.58	.0218	-.0014	47.85	-.0001	-.0021	.0018	-.0010
#2	.3746	1.986	24.71	.0219	-.0017	47.95	-.0002	-.0011	-.0014	.0030
#3	.3676	1.987	24.75	.0217	-.0013	47.85	-.0003	-.0024	.0008	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	7.279	-.0002	.3922	.0013	.0000	.0000	.0054
Stddev	.009	.0005	.0009	.0003	.0004	.000	.0001
%RSD	.1220	200.6	.2315	19.78	14540.	1492.	1.164
#1	7.269	.0002	.3916	.0016	.0004	-.0001	.0054
#2	7.282	-.0001	.3932	.0014	-.0005	-.0001	.0054
#3	7.285	-.0008	.3917	.0011	.0001	.0002	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.1	4811.4	30376.	3855.1
Stddev	2.9	1.3	60.	2.4
%RSD	.18180	.02801	.19685	.06235
#1	1606.9	4812.2	30316.	3855.8
#2	1612.7	4812.2	30435.	3857.2
#3	1610.8	4809.8	30377.	3852.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 14:47:11 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2488	41.65	1.889	1.985	2.029	41.59	1.972	1.957	2.092	2.007
Stddev	.0009	.03	.002	.005	.006	.03	.002	.002	.001	.003
%RSD	.3588	.0751	.1154	.2626	.2745	.0638	.1076	.1035	.0575	.1521
#1	.2498	41.62	1.889	1.984	2.026	41.56	1.970	1.955	2.091	2.010
#2	.2483	41.64	1.886	1.990	2.035	41.61	1.973	1.957	2.093	2.004
#3	.2483	41.68	1.891	1.980	2.026	41.60	1.974	1.959	2.091	2.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.10	41.09	39.75	2.048	1.920	41.80	1.907	1.972	1.901	1.901
Stddev	.05	.07	.15	.003	.006	.02	.000	.005	.001	.002
%RSD	.1329	.1630	.3830	.1375	.3402	.0561	.0190	.2587	.0653	.1070
#1	40.04	41.02	39.77	2.050	1.913	41.78	1.908	1.966	1.901	1.902
#2	40.12	41.13	39.89	2.045	1.921	41.82	1.907	1.976	1.900	1.903
#3	40.14	41.14	39.59	2.050	1.926	41.79	1.907	1.975	1.903	1.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.349	1.860	2.059	2.039	1.968	1.970	1.966
Stddev	.001	.004	.003	.002	.005	.007	.003
%RSD	.0997	.2169	.1601	.0740	.2366	.3332	.1533
#1	1.349	1.857	2.055	2.041	1.964	1.969	1.962
#2	1.347	1.859	2.062	2.040	1.968	1.964	1.967
#3	1.350	1.864	2.060	2.038	1.973	1.977	1.968
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 14:47:11 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1606.1	4787.0	30223.	3841.1
Stddev	6.3	10.6	65.	19.0
%RSD	.38992	.22195	.21577	.49572
#1	1612.3	4797.0	30298.	3819.9
#2	1599.8	4775.8	30177.	3856.9
#3	1606.1	4788.2	30195.	3846.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:51:08 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.0024	.0002	.0001	-.0001	-.0032	.0000	.0000	.0001
Stddev	.0002	.0082	.0003	.0003	.0001	.0031	.000	.0002	.0001
%RSD	41.27	340.9	126.0	329.1	81.42	98.43	9217.	333.8	85.81
#1	-.0006	.0118	.0005	.0000	-.0001	-.0058	-.0001	.0000	.0000
#2	-.0003	-.0022	-.0001	.0003	-.0001	-.0039	.0001	.0002	.0001
#3	-.0003	-.0024	.0003	-.0002	.0000	.0003	.0000	-.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0459	-.0067	.0196	.0000	F.0037	.0255	-.0003	-.0004
Stddev	.0001	.0153	.0496	.0200	.0001	.0010	.0081	.0001	.0017
%RSD	37.61	33.41	739.8	102.2	457.4	27.49	31.92	36.46	386.6
#1	-.0002	.0620	-.0283	.0386	.0000	.0048	.0204	-.0002	-.0019
#2	-.0002	.0441	-.0419	-.0013	.0000	.0035	.0211	-.0004	-.0010
#3	-.0001	.0315	.0501	.0215	.0000	.0028	.0348	-.0002	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0009	.0005	.0001	.0000	F.0022	.0005	-.0005	-.0001
Stddev	.0002	.0014	.0003	.0002	.000	.0002	.0011	.0002	.0001
%RSD	10.87	157.5	59.64	173.1	163.2	10.24	220.0	33.68	58.08
#1	.0016	.0007	.0005	.0004	-.0001	.0024	.0012	-.0004	.0000
#2	.0018	-.0004	.0008	.0001	.0000	.0022	-.0008	-.0007	-.0001
#3	.0014	.0023	.0002	-.0001	.0000	.0020	.0010	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 14:51:08 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1662.0	4996.0	31352.	3849.4
Stddev	3.9	9.7	16.	25.9
%RSD	.23265	.19400	.04947	.67305
#1	1659.2	4987.1	31348.	3876.2
#2	1666.4	5006.4	31369.	3847.6
#3	1660.3	4994.6	31339.	3824.5

Zoom In Zoom Out

Sample Name: FA22154-12 Acquired: 2/17/2015 14:55:21 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0060	-.0004	.0195	.0000	7.468	.0001	.0009	.0023
Stddev	.0002	.0070	.0004	.0002	.000	.026	.0000	.0002	.0001
%RSD	91.20	115.8	86.01	1.220	185.4	.3511	31.64	21.56	5.937
#1	-.0004	.0074	-.0002	.0197	.0000	7.492	.0001	.0007	.0024
#2	.0000	.0122	-.0002	.0192	.0000	7.473	.0002	.0011	.0022
#3	-.0002	-.0015	-.0008	.0196	.0000	7.440	.0001	.0009	.0021

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0001	.0841	F127.8	1.838	.0005	.0011	56.41	.0008	.0010
Stddev	.0003	.0035	.7	.009	.0000	.0004	.31	.0003	.0002
%RSD	317.0	4.126	.5324	.5168	4.858	32.69	.5520	33.85	23.82
#1	-.0003	.0872	128.4	1.835	.0005	.0014	56.64	.0007	.0007
#2	-.0002	.0846	128.1	1.830	.0005	.0011	56.55	.0005	.0012
#3	.0002	.0804	127.1	1.848	.0005	.0007	56.06	.0010	.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0013	4.503	.0000	.7928	.0009	-.0017	.0000	.0073
Stddev	.0000	.0002	.002	.000	.0039	.0002	.0006	.0001	.0001
%RSD	6.150	14.22	.0515	318.1	.4972	27.58	38.06	1434.	1.324
#1	.0005	.0015	4.500	.0001	.7953	.0011	-.0024	-.0001	.0074
#2	.0005	.0014	4.505	-.0001	.7948	.0007	-.0011	.0000	.0073
#3	.0006	.0011	4.504	-.0001	.7883	.0008	-.0016	.0001	.0072

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1633.8	4905.0	30655.	3816.0
Stddev	6.9	5.9	96.	30.5
%RSD	.42497	.12098	.31359	.79961
#1	1625.9	4898.1	30610.	3815.3
#2	1636.8	4908.6	30765.	3785.9
#3	1638.7	4908.3	30590.	3846.9

Zoom In Zoom Out

Sample Name: FA22154-13 Acquired: 2/17/2015 14:59:30 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0002	.0246	.0005	.0426	.0000	145.8	-.0001	-.0001	.0004	-.0010
Stddev	.0001	.0193	.0003	.0002	.0001	.7	.0001	.0001	.0002	.0002
%RSD	29.83	78.23	65.45	.4087	2167.	.4535	61.51	94.66	53.39	23.83
#1	-.0003	.0026	.0002	.0427	-.0001	145.4	.0000	.0000	.0001	-.0008
#2	-.0002	.0330	.0006	.0427	.0000	145.4	-.0001	-.0002	.0005	-.0012
#3	-.0002	.0382	.0008	.0424	.0001	146.6	-.0002	.0000	.0004	-.0010

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1576	1.995	39.70	.0063	-.0006	36.18	.0003	-.0023	-.0001	.0011
Stddev	.0026	.040	.18	.0001	.0001	.14	.0002	.0006	.0008	.0008
%RSD	1.674	1.990	.4516	1.334	15.91	.3844	77.75	26.90	559.6	71.55
#1	.1603	2.035	39.56	.0064	-.0006	36.10	.0001	-.0031	.0007	.0002
#2	.1576	1.956	39.63	.0063	-.0005	36.11	.0002	-.0019	-.0009	.0016
#3	.1550	1.995	39.90	.0063	-.0007	36.34	.0005	-.0021	-.0002	.0015

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	11.42	-.0001	.5085	.0014	.0006	-.0003	.0066
Stddev	.01	.0002	.0021	.0001	.0019	.0004	.0000
%RSD	.0991	230.8	.4127	8.271	341.1	145.3	.4848
#1	11.40	.0001	.5074	.0014	.0011	.0000	.0066
#2	11.42	-.0003	.5072	.0013	-.0015	-.0007	.0066
#3	11.42	-.0001	.5109	.0015	.0021	-.0001	.0066

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1610.2	4795.3	30146.	3824.3
Stddev	2.6	7.9	200.	7.9
%RSD	.16291	.16430	.66291	.20759
#1	1607.2	4795.5	29942.	3820.0
#2	1611.8	4787.4	30155.	3833.5
#3	1611.6	4803.1	30341.	3819.5

Zoom In Zoom Out

Sample Name: FA22154-14 Acquired: 2/17/2015 15:03:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0005	.0170	-.0002	.0053	-.0001	71.83	-.0001	-.0002	.0008	-.0007
Stddev	.0001	.0153	.0002	.0001	.0001	.14	.0000	.0000	.0003	.0003
%RSD	21.92	89.65	98.27	2.411	106.8	.1881	54.63	24.14	38.01	46.79
#1	.0006	.0002	-.0002	.0054	-.0001	71.88	-.0001	-.0002	.0010	-.0006
#2	.0006	.0207	-.0005	.0052	.0000	71.93	-.0001	-.0002	.0004	-.0011
#3	.0004	.0301	.0000	.0054	-.0001	71.67	.0000	-.0001	.0008	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	-.0036	.5272	4.726	.0000	.0086	8.799	-.0002	-.0019	.0003	.0021
Stddev	.0032	.0065	.026	.0001	.0001	.013	.0002	.0001	.0007	.0009
%RSD	89.02	1.229	.5533	120.5	.9646	.1424	89.08	7.904	248.5	41.39
#1	-.0018	.5319	4.753	.0001	.0085	8.813	-.0001	-.0017	.0006	.0020
#2	-.0017	.5298	4.724	.0001	.0086	8.789	-.0001	-.0020	-.0005	.0031
#3	-.0072	.5198	4.701	.0000	.0086	8.795	-.0005	-.0018	.0008	.0013

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	3.101	-.0001	.2562	.0010	-.0002	.0050	.0053
Stddev	.003	.0004	.0004	.0002	.0017	.0001	.0001
%RSD	.0848	328.7	.1731	21.09	1002.	2.020	1.110
#1	3.104	-.0002	.2558	.0013	-.0012	.0049	.0053
#2	3.098	-.0005	.2566	.0009	.0018	.0050	.0052
#3	3.101	.0003	.2563	.0009	-.0011	.0051	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1645.4	4891.9	30931.	3817.1
Stddev	2.3	6.3	75.	34.0
%RSD	.14229	.12903	.24241	.89024
#1	1644.9	4886.2	30845.	3778.4
#2	1643.4	4890.7	30981.	3830.7
#3	1648.0	4898.7	30967.	3842.2

Zoom In Zoom Out

Sample Name: FA22154-15 Acquired: 2/17/2015 15:07:47 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.0938	.0064	.0186	.0000	124.7	-.0002	.0004	.0036
Stddev	.0003	.0009	.0005	.0002	.0001	.4	.0000	.0001	.0004
%RSD	93.60	1.007	7.761	.9150	408.5	.3310	33.16	16.87	11.84
#1	.0004	.0948	.0062	.0185	.0000	124.2	-.0002	.0004	.0035
#2	.0007	.0937	.0070	.0185	.0002	124.9	-.0001	.0003	.0033
#3	.0000	.0929	.0060	.0188	.0000	125.0	-.0001	.0004	.0041

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	2.912	6.560	6.359	.0097	.0018	F97.78	.0008	-.0025
Stddev	.0003	.011	.044	.034	.0000	.0002	.20	.0003	.0006
%RSD	670.7	.3683	.6712	.5319	.4210	8.948	.2086	39.31	23.21
#1	.0002	2.907	6.539	6.323	.0097	.0019	97.54	.0008	-.0019
#2	-.0003	2.906	6.531	6.390	.0098	.0016	97.90	.0005	-.0030
#3	.0001	2.925	6.611	6.363	.0097	.0019	97.90	.0012	-.0025

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0010	.0010	3.681	-.0002	1.319	.0045	-.0002	.0077	.0067
Stddev	.0005	.0006	.004	.0002	.004	.0017	.0006	.0001	.0000
%RSD	52.85	58.87	.1010	116.1	.2740	36.76	324.7	.7876	.2008
#1	.0015	.0018	3.676	-.0001	1.315	.0034	.0003	.0076	.0067
#2	.0004	.0007	3.682	-.0005	1.319	.0038	.0000	.0077	.0067
#3	.0012	.0007	3.683	.0000	1.322	.0064	-.0009	.0077	.0067

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1613.7	4858.5	30173.	3834.7
Stddev	.6	7.9	88.	21.6
%RSD	.03956	.16166	.29031	.56281
#1	1613.9	4850.2	30134.	3837.8
#2	1613.0	4859.6	30111.	3811.7
#3	1614.2	4865.8	30273.	3854.6

Zoom In Zoom Out

Sample Name: FA22154-16 Acquired: 2/17/2015 15:11:56 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	.0067	-.0006	.0157	-.0001	67.52	-.0001	-.0002	.0003	-.0005
Stddev	.0003	.0100	.0002	.0001	.0000	.20	.0000	.0001	.0002	.0002
%RSD	82.84	149.1	32.64	.6934	5.517	.2905	34.86	44.29	50.14	31.76
#1	.0006	-.0038	-.0004	.0158	-.0001	67.57	-.0001	-.0002	.0003	-.0004
#2	.0005	.0162	-.0008	.0158	-.0001	67.31	-.0001	-.0001	.0002	-.0007
#3	.0000	.0078	-.0008	.0156	-.0002	67.70	-.0001	-.0002	.0005	-.0004

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0214	3.100	21.52	.0046	-.0013	13.94	-.0003	-.0015	.0008	.0005
Stddev	.0036	.036	.10	.0000	.0001	.05	.0004	.0009	.0007	.0005
%RSD	16.83	1.175	.4848	.7770	7.611	.3530	131.4	55.22	91.66	94.09
#1	.0255	3.072	21.59	.0046	-.0012	13.95	-.0005	-.0018	.0012	.0005
#2	.0194	3.087	21.40	.0046	-.0014	13.89	-.0004	-.0006	.0000	.0001
#3	.0192	3.141	21.57	.0046	-.0013	13.99	.0001	-.0022	.0011	.0010

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	8.775	-.0002	.1890	.0011	.0000	-.0003	.0053
Stddev	.007	.0001	.0007	.0001	.001	.0003	.0000
%RSD	.0793	55.92	.3918	8.654	353100.	93.17	.4108
#1	8.767	-.0003	.1891	.0013	.0013	-.0007	.0054
#2	8.777	-.0001	.1882	.0011	-.0004	-.0001	.0053
#3	8.780	-.0003	.1897	.0011	-.0009	-.0002	.0053

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1630.9	4878.6	30792.	3817.5
Stddev	3.8	6.8	22.	31.9
%RSD	.22995	.14034	.07304	.83625
#1	1634.3	4881.9	30767.	3781.8
#2	1626.9	4870.7	30811.	3843.3
#3	1631.4	4883.2	30799.	3827.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 15:36:38 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2474	40.68	1.917	1.983	1.993	40.62	1.968	1.956	2.045	1.985
Stddev	.0004	.22	.000	.005	.008	.11	.002	.001	.009	.006
%RSD	.1456	.5316	.0159	.2454	.4082	.2729	.0895	.0628	.4337	.3197
#1	.2478	40.93	1.917	1.989	2.003	40.74	1.969	1.957	2.051	1.992
#2	.2470	40.53	1.917	1.982	1.988	40.52	1.966	1.955	2.035	1.979
#3	.2474	40.60	1.917	1.979	1.989	40.59	1.969	1.956	2.050	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.47	40.76	39.43	2.029	1.933	41.19	1.931	1.969	1.920	1.925
Stddev	.06	.13	.17	.005	.006	.23	.001	.006	.003	.004
%RSD	.1633	.3198	.4300	.2367	.2899	.5498	.0433	.3112	.1769	.1982
#1	39.54	40.91	39.62	2.034	1.927	41.45	1.932	1.971	1.921	1.928
#2	39.45	40.69	39.37	2.024	1.935	41.05	1.931	1.973	1.917	1.921
#3	39.41	40.67	39.29	2.029	1.937	41.06	1.930	1.962	1.924	1.927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.361	1.902	2.026	2.009	1.965	1.967	1.967
Stddev	.001	.001	.010	.004	.005	.007	.002
%RSD	.0365	.0493	.4786	.2233	.2422	.3654	.0959
#1	1.361	1.903	2.037	2.014	1.968	1.974	1.968
#2	1.362	1.902	2.020	2.005	1.968	1.960	1.965
#3	1.361	1.901	2.020	2.009	1.959	1.969	1.967
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 15:36:38 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1613.0	4780.9	30643.	3882.4
Stddev	3.7	7.1	104.	7.3
%RSD	.22954	.14830	.34012	.18849
#1	1610.4	4772.9	30663.	3874.3
#2	1611.4	4786.4	30735.	3888.5
#3	1617.3	4783.5	30530.	3884.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 15:40:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0015	.0003	.0001	.0000	.0000	.0000	.0002	.0001
Stddev	.0004	.0051	.0009	.0001	.0001	.0043	.000	.0001	.0003
%RSD	108.1	327.2	260.5	202.1	124.4	100000.	10.51	43.74	224.9
#1	.0007	.0066	.0014	.0001	.0000	-.0021	.0000	.0002	.0004
#2	.0005	-.0036	.0000	.0002	.0001	-.0028	.0000	.0002	-.0002
#3	-.0001	.0016	-.0003	-.0001	.0000	.0049	.0000	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0479	-.0084	.0102	.0000	F.0037	.0076	-.0002	.0001
Stddev	.0002	.0124	.0240	.0135	.0001	.0013	.0054	.0002	.0001
%RSD	290.2	25.93	284.3	132.9	450.3	35.23	70.69	107.7	63.64
#1	-.0001	.0587	-.0309	.0122	.0001	.0051	.0129	.0000	.0002
#2	-.0003	.0507	-.0111	.0225	.0000	.0034	.0021	-.0003	.0000
#3	.0002	.0343	.0168	-.0042	.0000	.0025	.0079	-.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0001	.0000	.0004	.0001	F.0022	.0001	-.0001	-.0001
Stddev	.0004	.0002	.0007	.0005	.0000	.0003	.0011	.0002	.0000
%RSD	21.80	362.2	1835.	141.9	71.99	13.13	759.3	255.9	28.40
#1	.0019	.0003	.0001	.0009	.0001	.0026	-.0002	-.0001	-.0001
#2	.0014	.0000	.0007	-.0001	.0000	.0020	.0014	.0001	-.0001
#3	.0022	-.0002	-.0006	.0003	.0001	.0021	-.0007	-.0002	-.0001
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0020			
Low Limit						-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 15:40:33 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1669.6	4953.3	32301.	3960.7
Stddev	4.6	3.6	134.	14.9
%RSD	.27378	.07291	.41423	.37633
#1	1670.4	4956.8	32149.	3973.4
#2	1664.7	4949.6	32352.	3964.4
#3	1673.7	4953.5	32402.	3944.3

Zoom In Zoom Out

Sample Name: MP28563-MB1 Acquired: 2/17/2015 16:05:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	-.0096	-.0012	.0000	-.0001	.0069	-.0001	-.0002	-.0001	-.0003
Stddev	.0004	.0100	.0011	.0001	.0001	.0030	.0000	.0001	.0004	.0004
%RSD	301.6	104.4	91.44	247.9	151.8	43.30	8.307	36.88	370.0	131.9
#1	.0001	-.0202	.0000	.0000	-.0002	.0060	-.0001	-.0002	.0003	-.0002
#2	.0001	-.0003	-.0015	.0000	.0000	.0102	-.0001	-.0001	-.0001	-.0007
#3	-.0005	-.0084	-.0023	.0001	-.0001	.0045	-.0001	-.0002	-.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0173	.0172	-.0001	-.0003	.0088	-.0004	.0003	.0007	.0015
Stddev	.0057	.0080	.0246	.0000	.0002	.0033	.0001	.0008	.0006	.0023
%RSD	752.0	46.19	142.9	17.34	49.43	37.59	19.15	281.9	79.09	155.5
#1	.0057	-.0100	.0292	-.0001	-.0003	.0125	-.0004	.0007	.0002	.0028
#2	-.0054	-.0259	.0334	-.0001	-.0005	.0078	-.0003	.0008	.0007	.0028
#3	.0020	-.0161	-.0111	-.0001	-.0002	.0061	-.0004	-.0006	.0013	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0218	-.0001	-.0001	-.0004	-.0027	-.0004	.0009
Stddev	.0004	.0002	.0000	.0001	.0007	.0004	.0000
%RSD	2.062	187.0	41.98	33.34	25.32	94.07	2.870
#1	.0214	-.0003	-.0001	-.0004	-.0022	-.0004	.0009
#2	.0217	.0001	-.0001	-.0002	-.0024	-.0007	.0010
#3	.0223	.0000	-.0001	-.0005	-.0035	.0000	.0009
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28563-MB1 Acquired: 2/17/2015 16:05:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1653.9	4981.6	31833.	3925.6
Stddev	5.8	5.2	141.	5.9
%RSD	.34872	.10460	.44210	.15101
#1	1659.6	4986.5	31671.	3932.5
#2	1654.1	4976.1	31903.	3922.1
#3	1648.1	4982.2	31925.	3922.3

Zoom In Zoom Out

Sample Name: MP28563-B1 Acquired: 2/17/2015 16:09:16 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0510	30.30	1.931	2.097	.0541	28.24	.0498	.5041	.2250	.2660
Stddev	.0004	.06	.002	.000	.0002	.04	.0001	.0003	.0003	.0004
%RSD	.8633	.2039	.0964	.0092	.3273	.1420	.1871	.0612	.1399	.1376
#1	.0513	30.35	1.932	2.097	.0539	28.27	.0497	.5041	.2252	.2656
#2	.0505	30.23	1.932	2.097	.0542	28.19	.0498	.5038	.2246	.2660
#3	.0513	30.30	1.929	2.098	.0543	28.24	.0498	.5044	.2252	.2664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.56	27.75	26.69	.5303	.5026	28.59	.4980	.5077	.4841	1.909
Stddev	.02	.03	.03	.0006	.0004	.03	.0006	.0005	.0012	.002
%RSD	.0678	.0964	.1245	.1200	.0786	.1219	.1156	.1080	.2442	.1218
#1	28.58	27.73	26.72	.5306	.5022	28.62	.4976	.5082	.4828	1.909
#2	28.56	27.74	26.66	.5296	.5030	28.55	.4986	.5071	.4845	1.912
#3	28.55	27.78	26.67	.5307	.5026	28.60	.4976	.5078	.4851	1.907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0289	.5093	.5623	.5505	2.038	.5016	.5098
Stddev	.0001	.0012	.0007	.0006	.004	.0010	.0002
%RSD	.4003	.2360	.1226	.1124	.1982	.1930	.0386
#1	.0288	.5079	.5625	.5502	2.041	.5017	.5097
#2	.0288	.5101	.5615	.5501	2.039	.5006	.5096
#3	.0290	.5099	.5628	.5512	2.033	.5025	.5100
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28563-B1 Acquired: 2/17/2015 16:09:16 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1625.7	4865.1	30159.	3864.4
Stddev	4.7	6.9	86.	26.7
%RSD	.29182	.14237	.28430	.69085
#1	1620.2	4857.1	30097.	3833.5
#2	1627.7	4869.5	30257.	3879.1
#3	1629.1	4868.6	30123.	3880.4

Zoom In Zoom Out

Sample Name: FA22014-2L Acquired: 2/17/2015 16:13:15 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0003	.0382	-.0002	.0200	-.0001	11.42	.0007	.0005	.0007
Stddev	.0003	.0067	.0006	.0002	.0000	.02	.0000	.0001	.0003
%RSD	94.09	17.44	286.8	.9240	20.28	.1512	1.693	11.19	51.45
#1	-.0006	.0407	-.0007	.0198	-.0002	11.44	.0007	.0006	.0005
#2	.0000	.0433	-.0005	.0200	-.0001	11.40	.0007	.0004	.0005
#3	-.0003	.0307	.0005	.0201	-.0001	11.43	.0007	.0005	.0011

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6554	.2129	.5621	.2717	.0957	-.0003	F149.8	.0008	-.0010
Stddev	.0018	.0103	.0333	.0420	.0001	.0002	.4	.0001	.0007
%RSD	.2722	4.852	5.928	15.46	.1203	73.72	.2401	16.31	72.55
#1	.6566	.2248	.5343	.2847	.0958	.0000	150.2	.0008	-.0016
#2	.6534	.2063	.5990	.3057	.0957	-.0004	149.5	.0007	-.0002
#3	.6563	.2077	.5530	.2247	.0956	-.0004	149.8	.0009	-.0012

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0006	.0013	.0690	.0005	.0236	.0018	.0003	-.0005	.1334
Stddev	.0005	.0007	.0028	.0002	.0001	.0001	.0006	.0002	.0001
%RSD	92.18	49.50	4.024	39.89	.3429	6.962	170.6	36.05	.0514
#1	.0002	.0016	.0686	.0003	.0237	.0016	.0010	-.0007	.1334
#2	.0012	.0018	.0720	.0007	.0236	.0019	.0002	-.0004	.1333
#3	.0003	.0006	.0665	.0004	.0236	.0018	-.0001	-.0004	.1334

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1638.2	4939.8	30242.	3829.8
Stddev	3.0	4.2	159.	13.1
%RSD	.18170	.08474	.52622	.34199
#1	1641.6	4936.6	30062.	3829.0
#2	1636.9	4944.5	30299.	3843.3
#3	1636.2	4938.1	30364.	3817.2

Zoom In Zoom Out

Sample Name: MP28563-D1 Acquired: 2/17/2015 16:17:24 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0512	-.0003	.0202	-.0001	11.39	.0007	.0004	.0005
Stddev	.0003	.0031	.0007	.0002	.0001	.04	.0000	.0002	.0001
%RSD	177.1	5.989	250.6	.7837	54.87	.3701	4.341	43.07	16.12
#1	.0005	.0547	.0003	.0203	-.0001	11.36	.0007	.0004	.0005
#2	.0001	.0501	-.0001	.0201	-.0002	11.44	.0007	.0002	.0006
#3	-.0001	.0488	-.0011	.0203	.0000	11.37	.0008	.0006	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.6501	.2007	.5435	.2735	.0961	-.0006	F148.6	.0007	-.0015
Stddev	.0026	.0041	.0119	.0183	.0003	.0000	.6	.0000	.0010
%RSD	.4001	2.050	2.182	6.684	.3094	8.829	.3822	4.437	66.35
#1	.6529	.1965	.5398	.2909	.0965	-.0005	148.8	.0007	-.0006
#2	.6479	.2008	.5340	.2751	.0959	-.0006	149.1	.0007	-.0025
#3	.6495	.2047	.5568	.2544	.0960	-.0006	148.0	.0007	-.0014

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0015	.0025	.0705	.0003	.0238	.0012	-.0012	-.0004	.1348
Stddev	.0012	.0006	.0016	.0002	.0000	.0002	.0006	.0001	.0001
%RSD	80.98	22.86	2.243	73.96	.1251	16.33	53.66	37.74	.0684
#1	.0021	.0029	.0693	.0001	.0238	.0011	-.0013	-.0005	.1347
#2	.0001	.0018	.0699	.0006	.0238	.0010	-.0005	-.0002	.1349
#3	.0023	.0027	.0723	.0003	.0238	.0014	-.0018	-.0004	.1347

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1640.2	4928.3	30613.	3861.9
Stddev	4.5	12.3	92.	28.0
%RSD	.27462	.25000	.30156	.72446
#1	1635.3	4918.5	30512.	3885.8
#2	1641.1	4924.4	30692.	3831.1
#3	1644.2	4942.1	30636.	3868.7

Zoom In Zoom Out

Sample Name: MP28563-SD1 Acquired: 2/17/2015 16:21:32 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	-.0014	.0409	.0008	.0200	-.0003	11.06	.0002	.0000	-.0005	.6119
Stddev	.0007	.0232	.0028	.0014	.0003	.04	.0001	.000	.0006	.0021
%RSD	47.41	56.77	377.2	6.989	112.2	.3169	28.83	17260.	129.9	.3421
#1	-.0007	.0593	.0040	.0212	-.0005	11.07	.0003	-.0005	.0001	.6133
#2	-.0014	.0148	-.0008	.0203	.0001	11.02	.0002	.0003	-.0004	.6129
#3	-.0021	.0487	-.0010	.0184	-.0004	11.09	.0002	.0001	-.0011	.6095

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.1335	.3718	.1797	.0905	-.0023	146.1	.0006	-.0004	.0022	.0024
Stddev	.0078	.0584	.0744	.0006	.0004	.1	.0008	.0016	.0050	.0040
%RSD	5.856	15.71	41.41	.6410	17.94	.0408	130.1	395.6	222.8	170.5
#1	.1252	.3054	.2519	.0902	-.0027	146.2	.0014	.0000	.0059	-.0008
#2	.1408	.3949	.1032	.0912	-.0023	146.1	.0007	.0010	.0042	.0069
#3	.1343	.4152	.1840	.0901	-.0018	146.1	-.0002	-.0022	-.0034	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0635	.0000	.0218	-.0003	.0012	-.0027	.1274
Stddev	.0009	.001	.0004	.0001	.0071	.0010	.0001
%RSD	1.409	2001.	2.026	17.96	574.1	37.76	.0984
#1	.0631	.0004	.0220	-.0003	-.0064	-.0037	.1273
#2	.0645	-.0007	.0213	-.0002	.0025	-.0017	.1275
#3	.0628	.0002	.0222	-.0003	.0076	-.0028	.1273

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1668.0	5004.0	31125.	3837.4
Stddev	3.5	3.7	157.	3.0
%RSD	.21069	.07307	.50507	.07743
#1	1664.2	5003.6	31197.	3834.2
#2	1671.1	5000.6	31234.	3837.9
#3	1668.8	5007.9	30945.	3840.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 16:25:42 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2524	42.06	1.888	1.983	2.037	41.95	1.981	1.968	2.141	2.046
Stddev	.0008	.31	.002	.009	.014	.29	.001	.002	.002	.004
%RSD	.3278	.7364	.1168	.4462	.6699	.6895	.0360	.1129	.0916	.1696
#1	.2515	41.72	1.886	1.974	2.022	41.64	1.981	1.965	2.139	2.043
#2	.2532	42.32	1.890	1.992	2.049	42.22	1.982	1.970	2.142	2.049
#3	.2524	42.14	1.888	1.984	2.039	41.99	1.982	1.969	2.142	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.17	41.67	39.95	2.065	1.924	42.44	1.909	1.974	1.907	1.903
Stddev	.27	.26	.30	.003	.008	.28	.002	.009	.003	.006
%RSD	.6774	.6320	.7427	.1514	.4070	.6664	.0842	.4548	.1743	.3202
#1	39.89	41.42	39.62	2.061	1.915	42.14	1.907	1.978	1.904	1.900
#2	40.43	41.94	40.20	2.067	1.926	42.70	1.910	1.964	1.907	1.910
#3	40.20	41.65	40.02	2.066	1.930	42.48	1.909	1.981	1.911	1.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.351	1.867	2.075	2.059	1.973	2.013	1.977
Stddev	.003	.004	.015	.002	.011	.006	.001
%RSD	.1830	.2299	.7079	.1173	.5322	.3060	.0731
#1	1.349	1.865	2.059	2.057	1.972	2.007	1.976
#2	1.354	1.872	2.087	2.059	1.963	2.019	1.977
#3	1.351	1.863	2.080	2.062	1.984	2.012	1.979
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 16:25:42 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1608.7	4794.3	29782.	3820.0
Stddev	8.5	8.9	75.	18.9
%RSD	.52677	.18581	.25248	.49604
#1	1608.6	4803.9	29867.	3830.7
#2	1617.2	4792.7	29759.	3798.1
#3	1600.3	4786.3	29722.	3831.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 16:29:39 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.0025	.0003	.0001	.0000	.0030	.0000	.0000	-.0001
Stddev	.0003	.0122	.0006	.0001	.000	.0033	.0000	.0001	.0002
%RSD	394.1	492.8	226.4	231.8	1293.	109.5	86.74	2083.	233.1
#1	-.0004	.0073	.0007	.0001	.0000	.0053	.0000	.0001	-.0003
#2	.0001	-.0114	-.0004	-.0001	-.0001	.0044	.0000	-.0001	-.0001
#3	.0001	.0116	.0006	.0001	.0001	-.0008	.0001	.0001	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0488	.0290	.0230	.0001	F.0037	.0232	-.0001	-.0001
Stddev	.000	.0154	.0092	.0074	.0000	.0009	.0122	.0002	.0011
%RSD	873.4	31.55	31.63	32.10	40.01	23.53	52.71	183.6	1883.
#1	.0001	.0660	.0211	.0187	.0000	.0047	.0127	-.0001	.0012
#2	-.0003	.0443	.0391	.0315	.0001	.0035	.0366	.0001	-.0005
#3	.0001	.0362	.0269	.0187	.0001	.0030	.0203	-.0003	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0028	.0000	.0010	.0004	.0000	F.0026	-.0002	-.0002	.0002
Stddev	.0017	.0007	.0010	.0004	.0001	.0003	.0005	.0003	.0000
%RSD	59.86	1926.	92.58	88.30	187.4	10.68	335.2	161.7	13.06
#1	.0022	.0005	.0021	.0001	.0001	.0028	.0000	-.0004	.0002
#2	.0047	.0004	.0003	.0008	.0001	.0026	.0002	-.0002	.0002
#3	.0016	-.0008	.0007	.0003	.0000	.0023	-.0008	.0001	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020					.0020			
Low Limit	-.0020					-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 16:29:39 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1663.9	4994.5	30812.	3826.5
Stddev	1.6	9.5	97.	17.3
%RSD	.09831	.19031	.31588	.45251
#1	1662.0	4984.0	30797.	3807.3
#2	1665.2	4997.1	30916.	3840.8
#3	1664.4	5002.5	30723.	3831.5

Zoom In Zoom Out

Sample Name: MP28563-S1 Acquired: 2/17/2015 16:33:51 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0501	30.32	1.937	2.111	.0540	39.25	.0499	.4993	.2212
Stddev	.0002	.05	.001	.004	.0002	.11	.0001	.0004	.0009
%RSD	.4115	.1666	.0434	.1866	.3306	.2896	.1411	.0719	.3901
#1	.0503	30.32	1.938	2.113	.0542	39.23	.0500	.4995	.2215
#2	.0501	30.27	1.937	2.106	.0538	39.14	.0499	.4988	.2218
#3	.0499	30.37	1.936	2.112	.0539	39.37	.0499	.4995	.2202

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9120	28.68	28.27	26.49	.6172	.5035	F173.9	.4954	.5080
Stddev	.0025	.08	.10	.11	.0014	.0003	1.7	.0003	.0027
%RSD	.2789	.2805	.3498	.4083	.2207	.0686	1.005	.0600	.5329
#1	.9126	28.70	28.33	26.43	.6175	.5032	172.6	.4957	.5049
#2	.9142	28.59	28.16	26.42	.6184	.5036	173.3	.4953	.5099
#3	.9093	28.75	28.33	26.61	.6157	.5039	175.9	.4952	.5092

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4862	1.927	.0761	.5062	.5832	.5495	2.046	.4935	.6358
Stddev	.0031	.002	.0005	.0012	.0012	.0010	.005	.0020	.0004
%RSD	.6409	.1092	.6289	.2376	.2079	.1883	.2386	.4149	.0651
#1	.4849	1.930	.0763	.5058	.5837	.5492	2.040	.4939	.6354
#2	.4840	1.927	.0756	.5053	.5818	.5506	2.049	.4953	.6357
#3	.4898	1.926	.0765	.5076	.5841	.5486	2.049	.4913	.6362

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1600.5	4826.6	29813.	3813.6
Stddev	.9	4.4	136.	25.9
%RSD	.05706	.09073	.45718	.67988
#1	1601.2	4826.3	29962.	3837.1
#2	1599.5	4831.1	29694.	3818.0
#3	1600.9	4822.4	29783.	3785.8

Zoom In Zoom Out

Sample Name: MP28563-S2 Acquired: 2/17/2015 16:37:58 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0502	29.99	1.930	2.095	.0534	39.01	.0497	.4967	.2194
Stddev	.0004	.06	.004	.005	.0001	.06	.0002	.0009	.0008
%RSD	.7353	.1963	.1924	.2561	.1570	.1600	.3894	.1778	.3482
#1	.0500	30.01	1.926	2.099	.0535	39.04	.0496	.4965	.2187
#2	.0507	30.04	1.931	2.097	.0534	39.05	.0496	.4959	.2194
#3	.0501	29.92	1.934	2.089	.0533	38.94	.0499	.4977	.2202

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.9139	28.43	28.15	26.33	.6142	.5007	F174.2	.4934	.5048
Stddev	.0020	.08	.05	.11	.0004	.0013	2.7	.0012	.0016
%RSD	.2183	.2902	.1765	.4121	.0727	.2670	1.565	.2526	.3259
#1	.9116	28.47	28.18	26.28	.6141	.5008	176.8	.4924	.5040
#2	.9150	28.48	28.19	26.45	.6137	.4994	174.3	.4930	.5038
#3	.9151	28.34	28.10	26.26	.6146	.5020	171.4	.4948	.5067

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.4830	1.917	.0762	.5054	.5767	.5441	2.041	.4921	.6342
Stddev	.0008	.003	.0021	.0005	.0018	.0008	.008	.0005	.0013
%RSD	.1754	.1716	2.740	.0911	.3100	.1554	.3887	.1082	.2057
#1	.4832	1.915	.0780	.5049	.5778	.5433	2.037	.4925	.6336
#2	.4837	1.916	.0739	.5055	.5777	.5441	2.036	.4923	.6333
#3	.4821	1.921	.0767	.5058	.5747	.5450	2.050	.4915	.6357

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1609.7	4847.6	29981.	3821.7
Stddev	5.8	7.9	39.	5.8
%RSD	.35836	.16362	.13024	.15155
#1	1611.0	4849.8	29962.	3828.3
#2	1614.7	4854.2	30026.	3819.6
#3	1603.4	4838.8	29955.	3817.3

Zoom In Zoom Out

Sample Name: FA22014-1L Acquired: 2/17/2015 16:42:05 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	.0240	.0001	.0152	-.0001	51.57	-.0001	.0000	.0001
Stddev	.0004	.0019	.0006	.0002	.0000	.16	.0000	.0001	.0004
%RSD	119.4	7.923	870.1	1.061	25.49	.3072	53.89	220.8	526.9
#1	.0007	.0218	-.0004	.0154	-.0001	51.41	-.0001	.0000	.0001
#2	.0005	.0253	.0008	.0151	-.0001	51.72	-.0001	.0001	-.0003
#3	-.0001	.0248	-.0002	.0152	-.0001	51.57	.0000	.0001	.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0456	.7324	.6788	.0474	-.0003	F149.9	-.0001	-.0011
Stddev	.0000	.0065	.0262	.0221	.0001	.0001	.2	.0001	.0009
%RSD	7.594	14.33	3.573	3.260	.2160	47.64	.1572	135.4	81.74
#1	.0004	.0530	.7108	.6589	.0475	-.0001	149.9	-.0001	-.0007
#2	.0004	.0430	.7249	.6749	.0474	-.0004	150.1	.0000	-.0005
#3	.0004	.0407	.7615	.7026	.0473	-.0003	149.7	-.0002	-.0021

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0011	.0907	.0003	.0849	.0019	.0022	.0000	.0827
Stddev	.0002	.0001	.0016	.0002	.0001	.0000	.0013	.0002	.0002
%RSD	31.78	5.071	1.783	64.43	.1694	2.036	60.45	505.8	.2374
#1	.0006	.0011	.0918	.0001	.0849	.0018	.0007	-.0002	.0825
#2	.0006	.0012	.0889	.0003	.0850	.0019	.0025	.0003	.0829
#3	.0010	.0011	.0916	.0005	.0847	.0019	.0033	.0001	.0829

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.9	4895.2	30052.	3792.5
Stddev	1.8	8.8	108.	38.9
%RSD	.11313	.17893	.36034	1.0245
#1	1631.4	4904.5	29974.	3836.3
#2	1627.8	4887.1	30175.	3779.0
#3	1630.4	4893.9	30006.	3762.2

Zoom In Zoom Out

Sample Name: FA22014-3L Acquired: 2/17/2015 16:46:14 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0525	-.0001	.1416	-.0001	16.34	.0000	.0000	.0003
Stddev	.0007	.0060	.0003	.0005	.0000	.05	.0000	.0001	.0002
%RSD	341.7	11.45	260.1	.3189	42.89	.3038	89.60	146.7	77.20
#1	.0009	.0471	-.0004	.1415	-.0001	16.38	.0000	.0001	.0005
#2	.0003	.0590	-.0002	.1421	-.0001	16.35	.0000	.0000	.0003
#3	-.0006	.0515	.0002	.1412	-.0001	16.28	.0000	.0000	.0000

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0036	.0202	.7108	.2957	.0250	-.0005	F149.9	-.0002	-.0006
Stddev	.0003	.0019	.0179	.0168	.0001	.0002	.6	.0003	.0012
%RSD	8.017	9.226	2.516	5.679	.2031	30.67	.3921	154.3	185.8
#1	.0039	.0213	.7021	.2818	.0250	-.0004	150.3	.0000	-.0016
#2	.0033	.0212	.7313	.2909	.0249	-.0006	150.3	-.0006	.0007
#3	.0036	.0181	.6988	.3143	.0250	-.0007	149.2	-.0001	-.0011

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0014	.0951	.0002	.0234	.0005	.0002	.0006	.0148
Stddev	.0008	.0018	.0006	.0003	.0000	.0001	.0017	.0001	.0001
%RSD	99.51	124.8	.6597	185.9	.1093	16.13	784.4	17.99	.7838
#1	.0005	.0014	.0953	-.0002	.0234	.0004	-.0017	.0005	.0147
#2	.0002	-.0003	.0944	.0002	.0234	.0004	.0016	.0007	.0148
#3	.0017	.0033	.0956	.0004	.0234	.0006	.0008	.0005	.0150

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1634.4	4921.7	29954.	3824.0
Stddev	2.3	4.6	68.	39.9
%RSD	.14267	.09358	.22704	1.0445
#1	1635.7	4918.9	29892.	3802.1
#2	1631.7	4919.2	30027.	3799.9
#3	1635.8	4927.0	29944.	3870.2

Zoom In Zoom Out

Sample Name: FA22014-4L Acquired: 2/17/2015 16:50:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0006	.0893	-.0008	.0653	.0000	14.33	.0037	.0003	.0008
Stddev	.0003	.0060	.0004	.0007	.000	.02	.0001	.0002	.0005
%RSD	45.58	6.749	44.83	1.141	273.2	.1492	1.786	55.44	62.26
#1	.0010	.0876	-.0012	.0660	-.0002	14.34	.0037	.0003	.0011
#2	.0006	.0842	-.0005	.0653	-.0001	14.35	.0037	.0005	.0010
#3	.0004	.0959	-.0006	.0645	.0001	14.31	.0036	.0001	.0002

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0195	.0360	1.196	.5484	.0397	-.0006	F154.9	.0006	.0007
Stddev	.0004	.0026	.004	.0236	.0001	.0001	.2	.0001	.0004
%RSD	2.146	7.345	.3128	4.295	.2071	15.58	.1436	15.26	51.91
#1	.0199	.0340	1.200	.5751	.0396	-.0005	155.1	.0005	.0011
#2	.0191	.0350	1.192	.5307	.0398	-.0006	154.9	.0007	.0003
#3	.0196	.0390	1.197	.5394	.0397	-.0007	154.6	.0005	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0026	.0022	.1560	.0003	.0356	.0010	-.0010	.0001	.1989
Stddev	.0010	.0006	.0027	.0001	.0001	.0002	.0003	.0002	.0003
%RSD	37.36	28.72	1.732	33.45	.2157	15.67	31.66	188.0	.1710
#1	.0033	.0015	.1570	.0002	.0356	.0008	-.0013	.0003	.1988
#2	.0015	.0024	.1580	.0002	.0356	.0010	-.0007	-.0001	.1987
#3	.0030	.0028	.1529	.0004	.0355	.0011	-.0011	.0002	.1993

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1632.4	4909.5	30368.	3795.3
Stddev	8.1	13.3	96.	4.2
%RSD	.49343	.27059	.31517	.10999
#1	1628.0	4905.2	30361.	3796.4
#2	1641.7	4924.4	30277.	3790.7
#3	1627.6	4898.8	30468.	3798.9

Zoom In Zoom Out

Sample Name: FA22014-5L Acquired: 2/17/2015 16:54:30 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0001	.3502	-.0002	.0261	-.0001	3.895	.0007	.0001	.0009
Stddev	.0007	.0110	.0005	.0002	.0001	.016	.0000	.0000	.0002
%RSD	525.2	3.144	273.2	.9146	58.51	.4068	4.184	33.28	17.53
#1	-.0004	.3445	-.0005	.0264	-.0001	3.901	.0007	.0001	.0009
#2	-.0007	.3629	.0004	.0261	-.0001	3.907	.0007	.0001	.0010
#3	.0007	.3432	-.0006	.0259	-.0002	3.877	.0007	.0001	.0007

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0008	.0544	.5364	.1499	.0129	-.0003	F155.2	.0002	.0008
Stddev	.0002	.0014	.0162	.0212	.0001	.0001	.5	.0002	.0003
%RSD	27.97	2.511	3.026	14.11	.4460	35.39	.3316	113.0	31.08
#1	.0006	.0530	.5181	.1619	.0128	-.0004	155.7	.0001	.0006
#2	.0009	.0557	.5490	.1254	.0129	-.0003	155.2	.0000	.0011
#3	.0010	.0545	.5421	.1623	.0128	-.0002	154.7	.0004	.0008

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0014	.0004	.3524	.0002	.0101	.0101	-.0010	-.0001	.0989
Stddev	.0005	.0010	.0060	.0001	.0001	.0010	.0011	.0001	.0002
%RSD	35.26	221.4	1.694	34.47	1.185	10.33	108.0	107.6	.1639
#1	.0015	-.0002	.3494	.0002	.0101	.0108	-.0019	-.0002	.0987
#2	.0018	.0016	.3593	.0002	.0103	.0105	.0001	-.0001	.0990
#3	.0008	.0000	.3486	.0001	.0100	.0089	-.0011	.0000	.0991

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.0	4932.1	30280.	3805.9
Stddev	1.1	3.9	56.	4.4
%RSD	.06965	.07860	.18578	.11678
#1	1640.3	4936.5	30268.	3801.9
#2	1638.7	4929.4	30342.	3805.1
#3	1638.1	4930.3	30231.	3810.7

Zoom In Zoom Out

Sample Name: FA22014-6L Acquired: 2/17/2015 16:58:39 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.2200	-.0003	.0072	-.0001	42.85	-.0001	-.0002	.0007
Stddev	.0002	.0066	.0005	.0001	.0001	.08	.0000	.0000	.0003
%RSD	281.9	2.992	154.6	1.386	44.85	.1790	28.20	8.420	46.81
#1	-.0001	.2171	.0001	.0073	-.0001	42.77	-.0001	-.0002	.0010
#2	.0001	.2275	-.0002	.0071	-.0002	42.86	-.0001	-.0002	.0008
#3	.0003	.2153	-.0009	.0071	-.0002	42.92	-.0001	-.0002	.0003

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0000	.0060	.1847	.2916	.0040	-.0011	F157.6	-.0005	-.0032
Stddev	.000	.0008	.0067	.0273	.0000	.0002	.3	.0002	.0003
%RSD	968.7	12.64	3.622	9.362	.6968	14.03	.1646	39.64	9.965
#1	-.0001	.0057	.1780	.2634	.0039	-.0010	157.3	-.0003	-.0034
#2	.0000	.0054	.1848	.2933	.0040	-.0010	157.5	-.0005	-.0033
#3	.0001	.0069	.1914	.3179	.0039	-.0012	157.8	-.0007	-.0028

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0021	.1494	.0001	.0611	.0198	.0001	.0005	.0018
Stddev	.0010	.0014	.0017	.0004	.0001	.0002	.0005	.0003	.0001
%RSD	123.7	66.69	1.112	532.0	.1565	1.105	749.8	55.78	4.221
#1	.0002	.0007	.1492	.0003	.0610	.0201	.0005	.0004	.0017
#2	.0003	.0035	.1478	.0003	.0612	.0198	.0001	.0003	.0019
#3	.0019	.0022	.1511	-.0004	.0610	.0197	-.0004	.0008	.0018

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1633.5	4921.2	30015.	3792.8
Stddev	2.2	7.3	54.	17.5
%RSD	.13747	.14790	.18002	.46043
#1	1635.6	4929.1	29956.	3812.8
#2	1631.2	4914.9	30027.	3784.4
#3	1633.6	4919.6	30062.	3781.1

Zoom In Zoom Out

Sample Name: FA22014-7L Acquired: 2/17/2015 17:02:49 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	-.0002	.0374	.0055	.1064	-.0001	10.92	.0000	-.0001	.0015
Stddev	.0005	.0116	.0005	.0004	.0002	.01	.000	.0001	.0000
%RSD	300.3	30.92	9.088	.4158	129.7	.0843	143.9	85.41	2.891
#1	.0004	.0389	.0060	.1069	-.0003	10.92	.0000	-.0001	.0014
#2	-.0004	.0252	.0054	.1061	-.0002	10.92	.0000	.0000	.0015
#3	-.0006	.0481	.0050	.1061	.0001	10.91	-.0001	-.0003	.0015

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0113	.0203	1.042	.2317	.0143	-.0007	F149.0	-.0003	.0023
Stddev	.0003	.0010	.029	.0255	.0000	.0001	.1	.0002	.0009
%RSD	2.588	4.708	2.834	11.00	.0600	10.27	.0827	55.04	37.73
#1	.0111	.0213	1.019	.2293	.0143	-.0007	149.1	-.0004	.0016
#2	.0117	.0203	1.075	.2583	.0143	-.0007	149.0	-.0001	.0019
#3	.0112	.0194	1.030	.2074	.0143	-.0006	148.9	-.0003	.0032

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0003	.0002	.1219	.0003	.0160	.0010	-.0006	-.0002	.0368
Stddev	.0009	.0011	.0032	.0002	.0001	.0001	.0009	.0002	.0001
%RSD	312.5	649.1	2.595	81.40	.4650	8.984	162.1	123.8	.2832
#1	.0000	.0006	.1217	.0000	.0161	.0009	.0004	-.0001	.0367
#2	-.0004	-.0011	.1188	.0004	.0159	.0011	-.0013	.0000	.0369
#3	.0013	.0010	.1251	.0004	.0161	.0011	-.0008	-.0004	.0368

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1639.6	4938.7	30133.	3783.0
Stddev	5.6	7.8	121.	1.9
%RSD	.33964	.15814	.40002	.05007
#1	1635.1	4929.9	30197.	3783.5
#2	1637.7	4941.4	29993.	3784.5
#3	1645.8	4944.9	30207.	3780.9

Zoom In Zoom Out

Sample Name: FA22014-8L Acquired: 2/17/2015 17:06:56 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0001	.0405	-.0005	.1309	-.0001	11.23	.0000	.0000	.0002
Stddev	.0002	.0110	.0009	.0002	.0000	.04	.0000	.000	.0004
%RSD	401.2	27.17	169.7	.1454	33.05	.3777	129.6	603.8	205.6
#1	.0000	.0509	.0004	.1311	-.0001	11.27	.0000	.0001	-.0001
#2	-.0001	.0417	-.0015	.1308	-.0001	11.19	.0000	.0000	.0000
#3	.0003	.0290	-.0006	.1308	-.0001	11.23	.0000	-.0001	.0006

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0103	.7429	.1958	.0149	-.0006	F153.2	-.0004	.0000
Stddev	.0002	.0053	.0155	.0194	.0001	.0001	.8	.0002	.0007
%RSD	62.87	51.70	2.093	9.904	.7943	23.00	.5405	38.72	5054.
#1	.0003	.0148	.7521	.2163	.0149	-.0005	154.1	-.0003	-.0008
#2	.0001	.0116	.7249	.1777	.0149	-.0006	152.4	-.0006	.0007
#3	.0006	.0044	.7516	.1935	.0147	-.0008	153.1	-.0004	.0002

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0007	.1008	.0003	.0157	.0002	-.0014	.0002	.0055
Stddev	.0002	.0011	.0017	.0001	.0001	.0000	.0003	.0002	.0001
%RSD	21.50	167.2	1.695	23.04	.8551	8.704	24.04	78.21	1.371
#1	.0007	-.0006	.0991	.0002	.0159	.0002	-.0013	.0001	.0055
#2	.0007	.0017	.1025	.0003	.0156	.0002	-.0018	.0001	.0056
#3	.0010	.0009	.1008	.0003	.0157	.0002	-.0011	.0004	.0056

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1635.7	4945.3	30274.	3778.6
Stddev	9.0	12.0	119.	21.0
%RSD	.54958	.24244	.39453	.55653
#1	1626.4	4935.3	30136.	3756.6
#2	1644.3	4958.6	30335.	3798.5
#3	1636.4	4942.1	30350.	3780.8

Zoom In Zoom Out

Sample Name: FA22014-9L Acquired: 2/17/2015 17:11:05 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0003	.1557	-.0006	.0213	-.0001	20.51	.0008	.0005	.0004
Stddev	.0001	.0145	.0007	.0002	.0000	.01	.0000	.0001	.0002
%RSD	48.13	9.309	118.5	1.166	34.95	.0460	.9551	16.17	53.39
#1	.0004	.1426	-.0001	.0214	-.0001	20.50	.0008	.0005	.0006
#2	.0002	.1713	-.0014	.0215	-.0001	20.52	.0008	.0006	.0002
#3	.0002	.1531	-.0003	.0211	-.0001	20.52	.0008	.0004	.0004

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0051	.0344	.3231	.2969	.0311	-.0006	F153.8	.0000	.0005
Stddev	.0002	.0029	.0248	.0383	.0000	.0001	.1	.000	.0006
%RSD	2.968	8.299	7.672	12.91	.1463	19.84	.0971	748.9	129.6
#1	.0051	.0361	.3009	.2863	.0311	-.0006	153.8	.0000	.0011
#2	.0053	.0311	.3185	.2649	.0311	-.0007	154.0	.0002	.0004
#3	.0050	.0361	.3499	.3394	.0311	-.0005	153.7	-.0002	-.0001

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0009	.0021	.2103	.0004	.0283	.0077	-.0011	.0002	.0600
Stddev	.0009	.0023	.0013	.0004	.0001	.0003	.0006	.0000	.0001
%RSD	98.06	112.9	.6104	99.22	.3352	4.003	48.90	20.47	.1894
#1	.0002	.0025	.2117	.0004	.0284	.0080	-.0009	.0002	.0599
#2	.0007	-.0004	.2101	.0007	.0283	.0076	-.0018	.0002	.0600
#3	.0019	.0041	.2092	.0000	.0282	.0074	-.0007	.0002	.0601

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1629.0	4922.1	30252.	3790.5
Stddev	1.6	6.6	135.	26.4
%RSD	.09763	.13373	.44567	.69595
#1	1630.7	4926.9	30398.	3774.7
#2	1627.6	4924.7	30132.	3820.9
#3	1628.5	4914.6	30227.	3775.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 17:15:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2521	42.36	1.884	2.004	2.037	42.09	1.980	1.965	2.135	2.026
Stddev	.0003	.07	.003	.002	.003	.07	.002	.003	.004	.005
%RSD	.1135	.1742	.1768	.1095	.1459	.1667	.1103	.1388	.1983	.2505
#1	.2523	42.44	1.883	2.007	2.040	42.17	1.977	1.962	2.140	2.031
#2	.2522	42.36	1.882	2.003	2.035	42.03	1.980	1.966	2.134	2.026
#3	.2518	42.29	1.888	2.004	2.035	42.08	1.982	1.967	2.132	2.021

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.21	41.71	40.14	2.069	1.924	42.53	1.909	1.984	1.901	1.898
Stddev	.05	.08	.25	.003	.009	.09	.002	.006	.005	.006
%RSD	.1127	.1894	.6107	.1383	.4611	.2225	.1146	.2982	.2555	.3175
#1	40.17	41.64	40.27	2.072	1.915	42.62	1.907	1.977	1.895	1.891
#2	40.22	41.70	39.85	2.066	1.925	42.54	1.910	1.985	1.904	1.900
#3	40.26	41.80	40.28	2.069	1.933	42.43	1.911	1.989	1.903	1.903

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.346	1.866	2.081	2.058	1.972	1.997	1.981
Stddev	.002	.003	.004	.001	.006	.006	.002
%RSD	.1298	.1771	.1706	.0446	.2916	.3141	.1000
#1	1.344	1.863	2.085	2.059	1.967	2.002	1.979
#2	1.347	1.865	2.081	2.057	1.970	1.990	1.982
#3	1.346	1.870	2.078	2.057	1.978	1.998	1.982

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 17:15:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1610.2	4808.5	29824.	3744.2
Stddev	3.2	2.9	77.	11.3
%RSD	.19722	.06129	.25812	.30209
#1	1613.6	4811.0	29771.	3732.8
#2	1607.4	4805.3	29912.	3755.4
#3	1609.5	4809.2	29789.	3744.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 17:19:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0017	.0004	.0003	.0001	.0021	.0001	.0001	.0003
Stddev	.0004	.0016	.0004	.0002	.0001	.0015	.0000	.0002	.0004
%RSD	801.1	93.11	88.14	66.09	78.13	70.97	18.45	152.0	121.1
#1	.0002	.0035	.0001	.0005	.0002	.0038	.0001	-.0001	.0002
#2	-.0004	.0013	.0004	.0004	.0001	.0015	.0001	.0001	.0000
#3	.0003	.0003	.0008	.0001	.0001	.0011	.0001	.0003	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	F.0511	.0239	.0162	.0001	F.0041	.0515	.0001	-.0001
Stddev	.0002	.0126	.0202	.0220	.0000	.0009	.0058	.0001	.0005
%RSD	140.7	24.67	84.57	135.9	23.65	22.36	11.32	115.4	381.2
#1	-.0003	.0639	.0436	.0171	.0001	.0051	.0574	.0001	-.0001
#2	-.0003	.0506	.0249	.0377	.0001	.0040	.0457	.0002	.0003
#3	.0001	.0387	.0032	-.0062	.0001	.0033	.0515	.0000	-.0006
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0024	.0002	.0007	.0010	.0001	F.0029	.0002	-.0002	.0003
Stddev	.0008	.0008	.0003	.0007	.0001	.0002	.0006	.0002	.0001
%RSD	34.59	517.3	42.00	71.51	128.7	8.581	251.6	138.2	33.19
#1	.0034	.0009	.0004	.0012	.0001	.0032	.0007	-.0004	.0003
#2	.0021	-.0007	.0008	.0016	.0002	.0028	.0003	.0001	.0004
#3	.0018	.0003	.0010	.0002	.0000	.0027	-.0004	-.0002	.0002
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020					.0020			
Low Limit	-.0020					-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 17:19:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1672.7	4994.5	31008.	3798.8
Stddev	.4	6.8	53.	18.2
%RSD	.02131	.13615	.17213	.47801
#1	1672.3	4992.7	31027.	3779.2
#2	1672.8	4988.7	30947.	3815.1
#3	1672.9	5002.0	31049.	3802.1

Zoom In Zoom Out

Sample Name: D67687-4 Acquired: 2/17/2015 17:23:21 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0001	.0129	-.0011	.0005	.0000	.0785	-.0001	-.0001	.0001	.0000
Stddev	.0003	.0051	.0008	.0001	.000	.0030	.0001	.0001	.0004	.0001
%RSD	266.7	39.37	73.53	12.64	100.9	3.865	56.04	182.4	312.2	280.9
#1	.0003	.0071	-.0020	.0005	.0000	.0776	-.0001	.0001	-.0002	-.0001
#2	.0002	.0148	-.0011	.0005	.0000	.0761	-.0002	-.0001	.0000	.0000
#3	-.0002	.0167	-.0003	.0004	-.0001	.0819	-.0001	-.0002	.0006	.0001

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.0030	-.0052	.0078	.0000	.0006	.5386	-.0001	.0001	.0023	.0008
Stddev	.0036	.0106	.0172	.0001	.0002	.0026	.0001	.0006	.0004	.0003
%RSD	122.6	202.1	221.3	285.1	25.53	.4839	89.72	401.9	15.31	42.38
#1	.0068	-.0147	-.0019	-.0001	.0008	.5370	-.0001	.0008	.0026	.0004
#2	.0024	.0062	-.0025	.0001	.0006	.5371	.0000	-.0003	.0026	.0008
#3	-.0004	-.0071	.0277	.0001	.0005	.5416	-.0002	-.0001	.0019	.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0341	.0000	.0001	.0003	-.0023	-.0004	.0007
Stddev	.0004	.000	.0001	.0001	.0009	.0002	.0000
%RSD	1.253	3285.	155.1	18.49	38.36	50.82	4.474
#1	.0337	.0003	-.0001	.0003	-.0020	-.0004	.0008
#2	.0340	.0000	.0001	.0003	-.0016	-.0002	.0007
#3	.0346	-.0003	.0002	.0004	-.0033	-.0005	.0007

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1656.3	4961.0	31323.	3850.2
Stddev	1.2	4.7	106.	15.3
%RSD	.07148	.09498	.33685	.39862
#1	1654.9	4964.1	31252.	3867.5
#2	1656.8	4955.6	31273.	3838.2
#3	1657.1	4963.3	31445.	3844.9

Zoom In Zoom Out

Sample Name: MP28563-D2 Acquired: 2/17/2015 17:27:33 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0002	.0088	.0003	.0102	-.0001	50.76	.0000	-.0001	.0006
Stddev	.0005	.0091	.0005	.0001	.0001	.06	.000	.0001	.0001
%RSD	247.3	103.6	182.9	.9665	155.6	.1083	182.4	169.1	24.13
#1	.0005	.0186	.0006	.0103	.0000	50.78	-.0001	-.0001	.0006
#2	-.0004	.0073	-.0003	.0101	-.0001	50.80	.0000	.0000	.0005
#3	.0005	.0005	.0006	.0103	-.0001	50.69	.0000	.0000	.0008

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.0004	.0098	.5883	.6202	.0468	-.0007	F148.8	-.0002	-.0024
Stddev	.0005	.0045	.0253	.0168	.0001	.0001	.4	.0002	.0004
%RSD	139.1	45.92	4.308	2.708	.2933	6.830	.2976	74.25	15.40
#1	.0009	.0129	.6043	.6160	.0470	-.0007	149.1	-.0001	-.0028
#2	-.0002	.0046	.6016	.6059	.0467	-.0008	148.9	-.0004	-.0021
#3	.0004	.0118	.5591	.6387	.0469	-.0007	148.3	-.0001	-.0024

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0011	.0006	.0828	.0000	.0833	.0010	.0009	-.0001	.0820
Stddev	.0017	.0006	.0005	.001	.0001	.0001	.0008	.0003	.0000
%RSD	154.4	101.5	.6087	1179.	.0728	13.05	86.27	300.9	.0594
#1	.0022	.0014	.0827	.0001	.0833	.0011	.0000	-.0003	.0819
#2	.0020	.0002	.0824	-.0007	.0834	.0009	.0015	.0002	.0820
#3	-.0009	.0004	.0833	.0004	.0833	.0012	.0011	-.0002	.0820

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1631.4	4898.6	30322.	3758.9
Stddev	1.1	7.6	101.	12.9
%RSD	.06945	.15554	.33425	.34376
#1	1632.5	4900.6	30214.	3763.3
#2	1631.5	4890.2	30414.	3744.4
#3	1630.2	4905.0	30339.	3769.1

Zoom In Zoom Out

Sample Name: MP28563-MB2 Acquired: 2/17/2015 17:31:41 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0006	-.0003	.0016	-.0001	.0566	-.0001	-.0002	.0001
Stddev	.0004	.0024	.0005	.0002	.0001	.0014	.0000	.0001	.0001
%RSD	403.2	389.9	152.3	13.08	68.14	2.401	50.04	90.96	139.2
#1	-.0002	-.0029	-.0002	.0017	-.0001	.0574	.0000	.0000	.0000
#2	.0006	.0019	-.0009	.0013	-.0001	.0572	-.0001	-.0003	.0002
#3	-.0001	-.0009	.0001	.0016	-.0002	.0550	-.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0091	.1266	.0252	-.0001	-.0003	F159.7	-.0003	-.0003
Stddev	.0004	.0031	.0350	.0199	.0000	.0002	.3	.0000	.0015
%RSD	217.6	34.16	27.67	78.90	36.82	66.68	.1795	14.29	493.4
#1	.0000	-.0070	.0870	.0314	-.0001	-.0005	159.5	-.0003	-.0019
#2	.0001	-.0126	.1536	.0029	-.0001	-.0003	160.0	-.0003	.0010
#3	-.0006	-.0076	.1393	.0411	.0000	-.0001	159.7	-.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							2.500		
Low Limit							-2.500		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0019	.0290	.0001	.0000	-.0002	-.0021	-.0002	.0016
Stddev	.0006	.0005	.0017	.0003	.0000	.0001	.0021	.0003	.0001
%RSD	652.0	25.39	5.825	329.5	397.3	42.95	100.4	143.5	3.255
#1	-.0004	.0017	.0283	-.0002	.0001	-.0003	-.0010	-.0004	.0016
#2	.0008	.0025	.0279	.0003	.0000	-.0001	-.0045	-.0003	.0017
#3	-.0001	.0016	.0310	.0001	.0000	-.0003	-.0008	.0001	.0016
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP28563-MB2 Acquired: 2/17/2015 17:31:41 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1635.5	4926.0	30180.	3801.9
Stddev	2.6	5.3	16.	20.5
%RSD	.16089	.10809	.05155	.53903
#1	1632.5	4919.9	30195.	3780.8
#2	1637.5	4929.3	30180.	3803.3
#3	1636.5	4928.9	30164.	3821.7

Zoom In Zoom Out

Sample Name: MP28563-B2 Acquired: 2/17/2015 17:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0511	30.31	1.916	2.058	.0536	28.16	.0491	.4980	.2262
Stddev	.0006	.06	.001	.003	.0001	.09	.0001	.0003	.0007
%RSD	1.158	.1850	.0562	.1473	.2410	.3252	.1265	.0595	.3156
#1	.0513	30.35	1.917	2.055	.0537	28.26	.0491	.4980	.2262
#2	.0504	30.35	1.915	2.060	.0534	28.11	.0492	.4983	.2255
#3	.0516	30.25	1.915	2.060	.0537	28.10	.0492	.4978	.2270
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2660	28.13	28.50	26.29	.5243	.4985	F185.4	.4903	.5054
Stddev	.0004	.03	.05	.10	.0010	.0006	.5	.0005	.0011
%RSD	.1372	.1202	.1892	.3662	.1900	.1115	.2626	.0974	.2272
#1	.2664	28.16	28.53	26.39	.5254	.4992	184.8	.4905	.5061
#2	.2658	28.12	28.44	26.29	.5235	.4984	185.7	.4906	.5061
#3	.2657	28.09	28.54	26.20	.5240	.4981	185.6	.4897	.5041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							25.00		
Range							20.00%		

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4799	1.914	.0312	.5048	.5603	.5514	2.017	.5041	.5072
Stddev	.0005	.004	.0011	.0008	.0013	.0012	.005	.0008	.0006
%RSD	.0970	.2107	3.640	.1616	.2368	.2228	.2455	.1654	.1197
#1	.4795	1.916	.0317	.5056	.5613	.5522	2.011	.5045	.5074
#2	.4804	1.917	.0320	.5049	.5609	.5500	2.020	.5031	.5077
#3	.4798	1.909	.0299	.5040	.5588	.5519	2.019	.5046	.5065
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP28563-B2 Acquired: 2/17/2015 17:35:53 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1605.8	4838.8	29274.	3746.9
Stddev	3.6	10.2	79.	21.4
%RSD	.22249	.21080	.26938	.57131
#1	1607.7	4839.1	29238.	3722.2
#2	1601.7	4828.4	29364.	3758.9
#3	1608.0	4848.8	29219.	3759.7

Zoom In Zoom Out

Sample Name: MP28563-MB3 Acquired: 2/17/2015 17:40:01 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0005	-.0003	.0000	-.0001	.0019	-.0002	-.0001	.0001	-.0003
Stddev	.0007	.0076	.0005	.0003	.0000	.0053	.0001	.0001	.0003	.0002
%RSD	362.7	1650.	144.4	802.5	39.19	286.5	40.24	72.35	231.9	50.39
#1	.0009	-.0082	-.0008	-.0002	-.0001	.0027	-.0001	.0000	-.0002	-.0001
#2	-.0006	.0061	-.0004	.0003	-.0001	.0067	-.0002	-.0001	.0004	-.0004
#3	.0003	.0034	.0002	.0000	-.0001	-.0038	-.0001	-.0002	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0204	.0158	.0322	-.0001	-.0001	.0792	-.0002	-.0003	.0017	.0015
Stddev	.0048	.0169	.0251	.0001	.0001	.0015	.0001	.0011	.0010	.0005
%RSD	23.54	106.5	77.88	91.32	257.1	1.866	82.22	333.1	56.88	34.28
#1	.0252	.0334	.0570	.0000	.0001	.0779	.0000	.0009	.0023	.0016
#2	.0203	-.0002	.0328	-.0001	-.0002	.0790	-.0002	-.0008	.0023	.0019
#3	.0156	.0142	.0068	-.0001	-.0001	.0808	-.0003	-.0010	.0006	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0214	.0005	-.0001	.0002	-.0010	-.0003	.0003
Stddev	.0003	.0002	.0000	.0000	.0008	.0006	.0000
%RSD	1.173	34.16	23.43	11.62	75.36	211.9	7.755
#1	.0213	.0006	-.0002	.0002	-.0019	.0004	.0003
#2	.0217	.0003	-.0001	.0002	-.0007	-.0005	.0003
#3	.0212	.0005	-.0001	.0002	-.0005	-.0008	.0003
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28563-MB3 Acquired: 2/17/2015 17:40:01 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1653.7	4985.9	31152.	3814.4
Stddev	3.8	7.2	200.	19.3
%RSD	.23072	.14493	.64256	.50600
#1	1652.0	4987.2	30962.	3797.4
#2	1658.1	4992.3	31134.	3835.3
#3	1651.1	4978.1	31361.	3810.5

Zoom In Zoom Out

Sample Name: MP28563-B3 Acquired: 2/17/2015 17:44:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0502	29.63	1.899	2.052	.0526	27.49	.0486	.4917	.2175	.2570
Stddev	.0009	.02	.001	.002	.0003	.00	.0000	.0004	.0009	.0003
%RSD	1.744	.0758	.0256	.1052	.6202	.0053	.0864	.0830	.3924	.0975
#1	.0508	29.62	1.899	2.049	.0524	27.49	.0486	.4920	.2184	.2572
#2	.0492	29.61	1.899	2.054	.0525	27.49	.0486	.4912	.2170	.2567
#3	.0507	29.66	1.898	2.052	.0530	27.48	.0486	.4919	.2169	.2571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.74	27.51	26.15	.5173	.4919	27.99	.4913	.4955	.4764	1.878
Stddev	.08	.01	.21	.0004	.0002	.04	.0004	.0013	.0019	.002
%RSD	.2732	.0394	.8017	.0811	.0412	.1449	.0872	.2568	.4012	.0877
#1	27.68	27.52	26.05	.5177	.4920	27.95	.4913	.4964	.4746	1.879
#2	27.83	27.50	26.39	.5169	.4917	27.99	.4917	.4941	.4761	1.878
#3	27.73	27.52	26.00	.5174	.4921	28.03	.4909	.4960	.4784	1.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0262	.5055	.5461	.5335	1.975	.4894	.5014
Stddev	.0009	.0003	.0008	.0006	.011	.0011	.0006
%RSD	3.344	.0690	.1459	.1063	.5701	.2236	.1134
#1	.0254	.5057	.5452	.5342	1.963	.4907	.5021
#2	.0260	.5058	.5464	.5331	1.977	.4888	.5011
#3	.0271	.5051	.5467	.5334	1.986	.4887	.5012
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28563-B3 Acquired: 2/17/2015 17:44:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1628.3	4858.6	30411.	3783.1
Stddev	3.2	6.1	131.	34.5
%RSD	.19349	.12631	.43131	.91111
#1	1627.6	4851.9	30294.	3747.6
#2	1631.8	4859.9	30386.	3785.2
#3	1625.6	4864.0	30553.	3816.5

Zoom In Zoom Out

Sample Name: MP28561-MB1 Acquired: 2/17/2015 17:48:12 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0087	-.0009	.0002	.0000	.0238	-.0001	-.0001	.0007	.0001
Stddev	.0003	.0140	.0003	.0001	.0000	.0004	.0000	.0001	.0002	.0001
%RSD	115.4	159.8	38.55	66.45	369.4	1.598	15.46	177.2	32.82	165.0
#1	.0005	.0158	-.0005	.0001	.0000	.0242	-.0001	-.0002	.0009	.0002
#2	.0005	.0178	-.0012	.0003	.0000	.0238	-.0001	.0000	.0004	.0000
#3	-.0001	-.0073	-.0010	.0002	.0000	.0235	-.0001	.0000	.0008	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0468	.0304	.0173	.0002	.0000	.0424	-.0001	-.0004	.0001	.0010
Stddev	.0113	.0172	.0055	.0001	.000	.0105	.0003	.0013	.0004	.0006
%RSD	24.02	56.48	31.88	36.93	468.8	24.74	369.6	342.0	298.5	66.52
#1	.0597	.0491	.0231	.0003	.0001	.0517	-.0002	-.0014	.0000	.0017
#2	.0424	.0267	.0168	.0002	.0001	.0443	.0002	-.0007	-.0002	.0006
#3	.0385	.0154	.0121	.0001	-.0003	.0311	-.0003	.0010	.0006	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0161	.0207	.0000	.0007	-.0008	-.0006	.0016
Stddev	.0007	.0002	.000	.0001	.0004	.0001	.0001
%RSD	4.521	.9528	3973.	16.67	41.88	14.73	4.806
#1	.0159	.0205	.0001	.0007	-.0012	-.0005	.0015
#2	.0155	.0209	-.0001	.0008	-.0009	-.0006	.0017
#3	.0169	.0206	.0000	.0006	-.0005	-.0006	.0016
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Zoom In Zoom Out

Sample Name: MP28561-MB1 Acquired: 2/17/2015 17:48:12 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1659.8	4986.8	31331.	3902.0
Stddev	1.2	7.3	21.	23.9
%RSD	.07040	.14541	.06844	.61179
#1	1660.3	4994.3	31309.	3912.3
#2	1658.4	4986.5	31351.	3874.7
#3	1660.6	4979.8	31333.	3919.0

Zoom In Zoom Out

Sample Name: MP28561-B1 Acquired: 2/17/2015 17:52:25 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0511	30.00	1.907	2.061	.0530	27.80	.0490	.4958	.2229	.2689
Stddev	.0004	.02	.003	.002	.0001	.01	.0001	.0003	.0012	.0004
%RSD	.7378	.0713	.1354	.1118	.2750	.0246	.1962	.0507	.5443	.1336
#1	.0506	30.00	1.909	2.061	.0528	27.80	.0489	.4956	.2215	.2691
#2	.0513	30.01	1.905	2.059	.0531	27.79	.0491	.4961	.2234	.2685
#3	.0513	29.97	1.909	2.064	.0530	27.80	.0491	.4958	.2238	.2691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.85	27.72	26.25	.5236	.4936	28.36	.4913	.5006	.4736	1.886
Stddev	.05	.06	.09	.0015	.0003	.01	.0007	.0011	.0013	.004
%RSD	.1775	.1998	.3502	.2954	.0528	.0346	.1331	.2183	.2703	.2224
#1	27.80	27.70	26.33	.5219	.4933	28.37	.4920	.5009	.4723	1.889
#2	27.89	27.68	26.27	.5249	.4935	28.37	.4907	.4994	.4739	1.881
#3	27.88	27.79	26.15	.5240	.4939	28.35	.4913	.5015	.4748	1.888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0147	.5247	.5551	.5436	2.000	.4960	.5053
Stddev	.0007	.0007	.0010	.0015	.004	.0014	.0001
%RSD	4.586	.1273	.1758	.2754	.2086	.2837	.0235
#1	.0154	.5242	.5540	.5426	1.998	.4943	.5052
#2	.0141	.5255	.5554	.5429	2.004	.4968	.5054
#3	.0146	.5245	.5559	.5453	1.997	.4967	.5052
Check ?	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: MP28561-B1 Acquired: 2/17/2015 17:52:25 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1619.9	4866.2	30085.	3778.8
Stddev	3.9	4.2	126.	18.9
%RSD	.24308	.08714	.41750	.49891
#1	1620.7	4863.0	30224.	3757.3
#2	1615.6	4864.5	29979.	3792.4
#3	1623.3	4871.0	30052.	3786.6

Zoom In Zoom Out

Sample Name: FA22095-4 Acquired: 2/17/2015 17:56:25 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0028	61.67	.0250	.0617	.0004	10.23	-.0027	.0007	.1313	.0066
Stddev	.0002	.31	.0006	.0001	.0000	.05	.0001	.0001	.0003	.0002
%RSD	7.935	.4960	2.415	.1154	6.501	.4505	2.791	13.33	.2357	2.591
#1	.0027	61.83	.0256	.0618	.0004	10.25	-.0028	.0007	.1316	.0064
#2	.0027	61.32	.0248	.0617	.0004	10.17	-.0026	.0007	.1310	.0067
#3	.0031	61.86	.0245	.0616	.0004	10.26	-.0027	.0006	.1313	.0066

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	148.8	.2629	.7414	.0067	.0074	.2758	.0084	.0326	.0010	.0133
Stddev	.6	.0207	.0150	.0000	.0001	.0078	.0002	.0009	.0008	.0011
%RSD	.4270	7.859	2.022	.3309	1.443	2.816	2.228	2.698	76.70	8.594
#1	149.0	.2654	.7428	.0068	.0073	.2817	.0082	.0322	.0019	.0123
#2	148.1	.2412	.7258	.0067	.0074	.2787	.0086	.0336	.0003	.0146
#3	149.3	.2823	.7557	.0067	.0075	.2670	.0083	.0319	.0010	.0131

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.185	.0215	.0759	.2171	-.0037	.3030	.0087
Stddev	.006	.0001	.0005	.0004	.0007	.0009	.0001
%RSD	.2725	.3587	.6858	.1783	18.84	.3097	.7465
#1	2.178	.0215	.0761	.2174	-.0030	.3039	.0087
#2	2.187	.0214	.0753	.2166	-.0036	.3029	.0087
#3	2.189	.0215	.0763	.2172	-.0044	.3021	.0088

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1694.5	5015.6	31340.	3932.1
Stddev	4.3	12.0	69.	8.3
%RSD	.25356	.23896	.22126	.21114
#1	1699.2	5023.7	31265.	3934.3
#2	1693.3	5021.3	31402.	3939.0
#3	1690.9	5001.8	31354.	3922.9

Zoom In Zoom Out

Sample Name: MP28561-D1 Acquired: 2/17/2015 18:00:31 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0029	77.04	.0237	.0753	.0006	8.178	-.0025	.0010	.1498	.0073
Stddev	.0007	.06	.0003	.0005	.0001	.003	.0001	.0002	.0002	.0003
%RSD	25.06	.0779	1.293	.7248	16.64	.0309	2.548	15.50	.1381	4.241
#1	.0023	77.10	.0233	.0747	.0004	8.180	-.0025	.0010	.1500	.0076
#2	.0037	77.04	.0239	.0757	.0006	8.175	-.0025	.0012	.1496	.0071
#3	.0027	76.98	.0238	.0756	.0006	8.178	-.0024	.0009	.1499	.0071

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	150.6	.3493	.9827	.0083	.0071	.4048	.0106	.0423	.0002	.0131
Stddev	.2	.0090	.0100	.0001	.0000	.0018	.0002	.0004	.0010	.0021
%RSD	.1486	2.591	1.014	.9335	.3064	.4426	2.158	1.018	570.3	15.89
#1	150.9	.3461	.9824	.0083	.0072	.4051	.0108	.0427	.0013	.0111
#2	150.6	.3423	.9729	.0083	.0071	.4064	.0104	.0423	-.0004	.0130
#3	150.4	.3595	.9929	.0084	.0071	.4029	.0107	.0418	-.0004	.0152

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.637	.0226	.0860	.2828	-.0049	.3097	.0098
Stddev	.001	.0002	.0003	.0006	.0007	.0008	.0001
%RSD	.0511	1.094	.3423	.2176	13.45	.2540	1.369
#1	2.636	.0228	.0864	.2822	-.0053	.3089	.0099
#2	2.639	.0223	.0859	.2834	-.0041	.3100	.0098
#3	2.637	.0225	.0858	.2830	-.0052	.3104	.0096

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1687.0	4986.6	31206.	3955.8
Stddev	4.3	12.0	101.	19.7
%RSD	.25722	.23996	.32223	.49741
#1	1682.4	4973.8	31121.	3946.2
#2	1690.9	4988.7	31181.	3942.7
#3	1687.8	4997.4	31317.	3978.4

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:04:34 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2532	41.99	1.889	1.991	2.026	41.78	1.981	1.965	2.132	2.031
Stddev	.0004	.03	.004	.003	.001	.06	.001	.002	.005	.003
%RSD	.1409	.0804	.1878	.1447	.0603	.1494	.0730	.1053	.2597	.1534
#1	.2533	41.96	1.892	1.990	2.025	41.80	1.981	1.966	2.137	2.028
#2	.2534	42.02	1.885	1.994	2.027	41.82	1.980	1.963	2.132	2.029
#3	.2528	41.99	1.891	1.989	2.025	41.71	1.983	1.966	2.126	2.034
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value																		
Range																		

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.99	42.31	40.09	2.068	1.925	42.84	1.916	1.983	1.901	1.904
Stddev	.08	.12	.15	.003	.006	.07	.002	.003	.003	.003
%RSD	.2029	.2844	.3718	.1626	.3328	.1620	.0927	.1564	.1318	.1621
#1	39.97	42.45	40.20	2.071	1.919	42.90	1.918	1.987	1.904	1.905
#2	40.08	42.27	40.15	2.068	1.924	42.87	1.915	1.982	1.899	1.900
#3	39.92	42.22	39.92	2.064	1.932	42.77	1.915	1.981	1.900	1.906
Check ?	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value																		
Range																		

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.350	1.884	2.069	2.051	1.969	2.014	1.987
Stddev	.002	.002	.002	.003	.002	.001	.001
%RSD	.1364	.0857	.1049	.1210	.0878	.0547	.0570
#1	1.351	1.886	2.069	2.052	1.969	2.015	1.985
#2	1.348	1.883	2.072	2.048	1.971	2.014	1.988
#3	1.351	1.883	2.067	2.052	1.967	2.013	1.987
Check ?	None	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass	Chk	Pass
Value													
Range													

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:04:34 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.0	4818.1	29852.	3727.5
Stddev	2.5	3.1	115.	31.3
%RSD	.15764	.06379	.38530	.83940
#1	1618.4	4821.6	29719.	3693.3
#2	1614.0	4816.7	29915.	3734.3
#3	1618.5	4816.0	29921.	3754.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:08:31 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0056	.0010	.0003	.0001	.0022	.0001	.0002	.0001
Stddev	.0001	.0061	.0007	.0001	.0000	.0016	.0000	.0000	.0001
%RSD	187.1	110.3	68.33	15.51	48.15	72.43	37.27	20.38	116.0
#1	.0000	-.0008	.0017	.0003	.0001	.0041	.0001	.0003	.0001
#2	.0002	.0114	.0008	.0004	.0001	.0016	.0001	.0002	.0000
#3	.0000	.0061	.0004	.0003	.0001	.0010	.0002	.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	F.0548	.0308	.0117	.0001	F.0041	.0153	-.0001	-.0006
Stddev	.0001	.0137	.0226	.0130	.0000	.0014	.0017	.0000	.0009
%RSD	53.24	25.07	73.24	111.4	31.95	33.96	11.35	27.17	164.2
#1	-.0002	.0670	.0109	.0258	.0001	.0055	.0173	-.0001	.0005
#2	-.0001	.0575	.0262	.0091	.0001	.0038	.0144	-.0001	-.0012
#3	-.0002	.0399	.0554	.0001	.0001	.0028	.0142	-.0001	-.0010
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F.0025	F.0029	.0007	.0008	.0000	.0017	-.0001	-.0004	.0003
Stddev	.0005	.0020	.0001	.0002	.0001	.0003	.0003	.0001	.0000
%RSD	21.72	68.73	12.91	27.14	132.1	16.34	221.0	36.54	11.33
#1	.0019	.0041	.0008	.0010	.0001	.0020	.0002	-.0003	.0004
#2	.0030	.0006	.0008	.0006	.0001	.0015	-.0004	-.0003	.0003
#3	.0026	.0039	.0006	.0009	.0000	.0015	-.0002	-.0005	.0003
Check ?	Chk Fail	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020	.0020							
Low Limit	-.0020	-.0020							

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:08:31 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1693.7	5061.5	31459.	3805.1
Stddev	4.5	11.9	61.	24.0
%RSD	.26665	.23545	.19487	.63143
#1	1697.8	5067.8	31413.	3823.7
#2	1694.4	5068.9	31437.	3813.8
#3	1688.8	5047.7	31529.	3778.0

Zoom In Zoom Out

Sample Name: MP28561-SD1 Acquired: 2/17/2015 18:12:44 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0033	65.87	.0305	.0666	.0002	11.31	-.0036	.0009	.1388	.0073
Stddev	.0020	.07	.0013	.0003	.0001	.04	.0003	.0006	.0017	.0011
%RSD	58.88	.1101	4.354	.5216	73.33	.3493	8.858	67.94	1.226	15.46
#1	.0047	65.93	.0295	.0662	.0001	11.35	-.0035	.0004	.1400	.0080
#2	.0011	65.79	.0300	.0668	.0002	11.29	-.0034	.0008	.1396	.0079
#3	.0042	65.90	.0320	.0669	.0003	11.28	-.0040	.0015	.1369	.0060

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	161.0	.3510	.8225	.0069	.0088	.4547	.0073	.0354	.0024	.0124
Stddev	.1	.1575	.1749	.0001	.0006	.0490	.0005	.0010	.0055	.0068
%RSD	.0649	44.87	21.26	1.086	6.317	10.78	6.237	2.726	233.8	55.12
#1	160.8	.5329	.7499	.0068	.0092	.5067	.0068	.0352	-.0020	.0129
#2	161.0	.2603	.6956	.0070	.0090	.4093	.0074	.0364	.0005	.0189
#3	161.0	.2598	1.022	.0070	.0082	.4482	.0077	.0345	.0086	.0053

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.287	.0215	.0807	.2250	.0012	.3151	.0117
Stddev	.004	.0004	.0003	.0011	.0036	.0021	.0002
%RSD	.1840	1.899	.4333	.4865	296.2	.6814	1.437
#1	2.283	.0215	.0803	.2256	.0001	.3156	.0115
#2	2.287	.0211	.0808	.2257	-.0016	.3170	.0117
#3	2.291	.0219	.0810	.2238	.0052	.3128	.0118

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1694.9	5035.0	31329.	3848.7
Stddev	1.5	4.4	97.	38.3
%RSD	.09134	.08715	.30918	.99452
#1	1694.8	5039.4	31308.	3832.1
#2	1696.5	5034.9	31244.	3821.5
#3	1693.4	5030.6	31434.	3892.5

Zoom In Zoom Out

Sample Name: MP28561-PS1 Acquired: 2/17/2015 18:16:52 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0515	62.52	.1227	.3145	.0527	15.16	.0476	.0508	.1836	.1112
Stddev	.0005	.17	.0001	.0006	.0002	.04	.0001	.0002	.0003	.0003
%RSD	1.059	.2641	.1183	.1935	.3125	.2412	.1892	.4004	.1858	.2824
#1	.0520	62.67	.1226	.3141	.0528	15.19	.0475	.0506	.1833	.1108
#2	.0510	62.35	.1228	.3142	.0525	15.12	.0477	.0507	.1837	.1114
#3	.0516	62.55	.1225	.3152	.0527	15.17	.0477	.0510	.1840	.1112

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	147.3	10.63	5.434	.0596	.1025	11.45	.1073	.0830	.0964	.1065
Stddev	.4	.01	.019	.0001	.0001	.03	.0001	.0012	.0018	.0013
%RSD	.2698	.1346	.3498	.2184	.0570	.2448	.0573	1.412	1.893	1.195
#1	147.4	10.64	5.412	.0596	.1025	11.47	.1074	.0833	.0949	.1051
#2	146.9	10.62	5.447	.0594	.1025	11.42	.1073	.0817	.0984	.1066
#3	147.7	10.64	5.443	.0597	.1024	11.46	.1074	.0840	.0960	.1076

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.159	.0669	.1257	.3144	.0958	.3458	.2589
Stddev	.001	.0003	.0003	.0005	.0005	.0020	.0004
%RSD	.0640	.5086	.2168	.1663	.4760	.5652	.1726
#1	2.159	.0666	.1260	.3142	.0955	.3471	.2587
#2	2.157	.0673	.1254	.3140	.0963	.3436	.2586
#3	2.160	.0668	.1257	.3150	.0956	.3468	.2594

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1674.0	4989.1	30956.	3928.9
Stddev	8.2	12.5	63.	23.6
%RSD	.48951	.24961	.20320	.60169
#1	1676.1	4981.8	30931.	3907.4
#2	1680.9	5003.5	31028.	3954.2
#3	1664.9	4981.9	30910.	3925.2

Zoom In Zoom Out

Sample Name: MP28561-S1 Acquired: 2/17/2015 18:20:53 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0516	100.4	1.848	2.055	.0520	35.48	.0458	.4844	.3375	.2681
Stddev	.0004	.1	.002	.002	.0000	.04	.0001	.0002	.0005	.0003
%RSD	.8100	.0745	.1113	.0844	.0821	.1079	.2196	.0475	.1509	.1269
#1	.0521	100.4	1.850	2.056	.0520	35.50	.0459	.4842	.3376	.2685
#2	.0512	100.4	1.846	2.055	.0520	35.51	.0458	.4847	.3370	.2680
#3	.0515	100.3	1.848	2.053	.0521	35.44	.0457	.4844	.3380	.2678

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	141.8	27.53	26.12	.5176	.4630	28.23	.4885	.5232	.1617	1.824
Stddev	.1	.05	.07	.0005	.0004	.03	.0001	.0005	.0005	.004
%RSD	.0499	.1860	.2549	.0973	.0799	.1194	.0178	.0952	.3136	.2446
#1	141.9	27.59	26.09	.5181	.4626	28.27	.4885	.5230	.1621	1.827
#2	141.8	27.52	26.07	.5176	.4631	28.22	.4885	.5229	.1611	1.826
#3	141.7	27.49	26.20	.5171	.4634	28.21	.4884	.5238	.1619	1.819

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.554	.4932	.6273	.5195	1.917	.7300	.4959
Stddev	.001	.0012	.0015	.0008	.004	.0011	.0006
%RSD	.0471	.2405	.2331	.1529	.2275	.1554	.1119
#1	2.555	.4922	.6290	.5200	1.922	.7294	.4964
#2	2.553	.4927	.6262	.5201	1.914	.7313	.4953
#3	2.553	.4945	.6268	.5186	1.916	.7293	.4958

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1635.6	4895.2	29785.	3831.7
Stddev	4.8	12.3	105.	26.4
%RSD	.29541	.25211	.35243	.69008
#1	1630.3	4882.7	29733.	3842.2
#2	1636.8	4895.3	29715.	3801.6
#3	1639.7	4907.4	29905.	3851.2

Zoom In Zoom Out

Sample Name: MP28561-S2 Acquired: 2/17/2015 18:24:51 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0532	117.7	1.887	2.098	.0528	82.12	.0468	.4947	.3666	.2740
Stddev	.0005	.2	.003	.003	.0001	.12	.0002	.0005	.0016	.0007
%RSD	.9705	.1650	.1774	.1242	.2400	.1471	.3407	.0991	.4482	.2725
#1	.0538	117.6	1.883	2.096	.0527	82.02	.0468	.4951	.3683	.2748
#2	.0530	117.6	1.887	2.098	.0530	82.07	.0467	.4942	.3650	.2739
#3	.0528	118.0	1.890	2.101	.0527	82.25	.0470	.4947	.3666	.2733

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	159.3	28.23	26.73	.5323	.4703	28.71	.5008	.5389	.1617	1.864
Stddev	.2	.06	.10	.0006	.0006	.01	.0009	.0021	.0005	.004
%RSD	.1352	.2284	.3652	.1210	.1291	.0382	.1789	.3883	.2859	.2042
#1	159.1	28.16	26.82	.5329	.4705	28.70	.5013	.5380	.1614	1.868
#2	159.4	28.25	26.74	.5316	.4697	28.72	.4998	.5413	.1622	1.861
#3	159.5	28.29	26.62	.5325	.4709	28.71	.5014	.5375	.1615	1.864

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.864	.5026	.7003	.5393	1.953	.7870	.5054
Stddev	.004	.0006	.0010	.0010	.007	.0012	.0006
%RSD	.1321	.1111	.1447	.1902	.3695	.1466	.1213
#1	2.862	.5029	.7001	.5401	1.946	.7882	.5053
#2	2.861	.5020	.6995	.5382	1.961	.7859	.5049
#3	2.868	.5029	.7014	.5397	1.951	.7869	.5061

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1628.0	4866.8	29700.	3820.3
Stddev	3.2	6.2	158.	20.7
%RSD	.19649	.12792	.53202	.54196
#1	1630.0	4864.9	29629.	3813.1
#2	1624.3	4873.8	29881.	3804.1
#3	1629.7	4861.7	29589.	3843.6

Zoom In Zoom Out

Sample Name: FA22095-1 Acquired: 2/17/2015 18:28:50 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0031	59.17	.0204	.0722	.0009	50.39	-.0003	.0012	.1446	.0871
Stddev	.0005	.14	.0014	.0005	.0000	.10	.0000	.0001	.0005	.0006
%RSD	17.28	.2372	6.826	.6527	4.564	.1996	14.29	9.748	.3635	.6660
#1	.0028	59.02	.0217	.0718	.0009	50.33	-.0002	.0012	.1447	.0874
#2	.0037	59.19	.0189	.0727	.0009	50.33	-.0003	.0012	.1441	.0864
#3	.0027	59.30	.0206	.0720	.0010	50.50	-.0002	.0010	.1452	.0875

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	153.9	.3831	1.023	.0190	.0078	.4602	.0096	.0497	.0003	.0149
Stddev	.4	.0381	.017	.0001	.0002	.0049	.0001	.0004	.0001	.0017
%RSD	.2365	9.957	1.644	.7497	3.045	1.061	1.508	.8967	38.69	11.66
#1	153.5	.3874	1.013	.0190	.0080	.4618	.0094	.0492	.0004	.0141
#2	153.9	.4190	1.043	.0189	.0076	.4548	.0097	.0498	.0002	.0169
#3	154.3	.3430	1.014	.0192	.0080	.4642	.0097	.0500	.0004	.0137

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.424	.0227	.0858	.2847	-.0029	.3569	.0244
Stddev	.003	.0003	.0004	.0005	.0007	.0010	.0001
%RSD	.1386	1.296	.4193	.1821	24.66	.2667	.3182
#1	2.427	.0227	.0855	.2852	-.0029	.3577	.0244
#2	2.424	.0230	.0856	.2842	-.0037	.3559	.0245
#3	2.421	.0224	.0862	.2846	-.0022	.3573	.0243

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1674.5	4973.3	30654.	3892.7
Stddev	2.5	4.4	161.	11.9
%RSD	.15067	.08776	.52388	.30662
#1	1675.6	4976.6	30477.	3892.3
#2	1671.6	4968.4	30791.	3881.0
#3	1676.2	4975.0	30694.	3904.8

Zoom In Zoom Out

Sample Name: FA22095-2 Acquired: 2/17/2015 18:32:53 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0050	113.3	.0382	.0964	.0014	5.486	-.0040	.0021	.2687	.0079
Stddev	.0005	.2	.0007	.0002	.0001	.015	.0001	.0001	.0017	.0006
%RSD	9.068	.1770	1.733	.1599	4.658	.2649	2.220	5.771	.6359	7.286
#1	.0055	113.2	.0386	.0964	.0014	5.469	-.0040	.0020	.2705	.0073
#2	.0049	113.5	.0374	.0963	.0015	5.496	-.0041	.0022	.2671	.0083
#3	.0046	113.2	.0385	.0966	.0013	5.492	-.0040	.0020	.2686	.0083

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	251.1	.3428	1.282	.0061	.0134	.4568	.0162	.0527	-.0010	.0267
Stddev	.6	.0204	.030	.0001	.0003	.0038	.0002	.0007	.0010	.0016
%RSD	.2219	5.938	2.337	1.095	2.041	.8347	1.476	1.413	103.5	6.099
#1	250.5	.3368	1.282	.0062	.0133	.4542	.0159	.0521	-.0018	.0286
#2	251.5	.3261	1.312	.0061	.0137	.4612	.0164	.0525	-.0014	.0257
#3	251.3	.3655	1.252	.0061	.0132	.4551	.0161	.0535	.0002	.0258

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.537	.0229	.0643	.3798	-.0075	.5389	.0149
Stddev	.001	.0003	.0002	.0012	.0008	.0005	.0001
%RSD	.0523	1.199	.2430	.3143	11.25	.0931	.3385
#1	2.537	.0225	.0641	.3811	-.0084	.5394	.0148
#2	2.538	.0230	.0644	.3787	-.0075	.5384	.0149
#3	2.535	.0230	.0643	.3794	-.0067	.5391	.0149

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1697.3	5082.1	31357.	4000.5
Stddev	.7	6.7	95.	4.7
%RSD	.03887	.13263	.30377	.11644
#1	1698.0	5088.7	31247.	3997.6
#2	1696.6	5075.2	31421.	4005.9
#3	1697.3	5082.3	31403.	3998.0

Zoom In Zoom Out

Sample Name: FA22095-3 Acquired: 2/17/2015 18:36:57 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0054	134.5	.0541	.1140	.0016	4.133	-.0046	.0026	.3278	.0074
Stddev	.0002	.1	.0004	.0001	.0001	.020	.0001	.0000	.0009	.0002
%RSD	4.474	.0934	.7325	.1016	3.768	.4766	2.870	1.952	.2816	3.301
#1	.0051	134.6	.0540	.1140	.0017	4.134	-.0048	.0025	.3274	.0077
#2	.0056	134.4	.0545	.1138	.0016	4.113	-.0045	.0026	.3271	.0074
#3	.0056	134.5	.0538	.1140	.0016	4.152	-.0046	.0025	.3289	.0072

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	327.6	.4119	1.463	.0059	.0165	.4931	.0201	.0559	-.0022	.0321
Stddev	.5	.0176	.020	.0000	.0001	.0078	.0003	.0017	.0010	.0020
%RSD	.1496	4.273	1.337	.1892	.3811	1.587	1.561	2.961	44.73	6.154
#1	328.1	.4186	1.485	.0059	.0165	.4861	.0201	.0567	-.0016	.0344
#2	327.1	.4252	1.449	.0059	.0166	.5016	.0198	.0570	-.0016	.0310
#3	327.6	.3920	1.455	.0059	.0165	.4917	.0204	.0540	-.0033	.0310

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	2.989	.0238	.0711	.4079	-.0096	.6311	.0154
Stddev	.004	.0004	.0002	.0005	.0024	.0005	.0001
%RSD	.1250	1.670	.2671	.1267	24.93	.0716	.5607
#1	2.985	.0234	.0713	.4081	-.0103	.6308	.0154
#2	2.990	.0242	.0709	.4083	-.0116	.6309	.0153
#3	2.993	.0237	.0711	.4073	-.0070	.6316	.0154

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1690.2	5061.9	31469.	4001.8
Stddev	8.2	7.7	28.	31.5
%RSD	.48449	.15279	.08801	.78752
#1	1684.7	5061.2	31445.	3968.4
#2	1686.4	5054.5	31499.	4031.0
#3	1699.6	5069.9	31462.	4006.0

Zoom In Zoom Out

Sample Name: FA22095-6 Acquired: 2/17/2015 18:40:59 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	5.453	.0217	.0126	.0001	.3648	.0486	-.0002	.0105	.0175
Stddev	.0003	.012	.0006	.0000	.0001	.0033	.0002	.0000	.0001	.0004
%RSD	46.38	.2247	2.823	.3194	48.53	.9035	.3276	7.240	.8952	2.054
#1	.0009	5.458	.0221	.0126	.0002	.3662	.0485	-.0003	.0106	.0171
#2	.0003	5.439	.0210	.0126	.0001	.3673	.0486	-.0002	.0106	.0177
#3	.0007	5.462	.0221	.0125	.0001	.3611	.0488	-.0003	.0104	.0178

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	27.02	.0518	.0931	.0115	.0013	.0907	.0122	.0085	-.0002	.0020
Stddev	.00	.0104	.0169	.0001	.0000	.0051	.0001	.0003	.0013	.0011
%RSD	.0178	20.13	18.21	.4406	2.009	5.597	.7150	3.331	540.0	55.39
#1	27.02	.0586	.0765	.0115	.0013	.0962	.0121	.0084	-.0010	.0030
#2	27.03	.0569	.0923	.0114	.0012	.0862	.0123	.0088	-.0009	.0021
#3	27.02	.0398	.1104	.0115	.0013	.0898	.0122	.0082	.0012	.0008

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.031	.0201	.0064	.1727	-.0038	.1012	.0683
Stddev	.001	.0003	.0001	.0004	.0010	.0003	.0001
%RSD	.1064	1.294	1.207	.2547	26.38	.2616	.1496
#1	1.032	.0204	.0064	.1731	-.0048	.1009	.0681
#2	1.030	.0201	.0063	.1722	-.0028	.1014	.0683
#3	1.031	.0198	.0063	.1727	-.0037	.1013	.0683

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1674.9	5067.8	32106.	3924.8
Stddev	4.5	7.3	85.	22.5
%RSD	.26859	.14468	.26566	.57367
#1	1671.8	5059.9	32133.	3904.8
#2	1672.7	5069.1	32174.	3920.5
#3	1680.0	5074.4	32010.	3949.2

Zoom In Zoom Out

Sample Name: FA22095-7 Acquired: 2/17/2015 18:45:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	-.0001	1.815	.0229	.0121	.0000	3.013	.0059	.0085
Stddev	.0004	.013	.0110	.0003	.000	.016	.0013	.0041
%RSD	377.1	.7005	48.16	2.281	132.4	.5166	21.25	48.38
#1	-.0005	1.800	.0118	.0119	.0000	2.996	.0047	.0045
#2	.0004	1.824	.0231	.0122	.0000	3.017	.0059	.0083
#3	-.0002	1.820	.0338	.0124	-.0001	3.026	.0072	.0127

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.0070	.0087	4.448	.0674	.1464	.0079	.0181	.1516
Stddev	.0004	.0006	.012	.0306	.0103	.0002	.0094	.0090
%RSD	5.588	7.454	.2710	45.45	7.034	2.437	51.76	5.926
#1	.0067	.0088	4.439	.0567	.1362	.0077	.0090	.1616
#2	.0067	.0093	4.444	.0436	.1568	.0078	.0175	.1491
#3	.0074	.0080	4.462	.1020	.1461	.0081	.0277	.1442

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0132	.0448	F-.0156	.0530	.6706	.0703	.0087	.1137
Stddev	.0060	.0103	.0055	.0207	.0123	.0245	.0001	.0004
%RSD	45.08	22.90	35.41	39.08	1.829	34.79	.8803	.3867
#1	.0075	.0345	-.0102	.0318	.6574	.0464	.0087	.1142
#2	.0128	.0451	-.0153	.0542	.6729	.0693	.0087	.1133
#3	.0194	.0550	-.0212	.0732	.6816	.0953	.0086	.1137

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0338	.0135	.0440
Stddev	.0115	.0005	.0015
%RSD	33.98	3.977	3.437
#1	-.0218	.0139	.0427
#2	-.0347	.0138	.0437
#3	-.0447	.0129	.0457

Zoom In Zoom Out

Sample Name: FA22095-7 Acquired: 2/17/2015 18:45:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1553.4	4734.1	30626.	3811.0
Stddev	8.2	4.5	182.	72.3
%RSD	.52576	.09496	.59348	1.8977
#1	1547.9	4737.5	30731.	3884.8
#2	1549.6	4735.7	30731.	3807.8
#3	1562.8	4729.0	30416.	3740.3

Zoom In Zoom Out

Sample Name: FA22095-8 Acquired: 2/17/2015 18:49:06 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	12.07	.0131	.0159	.0001	1.560	.0008	.0001	.0205	.0072
Stddev	.0003	.06	.0010	.0002	.0001	.010	.0000	.0002	.0006	.0003
%RSD	78.31	.4595	7.281	1.154	72.17	.6156	3.679	188.2	3.039	4.499
#1	.0001	12.05	.0138	.0157	.0002	1.556	.0008	-.0001	.0198	.0075
#2	.0007	12.03	.0135	.0161	.0001	1.552	.0008	.0003	.0210	.0068
#3	.0005	12.14	.0120	.0160	.0001	1.570	.0008	.0001	.0208	.0072

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	33.93	.0812	.2083	.0049	.0020	.6091	.0087	.0132	.0001	.0046
Stddev	.20	.0138	.0203	.0000	.0002	.0033	.0002	.0007	.0007	.0006
%RSD	.5935	17.01	9.746	.8594	10.21	.5447	2.829	5.219	1312.	13.05
#1	33.85	.0654	.1849	.0048	.0020	.6072	.0086	.0131	-.0006	.0042
#2	33.79	.0872	.2207	.0049	.0018	.6072	.0089	.0139	.0007	.0044
#3	34.16	.0909	.2194	.0049	.0022	.6130	.0085	.0125	.0001	.0053

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.025	.0203	.0146	.1760	-.0033	.0676	.0250
Stddev	.002	.0004	.0001	.0001	.0010	.0001	.0000
%RSD	.2349	2.124	.5653	.0813	31.00	.1739	.1365
#1	1.028	.0208	.0145	.1758	-.0039	.0678	.0250
#2	1.023	.0202	.0146	.1761	-.0022	.0675	.0250
#3	1.025	.0200	.0147	.1760	-.0040	.0676	.0250

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1684.5	5067.0	31775.	3915.3
Stddev	.9	9.4	43.	35.8
%RSD	.05422	.18529	.13525	.91480
#1	1683.6	5057.8	31737.	3914.6
#2	1685.4	5076.5	31822.	3951.5
#3	1684.6	5066.7	31767.	3879.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:53:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2515	41.38	1.907	1.990	1.996	41.18	1.980	1.964	2.101	2.010
Stddev	.0005	.08	.005	.000	.003	.08	.003	.002	.004	.002
%RSD	.2123	.1941	.2473	.0109	.1338	.2026	.1385	.1213	.2159	.0904
#1	.2517	41.29	1.902	1.990	1.993	41.10	1.977	1.961	2.101	2.012
#2	.2518	41.44	1.912	1.990	1.999	41.27	1.981	1.964	2.105	2.010
#3	.2508	41.42	1.906	1.990	1.996	41.17	1.982	1.966	2.096	2.008

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.43	41.82	39.67	2.054	1.931	42.40	1.929	1.980	1.904	1.916
Stddev	.09	.07	.13	.004	.009	.06	.004	.002	.007	.007
%RSD	.2404	.1751	.3172	.1792	.4918	.1303	.1973	.0830	.3484	.3499
#1	39.32	41.74	39.57	2.054	1.920	42.34	1.925	1.982	1.896	1.909
#2	39.50	41.87	39.81	2.058	1.933	42.45	1.931	1.979	1.909	1.922
#3	39.46	41.86	39.63	2.050	1.939	42.41	1.931	1.980	1.907	1.919

Check ? Chk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.354	1.905	2.048	2.033	1.968	1.995	1.989
Stddev	.001	.005	.003	.003	.005	.002	.003
%RSD	.0840	.2396	.1569	.1517	.2466	.0847	.1368
#1	1.353	1.900	2.044	2.035	1.964	1.994	1.986
#2	1.355	1.908	2.050	2.034	1.967	1.997	1.989
#3	1.354	1.907	2.049	2.029	1.973	1.994	1.991

Check ? None Chk PassChk PassChk PassChk PassChk PassChk Pass
Value
Range

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 18:53:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1617.0	4803.3	30241.	3737.4
Stddev	1.1	4.8	74.	8.7
%RSD	.07031	.10097	.24309	.23207
#1	1616.7	4808.0	30283.	3742.6
#2	1618.3	4803.7	30156.	3727.4
#3	1616.1	4798.3	30285.	3742.1

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:57:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0044	.0006	.0003	.0001	.0005	.0001	.0002	.0001
Stddev	.0002	.0057	.0009	.0004	.0001	.0043	.0001	.0001	.0002
%RSD	78.46	130.9	162.0	140.5	133.2	854.7	70.89	40.54	362.3
#1	-.0004	.0062	-.0005	.0000	.0001	-.0022	.0001	.0001	.0002
#2	-.0002	-.0020	.0012	.0001	.0002	-.0018	.0002	.0002	-.0002
#3	-.0001	.0090	.0010	.0007	.0000	.0055	.0000	.0003	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0433	.0237	.0220	.0001	F.0043	.0108	-.0001	.0000
Stddev	.0004	.0097	.0229	.0338	.0000	.0012	.0114	.0001	.000
%RSD	475.2	22.34	96.29	153.6	20.11	26.94	105.5	170.0	2120.
#1	.0006	.0544	.0484	-.0169	.0001	.0056	.0092	.0001	-.0002
#2	-.0003	.0388	.0033	.0389	.0001	.0041	.0003	-.0001	.0003
#3	.0000	.0366	.0195	.0441	.0001	.0033	.0229	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0009	.0008	.0007	.0002	.0013	.0002	-.0001	.0003
Stddev	.0017	.0016	.0004	.0002	.0001	.0002	.0013	.0001	.0000
%RSD	109.4	173.4	46.55	29.05	35.82	12.15	681.9	37.75	17.08
#1	.0029	-.0002	.0005	.0007	.0002	.0014	.0017	-.0001	.0002
#2	-.0003	.0027	.0012	.0009	.0001	.0014	-.0009	-.0001	.0003
#3	.0020	.0002	.0008	.0005	.0002	.0011	-.0002	-.0002	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 18:57:10 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1679.1	4995.5	31439.	3780.2
Stddev	3.7	6.8	109.	14.4
%RSD	.22167	.13687	.34813	.38027
#1	1683.2	5003.3	31320.	3778.2
#2	1678.4	4992.2	31460.	3766.9
#3	1675.8	4990.9	31536.	3795.4

Zoom In Zoom Out

Sample Name: FA22095-9 Acquired: 2/17/2015 19:01:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0120	92.27	.0482	.1911	.0010	1.309	-.0025	.0030
Stddev	.0004	.22	.0005	.0005	.0001	.006	.0000	.0001
%RSD	3.673	.2413	.9848	.2475	4.895	.4615	1.946	2.800
#1	.0115	92.02	.0486	.1916	.0010	1.302	-.0024	.0031
#2	.0123	92.43	.0477	.1908	.0011	1.313	-.0025	.0031
#3	.0122	92.36	.0484	.1908	.0010	1.311	-.0025	.0029

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2492	.0074	200.3	.6894	3.227	.0093	.0093	1.350
Stddev	.0006	.0001	.4	.0122	.024	.0000	.0000	.003
%RSD	.2339	1.493	.2124	1.769	.7507	.3510	.1112	.2306
#1	.2486	.0076	199.8	.6754	3.200	.0094	.0093	1.354
#2	.2497	.0074	200.5	.6949	3.247	.0093	.0093	1.348
#3	.2493	.0074	200.5	.6979	3.234	.0093	.0093	1.349

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0140	.1159	.0015	.0121	1.546	.0186	.1560	.1346
Stddev	.0001	.0004	.0014	.0008	.001	.0005	.0003	.0005
%RSD	.6297	.3179	96.51	6.698	.0308	2.433	.1815	.3493
#1	.0139	.1162	-.0001	.0127	1.546	.0186	.1559	.1342
#2	.0141	.1155	.0027	.0112	1.546	.0190	.1564	.1351
#3	.0140	.1161	.0018	.0125	1.546	.0181	.1559	.1344

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0454	1.528	.0248
Stddev	.0020	.007	.0000
%RSD	4.329	.4431	.1620
#1	-.0444	1.523	.0248
#2	-.0441	1.536	.0248
#3	-.0477	1.525	.0248

Zoom In Zoom Out

Sample Name: FA22095-9 Acquired: 2/17/2015 19:01:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1690.0	6733.8	41886.	5291.5
Stddev	1.1	3.1	240.	29.1
%RSD	.06521	.04560	.57404	.55045
#1	1690.0	6736.7	42096.	5325.1
#2	1691.1	6734.2	41624.	5275.5
#3	1688.9	6730.6	41939.	5273.9

Zoom In Zoom Out

Sample Name: FA22095-10 Acquired: 2/17/2015 19:05:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Avg	.0124	114.3	.0351	.2450	.0013	1.226	-.0015	.0036
Stddev	.0003	.3	.0008	.0006	.0000	.001	.0001	.0000
%RSD	2.786	.2365	2.144	.2544	2.252	.1073	5.167	1.285
#1	.0127	114.7	.0357	.2457	.0013	1.226	-.0016	.0036
#2	.0125	114.2	.0343	.2449	.0013	1.227	-.0015	.0036
#3	.0120	114.2	.0353	.2444	.0012	1.224	-.0014	.0037

Elem	Cr2677	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Avg	.2627	.0051	133.7	.6046	3.750	.0113	.0067	1.242
Stddev	.0018	.0001	.4	.0250	.010	.0000	.0001	.010
%RSD	.6754	1.976	.2620	4.139	.2549	.2265	1.108	.8015
#1	.2626	.0052	134.1	.6239	3.741	.0113	.0066	1.249
#2	.2645	.0051	133.5	.6135	3.760	.0113	.0067	1.246
#3	.2610	.0050	133.5	.5763	3.750	.0113	.0067	1.230

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)
Avg	.0161	.1782	-.0002	.0098	1.480	.0167	.1868	.1386
Stddev	.0003	.0009	.0008	.0012	.001	.0002	.0006	.0006
%RSD	1.556	.5111	498.1	12.36	.0444	1.229	.3369	.4004
#1	.0161	.1782	-.0010	.0112	1.480	.0167	.1874	.1392
#2	.0158	.1792	.0001	.0093	1.480	.0169	.1862	.1387
#3	.0163	.1773	.0004	.0090	1.481	.0165	.1867	.1381

Elem	Tl1908	V_2924	Zn2062
IS Ref	(In2306)	(Y_3600)	(Y_2243)
Avg	F-.0579	1.606	.0184
Stddev	.0022	.006	.0001
%RSD	3.882	.3880	.3040
#1	-.0568	1.606	.0184
#2	-.0605	1.613	.0184
#3	-.0564	1.600	.0183

Zoom In Zoom Out

Sample Name: FA22095-10 Acquired: 2/17/2015 19:05:26 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1681.2	7341.9	45859.	5874.3
Stddev	4.8	11.8	196.	36.9
%RSD	.28552	.16082	.42659	.62850
#1	1675.9	7335.8	45874.	5831.7
#2	1682.3	7334.4	45657.	5894.5
#3	1685.3	7355.5	46047.	5896.8

Zoom In Zoom Out

Sample Name: FA22134-2 Acquired: 2/17/2015 19:09:28 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	25.18	.0013	.0306	.0002	.8490	.0000	.0007	.0245	.0041
Stddev	.0001	.08	.0000	.0002	.0000	.0060	.000	.0001	.0001	.0001
%RSD	86.26	.3214	3.759	.6294	17.40	.7074	185.2	7.582	.3632	1.354
#1	.0000	25.18	.0013	.0306	.0002	.8544	.0000	.0007	.0244	.0041
#2	.0002	25.10	.0014	.0308	.0001	.8499	-.0001	.0007	.0245	.0041
#3	.0003	25.26	.0013	.0305	.0001	.8425	.0000	.0008	.0245	.0040

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.746	.3132	.5637	.0118	.0008	.1328	.0097	.0790	.0007	.0010
Stddev	.033	.0209	.0339	.0001	.0000	.0067	.0002	.0011	.0001	.0023
%RSD	1.217	6.681	6.009	.7230	2.224	5.033	1.753	1.438	11.41	234.5
#1	2.778	.3289	.5936	.0118	.0008	.1305	.0099	.0784	.0006	.0006
#2	2.749	.2895	.5707	.0119	.0008	.1276	.0097	.0783	.0007	.0035
#3	2.711	.3214	.5269	.0118	.0008	.1404	.0095	.0803	.0008	-.0011

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.398	.0202	.0599	.3493	-.0035	.0150	.0107
Stddev	.001	.0003	.0001	.0005	.0017	.0002	.0000
%RSD	.0347	1.548	.1825	.1359	47.21	1.505	.1647
#1	1.398	.0200	.0599	.3492	-.0022	.0148	.0107
#2	1.398	.0206	.0597	.3498	-.0029	.0152	.0107
#3	1.397	.0200	.0599	.3489	-.0054	.0149	.0107

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1678.1	4983.4	31238.	3900.6
Stddev	4.7	8.2	80.	9.2
%RSD	.28167	.16395	.25471	.23533
#1	1681.9	4986.1	31173.	3900.3
#2	1672.8	4974.2	31215.	3909.9
#3	1679.5	4989.8	31327.	3891.6

Zoom In Zoom Out

Sample Name: FA22134-3 Acquired: 2/17/2015 19:13:35 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0008	48.79	.0043	.0860	.0008	5.492	.0000	.0016	.0495	.0185
Stddev	.0003	.09	.0004	.0001	.0000	.013	.000	.0002	.0002	.0003
%RSD	40.08	.1932	9.833	.1107	.8515	.2409	175.5	10.80	.3714	1.820
#1	.0005	48.80	.0039	.0859	.0008	5.492	.0000	.0014	.0496	.0183
#2	.0011	48.68	.0044	.0860	.0008	5.479	-.0001	.0017	.0493	.0189
#3	.0007	48.87	.0047	.0861	.0008	5.505	.0000	.0017	.0496	.0182

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	8.686	.6765	1.028	.0176	.0015	.4014	.0141	1.009	.0029	.0038
Stddev	.028	.0153	.024	.0001	.0001	.0070	.0001	.001	.0007	.0021
%RSD	.3219	2.258	2.352	.3343	4.594	1.733	.7345	.1270	24.41	54.73
#1	8.680	.6800	1.009	.0176	.0014	.4041	.0141	1.008	.0032	.0014
#2	8.661	.6897	1.055	.0176	.0014	.3935	.0140	1.010	.0021	.0050
#3	8.716	.6597	1.019	.0175	.0015	.4066	.0142	1.008	.0034	.0051

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.570	.0203	.3178	.3666	-.0031	.0274	.0176
Stddev	.003	.0002	.0004	.0004	.0014	.0003	.0001
%RSD	.2014	.9631	.1125	.1171	43.69	1.030	.5385
#1	1.567	.0202	.3176	.3671	-.0030	.0272	.0175
#2	1.573	.0201	.3175	.3666	-.0045	.0277	.0176
#3	1.571	.0205	.3182	.3662	-.0018	.0272	.0177

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.3	5168.6	32093.	4048.6
Stddev	3.0	6.0	133.	12.7
%RSD	.18086	.11540	.41537	.31346
#1	1673.5	5171.4	32105.	4035.7
#2	1670.2	5161.7	31954.	4061.0
#3	1676.3	5172.6	32220.	4049.1

Zoom In Zoom Out

Sample Name: FA22134-4 Acquired: 2/17/2015 19:17:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0007	53.52	.0024	.0623	.0003	1.920	-.0002	.0039	.0443	.0063
Stddev	.0003	.17	.0009	.0004	.0001	.018	.0001	.0001	.0003	.0002
%RSD	36.94	.3263	36.67	.6410	28.07	.9504	29.14	3.079	.6229	3.191
#1	.0006	53.40	.0035	.0623	.0004	1.905	-.0002	.0038	.0445	.0062
#2	.0011	53.44	.0018	.0618	.0002	1.914	-.0001	.0039	.0440	.0063
#3	.0006	53.72	.0021	.0626	.0004	1.940	-.0002	.0040	.0444	.0066

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.985	.5933	1.059	.0186	.0011	.1534	.0257	.1856	.0008	.0044
Stddev	.028	.0127	.029	.0001	.0001	.0035	.0002	.0007	.0005	.0013
%RSD	.5671	2.145	2.779	.4702	9.396	2.308	.8025	.3830	63.07	30.57
#1	4.971	.5800	1.025	.0186	.0012	.1532	.0255	.1853	.0004	.0030
#2	4.966	.5946	1.080	.0185	.0010	.1499	.0256	.1864	.0013	.0045
#3	5.018	.6054	1.072	.0187	.0010	.1570	.0259	.1851	.0006	.0057

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.613	.0201	.1015	.3837	-.0022	.0271	.0157
Stddev	.001	.0001	.0003	.0003	.0011	.0004	.0000
%RSD	.0584	.6983	.2899	.0877	49.87	1.436	.2585
#1	1.614	.0200	.1012	.3835	-.0033	.0271	.0157
#2	1.613	.0203	.1016	.3835	-.0022	.0268	.0156
#3	1.612	.0202	.1017	.3841	-.0011	.0275	.0157

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1679.0	5013.3	31240.	3905.5
Stddev	3.3	6.6	42.	16.3
%RSD	.19926	.13246	.13457	.41651
#1	1675.4	5005.8	31193.	3920.9
#2	1679.6	5015.2	31253.	3907.1
#3	1682.0	5018.7	31274.	3888.5

Zoom In Zoom Out

Sample Name: FA22134-5 Acquired: 2/17/2015 19:21:44 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0005	47.89	.0135	.0408	.0002	2.689	.0003	.0011	.0470
Stddev	.0004	.14	.0005	.0003	.0001	.009	.0001	.0001	.0002
%RSD	83.04	.2923	3.977	.7941	32.68	.3233	15.06	9.823	.4781
#1	.0001	47.84	.0129	.0405	.0002	2.691	.0003	.0010	.0471
#2	.0004	48.05	.0135	.0408	.0002	2.696	.0004	.0012	.0467
#3	.0009	47.78	.0140	.0411	.0001	2.679	.0003	.0011	.0472

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.3119	3.514	.6166	1.276	.0329	.0012	.1536	.0165	F47.70
Stddev	.0002	.009	.0134	.014	.0000	.0001	.0029	.0002	.13
%RSD	.0682	.2645	2.165	1.087	.1333	10.09	1.868	1.111	.2656
#1	.3117	3.509	.6068	1.263	.0328	.0011	.1567	.0167	47.80
#2	.3121	3.524	.6112	1.290	.0329	.0013	.1531	.0165	47.56
#3	.3119	3.507	.6318	1.276	.0328	.0011	.1510	.0163	47.74

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0384	.0054	1.168	.0466	.0606	.2260	-.0028	.0248	.0530
Stddev	.0012	.0006	.003	.0005	.0001	.0003	.0021	.0002	.0001
%RSD	3.133	11.02	.2588	1.086	.1341	.1144	73.49	.7431	.1050
#1	.0383	.0053	1.166	.0461	.0605	.2258	-.0042	.0249	.0531
#2	.0397	.0060	1.167	.0470	.0607	.2260	-.0004	.0246	.0530
#3	.0373	.0048	1.172	.0468	.0605	.2263	-.0039	.0250	.0530

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1696.4	5036.2	31983.	3980.9
Stddev	6.6	15.8	52.	34.4
%RSD	.38698	.31321	.16306	.86363
#1	1690.9	5029.4	31994.	3977.6
#2	1703.6	5054.2	31926.	3948.3
#3	1694.5	5024.9	32029.	4016.8

Zoom In Zoom Out

Sample Name: FA22134-6 Acquired: 2/17/2015 19:25:49 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0000	29.89	.0014	.0308	.0002	.2161	-.0002	.0008	.0256	.0033
Stddev	.000	.11	.0002	.0003	.0001	.0036	.0000	.0001	.0004	.0004
%RSD	1456.	.3666	10.60	.9371	47.99	1.674	20.61	16.29	1.490	10.89
#1	-.0003	29.96	.0014	.0310	.0002	.2193	-.0002	.0009	.0258	.0037
#2	-.0001	29.76	.0013	.0305	.0001	.2168	-.0002	.0008	.0258	.0030
#3	.0004	29.94	.0016	.0310	.0001	.2122	-.0002	.0007	.0251	.0032

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	2.282	.2584	.4421	.0080	.0007	.1633	.0093	.0560	.0275	.0043
Stddev	.023	.0438	.0136	.0001	.0000	.0044	.0001	.0002	.0013	.0006
%RSD	1.010	16.96	3.078	.6331	4.431	2.672	.5818	.2884	4.746	13.53
#1	2.294	.2159	.4540	.0079	.0008	.1658	.0093	.0559	.0290	.0039
#2	2.255	.2557	.4451	.0080	.0007	.1582	.0092	.0560	.0271	.0041
#3	2.296	.3035	.4273	.0080	.0007	.1657	.0093	.0562	.0265	.0050

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.294	.0203	.0336	.3232	-.0026	.0166	.0069
Stddev	.001	.0004	.0001	.0001	.0006	.0005	.0001
%RSD	.0417	2.004	.2575	.0436	21.00	3.214	1.497
#1	1.294	.0202	.0337	.3232	-.0026	.0162	.0068
#2	1.294	.0207	.0335	.3230	-.0032	.0164	.0070
#3	1.295	.0199	.0337	.3233	-.0021	.0172	.0069

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1680.9	4990.3	31540.	3931.3
Stddev	4.6	11.1	147.	24.2
%RSD	.27081	.22300	.46702	.61653
#1	1678.5	4983.1	31402.	3924.7
#2	1678.1	4984.7	31523.	3958.2
#3	1686.2	5003.1	31695.	3911.1

Zoom In Zoom Out

Sample Name: FA22134-7 Acquired: 2/17/2015 19:29:56 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0007	20.04	.1047	.0848	.0002	13.91	.0000	.0011	.0283
Stddev	.0005	.12	.0009	.0006	.0001	.10	.0000	.0001	.0003
%RSD	66.64	.6020	.8811	.6624	33.91	.7114	159.0	5.380	1.217
#1	.0008	19.93	.1055	.0844	.0001	13.85	.0000	.0012	.0281
#2	.0002	20.17	.1050	.0854	.0003	14.03	.0000	.0011	.0287
#3	.0011	20.03	.1037	.0846	.0003	13.86	.0000	.0011	.0281

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	1.423	3.646	.7715	1.189	.0191	.0008	.1524	.0098	F18.54
Stddev	.005	.030	.0409	.025	.0000	.0001	.0032	.0000	.06
%RSD	.3685	.8273	5.304	2.127	.2521	7.814	2.128	.3333	.3143
#1	1.429	3.611	.7465	1.217	.0191	.0008	.1500	.0098	18.48
#2	1.422	3.663	.8187	1.167	.0192	.0007	.1561	.0098	18.57
#3	1.419	3.664	.7493	1.183	.0192	.0009	.1511	.0099	18.59

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.1471	.0035	1.562	.0394	.3163	.1946	-.0018	.0181	.2186
Stddev	.0006	.0009	.002	.0002	.0013	.0005	.0008	.0002	.0001
%RSD	.4177	26.42	.1296	.6037	.4001	.2479	44.15	.9686	.0442
#1	.1465	.0036	1.560	.0392	.3150	.1951	-.0014	.0182	.2187
#2	.1469	.0026	1.564	.0394	.3175	.1946	-.0028	.0179	.2185
#3	.1477	.0044	1.563	.0397	.3163	.1941	-.0014	.0182	.2185

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1676.0	5055.4	31633.	3956.3
Stddev	5.8	7.8	94.	26.5
%RSD	.34805	.15435	.29619	.67034
#1	1682.7	5063.9	31529.	3972.8
#2	1672.5	5048.6	31711.	3925.7
#3	1672.8	5053.6	31659.	3970.4

Zoom In Zoom Out

Sample Name: FA22134-8 Acquired: 2/17/2015 19:34:00 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0002	30.59	.0602	.0857	.0003	13.97	.0000	.0014	.0722	.2814
Stddev	.0003	.05	.0003	.0005	.0000	.02	.000	.0001	.0004	.0009
%RSD	114.2	.1759	.4496	.5687	14.83	.1613	793.5	7.499	.5614	.3279
#1	.0004	30.53	.0600	.0855	.0004	13.95	.0000	.0015	.0717	.2818
#2	-.0001	30.63	.0601	.0863	.0003	14.00	-.0001	.0013	.0723	.2803
#3	.0003	30.60	.0605	.0854	.0003	13.96	.0000	.0014	.0724	.2821

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	4.732	.8610	1.381	.0217	.0015	.2728	.0119	2.977	.0267	.0035
Stddev	.018	.0282	.019	.0000	.0001	.0083	.0003	.005	.0028	.0011
%RSD	.3721	3.271	1.404	.1752	6.554	3.040	2.391	.1737	10.40	30.16
#1	4.729	.8930	1.366	.0217	.0016	.2632	.0116	2.972	.0269	.0026
#2	4.750	.8397	1.403	.0218	.0015	.2780	.0120	2.978	.0239	.0047
#3	4.715	.8504	1.374	.0217	.0014	.2771	.0121	2.982	.0294	.0033

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.730	.0251	.4038	.2551	-.0021	.0248	.0933
Stddev	.003	.0002	.0007	.0007	.0002	.0003	.0001
%RSD	.1489	.6811	.1846	.2672	7.514	1.202	.0726
#1	1.733	.0252	.4030	.2557	-.0019	.0245	.0934
#2	1.728	.0249	.4045	.2544	-.0022	.0250	.0933
#3	1.728	.0252	.4037	.2551	-.0022	.0249	.0933

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1679.6	5073.6	31934.	3991.7
Stddev	2.7	3.2	78.	17.5
%RSD	.16074	.06234	.24488	.43884
#1	1682.4	5071.8	31884.	3988.2
#2	1679.3	5071.8	31894.	4010.7
#3	1677.1	5077.3	32024.	3976.2

Zoom In Zoom Out

Sample Name: FA22134-9 Acquired: 2/17/2015 19:38:04 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0009	26.53	.0745	.0916	.0004	18.32	.0002	.0012	.0718
Stddev	.0005	.01	.0013	.0004	.0000	.01	.0000	.0001	.0004
%RSD	53.04	.0426	1.746	.4033	7.784	.0428	17.82	10.05	.5725
#1	.0013	26.52	.0751	.0912	.0004	18.31	.0002	.0012	.0722
#2	.0004	26.52	.0730	.0917	.0003	18.32	.0002	.0011	.0719
#3	.0009	26.54	.0753	.0919	.0004	18.33	.0003	.0013	.0714

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7191	5.728	.7952	1.767	.0462	.0016	.2868	.0298	F18.97
Stddev	.0016	.022	.0142	.019	.0000	.0001	.0093	.0000	.04
%RSD	.2199	.3913	1.788	1.084	.0768	6.542	3.250	.0609	.1923
#1	.7206	5.712	.7789	1.776	.0462	.0016	.2882	.0297	19.01
#2	.7193	5.718	.8020	1.745	.0462	.0016	.2953	.0298	18.95
#3	.7175	5.754	.8048	1.779	.0462	.0014	.2768	.0298	18.95

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0930	.0032	1.749	.0567	.2984	.2369	-.0011	.0280	.3216
Stddev	.0021	.0009	.001	.0006	.0002	.0005	.0019	.0003	.0001
%RSD	2.261	27.60	.0361	1.003	.0708	.1913	169.1	.9370	.0364
#1	.0906	.0023	1.749	.0567	.2982	.2374	.0006	.0282	.3215
#2	.0942	.0033	1.748	.0572	.2986	.2369	-.0008	.0277	.3216
#3	.0942	.0041	1.749	.0561	.2983	.2365	-.0031	.0282	.3217

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.2	5053.1	31792.	3961.8
Stddev	5.0	7.5	155.	19.5
%RSD	.29629	.14772	.48646	.49272
#1	1667.7	5047.0	31779.	3952.3
#2	1677.3	5061.4	31645.	3984.3
#3	1674.6	5050.7	31953.	3948.8

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 19:42:07 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2492	41.37	1.889	1.986	1.994	41.19	1.962	1.948	2.072	1.988
Stddev	.0009	.09	.002	.004	.004	.09	.002	.002	.003	.001
%RSD	.3562	.2295	.1242	.2168	.1938	.2297	.0894	.1030	.1290	.0718
#1	.2482	41.45	1.886	1.984	1.998	41.29	1.960	1.946	2.073	1.986
#2	.2495	41.38	1.890	1.984	1.991	41.12	1.962	1.948	2.069	1.989
#3	.2499	41.27	1.890	1.991	1.994	41.14	1.964	1.950	2.073	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.33	41.99	39.69	2.038	1.918	42.55	1.915	1.973	1.894	1.900
Stddev	.04	.14	.19	.003	.009	.12	.002	.005	.003	.004
%RSD	.0962	.3286	.4791	.1612	.4540	.2770	.0832	.2322	.1454	.2296
#1	39.30	42.12	39.90	2.042	1.909	42.68	1.913	1.970	1.891	1.896
#2	39.31	41.84	39.53	2.036	1.919	42.52	1.915	1.978	1.895	1.905
#3	39.37	42.01	39.63	2.037	1.927	42.45	1.916	1.971	1.895	1.900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.343	1.885	2.050	2.015	1.956	1.972	1.971
Stddev	.004	.003	.004	.000	.003	.005	.001
%RSD	.2762	.1565	.1686	.0175	.1567	.2797	.0624
#1	1.339	1.882	2.053	2.015	1.954	1.967	1.969
#2	1.344	1.886	2.046	2.016	1.954	1.970	1.971
#3	1.347	1.888	2.050	2.015	1.960	1.978	1.972
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 19:42:07 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1629.3	4853.1	30578.	3728.5
Stddev	1.8	5.9	51.	22.8
%RSD	.11189	.12063	.16771	.61179
#1	1627.3	4853.5	30599.	3702.3
#2	1629.7	4858.7	30616.	3739.9
#3	1630.9	4847.0	30520.	3743.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 19:46:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0090	.0003	.0001	.0001	.0012	.0001	.0002	.0000
Stddev	.0002	.0090	.0002	.0004	.0001	.0023	.0001	.0001	.0004
%RSD	49.26	100.6	72.99	665.0	84.31	192.4	118.0	44.76	982.5
#1	.0002	.0194	.0005	-.0004	.0000	-.0012	.0001	.0002	-.0001
#2	.0006	.0040	.0001	.0003	.0001	.0035	.0000	.0003	-.0003
#3	.0003	.0036	.0003	.0002	.0002	.0014	.0001	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0421	.0453	-.0115	.0001	F.0042	.0080	.0000	.0009
Stddev	.0002	.0120	.0398	.0109	.0000	.0013	.0032	.0001	.0001
%RSD	458.1	28.50	87.81	95.06	45.37	30.67	40.33	721.3	16.77
#1	.0003	.0559	.0366	-.0220	.0001	.0056	.0048	.0001	.0011
#2	.0000	.0365	.0106	-.0002	.0001	.0041	.0113	.0000	.0008
#3	-.0001	.0339	.0887	-.0122	.0000	.0030	.0079	.0000	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0010			
Low Limit						-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0004	.0009	.0007	.0001	.0017	.0003	-.0003	.0002
Stddev	.0008	.0015	.0002	.0004	.0000	.0001	.0006	.0002	.0000
%RSD	42.84	405.4	20.34	63.49	49.27	3.773	188.5	62.56	7.898
#1	.0010	.0009	.0011	.0005	.0001	.0018	.0001	-.0006	.0002
#2	.0020	.0016	.0009	.0012	.0000	.0017	.0010	-.0003	.0003
#3	.0025	-.0013	.0007	.0003	.0001	.0017	-.0001	-.0001	.0002
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 19:46:04 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1684.1	5000.5	31541.	3779.1
Stddev	2.5	5.7	72.	30.3
%RSD	.15109	.11336	.22848	.80119
#1	1687.1	5005.4	31543.	3769.3
#2	1682.3	4994.3	31612.	3813.1
#3	1683.1	5001.7	31468.	3755.0

Zoom In Zoom Out

Sample Name: FA22134-10 Acquired: 2/17/2015 19:50:17 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0004	26.02	.0131	.0727	.0004	8.657	.0000	.0009	.0357	.3487
Stddev	.0002	.04	.0011	.0003	.0000	.010	.0000	.0001	.0001	.0010
%RSD	35.92	.1461	8.661	.4036	7.660	.1147	433.1	11.53	.3358	.2920
#1	.0006	26.05	.0117	.0727	.0005	8.661	.0000	.0011	.0358	.3479
#2	.0003	25.98	.0137	.0724	.0004	8.664	.0000	.0009	.0356	.3484
#3	.0005	26.03	.0137	.0730	.0004	8.646	.0000	.0009	.0356	.3499

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	7.967	.4932	1.100	.0307	.0031	.1908	.0118	2.003	.0144	.0029
Stddev	.008	.0178	.030	.0002	.0002	.0049	.0002	.002	.0011	.0011
%RSD	.0950	3.617	2.738	.5769	5.390	2.571	1.825	.1219	7.640	37.17
#1	7.974	.5072	1.090	.0308	.0031	.1959	.0118	2.002	.0148	.0040
#2	7.959	.4992	1.076	.0308	.0033	.1862	.0116	2.002	.0152	.0019
#3	7.967	.4731	1.133	.0305	.0029	.1903	.0120	2.006	.0131	.0028

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.674	.0279	.2911	.2937	-.0021	.0263	.1572
Stddev	.001	.0006	.0004	.0003	.0012	.0003	.0003
%RSD	.0376	2.086	.1216	.1010	58.03	1.063	.2216
#1	1.674	.0280	.2913	.2939	-.0008	.0260	.1571
#2	1.675	.0272	.2907	.2934	-.0023	.0266	.1569
#3	1.674	.0284	.2912	.2938	-.0033	.0263	.1576

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1676.6	5030.5	31634.	3957.1
Stddev	3.3	10.8	97.	33.3
%RSD	.19700	.21383	.30516	.84068
#1	1675.5	5028.2	31543.	3942.6
#2	1680.3	5042.2	31625.	3933.6
#3	1674.0	5021.1	31735.	3995.2

Zoom In Zoom Out

Sample Name: FA22134-11 Acquired: 2/17/2015 19:54:22 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	25.52	.0818	.1166	.0004	27.70	.0004	.0015	.1031
Stddev	.0004	.08	.0001	.0003	.0001	.08	.0000	.0001	.0005
%RSD	117.4	.3169	.1095	.2249	17.47	.2825	9.598	6.233	.4516
#1	-.0001	25.50	.0819	.1166	.0005	27.68	.0004	.0016	.1036
#2	.0008	25.45	.0817	.1164	.0004	27.64	.0004	.0014	.1028
#3	.0004	25.61	.0818	.1169	.0004	27.79	.0004	.0014	.1028

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.7278	6.536	.6893	2.385	.0869	.0026	.1854	.0163	F9.958
Stddev	.0022	.016	.0155	.033	.0003	.0001	.0016	.0001	.039
%RSD	.3056	.2396	2.245	1.385	.2978	2.541	.8409	.4596	.3948
#1	.7303	6.548	.6820	2.357	.0872	.0027	.1840	.0163	9.941
#2	.7270	6.518	.6788	2.377	.0867	.0026	.1871	.0164	9.931
#3	.7261	6.542	.7071	2.422	.0868	.0025	.1851	.0163	10.00

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0285	.0050	1.259	.0314	.4393	.3013	-.0004	.0284	.9213
Stddev	.0008	.0003	.001	.0001	.0008	.0003	.0005	.0002	.0015
%RSD	2.770	5.425	.1015	.2804	.1750	.1089	108.4	.7108	.1576
#1	.0284	.0051	1.260	.0314	.4387	.3016	-.0007	.0283	.9214
#2	.0293	.0052	1.258	.0313	.4390	.3011	.0001	.0286	.9199
#3	.0277	.0047	1.259	.0315	.4401	.3010	-.0007	.0282	.9228

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1683.9	5089.4	31896.	3991.8
Stddev	7.5	11.4	175.	6.9
%RSD	.44731	.22475	.55019	.17192
#1	1684.2	5081.6	31723.	3984.2
#2	1691.2	5102.5	31890.	3997.4
#3	1676.2	5084.1	32074.	3993.9

Zoom In Zoom Out

Sample Name: FA22134-12 Acquired: 2/17/2015 19:58:27 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0003	17.61	.0693	.1094	.0003	21.89	.0003	.0018	.0754	.2961
Stddev	.0006	.05	.0003	.0001	.0001	.07	.0001	.0001	.0002	.0009
%RSD	195.9	.3031	.4270	.0868	40.00	.3364	26.23	6.410	.2033	.3000
#1	-.0001	17.62	.0689	.1095	.0003	21.93	.0004	.0017	.0754	.2967
#2	.0000	17.56	.0695	.1094	.0005	21.81	.0004	.0018	.0753	.2965
#3	.0010	17.66	.0694	.1093	.0002	21.94	.0002	.0019	.0756	.2951

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	9.200	.5235	.9617	.0874	.0030	.2897	.0139	3.582	.0161	.0040
Stddev	.007	.0088	.0297	.0003	.0001	.0102	.0001	.007	.0009	.0007
%RSD	.0773	1.672	3.086	.3123	2.736	3.533	.4801	.1964	5.723	17.92
#1	9.195	.5236	.9942	.0877	.0030	.2798	.0138	3.590	.0152	.0037
#2	9.198	.5321	.9550	.0874	.0031	.3003	.0139	3.577	.0161	.0035
#3	9.208	.5146	.9360	.0872	.0030	.2890	.0139	3.578	.0170	.0048

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.579	.0269	.2510	.2150	-.0014	.0248	.4637
Stddev	.002	.0001	.0003	.0003	.0003	.0002	.0004
%RSD	.1360	.4489	.1043	.1228	23.83	.6619	.0848
#1	1.576	.0269	.2508	.2152	-.0013	.0250	.4633
#2	1.580	.0270	.2509	.2147	-.0018	.0248	.4639
#3	1.580	.0267	.2513	.2151	-.0012	.0247	.4640

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1673.7	5021.8	31830.	3966.8
Stddev	3.4	5.6	40.	23.3
%RSD	.20345	.11099	.12548	.58661
#1	1670.4	5024.9	31797.	3941.6
#2	1673.5	5015.4	31875.	3987.4
#3	1677.2	5025.2	31820.	3971.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 2/17/2015 20:02:31 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)	(Y_3600)
Avg	.0103	.2211	.0101	.2080	.0053	1.083	.0050	.0507	.0109	.0265
Stddev	.0002	.0116	.0005	.0012	.0000	.003	.0000	.0001	.0005	.0002
%RSD	1.587	5.231	4.853	.5927	.7293	.2966	.6222	.1262	4.925	.7512
#1	.0103	.2100	.0098	.2081	.0053	1.081	.0050	.0508	.0112	.0263
#2	.0104	.2331	.0098	.2091	.0052	1.087	.0049	.0507	.0103	.0265
#3	.0101	.2202	.0107	.2067	.0053	1.082	.0050	.0508	.0113	.0267

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
IS Ref	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)
Avg	.3227	10.93	5.203	.0160	.0462	11.05	.0401	.0044	.0049	.0098
Stddev	.0022	.03	.033	.0000	.0003	.04	.0002	.0002	.0007	.0010
%RSD	.6779	.2578	.6348	.1168	.6387	.3853	.5898	3.888	15.04	9.751
#1	.3221	10.95	5.239	.0160	.0463	11.08	.0401	.0044	.0054	.0089
#2	.3251	10.94	5.174	.0160	.0459	11.07	.0403	.0043	.0041	.0108
#3	.3209	10.90	5.196	.0160	.0464	11.01	.0399	.0046	.0052	.0097

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0426	.0493	.0106	.0100	.0103	.0496	.0215
Stddev	.0004	.0003	.0000	.0002	.0006	.0005	.0000
%RSD	.9288	.6637	.4446	1.939	6.155	.9556	.1302
#1	.0424	.0490	.0106	.0102	.0106	.0496	.0215
#2	.0425	.0493	.0105	.0101	.0107	.0491	.0215
#3	.0431	.0497	.0106	.0098	.0096	.0501	.0215

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1687.5	4994.6	31692.	3821.2
Stddev	3.2	6.1	92.	32.2
%RSD	.19222	.12143	.29053	.84200
#1	1686.1	5000.0	31725.	3840.1
#2	1685.3	4988.0	31588.	3839.4
#3	1691.3	4995.9	31764.	3784.0

Zoom In Zoom Out

Sample Name: ICSA Acquired: 2/17/2015 20:06:38 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	.0004	F514.0	.0015	.0004	.0000	487.3	-.0009	.0009	-.0002
Stddev	.0002	6.2	.0016	.0002	.000	.7	.0001	.0001	.0005
%RSD	46.88	1.202	107.8	54.56	110.1	.1378	14.39	8.674	244.6
#1	.0006	508.0	.0006	.0001	.0000	487.0	-.0008	.0010	-.0003
#2	.0003	513.5	.0005	.0005	.0000	486.8	-.0010	.0009	.0003
#3	.0004	520.4	.0033	.0005	-.0001	488.1	-.0009	.0009	-.0005

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	-.0029	183.5	.2016	479.6	.0001	.0028	.1423	.0011	-.0046
Stddev	.0002	.6	.0270	1.3	.0001	.0002	.0045	.0002	.0004
%RSD	5.627	.3029	13.39	.2629	52.86	6.316	3.152	20.94	9.090
#1	-.0030	182.9	.1929	478.3	.0001	.0029	.1372	.0014	-.0047
#2	-.0029	183.7	.2319	479.7	.0000	.0030	.1446	.0010	-.0042
#3	-.0027	183.9	.1800	480.8	.0001	.0026	.1453	.0011	-.0050

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	.0008	.0019	.0967	.0006	.0001	.0002	-.0002	.0004	-.0002
Stddev	.0027	.0012	.0002	.0004	.0000	.0002	.0025	.0002	.0001
%RSD	342.4	63.28	.2150	67.55	34.32	133.5	1313.	48.10	79.58
#1	.0027	.0032	.0968	.0003	.0002	.0004	.0021	.0002	-.0001
#2	.0019	.0011	.0965	.0010	.0001	.0000	-.0029	.0003	.0000
#3	-.0023	.0013	.0969	.0005	.0001	.0001	.0002	.0005	-.0003

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1533.7	4423.8	27656.	3596.5
Stddev	2.5	6.1	162.	22.8
%RSD	.16377	.13863	.58648	.63501
#1	1531.0	4419.5	27470.	3618.1
#2	1536.0	4430.8	27770.	3598.6
#3	1534.0	4421.0	27727.	3572.6

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 2/17/2015 20:10:59 Type: Unk
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3600)
Avg	F1.012	F522.6	1.048	.5160	.5123	487.0	.9720	.5080	.5305
Stddev	.001	8.5	.004	.0019	.0024	1.8	.0009	.0002	.0008
%RSD	.0913	1.630	.3859	.3745	.4596	.3646	.0965	.0363	.1533
#1	1.013	513.5	1.051	.5151	.5118	486.6	.9720	.5078	.5307
#2	1.012	530.4	1.048	.5146	.5103	489.0	.9711	.5080	.5311
#3	1.011	523.9	1.043	.5182	.5149	485.5	.9730	.5082	.5296

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
IS Ref	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)
Avg	.5714	182.2	.0728	479.2	.5241	.9576	.1054	.9990	.9791
Stddev	.0005	.9	.0375	1.6	.0002	.0018	.0091	.0004	.0035
%RSD	.0901	.4780	51.51	.3331	.0308	.1831	8.619	.0358	.3569
#1	.5720	181.6	.0404	478.2	.5240	.9564	.1159	.9987	.9831
#2	.5711	181.8	.0642	478.3	.5242	.9567	.1010	.9994	.9765
#3	.5712	183.2	.1139	481.0	.5239	.9596	.0994	.9990	.9779

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Avg	1.069	1.016	.0483	.9699	1.042	1.046	1.003	.5023	.9923
Stddev	.005	.004	.0004	.0016	.005	.001	.001	.0012	.0014
%RSD	.4602	.3498	.7392	.1687	.4498	.0932	.1426	.2381	.1389
#1	1.071	1.018	.0480	.9695	1.040	1.046	1.002	.5017	.9919
#2	1.064	1.012	.0487	.9685	1.038	1.047	1.002	.5037	.9912
#3	1.073	1.018	.0482	.9717	1.047	1.045	1.004	.5015	.9938

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Avg	1522.2	4413.2	27285.	3590.7
Stddev	2.5	5.4	96.	25.1
%RSD	.16738	.12216	.35060	.69785
#1	1525.0	4418.0	27283.	3618.1
#2	1521.5	4414.2	27191.	3585.0
#3	1520.0	4407.4	27383.	3568.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 20:15:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2574	41.75	1.944	2.009	2.007	41.46	1.995	1.979	2.126	2.040
Stddev	.0015	.22	.003	.004	.010	.25	.003	.003	.001	.006
%RSD	.5714	.5382	.1558	.1867	.4857	.6110	.1396	.1295	.0603	.3172
#1	.2583	41.53	1.947	2.005	1.997	41.20	1.994	1.978	2.125	2.046
#2	.2557	41.76	1.941	2.008	2.007	41.46	1.993	1.978	2.125	2.033
#3	.2582	41.98	1.943	2.013	2.017	41.71	1.998	1.982	2.127	2.040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.96	42.77	39.83	2.068	1.962	42.88	1.945	1.991	1.943	1.955
Stddev	.20	.20	.27	.001	.007	.21	.003	.004	.002	.003
%RSD	.5031	.4580	.6803	.0471	.3846	.4824	.1398	.1894	.0895	.1475
#1	39.75	42.55	39.60	2.068	1.954	42.67	1.946	1.988	1.943	1.957
#2	39.97	42.85	39.76	2.069	1.963	42.88	1.942	1.991	1.941	1.952
#3	40.16	42.92	40.13	2.068	1.969	43.09	1.947	1.995	1.945	1.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Elem	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.366	1.936	2.072	2.067	1.983	2.033	1.997
Stddev	.002	.002	.007	.003	.003	.001	.002
%RSD	.1777	.0754	.3574	.1228	.1346	.0712	.1008
#1	1.366	1.937	2.066	2.070	1.982	2.033	1.996
#2	1.363	1.934	2.069	2.065	1.980	2.032	1.996
#3	1.368	1.936	2.080	2.067	1.986	2.035	1.999
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Zoom In Zoom Out

Sample Name: CCV Acquired: 2/17/2015 20:15:15 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1609.5	4776.1	29991.	3676.4
Stddev	3.8	7.1	99.	50.2
%RSD	.23349	.14859	.33063	1.3662
#1	1613.1	4777.9	30096.	3727.0
#2	1609.8	4782.1	29899.	3675.5
#3	1605.6	4768.3	29979.	3626.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 20:19:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0070	.0014	.0003	.0000	.0038	.0000	.0002	.0001
Stddev	.0003	.0037	.0000	.0003	.0001	.0015	.000	.0001	.0000
%RSD	106.0	52.62	2.184	106.6	132.9	39.74	290.7	83.14	27.99
#1	.0001	.0090	.0015	.0007	.0001	.0046	.0000	.0001	.0001
#2	.0006	.0028	.0014	.0003	.0001	.0047	.0001	.0003	.0001
#3	.0001	.0093	.0014	.0000	.0000	.0020	-.0001	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cu3247	Fe2599	K_7664	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	F.0524	-.0009	.0385	.0000	F.0041	.0046	.0001	-.0010
Stddev	.0002	.0143	.0279	.0067	.000	.0010	.0097	.0003	.0011
%RSD	529.1	27.30	3087.	17.30	243.7	24.68	209.3	413.7	114.9
#1	.0001	.0688	.0307	.0462	.0000	.0051	.0025	-.0003	-.0003
#2	.0002	.0461	-.0218	.0352	.0000	.0041	-.0038	.0003	-.0022
#3	-.0002	.0424	-.0116	.0341	-.0001	.0031	.0153	.0002	-.0004
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.0500				.0010			
Low Limit		-.0500				-.0010			

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0005	.0001	.0009	.0000	.0014	.0001	-.0003	.0000
Stddev	.0012	.0001	.0005	.0003	.000	.0003	.0008	.0002	.000
%RSD	70.33	28.44	516.4	39.84	311.9	17.60	735.0	71.35	222.7
#1	.0021	.0003	-.0002	.0013	-.0001	.0016	-.0005	-.0004	-.0001
#2	.0004	.0005	-.0002	.0006	.0000	.0016	-.0002	-.0001	.0000
#3	.0027	.0006	.0007	.0007	.0000	.0011	.0010	-.0006	.0000
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 2/17/2015 20:19:13 Type: QC
Method: 60102007_041712(v125) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE02: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1677.2	4958.2	31612.	3762.6
Stddev	2.8	5.8	45.	12.6
%RSD	.16488	.11640	.14184	.33568
#1	1679.8	4964.8	31623.	3754.7
#2	1674.3	4955.9	31562.	3777.2
#3	1677.3	4953.9	31650.	3755.9

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	X	3	V	-0.009834	0.000000	No
			Fe	0.000002	0.000000	No
			Mg	0.000000	0.000000	No
Al 396.152 { 85}	X	1	Mo	0.053780	0.000000	No
As 189.042 {478}	X	5	Fe	-0.000071	0.000000	No
			Cr	-0.002131	0.000000	No
			Mo	0.000500	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
Ba 455.403 { 74}	X	1	Fe	0.000009	0.000000	No
Be 313.042 {108}	X	2	V	0.000115	0.000000	No
			Ti	-0.000059	0.000000	No
Ca 317.933 {106}	X	None				
Cd 226.502 {449}	X	4	Fe	0.000086	0.000000	No
			Ca	0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Ti	0.000151	0.000000	No
Co 228.616 {447}	X	3	Mo	-0.001220	0.000000	No
			Ti	0.003012	0.000000	No
			Fe	-0.000002	0.000000	No
Cr 267.716 {126}	X	3	Al	0.000001	0.000000	No
			Fe	-0.000010	0.000000	No
			Ca	0.000002	0.000000	No
Cu 324.754 {104}	X	10	Fe	-0.000182	0.000000	No
			Ca	0.000002	0.000000	No
			Mo	0.000528	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Ti	-0.000251	0.000000	No
			Al	0.000008	0.000000	No
			Mg	0.000005	0.000000	No
			Co	-0.000787	0.000000	No
			Cd	0.000240	0.000000	No
Fe 259.940 {130}	X	None				
In 230.606 {446}*	X	None				
K 766.490 { 44}	X	None				
Mg 279.079 {121}	X	None				
Mn 257.610 {131}	X	2	Fe	0.000006	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	X	1	Fe	-0.000038	0.000000	No
Na 589.592 { 57}	X	None				
Ni 231.604 {445}	X	7	Fe	-0.000054	0.000000	No
			Co	-0.000054	0.000000	No
			Mo	0.000971	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000269	0.000000	No
			Tl	0.000440	0.000000	No
Pb 220.353 {453}	X	9	Al	0.000276	0.000000	No
			Fe	0.000119	0.000000	No
			Mo	-0.001480	0.000000	No
			Cu	0.001070	0.000000	No
			Ti	0.000036	0.000000	No
			Si	0.000071	0.000000	No
			Ca	-0.000005	0.000000	No
			Cr	0.000050	0.000000	No
			Mg	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Sb 206.833 {463}	☒	10	Fe	0.000044	0.000000	No
			Cr	0.012815	0.000000	No
			Mo	-0.000310	0.000000	No
			V	-0.001708	0.000000	No
			Sn	-0.010736	0.000000	No
			Ti	0.000040	0.000000	No
			Ca	-0.000001	0.000000	No
			Ni	-0.000438	0.000000	No
			Mg	0.000000	0.000000	No
			Al	0.000003	0.000000	No
Se 196.090 {472}	☒	10	Fe	-0.000019	0.000000	No
			Ca	-0.000000	0.000000	No
			Mn	0.000574	0.000000	No
			Mo	0.000111	0.000000	No
			Al	-0.000017	0.000000	No
			V	0.000000	0.000000	No
			Zn	0.000000	0.000000	No
			Sr	0.000137	0.000000	No
			As	-0.000032	0.000000	No
			Be	0.000212	0.000000	No
Si 212.412 {459}	☒	1	Mo	0.019120	0.000000	No
Sn 189.989 {477}	☒	None				
Sr 407.771 { 83}	☒	1	Ca	0.000006	0.000000	No
Ti 334.941 {101}	☒	1	Ca	-0.000009	0.000000	No
Tl 190.856 {477}	☒	11	Co	0.001145	0.000000	No
			Fe	0.000003	0.000000	No
			Al	-0.000005	0.000000	No
			Ba	-0.000051	0.000000	No
			Ti	-0.002651	0.000000	No
			Sb	0.000012	0.000000	No
			Ca	0.000003	0.000000	No
			Cr	0.000230	0.000000	No
			Mg	0.000002	0.000000	No
			Mn	0.000818	0.000000	No
			V	-0.025078	0.000000	No
V 292.402 {115}	☒	5	Fe	0.000012	0.000000	No
			Cr	-0.002590	0.000000	No
			Mo	-0.003709	0.000000	No
			Ti	0.000364	0.000000	No
			Mn	-0.000693	0.000000	No
Y 224.306 {450}*	☒	None				
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Zn 206.200 {463}	☒	5	Cr	-0.000965	0.000000	No
			Al	0.000016	0.000000	No
			Ca	0.000003	0.000000	No
			Fe	-0.000027	0.000000	No
			As	0.001128	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ag 328.068 {103}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000110	0.676010	0.000000	1.000000
	Al 396.152 { 85}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.002330	0.149282	0.000000	1.000000
	As 189.042 {478}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000342	0.276934	0.000000	1.000000
	Ba 455.403 { 74}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.008955	10.723257	0.000000	1.000000
	Be 313.042 {108}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000347	6.833063	0.000000	1.000000
	Ca 317.933 {106}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.007446	0.219528	0.000000	1.000000
	Cd 226.502 {449}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000406	5.375155	0.000000	1.000000
	Co 228.616 {447}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000853	2.457064	0.000000	1.000000
	Cr 267.716 {126}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000125	0.526824	0.000000	1.000000
	Cu 324.754 {104}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004868	0.842242	0.000000	1.000000
	Fe 259.940 {130}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004777	0.125211	0.000000	1.000000
	In 230.606 {446}*	2/17/2015 10:30:32	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	K 766.490 { 44}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.007681	0.124129	0.000000	1.000000
	Mg 279.079 {121}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000437	0.020116	0.000000	1.000000
	Mn 257.610 {131}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000866	3.364073	0.000000	1.000000
	Mo 202.030 {467}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004453	1.196130	0.000000	1.000000
	Na 589.592 { 57}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.016068	0.426053	0.000000	1.000000
	Ni 231.604 {445}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000136	1.528918	0.000000	1.000000
	Pb 220.353 {453}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.004660	1.315145	0.000000	1.000000
	Sb 206.833 {463}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000266	0.278604	0.000000	1.000000
	Se 196.090 {472}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000879	0.210189	0.000000	1.000000
	Si 212.412 {459}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.008245	0.549035	0.000000	1.000000
	Sn 189.989 {477}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.000827	0.461613	0.000000	1.000000
	Sr 407.771 { 83}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.002139	15.838277	0.000000	1.000000
	Ti 334.941 {101}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.004327	2.089365	0.000000	1.000000
	Tl 190.856 {477}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.005722	0.598692	0.000000	1.000000
	V 292.402 {115}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	-0.000279	0.706186	0.000000	1.000000
	Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Zn 206.200 {463}	2/17/2015 10:30:32	2/17/2015 9:57:03	Linear	1/Conc	0.003889	3.610097	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999901	0.000088	0.000488	0.001628	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999798	0.004849	0.011792	0.039307	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999957	0.000206	0.000750	0.002501	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999850	0.014972	0.000230	0.000766	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999789	0.011295	0.000100	0.000335	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999623	0.009714	0.003805	0.012683	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999926	0.005267	0.000059	0.000198	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999955	0.001872	0.000139	0.000463	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999859	0.000713	0.000364	0.001212	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999957	0.000625	0.000337	0.001125	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999428	0.006824	0.003274	0.010912	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999904	0.002769	0.029090	0.096966	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999701	0.000792	0.025486	0.084954	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999595	0.007717	0.000052	0.000174	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999958	0.000887	0.000181	0.000603	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999735	0.015790	0.008749	0.029165	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999944	0.001303	0.000220	0.000734	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999933	0.001231	0.000685	0.002283	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999955	0.000213	0.001207	0.004025	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999947	0.000174	0.001510	0.005032	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.990534	0.006245	0.000437	0.001456	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999955	0.000354	0.000375	0.001249	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999722	0.030096	0.000095	0.000316	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999793	0.003425	0.000146	0.000486	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999903	0.000653	0.000968	0.003227	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999999	0.000097	0.000344	0.001147	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999872	0.004660	0.000064	0.000214	OK.	1.000000	0.000000	1	0

Accutest Laboratories SE Metals Digestion Log Soil

MP #: 28549 Method of Digestion: SW846-3050B

Prep Date/Time (mm/dd/yy 24:00): 2/12/15 9:01
HotBlock I.D. 6
Thermometer I.D. 60071
Correction Factor (°C) -1
Temperature Observed/Corrected (°C) 94/93
Balance I.D. ADVPRO3

Spk. Sol. A	Volume Used(ml)	Pipette #
ACC 861	0.50	10
ACC 841	0.25	10
Met 5036	0.25	10

Filter Lot#: 140730082
Dig. Tube Lot# MP2455

Added B:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	145881	0000088909	0000088821	J997-4F015

Sample #			Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.00	50.0	
Spike Blank(SB)			1.00		
Matrix Spike(MS)			1.26		
Matrix Spike Dup(MSD)			1.13		
Duplicate(DUP)			1.06		
1 QC C	FA22009-2	D 1	1.12		
2		5	1.45		
3		6	1.23		
4		9	1.28		
5		12	1.16		
6		15	1.05		
7		19	1.40		
8		22	1.39		
9		25	1.36		
10		26	1.47		
11		29	1.22		
12	FA22015-2	10	1.53		Added additional DI H_2O to prevent bubbling over.
13	FA22020-1	6	1.13		
14		2	1.44		
15		3	1.20		
16		4	1.14		
17		5	1.37		
18	FA22032-1	1	1.15		
19		2	1.14		
20		3	1.21		
21 E					
22 E				DB	
23 E				2/12/15	
24 E					

Analyst: [signature] Date: 2/12/15

QC Review: [signature] Date: 2.12.15

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

DOD

Accutest Laboratories SE **Metals Digestion Log Soil**

MP #: 28558 **Method of Digestion: SW846-3050B**

Prep Date/Time (mm/dd/yy 24:00): 2/16/15 9:32

HotBlock I.D. 6

Thermometer I.D. 60711

Correction Factor (°C) -1

Temperature Observed/Corrected (°C) 93/92

Balance I.D. ADVPRO3

Spk. Sol. [A]	Volume Used(ml)	Pipette #
ACC 875	0.50	10
ACC 841	0.25	10
Met 5036	0.25	10

Filter Lot#: 140730082

Dig. Tube Lot# MP2455

Added [B]:

	H_2O_2	HNO_3	HCL	PTFE Boiling Chips
Lot#	145881	000008896 9	0000088821	J997-4F015

Sample #			Wt., g	Final Volume(ml)	Comments
Method Blank(MB)			1.00	50.0	
Spike Blank(SB)			1.00		
Matrix Spike(MS)			1.23		
Matrix Spike Dup(MSD)			1.19		
Duplicate(DUP)			1.36		
1 QC [C]	FA22051-3	D 7	1.14		
2	FA22086-1	1	1.42		
3	FA22062-1	5	1.43		
4	2		1.22		
5	3		1.38		
6	4		1.10		
7	5		1.22		
8	6		1.28		
9	FA22125-4	10	1.10		ROCKY
10	FA22032-4	1	1.05		
11	5		1.14		
12	6		1.13		
13	7		1.10		
14	FA22133-1		1.22		
15	2		1.37		
16	3		1.08		
17	4		1.20		
18	5		1.15		
19	FA22134-1		1.12		
20	FA22036-1		1.24		pellets/brown fumes, added 2.5mL HNO_3
21 [E]					
22 [E]					DB
23 [E]					
24 [E]					2/16/15

Analyst: [signature] Date: 2/16/15

QC Review: [signature] Date: 2.16.15

A Used for SB, MS, MSD
B For reagent volumes used consult SOP MET 104, current revision
C Parent sample used to prepare MS, MSD, DUP
D Bottle Number
E Additional Matrix QC

icpsoildigestionlog012010.xls Rev 01/20/10 DM

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: FA22032-1 **Analyzed:** 12-FEB-15 by KC **Method:** SM19 2540G
ClientID: ML865SOS10A1A

Wet Weight (Total)	7.24	g
Tare Weight	1.03	g
Dry Weight (Total)	5.96	g
Solids, Percent	79.4	%

Sample: FA22032-2 **Analyzed:** 12-FEB-15 by KC **Method:** SM19 2540G
ClientID: SR864SOSDA2A

Wet Weight (Total)	7.26	g
Tare Weight	1.01	g
Dry Weight (Total)	6.39	g
Solids, Percent	86.1	%

Sample: FA22032-3 **Analyzed:** 12-FEB-15 by KC **Method:** SM19 2540G
ClientID: SR864SOSG1A

Wet Weight (Total)	7.71	g
Tare Weight	1.02	g
Dry Weight (Total)	6.56	g
Solids, Percent	82.8	%

Sample: FA22032-4 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSG2A

Wet Weight (Total)	7.88	g
Tare Weight	1.03	g
Dry Weight (Total)	6.92	g
Solids, Percent	86	%

Sample: FA22032-5 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSDA2C

Wet Weight (Total)	8.09	g
Tare Weight	1.04	g
Dry Weight (Total)	7.16	g
Solids, Percent	86.8	%

Sample: FA22032-6 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSG1S

Wet Weight (Total)	8.07	g
Tare Weight	1.02	g
Dry Weight (Total)	6.93	g
Solids, Percent	83.8	%

Percent Solids Raw Data Summary

Job Number: FA22032
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: FA22032-7 **Analyzed:** 14-FEB-15 by TF **Method:** SM19 2540G
ClientID: SR864SOSG2D

Wet Weight (Total)	8.09	g
Tare Weight	.97	g
Dry Weight (Total)	6.63	g
Solids, Percent	79.5	%

Southeast
ACCUTEST
LABORATORIES

01/07/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA20937

Sampling Date: 12/18/14

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **291**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10 11

Table of Contents

Section 1: Sample Summary 4
Section 2: Case Narrative/Conformance Summary 5
Section 3: Summary of Hits 6
Section 4: Sample Results 7
4.1: FA20937-1: XU854ISK06Z2 8
4.2: FA20937-2: XU854ISK06Z3 11
4.3: FA20937-3: XU854ISM06A 14
Section 5: Misc. Forms 17
5.1: Chain of Custody 18
Section 6: GC/MS Semi-volatiles - QC Data Summaries 21
6.1: Method Blank Summary 22
6.2: Blank Spike Summary 23
6.3: Matrix Spike/Matrix Spike Duplicate Summary 24
6.4: Internal Standard Area Summaries 25
6.5: Initial and Continuing Calibration Summaries 28
Section 7: GC/MS Semi-volatiles - Raw Data 38
7.1: Samples 39
7.2: Method Blanks 45
7.3: Blank Spikes 47
7.4: Matrix Spike/Matrix Spike Duplicates 49
7.5: Initial and Continuing Calibarations 53
7.6: Instrument Run Logs 88
7.7: Prep Logs 95
Section 8: GC Semi-volatiles - QC Data Summaries 96
8.1: Method Blank Summary 97
8.2: Blank Spike Summary 99
8.3: Laboratory Control Sample Summary 100
8.4: Matrix Spike/Matrix Spike Duplicate Summary 101
8.5: Duplicate Summary 102
8.6: Surrogate Recovery Summaries 104
8.7: GC Surrogate Retention Time Summaries 105
8.8: Initial and Continuing Calibration Summaries 108
Section 9: GC Semi-volatiles - Raw Data 128
9.1: Samples 129
9.2: Method Blanks 136
9.3: Blank Spikes 141
9.4: Laboratory Control Samples 144
9.5: Matrix Spike/Matrix Spike Duplicates 147
9.6: Duplicates 153
9.7: Initial and Continuing Calibarations 158
9.8: Instrument Run Logs 224
9.9: Prep Logs 232

Sections:

1 2 3 4 5 6 7 8 9 10 11

Table of Contents

Section 10: General Chemistry - QC Data Summaries 233
10.1: Method Blank and Spike Results Summary 234
10.2: Matrix Spike Results Summary 235
10.3: Matrix Spike Duplicate Results Summary 236
10.4: Inst QC GN64700: Nitrogen, Nitrate 237
Section 11: General Chemistry - Raw Data 239
11.1: Raw Data GN64700: Nitrogen, Nitrate 240

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20937

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20937-1	12/18/14	09:00	MS	12/19/14	SO	Soil	XU854ISK06Z2
FA20937-2	12/18/14	10:07	MS	12/19/14	SO	Soil	XU854ISK06Z3
FA20937-3	12/18/14	11:06	MS	12/19/14	SO	Soil	XU854ISM06A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20937

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 9:05:14 PM

3 Sample(s) were collected on 12/18/2014 and were received at Accutest SE on 12/19/2014 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of FA20937. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits for MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54435

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MS, FA20881-1MSD, FA20937-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25263

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MSD, FA20881-1MS were used as the QC samples for Nitrogen, Nitrate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity. % RPD was within control limits for MS/MSD.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Kim Benham, Client Services (signature on file)

Date: January 6, 2015

Summary of Hits

Job Number: FA20937
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 12/18/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20937-1	**XU854ISK06Z2**					
Perchlorate		18.6	1.9	0.97	ug/kg	SW846 6850
Nitrogen, Nitrate		4.5	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20937-2	**XU854ISK06Z3**					
Perchlorate		15.7	2.0	1.0	ug/kg	SW846 6850
Nitrogen, Nitrate		3.4	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20937-3	**XU854ISM06A**					
Perchlorate		2.9	1.9	0.93	ug/kg	SW846 6850
Nitrogen, Nitrate		4.0	1.0	0.50	mg/kg	EPA 300/SW846 9056A

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z2
Lab Sample ID: FA20937-1 **Date Sampled:** 12/18/14
Matrix: SO - Soil **Date Received:** 12/19/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9532.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.03 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	18.6	1.9	0.97	0.53	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z2
Lab Sample ID: FA20937-1 **Date Sampled:** 12/18/14
Matrix: SO - Soil **Date Received:** 12/19/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045475.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	121%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06Z2		
Lab Sample ID:	FA20937-1	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.5	1.0	0.50	0.50	mg/kg	1	01/03/15 15:42	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z3
Lab Sample ID: FA20937-2 **Date Sampled:** 12/18/14
Matrix: SO - Soil **Date Received:** 12/19/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9533.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.00 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	15.7	2.0	1.0	0.55	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z3
Lab Sample ID: FA20937-2 **Date Sampled:** 12/18/14
Matrix: SO - Soil **Date Received:** 12/19/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045471.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	122%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06Z3		
Lab Sample ID:	FA20937-2	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	3.4	1.0	0.50	0.50	mg/kg	1	01/03/15 15:59	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISM06A
Lab Sample ID: FA20937-3 **Date Sampled:** 12/18/14
Matrix: SO - Soil **Date Received:** 12/19/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9539.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.07 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	2.9	1.9	0.93	0.51	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISM06A
Lab Sample ID: FA20937-3 **Date Sampled:** 12/18/14
Matrix: SO - Soil **Date Received:** 12/19/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045472.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	113%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISM06A		
Lab Sample ID:	FA20937-3	**Date Sampled:**	12/18/14
Matrix:	SO - Soil	**Date Received:**	12/19/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.0	1.0	0.50	0.50	mg/kg	1	01/03/15 16:16	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20937 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM REMEDIATIONS, INC.
Address: 5811 UNIVERSITY HEIGHTS STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: EVANA RAICEVIC E-mail: E.RAICEVIC@FPM-REMEDIATIONS.COM
Phone#: 210-495-7744 ext 13
Sampler(s) Name(s) (Printed): MIKE SAMPLE

Project Information

Project Name: NM-AZ PBR
Street: HOLLOMAN AFB
City: ALAMOGORDO State: NM
Project #: 1029-13-01-H-XU854.05
Fax #: 210-495-8544
Client Purchase Order #: HOLLOMAN AFB

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	8330SL	NC353.2	NO30 300	PERC6850	LAB USE ONLY
1	XU854ISK06Z2	12/18	0900	MS	Soil	1										X	X	X	X	
2	XU854ISK06Z3	12/18	1057	MS	Soil	1										X	X	X	X	
3	XU854ISM06A	12/18	1106	MS	Soil	1										X	X	X	X	

TURNAROUND TIME (Business Days) — Approved By: / Rush Code: MS

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 [signature]	12/18 1145	2 FP	3 FP 12-19-20	1000	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3.0

5.1 5

FA20937: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20937 CLIENT: FPM PROJECT: NM-AZ PBR

DATE/TIME RECEIVED: 12-19-14 1000 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 7042

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM _____ 5-GRAM _____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.6
- [ ] CORRECTED TEMPS: 3.0

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT# _____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE RW 12-20-14 REVIEWER SIGNATURE/DATE 12/20/14

NF 10/14

receipt confirmation 102914.xls

5.1 5

FA20937: Chain of Custody

Page 2 of 3

FA20937: Chain of Custody
Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MB	Q9513.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	2.0	0.55	ug/kg	

Blank Spike Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-BS	Q9525.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
14797-73-0	Perchlorate	2	2.1	105	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MS	Q9515.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
OP54473-MSD	Q9516.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
FA20794-1	Q9514.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	FA20794-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	13.1		1.82	13.7	33* [a]	1.72	13.8	41* [a]	1	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9509.D	**Injection Time:**	09:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	20879	4.64
Upper Limit [c]	43769	6.64
Lower Limit [d]	14590	2.64

Lab Sample ID	IS 1 AREA	RT
OP54473-MB	21635	4.62
FA20794-1	20003	4.53
OP54473-MS	20064	4.54
OP54473-MSD	19714	4.54
ZZZZZZ	19953	4.54
ZZZZZZ	19463	4.55
ZZZZZZ	19453	4.55
ZZZZZZ	19951	4.55
ZZZZZZ	19428	4.55

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9522.D	**Injection Time:**	11:19
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	19506	4.69
Upper Limit [c]	43769	6.69
Lower Limit [d]	14590	2.69

Lab Sample ID	IS 1 AREA	RT
OP54473-BS	20285	4.66
ZZZZZZ	19024	4.56
ZZZZZZ	19432	4.55
ZZZZZZ	18982	4.56
ZZZZZZ	20688	4.56
ZZZZZZ	20292	4.56
FA20937-1	19424	4.56
FA20937-2	18219	4.56

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9535.D	**Injection Time:**	13:12
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	19366	4.69
Upper Limit [c]	43769	6.69
Lower Limit [d]	14590	2.69

Lab Sample ID	IS 1 AREA	RT
ZZZZZZ	25080	4.59
FA20937-3	20408	4.56
OP54492-BS	20703	4.67
OP54492-MB	20693	4.67
ZZZZZZ	21387	4.67
ZZZZZZ	16706	4.51
ZZZZZZ	29820	4.77
ZZZZZZ	33003	4.81
ZZZZZZ	34053	4.82

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICC295
Lab FileID: Q9302.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2 : D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3 : D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4 : D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5 : D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6 : D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7 : D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------									
3) Perchlorate	1.1702	1.1127	1.2371	1.2032	1.2930	1.3009	1.4553	1.2532	8.869	1.0000

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Sample: SQ295-ICV295
Lab FileID: Q9307.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9307
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.917	-4.2	95.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9509.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9509
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.010	0.5	100.5

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9510.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9510
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.189	-5.4	94.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9522.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9522
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.194	9.7	109.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9523.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9523
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.206	3.0	103.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9535.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9535
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.128	6.4	106.4

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9536.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9536
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.196	-2.1	97.9

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9548.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9548
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.112	5.6	105.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9549.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9549
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.202	1.2	101.2

CC Criteria: +/- 15%

Southeast

ACCUTEST LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9532.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:46
Sample Name	:	FA20937-1
Vial	:	Vial 21
Sample Info	:	OP54473,SQ301,1.03,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

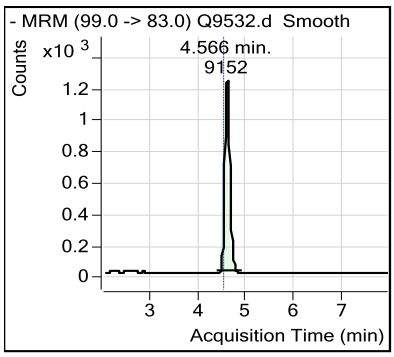
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.562	107.0 -> 89.0	19424	5.000	ng/ml	-0.363	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.566	99.0 -> 83.0	9152	1.914	ng/ml	93	3.0
		101.0 -> 85.0	3085				

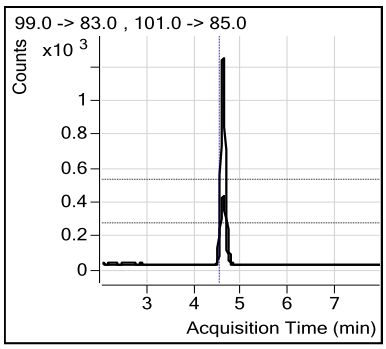
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

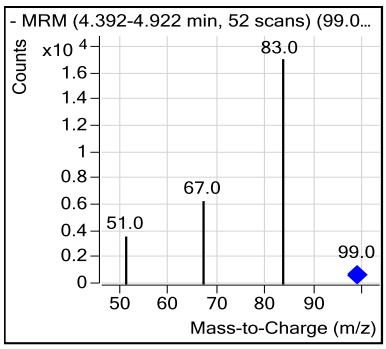
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9532.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:46
Sample Name	:	FA20937-1
Vial	:	Vial 21
Sample Info	:	OP54473,SQ301,1.03,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

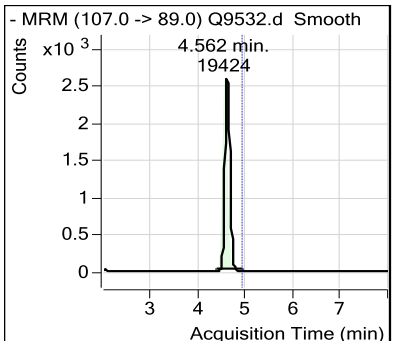
Perchlorate

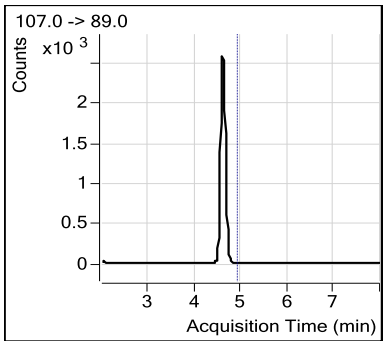


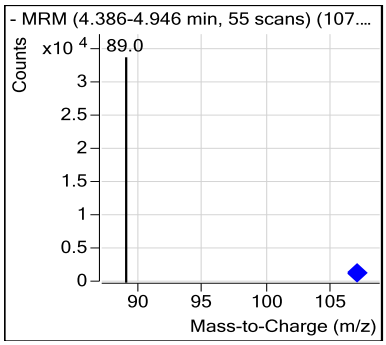




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9533.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:55
Sample Name	:	FA20937-2
Vial	:	Vial 22
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

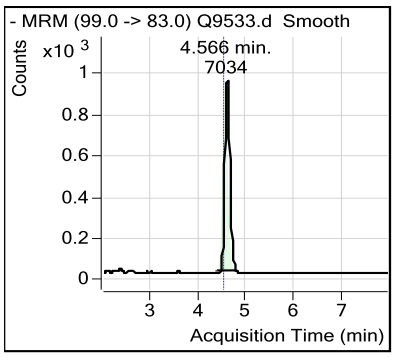
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.562	107.0 -> 89.0	18219	5.000	ng/ml	-0.363	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.566	99.0 -> 83.0	7034	1.572	ng/ml	87	2.7
		101.0 -> 85.0	2593				

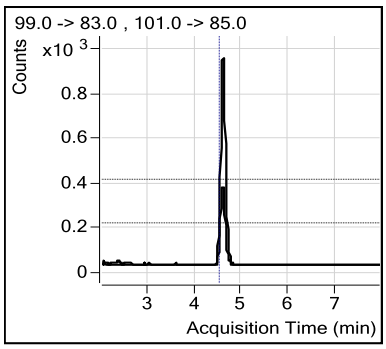
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

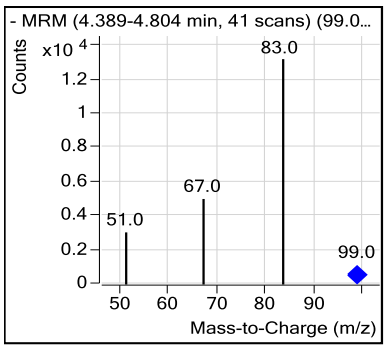
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9533.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:55
Sample Name	:	FA20937-2
Vial	:	Vial 22
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

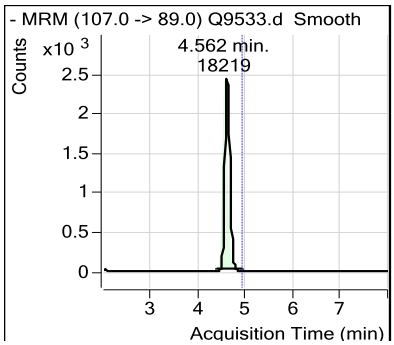
Perchlorate

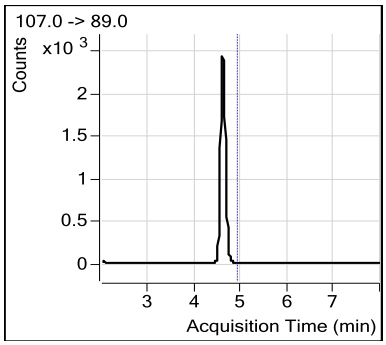


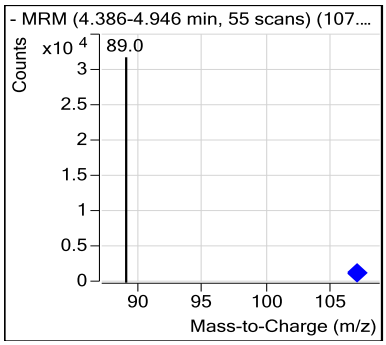




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9539.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 14:14
Sample Name	:	FA20937-3
Vial	:	Vial 25
Sample Info	:	OP54473,SQ301,1.07,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

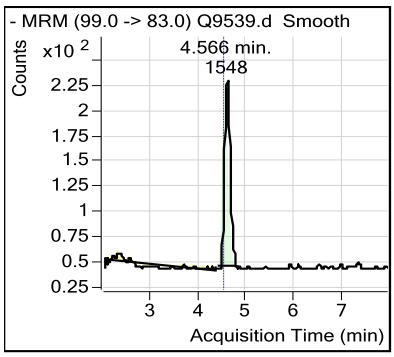
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.562	107.0 -> 89.0	20408	5.000	ng/ml	-0.363	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.566	99.0 -> 83.0	1548	0.312	ng/ml	95	3.7
		101.0 -> 85.0	421				

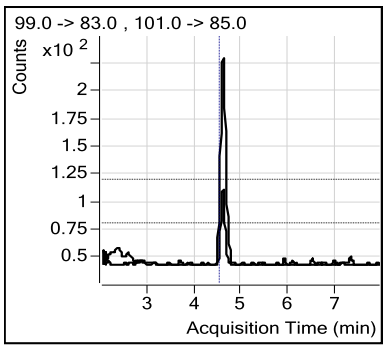
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

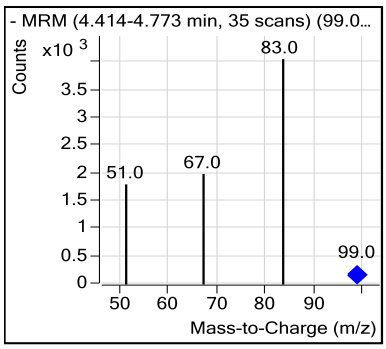
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9539.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 14:14
Sample Name	:	FA20937-3
Vial	:	Vial 25
Sample Info	:	OP54473,SQ301,1.07,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

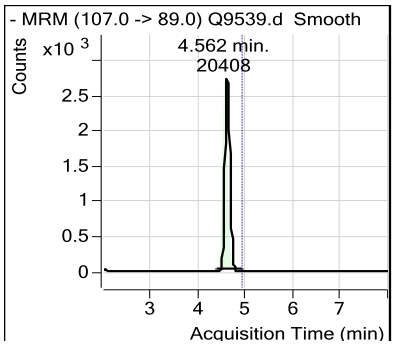
Perchlorate

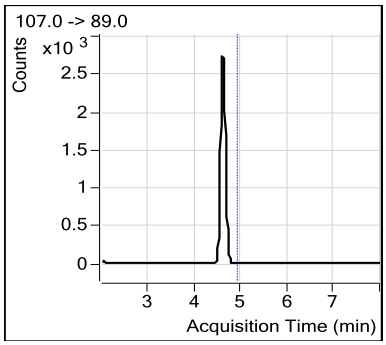


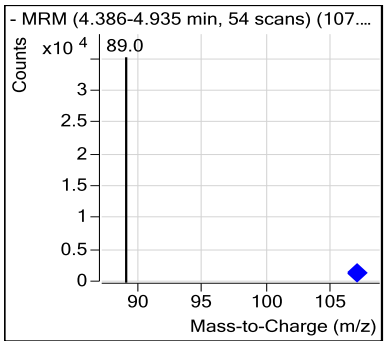




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9513.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:00
Sample Name	:	OP54473-MB
Vial	:	Vial 6
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

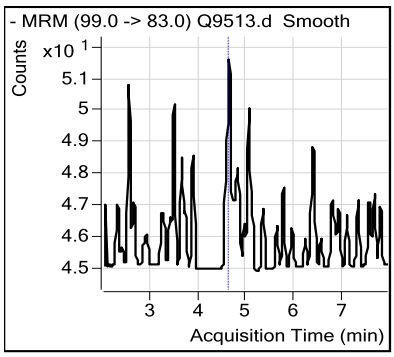
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.624	107.0 -> 89.0	21635	5.000	ng/ml	-0.301	
System Monitoring Compounds							
Target Compounds						Qvalue	Q-Ratio

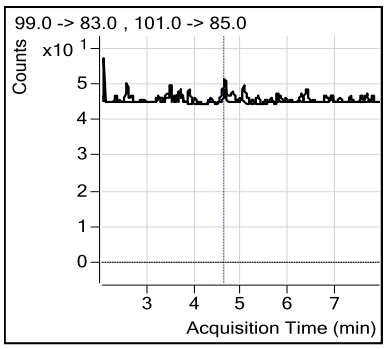
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

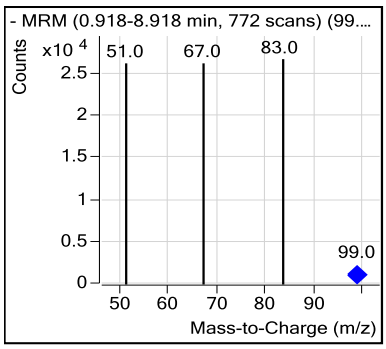
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9513.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:00
Sample Name	:	OP54473-MB
Vial	:	Vial 6
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

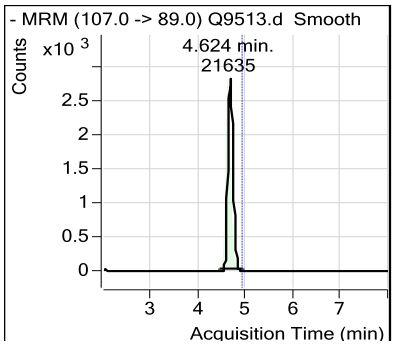
Perchlorate

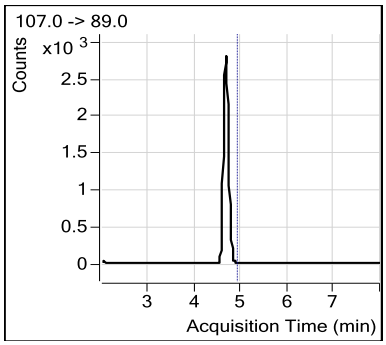


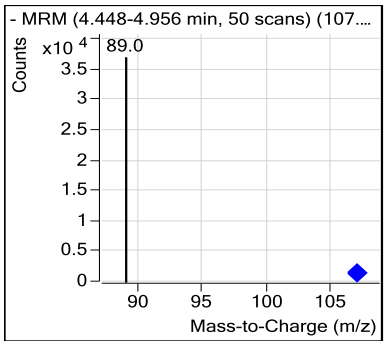




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9525.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:45
Sample Name	:	OP54473-BS
Vial	:	Vial 5
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

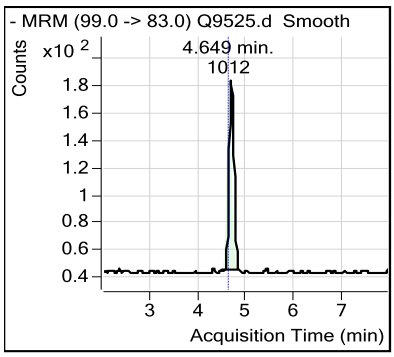
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.655	107.0 -> 89.0	20285	5.000	ng/ml	-0.270	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.649	99.0 -> 83.0	1012	0.205	ng/ml	86	2.7
		101.0 -> 85.0	382				

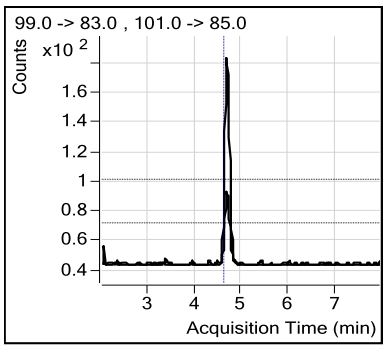
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

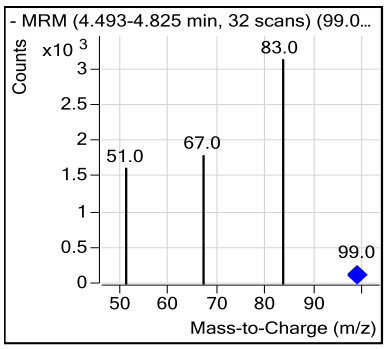
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9525.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:45
Sample Name	:	OP54473-BS
Vial	:	Vial 5
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

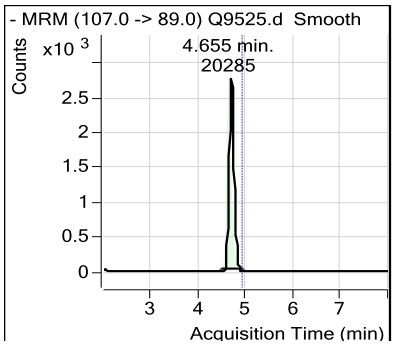
Perchlorate

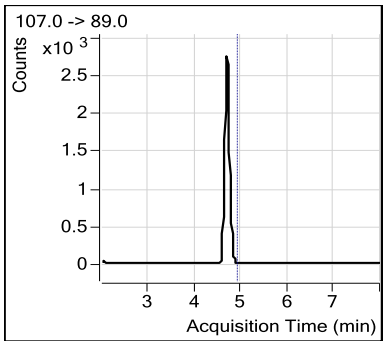


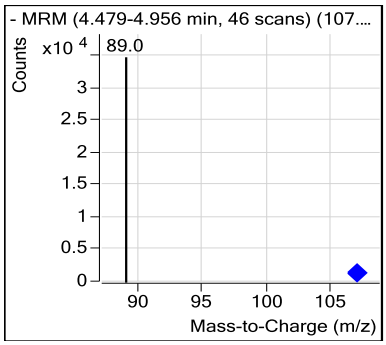




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9515.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:18
Sample Name	:	OP54473-MS
Vial	:	Vial 8
Sample Info	:	OP54473,SQ301,1.10,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

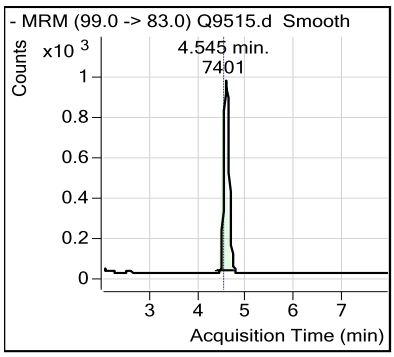
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.541	107.0 -> 89.0	20064	5.000	ng/ml	-0.384	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.545	99.0 -> 83.0	7401	1.503	ng/ml	93	3.0
		101.0 -> 85.0	2481				

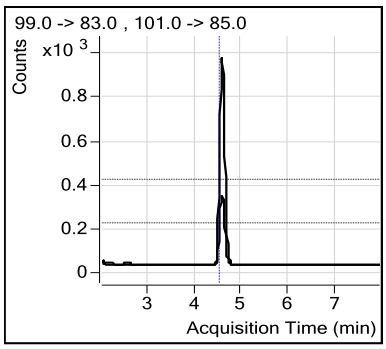
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

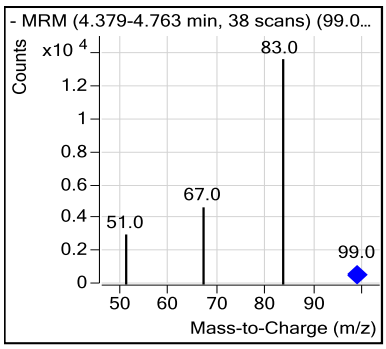
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9515.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:18
Sample Name	:	OP54473-MS
Vial	:	Vial 8
Sample Info	:	OP54473,SQ301,1.10,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

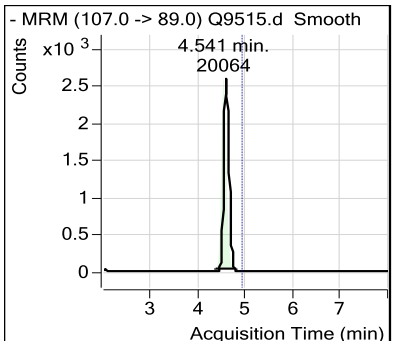
Perchlorate

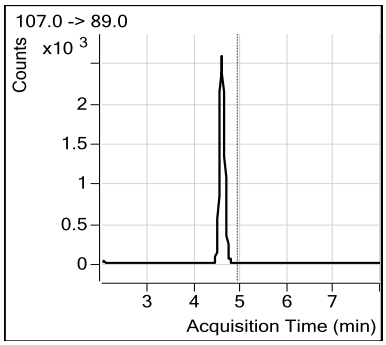


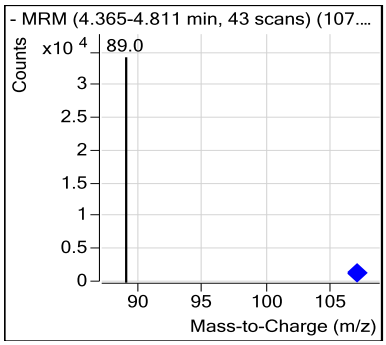




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9516.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:27
Sample Name	:	OP54473-MSD
Vial	:	Vial 9
Sample Info	:	OP54473,SQ301,1.16,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

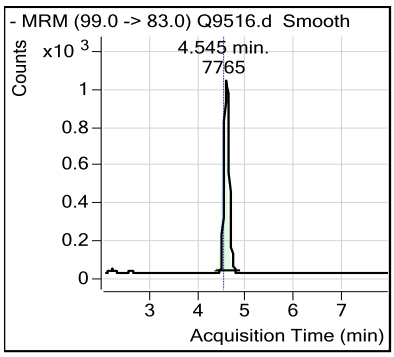
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.541	107.0 -> 89.0	19714	5.000	ng/ml	-0.384	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.545	99.0 -> 83.0	7765	1.604	ng/ml	89	2.8
		101.0 -> 85.0	2792				

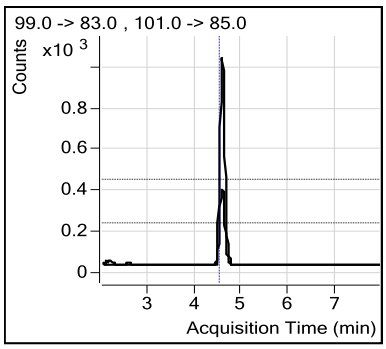
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

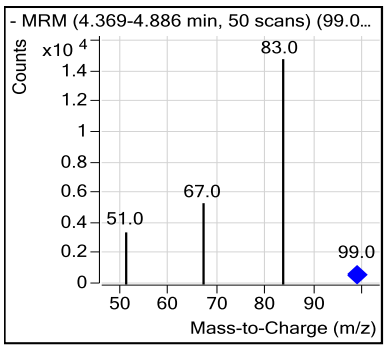
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9516.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:27
Sample Name	:	OP54473-MSD
Vial	:	Vial 9
Sample Info	:	OP54473,SQ301,1.16,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

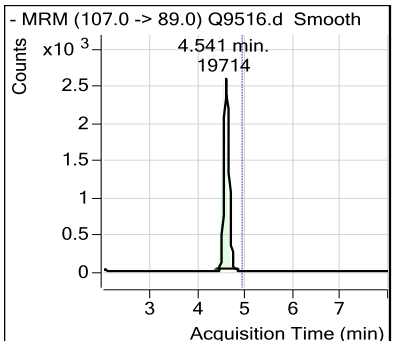
Perchlorate

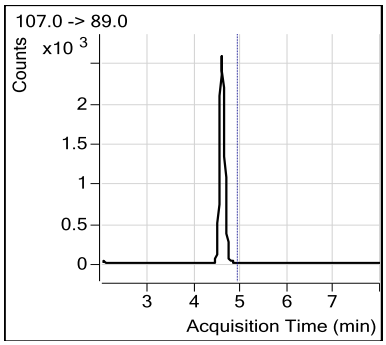


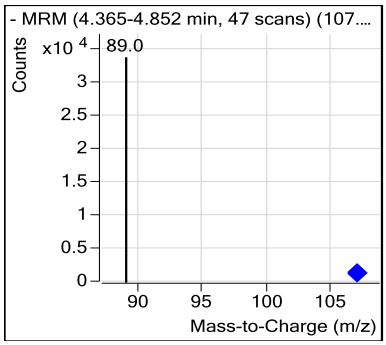




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

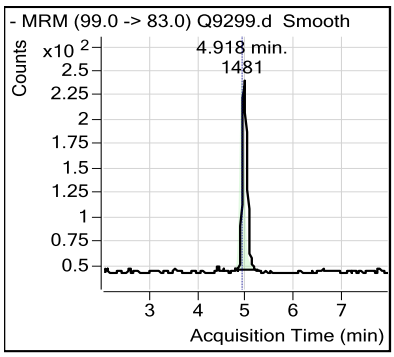
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	31638	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	1481	0.193	ng/ml	98	3.4
		101.0 -> 85.0	430				

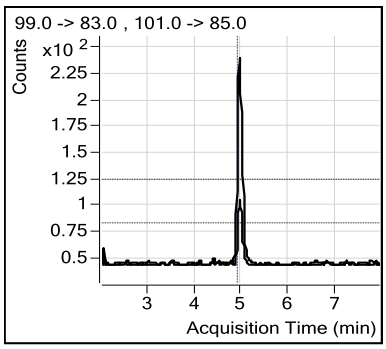
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

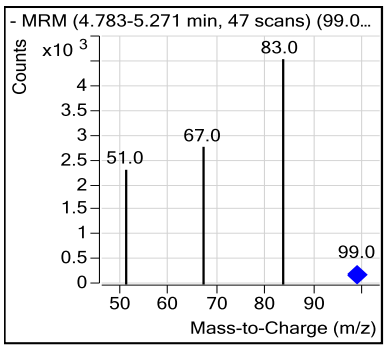
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

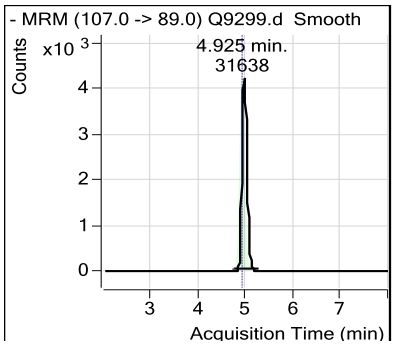
Perchlorate

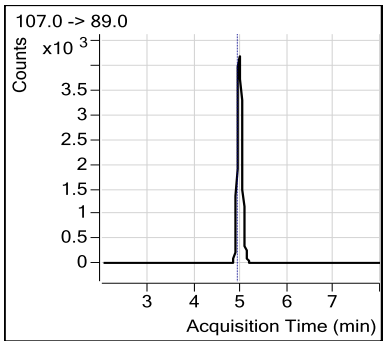


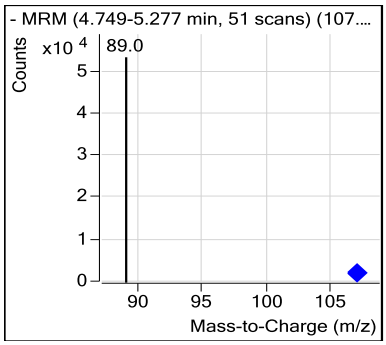




Cl18O4







Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:10

Quantitative Analysis Report for Perchlorate by 685

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	Q-Ratio
Internal Standards								
Cl18O4	4.925	107.0 -> 89.0	30978	5.000	ng/ml		0.000	
System Monitoring Compounds								
Target Compounds							**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	3447	0.457	ng/ml	m	85	2.6
		101.0 -> 85.0	1319					

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

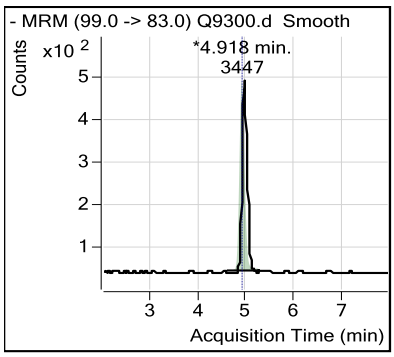
7.5.2

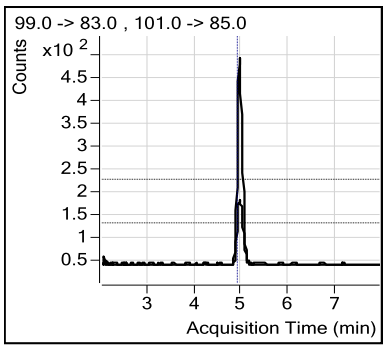
7

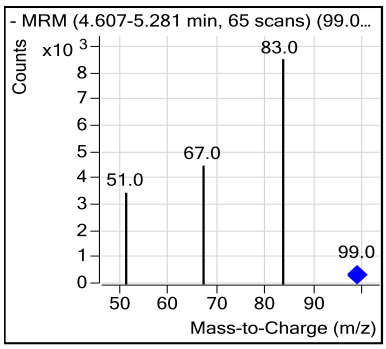
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

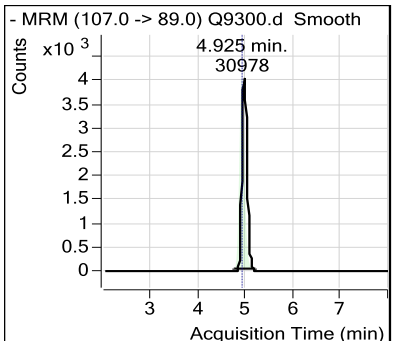
Perchlorate

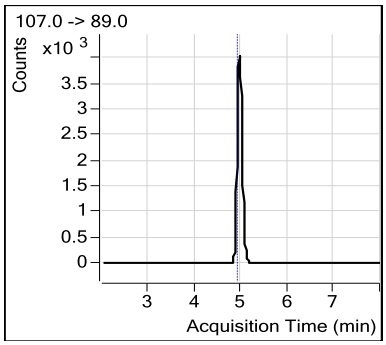


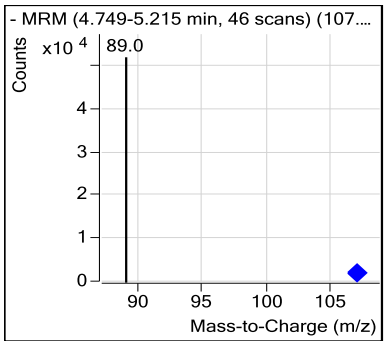




Cl18O4







Manual Integration Approval Summary

Sample Number:	SQ295-IC295	**Method:**	SW846 6850
Lab FileID:	Q9300.D	**Analyst approved:**	12/26/14 14:09 Nancy Saunders
Injection Time:	12/26/14 09:31	**Supervisor approved:**	12/26/14 15:10 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perchlorate	14797-73-0		4.92	Poor instrument integration

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

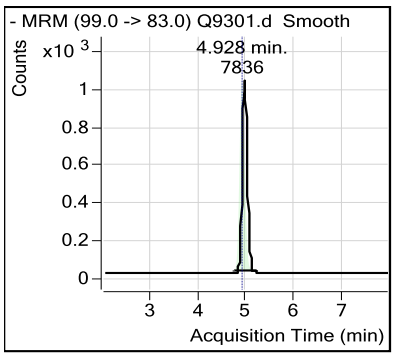
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31673	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.928	99.0 -> 83.0	7836	1.012	ng/ml	94	3.0
		101.0 -> 85.0	2618				

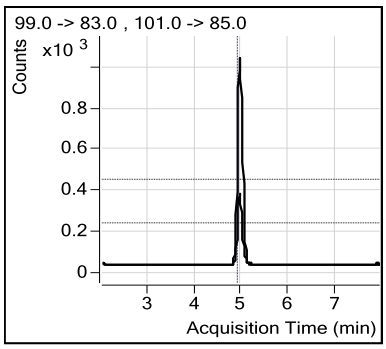
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

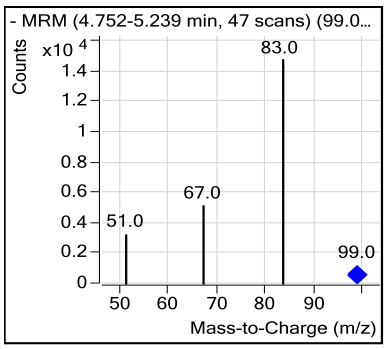
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

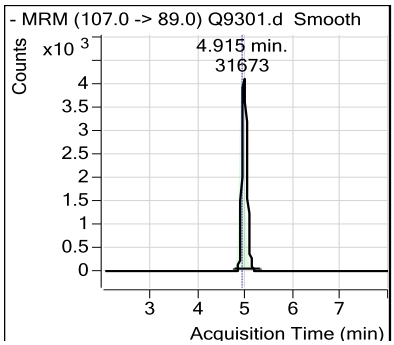
Perchlorate

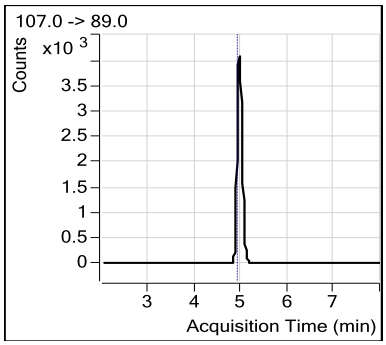


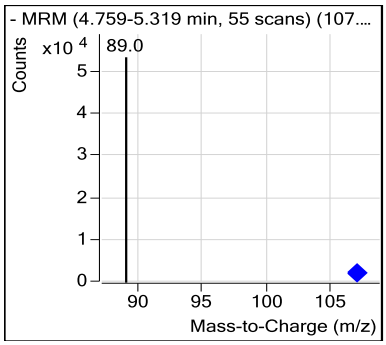




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

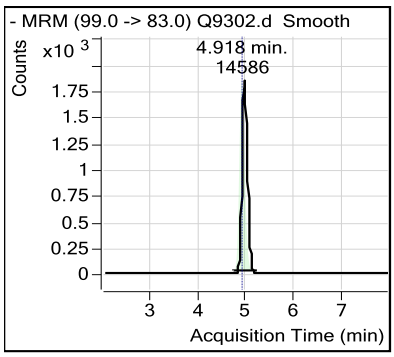
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	30308	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14586	1.954	ng/ml	90	2.8
		101.0 -> 85.0	5130				

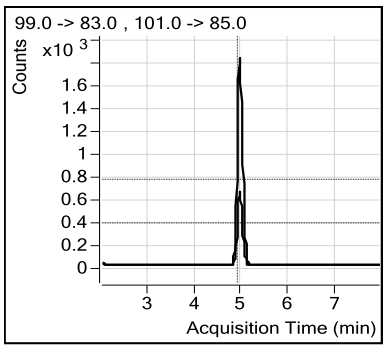
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

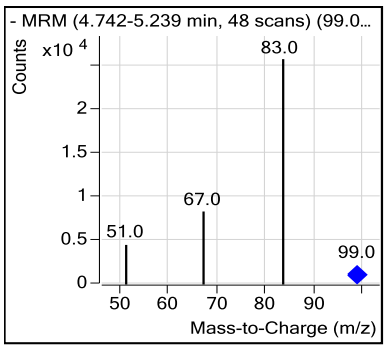
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

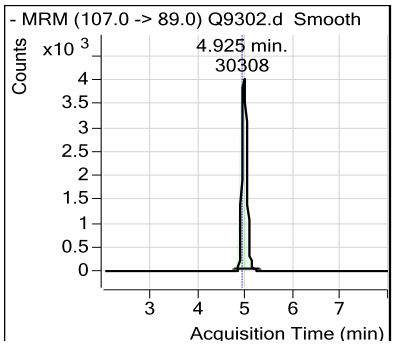
Perchlorate

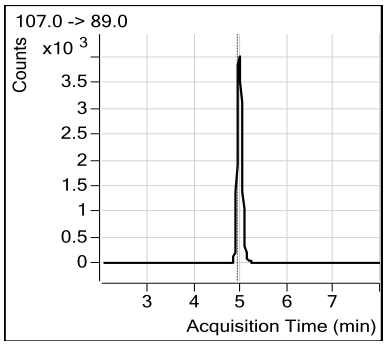


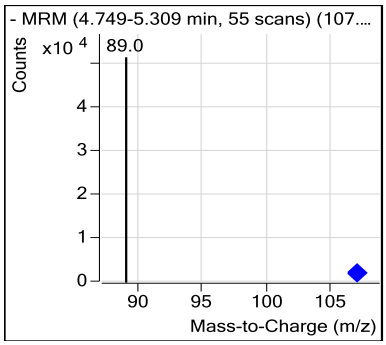




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

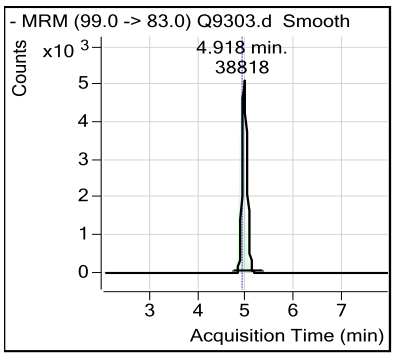
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	30021	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	38818	5.122	ng/ml	94	3.0
		101.0 -> 85.0	12891				

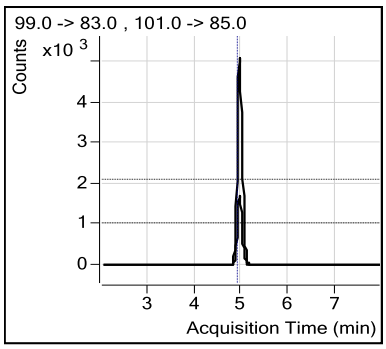
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

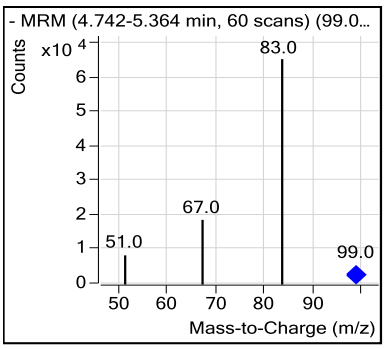
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

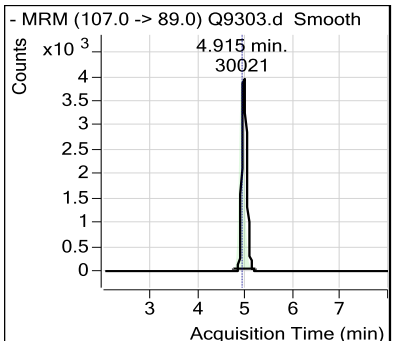
Perchlorate

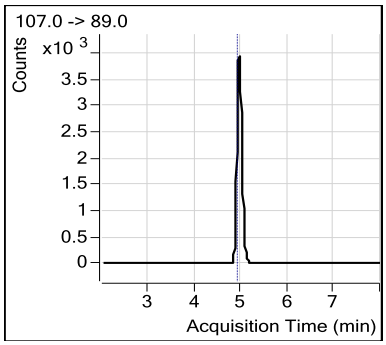


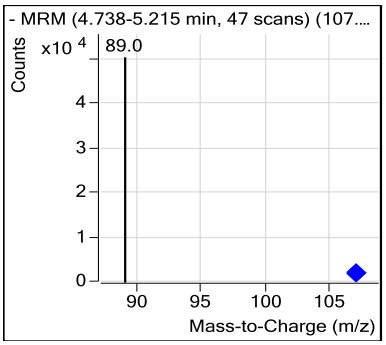




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

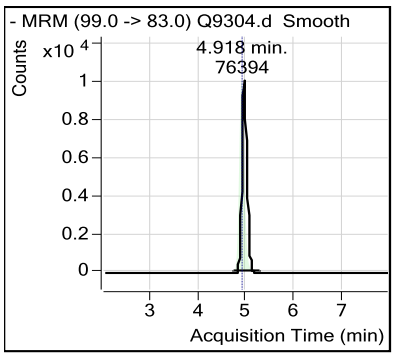
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	29362	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	76394	9.938	ng/ml	95	3.1
		101.0 -> 85.0	24863				

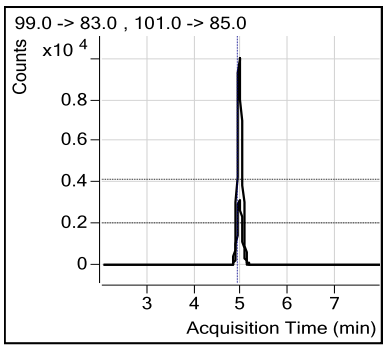
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

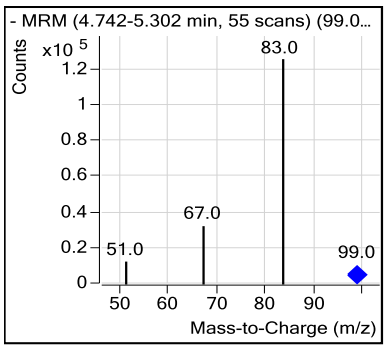
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

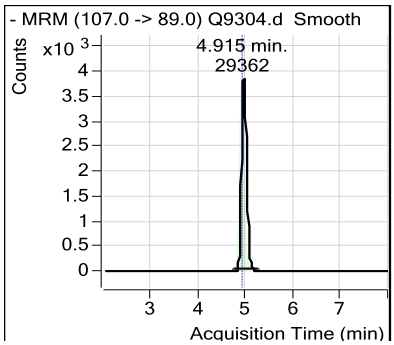
Perchlorate

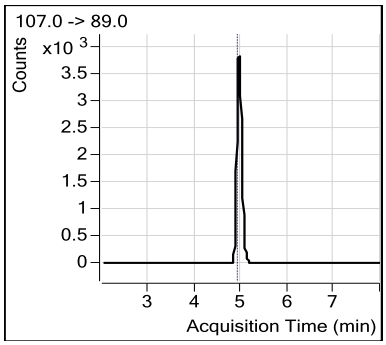


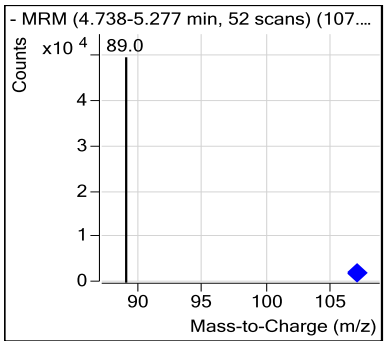




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

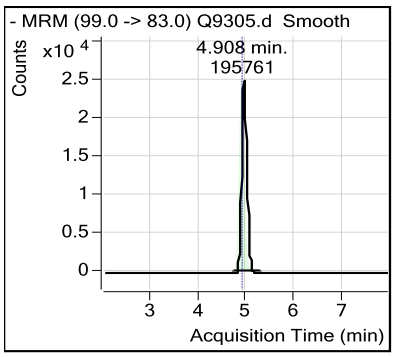
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	26903	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	195761	25.005	ng/ml	95	3.0
		101.0 -> 85.0	64220				

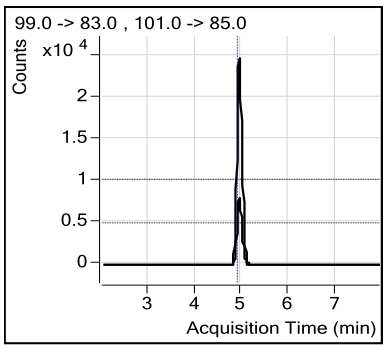
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

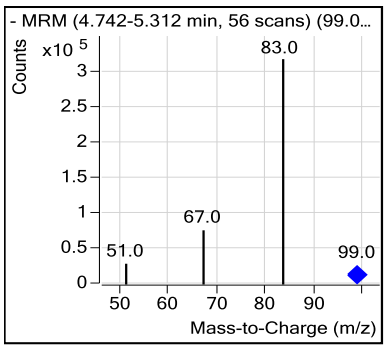
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

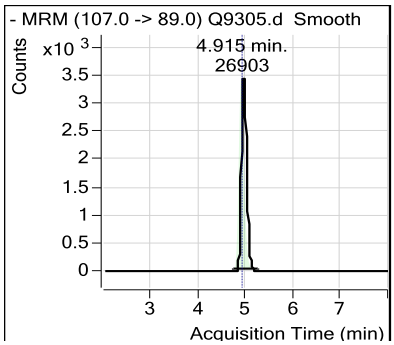
Perchlorate

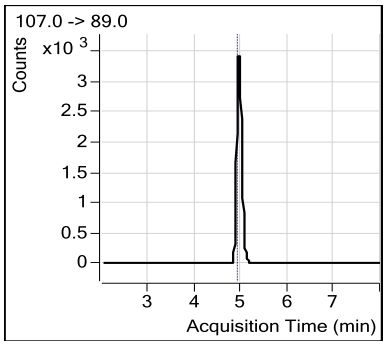


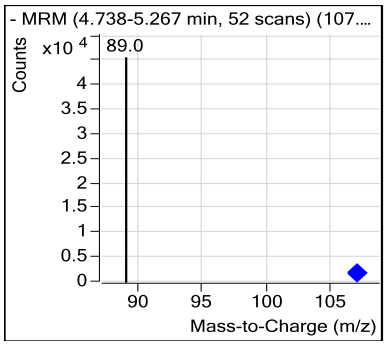




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

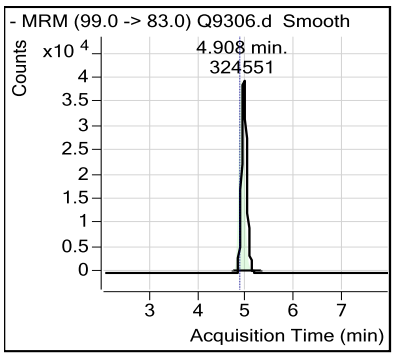
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.904	107.0 -> 89.0	22545	5.000	ng/ml	-0.021	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	324551	43.928	ng/ml	97	3.2
		101.0 -> 85.0	102852				

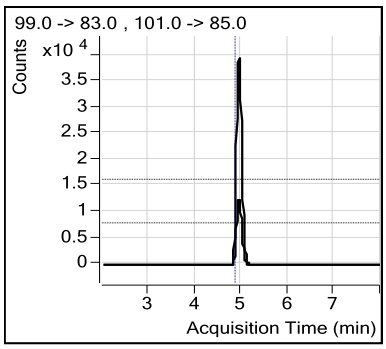
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

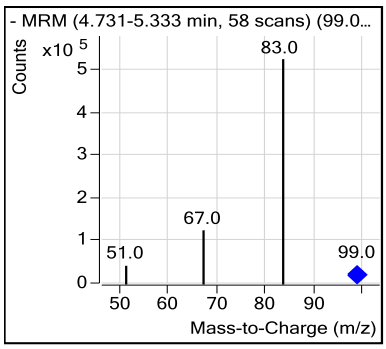
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

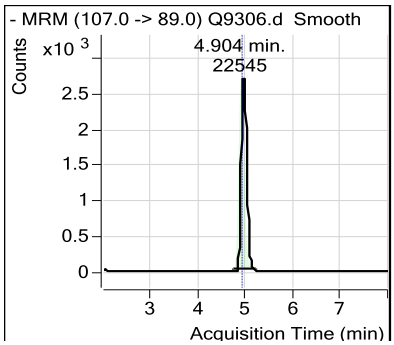
Perchlorate

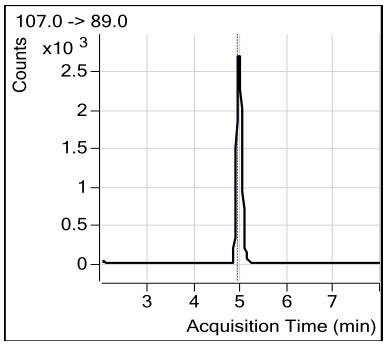


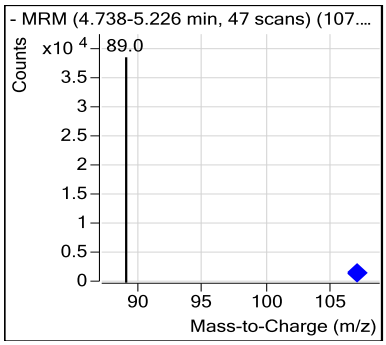




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

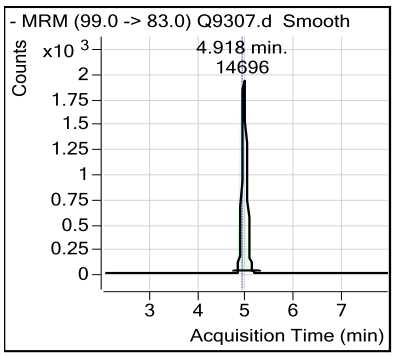
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31140	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14696	1.917	ng/ml	95	3.1
		101.0 -> 85.0	4806				

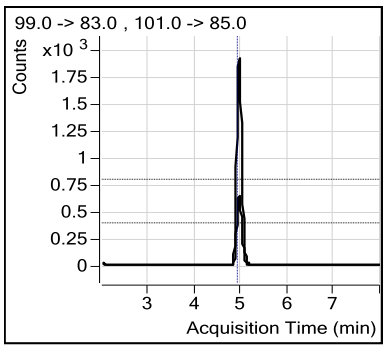
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

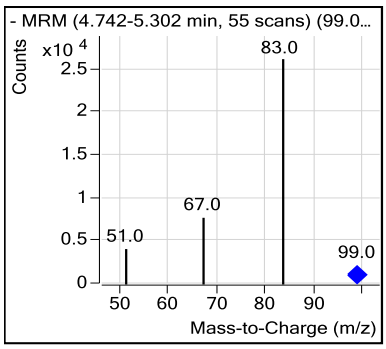
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

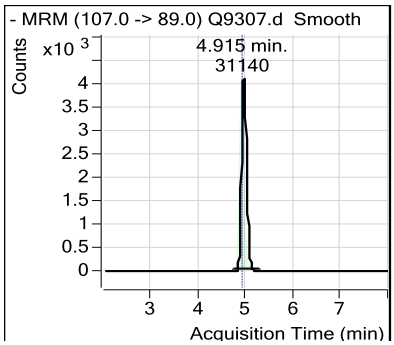
Perchlorate

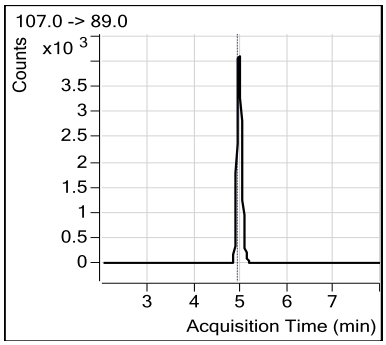


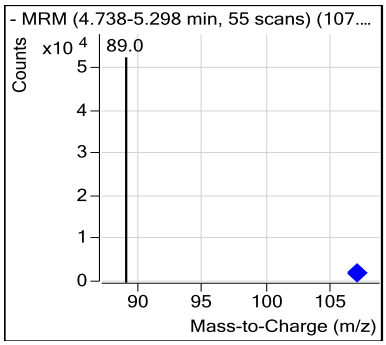




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9509.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:11
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

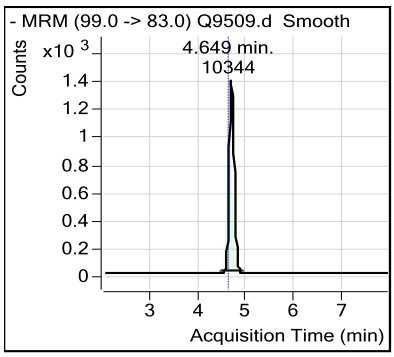
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.645	107.0 -> 89.0	20879	5.000	ng/ml	-0.280	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.649	99.0 -> 83.0	10344	2.010	ng/ml	87	2.7
		101.0 -> 85.0	3837				

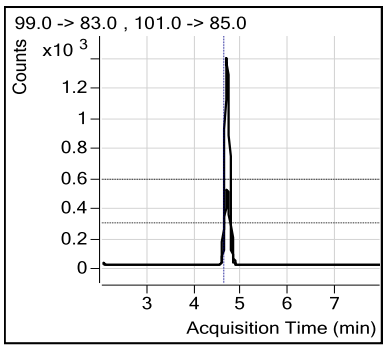
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

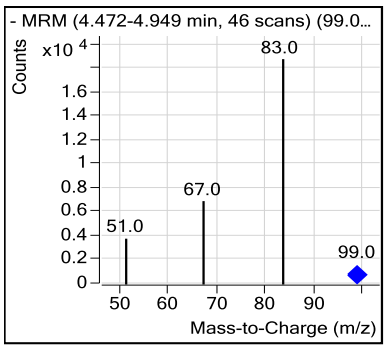
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9509.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:11
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

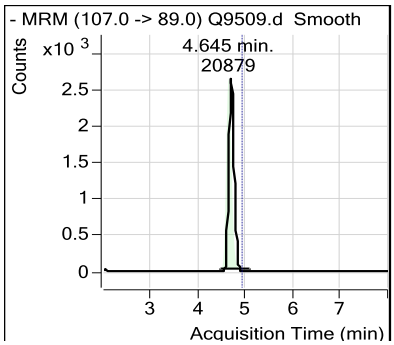
Perchlorate

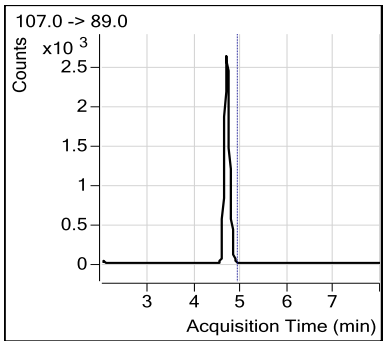


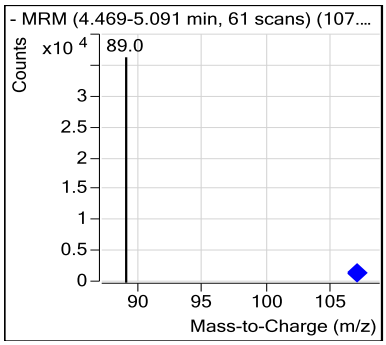




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9510.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:20
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

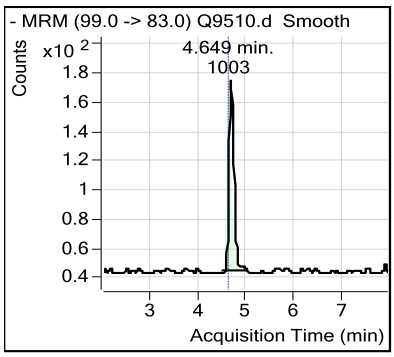
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.655	107.0 -> 89.0	21811	5.000	ng/ml	-0.270	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.649	99.0 -> 83.0	1003	0.189	ng/ml	97	3.2
		101.0 -> 85.0	317				

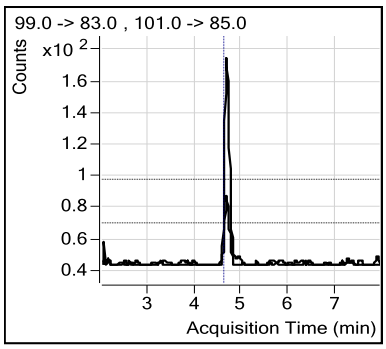
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

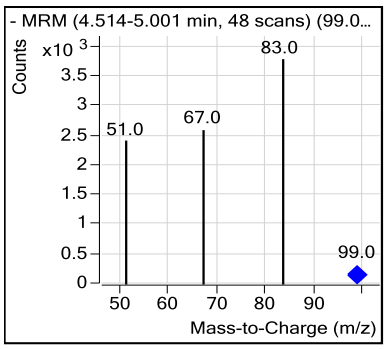
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9510.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:20
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

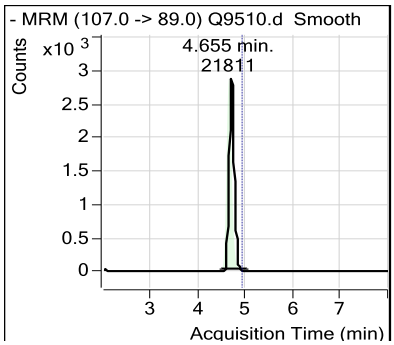
Perchlorate

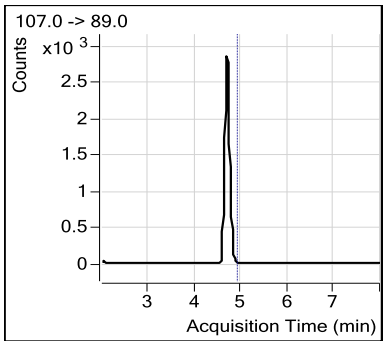


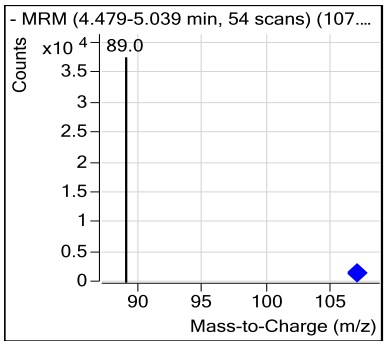




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9522.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:19
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

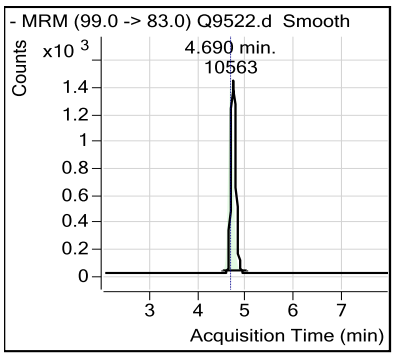
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.687	107.0 -> 89.0	19506	5.000	ng/ml	-0.238	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	10563	2.194	ng/ml	93	3.0
		101.0 -> 85.0	3550				

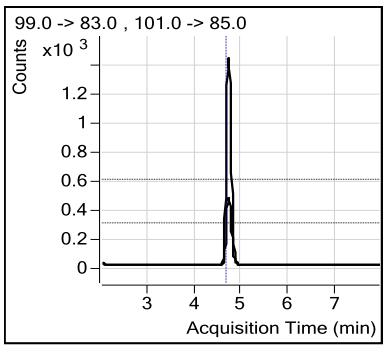
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

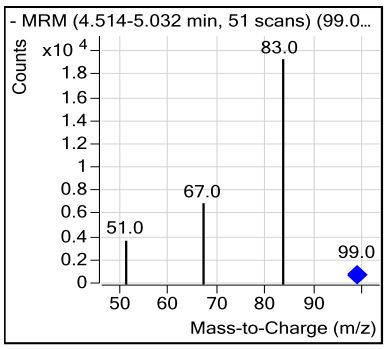
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9522.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:19
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

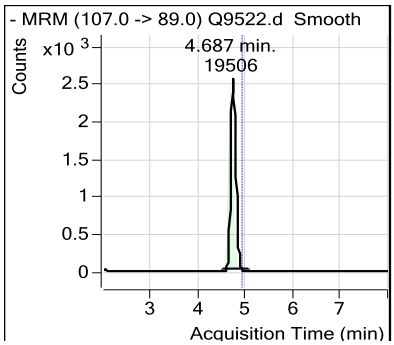
Perchlorate

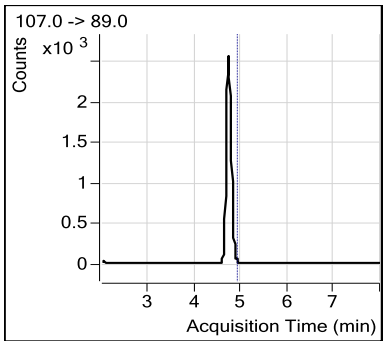


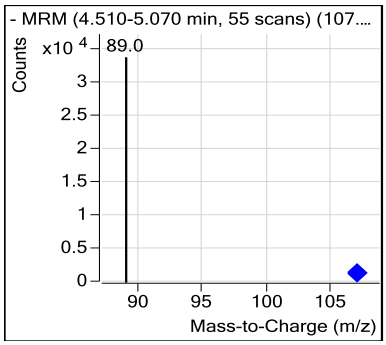




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9523.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:28
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

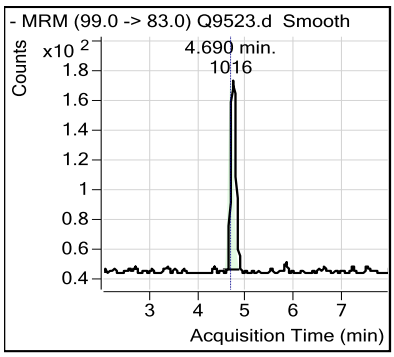
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.687	107.0 -> 89.0	20305	5.000	ng/ml	-0.238	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	1016	0.206	ng/ml	91	2.9
		101.0 -> 85.0	353				

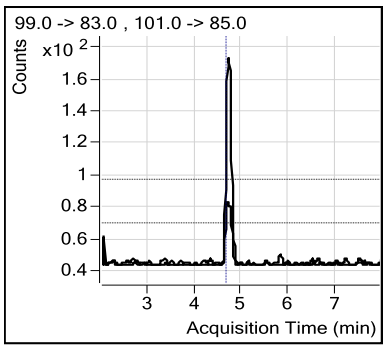
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

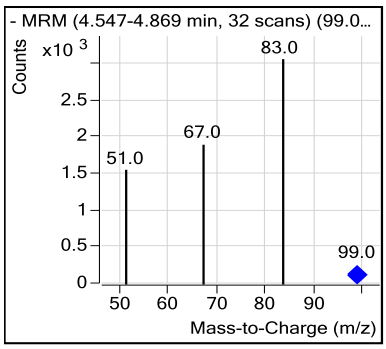
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9523.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:28
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

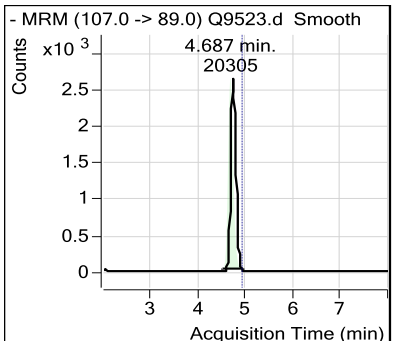
Perchlorate

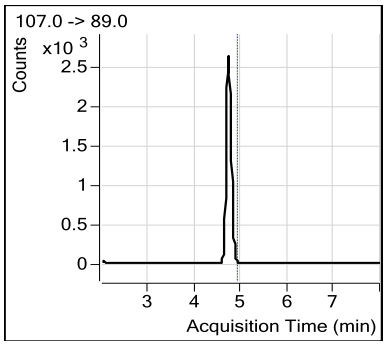


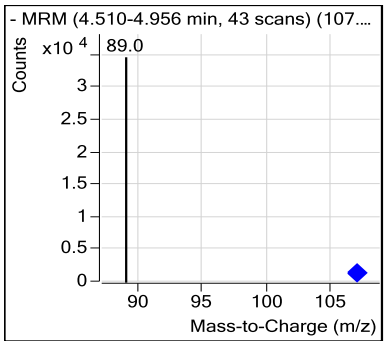




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9535.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:12
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

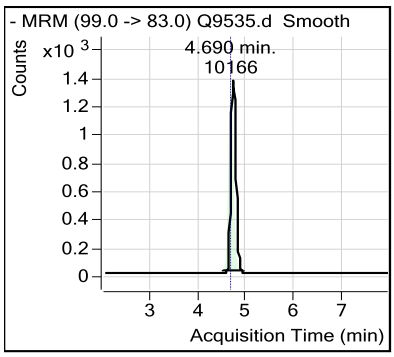
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.687	107.0 -> 89.0	19366	5.000	ng/ml	-0.238	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	10166	2.128	ng/ml	86	2.7
		101.0 -> 85.0	3818				

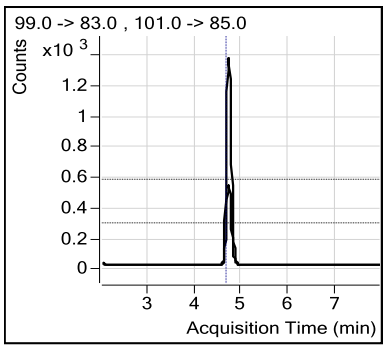
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

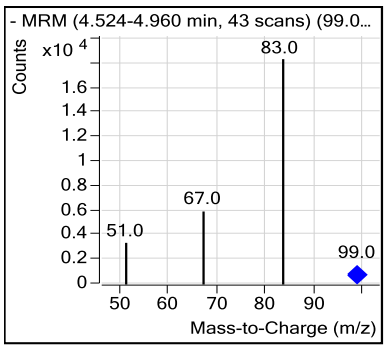
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9535.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:12
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

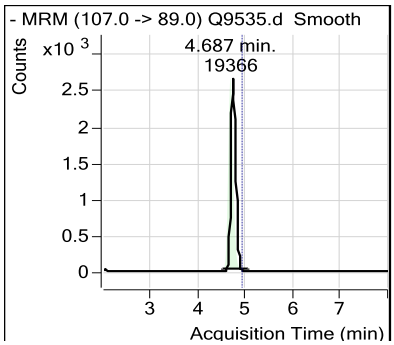
Perchlorate

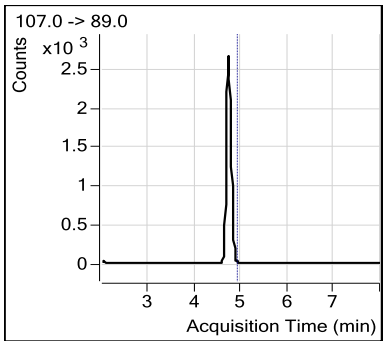


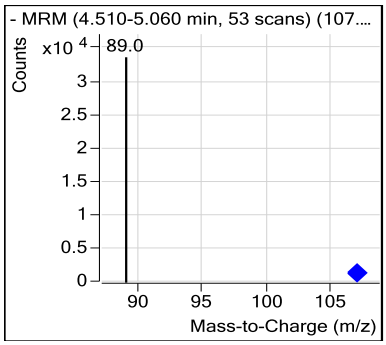




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9536.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:21
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	Q-Ratio
Internal Standards								
Cl18O4	4.687	107.0 -> 89.0	20858	5.000	ng/ml		-0.238	
System Monitoring Compounds								
Target Compounds							**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	992	0.196	ng/ml	#	78	2.4
		101.0 -> 85.0	416					

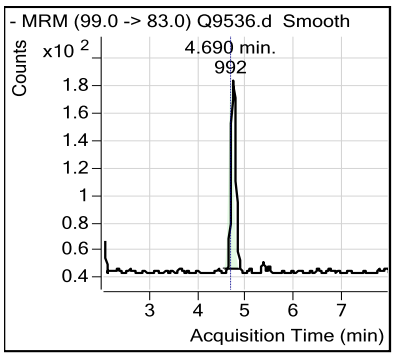
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

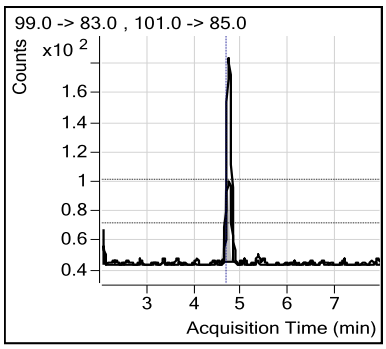
ACCUTEST LABORATORIES FA20937

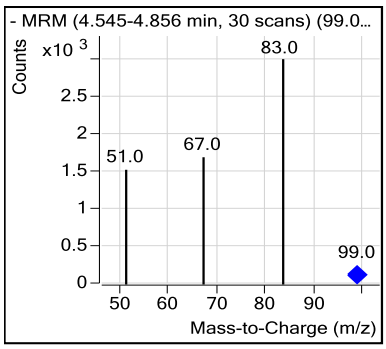
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9536.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:21
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

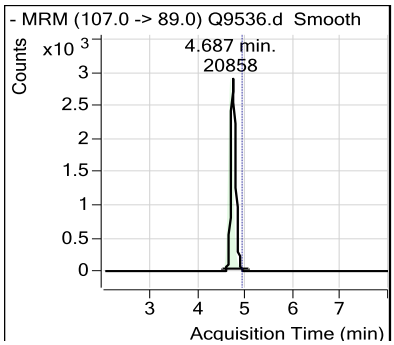
Perchlorate

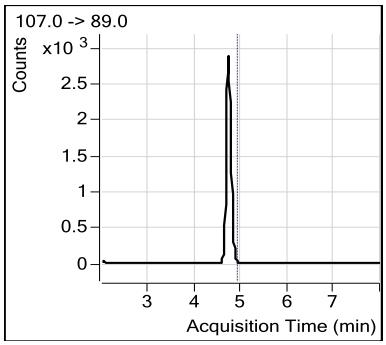


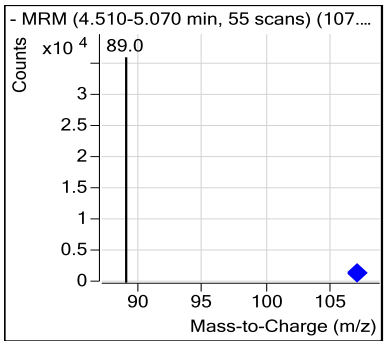




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9548.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 15:37
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

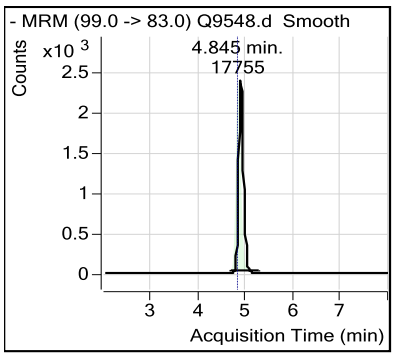
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.842	107.0 -> 89.0	34093	5.000	ng/ml	-0.083	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.845	99.0 -> 83.0	17755	2.112	ng/ml	98	3.2
		101.0 -> 85.0	5477				

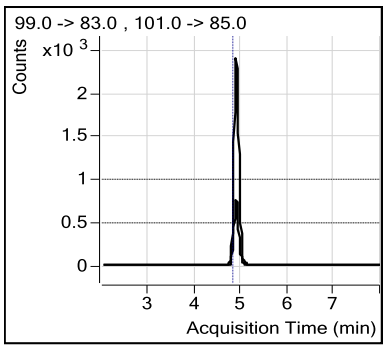
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

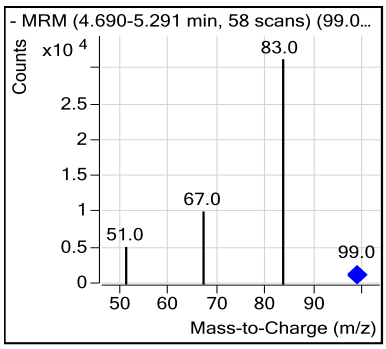
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9548.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 15:37
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

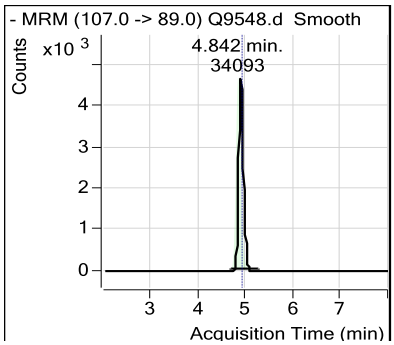
Perchlorate

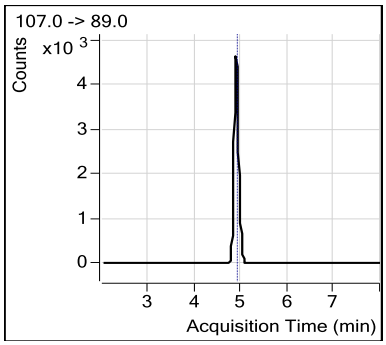


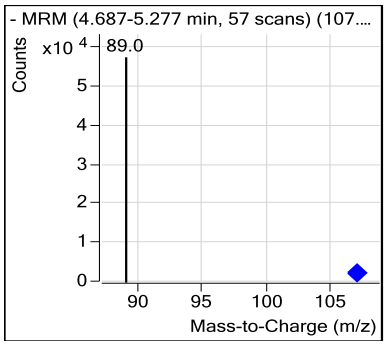




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9549.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 15:45
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

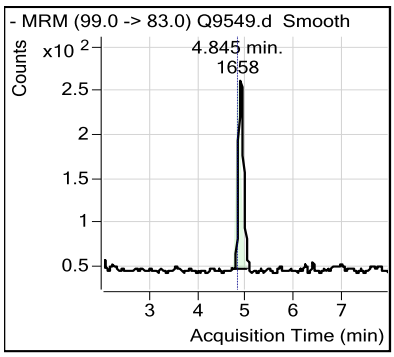
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.842	107.0 -> 89.0	33717	5.000	ng/ml	-0.083	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.845	99.0 -> 83.0	1658	0.202	ng/ml	85	2.6
		101.0 -> 85.0	629				

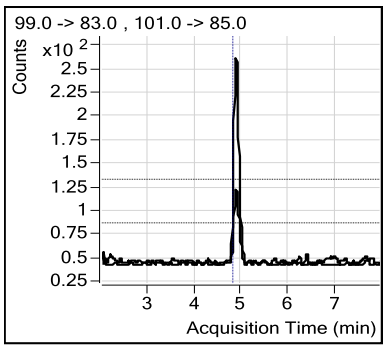
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

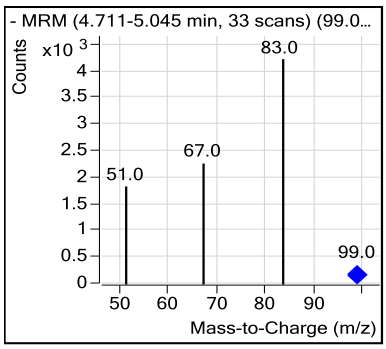
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9549.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 15:45
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

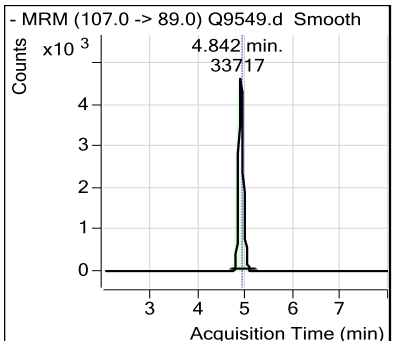
Perchlorate

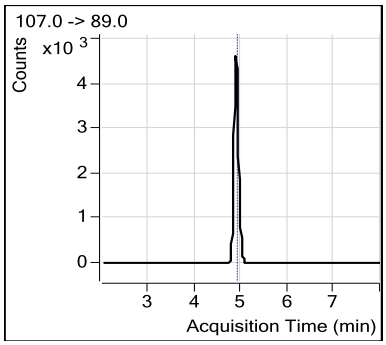


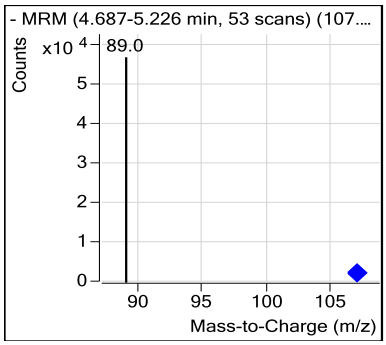




Cl18O4







ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	K prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6BTO
ACQ. METHOD:	Perchlorate_2
PROC. METHOD:	1226 6BTO SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	~~294~~ 295

mc 122614

ANALYST:	NAS
SOLVENT A LOT #:	95/5 084623/066640
SOLVENT B LOT #:	95/5 066640/084623
WATER LOT #:	084623
ISTD Lot #:	7199

	DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q	9294	1	CCB	6BTO	—	—	2 10K	—		IS ↑ Am curve
Q	95	1	CCB		—	—		—		
Q	96	1	CCB		—	—		—		
Q	97	2	CCB		—	—		—		
Q	98	2	CCB		—	—		—		
Q	99	2	~~ICP~~ ICV295-0.2		LC494	20/10ml		3.4		✓
Q	300	3	FCV295-0.5			50ul 10ml		2.6	AI	✓
Q	01	4	-1.0			100ul 10ml		3.0		✓
Q	02	5	ICCV295-2.0			200ul 10ml		2.8		✓
Q	03	6	FCV295-5.0			500ul 10ml		3.0		✓
Q	04	7	-10			1ml 10ml		3.1		✓
Q	05	8	-25			2.5ml 10ml		3.0		✓
Q	06	9	-50		↓	5ml 10ml		3.2		Drop point
Q	07	10	FCV295-2.0		LC495	20ml 10ml	↓	3.1		Pass
Q	08	11	ICS295-0.2		↓	20ml 10ml	710K 415K	2.7		Pass
Q	09	12	OP54351-BS		OP54351	17	2 10K	X		AA missinject
Q	10	13	-MB					X		↓
Q	11	14	FA20579-1					2.6		✓
Q	12	15	-2					2.8		✓
Q	13	16	-3	↓	↓	↓	↓	3.0		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	Rx Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate 2
PROC. METHOD:	R226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	295

ANALYST:	NAS		
SOLVENT A LOT #:	9515	084623	066640
SOLVENT B LOT #:	9515	066640	084623
WATER LOT #:	084623		
ISTD Lot #:	1199		

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9314	17	FA20574-4	6850	OP54351	1X	L10K	3.0		✓
Q 15	5	CC295-2.0		LC494	20ave 10ml		2.9		Pass
Q 16	2	-0.2		↓	20ave 10ml		3.1		Pass
Q 17	1	CCB		—			—		NA
Q 18	18	FA20723-1		OP54351	1X		2.8		✓
Q 19	19	-2					2.7		✓
Q 20	12	OP54351-BS					2.9		✓
Q 21	13	-MB					—		✓
Q 22	20	FA20723-3					2.6		✓
Q 23	21	OP54351-MS					2.9		✓
Q 24	22	-MSD		↓	↓		3.3		✓
Q 25	5	EC295-2.0		LC494	20ave 10ml		3.0		✓ Pass
Q 26	2	CC295-0.2	↓	↓	20ave 10ml		2.8		Pass
Q 27	1	CCB	↓	—	—	↓	—		
Q									
Q									
Q									
Q						12-26-14 NAS			
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

ACCUTEST LABORATORIES SE

LCMS1-Q ANALYSIS LOG

DATE:	01-05-15
COLUMN TYPE:	K prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

METHODS:	6650
ACQ. METHOD:	perchlorate 2
PROC. METHOD:	1220 6650 SQ29T
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NAS
SOLVENT A LOT #:	9T1T 076032 / K38813
SOLVENT B LOT #:	GT/T K38813 / 076032
WATER LOT #:	076032
ISTD Lot #:	7149

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9506	1	CCB	6650	—	—	<10K			✓
Q 07	1	CCB		—	—				✓
Q 08	1	CCB		—	—				✓
Q 09	2	CC2QT-2.0		LC494	200/10ml		2.7		Pass
Q 10	3	-0.2		↓	200ul 10ml	↓	3.2		Pass
Q 11	4	ICS2QT-0.2		LC450	200ul 10ml	>10K <15K	2.9		Pass
Q 12	5	OP54473-BS		OP54473	1T	<10K	2.2	PR	✓ PR
Q 13	6	-MB					—		NO
Q 14 DILUTION	7	FA20744-1					2.9		✓
Q 15	8	OP54473-MS					3.0		✓
Q 16	9	-MSD					2.8		✓
Q 17	10	FA20744-2					2.7		✓
Q 18	11	-3					2.7		✓
Q 19	12	-4					3.0		✓
Q 20	13	FA20820-1					2.8		✓
Q 21	14	-2		↓	↓		2.9		✓
Q 22	2	CC2QT-2.0		LC494	200ul 10ml		3.0		Pass
Q 23	3	-0.2		⊥	200ul 10ml		2.9		Pass
Q 24	1	CCB		—	—		—		NO
Q 25	5	OP54473-BS		OP54473	1T	↓	2.7		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	01-05-15
COLUMN TYPE:	K Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate 2
PROC. METHOD:	1226 6850 S0245
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	WAS
SOLVENT A LOT #:	9515 076032/K38813
SOLVENT B LOT #:	9515 K38813/076032
WATER LOT #:	0760X
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9526	15	FA20820-3	6850	OP54473	1X	210K	2.7		✓
Q 27	16	-4					3.1		✓ RR 4X
Q 28	17	-5					3.0		✓
Q 29	18	FA20981-1					3.0		✓
Q 30	19	-2					3.3		✓
Q 31	20	-3					2.9		✓
Q 32	21	FA20437-1					3.0		✓
Q 33	22	-2					2.7		✓
Q 34	23	-3					2.2		RR 1X
Q 35	2	CC245-2.0		LL494	200ul 10ml		2.7		Pass
Q 36	3	-0.2			200ul 10ml		2.4		Pass
Q 37	1	CCB		—	—		—		ND
Q 38	24	FA20820-4		OP54473	5X [illegible]		2.9	2ml/10ml	✓
Q 39	25	FA20437-3			1X		3.7		✓
Q 40	26	OP54492-05		OP54492			3.2		✓
Q 41	27	-MB					—		ND
Q 42	28	FA21067-1					2.9		✓
Q 43	29	-2					2.9		✓
Q 44	30	-3					2.7		✓
Q 45	31	-4					2.2		✗ RR 1X

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature: [signature]

ACCUTEST LABORATORIES SE

DATE:	01-07-15
COLUMN TYPE:	K-Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate2
PROC. METHOD:	1226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NAS
SOLVENT A LOT #:	GP/F 076032 / K36613
SOLVENT B LOT #:	GP/F K36613 / 076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9546	32	FA21067-5	6850	OP54442	1X	CLOK	2.8	MASSLOGIC	✓ MASSLOGIC
Q 47	33	-6		"	"		~~3.0~~	3.3	✓ ~~PASS~~ OK
Q 48	2	CCL25 -2.0		LC444	20ul 10ml		3.2		PASS
Q 49	3	-0.2		"	20ul 10ml		2.6		PASS
Q 50	1	CCV3					—		ND
Q 51	34	FA21867-7		OP54442	1X		2.9		✓
Q 52	35	-8					3.1		✓
Q 53	36	-9					2.7		✓
Q 54	37	-10					—		ND
Q 55	38	-11					—		ND
Q 56	39	-12					—	W	ND
Q 57	40	-13					3.8	MASSLOGIC	~~ND~~ ✓
Q 58	41	-14					2.8		✓
Q 59	42	-15					—		ND
Q 60	43	-16		"	"		3.3		✓
Q 61	2	CCL25-2.0		LC444	20ul 10ml		2.9		PASS
Q 62	3	-0.2		"	20ul 10ml		2.8		PASS
Q 63	1	CCV3					—		ND
Q 64	44	FA21067-17		OP54442	1X		3.1		✓
Q 65	45	-18		"	"		2.8		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	01-07-15
COLUMN TYPE:	K Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate2
PROC. METHOD:	1226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NTS
SOLVENT A LOT #:	15/15 076032 / K3885
SOLVENT B LOT #:	91/15 K3885 / 076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9566	46	FA21067-19	6850	OP54442	1x	210K	2.7		✓
Q 67	47	-20				MS 0.0001F	~~3.5~~ 3.5		✓
Q 68	48	OP54442-MS					3.1		✓
Q 69	49	-MSD					3.5		✓
Q 70	50	OP54443-BS		OP54443			3.0		✓
Q 71	51	-MB					—		ND
Q 72	52	FA21067-21					2.9		✓
Q 73	53	-22					2.9		✓
Q 74	2	CC245-2.0		LC444	200ul 10ml		2.9		PASS
Q 75	3	-0.2			20ul 10ml		2.8		PASS
Q 76	1	CCB					—		ND
Q 77	54	FA21067-23		OP54443	1x		3.3		✓
Q 78	55	-24					3.0		✓
Q 79	56	-25					2.6		✓
Q 80	57	-26					3.5		✓
Q 81	58	-27					3.0		✓
Q 82	59	- 28					2.9		✓
Q 83	60	- 29					2.7		✓
Q 84	61	OP54443-MS					3.1		X ISLAR
Q 85	62	-MSD					2.9		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	01-05-15
COLUMN TYPE:	K Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Prchlorate 2
PROC. METHOD:	6850 1226 SQ245
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NAS
SOLVENT A LOT #:	95/5 076032 / K38513
SOLVENT B LOT #:	95/5 K38513 / 076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9586	63	FA21067-30	6850	OP54443	1X	CLOK	2.7		✓
Q 87	2	CC245-2.0		LL494	200uL (0ml		3.0		Pass
Q 88	3	-0.2		↓	20uL 10ml		3.2		high
Q 89	1	CCB		—			—		NO
Q 90	64	FA21067-31		OP54443			2.0		X AR
Q 91	65	-32					—		NO
Q 92	66	-33					2.7		✓
Q 93	67	-34					—		X NO IS AR
Q 94	68	-35					3.3		✓
Q 95	69	-36					—		NO
Q 96	70	-37					2.4		✓
Q 97	71	-38					2.7		✓
Q 98	72	-39					2.6		✓
Q 99	73	-40		↓			—		NO
Q 9600	2	CC245-2.0		LL494	200uL (0ml		3.0		Pass
Q 01	3	CC245-0.2		↓	20uL 10ml		2.5		Pass
Q 02	1	CCB	↓	—		↓	—		NO
Q									
Q									
Q							NAS 01/06/15		

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature:

ACCUTEST LABORATORIES SE

SOLID SAMPLE PREP REPORT

Date/Time: 01-02-15 1100
Started {mm/dd/yy 24:00}

Prep Method: 3550C 3580A or Method (circle)

Date/Time: 01-02-15 1300
Finished {mm/dd/yy 24:00}

Batch#: OP54473

Analytical Method: 6850

Ext. By: NHS Conc. By: — Vialed By: NHS Balance ID: ADVAN05

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54473 MB		1.00			10ml	
OP ↓ BS		1.00		20ul		
FA20794-1	1	1.29				MS/MSD
-2		1.26				
-3		1.02				
-4		1.19				
FA20820-1		1.09				
-2		1.21				
-3		1.18				
-4		1.19				
-5		1.00				
FA20891-1		1.00				
-2		1.13				
-3		1.02				
FA20937-1		1.03				
-2		1.00				
-3	↓	1.07			↓	
						NHS 01-02-15
OP54473 – MS	1	1.10		20ul	10ml	FA20794-1
– MSD	1	1.16		↓	↓	-1
DUP						

Comments:

Surr. ID: — Conc: — Exp. Date: — Inj. By: — Ver. By —

Spk. ID: LC450 Conc: 100ppb Exp. Date: 05-22-15 Inj. By: NHS Ver. By NHS

Initial Bath Temp (Therm ID): Exchange Bath/N-Evap Temp (Therm ID):

Observed Temp °C: Corr. Temp °C: Observed Temp °C: Corr. Temp °C:

CH2CL2 Lot # — Hexane Lot # — Na2SO4 Lot# —

Acetonitrile Lot # — Methanol Lot # — Acetone Lot# —

Syringe Filter Lot# 1001010 Filter ~~Paper~~ Vial # 022673 Reagent # 084623

Copper Lot # If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: Date: 01-02-15

Accepted By: Date: 01-02-15

NF rev. 09/14/12 extsolid 091412.xls

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-MB	BB045465.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	125%	69-134%

Method Blank Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-MB	GG058050.D	1	01/05/15	KL	12/30/14	OP54435	GGG2338

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	69-134%

Blank Spike Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-BS	BB045463.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2690	108	75-147
121-82-4	RDX	2500	2500	100	79-126
606-20-2	2,6-Dinitrotoluene	2500	2630	105	81-134
121-14-2	2,4-Dinitrotoluene	2500	2620	105	81-128
35572-78-2	2-amino-4,6-Dinitrotoluene	2500	2560	102	81-127
19406-51-0	4-amino-2,6-Dinitrotoluene	2500	2510	100	74-125
118-96-7	2,4,6-Trinitrotoluene	2500	2340	94	70-123
55-63-0	Nitroglycerine	12500	12200	98	73-121

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	114%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-PT1	BB045464.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	620	605	98	54-255
121-82-4	RDX	587	541	92	59-118
606-20-2	2,6-Dinitrotoluene	1320	1270	96	64-119
121-14-2	2,4-Dinitrotoluene	638	631	99	66-119
35572-78-2	2-amino-4,6-Dinitrotoluene	650	539	83	60-112
19406-51-0	4-amino-2,6-Dinitrotoluene	947	509	54	54-103
118-96-7	2,4,6-Trinitrotoluene	808	703	87	59-100
55-63-0	Nitroglycerine	1000	745	75	62-115

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	115%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-MS	BB045467.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
OP54435-MSD	BB045468.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
FA20881-1	BB045466.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	FA20881-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	100	U	2480	2840	115	2500	2640	106	7	75-147/22
121-82-4	RDX	100	U	2480	2320	94	2500	2380	95	3	79-126/21
606-20-2	2,6-Dinitrotoluene	100	U	2480	2580	104	2500	2560	102	1	81-134/20
121-14-2	2,4-Dinitrotoluene	100	U	2480	2590	105	2500	2550	102	2	81-128/17
35572-78-2	2-amino-4,6-Dinitrotoluene	100	U	2480	2500	101	2500	2540	102	2	81-127/15
19406-51-0	4-amino-2,6-Dinitrotoluene	100	U	2480	2430	98	2500	2460	98	1	74-125/23
118-96-7	2,4,6-Trinitrotoluene	100	U	2480	2250	91	2500	2290	92	2	70-123/16
55-63-0	Nitroglycerine	1000	U	12400	12100	98	12500	12200	98	1	73-121/15

CAS No.	Surrogate Recoveries	MS	MSD	FA20881-1	Limits
610-39-9	3,4-Dinitrotoluene	111%	110%	122%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-DUP	BB045476.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
FA20937-1	BB045475.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	FA20937-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	100 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	100 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	100 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	100 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16
55-63-0	Nitroglycerine	1000 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20937-1	Limits
610-39-9	3,4-Dinitrotoluene	117%	121%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-DUP2	BB045477.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
FA20937-1	BB045475.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20937-1, FA20937-2, FA20937-3

CAS No.	Compound	FA20937-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	100 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	100 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	100 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	100 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16
55-63-0	Nitroglycerine	1000 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20937-1	Limits
610-39-9	3,4-Dinitrotoluene	121%	121%	69-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA20937-1	BB045475.D	121
FA20937-2	BB045471.D	122
FA20937-3	BB045472.D	113
OP54435-BS	BB045463.D	114
OP54435-DUP	BB045476.D	117
OP54435-DUP2	BB045477.D	121
OP54435-MB	BB045465.D	125
OP54435-MB	GG058050.D	
OP54435-MS	BB045467.D	111
OP54435-MSD	BB045468.D	110
OP54435-PT1	BB045464.D	115

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1225-CC1221	**Injection Date:**	01/02/15
Lab File ID:	BB045462.D	**Injection Time:**	14:31
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] **RT**
Check Std	11.18

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
OP54435-BS	BB045463.D	01/02/15	14:57	11.16
OP54435-PT1	BB045464.D	01/02/15	15:22	11.16
OP54435-MB	BB045465.D	01/02/15	15:47	11.15
FA20881-1	BB045466.D	01/02/15	16:11	11.16
OP54435-MS	BB045467.D	01/02/15	16:36	11.16
OP54435-MSD	BB045468.D	01/02/15	17:01	11.15
ZZZZZZ	BB045469.D	01/02/15	17:26	11.15
ZZZZZZ	BB045470.D	01/02/15	17:51	11.15
FA20937-2	BB045471.D	01/02/15	18:16	11.14
FA20937-3	BB045472.D	01/02/15	18:41	11.14

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1225-CC1221	**Injection Date:**	01/02/15
Lab File ID:	BB045473.D	**Injection Time:**	19:06
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	11.15	11.15

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA20937-1	BB045475.D	01/02/15	19:56	11.14	
OP54435-DUP	BB045476.D	01/02/15	20:21	11.12	
OP54435-DUP2	BB045477.D	01/02/15	20:46	11.12	
GBB1225-ECC122B	BB045481.D	01/02/15	22:26	11.13	11.13

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GGG2338-CC2334	**Injection Date:**	01/05/15
Lab File ID:	GG058049.D	**Injection Time:**	08:30
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	16.27	16.28

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP54435-MB	GG058050.D	01/05/15	09:08		16.20
ZZZZZZ	GG058051.D	01/05/15	09:40	16.20	
GGG2338-ECC2334	GG058053.D	01/05/15	10:44	16.23	16.24

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration

Calibration Files
20 =BB045353.D 50 =BB045354.D 100 =BB045355.D 200 =BB045356.D
500 =BB045357.D 1000=BB045358.D 2000=BB045359.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.083	3.188	3.339	3.315	3.251	3.260	3.334	3.253	E3	2.83
2)	HMX	1.474	1.670	1.716	1.606	1.362	1.383	1.387	1.514	E3	9.79
3)	DNX	2.832	2.894	2.975	2.866	2.801	2.804	2.844	2.860	E3	2.12
4)	MNX	2.374	2.804	2.556	2.409	2.322	2.355	2.394	2.459	E3	6.88
5)	RDX	1.678	1.843	1.932	1.772	1.747	1.752	1.790	1.788	E3	4.52
6)	1,3,5-Trinitroben	4.481	4.244	3.946	3.884	3.871	3.921	3.957	4.043	E3	5.70
7)	1,3-Dinitrobenzen	5.762	5.450	5.064	5.209	5.032	5.039	5.164	5.246	E3	5.15
8)	3,5-Dinitroanilin	4.428	4.294	4.178	4.237	4.085	4.059	4.165	4.207	E3	3.02
9)	Nitrobenzene	3.284	2.994	3.213	3.005	3.053	2.947	3.019	3.074	E3	4.07
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.249	2.503	2.699	2.670	2.612	2.621	2.703	2.722	E3	8.90
12)	2,4,6-Trinitrotol	3.826	3.865	3.450	3.659	3.673	3.722	3.835	3.719	E3	3.87
13)	2-Amino-4,6-Dinit	3.530	2.871	2.821	2.977	3.028	3.076	3.196	3.071	E3	7.74
14)	4-Amino-2,6-Dinit	2.435	1.814	2.010	2.087	2.154	2.232	2.335	2.153	E3	9.65
15)S	3,4-Dinitrotoluen	1.255	1.611	1.536	1.636	1.789	1.878	1.985	1.670	E3	14.49
16)	2,4-Dinitrotoluen	4.665	4.604	4.533	4.326	4.368	4.431	4.582	4.501	E3	2.84
17)	2,6-Dinitrotoluen	2.520	2.735	2.784	2.590	2.484	2.498	2.572	2.598	E3	4.54
18)	o-Nitrotoluene	2.558	2.143	2.170	2.422	2.225	2.241	2.211	2.281	E3	6.64
19)	p-Nitrotoluene	4.075	3.357	3.374	3.402	3.460	3.500	3.455	3.518	E3	7.14
20)	m-Nitrotoluene	3.363	2.975	2.971	2.975	2.971	3.030	3.055	3.048	E3	4.68
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.230	4.445	5.099	5.021	4.991	5.011	5.125	4.846	E3	7.35
2)	HMX	6.508	6.195	4.907	4.746	3.950	3.968	3.929	4.886	E3	22.11

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 3946.60045 *A

3)	DNX	4.912	4.407	4.943	4.721	4.494	4.508	4.544	4.647	E3	4.60
4)	MNX	3.468	3.785	3.814	3.676	3.612	3.635	3.712	3.672	E3	3.16
5)	RDX	3.145	3.081	2.963	2.852	2.787	2.806	2.864	2.928	E3	4.76
6)	1,3,5-Trinitroben	8.213	7.591	7.478	7.449	7.405	7.515	7.661	7.616	E3	3.64
7)	1,3-Dinitrobenzen	3.725	3.678	3.707	3.397	3.387	3.414	3.504	3.545	E3	4.33
8)	3,5-Dinitroanilin	6.498	7.321	7.046	7.024	6.894	6.889	7.022	6.956	E3	3.56
9)	Nitrobenzene	3.210	3.149	2.901	3.005	2.977	2.862	2.917	3.003	E3	4.35
10)	Nitroglycerin	1.196	1.315	1.272	1.238	1.213	1.229	1.258	1.246	E3	3.19
11)	Tetryl	3.961	4.500	4.527	4.412	4.390	4.433	4.579	4.400	E3	4.66
12)	2,4,6-Trinitrotol	4.562	4.724	4.508	4.392	4.366	4.403	4.578	4.505	E3	2.85
13)	2-Amino-4,6-Dinit	5.080	4.634	4.475	4.586	4.578	4.621	4.850	4.689	E3	4.40
14)	4-Amino-2,6-Dinit	4.560	4.217	4.347	4.444	4.420	4.490	4.748	4.461	E3	3.75
15)S	3,4-Dinitrotoluen	2.765	2.828	3.098	3.156	3.212	3.287	3.560	3.129	E3	8.68
16)	2,4-Dinitrotoluen	2.590	2.550	2.594	2.638	2.658	2.711	2.939	2.668	E3	4.87
17)	2,6-Dinitrotoluen	3.069	3.190	2.949	3.132	3.166	3.207	3.375	3.155	E3	4.15
18)	o-Nitrotoluene	2.918	3.190	2.992	3.097	3.129	3.096	3.156	3.083	E3	3.10
19)	p-Nitrotoluene	3.152	2.835	2.934	2.912	2.943	2.937	2.985	2.957	E3	3.29
20)	m-Nitrotoluene	2.925	3.513	3.544	3.543	3.621	3.627	3.717	3.498	E3	7.50

Initial Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

```
21)  PETN              1.019 1.021 1.064 1.048 1.048 1.045 1.044 1.041 E3   1.52
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Tue Dec 30 07:02:24 2014
```

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX	500.000	517.314	-3.5	115	0.01	1.28- 1.89
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	RDX	500.000	523.852	-4.8	107	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	500.000	514.427	-2.9	107	0.00	4.10- 4.90
7	1,3-Dinitrobenzene	500.000	469.073	6.2	98	0.00	5.29- 6.09
8	3,5-Dinitroaniline	500.000	513.448	-2.7	106	0.00	5.81- 6.61
9	Nitrobenzene	500.000	530.019	-6.0	107	0.00	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	428.487	14.3	89	0.00	8.92- 9.72
12	2,4,6-Trinitrotoluene	500.000	516.406	-3.3	105	0.00	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	500.000	547.959	-9.6	111	0.00	9.54-10.34
14	4-Amino-2,6-Dinitrotol	500.000	569.662	-13.9	114	0.00	9.97-10.77
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	533.805	-6.8	110	0.00	10.86-11.66
17	2,6-Dinitrotoluene	500.000	526.912	-5.4	110	0.00	11.25-12.05
18	o-Nitrotoluene	500.000	538.039	-7.6	110	0.00	13.46-14.34
19	p-Nitrotoluene	500.000	525.630	-5.1	107	0.00	13.76-14.76
20	m-Nitrotoluene	500.000	558.699	-11.7	115	0.00	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
2	HMX	500.000	572.928	-14.6	114	0.01	1.28- 1.89
	----------	Amount	Calc.	%Drift	----------		
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	RDX	500.000	509.258	-1.9	107	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	500.000	525.399	-5.1	108	0.00	4.10- 4.90
7	1,3-Dinitrobenzene	500.000	489.663	2.1	102	0.00	5.29- 6.09
8	3,5-Dinitroaniline	500.000	529.536	-5.9	107	-0.01	5.81- 6.61
9	Nitrobenzene	500.000	516.106	-3.2	104	0.00	6.67- 7.47
10	Nitroglycerin	2500.000	2589.908	-3.6	106	0.00	8.55- 9.55
11	Tetryl	500.000	452.808	9.4	91	0.00	8.91- 9.71
12	2,4,6-Trinitrotoluene	500.000	537.672	-7.5	111	0.00	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	500.000	563.179	-12.6	115	0.00	9.55-10.35

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

14		4-Amino-2,6-Dinitrotol	500.000	571.387	-14.3	115	0.00	9.97-10.77
15	S	3,4-Dinitrotoluene			----------NA----------			
16		2,4-Dinitrotoluene	500.000	574.059	-14.8	115	-0.02	10.86-11.66
17		2,6-Dinitrotoluene	500.000	557.864	-11.6	111	-0.02	11.27-12.07
18		o-Nitrotoluene	500.000	531.281	-6.3	105	0.00	13.34-14.34
19		p-Nitrotoluene	500.000	529.110	-5.8	106	0.00	13.76-14.76
20		m-Nitrotoluene	500.000	585.508	-17.1#	113	0.00	14.34-15.34
21		PETN	2500.000	3447.072	-37.9#	137	0.00	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:58 2014

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	500.000	544.273	-8.9	109	0.00	1.07- 1.67
2		HMX			----------NA----------			
3		DNX	500.000	516.485	-3.3	105	0.00	1.47- 2.07
4		MNX	500.000	517.911	-3.6	110	0.00	2.07- 2.67
5		RDX			----------NA----------			
6		1,3,5-Trinitrobenzene			----------NA----------			
7		1,3-Dinitrobenzene			----------NA----------			
8		3,5-Dinitroaniline			----------NA----------			
9		Nitrobenzene			----------NA----------			
10		Nitroglycerin			----------NA----------			
11		Tetryl			----------NA----------			
12		2,4,6-Trinitrotoluene			----------NA----------			
13		2-Amino-4,6-Dinitrotoluen			----------NA----------			
14		4-Amino-2,6-Dinitrotoluen			----------NA----------			
15	S	3,4-Dinitrotoluene			----------NA----------			
16		2,4-Dinitrotoluene			----------NA----------			
17		2,6-Dinitrotoluene			----------NA----------			
18		o-Nitrotoluene			----------NA----------			
19		p-Nitrotoluene			----------NA----------			
20		m-Nitrotoluene			----------NA----------			
21		PETN			----------NA----------			

***** Signal #2 *****

1		TNX	500.000	566.364	-13.3	110	0.00	1.07- 1.67
		---------- Amount Calc. %Drift ----------						
2		HMX			----------NA----------			
		---------- Amount Calc. %Drift ----------						
3		DNX	500.000	505.196	-1.0	104	0.00	1.47- 2.07
4		MNX	500.000	528.313	-5.7	107	0.00	2.07- 2.67
5		RDX			----------NA----------			
6		1,3,5-Trinitrobenzene			----------NA----------			
7		1,3-Dinitrobenzene			----------NA----------			
8		3,5-Dinitroaniline			----------NA----------			
9		Nitrobenzene			----------NA----------			
10		Nitroglycerin			----------NA----------			
11		Tetryl			----------NA----------			
12		2,4,6-Trinitrotoluene			----------NA----------			
13		2-Amino-4,6-Dinitrotoluen			----------NA----------			

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

14		4-Amino-2,6-Dinitrotoluen	----------NA----------	
15	S	3,4-Dinitrotoluene	----------NA----------	
16		2,4-Dinitrotoluene	----------NA----------	
17		2,6-Dinitrotoluene	----------NA----------	
18		o-Nitrotoluene	----------NA----------	
19		p-Nitrotoluene	----------NA----------	
20		m-Nitrotoluene	----------NA----------	
21		PETN	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:59 2014

8.8.3

8

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045462.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1A.ch
Acq On : 02-Jan-2015, 14:31:48 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	950.522	4.9	95	0.00	1.06- 1.66
2	HMX	1000.000	1050.123	-5.0	115	0.00	1.18- 1.78
3	DNX	1000.000	964.170	3.6	98	0.00	1.44- 2.04
4	MNX	1000.000	962.799	3.7	101	0.00	2.03- 2.63
5	RDX	1000.000	992.496	0.8	101	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	966.097	3.4	100	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	966.795	3.3	101	0.01	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	966.592	3.3	100	0.00	5.93- 6.73
9	Nitrobenzene	1000.000	944.457	5.6	98	0.03	6.98- 7.78
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	1034.062	-3.4	107	0.00	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	947.881	5.2	95	0.02	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	1011.849	-1.2	101	0.00	9.92-10.72
14	4-Amino-2,6-Dinitrotol	1000.000	1046.613	-4.7	101	0.01	10.39-11.19
15 S	3,4-Dinitrotoluene	1000.000	1165.923	-16.6#	104	0.02	10.76-11.56
16	2,4-Dinitrotoluene	1000.000	1006.835	-0.7	102	0.03	11.33-12.13
17	2,6-Dinitrotoluene	1000.000	982.499	1.8	102	0.03	11.73-12.53
18	o-Nitrotoluene	1000.000	944.301	5.6	96	0.04	13.92-14.80
19	p-Nitrotoluene	1000.000	967.152	3.3	97	0.04	14.19-15.19
20	m-Nitrotoluene	1000.000	943.741	5.6	95	0.03	14.74-15.74
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	955.368	4.5	92	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1108.685	-10.9	110	0.00	1.19- 1.79
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	941.330	5.9	97	0.00	1.44- 2.04
4	MNX	1000.000	991.718	0.8	100	0.00	2.03- 2.63
5	RDX	1000.000	964.987	3.5	101	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	1000.885	-0.1	101	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	985.241	1.5	102	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	985.038	1.5	99	0.00	5.93- 6.73
9	Nitrobenzene	1000.000	939.118	6.1	99	0.03	6.98- 7.78
10	Nitroglycerin	5000.000	4958.196	0.8	101	0.00	8.65- 9.65
11	Tetryl	1000.000	1047.214	-4.7	104	0.00	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	930.558	6.9	95	0.02	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	984.031	1.6	100	0.00	9.92-10.72

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045462.D

14		4-Amino-2,6-Dinitrotol	1000.000	1002.566	-0.3	100	0.01	10.39-11.19
15	S	3,4-Dinitrotoluene	1000.000	1129.470	-12.9	108	0.02	10.76-11.56
16		2,4-Dinitrotoluene	1000.000	1110.183	-11.0	109	0.03	11.33-12.13
17		2,6-Dinitrotoluene	1000.000	1065.793	-6.6	105	0.03	11.73-12.53
18		o-Nitrotoluene	1000.000	984.206	1.6	98	0.04	13.80-14.80
19		p-Nitrotoluene	1000.000	948.770	5.1	96	0.04	14.19-15.19
20		m-Nitrotoluene	1000.000	1012.349	-1.2	98	0.03	14.74-15.74
21		PETN	5000.000	1340.902	73.2#	27	0.01	16.25-17.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Mon Jan 05 07:32:47 2015

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045473.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1A.ch
Acq On : 02-Jan-2015, 19:06:41 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	943.427	5.7	94	0.00	1.06- 1.66
2	HMX	1000.000	1055.251	-5.5	116	-0.01	1.18- 1.78
3	DNX	1000.000	960.143	4.0	98	0.00	1.44- 2.04
4	MNX	1000.000	948.649	5.1	99	0.00	2.03- 2.63
5	RDX	1000.000	977.909	2.2	100	-0.01	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	958.493	4.2	99	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	954.407	4.6	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	963.637	3.6	100	-0.02	5.93- 6.73
9	Nitrobenzene	1000.000	931.680	6.8	97	0.02	6.98- 7.78
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	1026.511	-2.7	107	-0.03	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	940.177	6.0	94	0.00	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	1006.844	-0.7	101	-0.02	9.92-10.72
14	4-Amino-2,6-Dinitrotol	1000.000	1026.774	-2.7	99	-0.01	10.39-11.19
15 S	3,4-Dinitrotoluene	1000.000	1193.515	-19.4#	106	-0.01	10.76-11.56
16	2,4-Dinitrotoluene	1000.000	995.277	0.5	101	0.00	11.33-12.13
17	2,6-Dinitrotoluene	1000.000	968.044	3.2	101	0.00	11.73-12.53
18	o-Nitrotoluene	1000.000	942.803	5.7	96	0.03	13.92-14.80
19	p-Nitrotoluene	1000.000	953.363	4.7	96	0.02	14.19-15.19
20	m-Nitrotoluene	1000.000	966.580	3.3	97	0.02	14.74-15.74
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	948.653	5.1	92	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1126.727	-12.7	112	-0.01	1.19- 1.79
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	950.542	4.9	98	0.00	1.44- 2.04
4	MNX	1000.000	987.154	1.3	100	0.00	2.03- 2.63
5	RDX	1000.000	954.584	4.5	100	-0.01	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	989.932	1.0	100	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	956.418	4.4	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	996.253	0.4	101	-0.02	5.93- 6.73
9	Nitrobenzene	1000.000	920.811	7.9	97	0.01	6.98- 7.78
10	Nitroglycerin	5000.000	4933.342	1.3	100	-0.02	8.65- 9.65
11	Tetryl	1000.000	1044.210	-4.4	104	-0.03	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	928.667	7.1	95	0.00	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	984.107	1.6	100	-0.02	9.92-10.72

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045473.D

14		4-Amino-2,6-Dinitrotol	1000.000	998.341	0.2	99	-0.01	10.39-11.19
15	S	3,4-Dinitrotoluene	1000.000	1121.421	-12.1	107	0.00	10.76-11.56
16		2,4-Dinitrotoluene	1000.000	1094.853	-9.5	108	0.00	11.33-12.13
17		2,6-Dinitrotoluene	1000.000	1048.068	-4.8	103	0.00	11.73-12.53
18		o-Nitrotoluene	1000.000	972.026	2.8	97	0.02	13.80-14.80
19		p-Nitrotoluene	1000.000	943.437	5.7	95	0.02	14.19-15.19
20		m-Nitrotoluene	1000.000	1024.261	-2.4	99	0.02	14.74-15.74
21		PETN	5000.000	1367.267	72.7#	27	0.00	16.25-17.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Mon Jan 05 07:32:48 2015

8.8.5

8

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-ECC1221
Lab FileID: BB045481.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1A.ch
Acq On : 02-Jan-2015, 22:26:16 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	936.182	6.4	93	0.00	1.06- 1.66
2	HMX	1000.000	1063.504	-6.4	116	-0.01	1.18- 1.78
3	DNX	1000.000	957.821	4.2	98	0.00	1.44- 2.04
4	MNX	1000.000	947.856	5.2	99	-0.01	2.03- 2.63
5	RDX	1000.000	979.986	2.0	100	-0.02	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	960.846	3.9	99	-0.01	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	954.533	4.5	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	965.842	3.4	100	-0.02	5.93- 6.73
9	Nitrobenzene	1000.000	945.139	5.5	99	0.01	6.98- 7.78
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	1024.272	-2.4	106	-0.05	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	933.905	6.6	93	-0.03	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	997.633	0.2	100	-0.04	9.92-10.72
14	4-Amino-2,6-Dinitrotol	1000.000	1023.838	-2.4	99	-0.04	10.39-11.19
15 S	3,4-Dinitrotoluene	1000.000	1185.621	-18.6#	105	-0.03	10.76-11.56
16	2,4-Dinitrotoluene	1000.000	992.147	0.8	101	-0.02	11.33-12.13
17	2,6-Dinitrotoluene	1000.000	963.307	3.7	100	0.00	11.73-12.53
18	o-Nitrotoluene	1000.000	936.424	6.4	95	0.02	13.92-14.80
19	p-Nitrotoluene	1000.000	953.846	4.6	96	0.01	14.19-15.19
20	m-Nitrotoluene	1000.000	968.048	3.2	97	0.01	14.74-15.74
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	943.313	5.7	91	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1123.546	-12.4	112	-0.01	1.19- 1.79
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	946.339	5.4	98	0.00	1.44- 2.04
4	MNX	1000.000	982.374	1.8	99	-0.01	2.03- 2.63
5	RDX	1000.000	959.057	4.1	100	-0.02	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	986.536	1.3	100	-0.01	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	951.053	4.9	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	982.731	1.7	99	-0.03	5.93- 6.73
9	Nitrobenzene	1000.000	935.035	6.5	98	0.00	6.98- 7.78
10	Nitroglycerin	5000.000	4906.379	1.9	99	-0.03	8.65- 9.65
11	Tetryl	1000.000	1043.279	-4.3	104	-0.05	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	927.811	7.2	95	-0.03	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	982.472	1.8	100	-0.04	9.92-10.72

8.8.6

8

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-ECC1221
Lab FileID: BB045481.D

14		4-Amino-2,6-Dinitrotol	1000.000	1001.681	-0.2	100	-0.03	10.39-11.19
15	S	3,4-Dinitrotoluene	1000.000	1124.529	-12.5	107	-0.03	10.76-11.56
16		2,4-Dinitrotoluene	1000.000	1101.697	-10.2	108	-0.02	11.33-12.13
17		2,6-Dinitrotoluene	1000.000	1054.244	-5.4	104	0.00	11.73-12.53
18		o-Nitrotoluene	1000.000	955.012	4.5	95	0.01	13.80-14.80
19		p-Nitrotoluene	1000.000	945.750	5.4	95	0.01	14.19-15.19
20		m-Nitrotoluene	1000.000	1024.773	-2.5	99	0.01	14.74-15.74
21		PETN	5000.000	1329.611	73.4#	27	-0.02	16.25-17.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Mon Jan 05 07:32:49 2015

8.8.6

8

Initial Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICC2334
Lab FileID: GG057990.D

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Initial Calibration

Calibration Files
20 =GG057986.D 50 =GG057987.D 100 =GG057988.D 200 =GG057989.D
500 =GG057990.D 1000=GG057991.D 2000=GG057992.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	9.184	9.272	8.859	9.117	8.646	8.924	9.117	9.017	E3	2.41
2)	HMX	3.108	2.748	2.583	2.505	2.600	2.710	2.807	2.723	E3	7.32
3)	DNX	6.708	8.500	7.802	8.004	7.968	7.999	8.243	7.889	E3	7.19
4)	MNX	6.358	7.047	6.349	6.314	6.136	6.173	6.343	6.388	E3	4.75
5)	1,3,5-Trinitroben	1.090	1.016	0.971	1.042	0.987	1.002	1.040	1.021	E4	3.92
6)	RDX	4.897	4.879	4.448	4.890	4.530	4.582	4.743	4.710	E3	4.01
7)	1,3-Dinitrobenzen	1.362	1.420	1.349	1.392	1.338	1.346	1.389	1.371	E4	2.21
8)	Nitrobenzene	9.086	9.298	8.656	8.888	8.802	8.840	9.013	8.940	E3	2.36
9)	2,4,6-Trinitrotol	1.021	0.992	0.912	0.957	0.937	0.942	0.969	0.961	E4	3.80
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.025	7.656	7.201	7.789	7.432	7.472	7.692	7.752	E3	7.67
12)S	3,4-Dinitrotoluen	6.728	6.137	5.737	5.852	5.812	5.781	5.978	6.004	E3	5.78
13)	2,6-Dinitrotoluen	6.870	6.885	6.440	6.598	6.418	6.439	6.622	6.610	E3	3.01
14)	2,4-Dinitrotoluen	1.256	1.347	1.250	1.277	1.244	1.249	1.289	1.273	E4	2.89
15)	o-Nitrotoluene	1.697	1.806	1.719	1.738	1.686	1.697	1.747	1.727	E4	2.41
16)	3,5-Dinitroanilin	1.697	1.806	1.719	1.738	1.686	1.697	1.747	1.727	E4	2.41
17)	p-Nitrotoluene	5.700	5.476	5.180	5.221	5.077	5.105	5.256	5.288	E3	4.24
18)	4-Amino-2,6-Dinit	7.111	7.110	6.555	6.712	6.352	6.388	6.588	6.688	E3	4.68
19)	m-Nitrotoluene	6.198	6.455	6.105	6.062	5.834	5.889	6.047	6.084	E3	3.38
20)	2-Amino-4,6-Dinit	1.042	0.970	0.912	0.952	0.889	0.899	0.932	0.942	E4	5.57
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.324	1.390	1.319	1.356	1.304	1.345	1.378	1.345	E4	2.35
2)	HMX	0.982	1.316	1.032	0.989	0.860	0.954	0.975	1.015	E4	14.02
3)	DNX	1.507	1.450	1.386	1.342	1.370	1.335	1.347	1.391	E4	4.61
4)	MNX	0.893	1.122	1.038	1.055	0.967	0.976	1.009	1.008	E4	7.24
5)	1,3,5-Trinitroben	1.745	1.827	1.729	1.840	1.756	1.792	1.867	1.794	E4	2.94
6)	RDX	8.419	8.923	8.546	8.906	8.555	8.850	9.173	8.768	E3	3.05
7)	1,3-Dinitrobenzen	1.074	1.014	1.014	1.073	1.008	1.023	1.072	1.040	E4	3.01
8)	Nitrobenzene	6.976	9.557	8.306	8.493	8.012	8.194	8.560	8.300	E3	9.24
9)	2,4,6-Trinitrotol	1.312	1.309	1.248	1.239	1.219	1.229	1.307	1.266	E4	3.26
10)	Nitroglycerin	3.255	3.282	3.123	3.300	3.304	3.333	3.552	3.307	E3	3.87
11)	Tetryl	1.678	1.453	1.251	1.357	1.255	1.287	1.392	1.382	E4	10.90
12)S	3,4-Dinitrotoluen	1.194	1.128	1.047	1.108	1.073	1.059	1.213	1.118	E4	5.85
13)	2,6-Dinitrotoluen	9.317	8.747	8.684	9.020	8.784	8.982	9.703	9.034	E3	4.04
14)	2,4-Dinitrotoluen	9.316	8.417	8.600	8.845	8.599	8.706	9.650	8.876	E3	5.01
15)	o-Nitrotoluene	2.944	2.865	2.758	2.830	2.675	2.723	2.881	2.811	E4	3.41
16)	3,5-Dinitroanilin	2.944	2.865	2.854	2.830	2.710	2.717	2.881	2.829	E4	3.04
17)	p-Nitrotoluene	9.828	9.650	8.166	8.797	8.131	8.186	9.054	8.830	E3	8.09
18)	4-Amino-2,6-Dinit	1.271	1.426	1.265	1.369	1.260	1.272	1.360	1.318	E4	5.04
19)	m-Nitrotoluene	1.005	1.111	1.029	1.031	0.982	0.988	1.055	1.029	E4	4.33
20)	2-Amino-4,6-Dinit	1.776	1.403	1.297	1.383	1.319	1.323	1.394	1.414	E4	11.67
21)	PETN	0.989	1.957	2.544	3.220	3.348	3.473	3.626	2.737	E3	35.42

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 3578.30972 *A

Initial Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICC2334
Lab FileID: GG057990.D

(#) = Out of Range

8330_RPB2.M Fri Dec 26 12:54:53 2014

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICV2334
Lab FileID: GG057993.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1224RPB2\GG057993.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\1224RPB2\GG057993.D\dad1A.ch
Acq On : 24-Dec-2014, 14:31:07 Operator: kismetl
Sample : icv2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	529.440	-5.9	110	0.00	5.15- 6.15
2	HMX	500.000	563.884	-12.8	118	-0.02	5.76- 6.76
3	DNX	500.000	524.888	-5.0	104	-0.01	5.88- 6.88
4	MNX	500.000	521.522	-4.3	109	-0.01	7.23- 8.23
5	1,3,5-Trinitrobenzene	500.000	535.552	-7.1	111	0.00	8.11- 9.11
6	RDX	500.000	526.309	-5.3	109	0.00	8.71- 9.71
7	1,3-Dinitrobenzene	500.000	488.671	2.3	100	0.00	10.74-11.74
8	Nitrobenzene	500.000	545.420	-9.1	111	0.00	11.72-12.72
9	2,4,6-Trinitrotoluene	500.000	507.442	-1.5	104	0.00	12.77-13.77
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	500.000	486.237	2.8	101	0.00	14.49-15.49
12 S	3,4-Dinitrotoluene	----------	NA	----------			
13	2,6-Dinitrotoluene	500.000	549.184	-9.8	113	0.00	16.05-17.05
14	2,4-Dinitrotoluene	500.000	519.727	-3.9	106	0.00	16.85-17.85
15	o-Nitrotoluene	500.000	502.599	-0.5	103	0.00	18.43-19.43
16	3,5-Dinitroaniline	500.000	514.563	-2.9	105	0.00	18.43-19.43
17	p-Nitrotoluene	500.000	499.151	0.2	104	0.00	19.87-20.87
18	4-Amino-2,6-Dinitrotol	500.000	514.100	-2.8	108	0.00	20.52-21.52
19	m-Nitrotoluene	500.000	556.302	-11.3	116	0.00	21.42-22.42
20	2-Amino-4,6-Dinitrotol	500.000	522.520	-4.5	111	0.00	23.18-24.18
21	PETN	----------	NA	----------			

***** Signal #2 *****

1	TNX	500.000	537.312	-7.5	111	0.00	5.15- 6.15
2	HMX	500.000	566.243	-13.2	134	0.00	5.73- 6.73
3	DNX	500.000	497.167	0.6	101	-0.01	5.88- 6.88
4	MNX	500.000	518.629	-3.7	108	-0.01	7.23- 8.23
5	1,3,5-Trinitrobenzene	500.000	542.363	-8.5	111	0.00	8.11- 9.11
6	RDX	500.000	534.347	-6.9	110	-0.01	8.71- 9.71
7	1,3-Dinitrobenzene	500.000	506.987	-1.4	105	0.00	10.74-11.74
8	Nitrobenzene	500.000	540.433	-8.1	112	0.00	11.71-12.71
9	2,4,6-Trinitrotoluene	500.000	480.845	3.8	100	0.00	12.77-13.77
10	Nitroglycerin	2500.000	2463.201	1.5	99	0.00	13.65-14.65
11	Tetryl	500.000	478.133	4.4	105	0.00	14.49-15.49
12 S	3,4-Dinitrotoluene	----------	NA	----------			
13	2,6-Dinitrotoluene	500.000	567.309	-13.5	117	0.00	16.04-17.04
14	2,4-Dinitrotoluene	500.000	515.640	-3.1	106	0.00	16.85-17.85
15	o-Nitrotoluene	500.000	502.584	-0.5	106	0.00	18.42-19.42
16	3,5-Dinitroaniline	500.000	501.257	-0.3	105	0.00	18.42-19.42
17	p-Nitrotoluene	500.000	499.651	0.1	109	0.00	19.87-20.87

Initial Calibration Verification

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICV2334
Lab FileID: GG057993.D

18	4-Amino-2,6-Dinitrotol	500.000	536.087	-7.2	112	0.00	20.52-21.52
19	m-Nitrotoluene	500.000	560.680	-12.1	117	0.00	21.42-22.42
20	2-Amino-4,6-Dinitrotol	500.000	514.943	-3.0	110	0.00	23.18-24.18
		Amount	Calc.	%Drift			
21	PETN	2500.000	2447.762	2.1	105	0.00	25.07-26.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057990.D 8330_RPB2.M Fri Dec 26 13:29:09 2014

8.8.8

8

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-CC2334
Lab FileID: GG058049.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0105RPB2\GG058049.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058049.D\dad1A.ch
Acq On : 05-Jan-2015, 08:30:22 Operator: kismetl
Sample : cc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	1000.000	993.509	0.6	100	0.00	5.15- 6.15
2		HMX	1000.000	956.102	4.4	96	0.02	5.77- 6.77
3		DNX	1000.000	1062.773	-6.3	105	0.00	5.89- 6.89
4		MNX	1000.000	974.428	2.6	101	0.02	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	994.162	0.6	101	0.00	8.12- 9.12
6		RDX	1000.000	989.962	1.0	102	0.03	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	993.253	0.7	101	0.02	10.77-11.77
8		Nitrobenzene	1000.000	985.805	1.4	100	0.02	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	989.879	1.0	101	0.02	12.80-13.80
10		Nitroglycerin	----------	----------	NA	----------		
11		Tetryl	1000.000	970.866	2.9	101	0.05	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	890.034	11.0	92	0.06	15.72-16.72
13		2,6-Dinitrotoluene	1000.000	1068.655	-6.9	110	0.03	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	999.676	0.0	102	0.05	16.91-17.91
15		o-Nitrotoluene	1000.000	990.737	0.9	101	0.06	18.50-19.50
16		3,5-Dinitroaniline	1000.000	990.737	0.9	101	0.06	18.50-19.50
17		p-Nitrotoluene	1000.000	939.499	6.1	97	0.06	19.93-20.93
18		4-Amino-2,6-Dinitrotol	1000.000	983.662	1.6	103	0.09	20.61-21.61
19		m-Nitrotoluene	1000.000	972.602	2.7	100	0.06	21.48-22.48
20		2-Amino-4,6-Dinitrotol	1000.000	963.145	3.7	101	0.10	23.28-24.28
21		PETN	----------	----------	NA	----------		

***** Signal #2 *****

1		TNX	1000.000	1009.399	-0.9	101	0.00	5.15- 6.15
2		HMX	1000.000	788.086	21.2#	84	0.03	5.74- 6.74
3		DNX	1000.000	1088.780	-8.9	113	0.00	5.89- 6.89
4		MNX	1000.000	971.540	2.8	100	0.02	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	998.893	0.1	100	0.00	8.12- 9.12
6		RDX	1000.000	1031.884	-3.2	102	0.03	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	1033.605	-3.4	105	0.02	10.77-11.77
8		Nitrobenzene	1000.000	957.173	4.3	97	0.02	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	986.876	1.3	102	0.02	12.80-13.80
10		Nitroglycerin	5000.000	5199.586	-4.0	103	0.03	13.70-14.70
11		Tetryl	1000.000	947.159	5.3	102	0.05	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	986.489	1.4	104	0.06	15.71-16.71
13		2,6-Dinitrotoluene	1000.000	1094.436	-9.4	110	0.02	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	1023.669	-2.4	104	0.04	16.91-17.91
15		o-Nitrotoluene	1000.000	976.545	2.3	101	0.07	18.49-19.49
16		3,5-Dinitroaniline	1000.000	970.325	3.0	101	0.07	18.49-19.49
17		p-Nitrotoluene	1000.000	923.161	7.7	100	0.06	19.93-20.93

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-CC2334
Lab FileID: GG058049.D

18	4-Amino-2,6-Dinitrotol	1000.000	1009.036	-0.9	105	0.09	20.61-21.61
19	m-Nitrotoluene	1000.000	974.020	2.6	101	0.06	21.49-22.49
20	2-Amino-4,6-Dinitrotol	1000.000	920.604	7.9	98	0.10	23.29-24.29
		Amount	Calc.	%Drift			
21	PETN	5000.000	593.960	88.1#	12	0.08	25.13-26.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057991.D 8330_RPB2.M Mon Jan 05 11:28:45 2015

8.8.9

8

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-ECC2334
Lab FileID: GG058053.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0105RPB2\GG058053.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058053.D\dad1A.ch
Acq On : 05-Jan-2015, 10:44:58 Operator: kismetl
Sample : ecc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	1000.000	993.612	0.6	100	0.00	5.15- 6.15
2		HMX	1000.000	919.174	8.1	92	0.00	5.77- 6.77
3		DNX	1000.000	1056.005	-5.6	104	0.00	5.89- 6.89
4		MNX	1000.000	970.601	2.9	100	0.01	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	987.080	1.3	101	0.00	8.12- 9.12
6		RDX	1000.000	986.178	1.4	101	0.02	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	988.411	1.2	101	0.01	10.77-11.77
8		Nitrobenzene	1000.000	988.326	1.2	100	0.01	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	980.111	2.0	100	0.00	12.80-13.80
10		Nitroglycerin	----------	NA	----------			
11		Tetryl	1000.000	953.874	4.6	99	0.02	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	916.179	8.4	95	0.03	15.72-16.72
13		2,6-Dinitrotoluene	1000.000	1019.425	-1.9	105	0.01	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	986.446	1.4	101	0.02	16.91-17.91
15		o-Nitrotoluene	1000.000	983.927	1.6	100	0.03	18.50-19.50
16		3,5-Dinitroaniline	1000.000	983.927	1.6	100	0.03	18.50-19.50
17		p-Nitrotoluene	1000.000	942.318	5.8	98	0.01	19.93-20.93
18		4-Amino-2,6-Dinitrotol	1000.000	968.210	3.2	101	0.03	20.61-21.61
19		m-Nitrotoluene	1000.000	970.261	3.0	100	0.01	21.48-22.48
20		2-Amino-4,6-Dinitrotol	1000.000	959.622	4.0	101	0.04	23.28-24.28
21		PETN	----------	NA	----------			

***** Signal #2 *****

1		TNX	1000.000	1012.150	-1.2	101	0.00	5.15- 6.15
2		HMX	1000.000	843.566	15.6#	90	0.02	5.74- 6.74
3		DNX	1000.000	1046.239	-4.6	109	0.00	5.89- 6.89
4		MNX	1000.000	978.341	2.2	101	0.01	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	1007.231	-0.7	101	0.00	8.12- 9.12
6		RDX	1000.000	1027.208	-2.7	102	0.02	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	985.418	1.5	100	0.00	10.77-11.77
8		Nitrobenzene	1000.000	968.816	3.1	98	0.01	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	951.178	4.9	98	0.00	12.80-13.80
10		Nitroglycerin	5000.000	4931.781	1.4	98	0.00	13.70-14.70
11		Tetryl	1000.000	892.000	10.8	96	0.02	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	944.213	5.6	100	0.02	15.71-16.71
13		2,6-Dinitrotoluene	1000.000	1027.543	-2.8	103	0.00	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	989.902	1.0	101	0.00	16.91-17.91
15		o-Nitrotoluene	1000.000	973.811	2.6	101	0.02	18.49-19.49
16		3,5-Dinitroaniline	1000.000	967.086	3.3	101	0.02	18.49-19.49
17		p-Nitrotoluene	1000.000	955.372	4.5	103	0.01	19.93-20.93

Continuing Calibration Summary

Job Number: FA20937
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-ECC2334
Lab FileID: GG058053.D

18	4-Amino-2,6-Dinitrotol	1000.000	1004.794	-0.5	104	0.03	20.61-21.61
19	m-Nitrotoluene	1000.000	982.442	1.8	102	0.00	21.49-22.49
20	2-Amino-4,6-Dinitrotol	1000.000	925.490	7.5	99	0.03	23.29-24.29
		Amount	Calc.	%Drift			
21	PETN	5000.000	581.360	88.4#	12	0.02	25.13-26.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057991.D 8330_RPB2.M Mon Jan 05 11:28:46 2015

8.8.10

8

Southeast

ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045475.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045475.D\dad1A.ch
Acq On : 02-Jan-2015, 19:56:37 Operator: KISMETL
Sample : FA20937-1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:53 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.14	11.14	1085373	1894603	649.935	605.428
	Spiked Amount 500.000	Range 72 - 134		Recovery =		129.99%	121.09%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

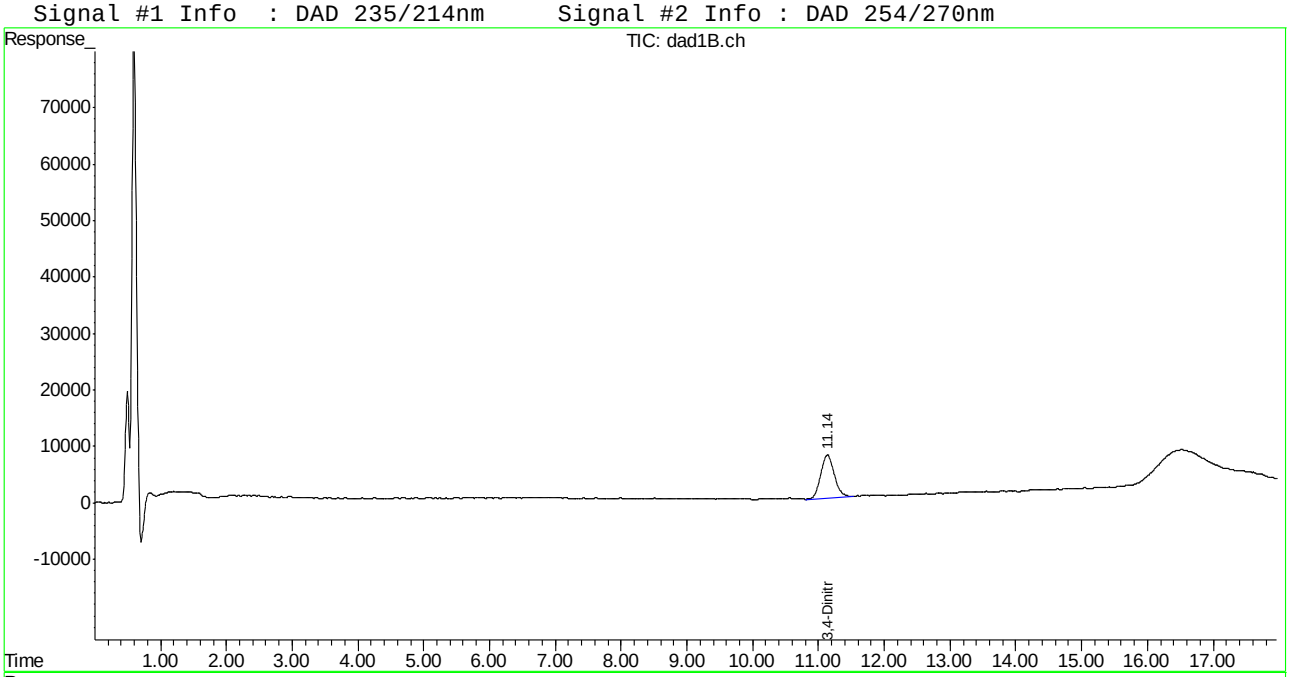
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045475.D 8330B.M Mon Jan 05 07:33:57 2015 Page 1

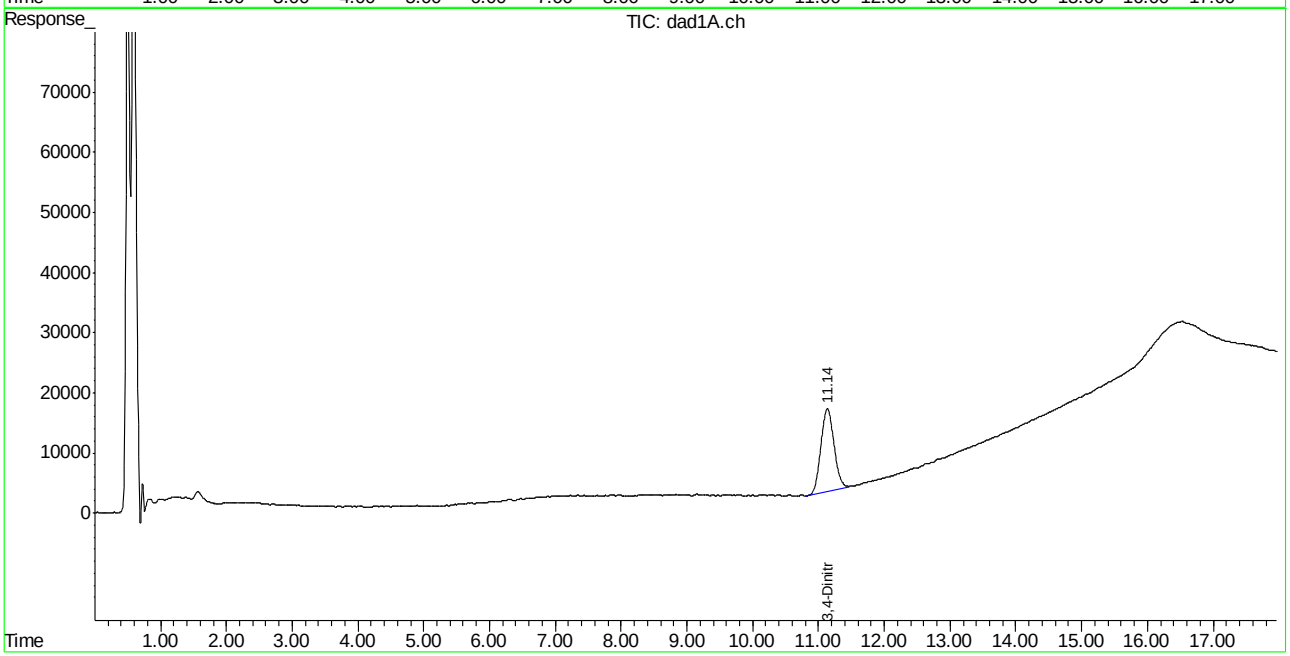
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045475.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045475.D\dad1A.ch
Acq On : 02-Jan-2015, 19:56:37 Operator: KISMETL
Sample : FA20937-1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:20 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045471.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045471.D\dad1A.ch
Acq On : 02-Jan-2015, 18:16:49 Operator: KISMETL
Sample : FA20937-2 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:49 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.15	11.14	1053239	1903973	630.693	608.422m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		126.14%	121.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

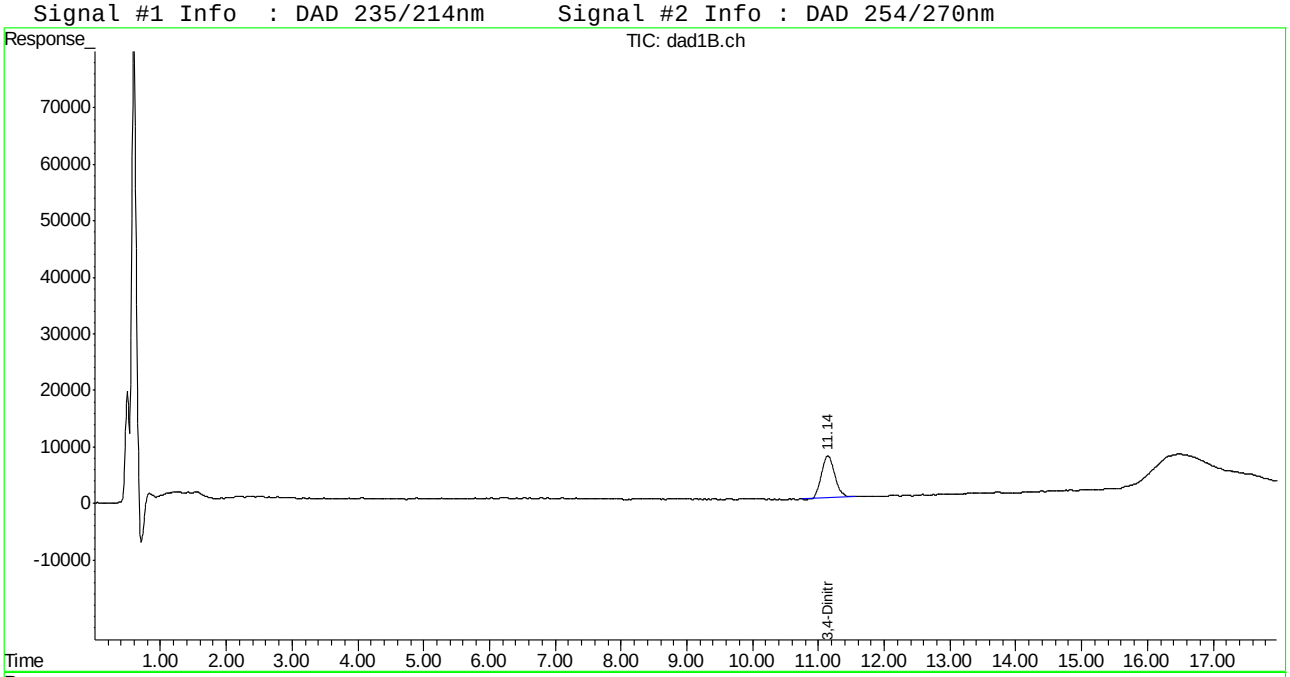
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045471.D 8330B.M Mon Jan 05 11:34:18 2015

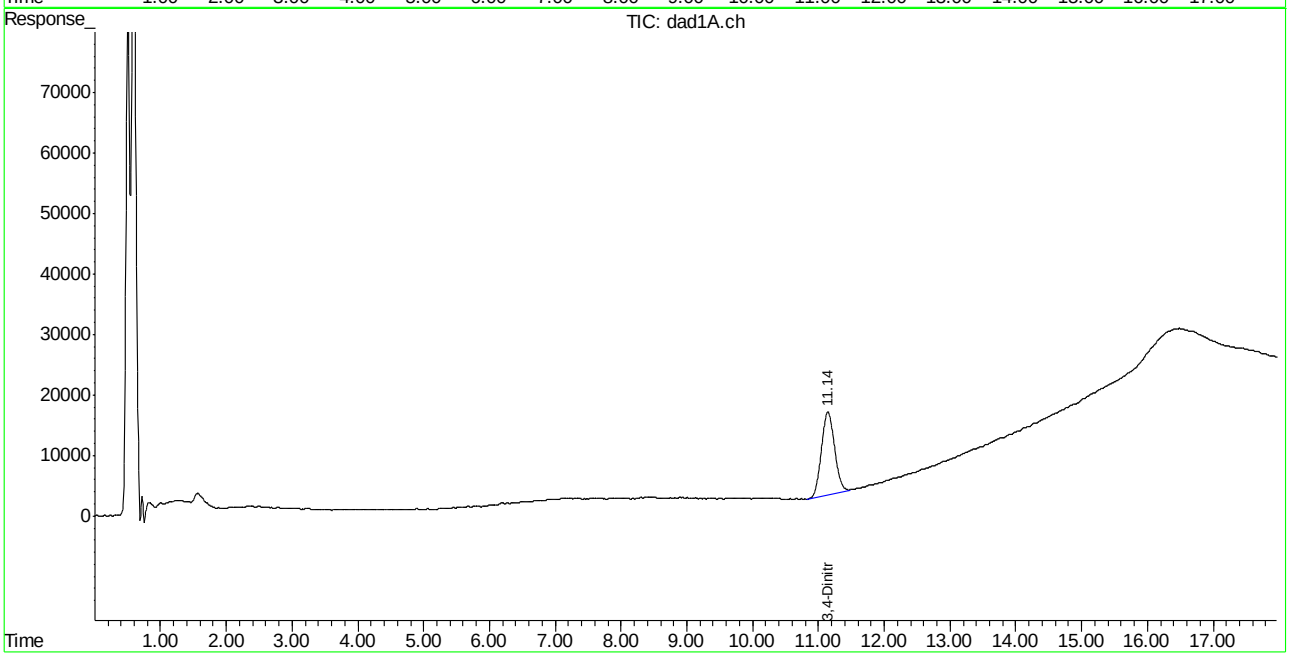
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045471.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045471.D\dad1A.ch
Acq On : 02-Jan-2015, 18:16:49 Operator: KISMETL
Sample : FA20937-2 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 11:33 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA20937-2
Lab FileID: BB045471.D
Injection Time: 01/02/15 18:16
Method: SW846 8330B
Analyst approved: 01/05/15 11:34 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.14	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045472.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045472.D\dad1A.ch
Acq On : 02-Jan-2015, 18:41:47 Operator: KISMETL
Sample : FA20937-3 Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:50 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.14	11.14	1058106	1770477	633.607	565.763
	Spiked Amount 500.000	Range 72 - 134		Recovery =		126.72%	113.15%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

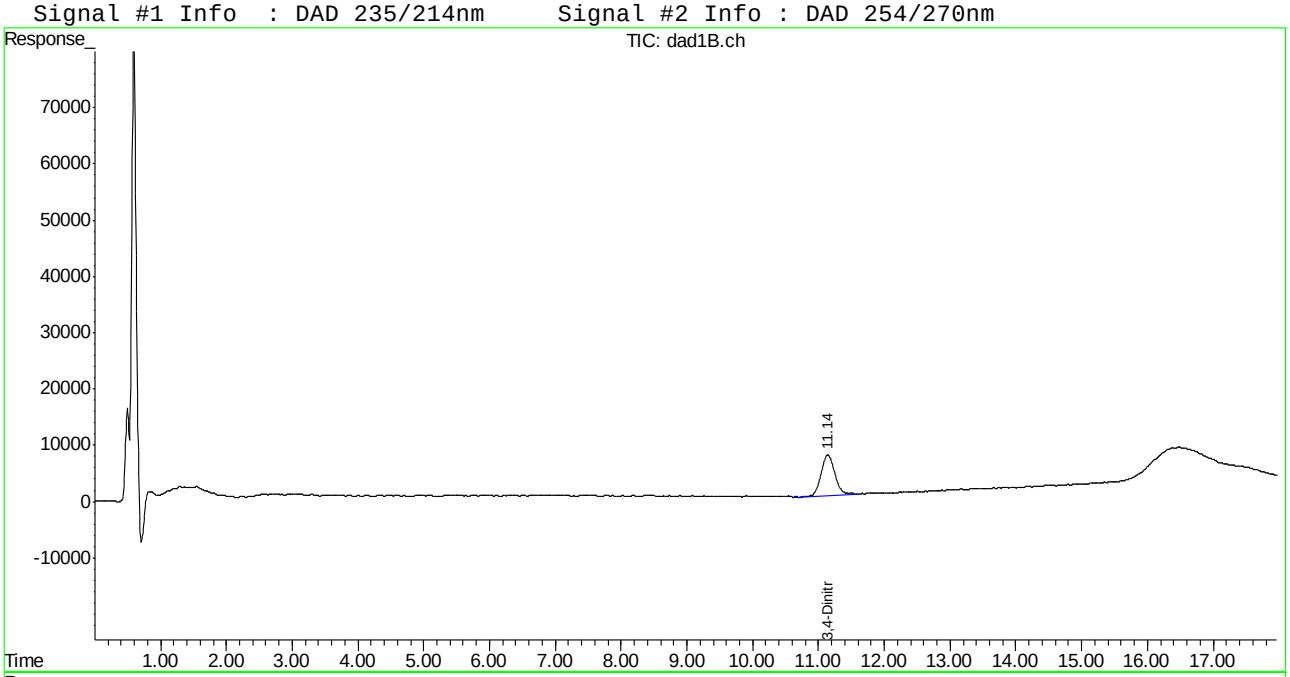
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045472.D 8330B.M Mon Jan 05 07:33:54 2015 Page 1

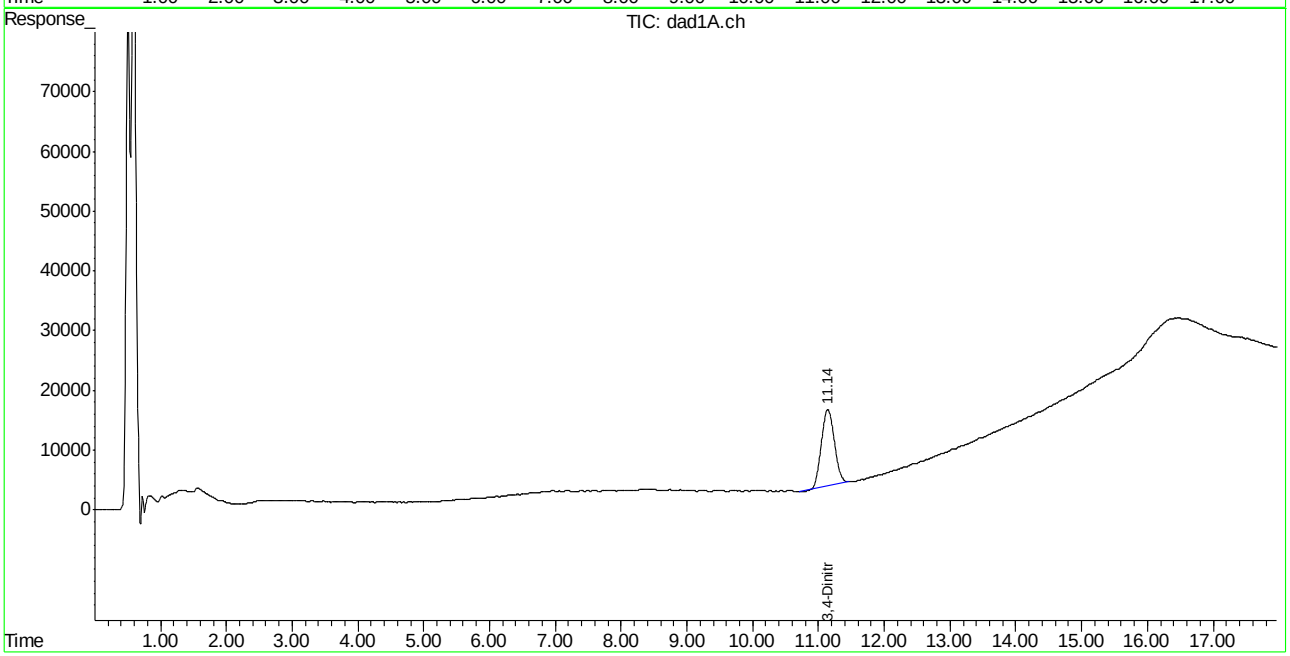
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045472.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045472.D\dad1A.ch
Acq On : 02-Jan-2015, 18:41:47 Operator: KISMETL
Sample : FA20937-3 Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:19 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1A.ch
Acq On : 02-Jan-2015, 15:47:02 Operator: KISMETL
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:43 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.15	1107516	1953446	663.195	624.231m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	132.64%	124.85%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

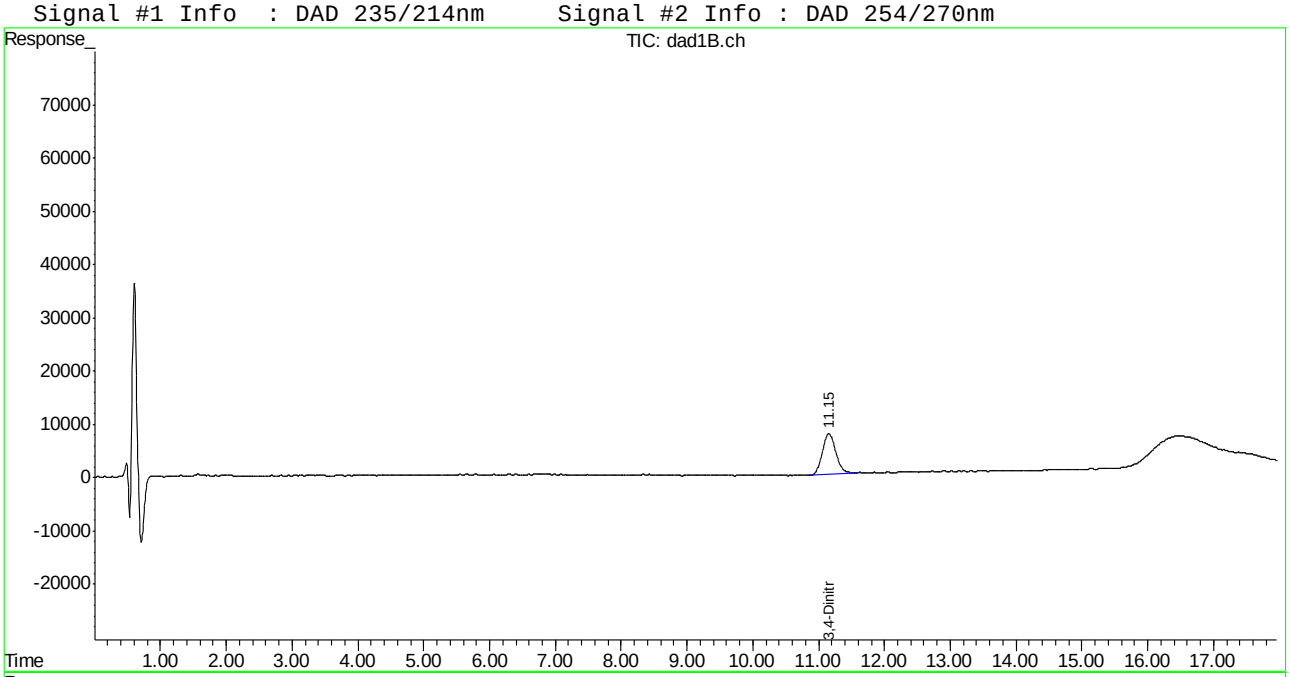
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045465.D 8330B.M Mon Jan 05 07:33:47 2015 Page 1

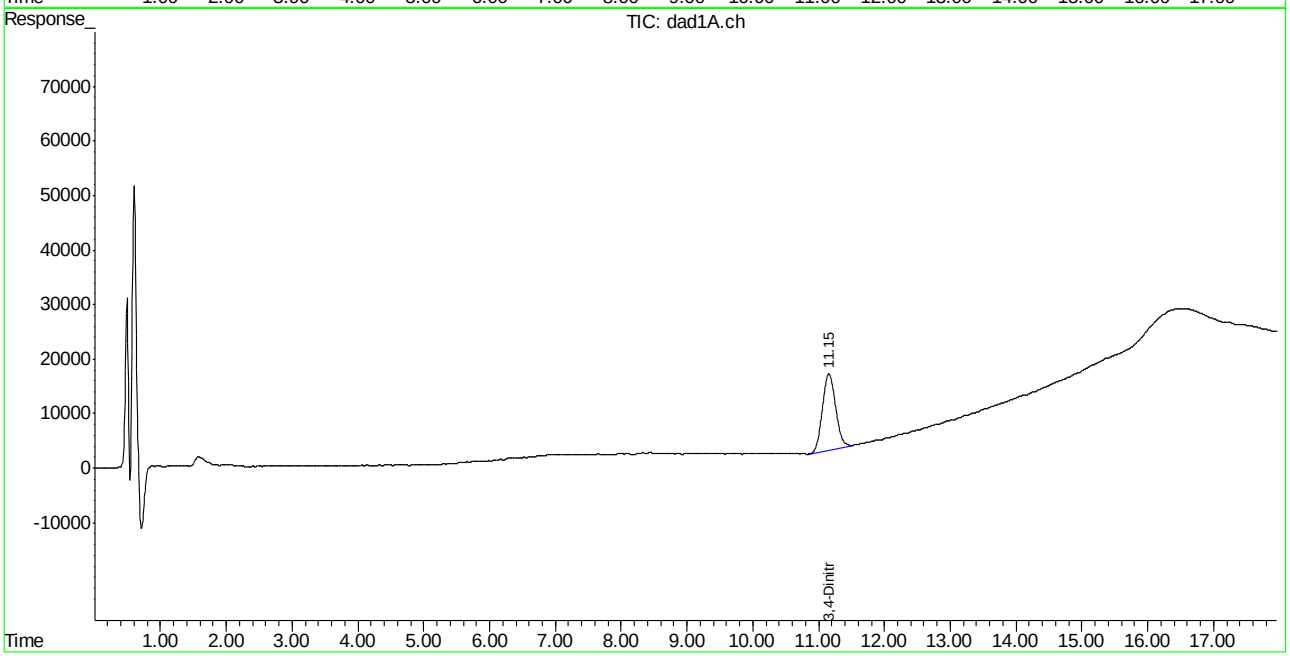
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1A.ch
Acq On : 02-Jan-2015, 15:47:02 Operator: KISMETL
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:10 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54435-MB
Lab FileID: BB045465.D
Injection Time: 01/02/15 15:47
Method: SW846 8330B
Analyst approved: 01/05/15 07:44 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.15	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058050.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0105RPB2\GG058050.D\dad1A.ch
Acq On : 05-Jan-2015, 09:08:49 Operator: kismetl
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:17:00 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.20	16.20	3085661	5888273	513.969	526.864
	Spiked Amount 500.000	Range 72 - 145		Recovery =		102.79%	105.37%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

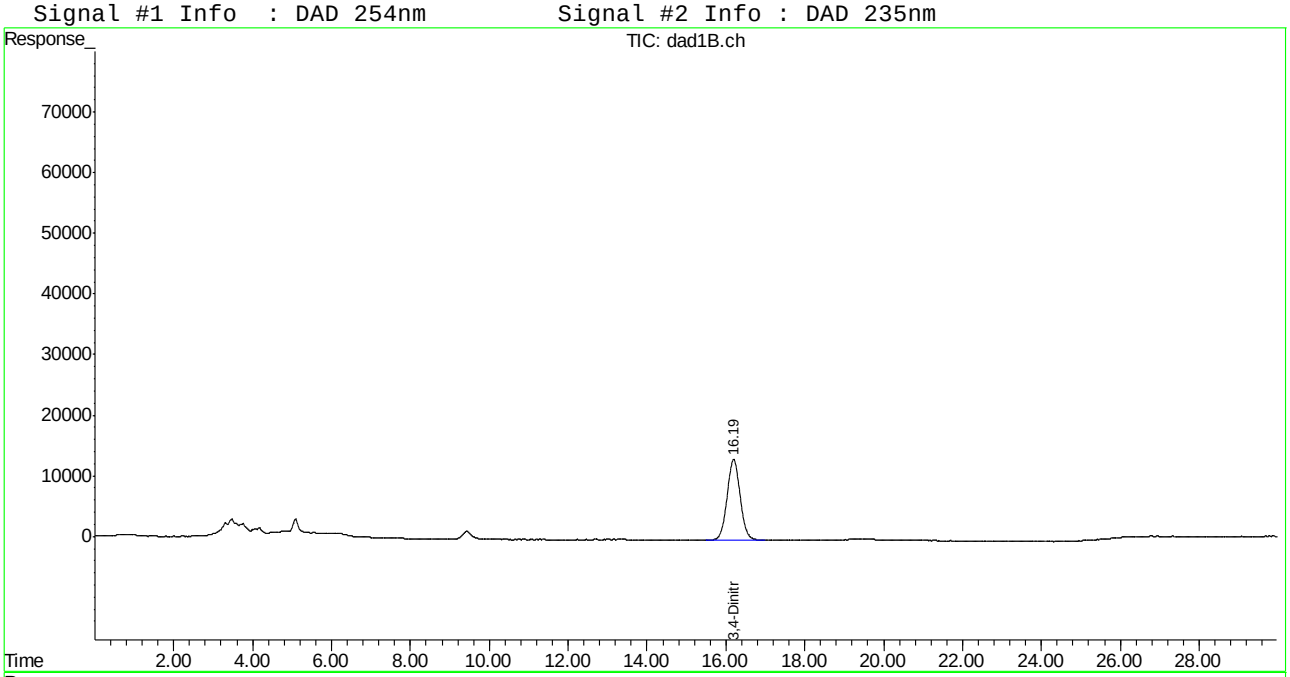
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058050.D 8330_RPB2.M Mon Jan 05 11:29:24 2015 Page 1

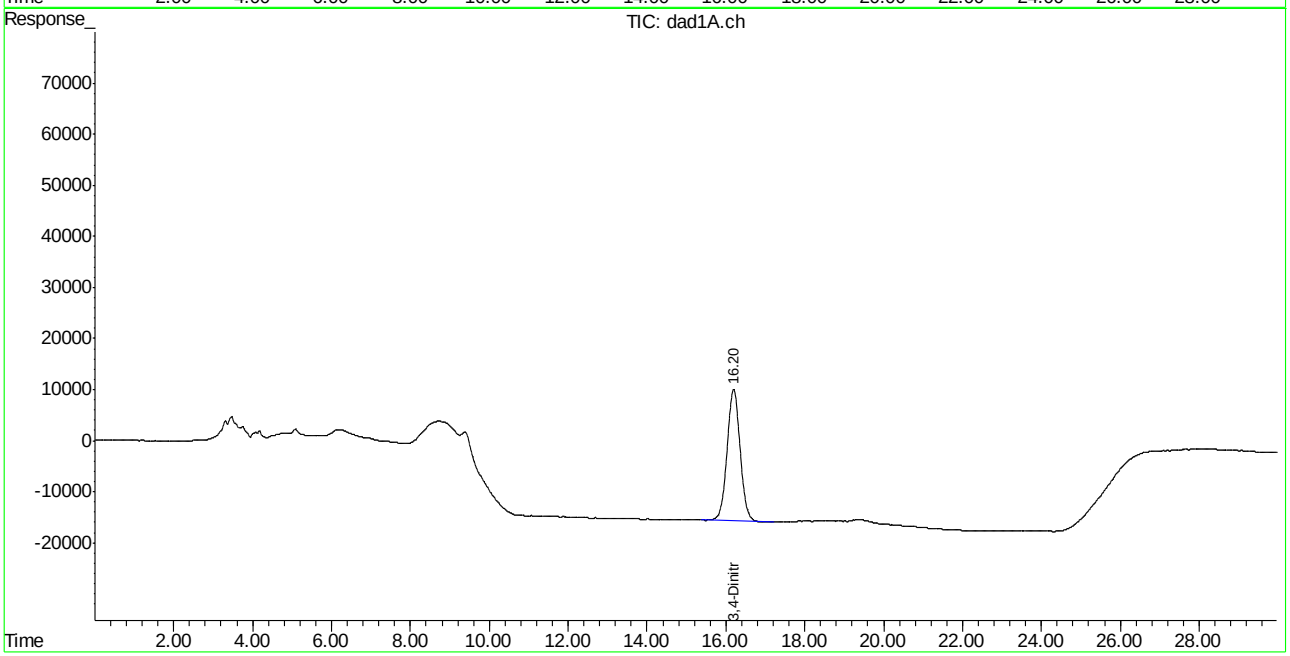
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058050.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0105RPB2\GG058050.D\dad1A.ch
Acq On : 05-Jan-2015, 09:08:49 Operator: kismetl
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:26 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1A.ch
Acq On : 02-Jan-2015, 14:57:08 Operator: KISMETL
Sample : op54435-bs Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:41 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.16	1063682	1781542	636.946	569.299
	Spiked Amount 500.000	Range 72 - 134		Recovery =		127.39%	113.86%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.52	1.52	815248	2406000	538.448m	609.638m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	894240	1432703	500.196	489.286
6)	1,3,5-Trinitrobe	4.59	4.59	2035908	3962738	503.505	520.313
7)	1,3-Dinitrobenze	5.84	5.84	2439192	1688427	464.997	476.347
8)	3,5-Dinitroanili	6.31	6.30	1974405	3329740	469.349	478.661m
9)	Nitrobenzene	7.39	7.39	1553748	1515639	505.511	504.713m
10)	Nitroglycerin	0.00	9.15	0	3043838	N.D.	2443.182 #
11)	Tetryl	9.48	9.48	1401935	2178300	514.971	495.029
12)	2,4,6-Trinitroto	9.85	9.85	1738666	2044663	467.553	453.904
13)	2-Amino-4,6-Dini	10.29	10.29	1574607	2290817	512.694	488.552
14)	4-Amino-2,6-Dini	10.77	10.77	1079956	2092160	501.717	469.005
16)	2,4-Dinitrotolue	11.74	11.74	2359857	1498703	524.280	561.650
17)	2,6-Dinitrotolue	12.14	12.14	1364605	1741090	525.331	551.817
18)	o-Nitrotoluene	14.33	14.32	1125807	1518176	493.482	492.512m
19)	p-Nitrotoluene	14.71	14.72	1727779	1442788	491.194	487.929
20)	m-Nitrotoluene	15.26	15.26	1604378	1910694	526.294m	546.150m
21)	PETN	0.00	16.86	0	3230596	N.D.	3102.599m#

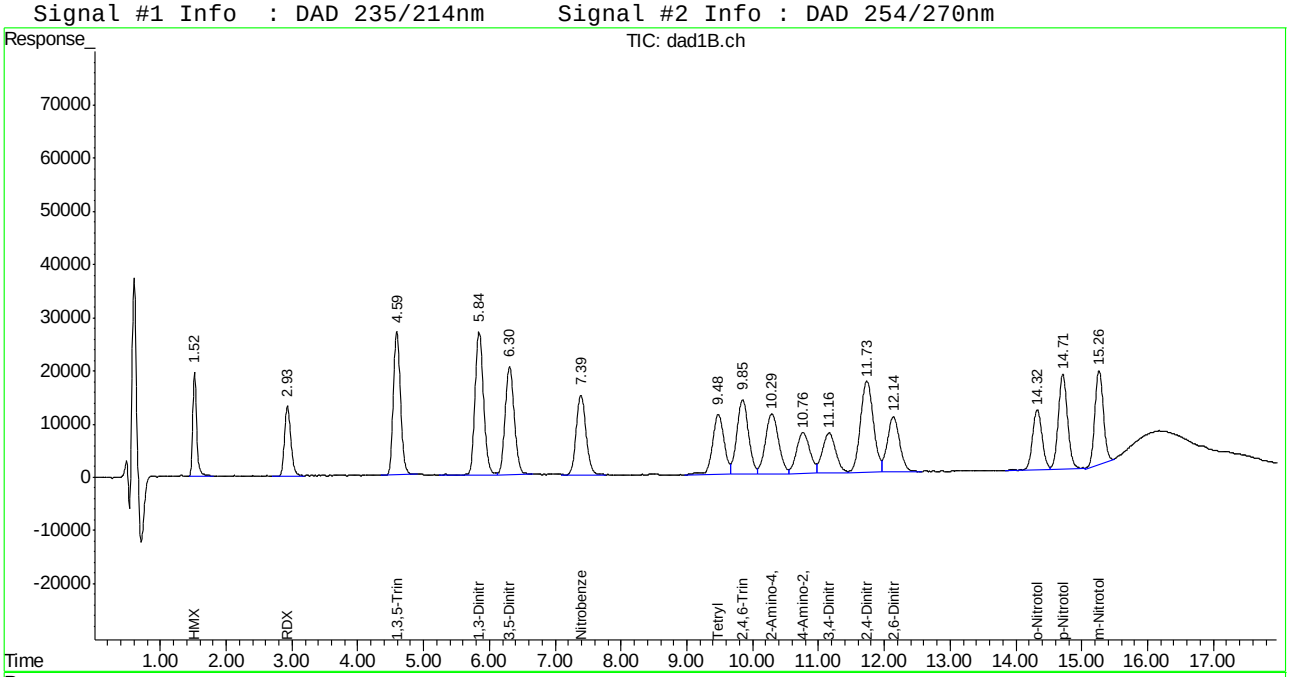
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045463.D 8330B.M Mon Jan 05 07:33:45 2015

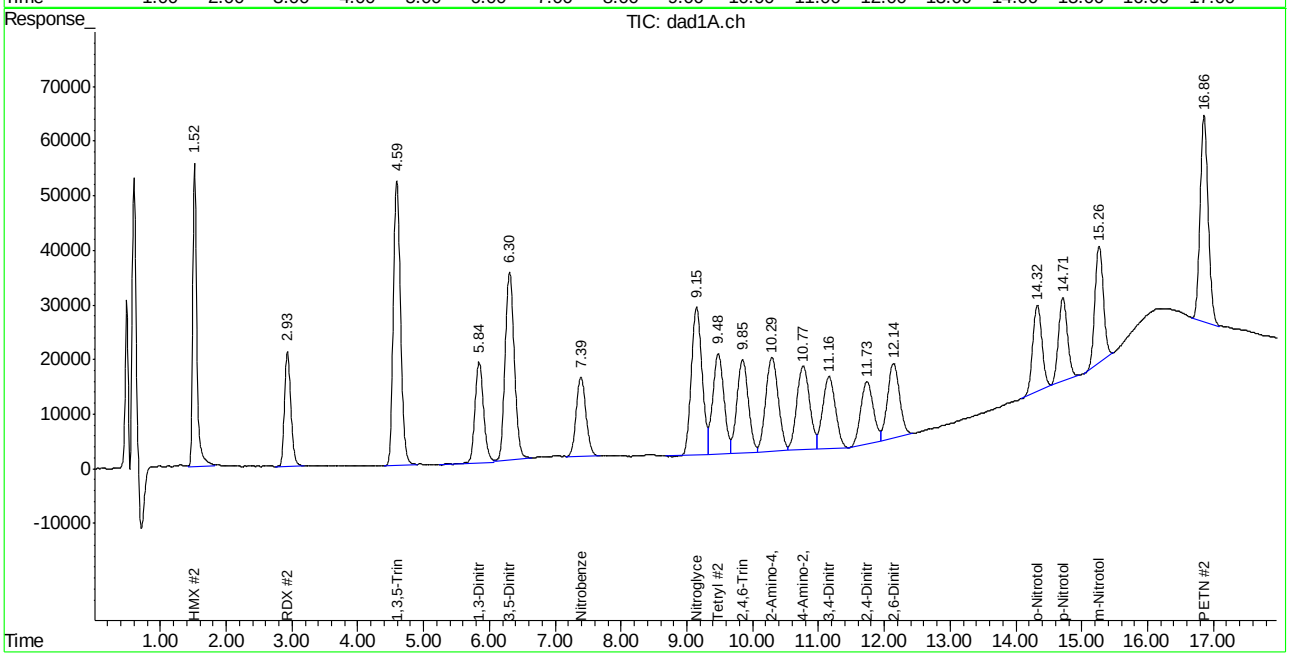
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1A.ch
Acq On : 02-Jan-2015, 14:57:08 Operator: KISMETL
Sample : op54435-bs Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:09 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: OP54435-BS
Lab FileID: BB045463.D
Injection Time: 01/02/15 14:57
Method: SW846 8330B
Analyst approved: 01/05/15 07:39 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.52	Poorly defined baseline
HMX	2691-41-0	2	1.52	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.26	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1A.ch
Acq On : 02-Jan-2015, 15:22:05 Operator: KISMETL
Sample : op54435-pt1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:42 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.16	1044571	1795330	625.502	573.705
	Spiked Amount 500.000	Range 72 - 134		Recovery =		125.10%	114.74%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.52	1.52	183118	544537	120.944m	137.976m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	193295	319444	108.120	109.094
6)	1,3,5-Trinitrobe	4.59	4.59	536072	1024455	132.577	134.512
7)	1,3-Dinitrobenze	5.84	5.84	1005600	685525	191.703	193.404m
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	7.39	7.39	549700	557407	178.845	185.618m
10)	Nitroglycerin	0.00	9.14	0	185668	N.D.	149.029 #
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	9.84	9.84	523191	622799	140.694	138.258
13)	2-Amino-4,6-Dini	10.29	10.30	330846	479275	107.724	102.213
14)	4-Amino-2,6-Dini	10.77	10.76	219262	443981	101.863	99.528
16)	2,4-Dinitrotolue	11.73	11.74	568478	337812	126.296	126.597
17)	2,6-Dinitrotolue	12.14	12.14	658546	854733	253.520	270.897
18)	o-Nitrotoluene	14.32	14.32	532395	739043	233.368	239.753m
19)	p-Nitrotoluene	14.71	14.71	1037430	842544	294.933	284.936
20)	m-Nitrotoluene	15.26	15.26	485990	577351	159.422m	165.029m
21)	PETN	0.00	16.86	0	218107	N.D.	209.465m#

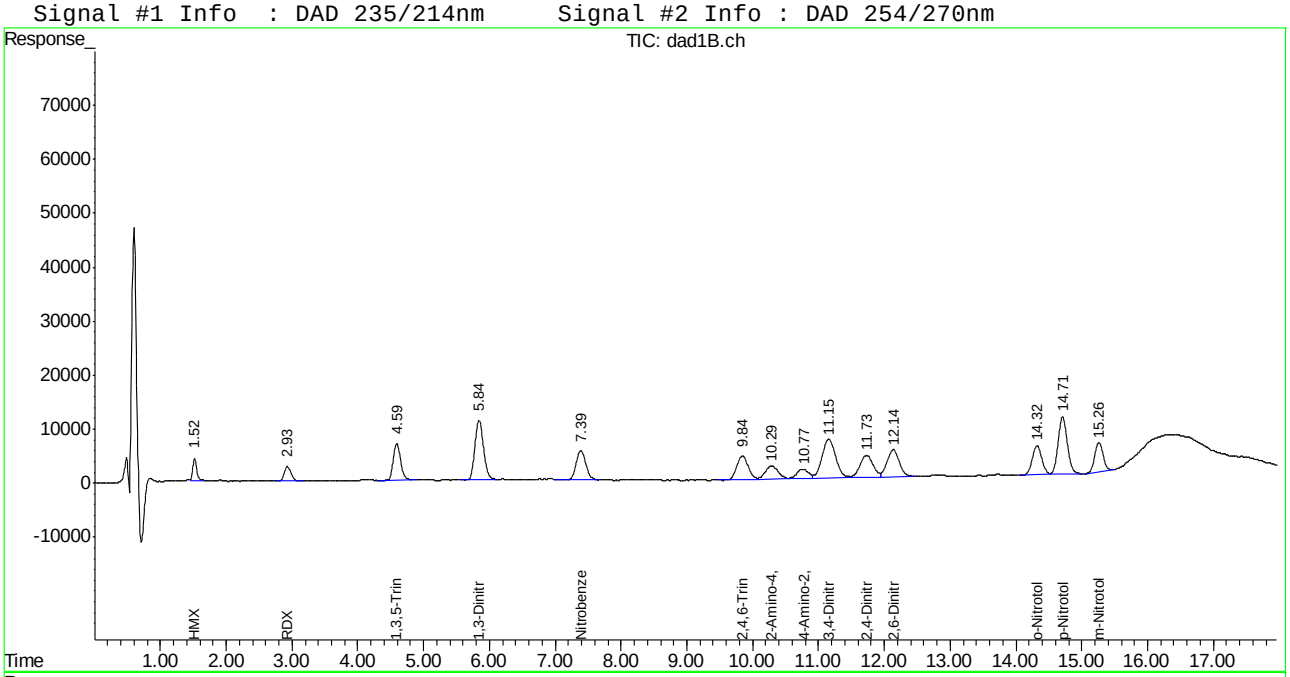
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045464.D 8330B.M Mon Jan 05 07:33:46 2015

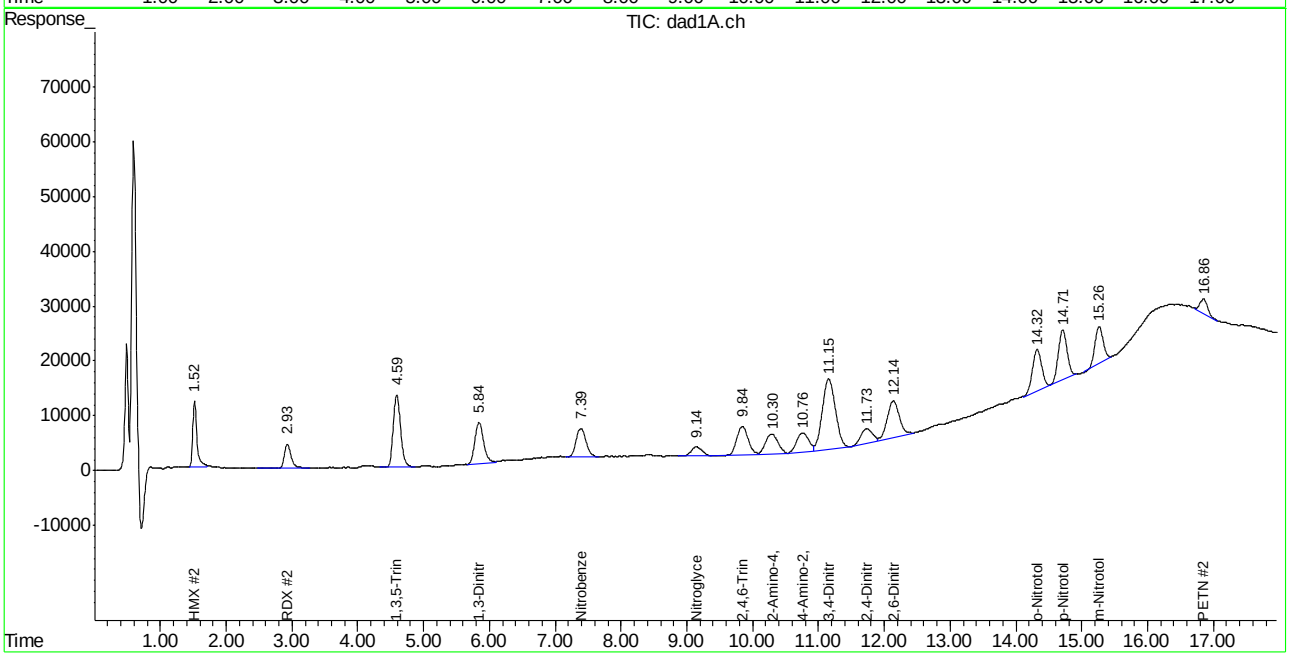
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1A.ch
Acq On : 02-Jan-2015, 15:22:05 Operator: KISMETL
Sample : op54435-pt1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:10 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





BB045464.D 8330B.M Mon Jan 05 07:33:46 2015 Page 2

Manual Integration Approval Summary

Sample Number: OP54435-PT1
Lab FileID: BB045464.D
Injection Time: 01/02/15 15:22
Method: SW846 8330B
Analyst approved: 01/05/15 07:39 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.52	Poorly defined baseline
HMX	2691-41-0	2	1.52	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.84	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.26	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1A.ch
Acq On : 02-Jan-2015, 16:36:55 Operator: KISMETL
Sample : op54435-ms Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:45 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.16	1018296	1743679	609.768	557.199
	Spiked Amount 500.000	Range 72 - 134		Recovery =		121.95%	111.44%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.52	1.52	868508	2305012	573.625	584.050m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	836207	1331989	467.735m	454.891m
6)	1,3,5-Trinitrobe	4.59	4.59	1846531	3629692	456.669	476.583
7)	1,3-Dinitrobenze	5.84	5.84	2448214	1667085	466.717	470.326
8)	3,5-Dinitroanili	6.31	6.30	1965815	3325313	467.307	478.025m
9)	Nitrobenzene	7.39	7.39	1579795	1535248	513.986	511.243m
10)	Nitroglycerin	0.00	9.14	0	3037523	N.D.	2438.113 #
11)	Tetryl	9.48	9.48	926057	1501521	340.167	341.228
12)	2,4,6-Trinitroto	9.85	9.85	1693582	2018589	455.429	448.116
13)	2-Amino-4,6-Dini	10.29	10.29	1550235	2289090	504.758	488.184
14)	4-Amino-2,6-Dini	10.76	10.77	1055150	2093473	490.193	469.299
16)	2,4-Dinitrotolue	11.73	11.74	2354690	1507122	523.132	564.805
17)	2,6-Dinitrotolue	12.14	12.14	1353018	1749840	520.870	554.591
18)	o-Nitrotoluene	14.32	14.32	1159597	1597968	508.293	518.398m
19)	p-Nitrotoluene	14.71	14.71	1763680	1438816	501.401	486.586
20)	m-Nitrotoluene	15.26	15.26	1661197	2019710	544.932	577.311
21)	PETN	0.00	16.86	0	3310999	N.D.	3179.817m#

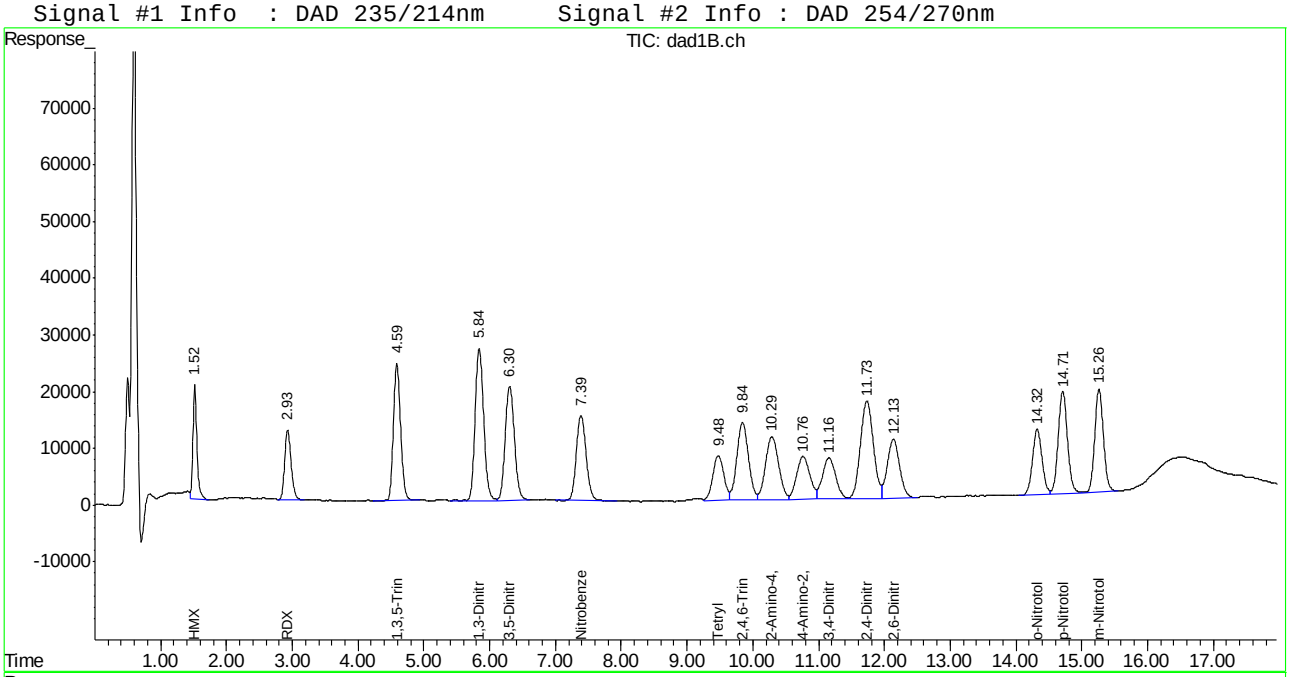
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045467.D 8330B.M Mon Jan 05 07:33:49 2015 Page 1

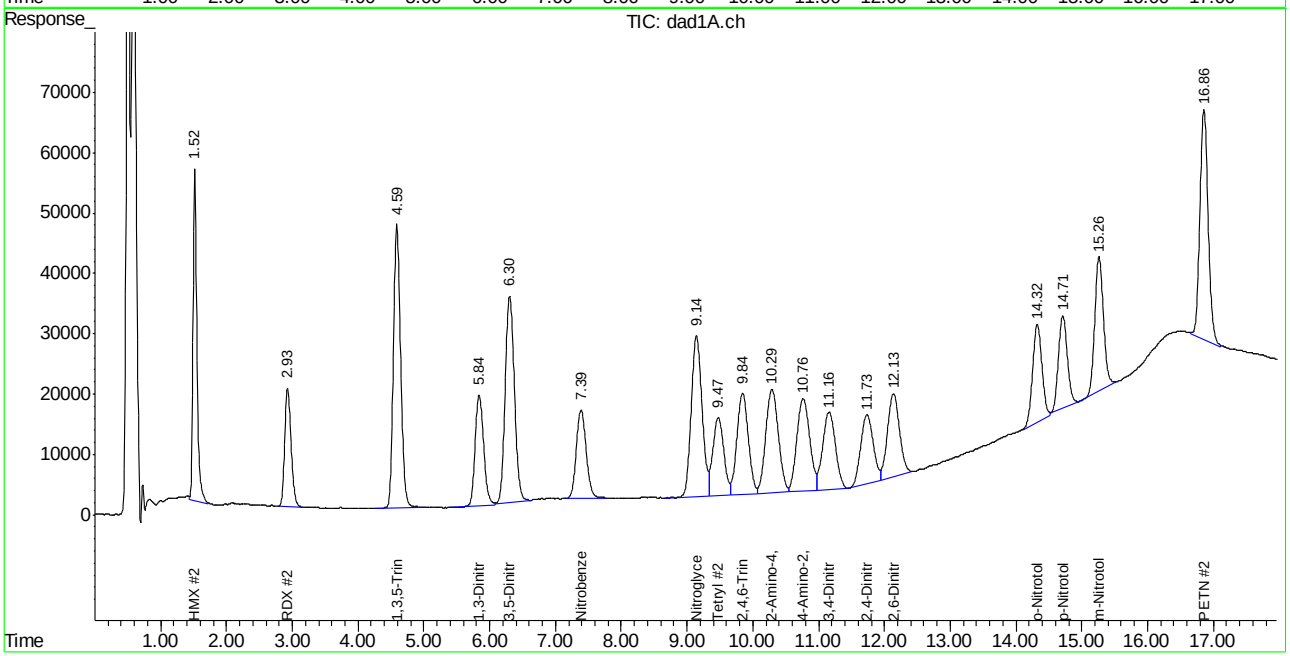
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1A.ch
Acq On : 02-Jan-2015, 16:36:55 Operator: KISMETL
Sample : op54435-ms Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:13 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: OP54435-MS
Lab FileID: BB045467.D
Injection Time: 01/02/15 16:36
Method: SW846 8330B
Analyst approved: 01/05/15 07:47 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	2	1.52	Poorly defined baseline
RDX	121-82-4	1	2.93	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1A.ch
Acq On : 02-Jan-2015, 17:01:51 Operator: KISMETL
Sample : op54435-msd Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:46 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.15	1004789	1726336	601.680	551.658
	Spiked Amount 500.000	Range 72 - 134		Recovery =		120.34%	110.33%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.52	1.52	799238	2228149	527.874m	564.574m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	850285	1349330	475.610	460.813
6)	1,3,5-Trinitrobe	4.59	4.59	1866648	3616682	461.645	474.875
7)	1,3-Dinitrobenze	5.84	5.84	2423575	1632922	462.020	460.688
8)	3,5-Dinitroanili	6.30	6.30	1985884	3364105	472.078	483.601m
9)	Nitrobenzene	7.39	7.38	1553690	1539419	505.492	512.632m
10)	Nitroglycerin	0.00	9.14	0	3027975	N.D.	2430.449m#
11)	Tetryl	9.47	9.47	963988	1496450	354.100	340.075
12)	2,4,6-Trinitroto	9.84	9.84	1700376	2004879	457.256	445.073
13)	2-Amino-4,6-Dini	10.29	10.29	1557958	2289578	507.273	488.288
14)	4-Amino-2,6-Dini	10.76	10.76	1059974	2098898	492.434	470.515
16)	2,4-Dinitrotolue	11.73	11.73	2298386	1489542	510.623	558.217
17)	2,6-Dinitrotolue	12.13	12.13	1332416	1725987	512.939	547.031
18)	o-Nitrotoluene	14.32	14.32	1175143	1586758	515.108	514.761m
19)	p-Nitrotoluene	14.71	14.71	1778816	1438381	505.704	486.439
20)	m-Nitrotoluene	15.26	15.26	1681168	2012126	551.483	575.143
21)	PETN	0.00	16.85	0	3380736	N.D.	3246.791m#

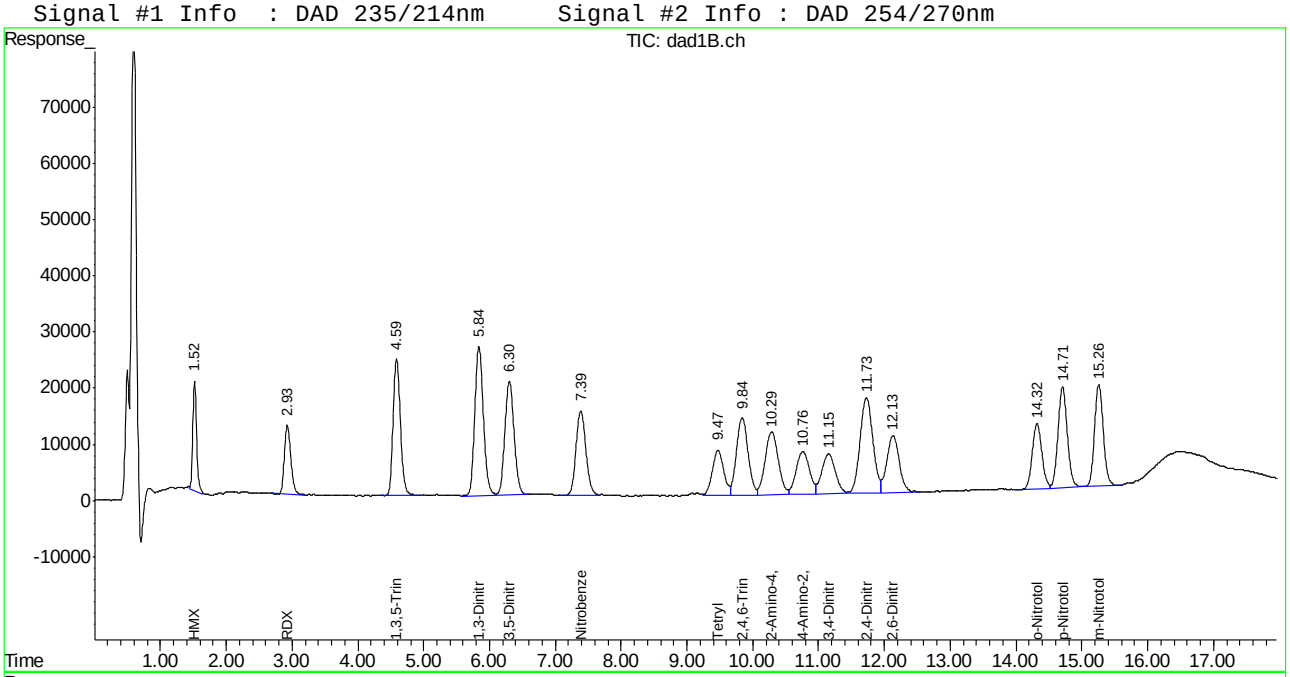
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045468.D 8330B.M Mon Jan 05 07:33:50 2015 Page 1

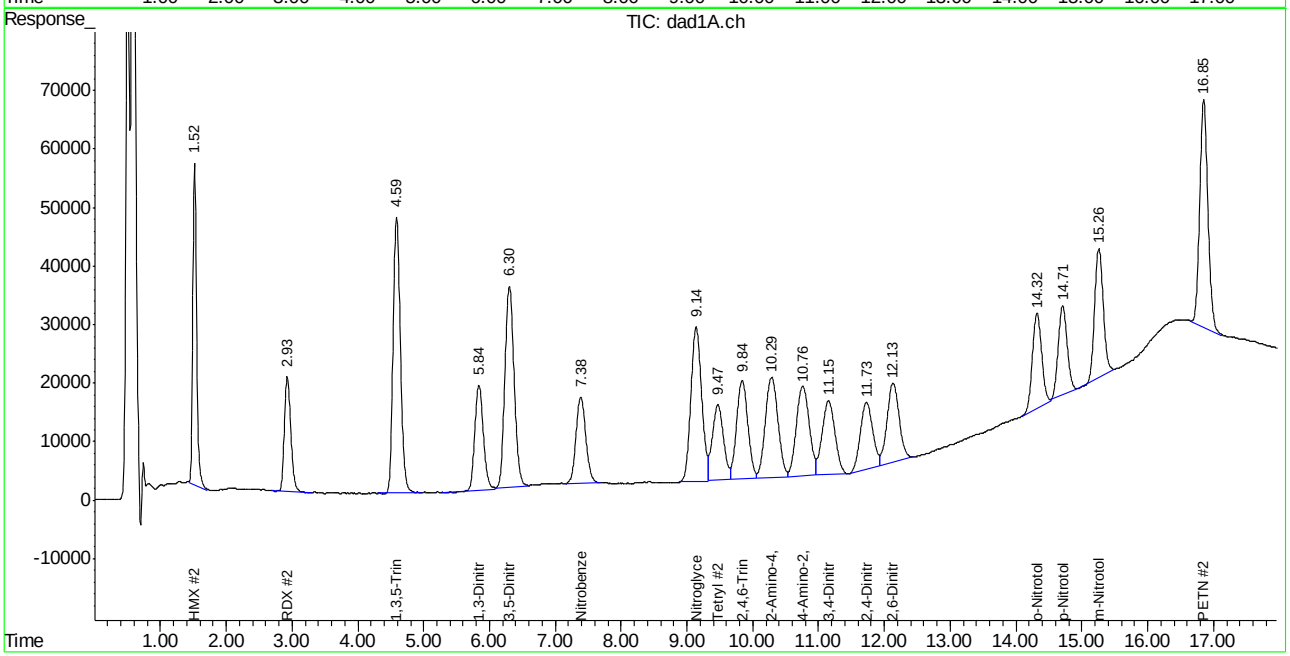
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1A.ch
Acq On : 02-Jan-2015, 17:01:51 Operator: KISMETL
Sample : op54435-msd Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:14 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: OP54435-MSD
Lab FileID: BB045468.D
Injection Time: 01/02/15 17:01
Method: SW846 8330B
Analyst approved: 01/05/15 07:47 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.52	Poorly defined baseline
HMX	2691-41-0	2	1.52	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.38	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.14	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
PETN	78-11-5	2	16.85	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1A.ch
Acq On : 02-Jan-2015, 20:21:35 Operator: KISMETL
Sample : op54435-dup Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:54 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.13	11.12	1050459	1827203	629.028	583.890m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		125.81%	116.78%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

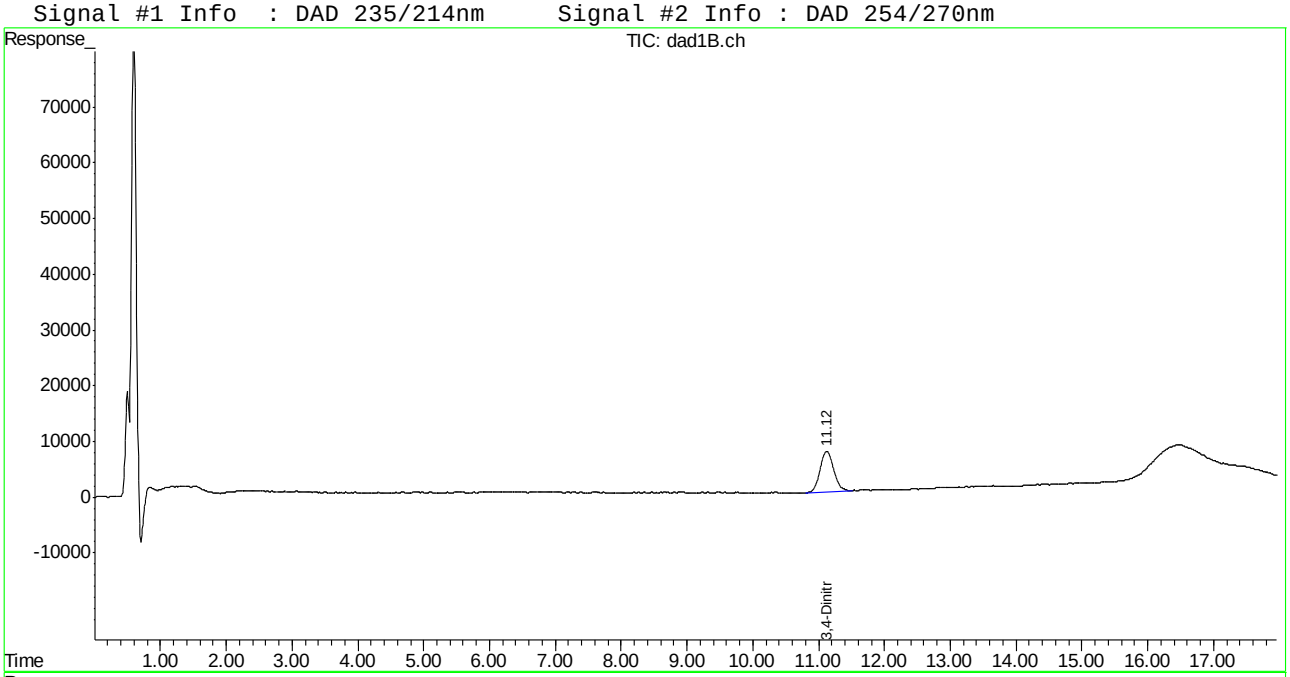
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045476.D 8330B.M Mon Jan 05 07:33:58 2015 Page 1

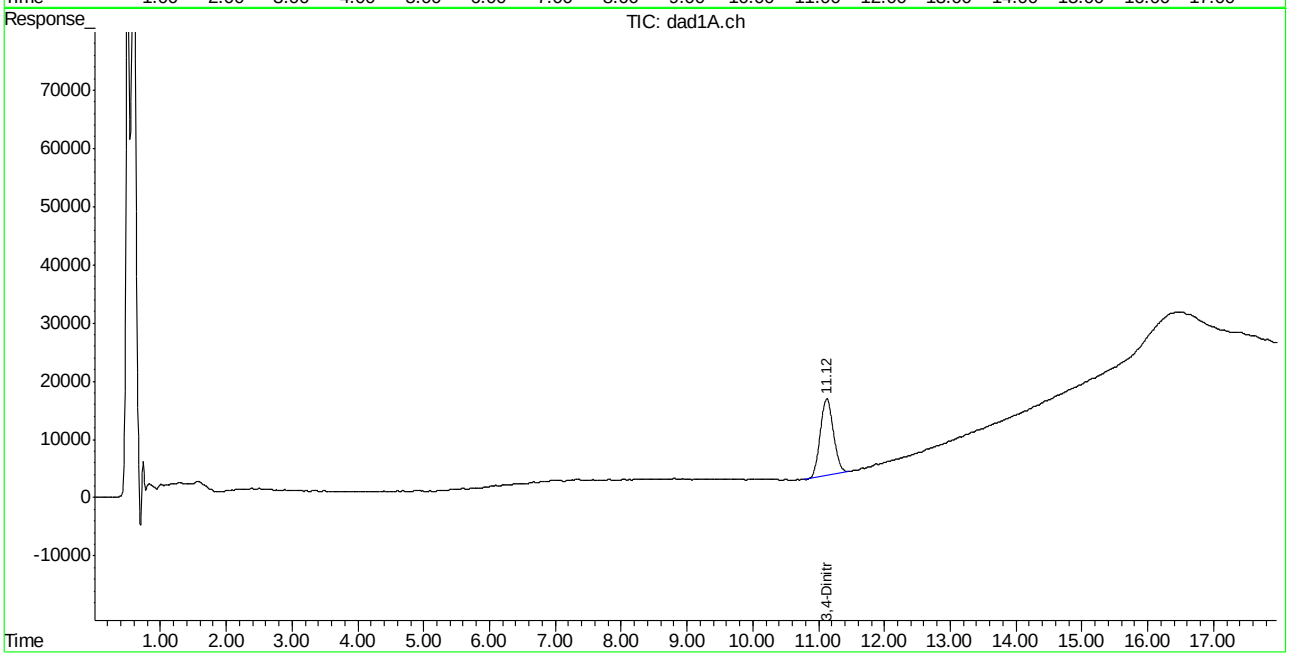
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1A.ch
Acq On : 02-Jan-2015, 20:21:35 Operator: KISMETL
Sample : op54435-dup Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:21 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	OP54435-DUP	**Method:**	SW846 8330B
Lab FileID:	BB045476.D	**Analyst approved:**	01/05/15 07:47 Kismet Lugo
Injection Time:	01/02/15 20:21	**Supervisor approved:**	01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.12	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1A.ch
Acq On : 02-Jan-2015, 20:46:29 Operator: KISMETL
Sample : op54435-dup2 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:55 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.12	11.12	1049194	1888508	628.270	603.480
	Spiked Amount 500.000	Range 72 - 134		Recovery =		125.65%	120.70%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

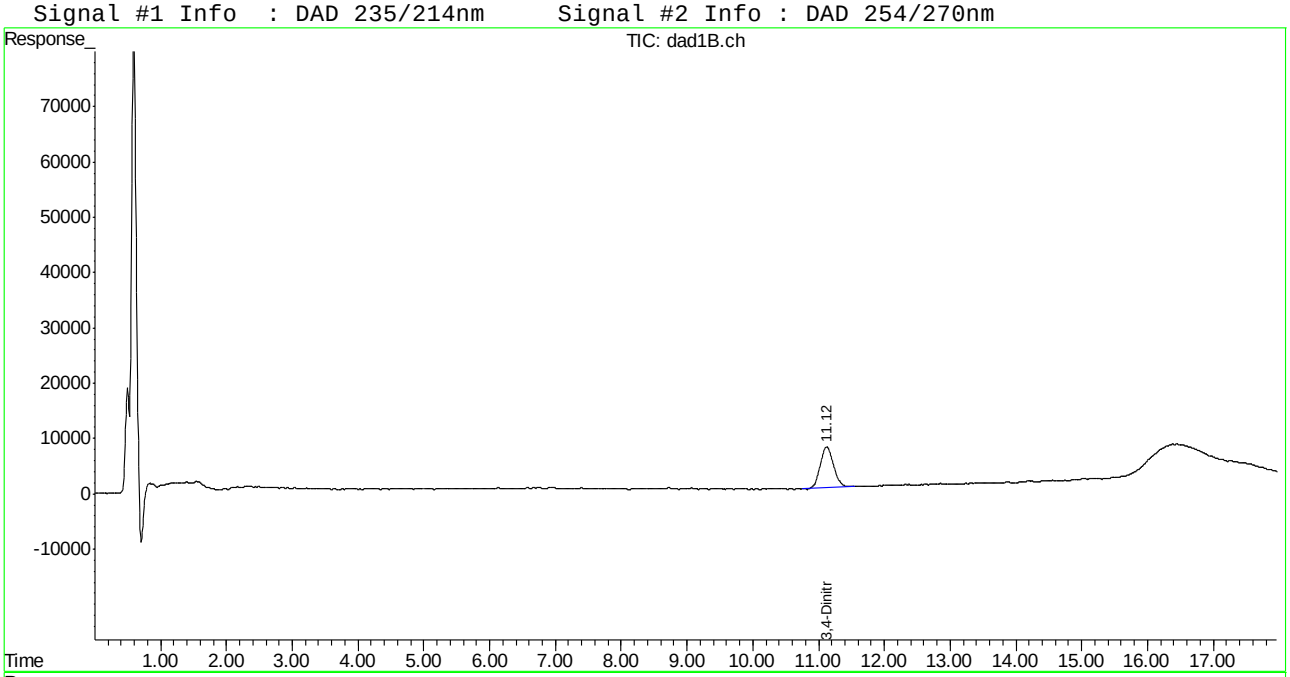
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045477.D 8330B.M Mon Jan 05 07:33:59 2015

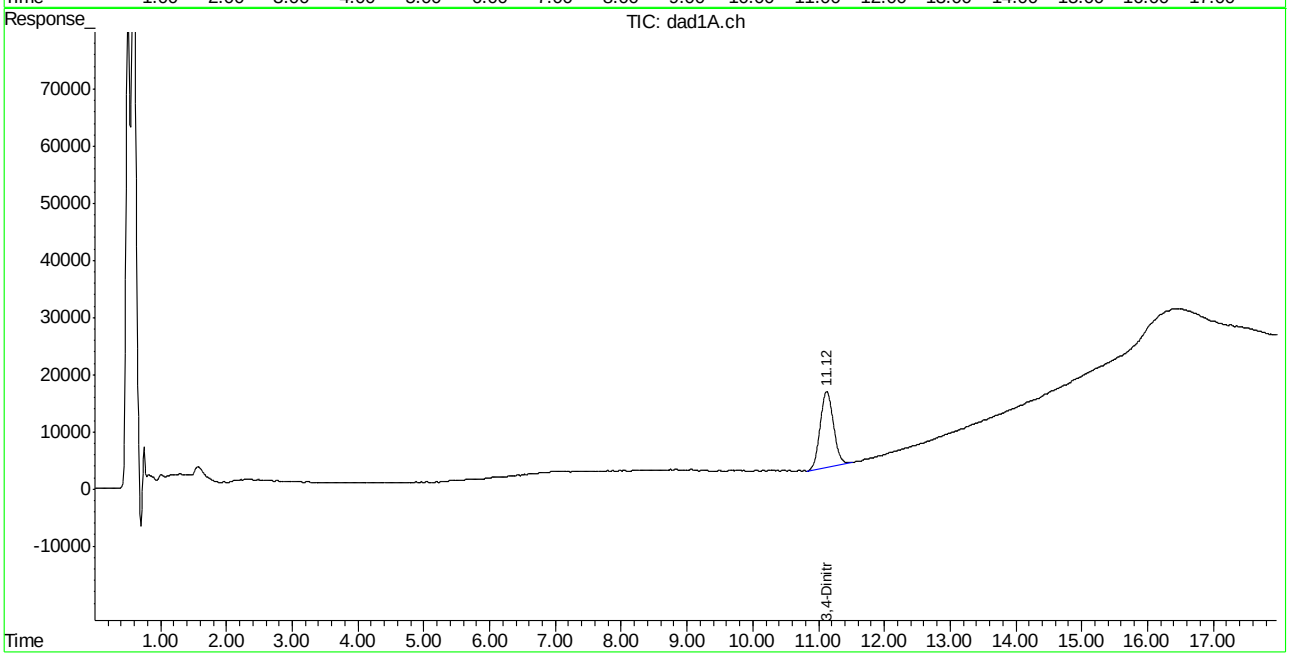
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1A.ch
Acq On : 02-Jan-2015, 20:46:29 Operator: KISMETL
Sample : op54435-dup2 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:22 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1A.ch
Acq On : 29-Dec-2014, 11:48:44 Operator: KISMETL
Sample : ic1221-20 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:13 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.82	10.81	25098	55306	13.695m	16.769m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	2.74%#	3.35%#
	Target Compounds						
1)	TNX	1.37	1.37	61656	84605	20.675m	19.548m
2)	HMX	1.57	1.58	29479	130152	18.120m	28.972m#
3)	DNX	1.77	1.77	56641	98249	20.659m	22.457m
4)	MNX	2.37	2.37	47487	69362	19.075m	18.733m
5)	RDX	2.98	2.98	33562	62907	18.155m	21.466m
6)	1,3,5-Trinitrobe	4.50	4.50	89630	164265	22.522m	21.310m
7)	1,3-Dinitrobenze	5.69	5.69	115238	74495	22.165m	21.027m
8)	3,5-Dinitroanili	6.21	6.21	88570	129962	21.228m	18.673m
9)	Nitrobenzene	7.07	7.08	65670	64198	22.203m	21.853m
10)	Nitroglycerin	0.00	9.08	0	119597	N.D.	95.601m#
11)	Tetryl	9.34	9.34	64985	79225	22.425m	17.304m
12)	2,4,6-Trinitroto	9.53	9.52	76523	91230	21.711m	21.987m
13)	2-Amino-4,6-Dini	9.95	9.98	70598	101595	22.956m	22.146m
14)	4-Amino-2,6-Dini	10.42	10.38	48707	91196	23.156m	20.355
16)	2,4-Dinitrotolue	11.27	11.39	93292	51806	20.460m	19.088m
17)	2,6-Dinitrotolue	11.64	11.82	50401	61377	19.468m	19.698m
18)	o-Nitrotoluene	13.88	13.89	51162	58360	23.729m	19.817m
19)	p-Nitrotoluene	14.26	14.32	81502	63050	23.928m	22.368
20)	m-Nitrotoluene	14.83	14.84	67259	58493	22.331m	16.616m
21)	PETN	0.00	16.66	0	101895	N.D.	57.706m#

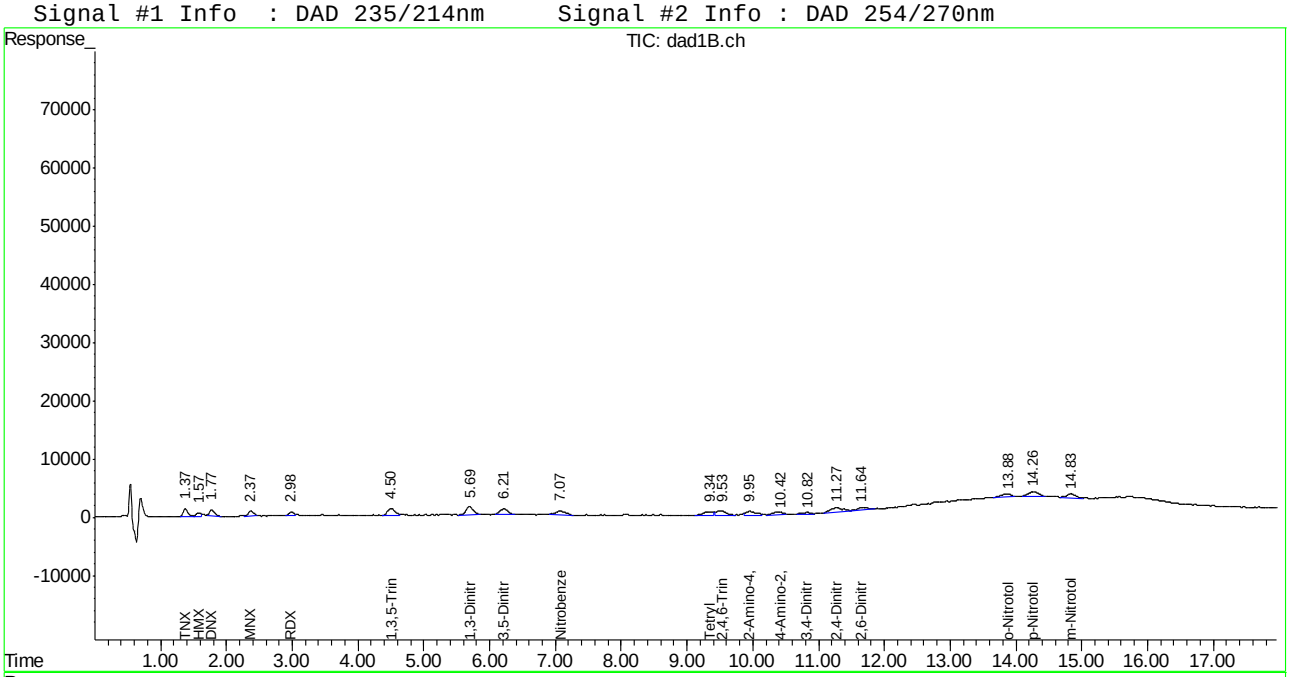
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045353.D 8330B.M Tue Dec 30 07:04:08 2014 Page 1

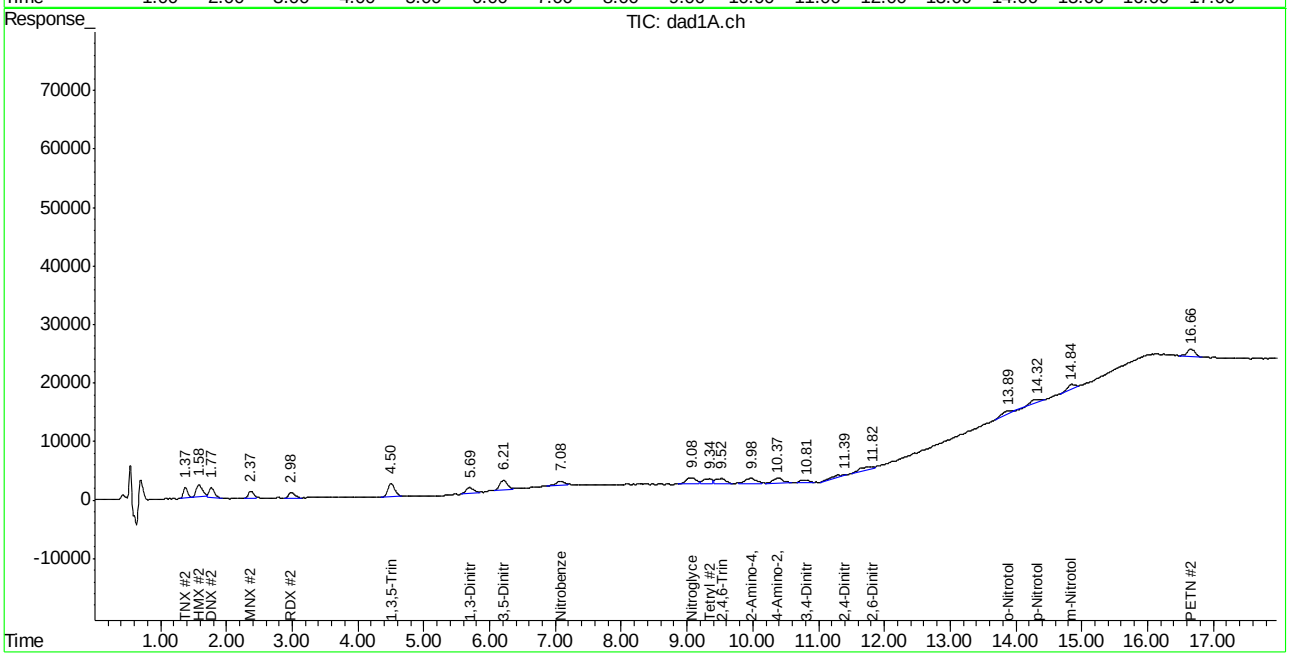
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1A.ch
Acq On : 29-Dec-2014, 11:48:44 Operator: KISMETL
Sample : ic1221-20 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:16 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045353.D
Injection Time: 12/29/14 11:48
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Poorly defined baseline
TNX		2	1.37	Poorly defined baseline
HMX	2691-41-0	1	1.57	Poorly defined baseline
HMX	2691-41-0	2	1.58	Poorly defined baseline
DNX		1	1.77	Poorly defined baseline
DNX		2	1.77	Poorly defined baseline
MNX		1	2.37	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	1	2.98	Poorly defined baseline
RDX	121-82-4	2	2.98	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.50	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.50	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.69	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.69	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.21	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.21	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.07	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.08	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.08	Poorly defined baseline
Tetryl	479-45-8	1	9.34	Poorly defined baseline
Tetryl	479-45-8	2	9.34	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.52	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.53	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.95	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.98	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.42	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.81	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.82	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.27	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.39	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.64	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.82	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.88	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.89	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1A.ch
Acq On : 29-Dec-2014, 12:13:43 Operator: KISMETL
Sample : ic1221-50 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:14 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.78	10.77	80555	141379	43.956m	42.868
Spiked Amount	500.000	Range	70 - 136	Recovery	=	8.79%#	8.57%#
	Target Compounds						
1)	TNX	1.37	1.37	159402	222258	53.451m	51.354m
2)	HMX	1.58	1.58	83517	309773	51.334m	68.956m
3)	DNX	1.77	1.77	144697	220341	52.775m	50.364m
4)	MNX	2.37	2.37	140200	189249	56.316	51.112m
5)	RDX	2.98	2.98	92138	154032	49.842m	52.560m
6)	1,3,5-Trinitrobe	4.50	4.50	212197	379530	53.321m	49.236m
7)	1,3-Dinitrobenze	5.69	5.69	272523	183902	52.417m	51.908m
8)	3,5-Dinitroanili	6.21	6.21	214695	366057	51.458	52.594
9)	Nitrobenzene	7.07	7.08	149717	157449	50.618m	53.596m
10)	Nitroglycerin	0.00	9.06	0	328701	N.D.	262.749 #
11)	Tetryl	9.32	9.32	125137	225018	43.182m	49.147
12)	2,4,6-Trinitroto	9.52	9.51	193258	236205	54.830	56.926
13)	2-Amino-4,6-Dini	9.95	9.95	143531	231677	46.671	50.503
14)	4-Amino-2,6-Dini	10.35	10.37	90703	210847	43.121m	47.062
16)	2,4-Dinitrotolue	11.28	11.29	230200	127501	50.485	46.979m
17)	2,6-Dinitrotolue	11.67	11.70	136773	159493	52.830	51.188m
18)	o-Nitrotoluene	13.85	13.86	107146	159503	49.694m	54.161m
19)	p-Nitrotoluene	14.26	14.27	167851	141770	49.279m	50.296m
20)	m-Nitrotoluene	14.83	14.84	148734	175628	49.383	49.890m
21)	PETN	0.00	16.66	0	255320	N.D.	145.266m#

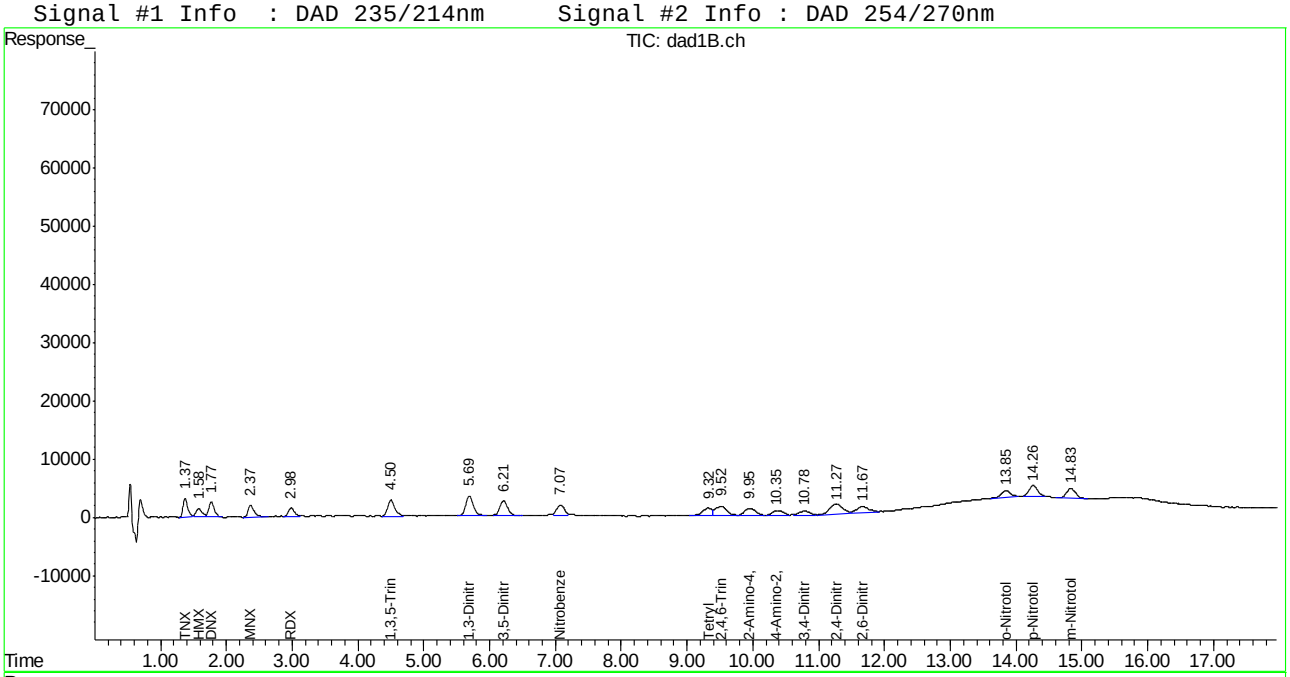
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045354.D 8330B.M Tue Dec 30 07:04:09 2014 Page 1

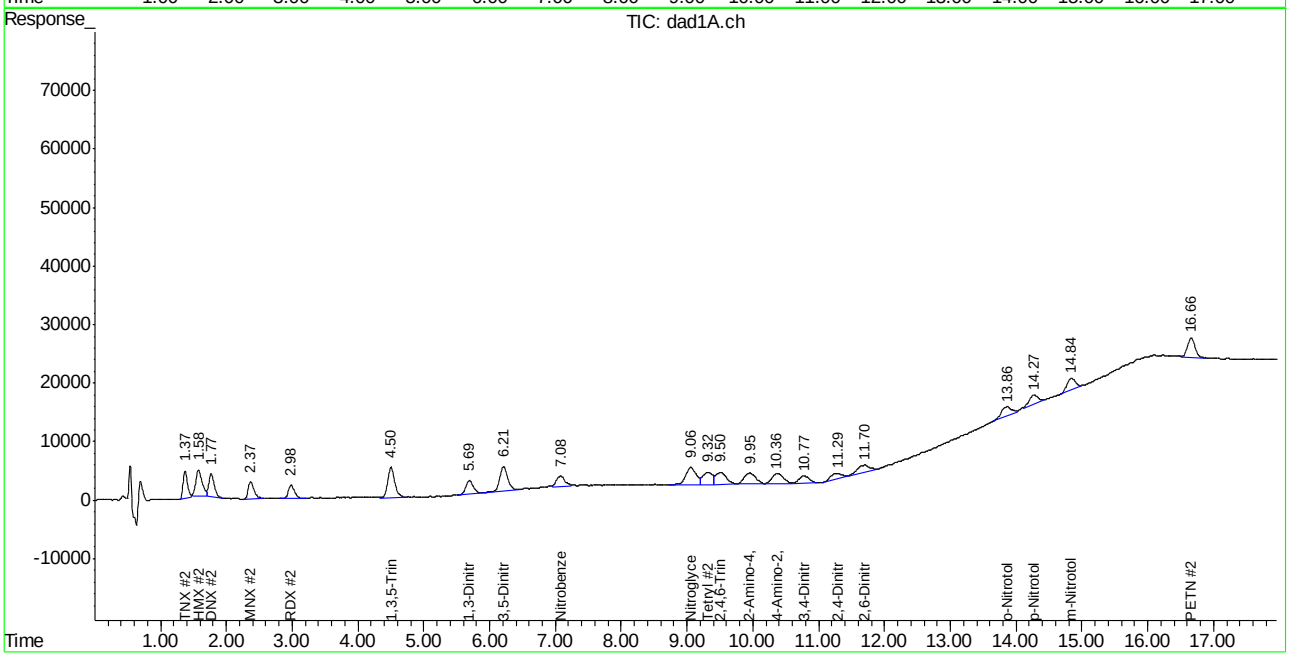
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1A.ch
Acq On : 29-Dec-2014, 12:13:43 Operator: KISMETL
Sample : ic1221-50 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:19 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221 **Method:** SW846 8330A
Lab FileID: BB045354.D **Analyst approved:** 12/30/14 09:14 Kismet Lugo
Injection Time: 12/29/14 12:13 **Supervisor approved:** 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Poorly defined baseline
TNX		2	1.37	Poorly defined baseline
HMX	2691-41-0	1	1.58	Poorly defined baseline
HMX	2691-41-0	2	1.58	Poorly defined baseline
DNX		1	1.77	Poorly defined baseline
DNX		2	1.77	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	1	2.98	Poorly defined baseline
RDX	121-82-4	2	2.98	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.50	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.50	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.69	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.69	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.07	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.08	Poorly defined baseline
Tetryl	479-45-8	1	9.32	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.35	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.78	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.29	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.70	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.85	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.86	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.27	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1A.ch
Acq On : 29-Dec-2014, 12:38:39 Operator: KISMETL
Sample : ic1221-100 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:15 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.77	10.78	153644	309777	83.838	93.928
Spiked Amount 500.000	Range 70 - 136		Recovery =		16.77%#	18.79%#
Target Compounds						
1) TNX	1.37	1.37	333895	509911	111.962m	117.818m
2) HMX	1.58	1.58	171632	490651	105.495	109.220
3) DNX	1.77	1.77	297537	494251	108.520	112.972
4) MNX	2.37	2.37	255573	381355	102.659	102.995m
5) RDX	2.99	2.98	193243	296300	104.536	101.107m
6) 1,3,5-Trinitrobe	4.50	4.50	394600	747795	99.156	97.010
7) 1,3-Dinitrobenze	5.69	5.69	506401	370656	97.401	104.621m
8) 3,5-Dinitroanili	6.21	6.21	417798	704637	100.138	101.241m
9) Nitrobenzene	7.07	7.07	321325	290107	108.638m	98.753m
10) Nitroglycerin	0.00	9.05	0	635940	N.D.	508.342 #
11) Tetryl	9.31	9.31	269891	452736	93.134	98.883
12) 2,4,6-Trinitroto	9.51	9.50	344976	450755	97.874	108.634
13) 2-Amino-4,6-Dini	9.95	9.95	282145	447451	91.742	97.539
14) 4-Amino-2,6-Dini	10.36	10.37	201005	434689	95.561	97.024
16) 2,4-Dinitrotolue	11.26	11.26	453299	259378	99.412	95.571
17) 2,6-Dinitrotolue	11.64	11.68	278390	294861	107.532m	94.634
18) o-Nitrotoluene	13.84	13.84	216989	299198	100.639m	101.597m
19) p-Nitrotoluene	14.26	14.26	337360	293350	99.044m	104.072m
20) m-Nitrotoluene	14.84	14.84	297069	354363	98.633m	100.662m
21) PETN	0.00	16.66	0	531752	N.D.	305.134m#

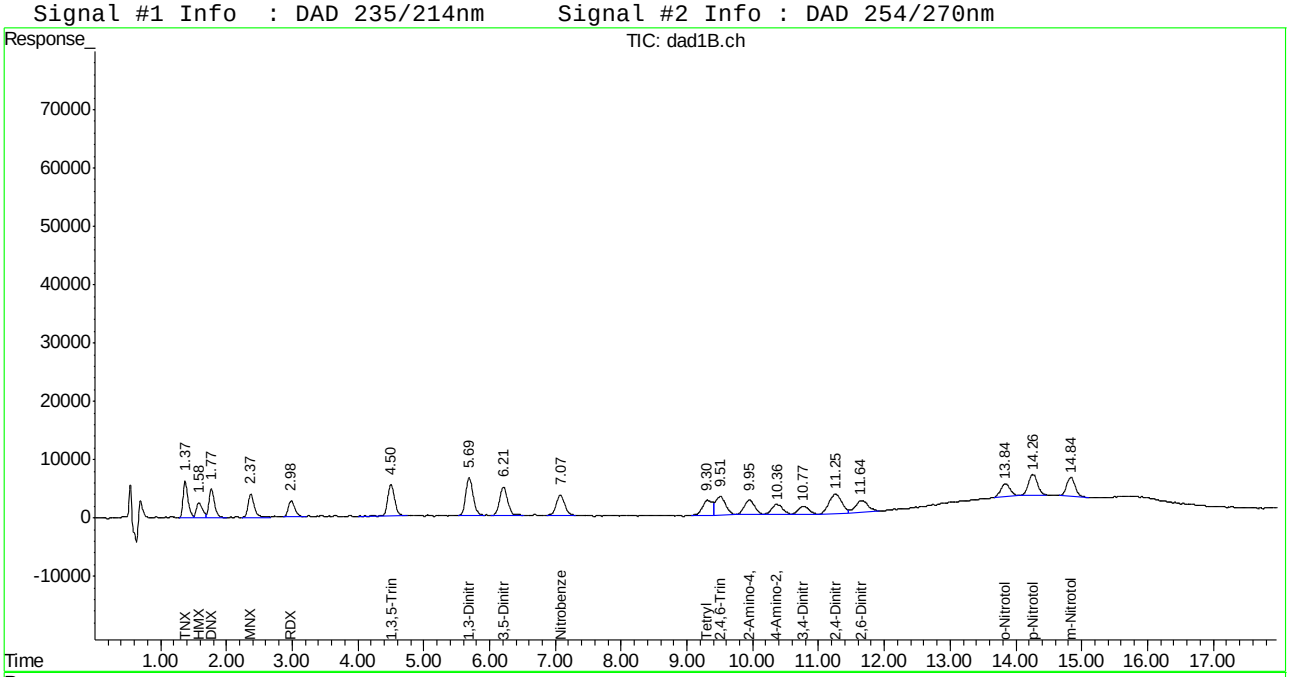
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045355.D 8330B.M Tue Dec 30 07:04:10 2014 Page 1

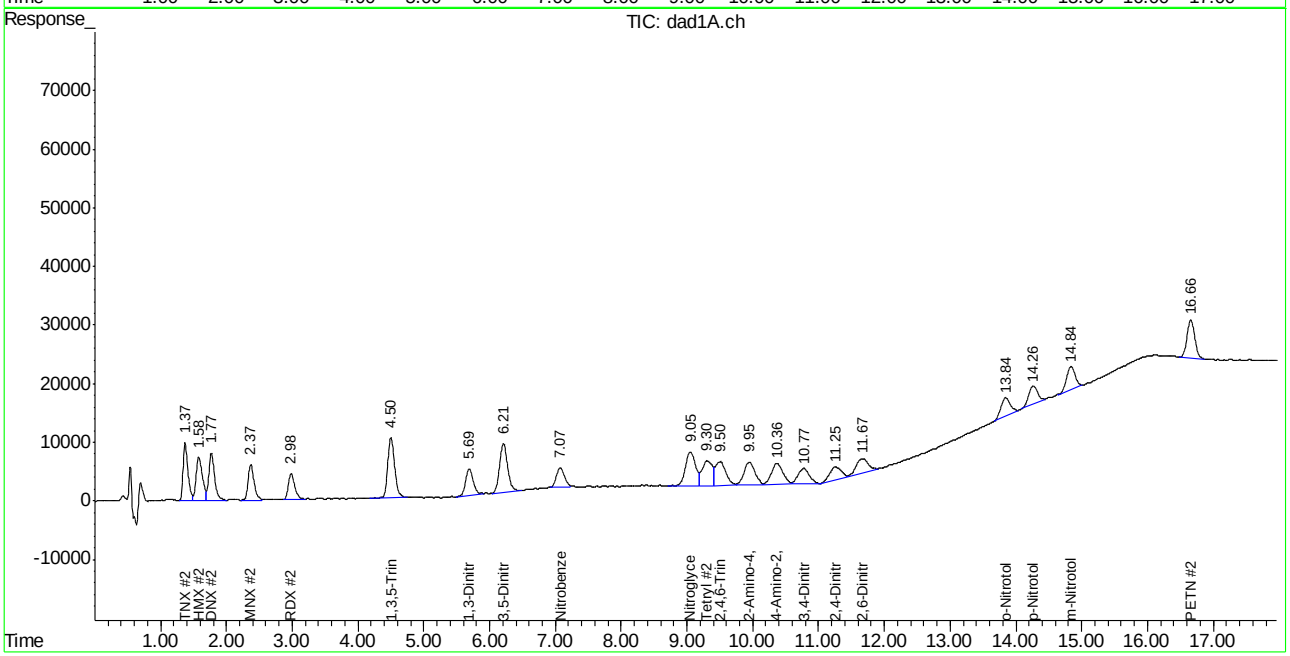
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1A.ch
Acq On : 29-Dec-2014, 12:38:39 Operator: KISMETL
Sample : ic1221-100 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:22 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221 **Method:** SW846 8330A
Lab FileID: BB045355.D **Analyst approved:** 12/30/14 09:14 Kismet Lugo
Injection Time: 12/29/14 12:38 **Supervisor approved:** 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Poorly defined baseline
TNX		2	1.37	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	2	2.98	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.69	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.21	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.07	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.07	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.64	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.84	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1A.ch
Acq On : 29-Dec-2014, 13:03:38 Operator: KISMETL
Sample : ic1221-200 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:16 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	327107	631189	178.492	191.384
Spiked Amount	500.000	Range	70 - 136	Recovery	=	35.70%#	38.28%#
	Target Compounds						
1)	TNX	1.37	1.37	662998	1004251	222.318	232.038m
2)	HMX	1.58	1.58	321158	949210	197.402	211.297
3)	DNX	1.77	1.77	573252	944169	209.082	215.811
4)	MNX	2.37	2.37	481838	735157	193.545m	198.549m
5)	RDX	2.98	2.99	354394	570393	191.710m	194.635
6)	1,3,5-Trinitrobe	4.50	4.50	776877	1489797	195.215	193.269
7)	1,3-Dinitrobenze	5.69	5.69	1041718	679451	200.364	191.781
8)	3,5-Dinitroanili	6.21	6.21	847377	1404848	203.100	201.845
9)	Nitrobenzene	7.08	7.07	601087	601030	203.223	204.591m
10)	Nitroglycerin	0.00	9.06	0	1237776	N.D.	989.424 #
11)	Tetryl	9.32	9.32	534020	882363	184.279	192.720
12)	2,4,6-Trinitroto	9.51	9.51	731886	878423	207.645	211.704
13)	2-Amino-4,6-Dini	9.95	9.95	595327	917211	193.576	199.941
14)	4-Amino-2,6-Dini	10.38	10.37	417446	888872	198.459	198.400
16)	2,4-Dinitrotolue	11.26	11.26	865219	527614	189.750	194.405
17)	2,6-Dinitrotolue	11.66	11.66	518050	626318	200.103	201.012
18)	o-Nitrotoluene	13.84	13.84	484334	619485	224.632m	210.354m
19)	p-Nitrotoluene	14.26	14.26	680416	582451	199.760m	206.637m
20)	m-Nitrotoluene	14.83	14.84	594941	708522	197.532m	201.267m
21)	PETN	0.00	16.66	0	1047868	N.D.	611.320m#

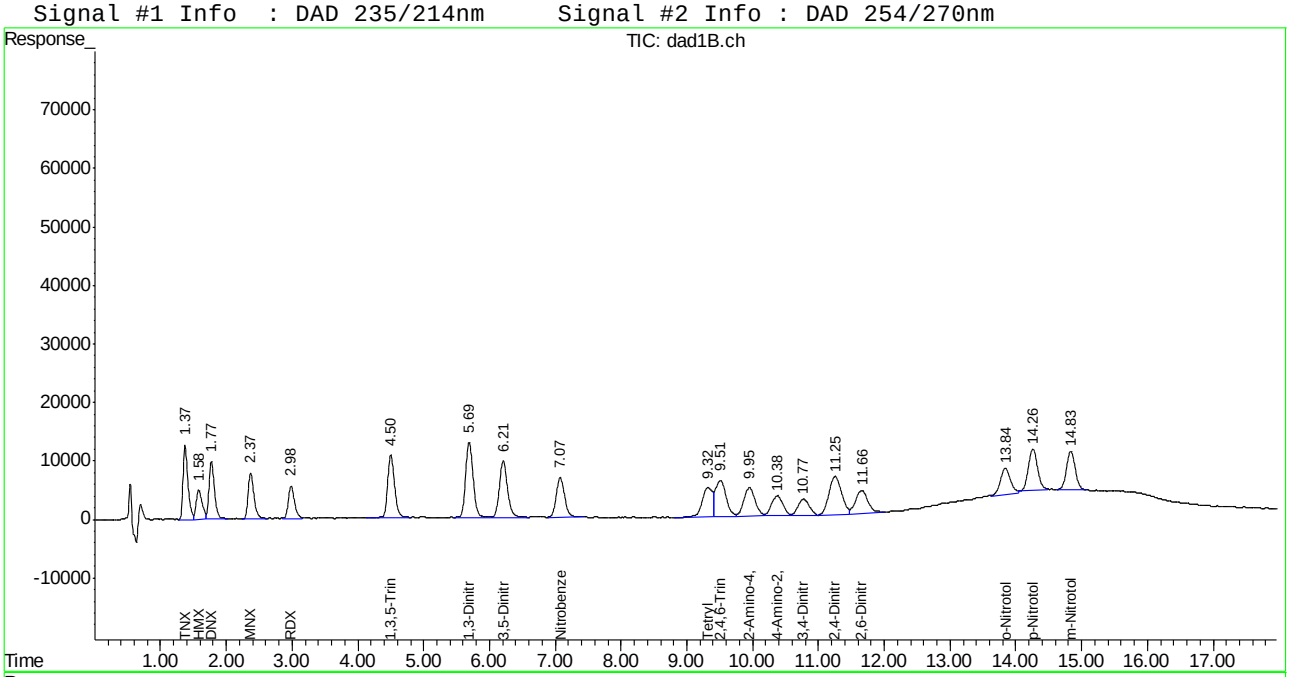
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045356.D 8330B.M Tue Dec 30 07:04:11 2014 Page 1

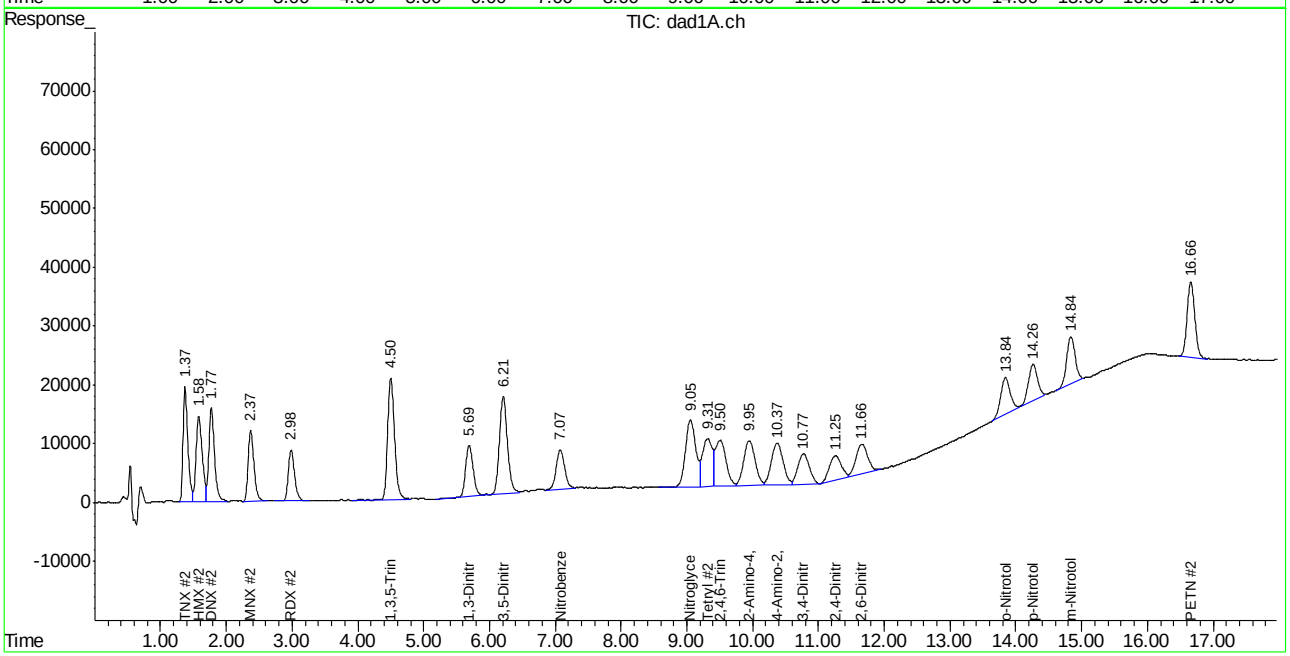
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1A.ch
Acq On : 29-Dec-2014, 13:03:38 Operator: KISMETL
Sample : ic1221-200 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:24 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045356.D
Injection Time: 12/29/14 13:03
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	1.37	Poorly defined baseline
MNX		1	2.37	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	1	2.98	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.07	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1A.ch
Acq On : 29-Dec-2014, 13:28:36 Operator: KISMETL
Sample : icc1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:17 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	894354	1605975	488.021	486.951
Spiked Amount	500.000	Range	70 - 136	Recovery	=	97.60%	97.39%
	Target Compounds						
1)	TNX	1.37	1.37	1625466	2495666	545.055	576.639
2)	HMX	1.58	1.58	681001	1974833	418.583	439.604
3)	DNX	1.77	1.77	1400403	2247183	510.768	513.644
4)	MNX	2.37	2.37	1161171	1806169	466.421	487.805
5)	RDX	2.98	2.98	873460	1393316	472.501	475.441
6)	1,3,5-Trinitrobe	4.50	4.50	1935577	3702749	486.374	480.352
7)	1,3-Dinitrobenze	5.69	5.69	2515975	1693625	483.923	478.041
8)	3,5-Dinitroanili	6.21	6.21	2042305	3447232	489.500	495.290
9)	Nitrobenzene	7.07	7.07	1526355	1488376	516.050	506.645
10)	Nitroglycerin	0.00	9.05	0	3033628	N.D.	2424.949 #
11)	Tetryl	9.31	9.31	1306117	2194866	450.713	479.388
12)	2,4,6-Trinitroto	9.50	9.50	1836432	2183145	521.018	526.148
13)	2-Amino-4,6-Dini	9.94	9.94	1514180	2288881	492.350	498.948
14)	4-Amino-2,6-Dini	10.37	10.37	1077062	2209800	512.050	493.236
16)	2,4-Dinitrotolue	11.25	11.25	2183794	1328763	478.924	489.596
17)	2,6-Dinitrotolue	11.65	11.66	1242003	1582911	479.738	508.025
18)	o-Nitrotoluene	13.84	13.84	1112725	1564386	516.078m	531.208m
19)	p-Nitrotoluene	14.26	14.26	1730230	1471577	507.971m	522.074
20)	m-Nitrotoluene	14.83	14.84	1485595	1810727	493.246m	514.365
21)	PETN	0.00	16.66	0	2621057	N.D.	1617.758m#

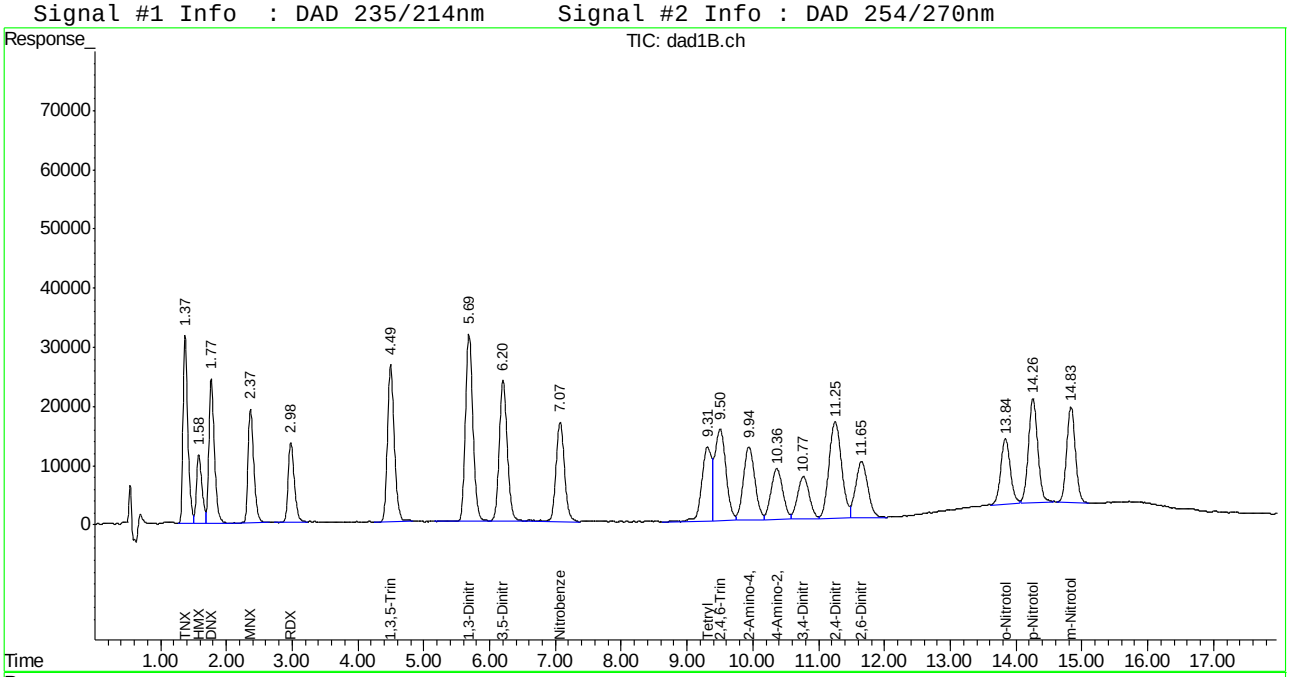
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045357.D 8330B.M Tue Dec 30 07:04:12 2014 Page 1

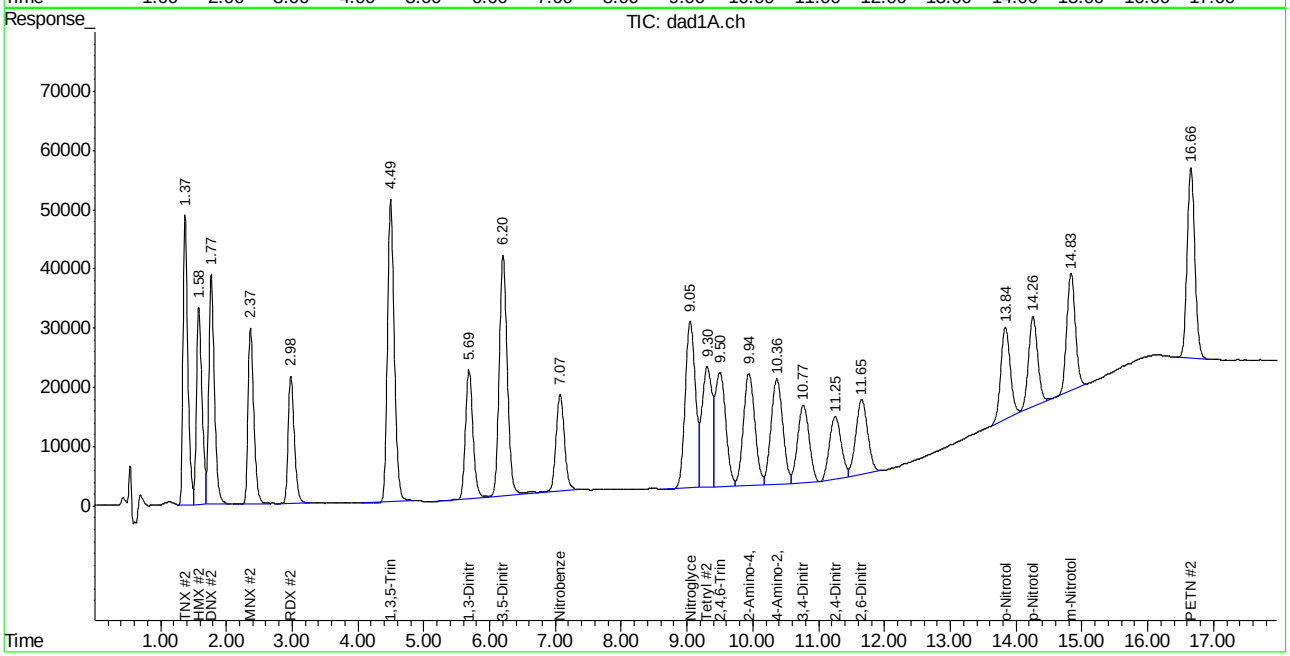
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1A.ch
Acq On : 29-Dec-2014, 13:28:36 Operator: KISMETL
Sample : icc1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:26 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-ICC1221 **Method:** SW846 8330A
Lab FileID: BB045357.D **Analyst approved:** 12/30/14 09:14 Kismet Lugo
Injection Time: 12/29/14 13:28 **Supervisor approved:** 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1A.ch
Acq On : 29-Dec-2014, 13:53:33 Operator: KISMETL
Sample : ic1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:26:39 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	1877677	3286570	1024.589	996.527
	Spiked Amount 500.000	Range 70 - 136		Recovery =		204.92%#	199.31%#
	Target Compounds						
1)	TNX	1.38	1.38	3259550	5010933	1092.999	1157.806
2)	HMX	1.59	1.59	1383133	3967640	850.153	883.209
3)	DNX	1.77	1.77	2804116	4507520	1022.743	1030.296
4)	MNX	2.37	2.37	2355395	3635481	946.118	981.862
5)	RDX	2.98	2.98	1751863	2805865	947.676	957.445
6)	1,3,5-Trinitrobe	4.50	4.50	3920760	7515003	985.214	974.910
7)	1,3-Dinitrobenze	5.69	5.69	5038525	3414287	969.111	963.713
8)	3,5-Dinitroanili	6.21	6.21	4059462	6888638	972.973	989.744
9)	Nitrobenzene	7.07	7.07	2947288	2861838	996.458	974.173m
10)	Nitroglycerin	0.00	9.05	0	6144490	N.D.	4911.636 #
11)	Tetryl	9.32	9.31	2620520	4433190	904.285	968.267
12)	2,4,6-Trinitroto	9.51	9.51	3722049	4403140	1055.991	1061.178
13)	2-Amino-4,6-Dini	9.94	9.94	3075911	4621043	1000.161	1007.331
14)	4-Amino-2,6-Dini	10.37	10.37	2231877	4489995	1061.064	1002.184
16)	2,4-Dinitrotolue	11.25	11.26	4430886	2710547	971.730	998.729
17)	2,6-Dinitrotolue	11.66	11.66	2497908	3207116	964.846	1029.303
18)	o-Nitrotoluene	13.84	13.84	2240748	3095747	1039.251m	1051.202m
19)	p-Nitrotoluene	14.26	14.26	3499664	2937098	1027.452m	1041.999
20)	m-Nitrotoluene	14.83	14.84	3030125	3627320	1006.060m	1030.396
21)	PETN	0.00	16.66	0	5223205	N.D.	3651.668 #

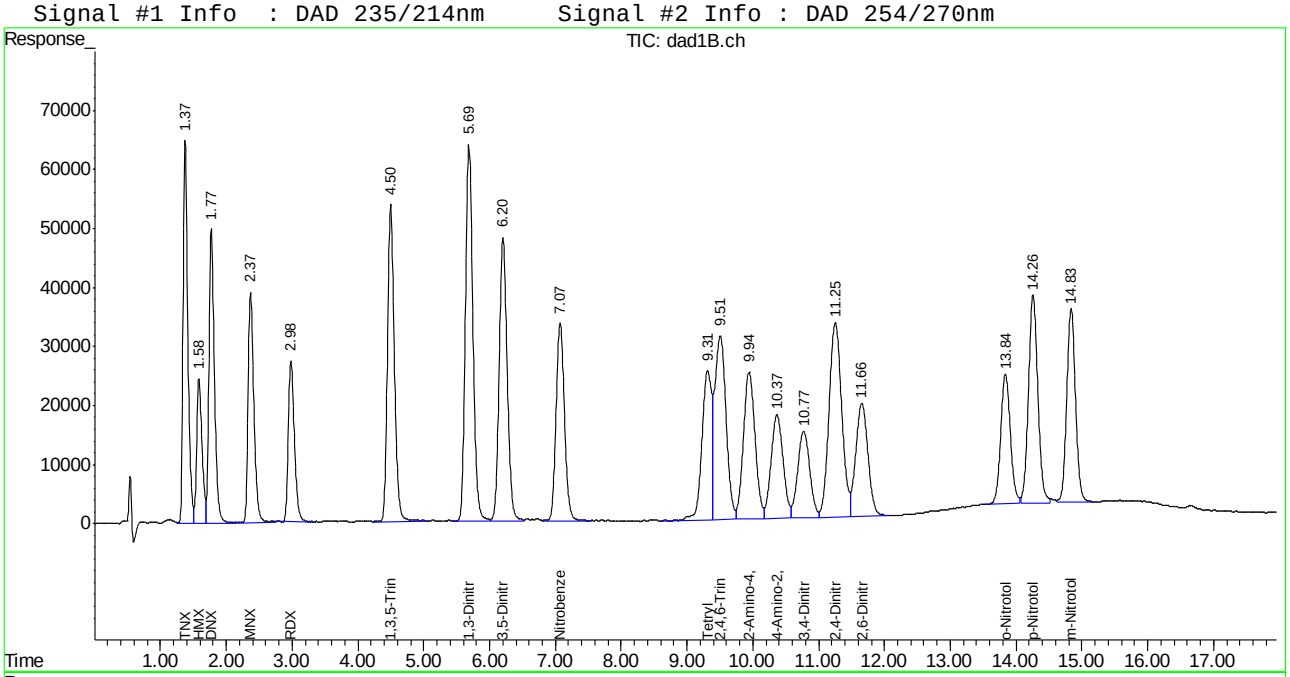
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045358.D 8330B.M Tue Dec 30 07:04:13 2014

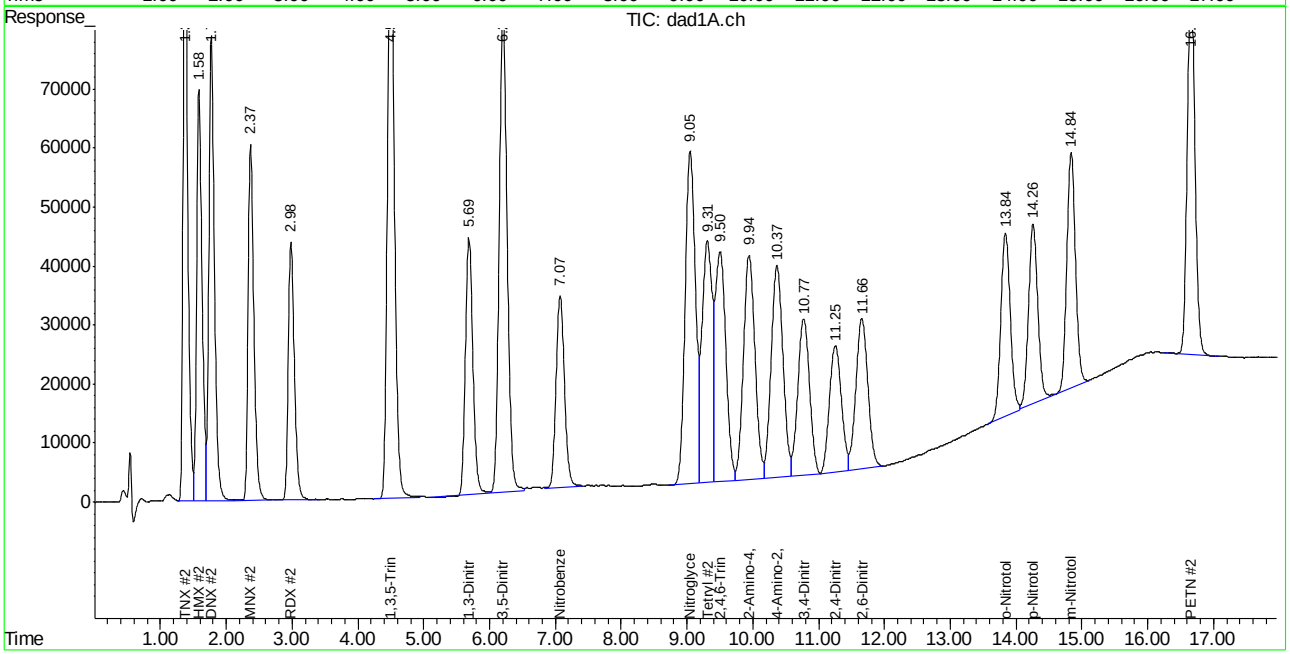
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1A.ch
Acq On : 29-Dec-2014, 13:53:33 Operator: KISMETL
Sample : ic1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045358.D
Injection Time: 12/29/14 13:53
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitrobenzene	98-95-3	2	7.07	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline

BB045359.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1A.ch
Acq On : 29-Dec-2014, 14:18:32 Operator: KISMETL
Sample : ic1221-2000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:37:43 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	3970911	7120834	2166.801	2159.122
	Spiked Amount 500.000	Range 70 - 136		Recovery =		433.36%#	431.82%#
	Target Compounds						
1)	TNX	1.38	1.38	6667058	10250456	2235.612	2368.429
2)	HMX	1.59	1.59	2773909	7858186	1705.005	1749.256
3)	DNX	1.78	1.78	5688778	9087978	2074.863	2077.263
4)	MNX	2.37	2.37	4787469	7424750	1923.038	2005.258
5)	RDX	2.99	2.99	3580831	5727207	1937.062	1954.295
6)	1,3,5-Trinitrobe	4.50	4.50	7913143	15322461	1988.425	1987.759
7)	1,3-Dinitrobenze	5.69	5.69	10327684	7007149	1986.428	1977.830
8)	3,5-Dinitroanili	6.20	6.20	8330977	14043174	1996.771	2017.691
9)	Nitrobenzene	7.07	7.07	6037599	5834197	2041.270	1985.967
10)	Nitroglycerin	0.00	9.04	0	12581683	N.D.	10057.244 #
11)	Tetryl	9.31	9.31	5405565	9157404	1865.345	2000.097
12)	2,4,6-Trinitroto	9.51	9.50	7670209	9155189	2176.133	2206.445
13)	2-Amino-4,6-Dini	9.94	9.94	6391654	9700559	2078.306	2114.604
14)	4-Amino-2,6-Dini	10.37	10.37	4669931	9496728	2220.147	2119.707
16)	2,4-Dinitrotolue	11.25	11.25	9163675	5877032	2009.670	2165.452
17)	2,6-Dinitrotolue	11.65	11.66	5143441	6749007	1986.715	2166.049
18)	o-Nitrotoluene	13.84	13.84	4421456	6311223	2050.656m	2143.060m
19)	p-Nitrotoluene	14.26	14.26	6909254	5969658	2028.459m	2117.865
20)	m-Nitrotoluene	14.83	14.83	6109530	7434253	2028.482m	2111.814m
21)	PETN	0.00	16.66	0	10441138	N.D.	BelowCal

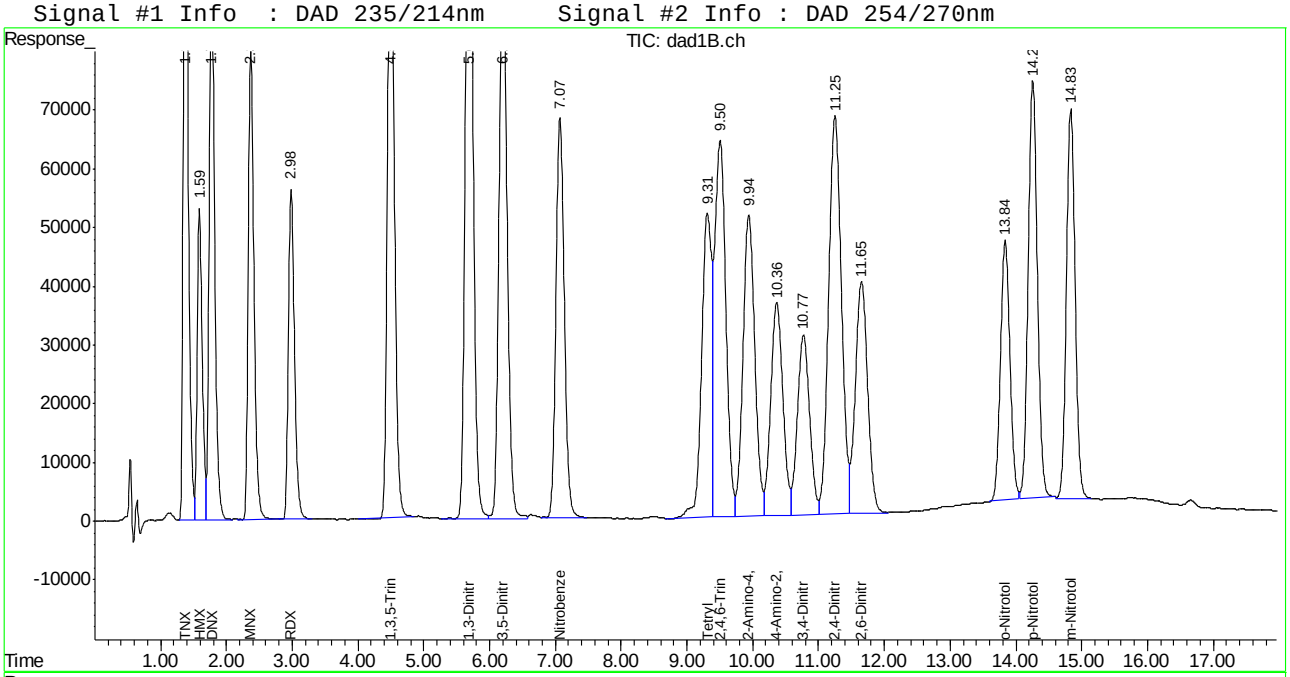
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045359.D 8330B.M Tue Dec 30 07:04:14 2014 Page 1

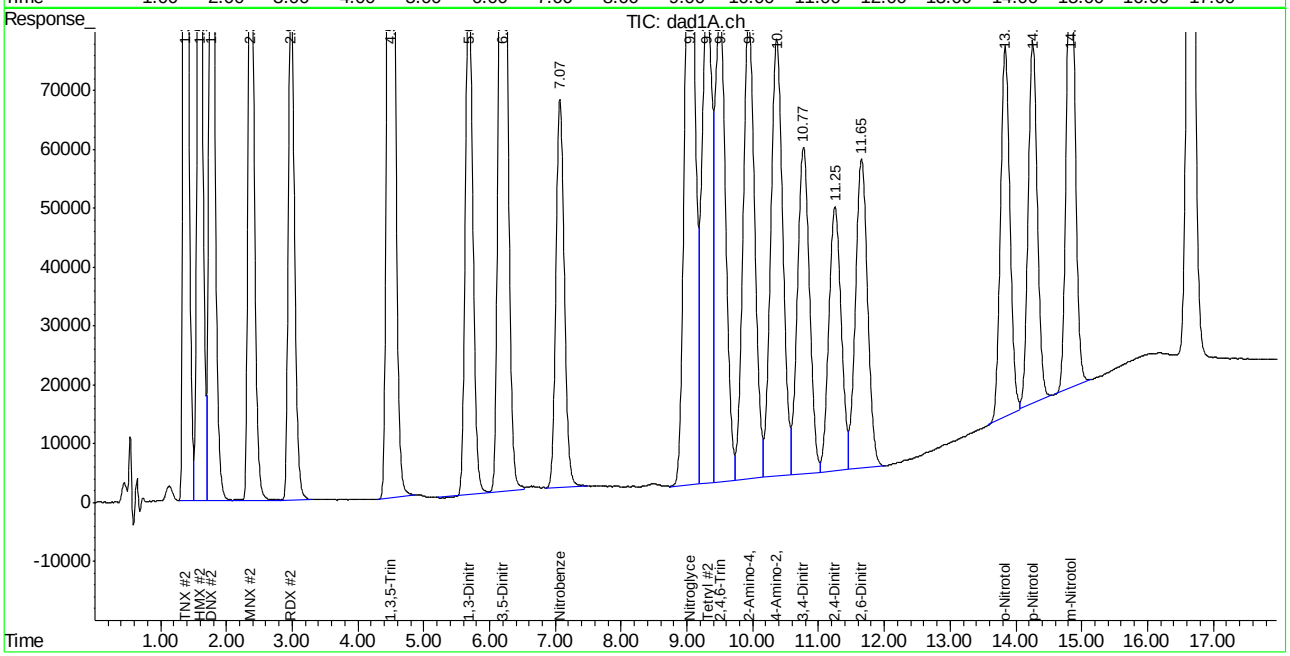
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1A.ch
Acq On : 29-Dec-2014, 14:18:32 Operator: KISMETL
Sample : ic1221-2000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:38 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045359.D
Injection Time: 12/29/14 14:18
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.83	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 15:10:04 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.60	1.60	783250	2261118	517.314m	572.928m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	2.98	2.98	936532	1491185	523.852	509.258
6)	1,3,5-Trinitrobe	4.49	4.49	2080072	4001473	514.427	525.399
7)	1,3-Dinitrobenze	5.68	5.68	2460575	1735624	469.073	489.663
8)	3,5-Dinitroanili	6.20	6.20	2159916	3683642	513.448	529.536m
9)	Nitrobenzene	7.07	7.06	1629077	1549850	530.019	516.106m
10)	Nitroglycerin	0.00	9.05	0	3226636	N.D.	2589.908 #
11)	Tetryl	9.31	9.31	1166495	1992513	428.487	452.808
12)	2,4,6-Trinitroto	9.50	9.50	1920333	2422002	516.406	537.672
13)	2-Amino-4,6-Dini	9.94	9.94	1682914	2640740	547.959	563.179
14)	4-Amino-2,6-Dini	10.36	10.36	1226209	2548873	569.662	571.387
16)	2,4-Dinitrotolue	11.25	11.25	2402731	1531815	533.805	574.059m
17)	2,6-Dinitrotolue	11.65	11.65	1368713	1760168	526.912	557.864m
18)	o-Nitrotoluene	13.83	13.84	1227458	1637680	538.039m	531.281m
19)	p-Nitrotoluene	14.25	14.26	1848906	1564560	525.630m	529.110
20)	m-Nitrotoluene	14.83	14.83	1703165	2048389	558.699m	585.508m
21)	PETN	0.00	16.65	0	3589280	N.D.	3447.072m#

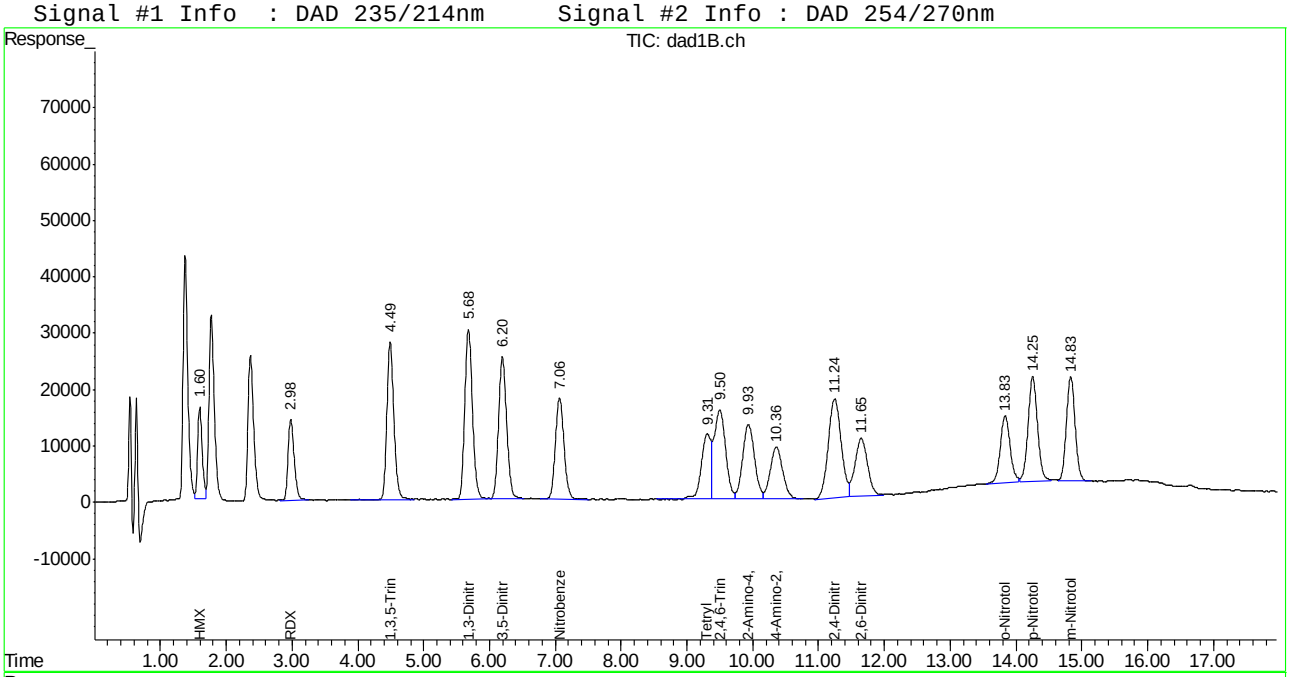
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045360.D 8330B.M Tue Dec 30 07:04:15 2014

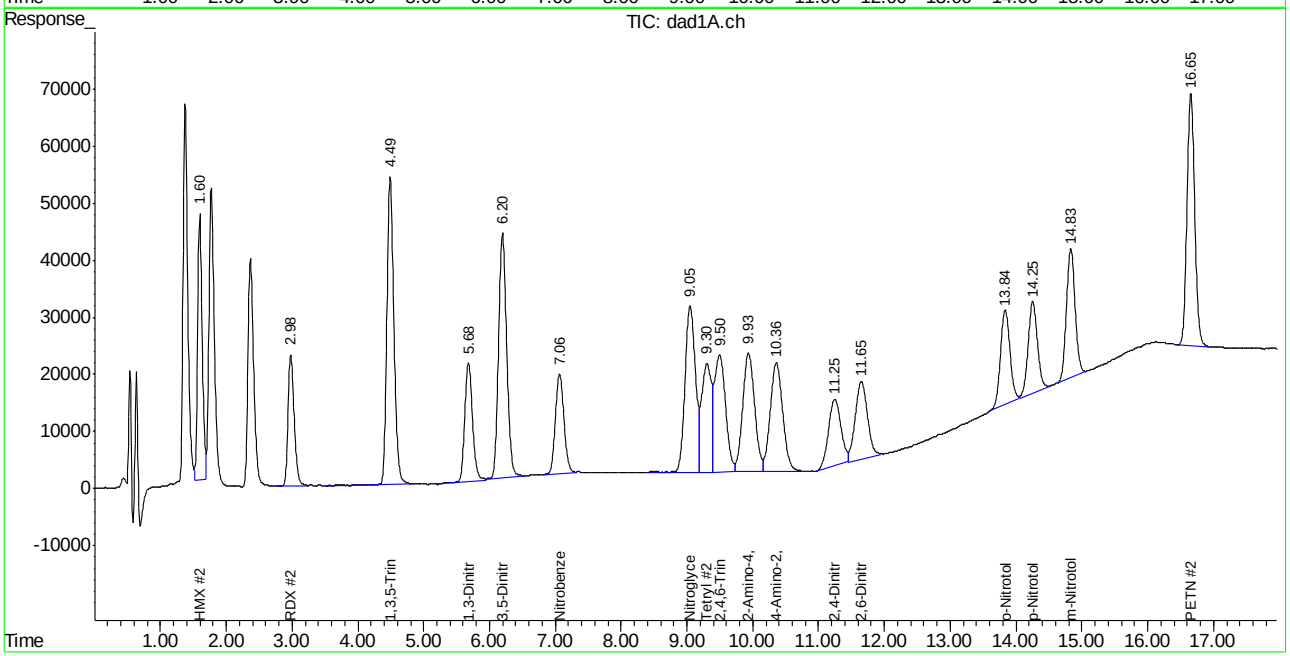
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 16:37 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-ICV1221
Lab FileID: BB045360.D
Injection Time: 12/29/14 14:43
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.60	Poorly defined baseline
HMX	2691-41-0	2	1.60	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.20	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.06	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.25	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.83	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.25	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.83	Poorly defined baseline
PETN	78-11-5	2	16.65	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 30 06:31:39 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.37	1.37	1770351	2744701	544.273m	566.364m
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	1.78	1.78	1476922	2347612	516.485	505.196
4)	MNX	2.37	2.37	1273673	1939862	517.911	528.313
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

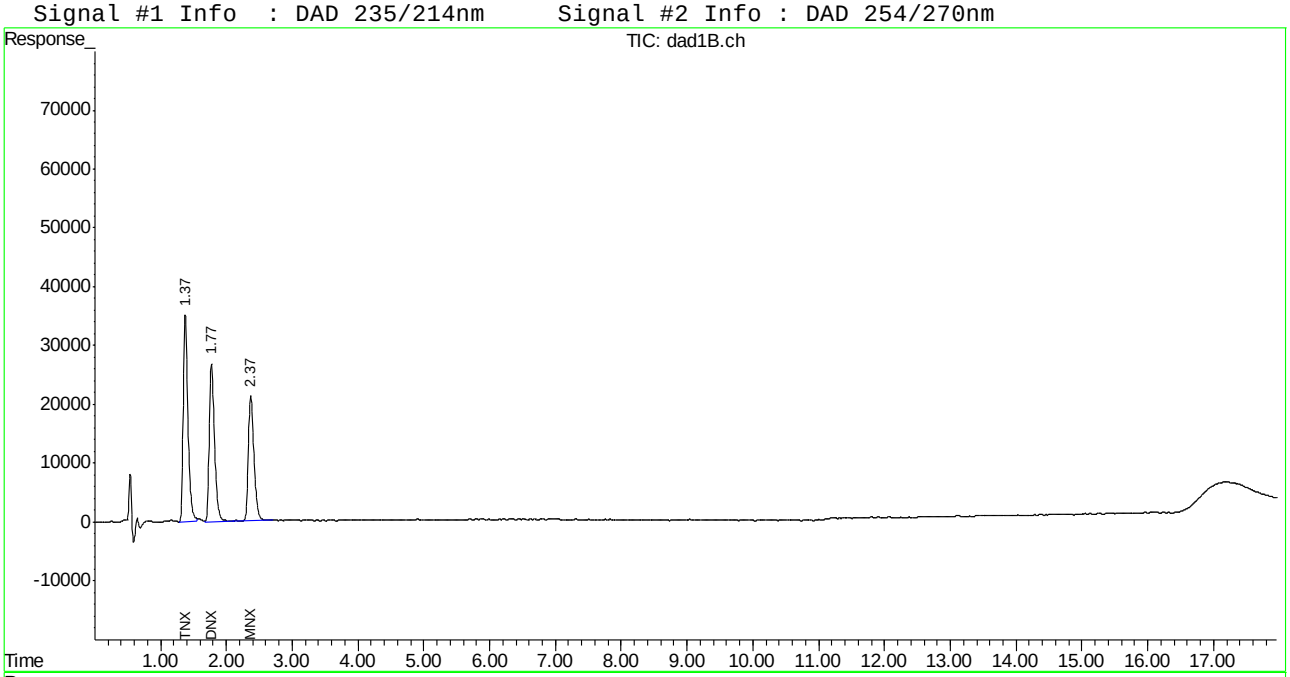
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045361.D 8330B.M Tue Dec 30 07:04:16 2014 Page 1

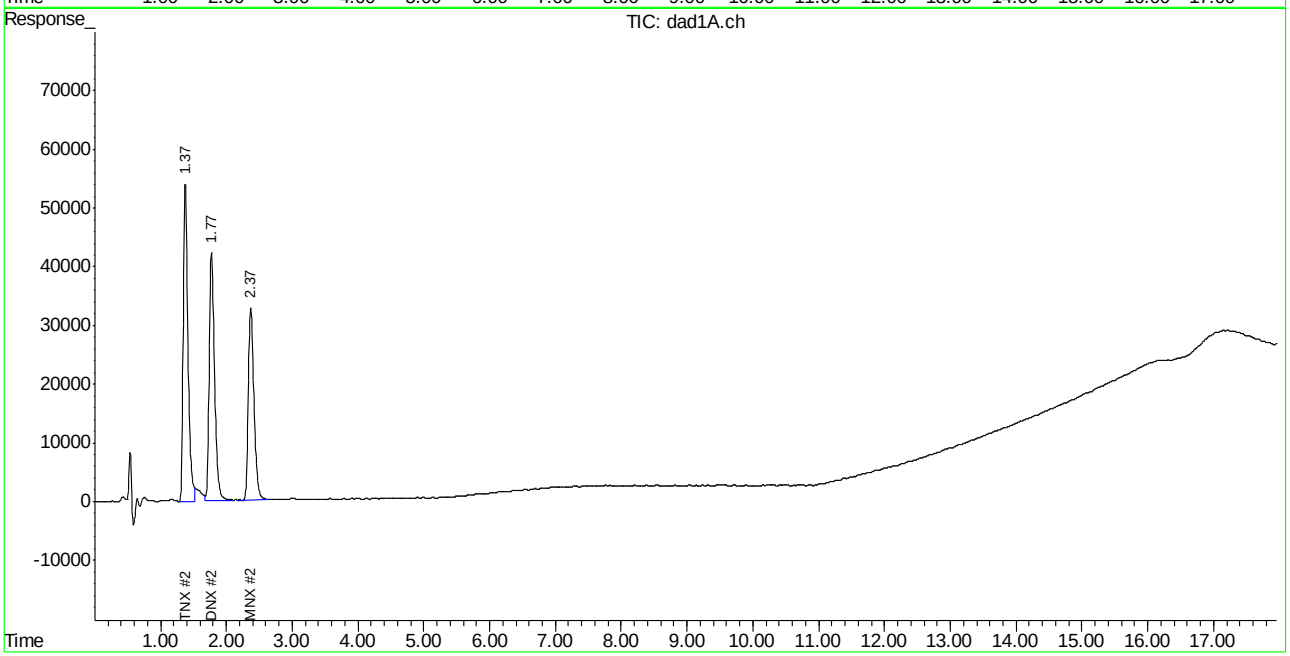
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 30 6:33 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-ICV1221 **Method:** SW846 8330A
Lab FileID: BB045361.D **Analyst approved:** 12/30/14 09:14 Kismet Lugo
Injection Time: 12/29/14 15:51 **Supervisor approved:** 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Overlapping peak
TNX		2	1.37	Overlapping peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1A.ch
Acq On : 02-Jan-2015, 14:31:48 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:40 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.18	11.18	1947058	3534522	1165.923m	1129.470
	Spiked Amount 500.000	Range 72 - 134		Recovery =		233.18%#	225.89%#
	Target Compounds						
1)	TNX	1.36	1.36	3091749	4629885	950.522	955.368
2)	HMX	1.48	1.48	1589959	4375537	1050.123	1108.685
3)	DNX	1.74	1.74	2757104	4374300	964.170	941.330
4)	MNX	2.33	2.33	2367763	3641392	962.799	991.718
5)	RDX	2.93	2.93	1774364	2825628	992.496	964.987
6)	1,3,5-Trinitrobe	4.60	4.60	3906386	7622807	966.097	1000.885
7)	1,3-Dinitrobenze	5.86	5.86	5071430	3492215	966.795	985.241
8)	3,5-Dinitroanili	6.32	6.32	4066152	6852278	966.592	985.038m
9)	Nitrobenzene	7.41	7.41	2902899	2820141	944.457	939.118m
10)	Nitroglycerin	0.00	9.15	0	6177168	N.D. d	4958.196
11)	Tetryl	9.49	9.49	2815087	4608105	1034.062	1047.214
12)	2,4,6-Trinitroto	9.86	9.86	3524837	4191804	947.881	930.558
13)	2-Amino-4,6-Dini	10.32	10.32	3107635	4614110	1011.849	984.031
14)	4-Amino-2,6-Dini	10.80	10.80	2252857	4472294	1046.613	1002.566
16)	2,4-Dinitrotolue	11.76	11.76	4531907	2962403	1006.835	1110.183
17)	2,6-Dinitrotolue	12.16	12.16	2552150	3362781	982.499	1065.793
18)	o-Nitrotoluene	14.34	14.34	2154285	3033827	944.301	984.206m
19)	p-Nitrotoluene	14.73	14.73	3401966	2805478	967.152	948.770
20)	m-Nitrotoluene	15.27	15.27	2876947	3541684	943.741m	1012.349m
21)	PETN	0.00	16.86	0	1396221	N.D.	1340.902m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045462.D 8330B.M Mon Jan 05 07:33:44 2015 Page 1

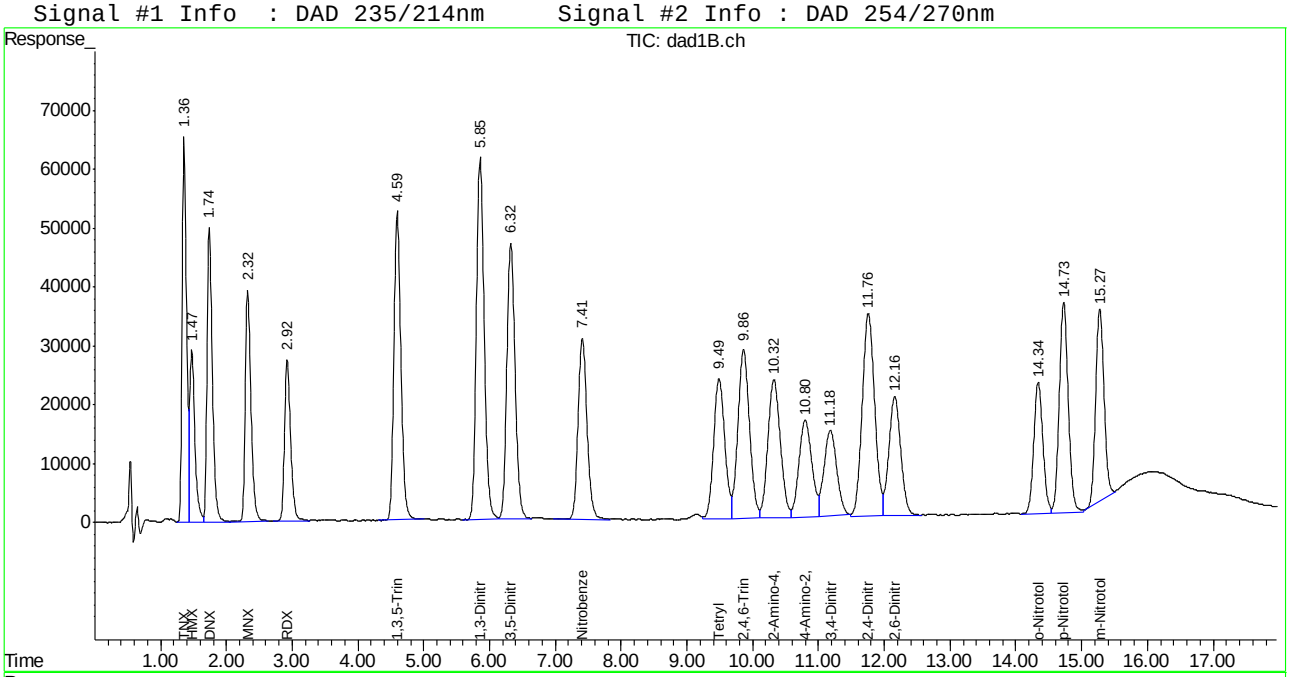
9.7.10
9

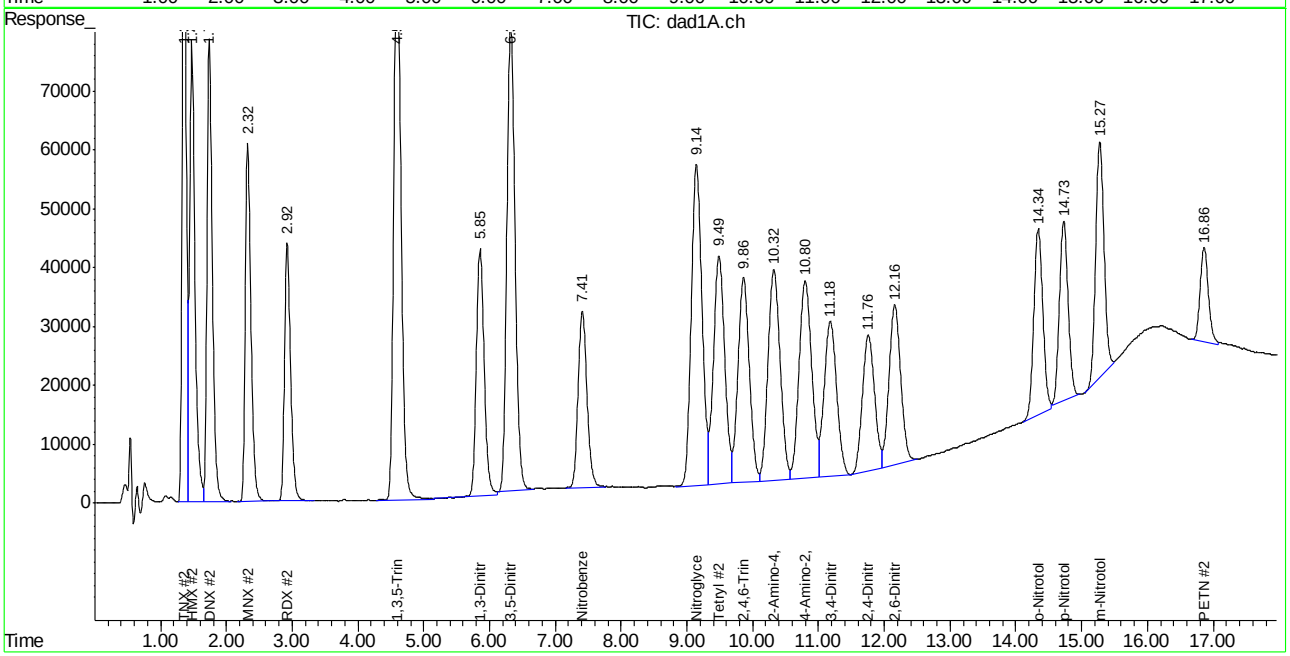
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1A.ch
Acq On : 02-Jan-2015, 14:31:48 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:04 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GBB1225-CC1221 **Method:** SW846 8330B
Lab FileID: BB045462.D **Analyst approved:** 01/05/15 07:39 Kismet Lugo
Injection Time: 01/02/15 14:31 **Supervisor approved:** 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.32	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.18	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.34	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.27	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.27	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1A.ch
Acq On : 02-Jan-2015, 19:06:41 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:51 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.15	11.15	1993136	3509333	1193.515	1121.421
	Spiked Amount 500.000	Range 72 - 134		Recovery =		238.70%#	224.28%#
	Target Compounds						
1)	TNX	1.36	1.36	3068674	4597340	943.427	948.653
2)	HMX	1.47	1.47	1597723	4446741	1055.251	1126.727
3)	DNX	1.74	1.74	2745589	4417107	960.143	950.542
4)	MNX	2.32	2.32	2332966	3624636	948.649	987.154
5)	RDX	2.92	2.92	1748285	2795167	977.909	954.584
6)	1,3,5-Trinitrobe	4.59	4.59	3875641	7539391	958.493	989.932
7)	1,3-Dinitrobenze	5.85	5.85	5006450	3390050	954.407	956.418
8)	3,5-Dinitroanili	6.31	6.31	4053722	6930296	963.637	996.253
9)	Nitrobenzene	7.40	7.40	2863629	2765167	931.680	920.811m
10)	Nitroglycerin	0.00	9.13	0	6146204	N.D. d	4933.342
11)	Tetryl	9.47	9.47	2794531	4594889	1026.511	1044.210
12)	2,4,6-Trinitroto	9.84	9.84	3496187	4183283	940.177	928.667
13)	2-Amino-4,6-Dini	10.30	10.30	3092262	4614467	1006.844	984.107
14)	4-Amino-2,6-Dini	10.77	10.77	2210152	4453449	1026.774	998.341
16)	2,4-Dinitrotolue	11.73	11.73	4479879	2921497	995.277	1094.853
17)	2,6-Dinitrotolue	12.14	12.14	2514601	3306855	968.044	1048.068
18)	o-Nitrotoluene	14.33	14.33	2150869	2996282	942.803	972.026m
19)	p-Nitrotoluene	14.72	14.72	3353462	2789709	953.363	943.437
20)	m-Nitrotoluene	15.27	15.27	2946569	3583359	966.580	1024.261
21)	PETN	0.00	16.84	0	1423673	N.D.	1367.267m#

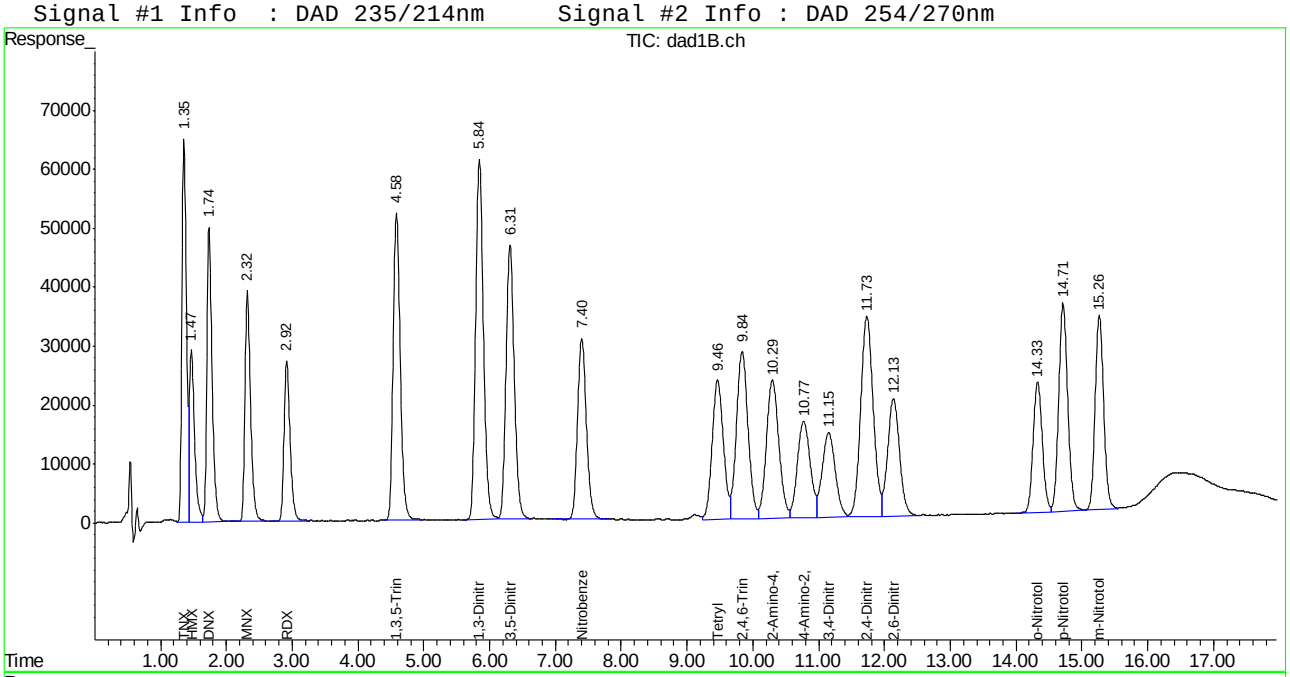
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045473.D 8330B.M Mon Jan 05 07:33:55 2015 Page 1

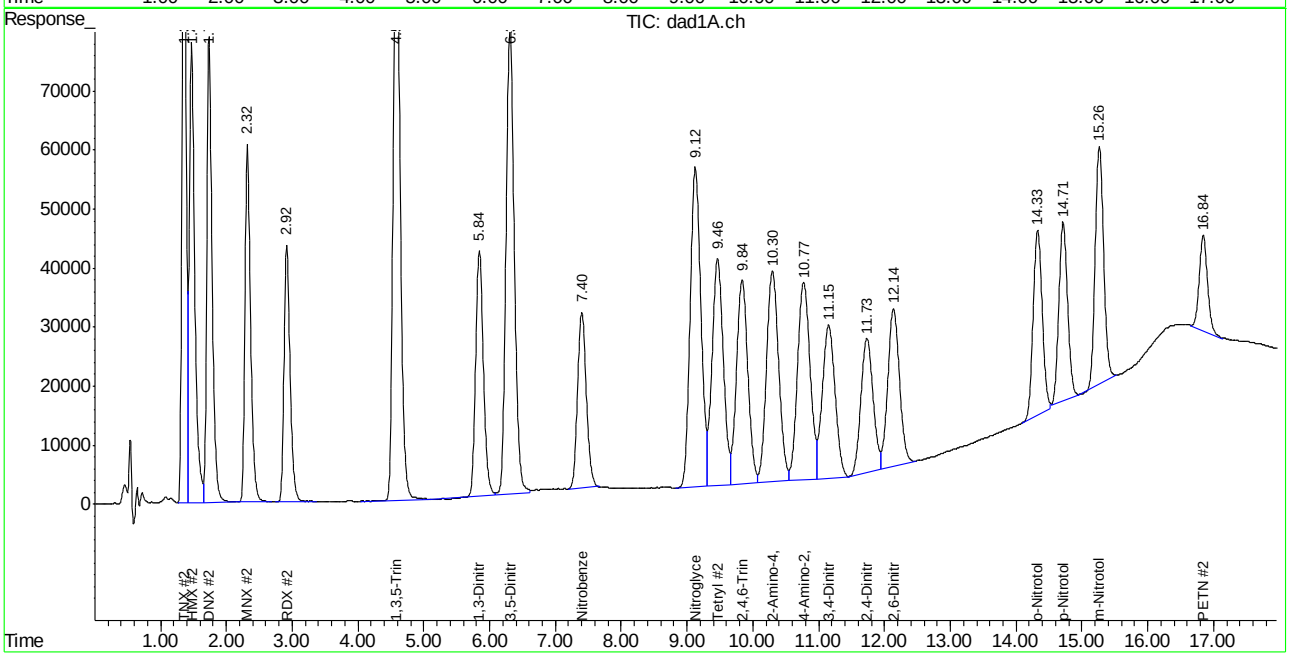
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1A.ch
Acq On : 02-Jan-2015, 19:06:41 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:06 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GBB1225-CC1221
Lab FileID: BB045473.D
Injection Time: 01/02/15 19:06
Method: SW846 8330B
Analyst approved: 01/05/15 07:39 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.33	Poorly defined baseline
PETN	78-11-5	2	16.84	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1A.ch
Acq On : 02-Jan-2015, 22:26:16 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:59 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.13	11.13	1979954	3519060	1185.621	1124.529
	Spiked Amount 500.000	Range 72 - 134		Recovery =		237.12%#	224.91%#
	Target Compounds						
1)	TNX	1.36	1.36	3045106	4571462	936.182	943.313
2)	HMX	1.47	1.47	1610219	4434187	1063.504	1123.546
3)	DNX	1.74	1.74	2738951	4397576	957.821	946.339
4)	MNX	2.32	2.32	2331016	3607083	947.856	982.374
5)	RDX	2.92	2.92	1751998	2808265	979.986	959.057
6)	1,3,5-Trinitrobe	4.58	4.58	3885154	7513531	960.846	986.536
7)	1,3-Dinitrobenze	5.84	5.84	5007110	3371033	954.533	951.053
8)	3,5-Dinitroanili	6.30	6.30	4062998	6836228	965.842	982.731m
9)	Nitrobenzene	7.39	7.39	2904995	2807881	945.139	935.035m
10)	Nitroglycerin	0.00	9.11	0	6112611	N.D.	4906.379 #
11)	Tetryl	9.45	9.45	2788436	4590788	1024.272	1043.279
12)	2,4,6-Trinitroto	9.82	9.82	3472867	4179431	933.905	927.811
13)	2-Amino-4,6-Dini	10.28	10.28	3063974	4606804	997.633	982.472
14)	4-Amino-2,6-Dini	10.75	10.75	2203832	4468349	1023.838	1001.681
16)	2,4-Dinitrotolue	11.71	11.71	4465791	2939760	992.147	1101.697
17)	2,6-Dinitrotolue	12.12	12.12	2502296	3326343	963.307	1054.244
18)	o-Nitrotoluene	14.32	14.31	2136316	2943837	936.424	955.012m
19)	p-Nitrotoluene	14.70	14.70	3355162	2796546	953.846	945.750
20)	m-Nitrotoluene	15.25	15.25	2951044	3585147	968.048	1024.773
21)	PETN	0.00	16.83	0	1384463	N.D.	1329.611m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045481.D 8330B.M Mon Jan 05 07:34:03 2015 Page 1

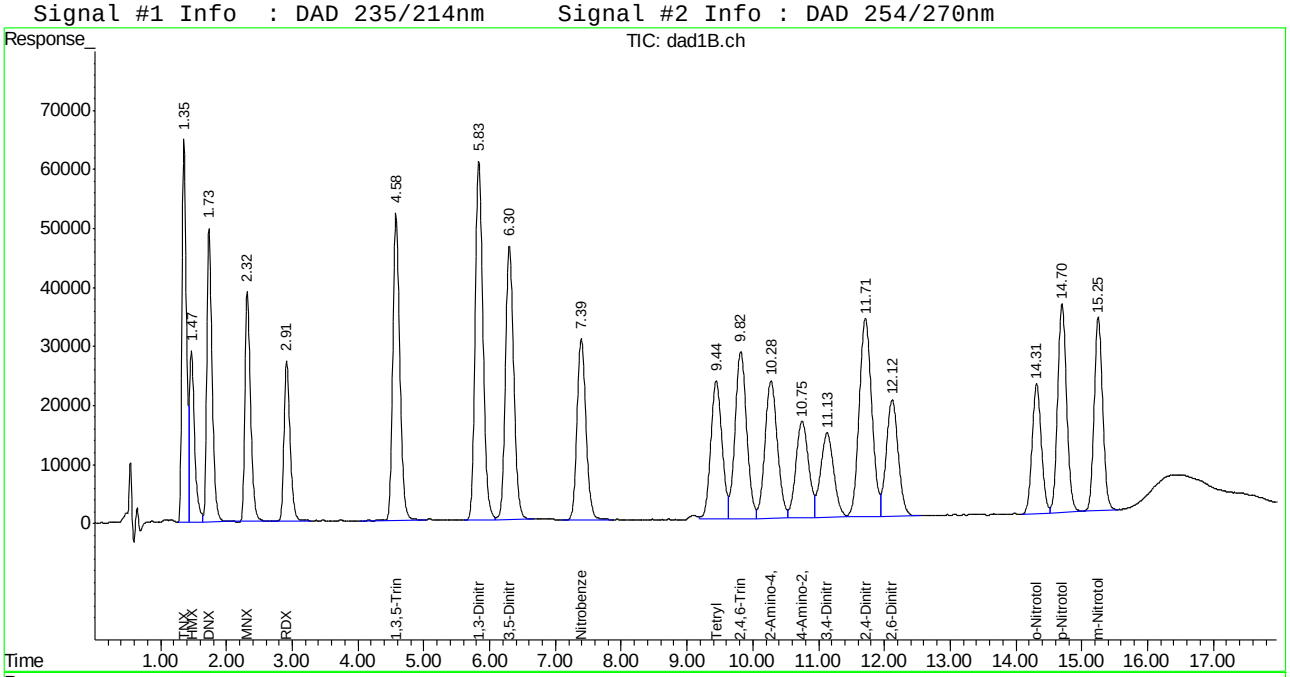
9.7.12
9

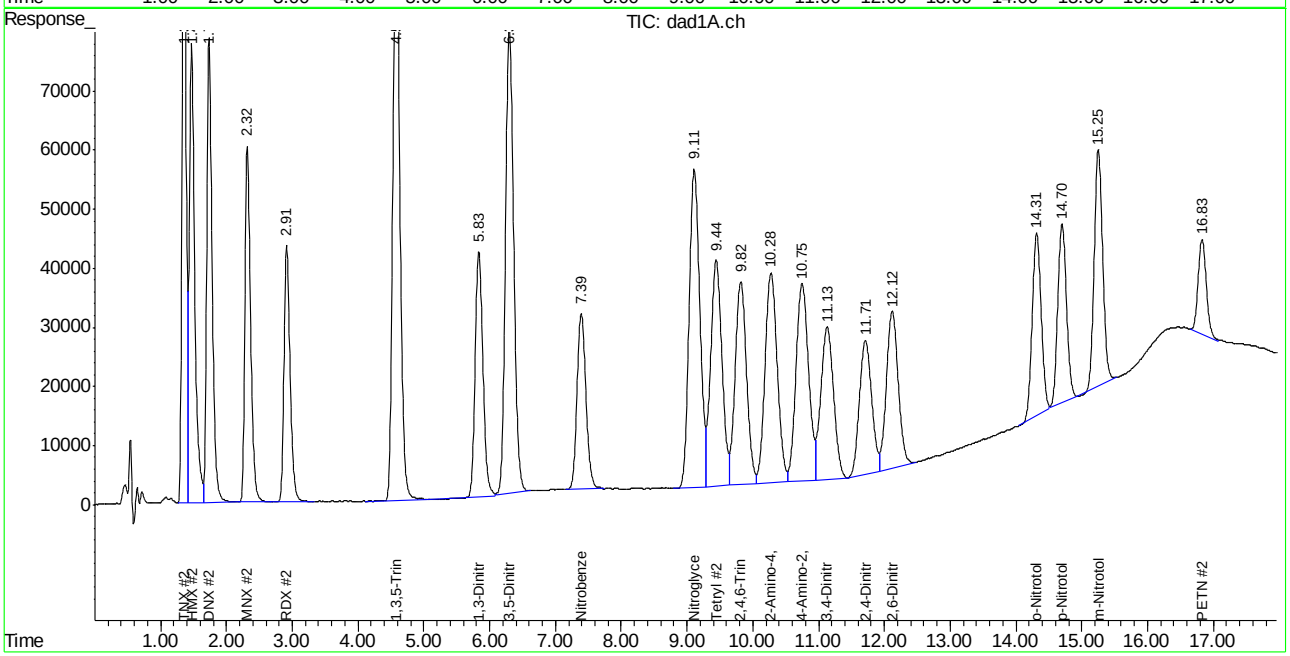
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1A.ch
Acq On : 02-Jan-2015, 22:26:16 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:07 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GBB1225-ECC1221 **Method:** SW846 8330B
Lab FileID: BB045481.D **Analyst approved:** 01/05/15 07:39 Kismet Lugo
Injection Time: 01/02/15 22:26 **Supervisor approved:** 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.31	Poorly defined baseline
PETN	78-11-5	2	16.83	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057986.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1224RPB2\GG057986.D\dad1A.ch
Acq On : 24-Dec-2014, 10:32:47 Operator: kismetl
Sample : ic2334-20 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:27 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.11	134564	238897	22.939	22.356m
	Spiked Amount 500.000	Range 72 - 145		Recovery =		4.59%#	4.47%#
	Target Compounds						
1)	TNX	5.64	5.64	183685	264724	20.295m	19.532m
2)	HMX	6.26	6.23	62165	196327	26.542m	24.397m
3)	DNX	6.38	6.37	134154	301301	16.556m	21.664m
4)	MNX	7.73	7.72	127163	178626	19.834	17.844m
5)	1,3,5-Trinitrobe	8.61	8.61	217996	348989	21.171	19.559
6)	RDX	9.19	9.20	97931	168382	20.543	18.868m
7)	1,3-Dinitrobenze	11.24	11.24	272334	214739	18.713	21.059m
8)	Nitrobenzene	12.21	12.20	181723	139517	19.756	16.513m
9)	2,4,6-Trinitroto	13.28	13.27	204202	262354	20.470	20.533
10)	Nitroglycerin	0.00	14.14	0	325516	N.D.	93.836 #
11)	Tetryl	15.00	14.97	180494	335674	24.174m	26.627m
13)	2,6-Dinitrotolue	16.56	16.55	137399	186346	19.850	20.377m
14)	2,4-Dinitrotolue	17.35	17.33	251205	186322	19.536	20.371m
15)	o-Nitrotoluene	18.90	18.90	339345	588865	19.520	21.181
16)	3,5-Dinitroanili	18.90	18.90	339345	588865	19.520	21.168
17)	p-Nitrotoluene	20.34	20.34	114007	196557	22.915	22.906
18)	4-Amino-2,6-Dini	21.04	21.04	142224	254272	21.165	18.013
19)	m-Nitrotoluene	21.85	21.87	123960	201019	19.047	17.603m
20)	2-Amino-4,6-Dini	23.62	23.62	208432	355133	22.474	27.086m
21)	PETN	0.00	25.50	0	98938	N.D.	104.900m#

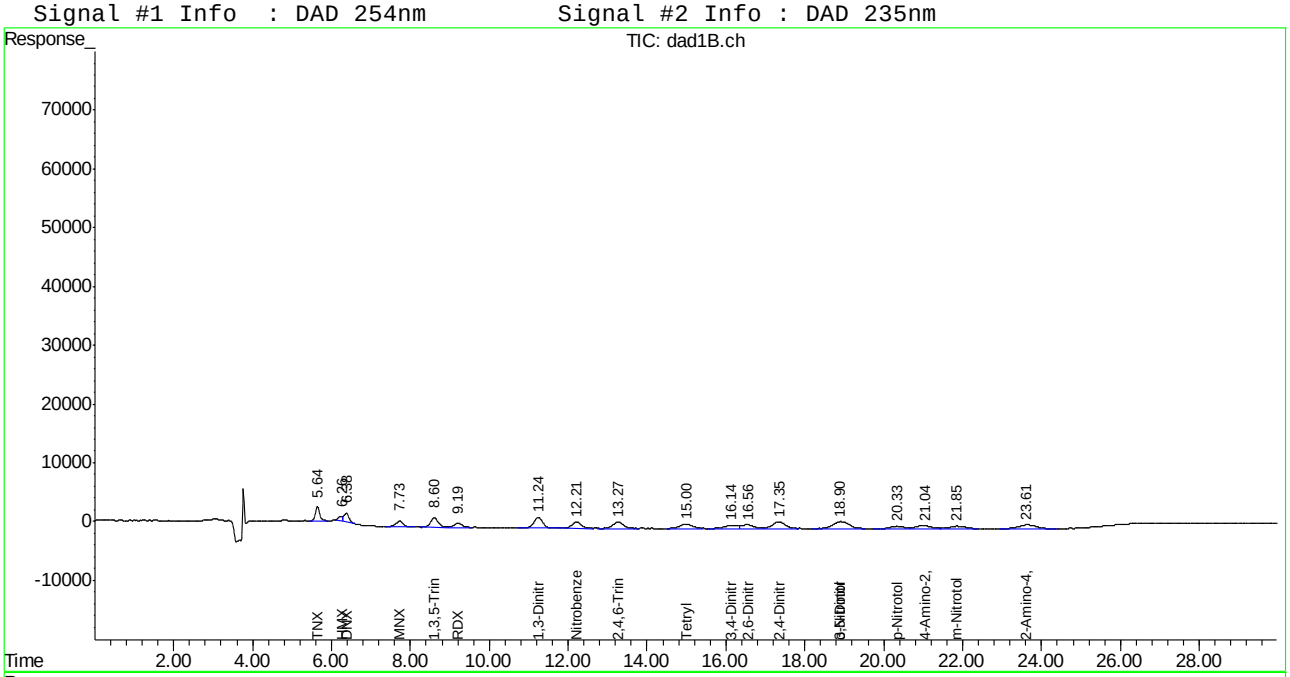
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

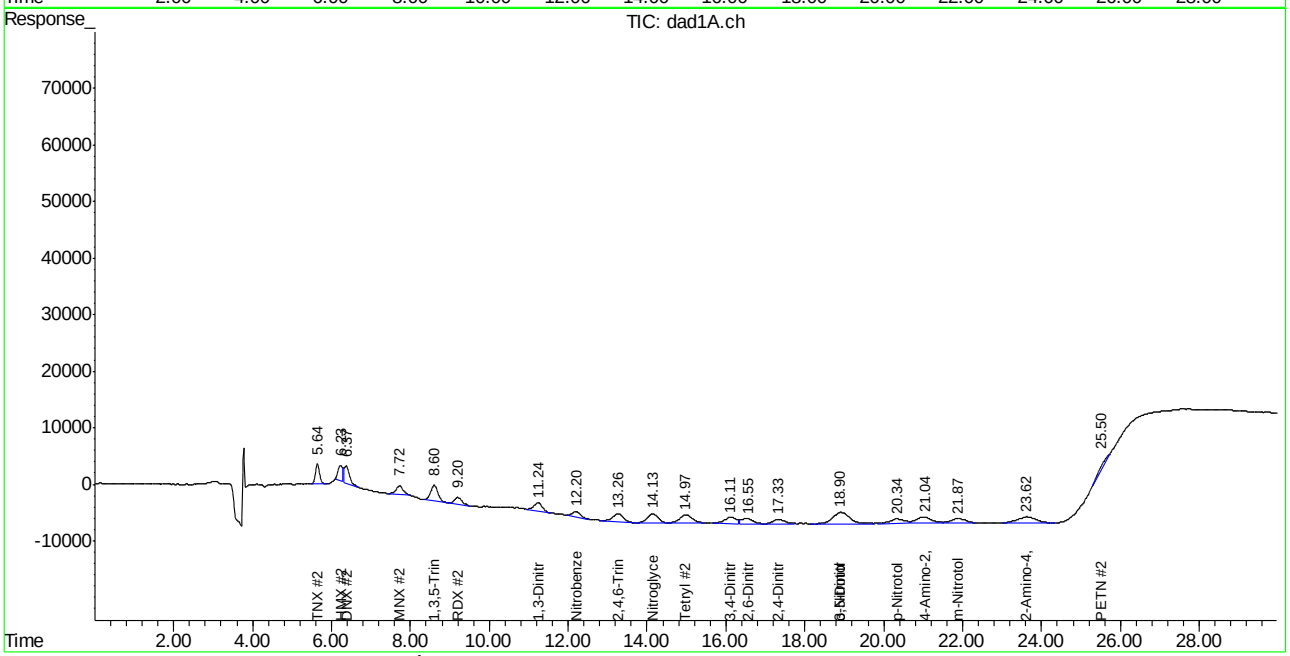
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057986.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1224RPB2\GG057986.D\dad1A.ch
Acq On : 24-Dec-2014, 10:32:47 Operator: kismetl
Sample : ic2334-20 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:42 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057986.D
Injection Time: 12/24/14 10:32
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.64	Poorly defined baseline
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		2	6.37	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
MNX		2	7.72	Poorly defined baseline
RDX	121-82-4	2	9.20	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.24	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.20	Poorly defined baseline
Tetryl	479-45-8	2	14.97	Poorly defined baseline
Tetryl	479-45-8	1	15.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.11	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.55	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.33	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.87	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	23.62	Poorly defined baseline
PETN	78-11-5	2	25.50	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057987.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1224RPB2\GG057987.D\dad1A.ch
Acq On : 24-Dec-2014, 11:04:50 Operator: kismetl
Sample : ic2334-50 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:28 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.14	16.14	306850	564080	52.309	52.787m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	10.46%#	10.56%#
	Target Compounds						
1)	TNX	5.65	5.64	463597	694980	51.221	51.278m
2)	HMX	6.26	6.23	137421	657857	58.674m	81.748m
3)	DNX	6.38	6.38	425008	725007	52.451m	52.128m
4)	MNX	7.73	7.73	352332	560949	54.955	56.036
5)	1,3,5-Trinitrobe	8.61	8.61	508034	913462	49.338	51.196
6)	RDX	9.21	9.22	243952	446134	51.173	49.990
7)	1,3-Dinitrobenze	11.25	11.25	710116	507067	48.796	49.727m
8)	Nitrobenzene	12.22	12.22	464913	477838	50.543	56.555m
9)	2,4,6-Trinitroto	13.28	13.28	496239	654393	49.745	51.216m
10)	Nitroglycerin	0.00	14.15	0	820623	N.D. d	236.559m
11)	Tetryl	15.00	14.99	382782	726744	51.267	57.649m
13)	2,6-Dinitrotolue	16.54	16.54	344227	437362	49.729	47.825m
14)	2,4-Dinitrotolue	17.35	17.34	673734	420872	52.396	46.014m
15)	o-Nitrotoluene	18.93	18.92	903111	1432514	51.948	51.527
16)	3,5-Dinitroanili	18.93	18.92	903111	1432514	51.948	51.495
17)	p-Nitrotoluene	20.35	20.36	273823	482505	55.038	56.229
18)	4-Amino-2,6-Dini	21.00	21.01	355503	712752	52.904	50.492
19)	m-Nitrotoluene	21.90	21.91	322744	555716	49.592	48.664
20)	2-Amino-4,6-Dini	23.66	23.69	484847	701718	52.277	53.521m
21)	PETN	0.00	25.54	0	489151	N.D.	512.203m#

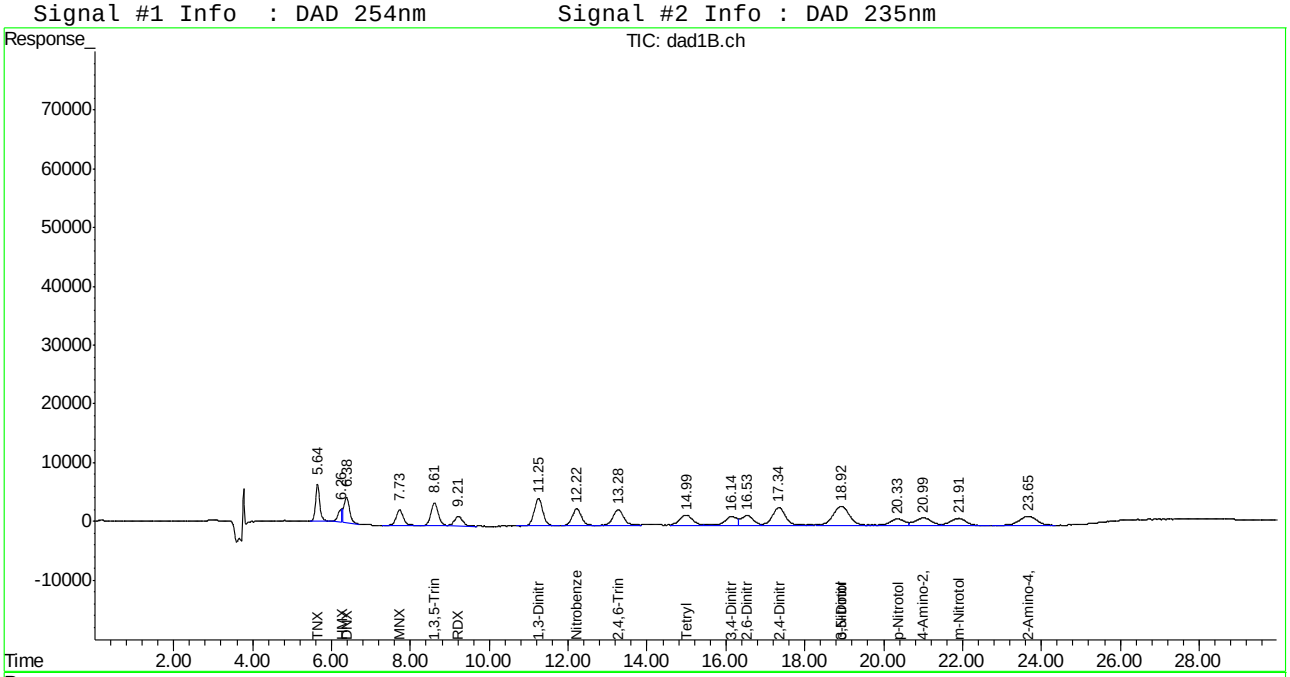
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057987.D 8330_RPB2.M Fri Dec 26 12:55:51 2014 Page 1

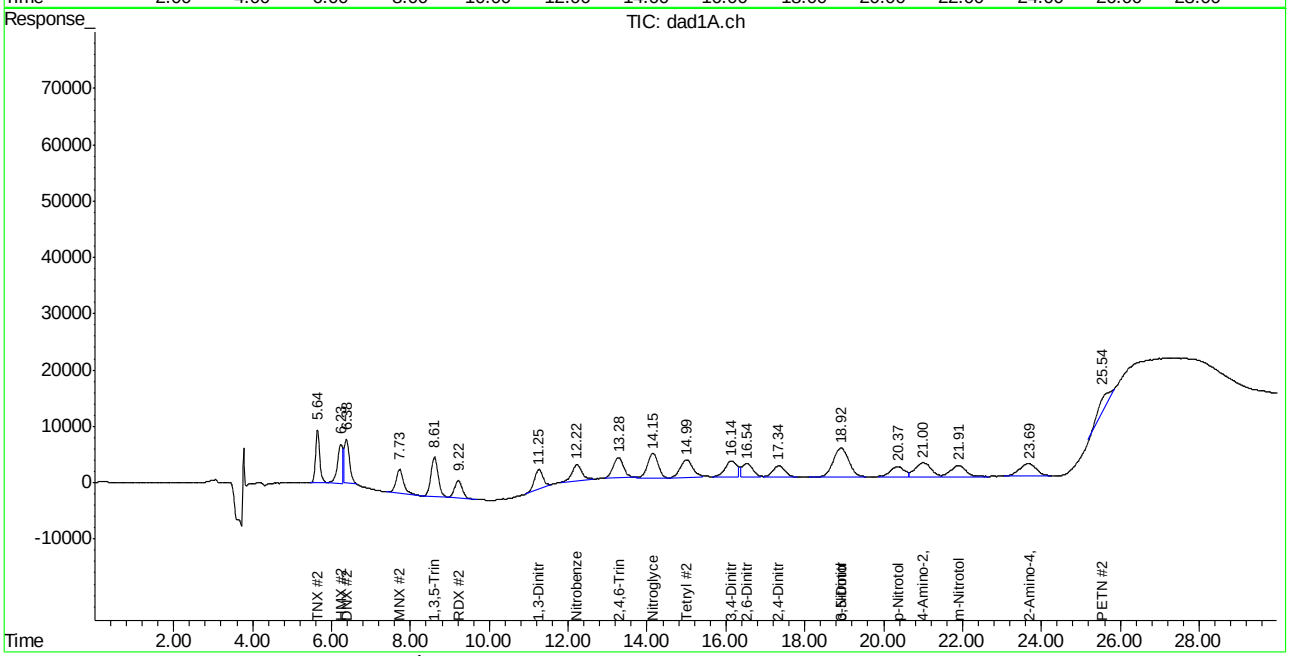
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057987.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1224RPB2\GG057987.D\dad1A.ch
Acq On : 24-Dec-2014, 11:04:50 Operator: kismetl
Sample : ic2334-50 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:47 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GGG2334-IC2334 **Method:** SW846 8330A
Lab FileID: GG057987.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 11:04 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
DNX		2	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.25	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.22	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.28	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	14.99	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.14	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.34	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	23.69	Poorly defined baseline
PETN	78-11-5	2	25.54	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057988.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1224RPB2\GG057988.D\dad1A.ch
Acq On : 24-Dec-2014, 11:36:54 Operator: kismetl
Sample : ic2334-100 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:29 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.15	573749	1046697	97.807	97.951m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	19.56%#	19.59%#
	Target Compounds						
1)	TNX	5.65	5.65	885935	1318785	97.884m	97.304m
2)	HMX	6.27	6.23	258269	1032094	110.271m	128.253m
3)	DNX	6.38	6.38	780206	1386496	96.287m	99.689m
4)	MNX	7.73	7.73	634919	1037566	99.032	103.648
5)	1,3,5-Trinitrobe	8.61	8.61	971047	1728864	94.304	96.896
6)	RDX	9.22	9.22	444791	854620	93.302	95.762
7)	1,3-Dinitrobenze	11.25	11.25	1349454	1013554	92.728m	99.397m
8)	Nitrobenzene	12.23	12.22	865606	830550	94.105	98.301m
9)	2,4,6-Trinitroto	13.27	13.27	911959	1247618	91.419	97.645m
10)	Nitroglycerin	0.00	14.15	0	1561412	N.D. d	450.105m
11)	Tetryl	15.00	15.00	720081	1250547	96.442	99.200m
13)	2,6-Dinitrotolue	16.55	16.54	644013	868449	93.039	94.964m
14)	2,4-Dinitrotolue	17.36	17.36	1249671	859952	97.187	94.019m
15)	o-Nitrotoluene	18.93	18.92	1718761	2757717	98.866	99.194m
16)	3,5-Dinitroanili	18.93	18.92	1718761	2853775	98.866	102.586m
17)	p-Nitrotoluene	20.36	20.35	517967	816595	104.111	95.162m
18)	4-Amino-2,6-Dini	21.02	21.00	655540	1264848	97.554	89.603m
19)	m-Nitrotoluene	21.90	21.91	610458	1029117	93.801	90.120m
20)	2-Amino-4,6-Dini	23.67	23.66	912044	1297394	98.338	98.953m
21)	PETN	0.00	25.61	0	1272245	N.D.	1300.992m#

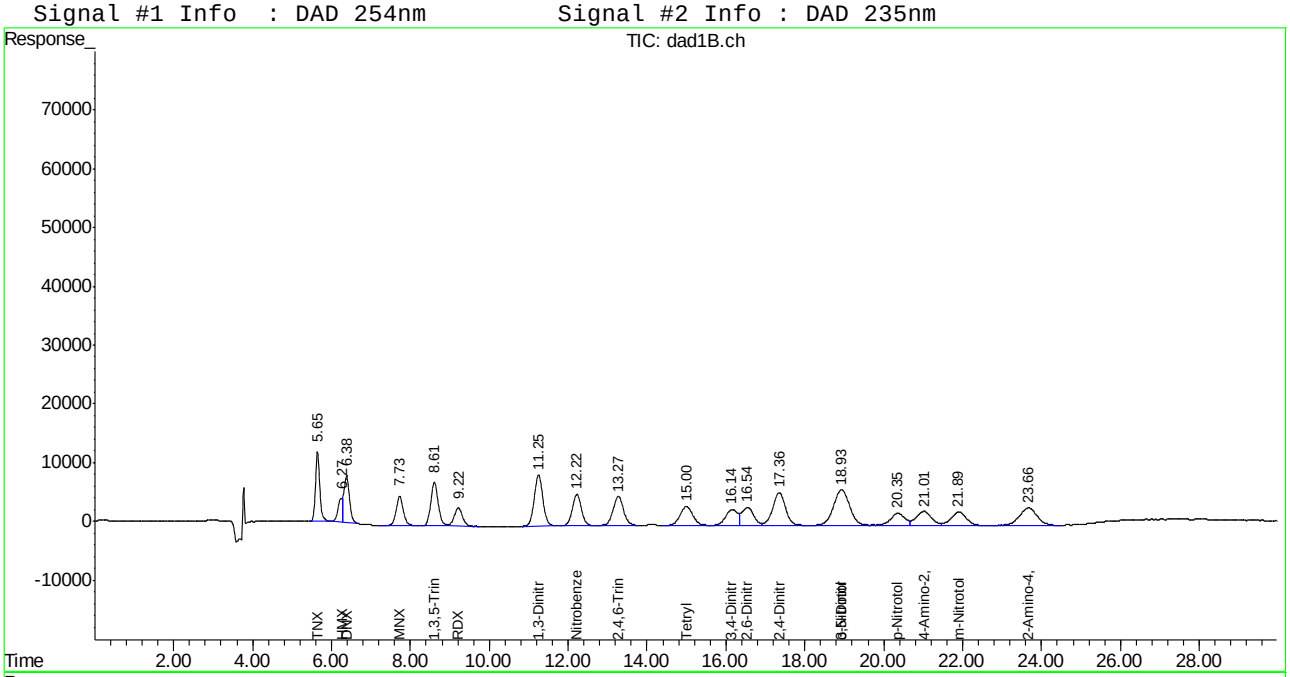
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057988.D 8330_RPB2.M Fri Dec 26 12:55:52 2014 Page 1

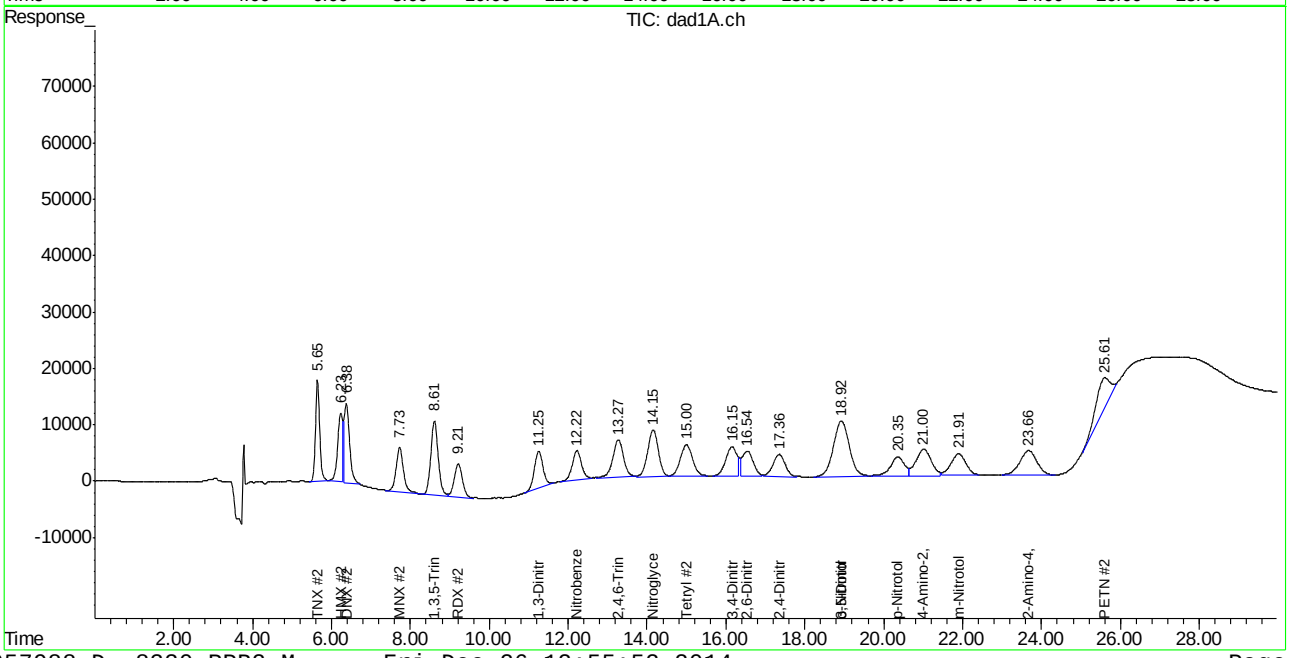
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057988.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1224RPB2\GG057988.D\dad1A.ch
Acq On : 24-Dec-2014, 11:36:54 Operator: kismetl
Sample : ic2334-100 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:53 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057988.D
Injection Time: 12/24/14 11:36
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.65	Poorly defined baseline
TNX		2	5.65	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.27	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
DNX		2	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	11.25	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.25	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.22	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.27	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	15.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.15	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.36	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.92	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.92	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.35	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.00	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.91	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	23.66	Poorly defined baseline
PETN	78-11-5	2	25.61	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057989.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1224RPB2\GG057989.D\dad1A.ch
Acq On : 24-Dec-2014, 12:19:28 Operator: kismetl
Sample : ic2334-200 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:30 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.14	1170379	2216319	199.515	207.404
	Spiked Amount 500.000	Range 72 - 145		Recovery =		39.90%#	41.48%#
	Target Compounds						
1)	TNX	5.64	5.64	1823353	2712093	201.456m	200.106m
2)	HMX	6.24	6.23	500992	1977249	213.905m	245.702m
3)	DNX	6.38	6.37	1600788	2684956	197.558m	193.048m
4)	MNX	7.73	7.73	1262732	2110507	196.955	210.831
5)	1,3,5-Trinitrobe	8.61	8.61	2084120	3680103	202.400	206.255
6)	RDX	9.21	9.21	978099	1781281	205.172	199.596
7)	1,3-Dinitrobenze	11.24	11.24	2784308	2145315	191.324	210.386m
8)	Nitrobenzene	12.22	12.21	1777590	1698555	193.252	201.035m
9)	2,4,6-Trinitroto	13.27	13.27	1914542	2478334	191.922	193.966
10)	Nitroglycerin	0.00	14.15	0	3299503	N.D.	951.140 #
11)	Tetryl	14.99	14.99	1557852	2714681	208.647	215.342
13)	2,6-Dinitrotolue	16.54	16.54	1319587	1804069	190.637	197.273
14)	2,4-Dinitrotolue	17.35	17.35	2554262	1769018	198.645	193.407
15)	o-Nitrotoluene	18.92	18.92	3475831	5659279	199.935	203.563
16)	3,5-Dinitroanili	18.92	18.92	3475831	5659279	199.935	203.437
17)	p-Nitrotoluene	20.37	20.37	1044283	1759361	209.900	205.028
18)	4-Amino-2,6-Dini	21.01	21.01	1342444	2737895	199.775	193.954
19)	m-Nitrotoluene	21.91	21.91	1212314	2062910	186.280	180.649
20)	2-Amino-4,6-Dini	23.67	23.67	1904260	2765747	205.321	210.946
21)	PETN	0.00	25.59	0	3219573	N.D. d	3123.290m

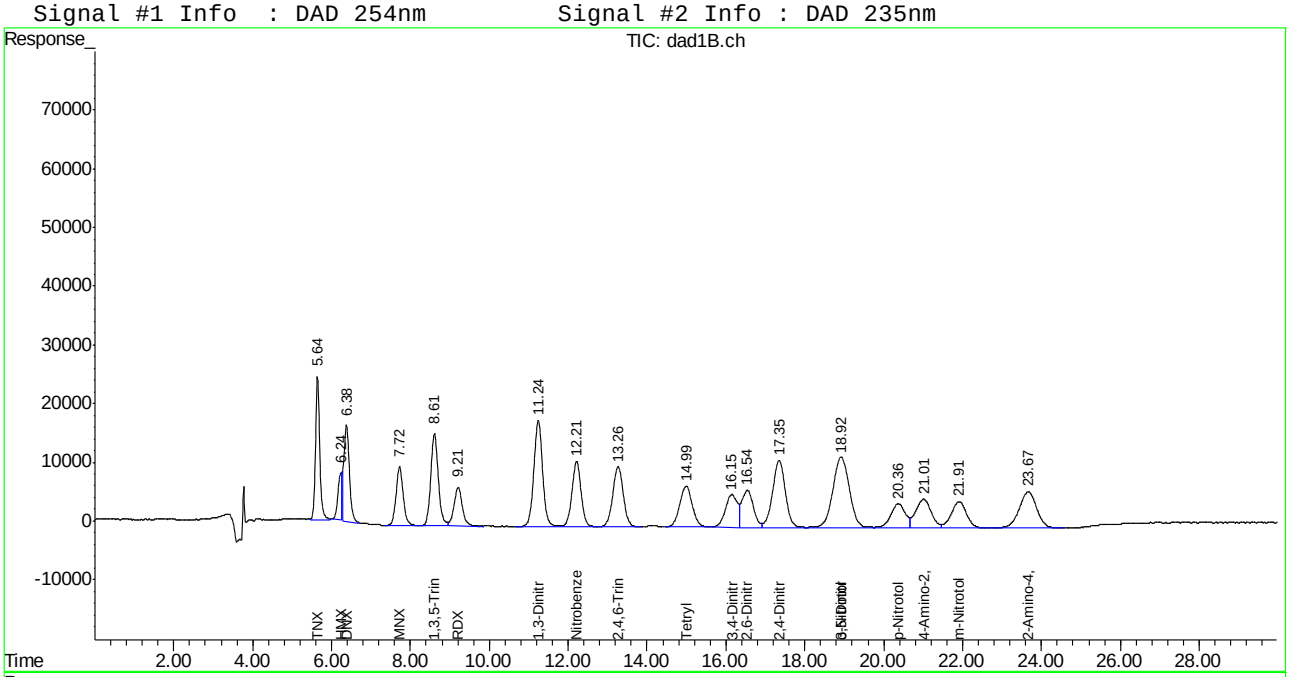
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057989.D 8330_RPB2.M Fri Dec 26 12:55:53 2014 Page 1

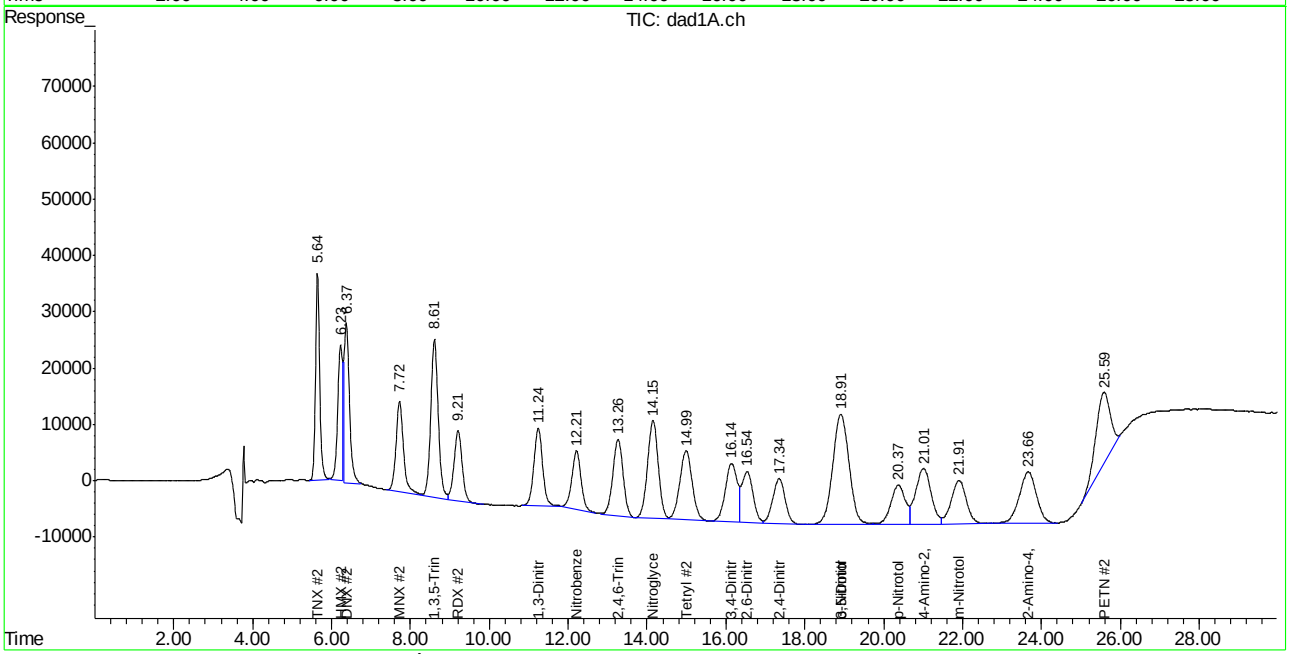
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057989.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1224RPB2\GG057989.D\dad1A.ch
Acq On : 24-Dec-2014, 12:19:28 Operator: kismetl
Sample : ic2334-200 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:57 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-IC2334 **Method:** SW846 8330A
Lab FileID: GG057989.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 12:19 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.64	Poorly defined baseline
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.24	Poorly defined baseline
DNX		2	6.37	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.24	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.21	Poorly defined baseline
PETN	78-11-5	2	25.59	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057990.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1224RPB2\GG057990.D\dad1A.ch
Acq On : 24-Dec-2014, 12:51:32 Operator: kismetl
Sample : icc2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:31 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.14	2905851	5367455	495.362	502.289m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	99.07%	100.46%
	Target Compounds						
1)	TNX	5.64	5.64	4322920	6521372	477.626m	481.166m
2)	HMX	6.25	6.23	1299950	4302498	555.030m	534.648m
3)	DNX	6.38	6.38	3984249	6849804	491.707m	492.500
4)	MNX	7.73	7.73	3067811	4833665	478.503	482.863
5)	1,3,5-Trinitrobe	8.61	8.61	4933056	8780084	479.075	492.088
6)	RDX	9.21	9.21	2265211	4277728	475.166	479.329
7)	1,3-Dinitrobenze	11.24	11.24	6688709	5042101	459.614	494.468m
8)	Nitrobenzene	12.21	12.21	4400776	4006081	478.434	474.145m
9)	2,4,6-Trinitroto	13.27	13.26	4683649	6093868	469.511	476.936m
10)	Nitroglycerin	0.00	14.15	0	8260233	N.D. d	2381.159m
11)	Tetryl	14.99	14.98	3715761	6275202	497.661	497.781m
13)	2,6-Dinitrotolue	16.54	16.54	3209118	4392052	463.611	480.267m
14)	2,4-Dinitrotolue	17.35	17.35	6218269	4299544	483.594	470.070m
15)	o-Nitrotoluene	18.92	18.91	8431272	13375441	484.980	481.112m
16)	3,5-Dinitroanili	18.92	18.91	8431272	13552390	484.980	487.175m
17)	p-Nitrotoluene	20.38	20.37	2538362	4065702	510.208	473.798m
18)	4-Amino-2,6-Dini	21.01	21.01	3175784	6297902	472.603	446.148m
19)	m-Nitrotoluene	21.92	21.92	2917216	4911454	448.249	430.096m
20)	2-Amino-4,6-Dini	23.68	23.68	4446849	6592567	479.468	502.821
21)	PETN	0.00	25.58	0	8370620	N.D. d	7270.716m

9.7.17

6

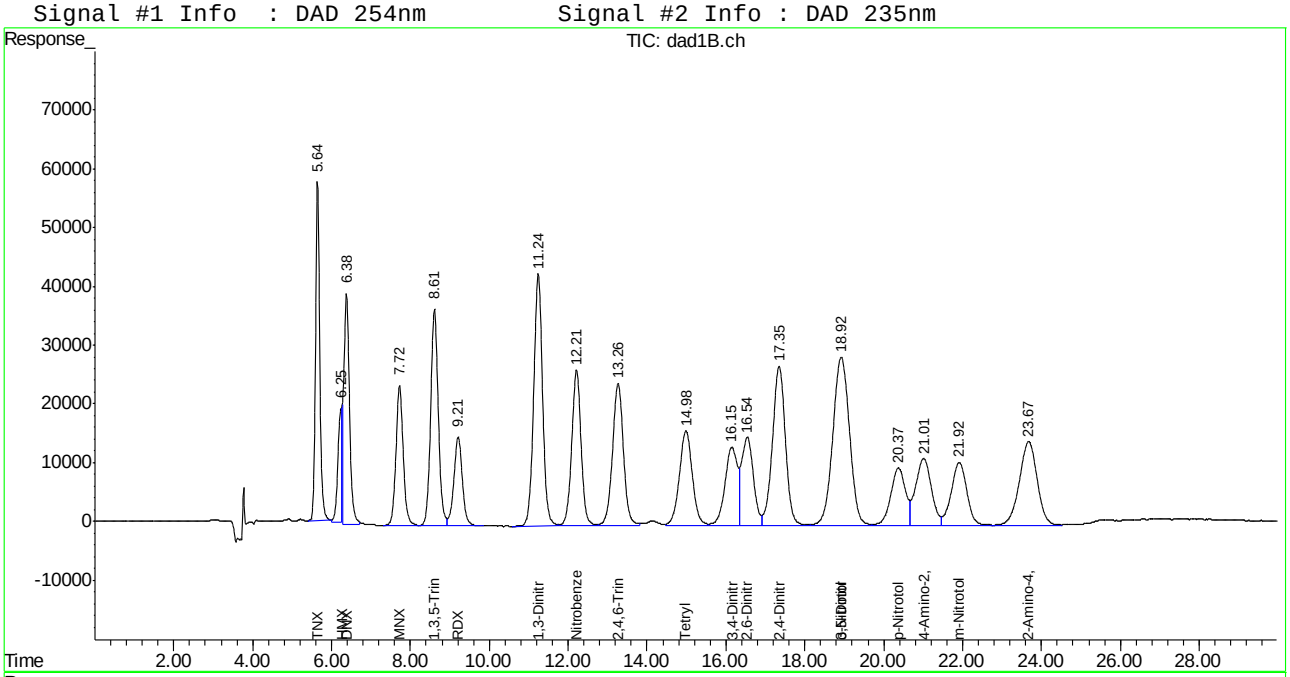
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057990.D 8330_RPB2.M Fri Dec 26 12:55:54 2014 Page 1

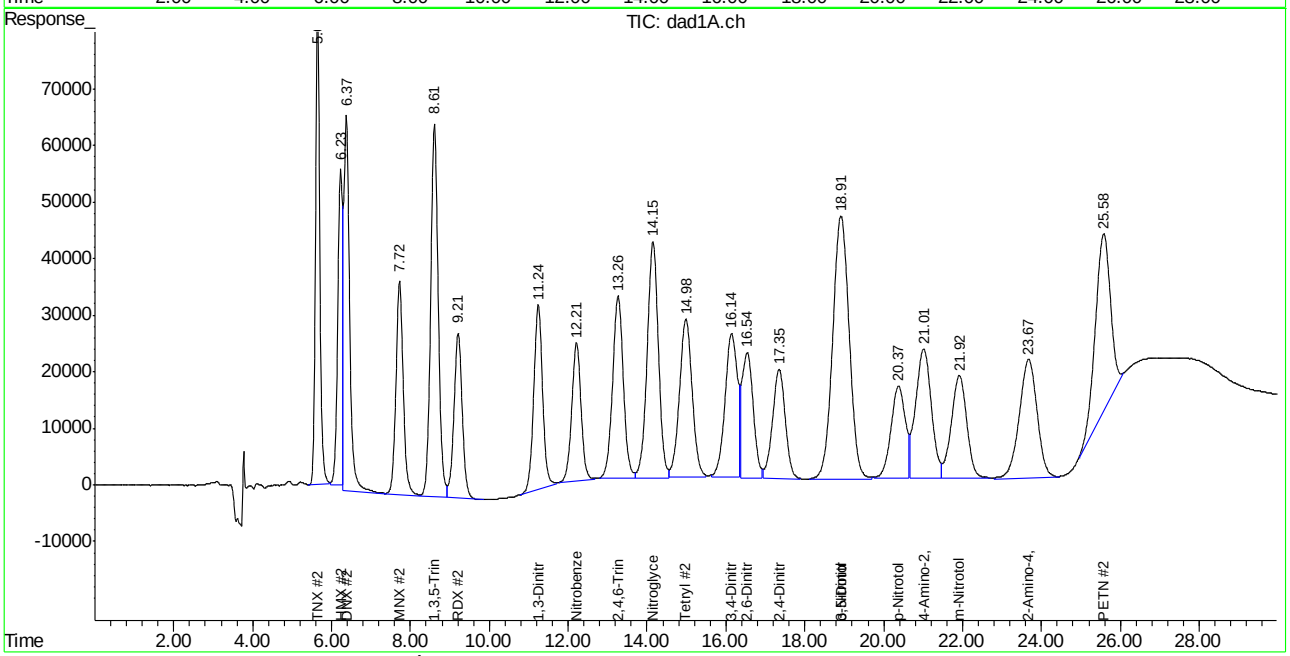
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057990.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1224RPB2\GG057990.D\dad1A.ch
Acq On : 24-Dec-2014, 12:51:32 Operator: kismetl
Sample : icc2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 9:01 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-ICC2334 **Method:** SW846 8330A
Lab FileID: GG057990.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 12:51 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.64	Poorly defined baseline
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.25	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.24	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.21	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.26	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	14.98	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.14	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.91	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.91	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.37	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.01	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.92	Poorly defined baseline
PETN	78-11-5	2	25.58	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057991.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1224RPB2\GG057991.D\dad1A.ch
Acq On : 24-Dec-2014, 13:23:38 Operator: kismetl
Sample : ic2334-1000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:32 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.17	16.16	5781364	10591592	985.552	991.167m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	197.11%#	198.23%#
	Target Compounds						
1)	TNX	5.65	5.65	8923725	13452349	985.954	992.553
2)	HMX	6.26	6.24	2709809	9544446	1156.987m	1186.037
3)	DNX	6.38	6.38	7998865	13352744	987.162m	960.060
4)	MNX	7.73	7.73	6173200	9761924	962.868	975.176
5)	1,3,5-Trinitrobe	8.62	8.62	10017205	17918325	972.824	1004.248
6)	RDX	9.22	9.22	4582436	8850243	961.242	991.689
7)	1,3-Dinitrobenze	11.25	11.25	13455935	10225134	924.624	1002.757m
8)	Nitrobenzene	12.23	12.22	8840279	8193570	961.079	969.760m
9)	2,4,6-Trinitroto	13.28	13.28	9418066	12294909	944.111	962.259m
10)	Nitroglycerin	0.00	14.16	0	16665966	N.D. d	4804.262m
11)	Tetryl	15.01	15.00	7472479	12871490	1000.807	1021.032m
13)	2,6-Dinitrotolue	16.56	16.56	6438830	8981615	930.198	982.132m
14)	2,4-Dinitrotolue	17.37	17.36	12488304	8706312	971.214	951.863m
15)	o-Nitrotoluene	18.95	18.94	16965986	27225747	975.910	979.304m
16)	3,5-Dinitroanili	18.95	18.94	16965986	27172573	975.910	976.788m
17)	p-Nitrotoluene	20.39	20.39	5104632	8186343	1026.025	953.998m
18)	4-Amino-2,6-Dini	21.05	21.04	6388202	12719895	950.658	901.086m
19)	m-Nitrotoluene	21.94	21.94	5888608	9875723	904.823	864.816m
20)	2-Amino-4,6-Dini	23.71	23.71	8986837	13228698	968.979	1008.964
21)	PETN	0.00	25.58	0	17365770	N.D. d	13138.915m

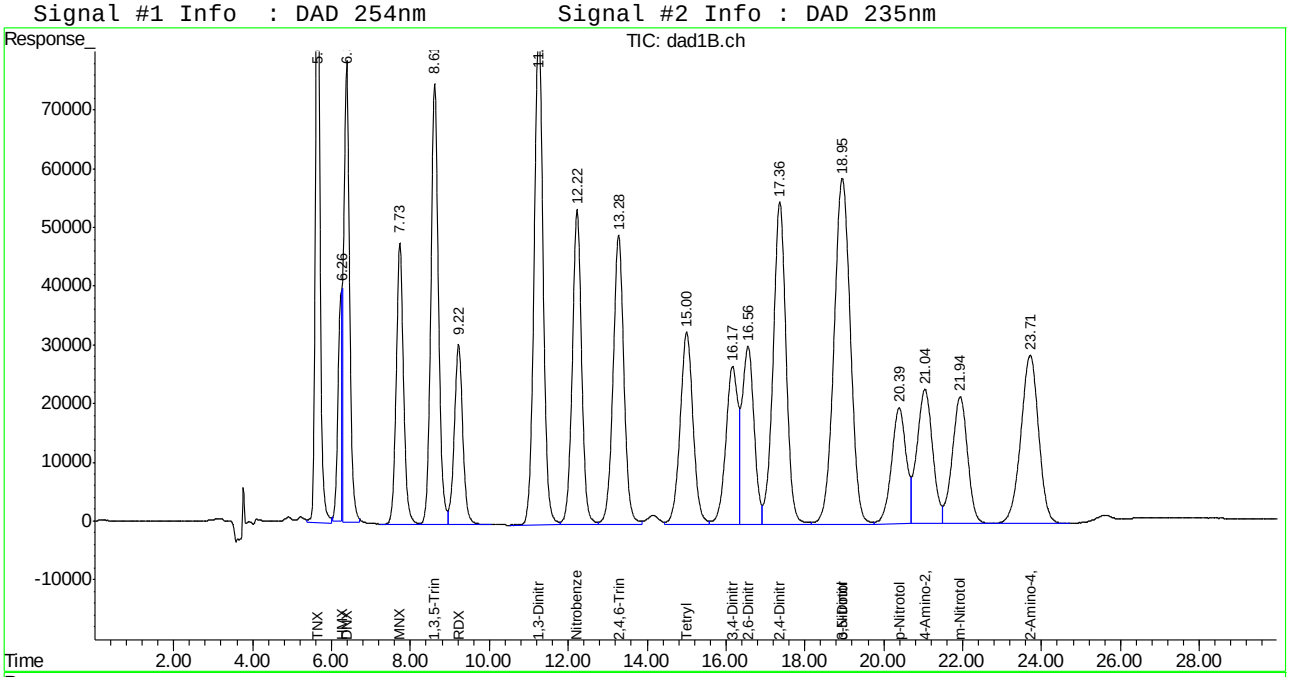
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057991.D 8330_RPB2.M Fri Dec 26 12:55:55 2014 Page 1

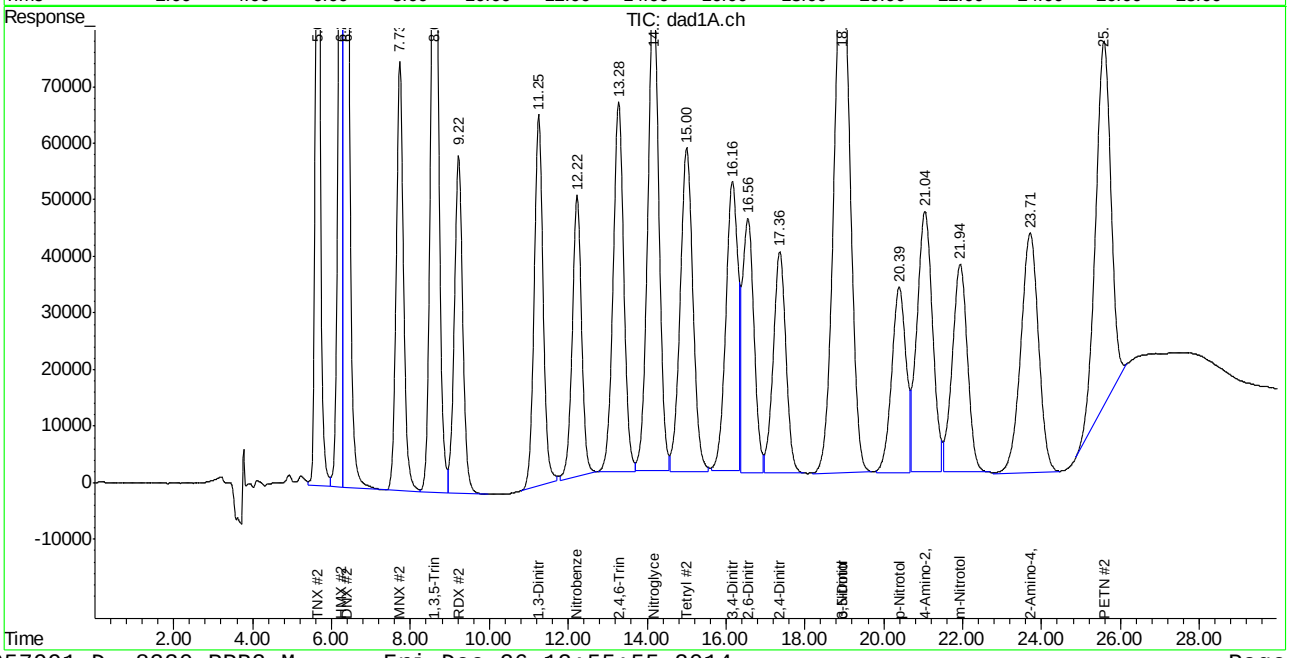
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057991.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1224RPB2\GG057991.D\dad1A.ch
Acq On : 24-Dec-2014, 13:23:38 Operator: kismetl
Sample : ic2334-1000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 9:05 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057991.D
Injection Time: 12/24/14 13:23
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.25	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.22	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.28	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.16	Poorly defined baseline
Tetryl	479-45-8	2	15.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.16	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.56	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.36	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.94	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.94	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.39	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.04	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.94	Poorly defined baseline
PETN	78-11-5	2	25.58	Poorly defined baseline

GG057992.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057992.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\1224RPB2\GG057992.D\dad1A.ch
Acq On : 24-Dec-2014, 13:59:04 Operator: kismetl
Sample : ic2334-2000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:33 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.14	11955029	24262170	2037.979	2270.467
	Spiked Amount 500.000	Range 72 - 145		Recovery =		407.60%#	454.09%#
	Target Compounds						
1)	TNX	5.65	5.65	18234703	27553157	2014.694	2032.952
2)	HMX	6.26	6.23	5613710	19496213	2396.844m	2422.689
3)	DNX	6.38	6.38	16485162	26947765	2034.480m	1937.539
4)	MNX	7.72	7.72	12685079	20171567	1978.561	2015.056
5)	1,3,5-Trinitrobe	8.61	8.61	20798690	37348029	2019.871	2093.203
6)	RDX	9.21	9.21	9485214	18346928	1989.681	2055.812
7)	1,3-Dinitrobenze	11.24	11.24	27784726	21431008	1909.226	2101.693
8)	Nitrobenzene	12.21	12.21	18025458	17120291	1959.653	2026.293
9)	2,4,6-Trinitroto	13.26	13.26	19373372	26138316	1942.076	2045.712
10)	Nitroglycerin	0.00	14.15	0	35521361	N.D. d	10239.665
11)	Tetryl	14.98	14.98	15384323	27846994	2060.460	2208.966
13)	2,6-Dinitrotolue	16.54	16.54	13244408	19405534	1913.379	2121.978
14)	2,4-Dinitrotolue	17.35	17.35	25781566	19299869	2005.029	2110.058
15)	o-Nitrotoluene	18.92	18.92	34938955	57621172	2009.744	2072.621
16)	3,5-Dinitroanili	18.92	18.92	34938955	57621172	2009.744	2071.341
17)	p-Nitrotoluene	20.38	20.38	10512172	18107492	2112.935	2110.161
18)	4-Amino-2,6-Dini	21.02	21.02	13176405	27206314	1960.841	1927.313
19)	m-Nitrotoluene	21.93	21.92	12094957	21090057	1858.469	1846.854
20)	2-Amino-4,6-Dini	23.69	23.69	18649609	27875932	2010.839	2126.120
21)	PETN	0.00	25.57	0	36264219	N.D. d	22681.513m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057992.D 8330_RPB2.M Fri Dec 26 12:55:56 2014 Page 1

9.7.19

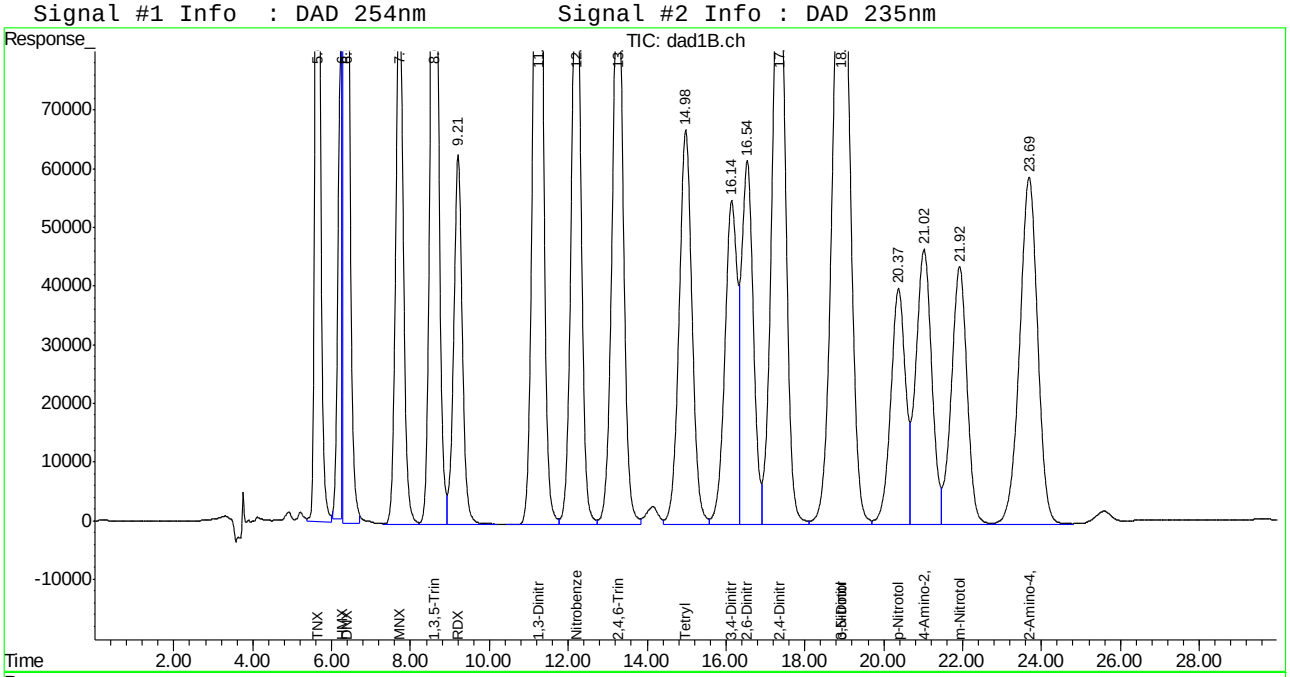
6

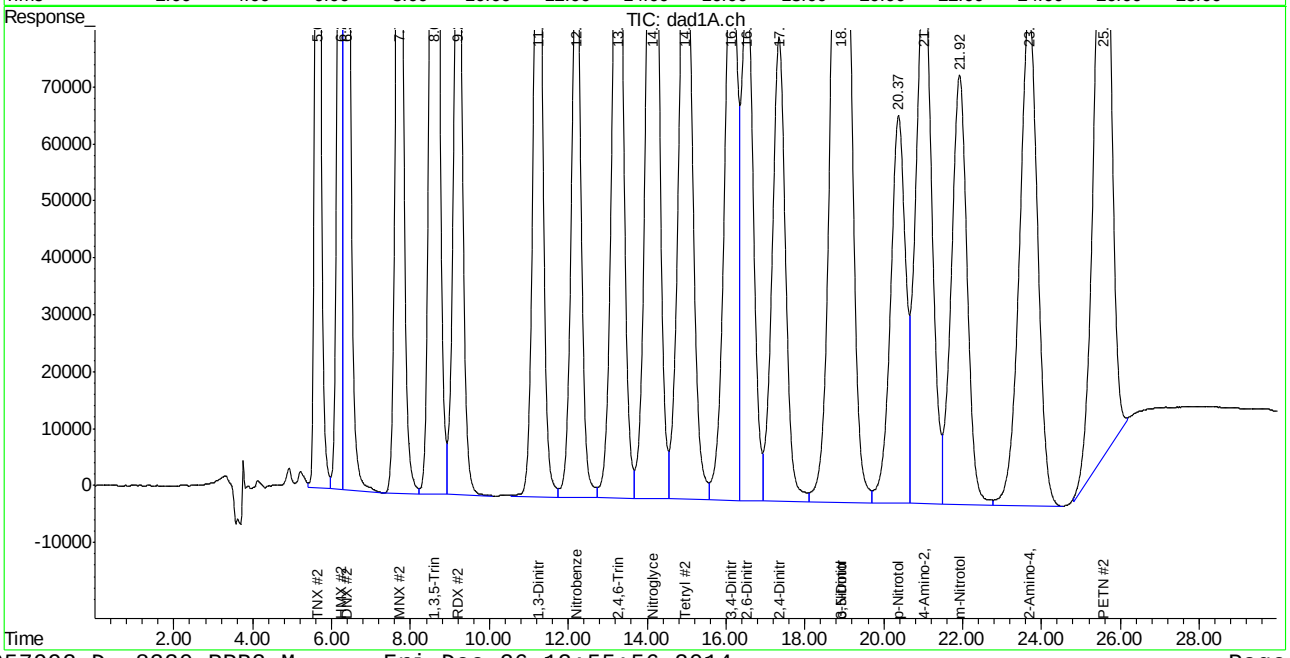
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057992.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\1224RPB2\GG057992.D\dad1A.ch
Acq On : 24-Dec-2014, 13:59:04 Operator: kismetl
Sample : ic2334-2000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 9:07 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-IC2334 **Method:** SW846 8330A
Lab FileID: GG057992.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 13:59 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
PETN	78-11-5	2	25.57	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057993.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\1224RPB2\GG057993.D\dad1A.ch
Acq On : 24-Dec-2014, 14:31:07 Operator: kismetl
Sample : icv2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 09:14:04 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 72 - 145		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.64	5.64	4773974	7227292	529.440	537.312
2)	HMX	6.24	6.22	1535448	5749648	563.884m	566.243m
3)	DNX	6.37	6.36	4140903	6916384	524.888m	497.167m
4)	MNX	7.72	7.72	3331703	5230264	521.522	518.629
5)	1,3,5-Trinitrobe	8.60	8.60	5468312	9728470	535.552	542.363
6)	RDX	9.20	9.20	2478875	4684966	526.309	534.347
7)	1,3-Dinitrobenze	11.24	11.24	6699043	5270145	488.671	506.987
8)	Nitrobenzene	12.21	12.21	4876283	4485345	545.420	540.433m
9)	2,4,6-Trinitroto	13.26	13.26	4878635	6087856	507.442	480.845m
10)	Nitroglycerin	0.00	14.15	0	8145948	N.D. d	2463.201m
11)	Tetryl	14.98	14.98	3769489	6607992	486.237	478.133m
13)	2,6-Dinitrotolue	16.54	16.54	3630248	5125058	549.184m	567.309m
14)	2,4-Dinitrotolue	17.35	17.35	6616766	4576931	519.727m	515.640m
15)	o-Nitrotoluene	18.93	18.93	8680196	14126503	502.599m	502.584m
16)	3,5-Dinitroanili	18.93	18.93	8886809	14179522	514.563	501.257m
17)	p-Nitrotoluene	20.37	20.38	2639465	4412078	499.151m	499.651m
18)	4-Amino-2,6-Dini	21.03	21.02	3438363	7062983	514.100	536.087m
19)	m-Nitrotoluene	21.92	21.92	3384666	5768166	556.302	560.680m
20)	2-Amino-4,6-Dini	23.69	23.69	4924055	7278763	522.520	514.943
21)	PETN	0.00	25.58	0	8758851	N.D. d	2447.762m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057993.D 8330_RPB2.M Fri Dec 26 12:55:57 2014 Page 1

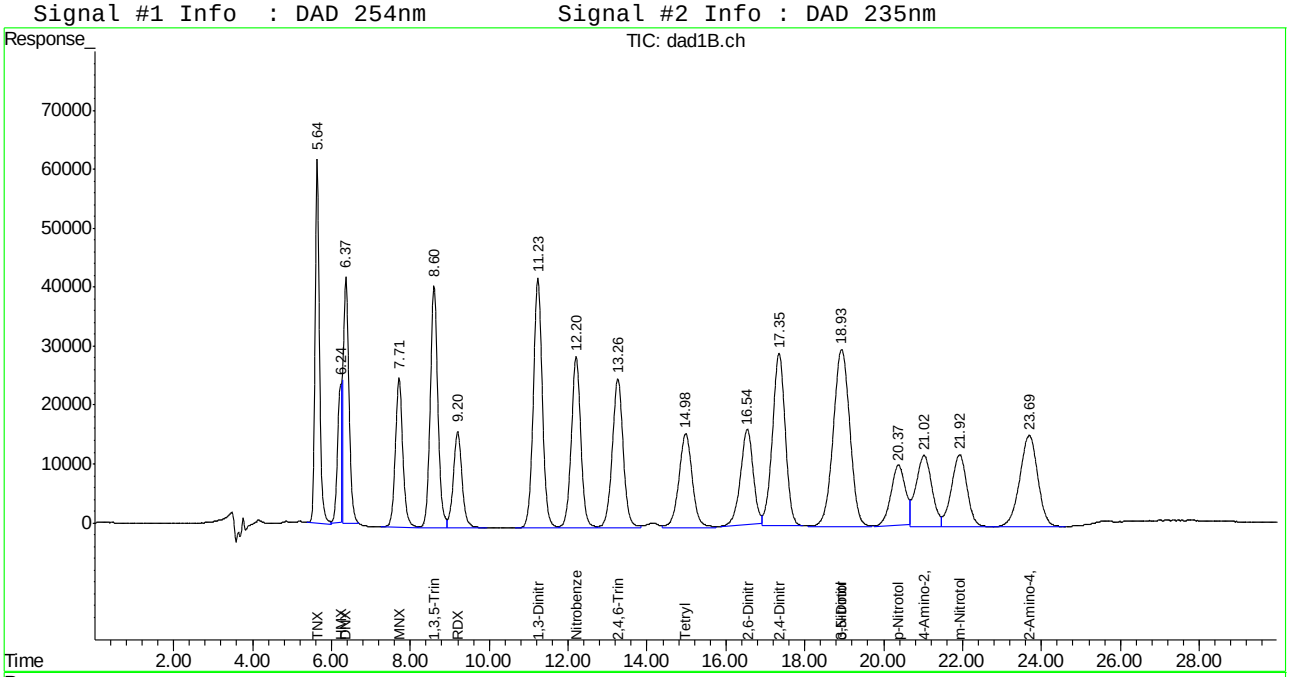
9.7.20
9

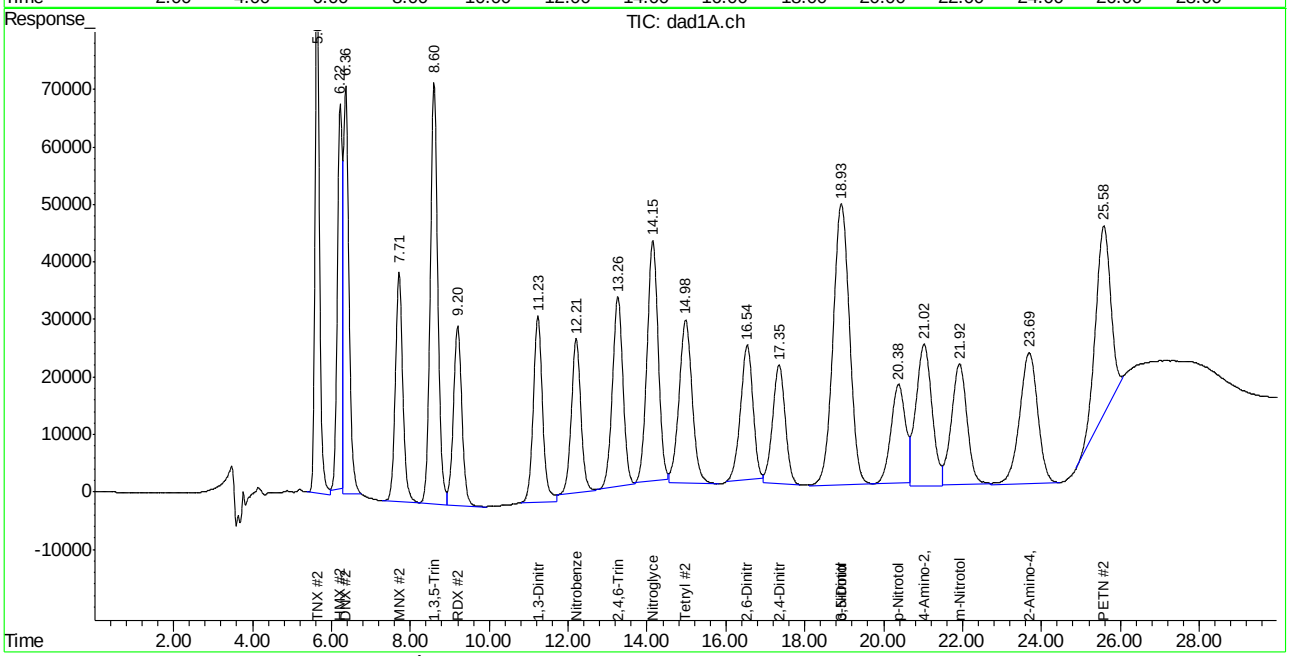
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057993.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\1224RPB2\GG057993.D\dad1A.ch
Acq On : 24-Dec-2014, 14:31:07 Operator: kismetl
Sample : icv2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 10:14 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-ICV2334 **Method:** SW846 8330A
Lab FileID: GG057993.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 14:31 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	2	6.22	Poorly defined baseline
HMX	2691-41-0	1	6.24	Poorly defined baseline
DNX		2	6.36	Poorly defined baseline
DNX		1	6.37	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.21	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.26	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	14.98	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	16.54	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	17.35	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.35	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	18.93	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.93	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.93	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	20.37	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.38	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.02	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.92	Poorly defined baseline
PETN	78-11-5	2	25.58	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058049.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058049.D\dad1A.ch
Acq On : 05-Jan-2015, 08:30:22 Operator: kismetl
Sample : cc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:16:59 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.28	16.27	5343402	11025088	890.034	986.489
	Spiked Amount 500.000	Range 72 - 145		Recovery =		178.01%#	197.30%#
	Target Compounds						
1)	TNX	5.65	5.65	8958499	13577255	993.509	1009.399
2)	HMX	6.28	6.27	2603454	8002255	956.102m	788.086
3)	DNX	6.40	6.39	8384343	15146670	1062.773m	1088.780
4)	MNX	7.76	7.76	6225061	9797771	974.428	971.540
5)	1,3,5-Trinitrobe	8.63	8.63	10150994	17917341	994.162	998.893
6)	RDX	9.26	9.26	4662648	9047194	989.962	1031.884
7)	1,3-Dinitrobenze	11.29	11.29	13616192	10744358	993.253	1033.605
8)	Nitrobenzene	12.27	12.27	8813515	7944093	985.805	957.173
9)	2,4,6-Trinitroto	13.33	13.33	9516868	12494579	989.879	986.876
10)	Nitroglycerin	0.00	14.22	0	17195329	N.D. d	5199.586
11)	Tetryl	15.10	15.10	7526508	13090128	970.866	947.159
13)	2,6-Dinitrotolue	16.63	16.62	7064090	9887116	1068.655	1094.436
14)	2,4-Dinitrotolue	17.45	17.45	12727107	9086300	999.676	1023.669
15)	o-Nitrotoluene	19.06	19.06	17110632	27448502	990.737	976.545
16)	3,5-Dinitroanili	19.06	19.06	17110632	27448502	990.737	970.325
17)	p-Nitrotoluene	20.49	20.49	4967981	8151805	939.499	923.161
18)	4-Amino-2,6-Dini	21.20	21.20	6578852	13294118	983.662	1009.036
19)	m-Nitrotoluene	22.05	22.05	5917526	10020525	972.602	974.020
20)	2-Amino-4,6-Dini	23.88	23.88	9076357	13012811	963.145	920.604
21)	PETN	0.00	25.72	0	2125374	N.D. d	593.960m

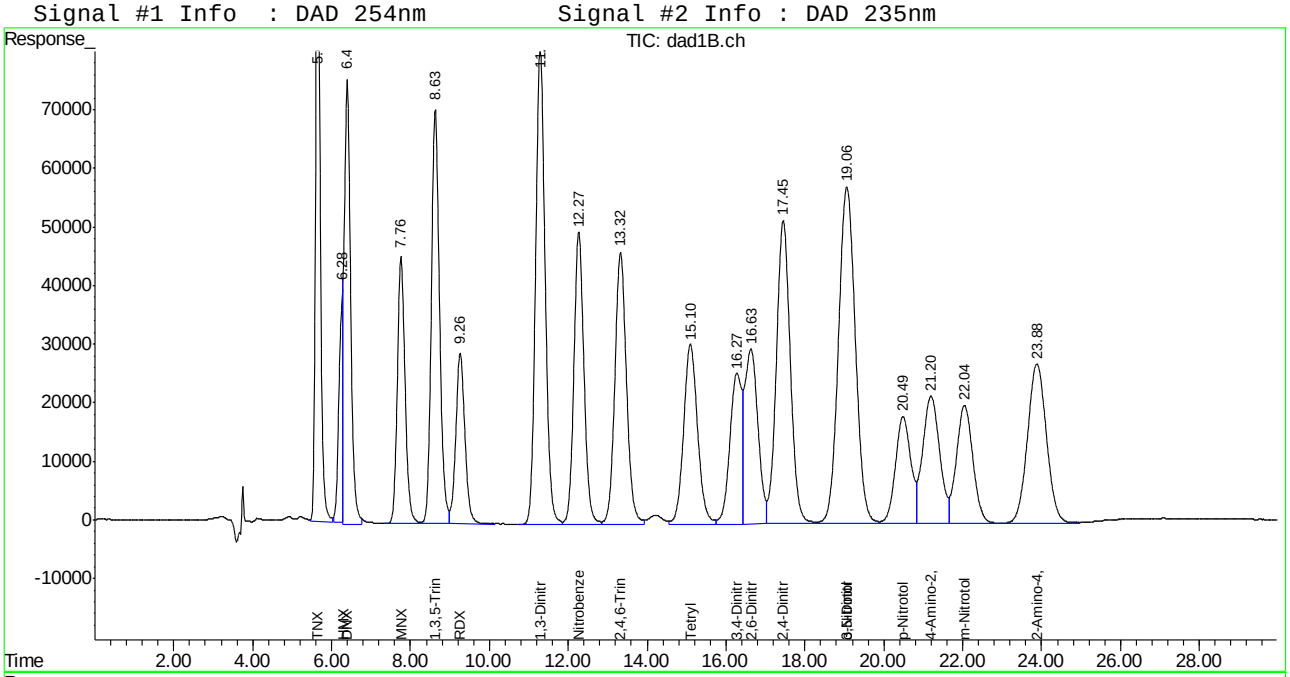
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058049.D 8330_RPB2.M Mon Jan 05 11:29:23 2015 Page 1

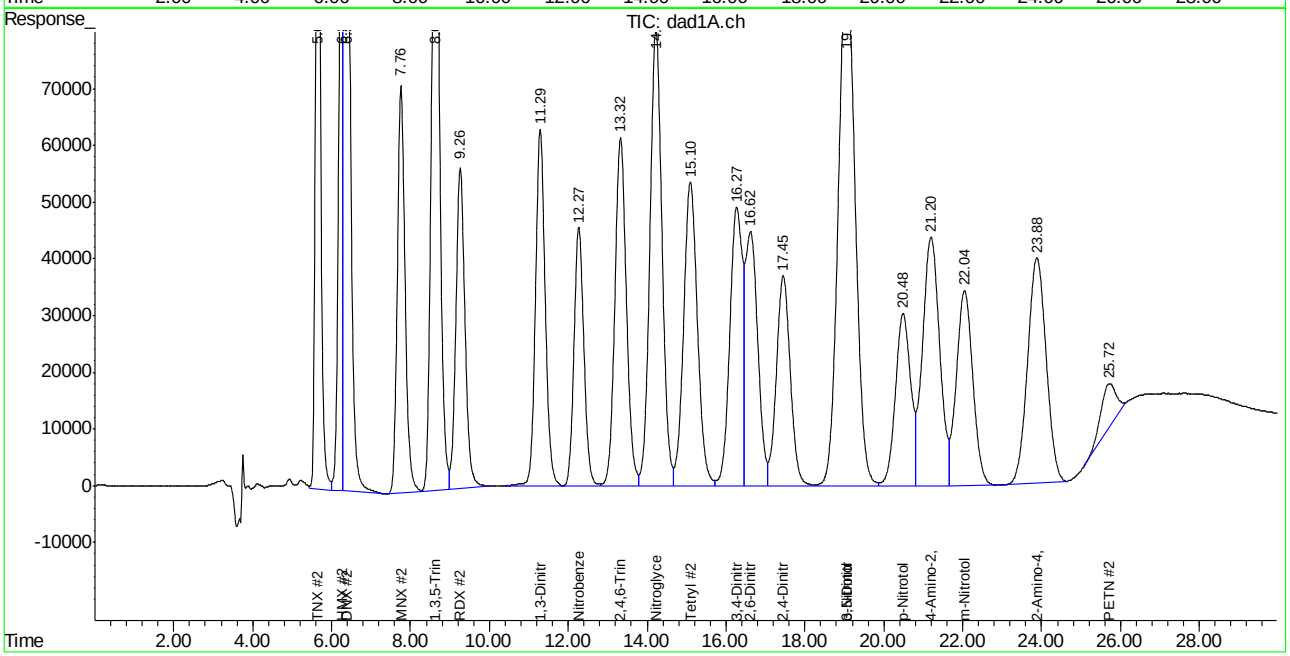
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058049.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058049.D\dad1A.ch
Acq On : 05-Jan-2015, 08:30:22 Operator: kismetl
Sample : cc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:20 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2338-CC2334
Lab FileID: GG058049.D
Injection Time: 01/05/15 08:30
Method: SW846 8330B
Analyst approved: 01/05/15 11:32 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.28	Overlapping peak
DNX		1	6.40	Overlapping peak
PETN	78-11-5	2	25.72	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058053.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058053.D\dad1A.ch
Acq On : 05-Jan-2015, 10:44:58 Operator: kismetl
Sample : ecc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:17:03 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.24	16.23	5500365	10552600	916.179	944.213m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	183.24%#	188.84%#
	Target Compounds						
1)	TNX	5.65	5.65	8959433	13614259	993.612	1012.150
2)	HMX	6.28	6.26	2502899	8565595	919.174m	843.566
3)	DNX	6.39	6.39	8330945	14554852	1056.005m	1046.239
4)	MNX	7.76	7.76	6200614	9866357	970.601	978.341
5)	1,3,5-Trinitrobe	8.63	8.63	10078686	18066902	987.080	1007.231
6)	RDX	9.26	9.26	4644827	9006196	986.178	1027.208
7)	1,3-Dinitrobenze	11.28	11.28	13549824	10243450	988.411	985.418m
8)	Nitrobenzene	12.26	12.26	8836054	8040721	988.326	968.816m
9)	2,4,6-Trinitroto	13.31	13.31	9422957	12042622	980.111	951.178m
10)	Nitroglycerin	0.00	14.20	0	16309682	N.D. d	4931.781m
11)	Tetryl	15.07	15.07	7394782	12327805	953.874	892.000m
13)	2,6-Dinitrotolue	16.61	16.60	6738669	9282801	1019.425	1027.543m
14)	2,4-Dinitrotolue	17.42	17.42	12558672	8786583	986.446	989.902m
15)	o-Nitrotoluene	19.03	19.02	16993020	27371653	983.927	973.811m
16)	3,5-Dinitroanili	19.03	19.02	16993020	27356887	983.927	967.086m
17)	p-Nitrotoluene	20.44	20.44	4982888	8436241	942.318	955.372
18)	4-Amino-2,6-Dini	21.14	21.14	6475508	13238231	968.210	1004.794
19)	m-Nitrotoluene	21.99	21.99	5903280	10107170	970.261	982.442
20)	2-Amino-4,6-Dini	23.82	23.82	9043150	13081872	959.622	925.490
21)	PETN	0.00	25.65	0	2080286	N.D. d	581.360m

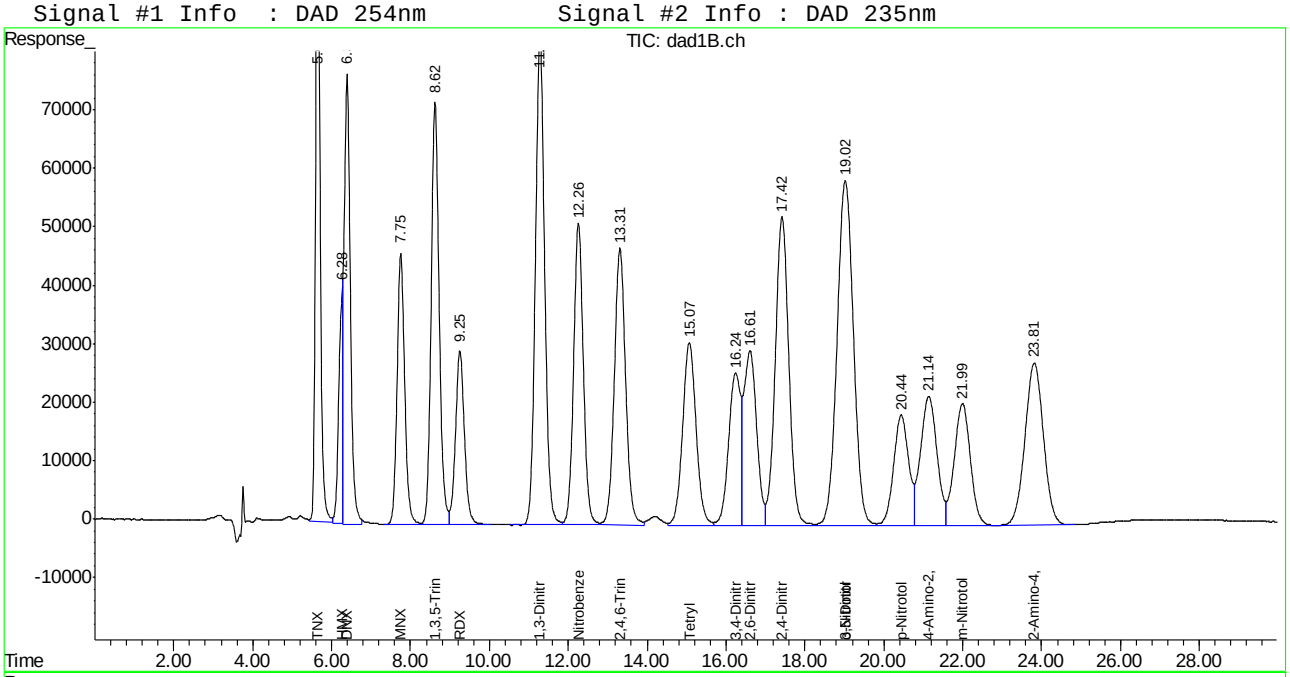
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058053.D 8330_RPB2.M Mon Jan 05 11:29:27 2015 Page 1

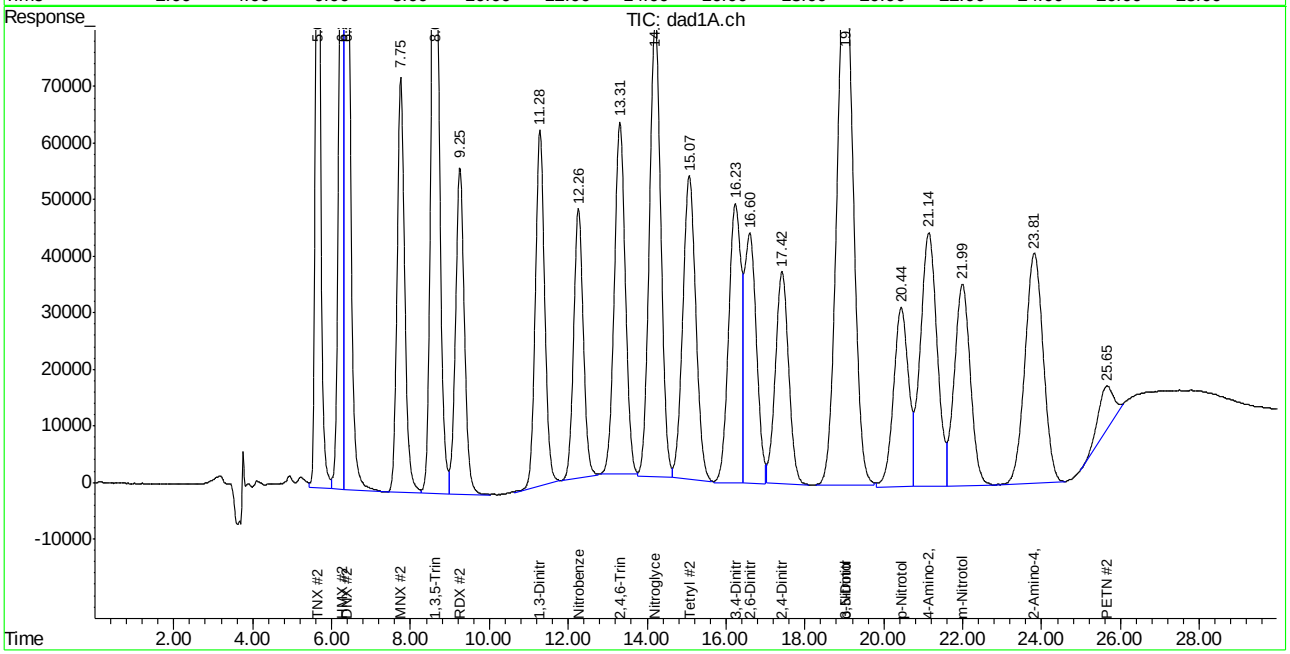
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058053.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058053.D\dad1A.ch
Acq On : 05-Jan-2015, 10:44:58 Operator: kismetl
Sample : ecc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:25 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20937

Manual Integration Approval Summary

Sample Number: GGG2338-ECC2334 **Method:** SW846 8330B
Lab FileID: GG058053.D **Analyst approved:** 01/05/15 11:32 Kismet Lugo
Injection Time: 01/05/15 10:44 **Supervisor approved:** 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.28	Overlapping peak
DNX		1	6.39	Overlapping peak
1,3-Dinitrobenzene	99-65-0	2	11.28	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.26	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.31	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.20	Poorly defined baseline
Tetryl	479-45-8	2	15.07	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.23	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.60	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.42	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	19.02	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	19.02	Poorly defined baseline
PETN	78-11-5	2	25.65	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045345	1	solvent	8330	—	—		ND LL 12/29/14
BB 46	2	CC1219-1000		LC493	1:1		replaced column ~~re~~ Hmx ↓ ~~prep wid with 500std~~
BB 47	1	solvent		—	—		ND
BB 48	2	CC1219-1000		LC493	1:1		Hmx ↓ prep wid w/ LC500std
BB 49	2	↓		LC500	1:1		Hmx ↓ fix resolution
BB 50	2	↓		↓	↓		✓ wrong std!
BB 51	1	solvent		—	—		ND
BB 52	2	CC1219-1000		LC500	1:1		✓ Pass resolution in batch - run curve
BB 53	4	IC1221-20			50+450 50+450 ↓	PDB	✓
BB 54	5	IC1221-50			10+390	PDB	✓
BB 55	6	IC1221-100			25+475	PDB	✓
BB 56	7	IC1221-200			50+450	PDB	✓
BB 57	8	ICC1221-500			1:4	PDB	✓
BB 58	9	IC1221-1000			1:1	PDB	✓
BB 59	10	IC1221-2000		↓	1x	PDB	✓
BB 60	11	ICV 1221-500		LC497 LC498 E4944 E5029 *		~~TNxOP~~ LL 12/30/14 PDB	Pass S1 MNPS2 PETN ↑
BB 61	12	ICV 1221-500 flow		~~LC500~~ E5029	10+490	TNxOP	Pass
BB 62	4	CC1221-20		LC500	50+450 50+450 ↓	HMX, NPxOPS1 PDB	Pass S1 HMX ↑ S2 PETN ↓
BB 63	41	OP54361-bs		OP54361	1x	PDB	✓
BB 64	42	OP54361-MD	↓	↓	↓		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

* LC497 25ul
LC498 25ul
E4944 10ul
} + 920

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 B
PROC. METHOD:	1
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2588
MEOH LOT #:	91422
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045365	43	FA20818-6	8330	OP54361	1x		~~MM(5)~~ ✓
BB 66	44	FA20818-7				PDB	✓ MM(5)
BB 67	45	FA20818-8				TDXMPS1, PDB	✓
BB 68	46	OP54361-MS				PDB	✓
BB 69	47	OP54361-MSD				PDB	✓
BB 70	48	FA20818-9				HMXOPS2MPS1 2A-4AMPS1	✓
BB 71	49	FA20818-10					✓
BB 72	50	FA20819-1		↓	↓	PDB	✓
BB 73	3	CC1221-1000		LC500	1:1	PDB	Pass
BB 74	1	clb		—	—		ND
BB 75	51	FA20819-2		OP54361	1x	HMXMPS1 OPS2 1,3,5MPS1 PDB	✓
BB 76	52	OP54317-BS		OP54317		PDB	✓
BB 77	53	OP54317-MB					ND
BB 78	54	FA20818-1				MNXOP, PDB	✓
BB 79	55	FA20818-2				PDB	✓
BB 80	56	FA20818-3				2A-4A MPS1 PDB	✓
BB 81	57	FA20818-4				24DNOPS1, PDB	✓
BB 82	58	OP54317-MS				PDB	✓
BB 83	59	OP54317-MSD				PDB	✓
BB 84	60	FA20818-5	↓	↓	↓	PDB	ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045385	3	cc1221-1000	8330	LC500	1:1	PDB	PETN not requested
BB 86	1	ccb		—	—		ND
BB 87	61	FA20818-6		OP54361	1:5	PDB	✓
BB 88	62	FA20818-7		↓	1:5	PDB	✓
BB 89	63	OP54390-bs		OP54390	1x	PDB	✓
BB 90	64	OP54390-pt1				PDB	✓
BB 91	65	OP54390-mb					ND
BB 92	66	FA20794-1					ND
BB 93	67	OP54390-ms				PDB	✓
BB 94	68	OP54390-MSd				PDB	✓
BB 95	69	FA20794-2				PDB	✓ ROSS. PETN
BB 96	70	FA20794-3		↓	↓		ND
BB 97	91	cc1221-1000		LC500	1:1	PDB	Pass
BB 98	1	ccb		—	—		ND
BB 99	71	FA20794-4		OP54390	1x		ND
BB 045400	72	FA20820-1					ND
BB 01	73	FA20820-2					ND
BB 02	74	OP54390-dup					ND
BB 03	75	OP54390-dup2					ND
BB 04	76	FA20820-3	↓	↓	↓		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimmet Lyn

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	232

kl 12/30/14

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045405	77	FA20820-4	8330	~~OP54350~~ ~~8330~~	1X		ND OP54390
BB 06	78	FA20820-5	↓	OP54390	↓		ND
BB 07	91	CCC1221-1000	↓	LC50U	1:1	PDB	Pass
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

* For NELAC purposes, Method 8332 includes analytes by SOP GC020
Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE 01/02/15

DATE:	~~01/02/14~~
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

01/05/15 lw

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1225

ANALYST:	lw
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	240

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045461	1	solvent	8330	—	—		ND
BB 62	2	CC1221-1000		LC500	1:1	PDB	PETNJ not required SumTS1
BB 63	12	OP54435-bs		OP54435	1x	PDB	✓
BB 64	13	OP54435-pt1				PDB	✓
BB 65	14	OP54435-mb				PDB	ND
BB 66	15	FA 20881-1				PDB	ND
BB 67	16	OP54435-ms				PDB	✓
BB 68	17	OP54435-msd				PDB	✓
BB 69	18	FA 20881-2				PDB	ND
BB 70	19	FA 20881-3				NG-08 PDB	✓
BB 71	20	FA 20937-2				HMX MPS1	✓
BB 72	21	FA 20937-3		↓	↓		ND
BB 73	3	CC1221-1000		LC500	1:1	PDB	PETNJ, SumTS1
BB 74	1	calb		—	—		ND
BB 75	22	FA 20937-1		OP5443J	1x		ND
BB 76	23	OP54435-dup				PDB	ND
BB 77	24	OP54435-dup2					ND
BB 78	25	grind blk a					ND
BB 79	26	grind blk b					ND
BB 80	27	grind blk c					ND
81	28	ccc1221-1000		LC500	1:1	PDB	PETNJ, SumTS1

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC3-GG	

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 LPB2
PROC. METHOD:	8330-LPB2
CALIB. DATE:	12/24/14
RUN BATCH: GGG	2334

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	9/422
HEAD PRESSURE:	165

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 057982	1	solvent	8330	—	—		ND
GG 83	2	CC2332-1000		LC493	1:1	HMX-DNX OP, PDB	Pass
GG 84	4	ICV2332-500		—	—	↓ ↓	HMXT PETNT 2ndPS2 run curve
GG 85	3	CC2332-1000		LC500	1:1	↓ ↓	HMXT, PETNT
GG 86	5	IC2334-20			50+450 50+450	PDB	✓
GG 87	6	IC2334-50			10+390	PDB	✓
GG 88	7	IC2334-100			25+475	PDB	✓
GG 89	8	IC2334-200			50+450	PDB	✓
GG 90	9	ICC2334-500			1:4	PDB	✓
GG 91	10	IC2334-1000			1:1	PDB	✓
GG 92	11	IC2334-2000			1x	PDB	✓
GG 93	12	ICV2334-500		LC497 LC498 E4944 ESOQ4	*		Pass
GG 94	5	CC2334-20		LC500	50+450 50+450		PETN↓ HMXTS2
GG 95	21	FA2070f-49ct		op54337	1x	PDB	✓
GG 96	22	FA2070f-51ct					ND HMX[17] MH-H
GG 97	23	FA2070f-57ct				HMXOP PDXOP SMOPS2, PDD	✓ NB PETN[107]
GG 98	13	op54324-mb		op54324			DWL – ND on primary
GG 99	14	FA20579-1ct					
GG 058000	15	FA20579-2ct					
GG 01	16	FA20579-3ct					

* For NELAC purposes, Method 8332 includes analytes by SOP GC020
Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

* LC497 25 ml
LC498 25 ml
E4944 10 ml
} +920

Analyst's Signature: Kamal Lyo

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC3-GG	

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	12/24/14
RUN BATCH: GGG	2334

ANALYST:	IK
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	166

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058002	17	FA20579-4cf	8330	OP54324	1x		DNR
GG 03	18	FA20523-1cf	↓	↓	↓		↓
GG 04	19	FA20523-2cf	↓	↓	↓		↓
GG 05	3	cc2332-1000	↓	LC500	1:1	HMX-DNX0P, PDB	Pass
GG 06	1	ccb	↓	—	—		ND
GG 07	20	FA20523-3cf	↓	OP54324	1x		DNR
GG 08	24	ecc2332-1000	↓	LC500	1:1	HMX-DNX0P, PDB	PETN J not required
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

IK 12/26/14

* For NELAC purposes, Method 8332 includes analytes by SOP GC020
Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

Analyst's Signature: Kismet Ly

ACCUTEST LABORATORIES SE

DATE:	01/05/15
COLUMN TYPE:	Bond RP
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC3-GG	

HPLC3-GG ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	12/24/14
RUN BATCH: GGG	2338

ANALYST:	JL
ACETONITRILE LOT #:	2588
MEOH LOT #:	91422
HEAD PRESSURE:	176

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058048	1	solvent	8330	—	—		ND
GG 49	2	cc2334-1000	↓	LC500	1:1	HMX-DNX OP, PDB	PETN J, not required HMXdS2
GG 50	11	OP54435-mb		OP54435	1X		ND
GG 51	12	FA20881-3ct		↓	↓		✓
GG 52	13	FA20937-2ct					ND HMX
GG 53	2	ecc 2334-1000	↓	LC500	1:1	HMX-DNX OP, PDB	Pan, PETN HMXdS2
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

JL 01/05/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: Kimberly Lyle

ACCUTEST LABORATORIES SE **EXP SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B or Method (circle)

Date/Time: 12/30/14 1500 Started {mm/dd/yy 24:00}

Date/Time: 12/31/14 1030 Finished {mm/dd/yy 24:00}

Therm. ID: ✓ Corr. Factor (±℃): —

Bath Temp. (High) ℃: ✓ / ✓ {obs/corr}

Ultrasonic Bath ID (8330A or 8332): ✓

Shaker Table ID (8330B): ST2

Batch#: OP54435 Ext. By: MB Vialed By: MB Balance ID: ADVPRO5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54435 MB	X	10.0	1.25ml		50ml	
OP 54435 BS	X	10.0		125+125ul 1.25ml		
FA 20881-1	1	10.0				
-2	1	10.1				
-3	1	10.0				
FA 20937-1	1	10.0				
-2	1	10.0				
-3	1	10.1				
GRINDING BLANK	A	10.0	—			
↓	B	10.0	—			
	C	10.0	—			
					12/31/14	
			MB			
OP 54435 PT-1	X	10.0	1.25ml		50ml	6470A
FA20881-1 MS	1	10.1		125+125ul 1.25ml		
-1 MSD	1	10.0		↓		
FA20937-1 DUP	1	10.0				
-1 TRP	1	10.0	↓		↓	

Comments:

Surr. ID: E4954M Conc: 20ppm Exp. Date: 03/02/15 Inj. By: MB Ver. By MB

Spk.1 ID: E5025 Conc: 20ppm Exp. Date: 06/04/15 Inj. By: MB Ver. By MB

Spk.2 ID: 7183B Conc: 1000 ug/ml Exp. Date: 12/30/15 Inj. By: MB Ver. By MB

Acetonitrile Lot # 06/8/7 Methanol Lot # ✓ Water Lot# 084623 HPLC

Syringe Filter Lot# Reagent # CS1 Reagent # ✓

Relinquished By: Date: 12/31/14

Accepted By: Date: 12/31/14

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20937
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate	GP25263/GN64700	1.0	0.0	mg/kg	25	24.7	98.9	90-110%

Associated Samples:
Batch GP25263: FA20937-1, FA20937-2, FA20937-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20937
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate	GP25263/GN64700	FA20881-1	mg/kg	4.1	25	25.8	86.7N(a)	90-110%

Associated Samples:
Batch GP25263: FA20937-1, FA20937-2, FA20937-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20937
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Nitrate	GP25263/GN64700	FA20881-1	mg/kg	4.1	24.9	25.6	0.8	20%

Associated Samples:
Batch GP25263: FA20937-1, FA20937-2, FA20937-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20937
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 315010301.TXT Date Analyzed: 01/03/15 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64700
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:28	GN64700-CCV1	1		
11:44	GN64700-CCB1	1		
12:52	ZZZZZZ	5		
13:09	ZZZZZZ	25		
13:26	ZZZZZZ	5		
13:43	ZZZZZZ	5		
14:00	GN64700-CCV2	1		
14:17	GP25263-MB1	1		
14:34	GP25263-B1	1		
14:51	FA20881-1	1		(sample used for QC only; not part of login FA20937)
15:08	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:42	FA20937-1	1		
15:59	FA20937-2	1		
16:16	FA20937-3	1		
16:33	GP25263-S1	1		
16:50	GP25263-S2	1		
17:07	GN64700-CCV3	1		
17:24	GN64700-CCB2	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA20937
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 315010301.TXT Date Analyzed: 01/03/15 Methods: EPA 300/SW846 9056A
Run ID: GN64700 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN64700-CCV1	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64700-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64700-CCV2	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64700-CCV3	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64700-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			

(!) Outside of QC limits

Southeast ACCUTEST LABORATORIES

General Chemistry

Raw Data

Sequence: 01-03-2015
Operator: Chemistry

Printed: 1/5/2015 9:19:30 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\JAN 2015
Timebase: ICS-2100
#Samples: 31

Created: 1/3/2015 11:26:08 AM by Chemistry
Last Update: 1/3/2015 1:52:33 PM by Chemistry

No.	Name	Dil. Factor	Weight	ISTD Amount	Sample ID	Replicate ID	Comment
1	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
2	STD A	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
3	STD B	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
4	STD C	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
5	STD D	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
6	STD E	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
7	STD F	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
8	STD G	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
9	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
10	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
11	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
12	MB1(UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
13	B1 (UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
14	FA21096-7	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
15	FA21096-8	25.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
16	FA21096-11	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
17	FA21096-13	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
18	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
19	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
20	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
21	FA20881-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
22	FA20881-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
23	FA20881-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
24	FA20937-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
25	FA20937-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
26	FA20937-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
27	FA20881-1S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
28	FA20881-1S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
29	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
30	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
31	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO3		~~GC 086~~ GC 255	01-01-15								
	CHL		~~GC 007~~ GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Acculon	GC 010	08-31-15	1000	0.250	100	2.5	01-03-15	VL	LL05367	01-03-15
	NO2		GC 125	01-31-15								
	NO3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO4		GC 268	05-10-16								
	Br	spex	GC 156	04-30-16		1.25		12.5				
Br	F	spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05368	
	NO2	Inorganic	GC 267	11-04-16								
	NO3		~~GC 255~~	~~01-01-15~~								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	01-03-2015
Analyst:	VL
Instrument:	# 3
Inst. File Name:	010315

Prep Batchs:	GP 25263
Analytical Batch:	GN 64700
Calibration Date:	12-15-2015
Pump pressure:	2011 psi

Vial lot#	EC 271
Cap lot#	EC 271
Syringe lot#	EC 283
Filter lot#	EC 283

Standards	
ICAL:	N/A
ICV:	L105368
CCV:	L105367
QC:	L105368

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
CCV		AQ			n	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
MB1					y	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
3					y	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
MB1 (UF)					n	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
B1 (UF)						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
FA 21096-7	9		870uS	5x							✓						✓	GP 25255
-8	9		257uS	25x							✓						✓	
-11	9		136uS	5x							✓						✓	
-13	9		837uS	5x							✓						✓	
CCV						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
MB1		SO			y	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
3						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
FA 20981-1	1									✓						✓		
-2	1									✓						✓		
-3	1									✓						✓		
FA 20937-1	1									✓						✓		
-2	1									✓						✓		
-3	1									✓						✓		
FA 20881-1S1	1									✓						✓		
FA 20881-1S2	1									✓						✓		
CCV						✓	✓	✓		✓	✓							
CCB						✓	✓	✓		✓	✓							
BLK (shut down)		↓			y													

VL 01-05-2015

Rev 050914 lm

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC2551I	01-01-15								
	CHL		GC086	02-01-15		0.800		50				
	SO_4		GC007	02-01-15								
	Br		GC158	01-01-15		1.25		12.5				
CCV	F	Accutom	GC010	08-31-15	1000	0.250	100	2.5	12-13-14	VL	LL05330	12-13-15
	NO_2		GC125II	01-30-15								
	NO_3		GC169	06-17-16								
	CHL		GC125II	03-31-16		0.500		50				
	SO_4		GC268	05-10-16								
	Br	Spex	GC156	04-30-16		1.25		12.5				
Br	F	Spex	GC514	12-31-16	1000	0.250	100	2.5			LL05331	
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC2551I	01-01-15								
	CHL		GC086	02-01-15		0.500		50				
	SO_4		GC007	02-01-15								
	Br		GC155	01-01-15		1.25		12.5				
Std A	F	Accutom	GC010	08-31-15	1000	0.01	100	0.1	12-15-14	VL	LL05332	12-15-16
	NO_2		GC125II	09-30-16		0.01		0.1				
	NO_3		GC600II	01-31-15		0.01		0.1				
	CHL		GC124	03-31-16		0.2		2.0				
	SO_4		GC268	05-10-16		0.2		2.0				
	Br	Spex	GC156	04-30-16		0.05		0.5				
Std B	F	Refer to	Std LL05332		1000	0.05	100	0.5			LL05333	
	NO_2					0.05		0.5				
	NO_3					0.05		0.5				
	CHL					1.0		10				
	SO_4					1.0		10				
	Br					0.1		1.0				
Std C	F				1000	0.1	100	1.0			LL05334	
	NO_2					0.1		1.0				
	NO_3					0.1		1.0				

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Cl					3.0		30				
	SO_4					3.0		30				
	Br					0.75		7.5				
Std D	F				1000	0.250	100	2.5			LL05335	
	NO_2					0.250		2.5				
	NO_3					0.250		2.5				
	Cl					5.0		50				
	SO_4					5.0		50				
	Br					1.25		12.5				
Std E	F				1000	0.30	100	3.0			LL05336	
	NO_2					0.30		3.0				
	NO_3					0.30		3.0				
	Cl					6.5		65				
	SO_4					6.5		65				
	Br					1.5		15				
Std F	F				1000	0.40	100	4.0			LL05337	
	NO_2					0.40		4.0				
	NO_3					0.40		4.0				
	Cl					8.0		80				
	SO_4					8.0		80				
	Br					2.0		20				
Std G	F				1000	0.50	100	5.0			LL05338	
	NO_2					0.50		5.0				
	NO_3					0.50		5.0				
	Cl					10.0		100				
	SO_4					10.0		100				
	Br					2.5		25				
CCV	F	Accuton	GC 010	08-31-15	1000	0.250	100	2.5			LL05335	
	NO_2		GC 1251	01-30-15								
	NO_3		CC 169	06-17-16								
	Cl		GC 124	03-31-16		0.500		5.00				
	SO_4		GC 268	05-10-16								

IC STANDARDS PREP LOG

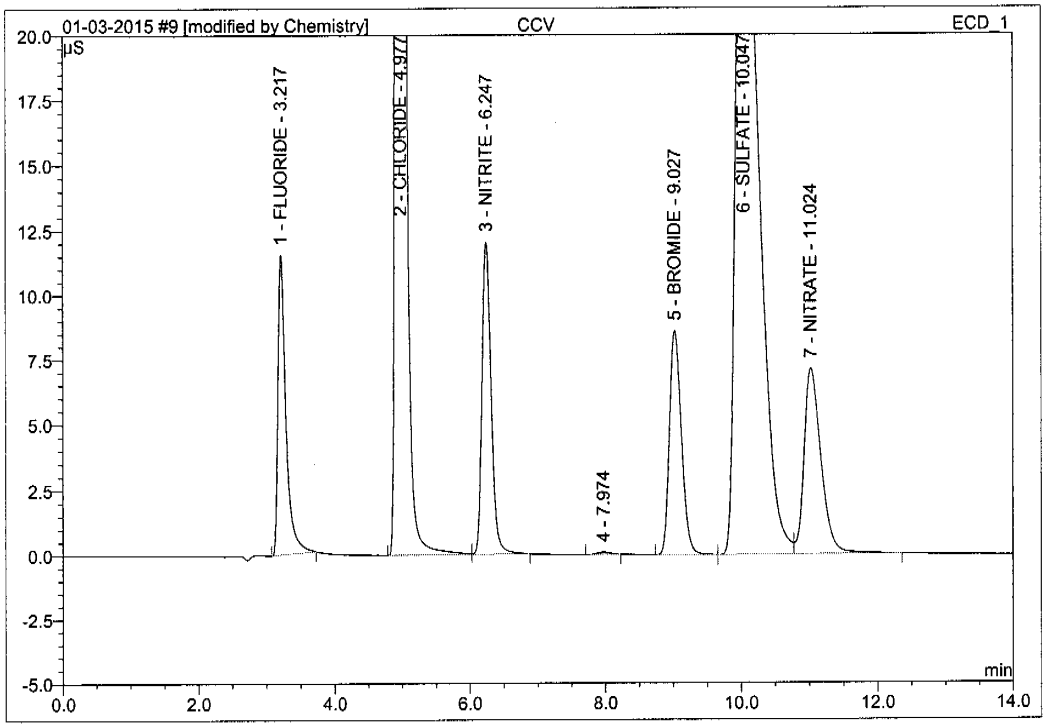
STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Br	spex	CC156	09-30-16		1.25		12.5				
B1	F	spex	CC514	12-31-16	1000	0.250	100	2.5				
	NO2		CC267	11-04-16								
	NO3		CC25511	01-01-18								
	CHL		CC096	02-01-15		0.500		50				
	SO4		CC007	02-01-15								
	Br		CC155	01-07-18		1.25		12.5				

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 11:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	11.531	1.558	4.65	2.733	BMB*
2	4.98	CHLORIDE	121.009	14.977	44.72	51.620	BM
3	6.25	NITRITE	12.009	1.878	5.61	2.391	MB
4	7.97	n.a.	0.095	0.022	0.07	n.a.	BMB
5	9.03	BROMIDE	8.618	1.757	5.25	13.163	BM
6	10.05	SULFATE	30.129	11.242	33.57	51.280	M
7	11.02	NITRATE	7.128	2.057	6.14	2.524	MB
Total:			190.518	33.492	100.00	123.710	

1/01-05-2015

01/05/15

Anions/Integration

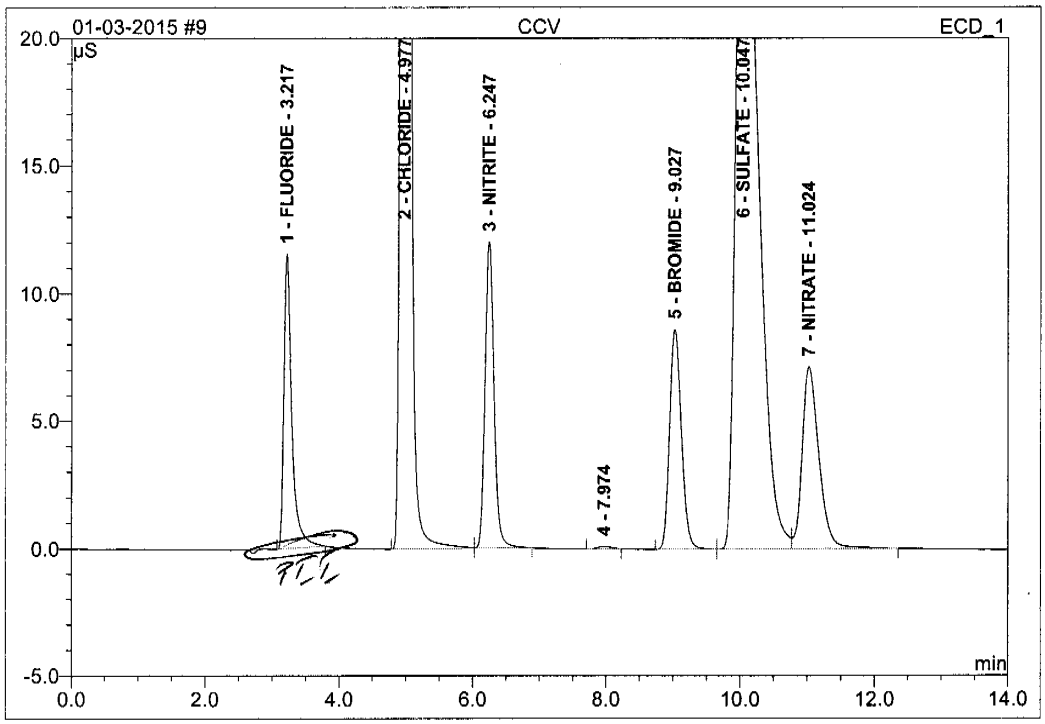
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 11:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	11.541	1.575	4.70	2.762	BMB
2	4.98	CHLORIDE	121.009	14.977	44.70	51.620	BM
3	6.25	NITRITE	12.009	1.878	5.61	2.391	MB
4	7.97	n.a.	0.095	0.022	0.07	n.a.	BMB
5	9.03	BROMIDE	8.618	1.757	5.24	13.163	BM
6	10.05	SULFATE	30.129	11.242	33.55	51.280	M
7	11.02	NITRATE	7.128	2.057	6.14	2.524	MB
Total:			190.529	33.508	100.00	123.739	

Thu-05-2015

01/05/15

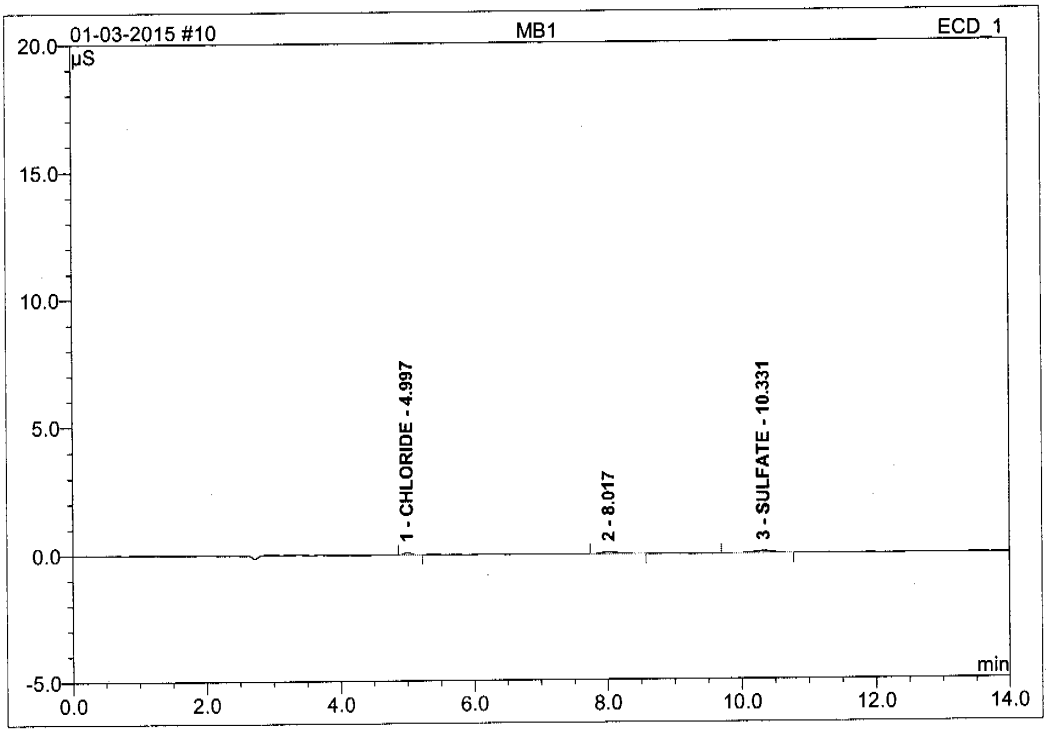
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

10 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 11:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.00	CHLORIDE	0.099	0.012	17.53	0.041	BMB
2	8.02	n.a.	0.081	0.024	35.52	n.a.	BMB
3	10.33	SULFATE	0.087	0.032	46.95	0.145	BMB
Total:			0.267	0.068	100.00	0.186	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

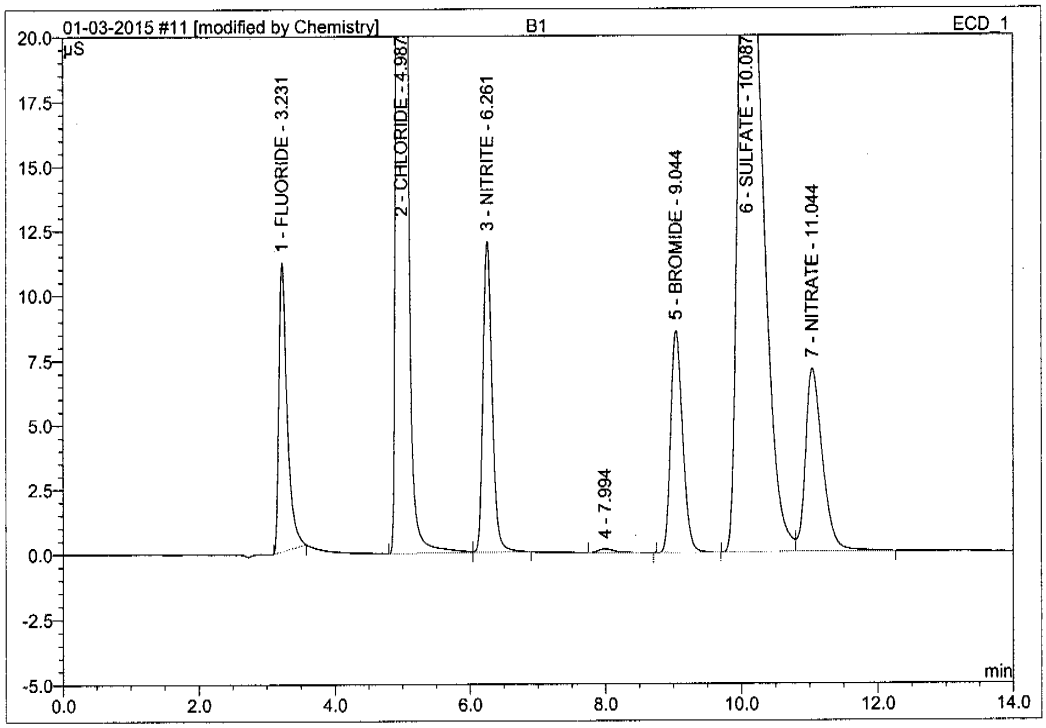
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 9:52 AM

11 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.23	FLUORIDE	11.161	1.566	4.66	2.746	BMB*
2	4.99	CHLORIDE	120.749	14.921	44.43	51.426	BM
3	6.26	NITRITE	12.012	1.876	5.59	2.388	MB
4	7.99	n.a.	0.146	0.044	0.13	n.a.	BMB
5	9.04	BROMIDE	8.597	1.748	5.20	13.099	BMB
6	10.09	SULFATE	29.150	11.382	33.89	51.917	BM
7	11.04	NITRATE	7.099	2.048	6.10	2.513	MB
Total:			188.915	33.585	100.00	124.089	

VM 01-05-2015

01/05/15

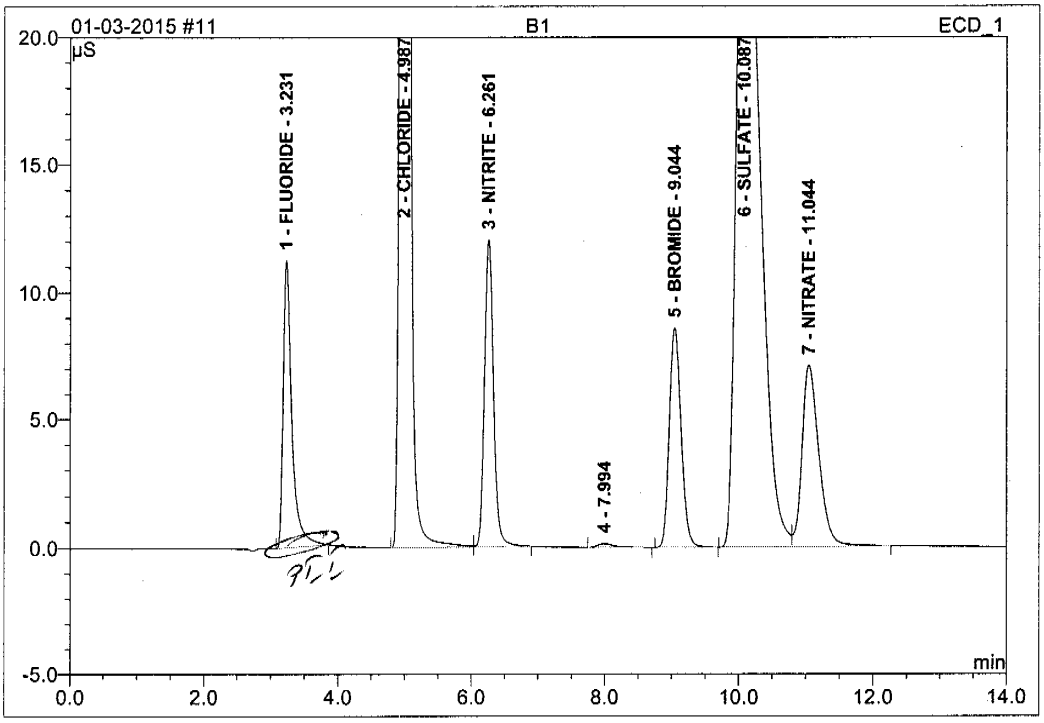
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.23	FLUORIDE	11.252	1.672	4.96	2.933	BMB
2	4.99	CHLORIDE	120.749	14.921	44.29	51.426	BM
3	6.26	NITRITE	12.012	1.876	5.57	2.388	MB
4	7.99	n.a.	0.146	0.044	0.13	n.a.	BMB
5	9.04	BROMIDE	8.597	1.748	5.19	13.099	BMB
6	10.09	SULFATE	29.150	11.382	33.78	51.917	BM
7	11.04	NITRATE	7.099	2.048	6.08	2.513	MB
Total:			189.006	33.692	100.00	124.275	

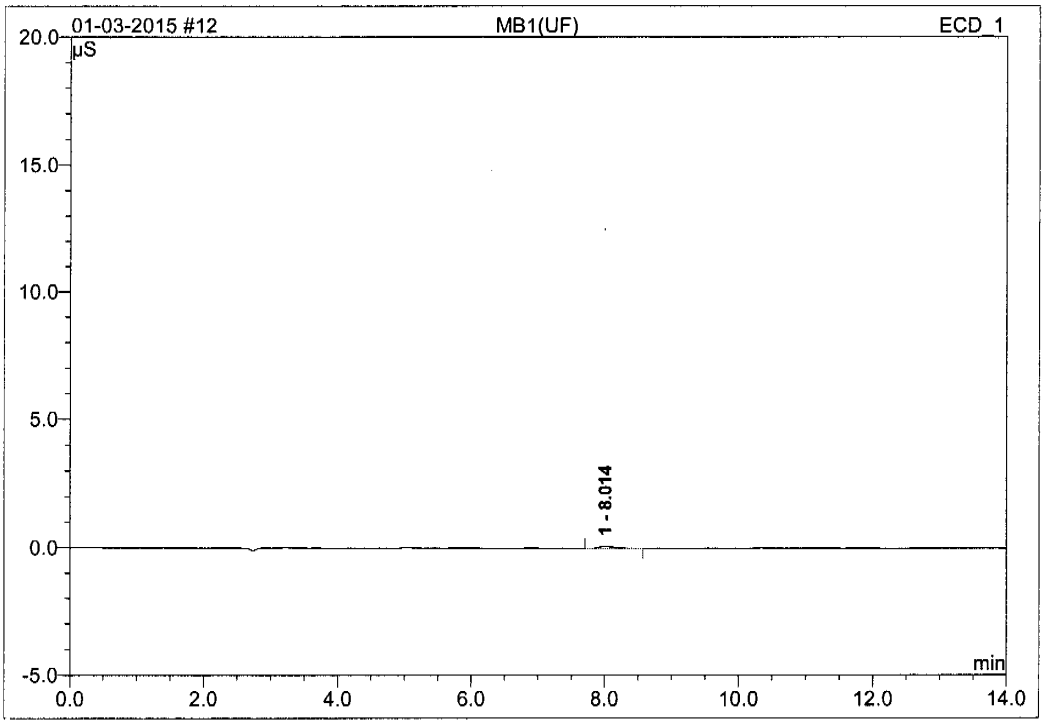
1/5 01-05-2015 01/05/15

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

12 MB1(UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1(UF)**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.01	n.a.	0.086	0.026	100.00	n.a.	BMB
Total:			0.086	0.026	100.00	0.000	

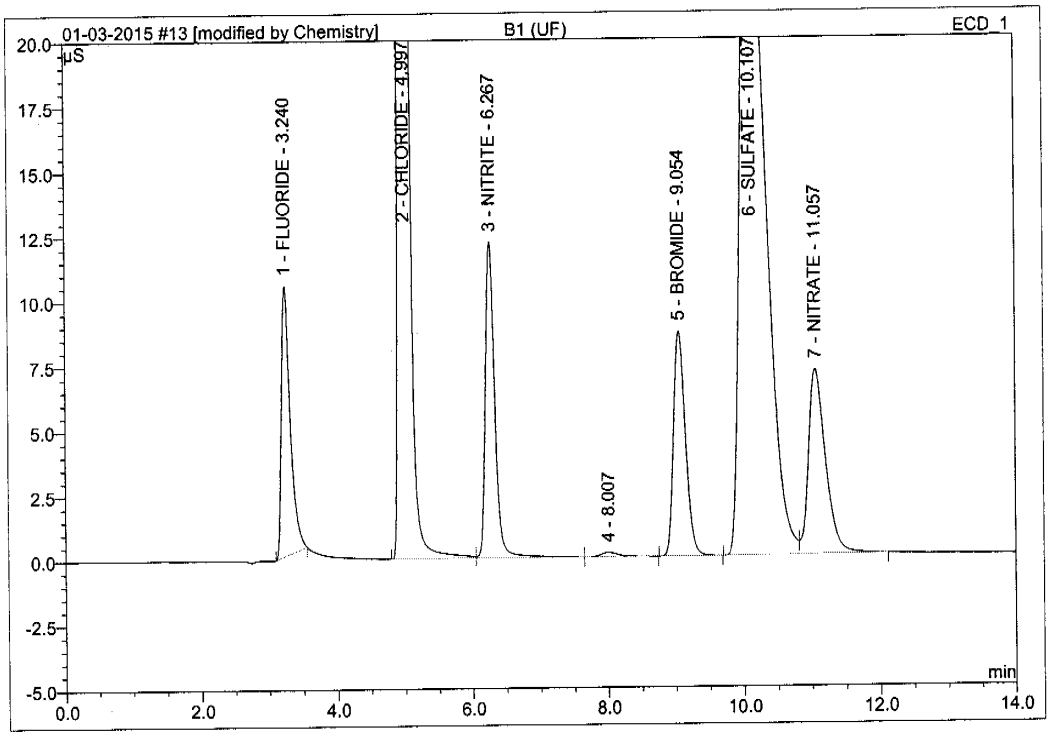
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

13 B1 (UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1 (UF)**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	10.440	1.568	4.60	2.749	BMB*
2	5.00	CHLORIDE	121.213	15.069	44.20	51.938	BM *
3	6.27	NITRITE	12.200	1.963	5.76	2.498	M *
4	8.01	n.a.	0.171	0.057	0.17	n.a.	MB*
5	9.05	BROMIDE	8.690	1.767	5.18	13.240	BMB
6	10.11	SULFATE	28.540	11.602	34.03	52.922	BM
7	11.06	NITRATE	7.137	2.067	6.06	2.536	MB
Total:			188.391	34.093	100.00	125.883	

jh 01-05-2015 01/05/15

Anions/Integration

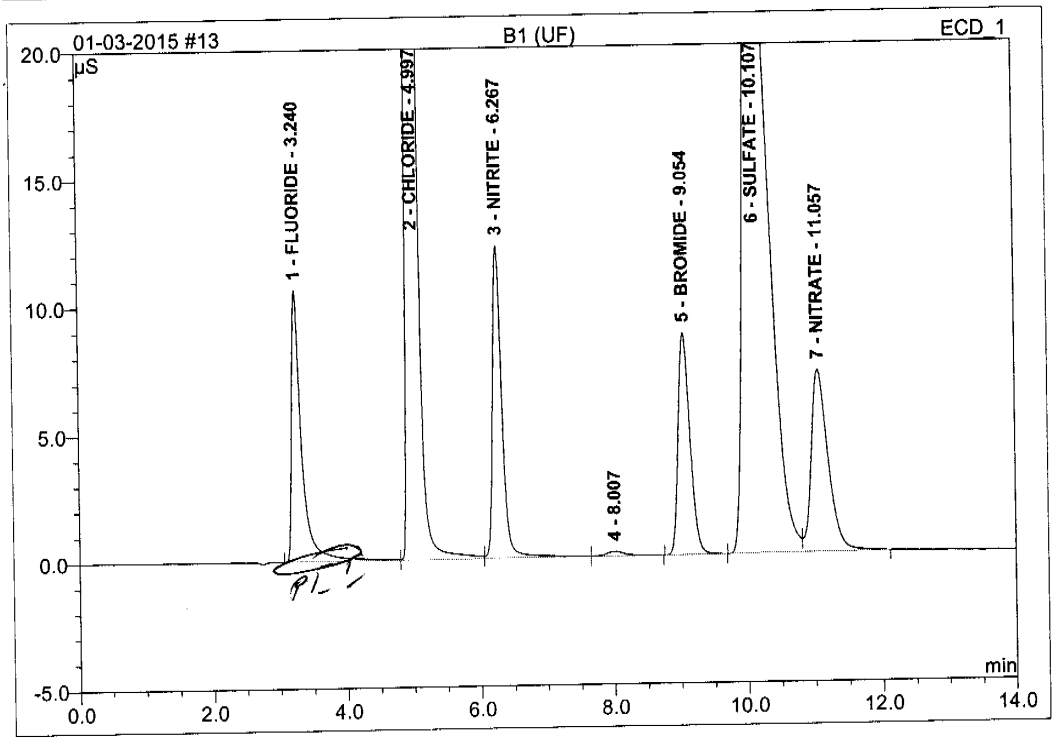
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

13 B1 (UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1 (UF)**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	10.606	1.846	5.36	3.238	BM
2	5.00	CHLORIDE	121.236	15.096	43.86	52.029	M
3	6.27	NITRITE	12.216	1.982	5.76	2.523	M
4	8.01	n.a.	0.176	0.060	0.18	n.a.	MB
5	9.05	BROMIDE	8.690	1.767	5.13	13.240	BMB
6	10.11	SULFATE	28.540	11.602	33.71	52.922	BM
7	11.06	NITRATE	7.137	2.067	6.01	2.536	MB
Total:			188.602	34.421	100.00	126.488	

VK 01-05-2015

01/05/15

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

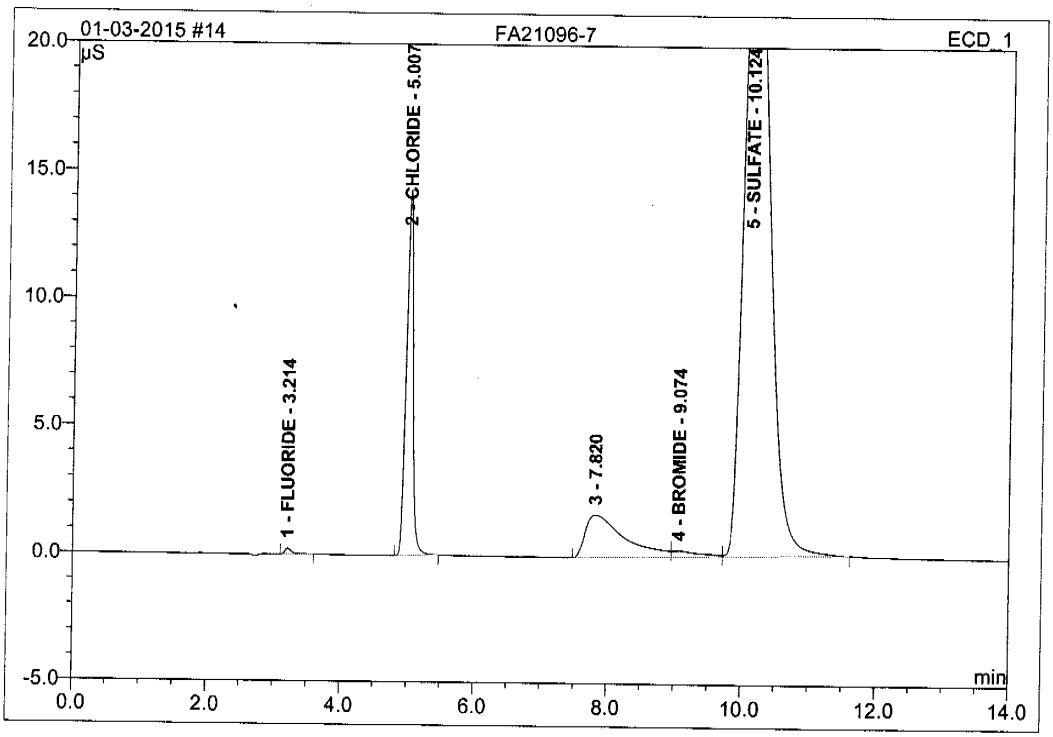
Anions/Integration

11.1 11

14 FA21096-7

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-7**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/3/2015 12:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	0.235	0.029	0.20	0.251	BMB
2	5.01	CHLORIDE	14.327	1.695	11.56	29.217	BMB
3	7.82	n.a.	1.668	1.134	7.73	n.a.	BM
4	9.07	BROMIDE	0.248	0.121	0.83	4.536	M
5	10.12	SULFATE	27.829	11.684	79.68	266.487	MB
Total:			44.307	14.663	100.00	300.491	

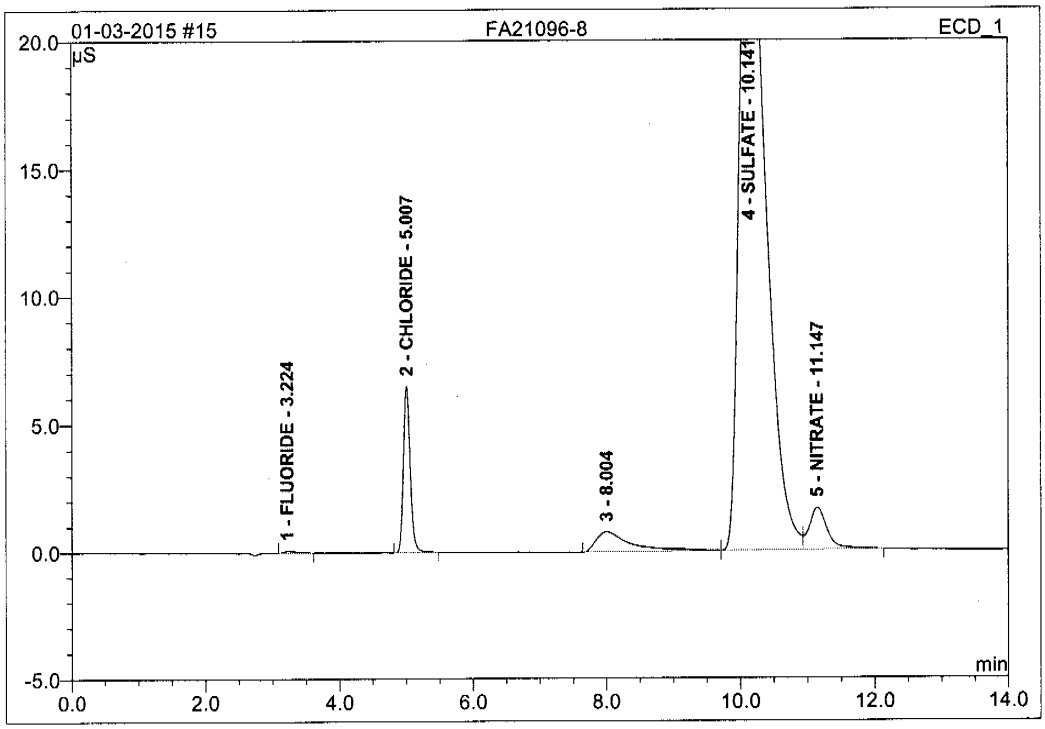
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

15 FA21096-8

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-8**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**25.0000**
Recording Time:	**1/3/2015 13:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	0.077	0.015	0.10	0.637	BMB
2	5.01	CHLORIDE	6.508	0.772	5.51	66.546	BMB
3	8.00	n.a.	0.795	0.488	3.48	n.a.	BM
4	10.14	SULFATE	27.880	12.216	87.20	1393.118	M
5	11.15	NITRATE	1.645	0.519	3.71	15.920	MB
Total:			36.906	14.010	100.00	1476.221	

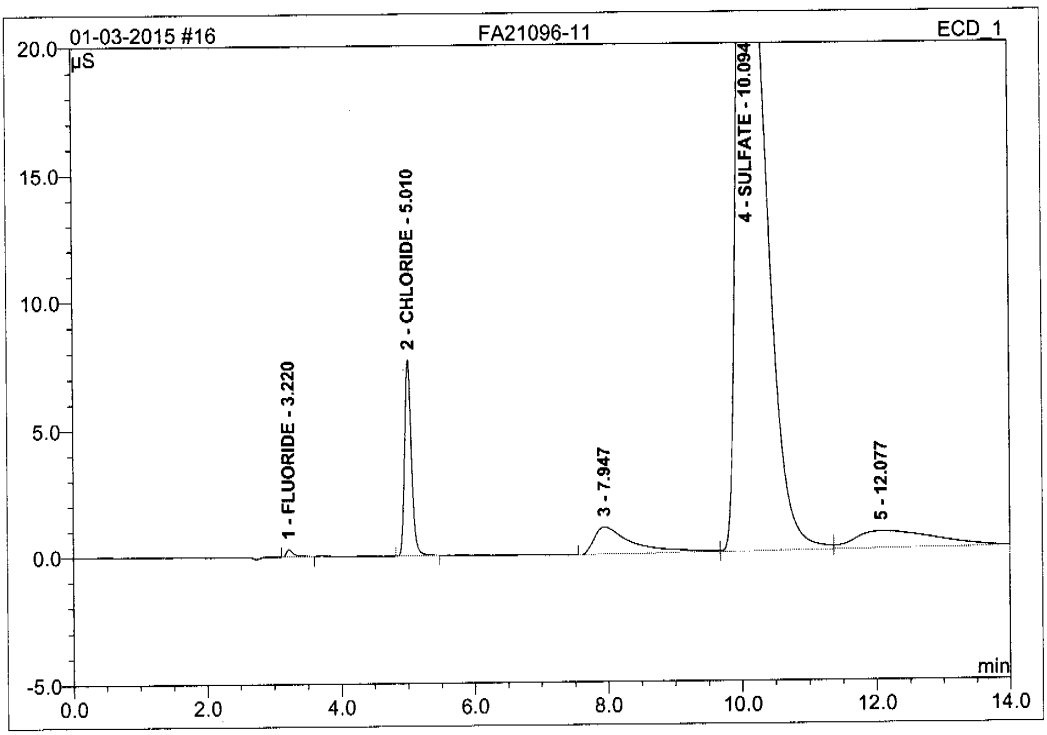
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

16 FA21096-11

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-11**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/3/2015 13:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	0.289	0.037	0.21	0.324	BMB
2	5.01	CHLORIDE	7.715	0.914	5.18	15.745	BMB
3	7.95	n.a.	1.080	0.703	3.98	n.a.	BM
4	10.09	SULFATE	33.548	15.064	85.36	343.567	M
5	12.08	n.a.	0.672	0.931	5.27	n.a.	MB
Total:			43.305	17.648	100.00	359.636	

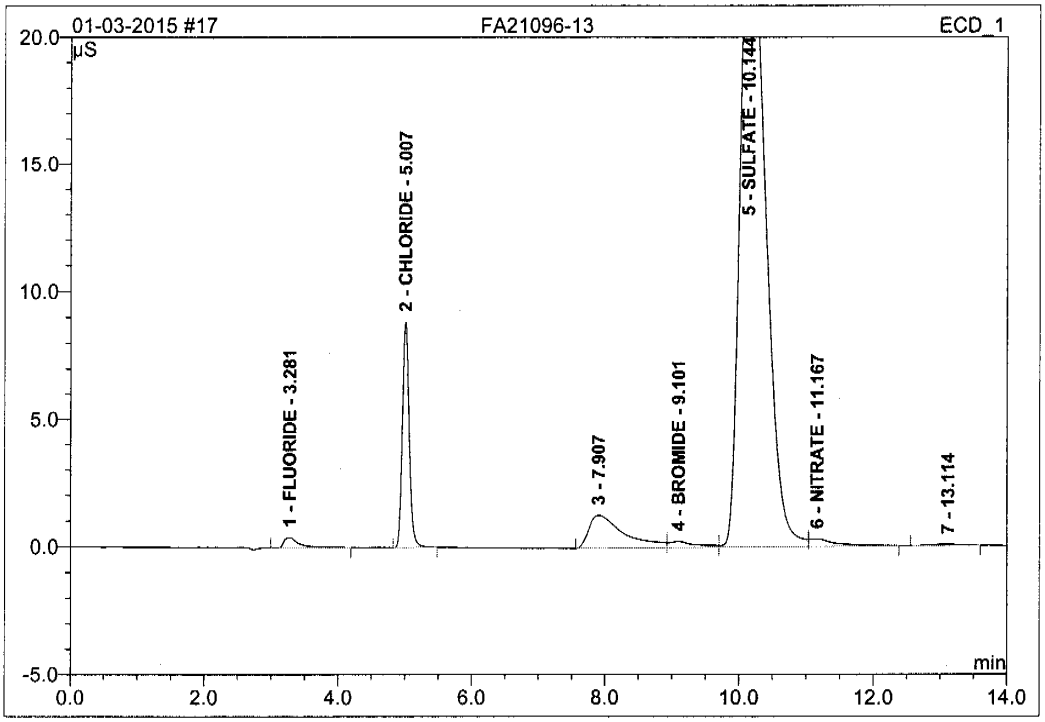
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

17 FA21096-13

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-13**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/3/2015 13:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.28	FLUORIDE	0.396	0.109	0.82	0.956	BMB
2	5.01	CHLORIDE	8.852	1.047	7.90	18.040	BMB
3	7.91	n.a.	1.280	0.777	5.87	n.a.	BM
4	9.10	BROMIDE	0.244	0.111	0.84	4.177	M
5	10.14	SULFATE	26.463	11.041	83.37	251.826	M
6	11.17	NITRATE	0.289	0.134	1.01	0.822	MB
7	13.11	n.a.	0.039	0.023	0.18	n.a.	BMB
Total:			37.563	13.243	100.00	275.821	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

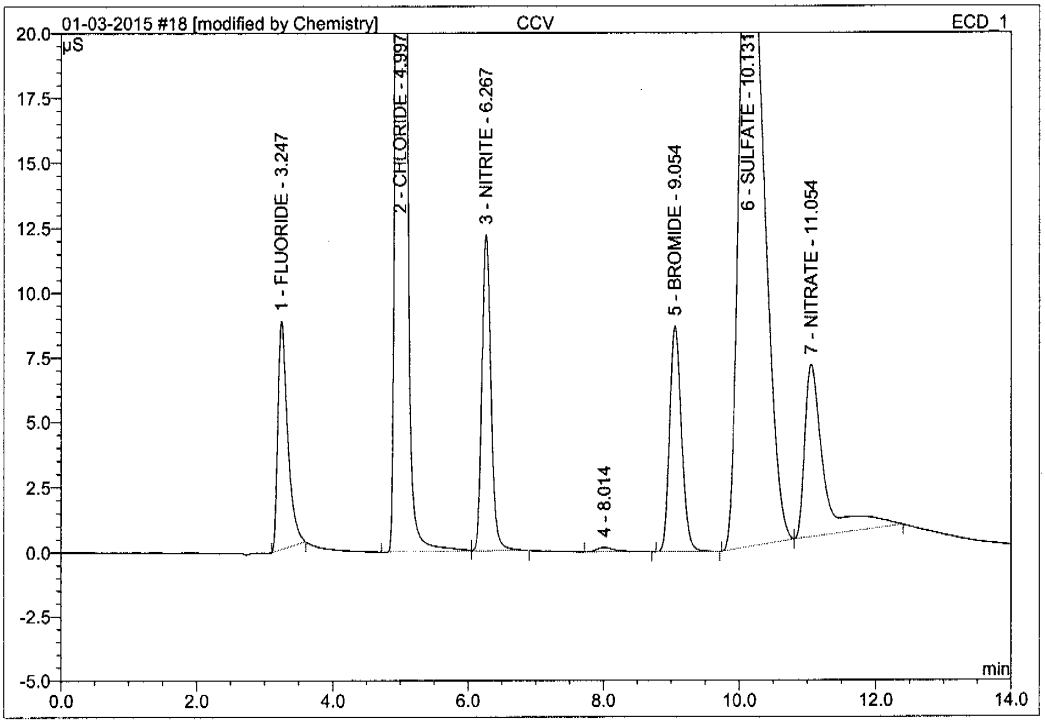
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 9:58 AM

18 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.808	1.463	4.39	2.566	BMB*
2	5.00	CHLORIDE	120.977	15.046	45.18	51.859	BM *
3	6.27	NITRITE	12.178	1.897	5.70	2.414	MB*
4	8.01	n.a.	0.167	0.054	0.16	n.a.	BMB
5	9.05	BROMIDE	8.686	1.762	5.29	13.203	BMB
6	10.13	SULFATE	27.385	10.899	32.73	49.716	BMb*
7	11.05	NITRATE	6.642	2.181	6.55	2.676	bMB
Total:			184.841	33.303	100.00	122.434	

JH 01-05-2015

01/05/15

Anions/Integration

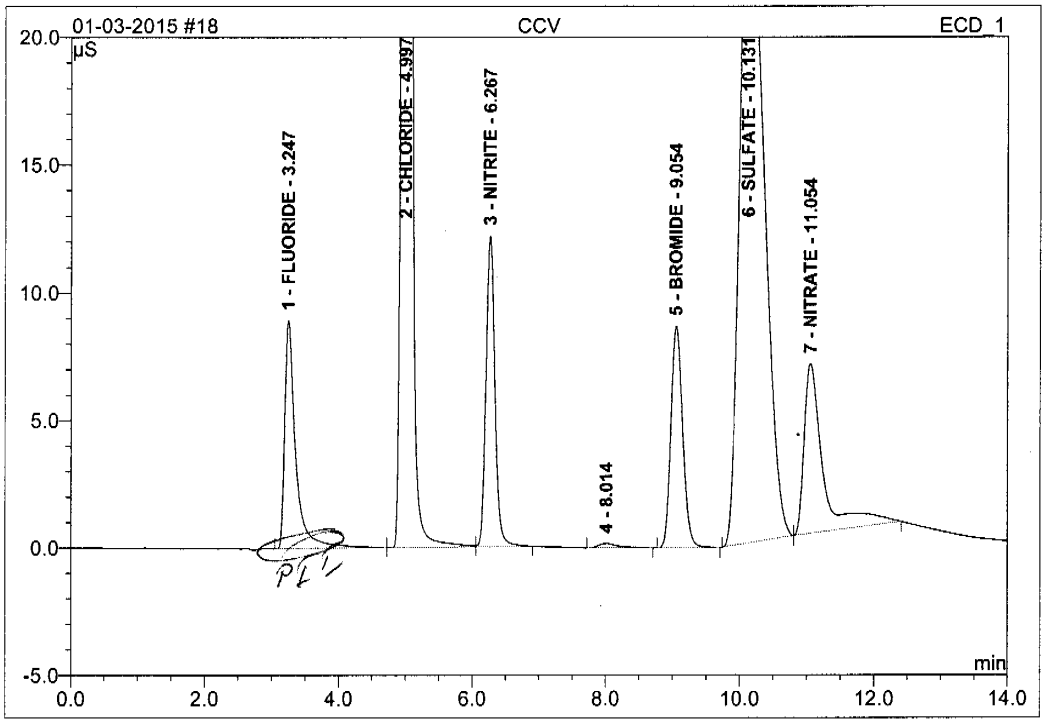
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

18 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.941	1.699	5.06	2.979	BM
2	5.00	CHLORIDE	120.978	15.047	44.86	51.861	M
3	6.27	NITRITE	12.178	1.897	5.66	2.414	MB
4	8.01	n.a.	0.167	0.054 -	0.16	n.a.	BMB
5	9.05	BROMIDE	8.686	1.762	5.25	13.203	BMB
6	10.13	SULFATE	27.385	10.899	32.50	49.716	BMB
7	11.05	NITRATE	6.642	2.181	6.50	2.676	bMB
Total:			184.975	33.539	100.00	122.848	

14 01-05-2015 01/05/15

Anions/Integration

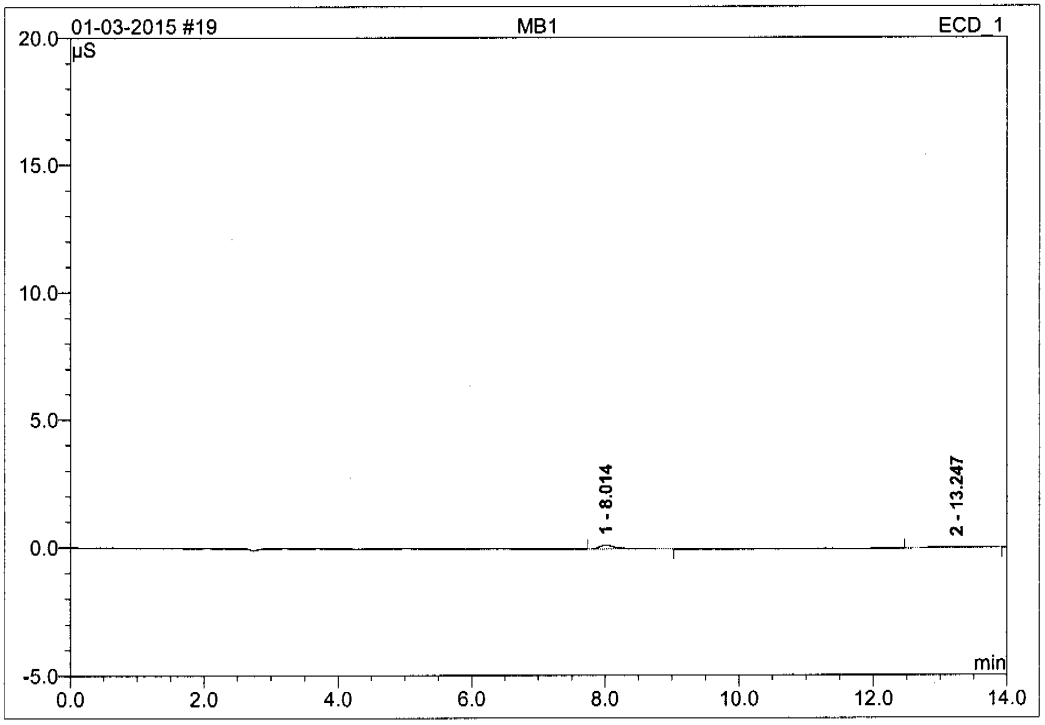
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

19 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



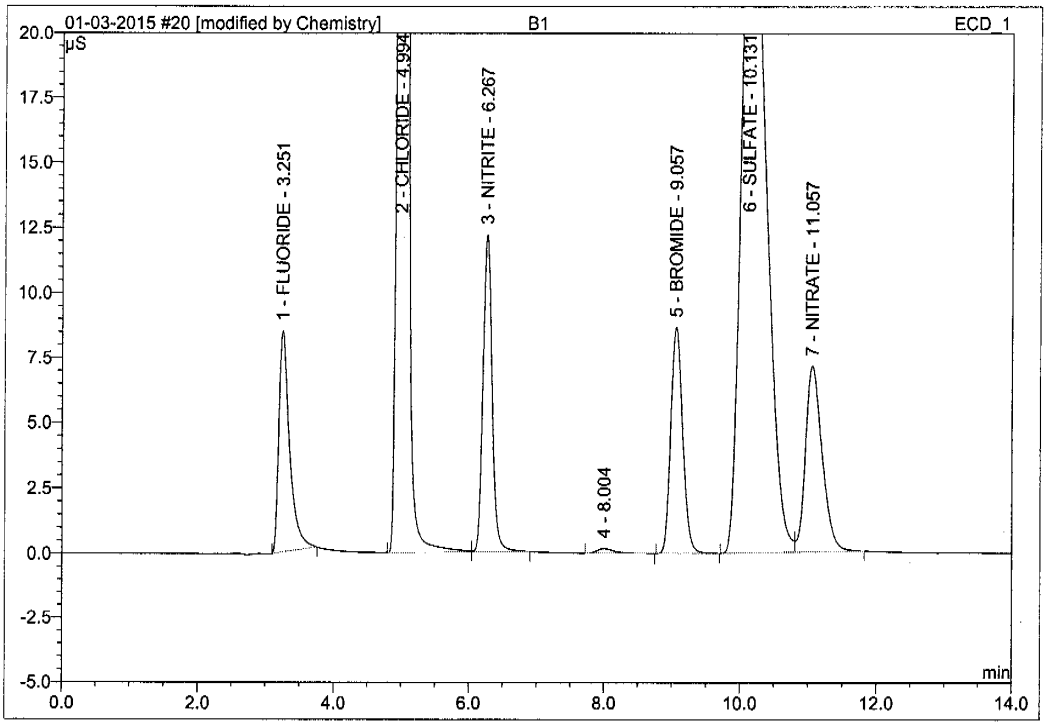
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.01	n.a.	0.152	0.050	58.22	n.a.	BMB
2	13.25	n.a.	0.046	0.036	41.78	n.a.	BMB
Total:			0.198	0.086	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

20 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.479	1.540	4.59	2.700	BMB*
2	4.99	CHLORIDE	120.625	15.005	44.77	51.716	BM *
3	6.27	NITRITE	12.152	1.889	5.64	2.404	MB*
4	8.00	n.a.	0.178	0.053	0.16	n.a.	BMB
5	9.06	BROMIDE	8.668	1.762	5.26	13.204	BMB
6	10.13	SULFATE	28.278	11.250	33.57	51.319	BM
7	11.06	NITRATE	7.107	2.017	6.02	2.475	MB
Total:			185.486	33.517	100.00	123.818	

JH 01-05-2015 01/05/15

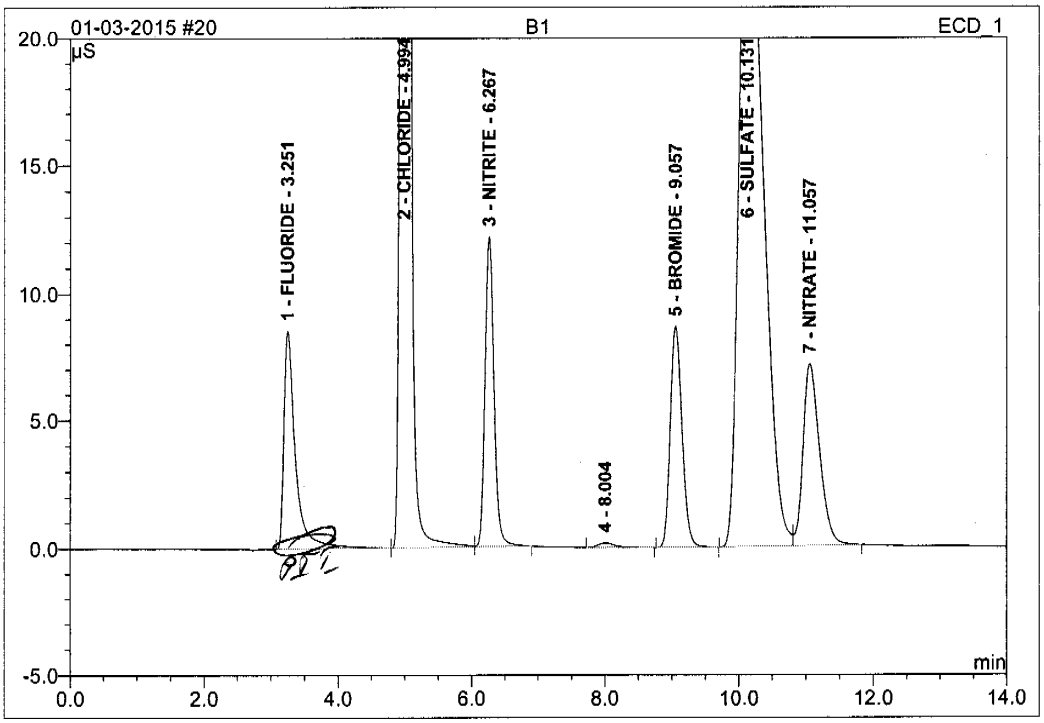
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

20 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.545	1.703	5.05	2.986	BM
2	4.99	CHLORIDE	120.630	15.010	44.56	51.732	M
3	6.27	NITRITE	12.153	1.890	5.61	2.405	MB
4	8.00	n.a.	0.178	0.053	0.16	n.a.	BMB
5	9.06	BROMIDE	8.668	1.762	5.23	13.204	BMB
6	10.13	SULFATE	28.278	11.250	33.40	51.319	BM
7	11.06	NITRATE	7.107	2.017	5.99	2.475	MB
Total:			185.558	33.685	100.00	124.121	

VH 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

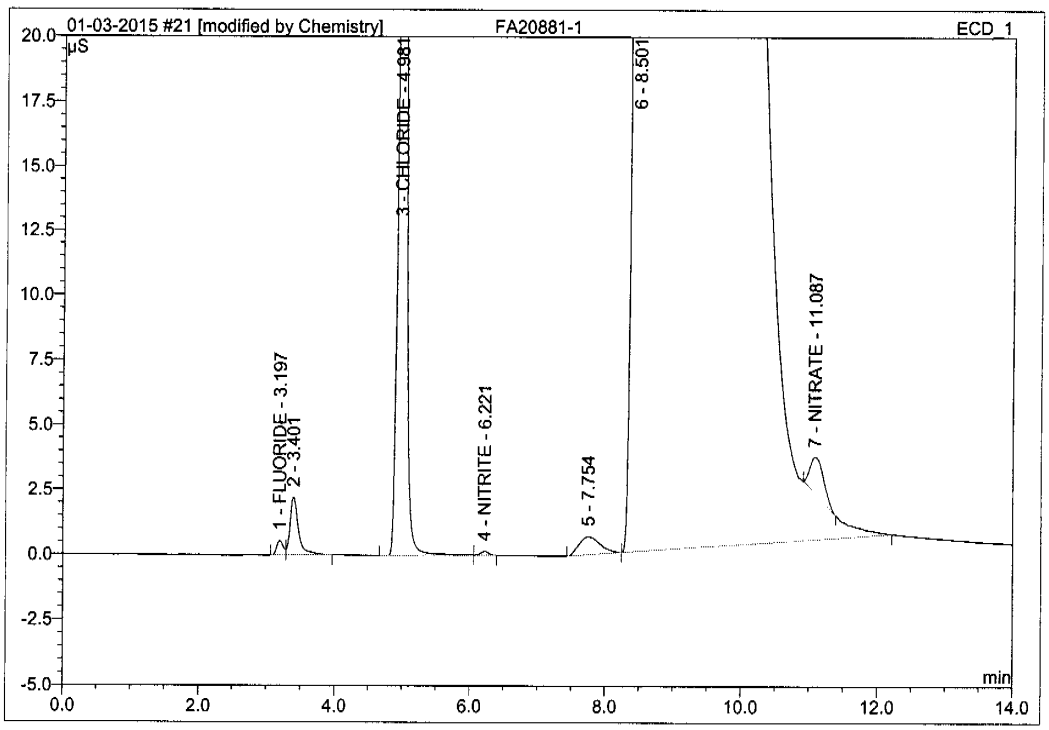
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:06 AM

21 FA20881-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.556	0.060	0.02	0.106	BM
2	3.40	n.a.	2.227	0.316	0.10	n.a.	MB
3	4.98	CHLORIDE	43.010	5.188	1.72	17.880	BM
4	6.22	NITRITE	0.159	0.022	0.01	0.028	MB
5	7.75	n.a.	0.699	0.253	0.08	n.a.	BMB
6	8.50	n.a.	287.562	295.543	97.95	n.a.	BMB*
7	11.09	NITRATE	1.403	0.335	0.11	0.410	Rd*
Total:			335.617	301.717	100.00	18.424	

JH 01-05-2015 01/05/15

Anions/Integration

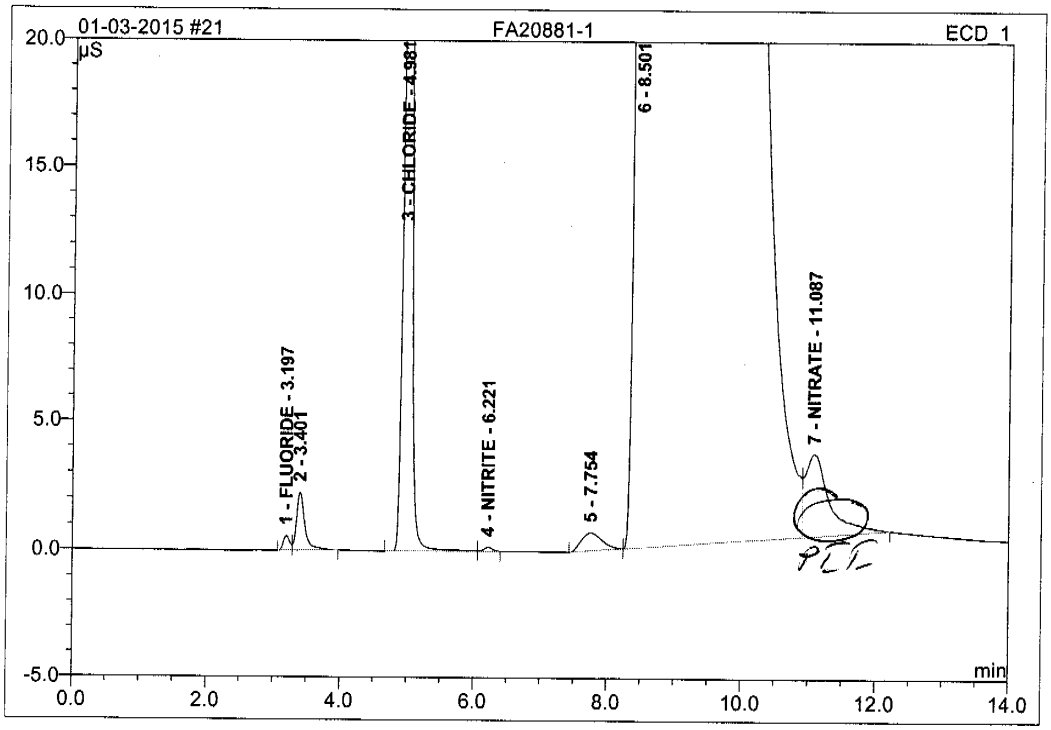
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

21 FA20881-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.556	0.060	0.02	0.106	BM
2	3.40	n.a.	2.227	0.316	0.10	n.a.	MB
3	4.98	CHLORIDE	43.010	5.188	1.72	17.880	BM
4	6.22	NITRITE	0.159	0.022	0.01	0.028	MB
5	7.75	n.a.	0.699	0.253	0.08	n.a.	BMB
6	8.50	n.a.	287.562	294.535	97.62	n.a.	BM
7	11.09	NITRATE	3.178	1.343	0.45	1.647	MB
Total:			337.391	301.717	100.00	19.661	

JL 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

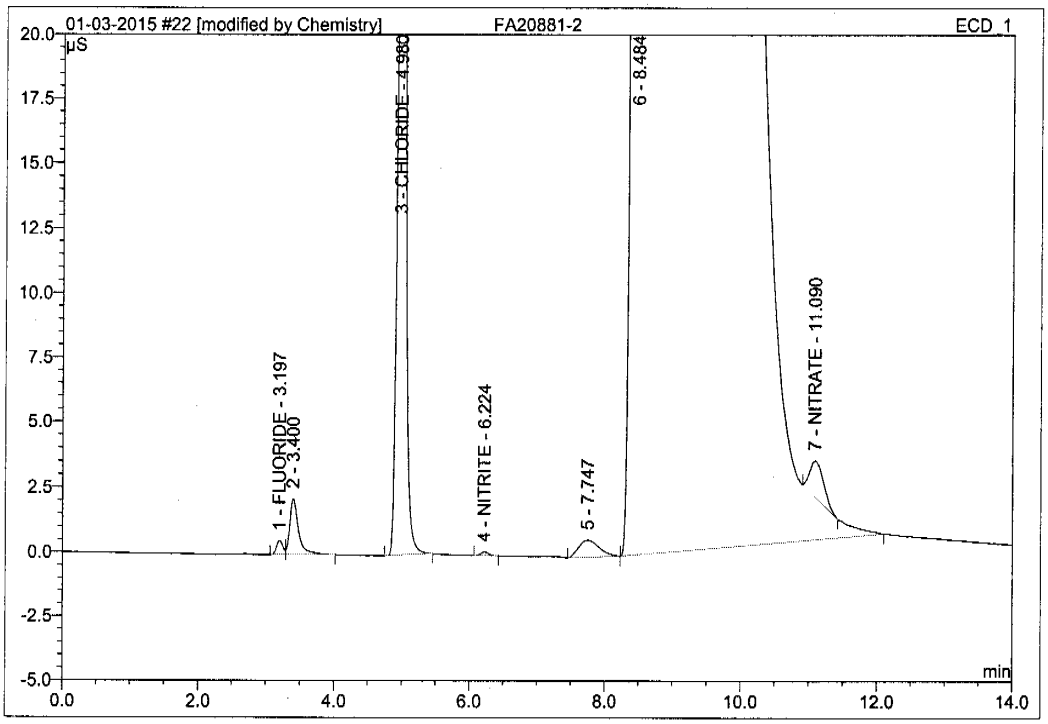
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:07 AM

22 FA20881-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.544	0.059	0.02	0.104	BM
2	3.40	n.a.	2.154	0.322	0.10	n.a.	MB
3	4.98	CHLORIDE	41.760	4.986	1.63	17.184	BMB
4	6.22	NITRITE	0.138	0.019	0.01	0.024	BMB
5	7.75	n.a.	0.659	0.231	0.08	n.a.	BMB
6	8.48	n.a.	291.565	300.724	98.06	n.a.	BMB*
7	11.09	NITRATE	1.386	0.335	0.11	0.411	Rd*
Total:			338.206	306.676	100.00	17.724	

VL 01-05-2015 1/05/15

Anions/Integration

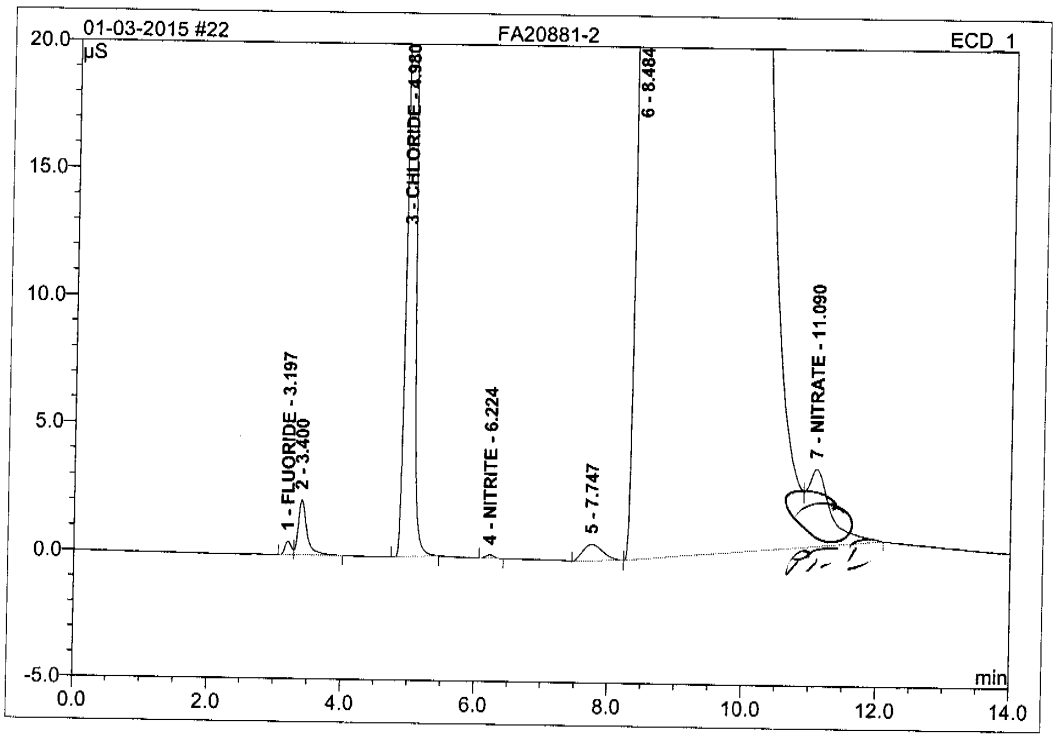
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

22 FA20881-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.544	0.059	0.02	0.104	BM
2	3.40	n.a.	2.154	0.322	0.10	n.a.	MB
3	4.98	CHLORIDE	41.760	4.986	1.63	17.184	BMB
4	6.22	NITRITE	0.138	0.019	0.01	0.024	BMB
5	7.75	n.a.	0.659	0.231	0.08	n.a.	BMB
6	8.48	n.a.	291.565	299.780	97.75	n.a.	BM
7	11.09	NITRATE	3.032	1.279	0.42	1.569	MB
Total:			339.853	306.676	100.00	18.882	

1/4 01-05-2015

01/06/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

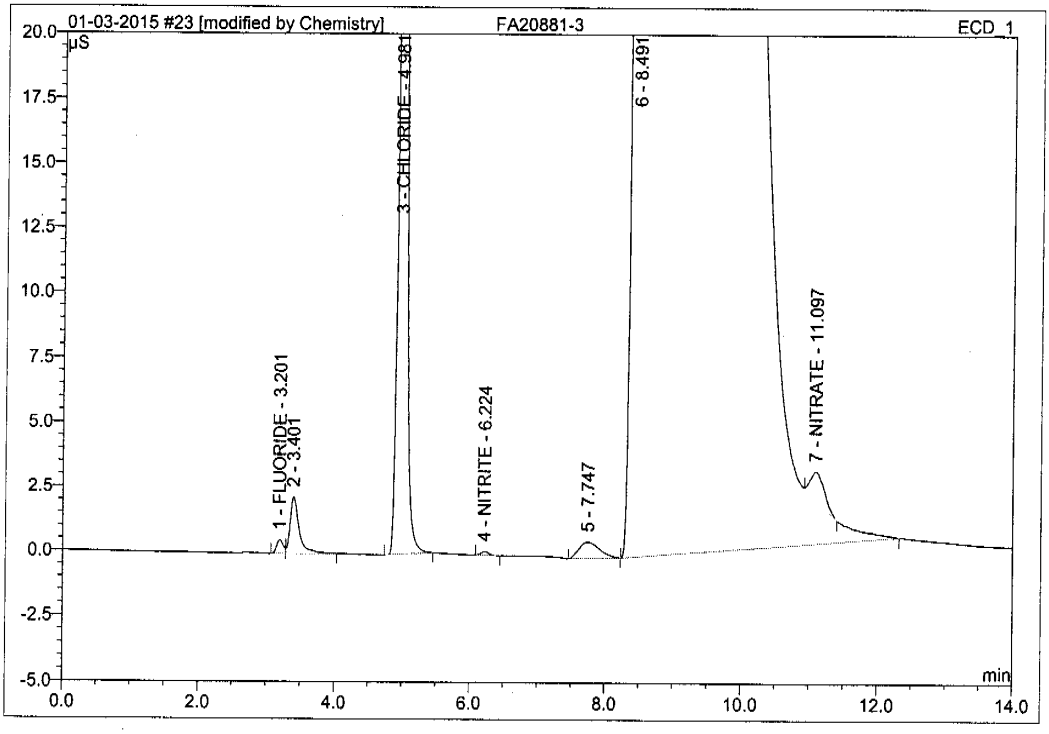
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:08 AM

23 FA20881-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.527	0.058	0.02	0.101	BM
2	3.40	n.a.	2.202	0.336	0.11	n.a.	MB
3	4.98	CHLORIDE	45.930	5.513	1.80	18.999	BMB
4	6.22	NITRITE	0.148	0.020	0.01	0.025	BMB
5	7.75	n.a.	0.640	0.228	0.07	n.a.	BMB
6	8.49	n.a.	289.885	299.711	97.91	n.a.	BMB*
7	11.10	NITRATE	1.064	0.245	0.08	0.301	Rd*
Total:			340.397	306.110	100.00	19.427	

I/A 01-05-2015 01/05/15

Anions/Integration

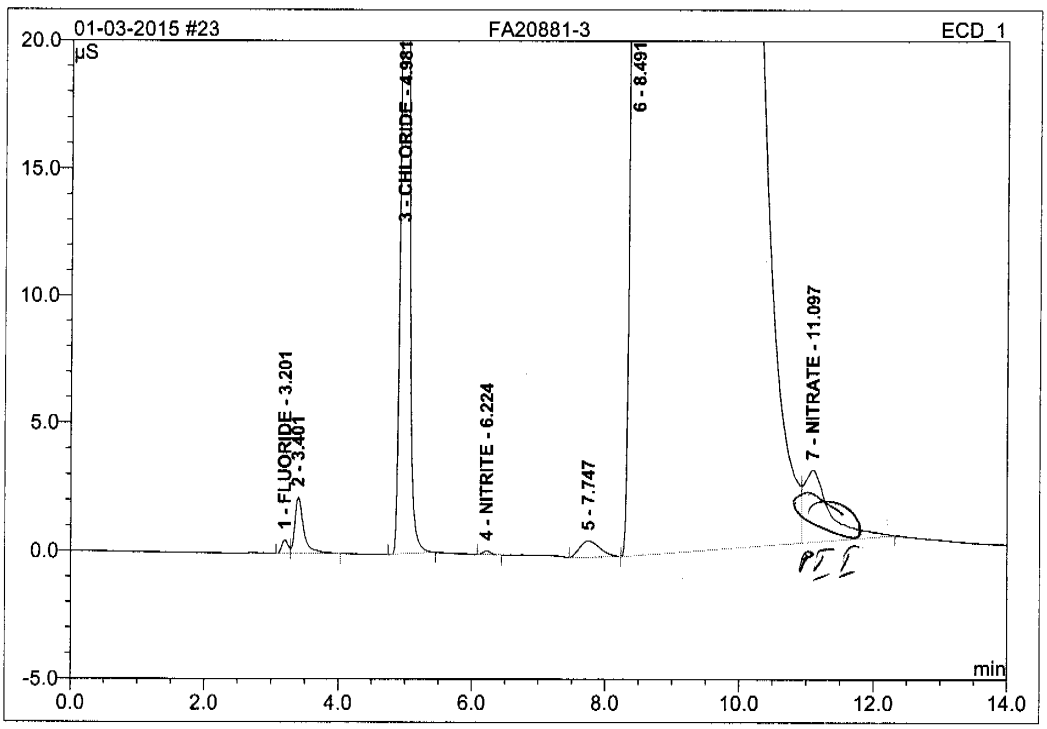
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

23 FA20881-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.527	0.058	0.02	0.101	BM
2	3.40	n.a.	2.202	0.336	0.11	n.a.	MB
3	4.98	CHLORIDE	45.930	5.513	1.80	18.999	BMB
4	6.22	NITRITE	0.148	0.020	0.01	0.025	BMB
5	7.75	n.a.	0.640	0.228	0.07	n.a.	BMB
6	8.49	n.a.	289.885	298.667	97.57	n.a.	BM
7	11.10	NITRATE	2.820	1.289	0.42	1.582	MB
Total:			342.153	306.110	100.00	20.708	

MA 01-05-2015 JPL 01/05/15

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

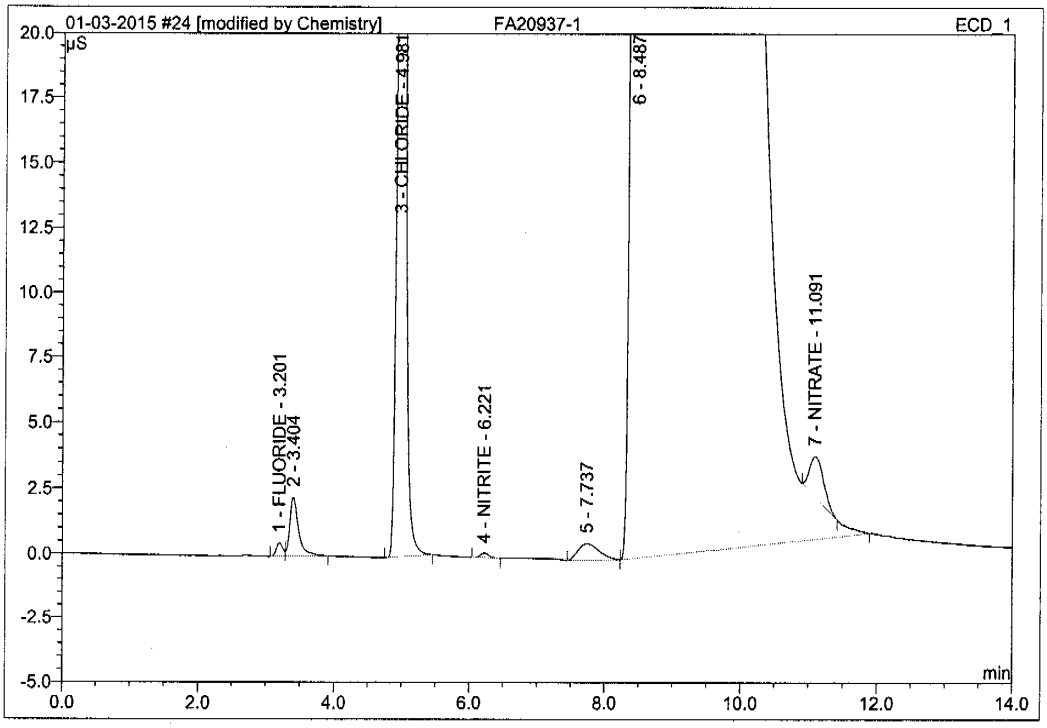
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:09 AM

24 FA20937-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-1**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.516	0.057	0.02	0.100	BM
2	3.40	n.a.	2.257	0.341	0.11	n.a.	MB
3	4.98	CHLORIDE	51.570	6.193	2.01	21.345	BMB
4	6.22	NITRITE	0.175	0.024	0.01	0.031	BMB
5	7.74	n.a.	0.653	0.237	0.08	n.a.	BMB
6	8.49	n.a.	290.951	300.792	97.66	n.a.	BMB*
7	11.09	NITRATE	1.521	0.365	0.12	0.448	Rd*
Total:			347.643	308.009	100.00	21.923	

VN 01-05-2015 01/05/15

Anions/Integration

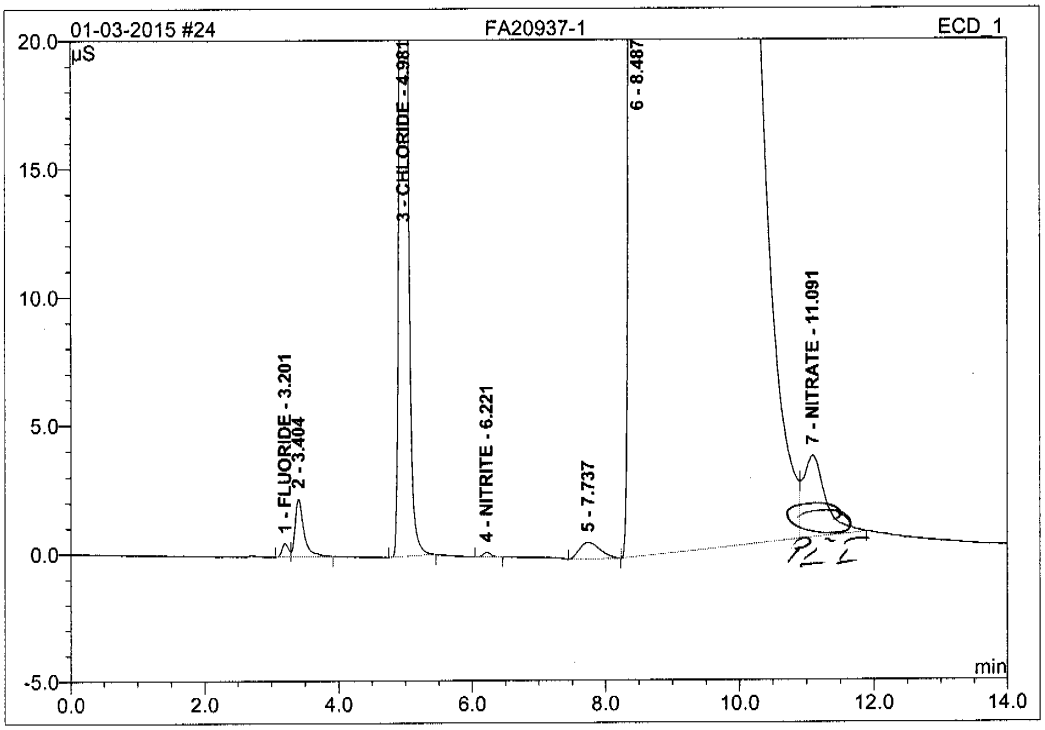
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

24 FA20937-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-1**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.516	0.057	0.02	0.100	BM
2	3.40	n.a.	2.257	0.341	0.11	n.a.	MB
3	4.98	CHLORIDE	51.570	6.193	2.01	21.345	BMB
4	6.22	NITRITE	0.175	0.024	0.01	0.031	BMB
5	7.74	n.a.	0.653	0.237	0.08	n.a.	BMB
6	8.49	n.a.	290.951	299.933	97.38	n.a.	BM
7	11.09	NITRATE	3.170	1.224	0.40	1.501	MB
Total:			349.292	308.009	100.00	22.976	

01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

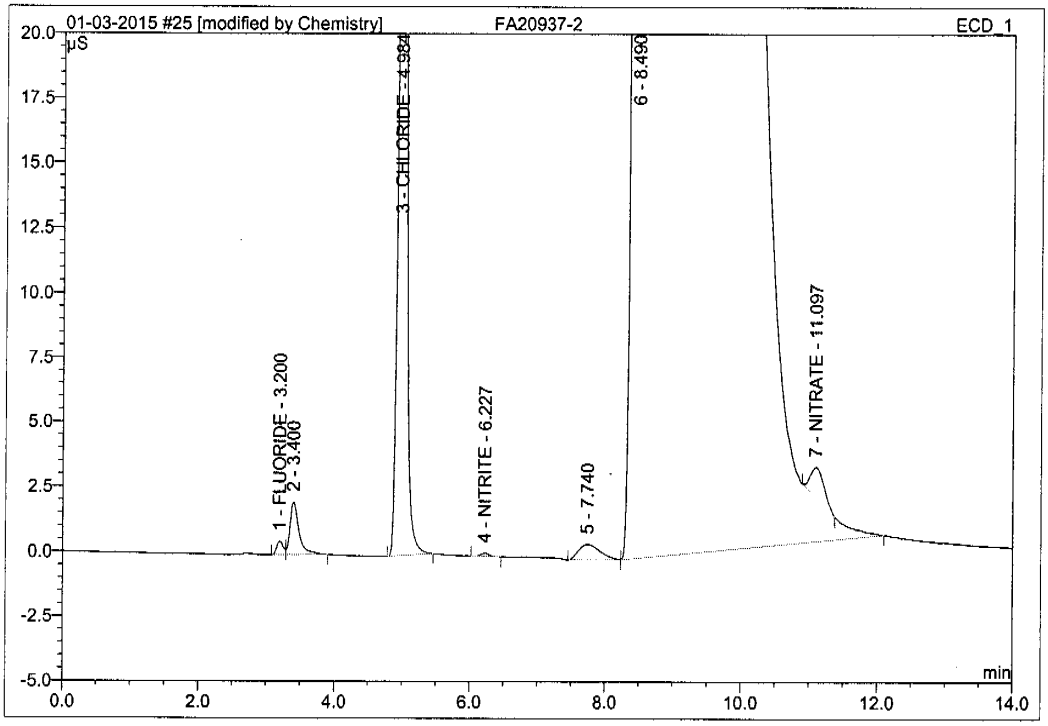
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:09 AM

25 FA20937-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-2**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.518	0.058	0.02	0.101	BM
2	3.40	n.a.	2.032	0.307	0.10	n.a.	MB
3	4.98	CHLORIDE	46.301	5.587	1.82	19.258	BMB
4	6.23	NITRITE	0.124	0.018	0.01	0.022	BMB
5	7.74	n.a.	0.600	0.218	0.07	n.a.	BMB
6	8.49	n.a.	291.047	301.009	97.90	n.a.	BMB*
7	11.10	NITRATE	1.173	0.277	0.09	0.340	Rd*
Total:			341.796	307.474	100.00	19.721	

VM 01-05-2015 01/05/15

Anions/Integration

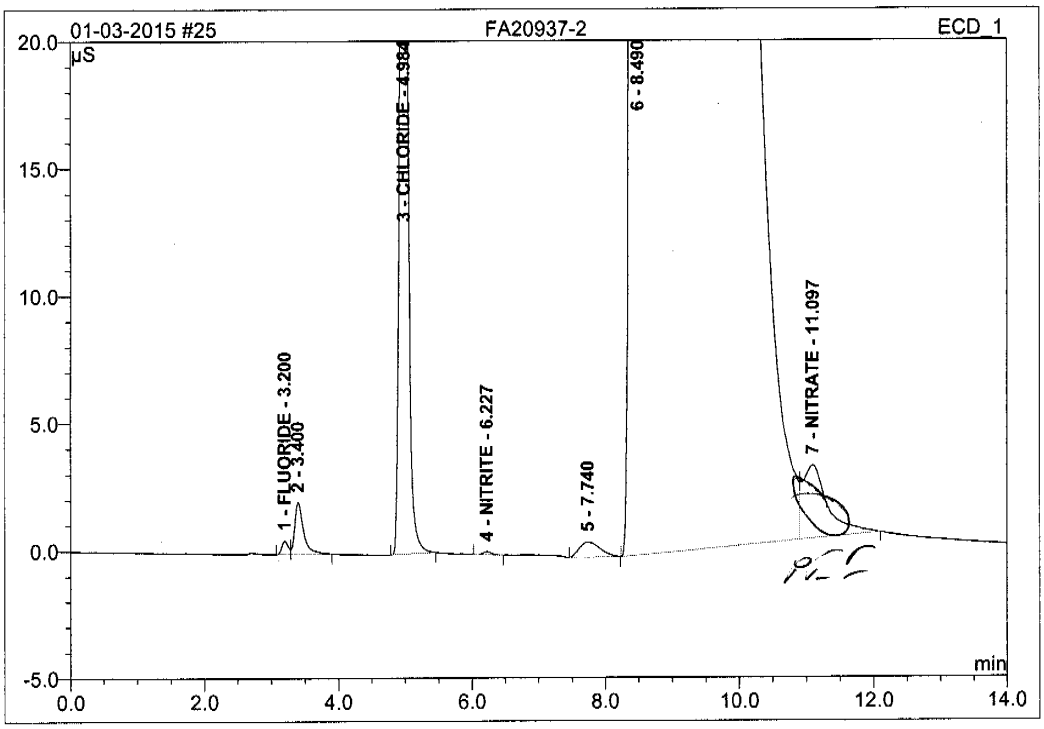
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

25 FA20937-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-2**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.518	0.058	0.02	0.101	BM
2	3.40	n.a.	2.032	0.307	0.10	n.a.	MB
3	4.98	CHLORIDE	46.301	5.587	1.82	19.258	BMB
4	6.23	NITRITE	0.124	0.018	0.01	0.022	BMB
5	7.74	n.a.	0.600	0.218	0.07	n.a.	BMB
6	8.49	n.a.	291.047	300.026	97.58	n.a.	BM
7	11.10	NITRATE	2.868	1.261	0.41	1.546	MB
Total:			343.491	307.474	100.00	20.927	

VG 01-05-2015

01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

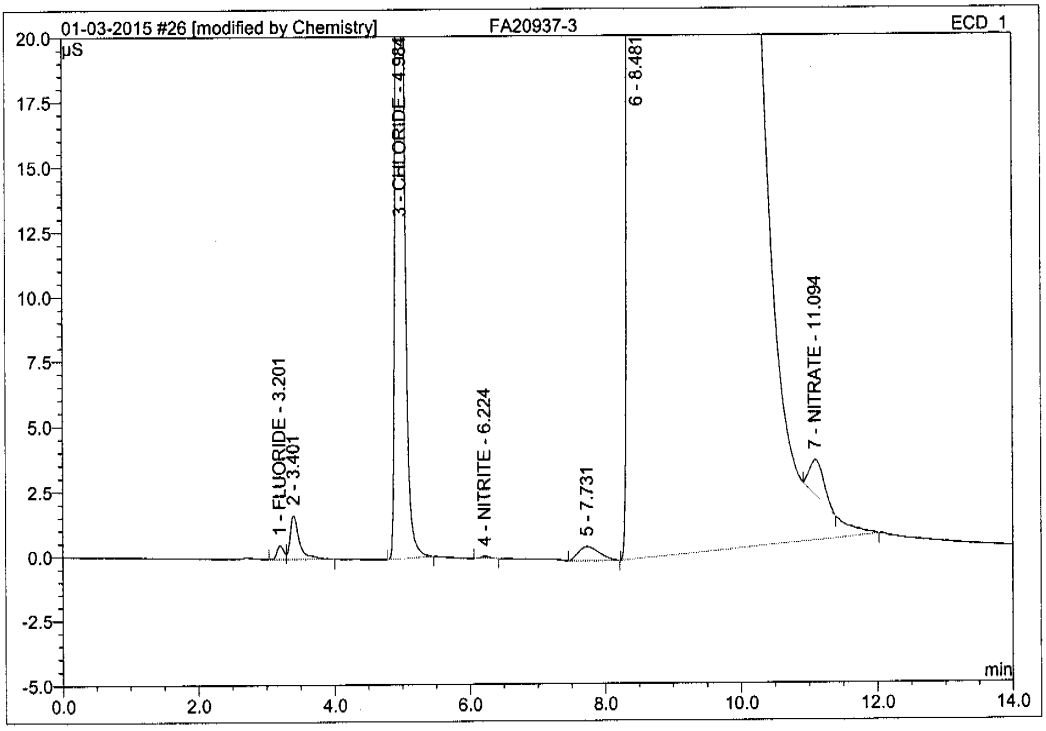
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:10 AM

26 FA20937-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-3**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.529	0.060	0.02	0.106	BM
2	3.40	n.a.	1.696	0.264	0.08	n.a.	MB
3	4.98	CHLORIDE	50.007	6.036	1.93	20.805	BMB
4	6.22	NITRITE	0.102	0.014	0.00	0.018	BMB
5	7.73	n.a.	0.552	0.198	0.06	n.a.	BMB
6	8.48	n.a.	294.515	305.185	97.79	n.a.	BMB*
7	11.09	NITRATE	1.345	0.328	0.10	0.402	Rd*
Total:			348.746	312.086	100.00	21.331	

lh 01-05-2015

01/05/15

Anions/Integration

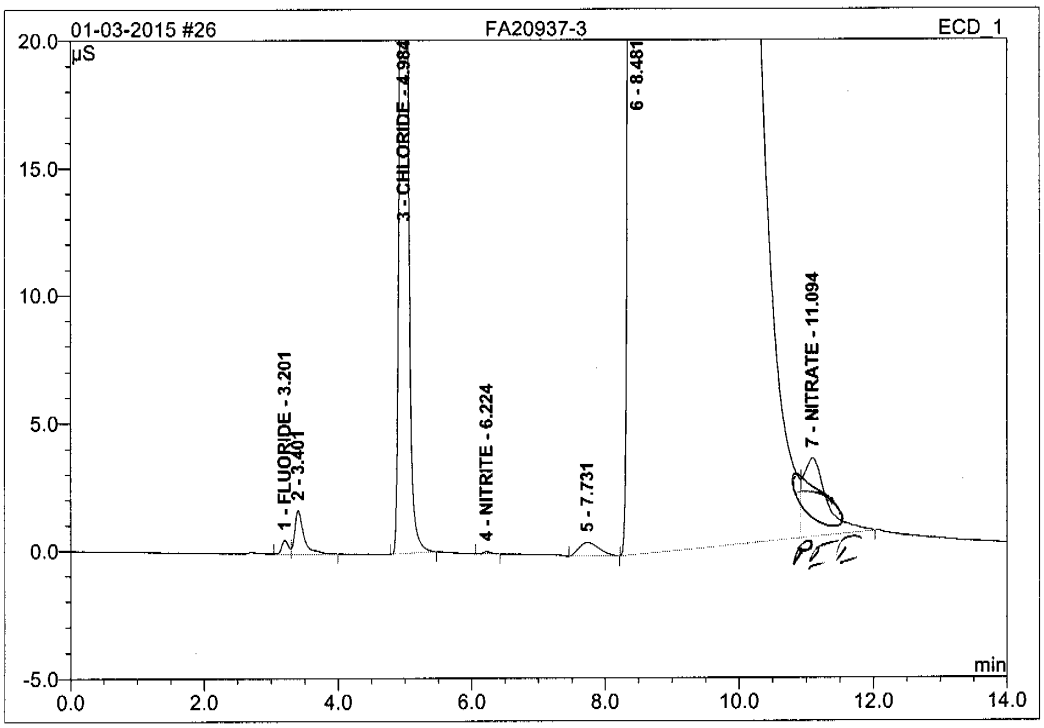
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

26 FA20937-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-3**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.529	0.060	0.02	0.106	BM
2	3.40	n.a.	1.696	0.264	0.08	n.a.	MB
3	4.98	CHLORIDE	50.007	6.036	1.93	20.805	BMB
4	6.22	NITRITE	0.102	0.014	0.00	0.018	BMB
5	7.73	n.a.	0.552	0.198	0.06	n.a.	BMB
6	8.48	n.a.	294.515	304.246	97.49	n.a.	BM
7	11.09	NITRATE	3.084	1.267	0.41	1.554	MB
Total:			350.485	312.086	100.00	22.483	

1.4 01-05-2015 01/05/15

Anions/Integration

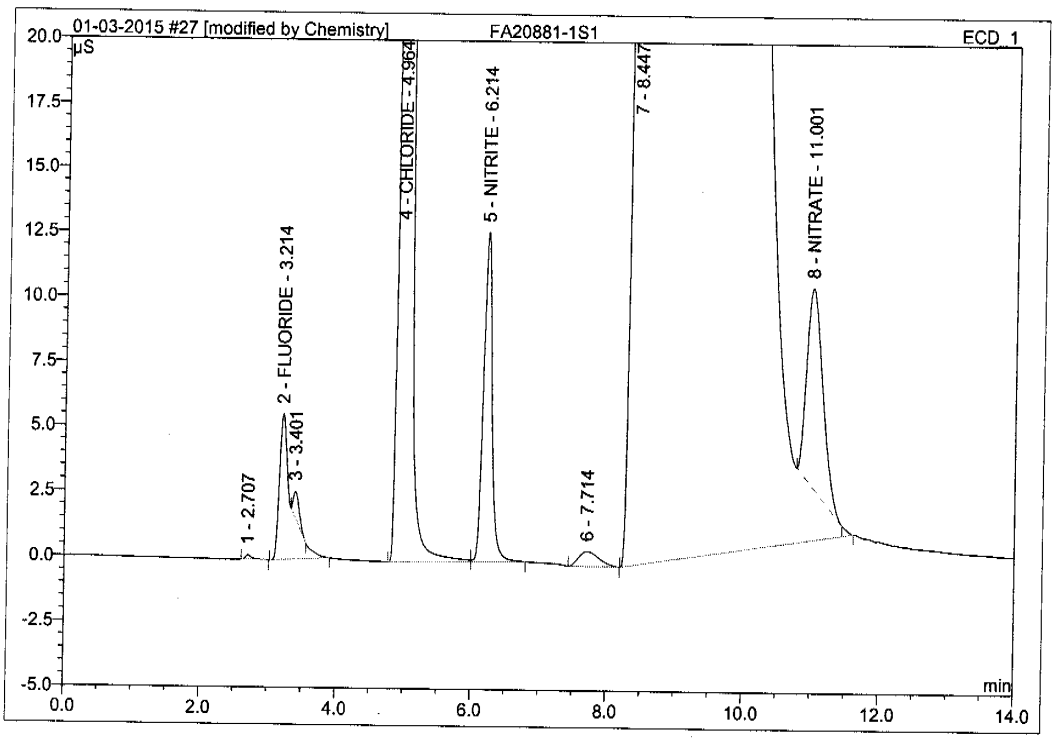
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

27 FA20881-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.182	0.019	0.01	n.a.	BMB
2	3.21	FLUORIDE	5.590	1.125	0.33	1.974	BMB
3	3.40	n.a.	1.031	0.105	0.03	n.a.	Rd
4	4.96	CHLORIDE	167.327	21.010	6.21	72.413	BM
5	6.21	NITRITE	12.678	1.882	0.56	2.395	MB
6	7.71	n.a.	0.586	0.204	0.06	n.a.	BMB
7	8.45	n.a.	306.545	311.839	92.18	n.a.	BMB*
8	11.00	NITRATE	7.638	2.103	0.62	2.580	Rd*
Total:			501.576	338.288	100.00	79.361	

VH 01-05-2015 01/05/15

Anions/Integration

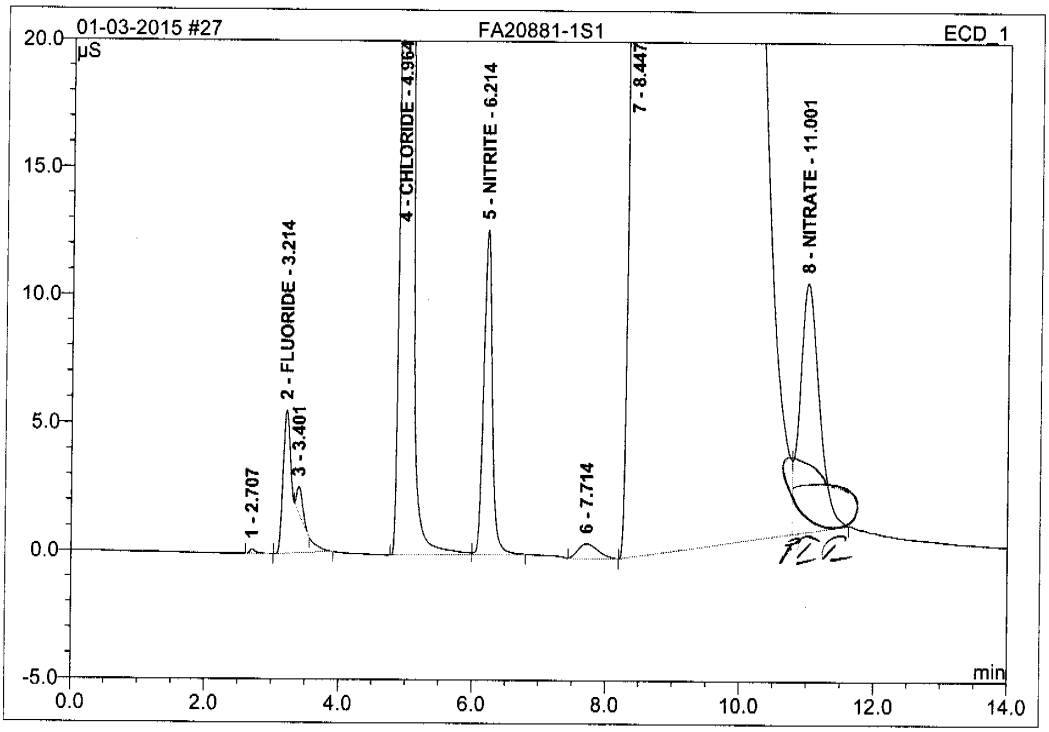
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

27 FA20881-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.182	0.019	0.01	n.a.	BMB
2	3.21	FLUORIDE	5.590	1.125	0.33	1.974	BMB
3	3.40	n.a.	1.031	0.105	0.03	n.a.	Rd
4	4.96	CHLORIDE	167.327	21.010	6.21	72.413	BM
5	6.21	NITRITE	12.678	1.882	0.56	2.395	MB
6	7.71	n.a.	0.586	0.204	0.06	n.a.	BMB
7	8.45	n.a.	306.545	310.711	91.85	n.a.	BM
8	11.00	NITRATE	9.713	3.231	0.96	3.963	MB
Total:			503.651	338.288	100.00	80.745	

V.K 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

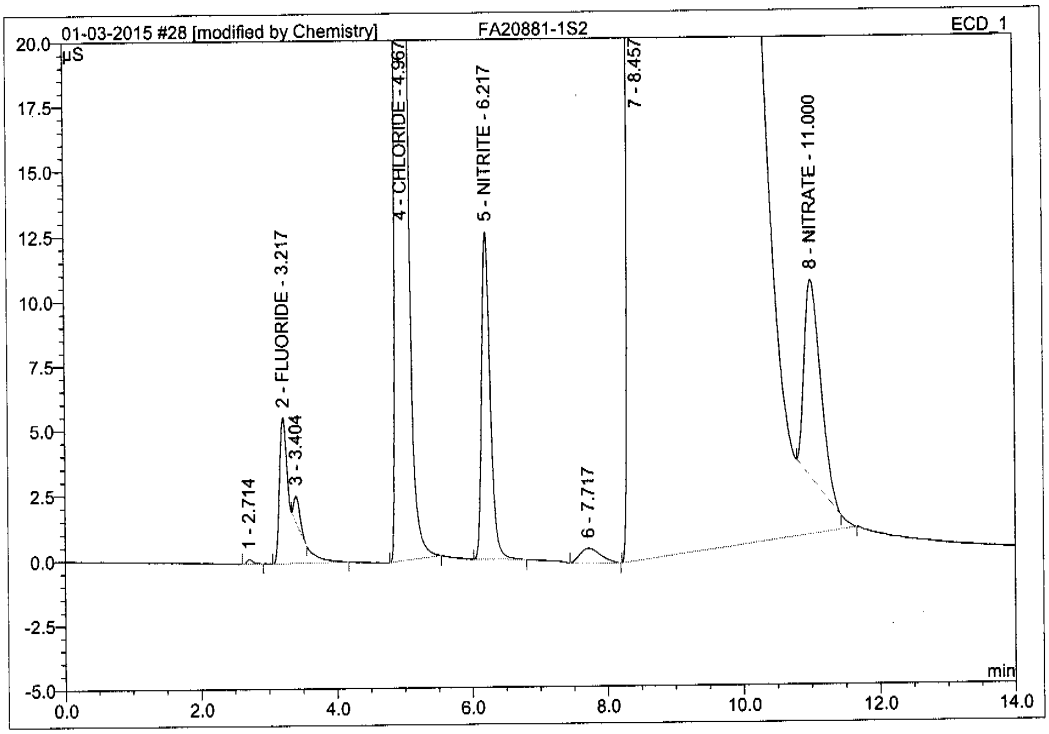
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

28 FA20881-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.170	0.017	0.01	n.a.	BMB
2	3.22	FLUORIDE	5.594	1.162	0.34	2.038	BMB
3	3.40	n.a.	1.008	0.103	0.03	n.a.	Rd
4	4.97	CHLORIDE	166.461	20.828	6.17	71.784	BMB
5	6.22	NITRITE	12.615	1.851	0.55	2.356	BMB
6	7.72	n.a.	0.573	0.201	0.06	n.a.	BMB
7	8.46	n.a.	305.906	311.452	92.23	n.a.	BMB*
8	11.00	NITRATE	7.640	2.094	0.62	2.568	Rd*
Total:			499.967	337.707	100.00	78.746	

VH 01-05-2015

01/05/15

Anions/Integration

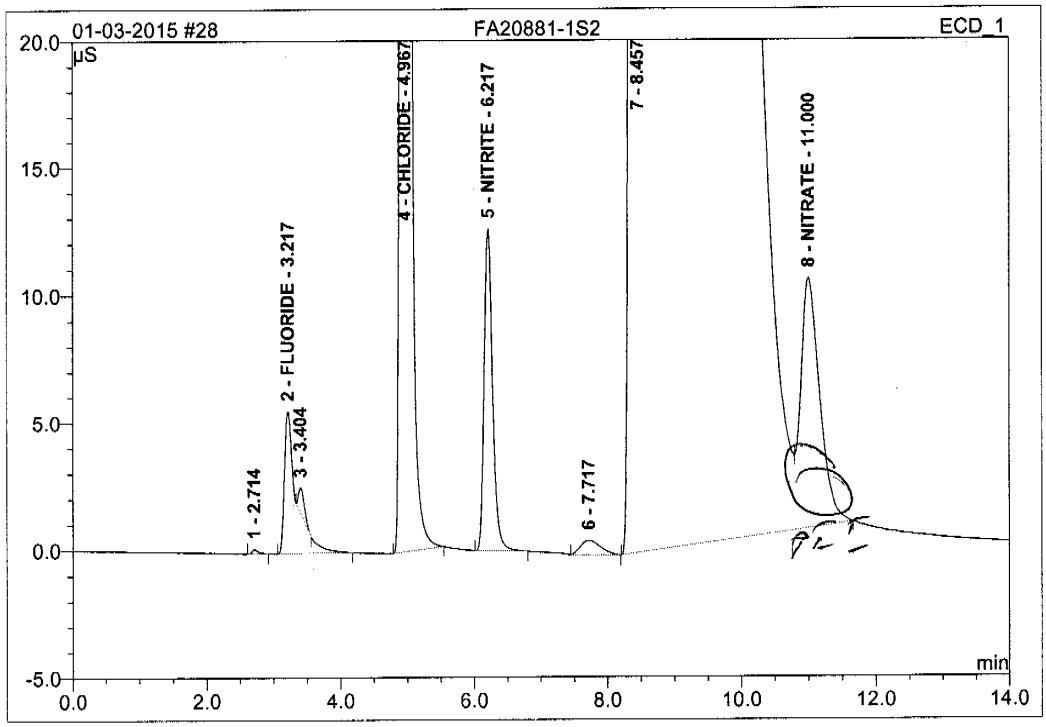
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

28 FA20881-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.170	0.017	0.01	n.a.	BMB
2	3.22	FLUORIDE	5.594	1.162	0.34	2.038	BMB
3	3.40	n.a.	1.008	0.103	0.03	n.a.	Rd
4	4.97	CHLORIDE	166.461	20.828	6.17	71.784	BMB
5	6.22	NITRITE	12.615	1.851	0.55	2.356	BMB
6	7.72	n.a.	0.573	0.201	0.06	n.a.	BMB
7	8.46	n.a.	305.906	310.284	91.88	n.a.	BM
8	11.00	NITRATE	9.797	3.262	0.97	4.001	MB
Total:			502.123	337.707	100.00	80.178	

VL 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

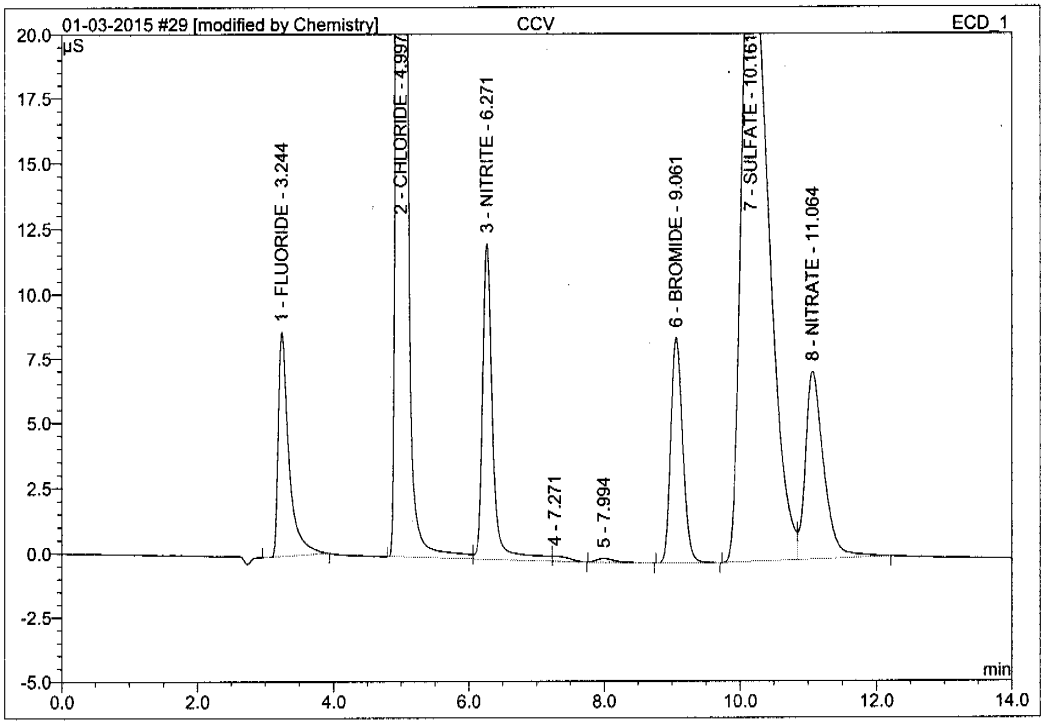
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:15 AM

29 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	8.644	1.561	4.54	2.737	BMB*
2	5.00	CHLORIDE	120.692	15.160	44.11	52.252	BM
3	6.27	NITRITE	12.174	2.106	6.13	2.681	M
4	7.27	n.a.	0.200	0.055	0.16	n.a.	MB
5	7.99	n.a.	0.151	0.047	0.14	n.a.	BMB
6	9.06	BROMIDE	8.702	1.770	5.15	13.259	BMB
7	10.16	SULFATE	26.131	11.432	33.26	52.148	BM
8	11.06	NITRATE	7.230	2.241	6.52	2.749	MB
Total:			183.925	34.372	100.00	125.826	

VK 01-05-2015 01/05/15

Anions/Integration

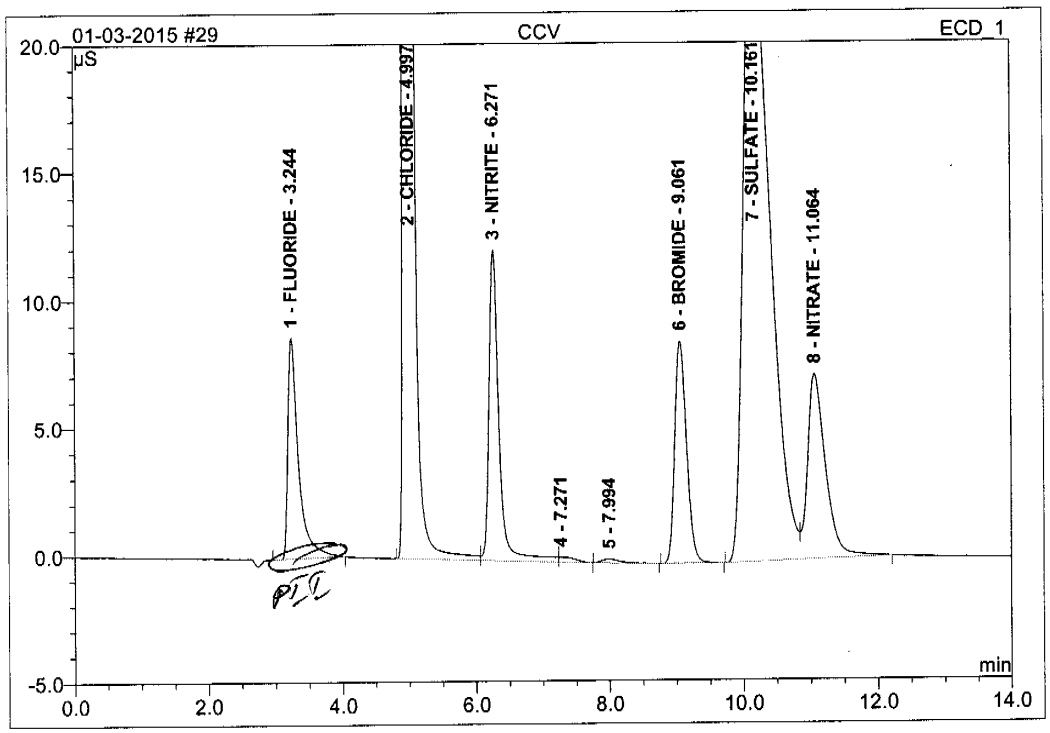
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

29 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	8.659	1.586	4.61	2.782	BMB
2	5.00	CHLORIDE	120.692	15.160	44.07	52.252	BM
3	6.27	NITRITE	12.174	2.106	6.12	2.681	M
4	7.27	n.a.	0.200	0.055	0.16	n.a.	MB
5	7.99	n.a.	0.151	0.047	0.14	n.a.	BMB
6	9.06	BROMIDE	8.702	1.770	5.14	13.259	BMB
7	10.16	SULFATE	26.131	11.432	33.24	52.148	BM
8	11.06	NITRATE	7.230	2.241	6.51	2.749	MB
Total:			183.939	34.398	100.00	125.871	

V-L 01-05-2015

01/05/15

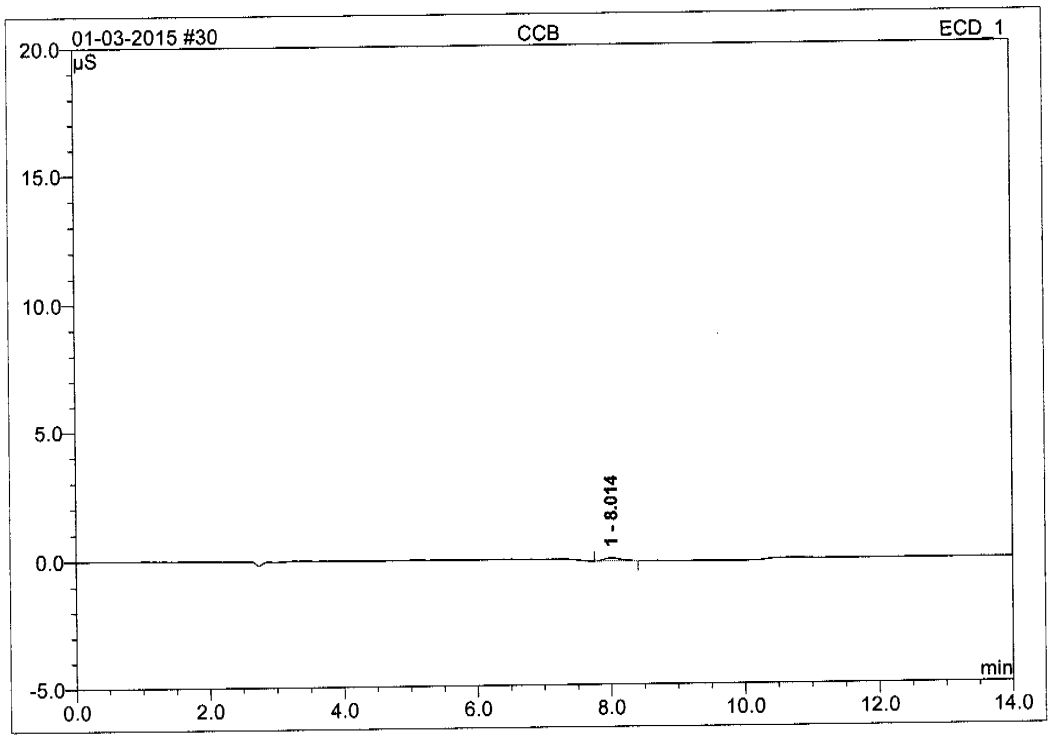
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

30 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.01	n.a.	0.123	0.035	100.00	n.a.	BMB
Total:			0.123	0.035	100.00	0.000	

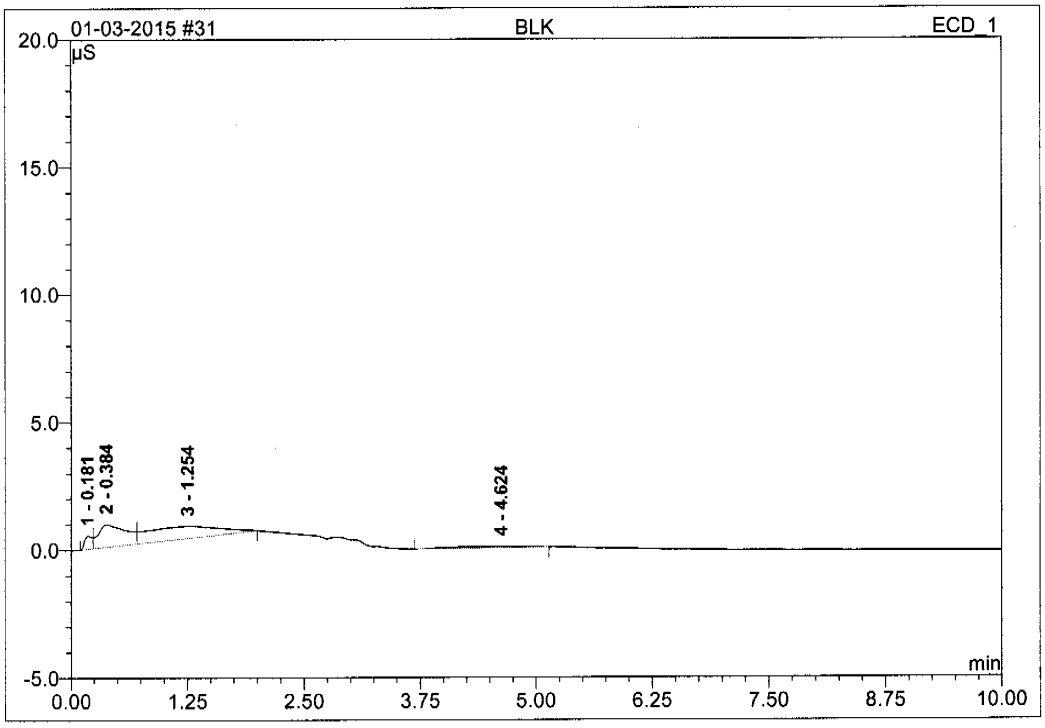
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

31 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.00**	*Sample Amount:*	**1.0000**

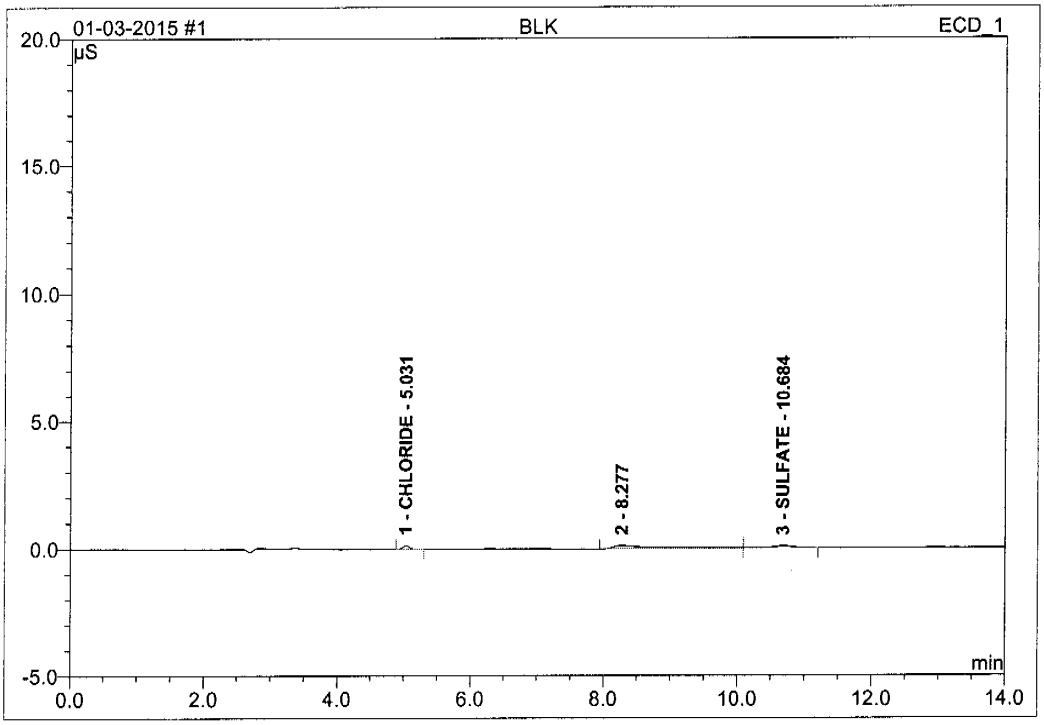


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	0.18	n.a.	0.525	0.051	5.99	n.a.	BM
2	0.38	n.a.	0.895	0.308	36.40	n.a.	M
3	1.25	n.a.	0.476	0.439	51.91	n.a.	MB
4	4.62	n.a.	0.050	0.048	5.70	n.a.	BMB
Total:			1.945	0.846	100.00	0.000	

1 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



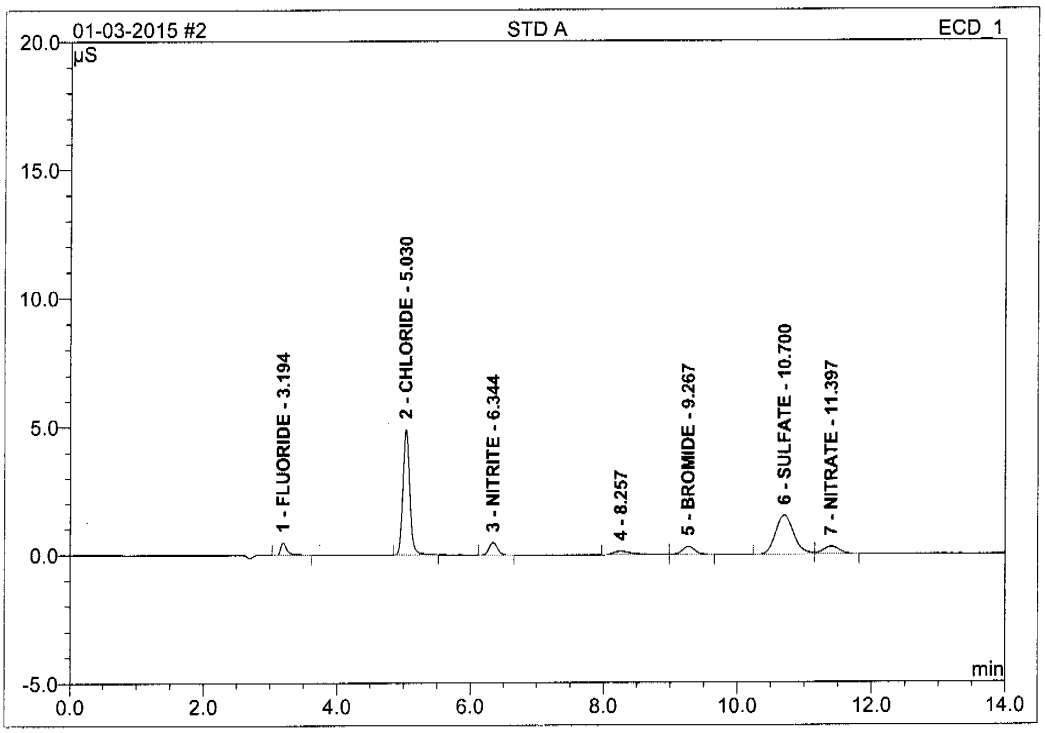
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.03	CHLORIDE	0.139	0.016	10.08	0.056	BMB
2	8.28	n.a.	0.134	0.108	67.59	n.a.	BM
3	10.68	SULFATE	0.083	0.036	22.33	0.163	MB
Total:			0.356	0.160	100.00	0.218	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

2 STD A

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD A**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

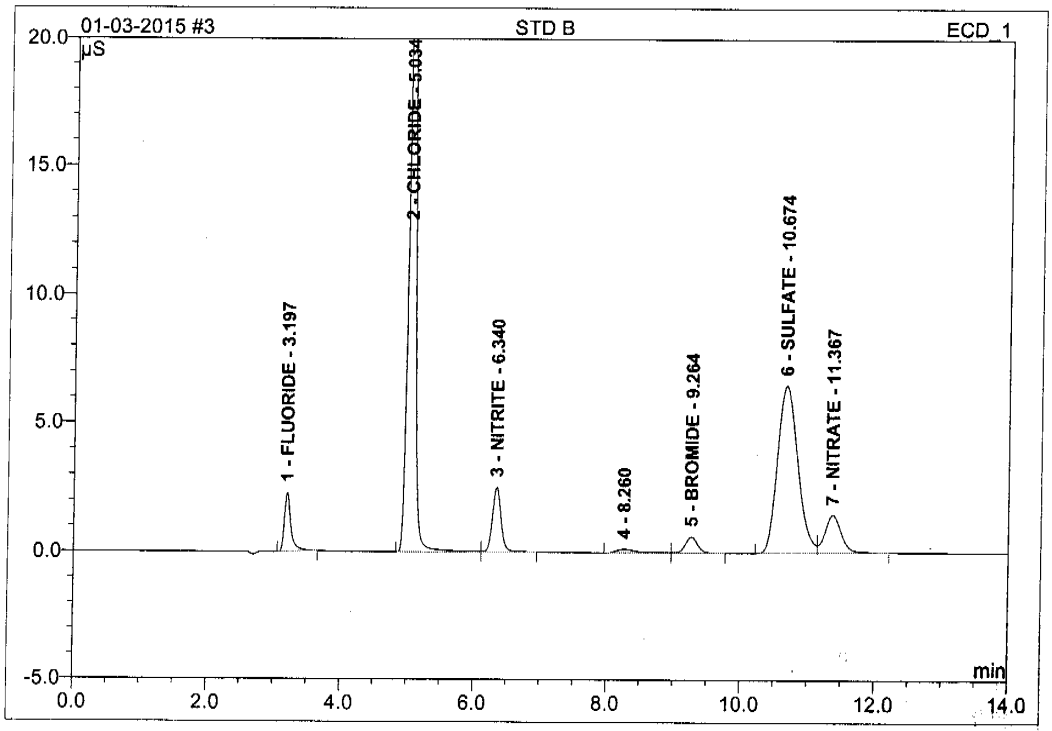


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.473	0.051	3.75	0.090	BMB
2	5.03	CHLORIDE	4.909	0.581	42.50	2.003	BMB
3	6.34	NITRITE	0.484	0.070	5.13	0.089	BMB
4	8.26	n.a.	0.138	0.048	3.52	n.a.	BM
5	9.27	BROMIDE	0.308	0.065	4.75	0.486	MB
6	10.70	SULFATE	1.513	0.470	34.40	2.146	BM
7	11.40	NITRATE	0.297	0.081	5.95	0.100	MB
Total:			8.121	1.367	100.00	4.914	

3 STD B

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD B**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



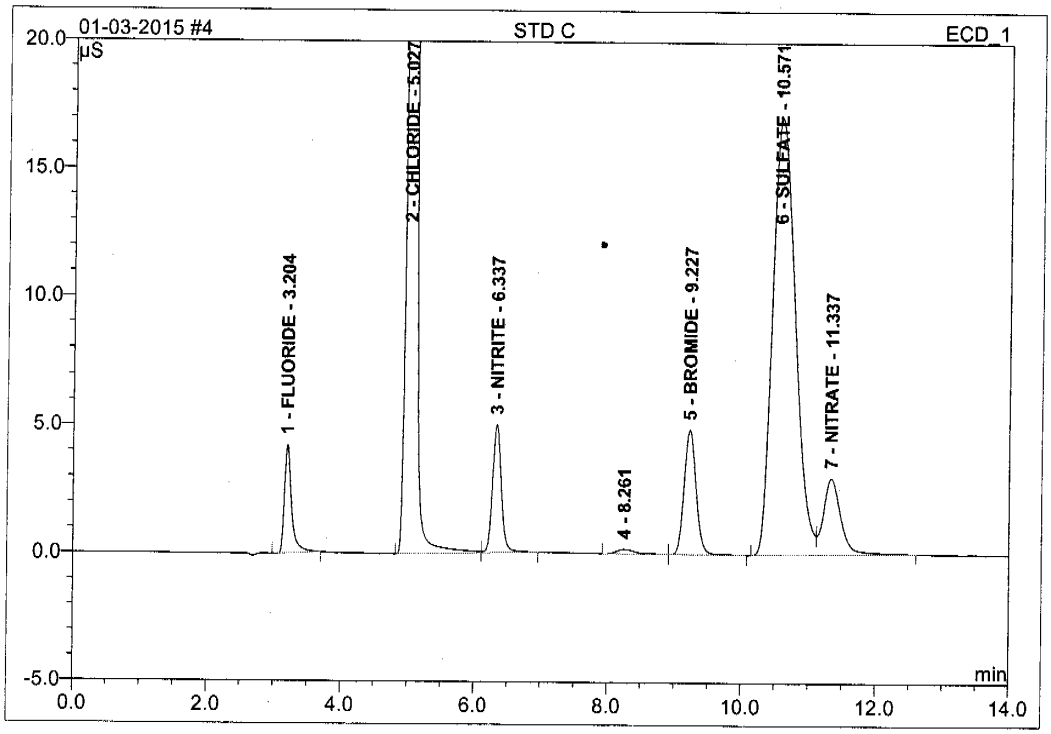
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	2.287	0.257	3.93	0.450	BMB
2	5.03	CHLORIDE	25.145	3.015	46.23	10.392	BM
3	6.34	NITRITE	2.508	0.374	5.74	0.476	MB
4	8.26	n.a.	0.139	0.047	0.72	n.a.	BM
5	9.26	BROMIDE	0.625	0.130	1.99	0.975	MB
6	10.67	SULFATE	6.489	2.280	34.97	10.402	BM
7	11.37	NITRATE	1.469	0.418	6.41	0.513	MB
Total:			38.662	6.521	100.00	23.208	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

4 STD C

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD C**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



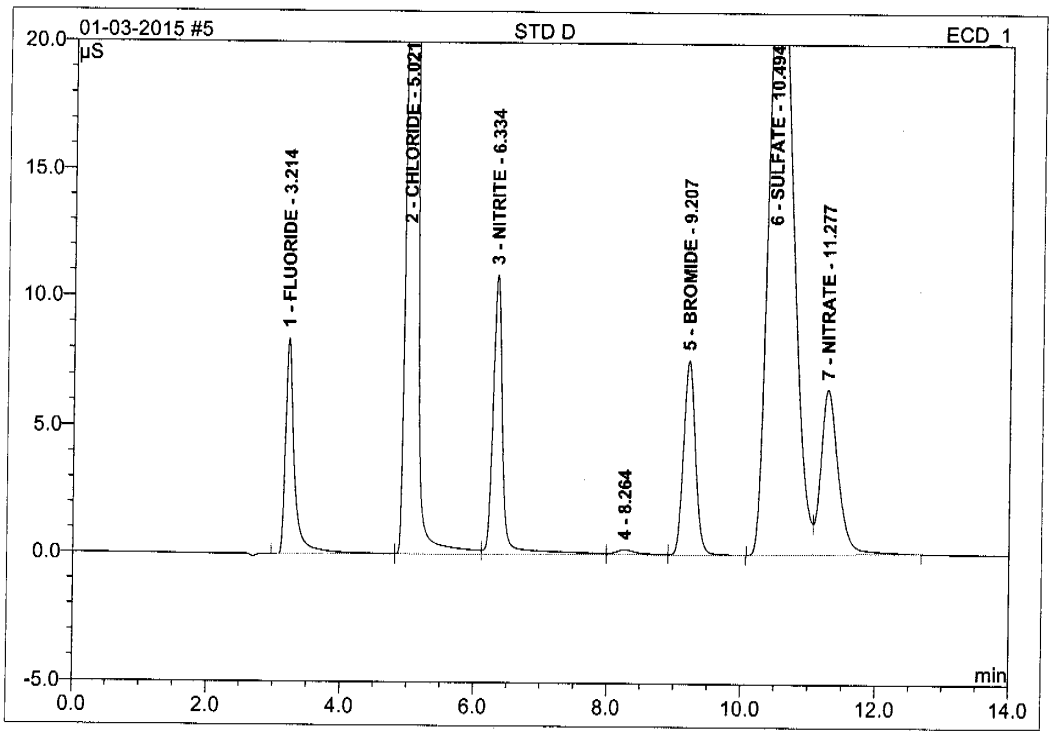
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	4.207	0.514	2.69	0.902	BMB
2	5.03	CHLORIDE	76.065	9.247	48.43	31.870	BM
3	6.34	NITRITE	4.993	0.761	3.99	0.969	MB
4	8.26	n.a.	0.165	0.052	0.27	n.a.	BM
5	9.23	BROMIDE	4.849	0.997	5.22	7.474	MB
6	10.57	SULFATE	17.033	6.625	34.69	30.218	BM
7	11.34	NITRATE	2.961	0.899	4.71	1.102	MB
Total:			110.273	19.095	100.00	72.535	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

5 STD D

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD D**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



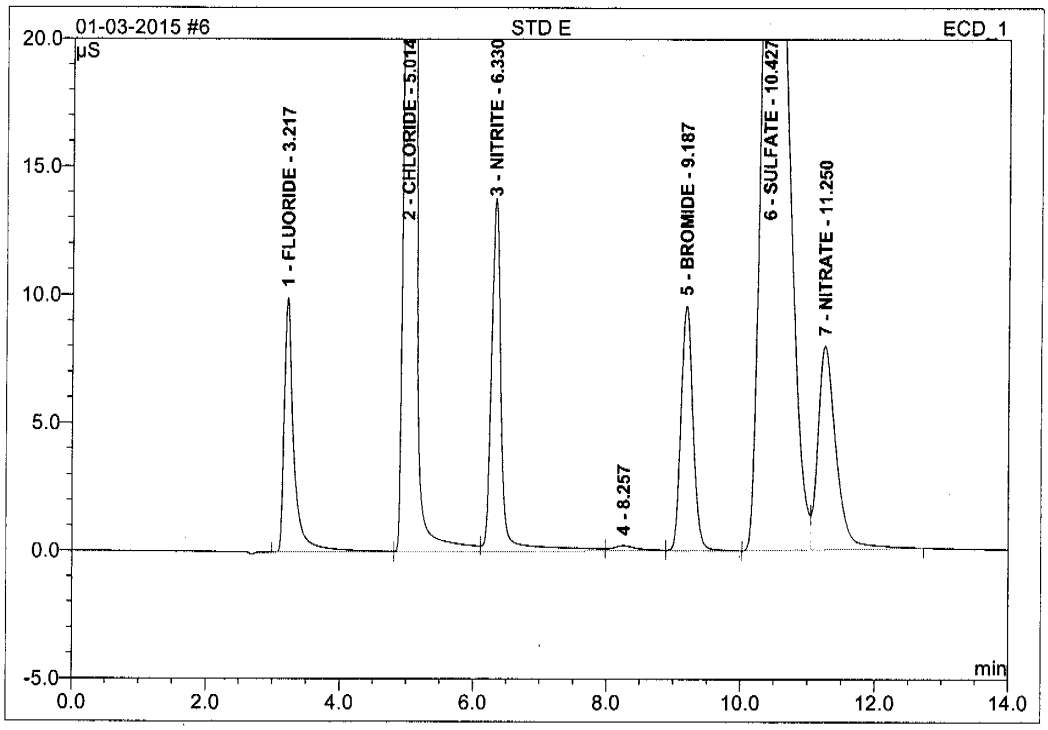
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.405	1.328	4.23	2.329	BM
2	5.02	CHLORIDE	115.261	14.194	45.22	48.922	M
3	6.33	NITRITE	10.881	1.865	5.94	2.374	M
4	8.26	n.a.	0.197	0.082	0.26	n.a.	M
5	9.21	BROMIDE	7.590	1.576	5.02	11.810	MB
6	10.49	SULFATE	25.682	10.362	33.01	47.266	BM
7	11.28	NITRATE	6.462	1.983	6.32	2.433	MB
Total:			174.479	31.392	100.00	115.134	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

6 STD E

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD E**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

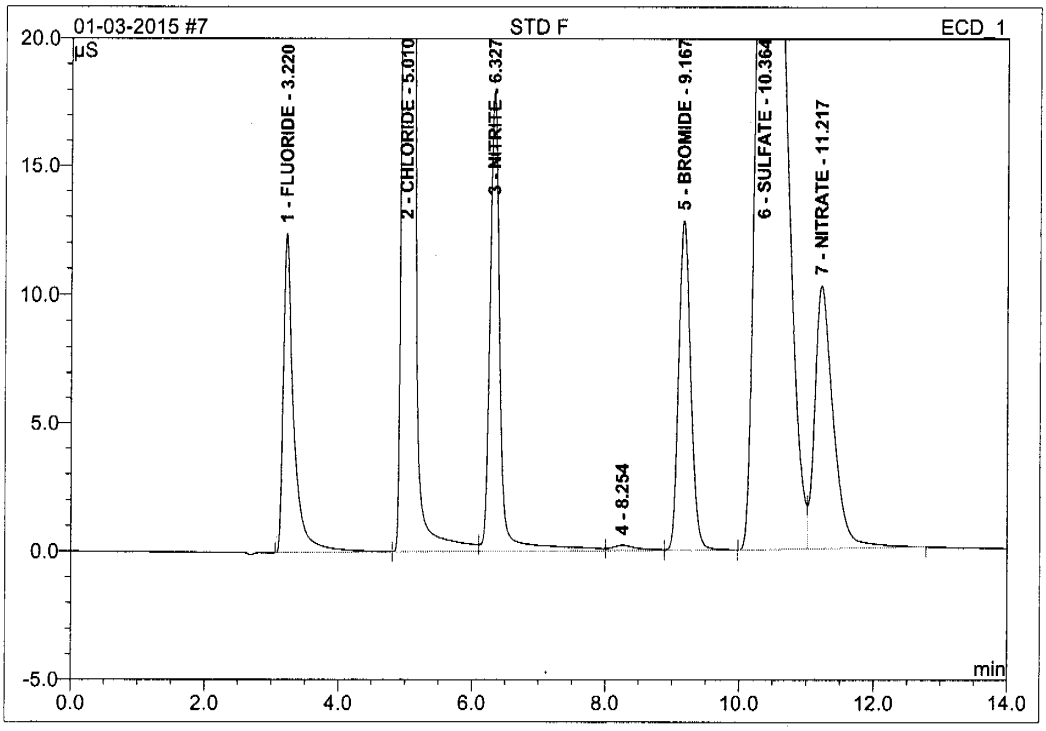


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	9.959	1.678	3.99	2.942	BM
2	5.01	CHLORIDE	152.909	19.012	45.27	65.526	M
3	6.33	NITRITE	13.775	2.406	5.73	3.063	M
4	8.26	n.a.	0.216	0.098	0.23	n.a.	M
5	9.19	BROMIDE	9.569	1.992	4.74	14.926	MB
6	10.43	SULFATE	33.517	14.315	34.09	65.296	BM
7	11.25	NITRATE	7.944	2.496	5.94	3.061	MB
Total:			227.889	41.996	100.00	154.814	

7 STD F

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD F**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



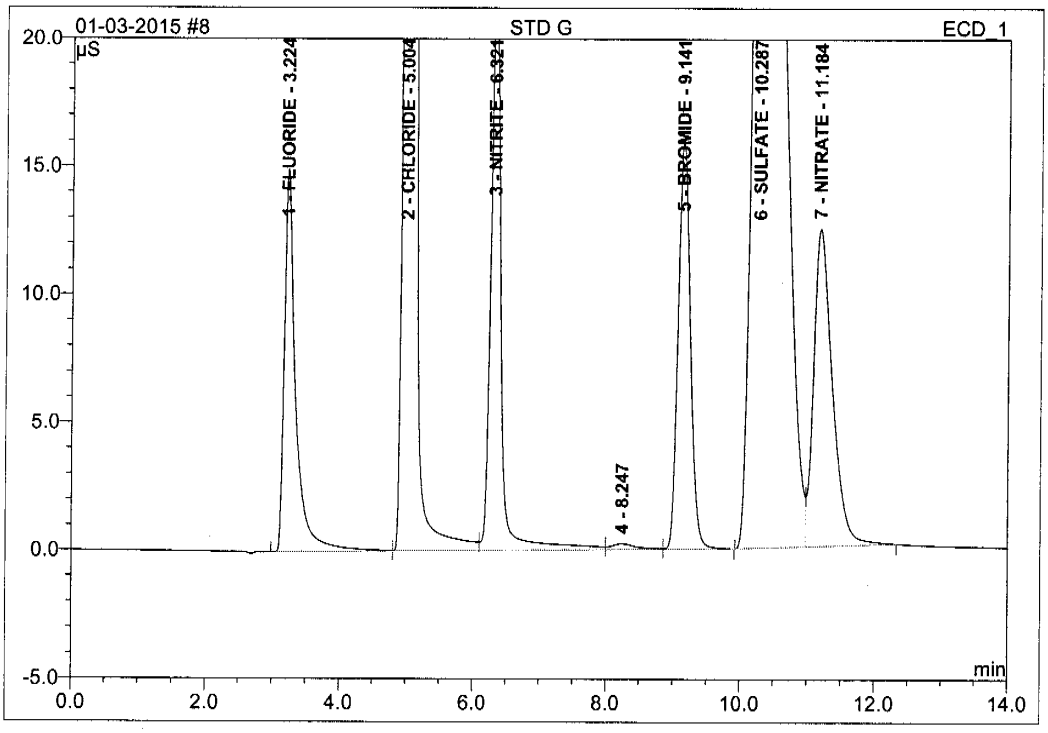
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	12.395	2.267	4.35	3.976	BM
2	5.01	CHLORIDE	182.800	23.015	44.16	79.325	M
3	6.33	NITRITE	17.936	3.155	6.05	4.015	M
4	8.25	n.a.	0.212	0.095	0.18	n.a.	M
5	9.17	BROMIDE	12.807	2.683	5.15	20.102	MB
6	10.36	SULFATE	40.390	17.608	33.78	80.319	BM
7	11.22	NITRATE	10.250	3.294	6.32	4.041	MB
Total:			276.789	52.118	100.00	191.779	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

8 STD G

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



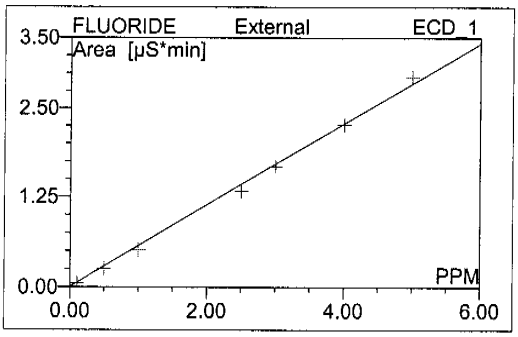
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	14.948	2.945	4.49	5.164	BM
2	5.00	CHLORIDE	228.832	29.054	44.32	100.137	M
3	6.32	NITRITE	22.125	3.946	6.02	5.022	M
4	8.25	n.a.	0.228	0.100	0.15	n.a.	M
5	9.14	BROMIDE	15.982	3.379	5.15	25.317	MB
6	10.29	SULFATE	48.349	22.100	33.71	100.811	BM
7	11.18	NITRATE	12.403	4.029	6.15	4.942	MB
Total:			342.867	65.553	100.00	241.393	

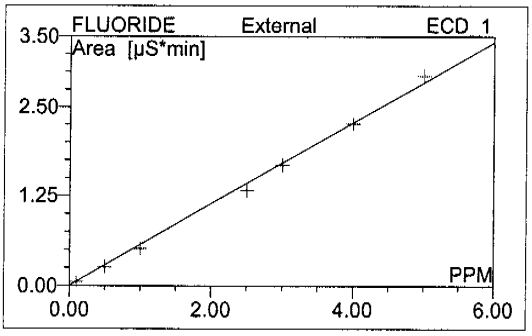
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

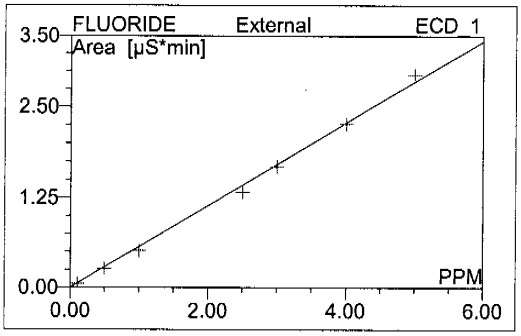
8 STD G

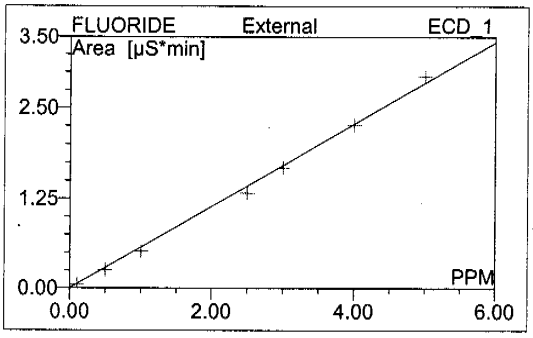
ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**###############**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**









No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	3.22	FLUORIDE	Lin	7	99.6655	0.0000	0.5702	0.0000
2	5.00	CHLORIDE	Lin	7	99.9287	0.0000	0.2901	0.0000
3	6.32	NITRITE	Lin	7	99.8942	0.0000	0.7858	0.0000
4	8.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	9.14	BROMIDE	Lin	7	99.8869	0.0000	0.1335	0.0000
6	10.29	SULFATE	Lin	7	99.8927	0.0000	0.2192	0.0000
7	11.18	NITRATE	Lin	7	99.8807	0.0000	0.8152	0.0000
Average:					99.8581	0.0000	0.4690	0.0000

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Southeast ACCUTEST LABORATORIES

01/07/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA20881

Sampling Date: 12/17/14

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **288**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10 11

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **7**
4.1: FA20881-1: XU854ISK06A 8
4.2: FA20881-2: XU854ISK06C 11
4.3: FA20881-3: XU854ISK06Z1 14
Section 5: Misc. Forms **17**
5.1: Chain of Custody 18
Section 6: GC/MS Semi-volatiles - QC Data Summaries **21**
6.1: Method Blank Summary 22
6.2: Blank Spike Summary 23
6.3: Matrix Spike/Matrix Spike Duplicate Summary 24
6.4: Internal Standard Area Summaries 25
6.5: Initial and Continuing Calibration Summaries 27
Section 7: GC/MS Semi-volatiles - Raw Data **35**
7.1: Samples 36
7.2: Method Blanks 42
7.3: Blank Spikes 44
7.4: Matrix Spike/Matrix Spike Duplicates 46
7.5: Initial and Continuing Calibarations 50
7.6: Instrument Run Logs 81
7.7: Prep Logs 88
Section 8: GC Semi-volatiles - QC Data Summaries **89**
8.1: Method Blank Summary 90
8.2: Blank Spike Summary 92
8.3: Laboratory Control Sample Summary 93
8.4: Matrix Spike/Matrix Spike Duplicate Summary 94
8.5: Duplicate Summary 95
8.6: Surrogate Recovery Summaries 97
8.7: GC Surrogate Retention Time Summaries 98
8.8: Initial and Continuing Calibration Summaries 101
Section 9: GC Semi-volatiles - Raw Data **121**
9.1: Samples 122
9.2: Method Blanks 133
9.3: Blank Spikes 138
9.4: Laboratory Control Samples 141
9.5: Matrix Spike/Matrix Spike Duplicates 144
9.6: Duplicates 150
9.7: Initial and Continuing Calibarations 155
9.8: Instrument Run Logs 221
9.9: Prep Logs 229

Sections:

1 2 3 4 5 6 7 8 9 10 11

Table of Contents

Section 10: General Chemistry - QC Data Summaries 230
10.1: Method Blank and Spike Results Summary 231
10.2: Matrix Spike Results Summary 232
10.3: Matrix Spike Duplicate Results Summary 233
10.4: Inst QC GN64700: Nitrogen, Nitrate 234
Section 11: General Chemistry - Raw Data 236
11.1: Raw Data GN64700: Nitrogen, Nitrate 237

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20881

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20881-1	12/17/14	13:40	MS	12/18/14	SO	Soil	XU854ISK06A
FA20881-2	12/17/14	13:40	MS	12/18/14	SO	Soil	XU854ISK06C
FA20881-3	12/17/14	14:30	MS	12/18/14	SO	Soil	XU854ISK06Z1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20881

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 9:06:14 PM

3 Sample(s) were collected on 12/17/2014 and were received at Accutest SE on 12/18/2014 properly preserved, at 3.6 Deg. C and intact. These Samples received an Accutest job number of FA20881. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54435

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MS, FA20881-1MSD, FA20937-1DUP were used as the QC samples indicated.
FA20881-3: All hits confirmed by reanalysis on a dissimilar column.

FA20881-3: Confirmation run.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25263

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20881-1MSD, FA20881-1MS were used as the QC samples for Nitrogen, Nitrate.

Matrix Spike Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference and/or sample non-homogeneity. % RPD was within control limits in MS/MSD.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: January 6, 2015

Kim Benham, Client Services (signature on file)

Summary of Hits

Job Number: FA20881
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 12/17/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20881-1	**XU854ISK06A**					
Perchlorate		16.4	2.0	1.0	ug/kg	SW846 6850
Nitrogen, Nitrate		4.1	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20881-2	**XU854ISK06C**					
Perchlorate		13.1	1.8	0.88	ug/kg	SW846 6850
Nitrogen, Nitrate		4.1	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20881-3	**XU854ISK06Z1**					
Perchlorate		13.0	2.0	0.98	ug/kg	SW846 6850
Nitroglycerine [a]		780 J	1000	500	ug/kg	SW846 8330B
Nitrogen, Nitrate		3.0	1.0	0.50	mg/kg	EPA 300/SW846 9056A

(a) All hits confirmed by reanalysis on a dissimilar column.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06A
Lab Sample ID: FA20881-1 **Date Sampled:** 12/17/14
Matrix: SO - Soil **Date Received:** 12/18/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9529.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.00 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	16.4	2.0	1.0	0.55	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06A
Lab Sample ID: FA20881-1 **Date Sampled:** 12/17/14
Matrix: SO - Soil **Date Received:** 12/18/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045466.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	122%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06A		
Lab Sample ID:	FA20881-1	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.1	1.0	0.50	0.50	mg/kg	1	01/03/15 14:51	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06C
Lab Sample ID: FA20881-2 **Date Sampled:** 12/17/14
Matrix: SO - Soil **Date Received:** 12/18/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9530.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.13 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	13.1	1.8	0.88	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06C
Lab Sample ID: FA20881-2 **Date Sampled:** 12/17/14
Matrix: SO - Soil **Date Received:** 12/18/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045469.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	122%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06C		
Lab Sample ID:	FA20881-2	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	4.1	1.0	0.50	0.50	mg/kg	1	01/03/15 15:08	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z1
Lab Sample ID: FA20881-3 **Date Sampled:** 12/17/14
Matrix: SO - Soil **Date Received:** 12/18/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9531.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.02 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	13.0	2.0	0.98	0.54	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISK06Z1
Lab Sample ID: FA20881-3 **Date Sampled:** 12/17/14
Matrix: SO - Soil **Date Received:** 12/18/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [b]	BB045470.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
Run #2 [c]	GG058051.D	1	01/05/15	KL	12/30/14	OP54435	GGG2338

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2	10.0 g	50.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	780	1000	500	250	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	121%	104%	69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) All hits confirmed by reanalysis on a dissimilar column.
(c) Confirmation run.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISK06Z1		
Lab Sample ID:	FA20881-3	**Date Sampled:**	12/17/14
Matrix:	SO - Soil	**Date Received:**	12/18/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	3.0	1.0	0.50	0.50	mg/kg	1	01/03/15 15:25	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20881 SF 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM REMEDIATIONS, INC.
Address: 5811 UNIVERSITY HEIGHTS, STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: IVANA RAICEVIC E-mail: IRAICEVIC@FPM-REMEDIATIONS.COM
Phone#: 210-495-7744 ext 13
Sampler(s) Name(s) (Printed): MIKE SAMPLE

Project Information

Project Name: NM-AZ PBR
Street: HOLLOMAN AFB
City: ALAMOGORDO State: NM
Project #: 1029-13-01-H-YU854:05
Fax #: 210-495-8544
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	Other	None	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI Water	MeOH	8330 SL	NC 353.2	NO3 3000	PARC 6850	LAB USE ONLY
1	YU854ISK06A	12/17	13:40	MS	Soil	1										X	X	X	X	
2	YU854ISK06C	12/17	13:40	MS	Soil	1										X	X	X	X	
3	YU854ISK06Z1	12/17	14:30	MS	Soil	1										X	X	X	X	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard — VMS
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1	12/17 15:15	2 FX	3 FX	12.18.14	4 J. COPAS (AIR) 10:00
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 3.6

5.1 5

FA20881: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 20881 CLIENT: FPM PROFORATION PROJECT: NM-AZ-Q&A

DATE/TIME RECEIVED: 12-18-14 10:00 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 6149

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 3.2
- [ ] CORRECTED TEMPS: 3.6

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 12-19-14 REVIEWER SIGNATURE/DATE 12-19-14

NF 10/14

receipt confirmation 102914.xls

5.1 5

FA20881: Chain of Custody
Page 2 of 3

FA20881: Chain of Custody
Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MB	Q9513.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	2.0	0.55	ug/kg	

Blank Spike Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-BS	Q9525.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
14797-73-0	Perchlorate	2	2.1	105	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MS	Q9515.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
OP54473-MSD	Q9516.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
FA20794-1	Q9514.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	FA20794-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	13.1		1.82	13.7	33* [a]	1.72	13.8	41* [a]	1	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9509.D	**Injection Time:**	09:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	20879	4.64
Upper Limit [c]	43769	6.64
Lower Limit [d]	14590	2.64

Lab Sample ID	IS 1 AREA	RT
OP54473-MB	21635	4.62
FA20794-1	20003	4.53
OP54473-MS	20064	4.54
OP54473-MSD	19714	4.54
ZZZZZZ	19953	4.54
ZZZZZZ	19463	4.55
ZZZZZZ	19453	4.55
ZZZZZZ	19951	4.55
ZZZZZZ	19428	4.55

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9522.D	**Injection Time:**	11:19
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	19506	4.69
Upper Limit [c]	43769	6.69
Lower Limit [d]	14590	2.69

Lab Sample ID	IS 1 AREA	RT
OP54473-BS	20285	4.66
ZZZZZZ	19024	4.56
ZZZZZZ	19432	4.55
FA20881-1	18982	4.56
FA20881-2	20688	4.56
FA20881-3	20292	4.56
ZZZZZZ	19424	4.56
ZZZZZZ	18219	4.56

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICC295
Lab FileID: Q9302.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2 : D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3 : D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4 : D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5 : D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6 : D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7 : D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------									
3) Perchlorate	1.1702	1.1127	1.2371	1.2032	1.2930	1.3009	1.4553	1.2532	8.869	1.0000

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Sample: SQ295-ICV295
Lab FileID: Q9307.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9307
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.917	-4.2	95.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9509.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9509
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.010	0.5	100.5

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9510.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9510
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.189	-5.4	94.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9522.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9522
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.194	9.7	109.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9523.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9523
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.206	3.0	103.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9535.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9535
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.128	6.4	106.4

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9536.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9536
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.196	-2.1	97.9

CC Criteria: +/- 15%

Southeast

ACCUTEST LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9529.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:20
Sample Name	:	FA20881-1
Vial	:	Vial 18
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

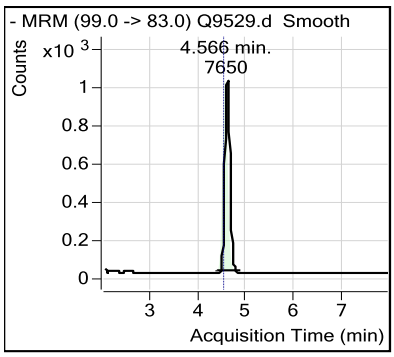
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.562	107.0 -> 89.0	18982	5.000	ng/ml	-0.363	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.566	99.0 -> 83.0	7650	1.640	ng/ml	94	3.0
		101.0 -> 85.0	2547				

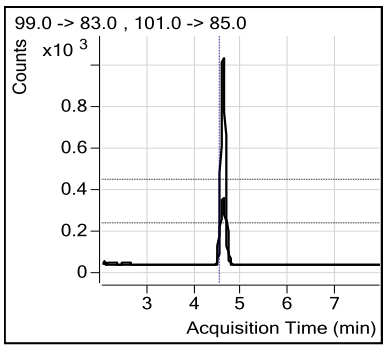
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

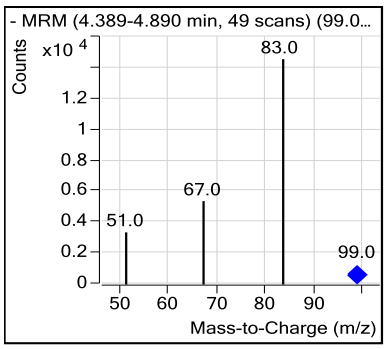
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9529.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:20
Sample Name	:	FA20881-1
Vial	:	Vial 18
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

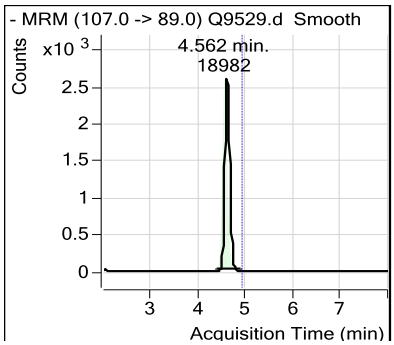
Perchlorate

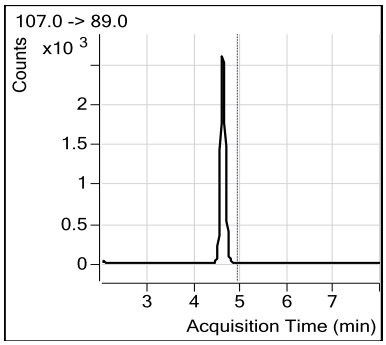


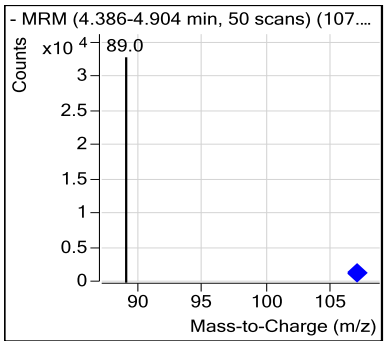




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9530.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:29
Sample Name	:	FA20881-2
Vial	:	Vial 19
Sample Info	:	OP54473,SQ301,1.13,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

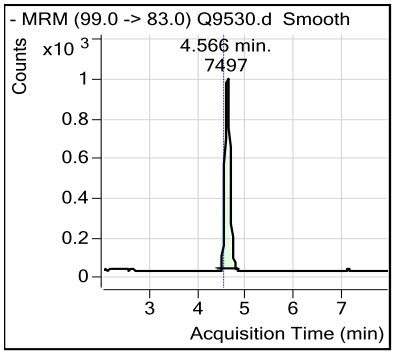
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.562	107.0 -> 89.0	20688	5.000	ng/ml	-0.363	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.566	99.0 -> 83.0	7497	1.477	ng/ml	99	3.3
		101.0 -> 85.0	2273				

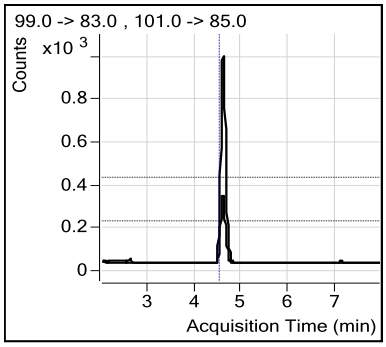
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

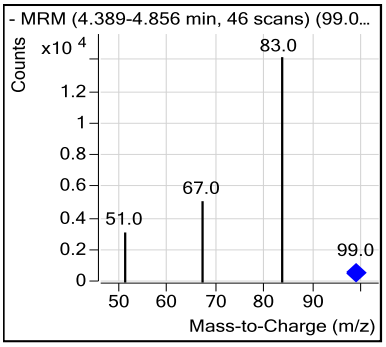
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9530.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:29
Sample Name	:	FA20881-2
Vial	:	Vial 19
Sample Info	:	OP54473,SQ301,1.13,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

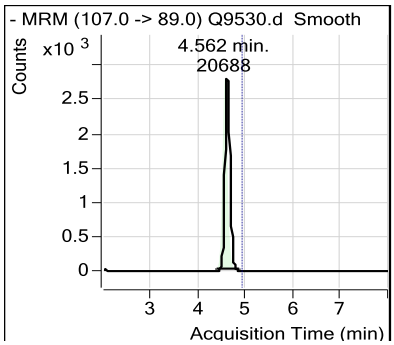
Perchlorate

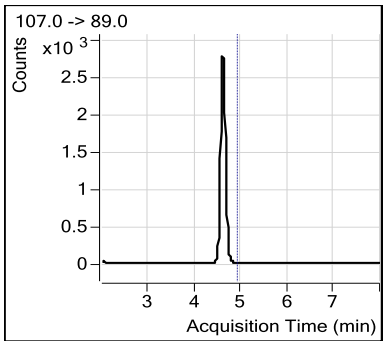


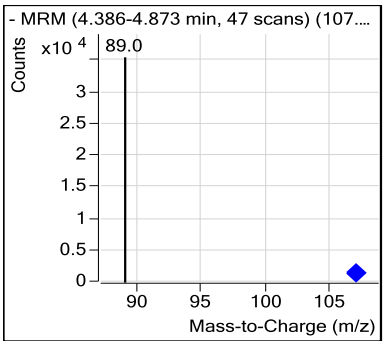




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9531.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:38
Sample Name	:	FA20881-3
Vial	:	Vial 20
Sample Info	:	OP54473,SQ301,1.02,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

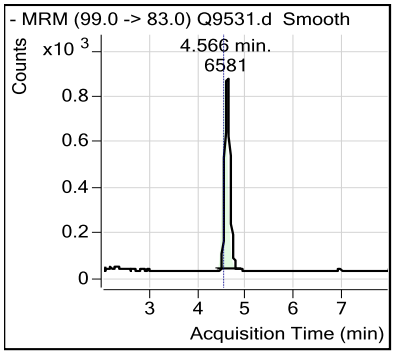
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.562	107.0 -> 89.0	20292	5.000	ng/ml	-0.363	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.566	99.0 -> 83.0	6581	1.323	ng/ml	91	2.9
		101.0 -> 85.0	2301				

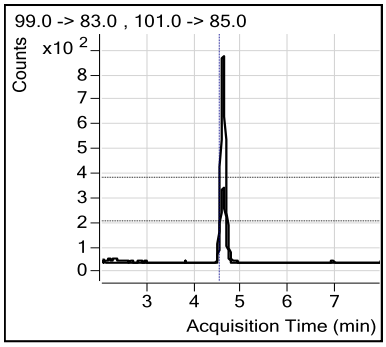
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

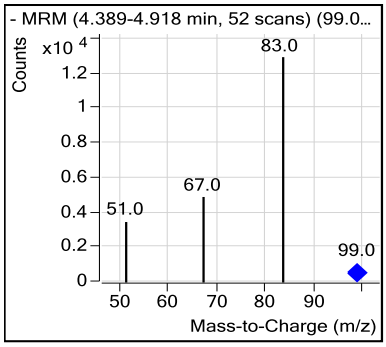
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9531.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 12:38
Sample Name	:	FA20881-3
Vial	:	Vial 20
Sample Info	:	OP54473,SQ301,1.02,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

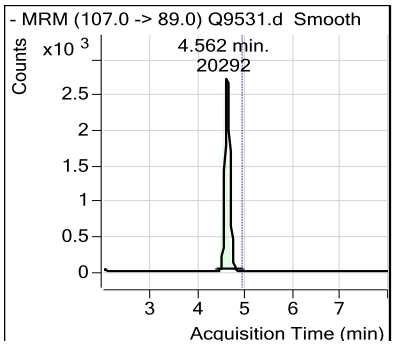
Perchlorate

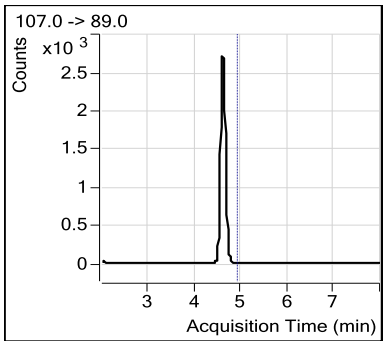


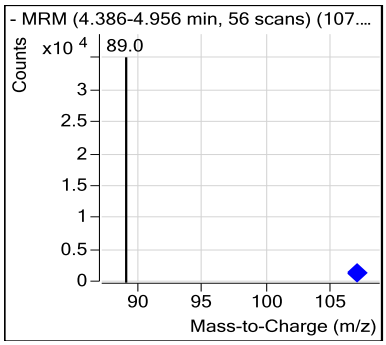




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9513.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:00
Sample Name	:	OP54473-MB
Vial	:	Vial 6
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

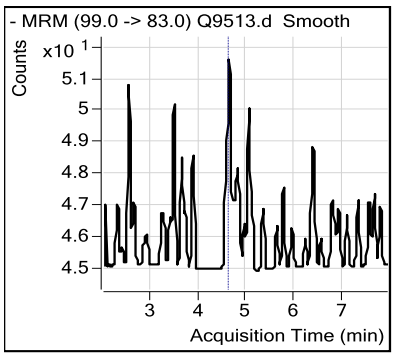
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.624	107.0 -> 89.0	21635	5.000	ng/ml	-0.301	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**

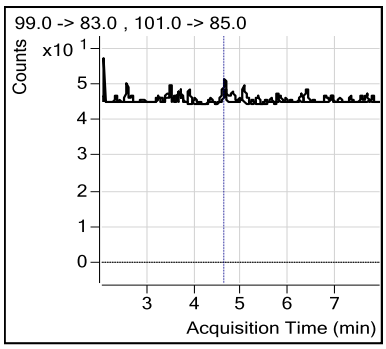
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

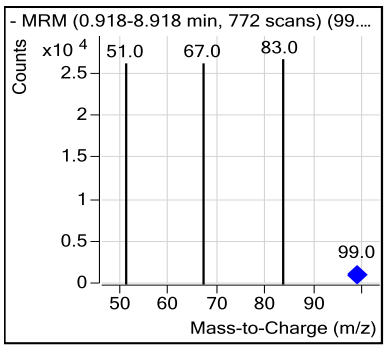
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9513.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:00
Sample Name	:	OP54473-MB
Vial	:	Vial 6
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

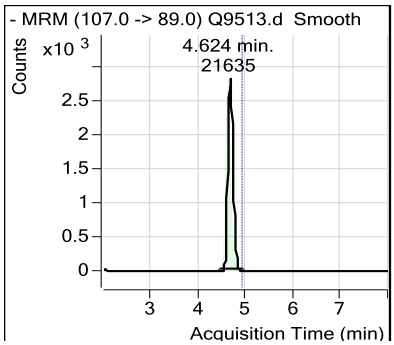
Perchlorate

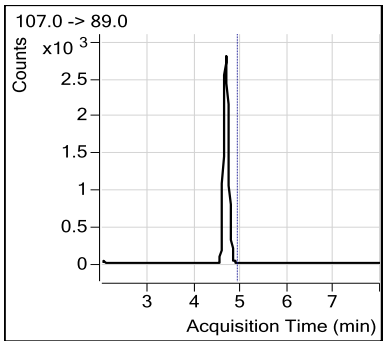


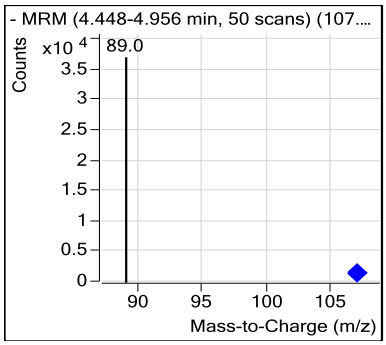




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9525.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:45
Sample Name	:	OP54473-BS
Vial	:	Vial 5
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

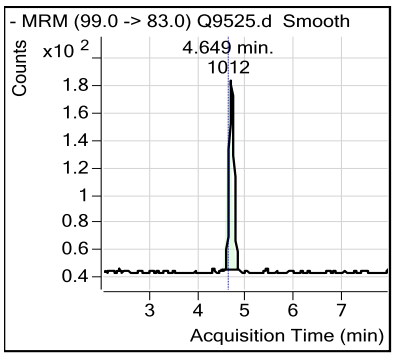
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.655	107.0 -> 89.0	20285	5.000	ng/ml	-0.270	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.649	99.0 -> 83.0	1012	0.205	ng/ml	86	2.7
		101.0 -> 85.0	382				

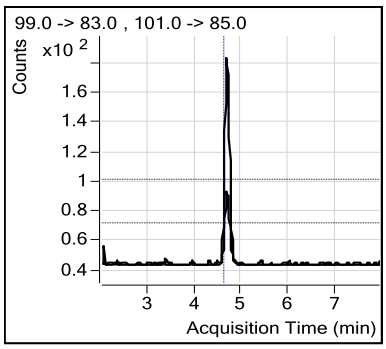
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

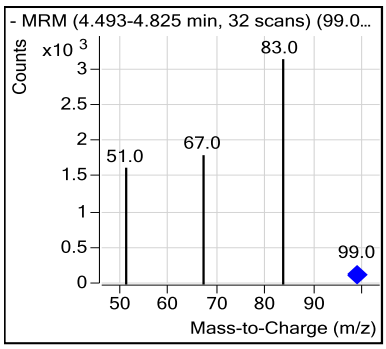
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9525.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:45
Sample Name	:	OP54473-BS
Vial	:	Vial 5
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

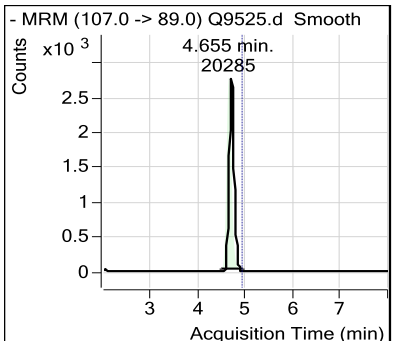
Perchlorate

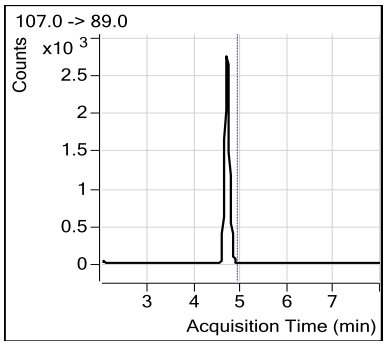


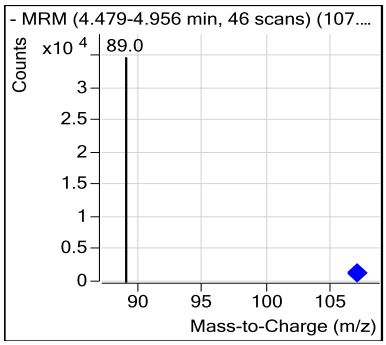




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9515.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:18
Sample Name	:	OP54473-MS
Vial	:	Vial 8
Sample Info	:	OP54473,SQ301,1.10,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

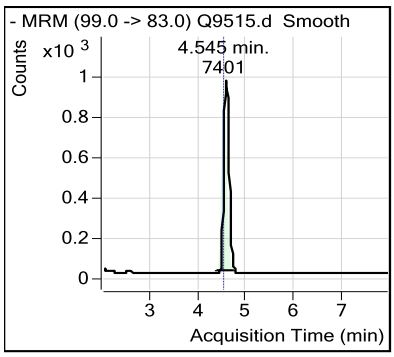
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.541	107.0 -> 89.0	20064	5.000	ng/ml	-0.384	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.545	99.0 -> 83.0	7401	1.503	ng/ml	93	3.0
		101.0 -> 85.0	2481				

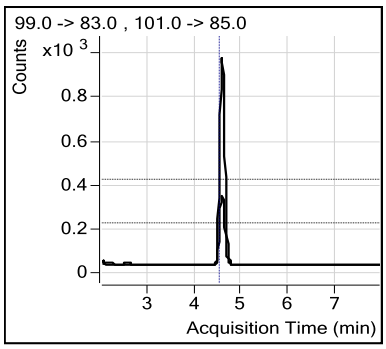
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

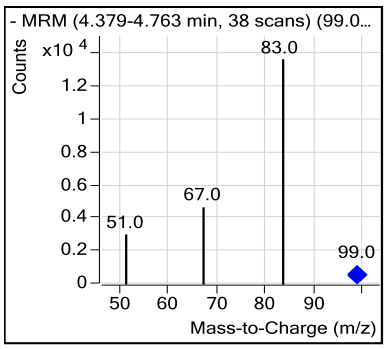
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9515.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:18
Sample Name	:	OP54473-MS
Vial	:	Vial 8
Sample Info	:	OP54473,SQ301,1.10,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

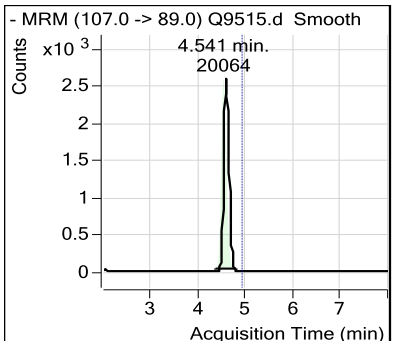
Perchlorate

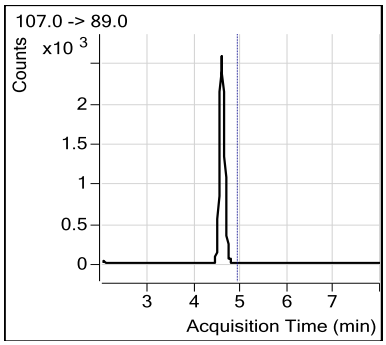


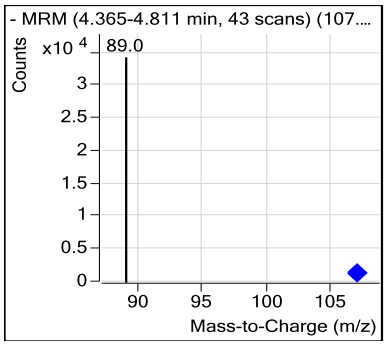




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9516.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:27
Sample Name	:	OP54473-MSD
Vial	:	Vial 9
Sample Info	:	OP54473,SQ301,1.16,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

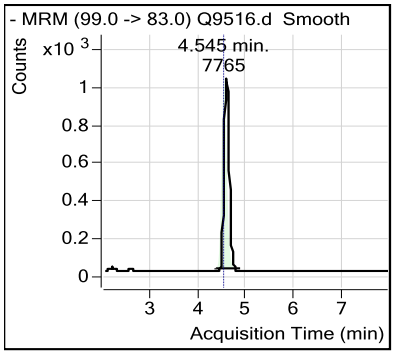
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.541	107.0 -> 89.0	19714	5.000	ng/ml	-0.384	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.545	99.0 -> 83.0	7765	1.604	ng/ml	89	2.8
		101.0 -> 85.0	2792				

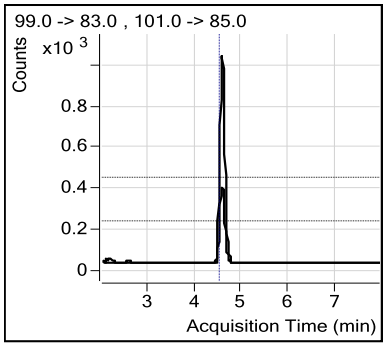
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

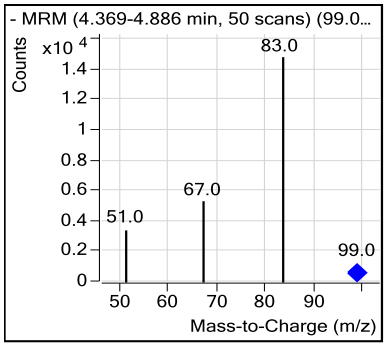
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9516.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 10:27
Sample Name	:	OP54473-MSD
Vial	:	Vial 9
Sample Info	:	OP54473,SQ301,1.16,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

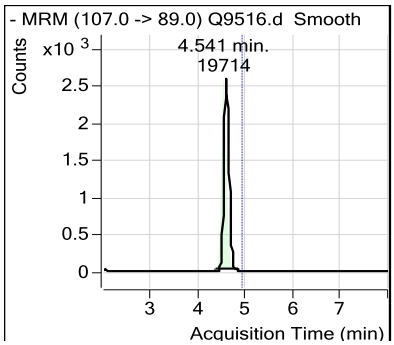
Perchlorate

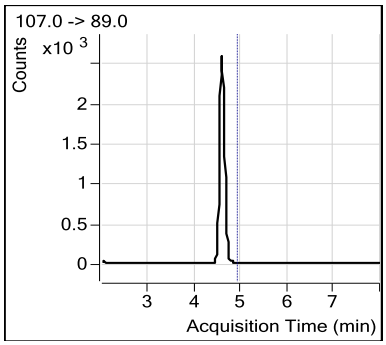


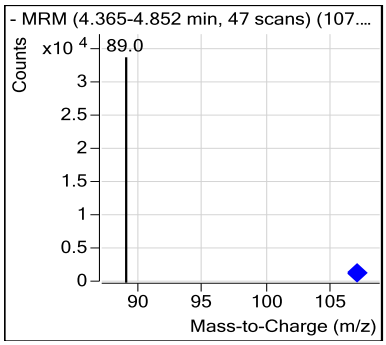




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	31638	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	1481	0.193	ng/ml	98	3.4
		101.0 -> 85.0	430				

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

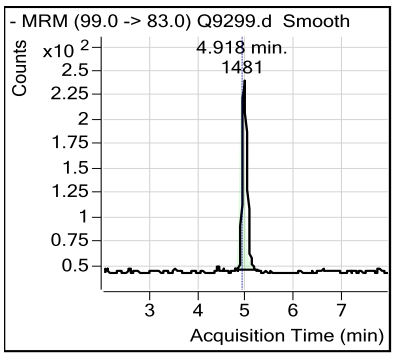
7.5.1

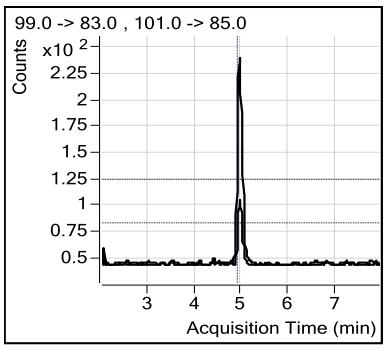
7

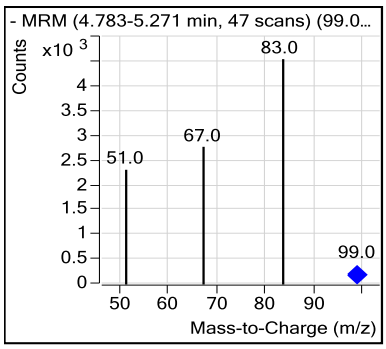
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

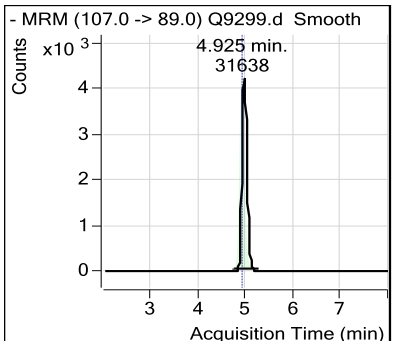
Perchlorate

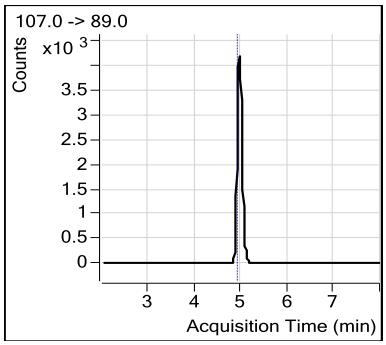


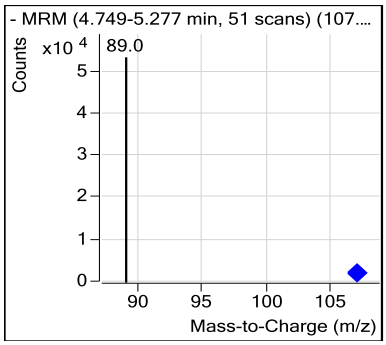




Cl18O4







Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:10

Quantitative Analysis Report for Perchlorate by 685

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	Q-Ratio
Internal Standards								
Cl18O4	4.925	107.0 -> 89.0	30978	5.000	ng/ml		0.000	
System Monitoring Compounds								
Target Compounds							**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	3447	0.457	ng/ml	m	85	2.6
		101.0 -> 85.0	1319					

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

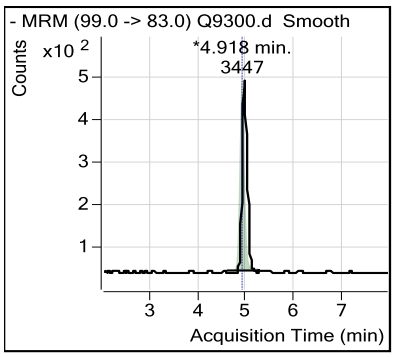
7.5.2

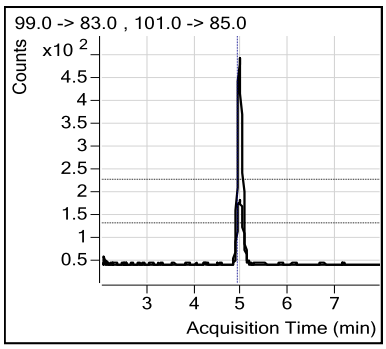
7

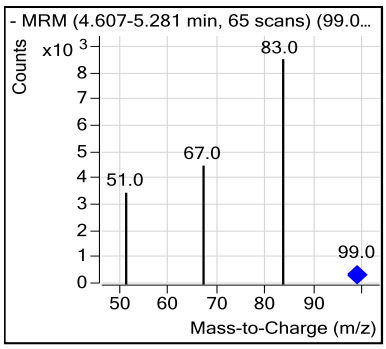
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

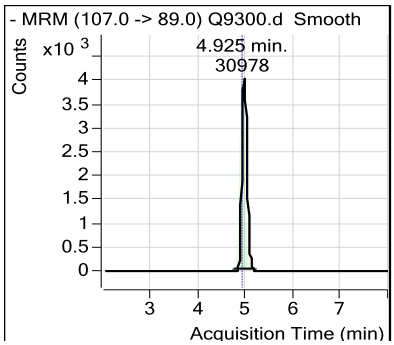
Perchlorate

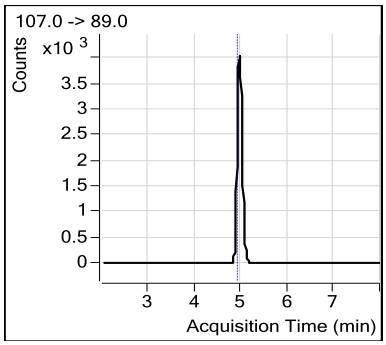


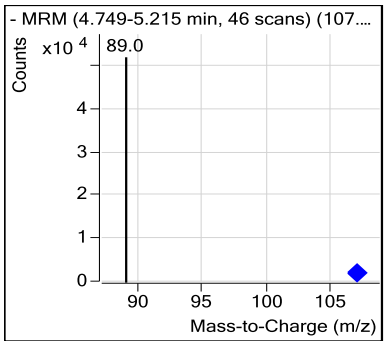




Cl18O4







Manual Integration Approval Summary

Sample Number:	SQ295-IC295	**Method:**	SW846 6850
Lab FileID:	Q9300.D	**Analyst approved:**	12/26/14 14:09 Nancy Saunders
Injection Time:	12/26/14 09:31	**Supervisor approved:**	12/26/14 15:10 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perchlorate	14797-73-0		4.92	Poor instrument integration

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

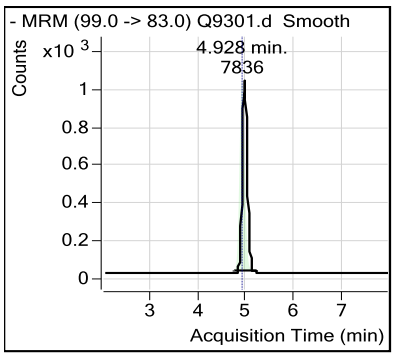
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31673	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.928	99.0 -> 83.0	7836	1.012	ng/ml	94	3.0
		101.0 -> 85.0	2618				

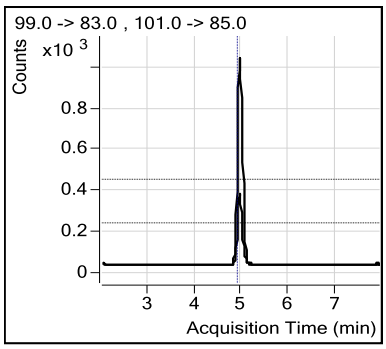
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

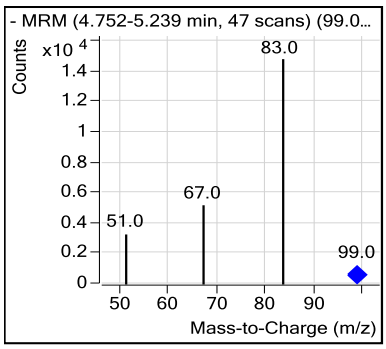
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

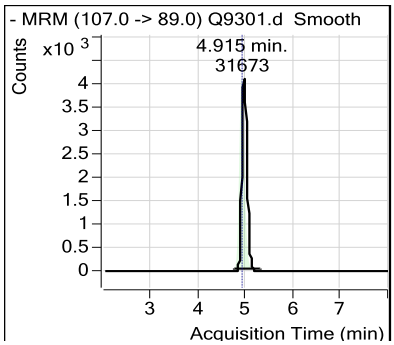
Perchlorate

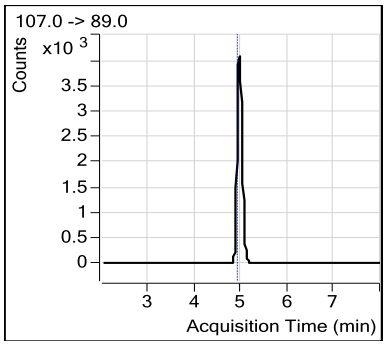


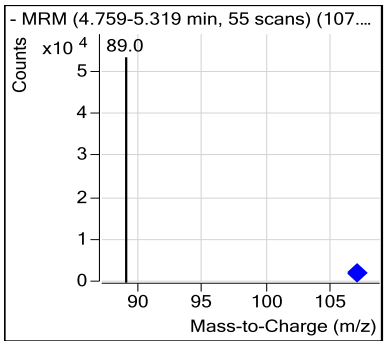




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

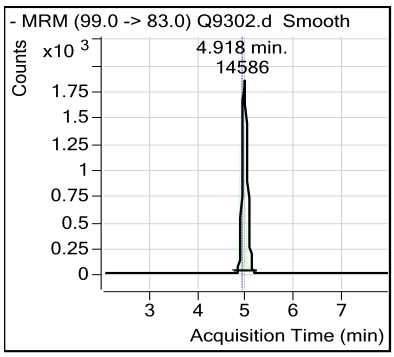
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	30308	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14586	1.954	ng/ml	90	2.8
		101.0 -> 85.0	5130				

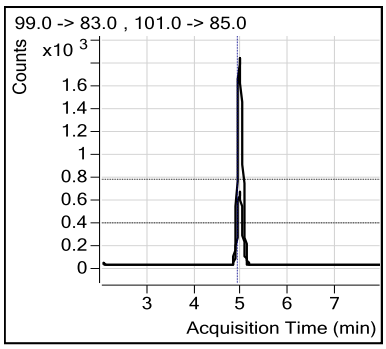
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

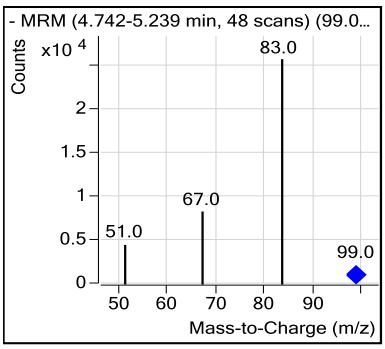
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

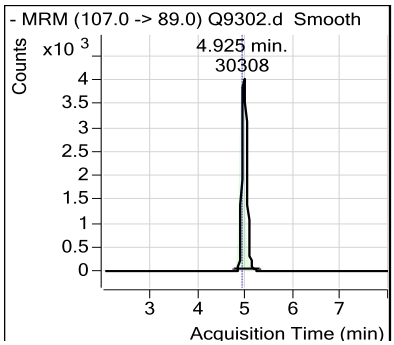
Perchlorate

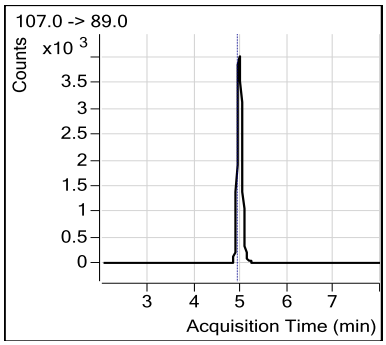


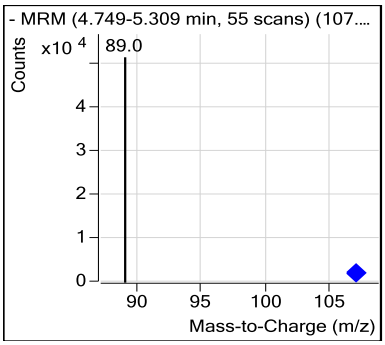




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

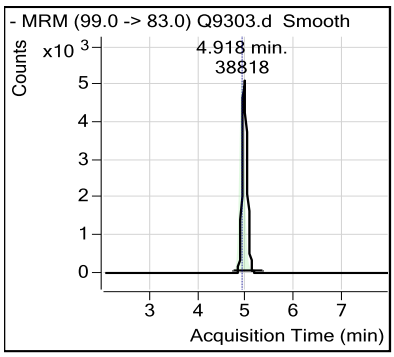
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	30021	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	38818	5.122	ng/ml	94	3.0
		101.0 -> 85.0	12891				

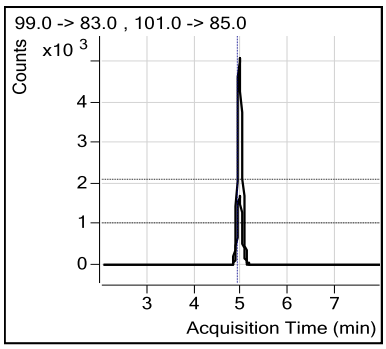
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

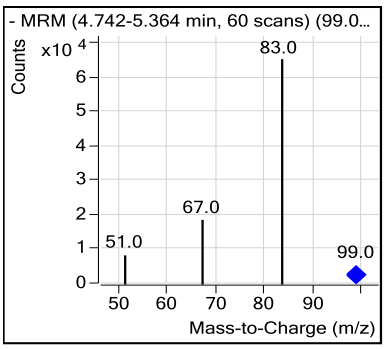
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

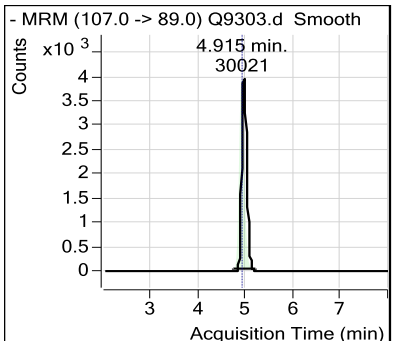
Perchlorate

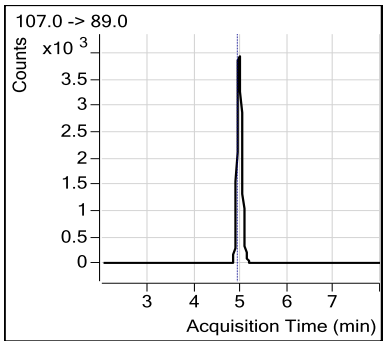


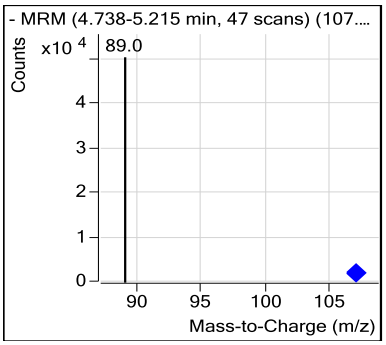




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	29362	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	76394	9.938	ng/ml	95	3.1
		101.0 -> 85.0	24863				

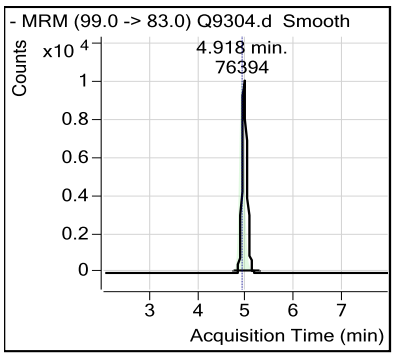
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

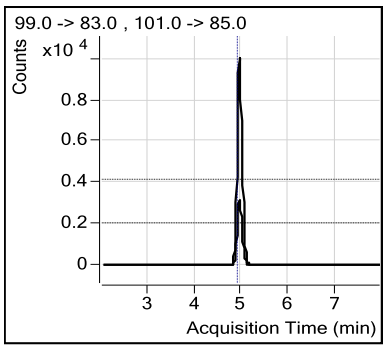
ACCUTEST LABORATORIES FA20881

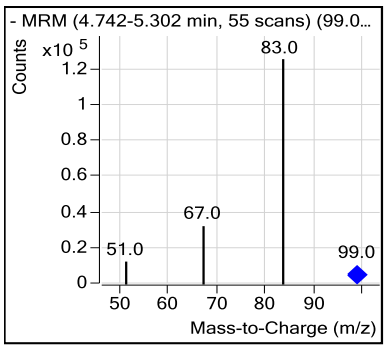
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

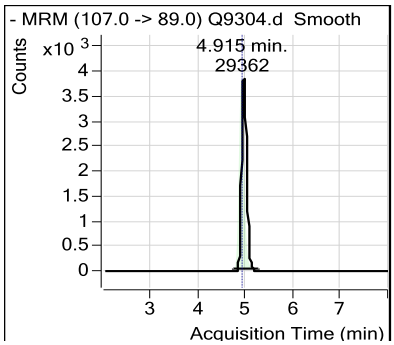
Perchlorate

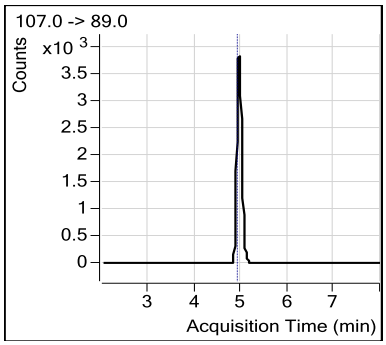


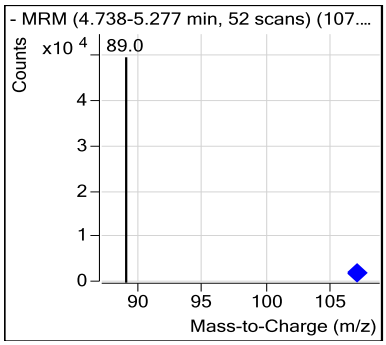




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	26903	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	195761	25.005	ng/ml	95	3.0
		101.0 -> 85.0	64220				

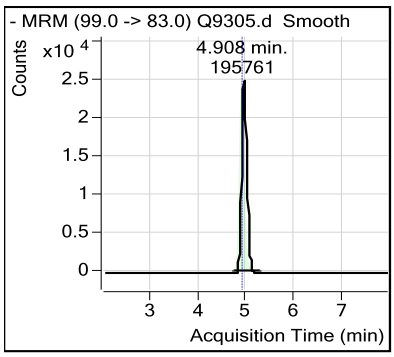
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

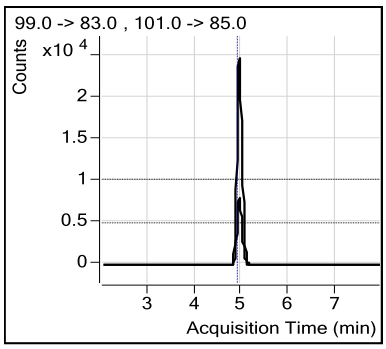
ACCUTEST LABORATORIES FA20881

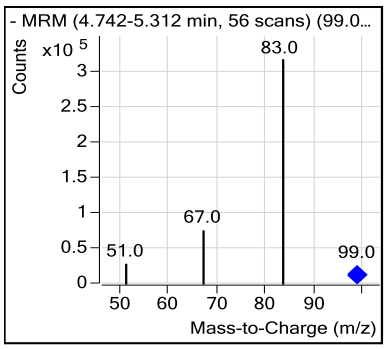
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

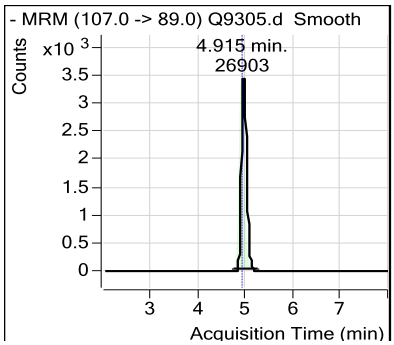
Perchlorate

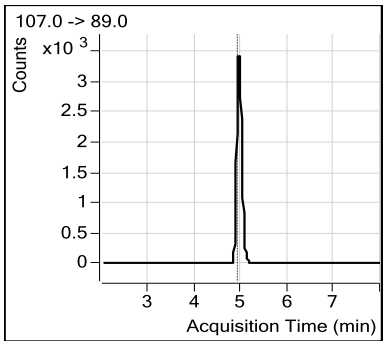


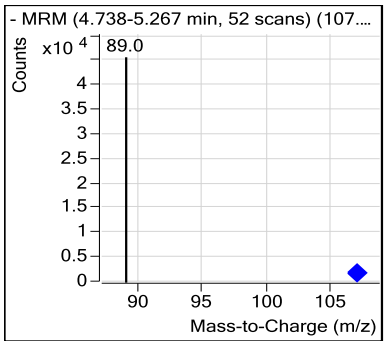




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

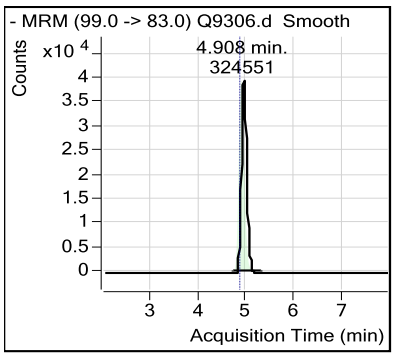
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.904	107.0 -> 89.0	22545	5.000	ng/ml	-0.021	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	324551	43.928	ng/ml	97	3.2
		101.0 -> 85.0	102852				

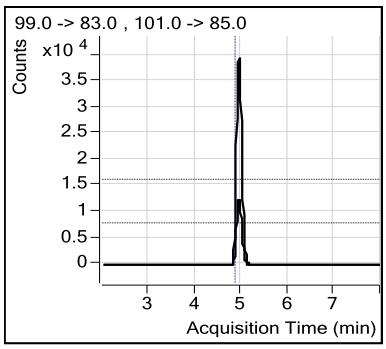
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

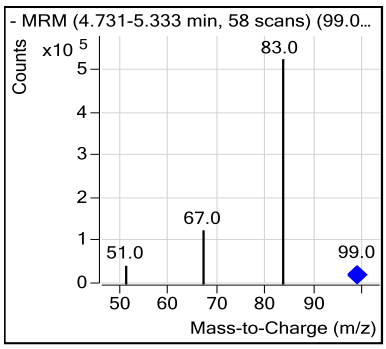
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

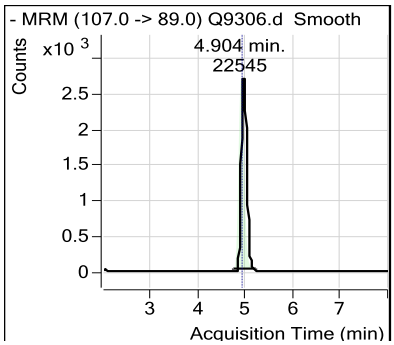
Perchlorate

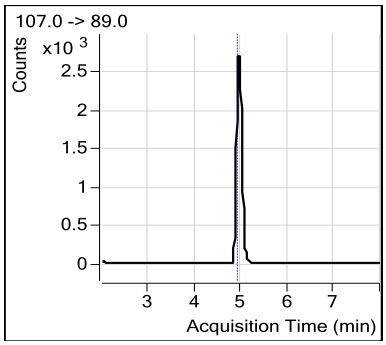


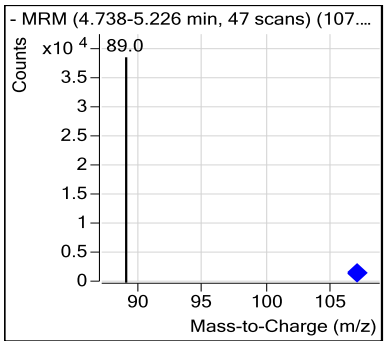




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

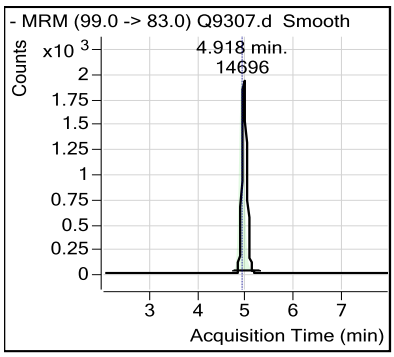
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31140	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14696	1.917	ng/ml	95	3.1
		101.0 -> 85.0	4806				

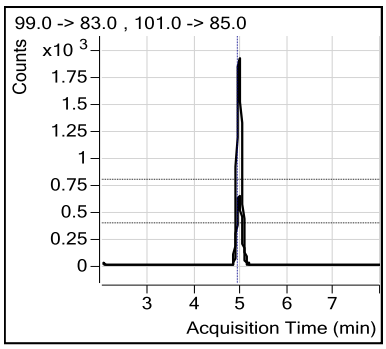
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

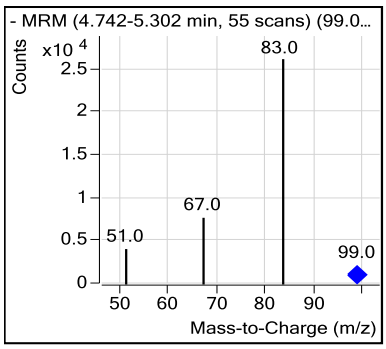
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

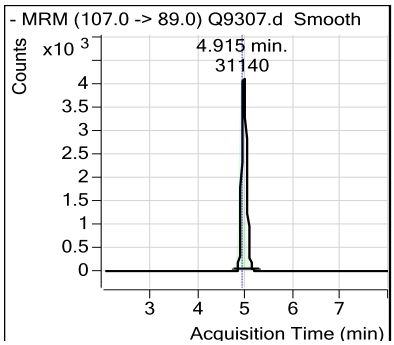
Perchlorate

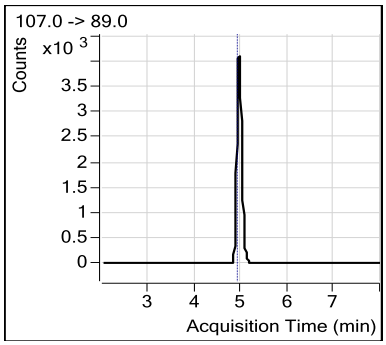


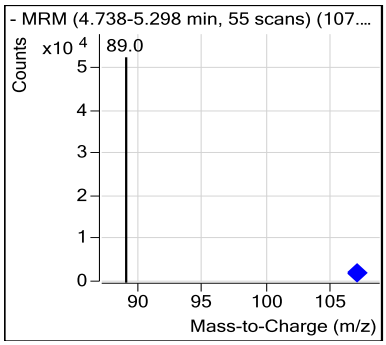




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9509.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:11
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

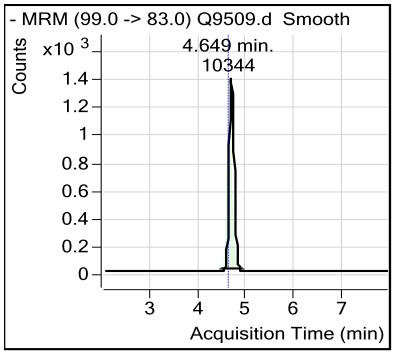
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.645	107.0 -> 89.0	20879	5.000	ng/ml	-0.280	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.649	99.0 -> 83.0	10344	2.010	ng/ml	87	2.7
		101.0 -> 85.0	3837				

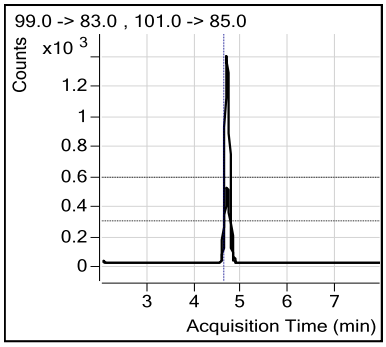
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

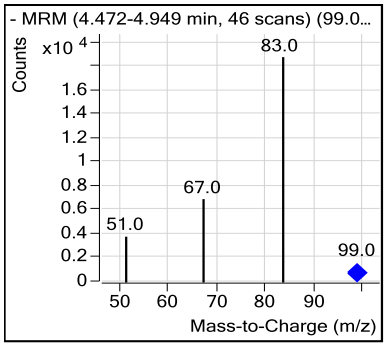
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9509.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:11
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

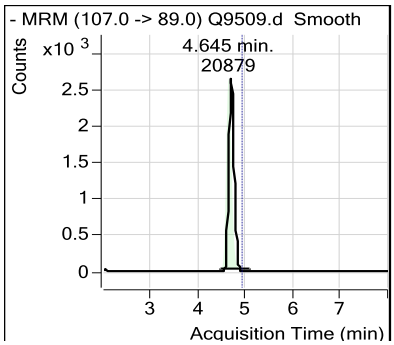
Perchlorate

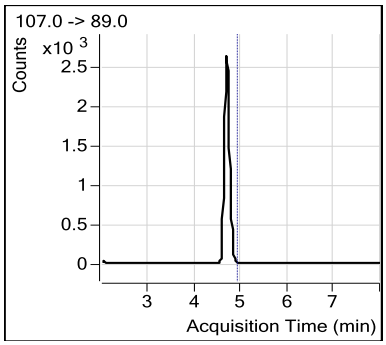


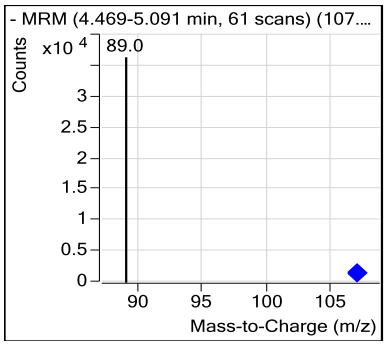




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9510.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:20
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

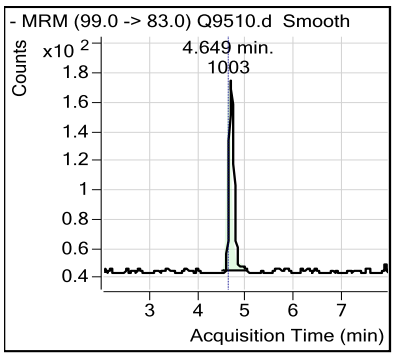
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.655	107.0 -> 89.0	21811	5.000	ng/ml	-0.270	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.649	99.0 -> 83.0	1003	0.189	ng/ml	97	3.2
		101.0 -> 85.0	317				

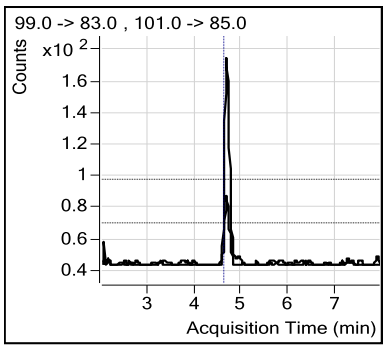
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

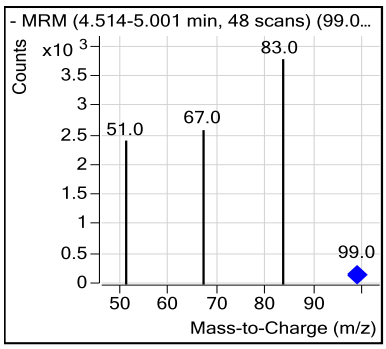
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9510.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 09:20
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

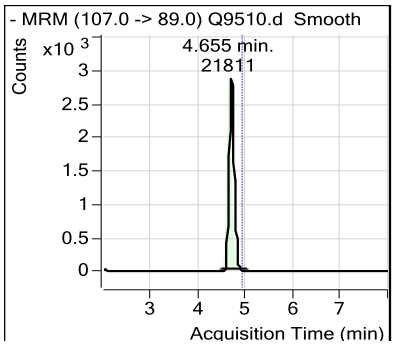
Perchlorate

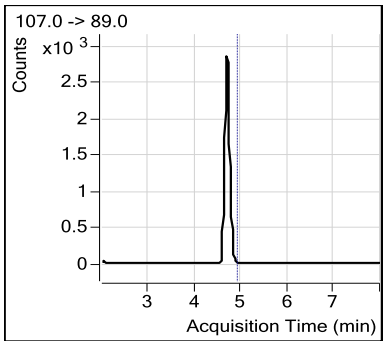


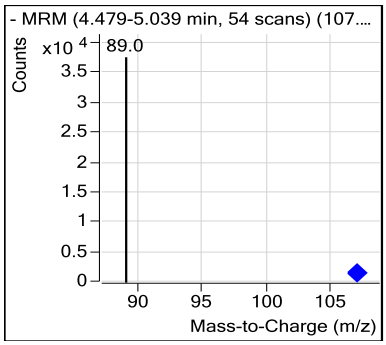




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9522.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:19
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

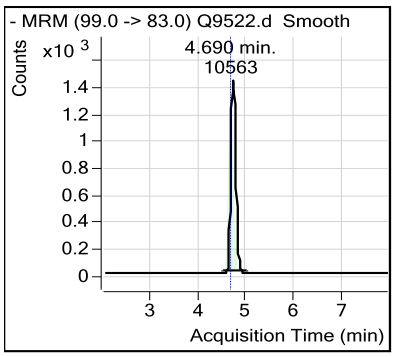
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.687	107.0 -> 89.0	19506	5.000	ng/ml	-0.238	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	10563	2.194	ng/ml	93	3.0
		101.0 -> 85.0	3550				

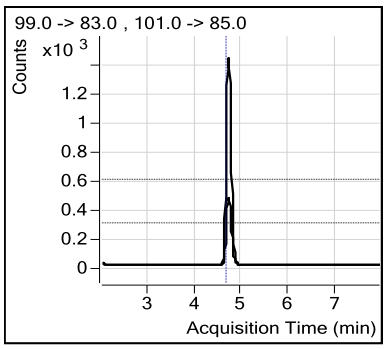
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

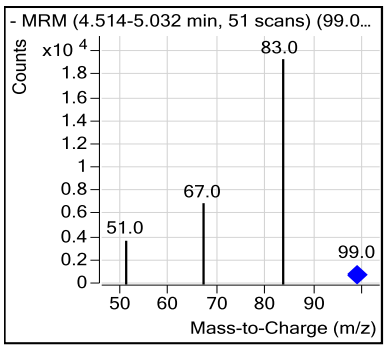
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9522.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:19
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

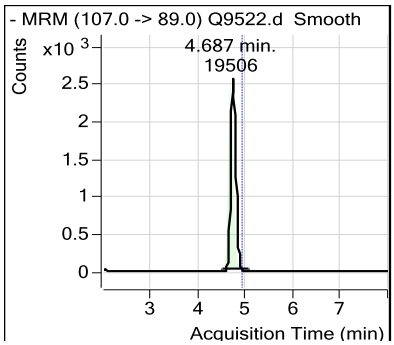
Perchlorate

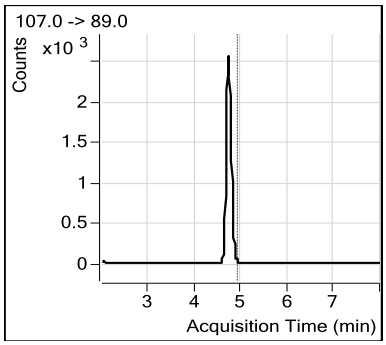


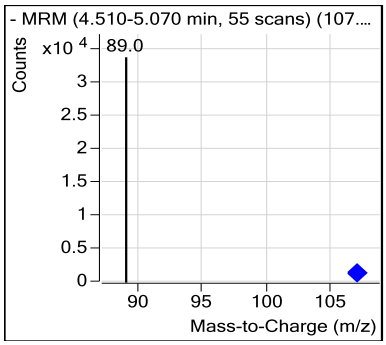




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9523.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:28
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

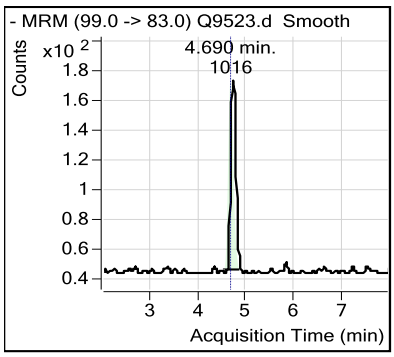
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.687	107.0 -> 89.0	20305	5.000	ng/ml	-0.238	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	1016	0.206	ng/ml	91	2.9
		101.0 -> 85.0	353				

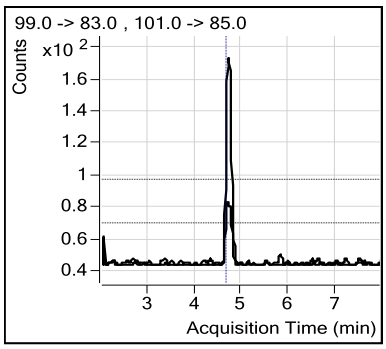
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

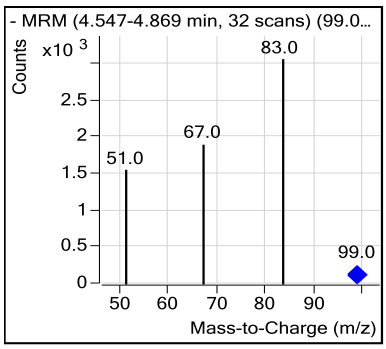
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9523.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 11:28
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

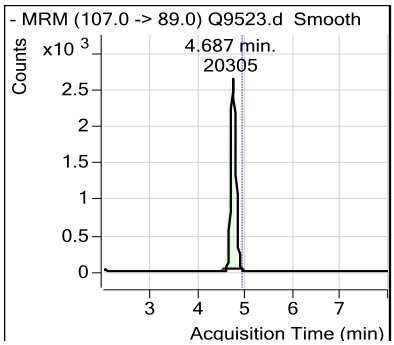
Perchlorate

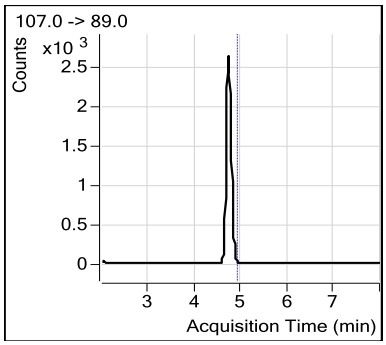


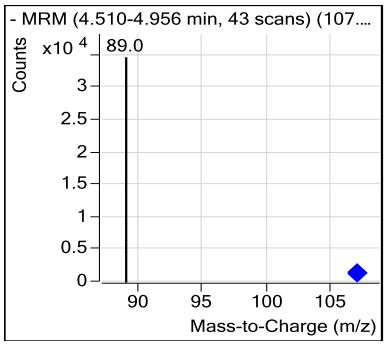




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9535.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:12
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

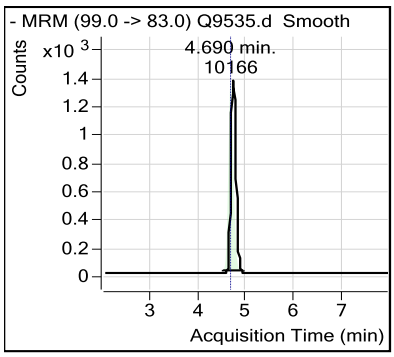
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.687	107.0 -> 89.0	19366	5.000	ng/ml	-0.238	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	10166	2.128	ng/ml	86	2.7
		101.0 -> 85.0	3818				

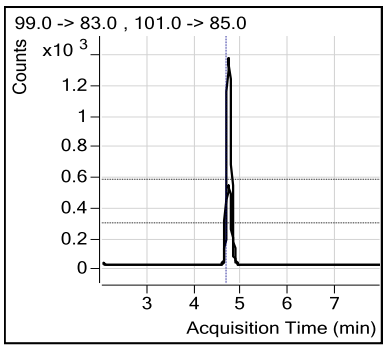
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

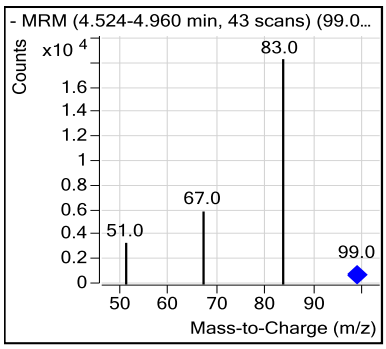
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9535.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:12
Sample Name	:	CC295-2.0
Vial	:	Vial 2
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

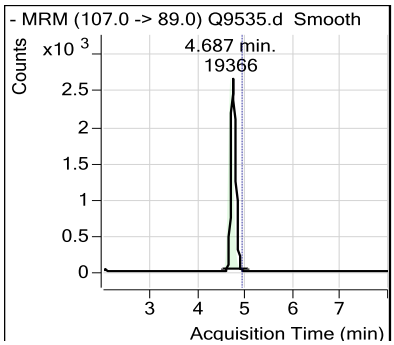
Perchlorate

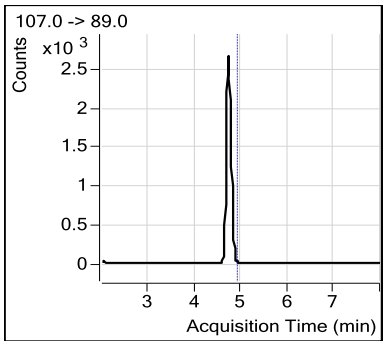


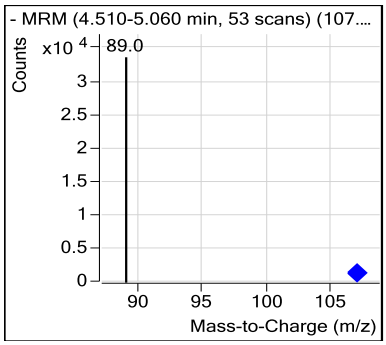




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9536.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:21
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	sq301.batch.bin
Last Calib Update	:	2014-12-26 10:52

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	Q-Ratio
Internal Standards								
Cl18O4	4.687	107.0 -> 89.0	20858	5.000	ng/ml		-0.238	
System Monitoring Compounds								
Target Compounds							**Qvalue**	**Q-Ratio**
Perchlorate	4.690	99.0 -> 83.0	992	0.196	ng/ml	#	78	2.4
		101.0 -> 85.0	416					

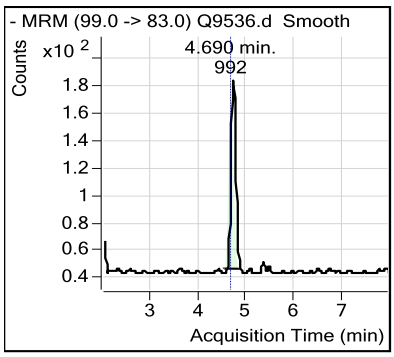
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

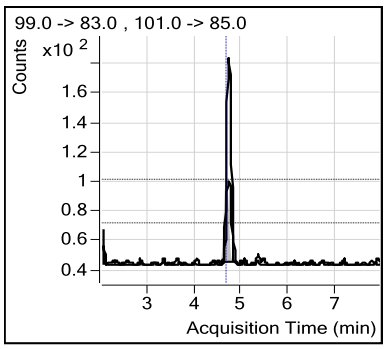
ACCUTEST LABORATORIES FA20881

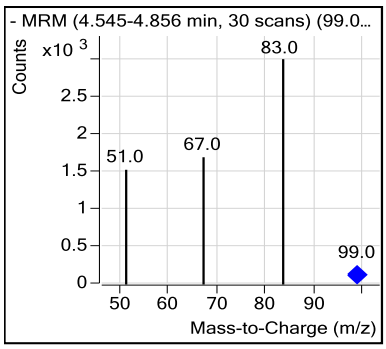
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9536.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2015-01-05 13:21
Sample Name	:	CC295-0.2
Vial	:	Vial 3
Sample Info	:	OP54473,SQ301,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

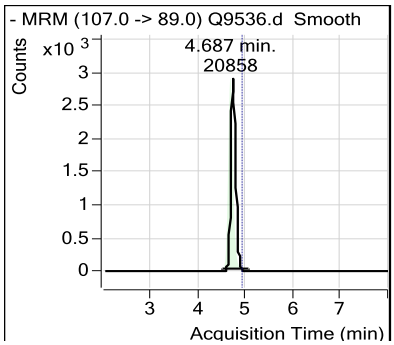
Perchlorate

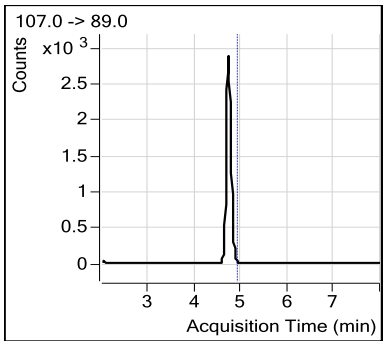


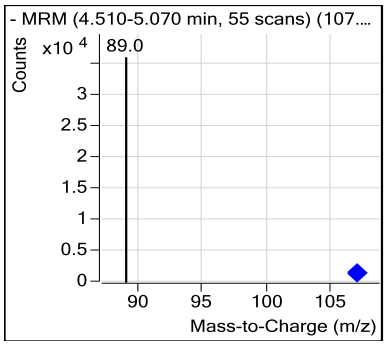




Cl18O4







ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	K prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6BTO
ACQ. METHOD:	Perch1ovocte_2
PROC. METHOD:	1226 6BTO SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	~~294~~ 295

mc 122614

ANALYST:	NAS
SOLVENT A LOT #:	95/5 084623/066640
SOLVENT B LOT #:	55/5 066640/084623
WATER LOT #:	084623
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9294	1	CCB	6BTO	—	—	2 10K	—		IS 7 pm curve
Q 95	1	CCB		—	—		—		
Q 96	1	CCB		—	—		—		
Q 97	2	CCB		—	—		—		
Q 98	2	CCB		—	—		—		
Q 99	2	~~ICP~~ IC295-0.2		LC494	20/10ml		3.4		✓
Q 300	3	FC295-0.5			50ul 10ml		2.6	AI	✓
Q 01	4	-1.0			100ul 10ml		3.0		✓
Q 02	5	ICC295-2.0			200ul 10ml		2.8		✓
Q 03	6	FC295-5.0			500ul 10ml		3.0		✓
Q 04	7	-10			1 ml 10ml		3.1		✓
Q 05	8	-25			2.5 ml 10ml		3.0		✓
Q 06	9	-50		↓	5 ml 10ml		3.2		Drop point
Q 07	10	FCV295-2.0		LC470	20ml 10ml	↓	3.1		Pass
Q 08	11	ICS295-0.2		↓	20ul 10ml	710K 415K	2.7		Pass
Q 09	12	OP54351-BS		OP54351	1X	2 10K	X		AA missinject
Q 10	13	-MB					X		↓
Q 11	14	FA20579-1					2.6		✓
Q 12	15	-2					2.8		✓
Q 13	16	-3	↓	↓	↓	↓	3.0		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	Rx Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate 2
PROC. METHOD:	R226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	295

ANALYST:	NAS		
SOLVENT A LOT #:	9515	084623	066640
SOLVENT B LOT #:	9515	066640	084623
WATER LOT #:	084623		
ISTD Lot #:	1199		

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9314	17	FA20574-4	6850	OP54351	1X	L10K	3.0		✓
Q 15	5	CC295-2.0		LC494	20ave 10ml		2.9		Pass
Q 16	2	-0.2		↓	20ave 10ml		3.1		Pass
Q 17	1	CCB		—			—		NA
Q 18	18	FA20723-1		OP54351	1X		2.8		✓
Q 19	19	-2					2.7		✓
Q 20	12	OP54351-BS					2.9		✓
Q 21	13	-MB					—		✓
Q 22	20	FA20723-3					2.6		✓
Q 23	21	OP54351-MS					2.9		✓
Q 24	22	-MSD					3.3		✓
Q 25	5	FC295-2.0		LC494	20ave 10ml		3.0		✓ Pass
Q 26	2	CC295-0.2	↓	↓	20ave 10ml		2.8		Pass
Q 27	1	CCB	↓	—		↓	—		
Q									
Q									
Q						12-26-14			
Q						NAS			
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

ACCUTEST LABORATORIES SE

DATE:	01-05-15
COLUMN TYPE:	K prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6650
ACQ. METHOD:	perchlorate 2
PROC. METHOD:	1220 6650 SQ29T
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NAS
SOLVENT A LOT #:	9T1T 076032 / K38813
SOLVENT B LOT #:	GT/T K38813 / 076032
WATER LOT #:	076032
ISTD Lot #:	7149

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9506	1	CCB	6650	—	—	<10K			✓
Q 07	1	CCB		—	—				✓
Q 08	1	CCB		—	—				✓
Q 09	2	CC2QT-2.0		LC494	200/10ml		2.7		Pass
Q 10	3	-0.2		↓	200ul 10ml	↓	3.2		Pass
Q 11	4	ICS2QT-0.2		LC450	200ul 10ml	>10K <15K	2.9		Pass
Q 12	5	OP54473-BS		OP54473	1T	<10K	2.2	PR	✓ PR
Q 13	6	-MB					—		NO
Q 14 DILUTION	7	FA20744-1					2.9		✓
Q 15	8	OP54473-MS					3.0		✓
Q 16	9	-MSD					2.8		✓
Q 17	10	FA20744-2					2.7		✓
Q 18	11	-3					2.7		✓
Q 19	12	-4					3.0		✓
Q 20	13	FA20820-1					2.8		✓
Q 21	14	-2		↓	↓		2.9		✓
Q 22	2	CC2QT-2.0		LC494	200ul 10ml		3.0		Pass
Q 23	3	-0.2		↓	200ul 10ml		2.9		Pass
Q 24	1	CCB		—	—		—		NO
Q 25	5	OP54473-BS		OP54473	1T		2.7		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	01-05-15
COLUMN TYPE:	K Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6870
ACQ. METHOD:	Perchlorate 3
PROC. METHOD:	1226 6870 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	KAS
SOLVENT A LOT #:	9515 076032 / K38813
SOLVENT B LOT #:	9515 K38813 / 076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9526	15	FA20820-3	6870	OP54473	1x	L10K	2.7		✓
Q 27	16	-4					3.1		✓ RR 4x
Q 28	17	-5					3.0		✓
Q 29	18	FA20981-1					3.0		✓
Q 30	19	-2					3.3		✓
Q 31	20	-3					2.9		✓
Q 32	21	FA20937-1					3.0		✓
Q 33	22	-2					2.7		✓
Q 34	23	-3		↓	↓		2.2		RR 1x
Q 35	2	CC295-2.0		LL444	20x dil 10ml		2.7		Pass
Q 36	3	-0.2		↓	20x dil 10ml		2.4		Pass
Q 37	1	CCB		—	—		—		ND
Q 38	24	FA20820-4		OP54473	5x 1x dilutions		2.9	2 millionl	✓
Q 39	25	FA20937-3		↓	1x		3.7		✓
Q 40	26	OP54492-05		OP54492			3.2		✓
Q 41	27	-MB					—		ND
Q 42	29	FA21067-1					2.9		✓
Q 43	28	-2					2.9		✓
Q 44	30	-3					2.7		✓
Q 45	31	-4		↓	↓	↓	2.2		✗ RR 1x

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature:

ACCUTEST LABORATORIES SE

DATE:	01-07-15
COLUMN TYPE:	K-Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate2
PROC. METHOD:	1226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NAS
SOLVENT A LOT #:	GP1F 076032/K396613
SOLVENT B LOT #:	GP1F K396613/076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9546	32	FA21067-5	6850	OP54442	1X	CLOK	2.8	MASSLOGIC	✓ MASSLOGIC
Q 47	33	-6		↓	↓		~~3.0~~	3.3	✓ ~~2.0~~ OK
Q 48	2	CC295 -2.0		LC444	200ul 10ml		3.2		PASS
Q 49	3	-0.2		↓	20ul 10ml		2.6		PASS
Q 50	1	CCV3					—		ND
Q 51	34	FA21867-7		OP54442	1X		2.9		✓
Q 52	35	-8					3.1		✓
Q 53	36	-9					2.7		✓
Q 54	37	-10					—		ND
Q 55	38	-11					—		ND
Q 56	39	-12					—	W	ND
Q 57	40	-13					3.8	MASSLOGIC	~~ND~~ ✓
Q 58	41	-14					2.8		✓
Q 59	42	-15					—		ND
Q 60	43	-16		↓	↓		3.3		✓
Q 61	2	CC295-2.0		LC444	200ul 10ml		2.9		PASS
Q 62	3	-0.2		↓	20ul 10ml		2.8		PASS
Q 63	1	CCV3					—		ND
Q 64	44	FA21067-17		OP54442	1X		3.1		✓
Q 65	45	-18		↓	↓		2.8		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature:

ACCUTEST LABORATORIES SE

DATE:	01-07-15
COLUMN TYPE:	K Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate2
PROC. METHOD:	1226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	NTS
SOLVENT A LOT #:	15/15 076032 / K3885
SOLVENT B LOT #:	91/15 K3885 / 076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9566	46	FA21067-19	6850	OP54442	1x	210K	2.7		✓
Q 67	47	-20					~~3.5~~ 3.5		✓
Q 68	48	OP54442-MS					3.1		✓
Q 69	49	-MSD					3.5		✓
Q 70	50	OP54443-BS		OP54443			3.0		✓
Q 71	51	-MB					—		ND
Q 72	52	FA21067-21					2.9		✓
Q 73	53	-22					2.9		✓
Q 74	2	CC245-2.0		LC444	200ul 10ml		2.9		PASS
Q 75	3	-0.2			20ul 10ml		2.8		PASS
Q 76	1	CCV3					—		ND
Q 77	54	FA21067-23		OP54443	1x		3.3		✓
Q 78	55	-24					3.0		✓
Q 79	56	-25					2.6		✓
Q 80	57	-26					3.5		✓
Q 81	58	-27					3.0		✓
Q 82	59	- 28					2.9		✓
Q 83	60	- 29					2.7		✓
Q 84	61	OP54443-MS					3.1		X ISLRR
Q 85	62	-MSD					2.9		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	01-05-15
COLUMN TYPE:	K Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	103

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Prchlorate 2
PROC. METHOD:	6850 1226 SQ245
CALIB. DATE:	12-26-14
RUN BATCH: SQ	301

ANALYST:	MAS
SOLVENT A LOT #:	95/5 076032 / K38513
SOLVENT B LOT #:	95/5 K38513 / 076032
WATER LOT #:	076032
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9586	63	FA21067-30	6850	OP54443	1X	CLOK	2.7		✓
Q 87	2	CC245-2.0		LC444	200uL (0ml		3.0		Pass
Q 88	3	-0.2		↓	20uL 10ml		3.2		high
Q 89	1	CCB		—			—		NO
Q 90	64	FA21067-31		OP54443			2.0		X AR
Q - 91	65	-32					—		NO
Q 92	66	-33					2.7		✓
Q 93	67	-34					—		X NO IS AR
Q 94	68	-35					3.3		✓
Q 95	69	-36					—		NO
Q 96	70	-37					2.4		✓
Q - 97	71	-38					2.7		✓
Q 98	72	-39					2.6		✓
Q - 99	73	-40		↓			—		NO
Q 9600	2	CC245-2.0		LC444	200uL (0ml		3.0		Pass
Q 01	3	CC245-0.2		↓	20uL 10ml		2.5		Pass
Q - 02	1	CCB	↓	—		↓	—		NO
Q									
Q									
Q									

MAS 01/06/15

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls NF rev. 10/12

Analyst's Signature:

ACCUTEST LABORATORIES SE

SOLID SAMPLE PREP REPORT

Date/Time: 01-02-15 1100
Started {mm/dd/yy 24:00}

Prep Method: 3550C 3580A or Method (circle)

Date/Time: 01-02-15 1300
Finished {mm/dd/yy 24:00}

Batch#: OP54473

Analytical Method: 6850

Ext. By: NHS Conc. By: — Vialed By: NHS Balance ID: ADVAN05

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54473 MB		1.00			10ml	
OP ↓ BS		1.00		20ul		
FA20794-1	1	1.29				MS/MSD
-2		1.26				
-3		1.02				
-4		1.19				
FA20820-1		1.09				
-2		1.21				
-3		1.18				
-4		1.19				
-5		1.00				
FA20891-1		1.00				
-2		1.13				
-3		1.02				
FA20937-1		1.07				
-2		1.00				
-3	↓	1.07			↓	
						NHS 01-02-15
OP54473 – MS	1	1.10		20ul	10ml	FA20794-1
– MSD	1	1.16		↓	↓	-1
DUP						

Comments:

Surr. ID: — Conc: — Exp. Date: — Inj. By: — Ver. By —

Spk. ID: LC450 Conc: 100ppb Exp. Date: 05-22-15 Inj. By: NHS Ver. By NHS

Initial Bath Temp (Therm ID): Exchange Bath/N-Evap Temp (Therm ID):

Observed Temp °C: Corr. Temp °C: Observed Temp °C: Corr. Temp °C:

CH2CL2 Lot # — Hexane Lot # — Na2SO4 Lot# —

Acetonitrile Lot # — Methanol Lot # — Acetone Lot# —

Syringe Filter Lot# 1001010 Filter ~~Paper~~ Vial # 022673 Reagent # 084623

Copper Lot # If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: Date: 01-02-15

Accepted By: Date: 01-02-15

NF rev. 09/14/12 extsolid 091412.xls

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-MB	BB045465.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	125%	69-134%

Method Blank Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-MB	GG058050.D	1	01/05/15	KL	12/30/14	OP54435	GGG2338

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	103%	69-134%

Blank Spike Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-BS	BB045463.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2690	108	75-147
121-82-4	RDX	2500	2500	100	79-126
606-20-2	2,6-Dinitrotoluene	2500	2630	105	81-134
121-14-2	2,4-Dinitrotoluene	2500	2620	105	81-128
35572-78-2	2-amino-4,6-Dinitrotoluene	2500	2560	102	81-127
19406-51-0	4-amino-2,6-Dinitrotoluene	2500	2510	100	74-125
118-96-7	2,4,6-Trinitrotoluene	2500	2340	94	70-123
55-63-0	Nitroglycerine	12500	12200	98	73-121

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	114%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-PT1	BB045464.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	620	605	98	54-255
121-82-4	RDX	587	541	92	59-118
606-20-2	2,6-Dinitrotoluene	1320	1270	96	64-119
121-14-2	2,4-Dinitrotoluene	638	631	99	66-119
35572-78-2	2-amino-4,6-Dinitrotoluene	650	539	83	60-112
19406-51-0	4-amino-2,6-Dinitrotoluene	947	509	54	54-103
118-96-7	2,4,6-Trinitrotoluene	808	703	87	59-100
55-63-0	Nitroglycerine	1000	745	75	62-115

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	115%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-MS	BB045467.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
OP54435-MSD	BB045468.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
FA20881-1	BB045466.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	FA20881-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	100	U	2480	2840	115	2500	2640	106	7	75-147/22
121-82-4	RDX	100	U	2480	2320	94	2500	2380	95	3	79-126/21
606-20-2	2,6-Dinitrotoluene	100	U	2480	2580	104	2500	2560	102	1	81-134/20
121-14-2	2,4-Dinitrotoluene	100	U	2480	2590	105	2500	2550	102	2	81-128/17
35572-78-2	2-amino-4,6-Dinitrotoluene	100	U	2480	2500	101	2500	2540	102	2	81-127/15
19406-51-0	4-amino-2,6-Dinitrotoluene	100	U	2480	2430	98	2500	2460	98	1	74-125/23
118-96-7	2,4,6-Trinitrotoluene	100	U	2480	2250	91	2500	2290	92	2	70-123/16
55-63-0	Nitroglycerine	1000	U	12400	12100	98	12500	12200	98	1	73-121/15

CAS No.	Surrogate Recoveries	MS	MSD	FA20881-1	Limits
610-39-9	3,4-Dinitrotoluene	111%	110%	122%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-DUP	BB045476.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
FA20937-1	BB045475.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	FA20937-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	100 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	100 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	100 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	100 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16
55-63-0	Nitroglycerine	1000 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20937-1	Limits
610-39-9	3,4-Dinitrotoluene	117%	121%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54435-DUP2	BB045477.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225
FA20937-1	BB045475.D	1	01/02/15	KL	12/30/14	OP54435	GBB1225

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20881-1, FA20881-2, FA20881-3

CAS No.	Compound	FA20937-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	100 U		ND		nc	22
121-82-4	RDX	100 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	100 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	100 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	100 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	100 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	100 U		ND		nc	16
55-63-0	Nitroglycerine	1000 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20937-1	Limits
610-39-9	3,4-Dinitrotoluene	121%	121%	69-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA20881-1	BB045466.D	122
FA20881-2	BB045469.D	122
FA20881-3	GG058051.D	104
FA20881-3	BB045470.D	121
OP54435-BS	BB045463.D	114
OP54435-DUP	BB045476.D	117
OP54435-DUP2	BB045477.D	121
OP54435-MB	BB045465.D	125
OP54435-MB	GG058050.D	
OP54435-MS	BB045467.D	111
OP54435-MSD	BB045468.D	110
OP54435-PT1	BB045464.D	115

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1225-CC1221	**Injection Date:**	01/02/15
Lab File ID:	BB045462.D	**Injection Time:**	14:31
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] **RT**
Check Std	11.18

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
OP54435-BS	BB045463.D	01/02/15	14:57	11.16
OP54435-PT1	BB045464.D	01/02/15	15:22	11.16
OP54435-MB	BB045465.D	01/02/15	15:47	11.15
FA20881-1	BB045466.D	01/02/15	16:11	11.16
OP54435-MS	BB045467.D	01/02/15	16:36	11.16
OP54435-MSD	BB045468.D	01/02/15	17:01	11.15
FA20881-2	BB045469.D	01/02/15	17:26	11.15
FA20881-3	BB045470.D	01/02/15	17:51	11.15
ZZZZZZ	BB045471.D	01/02/15	18:16	11.14
ZZZZZZ	BB045472.D	01/02/15	18:41	11.14

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1225-CC1221	**Injection Date:**	01/02/15
Lab File ID:	BB045473.D	**Injection Time:**	19:06
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	11.15	11.15

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA20937-1	BB045475.D	01/02/15	19:56	11.14	
OP54435-DUP	BB045476.D	01/02/15	20:21	11.12	
OP54435-DUP2	BB045477.D	01/02/15	20:46	11.12	
GBB1225-ECC122B	BB045481.D	01/02/15	22:26	11.13	11.13

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GGG2338-CC2334	**Injection Date:**	01/05/15
Lab File ID:	GG058049.D	**Injection Time:**	08:30
Instrument ID:	GCGG	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	16.27	16.28

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
OP54435-MB	GG058050.D	01/05/15	09:08		16.20
FA20881-3	GG058051.D	01/05/15	09:40	16.20	
GGG2338-ECC2334	GG058053.D	01/05/15	10:44	16.23	16.24

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

8.7.3

8

Initial Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration

Calibration Files
20 =BB045353.D 50 =BB045354.D 100 =BB045355.D 200 =BB045356.D
500 =BB045357.D 1000=BB045358.D 2000=BB045359.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.083	3.188	3.339	3.315	3.251	3.260	3.334	3.253	E3	2.83
2)	HMX	1.474	1.670	1.716	1.606	1.362	1.383	1.387	1.514	E3	9.79
3)	DNX	2.832	2.894	2.975	2.866	2.801	2.804	2.844	2.860	E3	2.12
4)	MNX	2.374	2.804	2.556	2.409	2.322	2.355	2.394	2.459	E3	6.88
5)	RDX	1.678	1.843	1.932	1.772	1.747	1.752	1.790	1.788	E3	4.52
6)	1,3,5-Trinitroben	4.481	4.244	3.946	3.884	3.871	3.921	3.957	4.043	E3	5.70
7)	1,3-Dinitrobenzen	5.762	5.450	5.064	5.209	5.032	5.039	5.164	5.246	E3	5.15
8)	3,5-Dinitroanilin	4.428	4.294	4.178	4.237	4.085	4.059	4.165	4.207	E3	3.02
9)	Nitrobenzene	3.284	2.994	3.213	3.005	3.053	2.947	3.019	3.074	E3	4.07
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.249	2.503	2.699	2.670	2.612	2.621	2.703	2.722	E3	8.90
12)	2,4,6-Trinitrotol	3.826	3.865	3.450	3.659	3.673	3.722	3.835	3.719	E3	3.87
13)	2-Amino-4,6-Dinit	3.530	2.871	2.821	2.977	3.028	3.076	3.196	3.071	E3	7.74
14)	4-Amino-2,6-Dinit	2.435	1.814	2.010	2.087	2.154	2.232	2.335	2.153	E3	9.65
15)S	3,4-Dinitrotoluen	1.255	1.611	1.536	1.636	1.789	1.878	1.985	1.670	E3	14.49
16)	2,4-Dinitrotoluen	4.665	4.604	4.533	4.326	4.368	4.431	4.582	4.501	E3	2.84
17)	2,6-Dinitrotoluen	2.520	2.735	2.784	2.590	2.484	2.498	2.572	2.598	E3	4.54
18)	o-Nitrotoluene	2.558	2.143	2.170	2.422	2.225	2.241	2.211	2.281	E3	6.64
19)	p-Nitrotoluene	4.075	3.357	3.374	3.402	3.460	3.500	3.455	3.518	E3	7.14
20)	m-Nitrotoluene	3.363	2.975	2.971	2.975	2.971	3.030	3.055	3.048	E3	4.68
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.230	4.445	5.099	5.021	4.991	5.011	5.125	4.846	E3	7.35
2)	HMX	6.508	6.195	4.907	4.746	3.950	3.968	3.929	4.886	E3	22.11

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 3946.60045 *A

3)	DNX	4.912	4.407	4.943	4.721	4.494	4.508	4.544	4.647	E3	4.60
4)	MNX	3.468	3.785	3.814	3.676	3.612	3.635	3.712	3.672	E3	3.16
5)	RDX	3.145	3.081	2.963	2.852	2.787	2.806	2.864	2.928	E3	4.76
6)	1,3,5-Trinitroben	8.213	7.591	7.478	7.449	7.405	7.515	7.661	7.616	E3	3.64
7)	1,3-Dinitrobenzen	3.725	3.678	3.707	3.397	3.387	3.414	3.504	3.545	E3	4.33
8)	3,5-Dinitroanilin	6.498	7.321	7.046	7.024	6.894	6.889	7.022	6.956	E3	3.56
9)	Nitrobenzene	3.210	3.149	2.901	3.005	2.977	2.862	2.917	3.003	E3	4.35
10)	Nitroglycerin	1.196	1.315	1.272	1.238	1.213	1.229	1.258	1.246	E3	3.19
11)	Tetryl	3.961	4.500	4.527	4.412	4.390	4.433	4.579	4.400	E3	4.66
12)	2,4,6-Trinitrotol	4.562	4.724	4.508	4.392	4.366	4.403	4.578	4.505	E3	2.85
13)	2-Amino-4,6-Dinit	5.080	4.634	4.475	4.586	4.578	4.621	4.850	4.689	E3	4.40
14)	4-Amino-2,6-Dinit	4.560	4.217	4.347	4.444	4.420	4.490	4.748	4.461	E3	3.75
15)S	3,4-Dinitrotoluen	2.765	2.828	3.098	3.156	3.212	3.287	3.560	3.129	E3	8.68
16)	2,4-Dinitrotoluen	2.590	2.550	2.594	2.638	2.658	2.711	2.939	2.668	E3	4.87
17)	2,6-Dinitrotoluen	3.069	3.190	2.949	3.132	3.166	3.207	3.375	3.155	E3	4.15
18)	o-Nitrotoluene	2.918	3.190	2.992	3.097	3.129	3.096	3.156	3.083	E3	3.10
19)	p-Nitrotoluene	3.152	2.835	2.934	2.912	2.943	2.937	2.985	2.957	E3	3.29
20)	m-Nitrotoluene	2.925	3.513	3.544	3.543	3.621	3.627	3.717	3.498	E3	7.50

Initial Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

```
21)  PETN              1.019 1.021 1.064 1.048 1.048 1.045 1.044 1.041 E3   1.52
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Tue Dec 30 07:02:24 2014
```

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX	500.000	517.314	-3.5	115	0.01	1.28- 1.89
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	RDX	500.000	523.852	-4.8	107	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	500.000	514.427	-2.9	107	0.00	4.10- 4.90
7	1,3-Dinitrobenzene	500.000	469.073	6.2	98	0.00	5.29- 6.09
8	3,5-Dinitroaniline	500.000	513.448	-2.7	106	0.00	5.81- 6.61
9	Nitrobenzene	500.000	530.019	-6.0	107	0.00	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	428.487	14.3	89	0.00	8.92- 9.72
12	2,4,6-Trinitrotoluene	500.000	516.406	-3.3	105	0.00	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	500.000	547.959	-9.6	111	0.00	9.54-10.34
14	4-Amino-2,6-Dinitrotol	500.000	569.662	-13.9	114	0.00	9.97-10.77
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	533.805	-6.8	110	0.00	10.86-11.66
17	2,6-Dinitrotoluene	500.000	526.912	-5.4	110	0.00	11.25-12.05
18	o-Nitrotoluene	500.000	538.039	-7.6	110	0.00	13.46-14.34
19	p-Nitrotoluene	500.000	525.630	-5.1	107	0.00	13.76-14.76
20	m-Nitrotoluene	500.000	558.699	-11.7	115	0.00	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
2	HMX	500.000	572.928	-14.6	114	0.01	1.28- 1.89
	----------	Amount	Calc.	%Drift	----------		
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	RDX	500.000	509.258	-1.9	107	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	500.000	525.399	-5.1	108	0.00	4.10- 4.90
7	1,3-Dinitrobenzene	500.000	489.663	2.1	102	0.00	5.29- 6.09
8	3,5-Dinitroaniline	500.000	529.536	-5.9	107	-0.01	5.81- 6.61
9	Nitrobenzene	500.000	516.106	-3.2	104	0.00	6.67- 7.47
10	Nitroglycerin	2500.000	2589.908	-3.6	106	0.00	8.55- 9.55
11	Tetryl	500.000	452.808	9.4	91	0.00	8.91- 9.71
12	2,4,6-Trinitrotoluene	500.000	537.672	-7.5	111	0.00	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	500.000	563.179	-12.6	115	0.00	9.55-10.35

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

14		4-Amino-2,6-Dinitrotol	500.000	571.387	-14.3	115	0.00	9.97-10.77
15	S	3,4-Dinitrotoluene			----------NA----------			
16		2,4-Dinitrotoluene	500.000	574.059	-14.8	115	-0.02	10.86-11.66
17		2,6-Dinitrotoluene	500.000	557.864	-11.6	111	-0.02	11.27-12.07
18		o-Nitrotoluene	500.000	531.281	-6.3	105	0.00	13.34-14.34
19		p-Nitrotoluene	500.000	529.110	-5.8	106	0.00	13.76-14.76
20		m-Nitrotoluene	500.000	585.508	-17.1#	113	0.00	14.34-15.34
21		PETN	2500.000	3447.072	-37.9#	137	0.00	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:58 2014

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	544.273	-8.9	109	0.00	1.07- 1.67
2	HMX		----------NA----------				
3	DNX	500.000	516.485	-3.3	105	0.00	1.47- 2.07
4	MNX	500.000	517.911	-3.6	110	0.00	2.07- 2.67
5	RDX		----------NA----------				
6	1,3,5-Trinitrobenzene		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	3,5-Dinitroaniline		----------NA----------				
9	Nitrobenzene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12	2,4,6-Trinitrotoluene		----------NA----------				
13	2-Amino-4,6-Dinitrotoluen		----------NA----------				
14	4-Amino-2,6-Dinitrotoluen		----------NA----------				
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene		----------NA----------				
17	2,6-Dinitrotoluene		----------NA----------				
18	o-Nitrotoluene		----------NA----------				
19	p-Nitrotoluene		----------NA----------				
20	m-Nitrotoluene		----------NA----------				
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	566.364	-13.3	110	0.00	1.07- 1.67
	---------- Amount	Calc.	%Drift	----------			
2	HMX		----------NA----------				
	---------- Amount	Calc.	%Drift	----------			
3	DNX	500.000	505.196	-1.0	104	0.00	1.47- 2.07
4	MNX	500.000	528.313	-5.7	107	0.00	2.07- 2.67
5	RDX		----------NA----------				
6	1,3,5-Trinitrobenzene		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	3,5-Dinitroaniline		----------NA----------				
9	Nitrobenzene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12	2,4,6-Trinitrotoluene		----------NA----------				
13	2-Amino-4,6-Dinitrotoluen		----------NA----------				

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

14		4-Amino-2,6-Dinitrotoluen	----------NA----------	
15	S	3,4-Dinitrotoluene	----------NA----------	
16		2,4-Dinitrotoluene	----------NA----------	
17		2,6-Dinitrotoluene	----------NA----------	
18		o-Nitrotoluene	----------NA----------	
19		p-Nitrotoluene	----------NA----------	
20		m-Nitrotoluene	----------NA----------	
21		PETN	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:59 2014

8.8.3

8

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045462.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1A.ch
Acq On : 02-Jan-2015, 14:31:48 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	950.522	4.9	95	0.00	1.06- 1.66
2	HMX	1000.000	1050.123	-5.0	115	0.00	1.18- 1.78
3	DNX	1000.000	964.170	3.6	98	0.00	1.44- 2.04
4	MNX	1000.000	962.799	3.7	101	0.00	2.03- 2.63
5	RDX	1000.000	992.496	0.8	101	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	966.097	3.4	100	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	966.795	3.3	101	0.01	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	966.592	3.3	100	0.00	5.93- 6.73
9	Nitrobenzene	1000.000	944.457	5.6	98	0.03	6.98- 7.78
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	1034.062	-3.4	107	0.00	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	947.881	5.2	95	0.02	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	1011.849	-1.2	101	0.00	9.92-10.72
14	4-Amino-2,6-Dinitrotol	1000.000	1046.613	-4.7	101	0.01	10.39-11.19
15 S	3,4-Dinitrotoluene	1000.000	1165.923	-16.6#	104	0.02	10.76-11.56
16	2,4-Dinitrotoluene	1000.000	1006.835	-0.7	102	0.03	11.33-12.13
17	2,6-Dinitrotoluene	1000.000	982.499	1.8	102	0.03	11.73-12.53
18	o-Nitrotoluene	1000.000	944.301	5.6	96	0.04	13.92-14.80
19	p-Nitrotoluene	1000.000	967.152	3.3	97	0.04	14.19-15.19
20	m-Nitrotoluene	1000.000	943.741	5.6	95	0.03	14.74-15.74
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	955.368	4.5	92	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1108.685	-10.9	110	0.00	1.19- 1.79
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	941.330	5.9	97	0.00	1.44- 2.04
4	MNX	1000.000	991.718	0.8	100	0.00	2.03- 2.63
5	RDX	1000.000	964.987	3.5	101	0.00	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	1000.885	-0.1	101	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	985.241	1.5	102	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	985.038	1.5	99	0.00	5.93- 6.73
9	Nitrobenzene	1000.000	939.118	6.1	99	0.03	6.98- 7.78
10	Nitroglycerin	5000.000	4958.196	0.8	101	0.00	8.65- 9.65
11	Tetryl	1000.000	1047.214	-4.7	104	0.00	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	930.558	6.9	95	0.02	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	984.031	1.6	100	0.00	9.92-10.72

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045462.D

14		4-Amino-2,6-Dinitrotol	1000.000	1002.566	-0.3	100	0.01	10.39-11.19
15	S	3,4-Dinitrotoluene	1000.000	1129.470	-12.9	108	0.02	10.76-11.56
16		2,4-Dinitrotoluene	1000.000	1110.183	-11.0	109	0.03	11.33-12.13
17		2,6-Dinitrotoluene	1000.000	1065.793	-6.6	105	0.03	11.73-12.53
18		o-Nitrotoluene	1000.000	984.206	1.6	98	0.04	13.80-14.80
19		p-Nitrotoluene	1000.000	948.770	5.1	96	0.04	14.19-15.19
20		m-Nitrotoluene	1000.000	1012.349	-1.2	98	0.03	14.74-15.74
21		PETN	5000.000	1340.902	73.2#	27	0.01	16.25-17.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Mon Jan 05 07:32:47 2015

8.8.4

8

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045473.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1A.ch
Acq On : 02-Jan-2015, 19:06:41 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	943.427	5.7	94	0.00	1.06- 1.66
2	HMX	1000.000	1055.251	-5.5	116	-0.01	1.18- 1.78
3	DNX	1000.000	960.143	4.0	98	0.00	1.44- 2.04
4	MNX	1000.000	948.649	5.1	99	0.00	2.03- 2.63
5	RDX	1000.000	977.909	2.2	100	-0.01	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	958.493	4.2	99	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	954.407	4.6	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	963.637	3.6	100	-0.02	5.93- 6.73
9	Nitrobenzene	1000.000	931.680	6.8	97	0.02	6.98- 7.78
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	1026.511	-2.7	107	-0.03	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	940.177	6.0	94	0.00	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	1006.844	-0.7	101	-0.02	9.92-10.72
14	4-Amino-2,6-Dinitrotol	1000.000	1026.774	-2.7	99	-0.01	10.39-11.19
15 S	3,4-Dinitrotoluene	1000.000	1193.515	-19.4#	106	-0.01	10.76-11.56
16	2,4-Dinitrotoluene	1000.000	995.277	0.5	101	0.00	11.33-12.13
17	2,6-Dinitrotoluene	1000.000	968.044	3.2	101	0.00	11.73-12.53
18	o-Nitrotoluene	1000.000	942.803	5.7	96	0.03	13.92-14.80
19	p-Nitrotoluene	1000.000	953.363	4.7	96	0.02	14.19-15.19
20	m-Nitrotoluene	1000.000	966.580	3.3	97	0.02	14.74-15.74
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	948.653	5.1	92	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1126.727	-12.7	112	-0.01	1.19- 1.79
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	950.542	4.9	98	0.00	1.44- 2.04
4	MNX	1000.000	987.154	1.3	100	0.00	2.03- 2.63
5	RDX	1000.000	954.584	4.5	100	-0.01	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	989.932	1.0	100	0.00	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	956.418	4.4	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	996.253	0.4	101	-0.02	5.93- 6.73
9	Nitrobenzene	1000.000	920.811	7.9	97	0.01	6.98- 7.78
10	Nitroglycerin	5000.000	4933.342	1.3	100	-0.02	8.65- 9.65
11	Tetryl	1000.000	1044.210	-4.4	104	-0.03	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	928.667	7.1	95	0.00	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	984.107	1.6	100	-0.02	9.92-10.72

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-CC1221
Lab FileID: BB045473.D

14		4-Amino-2,6-Dinitrotol	1000.000	998.341	0.2	99	-0.01	10.39-11.19
15	S	3,4-Dinitrotoluene	1000.000	1121.421	-12.1	107	0.00	10.76-11.56
16		2,4-Dinitrotoluene	1000.000	1094.853	-9.5	108	0.00	11.33-12.13
17		2,6-Dinitrotoluene	1000.000	1048.068	-4.8	103	0.00	11.73-12.53
18		o-Nitrotoluene	1000.000	972.026	2.8	97	0.02	13.80-14.80
19		p-Nitrotoluene	1000.000	943.437	5.7	95	0.02	14.19-15.19
20		m-Nitrotoluene	1000.000	1024.261	-2.4	99	0.02	14.74-15.74
21		PETN	5000.000	1367.267	72.7#	27	0.00	16.25-17.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Mon Jan 05 07:32:48 2015

8.8.5

8

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-ECC1221
Lab FileID: BB045481.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1A.ch
Acq On : 02-Jan-2015, 22:26:16 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	936.182	6.4	93	0.00	1.06- 1.66
2	HMX	1000.000	1063.504	-6.4	116	-0.01	1.18- 1.78
3	DNX	1000.000	957.821	4.2	98	0.00	1.44- 2.04
4	MNX	1000.000	947.856	5.2	99	-0.01	2.03- 2.63
5	RDX	1000.000	979.986	2.0	100	-0.02	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	960.846	3.9	99	-0.01	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	954.533	4.5	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	965.842	3.4	100	-0.02	5.93- 6.73
9	Nitrobenzene	1000.000	945.139	5.5	99	0.01	6.98- 7.78
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	1024.272	-2.4	106	-0.05	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	933.905	6.6	93	-0.03	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	997.633	0.2	100	-0.04	9.92-10.72
14	4-Amino-2,6-Dinitrotol	1000.000	1023.838	-2.4	99	-0.04	10.39-11.19
15 S	3,4-Dinitrotoluene	1000.000	1185.621	-18.6#	105	-0.03	10.76-11.56
16	2,4-Dinitrotoluene	1000.000	992.147	0.8	101	-0.02	11.33-12.13
17	2,6-Dinitrotoluene	1000.000	963.307	3.7	100	0.00	11.73-12.53
18	o-Nitrotoluene	1000.000	936.424	6.4	95	0.02	13.92-14.80
19	p-Nitrotoluene	1000.000	953.846	4.6	96	0.01	14.19-15.19
20	m-Nitrotoluene	1000.000	968.048	3.2	97	0.01	14.74-15.74
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	943.313	5.7	91	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1123.546	-12.4	112	-0.01	1.19- 1.79
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	946.339	5.4	98	0.00	1.44- 2.04
4	MNX	1000.000	982.374	1.8	99	-0.01	2.03- 2.63
5	RDX	1000.000	959.057	4.1	100	-0.02	2.53- 3.33
6	1,3,5-Trinitrobenzene	1000.000	986.536	1.3	100	-0.01	4.19- 4.99
7	1,3-Dinitrobenzene	1000.000	951.053	4.9	99	0.00	5.45- 6.25
8	3,5-Dinitroaniline	1000.000	982.731	1.7	99	-0.03	5.93- 6.73
9	Nitrobenzene	1000.000	935.035	6.5	98	0.00	6.98- 7.78
10	Nitroglycerin	5000.000	4906.379	1.9	99	-0.03	8.65- 9.65
11	Tetryl	1000.000	1043.279	-4.3	104	-0.05	9.09- 9.89
12	2,4,6-Trinitrotoluene	1000.000	927.811	7.2	95	-0.03	9.45-10.25
13	2-Amino-4,6-Dinitrotol	1000.000	982.472	1.8	100	-0.04	9.92-10.72

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1225-ECC1221
Lab FileID: BB045481.D

14		4-Amino-2,6-Dinitrotol	1000.000	1001.681	-0.2	100	-0.03	10.39-11.19
15	S	3,4-Dinitrotoluene	1000.000	1124.529	-12.5	107	-0.03	10.76-11.56
16		2,4-Dinitrotoluene	1000.000	1101.697	-10.2	108	-0.02	11.33-12.13
17		2,6-Dinitrotoluene	1000.000	1054.244	-5.4	104	0.00	11.73-12.53
18		o-Nitrotoluene	1000.000	955.012	4.5	95	0.01	13.80-14.80
19		p-Nitrotoluene	1000.000	945.750	5.4	95	0.01	14.19-15.19
20		m-Nitrotoluene	1000.000	1024.773	-2.5	99	0.01	14.74-15.74
21		PETN	5000.000	1329.611	73.4#	27	-0.02	16.25-17.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Mon Jan 05 07:32:49 2015

8.8.6

8

Initial Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICC2334
Lab FileID: GG057990.D

Response Factor Report G1315B

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Initial Calibration

Calibration Files
20 =GG057986.D 50 =GG057987.D 100 =GG057988.D 200 =GG057989.D
500 =GG057990.D 1000=GG057991.D 2000=GG057992.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	9.184	9.272	8.859	9.117	8.646	8.924	9.117	9.017	E3	2.41
2)	HMX	3.108	2.748	2.583	2.505	2.600	2.710	2.807	2.723	E3	7.32
3)	DNX	6.708	8.500	7.802	8.004	7.968	7.999	8.243	7.889	E3	7.19
4)	MNX	6.358	7.047	6.349	6.314	6.136	6.173	6.343	6.388	E3	4.75
5)	1,3,5-Trinitroben	1.090	1.016	0.971	1.042	0.987	1.002	1.040	1.021	E4	3.92
6)	RDX	4.897	4.879	4.448	4.890	4.530	4.582	4.743	4.710	E3	4.01
7)	1,3-Dinitrobenzen	1.362	1.420	1.349	1.392	1.338	1.346	1.389	1.371	E4	2.21
8)	Nitrobenzene	9.086	9.298	8.656	8.888	8.802	8.840	9.013	8.940	E3	2.36
9)	2,4,6-Trinitrotol	1.021	0.992	0.912	0.957	0.937	0.942	0.969	0.961	E4	3.80
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	9.025	7.656	7.201	7.789	7.432	7.472	7.692	7.752	E3	7.67
12)S	3,4-Dinitrotoluen	6.728	6.137	5.737	5.852	5.812	5.781	5.978	6.004	E3	5.78
13)	2,6-Dinitrotoluen	6.870	6.885	6.440	6.598	6.418	6.439	6.622	6.610	E3	3.01
14)	2,4-Dinitrotoluen	1.256	1.347	1.250	1.277	1.244	1.249	1.289	1.273	E4	2.89
15)	o-Nitrotoluene	1.697	1.806	1.719	1.738	1.686	1.697	1.747	1.727	E4	2.41
16)	3,5-Dinitroanilin	1.697	1.806	1.719	1.738	1.686	1.697	1.747	1.727	E4	2.41
17)	p-Nitrotoluene	5.700	5.476	5.180	5.221	5.077	5.105	5.256	5.288	E3	4.24
18)	4-Amino-2,6-Dinit	7.111	7.110	6.555	6.712	6.352	6.388	6.588	6.688	E3	4.68
19)	m-Nitrotoluene	6.198	6.455	6.105	6.062	5.834	5.889	6.047	6.084	E3	3.38
20)	2-Amino-4,6-Dinit	1.042	0.970	0.912	0.952	0.889	0.899	0.932	0.942	E4	5.57
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	1.324	1.390	1.319	1.356	1.304	1.345	1.378	1.345	E4	2.35
2)	HMX	0.982	1.316	1.032	0.989	0.860	0.954	0.975	1.015	E4	14.02
3)	DNX	1.507	1.450	1.386	1.342	1.370	1.335	1.347	1.391	E4	4.61
4)	MNX	0.893	1.122	1.038	1.055	0.967	0.976	1.009	1.008	E4	7.24
5)	1,3,5-Trinitroben	1.745	1.827	1.729	1.840	1.756	1.792	1.867	1.794	E4	2.94
6)	RDX	8.419	8.923	8.546	8.906	8.555	8.850	9.173	8.768	E3	3.05
7)	1,3-Dinitrobenzen	1.074	1.014	1.014	1.073	1.008	1.023	1.072	1.040	E4	3.01
8)	Nitrobenzene	6.976	9.557	8.306	8.493	8.012	8.194	8.560	8.300	E3	9.24
9)	2,4,6-Trinitrotol	1.312	1.309	1.248	1.239	1.219	1.229	1.307	1.266	E4	3.26
10)	Nitroglycerin	3.255	3.282	3.123	3.300	3.304	3.333	3.552	3.307	E3	3.87
11)	Tetryl	1.678	1.453	1.251	1.357	1.255	1.287	1.392	1.382	E4	10.90
12)S	3,4-Dinitrotoluen	1.194	1.128	1.047	1.108	1.073	1.059	1.213	1.118	E4	5.85
13)	2,6-Dinitrotoluen	9.317	8.747	8.684	9.020	8.784	8.982	9.703	9.034	E3	4.04
14)	2,4-Dinitrotoluen	9.316	8.417	8.600	8.845	8.599	8.706	9.650	8.876	E3	5.01
15)	o-Nitrotoluene	2.944	2.865	2.758	2.830	2.675	2.723	2.881	2.811	E4	3.41
16)	3,5-Dinitroanilin	2.944	2.865	2.854	2.830	2.710	2.717	2.881	2.829	E4	3.04
17)	p-Nitrotoluene	9.828	9.650	8.166	8.797	8.131	8.186	9.054	8.830	E3	8.09
18)	4-Amino-2,6-Dinit	1.271	1.426	1.265	1.369	1.260	1.272	1.360	1.318	E4	5.04
19)	m-Nitrotoluene	1.005	1.111	1.029	1.031	0.982	0.988	1.055	1.029	E4	4.33
20)	2-Amino-4,6-Dinit	1.776	1.403	1.297	1.383	1.319	1.323	1.394	1.414	E4	11.67
21)	PETN	0.989	1.957	2.544	3.220	3.348	3.473	3.626	2.737	E3	35.42

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 3578.30972 *A

Initial Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICC2334
Lab FileID: GG057990.D

(#) = Out of Range

8330_RPB2.M Fri Dec 26 12:54:53 2014

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICV2334
Lab FileID: GG057993.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\1224RPB2\GG057993.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\1224RPB2\GG057993.D\dad1A.ch
Acq On : 24-Dec-2014, 14:31:07 Operator: kismetl
Sample : icv2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	500.000	529.440	-5.9	110	0.00	5.15- 6.15
2		HMX	500.000	563.884	-12.8	118	-0.02	5.76- 6.76
3		DNX	500.000	524.888	-5.0	104	-0.01	5.88- 6.88
4		MNX	500.000	521.522	-4.3	109	-0.01	7.23- 8.23
5		1,3,5-Trinitrobenzene	500.000	535.552	-7.1	111	0.00	8.11- 9.11
6		RDX	500.000	526.309	-5.3	109	0.00	8.71- 9.71
7		1,3-Dinitrobenzene	500.000	488.671	2.3	100	0.00	10.74-11.74
8		Nitrobenzene	500.000	545.420	-9.1	111	0.00	11.72-12.72
9		2,4,6-Trinitrotoluene	500.000	507.442	-1.5	104	0.00	12.77-13.77
10		Nitroglycerin	----------	NA	----------			
11		Tetryl	500.000	486.237	2.8	101	0.00	14.49-15.49
12	S	3,4-Dinitrotoluene	----------	NA	----------			
13		2,6-Dinitrotoluene	500.000	549.184	-9.8	113	0.00	16.05-17.05
14		2,4-Dinitrotoluene	500.000	519.727	-3.9	106	0.00	16.85-17.85
15		o-Nitrotoluene	500.000	502.599	-0.5	103	0.00	18.43-19.43
16		3,5-Dinitroaniline	500.000	514.563	-2.9	105	0.00	18.43-19.43
17		p-Nitrotoluene	500.000	499.151	0.2	104	0.00	19.87-20.87
18		4-Amino-2,6-Dinitrotol	500.000	514.100	-2.8	108	0.00	20.52-21.52
19		m-Nitrotoluene	500.000	556.302	-11.3	116	0.00	21.42-22.42
20		2-Amino-4,6-Dinitrotol	500.000	522.520	-4.5	111	0.00	23.18-24.18
21		PETN	----------	NA	----------			

***** Signal #2 *****

1		TNX	500.000	537.312	-7.5	111	0.00	5.15- 6.15
2		HMX	500.000	566.243	-13.2	134	0.00	5.73- 6.73
3		DNX	500.000	497.167	0.6	101	-0.01	5.88- 6.88
4		MNX	500.000	518.629	-3.7	108	-0.01	7.23- 8.23
5		1,3,5-Trinitrobenzene	500.000	542.363	-8.5	111	0.00	8.11- 9.11
6		RDX	500.000	534.347	-6.9	110	-0.01	8.71- 9.71
7		1,3-Dinitrobenzene	500.000	506.987	-1.4	105	0.00	10.74-11.74
8		Nitrobenzene	500.000	540.433	-8.1	112	0.00	11.71-12.71
9		2,4,6-Trinitrotoluene	500.000	480.845	3.8	100	0.00	12.77-13.77
10		Nitroglycerin	2500.000	2463.201	1.5	99	0.00	13.65-14.65
11		Tetryl	500.000	478.133	4.4	105	0.00	14.49-15.49
12	S	3,4-Dinitrotoluene	----------	NA	----------			
13		2,6-Dinitrotoluene	500.000	567.309	-13.5	117	0.00	16.04-17.04
14		2,4-Dinitrotoluene	500.000	515.640	-3.1	106	0.00	16.85-17.85
15		o-Nitrotoluene	500.000	502.584	-0.5	106	0.00	18.42-19.42
16		3,5-Dinitroaniline	500.000	501.257	-0.3	105	0.00	18.42-19.42
17		p-Nitrotoluene	500.000	499.651	0.1	109	0.00	19.87-20.87

Initial Calibration Verification

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2334-ICV2334
Lab FileID: GG057993.D

		Amount	Calc.	%Drift			
18	4-Amino-2,6-Dinitrotol	500.000	536.087	-7.2	112	0.00	20.52-21.52
19	m-Nitrotoluene	500.000	560.680	-12.1	117	0.00	21.42-22.42
20	2-Amino-4,6-Dinitrotol	500.000	514.943	-3.0	110	0.00	23.18-24.18
21	PETN	2500.000	2447.762	2.1	105	0.00	25.07-26.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

GG057990.D 8330_RPB2.M Fri Dec 26 13:29:09 2014

8.8.8

8

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-CC2334
Lab FileID: GG058049.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0105RPB2\GG058049.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058049.D\dad1A.ch
Acq On : 05-Jan-2015, 08:30:22 Operator: kismetl
Sample : cc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	1000.000	993.509	0.6	100	0.00	5.15- 6.15
2		HMX	1000.000	956.102	4.4	96	0.02	5.77- 6.77
3		DNX	1000.000	1062.773	-6.3	105	0.00	5.89- 6.89
4		MNX	1000.000	974.428	2.6	101	0.02	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	994.162	0.6	101	0.00	8.12- 9.12
6		RDX	1000.000	989.962	1.0	102	0.03	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	993.253	0.7	101	0.02	10.77-11.77
8		Nitrobenzene	1000.000	985.805	1.4	100	0.02	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	989.879	1.0	101	0.02	12.80-13.80
10		Nitroglycerin	----------	----------	NA	----------		
11		Tetryl	1000.000	970.866	2.9	101	0.05	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	890.034	11.0	92	0.06	15.72-16.72
13		2,6-Dinitrotoluene	1000.000	1068.655	-6.9	110	0.03	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	999.676	0.0	102	0.05	16.91-17.91
15		o-Nitrotoluene	1000.000	990.737	0.9	101	0.06	18.50-19.50
16		3,5-Dinitroaniline	1000.000	990.737	0.9	101	0.06	18.50-19.50
17		p-Nitrotoluene	1000.000	939.499	6.1	97	0.06	19.93-20.93
18		4-Amino-2,6-Dinitrotol	1000.000	983.662	1.6	103	0.09	20.61-21.61
19		m-Nitrotoluene	1000.000	972.602	2.7	100	0.06	21.48-22.48
20		2-Amino-4,6-Dinitrotol	1000.000	963.145	3.7	101	0.10	23.28-24.28
21		PETN	----------	----------	NA	----------		

***** Signal #2 *****

1		TNX	1000.000	1009.399	-0.9	101	0.00	5.15- 6.15
2		HMX	1000.000	788.086	21.2#	84	0.03	5.74- 6.74
3		DNX	1000.000	1088.780	-8.9	113	0.00	5.89- 6.89
4		MNX	1000.000	971.540	2.8	100	0.02	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	998.893	0.1	100	0.00	8.12- 9.12
6		RDX	1000.000	1031.884	-3.2	102	0.03	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	1033.605	-3.4	105	0.02	10.77-11.77
8		Nitrobenzene	1000.000	957.173	4.3	97	0.02	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	986.876	1.3	102	0.02	12.80-13.80
10		Nitroglycerin	5000.000	5199.586	-4.0	103	0.03	13.70-14.70
11		Tetryl	1000.000	947.159	5.3	102	0.05	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	986.489	1.4	104	0.06	15.71-16.71
13		2,6-Dinitrotoluene	1000.000	1094.436	-9.4	110	0.02	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	1023.669	-2.4	104	0.04	16.91-17.91
15		o-Nitrotoluene	1000.000	976.545	2.3	101	0.07	18.49-19.49
16		3,5-Dinitroaniline	1000.000	970.325	3.0	101	0.07	18.49-19.49
17		p-Nitrotoluene	1000.000	923.161	7.7	100	0.06	19.93-20.93

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-CC2334
Lab FileID: GG058049.D

18	4-Amino-2,6-Dinitrotol	1000.000	1009.036	-0.9	105	0.09	20.61-21.61
19	m-Nitrotoluene	1000.000	974.020	2.6	101	0.06	21.49-22.49
20	2-Amino-4,6-Dinitrotol	1000.000	920.604	7.9	98	0.10	23.29-24.29
		Amount	Calc.	%Drift			
21	PETN	5000.000	593.960	88.1#	12	0.08	25.13-26.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057991.D 8330_RPB2.M Mon Jan 05 11:28:45 2015

8.8.9

8

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-ECC2334
Lab FileID: GG058053.D

Evaluate Continuing Calibration Report

Signal #1 : G:\DATA\0105RPB2\GG058053.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058053.D\dad1A.ch
Acq On : 05-Jan-2015, 10:44:58 Operator: kismetl
Sample : ecc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	1000.000	993.612	0.6	100	0.00	5.15- 6.15
2		HMX	1000.000	919.174	8.1	92	0.00	5.77- 6.77
3		DNX	1000.000	1056.005	-5.6	104	0.00	5.89- 6.89
4		MNX	1000.000	970.601	2.9	100	0.01	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	987.080	1.3	101	0.00	8.12- 9.12
6		RDX	1000.000	986.178	1.4	101	0.02	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	988.411	1.2	101	0.01	10.77-11.77
8		Nitrobenzene	1000.000	988.326	1.2	100	0.01	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	980.111	2.0	100	0.00	12.80-13.80
10		Nitroglycerin	----------	NA	----------			
11		Tetryl	1000.000	953.874	4.6	99	0.02	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	916.179	8.4	95	0.03	15.72-16.72
13		2,6-Dinitrotoluene	1000.000	1019.425	-1.9	105	0.01	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	986.446	1.4	101	0.02	16.91-17.91
15		o-Nitrotoluene	1000.000	983.927	1.6	100	0.03	18.50-19.50
16		3,5-Dinitroaniline	1000.000	983.927	1.6	100	0.03	18.50-19.50
17		p-Nitrotoluene	1000.000	942.318	5.8	98	0.01	19.93-20.93
18		4-Amino-2,6-Dinitrotol	1000.000	968.210	3.2	101	0.03	20.61-21.61
19		m-Nitrotoluene	1000.000	970.261	3.0	100	0.01	21.48-22.48
20		2-Amino-4,6-Dinitrotol	1000.000	959.622	4.0	101	0.04	23.28-24.28
21		PETN	----------	NA	----------			

***** Signal #2 *****

1		TNX	1000.000	1012.150	-1.2	101	0.00	5.15- 6.15
2		HMX	1000.000	843.566	15.6#	90	0.02	5.74- 6.74
3		DNX	1000.000	1046.239	-4.6	109	0.00	5.89- 6.89
4		MNX	1000.000	978.341	2.2	101	0.01	7.24- 8.24
5		1,3,5-Trinitrobenzene	1000.000	1007.231	-0.7	101	0.00	8.12- 9.12
6		RDX	1000.000	1027.208	-2.7	102	0.02	8.74- 9.74
7		1,3-Dinitrobenzene	1000.000	985.418	1.5	100	0.00	10.77-11.77
8		Nitrobenzene	1000.000	968.816	3.1	98	0.01	11.75-12.75
9		2,4,6-Trinitrotoluene	1000.000	951.178	4.9	98	0.00	12.80-13.80
10		Nitroglycerin	5000.000	4931.781	1.4	98	0.00	13.70-14.70
11		Tetryl	1000.000	892.000	10.8	96	0.02	14.55-15.55
12	S	3,4-Dinitrotoluene	1000.000	944.213	5.6	100	0.02	15.71-16.71
13		2,6-Dinitrotoluene	1000.000	1027.543	-2.8	103	0.00	16.10-17.10
14		2,4-Dinitrotoluene	1000.000	989.902	1.0	101	0.00	16.91-17.91
15		o-Nitrotoluene	1000.000	973.811	2.6	101	0.02	18.49-19.49
16		3,5-Dinitroaniline	1000.000	967.086	3.3	101	0.02	18.49-19.49
17		p-Nitrotoluene	1000.000	955.372	4.5	103	0.01	19.93-20.93

Continuing Calibration Summary

Job Number: FA20881
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GGG2338-ECC2334
Lab FileID: GG058053.D

18	4-Amino-2,6-Dinitrotol	1000.000	1004.794	-0.5	104	0.03	20.61-21.61
19	m-Nitrotoluene	1000.000	982.442	1.8	102	0.00	21.49-22.49
20	2-Amino-4,6-Dinitrotol	1000.000	925.490	7.5	99	0.03	23.29-24.29
		Amount	Calc.	%Drift			
21	PETN	5000.000	581.360	88.4#	12	0.02	25.13-26.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GG057991.D 8330_RPB2.M Mon Jan 05 11:28:46 2015

8.8.10

8

Southeast

ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045466.D\dad1B.ch Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045466.D\dad1A.ch
Acq On : 02-Jan-2015, 16:11:59 Operator: KISMETL
Sample : FA20881-1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:44 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.15	11.16	1056502	1909591	632.646m	610.217m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		126.53%	122.04%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

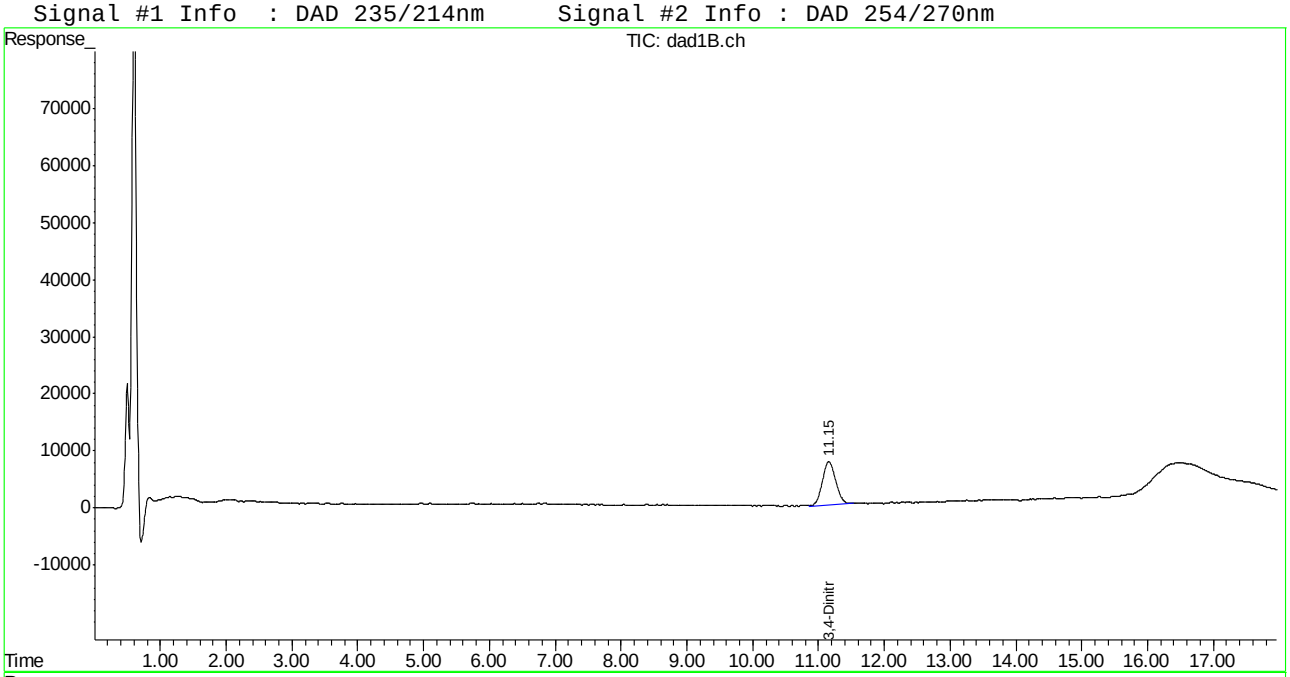
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045466.D 8330B.M Mon Jan 05 07:33:48 2015

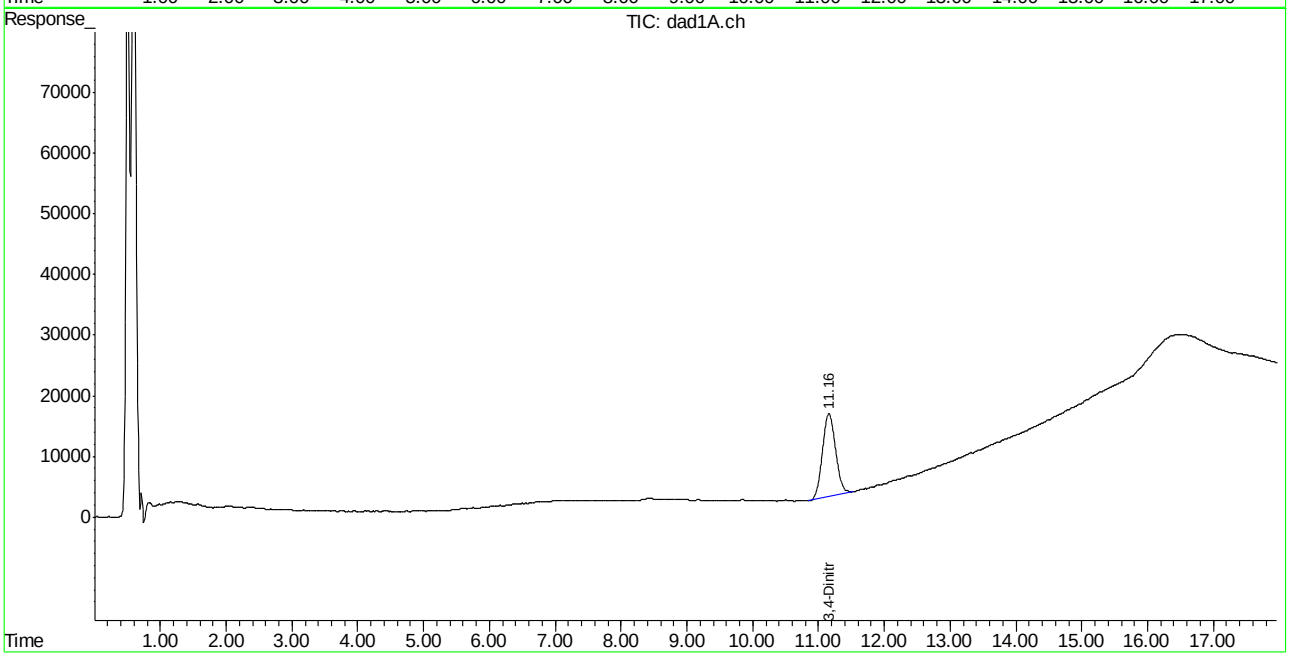
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045466.D\dad1B.ch Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045466.D\dad1A.ch
Acq On : 02-Jan-2015, 16:11:59 Operator: KISMETL
Sample : FA20881-1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:11 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: FA20881-1
Lab FileID: BB045466.D
Injection Time: 01/02/15 16:11
Method: SW846 8330B
Analyst approved: 01/05/15 07:47 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.15	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.16	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045469.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045469.D\dad1A.ch
Acq On : 02-Jan-2015, 17:26:51 Operator: KISMETL
Sample : FA20881-2 Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:47 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.15	11.15	1072061	1901285	641.964m	607.563m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		128.39%	121.51%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

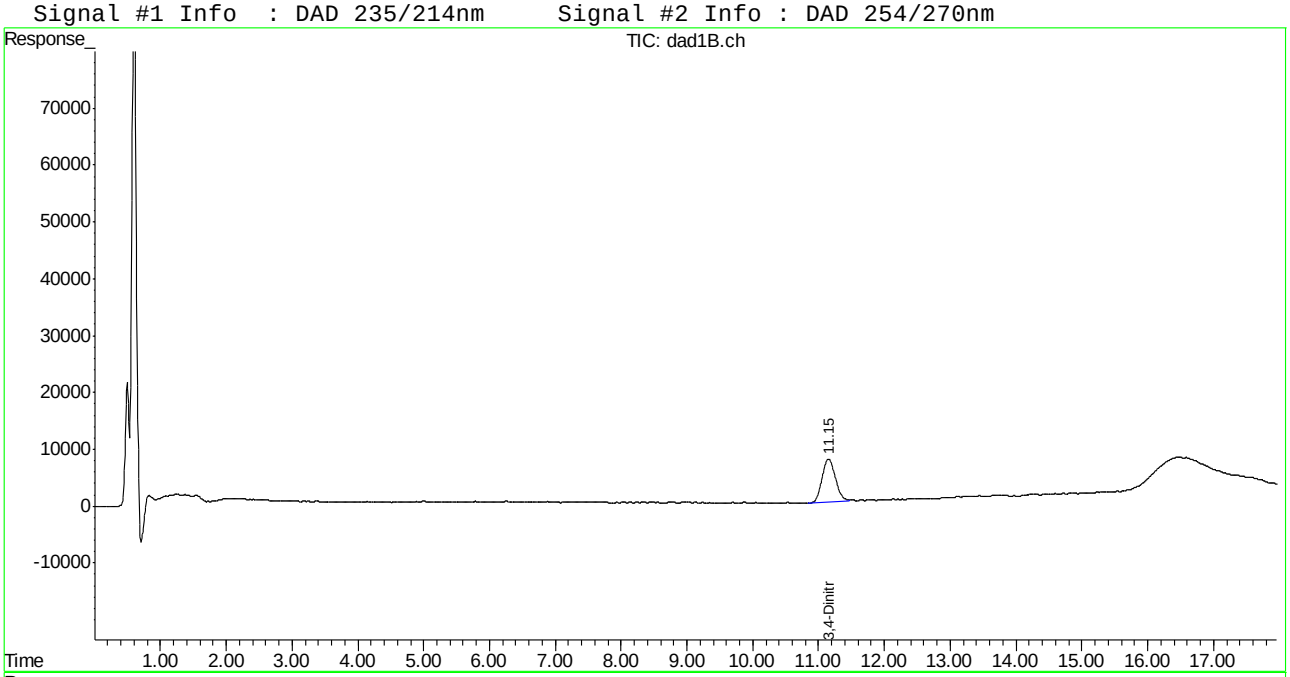
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045469.D 8330B.M Mon Jan 05 07:33:51 2015

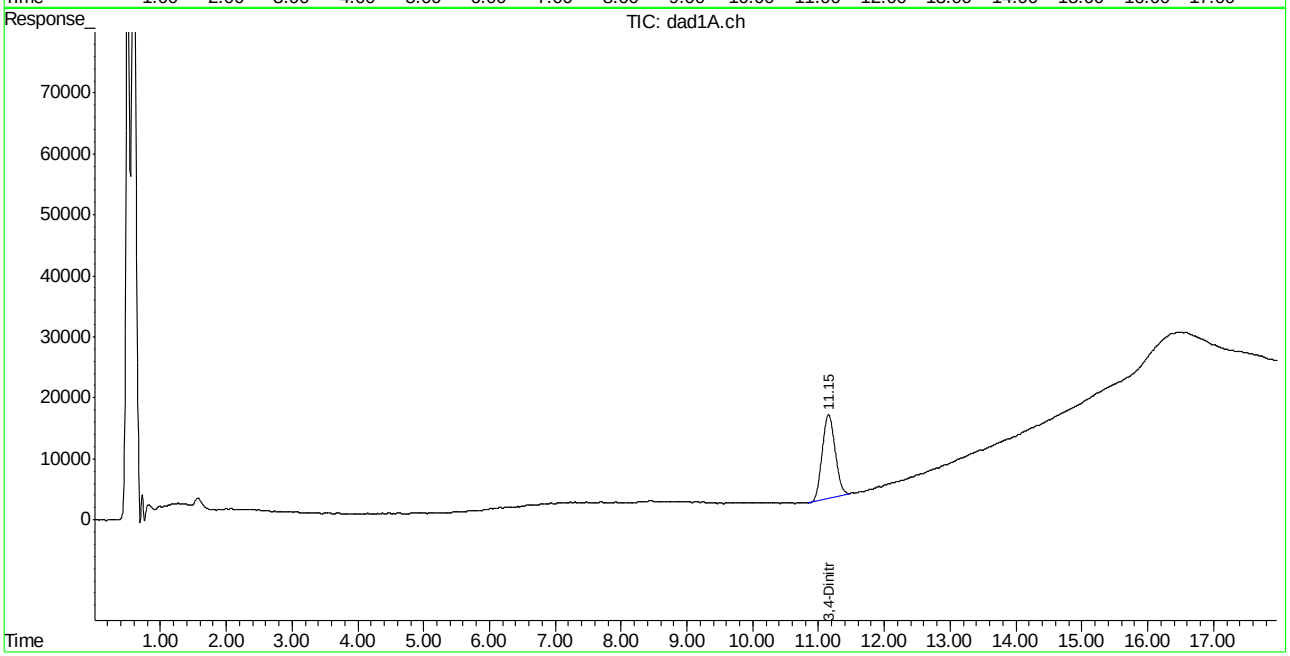
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045469.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045469.D\dad1A.ch
Acq On : 02-Jan-2015, 17:26:51 Operator: KISMETL
Sample : FA20881-2 Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:19 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA20881-2
Lab FileID: BB045469.D
Injection Time: 01/02/15 17:26
Method: SW846 8330B
Analyst approved: 01/05/15 07:47 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	11.15	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	11.15	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045470.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045470.D\dad1A.ch
Acq On : 02-Jan-2015, 17:51:48 Operator: KISMETL
Sample : FA20881-3 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:48 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.15	11.15	1077315	1886154	645.110m	602.728
Spiked Amount	500.000	Range	72 - 134	Recovery	=	129.02%	120.55%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	9.14	0	194464	N.D.	156.090m#
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

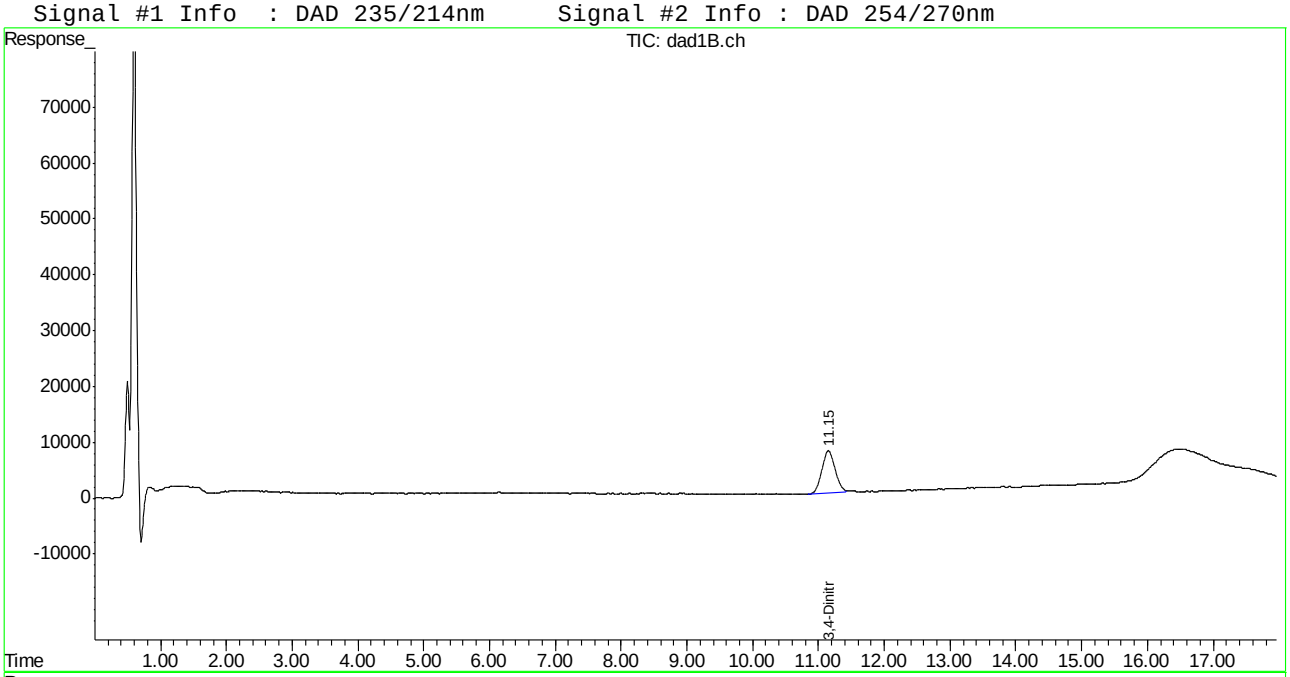
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045470.D 8330B.M Mon Jan 05 07:33:52 2015

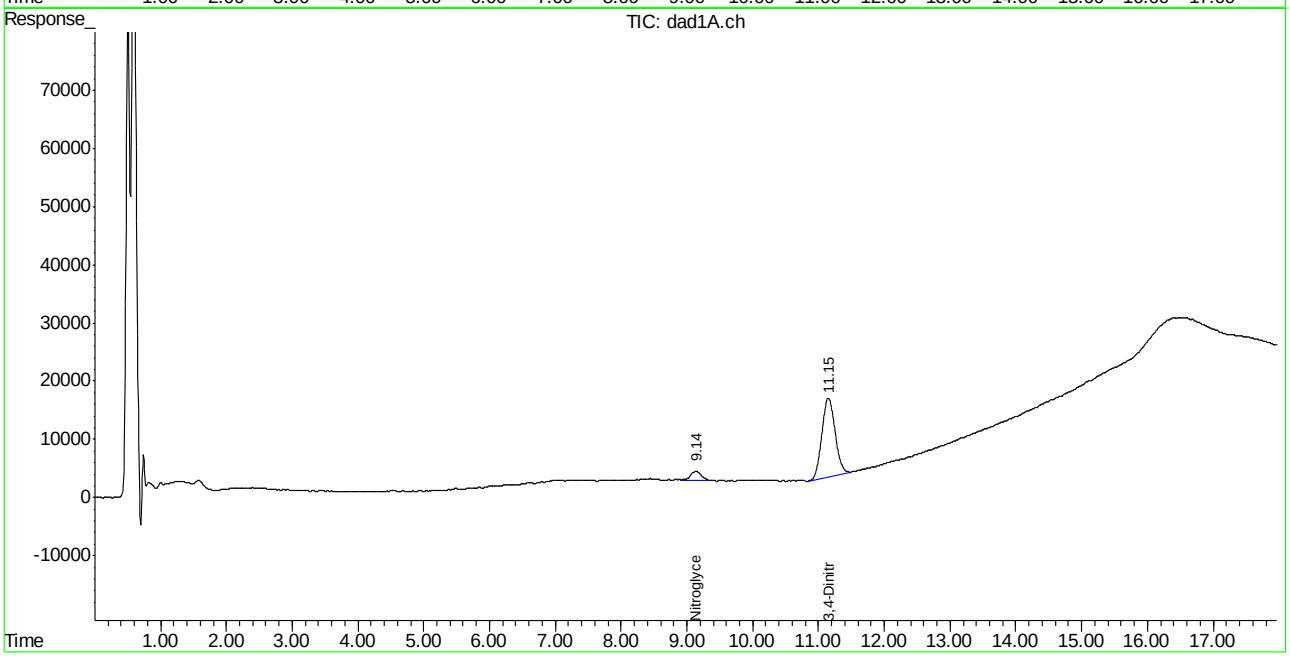
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045470.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045470.D\dad1A.ch
Acq On : 02-Jan-2015, 17:51:48 Operator: KISMETL
Sample : FA20881-3 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:16 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: FA20881-3
Lab FileID: BB045470.D
Injection Time: 01/02/15 17:51
Method: SW846 8330B
Analyst approved: 01/05/15 11:33 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitroglycerine	55-63-0	2	9.14	Overlapping peak
3,4-Dinitrotoluene	610-39-9	1	11.15	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058051.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\0105RPB2\GG058051.D\dad1A.ch
Acq On : 05-Jan-2015, 09:40:52 Operator: kismetl
Sample : FA20881-3cf Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:17:01 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.20	16.20	2946522	5793411	490.793	518.376
	Spiked Amount 500.000	Range 72 - 145		Recovery =		98.16%	103.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	14.19	0	516402	N.D.	156.151 #
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

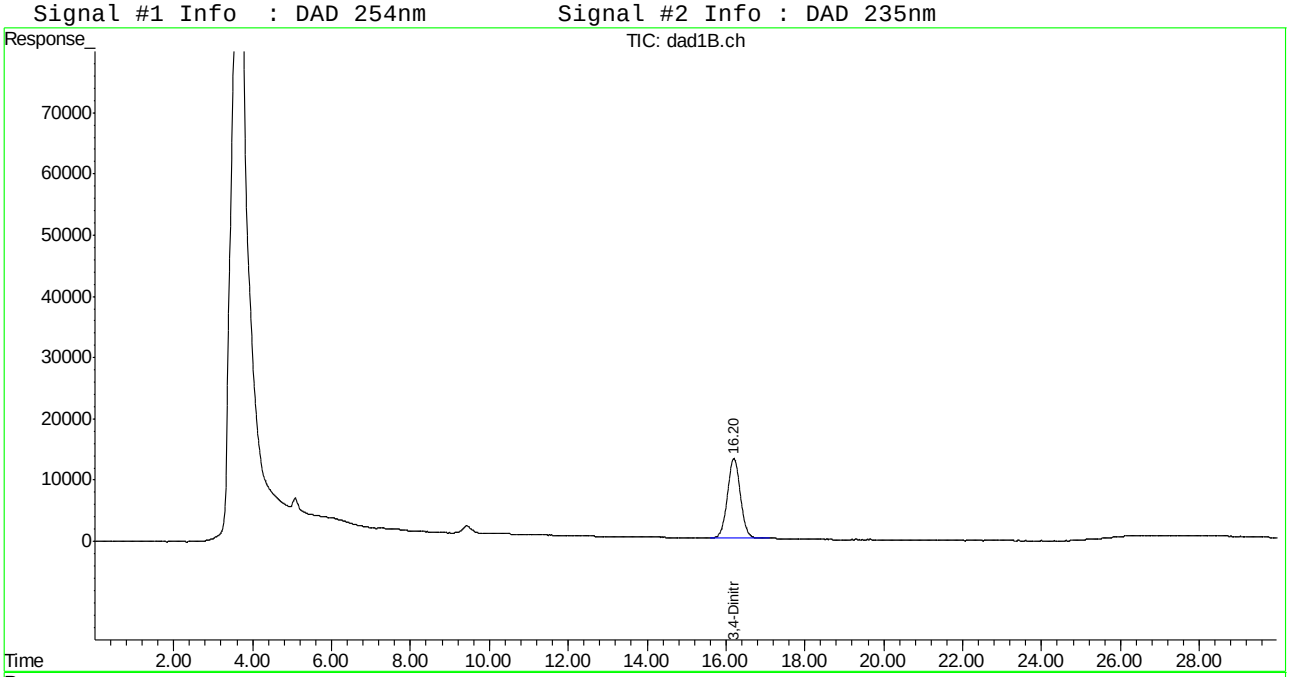
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058051.D 8330_RPB2.M Mon Jan 05 11:29:25 2015 Page 1

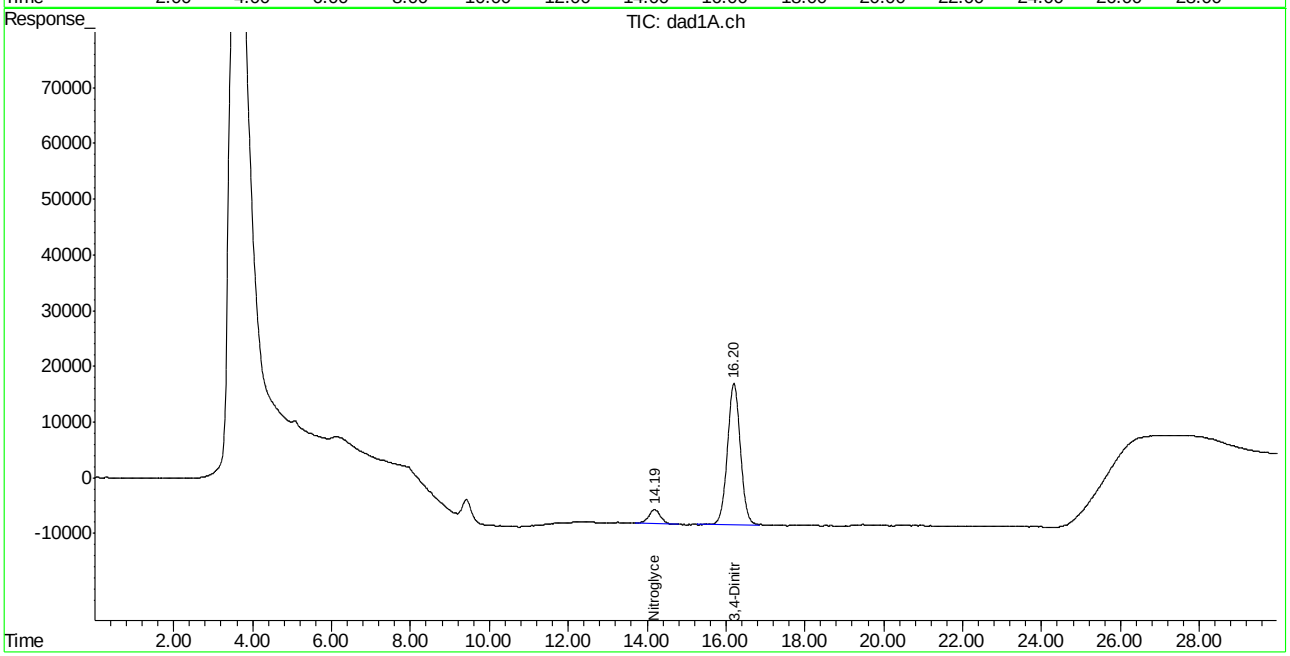
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058051.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\0105RPB2\GG058051.D\dad1A.ch
Acq On : 05-Jan-2015, 09:40:52 Operator: kismetl
Sample : FA20881-3cf Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:27 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20881

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1A.ch
Acq On : 02-Jan-2015, 15:47:02 Operator: KISMETL
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:43 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.15	1107516	1953446	663.195	624.231m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		132.64%	124.85%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

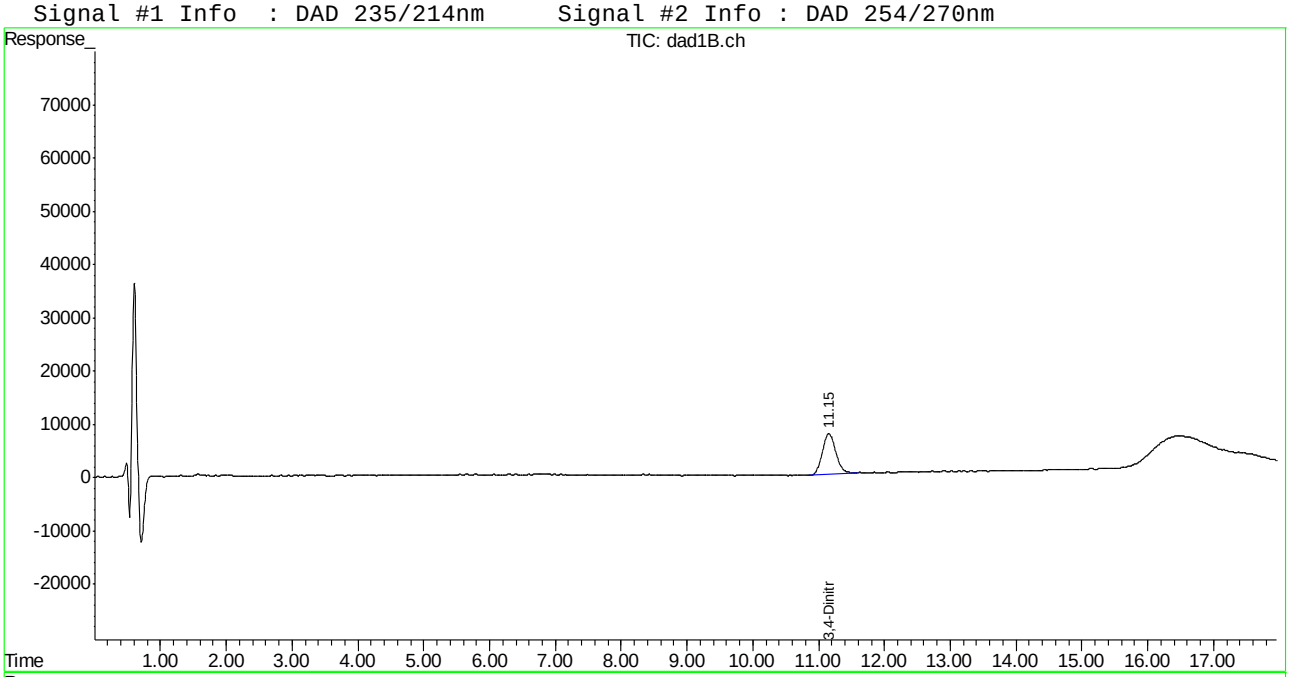
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045465.D 8330B.M Mon Jan 05 07:33:47 2015

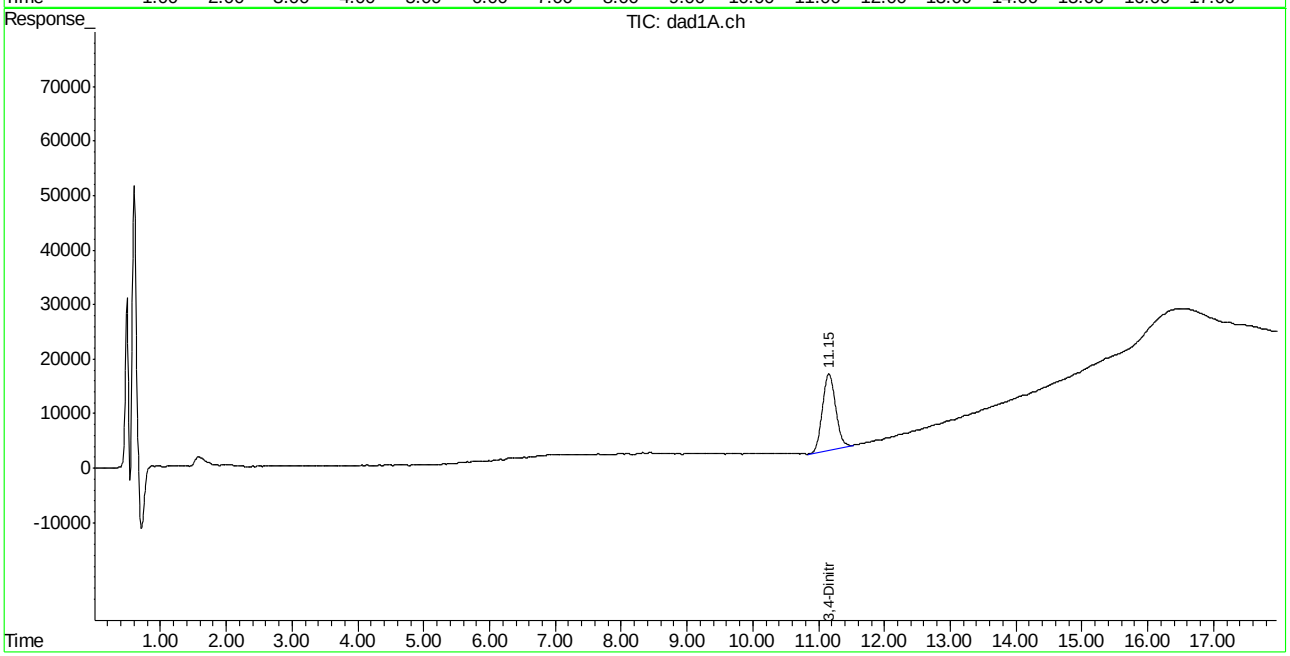
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045465.D\dad1A.ch
Acq On : 02-Jan-2015, 15:47:02 Operator: KISMETL
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:10 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: OP54435-MB
Lab FileID: BB045465.D
Injection Time: 01/02/15 15:47
Method: SW846 8330B
Analyst approved: 01/05/15 07:44 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.15	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058050.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0105RPB2\GG058050.D\dad1A.ch
Acq On : 05-Jan-2015, 09:08:49 Operator: kismetl
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:17:00 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.20	16.20	3085661	5888273	513.969	526.864
	Spiked Amount 500.000	Range 72 - 145		Recovery =		102.79%	105.37%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
6)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
9)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
13)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
14)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
15)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
16)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
17)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
18)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
19)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

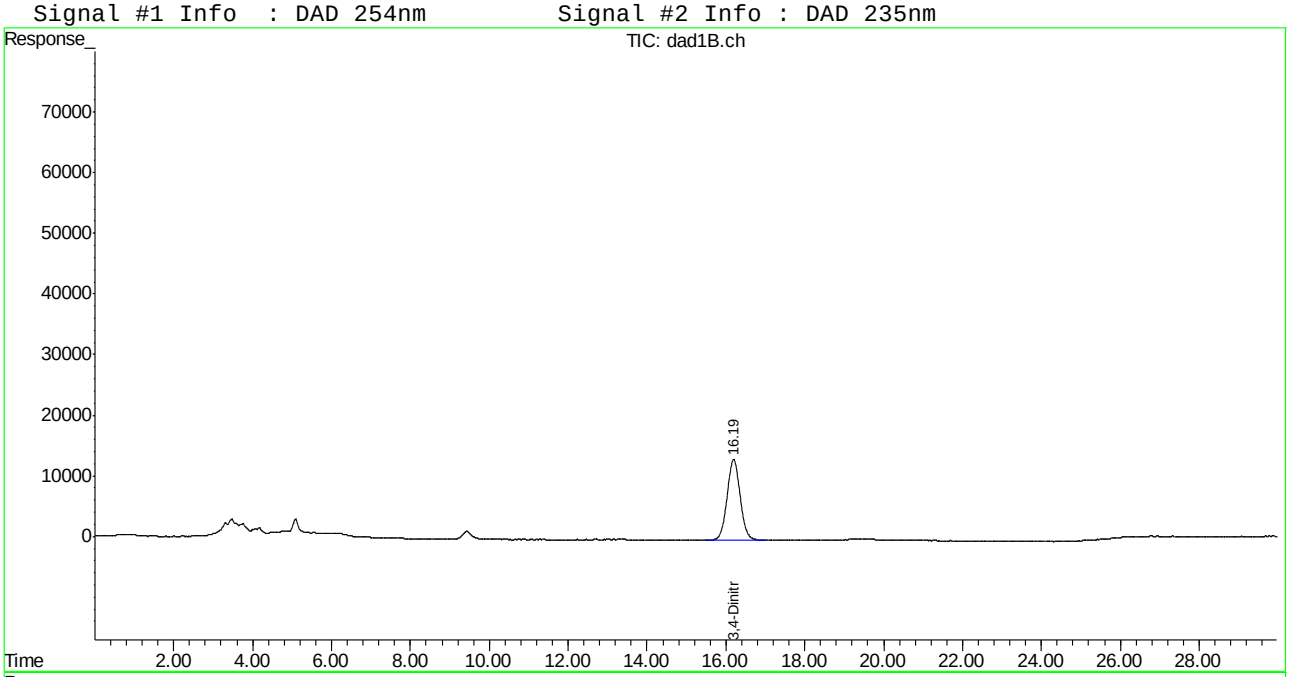
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058050.D 8330_RPB2.M Mon Jan 05 11:29:24 2015 Page 1

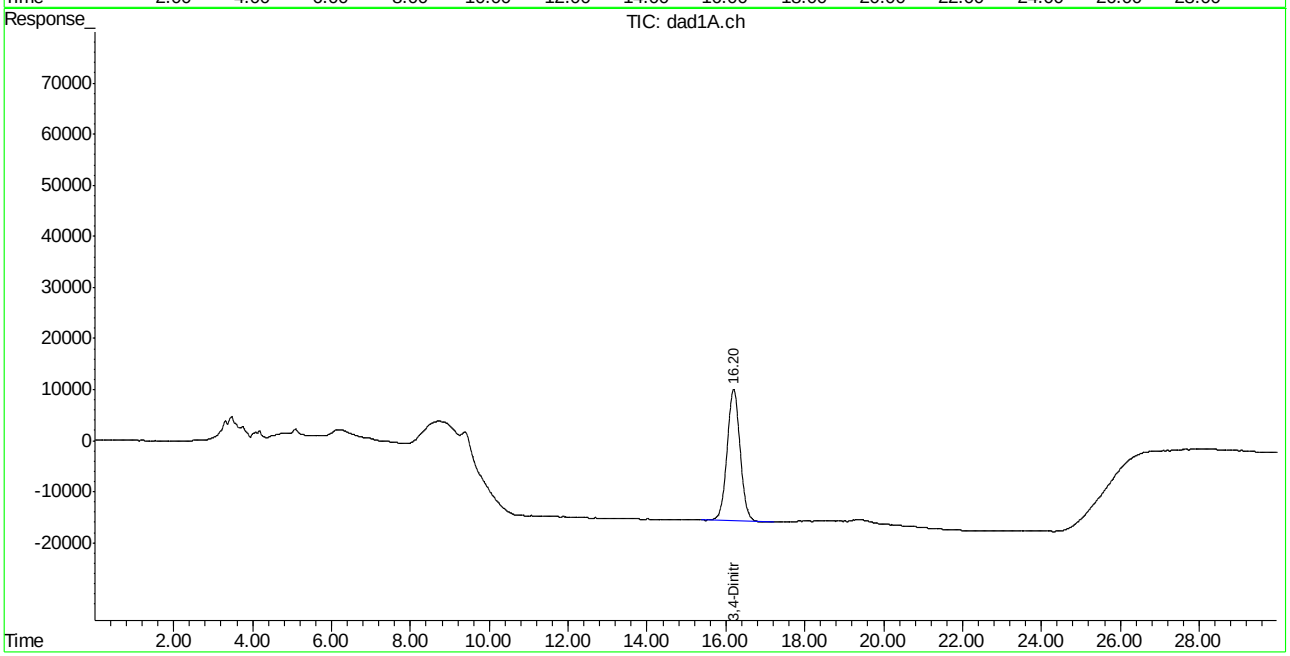
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058050.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\0105RPB2\GG058050.D\dad1A.ch
Acq On : 05-Jan-2015, 09:08:49 Operator: kismetl
Sample : op54435-mb Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:26 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1A.ch
Acq On : 02-Jan-2015, 14:57:08 Operator: KISMETL
Sample : op54435-bs Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:41 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.16	1063682	1781542	636.946	569.299
	Spiked Amount 500.000	Range 72 - 134		Recovery =		127.39%	113.86%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.52	1.52	815248	2406000	538.448m	609.638m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	894240	1432703	500.196	489.286
6)	1,3,5-Trinitrobe	4.59	4.59	2035908	3962738	503.505	520.313
7)	1,3-Dinitrobenze	5.84	5.84	2439192	1688427	464.997	476.347
8)	3,5-Dinitroanili	6.31	6.30	1974405	3329740	469.349	478.661m
9)	Nitrobenzene	7.39	7.39	1553748	1515639	505.511	504.713m
10)	Nitroglycerin	0.00	9.15	0	3043838	N.D.	2443.182 #
11)	Tetryl	9.48	9.48	1401935	2178300	514.971	495.029
12)	2,4,6-Trinitroto	9.85	9.85	1738666	2044663	467.553	453.904
13)	2-Amino-4,6-Dini	10.29	10.29	1574607	2290817	512.694	488.552
14)	4-Amino-2,6-Dini	10.77	10.77	1079956	2092160	501.717	469.005
16)	2,4-Dinitrotolue	11.74	11.74	2359857	1498703	524.280	561.650
17)	2,6-Dinitrotolue	12.14	12.14	1364605	1741090	525.331	551.817
18)	o-Nitrotoluene	14.33	14.32	1125807	1518176	493.482	492.512m
19)	p-Nitrotoluene	14.71	14.72	1727779	1442788	491.194	487.929
20)	m-Nitrotoluene	15.26	15.26	1604378	1910694	526.294m	546.150m
21)	PETN	0.00	16.86	0	3230596	N.D.	3102.599m#

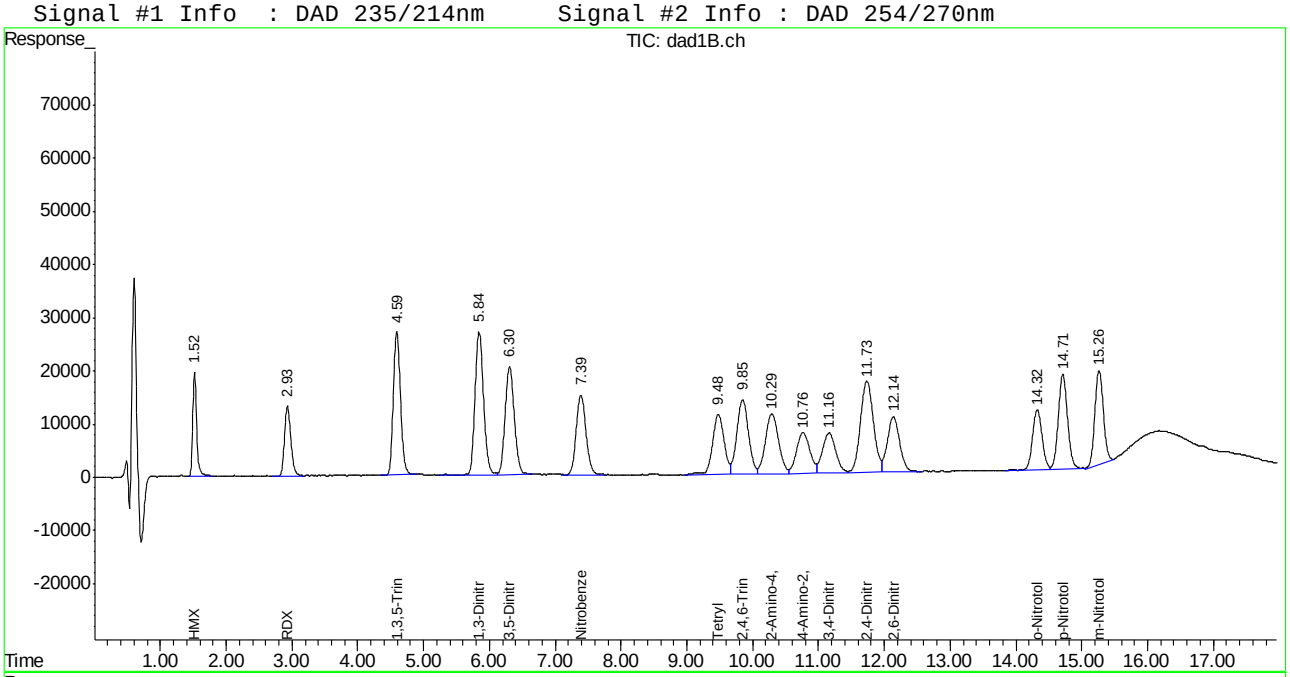
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045463.D 8330B.M Mon Jan 05 07:33:45 2015 Page 1

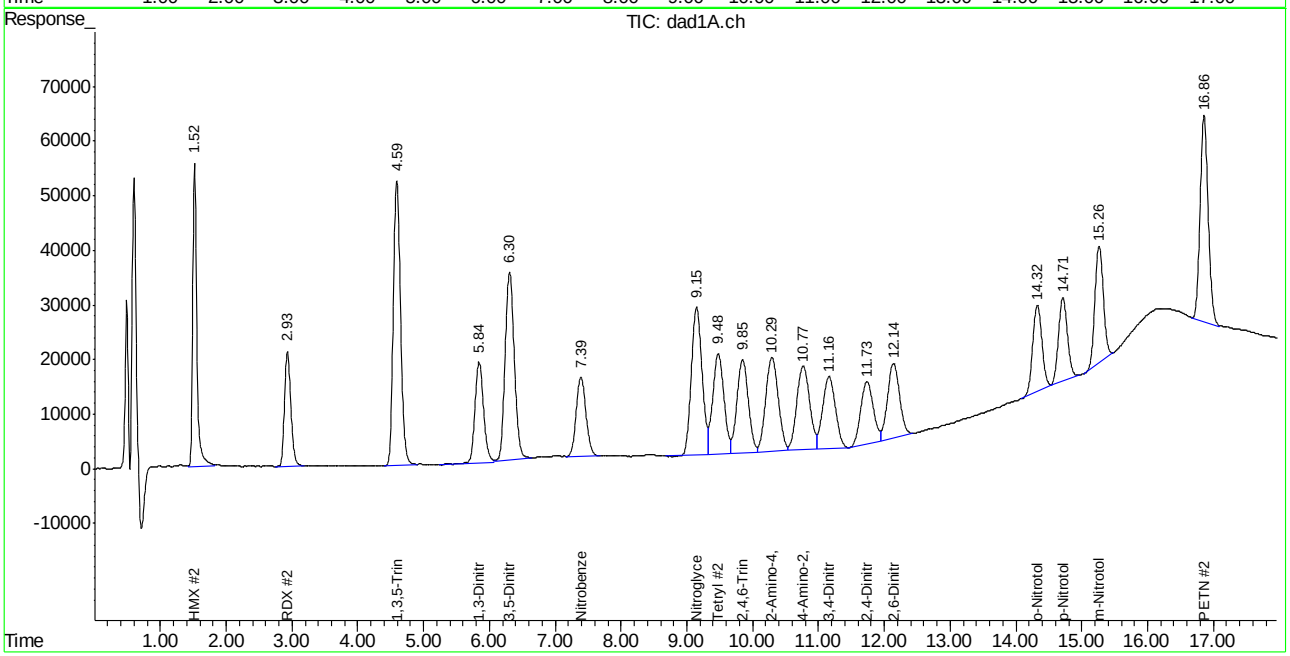
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045463.D\dad1A.ch
Acq On : 02-Jan-2015, 14:57:08 Operator: KISMETL
Sample : op54435-bs Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:09 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: OP54435-BS
Lab FileID: BB045463.D
Injection Time: 01/02/15 14:57
Method: SW846 8330B
Analyst approved: 01/05/15 07:39 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.52	Poorly defined baseline
HMX	2691-41-0	2	1.52	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.26	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1A.ch
Acq On : 02-Jan-2015, 15:22:05 Operator: KISMETL
Sample : op54435-pt1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:42 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	11.16	11.16	1044571	1795330	625.502	573.705
Spiked Amount 500.000	Range 72 - 134		Recovery =		125.10%	114.74%
Target Compounds						
1) TNX	0.00	0.00	0	0	N.D. d	N.D. d
2) HMX	1.52	1.52	183118	544537	120.944m	137.976m
3) DNX	0.00	0.00	0	0	N.D. d	N.D. d
4) MNX	0.00	0.00	0	0	N.D.	N.D.
5) RDX	2.93	2.93	193295	319444	108.120	109.094
6) 1,3,5-Trinitrobe	4.59	4.59	536072	1024455	132.577	134.512
7) 1,3-Dinitrobenze	5.84	5.84	1005600	685525	191.703	193.404m
8) 3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9) Nitrobenzene	7.39	7.39	549700	557407	178.845	185.618m
10) Nitroglycerin	0.00	9.14	0	185668	N.D.	149.029 #
11) Tetryl	0.00	0.00	0	0	N.D.	N.D.
12) 2,4,6-Trinitroto	9.84	9.84	523191	622799	140.694	138.258
13) 2-Amino-4,6-Dini	10.29	10.30	330846	479275	107.724	102.213
14) 4-Amino-2,6-Dini	10.77	10.76	219262	443981	101.863	99.528
16) 2,4-Dinitrotolue	11.73	11.74	568478	337812	126.296	126.597
17) 2,6-Dinitrotolue	12.14	12.14	658546	854733	253.520	270.897
18) o-Nitrotoluene	14.32	14.32	532395	739043	233.368	239.753m
19) p-Nitrotoluene	14.71	14.71	1037430	842544	294.933	284.936
20) m-Nitrotoluene	15.26	15.26	485990	577351	159.422m	165.029m
21) PETN	0.00	16.86	0	218107	N.D.	209.465m#

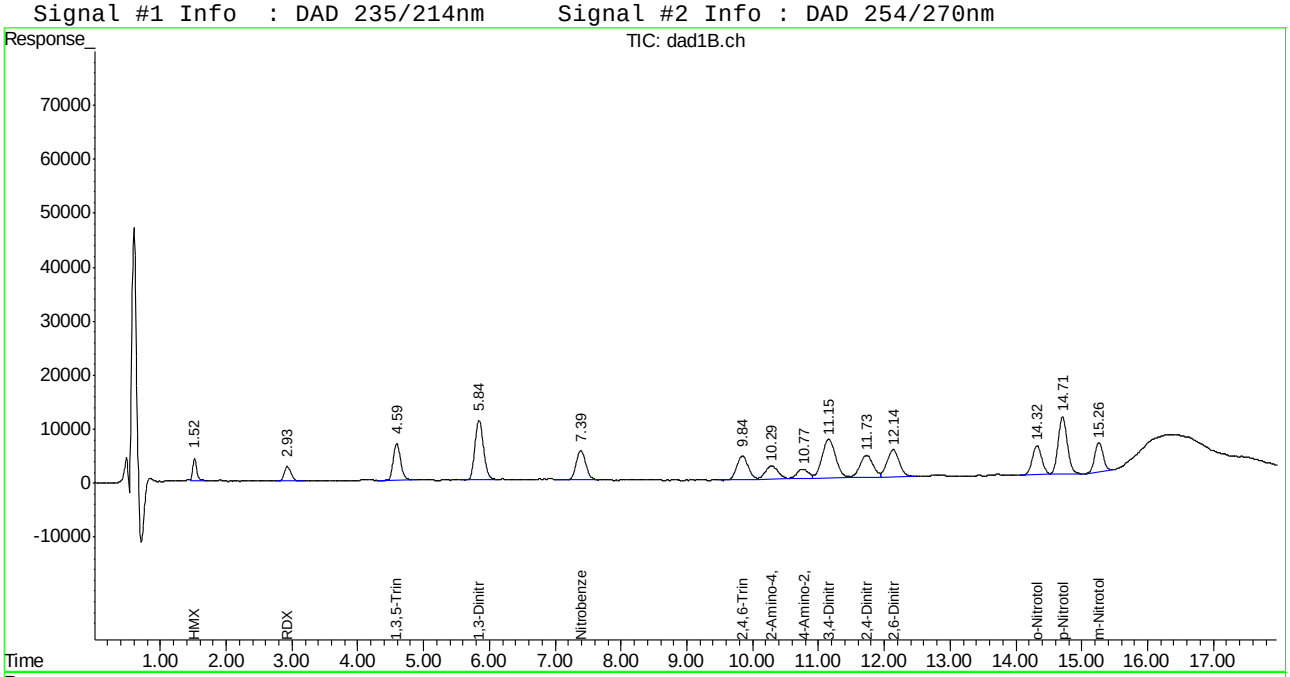
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045464.D 8330B.M Mon Jan 05 07:33:46 2015

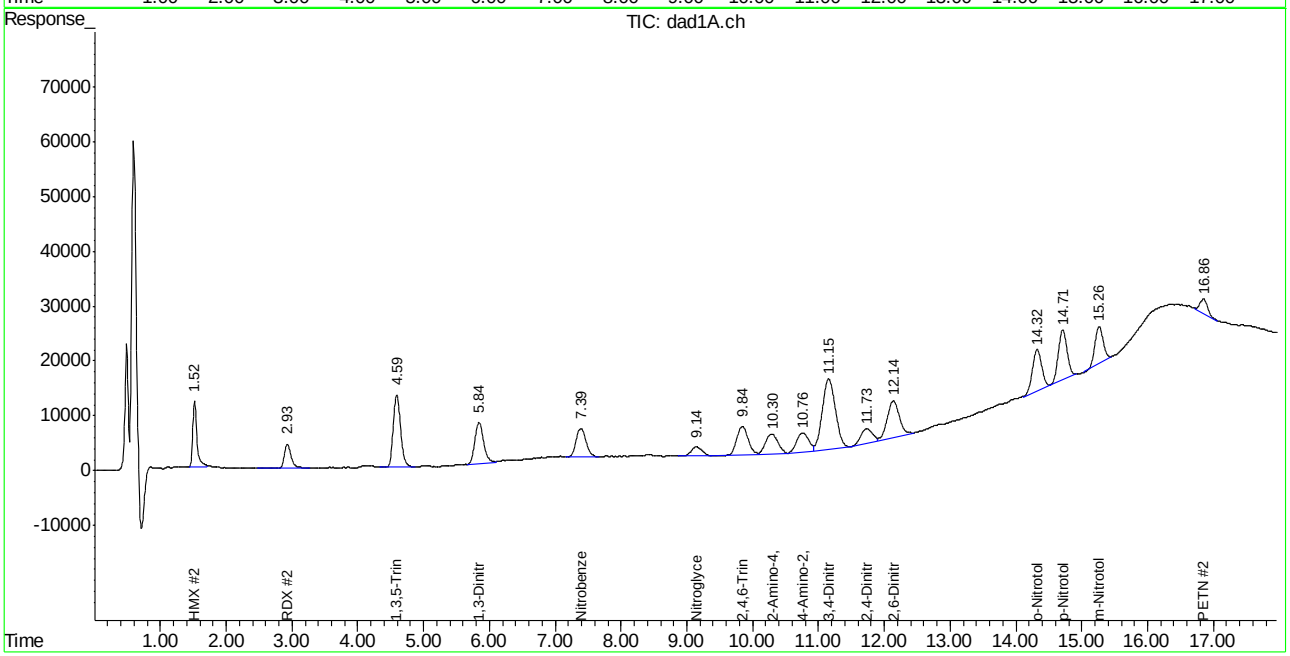
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045464.D\dad1A.ch
Acq On : 02-Jan-2015, 15:22:05 Operator: KISMETL
Sample : op54435-pt1 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:10 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54435-PT1
Lab FileID: BB045464.D
Injection Time: 01/02/15 15:22
Method: SW846 8330B
Analyst approved: 01/05/15 07:39 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.52	Poorly defined baseline
HMX	2691-41-0	2	1.52	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.84	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.26	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1A.ch
Acq On : 02-Jan-2015, 16:36:55 Operator: KISMETL
Sample : op54435-ms Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:45 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	11.16	11.16	1018296	1743679	609.768	557.199
Spiked Amount 500.000	Range 72 - 134		Recovery =		121.95%	111.44%
Target Compounds						
1) TNX	0.00	0.00	0	0	N.D. d	N.D. d
2) HMX	1.52	1.52	868508	2305012	573.625	584.050m
3) DNX	0.00	0.00	0	0	N.D. d	N.D. d
4) MNX	0.00	0.00	0	0	N.D.	N.D.
5) RDX	2.93	2.93	836207	1331989	467.735m	454.891m
6) 1,3,5-Trinitrobe	4.59	4.59	1846531	3629692	456.669	476.583
7) 1,3-Dinitrobenze	5.84	5.84	2448214	1667085	466.717	470.326
8) 3,5-Dinitroanili	6.31	6.30	1965815	3325313	467.307	478.025m
9) Nitrobenzene	7.39	7.39	1579795	1535248	513.986	511.243m
10) Nitroglycerin	0.00	9.14	0	3037523	N.D.	2438.113 #
11) Tetryl	9.48	9.48	926057	1501521	340.167	341.228
12) 2,4,6-Trinitroto	9.85	9.85	1693582	2018589	455.429	448.116
13) 2-Amino-4,6-Dini	10.29	10.29	1550235	2289090	504.758	488.184
14) 4-Amino-2,6-Dini	10.76	10.77	1055150	2093473	490.193	469.299
16) 2,4-Dinitrotolue	11.73	11.74	2354690	1507122	523.132	564.805
17) 2,6-Dinitrotolue	12.14	12.14	1353018	1749840	520.870	554.591
18) o-Nitrotoluene	14.32	14.32	1159597	1597968	508.293	518.398m
19) p-Nitrotoluene	14.71	14.71	1763680	1438816	501.401	486.586
20) m-Nitrotoluene	15.26	15.26	1661197	2019710	544.932	577.311
21) PETN	0.00	16.86	0	3310999	N.D.	3179.817m#

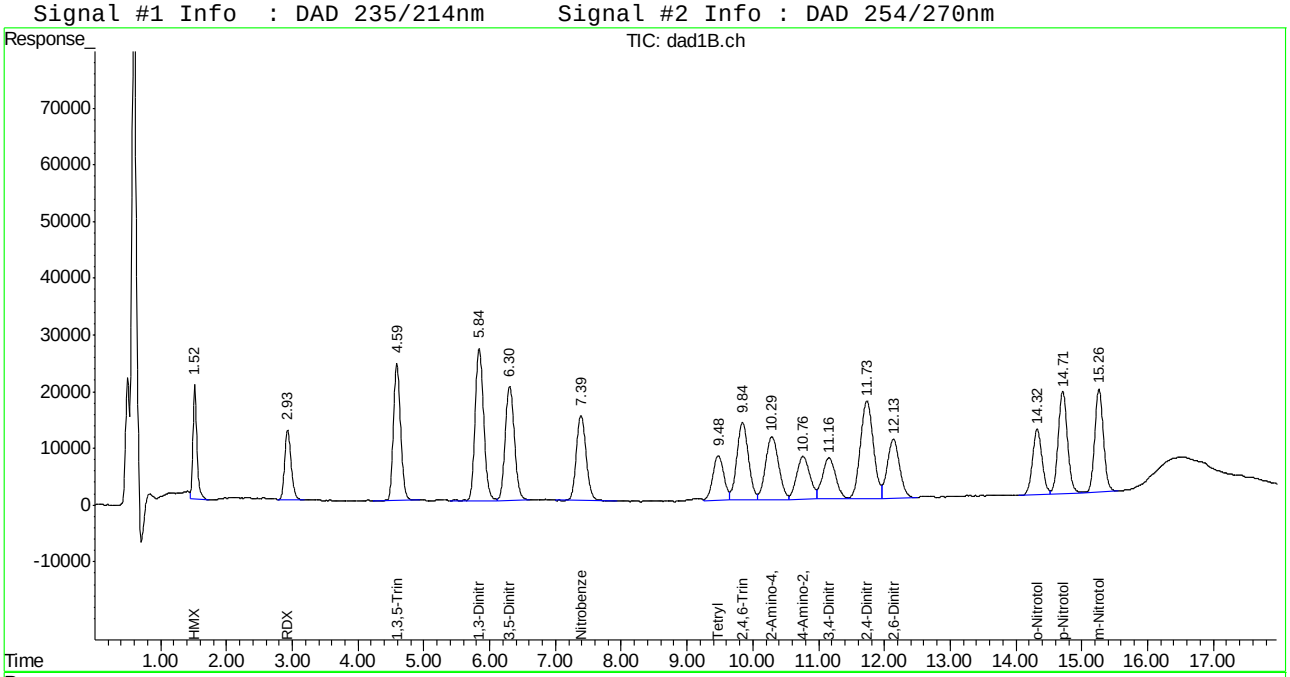
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045467.D 8330B.M Mon Jan 05 07:33:49 2015

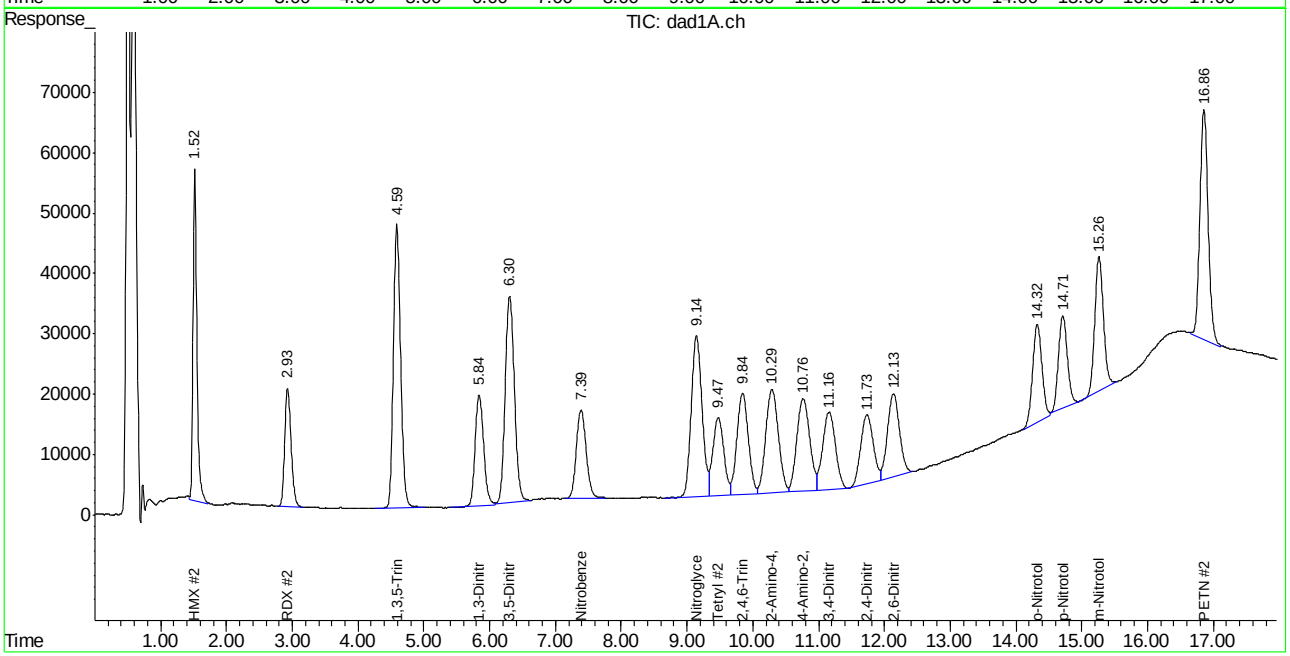
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045467.D\dad1A.ch
Acq On : 02-Jan-2015, 16:36:55 Operator: KISMETL
Sample : op54435-ms Inst : G1315B
Misc : OP54435,GBB1225,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:13 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: OP54435-MS
Lab FileID: BB045467.D
Injection Time: 01/02/15 16:36
Method: SW846 8330B
Analyst approved: 01/05/15 07:47 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	2	1.52	Poorly defined baseline
RDX	121-82-4	1	2.93	Poorly defined baseline
RDX	121-82-4	2	2.93	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1A.ch
Acq On : 02-Jan-2015, 17:01:51 Operator: KISMETL
Sample : op54435-msd Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:46 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.16	11.15	1004789	1726336	601.680	551.658
	Spiked Amount 500.000	Range 72 - 134		Recovery =		120.34%	110.33%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.52	1.52	799238	2228149	527.874m	564.574m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	850285	1349330	475.610	460.813
6)	1,3,5-Trinitrobe	4.59	4.59	1866648	3616682	461.645	474.875
7)	1,3-Dinitrobenze	5.84	5.84	2423575	1632922	462.020	460.688
8)	3,5-Dinitroanili	6.30	6.30	1985884	3364105	472.078	483.601m
9)	Nitrobenzene	7.39	7.38	1553690	1539419	505.492	512.632m
10)	Nitroglycerin	0.00	9.14	0	3027975	N.D.	2430.449m#
11)	Tetryl	9.47	9.47	963988	1496450	354.100	340.075
12)	2,4,6-Trinitroto	9.84	9.84	1700376	2004879	457.256	445.073
13)	2-Amino-4,6-Dini	10.29	10.29	1557958	2289578	507.273	488.288
14)	4-Amino-2,6-Dini	10.76	10.76	1059974	2098898	492.434	470.515
16)	2,4-Dinitrotolue	11.73	11.73	2298386	1489542	510.623	558.217
17)	2,6-Dinitrotolue	12.13	12.13	1332416	1725987	512.939	547.031
18)	o-Nitrotoluene	14.32	14.32	1175143	1586758	515.108	514.761m
19)	p-Nitrotoluene	14.71	14.71	1778816	1438381	505.704	486.439
20)	m-Nitrotoluene	15.26	15.26	1681168	2012126	551.483	575.143
21)	PETN	0.00	16.85	0	3380736	N.D.	3246.791m#

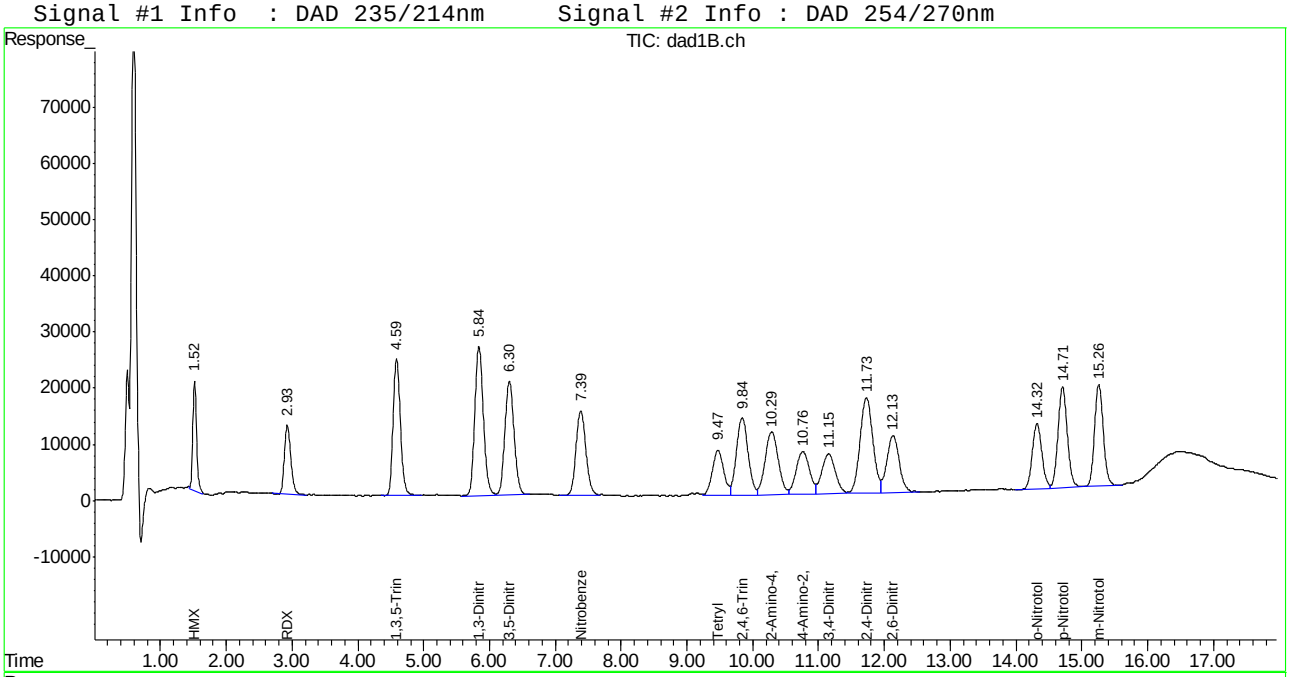
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045468.D 8330B.M Mon Jan 05 07:33:50 2015 Page 1

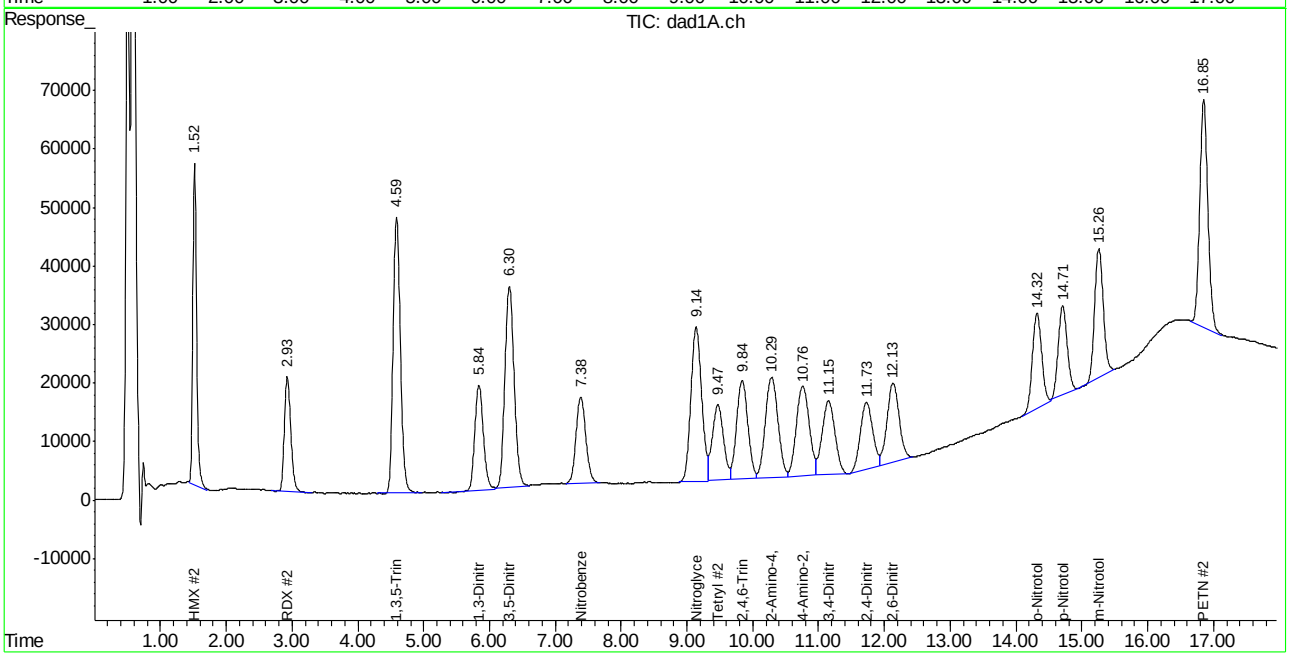
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045468.D\dad1A.ch
Acq On : 02-Jan-2015, 17:01:51 Operator: KISMETL
Sample : op54435-msd Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:14 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





BB045468.D 8330B.M Mon Jan 05 07:33:50 2015 Page 2

Manual Integration Approval Summary

Sample Number: OP54435-MSD
Lab FileID: BB045468.D
Injection Time: 01/02/15 17:01
Method: SW846 8330B
Analyst approved: 01/05/15 07:47 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.52	Poorly defined baseline
HMX	2691-41-0	2	1.52	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.38	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.14	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.32	Poorly defined baseline
PETN	78-11-5	2	16.85	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1A.ch
Acq On : 02-Jan-2015, 20:21:35 Operator: KISMETL
Sample : op54435-dup Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:54 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.13	11.12	1050459	1827203	629.028	583.890m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		125.81%	116.78%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

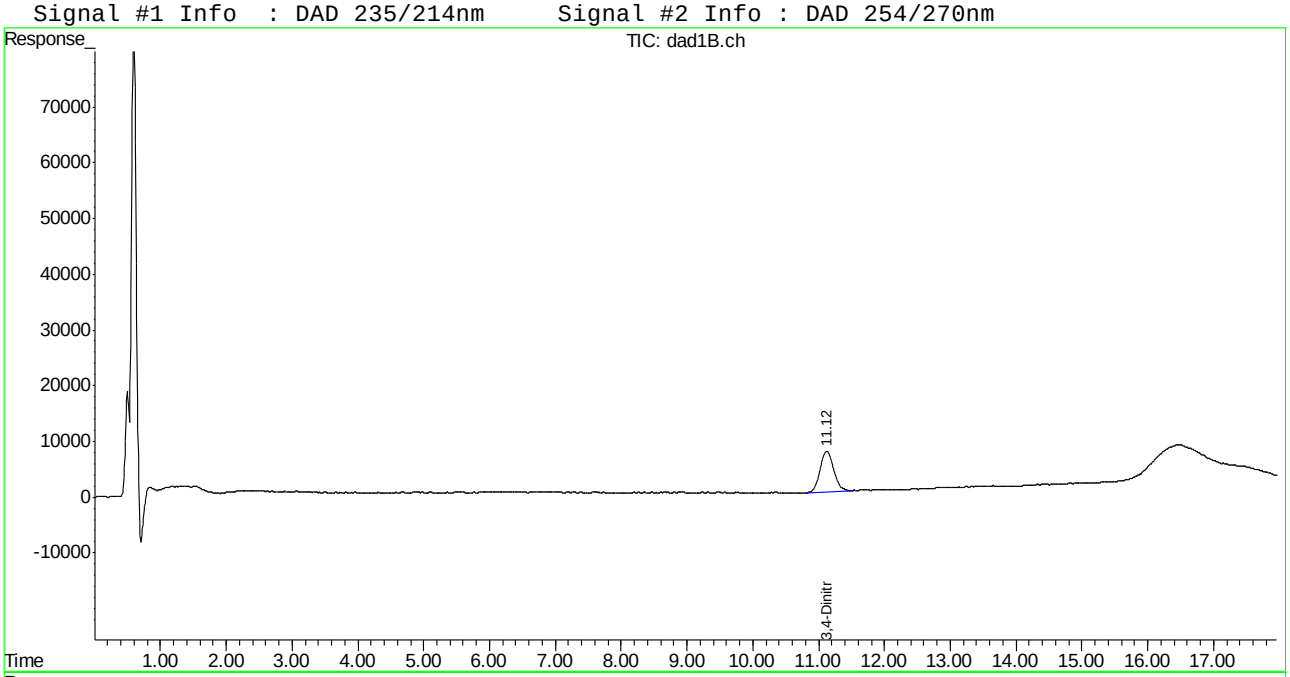
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045476.D 8330B.M Mon Jan 05 07:33:58 2015 Page 1

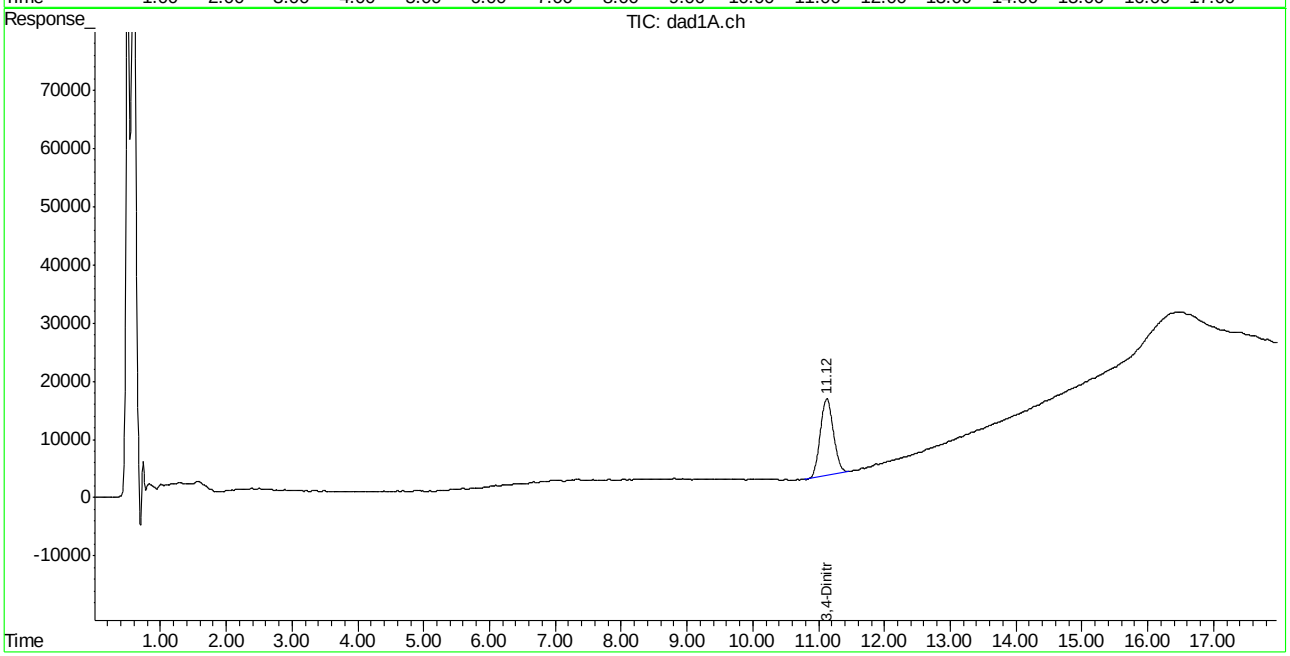
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045476.D\dad1A.ch
Acq On : 02-Jan-2015, 20:21:35 Operator: KISMETL
Sample : op54435-dup Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:21 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	OP54435-DUP	**Method:**	SW846 8330B
Lab FileID:	BB045476.D	**Analyst approved:**	01/05/15 07:47 Kismet Lugo
Injection Time:	01/02/15 20:21	**Supervisor approved:**	01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	11.12	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1A.ch
Acq On : 02-Jan-2015, 20:46:29 Operator: KISMETL
Sample : op54435-dup2 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:55 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.12	11.12	1049194	1888508	628.270	603.480
	Spiked Amount 500.000	Range 72 - 134		Recovery =		125.65%	120.70%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

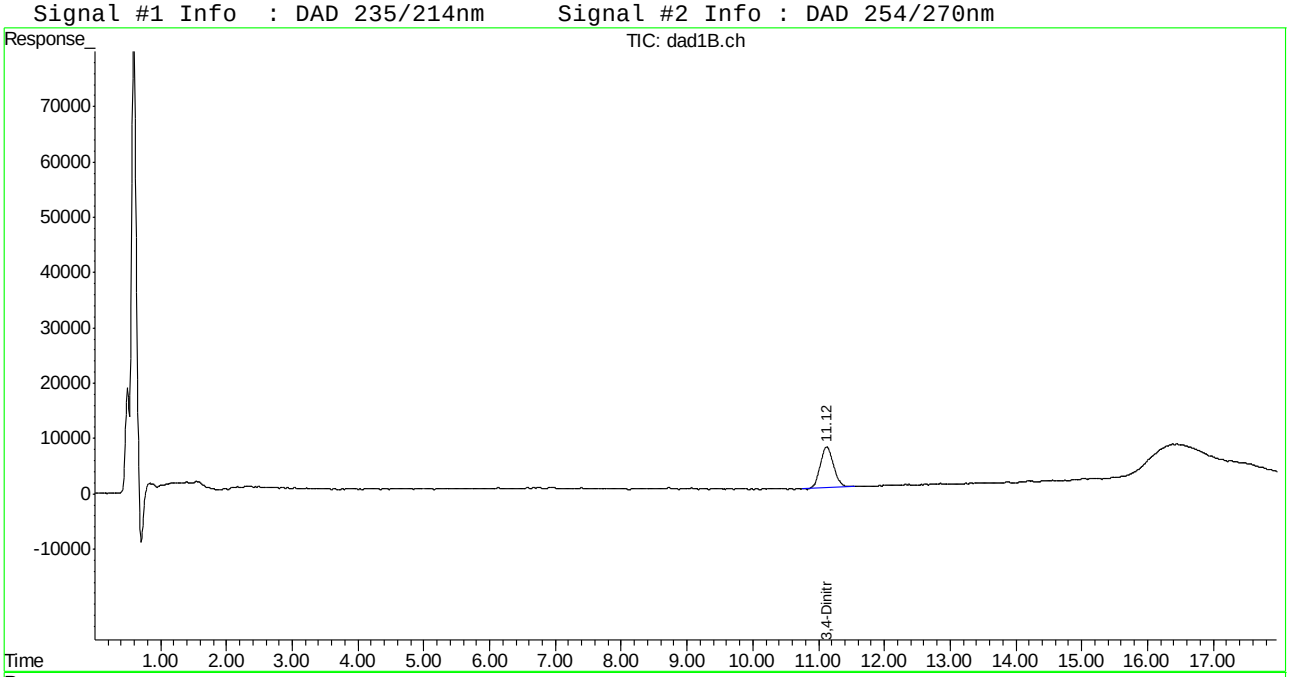
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045477.D 8330B.M Mon Jan 05 07:33:59 2015

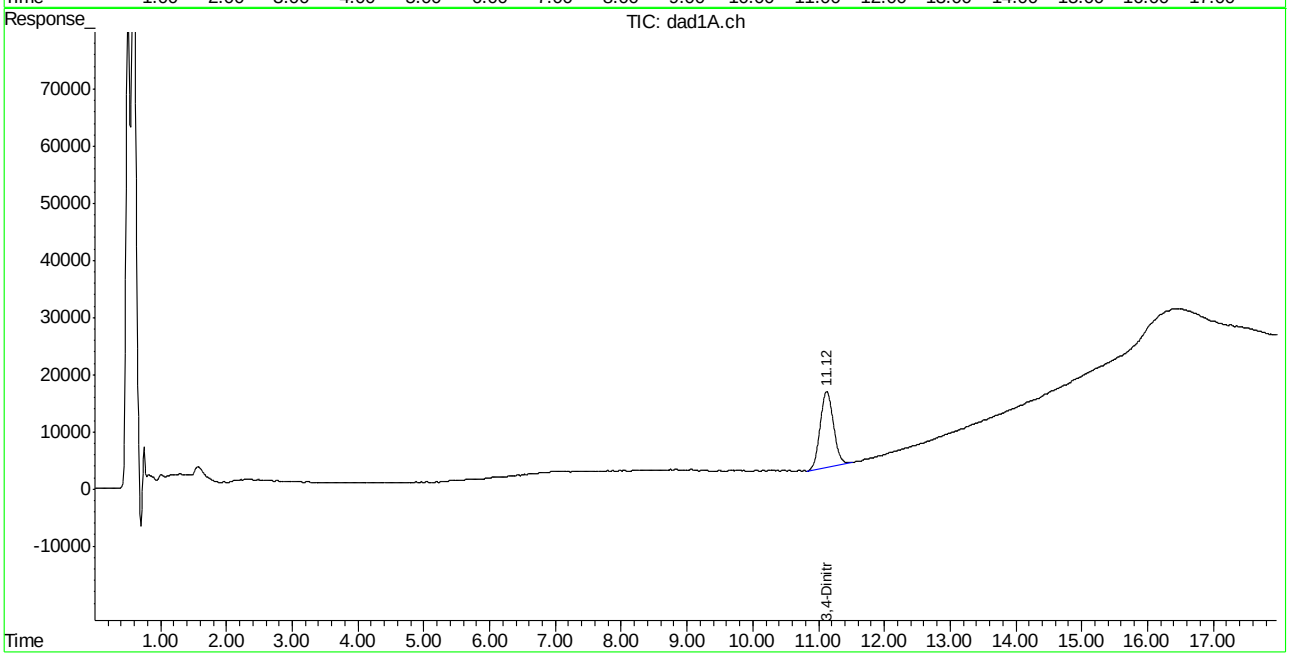
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045477.D\dad1A.ch
Acq On : 02-Jan-2015, 20:46:29 Operator: KISMETL
Sample : op54435-dup2 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:22 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1A.ch
Acq On : 29-Dec-2014, 11:48:44 Operator: KISMETL
Sample : ic1221-20 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:13 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.82	10.81	25098	55306	13.695m	16.769m
Spiked Amount	500.000	Range	70 - 136	Recovery	=	2.74%#	3.35%#
	Target Compounds						
1)	TNX	1.37	1.37	61656	84605	20.675m	19.548m
2)	HMX	1.57	1.58	29479	130152	18.120m	28.972m#
3)	DNX	1.77	1.77	56641	98249	20.659m	22.457m
4)	MNX	2.37	2.37	47487	69362	19.075m	18.733m
5)	RDX	2.98	2.98	33562	62907	18.155m	21.466m
6)	1,3,5-Trinitrobe	4.50	4.50	89630	164265	22.522m	21.310m
7)	1,3-Dinitrobenze	5.69	5.69	115238	74495	22.165m	21.027m
8)	3,5-Dinitroanili	6.21	6.21	88570	129962	21.228m	18.673m
9)	Nitrobenzene	7.07	7.08	65670	64198	22.203m	21.853m
10)	Nitroglycerin	0.00	9.08	0	119597	N.D.	95.601m#
11)	Tetryl	9.34	9.34	64985	79225	22.425m	17.304m
12)	2,4,6-Trinitroto	9.53	9.52	76523	91230	21.711m	21.987m
13)	2-Amino-4,6-Dini	9.95	9.98	70598	101595	22.956m	22.146m
14)	4-Amino-2,6-Dini	10.42	10.38	48707	91196	23.156m	20.355
16)	2,4-Dinitrotolue	11.27	11.39	93292	51806	20.460m	19.088m
17)	2,6-Dinitrotolue	11.64	11.82	50401	61377	19.468m	19.698m
18)	o-Nitrotoluene	13.88	13.89	51162	58360	23.729m	19.817m
19)	p-Nitrotoluene	14.26	14.32	81502	63050	23.928m	22.368
20)	m-Nitrotoluene	14.83	14.84	67259	58493	22.331m	16.616m
21)	PETN	0.00	16.66	0	101895	N.D.	57.706m#

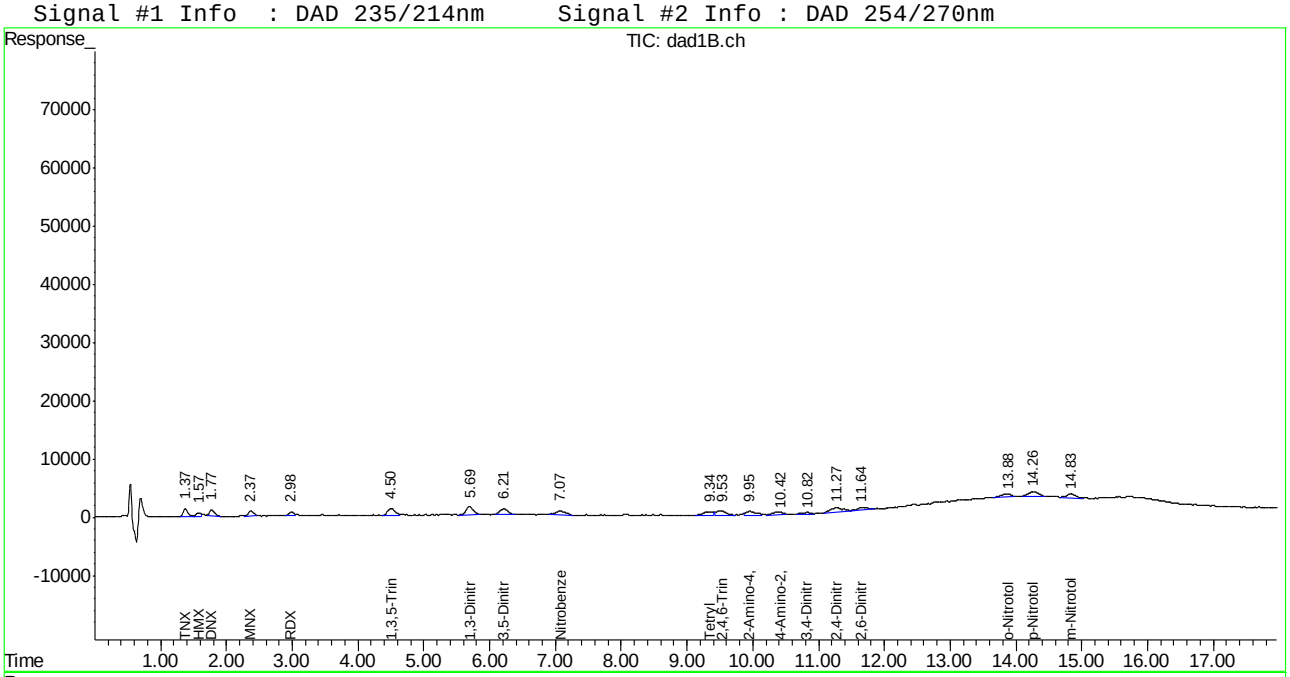
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045353.D 8330B.M Tue Dec 30 07:04:08 2014 Page 1

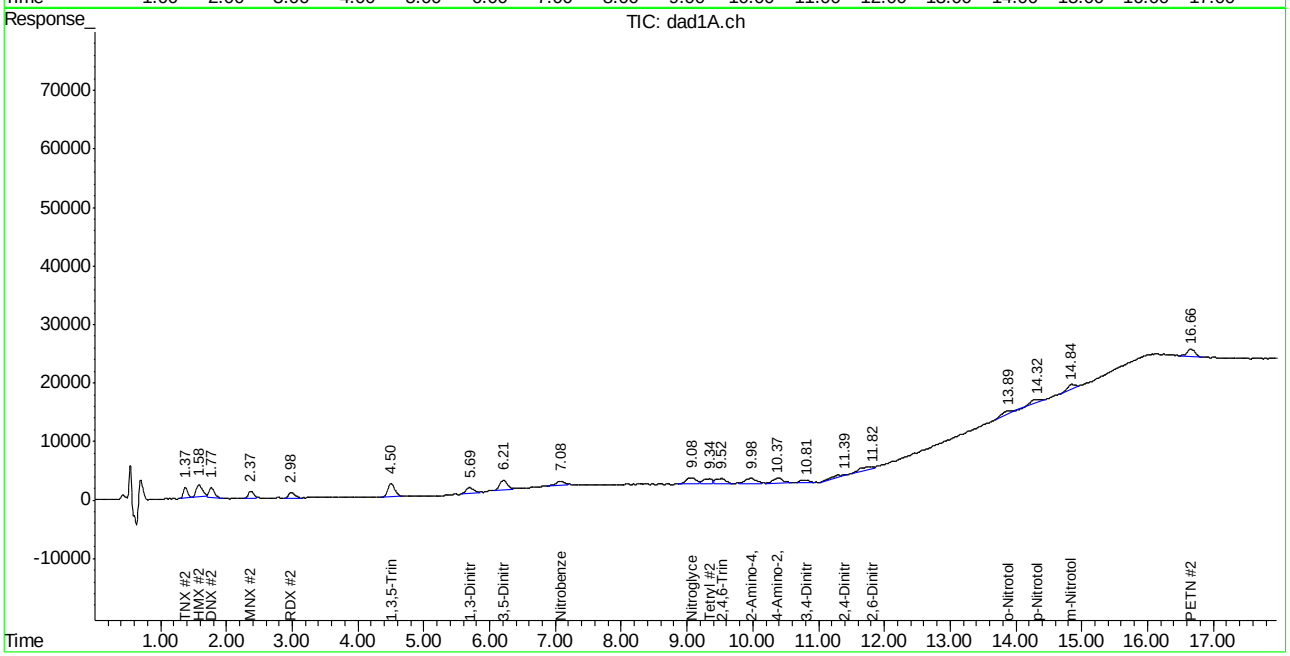
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1B.ch Vial: 4
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045353.D\dad1A.ch
Acq On : 29-Dec-2014, 11:48:44 Operator: KISMETL
Sample : ic1221-20 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:16 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045353.D
Injection Time: 12/29/14 11:48
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Poorly defined baseline
TNX		2	1.37	Poorly defined baseline
HMX	2691-41-0	1	1.57	Poorly defined baseline
HMX	2691-41-0	2	1.58	Poorly defined baseline
DNX		1	1.77	Poorly defined baseline
DNX		2	1.77	Poorly defined baseline
MNX		1	2.37	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	1	2.98	Poorly defined baseline
RDX	121-82-4	2	2.98	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.50	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.50	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.69	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.69	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.21	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.21	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.07	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.08	Poorly defined baseline
Nitroglycerine	55-63-0	2	9.08	Poorly defined baseline
Tetryl	479-45-8	1	9.34	Poorly defined baseline
Tetryl	479-45-8	2	9.34	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.52	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.53	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	9.95	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	9.98	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.42	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.81	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.82	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.27	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.39	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.64	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.82	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.88	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.89	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1A.ch
Acq On : 29-Dec-2014, 12:13:43 Operator: KISMETL
Sample : ic1221-50 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:14 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.78	10.77	80555	141379	43.956m	42.868
Spiked Amount	500.000	Range 70 - 136		Recovery =		8.79%#	8.57%#
	Target Compounds						
1)	TNX	1.37	1.37	159402	222258	53.451m	51.354m
2)	HMX	1.58	1.58	83517	309773	51.334m	68.956m
3)	DNX	1.77	1.77	144697	220341	52.775m	50.364m
4)	MNX	2.37	2.37	140200	189249	56.316	51.112m
5)	RDX	2.98	2.98	92138	154032	49.842m	52.560m
6)	1,3,5-Trinitrobe	4.50	4.50	212197	379530	53.321m	49.236m
7)	1,3-Dinitrobenze	5.69	5.69	272523	183902	52.417m	51.908m
8)	3,5-Dinitroanili	6.21	6.21	214695	366057	51.458	52.594
9)	Nitrobenzene	7.07	7.08	149717	157449	50.618m	53.596m
10)	Nitroglycerin	0.00	9.06	0	328701	N.D.	262.749 #
11)	Tetryl	9.32	9.32	125137	225018	43.182m	49.147
12)	2,4,6-Trinitroto	9.52	9.51	193258	236205	54.830	56.926
13)	2-Amino-4,6-Dini	9.95	9.95	143531	231677	46.671	50.503
14)	4-Amino-2,6-Dini	10.35	10.37	90703	210847	43.121m	47.062
16)	2,4-Dinitrotolue	11.28	11.29	230200	127501	50.485	46.979m
17)	2,6-Dinitrotolue	11.67	11.70	136773	159493	52.830	51.188m
18)	o-Nitrotoluene	13.85	13.86	107146	159503	49.694m	54.161m
19)	p-Nitrotoluene	14.26	14.27	167851	141770	49.279m	50.296m
20)	m-Nitrotoluene	14.83	14.84	148734	175628	49.383	49.890m
21)	PETN	0.00	16.66	0	255320	N.D.	145.266m#

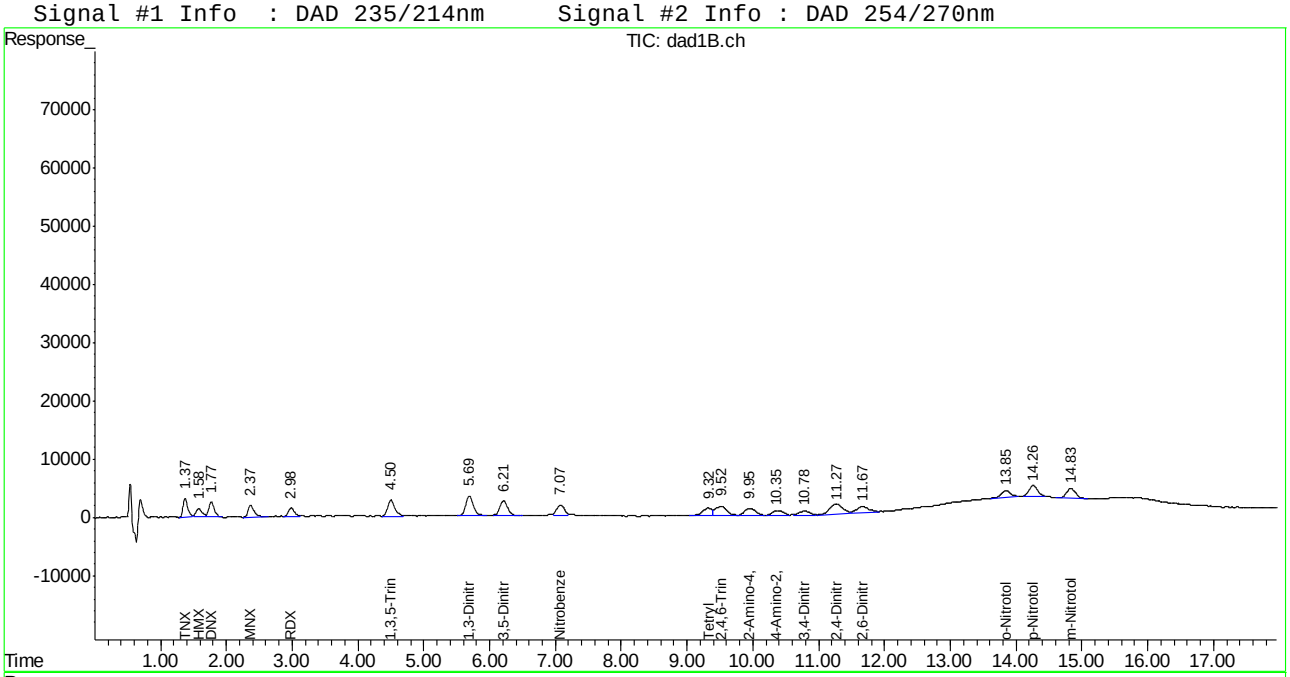
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045354.D 8330B.M Tue Dec 30 07:04:09 2014 Page 1

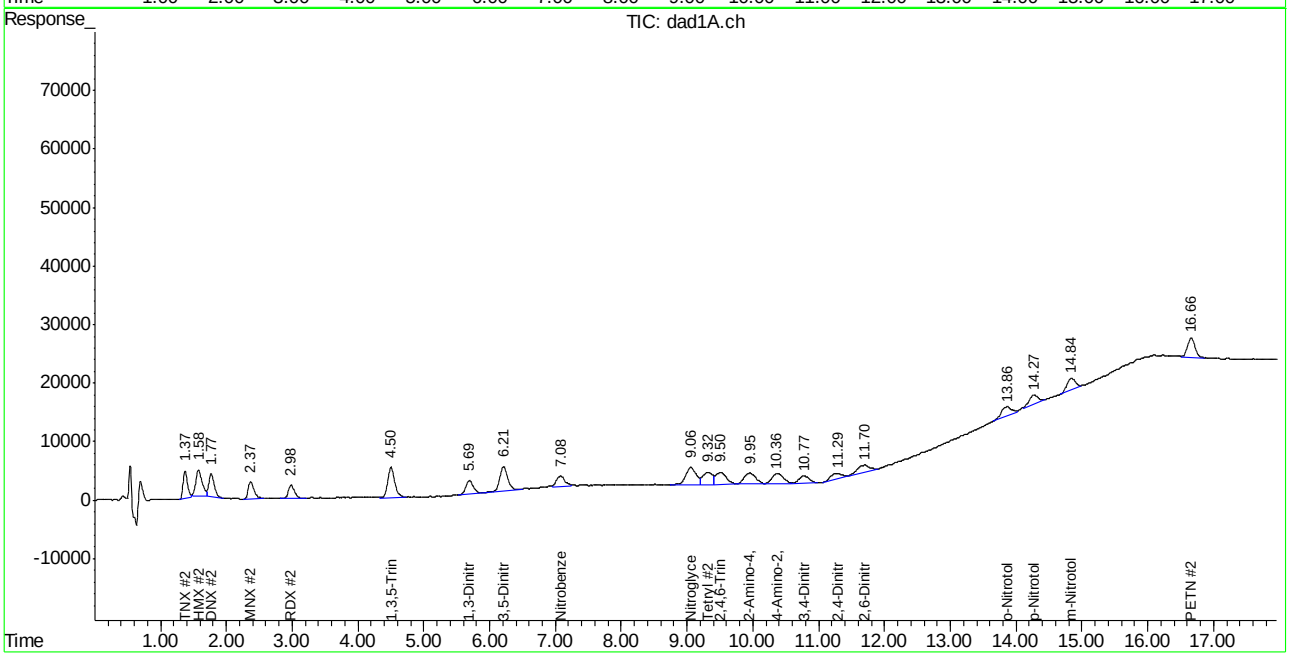
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045354.D\dad1A.ch
Acq On : 29-Dec-2014, 12:13:43 Operator: KISMETL
Sample : ic1221-50 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:19 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045354.D
Injection Time: 12/29/14 12:13
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Poorly defined baseline
TNX		2	1.37	Poorly defined baseline
HMX	2691-41-0	1	1.58	Poorly defined baseline
HMX	2691-41-0	2	1.58	Poorly defined baseline
DNX		1	1.77	Poorly defined baseline
DNX		2	1.77	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	1	2.98	Poorly defined baseline
RDX	121-82-4	2	2.98	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.50	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.50	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.69	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.69	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.07	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.08	Poorly defined baseline
Tetryl	479-45-8	1	9.32	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.35	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.78	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.29	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.70	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.85	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.86	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.27	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1A.ch
Acq On : 29-Dec-2014, 12:38:39 Operator: KISMETL
Sample : ic1221-100 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:15 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.77	10.78	153644	309777	83.838	93.928
Spiked Amount 500.000	Range 70 - 136		Recovery =		16.77%#	18.79%#
Target Compounds						
1) TNX	1.37	1.37	333895	509911	111.962m	117.818m
2) HMX	1.58	1.58	171632	490651	105.495	109.220
3) DNX	1.77	1.77	297537	494251	108.520	112.972
4) MNX	2.37	2.37	255573	381355	102.659	102.995m
5) RDX	2.99	2.98	193243	296300	104.536	101.107m
6) 1,3,5-Trinitrobe	4.50	4.50	394600	747795	99.156	97.010
7) 1,3-Dinitrobenze	5.69	5.69	506401	370656	97.401	104.621m
8) 3,5-Dinitroanili	6.21	6.21	417798	704637	100.138	101.241m
9) Nitrobenzene	7.07	7.07	321325	290107	108.638m	98.753m
10) Nitroglycerin	0.00	9.05	0	635940	N.D.	508.342 #
11) Tetryl	9.31	9.31	269891	452736	93.134	98.883
12) 2,4,6-Trinitroto	9.51	9.50	344976	450755	97.874	108.634
13) 2-Amino-4,6-Dini	9.95	9.95	282145	447451	91.742	97.539
14) 4-Amino-2,6-Dini	10.36	10.37	201005	434689	95.561	97.024
16) 2,4-Dinitrotolue	11.26	11.26	453299	259378	99.412	95.571
17) 2,6-Dinitrotolue	11.64	11.68	278390	294861	107.532m	94.634
18) o-Nitrotoluene	13.84	13.84	216989	299198	100.639m	101.597m
19) p-Nitrotoluene	14.26	14.26	337360	293350	99.044m	104.072m
20) m-Nitrotoluene	14.84	14.84	297069	354363	98.633m	100.662m
21) PETN	0.00	16.66	0	531752	N.D.	305.134m#

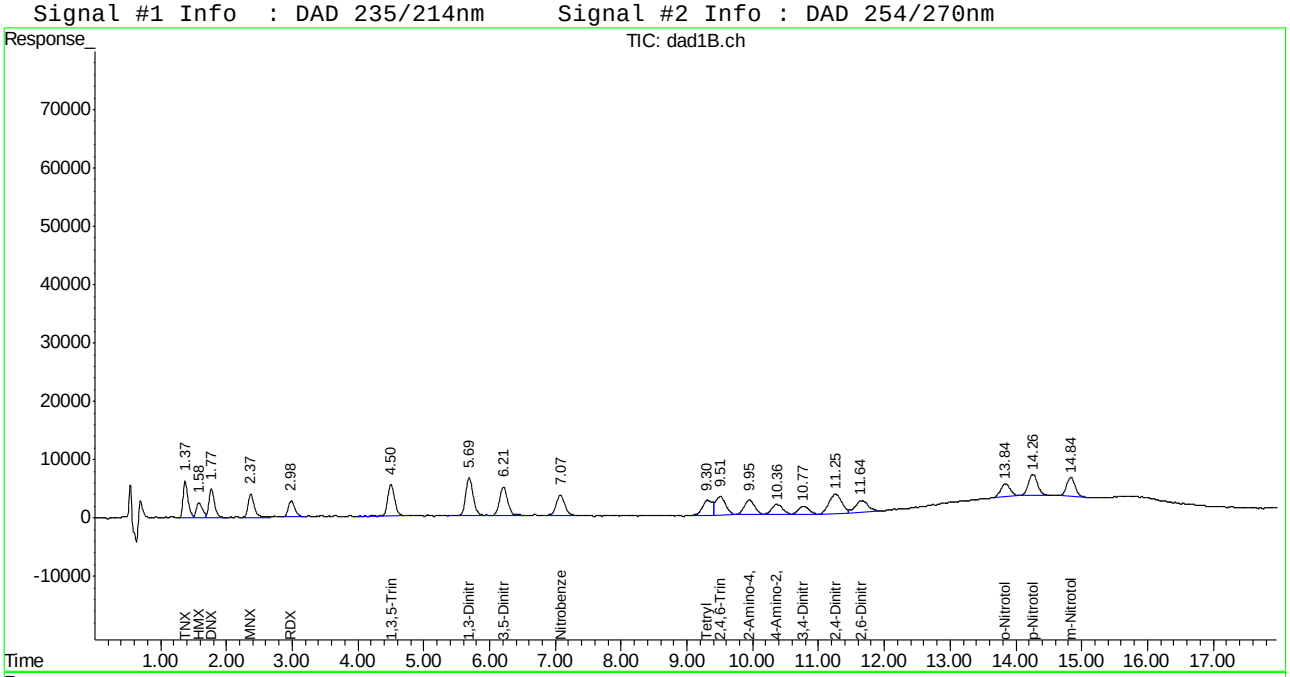
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045355.D 8330B.M Tue Dec 30 07:04:10 2014 Page 1

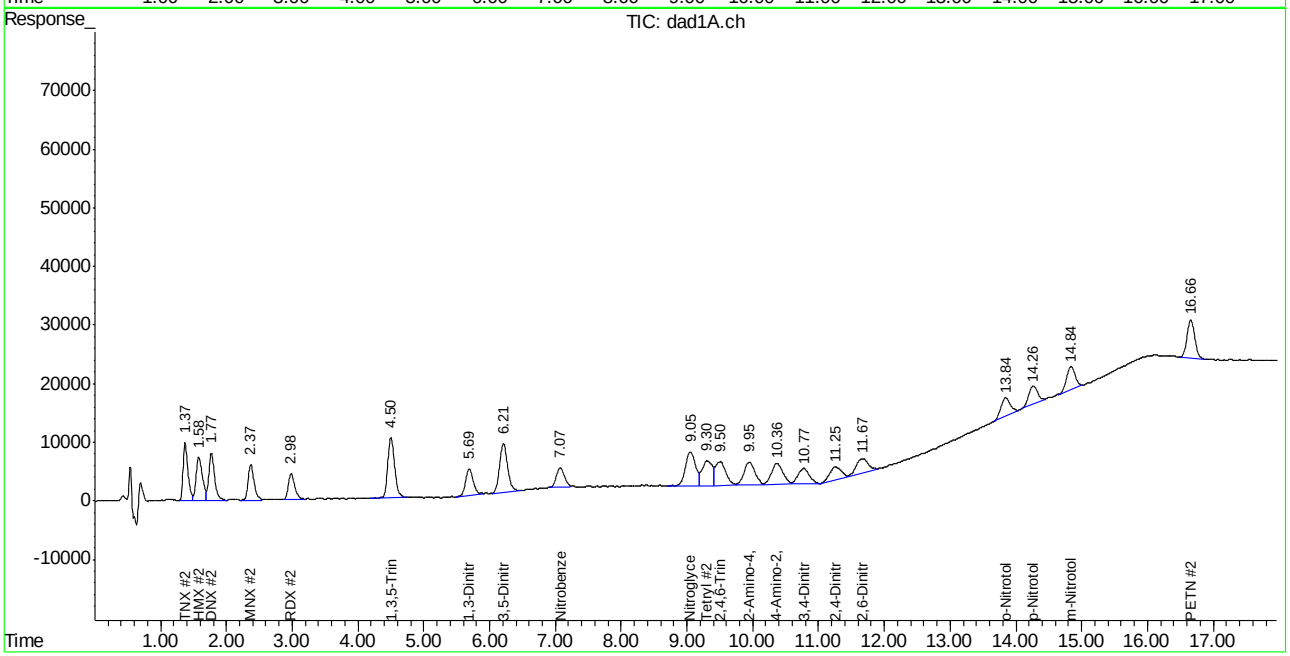
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045355.D\dad1A.ch
Acq On : 29-Dec-2014, 12:38:39 Operator: KISMETL
Sample : ic1221-100 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:22 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221 **Method:** SW846 8330A
Lab FileID: BB045355.D **Analyst approved:** 12/30/14 09:14 Kismet Lugo
Injection Time: 12/29/14 12:38 **Supervisor approved:** 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Poorly defined baseline
TNX		2	1.37	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	2	2.98	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.69	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.21	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.07	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.07	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.64	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.84	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1A.ch
Acq On : 29-Dec-2014, 13:03:38 Operator: KISMETL
Sample : ic1221-200 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:16 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	327107	631189	178.492	191.384
Spiked Amount	500.000	Range	70 - 136	Recovery	=	35.70%#	38.28%#
	Target Compounds						
1)	TNX	1.37	1.37	662998	1004251	222.318	232.038m
2)	HMX	1.58	1.58	321158	949210	197.402	211.297
3)	DNX	1.77	1.77	573252	944169	209.082	215.811
4)	MNX	2.37	2.37	481838	735157	193.545m	198.549m
5)	RDX	2.98	2.99	354394	570393	191.710m	194.635
6)	1,3,5-Trinitrobe	4.50	4.50	776877	1489797	195.215	193.269
7)	1,3-Dinitrobenze	5.69	5.69	1041718	679451	200.364	191.781
8)	3,5-Dinitroanili	6.21	6.21	847377	1404848	203.100	201.845
9)	Nitrobenzene	7.08	7.07	601087	601030	203.223	204.591m
10)	Nitroglycerin	0.00	9.06	0	1237776	N.D.	989.424 #
11)	Tetryl	9.32	9.32	534020	882363	184.279	192.720
12)	2,4,6-Trinitroto	9.51	9.51	731886	878423	207.645	211.704
13)	2-Amino-4,6-Dini	9.95	9.95	595327	917211	193.576	199.941
14)	4-Amino-2,6-Dini	10.38	10.37	417446	888872	198.459	198.400
16)	2,4-Dinitrotolue	11.26	11.26	865219	527614	189.750	194.405
17)	2,6-Dinitrotolue	11.66	11.66	518050	626318	200.103	201.012
18)	o-Nitrotoluene	13.84	13.84	484334	619485	224.632m	210.354m
19)	p-Nitrotoluene	14.26	14.26	680416	582451	199.760m	206.637m
20)	m-Nitrotoluene	14.83	14.84	594941	708522	197.532m	201.267m
21)	PETN	0.00	16.66	0	1047868	N.D.	611.320m#

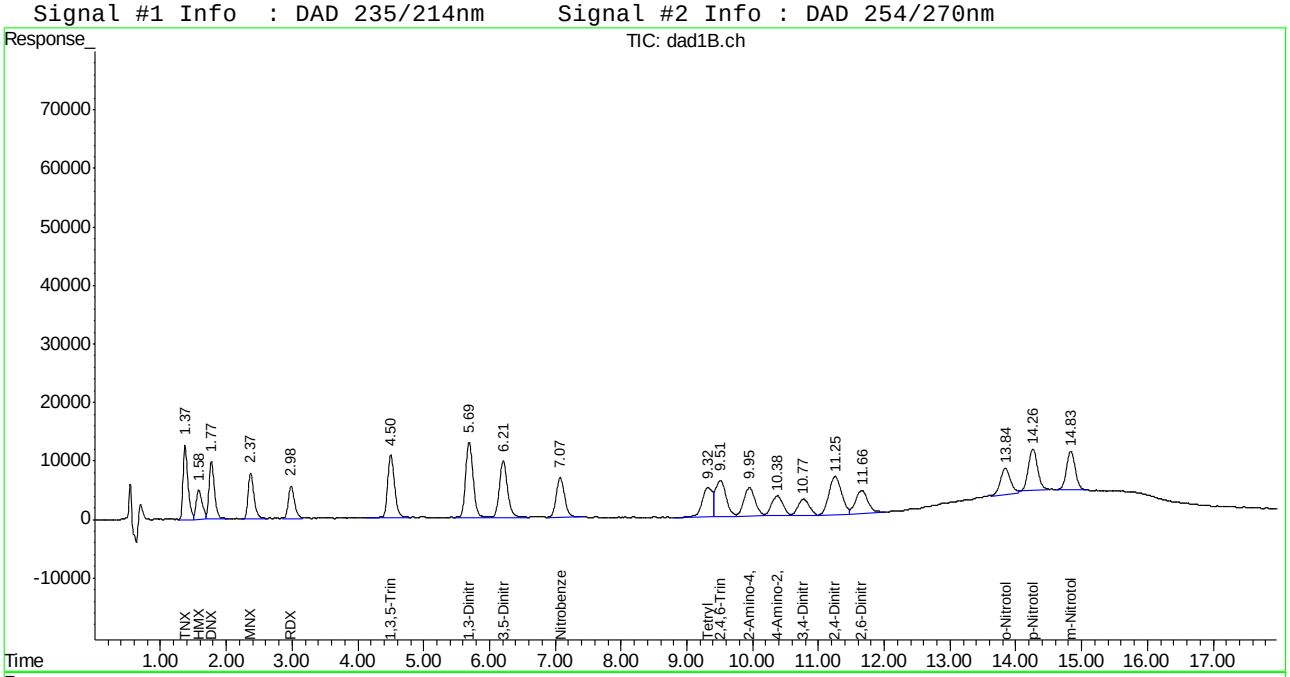
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045356.D 8330B.M Tue Dec 30 07:04:11 2014 Page 1

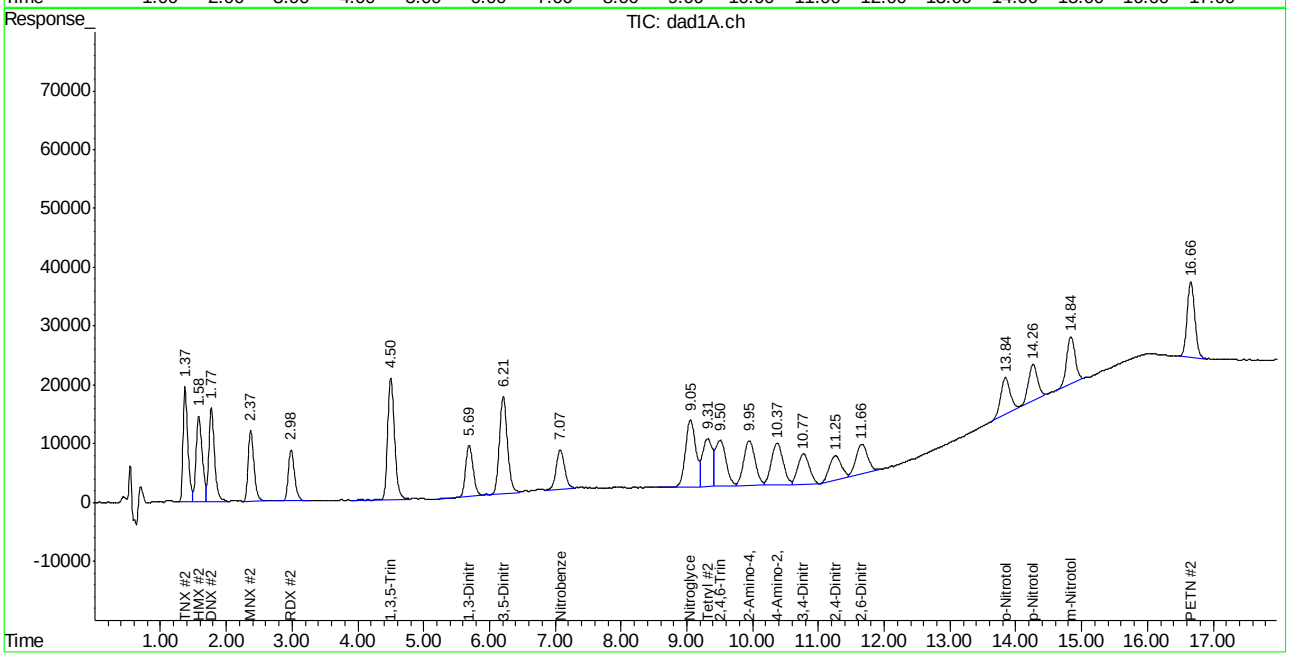
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045356.D\dad1A.ch
Acq On : 29-Dec-2014, 13:03:38 Operator: KISMETL
Sample : ic1221-200 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:24 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045356.D
Injection Time: 12/29/14 13:03
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	1.37	Poorly defined baseline
MNX		1	2.37	Poorly defined baseline
MNX		2	2.37	Poorly defined baseline
RDX	121-82-4	1	2.98	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.07	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.84	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1A.ch
Acq On : 29-Dec-2014, 13:28:36 Operator: KISMETL
Sample : icc1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:09:17 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.77	10.77	894354	1605975	488.021	486.951
Spiked Amount 500.000	Range 70 - 136		Recovery =		97.60%	97.39%
Target Compounds						
1) TNX	1.37	1.37	1625466	2495666	545.055	576.639
2) HMX	1.58	1.58	681001	1974833	418.583	439.604
3) DNX	1.77	1.77	1400403	2247183	510.768	513.644
4) MNX	2.37	2.37	1161171	1806169	466.421	487.805
5) RDX	2.98	2.98	873460	1393316	472.501	475.441
6) 1,3,5-Trinitrobe	4.50	4.50	1935577	3702749	486.374	480.352
7) 1,3-Dinitrobenze	5.69	5.69	2515975	1693625	483.923	478.041
8) 3,5-Dinitroanili	6.21	6.21	2042305	3447232	489.500	495.290
9) Nitrobenzene	7.07	7.07	1526355	1488376	516.050	506.645
10) Nitroglycerin	0.00	9.05	0	3033628	N.D.	2424.949 #
11) Tetryl	9.31	9.31	1306117	2194866	450.713	479.388
12) 2,4,6-Trinitroto	9.50	9.50	1836432	2183145	521.018	526.148
13) 2-Amino-4,6-Dini	9.94	9.94	1514180	2288881	492.350	498.948
14) 4-Amino-2,6-Dini	10.37	10.37	1077062	2209800	512.050	493.236
16) 2,4-Dinitrotolue	11.25	11.25	2183794	1328763	478.924	489.596
17) 2,6-Dinitrotolue	11.65	11.66	1242003	1582911	479.738	508.025
18) o-Nitrotoluene	13.84	13.84	1112725	1564386	516.078m	531.208m
19) p-Nitrotoluene	14.26	14.26	1730230	1471577	507.971m	522.074
20) m-Nitrotoluene	14.83	14.84	1485595	1810727	493.246m	514.365
21) PETN	0.00	16.66	0	2621057	N.D.	1617.758m#

9.7.5
9

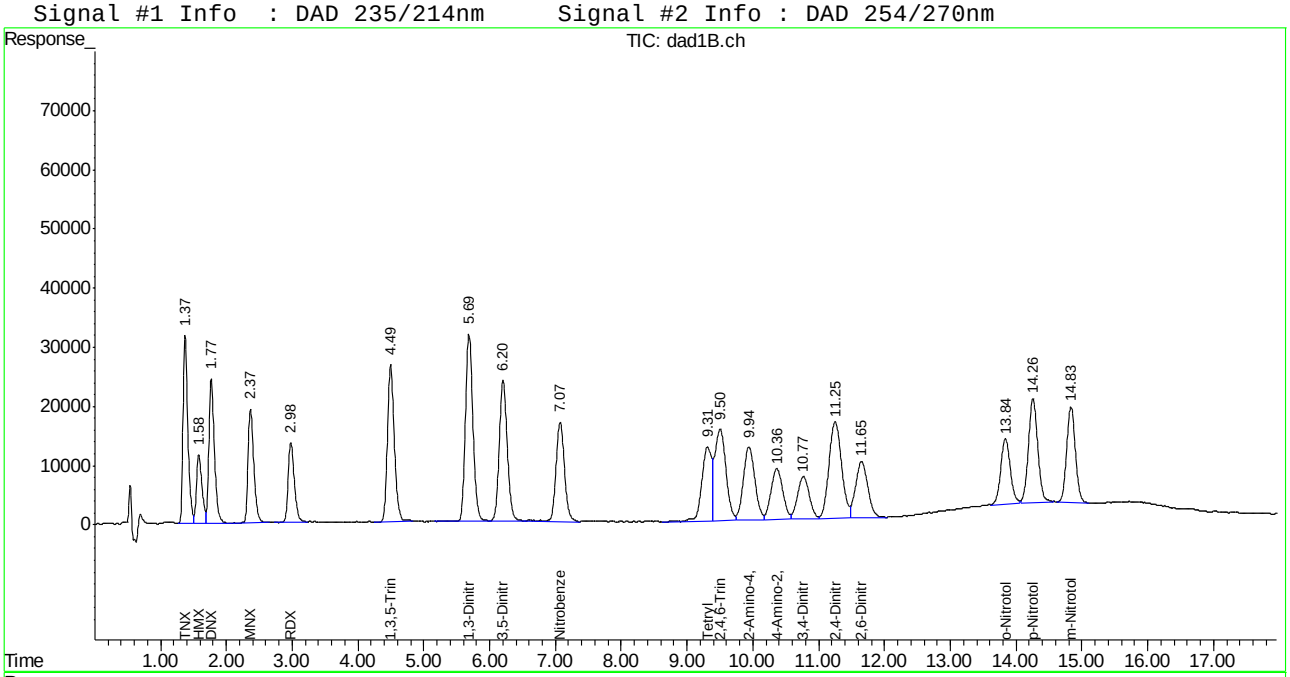
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045357.D 8330B.M Tue Dec 30 07:04:12 2014 Page 1

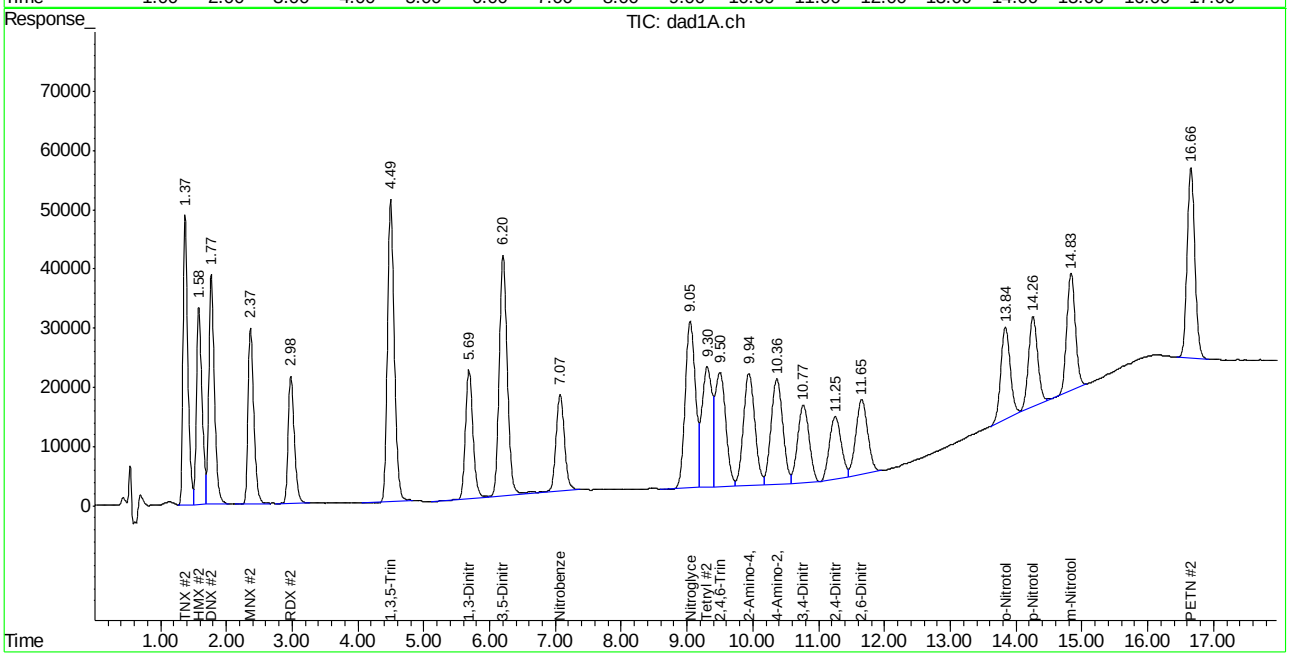
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045357.D\dad1A.ch
Acq On : 29-Dec-2014, 13:28:36 Operator: KISMETL
Sample : icc1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:26 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-ICC1221 **Method:** SW846 8330A
Lab FileID: BB045357.D **Analyst approved:** 12/30/14 09:14 Kismet Lugo
Injection Time: 12/29/14 13:28 **Supervisor approved:** 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
PETN	78-11-5	2	16.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1A.ch
Acq On : 29-Dec-2014, 13:53:33 Operator: KISMETL
Sample : ic1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:26:39 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	1877677	3286570	1024.589	996.527
	Spiked Amount 500.000	Range 70 - 136		Recovery =		204.92%#	199.31%#
	Target Compounds						
1)	TNX	1.38	1.38	3259550	5010933	1092.999	1157.806
2)	HMX	1.59	1.59	1383133	3967640	850.153	883.209
3)	DNX	1.77	1.77	2804116	4507520	1022.743	1030.296
4)	MNX	2.37	2.37	2355395	3635481	946.118	981.862
5)	RDX	2.98	2.98	1751863	2805865	947.676	957.445
6)	1,3,5-Trinitrobe	4.50	4.50	3920760	7515003	985.214	974.910
7)	1,3-Dinitrobenze	5.69	5.69	5038525	3414287	969.111	963.713
8)	3,5-Dinitroanili	6.21	6.21	4059462	6888638	972.973	989.744
9)	Nitrobenzene	7.07	7.07	2947288	2861838	996.458	974.173m
10)	Nitroglycerin	0.00	9.05	0	6144490	N.D.	4911.636 #
11)	Tetryl	9.32	9.31	2620520	4433190	904.285	968.267
12)	2,4,6-Trinitroto	9.51	9.51	3722049	4403140	1055.991	1061.178
13)	2-Amino-4,6-Dini	9.94	9.94	3075911	4621043	1000.161	1007.331
14)	4-Amino-2,6-Dini	10.37	10.37	2231877	4489995	1061.064	1002.184
16)	2,4-Dinitrotolue	11.25	11.26	4430886	2710547	971.730	998.729
17)	2,6-Dinitrotolue	11.66	11.66	2497908	3207116	964.846	1029.303
18)	o-Nitrotoluene	13.84	13.84	2240748	3095747	1039.251m	1051.202m
19)	p-Nitrotoluene	14.26	14.26	3499664	2937098	1027.452m	1041.999
20)	m-Nitrotoluene	14.83	14.84	3030125	3627320	1006.060m	1030.396
21)	PETN	0.00	16.66	0	5223205	N.D.	3651.668 #

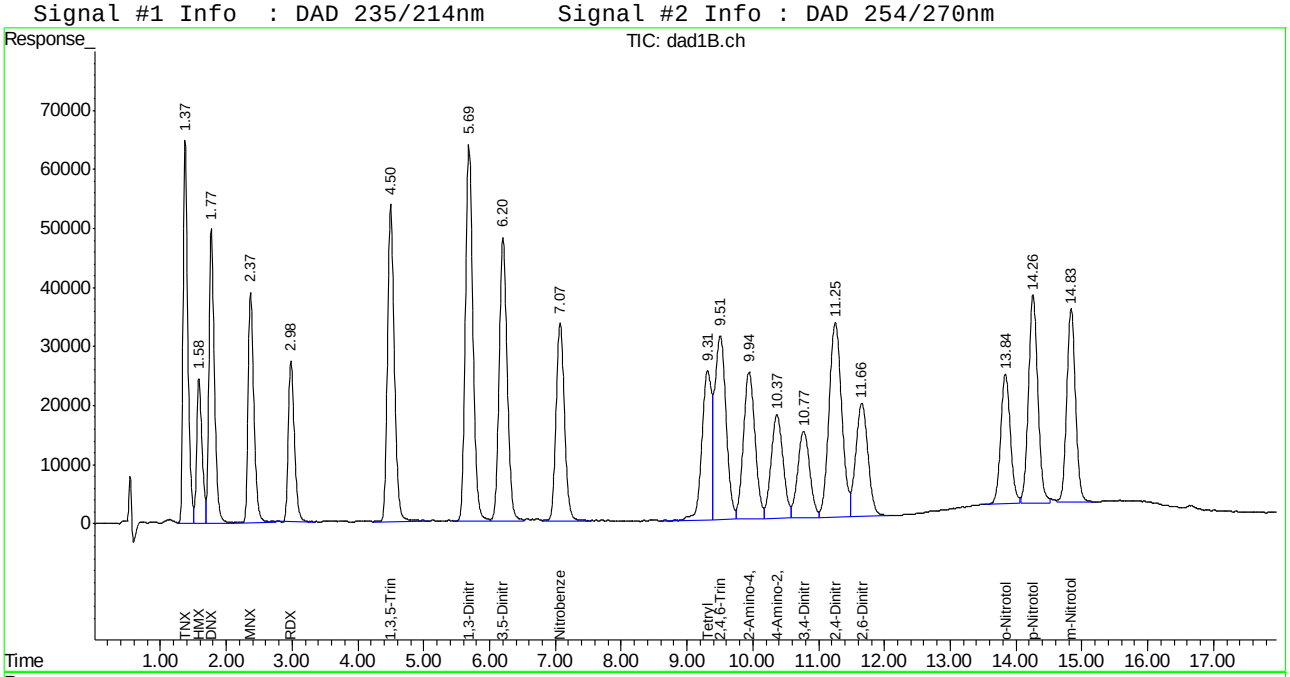
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045358.D 8330B.M Tue Dec 30 07:04:13 2014

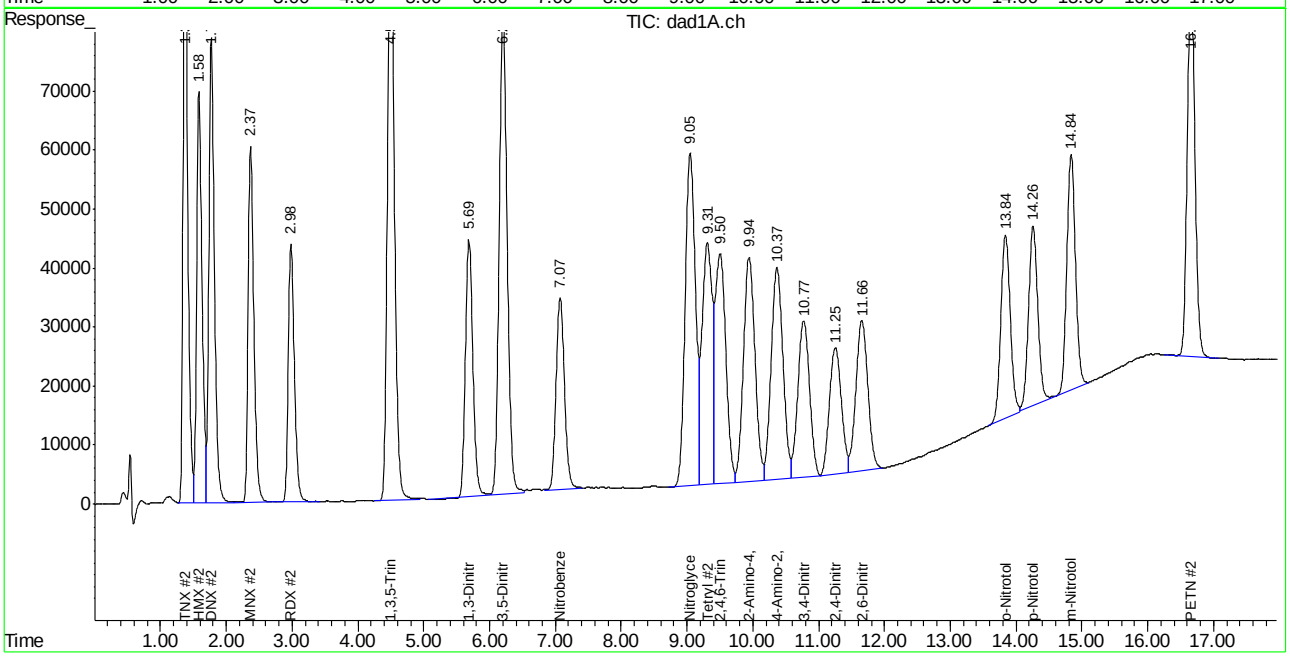
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045358.D\dad1A.ch
Acq On : 29-Dec-2014, 13:53:33 Operator: KISMETL
Sample : ic1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1221-IC1221
Lab FileID: BB045358.D
Injection Time: 12/29/14 13:53
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitrobenzene	98-95-3	2	7.07	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline

BB045359.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1A.ch
Acq On : 29-Dec-2014, 14:18:32 Operator: KISMETL
Sample : ic1221-2000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:37:43 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.77	10.77	3970911	7120834	2166.801	2159.122
	Spiked Amount 500.000	Range 70 - 136		Recovery =		433.36%#	431.82%#
	Target Compounds						
1)	TNX	1.38	1.38	6667058	10250456	2235.612	2368.429
2)	HMX	1.59	1.59	2773909	7858186	1705.005	1749.256
3)	DNX	1.78	1.78	5688778	9087978	2074.863	2077.263
4)	MNX	2.37	2.37	4787469	7424750	1923.038	2005.258
5)	RDX	2.99	2.99	3580831	5727207	1937.062	1954.295
6)	1,3,5-Trinitrobe	4.50	4.50	7913143	15322461	1988.425	1987.759
7)	1,3-Dinitrobenze	5.69	5.69	10327684	7007149	1986.428	1977.830
8)	3,5-Dinitroanili	6.20	6.20	8330977	14043174	1996.771	2017.691
9)	Nitrobenzene	7.07	7.07	6037599	5834197	2041.270	1985.967
10)	Nitroglycerin	0.00	9.04	0	12581683	N.D.	10057.244 #
11)	Tetryl	9.31	9.31	5405565	9157404	1865.345	2000.097
12)	2,4,6-Trinitroto	9.51	9.50	7670209	9155189	2176.133	2206.445
13)	2-Amino-4,6-Dini	9.94	9.94	6391654	9700559	2078.306	2114.604
14)	4-Amino-2,6-Dini	10.37	10.37	4669931	9496728	2220.147	2119.707
16)	2,4-Dinitrotolue	11.25	11.25	9163675	5877032	2009.670	2165.452
17)	2,6-Dinitrotolue	11.65	11.66	5143441	6749007	1986.715	2166.049
18)	o-Nitrotoluene	13.84	13.84	4421456	6311223	2050.656m	2143.060m
19)	p-Nitrotoluene	14.26	14.26	6909254	5969658	2028.459m	2117.865
20)	m-Nitrotoluene	14.83	14.83	6109530	7434253	2028.482m	2111.814m
21)	PETN	0.00	16.66	0	10441138	N.D.	BelowCal

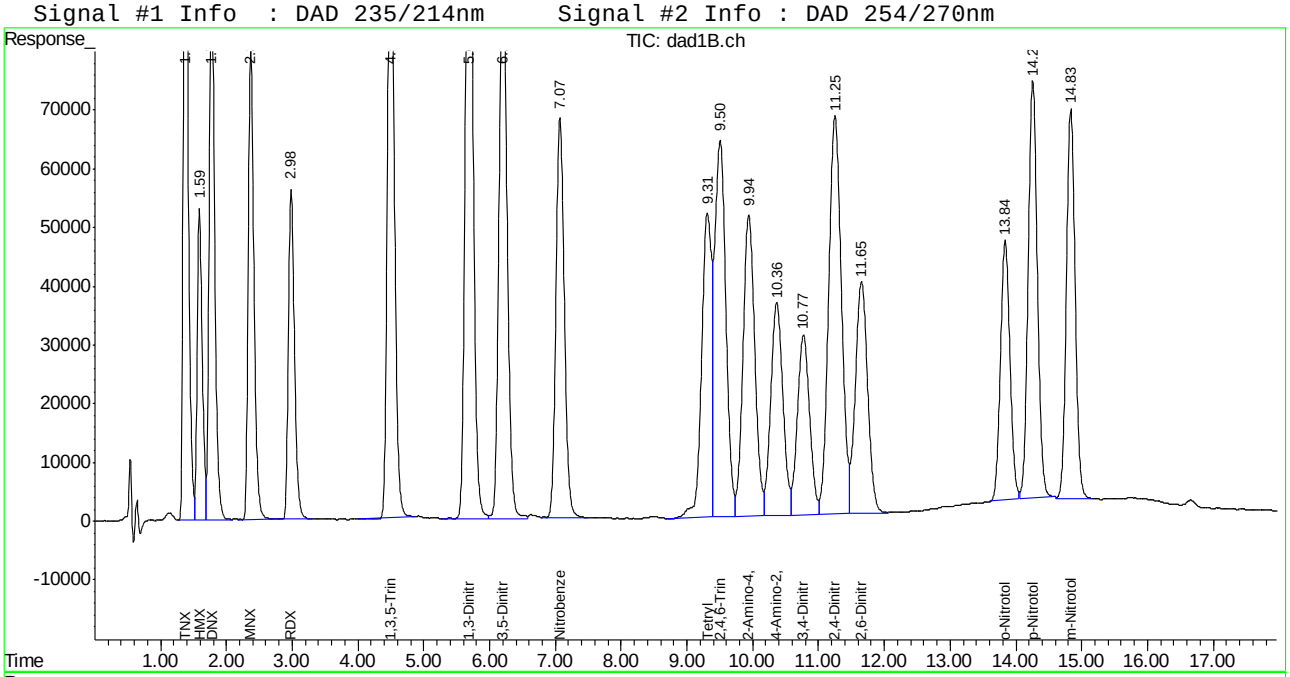
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045359.D 8330B.M Tue Dec 30 07:04:14 2014 Page 1

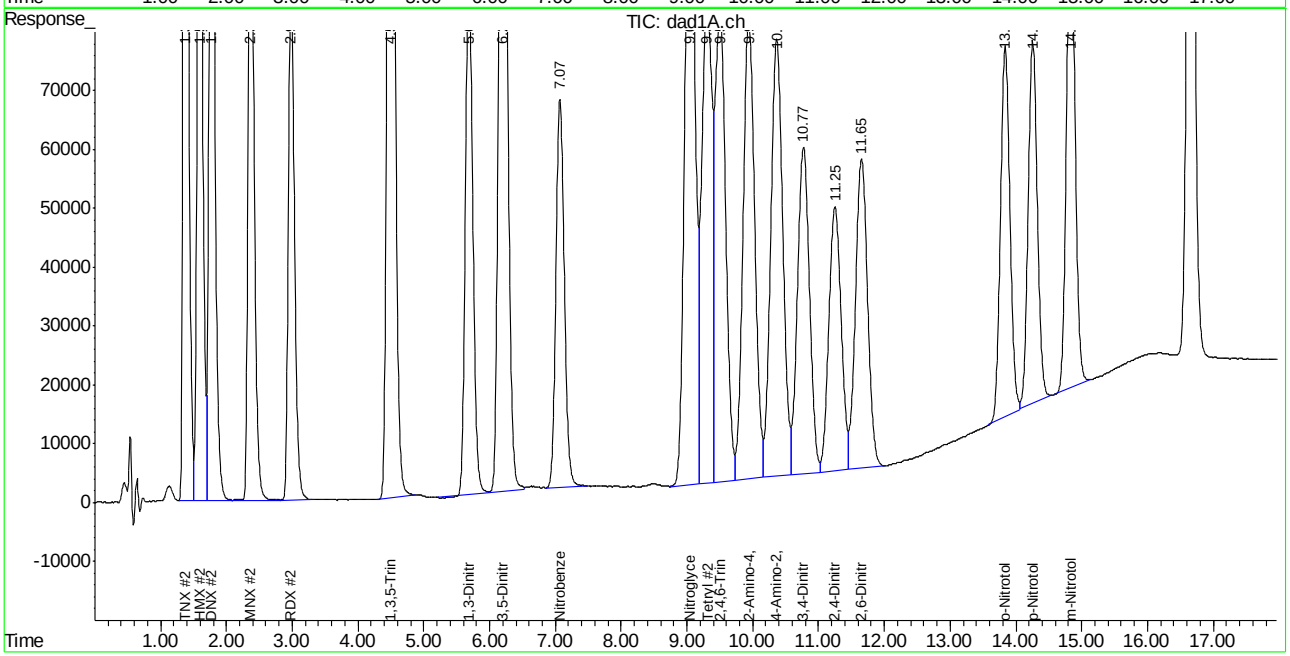
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045359.D\dad1A.ch
Acq On : 29-Dec-2014, 14:18:32 Operator: KISMETL
Sample : ic1221-2000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 14:38 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 14:09:00 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number:	GBB1221-IC1221	**Method:**	SW846 8330A
Lab FileID:	BB045359.D	**Analyst approved:**	12/30/14 09:14 Kismet Lugo
Injection Time:	12/29/14 14:18	**Supervisor approved:**	12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Nitrotoluene	88-72-2	1	13.84	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.26	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.83	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 15:10:04 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	70 - 136	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.60	1.60	783250	2261118	517.314m	572.928m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	2.98	2.98	936532	1491185	523.852	509.258
6)	1,3,5-Trinitrobe	4.49	4.49	2080072	4001473	514.427	525.399
7)	1,3-Dinitrobenze	5.68	5.68	2460575	1735624	469.073	489.663
8)	3,5-Dinitroanili	6.20	6.20	2159916	3683642	513.448	529.536m
9)	Nitrobenzene	7.07	7.06	1629077	1549850	530.019	516.106m
10)	Nitroglycerin	0.00	9.05	0	3226636	N.D.	2589.908 #
11)	Tetryl	9.31	9.31	1166495	1992513	428.487	452.808
12)	2,4,6-Trinitroto	9.50	9.50	1920333	2422002	516.406	537.672
13)	2-Amino-4,6-Dini	9.94	9.94	1682914	2640740	547.959	563.179
14)	4-Amino-2,6-Dini	10.36	10.36	1226209	2548873	569.662	571.387
16)	2,4-Dinitrotolue	11.25	11.25	2402731	1531815	533.805	574.059m
17)	2,6-Dinitrotolue	11.65	11.65	1368713	1760168	526.912	557.864m
18)	o-Nitrotoluene	13.83	13.84	1227458	1637680	538.039m	531.281m
19)	p-Nitrotoluene	14.25	14.26	1848906	1564560	525.630m	529.110
20)	m-Nitrotoluene	14.83	14.83	1703165	2048389	558.699m	585.508m
21)	PETN	0.00	16.65	0	3589280	N.D.	3447.072m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045360.D 8330B.M Tue Dec 30 07:04:15 2014

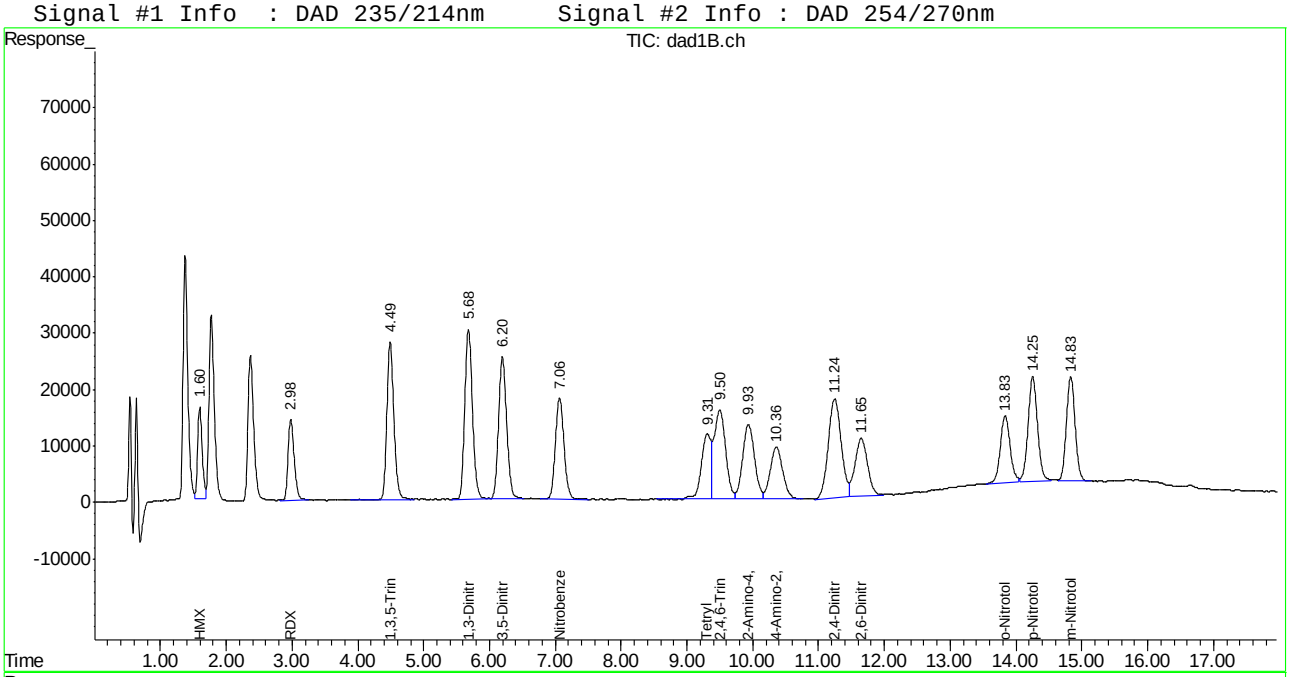
9.7.8
9

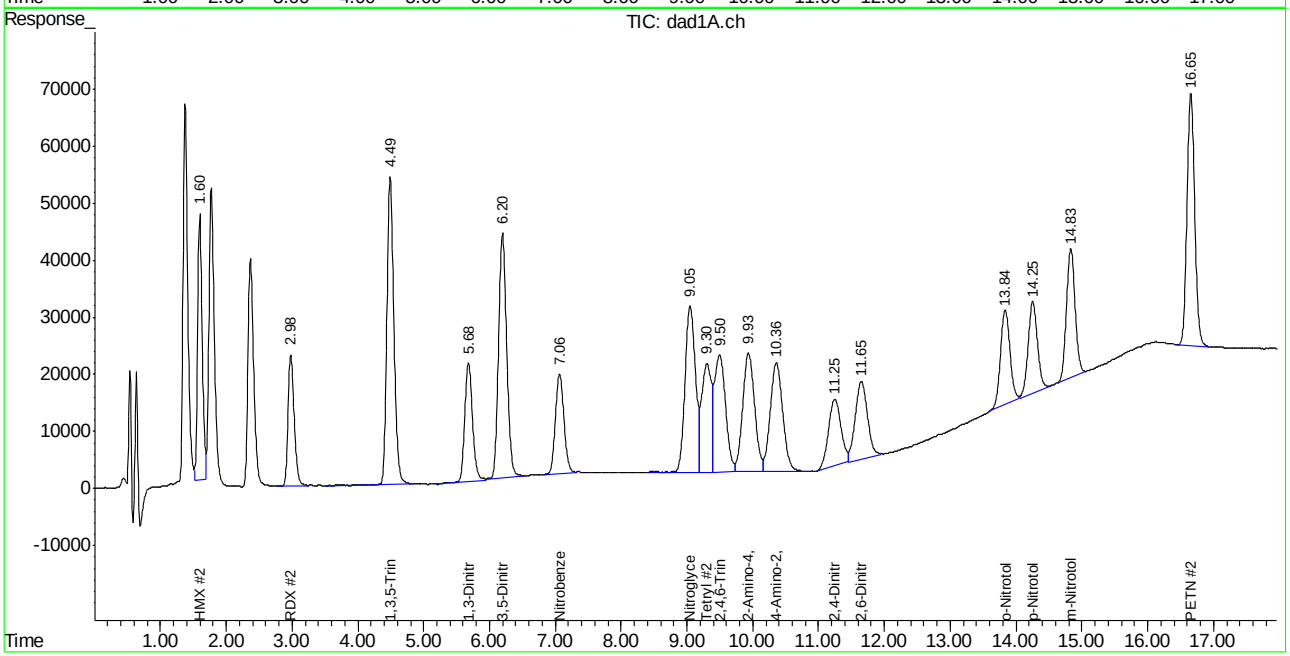
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 29 16:37 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GBB1221-ICV1221
Lab FileID: BB045360.D
Injection Time: 12/29/14 14:43
Method: SW846 8330A
Analyst approved: 12/30/14 09:14 Kismet Lugo
Supervisor approved: 12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.60	Poorly defined baseline
HMX	2691-41-0	2	1.60	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.20	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.06	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.25	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.65	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	13.83	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	13.84	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.25	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	14.83	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	14.83	Poorly defined baseline
PETN	78-11-5	2	16.65	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/30/14 14:53

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 30 06:31:39 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 70 - 136		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.37	1.37	1770351	2744701	544.273m	566.364m
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	1.78	1.78	1476922	2347612	516.485	505.196
4)	MNX	2.37	2.37	1273673	1939862	517.911	528.313
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D.	N.D.

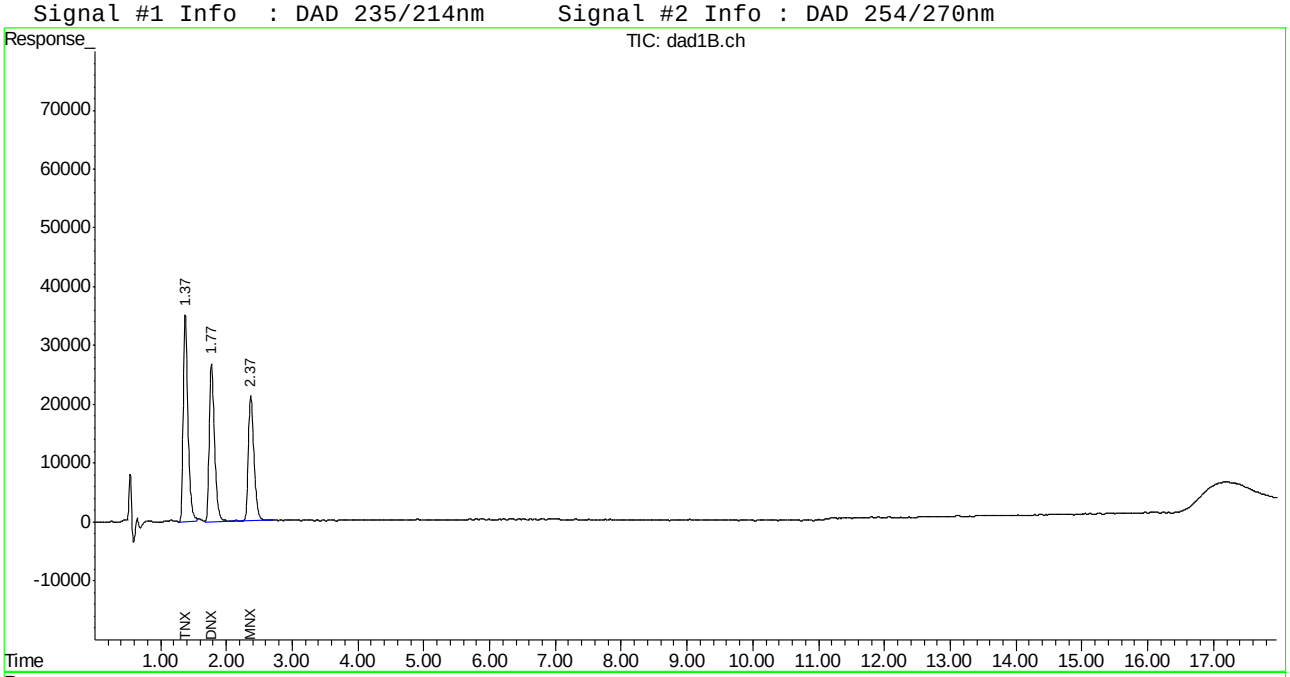
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045361.D 8330B.M Tue Dec 30 07:04:16 2014 Page 1

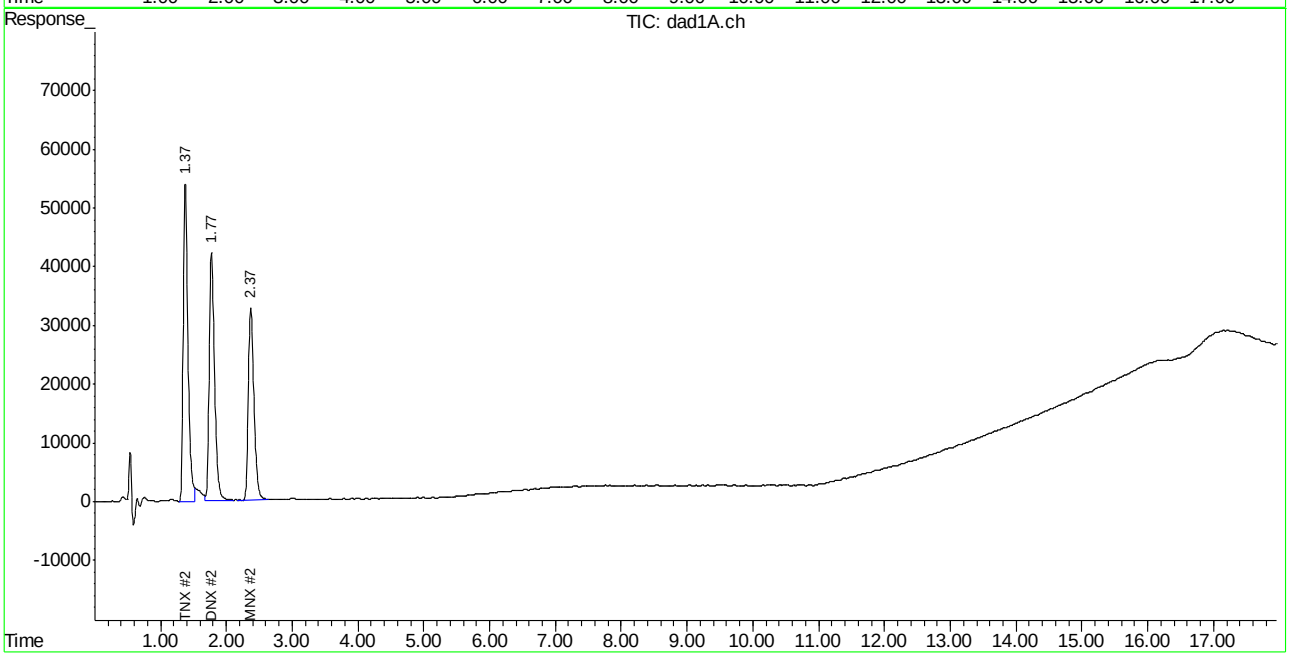
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 30 6:33 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number:	GBB1221-ICV1221	**Method:**	SW846 8330A
Lab FileID:	BB045361.D	**Analyst approved:**	12/30/14 09:14 Kismet Lugo
Injection Time:	12/29/14 15:51	**Supervisor approved:**	12/30/14 14:53 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.37	Overlapping peak
TNX		2	1.37	Overlapping peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1A.ch
Acq On : 02-Jan-2015, 14:31:48 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:40 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.18	11.18	1947058	3534522	1165.923m	1129.470
	Spiked Amount 500.000	Range 72 - 134		Recovery =		233.18%#	225.89%#
	Target Compounds						
1)	TNX	1.36	1.36	3091749	4629885	950.522	955.368
2)	HMX	1.48	1.48	1589959	4375537	1050.123	1108.685
3)	DNX	1.74	1.74	2757104	4374300	964.170	941.330
4)	MNX	2.33	2.33	2367763	3641392	962.799	991.718
5)	RDX	2.93	2.93	1774364	2825628	992.496	964.987
6)	1,3,5-Trinitrobe	4.60	4.60	3906386	7622807	966.097	1000.885
7)	1,3-Dinitrobenze	5.86	5.86	5071430	3492215	966.795	985.241
8)	3,5-Dinitroanili	6.32	6.32	4066152	6852278	966.592	985.038m
9)	Nitrobenzene	7.41	7.41	2902899	2820141	944.457	939.118m
10)	Nitroglycerin	0.00	9.15	0	6177168	N.D. d	4958.196
11)	Tetryl	9.49	9.49	2815087	4608105	1034.062	1047.214
12)	2,4,6-Trinitroto	9.86	9.86	3524837	4191804	947.881	930.558
13)	2-Amino-4,6-Dini	10.32	10.32	3107635	4614110	1011.849	984.031
14)	4-Amino-2,6-Dini	10.80	10.80	2252857	4472294	1046.613	1002.566
16)	2,4-Dinitrotolue	11.76	11.76	4531907	2962403	1006.835	1110.183
17)	2,6-Dinitrotolue	12.16	12.16	2552150	3362781	982.499	1065.793
18)	o-Nitrotoluene	14.34	14.34	2154285	3033827	944.301	984.206m
19)	p-Nitrotoluene	14.73	14.73	3401966	2805478	967.152	948.770
20)	m-Nitrotoluene	15.27	15.27	2876947	3541684	943.741m	1012.349m
21)	PETN	0.00	16.86	0	1396221	N.D.	1340.902m#

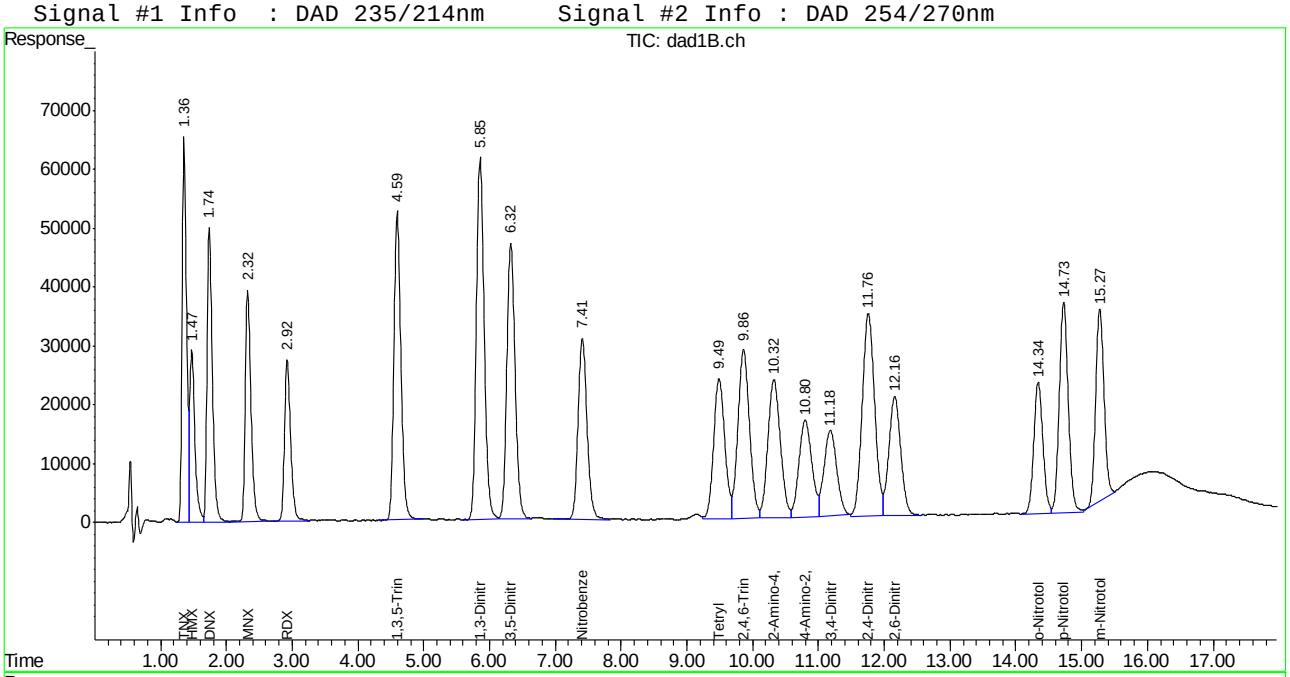
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045462.D 8330B.M Mon Jan 05 07:33:44 2015 Page 1

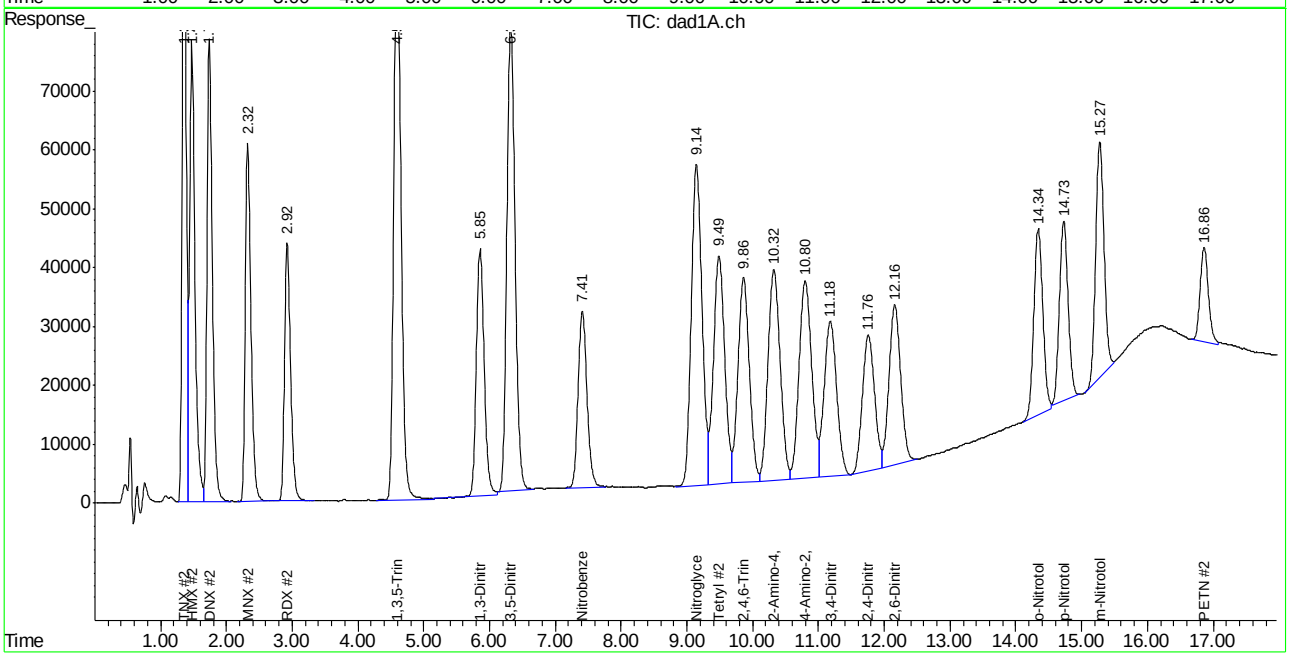
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045462.D\dad1A.ch
Acq On : 02-Jan-2015, 14:31:48 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:04 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GBB1225-CC1221 **Method:** SW846 8330B
Lab FileID: BB045462.D **Analyst approved:** 01/05/15 07:39 Kismet Lugo
Injection Time: 01/02/15 14:31 **Supervisor approved:** 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.32	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	11.18	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.34	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.27	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.27	Poorly defined baseline
PETN	78-11-5	2	16.86	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1A.ch
Acq On : 02-Jan-2015, 19:06:41 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:51 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.15	11.15	1993136	3509333	1193.515	1121.421
	Spiked Amount 500.000	Range 72 - 134		Recovery =		238.70%#	224.28%#
	Target Compounds						
1)	TNX	1.36	1.36	3068674	4597340	943.427	948.653
2)	HMX	1.47	1.47	1597723	4446741	1055.251	1126.727
3)	DNX	1.74	1.74	2745589	4417107	960.143	950.542
4)	MNX	2.32	2.32	2332966	3624636	948.649	987.154
5)	RDX	2.92	2.92	1748285	2795167	977.909	954.584
6)	1,3,5-Trinitrobe	4.59	4.59	3875641	7539391	958.493	989.932
7)	1,3-Dinitrobenze	5.85	5.85	5006450	3390050	954.407	956.418
8)	3,5-Dinitroanili	6.31	6.31	4053722	6930296	963.637	996.253
9)	Nitrobenzene	7.40	7.40	2863629	2765167	931.680	920.811m
10)	Nitroglycerin	0.00	9.13	0	6146204	N.D. d	4933.342
11)	Tetryl	9.47	9.47	2794531	4594889	1026.511	1044.210
12)	2,4,6-Trinitroto	9.84	9.84	3496187	4183283	940.177	928.667
13)	2-Amino-4,6-Dini	10.30	10.30	3092262	4614467	1006.844	984.107
14)	4-Amino-2,6-Dini	10.77	10.77	2210152	4453449	1026.774	998.341
16)	2,4-Dinitrotolue	11.73	11.73	4479879	2921497	995.277	1094.853
17)	2,6-Dinitrotolue	12.14	12.14	2514601	3306855	968.044	1048.068
18)	o-Nitrotoluene	14.33	14.33	2150869	2996282	942.803	972.026m
19)	p-Nitrotoluene	14.72	14.72	3353462	2789709	953.363	943.437
20)	m-Nitrotoluene	15.27	15.27	2946569	3583359	966.580	1024.261
21)	PETN	0.00	16.84	0	1423673	N.D.	1367.267m#

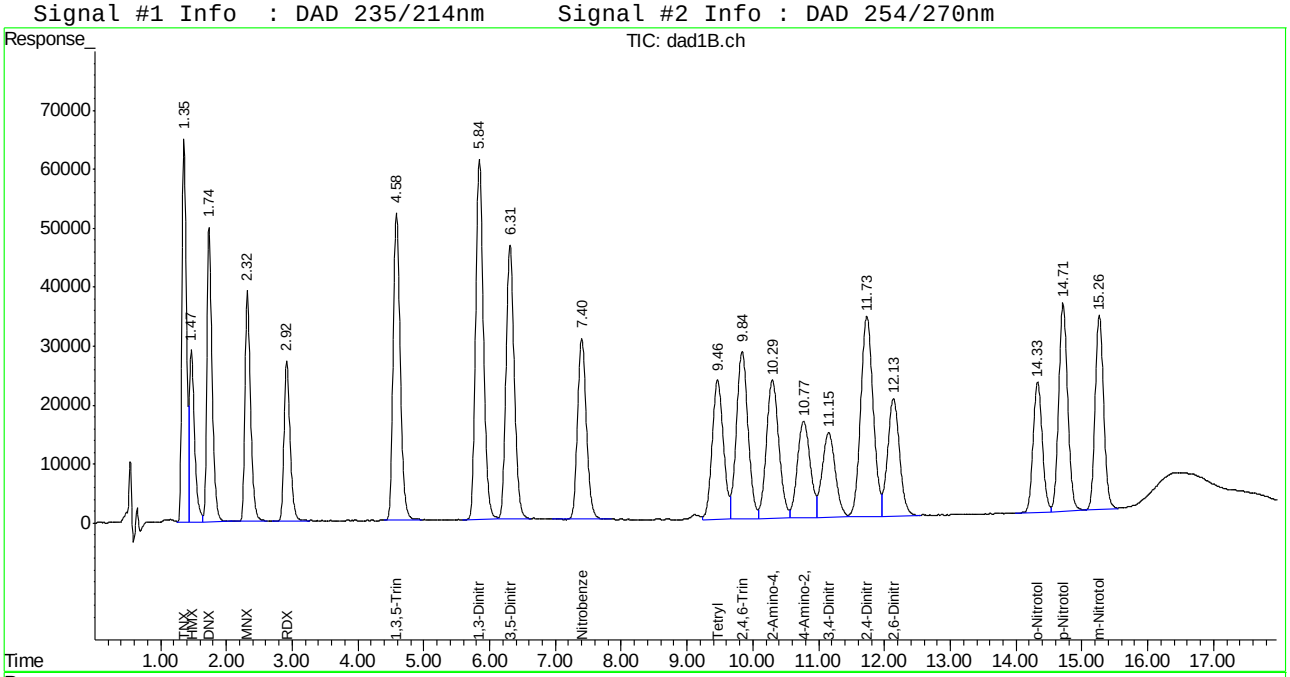
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045473.D 8330B.M Mon Jan 05 07:33:55 2015 Page 1

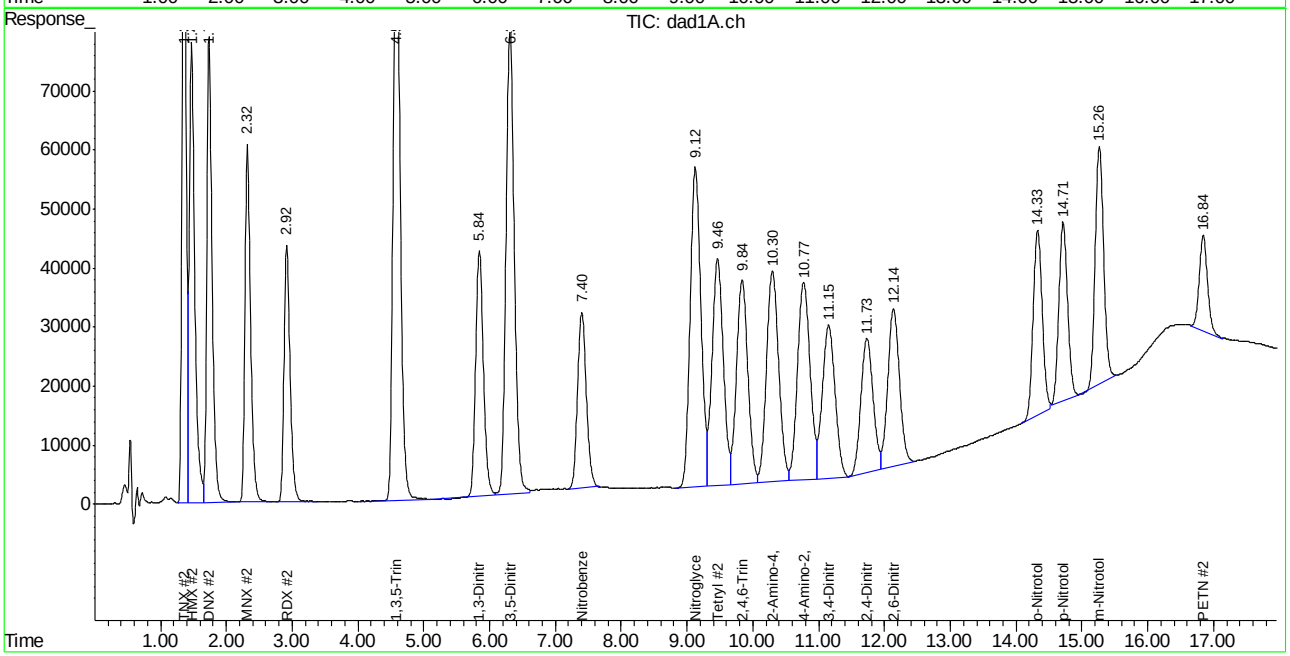
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045473.D\dad1A.ch
Acq On : 02-Jan-2015, 19:06:41 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:06 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GBB1225-CC1221
Lab FileID: BB045473.D
Injection Time: 01/02/15 19:06
Method: SW846 8330B
Analyst approved: 01/05/15 07:39 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.33	Poorly defined baseline
PETN	78-11-5	2	16.84	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1A.ch
Acq On : 02-Jan-2015, 22:26:16 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 05 07:01:59 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	11.13	11.13	1979954	3519060	1185.621	1124.529
	Spiked Amount 500.000	Range 72 - 134		Recovery =		237.12%#	224.91%#
	Target Compounds						
1)	TNX	1.36	1.36	3045106	4571462	936.182	943.313
2)	HMX	1.47	1.47	1610219	4434187	1063.504	1123.546
3)	DNX	1.74	1.74	2738951	4397576	957.821	946.339
4)	MNX	2.32	2.32	2331016	3607083	947.856	982.374
5)	RDX	2.92	2.92	1751998	2808265	979.986	959.057
6)	1,3,5-Trinitrobe	4.58	4.58	3885154	7513531	960.846	986.536
7)	1,3-Dinitrobenze	5.84	5.84	5007110	3371033	954.533	951.053
8)	3,5-Dinitroanili	6.30	6.30	4062998	6836228	965.842	982.731m
9)	Nitrobenzene	7.39	7.39	2904995	2807881	945.139	935.035m
10)	Nitroglycerin	0.00	9.11	0	6112611	N.D.	4906.379 #
11)	Tetryl	9.45	9.45	2788436	4590788	1024.272	1043.279
12)	2,4,6-Trinitroto	9.82	9.82	3472867	4179431	933.905	927.811
13)	2-Amino-4,6-Dini	10.28	10.28	3063974	4606804	997.633	982.472
14)	4-Amino-2,6-Dini	10.75	10.75	2203832	4468349	1023.838	1001.681
16)	2,4-Dinitrotolue	11.71	11.71	4465791	2939760	992.147	1101.697
17)	2,6-Dinitrotolue	12.12	12.12	2502296	3326343	963.307	1054.244
18)	o-Nitrotoluene	14.32	14.31	2136316	2943837	936.424	955.012m
19)	p-Nitrotoluene	14.70	14.70	3355162	2796546	953.846	945.750
20)	m-Nitrotoluene	15.25	15.25	2951044	3585147	968.048	1024.773
21)	PETN	0.00	16.83	0	1384463	N.D.	1329.611m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045481.D 8330B.M Mon Jan 05 07:34:03 2015 Page 1

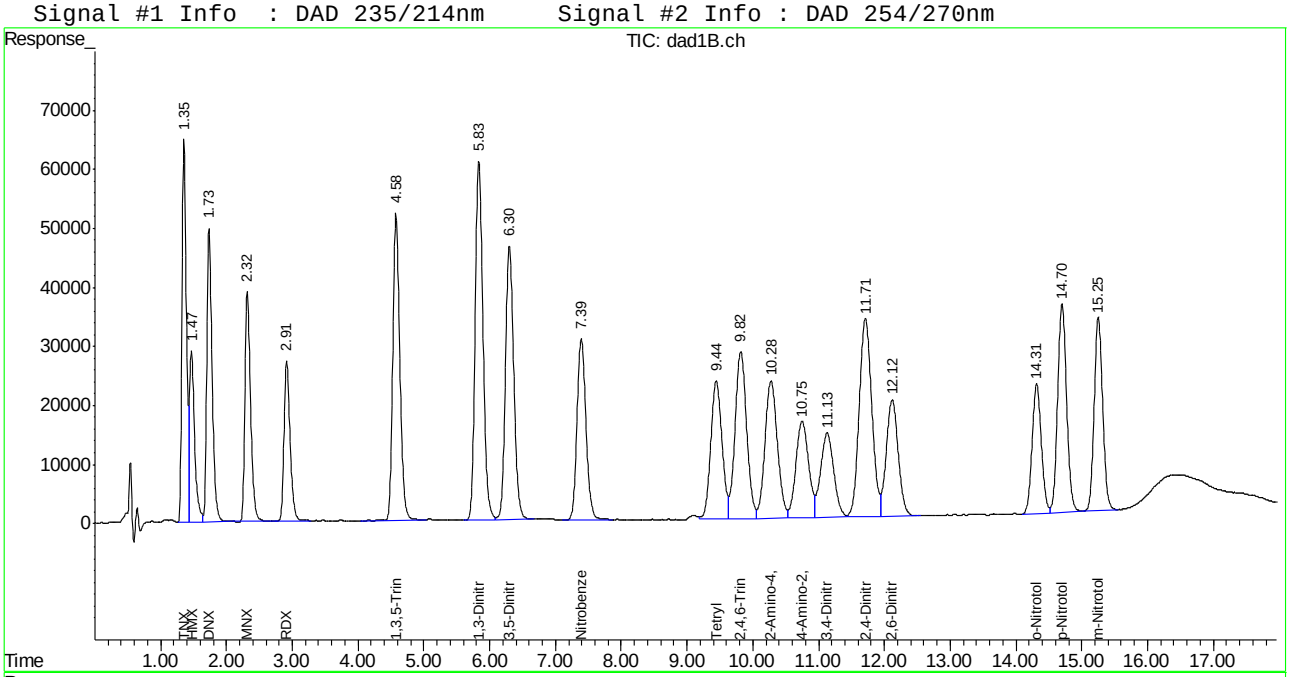
9.7.12
9

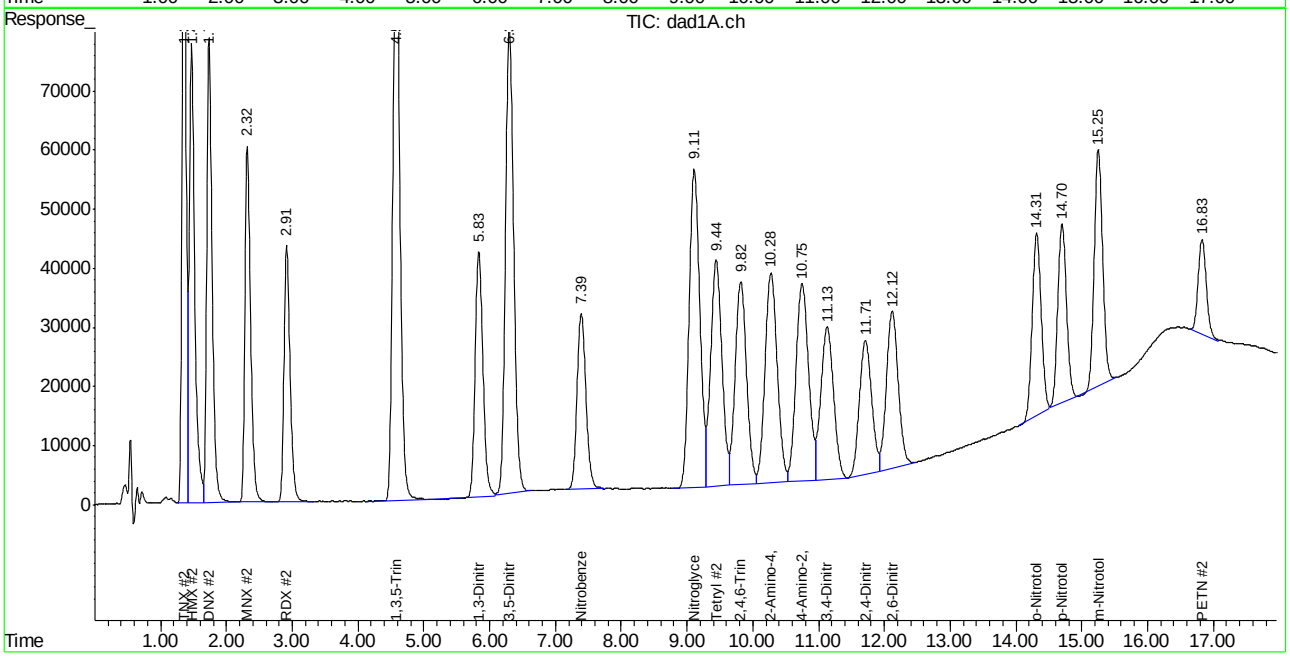
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1B.ch Vial: 28
Signal #2 : C:\HPCHEM\1\DATA\0102ABPL\BB045481.D\dad1A.ch
Acq On : 02-Jan-2015, 22:26:16 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54435,GBB1225,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Jan 5 7:07 2015 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Wed Dec 31 08:28:57 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GBB1225-ECC1221 **Method:** SW846 8330B
Lab FileID: BB045481.D **Analyst approved:** 01/05/15 07:39 Kismet Lugo
Injection Time: 01/02/15 22:26 **Supervisor approved:** 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.39	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.31	Poorly defined baseline
PETN	78-11-5	2	16.83	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057986.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1224RPB2\GG057986.D\dad1A.ch
Acq On : 24-Dec-2014, 10:32:47 Operator: kismetl
Sample : ic2334-20 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:27 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.11	134564	238897	22.939	22.356m
	Spiked Amount 500.000	Range 72 - 145		Recovery =		4.59%#	4.47%#
	Target Compounds						
1)	TNX	5.64	5.64	183685	264724	20.295m	19.532m
2)	HMX	6.26	6.23	62165	196327	26.542m	24.397m
3)	DNX	6.38	6.37	134154	301301	16.556m	21.664m
4)	MNX	7.73	7.72	127163	178626	19.834	17.844m
5)	1,3,5-Trinitrobe	8.61	8.61	217996	348989	21.171	19.559
6)	RDX	9.19	9.20	97931	168382	20.543	18.868m
7)	1,3-Dinitrobenze	11.24	11.24	272334	214739	18.713	21.059m
8)	Nitrobenzene	12.21	12.20	181723	139517	19.756	16.513m
9)	2,4,6-Trinitroto	13.28	13.27	204202	262354	20.470	20.533
10)	Nitroglycerin	0.00	14.14	0	325516	N.D.	93.836 #
11)	Tetryl	15.00	14.97	180494	335674	24.174m	26.627m
13)	2,6-Dinitrotolue	16.56	16.55	137399	186346	19.850	20.377m
14)	2,4-Dinitrotolue	17.35	17.33	251205	186322	19.536	20.371m
15)	o-Nitrotoluene	18.90	18.90	339345	588865	19.520	21.181
16)	3,5-Dinitroanili	18.90	18.90	339345	588865	19.520	21.168
17)	p-Nitrotoluene	20.34	20.34	114007	196557	22.915	22.906
18)	4-Amino-2,6-Dini	21.04	21.04	142224	254272	21.165	18.013
19)	m-Nitrotoluene	21.85	21.87	123960	201019	19.047	17.603m
20)	2-Amino-4,6-Dini	23.62	23.62	208432	355133	22.474	27.086m
21)	PETN	0.00	25.50	0	98938	N.D.	104.900m#

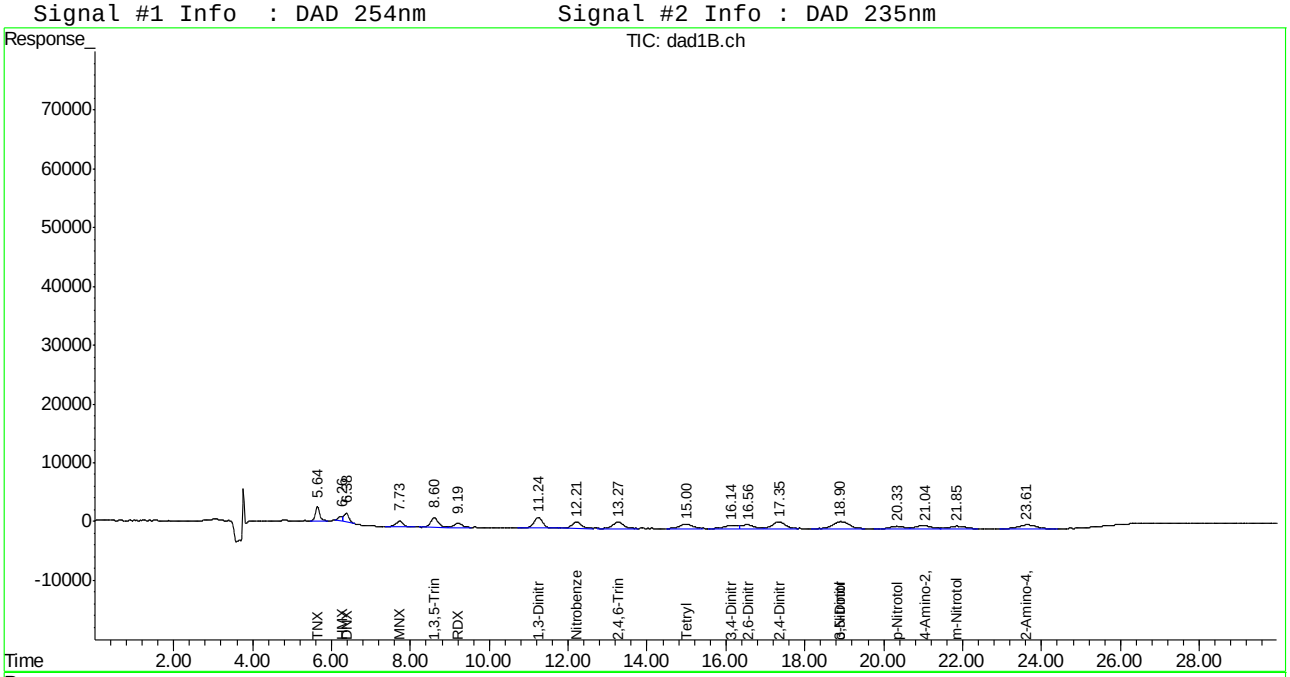
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057986.D 8330_RPB2.M Fri Dec 26 12:55:50 2014 Page 1

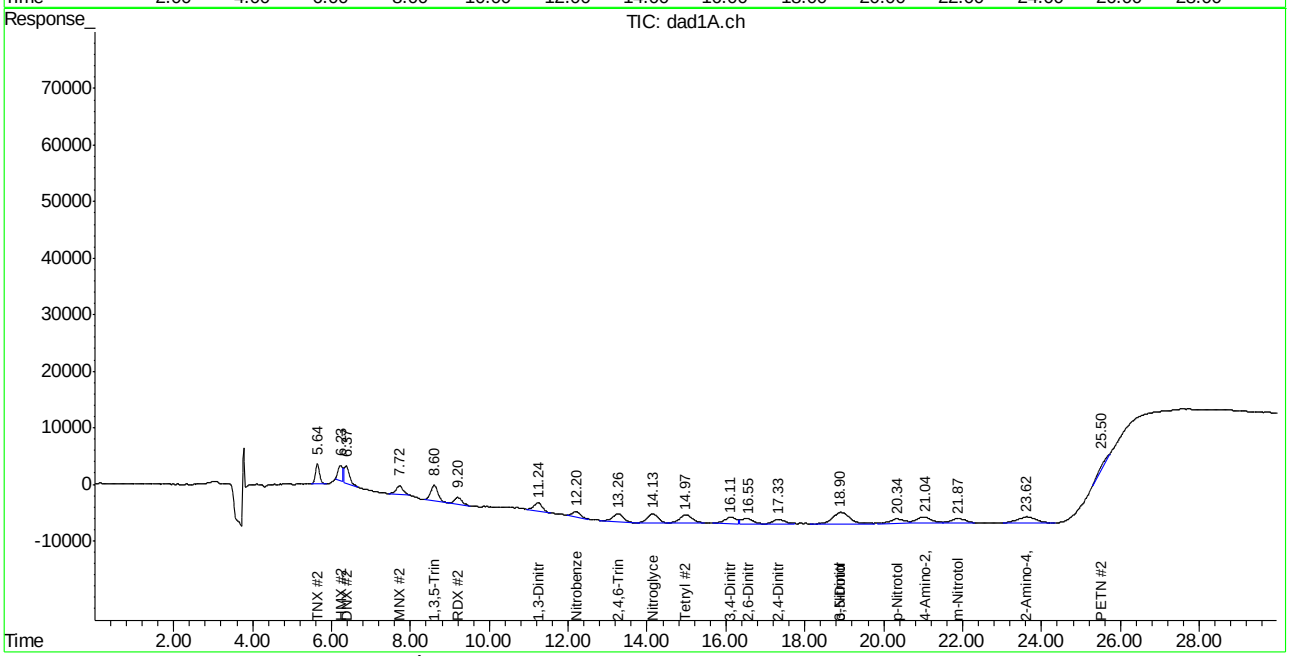
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057986.D\dad1B.ch Vial: 5
Signal #2 : G:\DATA\1224RPB2\GG057986.D\dad1A.ch
Acq On : 24-Dec-2014, 10:32:47 Operator: kismetl
Sample : ic2334-20 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:42 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-IC2334 **Method:** SW846 8330A
Lab FileID: GG057986.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 10:32 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.64	Poorly defined baseline
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		2	6.37	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
MNX		2	7.72	Poorly defined baseline
RDX	121-82-4	2	9.20	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.24	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.20	Poorly defined baseline
Tetryl	479-45-8	2	14.97	Poorly defined baseline
Tetryl	479-45-8	1	15.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.11	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.55	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.33	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.87	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	23.62	Poorly defined baseline
PETN	78-11-5	2	25.50	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057987.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1224RPB2\GG057987.D\dad1A.ch
Acq On : 24-Dec-2014, 11:04:50 Operator: kismetl
Sample : ic2334-50 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:28 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.14	16.14	306850	564080	52.309	52.787m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	10.46%#	10.56%#
	Target Compounds						
1)	TNX	5.65	5.64	463597	694980	51.221	51.278m
2)	HMX	6.26	6.23	137421	657857	58.674m	81.748m
3)	DNX	6.38	6.38	425008	725007	52.451m	52.128m
4)	MNX	7.73	7.73	352332	560949	54.955	56.036
5)	1,3,5-Trinitrobe	8.61	8.61	508034	913462	49.338	51.196
6)	RDX	9.21	9.22	243952	446134	51.173	49.990
7)	1,3-Dinitrobenze	11.25	11.25	710116	507067	48.796	49.727m
8)	Nitrobenzene	12.22	12.22	464913	477838	50.543	56.555m
9)	2,4,6-Trinitroto	13.28	13.28	496239	654393	49.745	51.216m
10)	Nitroglycerin	0.00	14.15	0	820623	N.D. d	236.559m
11)	Tetryl	15.00	14.99	382782	726744	51.267	57.649m
13)	2,6-Dinitrotolue	16.54	16.54	344227	437362	49.729	47.825m
14)	2,4-Dinitrotolue	17.35	17.34	673734	420872	52.396	46.014m
15)	o-Nitrotoluene	18.93	18.92	903111	1432514	51.948	51.527
16)	3,5-Dinitroanili	18.93	18.92	903111	1432514	51.948	51.495
17)	p-Nitrotoluene	20.35	20.36	273823	482505	55.038	56.229
18)	4-Amino-2,6-Dini	21.00	21.01	355503	712752	52.904	50.492
19)	m-Nitrotoluene	21.90	21.91	322744	555716	49.592	48.664
20)	2-Amino-4,6-Dini	23.66	23.69	484847	701718	52.277	53.521m
21)	PETN	0.00	25.54	0	489151	N.D.	512.203m#

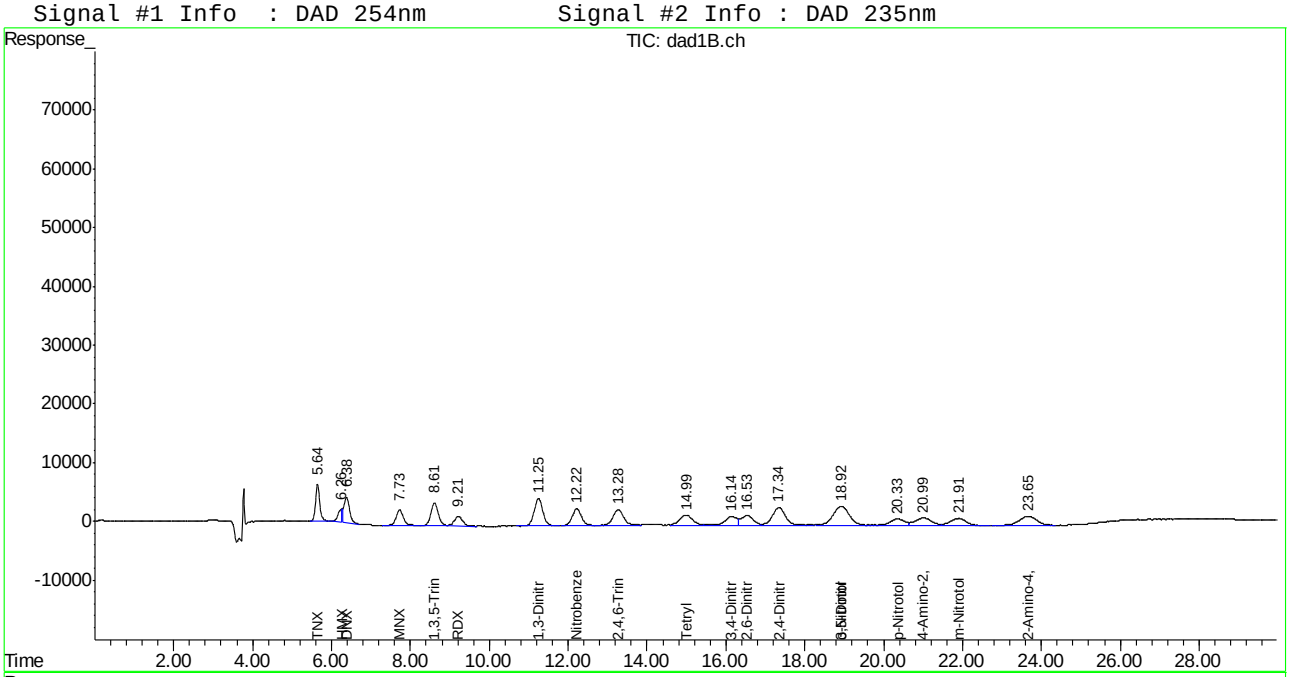
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

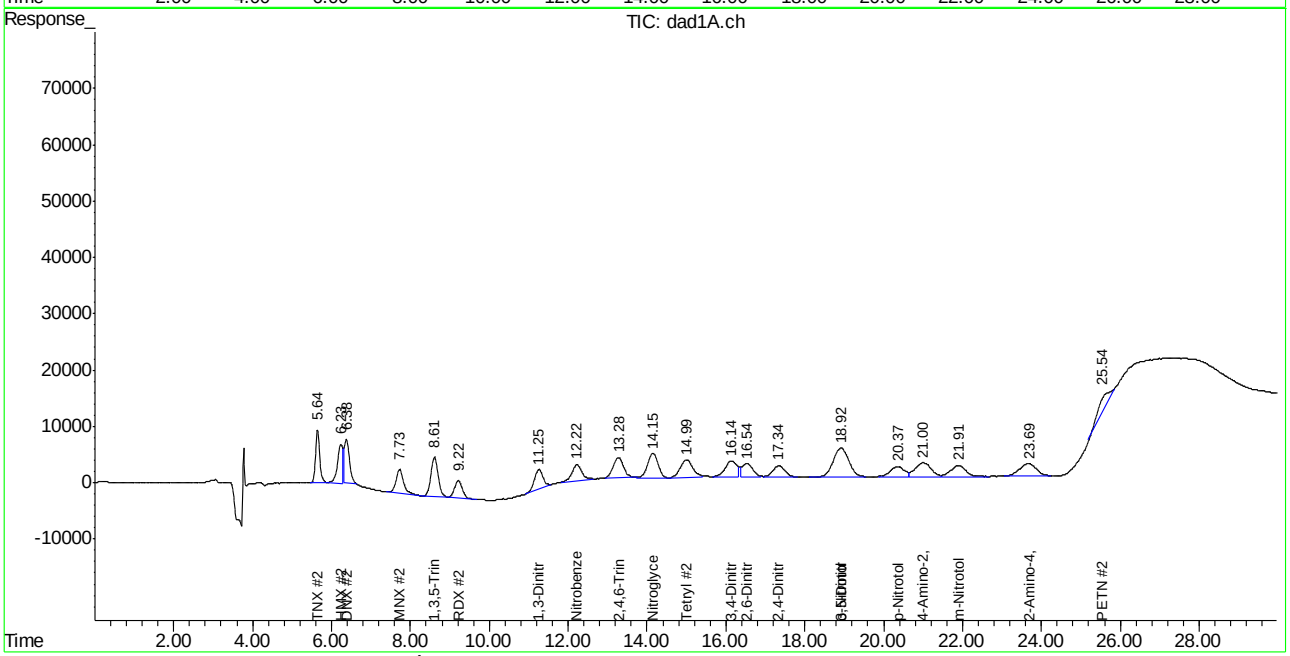
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057987.D\dad1B.ch Vial: 6
Signal #2 : G:\DATA\1224RPB2\GG057987.D\dad1A.ch
Acq On : 24-Dec-2014, 11:04:50 Operator: kismetl
Sample : ic2334-50 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:47 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057987.D
Injection Time: 12/24/14 11:04
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
DNX		2	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.25	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.22	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.28	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	14.99	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.14	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.34	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	23.69	Poorly defined baseline
PETN	78-11-5	2	25.54	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057988.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1224RPB2\GG057988.D\dad1A.ch
Acq On : 24-Dec-2014, 11:36:54 Operator: kismetl
Sample : ic2334-100 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:29 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.15	573749	1046697	97.807	97.951m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	19.56%#	19.59%#
	Target Compounds						
1)	TNX	5.65	5.65	885935	1318785	97.884m	97.304m
2)	HMX	6.27	6.23	258269	1032094	110.271m	128.253m
3)	DNX	6.38	6.38	780206	1386496	96.287m	99.689m
4)	MNX	7.73	7.73	634919	1037566	99.032	103.648
5)	1,3,5-Trinitrobe	8.61	8.61	971047	1728864	94.304	96.896
6)	RDX	9.22	9.22	444791	854620	93.302	95.762
7)	1,3-Dinitrobenze	11.25	11.25	1349454	1013554	92.728m	99.397m
8)	Nitrobenzene	12.23	12.22	865606	830550	94.105	98.301m
9)	2,4,6-Trinitroto	13.27	13.27	911959	1247618	91.419	97.645m
10)	Nitroglycerin	0.00	14.15	0	1561412	N.D. d	450.105m
11)	Tetryl	15.00	15.00	720081	1250547	96.442	99.200m
13)	2,6-Dinitrotolue	16.55	16.54	644013	868449	93.039	94.964m
14)	2,4-Dinitrotolue	17.36	17.36	1249671	859952	97.187	94.019m
15)	o-Nitrotoluene	18.93	18.92	1718761	2757717	98.866	99.194m
16)	3,5-Dinitroanili	18.93	18.92	1718761	2853775	98.866	102.586m
17)	p-Nitrotoluene	20.36	20.35	517967	816595	104.111	95.162m
18)	4-Amino-2,6-Dini	21.02	21.00	655540	1264848	97.554	89.603m
19)	m-Nitrotoluene	21.90	21.91	610458	1029117	93.801	90.120m
20)	2-Amino-4,6-Dini	23.67	23.66	912044	1297394	98.338	98.953m
21)	PETN	0.00	25.61	0	1272245	N.D.	1300.992m#

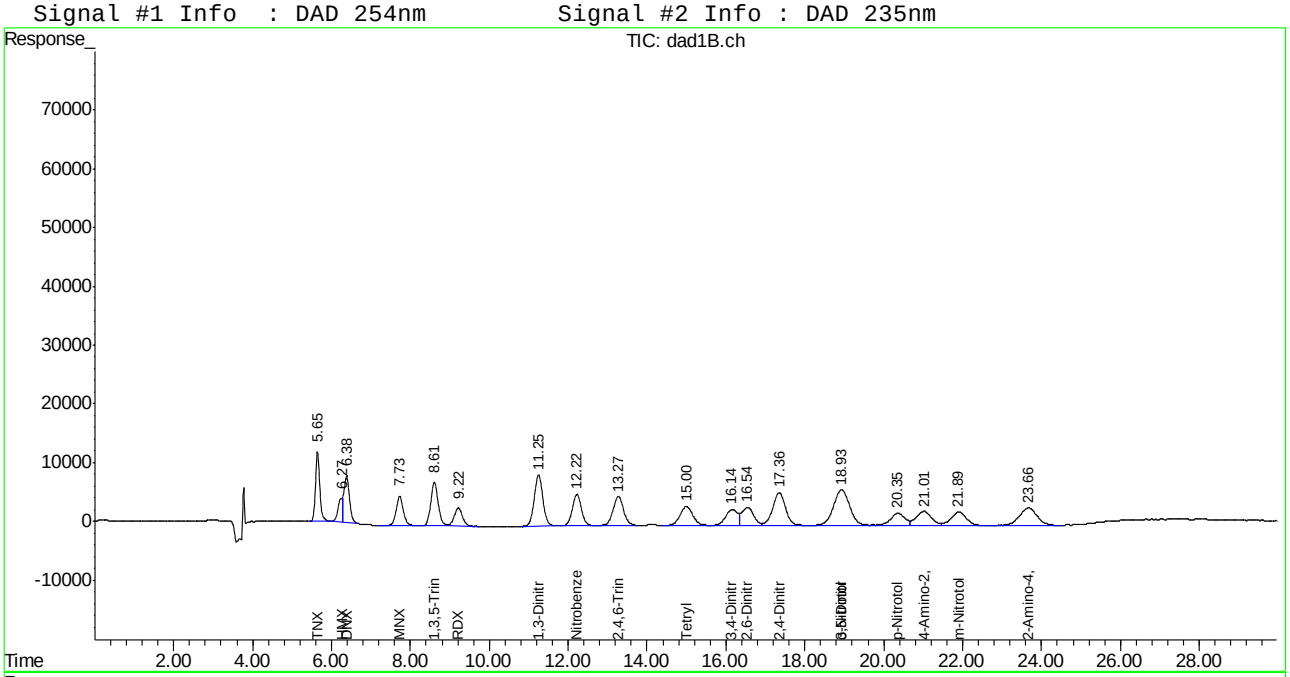
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057988.D 8330_RPB2.M Fri Dec 26 12:55:52 2014 Page 1

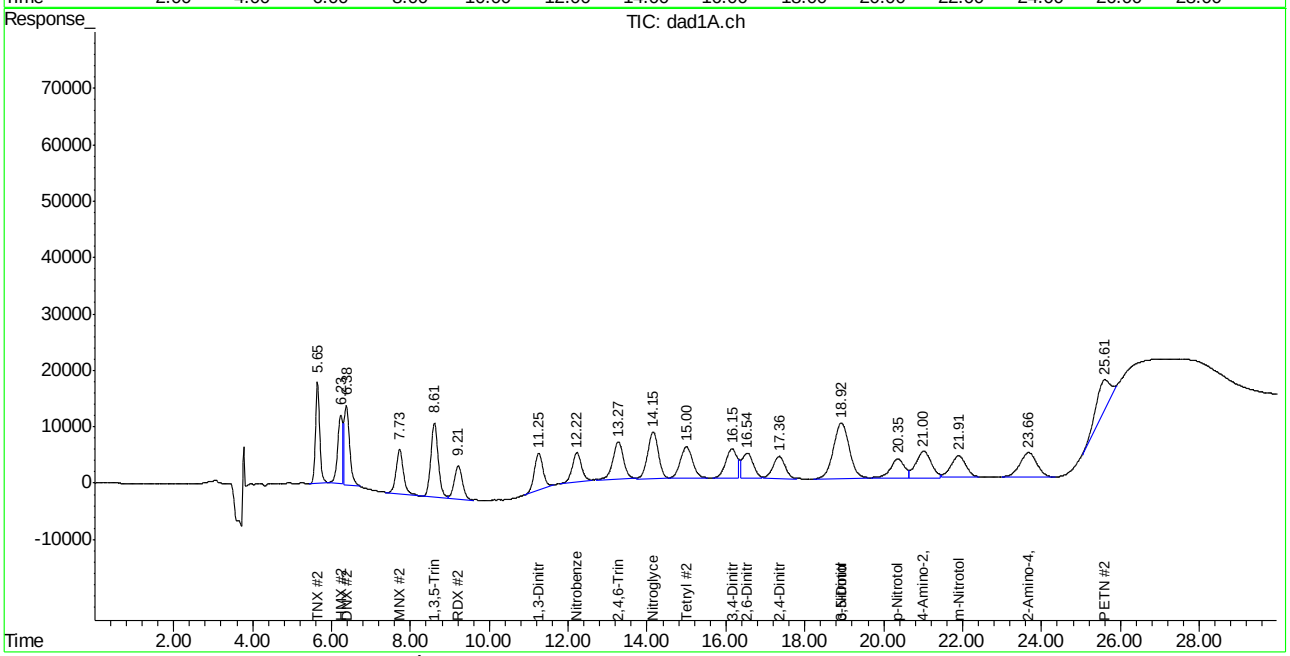
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057988.D\dad1B.ch Vial: 7
Signal #2 : G:\DATA\1224RPB2\GG057988.D\dad1A.ch
Acq On : 24-Dec-2014, 11:36:54 Operator: kismetl
Sample : ic2334-100 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:53 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057988.D
Injection Time: 12/24/14 11:36
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.65	Poorly defined baseline
TNX		2	5.65	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.27	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
DNX		2	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	11.25	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.25	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.22	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.27	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	15.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.15	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.36	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.92	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.92	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.35	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.00	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.91	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	23.66	Poorly defined baseline
PETN	78-11-5	2	25.61	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057989.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1224RPB2\GG057989.D\dad1A.ch
Acq On : 24-Dec-2014, 12:19:28 Operator: kismetl
Sample : ic2334-200 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:30 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.14	1170379	2216319	199.515	207.404
Spiked Amount	500.000	Range	72 - 145	Recovery	=	39.90%#	41.48%#
	Target Compounds						
1)	TNX	5.64	5.64	1823353	2712093	201.456m	200.106m
2)	HMX	6.24	6.23	500992	1977249	213.905m	245.702m
3)	DNX	6.38	6.37	1600788	2684956	197.558m	193.048m
4)	MNX	7.73	7.73	1262732	2110507	196.955	210.831
5)	1,3,5-Trinitrobe	8.61	8.61	2084120	3680103	202.400	206.255
6)	RDX	9.21	9.21	978099	1781281	205.172	199.596
7)	1,3-Dinitrobenze	11.24	11.24	2784308	2145315	191.324	210.386m
8)	Nitrobenzene	12.22	12.21	1777590	1698555	193.252	201.035m
9)	2,4,6-Trinitroto	13.27	13.27	1914542	2478334	191.922	193.966
10)	Nitroglycerin	0.00	14.15	0	3299503	N.D.	951.140 #
11)	Tetryl	14.99	14.99	1557852	2714681	208.647	215.342
13)	2,6-Dinitrotolue	16.54	16.54	1319587	1804069	190.637	197.273
14)	2,4-Dinitrotolue	17.35	17.35	2554262	1769018	198.645	193.407
15)	o-Nitrotoluene	18.92	18.92	3475831	5659279	199.935	203.563
16)	3,5-Dinitroanili	18.92	18.92	3475831	5659279	199.935	203.437
17)	p-Nitrotoluene	20.37	20.37	1044283	1759361	209.900	205.028
18)	4-Amino-2,6-Dini	21.01	21.01	1342444	2737895	199.775	193.954
19)	m-Nitrotoluene	21.91	21.91	1212314	2062910	186.280	180.649
20)	2-Amino-4,6-Dini	23.67	23.67	1904260	2765747	205.321	210.946
21)	PETN	0.00	25.59	0	3219573	N.D. d	3123.290m

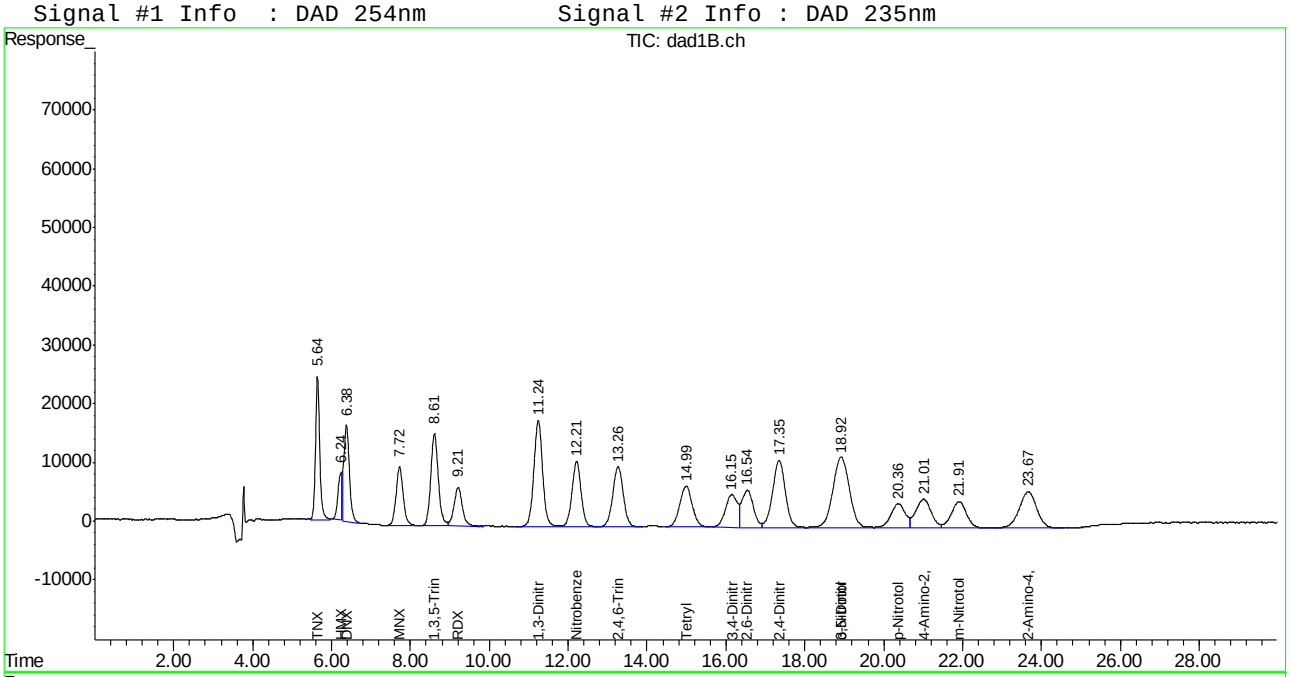
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057989.D 8330_RPB2.M Fri Dec 26 12:55:53 2014 Page 1

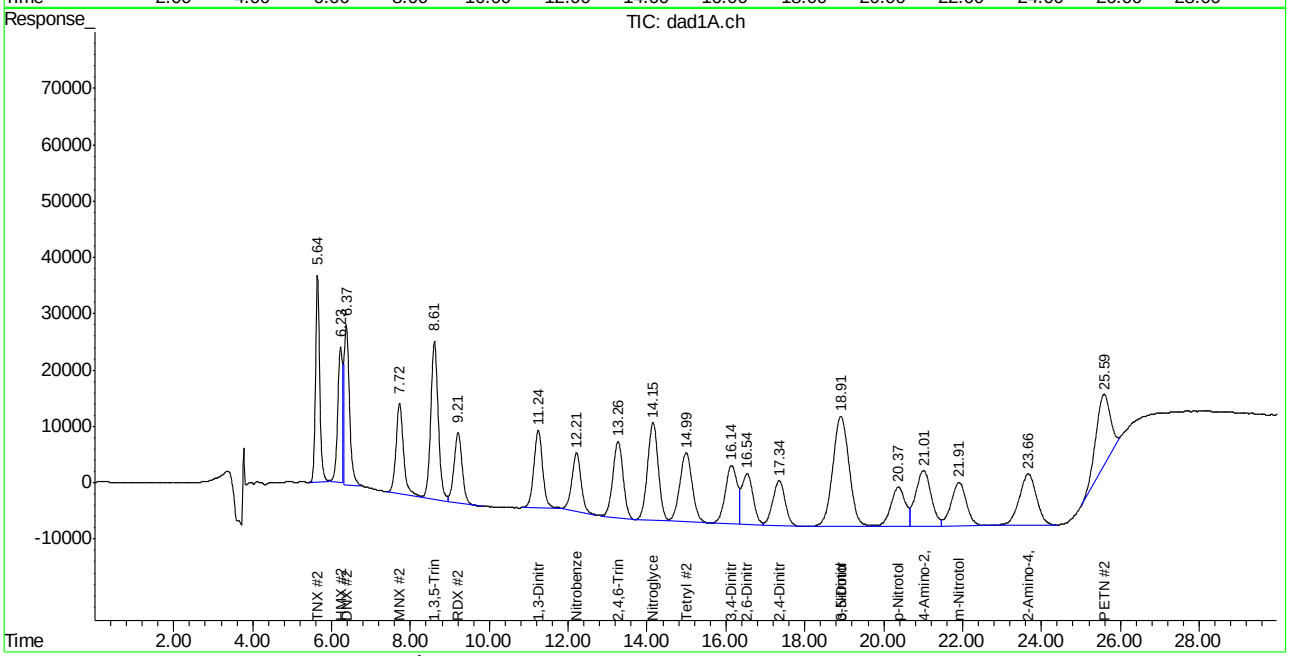
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057989.D\dad1B.ch Vial: 8
Signal #2 : G:\DATA\1224RPB2\GG057989.D\dad1A.ch
Acq On : 24-Dec-2014, 12:19:28 Operator: kismetl
Sample : ic2334-200 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 8:57 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GGG2334-IC2334 **Method:** SW846 8330A
Lab FileID: GG057989.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 12:19 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.64	Poorly defined baseline
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.24	Poorly defined baseline
DNX		2	6.37	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.24	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.21	Poorly defined baseline
PETN	78-11-5	2	25.59	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057990.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1224RPB2\GG057990.D\dad1A.ch
Acq On : 24-Dec-2014, 12:51:32 Operator: kismetl
Sample : icc2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:31 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.14	2905851	5367455	495.362	502.289m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	99.07%	100.46%
	Target Compounds						
1)	TNX	5.64	5.64	4322920	6521372	477.626m	481.166m
2)	HMX	6.25	6.23	1299950	4302498	555.030m	534.648m
3)	DNX	6.38	6.38	3984249	6849804	491.707m	492.500
4)	MNX	7.73	7.73	3067811	4833665	478.503	482.863
5)	1,3,5-Trinitrobe	8.61	8.61	4933056	8780084	479.075	492.088
6)	RDX	9.21	9.21	2265211	4277728	475.166	479.329
7)	1,3-Dinitrobenze	11.24	11.24	6688709	5042101	459.614	494.468m
8)	Nitrobenzene	12.21	12.21	4400776	4006081	478.434	474.145m
9)	2,4,6-Trinitroto	13.27	13.26	4683649	6093868	469.511	476.936m
10)	Nitroglycerin	0.00	14.15	0	8260233	N.D. d	2381.159m
11)	Tetryl	14.99	14.98	3715761	6275202	497.661	497.781m
13)	2,6-Dinitrotolue	16.54	16.54	3209118	4392052	463.611	480.267m
14)	2,4-Dinitrotolue	17.35	17.35	6218269	4299544	483.594	470.070m
15)	o-Nitrotoluene	18.92	18.91	8431272	13375441	484.980	481.112m
16)	3,5-Dinitroanili	18.92	18.91	8431272	13552390	484.980	487.175m
17)	p-Nitrotoluene	20.38	20.37	2538362	4065702	510.208	473.798m
18)	4-Amino-2,6-Dini	21.01	21.01	3175784	6297902	472.603	446.148m
19)	m-Nitrotoluene	21.92	21.92	2917216	4911454	448.249	430.096m
20)	2-Amino-4,6-Dini	23.68	23.68	4446849	6592567	479.468	502.821
21)	PETN	0.00	25.58	0	8370620	N.D. d	7270.716m

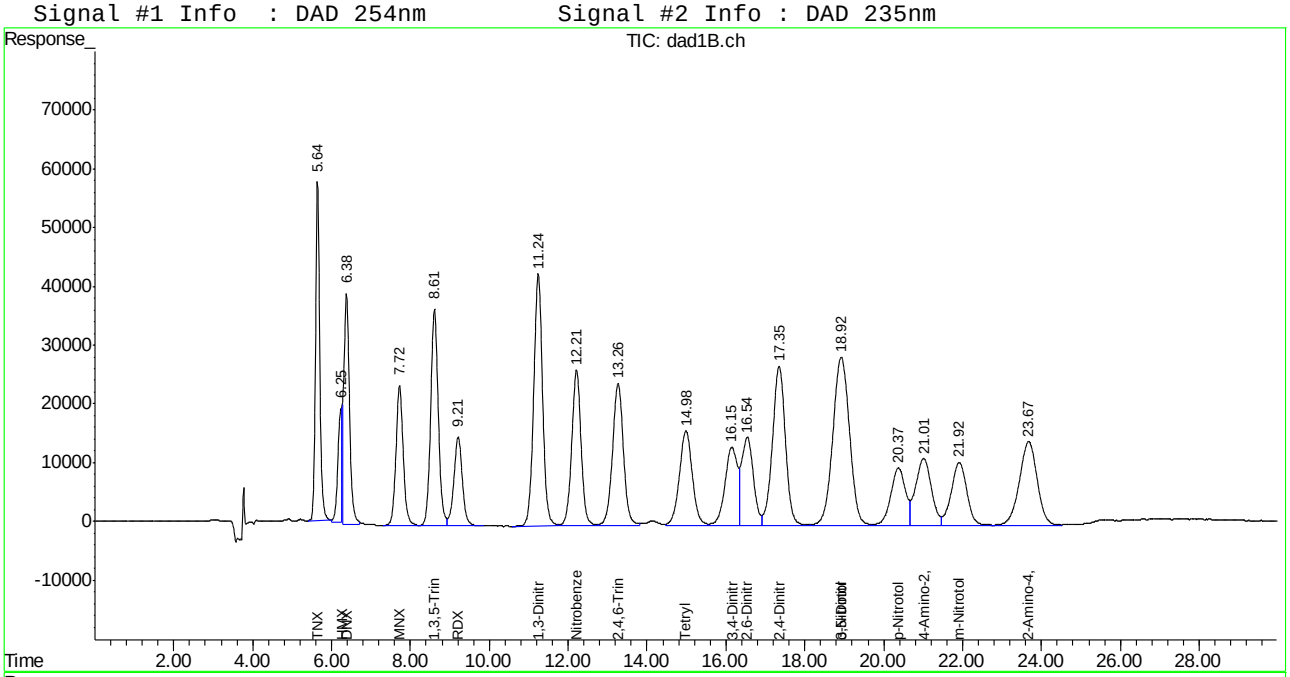
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

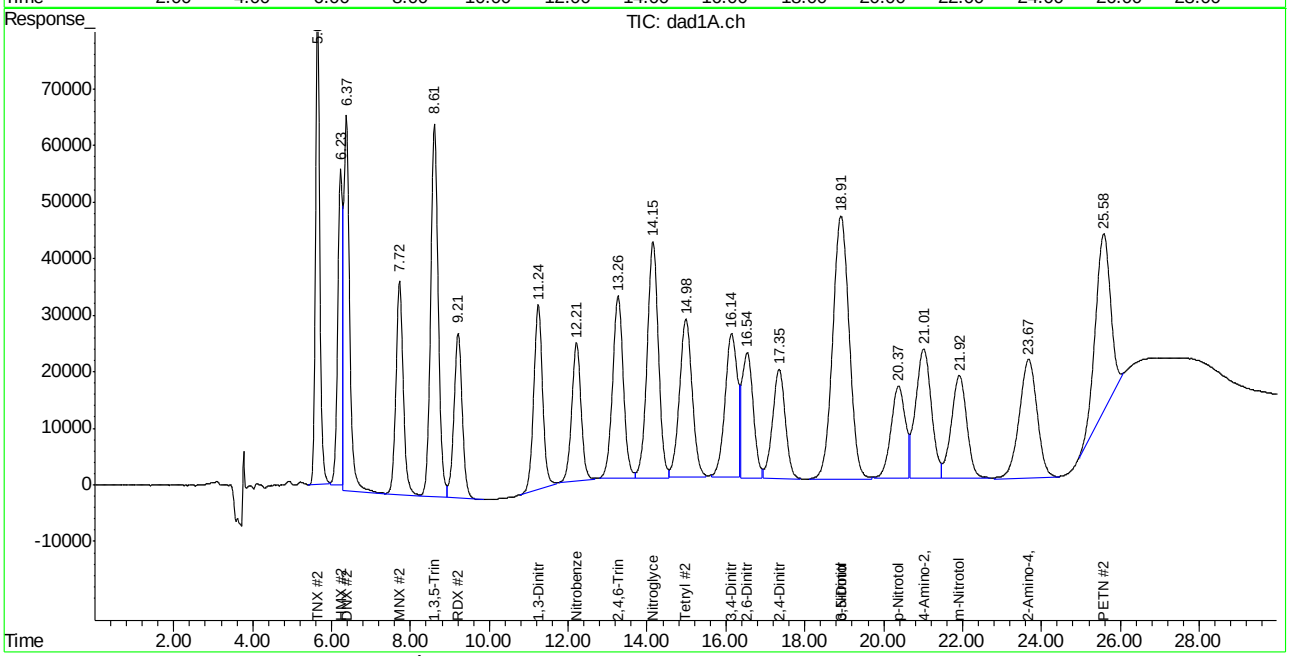
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057990.D\dad1B.ch Vial: 9
Signal #2 : G:\DATA\1224RPB2\GG057990.D\dad1A.ch
Acq On : 24-Dec-2014, 12:51:32 Operator: kismetl
Sample : icc2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 9:01 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GGG2334-ICC2334 **Method:** SW846 8330A
Lab FileID: GG057990.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 12:51 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	5.64	Poorly defined baseline
TNX		2	5.64	Poorly defined baseline
HMX	2691-41-0	2	6.23	Poorly defined baseline
HMX	2691-41-0	1	6.25	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.24	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.21	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.26	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	14.98	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.14	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.35	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.91	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.91	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.37	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.01	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.92	Poorly defined baseline
PETN	78-11-5	2	25.58	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057991.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1224RPB2\GG057991.D\dad1A.ch
Acq On : 24-Dec-2014, 13:23:38 Operator: kismetl
Sample : ic2334-1000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:32 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.17	16.16	5781364	10591592	985.552	991.167m
Spiked Amount	500.000	Range	72 - 145	Recovery	=	197.11%#	198.23%#
	Target Compounds						
1)	TNX	5.65	5.65	8923725	13452349	985.954	992.553
2)	HMX	6.26	6.24	2709809	9544446	1156.987m	1186.037
3)	DNX	6.38	6.38	7998865	13352744	987.162m	960.060
4)	MNX	7.73	7.73	6173200	9761924	962.868	975.176
5)	1,3,5-Trinitrobe	8.62	8.62	10017205	17918325	972.824	1004.248
6)	RDX	9.22	9.22	4582436	8850243	961.242	991.689
7)	1,3-Dinitrobenze	11.25	11.25	13455935	10225134	924.624	1002.757m
8)	Nitrobenzene	12.23	12.22	8840279	8193570	961.079	969.760m
9)	2,4,6-Trinitroto	13.28	13.28	9418066	12294909	944.111	962.259m
10)	Nitroglycerin	0.00	14.16	0	16665966	N.D. d	4804.262m
11)	Tetryl	15.01	15.00	7472479	12871490	1000.807	1021.032m
13)	2,6-Dinitrotolue	16.56	16.56	6438830	8981615	930.198	982.132m
14)	2,4-Dinitrotolue	17.37	17.36	12488304	8706312	971.214	951.863m
15)	o-Nitrotoluene	18.95	18.94	16965986	27225747	975.910	979.304m
16)	3,5-Dinitroanili	18.95	18.94	16965986	27172573	975.910	976.788m
17)	p-Nitrotoluene	20.39	20.39	5104632	8186343	1026.025	953.998m
18)	4-Amino-2,6-Dini	21.05	21.04	6388202	12719895	950.658	901.086m
19)	m-Nitrotoluene	21.94	21.94	5888608	9875723	904.823	864.816m
20)	2-Amino-4,6-Dini	23.71	23.71	8986837	13228698	968.979	1008.964
21)	PETN	0.00	25.58	0	17365770	N.D. d	13138.915m

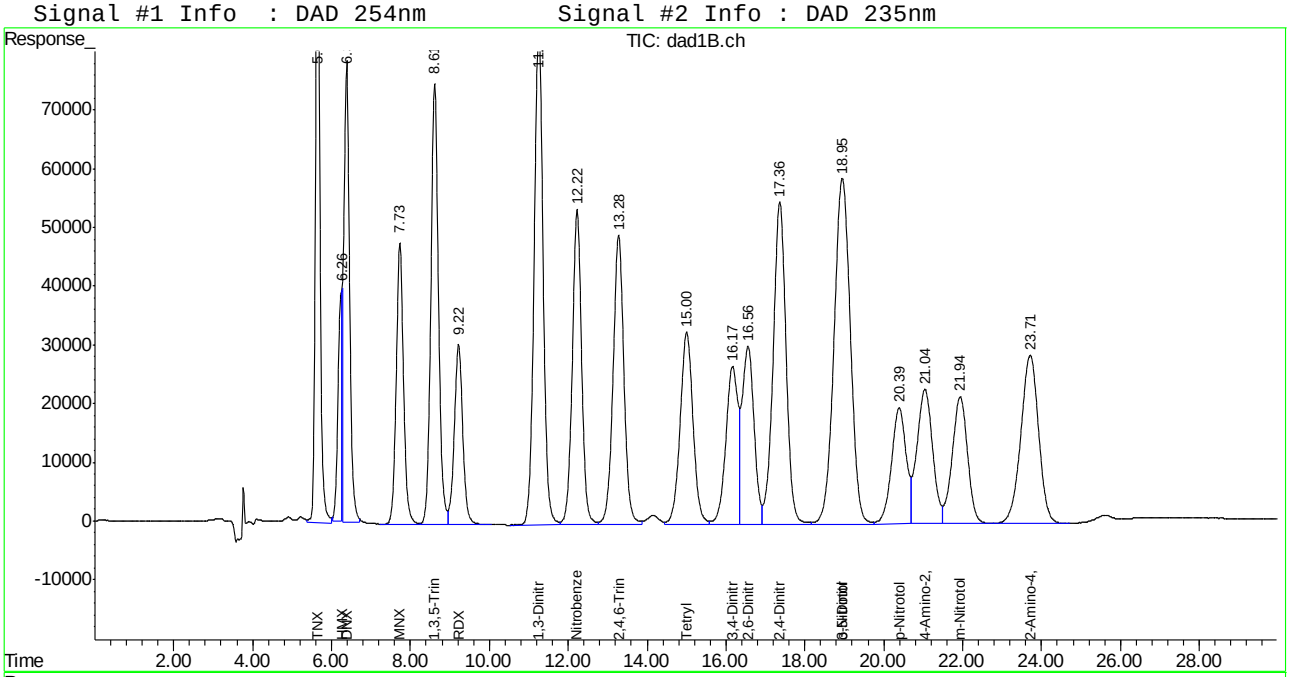
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG057991.D 8330_RPB2.M Fri Dec 26 12:55:55 2014 Page 1

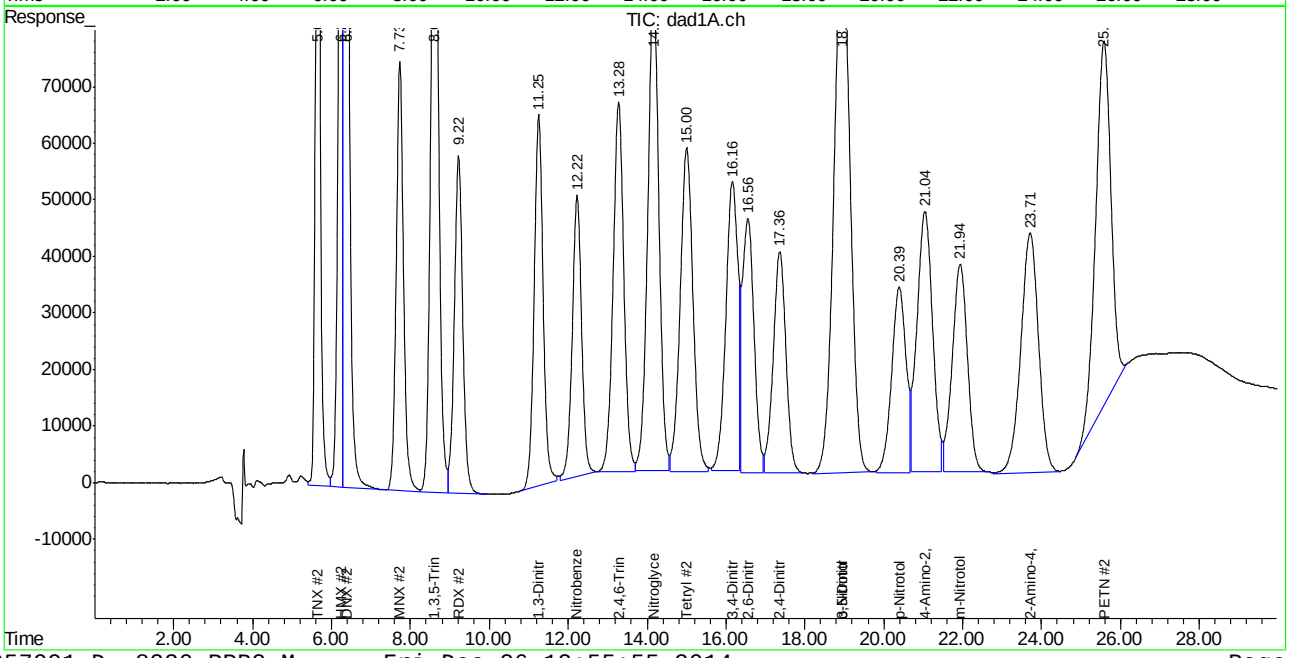
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057991.D\dad1B.ch Vial: 10
Signal #2 : G:\DATA\1224RPB2\GG057991.D\dad1A.ch
Acq On : 24-Dec-2014, 13:23:38 Operator: kismetl
Sample : ic2334-1000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 9:05 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057991.D
Injection Time: 12/24/14 13:23
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	11.25	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.22	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.28	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.16	Poorly defined baseline
Tetryl	479-45-8	2	15.00	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.16	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.56	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.36	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.94	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.94	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.39	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.04	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.94	Poorly defined baseline
PETN	78-11-5	2	25.58	Poorly defined baseline

GG057992.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057992.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\1224RPB2\GG057992.D\dad1A.ch
Acq On : 24-Dec-2014, 13:59:04 Operator: kismetl
Sample : ic2334-2000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 08:31:33 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.15	16.14	11955029	24262170	2037.979	2270.467
	Spiked Amount 500.000	Range 72 - 145		Recovery =		407.60%#	454.09%#
	Target Compounds						
1)	TNX	5.65	5.65	18234703	27553157	2014.694	2032.952
2)	HMX	6.26	6.23	5613710	19496213	2396.844m	2422.689
3)	DNX	6.38	6.38	16485162	26947765	2034.480m	1937.539
4)	MNX	7.72	7.72	12685079	20171567	1978.561	2015.056
5)	1,3,5-Trinitrobe	8.61	8.61	20798690	37348029	2019.871	2093.203
6)	RDX	9.21	9.21	9485214	18346928	1989.681	2055.812
7)	1,3-Dinitrobenze	11.24	11.24	27784726	21431008	1909.226	2101.693
8)	Nitrobenzene	12.21	12.21	18025458	17120291	1959.653	2026.293
9)	2,4,6-Trinitroto	13.26	13.26	19373372	26138316	1942.076	2045.712
10)	Nitroglycerin	0.00	14.15	0	35521361	N.D. d	10239.665
11)	Tetryl	14.98	14.98	15384323	27846994	2060.460	2208.966
13)	2,6-Dinitrotolue	16.54	16.54	13244408	19405534	1913.379	2121.978
14)	2,4-Dinitrotolue	17.35	17.35	25781566	19299869	2005.029	2110.058
15)	o-Nitrotoluene	18.92	18.92	34938955	57621172	2009.744	2072.621
16)	3,5-Dinitroanili	18.92	18.92	34938955	57621172	2009.744	2071.341
17)	p-Nitrotoluene	20.38	20.38	10512172	18107492	2112.935	2110.161
18)	4-Amino-2,6-Dini	21.02	21.02	13176405	27206314	1960.841	1927.313
19)	m-Nitrotoluene	21.93	21.92	12094957	21090057	1858.469	1846.854
20)	2-Amino-4,6-Dini	23.69	23.69	18649609	27875932	2010.839	2126.120
21)	PETN	0.00	25.57	0	36264219	N.D. d	22681.513m

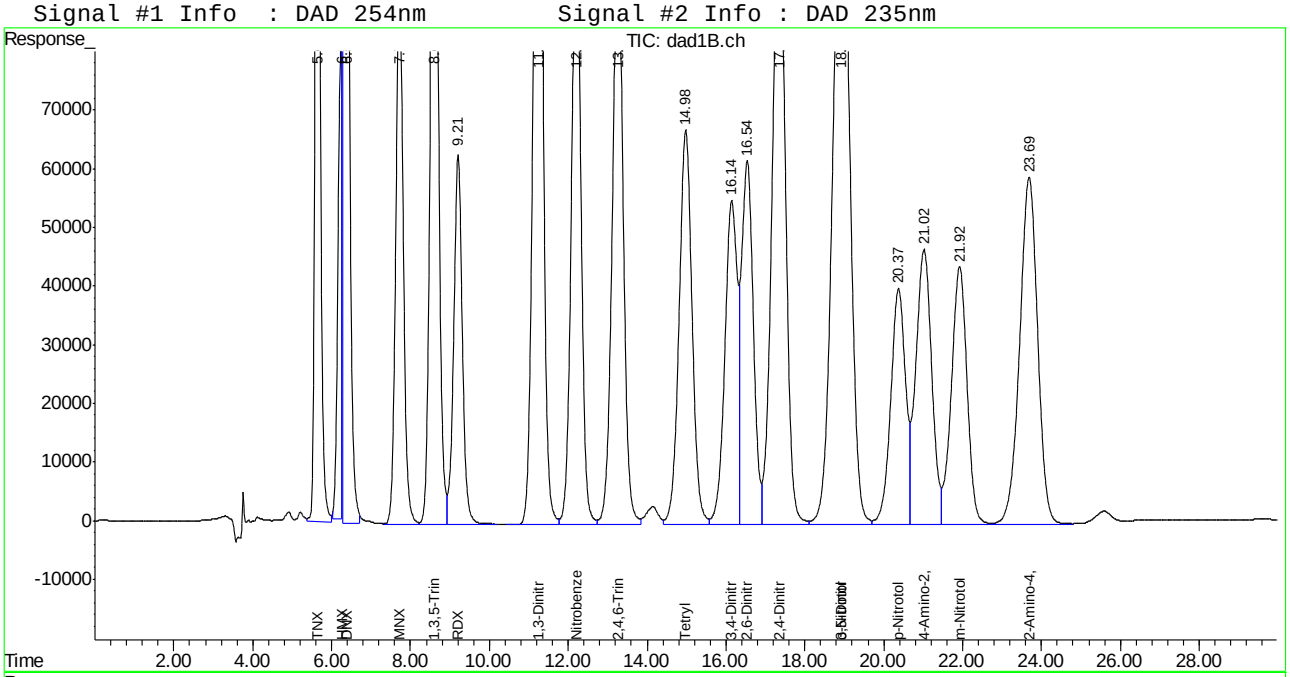
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

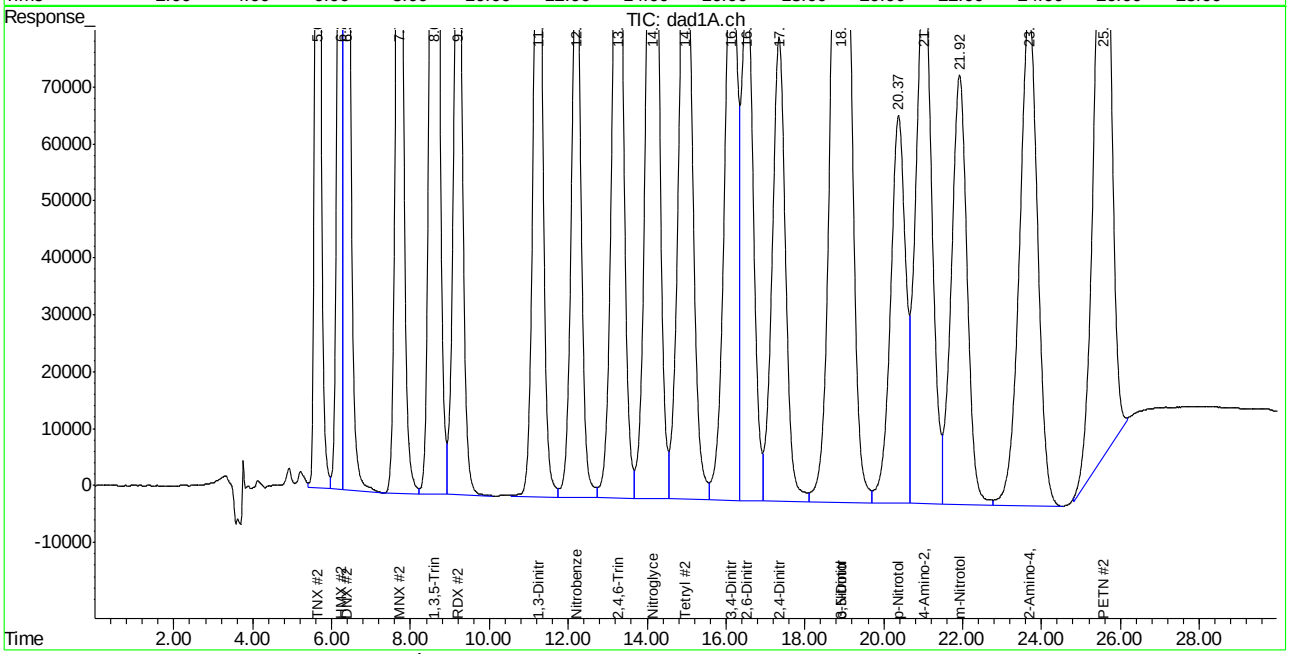
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057992.D\dad1B.ch Vial: 11
Signal #2 : G:\DATA\1224RPB2\GG057992.D\dad1A.ch
Acq On : 24-Dec-2014, 13:59:04 Operator: kismetl
Sample : ic2334-2000 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 9:07 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 08:31:09 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GGG2334-IC2334
Lab FileID: GG057992.D
Injection Time: 12/24/14 13:59
Method: SW846 8330A
Analyst approved: 12/26/14 13:26 Kismet Lugo
Supervisor approved: 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.26	Poorly defined baseline
DNX		1	6.38	Poorly defined baseline
PETN	78-11-5	2	25.57	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:07

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057993.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\1224RPB2\GG057993.D\dad1A.ch
Acq On : 24-Dec-2014, 14:31:07 Operator: kismetl
Sample : icv2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 09:14:04 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
	Spiked Amount 500.000	Range 72 - 145		Recovery =		0.00%#	0.00%#
	Target Compounds						
1)	TNX	5.64	5.64	4773974	7227292	529.440	537.312
2)	HMX	6.24	6.22	1535448	5749648	563.884m	566.243m
3)	DNX	6.37	6.36	4140903	6916384	524.888m	497.167m
4)	MNX	7.72	7.72	3331703	5230264	521.522	518.629
5)	1,3,5-Trinitrobe	8.60	8.60	5468312	9728470	535.552	542.363
6)	RDX	9.20	9.20	2478875	4684966	526.309	534.347
7)	1,3-Dinitrobenze	11.24	11.24	6699043	5270145	488.671	506.987
8)	Nitrobenzene	12.21	12.21	4876283	4485345	545.420	540.433m
9)	2,4,6-Trinitroto	13.26	13.26	4878635	6087856	507.442	480.845m
10)	Nitroglycerin	0.00	14.15	0	8145948	N.D. d	2463.201m
11)	Tetryl	14.98	14.98	3769489	6607992	486.237	478.133m
13)	2,6-Dinitrotolue	16.54	16.54	3630248	5125058	549.184m	567.309m
14)	2,4-Dinitrotolue	17.35	17.35	6616766	4576931	519.727m	515.640m
15)	o-Nitrotoluene	18.93	18.93	8680196	14126503	502.599m	502.584m
16)	3,5-Dinitroanili	18.93	18.93	8886809	14179522	514.563	501.257m
17)	p-Nitrotoluene	20.37	20.38	2639465	4412078	499.151m	499.651m
18)	4-Amino-2,6-Dini	21.03	21.02	3438363	7062983	514.100	536.087m
19)	m-Nitrotoluene	21.92	21.92	3384666	5768166	556.302	560.680m
20)	2-Amino-4,6-Dini	23.69	23.69	4924055	7278763	522.520	514.943
21)	PETN	0.00	25.58	0	8758851	N.D. d	2447.762m

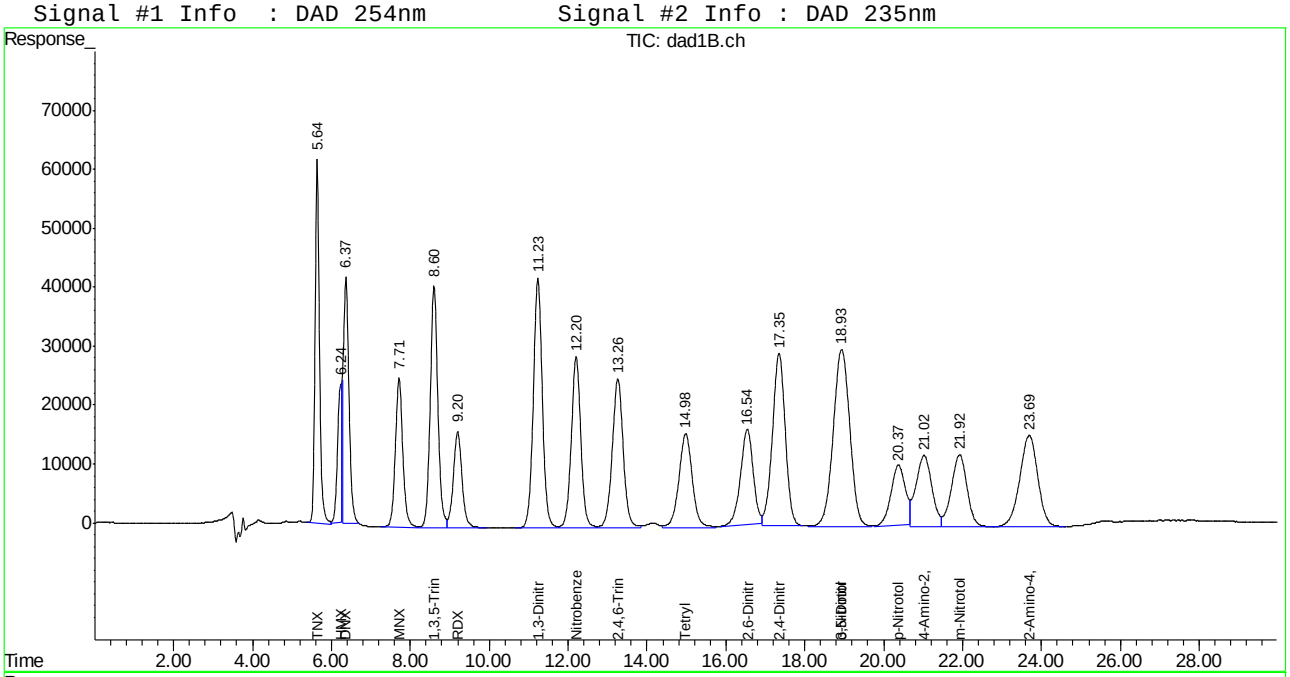
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

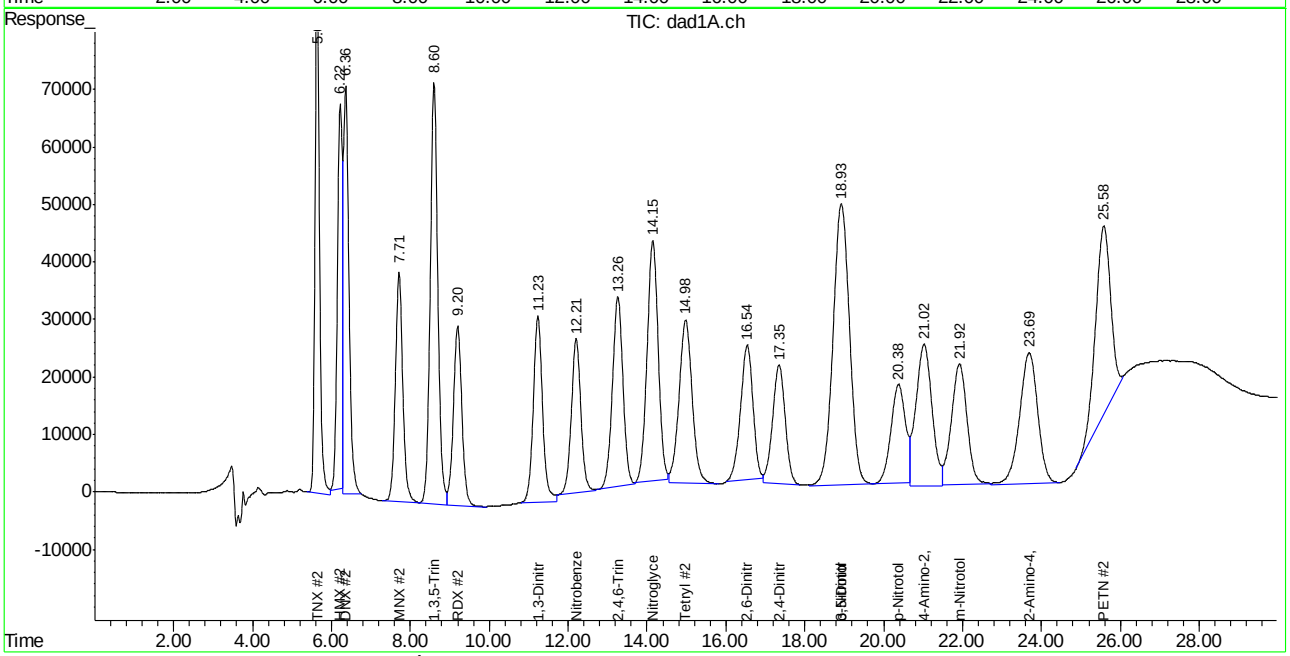
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\1224RPB2\GG057993.D\dad1B.ch Vial: 12
Signal #2 : G:\DATA\1224RPB2\GG057993.D\dad1A.ch
Acq On : 24-Dec-2014, 14:31:07 Operator: kismetl
Sample : icv2334-500 Inst : G1315B
Misc : OP54336,GGG2334,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Dec 26 10:14 2014 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Fri Dec 26 09:13:46 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2334-ICV2334 **Method:** SW846 8330A
Lab FileID: GG057993.D **Analyst approved:** 12/26/14 13:26 Kismet Lugo
Injection Time: 12/24/14 14:31 **Supervisor approved:** 12/26/14 15:07 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	2	6.22	Poorly defined baseline
HMX	2691-41-0	1	6.24	Poorly defined baseline
DNX		2	6.36	Poorly defined baseline
DNX		1	6.37	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.21	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.26	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.15	Poorly defined baseline
Tetryl	479-45-8	2	14.98	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	16.54	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	17.35	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.35	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	18.93	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	18.93	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	18.93	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	20.37	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	20.38	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	21.02	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	21.92	Poorly defined baseline
PETN	78-11-5	2	25.58	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058049.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058049.D\dad1A.ch
Acq On : 05-Jan-2015, 08:30:22 Operator: kismetl
Sample : cc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:16:59 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.28	16.27	5343402	11025088	890.034	986.489
	Spiked Amount 500.000	Range 72 - 145		Recovery =		178.01%#	197.30%#
	Target Compounds						
1)	TNX	5.65	5.65	8958499	13577255	993.509	1009.399
2)	HMX	6.28	6.27	2603454	8002255	956.102m	788.086
3)	DNX	6.40	6.39	8384343	15146670	1062.773m	1088.780
4)	MNX	7.76	7.76	6225061	9797771	974.428	971.540
5)	1,3,5-Trinitrobe	8.63	8.63	10150994	17917341	994.162	998.893
6)	RDX	9.26	9.26	4662648	9047194	989.962	1031.884
7)	1,3-Dinitrobenze	11.29	11.29	13616192	10744358	993.253	1033.605
8)	Nitrobenzene	12.27	12.27	8813515	7944093	985.805	957.173
9)	2,4,6-Trinitroto	13.33	13.33	9516868	12494579	989.879	986.876
10)	Nitroglycerin	0.00	14.22	0	17195329	N.D. d	5199.586
11)	Tetryl	15.10	15.10	7526508	13090128	970.866	947.159
13)	2,6-Dinitrotolue	16.63	16.62	7064090	9887116	1068.655	1094.436
14)	2,4-Dinitrotolue	17.45	17.45	12727107	9086300	999.676	1023.669
15)	o-Nitrotoluene	19.06	19.06	17110632	27448502	990.737	976.545
16)	3,5-Dinitroanili	19.06	19.06	17110632	27448502	990.737	970.325
17)	p-Nitrotoluene	20.49	20.49	4967981	8151805	939.499	923.161
18)	4-Amino-2,6-Dini	21.20	21.20	6578852	13294118	983.662	1009.036
19)	m-Nitrotoluene	22.05	22.05	5917526	10020525	972.602	974.020
20)	2-Amino-4,6-Dini	23.88	23.88	9076357	13012811	963.145	920.604
21)	PETN	0.00	25.72	0	2125374	N.D. d	593.960m

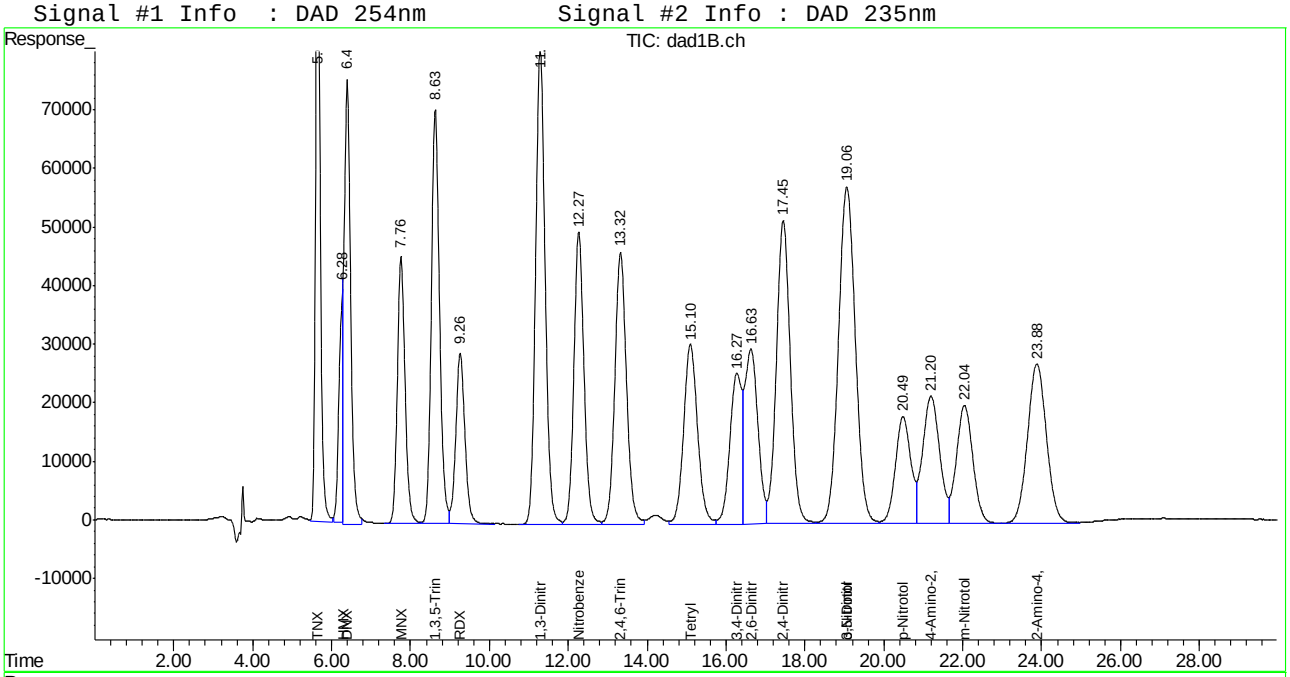
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058049.D 8330_RPB2.M Mon Jan 05 11:29:23 2015 Page 1

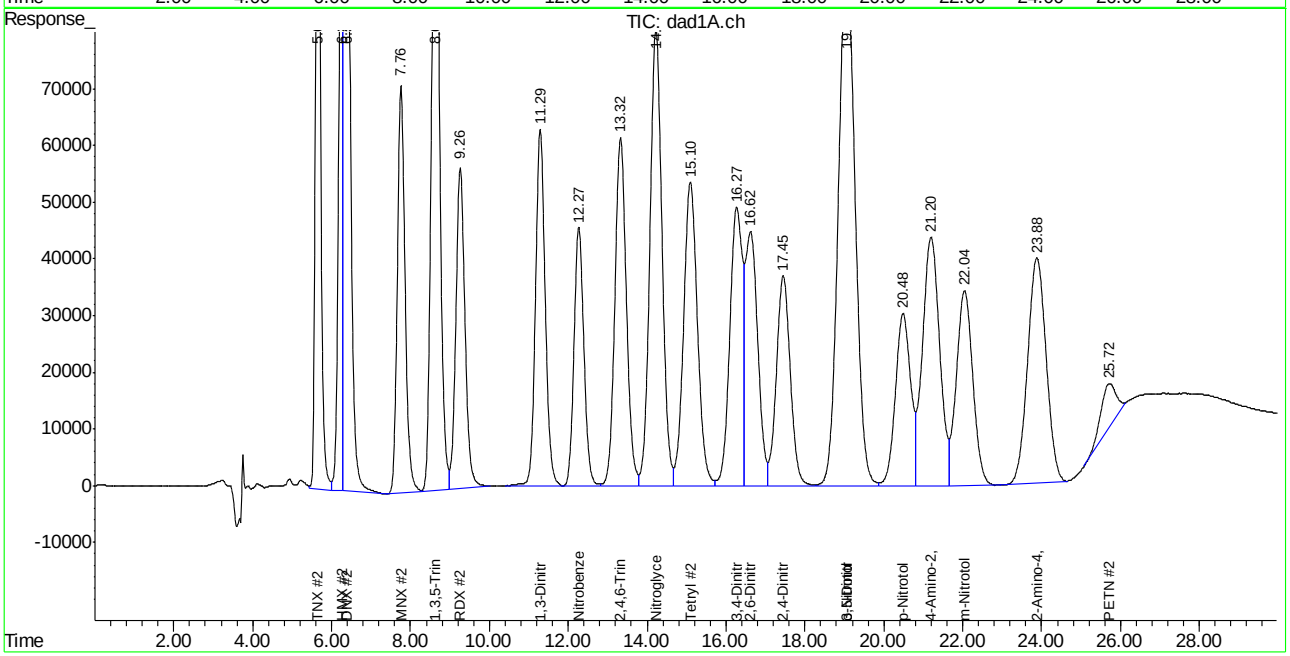
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058049.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058049.D\dad1A.ch
Acq On : 05-Jan-2015, 08:30:22 Operator: kismetl
Sample : cc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:20 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





Manual Integration Approval Summary

Sample Number: GGG2338-CC2334
Lab FileID: GG058049.D
Injection Time: 01/05/15 08:30
Method: SW846 8330B
Analyst approved: 01/05/15 11:32 Kismet Lugo
Supervisor approved: 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.28	Overlapping peak
DNX		1	6.40	Overlapping peak
PETN	78-11-5	2	25.72	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
01/06/15 16:41

Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058053.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058053.D\dad1A.ch
Acq On : 05-Jan-2015, 10:44:58 Operator: kismetl
Sample : ecc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 05 11:17:03 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Initial Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
12) S	3,4-Dinitrotolue	16.24	16.23	5500365	10552600	916.179	944.213m
	Spiked Amount 500.000	Range 72 - 145		Recovery =		183.24%#	188.84%#
	Target Compounds						
1)	TNX	5.65	5.65	8959433	13614259	993.612	1012.150
2)	HMX	6.28	6.26	2502899	8565595	919.174m	843.566
3)	DNX	6.39	6.39	8330945	14554852	1056.005m	1046.239
4)	MNX	7.76	7.76	6200614	9866357	970.601	978.341
5)	1,3,5-Trinitrobe	8.63	8.63	10078686	18066902	987.080	1007.231
6)	RDX	9.26	9.26	4644827	9006196	986.178	1027.208
7)	1,3-Dinitrobenze	11.28	11.28	13549824	10243450	988.411	985.418m
8)	Nitrobenzene	12.26	12.26	8836054	8040721	988.326	968.816m
9)	2,4,6-Trinitroto	13.31	13.31	9422957	12042622	980.111	951.178m
10)	Nitroglycerin	0.00	14.20	0	16309682	N.D. d	4931.781m
11)	Tetryl	15.07	15.07	7394782	12327805	953.874	892.000m
13)	2,6-Dinitrotolue	16.61	16.60	6738669	9282801	1019.425	1027.543m
14)	2,4-Dinitrotolue	17.42	17.42	12558672	8786583	986.446	989.902m
15)	o-Nitrotoluene	19.03	19.02	16993020	27371653	983.927	973.811m
16)	3,5-Dinitroanili	19.03	19.02	16993020	27356887	983.927	967.086m
17)	p-Nitrotoluene	20.44	20.44	4982888	8436241	942.318	955.372
18)	4-Amino-2,6-Dini	21.14	21.14	6475508	13238231	968.210	1004.794
19)	m-Nitrotoluene	21.99	21.99	5903280	10107170	970.261	982.442
20)	2-Amino-4,6-Dini	23.82	23.82	9043150	13081872	959.622	925.490
21)	PETN	0.00	25.65	0	2080286	N.D. d	581.360m

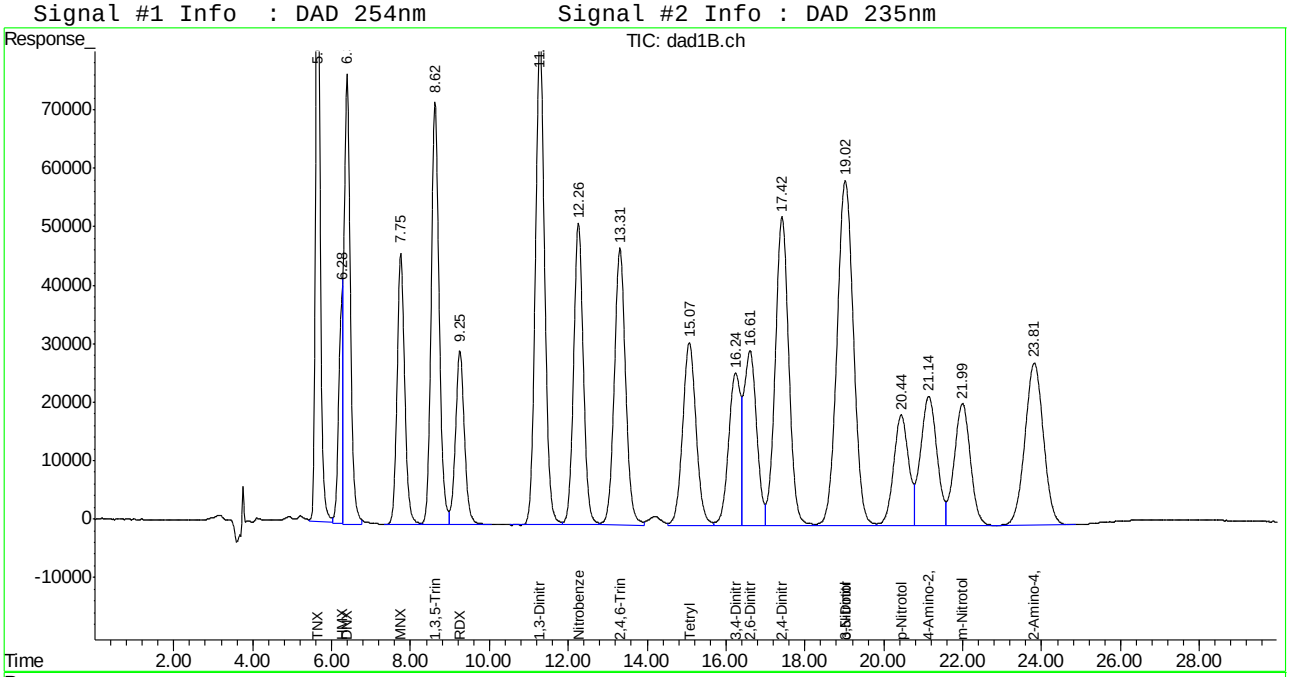
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GG058053.D 8330_RPB2.M Mon Jan 05 11:29:27 2015 Page 1

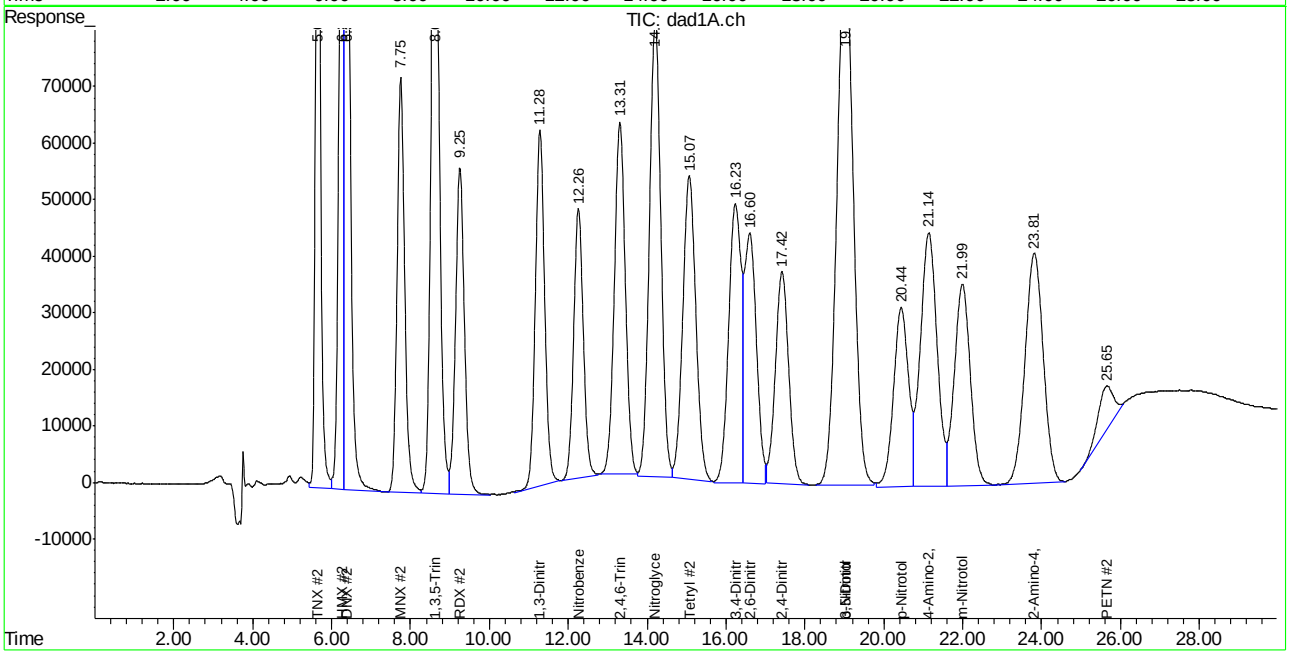
Quantitation Report (QT Reviewed)

Signal #1 : G:\DATA\0105RPB2\GG058053.D\dad1B.ch Vial: 2
Signal #2 : G:\DATA\0105RPB2\GG058053.D\dad1A.ch
Acq On : 05-Jan-2015, 10:44:58 Operator: kismetl
Sample : ecc2334-1000 Inst : G1315B
Misc : OP54435,GGG2338,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Jan 5 11:25 2015 Quant Results File: 8330_RPB2.RES

Quant Method : C:\MSDCHEM\1\METHODS\8330_RPB2.M (Chemstation Integrator)
Title : Explosives by 8330
Last Update : Tue Dec 30 09:48:20 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330RPB2.M

Volume Inj. : 100ul
Signal #1 Phase : Bonus RP Signal #2 Phase: Bonus RP
Signal #1 Info : DAD 254nm Signal #2 Info : DAD 235nm





ACCUTEST LABORATORIES FA20881

Manual Integration Approval Summary

Sample Number: GGG2338-ECC2334 **Method:** SW846 8330B
Lab FileID: GG058053.D **Analyst approved:** 01/05/15 11:32 Kismet Lugo
Injection Time: 01/05/15 10:44 **Supervisor approved:** 01/06/15 16:41 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	6.28	Overlapping peak
DNX		1	6.39	Overlapping peak
1,3-Dinitrobenzene	99-65-0	2	11.28	Poorly defined baseline
Nitrobenzene	98-95-3	2	12.26	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	13.31	Poorly defined baseline
Nitroglycerine	55-63-0	2	14.20	Poorly defined baseline
Tetryl	479-45-8	2	15.07	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	16.23	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	16.60	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	17.42	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	19.02	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	19.02	Poorly defined baseline
PETN	78-11-5	2	25.65	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	KL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045345	1	solvent	8330	—	—		ND 12/29/14
BB 46	2	CC1219-1000		LC493	1:1		replaced column ~~& prep wgt with 500std~~ Hmx ↓
BB 47	1	solvent		—	—		ND
BB 48	2	CC1219-1000		LC493	1:1		Hmx ↓ prep wgt w/ LC500std
BB 49	2	↓		LC500	1:1		Hmx ↓ fix resolution
BB 50	2	↓		↓	↓		✓ wrong std!
BB 51	1	solvent		—	—		ND
BB 52	2	CC1219-1000		LC500	1:1		✓ Pass resolution in batch - run curve
BB 53	4	IC1221-20			50+450 ~~50+450~~	PDB	✓
BB 54	5	IC1221-50			10+390	PDB	✓
BB 55	6	IC1221-100			25+475	PDB	✓
BB 56	7	IC1221-200			50+450	PDB	✓
BB 57	8	ICC1221-500			1:4	PDB	✓
BB 58	9	IC1221-1000			1:1	PDB	✓
BB 59	10	IC1221-2000		↓	1x	PDB	✓
BB 60	11	ICV 1221-500		LC497 LC498 E4944 E5029 *		~~TNXOP~~ LL 12/30/14 PDB	Pass S1 MNPS2 PETN ↑
BB 61	12	ICV 1221-500 flow		~~LC500~~ E5029	10+490	TNXOP	Pass
BB 62	4	CC1221-20		LC500	50+450 ~~50+450~~	HMX, NPX OP S1 PDB	Pass S1 HMX ↑ S2 PETN ↓
BB 63	41	OP54361-bs		OP54361	1x	PDB	✓
BB 64	42	OP54361-MB	↓	↓	↓		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

* LC497 25ml, LC498 25ml, E4944 10ml } + 920

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 B
PROC. METHOD:	1
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2588
MEOH LOT #:	91422
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045365	43	FA20818-6	8330	OP54361	1x		MM(5X) ✓
BB 66	44	FA20818-7				PDB	✓ MM(5)
BB 67	45	FA20818-8				TDXMPS1, PDB	✓
BB 68	46	OP54361-MS				PDB	✓
BB 69	47	OP54361-MSD				PDB	✓
BB 70	48	FA20818-9				HMXOPS2MPS1 2A-4AMPS1	✓
BB 71	49	FA20818-10					✓
BB 72	50	FA20819-1		↓	↓	PDB	✓
BB 73	3	CC1221-1000		LC500	1:1	PDB	Pass
BB 74	1	clb		—	—		ND
BB 75	51	FA20819-2		OP54361	1x	HMXMPS1 OPS2 1,3,5MPS1 PDB	✓
BB 76	52	OP54317-BS		OP54317		PDB	✓
BB 77	53	OP54317-MB					ND
BB 78	54	FA20818-1				MNXOP, PDB	✓
BB 79	55	FA20818-2				PDB	✓
BB 80	56	FA20818-3				2A-4A MPS1 PDB	✓
BB 81	57	FA20818-4				24DNOPS1, PDB	✓
BB 82	58	OP54317-MS				PDB	✓
BB 83	59	OP54317-MSD				PDB	✓
BB 84	60	FA20818-5	↓	↓	↓	PDB	ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	232

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045385	3	cc1221-1000	8330	LC500	1:1	PDB	PETN not requested
BB 86	1	ccb		—	—		ND
BB 87	61	FA20818-6		OP54361	1:5	PDB	✓
BB 88	62	FA20818-7		↓	1:5	PDB	✓
BB 89	63	OP54390-bs		OP54390	1x	PDB	✓
BB 90	64	OP54390-pt1				PDB	✓
BB 91	65	OP54390-mb					ND
BB 92	66	FA20794-1					ND
BB 93	67	OP54390-ms				PDB	✓
BB 94	68	OP54390-MSd				PDB	✓
BB 95	69	FA20794-2				PDB	✓ ROSS. PETN
BB 96	70	FA20794-3		↓	↓		ND
BB 97	91	cc1221-1000		LC500	1:1	PDB	Pass
BB 98	1	ccb		—	—		ND
BB 99	71	FA20794-4		OP54390	1x		ND
BB 045400	72	FA20820-1					ND
BB 01	73	FA20820-2					ND
BB 02	74	OP54390-dup					ND
BB 03	75	OP54390-dup2					ND
BB 04	76	FA20820-3	↓	↓	↓		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimmet Lyn

ACCUTEST LABORATORIES SE

DATE:	12/29/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1221

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	232

kl 12/30/14

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045405	77	FA20820-4	8330	~~OP54390~~ 8330	1X		ND OP54390
BB 06	78	FA20820-5	↓	OP54390	↓		ND
BB 07	91	CCC1221-1000	↓	LC50U	1:1	PDB	Pass
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							
BB							

* For NELAC purposes, Method 8332 includes analytes by SOP GC020
Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE 01/02/15

HPLC5-BB ANALYSIS LOG

DATE:	~~01/02/14~~ 01/05/15
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/29/14
RUN BATCH: GBB	1225

ANALYST:	IL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	240

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045461	1	solvent	8330	—	—		ND
BB 62	2	CC1221-1000		LC500	1:1	PDB	PETNJ not required SumTS1
BB 63	12	OP54435-bs		OP54435	1x	PDB	✓
BB 64	13	OP54435-pt1				PDB	✓
BB 65	14	OP54435-mb				PDB	ND
BB 66	15	FA 20881-1				PDB	ND
BB 67	16	OP54435-ms				PDB	✓
BB 68	17	OP54435-msd				PDB	✓
BB 69	18	FA 20881-2				PDB	ND
BB 70	19	FA 20881-3				NG-08 PDB	✓
BB 71	20	FA 20937-2				HMX MPS1	✓
BB 72	21	FA 20937-3		↓	↓		ND
BB 73	3	CC1221-1000		LC500	1:1	PDB	PETNJ, SumTS1
BB 74	1	calb		—	—		ND
BB 75	22	FA 20937-1		OP5443J	1x		ND
BB 76	23	OP54435-dup				PDB	ND
BB 77	24	OP54435-dup2					ND
BB 78	25	grind blk a					ND
BB 79	26	grind blk b					ND
BB 80	27	grind blk c					ND
81	28	ccc1221-1000		LC500	1:1	PDB	PETNJ, SumTS1

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC3-GG	

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 LPB2
PROC. METHOD:	8330-LPB2
CALIB. DATE:	12/24/14
RUN BATCH: GGG	2334

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	9/422
HEAD PRESSURE:	165

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 057982	1	solvent	8330	—	—		ND
GG 83	2	CC2332-1000		LC493	1:1	HMX-DNX OP, PDB	Pass
GG 84	4	ICV2332-500		—	—	↓ ↓	HMXT PETNT 2nd cal curve
GG 85	3	CC2332-1000		LC500	1:1	↓ ↓	HMXT, PETNT
GG 86	5	IC2334-20			50+450 / 50+450 dil	PDB	✓
GG 87	6	IC2334-50			10+390	PDB	✓
GG 88	7	IC2334-100			25+475	PDB	✓
GG 89	8	IC2334-200			50+450	PDB	✓
GG 90	9	ICC2334-500			1:4	PDB	✓
GG 91	10	IC2334-1000			1:1	PDB	✓
GG 92	11	IC2334-2000			1x	PDB	✓
GG 93	12	ICV2334-500		LC497 LC498 E4944 ES024	*		Pass
GG 94	5	CC2334-20		LC500	50+450 / 50+450 dil		PETN↓ HMXT S2
GG 95	21	FA20708-49ct		OP54337	1x	PDB	✓
GG 96	22	FA20708-51ct					ND HMX[17] Mdl-H
GG 97	23	FA20708-57ct				HMXOP PDXOP SMXOPS2, PDD	✓ NB PETN[107]
GG 98	13	OP54324-mb		OP54324			DWL – ND on primary
GG 99	14	FA20579-1ct					
GG 058000	15	FA20579-2ct					
GG 01	16	FA20579-3ct					

* For NELAC purposes, Method 8332 includes analytes by SOP GC020
Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

* LC497 25 ml
LC498 25 ml
E4944 10 ml
} +920

Analyst's Signature: Kamal Lyo

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Bonus RP
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC3-GG	

HPLC3-GG ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	12/24/14
RUN BATCH: GGG	2334

ANALYST:	IK
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	166

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058002	17	FA20579-4cf	8330	OP54324	1x		DNR
GG 03	18	FA20523-1cf					
GG 04	19	FA20523-2cf					
GG 05	3	cc2332-1000		LC500	1:1	HMX-DNXOP, PDB	Pass
GG 06	1	ccb		—	—		ND
GG 07	20	FA20523-3cf		OP54324	1x		DNR
GG 08	24	ecc2332-1000		LC500	1:1	HMX-DNXOP, PDB	PETNJ not required
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

IK 12/26/14

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc3_gg_log.xls NF rev. 08/09

Analyst's Signature: Kismet Ly

ACCUTEST LABORATORIES SE

DATE:	01/05/15
COLUMN TYPE:	Bond RP
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC3-GG	

HPLC3-GG ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 RPB2
PROC. METHOD:	8330_RPB2
CALIB. DATE:	12/24/14
RUN BATCH: GGG	2338

ANALYST:	JL
ACETONITRILE LOT #:	2588
MEOH LOT #:	91422
HEAD PRESSURE:	176

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
GG 058048	1	solvent	8330	—	—		ND
GG 49	2	cc2334-1000	↓	LC500	1:1	HMX-DNX OP, PDB	PETN J, not required HMX/52
GG 50	11	OP54435-mb		OP54435	1X		ND
GG 51	12	FA20881-3ct		↓	↓		✓
GG 52	13	FA20937-2ct					ND HMX
GG 53	2	ecc 2334-1000	↓	LC500	1:1	HMX-DNX OP, PDB	Pan, PETN HMX/52
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							
GG							

JL 01/05/15

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature: Kimberly Lyle

ACCUTEST LABORATORIES SE **EXP SAMPLE PREP REPORT**

Prep Method: 8330A, 8332, 8330B or Method (circle)

Date/Time: 12/30/14 1500 Started {mm/dd/yy 24:00}

Date/Time: 12/31/14 1030 Finished {mm/dd/yy 24:00}

Therm. ID: ✓ Corr. Factor (±℃): —

Bath Temp. (High) ℃: ✓ / ✓ {obs/corr}

Ultrasonic Bath ID (8330A or 8332): ✓

Shaker Table ID (8330B): ST2

Batch#: OP54435 Ext. By: MB Vialed By: MB Balance ID: ADVPRO5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54435 MB	X	10.0	1.25ml		50ml	
OP 54435 BS	X	10.0	↓	125+125ul 1.25ml	↓	
FA 20881-1	1	10.0	↓	↓	↓	
-2	1	10.1	↓	↓	↓	
-3	1	10.0	↓	↓	↓	
FA 20937-1	1	10.0	↓	↓	↓	
-2	1	10.0	↓	↓	↓	
-3	1	10.1	↓	↓	↓	
GRINDING BLANK	A	10.0	—	↓	↓	
↓	B	10.0	—	↓	↓	
↓	C	10.0	—	↓	↓	
				12/31/14		
			MB			
OP 54435 PT-1	X	10.0	1.25ml		50ml	6470A
FA20881-1 MS	1	10.1	↓	125+125ul 1.25ml	↓	
-1 MSD	1	10.0	↓	↓	↓	
FA20937-1 DUP	1	10.0	↓	↓	↓	
-1 TRP	1	10.0	↓	↓	↓	

Comments:

Surr. ID: E4954M Conc: 20ppm Exp. Date: 03/02/15 Inj. By: MB Ver. By MB

Spk.1 ID: E5025 Conc: 20ppm Exp. Date: 06/04/15 Inj. By: MB Ver. By MB

Spk.2 ID: 7183B Conc: 1000 ug/ml Exp. Date: 12/30/15 Inj. By: MB Ver. By MB

Acetonitrile Lot # 06/8/7 Methanol Lot # ✓ Water Lot# 084623 HPLC

Syringe Filter Lot# Reagent # CS1 Reagent # ✓

Relinquished By: Date: 12/31/14

Accepted By: Date: 12/31/14

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20881
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate	GP25263/GN64700	1.0	0.0	mg/kg	25	24.7	98.9	90-110%

Associated Samples:
Batch GP25263: FA20881-1, FA20881-2, FA20881-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20881
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate	GP25263/GN64700	FA20881-1	mg/kg	4.1	25	25.8	86.7N(a)	90-110%

Associated Samples:
Batch GP25263: FA20881-1, FA20881-2, FA20881-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference and/or sample non-homogeneity.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20881
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Nitrate	GP25263/GN64700	FA20881-1	mg/kg	4.1	24.9	25.6	0.8	20%

Associated Samples:
Batch GP25263: FA20881-1, FA20881-2, FA20881-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20881
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 315010301.TXT Date Analyzed: 01/03/15 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64700
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:28	GN64700-CCV1	1		
11:44	GN64700-CCB1	1		
12:52	ZZZZZZ	5		
13:09	ZZZZZZ	25		
13:26	ZZZZZZ	5		
13:43	ZZZZZZ	5		
14:00	GN64700-CCV2	1		
14:17	GP25263-MB1	1		
14:34	GP25263-B1	1		
14:51	FA20881-1	1		
15:08	FA20881-2	1		
15:25	FA20881-3	1		
15:42	ZZZZZZ	1		
15:59	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:33	GP25263-S1	1		
16:50	GP25263-S2	1		
17:07	GN64700-CCV3	1		
17:24	GN64700-CCB2	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA20881
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 315010301.TXT Date Analyzed: 01/03/15 Methods: EPA 300/SW846 9056A
Run ID: GN64700 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN64700-CCV1	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64700-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64700-CCV2	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64700-CCV3	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64700-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			

(!) Outside of QC limits

Southeast ACCUTEST LABORATORIES

General Chemistry

Raw Data

Sequence: 01-03-2015
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\JAN 2015
Timebase: ICS-2100
#Samples: 31

Created: 1/3/2015 11:26:08 AM by Chemistry
Last Update: 1/3/2015 1:52:33 PM by Chemistry

No.	Name	Dil. Factor	Weight	ISTD Amount	Sample ID	Replicate ID	Comment
1	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
2	STD A	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
3	STD B	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
4	STD C	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
5	STD D	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
6	STD E	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
7	STD F	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
8	STD G	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
9	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
10	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
11	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
12	MB1(UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
13	B1 (UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
14	FA21096-7	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
15	FA21096-8	25.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
16	FA21096-11	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
17	FA21096-13	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
18	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
19	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
20	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
21	FA20881-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
22	FA20881-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
23	FA20881-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
24	FA20937-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
25	FA20937-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
26	FA20937-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
27	FA20881-1S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
28	FA20881-1S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
29	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
30	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
31	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO3		~~GC 086~~ GC255	01-01-15								
	CHL		~~GC 007~~ GC086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Acculon	GC 010	08-31-15	1000	0.250	100	2.5	01-03-15	VL	LL05367	01-03-15
	NO2		GC 125II	01-31-15								
	NO3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO4		GC 268	05-10-16								
	Br	spex	GC 156	04-30-16		1.25		12.5				
B1	F	spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05368	
	NO2	Inorganic	GC 267	11-04-16								
	NO3		~~GC 255II~~	~~01-01-15~~								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	01-03-2015
Analyst:	VL
Instrument:	# 3
Inst. File Name:	010315

Prep Batchs:	GP 25263
Analytical Batch:	GN 64700
Calibration Date:	12-15-2015
Pump pressure:	2011 psi

Vial lot#	EC 271
Cap lot#	EC 271
Syringe lot#	EC 283
Filter lot#	EC 283

Standards	
ICAL:	N/A
ICV:	LL05368
CCV:	LL05367
QC:	LL05368

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
CCV		AQ			n	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
MB1					y	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
31					y	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
MB1 (UF)					n	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
B1 (UF)						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
FA 21096-7	9		570 ug	5x							✓						✓	GP 25255
-8	9		257 ug	25x							✓						✓	
-11	9		136 ug	5x							✓						✓	
-13	9		837 ug	5x							✓						✓	
CCV		↓			↓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
MB1		SO			y	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
31						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	
FA 20981-1	1									✓						✓		
-2	1									✓						✓		
-3	1									✓						✓		
FA 20937-1	1									✓						✓		
-2	1									✓						✓		
-3	1									✓						✓		
FA 20881-1S1	1									✓						✓		
FA 20881-1S2	1									✓						✓		
CCV						✓	✓	✓		✓	✓							
CCB						✓	✓	✓		✓	✓							
BLK (shut down)		↓			↓													

VL 01-05-2015

Rev 050914 lm

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC255II	01-01-15								
	CHL		GC086	02-01-15		0.800		50				
	SO_4		GC007	02-01-15								
	Br		GC158	01-01-15		1.25		12.5				
CCV	F	Accutest	GC010	08-31-15	1000	0.250	100	2.5	12-13-14	VK	LL05330	12-13-15
	NO_2		GC125II	01-30-15								
	NO_3		GC169	06-17-16								
	CHL		GC125II	03-31-16		0.500		50				
	SO_4		GC268	05-10-16								
	Br	Spex	GC156	04-30-16		1.25		12.5				
Br	F	Spex	GC514	12-31-16	1000	0.250	100	2.5			LL05331	
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC255II	01-01-15								
	CHL		GC086	02-01-15		0.500		50				
	SO_4		GC007	02-01-15								
	Br		GC155	01-01-15		1.25		12.5				
Std A	F	Accutest	GC010	08-31-15	1000	0.01	100	0.1	12-15-14	VK	LL05332	12-15-16
	NO_2		GC125II	09-30-16		0.01		0.1				
	NO_3		GC600II	01-31-15		0.01		0.1				
	CHL		GC124	03-31-16		0.2		2.0				
	SO_4		GC268	05-10-16		0.2		2.0				
	Br	Spex	GC156	04-30-16		0.05		0.5				
Std B	F	Refer to	Std LL05332		1000	0.05	100	0.5			LL05333	
	NO_2					0.05		0.5				
	NO_3					0.05		0.5				
	CHL					1.0		10				
	SO_4					1.0		10				
	Br					0.1		1.0				
Std C	F				1000	0.1	100	1.0			LL05334	
	NO_2					0.1		1.0				
	NO_3					0.1		1.0				

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Cl					3.0		30				
	SO_4					3.0		30				
	Br					0.75		7.5				
Std D	F				1000	0.250	100	2.5			LL05335	
	NO_2					0.250		2.5				
	NO_3					0.250		2.5				
	Cl					5.0		50				
	SO_4					5.0		50				
	Br					1.25		12.5				
Std E	F				1000	0.30	100	3.0			LL05336	
	NO_2					0.30		3.0				
	NO_3					0.30		3.0				
	Cl					6.5		65				
	SO_4					6.5		65				
	Br					1.5		15				
Std F	F				1000	0.40	100	4.0			LL05337	
	NO_2					0.40		4.0				
	NO_3					0.40		4.0				
	Cl					8.0		80				
	SO_4					8.0		80				
	Br					2.0		20				
Std G	F				1000	0.50	100	5.0			LL05338	
	NO_2					0.50		5.0				
	NO_3					0.50		5.0				
	Cl					10.0		100				
	SO_4					10.0		100				
	Br					2.5		25				
CCV	F	Accutest	CC 010	08-31-15	1000	0.250	100	2.5			LL05335	
	NO_2		GC 1251	01-30-15								
	NO_3		CC 169	06-17-16								
	Cl		CC 124	03-31-16		0.500		5.0				
	SO_4		CC 268	05-10-16								

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Br	Spex	CC156	09-30-16		1.25		12.5				
B1	F	Spex	CC514	12-31-16	1000	0.250	100	2.5				
	NO2		CC267	11-04-16								
	NO3		CC25511	01-01-18								
	CHL		CC096	02-01-15		0.500		50				
	SO4		CC007	02-01-15								
	Br		CC155	01-07-18		1.25		12.5				

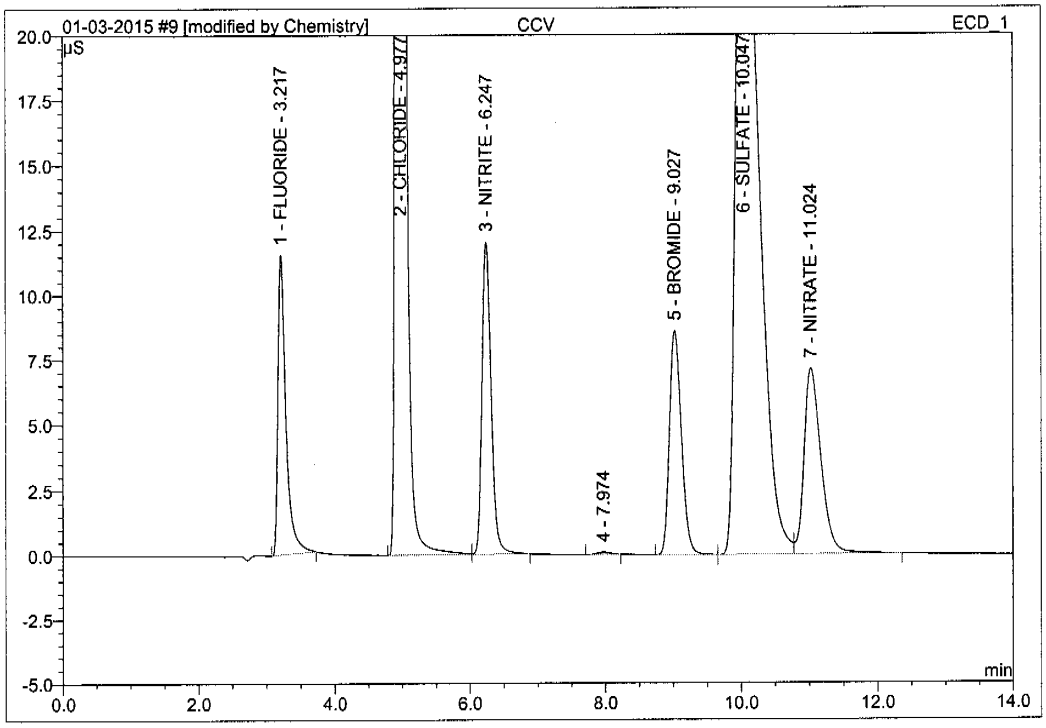
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 9:49 AM

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 11:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	11.531	1.558	4.65	2.733	BMB*
2	4.98	CHLORIDE	121.009	14.977	44.72	51.620	BM
3	6.25	NITRITE	12.009	1.878	5.61	2.391	MB
4	7.97	n.a.	0.095	0.022	0.07	n.a.	BMB
5	9.03	BROMIDE	8.618	1.757	5.25	13.163	BM
6	10.05	SULFATE	30.129	11.242	33.57	51.280	M
7	11.02	NITRATE	7.128	2.057	6.14	2.524	MB
Total:			190.518	33.492	100.00	123.710	

01-05-2015

01/05/15

Anions/Integration

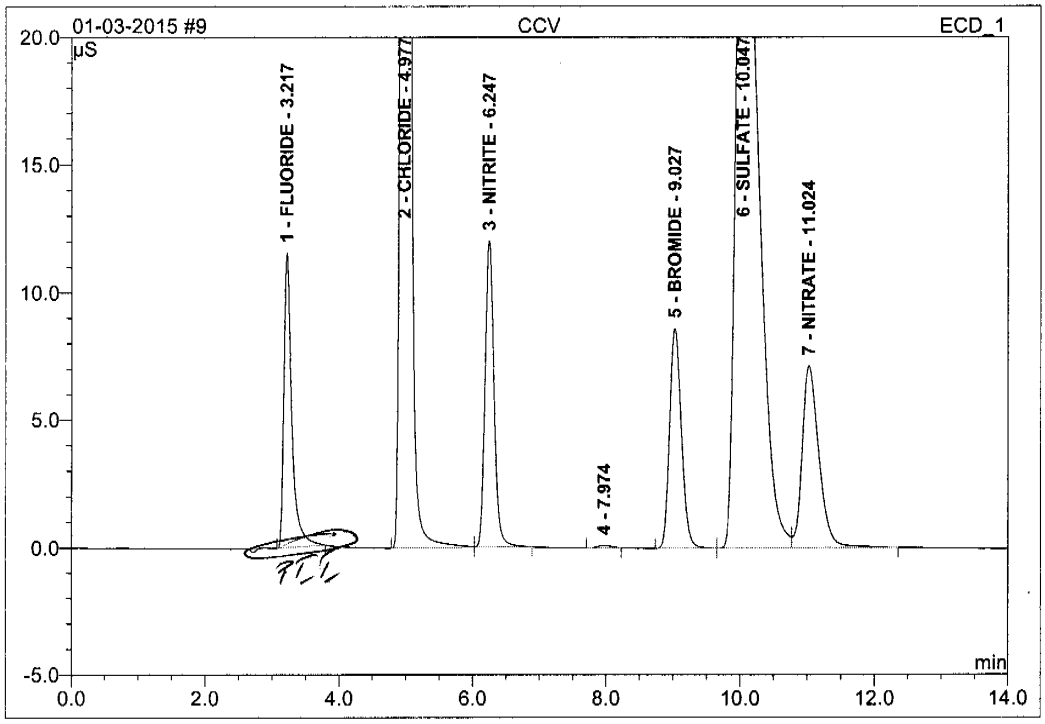
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 11:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	11.541	1.575	4.70	2.762	BMB
2	4.98	CHLORIDE	121.009	14.977	44.70	51.620	BM
3	6.25	NITRITE	12.009	1.878	5.61	2.391	MB
4	7.97	n.a.	0.095	0.022	0.07	n.a.	BMB
5	9.03	BROMIDE	8.618	1.757	5.24	13.163	BM
6	10.05	SULFATE	30.129	11.242	33.55	51.280	M
7	11.02	NITRATE	7.128	2.057	6.14	2.524	MB
Total:			190.529	33.508	100.00	123.739	

Thu-05-2015

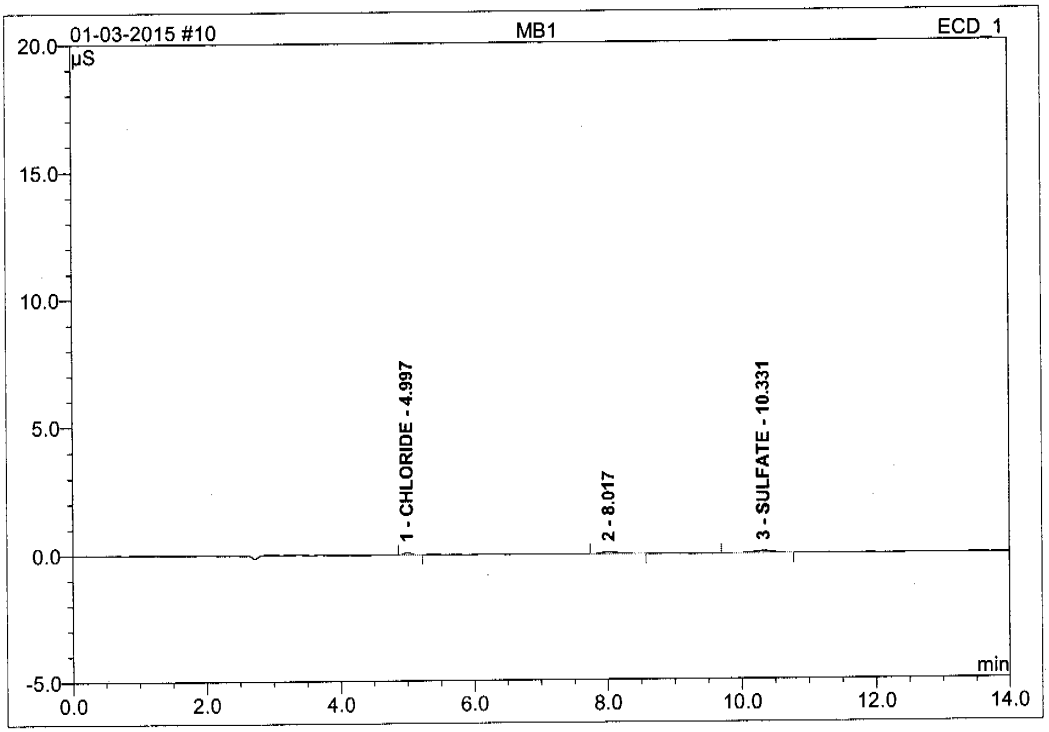
01/05/15

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

10 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 11:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.00	CHLORIDE	0.099	0.012	17.53	0.041	BMB
2	8.02	n.a.	0.081	0.024	35.52	n.a.	BMB
3	10.33	SULFATE	0.087	0.032	46.95	0.145	BMB
Total:			0.267	0.068	100.00	0.186	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

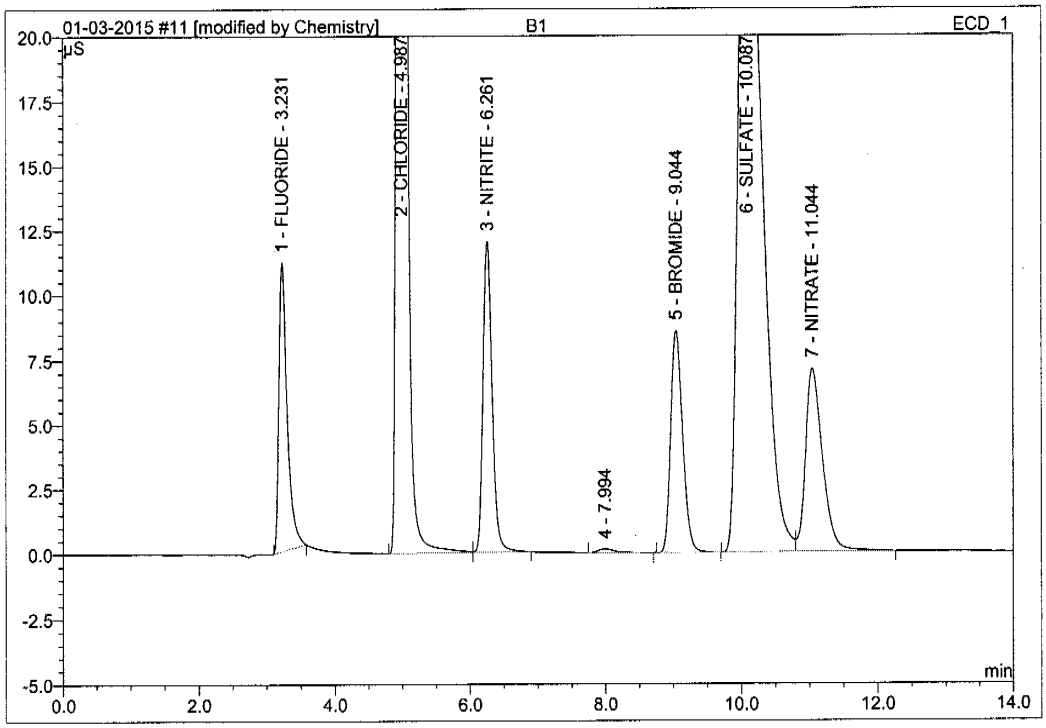
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 9:52 AM

11 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.23	FLUORIDE	11.161	1.566	4.66	2.746	BMB*
2	4.99	CHLORIDE	120.749	14.921	44.43	51.426	BM
3	6.26	NITRITE	12.012	1.876	5.59	2.388	MB
4	7.99	n.a.	0.146	0.044	0.13	n.a.	BMB
5	9.04	BROMIDE	8.597	1.748	5.20	13.099	BMB
6	10.09	SULFATE	29.150	11.382	33.89	51.917	BM
7	11.04	NITRATE	7.099	2.048	6.10	2.513	MB
Total:			188.915	33.585	100.00	124.089	

VM 01-05-2015

01/05/15

Anions/Integration

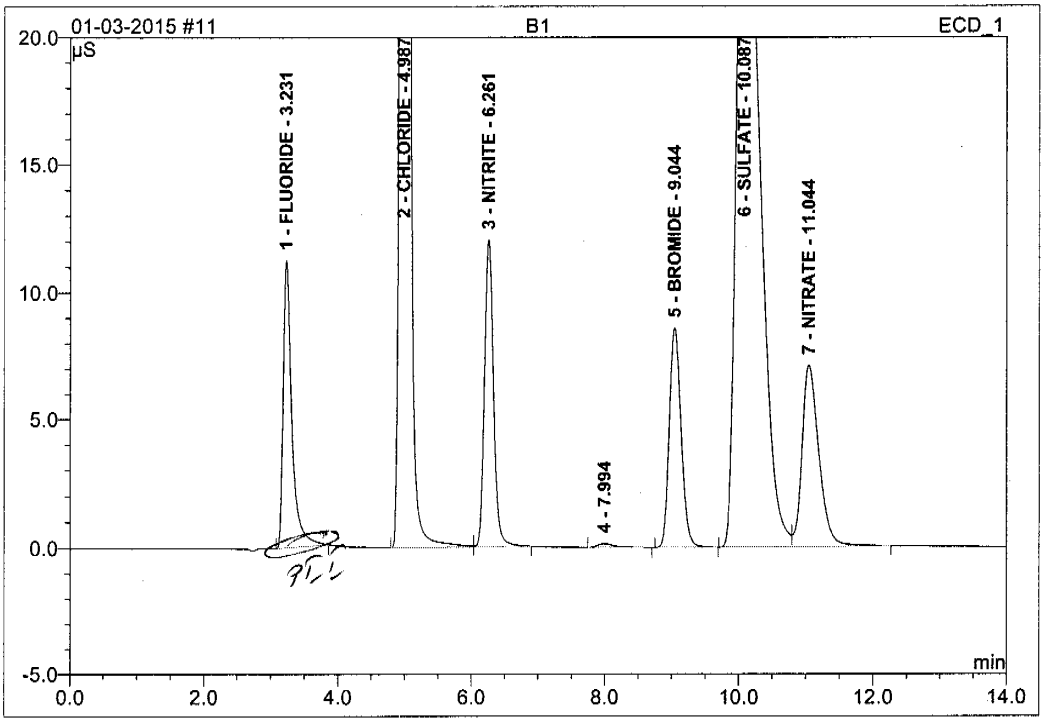
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

11 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.23	FLUORIDE	11.252	1.672	4.96	2.933	BMB
2	4.99	CHLORIDE	120.749	14.921	44.29	51.426	BM
3	6.26	NITRITE	12.012	1.876	5.57	2.388	MB
4	7.99	n.a.	0.146	0.044	0.13	n.a.	BMB
5	9.04	BROMIDE	8.597	1.748	5.19	13.099	BMB
6	10.09	SULFATE	29.150	11.382	33.78	51.917	BM
7	11.04	NITRATE	7.099	2.048	6.08	2.513	MB
Total:			189.006	33.692	100.00	124.275	

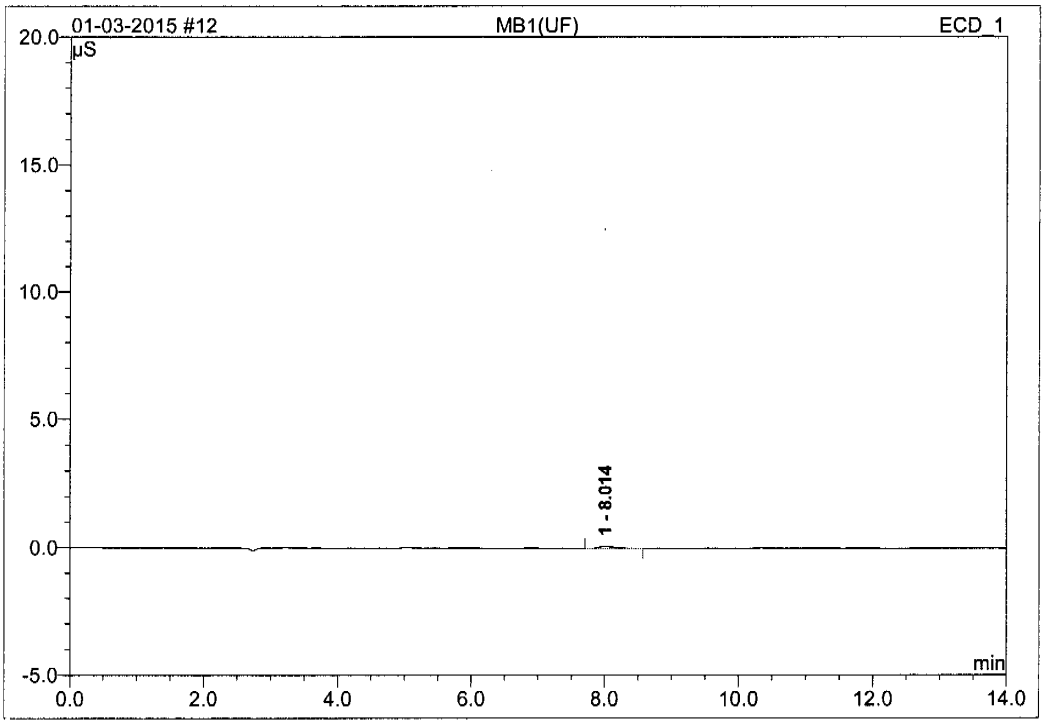
JH 01-05-2015 01/05/15

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

12 MB1(UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1(UF)**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.01	n.a.	0.086	0.026	100.00	n.a.	BMB
Total:			0.086	0.026	100.00	0.000	

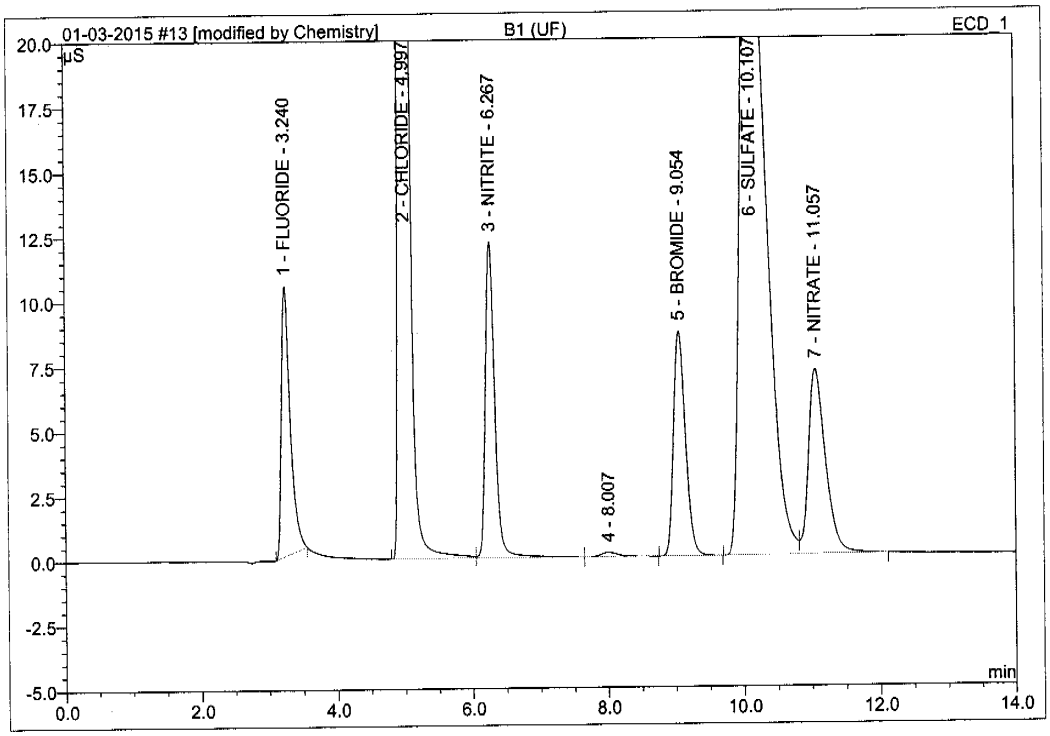
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

13 B1 (UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1 (UF)**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	10.440	1.568	4.60	2.749	BMB*
2	5.00	CHLORIDE	121.213	15.069	44.20	51.938	BM *
3	6.27	NITRITE	12.200	1.963	5.76	2.498	M *
4	8.01	n.a.	0.171	0.057	0.17	n.a.	MB*
5	9.05	BROMIDE	8.690	1.767	5.18	13.240	BMB
6	10.11	SULFATE	28.540	11.602	34.03	52.922	BM
7	11.06	NITRATE	7.137	2.067	6.06	2.536	MB
Total:			188.391	34.093	100.00	125.883	

jh 01-05-2015 01/05/15

Anions/Integration

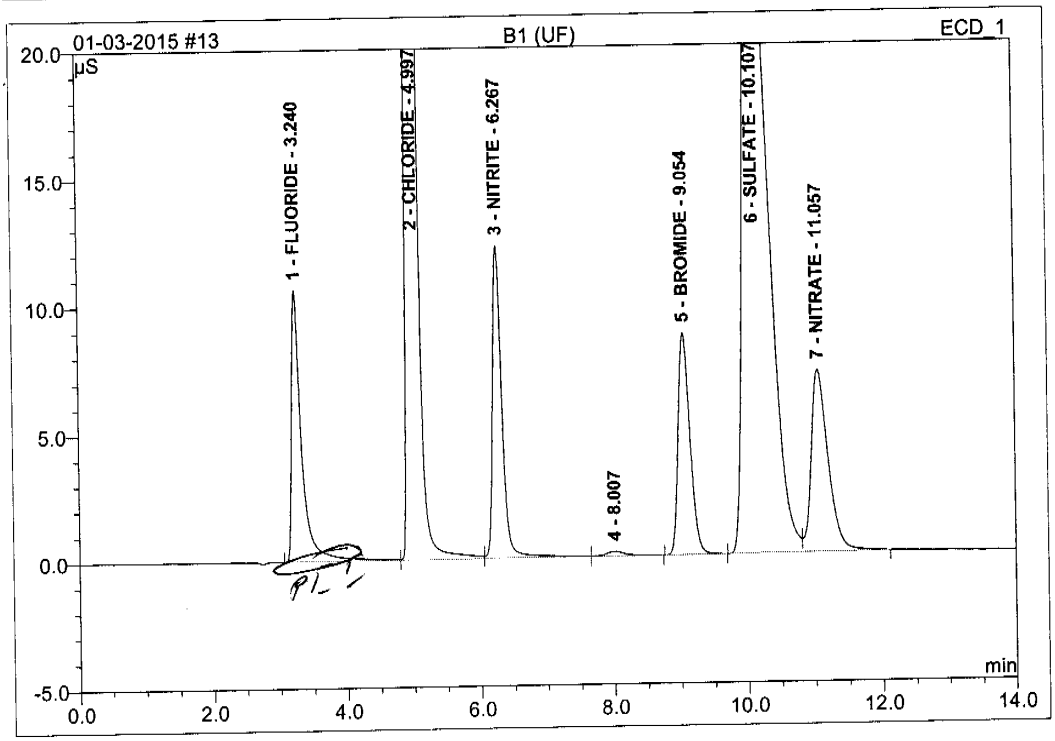
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

13 B1 (UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1 (UF)**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 12:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	10.606	1.846	5.36	3.238	BM
2	5.00	CHLORIDE	121.236	15.096	43.86	52.029	M
3	6.27	NITRITE	12.216	1.982	5.76	2.523	M
4	8.01	n.a.	0.176	0.060	0.18	n.a.	MB
5	9.05	BROMIDE	8.690	1.767	5.13	13.240	BMB
6	10.11	SULFATE	28.540	11.602	33.71	52.922	BM
7	11.06	NITRATE	7.137	2.067	6.01	2.536	MB
Total:			188.602	34.421	100.00	126.488	

1/4 01-05-2015

01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

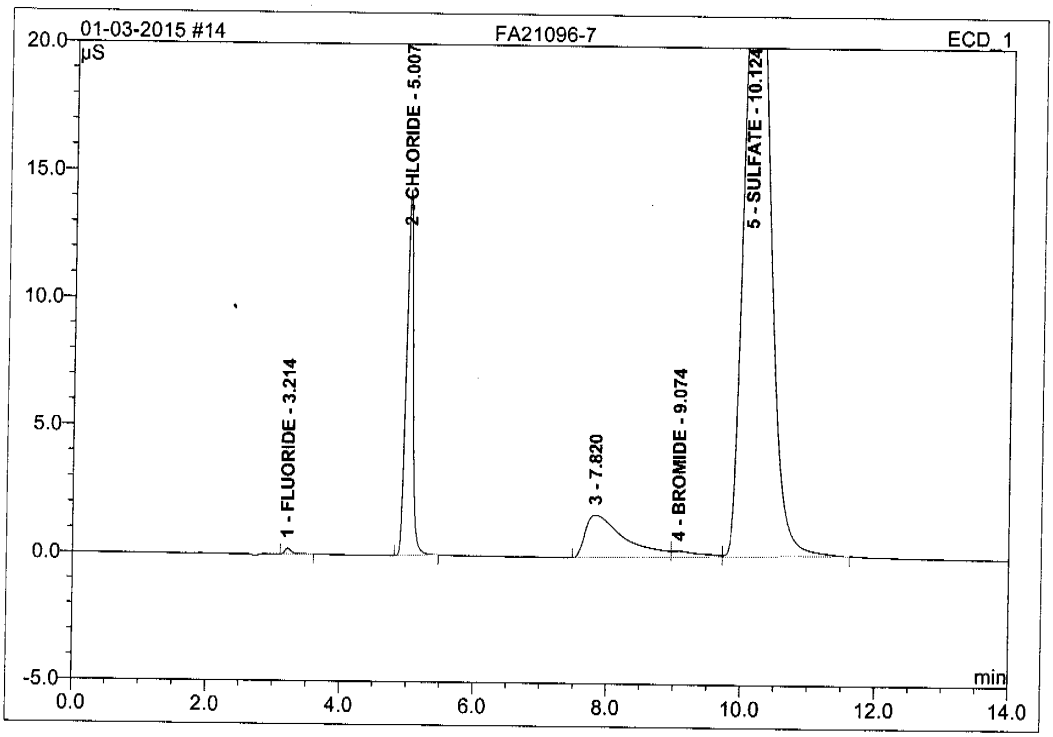
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

14 FA21096-7

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-7**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/3/2015 12:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	0.235	0.029	0.20	0.251	BMB
2	5.01	CHLORIDE	14.327	1.695	11.56	29.217	BMB
3	7.82	n.a.	1.668	1.134	7.73	n.a.	BM
4	9.07	BROMIDE	0.248	0.121	0.83	4.536	M
5	10.12	SULFATE	27.829	11.684	79.68	266.487	MB
Total:			44.307	14.663	100.00	300.491	

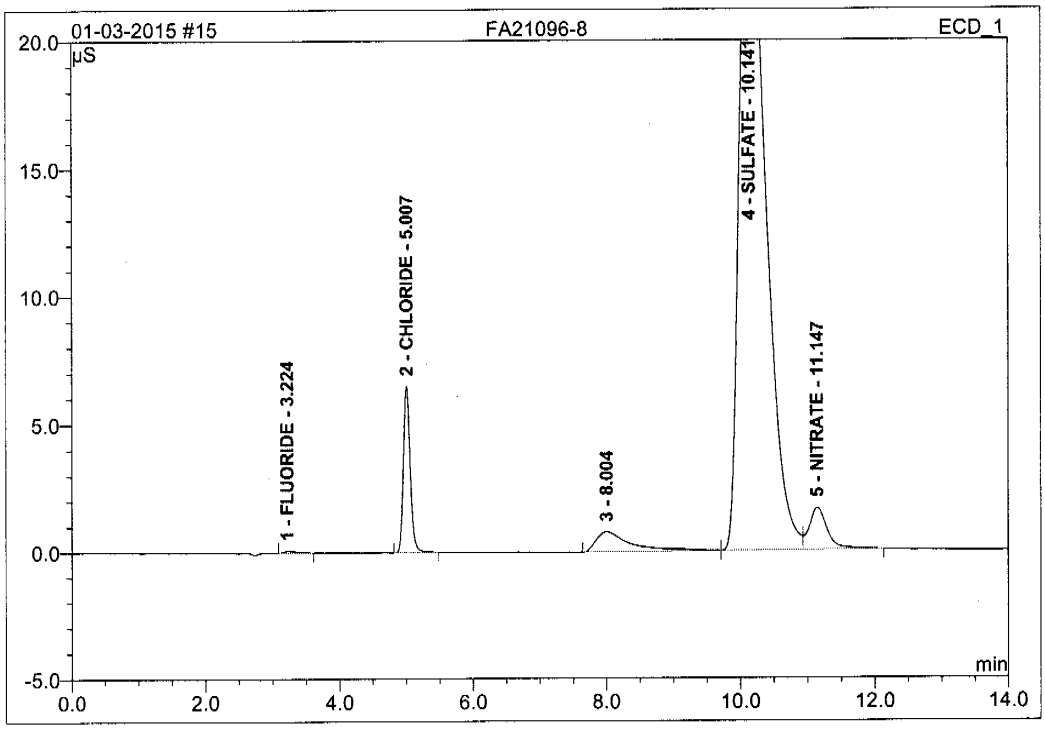
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

15 FA21096-8

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-8**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**25.0000**
Recording Time:	**1/3/2015 13:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	0.077	0.015	0.10	0.637	BMB
2	5.01	CHLORIDE	6.508	0.772	5.51	66.546	BMB
3	8.00	n.a.	0.795	0.488	3.48	n.a.	BM
4	10.14	SULFATE	27.880	12.216	87.20	1393.118	M
5	11.15	NITRATE	1.645	0.519	3.71	15.920	MB
Total:			36.906	14.010	100.00	1476.221	

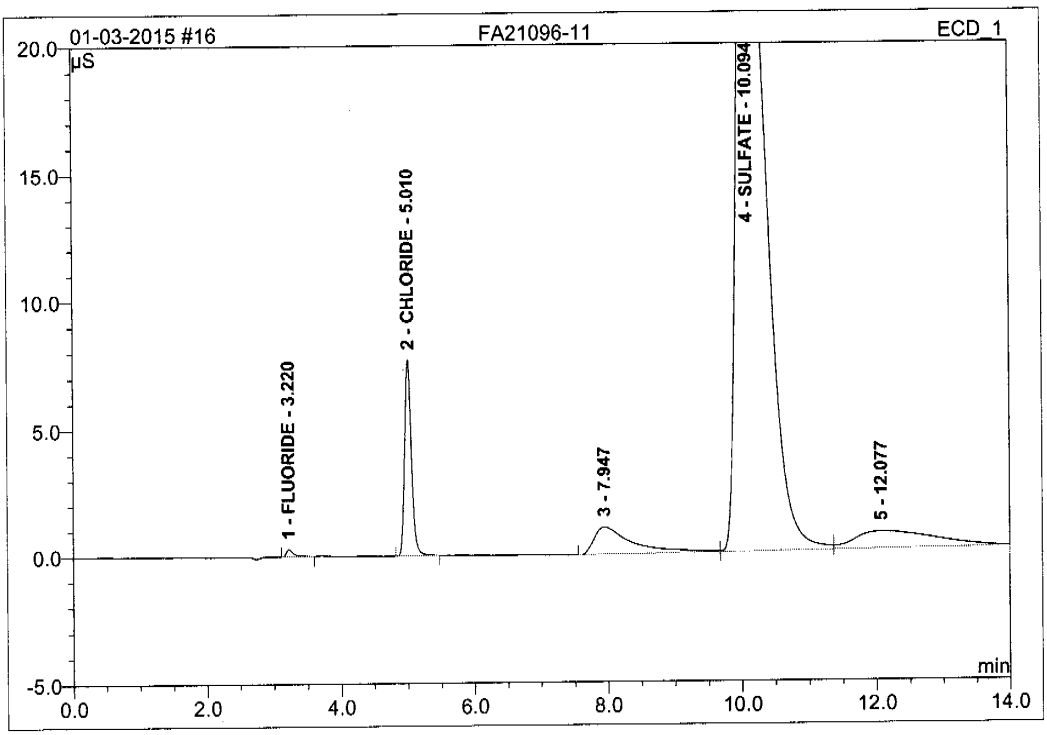
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

16 FA21096-11

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-11**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/3/2015 13:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	0.289	0.037	0.21	0.324	BMB
2	5.01	CHLORIDE	7.715	0.914	5.18	15.745	BMB
3	7.95	n.a.	1.080	0.703	3.98	n.a.	BM
4	10.09	SULFATE	33.548	15.064	85.36	343.567	M
5	12.08	n.a.	0.672	0.931	5.27	n.a.	MB
Total:			43.305	17.648	100.00	359.636	

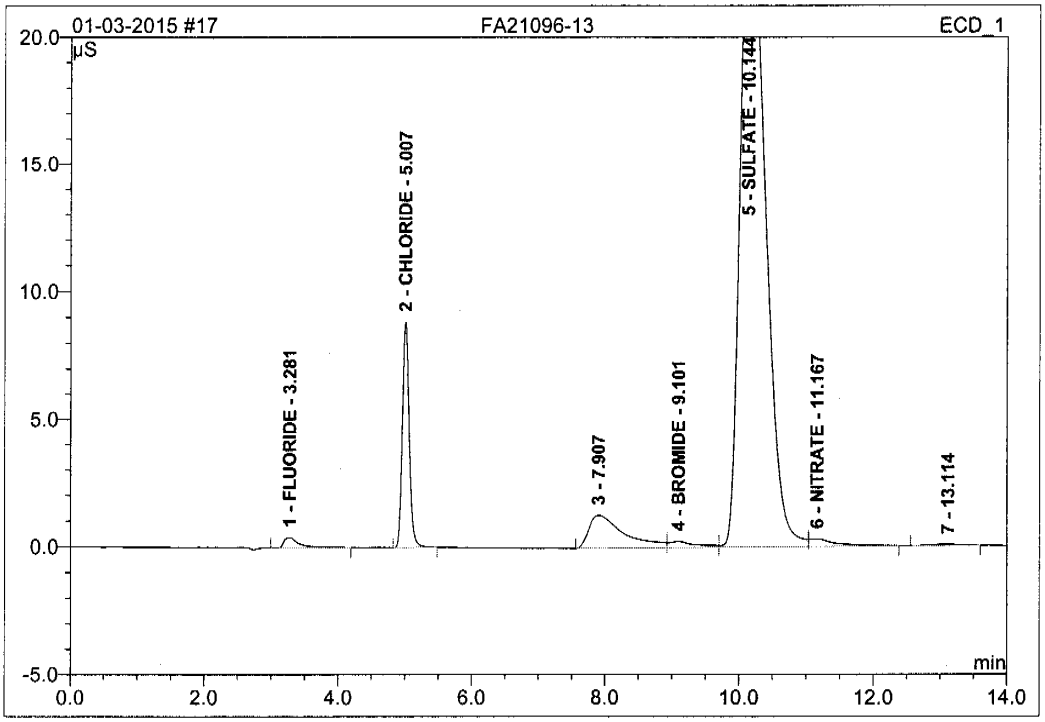
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

17 FA21096-13

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA21096-13**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/3/2015 13:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



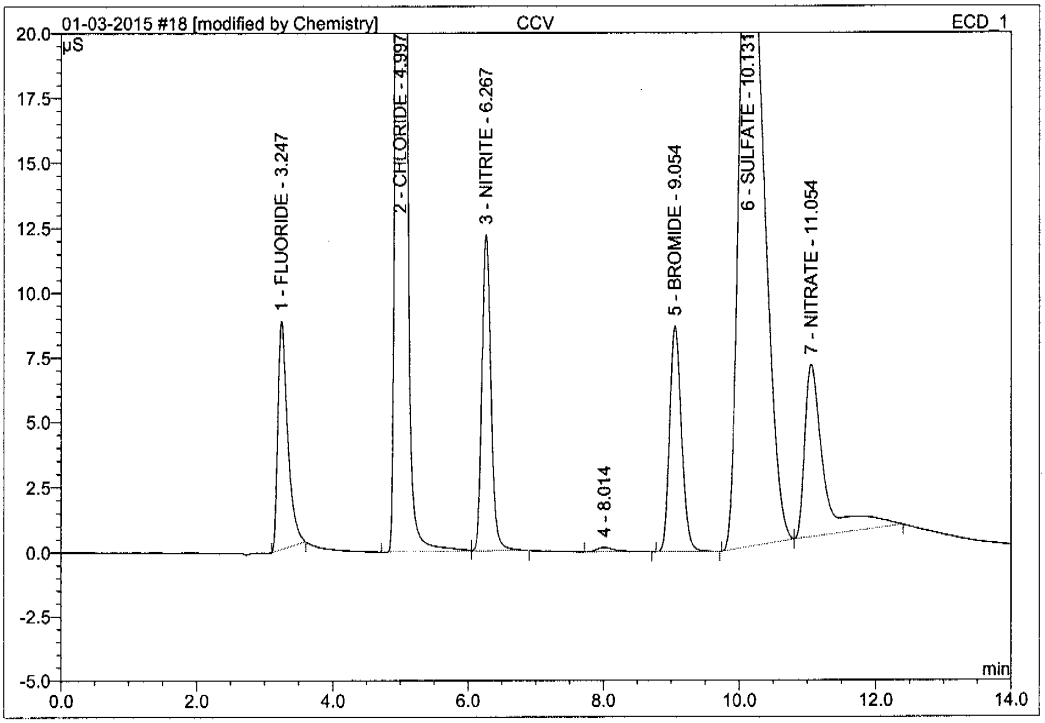
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.28	FLUORIDE	0.396	0.109	0.82	0.956	BMB
2	5.01	CHLORIDE	8.852	1.047	7.90	18.040	BMB
3	7.91	n.a.	1.280	0.777	5.87	n.a.	BM
4	9.10	BROMIDE	0.244	0.111	0.84	4.177	M
5	10.14	SULFATE	26.463	11.041	83.37	251.826	M
6	11.17	NITRATE	0.289	0.134	1.01	0.822	MB
7	13.11	n.a.	0.039	0.023	0.18	n.a.	BMB
Total:			37.563	13.243	100.00	275.821	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

18 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.808	1.463	4.39	2.566	BMB*
2	5.00	CHLORIDE	120.977	15.046	45.18	51.859	BM *
3	6.27	NITRITE	12.178	1.897	5.70	2.414	MB*
4	8.01	n.a.	0.167	0.054	0.16	n.a.	BMB
5	9.05	BROMIDE	8.686	1.762	5.29	13.203	BMB
6	10.13	SULFATE	27.385	10.899	32.73	49.716	BMb*
7	11.05	NITRATE	6.642	2.181	6.55	2.676	bMB
Total:			184.841	33.303	100.00	122.434	

JH 01-05-2015

01/05/15

Anions/Integration

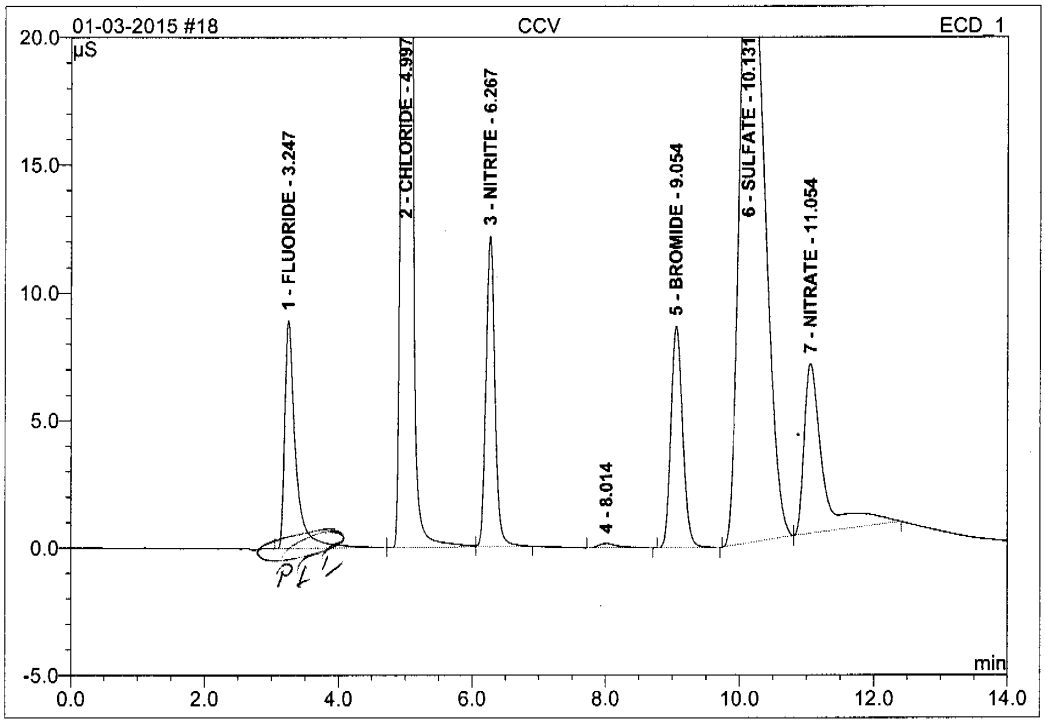
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

18 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.941	1.699	5.06	2.979	BM
2	5.00	CHLORIDE	120.978	15.047	44.86	51.861	M
3	6.27	NITRITE	12.178	1.897	5.66	2.414	MB
4	8.01	n.a.	0.167	0.054 -	0.16	n.a.	BMB
5	9.05	BROMIDE	8.686	1.762	5.25	13.203	BMB
6	10.13	SULFATE	27.385	10.899	32.50	49.716	BMB
7	11.05	NITRATE	6.642	2.181	6.50	2.676	bMB
Total:			184.975	33.539	100.00	122.848	

14 01-05-2015

01/05/15

Anions/Integration

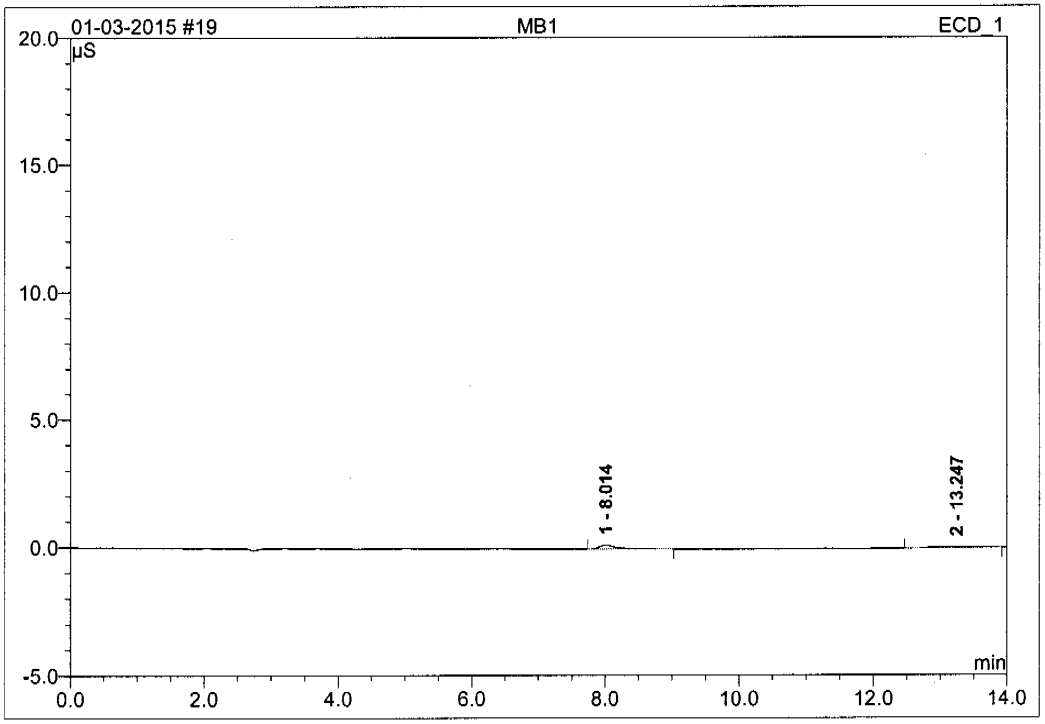
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

19 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.01	n.a.	0.152	0.050	58.22	n.a.	BMB
2	13.25	n.a.	0.046	0.036	41.78	n.a.	BMB
Total:			0.198	0.086	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

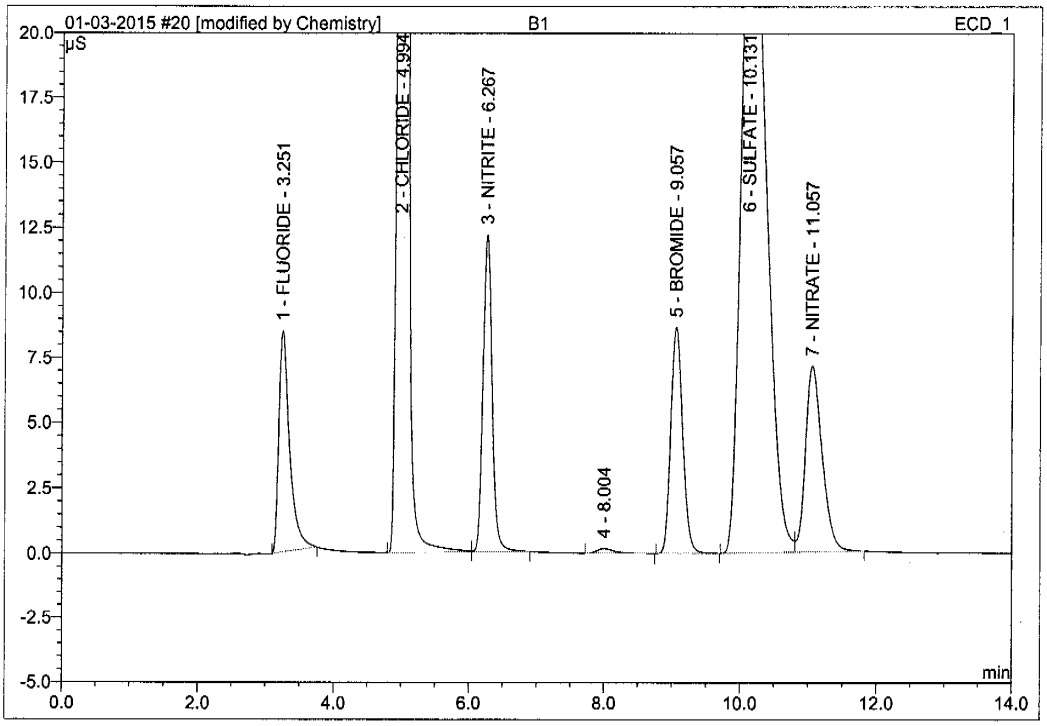
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:05 AM

20 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.479	1.540	4.59	2.700	BMB*
2	4.99	CHLORIDE	120.625	15.005	44.77	51.716	BM *
3	6.27	NITRITE	12.152	1.889	5.64	2.404	MB*
4	8.00	n.a.	0.178	0.053	0.16	n.a.	BMB
5	9.06	BROMIDE	8.668	1.762	5.26	13.204	BMB
6	10.13	SULFATE	28.278	11.250	33.57	51.319	BM
7	11.06	NITRATE	7.107	2.017	6.02	2.475	MB
Total:			185.486	33.517	100.00	123.818	

JH 01-05-2015 01/05/15

Anions/Integration

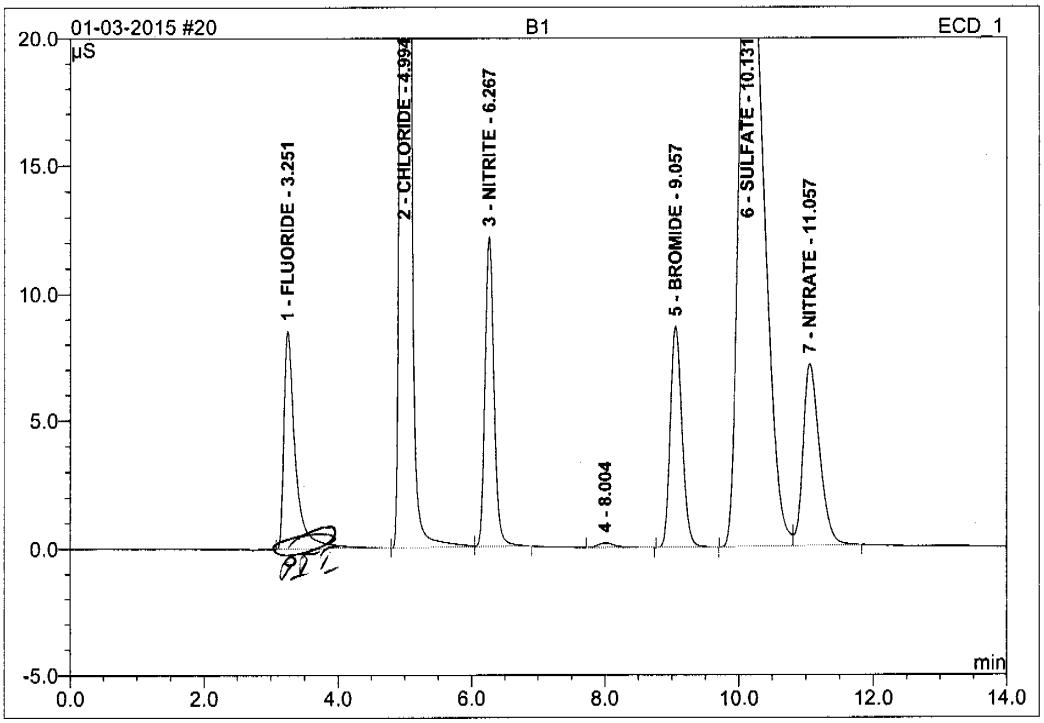
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

20 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.25	FLUORIDE	8.545	1.703	5.05	2.986	BM
2	4.99	CHLORIDE	120.630	15.010	44.56	51.732	M
3	6.27	NITRITE	12.153	1.890	5.61	2.405	MB
4	8.00	n.a.	0.178	0.053	0.16	n.a.	BMB
5	9.06	BROMIDE	8.668	1.762	5.23	13.204	BMB
6	10.13	SULFATE	28.278	11.250	33.40	51.319	BM
7	11.06	NITRATE	7.107	2.017	5.99	2.475	MB
Total:			185.558	33.685	100.00	124.121	

VK 01-05-2015 01/05/15

Anions/Integration

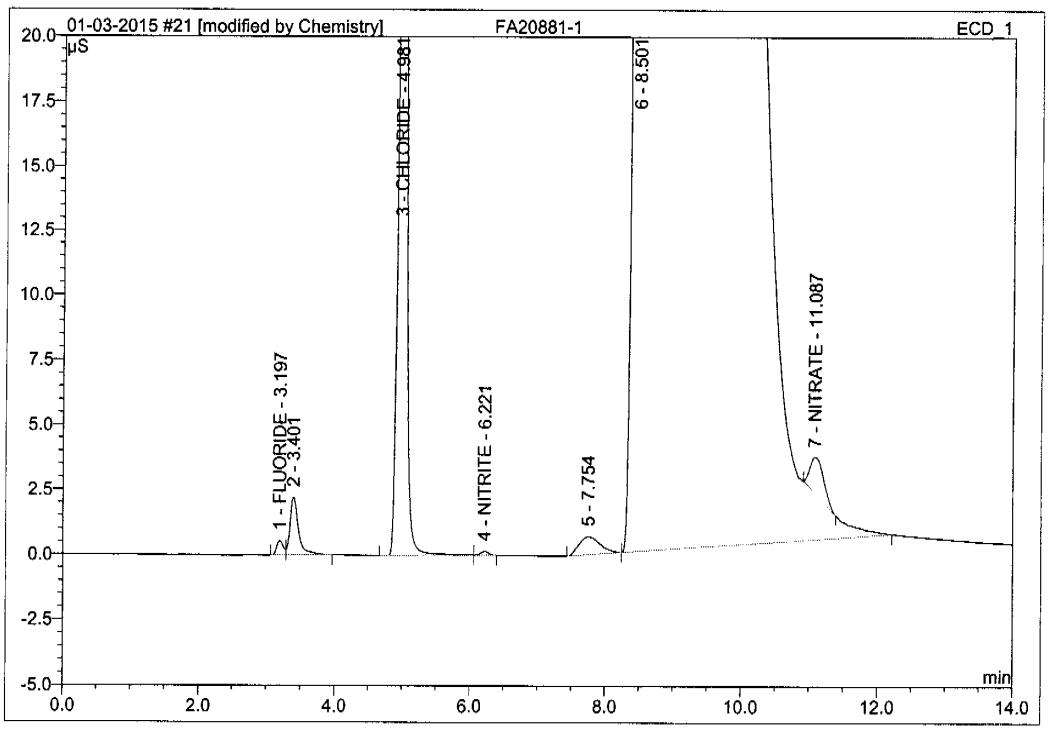
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

21 FA20881-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.556	0.060	0.02	0.106	BM
2	3.40	n.a.	2.227	0.316	0.10	n.a.	MB
3	4.98	CHLORIDE	43.010	5.188	1.72	17.880	BM
4	6.22	NITRITE	0.159	0.022	0.01	0.028	MB
5	7.75	n.a.	0.699	0.253	0.08	n.a.	BMB
6	8.50	n.a.	287.562	295.543	97.95	n.a.	BMB*
7	11.09	NITRATE	1.403	0.335	0.11	0.410	Rd*
Total:			335.617	301.717	100.00	18.424	

JH 01-05-2015 01/05/15

Anions/Integration

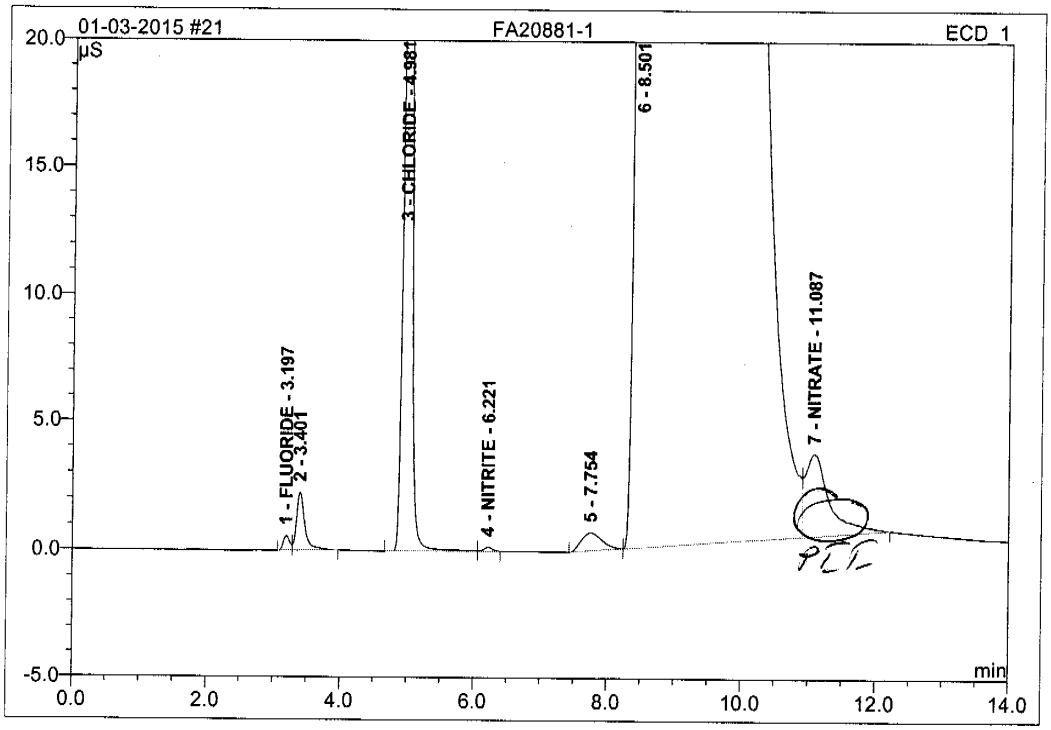
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

21 FA20881-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 14:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.556	0.060	0.02	0.106	BM
2	3.40	n.a.	2.227	0.316	0.10	n.a.	MB
3	4.98	CHLORIDE	43.010	5.188	1.72	17.880	BM
4	6.22	NITRITE	0.159	0.022	0.01	0.028	MB
5	7.75	n.a.	0.699	0.253	0.08	n.a.	BMB
6	8.50	n.a.	287.562	294.535	97.62	n.a.	BM
7	11.09	NITRATE	3.178	1.343	0.45	1.647	MB
Total:			337.391	301.717	100.00	19.661	

JL 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

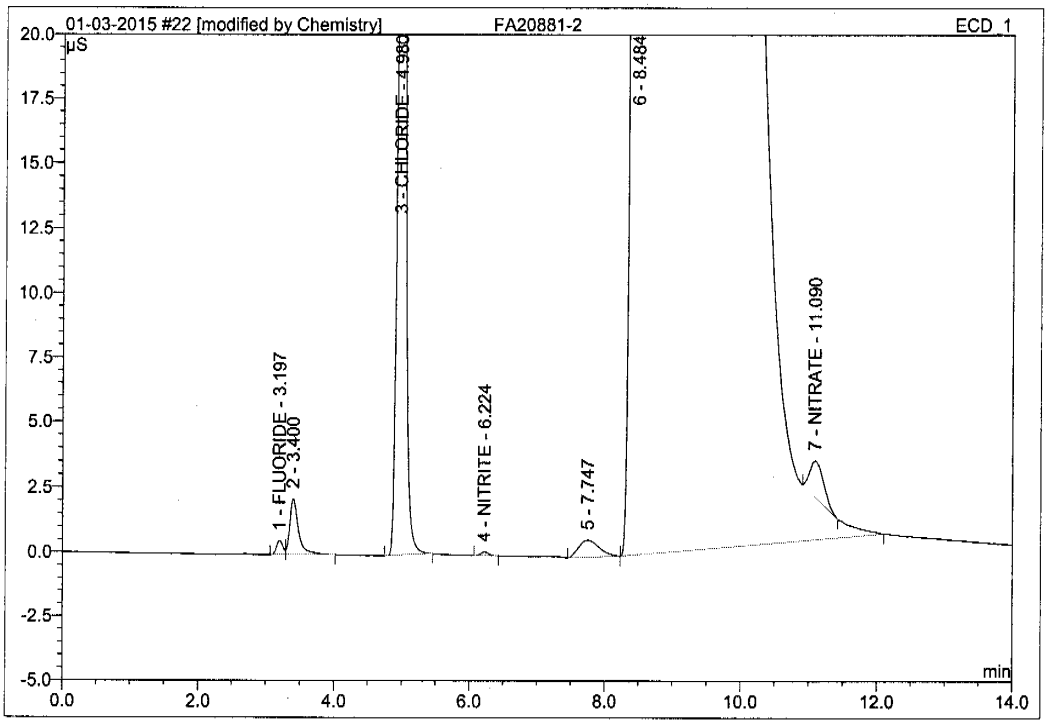
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:07 AM

22 FA20881-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.544	0.059	0.02	0.104	BM
2	3.40	n.a.	2.154	0.322	0.10	n.a.	MB
3	4.98	CHLORIDE	41.760	4.986	1.63	17.184	BMB
4	6.22	NITRITE	0.138	0.019	0.01	0.024	BMB
5	7.75	n.a.	0.659	0.231	0.08	n.a.	BMB
6	8.48	n.a.	291.565	300.724	98.06	n.a.	BMB*
7	11.09	NITRATE	1.386	0.335	0.11	0.411	Rd*
Total:			338.206	306.676	100.00	17.724	

VL 01-05-2015 1/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

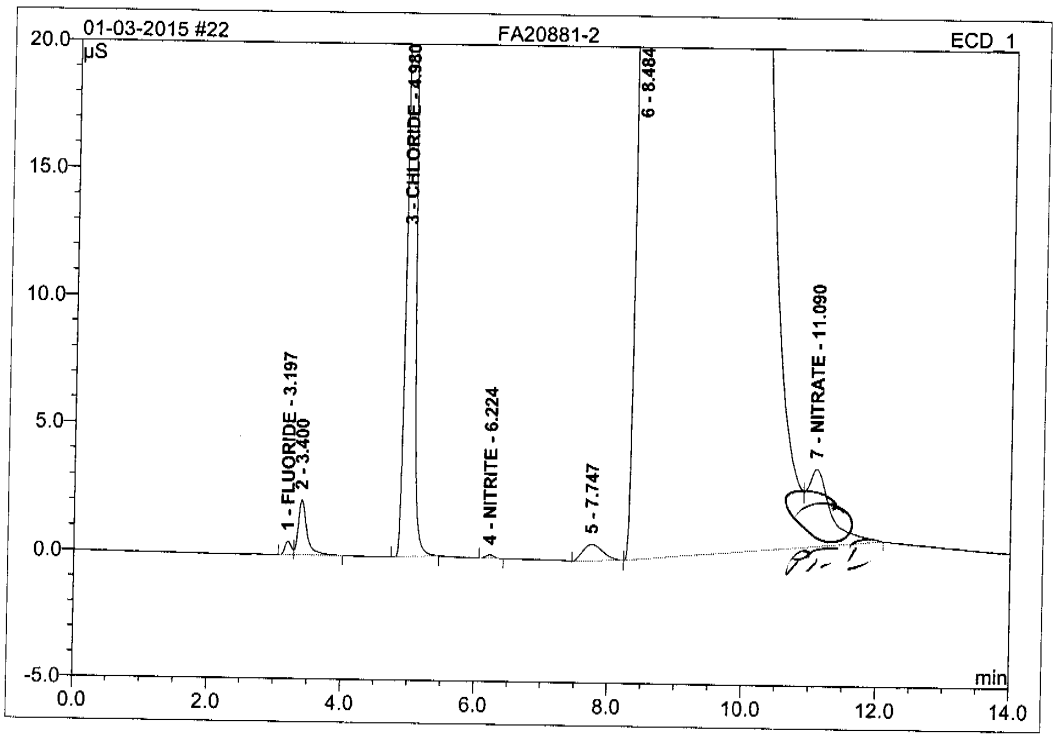
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

22 FA20881-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.544	0.059	0.02	0.104	BM
2	3.40	n.a.	2.154	0.322	0.10	n.a.	MB
3	4.98	CHLORIDE	41.760	4.986	1.63	17.184	BMB
4	6.22	NITRITE	0.138	0.019	0.01	0.024	BMB
5	7.75	n.a.	0.659	0.231	0.08	n.a.	BMB
6	8.48	n.a.	291.565	299.780	97.75	n.a.	BM
7	11.09	NITRATE	3.032	1.279	0.42	1.569	MB
Total:			339.853	306.676	100.00	18.882	

1/4 01-05-2015

01/06/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

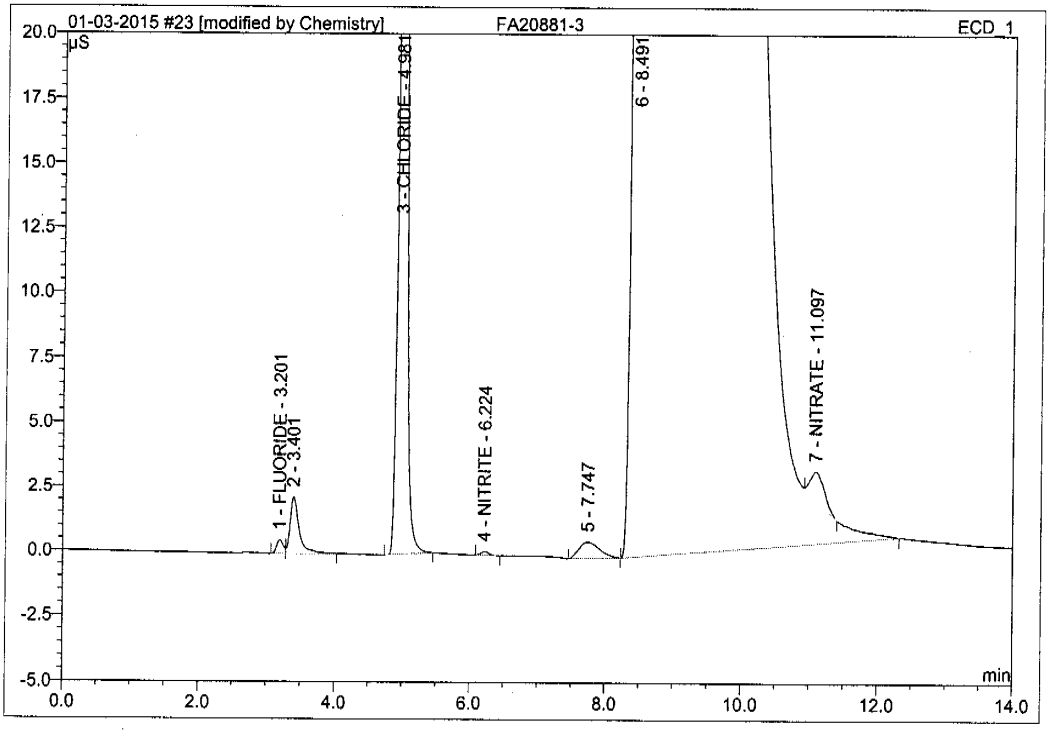
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:08 AM

23 FA20881-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.527	0.058	0.02	0.101	BM
2	3.40	n.a.	2.202	0.336	0.11	n.a.	MB
3	4.98	CHLORIDE	45.930	5.513	1.80	18.999	BMB
4	6.22	NITRITE	0.148	0.020	0.01	0.025	BMB
5	7.75	n.a.	0.640	0.228	0.07	n.a.	BMB
6	8.49	n.a.	289.885	299.711	97.91	n.a.	BMB*
7	11.10	NITRATE	1.064	0.245	0.08	0.301	Rd*
Total:			340.397	306.110	100.00	19.427	

1/4 01-05-2015 01/05/15

Anions/Integration

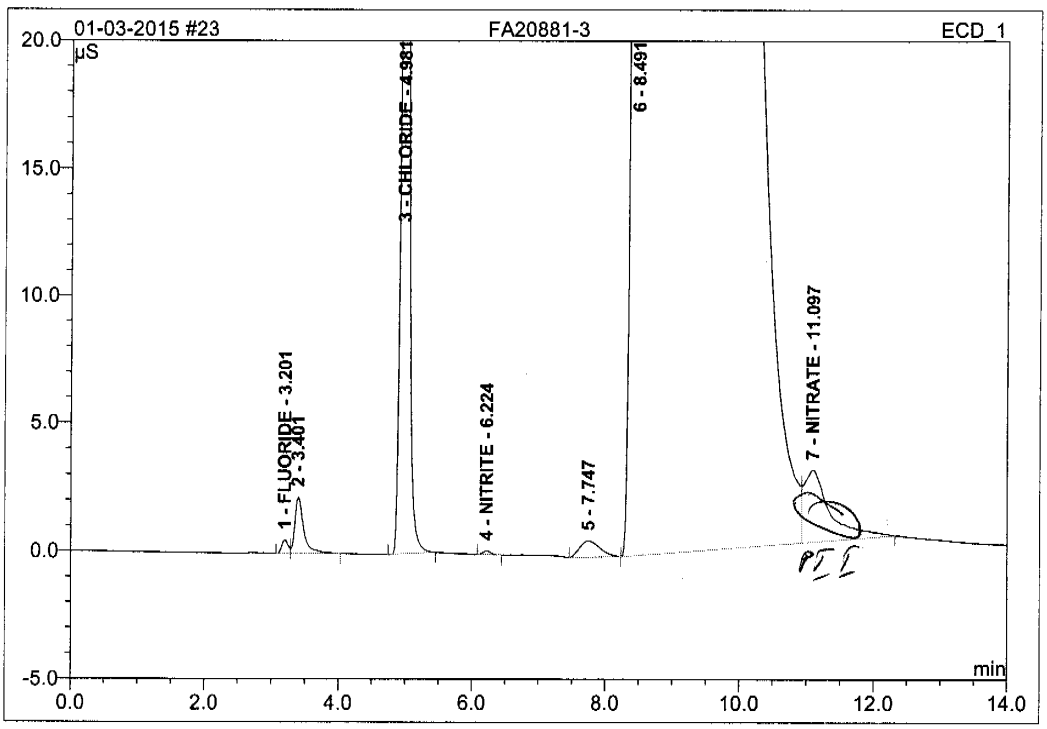
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

23 FA20881-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.527	0.058	0.02	0.101	BM
2	3.40	n.a.	2.202	0.336	0.11	n.a.	MB
3	4.98	CHLORIDE	45.930	5.513	1.80	18.999	BMB
4	6.22	NITRITE	0.148	0.020	0.01	0.025	BMB
5	7.75	n.a.	0.640	0.228	0.07	n.a.	BMB
6	8.49	n.a.	289.885	298.667	97.57	n.a.	BM
7	11.10	NITRATE	2.820	1.289	0.42	1.582	MB
Total:			342.153	306.110	100.00	20.708	

MA 01-05-2015 JPL 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

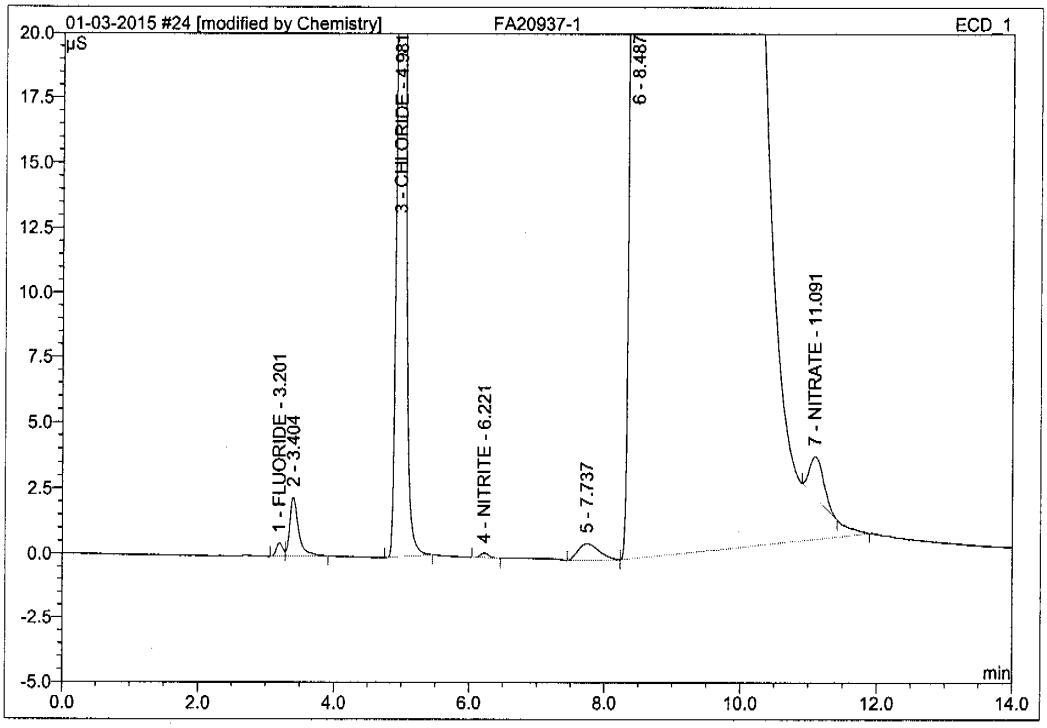
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:09 AM

24 FA20937-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-1**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.516	0.057	0.02	0.100	BM
2	3.40	n.a.	2.257	0.341	0.11	n.a.	MB
3	4.98	CHLORIDE	51.570	6.193	2.01	21.345	BMB
4	6.22	NITRITE	0.175	0.024	0.01	0.031	BMB
5	7.74	n.a.	0.653	0.237	0.08	n.a.	BMB
6	8.49	n.a.	290.951	300.792	97.66	n.a.	BMB*
7	11.09	NITRATE	1.521	0.365	0.12	0.448	Rd*
Total:			347.643	308.009	100.00	21.923	

VN 01-05-2015 01/05/15

Anions/Integration

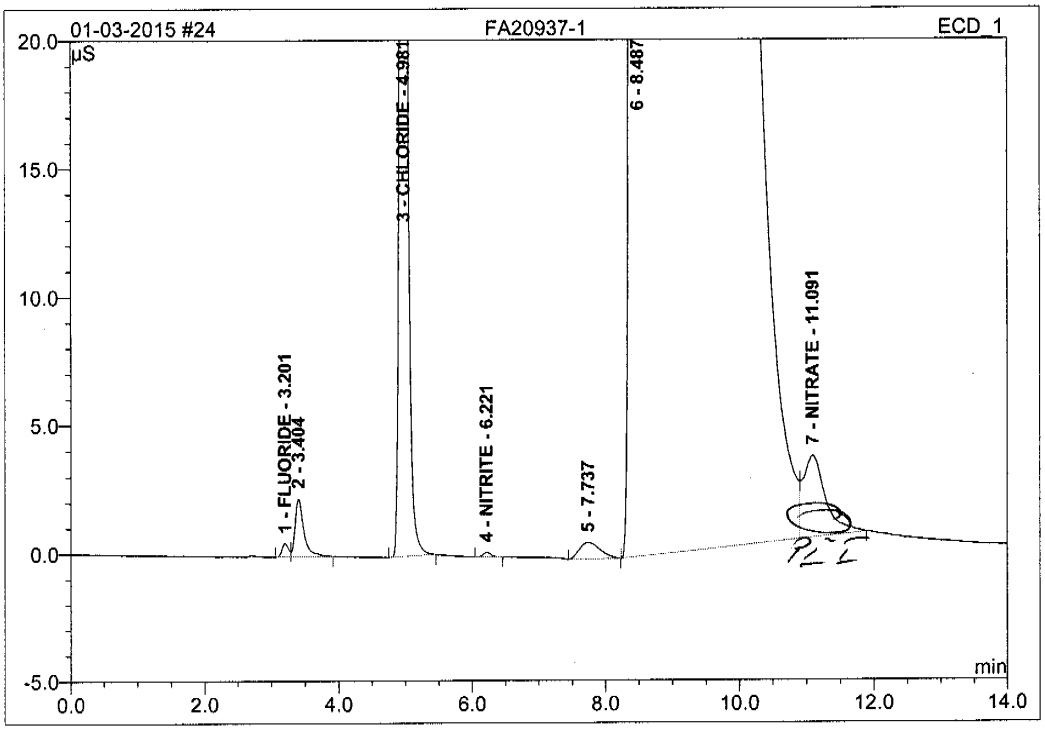
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

24 FA20937-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-1**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.516	0.057	0.02	0.100	BM
2	3.40	n.a.	2.257	0.341	0.11	n.a.	MB
3	4.98	CHLORIDE	51.570	6.193	2.01	21.345	BMB
4	6.22	NITRITE	0.175	0.024	0.01	0.031	BMB
5	7.74	n.a.	0.653	0.237	0.08	n.a.	BMB
6	8.49	n.a.	290.951	299.933	97.38	n.a.	BM
7	11.09	NITRATE	3.170	1.224	0.40	1.501	MB
Total:			349.292	308.009	100.00	22.976	

01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

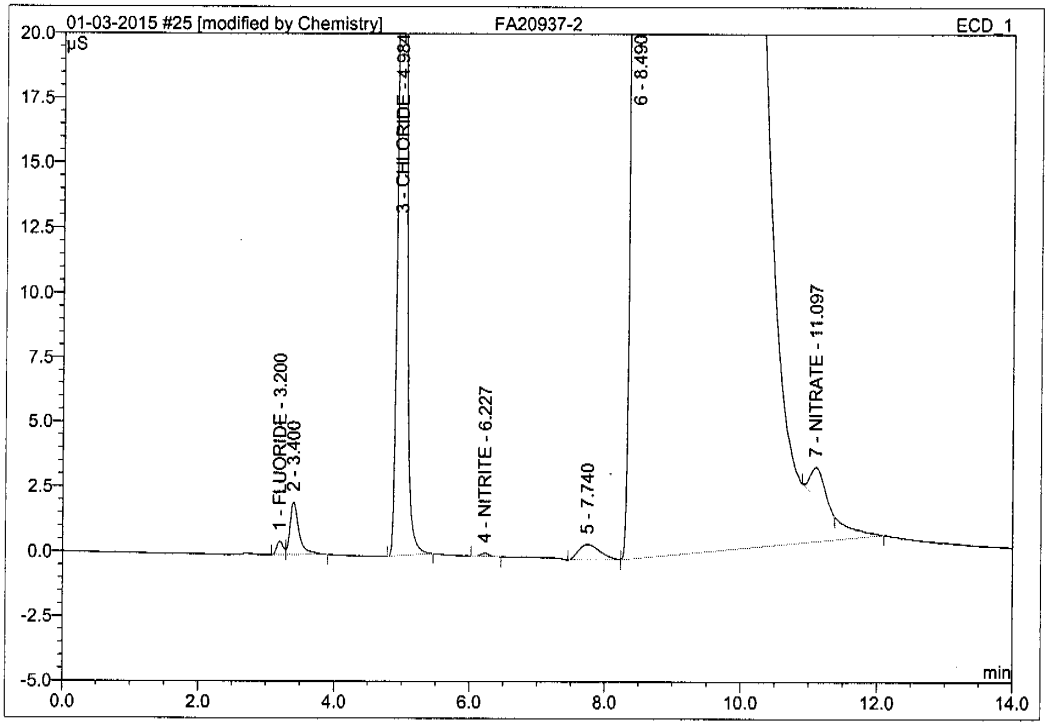
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:09 AM

25 FA20937-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-2**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.518	0.058	0.02	0.101	BM
2	3.40	n.a.	2.032	0.307	0.10	n.a.	MB
3	4.98	CHLORIDE	46.301	5.587	1.82	19.258	BMB
4	6.23	NITRITE	0.124	0.018	0.01	0.022	BMB
5	7.74	n.a.	0.600	0.218	0.07	n.a.	BMB
6	8.49	n.a.	291.047	301.009	97.90	n.a.	BMB*
7	11.10	NITRATE	1.173	0.277	0.09	0.340	Rd*
Total:			341.796	307.474	100.00	19.721	

VM 01-05-2015

01/05/15

Anions/Integration

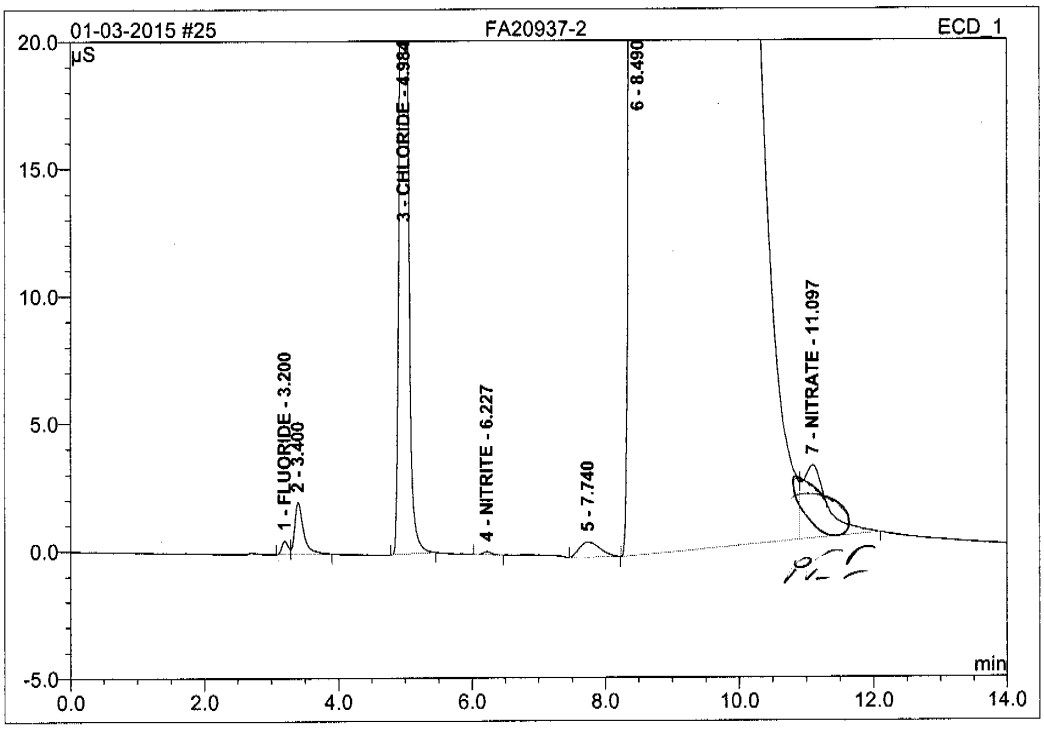
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

25 FA20937-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-2**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 15:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.518	0.058	0.02	0.101	BM
2	3.40	n.a.	2.032	0.307	0.10	n.a.	MB
3	4.98	CHLORIDE	46.301	5.587	1.82	19.258	BMB
4	6.23	NITRITE	0.124	0.018	0.01	0.022	BMB
5	7.74	n.a.	0.600	0.218	0.07	n.a.	BMB
6	8.49	n.a.	291.047	300.026	97.58	n.a.	BM
7	11.10	NITRATE	2.868	1.261	0.41	1.546	MB
Total:			343.491	307.474	100.00	20.927	

VG 01-05-2015

01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

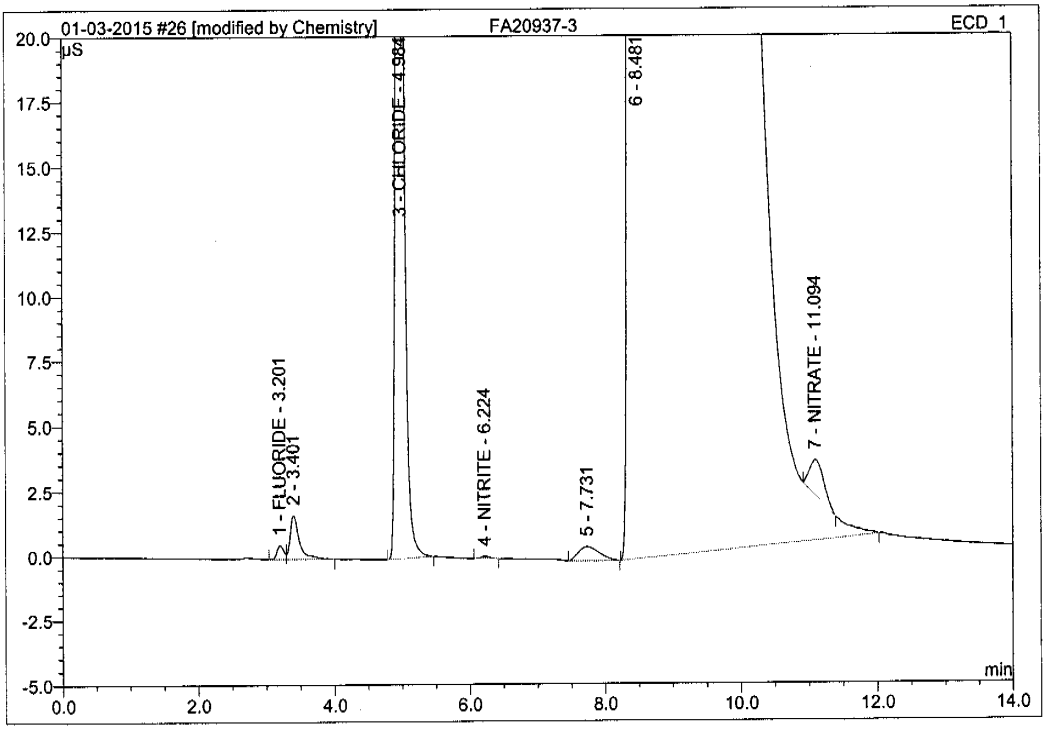
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:10 AM

26 FA20937-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-3**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.529	0.060	0.02	0.106	BM
2	3.40	n.a.	1.696	0.264	0.08	n.a.	MB
3	4.98	CHLORIDE	50.007	6.036	1.93	20.805	BMB
4	6.22	NITRITE	0.102	0.014	0.00	0.018	BMB
5	7.73	n.a.	0.552	0.198	0.06	n.a.	BMB
6	8.48	n.a.	294.515	305.185	97.79	n.a.	BMB*
7	11.09	NITRATE	1.345	0.328	0.10	0.402	Rd*
Total:			348.746	312.086	100.00	21.331	

lh 01-05-2015

01/05/15

Anions/Integration

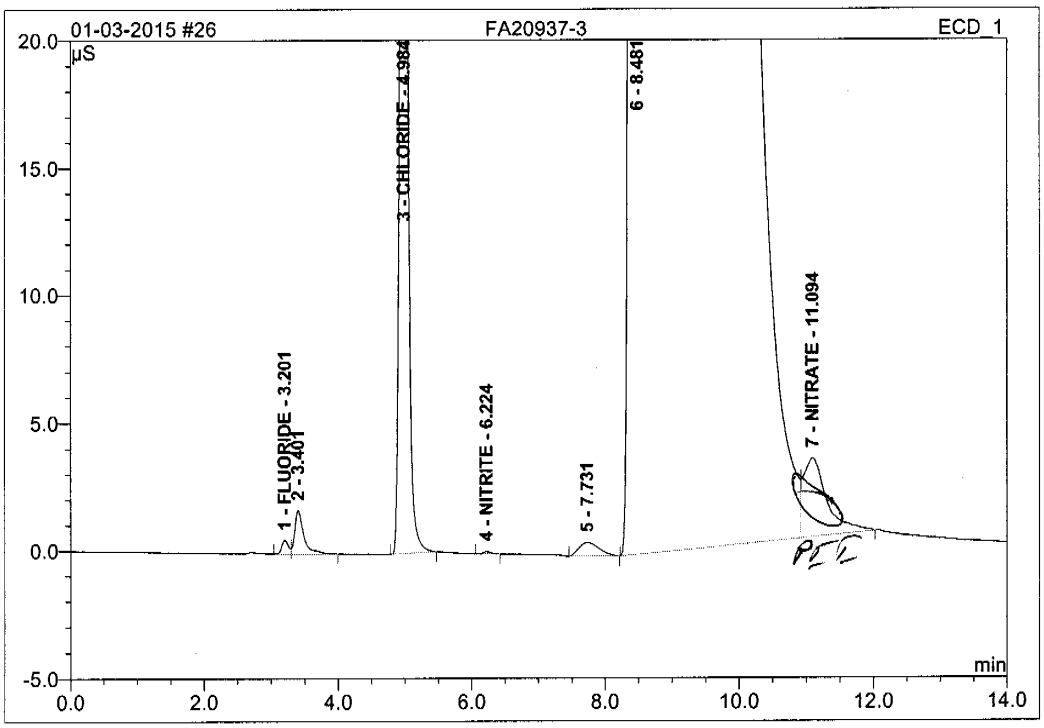
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

26 FA20937-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20937-3**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.529	0.060	0.02	0.106	BM
2	3.40	n.a.	1.696	0.264	0.08	n.a.	MB
3	4.98	CHLORIDE	50.007	6.036	1.93	20.805	BMB
4	6.22	NITRITE	0.102	0.014	0.00	0.018	BMB
5	7.73	n.a.	0.552	0.198	0.06	n.a.	BMB
6	8.48	n.a.	294.515	304.246	97.49	n.a.	BM
7	11.09	NITRATE	3.084	1.267	0.41	1.554	MB
Total:			350.485	312.086	100.00	22.483	

1.4 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

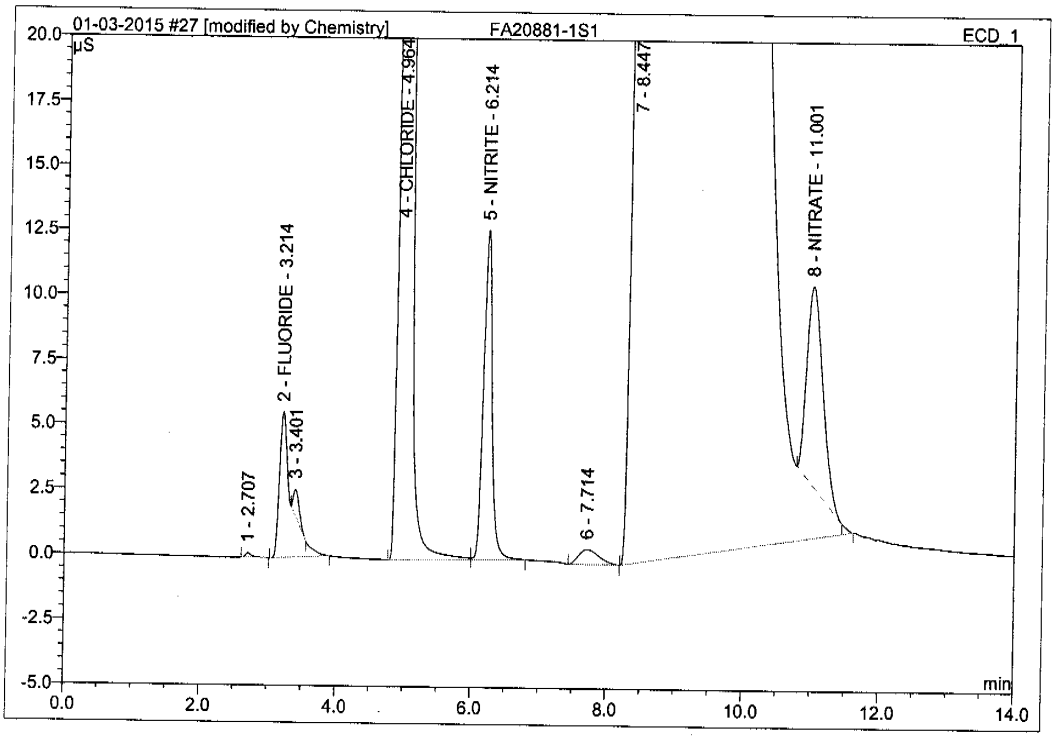
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

27 FA20881-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.182	0.019	0.01	n.a.	BMB
2	3.21	FLUORIDE	5.590	1.125	0.33	1.974	BMB
3	3.40	n.a.	1.031	0.105	0.03	n.a.	Rd
4	4.96	CHLORIDE	167.327	21.010	6.21	72.413	BM
5	6.21	NITRITE	12.678	1.882	0.56	2.395	MB
6	7.71	n.a.	0.586	0.204	0.06	n.a.	BMB
7	8.45	n.a.	306.545	311.839	92.18	n.a.	BMB*
8	11.00	NITRATE	7.638	2.103	0.62	2.580	Rd*
Total:			501.576	338.288	100.00	79.361	

VH 01-05-2015 01/05/15

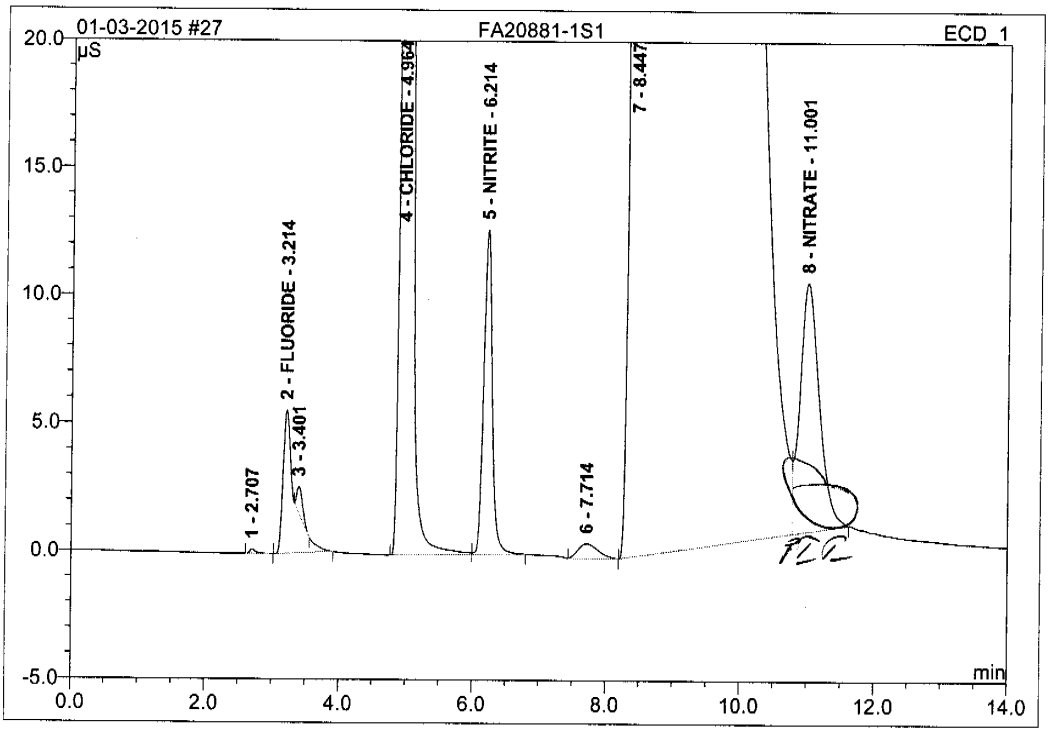
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

27 FA20881-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.182	0.019	0.01	n.a.	BMB
2	3.21	FLUORIDE	5.590	1.125	0.33	1.974	BMB
3	3.40	n.a.	1.031	0.105	0.03	n.a.	Rd
4	4.96	CHLORIDE	167.327	21.010	6.21	72.413	BM
5	6.21	NITRITE	12.678	1.882	0.56	2.395	MB
6	7.71	n.a.	0.586	0.204	0.06	n.a.	BMB
7	8.45	n.a.	306.545	310.711	91.85	n.a.	BM
8	11.00	NITRATE	9.713	3.231	0.96	3.963	MB
Total:			503.651	338.288	100.00	80.745	

V.K 01-05-2015 01/05/15

Anions/Integration

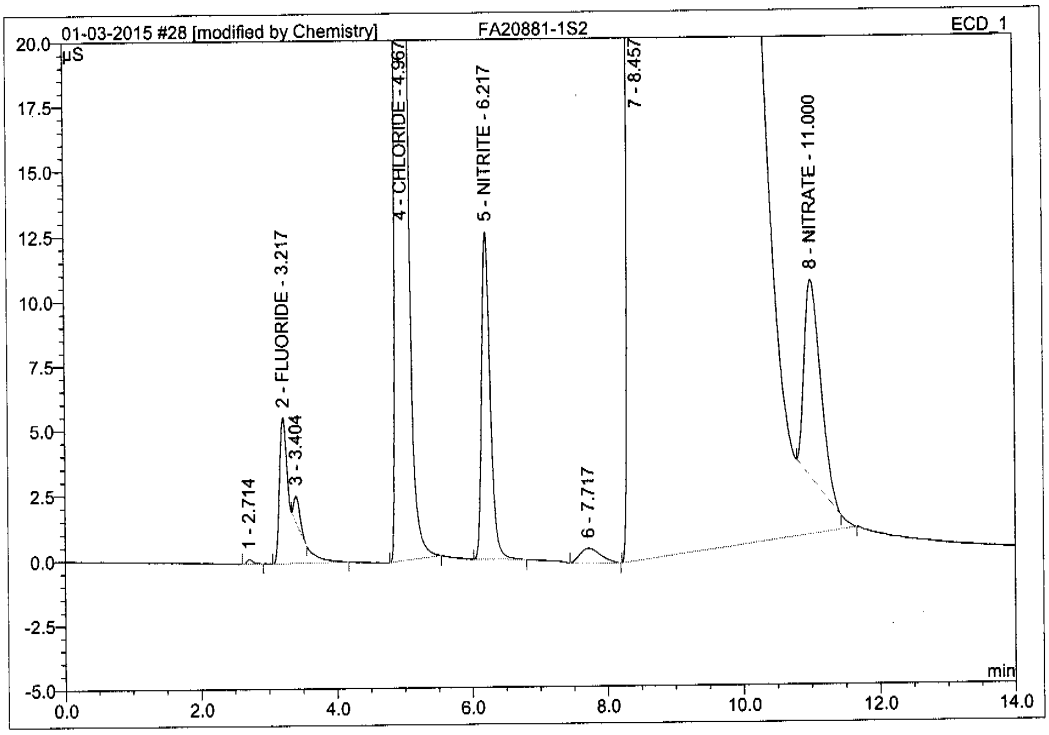
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

28 FA20881-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.170	0.017	0.01	n.a.	BMB
2	3.22	FLUORIDE	5.594	1.162	0.34	2.038	BMB
3	3.40	n.a.	1.008	0.103	0.03	n.a.	Rd
4	4.97	CHLORIDE	166.461	20.828	6.17	71.784	BMB
5	6.22	NITRITE	12.615	1.851	0.55	2.356	BMB
6	7.72	n.a.	0.573	0.201	0.06	n.a.	BMB
7	8.46	n.a.	305.906	311.452	92.23	n.a.	BMB*
8	11.00	NITRATE	7.640	2.094	0.62	2.568	Rd*
Total:			499.967	337.707	100.00	78.746	

VH 01-05-2015

01/05/15

Anions/Integration

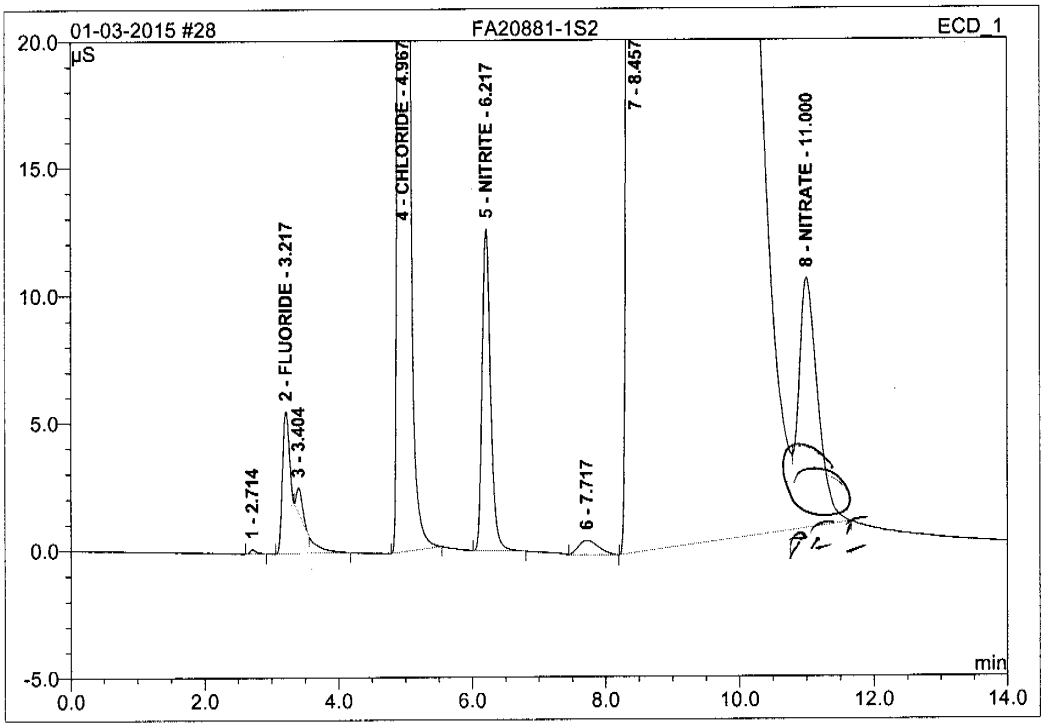
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

28 FA20881-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20881-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	2.71	n.a.	0.170	0.017	0.01	n.a.	BMB
2	3.22	FLUORIDE	5.594	1.162	0.34	2.038	BMB
3	3.40	n.a.	1.008	0.103	0.03	n.a.	Rd
4	4.97	CHLORIDE	166.461	20.828	6.17	71.784	BMB
5	6.22	NITRITE	12.615	1.851	0.55	2.356	BMB
6	7.72	n.a.	0.573	0.201	0.06	n.a.	BMB
7	8.46	n.a.	305.906	310.284	91.88	n.a.	BM
8	11.00	NITRATE	9.797	3.262	0.97	4.001	MB
Total:			502.123	337.707	100.00	80.178	

VL 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

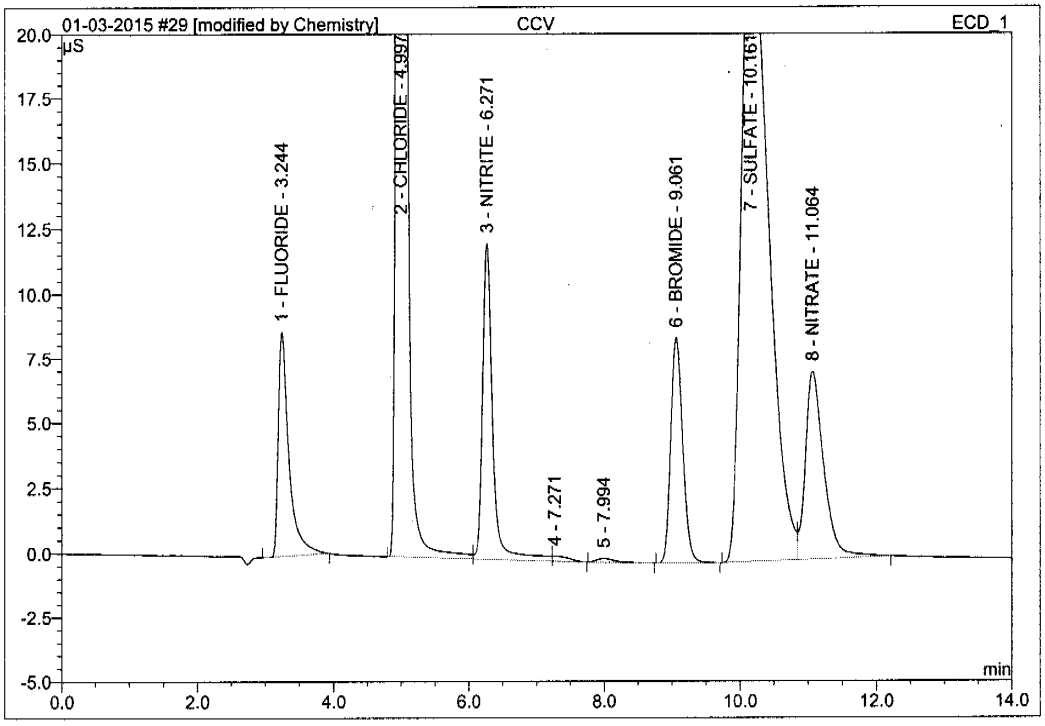
Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

1/5/2015 10:15 AM

29 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	8.644	1.561	4.54	2.737	BMB*
2	5.00	CHLORIDE	120.692	15.160	44.11	52.252	BM
3	6.27	NITRITE	12.174	2.106	6.13	2.681	M
4	7.27	n.a.	0.200	0.055	0.16	n.a.	MB
5	7.99	n.a.	0.151	0.047	0.14	n.a.	BMB
6	9.06	BROMIDE	8.702	1.770	5.15	13.259	BMB
7	10.16	SULFATE	26.131	11.432	33.26	52.148	BM
8	11.06	NITRATE	7.230	2.241	6.52	2.749	MB
Total:			183.925	34.372	100.00	125.826	

VK 01-05-2015 01/05/15

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

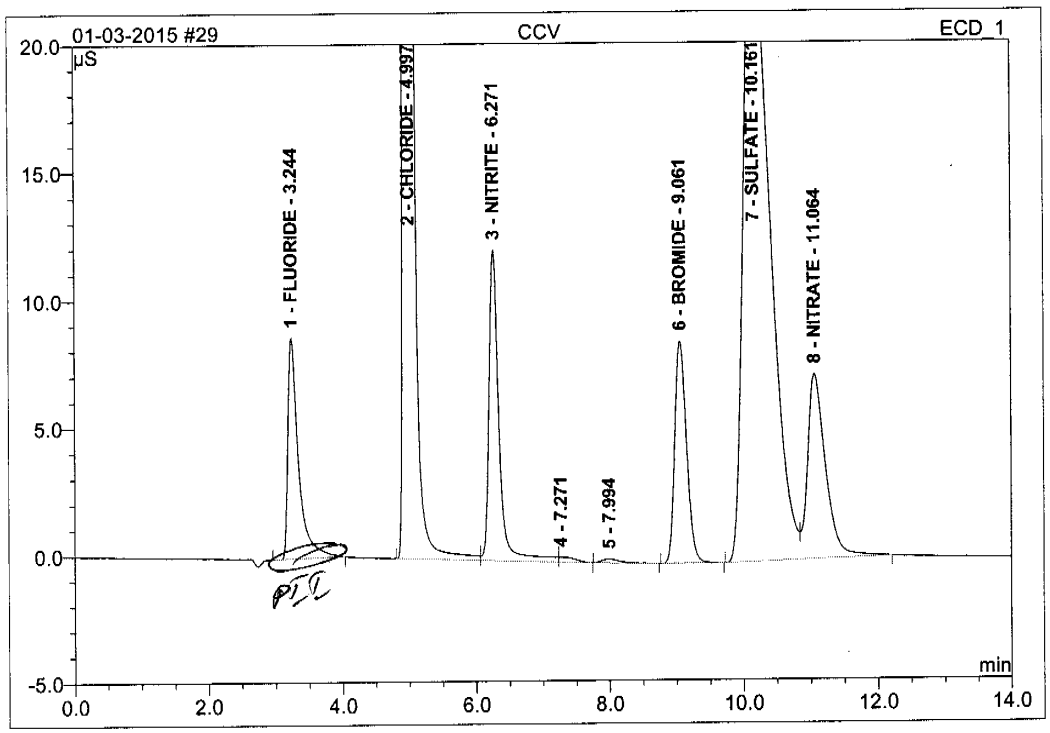
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:01-03-2015

29 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.24	FLUORIDE	8.659	1.586	4.61	2.782	BMB
2	5.00	CHLORIDE	120.692	15.160	44.07	52.252	BM
3	6.27	NITRITE	12.174	2.106	6.12	2.681	M
4	7.27	n.a.	0.200	0.055	0.16	n.a.	MB
5	7.99	n.a.	0.151	0.047	0.14	n.a.	BMB
6	9.06	BROMIDE	8.702	1.770	5.14	13.259	BMB
7	10.16	SULFATE	26.131	11.432	33.24	52.148	BM
8	11.06	NITRATE	7.230	2.241	6.51	2.749	MB
Total:			183.939	34.398	100.00	125.871	

VL 01-05-2015

01/05/15

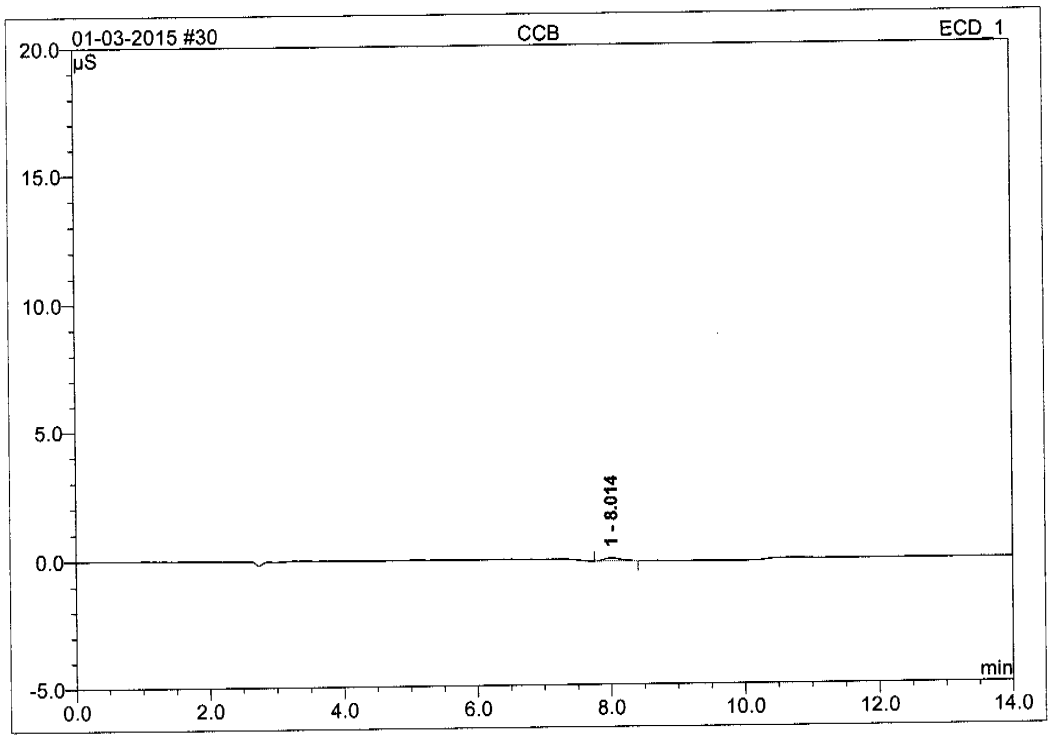
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

30 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.01	n.a.	0.123	0.035	100.00	n.a.	BMB
Total:			0.123	0.035	100.00	0.000	

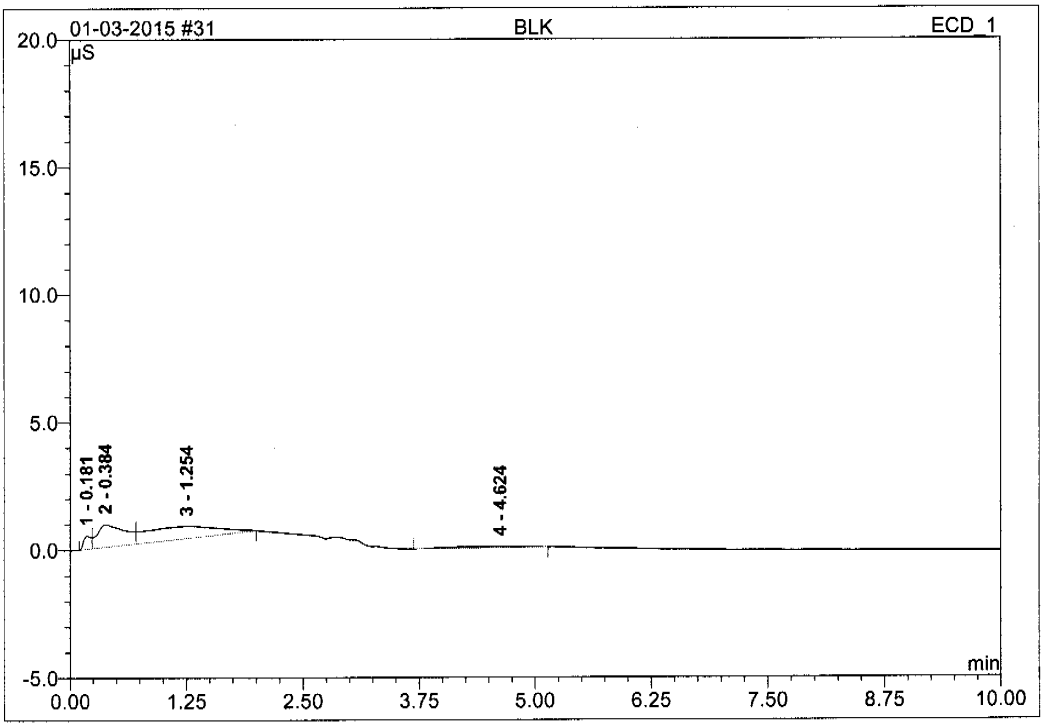
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

31 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/3/2015 17:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.00**	*Sample Amount:*	**1.0000**



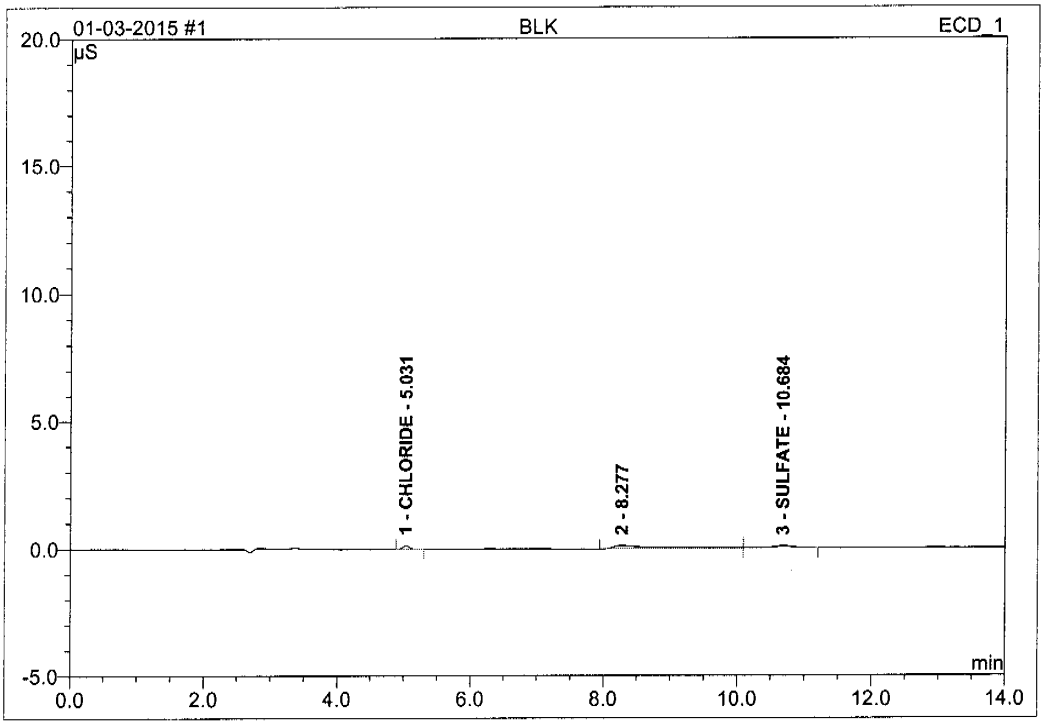
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	0.18	n.a.	0.525	0.051	5.99	n.a.	BM
2	0.38	n.a.	0.895	0.308	36.40	n.a.	M
3	1.25	n.a.	0.476	0.439	51.91	n.a.	MB
4	4.62	n.a.	0.050	0.048	5.70	n.a.	BMB
Total:			1.945	0.846	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

1 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



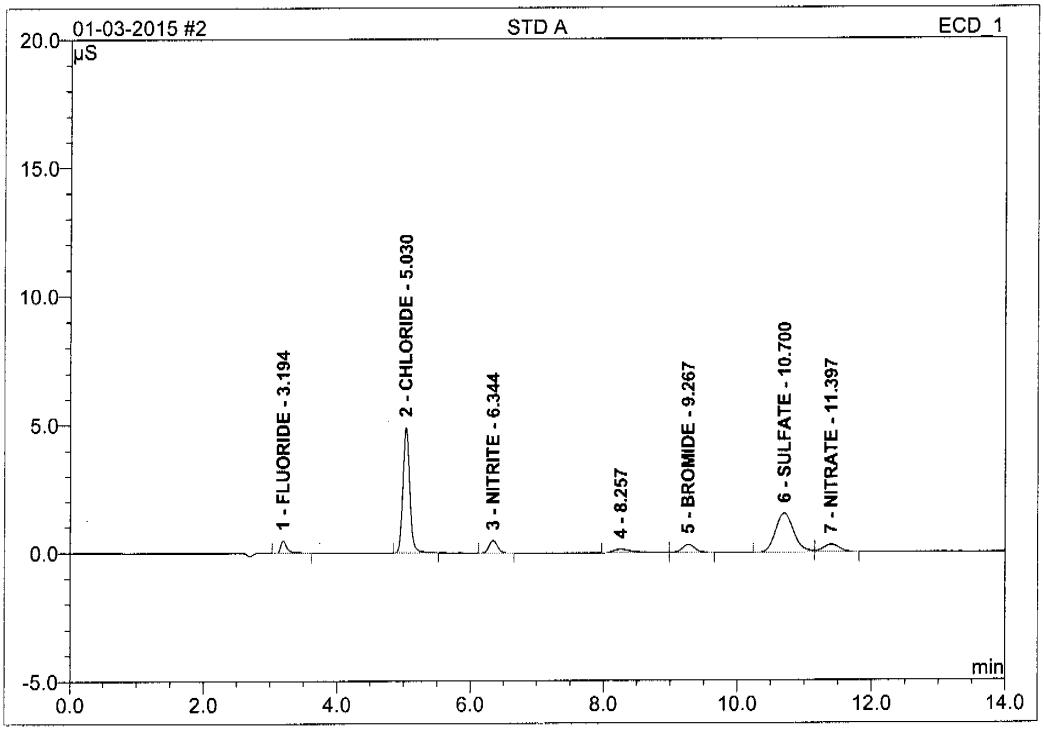
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.03	CHLORIDE	0.139	0.016	10.08	0.056	BMB
2	8.28	n.a.	0.134	0.108	67.59	n.a.	BM
3	10.68	SULFATE	0.083	0.036	22.33	0.163	MB
Total:			0.356	0.160	100.00	0.218	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

2 STD A

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD A**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

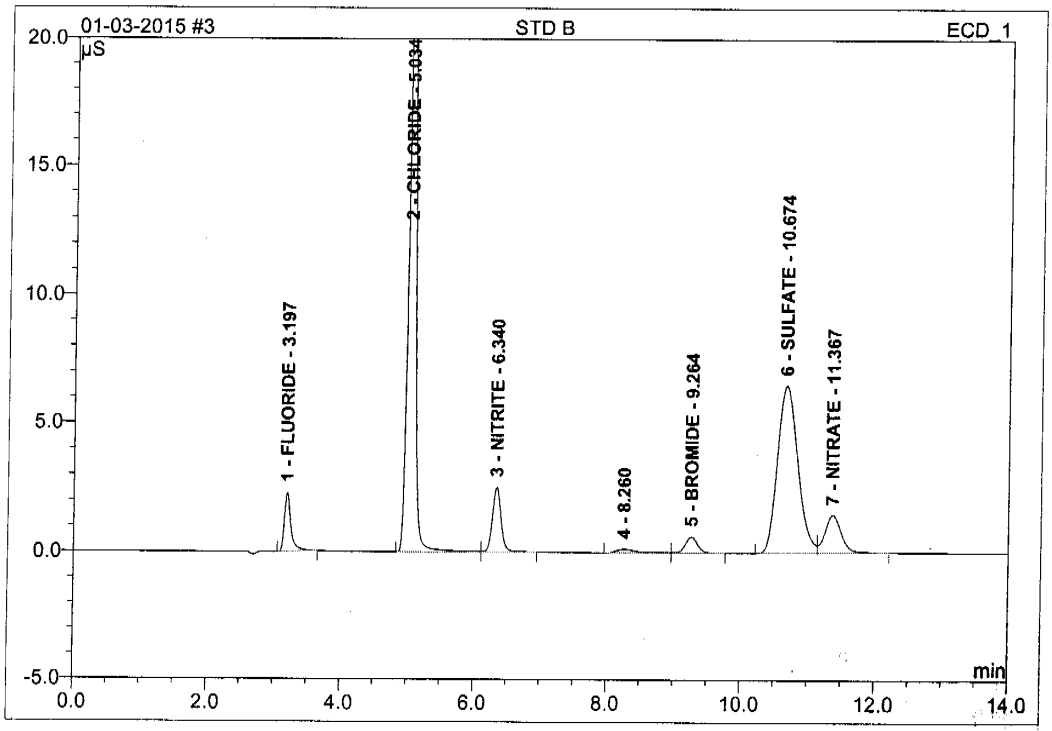


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.473	0.051	3.75	0.090	BMB
2	5.03	CHLORIDE	4.909	0.581	42.50	2.003	BMB
3	6.34	NITRITE	0.484	0.070	5.13	0.089	BMB
4	8.26	n.a.	0.138	0.048	3.52	n.a.	BM
5	9.27	BROMIDE	0.308	0.065	4.75	0.486	MB
6	10.70	SULFATE	1.513	0.470	34.40	2.146	BM
7	11.40	NITRATE	0.297	0.081	5.95	0.100	MB
Total:			8.121	1.367	100.00	4.914	

3 STD B

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD B**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



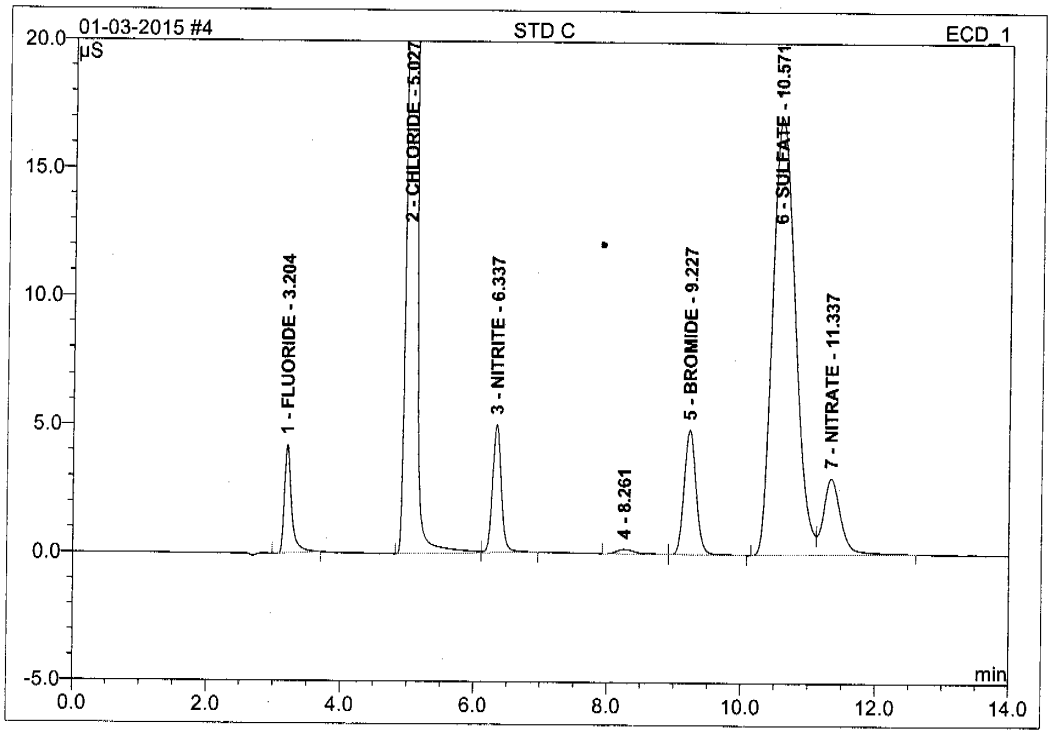
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	2.287	0.257	3.93	0.450	BMB
2	5.03	CHLORIDE	25.145	3.015	46.23	10.392	BM
3	6.34	NITRITE	2.508	0.374	5.74	0.476	MB
4	8.26	n.a.	0.139	0.047	0.72	n.a.	BM
5	9.26	BROMIDE	0.625	0.130	1.99	0.975	MB
6	10.67	SULFATE	6.489	2.280	34.97	10.402	BM
7	11.37	NITRATE	1.469	0.418	6.41	0.513	MB
Total:			38.662	6.521	100.00	23.208	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

4 STD C

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD C**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



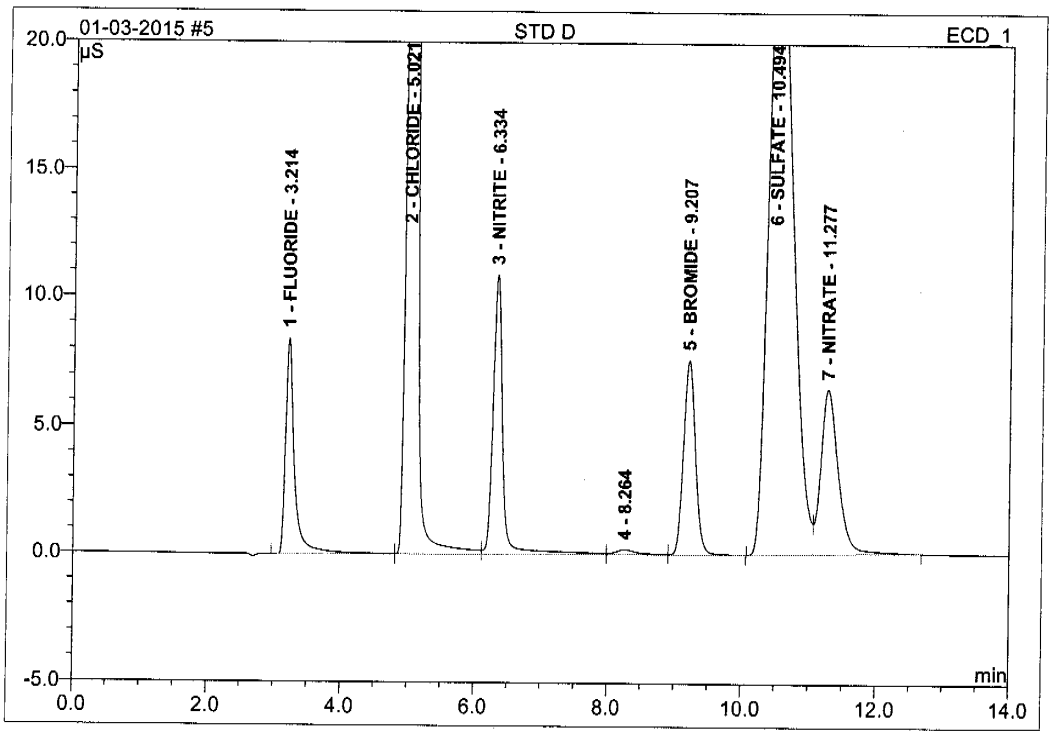
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	4.207	0.514	2.69	0.902	BMB
2	5.03	CHLORIDE	76.065	9.247	48.43	31.870	BM
3	6.34	NITRITE	4.993	0.761	3.99	0.969	MB
4	8.26	n.a.	0.165	0.052	0.27	n.a.	BM
5	9.23	BROMIDE	4.849	0.997	5.22	7.474	MB
6	10.57	SULFATE	17.033	6.625	34.69	30.218	BM
7	11.34	NITRATE	2.961	0.899	4.71	1.102	MB
Total:			110.273	19.095	100.00	72.535	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

5 STD D

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD D**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



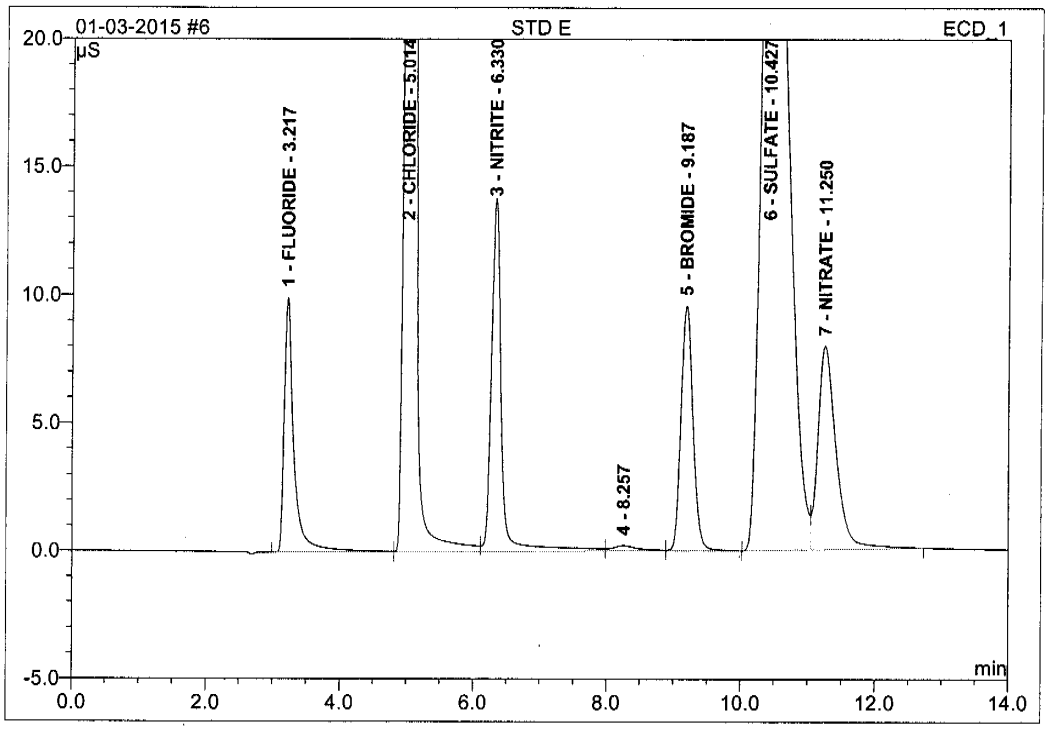
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.405	1.328	4.23	2.329	BM
2	5.02	CHLORIDE	115.261	14.194	45.22	48.922	M
3	6.33	NITRITE	10.881	1.865	5.94	2.374	M
4	8.26	n.a.	0.197	0.082	0.26	n.a.	M
5	9.21	BROMIDE	7.590	1.576	5.02	11.810	MB
6	10.49	SULFATE	25.682	10.362	33.01	47.266	BM
7	11.28	NITRATE	6.462	1.983	6.32	2.433	MB
Total:			174.479	31.392	100.00	115.134	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

6 STD E

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD E**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

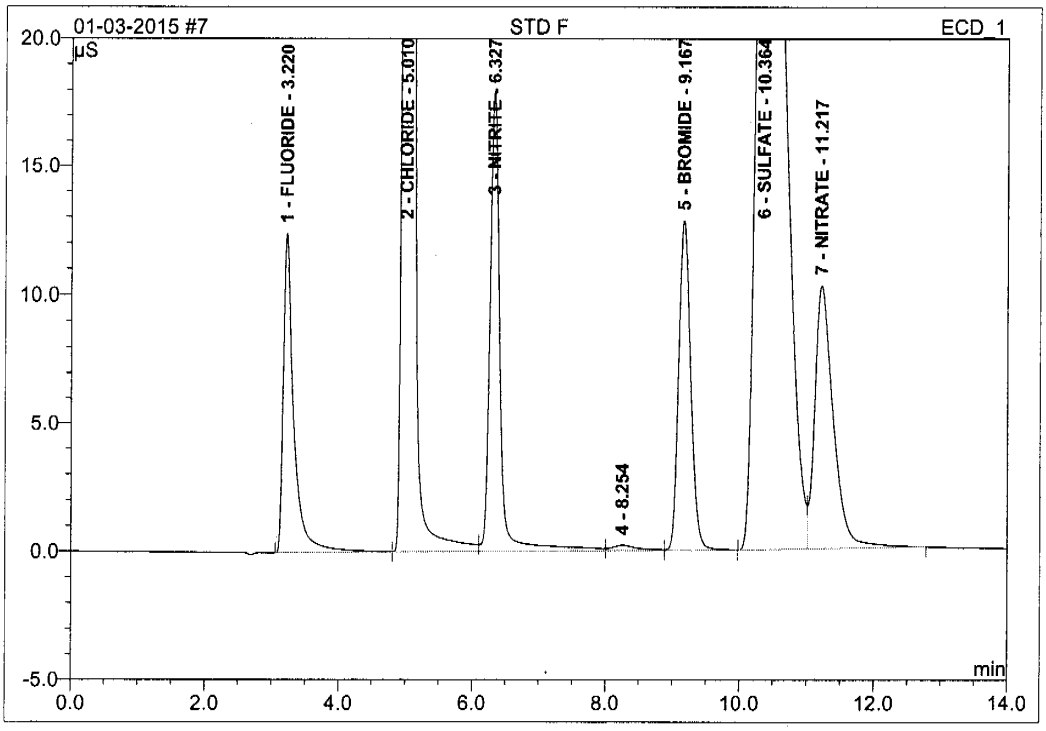


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	9.959	1.678	3.99	2.942	BM
2	5.01	CHLORIDE	152.909	19.012	45.27	65.526	M
3	6.33	NITRITE	13.775	2.406	5.73	3.063	M
4	8.26	n.a.	0.216	0.098	0.23	n.a.	M
5	9.19	BROMIDE	9.569	1.992	4.74	14.926	MB
6	10.43	SULFATE	33.517	14.315	34.09	65.296	BM
7	11.25	NITRATE	7.944	2.496	5.94	3.061	MB
Total:			227.889	41.996	100.00	154.814	

7 STD F

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD F**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



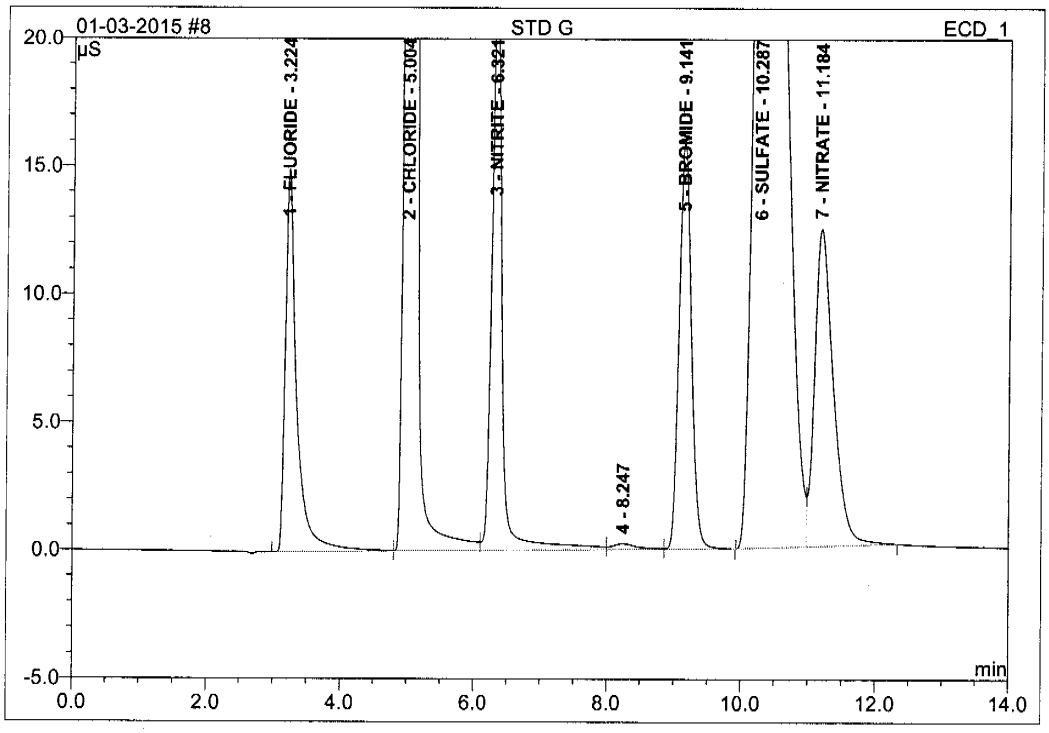
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	12.395	2.267	4.35	3.976	BM
2	5.01	CHLORIDE	182.800	23.015	44.16	79.325	M
3	6.33	NITRITE	17.936	3.155	6.05	4.015	M
4	8.25	n.a.	0.212	0.095	0.18	n.a.	M
5	9.17	BROMIDE	12.807	2.683	5.15	20.102	MB
6	10.36	SULFATE	40.390	17.608	33.78	80.319	BM
7	11.22	NITRATE	10.250	3.294	6.32	4.041	MB
Total:			276.789	52.118	100.00	191.779	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

8 STD G

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

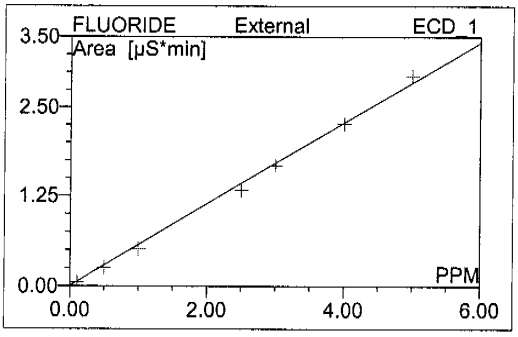


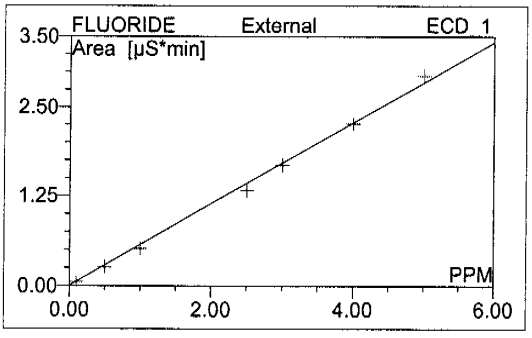
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	14.948	2.945	4.49	5.164	BM
2	5.00	CHLORIDE	228.832	29.054	44.32	100.137	M
3	6.32	NITRITE	22.125	3.946	6.02	5.022	M
4	8.25	n.a.	0.228	0.100	0.15	n.a.	M
5	9.14	BROMIDE	15.982	3.379	5.15	25.317	MB
6	10.29	SULFATE	48.349	22.100	33.71	100.811	BM
7	11.18	NITRATE	12.403	4.029	6.15	4.942	MB
Total:			342.867	65.553	100.00	241.393	

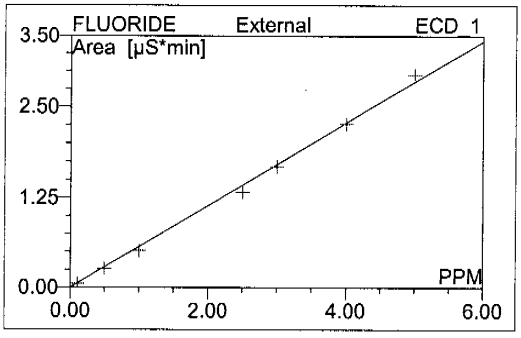
8 STD G

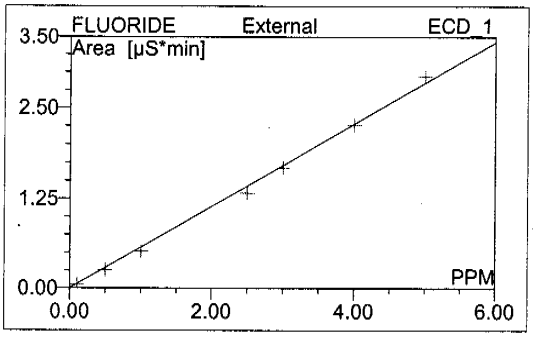
ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**###############**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**









No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	3.22	FLUORIDE	Lin	7	99.6655	0.0000	0.5702	0.0000
2	5.00	CHLORIDE	Lin	7	99.9287	0.0000	0.2901	0.0000
3	6.32	NITRITE	Lin	7	99.8942	0.0000	0.7858	0.0000
4	8.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	9.14	BROMIDE	Lin	7	99.8869	0.0000	0.1335	0.0000
6	10.29	SULFATE	Lin	7	99.8927	0.0000	0.2192	0.0000
7	11.18	NITRATE	Lin	7	99.8807	0.0000	0.8152	0.0000
Average:					99.8581	0.0000	0.4690	0.0000

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Southeast
ACCUTEST LABORATORIES

Reissue #1
04/11/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA20820

Sampling Date: 12/16/14

Report to:

FPM Remediations

i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **115**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

April 8, 2015

Ms. Ivana Raicevic
FPM Remediations, Inc.
5811 University Heights Blvd., Suite 101
San Antonio, Texas 78249

RE: Accutest job FA20820 Reissue

Dear Ms. Raicevic,

During a recent Accutest Management initiated 3rd party data review, an issue was discovered with some Ion Chromatography (IC) data. Some anions in associated Quality Control (QC) samples (Calibration Checks and/or Blank Spikes) were incorrectly or inconsistently integrated. These integration issues were isolated to a specific analyst. Accutest Southeast performed a comprehensive review of all IC data reported by this analyst. As a result of this review it was determined that some IC data for this job needed to be footnoted. Since only QC samples were impacted by these integration issues (no sample results changed), only the potential uncertainty associated with a reported result is impacted.

Anions analyzed by Ion Chromatography via EPA 300 or SW846 9056A have method specified quality control limits of 90-110%. Revised quality control data for the samples in question had a maximum recovery of 112% for Nitrate. Footnote applied to fractions 1 through 5.

The final report for job number FA20820 has been edited to reflect these changes.

Accutest apologizes for any inconvenience this may have caused and has taken corrective measures to prevent future issues. Please feel free to contact us if we can be of further assistance.

Sincerely,

Rick Watkins
Laboratory Director
Accutest Laboratories, SE

Norm Farmer
Technical Director
Accutest Laboratories, SE

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **7**
Section 4: Sample Results **8**
4.1: FA20820-1: XU854ISP06A 9
4.2: FA20820-2: XU854ISQ06A 12
4.3: FA20820-3: XU854ISR06A 15
4.4: FA20820-4: XU854ISL06A 18
4.5: FA20820-5: XU854ISJ06A 21
Section 5: Subcontract Lab Data **24**
Section 6: Misc. Forms **67**
6.1: Chain of Custody 68
Section 7: GC/MS Semi-volatiles - QC Data Summaries **71**
7.1: Method Blank Summary 72
7.2: Blank Spike Summary 73
7.3: Matrix Spike/Matrix Spike Duplicate Summary 74
7.4: Internal Standard Area Summaries 75
7.5: Initial and Continuing Calibration Summaries 78
Section 8: GC Semi-volatiles - QC Data Summaries **88**
8.1: Method Blank Summary 89
8.2: Blank Spike Summary 90
8.3: Laboratory Control Sample Summary 91
8.4: Matrix Spike/Matrix Spike Duplicate Summary 92
8.5: Duplicate Summary 93
8.6: Surrogate Recovery Summaries 95
8.7: GC Surrogate Retention Time Summaries 96
8.8: Initial and Continuing Calibration Summaries 98
Section 9: General Chemistry - QC Data Summaries **110**
9.1: Method Blank and Spike Results Summary 111
9.2: Matrix Spike Results Summary 112
9.3: Matrix Spike Duplicate Results Summary 113
9.4: Inst QC GN64657: Nitrogen, Nitrate 114

Sample Summary

FPM Remediations

Job No: FA20820

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20820-1	12/16/14	08:21	MS	12/17/14	SO	Soil	XU854ISP06A
FA20820-2	12/16/14	09:07	MS	12/17/14	SO	Soil	XU854ISQ06A
FA20820-3	12/16/14	10:32	MS	12/17/14	SO	Soil	XU854ISR06A
FA20820-4	12/16/14	11:35	MS	12/17/14	SO	Soil	XU854ISL06A
FA20820-5	12/16/14	13:30	MS	12/17/14	SO	Soil	XU854ISJ06A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20820

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 3:32:50 PM

5 Sample(s) were collected on 12/16/2014 and were received at Accutest SE on 12/17/2014 properly preserved, at 3.6 Deg. C and intact. These Samples received an Accutest job number of FA20820. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54390

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MS, FA20794-1MSD, FA20820-2DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25246

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. % RPD was within control limits in MS/MSD.

FA20794-1, 2, 3, 4 for Nitrogen, Nitrate: Associated CCV above upper control limits

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: January 6, 2015

Kim Benham, Client Services (signature on file)

Narrative revised by:

_____ Date: April 03, 2015

Svetlana Izosimova, QA Officer

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
GBB1221-CC1221	GCSEMI	BB045362.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1221-CC1221	GCSEMI	BB045385.D	o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1221-CC1221	GCSEMI	BB045397.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1221-ECC1221	GCSEMI	BB045407.D	PETN, Tetryl
GBB1221-IC1221	GCSEMI	BB045353.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1221-IC1221	GCSEMI	BB045354.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 3,4-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, DNX, HMX, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1221-IC1221	GCSEMI	BB045355.D	2,6-Dinitrotoluene, m-Nitrotoluene, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, PETN, TNX
GBB1221-IC1221	GCSEMI	BB045356.D	m-Nitrotoluene, MNX, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX
GBB1221-IC1221	GCSEMI	BB045358.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1221-IC1221	GCSEMI	BB045359.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1221-ICC1221	GCSEMI	BB045357.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1221-ICV1221	GCSEMI	BB045360.D	HMX, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1221-ICV1221	GCSEMI	BB045361.D	TNX
OP54390-BS	GCSEMI	BB045389.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
OP54390-MS	GCSEMI	BB045393.D	HMX, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, Tetryl
OP54390-MSD	GCSEMI	BB045394.D	HMX, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX
OP54390-PT1	GCSEMI	BB045390.D	1,3-Dinitrobenzene, HMX, m-Nitrotoluene, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, RDX
SQ295-IC295	MSSEMI	Q9300.D	Perchlorate

18 Manual Integrations were found for FA20820

Summary of Hits

Job Number: FA20820
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 12/16/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20820-1	**XU854ISP06A**					
Perchlorate		52.0	1.8	0.92	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		13.0	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20820-2	**XU854ISQ06A**					
Perchlorate		15.8	1.7	0.83	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		6.5	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20820-3	**XU854ISR06A**					
Perchlorate		11.7	1.7	0.85	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		4.2	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20820-4	**XU854ISL06A**					
Perchlorate		345	8.4	4.2	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		26.2	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20820-5	**XU854ISJ06A**					
Perchlorate		34.3	2.0	1.0	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		7.9	1.0	0.50	mg/kg	EPA 300/SW846 9056A

(a) Associated CCV outside control limits.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: XU854ISP06A
Lab Sample ID: FA20820-1 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9520.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.09 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	52.0	1.8	0.92	0.50	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISP06A
Lab Sample ID: FA20820-1 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045400.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	116%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISP06A		
Lab Sample ID:	FA20820-1	**Date Sampled:**	12/16/14
Matrix:	SO - Soil	**Date Received:**	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	13.0	1.0	0.50	0.50	mg/kg	1	12/29/14 16:45	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISQ06A
Lab Sample ID: FA20820-2 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9521.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.21 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	15.8	1.7	0.83	0.45	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISQ06A
Lab Sample ID: FA20820-2 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045401.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	117%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISQ06A		
Lab Sample ID:	FA20820-2	**Date Sampled:**	12/16/14
Matrix:	SO - Soil	**Date Received:**	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	6.5	1.0	0.50	0.50	mg/kg	1	12/29/14 17:02	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISR06A
Lab Sample ID: FA20820-3 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9526.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.18 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	11.7	1.7	0.85	0.47	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISR06A
Lab Sample ID: FA20820-3 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045404.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	49 U	98	49	43	ug/kg	
121-82-4	RDX	49 U	98	49	39	ug/kg	
606-20-2	2,6-Dinitrotoluene	49 U	98	49	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	49 U	98	49	39	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	49 U	98	49	39	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	49 U	98	49	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	49 U	98	49	39	ug/kg	
55-63-0	Nitroglycerine	490 U	980	490	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	120%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISR06A		
Lab Sample ID:	FA20820-3	**Date Sampled:**	12/16/14
Matrix:	SO - Soil	**Date Received:**	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	4.2	1.0	0.50	0.50	mg/kg	1	12/29/14 17:19	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISL06A
Lab Sample ID: FA20820-4
Matrix: SO - Soil
Method: SW846 6850 IN HOUSE
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/16/14
Date Received: 12/17/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9538.D	5	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.19 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	345	8.4	4.2	2.3	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISL06A
Lab Sample ID: FA20820-4 **Date Sampled:** 12/16/14
Matrix: SO - Soil **Date Received:** 12/17/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045405.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	120%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISL06A		
Lab Sample ID:	FA20820-4	**Date Sampled:**	12/16/14
Matrix:	SO - Soil	**Date Received:**	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	26.2	1.0	0.50	0.50	mg/kg	1	12/29/14 17:36	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISJ06A
Lab Sample ID: FA20820-5
Matrix: SO - Soil
Method: SW846 6850 IN HOUSE
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/16/14
Date Received: 12/17/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9528.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.00 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	34.3	2.0	1.0	0.55	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISJ06A
Lab Sample ID: FA20820-5
Matrix: SO - Soil
Method: SW846 8330B SW846 8330B
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/16/14
Date Received: 12/17/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045406.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	124%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISJ06A		
Lab Sample ID:	FA20820-5	**Date Sampled:**	12/16/14
Matrix:	SO - Soil	**Date Received:**	12/17/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	7.9	1.0	0.50	0.50	mg/kg	1	12/29/14 18:27	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Subcontract Lab Data

Report of Analysis

ANALYTICAL DATA PACKAGE
SDG # 1412231

PROJECT NAME: FA20820X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

5

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 12, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 42

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:
This is an original submittal of the final report package.

Analytical Information:
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:
No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

1412231

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: FA20820X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20820X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCL	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISP06A		12/16/14	8:21:00 AM	MS	SO	1					1				X	-01
2X	XU854ISQ06A		12/16/14	9:07:00 AM	MS	SO	1					1				X	-02
3X	XU854ISR06A		12/16/14	10:32:00 AM	MS	SO	1					1				X	-03
4X	XU854ISL06A		12/16/14	11:35:00 AM	MS	SO	1					1				X	-04
5X	XU854ISJ06A		12/16/14	1:30:00 PM	MS	SO	1					1				X	-05

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

1 Relinquished by Sampler:	Date Time: 12-29-14 7:00	Received By: 1	2 Relinquished By:	Date Time:	Received By: 2
3 Relinquished by Sampler:	Date Time:	Received By: 3	4 Relinquished By:	Date Time:	Received By: 4
5 Relinquished by:	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

1412231

ACCUTEST LABORATORIES FA20820

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 12/30/14 @0900 Workorder# 1412231

1. Tracking # 5815 (last 4 digits, FedEx)
   Courier: FedEx
2. Temperature of rep. sample or temp blank when opened: 0.8 °C + correction factor(-0.0) = 0.8 °C
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)
4. Were custody seals on outside of cooler? (YES)..NO...NA
   If yes, how many and where: 2 - front
5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA
6. Were custody papers inside cooler? (YES)..NO...NA
   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 12/30/14
7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)
   Were these signed and dated correctly? YES...NO...(NA)
8. Packing material used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None
9. Cooling process: Ice (Ice-pack) Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA
12. Did all container labels and tags agree with custody papers? (YES)..NO...NA
13. a. Were VOA vials received? YES..(NO)..NA
    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO...(NA)
14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES..(NO)..NA...Comments_____
    If multiple coolers, sequence # ____
    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) JTG 12/30/14
15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)
    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...(NA)
16. Was residual chlorine present? YES...NO...(NA)
    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) JTG 12/30/14
17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA
18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA
19. Were correct containers used for the analysis requested? (YES)..NO...NA If not, PM notified? YES...NO...(NA)
20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO...(NA)
21. Were there Non-Conformance issues at login? YES..(NO)...NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) JTG 12/30/14

I certify that I attached a label with the unique LIMS number to each container (initial/date) JTG 12/30/14

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) JTG 12/30/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM (Continued)

LIMS Data Entry Second Check Workorder# 1412231

22. Cooler Receipt Form issues reviewed and communicated to PM? YES...NO...NA

23. Client and Project verified to match the COC/CRF in LIMS Project Screen? YES...NO...NA

24. Following items verified to items verified to match the COC/CRF in LIMS Receipt Screen:

a. Received Date/Received By YES...NO...NA

b. TAT (COC specified different?) YES...NO...NA

c. Shipping Container Temperatures (corrected temps) YES...NO ...NA

d. Condition Items (seals, intact, labels, preservation, ROI) YES...NO...NA

25. Following LIMS Sample Information verified against COC for each sample:

a. Name YES...NO...NA

b. QC Source YES...NO...NA

c. Matrix YES...NO...NA

d. Sample Type YES...NO...NA

e. Sampled Date/Time (Correct Time Zone) YES...NO...NA

f. Work Analyses/Versions (if applicable) YES...NO...NA

g. Sample Issues included in comments (limited volume, concentration warnings, etc.)? YES...NO...NA

h. Unpreserved VOA holding time set to 7 days? YES...NO...NA

26. Containers consistent with tests requested? YES...NO...NA

27. Field data entered and matching COC? YES...NO...NA

I certify that I have verified the LIMS data entry and answered questions 23-27 above (initial/date): _____

Additional Details:

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1412231

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	12/31/2014		

C:\Users\sgordon\Desktop\QS10_R21_20140729_CoolerReceiptForm.doc

1412231

Empirical Laboratories, LLC

Client: Accutest Laboratories
Project: Nitrocellulose

Project Manager: Sonya Gordon
Project Number: ACC_Nitro

Report To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Due to Client: 01/14/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Joshua T. Gross
Date Received: 12/30/2014 09:00
Logged In By: Joshua T. Gross
Date Logged In: 12/30/2014 10:27

Samples Received at: **0.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1412231-01 XU854ISP06A [Solid] Sampled 12/16/2014 08:21 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 07:21	
1412231-02 XU854ISQ06A [Solid] Sampled 12/16/2014 09:07 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 08:07	
1412231-03 XU854ISR06A [Solid] Sampled 12/16/2014 10:32 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 09:32	
1412231-04 XU854ISL06A [Solid] Sampled 12/16/2014 11:35 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 10:35	
1412231-05 XU854ISJ06A [Solid] Sampled 12/16/2014 13:30 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 12:30	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412231

QC LEVEL: Level IV
Report Due: 1/14/2015
Client Sample Count: 5

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/16/2014	12/30/2014	1412231-01	XU854ISP06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-02	XU854ISQ06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-03	XU854ISR06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-04	XU854ISL06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-05	XU854ISJ06A	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1412231-01 [XU854ISP06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412231-02 [XU854ISQ06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412231-03 [XU854ISR06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412231-04 [XU854ISL06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412231-05 [XU854ISJ06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15

ANALYSIS DATA SHEET

XU854ISP06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/16/14 08:21

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 1412231-01
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.81**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:06

ANALYSIS DATA SHEET

XU854ISQ06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/16/14 09:07

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 1412231-02
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.25**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:07

ANALYSIS DATA SHEET

XU854ISR06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/16/14 10:32

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 1412231-03
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.17**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:09

ANALYSIS DATA SHEET

XU854ISL06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/16/14 11:35

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 1412231-04
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**4.97**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 14:10

5

ANALYSIS DATA SHEET

XU854ISJ06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/16/14 13:30

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 1412231-05
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.81**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:12

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A05001	01/08/15 13:38

5

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids:

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 5A05001-BS1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.98**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:40

5

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1412231
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%
5A00807-CCV2	Nitrate/Nitrite as N	1200	1187	98.9	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A05001

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A05001-BLK1	Nitrocellulose	0.112	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD
5A00807-CCB2	Nitrocellulose	-12.6	400	1600	ug/L	U	E353.2MOD

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A05001	Laboratory ID:	5A05001-BS1
Preparation:	pNone	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.98	88.8	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412231

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A05001 Batch Matrix: Solid Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISP06A	1412231-01	01/05/15 05:13	10.14	25.00
XU854ISQ06A	1412231-02	01/05/15 05:13	10.12	25.00
XU854ISR06A	1412231-03	01/05/15 05:13	10.04	25.00
XU854ISL06A	1412231-04	01/05/15 05:13	10.02	25.00
XU854ISJ06A	1412231-05	01/05/15 05:13	10.07	25.00
Blank	5A05001-BLK1	01/05/15 05:13	10.00	25.00
LCS	5A05001-BS1	01/05/15 05:13	10.00	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Sequence:	5A00807	Instrument:	WC-Lachat
Calibration:	5009003		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Blank	5A05001-BLK1		01/08/15 13:38
LCS	5A05001-BS1		01/08/15 13:40
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00
XU854ISP06A	1412231-01		01/08/15 14:06
XU854ISQ06A	1412231-02		01/08/15 14:07
XU854ISR06A	1412231-03		01/08/15 14:09
XU854ISL06A	1412231-04		01/08/15 14:10
XU854ISJ06A	1412231-05		01/08/15 14:12
Calibration Check	5A00807-CCV2		01/08/15 14:20
Calibration Blank	5A00807-CCB2		01/08/15 14:22

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

5

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

5

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Calibration:	5009003	Instrument:	WC-Lachat
Matrix:	Solid	Calibration Dates:	1/8/15 13:22 1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

5

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412231

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISP06A	12/16/14 08:21	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:06	23.28	28.00	
XU854ISQ06A	12/16/14 09:07	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:07	23.25	28.00	
XU854ISR06A	12/16/14 10:32	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:09	23.19	28.00	
XU854ISL06A	12/16/14 11:35	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:10	23.15	28.00	
XU854ISJ06A	12/16/14 13:30	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:12	23.07	28.00	

Data for Wet Chemistry
Supporting Raw Data / Logs

ACCUTEST LABORATORIES FA20820

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd QC 1/12/15 1412231

ACCUTEST LABORATORIES FA20820

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528 ✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1412221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 Nitrocellulose ug/g

ACCUTEST LABORATORIES FA20820

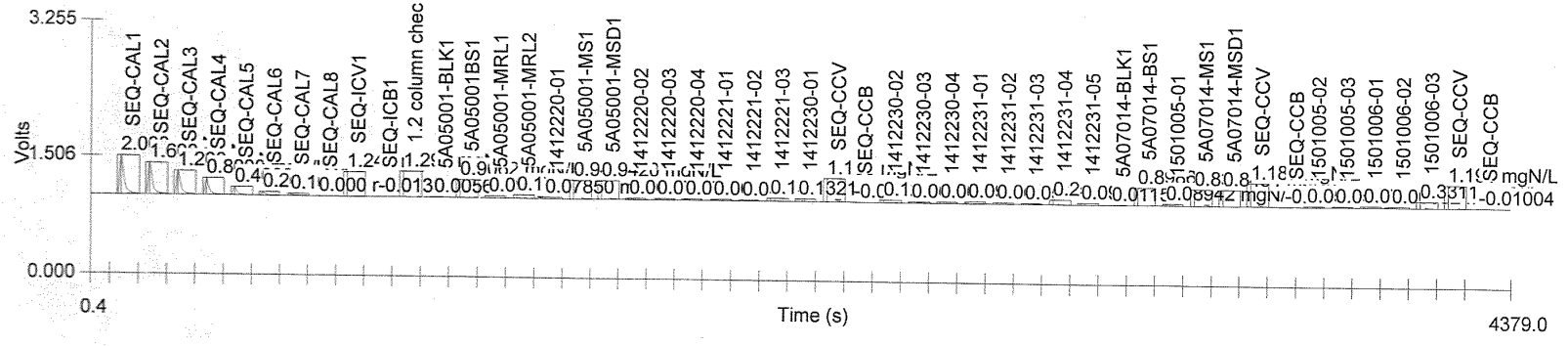
Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View



ACCUTEST LABORATORIES FA20820

Author: Omnion User

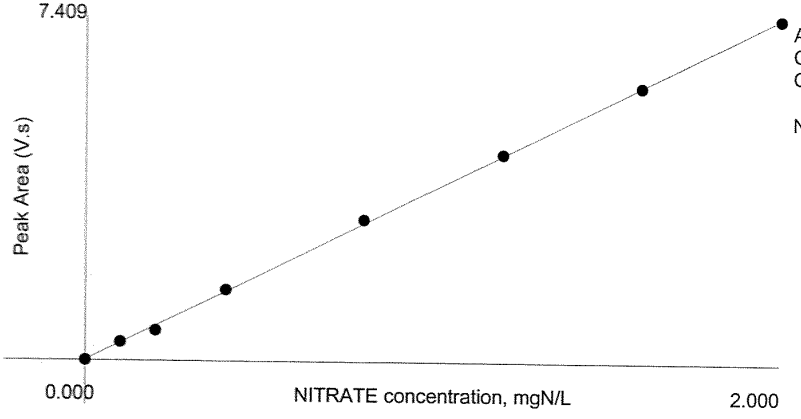
Nitrate/Nitrite

Date : 1/8/2015

Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

ACCUTEST LABORATORIES FA20820

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC

Printed: 1/12/2015 11:29:36AM

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID		ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1412220-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	"
1412220-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	"
1412220-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.15	25						NA	"
1412220-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.13	25						NA	"
1412221-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	"
1412221-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.1	25						NA	"
1412221-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.26	25						NA	"
1412230-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	"
1412230-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	"
1412230-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	"
1412230-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.03	25						NA	"
1412231-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.14	25						NA	"
1412231-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	"
1412231-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	"
1412231-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	"
1412231-05	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.07	25						NA	"
1501001-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10	25						NA	Prepare all MRLs within the first month of the quarter - upload associated method blank as sample.;Prepare/analyzed only if analysis performed this quarter!;

ACCUTEST LABORATORIES FA20820

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC

Printed: 1/12/2015 11:29:36AM

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
5A05001-BLK1		QC	01/05/2015	10	25					NA	
5A05001-BS1		QC	01/05/2015	10	25	14G0256		255		NA	
5A05001-MRL1		QC	01/05/2015	10	25	14G0257		255		NA	
5A05001-MRL2		QC	01/05/2015	10	25	14G0257		500		NA	
5A05001-MS1		QC	01/05/2015	10.09	25	14G0256	1412220-01	255		NA	
5A05001-MSD1		QC	01/05/2015	10.02	25	14G0256	1412220-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20820 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM REMEDIATIONS, INC.
Address: 5811 UNIVERSITY HEIGHTS, STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: JUANA RAICEVIC E-mail: J.RAICEVIC@FPM-REMEDIATIONS.COM
Phone#: 210-495-7744 ext. 13
Sampler(s) Name(s) (Printed): Michael Sample

Project Information

Project Name: NM-AZ PBR
Street: HOLLOMAN AFB
City: ALAMO GORDO State: NM
Project #: 1029-13-01-14-X0854
Fax #: 210-495-8544
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	Collection DATE	Collection TIME	Sampled By	Matrix	Total # of Bottles	Container Information	8330 SL	NC 353.2	NO3O 3000	PERC 6850	Matrix Codes / Lab Use Only
1	XU854ISP06A	12/16	0812	MS	Soil	1		X	X	X	X	
2	XU854ISQ06A	12/16	0907	MS	Soil	1		X	X	X	X	
3	XU854ISR06A	12/16	1032	MS	Soil	1		X	X	X	X	
4	XU854ISL06A	12/16	1135	MS	Soil	1		X	X	X	X	
5	XU854ISJ06A	12/16	1330	MS	Soil	1		X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code: MS

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 Michael Sample	12/16 1430	2 FX	3 FX	12-17-14	4 J. Boyce (FSE) 10:00
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: 1 Cooler Temperature (s) Celsius: 3-6

FA20820: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA 20820 CLIENT: FPM REMEDIATIONS PROJECT: NM-A2 PBR

DATE/TIME RECEIVED: 12-17-14 1080 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 7064

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 3.2
- [ ] CORRECTED TEMPS: 3.6

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

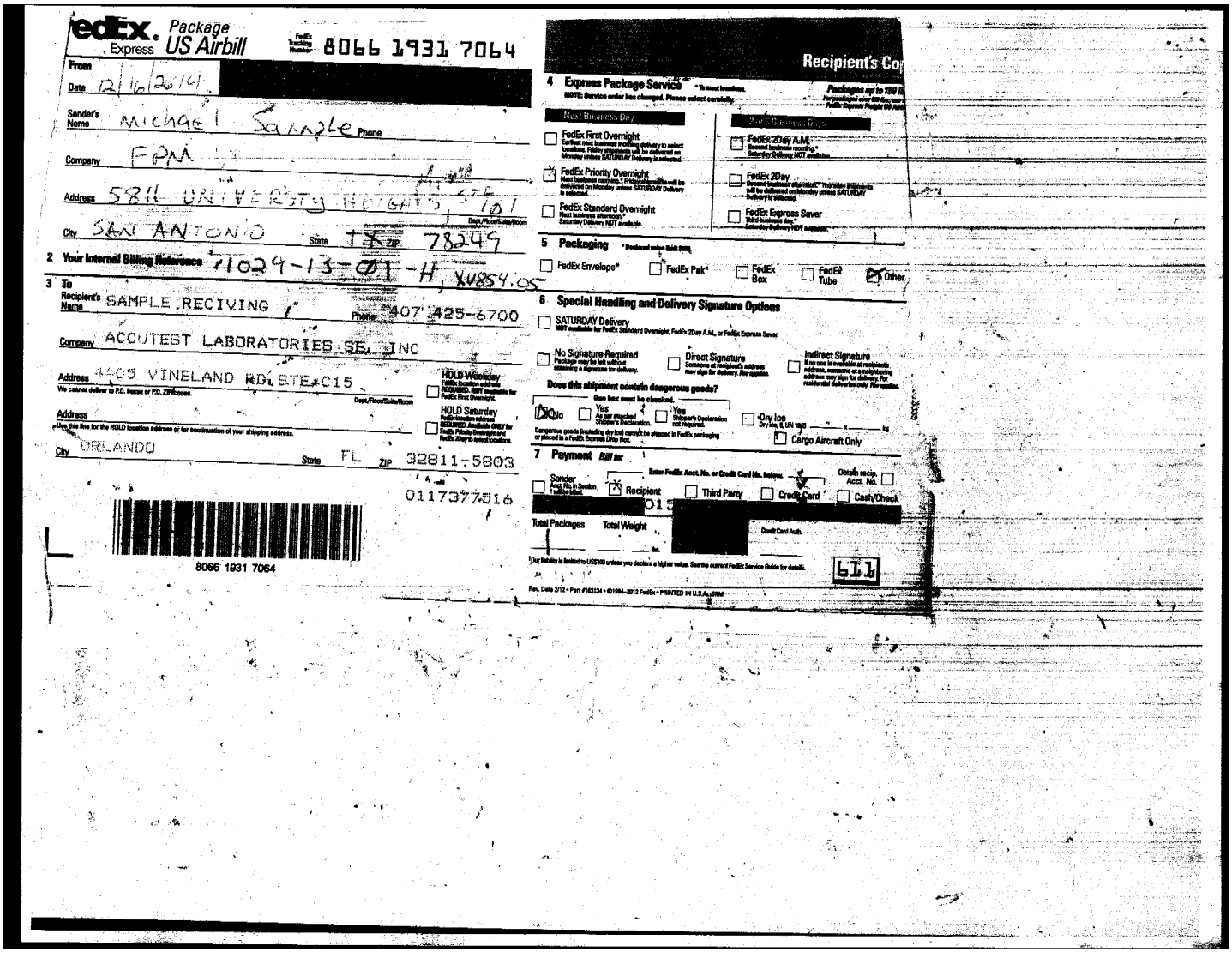
TECHNICIAN SIGNATURE/DATE 12-17-14 REVIEWER SIGNATURE/DATE 12/17/14

NF 10/14

receipt confirmation 102914.xls

6.1 6

FA20820: Chain of Custody
Page 2 of 3



FA20820: Chain of Custody

Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MB	Q9513.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	2.0	0.55	ug/kg	

Blank Spike Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-BS	Q9525.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
14797-73-0	Perchlorate	2	2.1	105	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MS	Q9515.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
OP54473-MSD	Q9516.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
FA20794-1	Q9514.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	FA20794-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	13.1		1.82	13.7	33* [a]	1.72	13.8	41* [a]	1	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9509.D	**Injection Time:**	09:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	20879	4.64
Upper Limit [c]	43769	6.64
Lower Limit [d]	14590	2.64

Lab Sample ID	IS 1 AREA	RT
OP54473-MB	21635	4.62
FA20794-1	20003	4.53
OP54473-MS	20064	4.54
OP54473-MSD	19714	4.54
ZZZZZZ	19953	4.54
ZZZZZZ	19463	4.55
ZZZZZZ	19453	4.55
FA20820-1	19951	4.55
FA20820-2	19428	4.55

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9522.D	**Injection Time:**	11:19
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	19506	4.69
Upper Limit [c]	43769	6.69
Lower Limit [d]	14590	2.69

Lab Sample ID	IS 1 AREA	RT
OP54473-BS	20285	4.66
FA20820-3	19024	4.56
FA20820-5	19432	4.55
ZZZZZZ	18982	4.56
ZZZZZZ	20688	4.56
ZZZZZZ	20292	4.56
ZZZZZZ	19424	4.56
ZZZZZZ	18219	4.56

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9535.D	**Injection Time:**	13:12
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	19366	4.69
Upper Limit [c]	43769	6.69
Lower Limit [d]	14590	2.69

Lab Sample ID	IS 1 AREA	RT
FA20820-4	25080	4.59
ZZZZZZ	20408	4.56
OP54492-BS	20703	4.67
OP54492-MB	20693	4.67
ZZZZZZ	21387	4.67
ZZZZZZ	16706	4.51
ZZZZZZ	29820	4.77
ZZZZZZ	33003	4.81
ZZZZZZ	34053	4.82

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICC295
Lab FileID: Q9302.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2 : D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3 : D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4 : D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5 : D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6 : D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7 : D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------									
3) Perchlorate	1.1702	1.1127	1.2371	1.2032	1.2930	1.3009	1.4553	1.2532	8.869	1.0000

*(value) - Average RF below (value)

7.5.1

7

Initial Calibration Verification

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICV295
Lab FileID: Q9307.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9307
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.917	-4.2	95.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9509.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9509
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.010	0.5	100.5

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9510.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9510
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.189	-5.4	94.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9522.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9522
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.194	9.7	109.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9523.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9523
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.206	3.0	103.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9535.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9535
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.128	6.4	106.4

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9536.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9536
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.196	-2.1	97.9

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9548.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9548
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.112	5.6	105.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9549.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9549
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.202	1.2	101.2

CC Criteria: +/- 15%

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-MB	BB045391.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	120%	69-134%

Blank Spike Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-BS	BB045389.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2850	114	75-147
121-82-4	RDX	2500	2520	101	79-126
606-20-2	2,6-Dinitrotoluene	2500	2520	101	81-134
121-14-2	2,4-Dinitrotoluene	2500	2520	101	81-128
35572-78-2	2-amino-4,6-Dinitrotoluene	2500	2550	102	81-127
19406-51-0	4-amino-2,6-Dinitrotoluene	2500	2510	100	74-125
118-96-7	2,4,6-Trinitrotoluene	2500	2540	102	70-123
55-63-0	Nitroglycerine	12500	12000	96	73-121

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	110%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-PT1	BB045390.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	620	572	92	54-255
121-82-4	RDX	587	540	92	59-118
606-20-2	2,6-Dinitrotoluene	1320	1260	95	64-119
121-14-2	2,4-Dinitrotoluene	638	549	86	66-119
35572-78-2	2-amino-4,6-Dinitrotoluene	650	514	79	60-112
19406-51-0	4-amino-2,6-Dinitrotoluene	947	571	60	54-103
118-96-7	2,4,6-Trinitrotoluene	808	690	85	59-100
55-63-0	Nitroglycerine	1000	673	67	62-115

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	111%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-MS	BB045393.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
OP54390-MSD	BB045394.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
FA20794-1	BB045392.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	FA20794-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99	U	2500	2590	104	2500	2670	107	3	75-147/22
121-82-4	RDX	99	U	2500	2350	94	2500	2320	93	1	79-126/21
606-20-2	2,6-Dinitrotoluene	99	U	2500	2500	100	2500	2500	100	0	81-134/20
121-14-2	2,4-Dinitrotoluene	99	U	2500	2470	99	2500	2480	99	0	81-128/17
35572-78-2	2-amino-4,6-Dinitrotoluene	99	U	2500	2500	100	2500	2510	100	0	81-127/15
19406-51-0	4-amino-2,6-Dinitrotoluene	99	U	2500	2440	98	2500	2480	99	2	74-125/23
118-96-7	2,4,6-Trinitrotoluene	99	U	2500	2490	100	2500	2550	102	2	70-123/16
55-63-0	Nitroglycerine	990	U	12500	12200	98	12500	12500	100	2	73-121/15

CAS No.	Surrogate Recoveries	MS	MSD	FA20794-1	Limits
610-39-9	3,4-Dinitrotoluene	106%	107%	119%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-DUP	BB045402.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
FA20820-2	BB045401.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	FA20820-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20820-2	Limits
610-39-9	3,4-Dinitrotoluene	121%	117%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-DUP2	BB045403.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
FA20820-2	BB045401.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5

CAS No.	Compound	FA20820-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20820-2	Limits
610-39-9	3,4-Dinitrotoluene	118%	117%	69-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA20820-1	BB045400.D	116
FA20820-2	BB045401.D	117
FA20820-3	BB045404.D	120
FA20820-4	BB045405.D	120
FA20820-5	BB045406.D	124
OP54390-BS	BB045389.D	110
OP54390-DUP	BB045402.D	121
OP54390-DUP2	BB045403.D	118
OP54390-MB	BB045391.D	120
OP54390-MS	BB045393.D	106
OP54390-MSD	BB045394.D	107
OP54390-PT1	BB045390.D	111

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1221-CC1221	**Injection Date:**	12/30/14
Lab File ID:	BB045385.D	**Injection Time:**	01:50
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] **RT**
Check Std	10.72

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
ZZZZZZ	BB045387.D	12/30/14	02:40	10.70
ZZZZZZ	BB045388.D	12/30/14	03:05	10.71
OP54390-BS	BB045389.D	12/30/14	03:30	10.71
OP54390-PT1	BB045390.D	12/30/14	03:55	10.71
OP54390-MB	BB045391.D	12/30/14	04:20	10.70
FA20794-1	BB045392.D	12/30/14	04:45	10.70
OP54390-MS	BB045393.D	12/30/14	05:10	10.69
OP54390-MSD	BB045394.D	12/30/14	05:35	10.69
ZZZZZZ	BB045395.D	12/30/14	06:00	10.69
ZZZZZZ	BB045396.D	12/30/14	06:25	10.69

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1221-CC1221	**Injection Date:**	12/30/14
Lab File ID:	BB045397.D	**Injection Time:**	06:50
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.69	10.69

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB045399.D	12/30/14	07:40		10.67
FA20820-1	BB045400.D	12/30/14	08:05		10.67
FA20820-2	BB045401.D	12/30/14	08:30		10.67
OP54390-DUP	BB045402.D	12/30/14	08:55		10.67
OP54390-DUP2	BB045403.D	12/30/14	09:20		10.67
FA20820-3	BB045404.D	12/30/14	09:45		10.67
FA20820-4	BB045405.D	12/30/14	10:10		10.66
FA20820-5	BB045406.D	12/30/14	10:35		10.67
GBB1221-ECC1221	BB045407.D	12/30/14	11:11	10.67	10.67

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration

Calibration Files
20 =BB045353.D 50 =BB045354.D 100 =BB045355.D 200 =BB045356.D
500 =BB045357.D 1000=BB045358.D 2000=BB045359.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.083	3.188	3.339	3.315	3.251	3.260	3.334	3.253	E3	2.83
2)	HMX	1.474	1.670	1.716	1.606	1.362	1.383	1.387	1.514	E3	9.79
3)	DNX	2.832	2.894	2.975	2.866	2.801	2.804	2.844	2.860	E3	2.12
4)	MNX	2.374	2.804	2.556	2.409	2.322	2.355	2.394	2.459	E3	6.88
5)	RDX	1.678	1.843	1.932	1.772	1.747	1.752	1.790	1.788	E3	4.52
6)	1,3,5-Trinitroben	4.481	4.244	3.946	3.884	3.871	3.921	3.957	4.043	E3	5.70
7)	1,3-Dinitrobenzen	5.762	5.450	5.064	5.209	5.032	5.039	5.164	5.246	E3	5.15
8)	3,5-Dinitroanilin	4.428	4.294	4.178	4.237	4.085	4.059	4.165	4.207	E3	3.02
9)	Nitrobenzene	3.284	2.994	3.213	3.005	3.053	2.947	3.019	3.074	E3	4.07
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.249	2.503	2.699	2.670	2.612	2.621	2.703	2.722	E3	8.90
12)	2,4,6-Trinitrotol	3.826	3.865	3.450	3.659	3.673	3.722	3.835	3.719	E3	3.87
13)	2-Amino-4,6-Dinit	3.530	2.871	2.821	2.977	3.028	3.076	3.196	3.071	E3	7.74
14)	4-Amino-2,6-Dinit	2.435	1.814	2.010	2.087	2.154	2.232	2.335	2.153	E3	9.65
15)S	3,4-Dinitrotoluen	1.255	1.611	1.536	1.636	1.789	1.878	1.985	1.670	E3	14.49
16)	2,4-Dinitrotoluen	4.665	4.604	4.533	4.326	4.368	4.431	4.582	4.501	E3	2.84
17)	2,6-Dinitrotoluen	2.520	2.735	2.784	2.590	2.484	2.498	2.572	2.598	E3	4.54
18)	o-Nitrotoluene	2.558	2.143	2.170	2.422	2.225	2.241	2.211	2.281	E3	6.64
19)	p-Nitrotoluene	4.075	3.357	3.374	3.402	3.460	3.500	3.455	3.518	E3	7.14
20)	m-Nitrotoluene	3.363	2.975	2.971	2.975	2.971	3.030	3.055	3.048	E3	4.68
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.230	4.445	5.099	5.021	4.991	5.011	5.125	4.846	E3	7.35
2)	HMX	6.508	6.195	4.907	4.746	3.950	3.968	3.929	4.886	E3	22.11

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 3946.60045 *A

3)	DNX	4.912	4.407	4.943	4.721	4.494	4.508	4.544	4.647	E3	4.60
4)	MNX	3.468	3.785	3.814	3.676	3.612	3.635	3.712	3.672	E3	3.16
5)	RDX	3.145	3.081	2.963	2.852	2.787	2.806	2.864	2.928	E3	4.76
6)	1,3,5-Trinitroben	8.213	7.591	7.478	7.449	7.405	7.515	7.661	7.616	E3	3.64
7)	1,3-Dinitrobenzen	3.725	3.678	3.707	3.397	3.387	3.414	3.504	3.545	E3	4.33
8)	3,5-Dinitroanilin	6.498	7.321	7.046	7.024	6.894	6.889	7.022	6.956	E3	3.56
9)	Nitrobenzene	3.210	3.149	2.901	3.005	2.977	2.862	2.917	3.003	E3	4.35
10)	Nitroglycerin	1.196	1.315	1.272	1.238	1.213	1.229	1.258	1.246	E3	3.19
11)	Tetryl	3.961	4.500	4.527	4.412	4.390	4.433	4.579	4.400	E3	4.66
12)	2,4,6-Trinitrotol	4.562	4.724	4.508	4.392	4.366	4.403	4.578	4.505	E3	2.85
13)	2-Amino-4,6-Dinit	5.080	4.634	4.475	4.586	4.578	4.621	4.850	4.689	E3	4.40
14)	4-Amino-2,6-Dinit	4.560	4.217	4.347	4.444	4.420	4.490	4.748	4.461	E3	3.75
15)S	3,4-Dinitrotoluen	2.765	2.828	3.098	3.156	3.212	3.287	3.560	3.129	E3	8.68
16)	2,4-Dinitrotoluen	2.590	2.550	2.594	2.638	2.658	2.711	2.939	2.668	E3	4.87
17)	2,6-Dinitrotoluen	3.069	3.190	2.949	3.132	3.166	3.207	3.375	3.155	E3	4.15
18)	o-Nitrotoluene	2.918	3.190	2.992	3.097	3.129	3.096	3.156	3.083	E3	3.10
19)	p-Nitrotoluene	3.152	2.835	2.934	2.912	2.943	2.937	2.985	2.957	E3	3.29
20)	m-Nitrotoluene	2.925	3.513	3.544	3.543	3.621	3.627	3.717	3.498	E3	7.50

Initial Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

```
21)  PETN              1.019 1.021 1.064 1.048 1.048 1.045 1.044 1.041 E3   1.52
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Tue Dec 30 07:02:24 2014
```

Initial Calibration Verification

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX		----------NA----------				
2		HMX	500.000	517.314	-3.5	115	0.01	1.28- 1.89
3		DNX		----------NA----------				
4		MNX		----------NA----------				
5		RDX	500.000	523.852	-4.8	107	0.00	2.58- 3.38
6		1,3,5-Trinitrobenzene	500.000	514.427	-2.9	107	0.00	4.10- 4.90
7		1,3-Dinitrobenzene	500.000	469.073	6.2	98	0.00	5.29- 6.09
8		3,5-Dinitroaniline	500.000	513.448	-2.7	106	0.00	5.81- 6.61
9		Nitrobenzene	500.000	530.019	-6.0	107	0.00	6.67- 7.47
10		Nitroglycerin		----------NA----------				
11		Tetryl	500.000	428.487	14.3	89	0.00	8.92- 9.72
12		2,4,6-Trinitrotoluene	500.000	516.406	-3.3	105	0.00	9.11- 9.91
13		2-Amino-4,6-Dinitrotol	500.000	547.959	-9.6	111	0.00	9.54-10.34
14		4-Amino-2,6-Dinitrotol	500.000	569.662	-13.9	114	0.00	9.97-10.77
15	S	3,4-Dinitrotoluene		----------NA----------				
16		2,4-Dinitrotoluene	500.000	533.805	-6.8	110	0.00	10.86-11.66
17		2,6-Dinitrotoluene	500.000	526.912	-5.4	110	0.00	11.25-12.05
18		o-Nitrotoluene	500.000	538.039	-7.6	110	0.00	13.46-14.34
19		p-Nitrotoluene	500.000	525.630	-5.1	107	0.00	13.76-14.76
20		m-Nitrotoluene	500.000	558.699	-11.7	115	0.00	14.33-15.33
21		PETN		----------NA----------				

***** Signal #2 *****

1		TNX		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
2		HMX	500.000	572.928	-14.6	114	0.01	1.28- 1.89
		----------	Amount	Calc.	%Drift	----------		
3		DNX		----------NA----------				
4		MNX		----------NA----------				
5		RDX	500.000	509.258	-1.9	107	0.00	2.58- 3.38
6		1,3,5-Trinitrobenzene	500.000	525.399	-5.1	108	0.00	4.10- 4.90
7		1,3-Dinitrobenzene	500.000	489.663	2.1	102	0.00	5.29- 6.09
8		3,5-Dinitroaniline	500.000	529.536	-5.9	107	-0.01	5.81- 6.61
9		Nitrobenzene	500.000	516.106	-3.2	104	0.00	6.67- 7.47
10		Nitroglycerin	2500.000	2589.908	-3.6	106	0.00	8.55- 9.55
11		Tetryl	500.000	452.808	9.4	91	0.00	8.91- 9.71
12		2,4,6-Trinitrotoluene	500.000	537.672	-7.5	111	0.00	9.10- 9.90
13		2-Amino-4,6-Dinitrotol	500.000	563.179	-12.6	115	0.00	9.55-10.35

8.8.2

8

Initial Calibration Verification

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

14		4-Amino-2,6-Dinitrotol	500.000	571.387	-14.3	115	0.00	9.97-10.77
15	S	3,4-Dinitrotoluene			----------NA----------			
16		2,4-Dinitrotoluene	500.000	574.059	-14.8	115	-0.02	10.86-11.66
17		2,6-Dinitrotoluene	500.000	557.864	-11.6	111	-0.02	11.27-12.07
18		o-Nitrotoluene	500.000	531.281	-6.3	105	0.00	13.34-14.34
19		p-Nitrotoluene	500.000	529.110	-5.8	106	0.00	13.76-14.76
20		m-Nitrotoluene	500.000	585.508	-17.1#	113	0.00	14.34-15.34
21		PETN	2500.000	3447.072	-37.9#	137	0.00	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:58 2014

8.8.2

8

Initial Calibration Verification

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	544.273	-8.9	109	0.00	1.07- 1.67
2	HMX		----------NA----------				
3	DNX	500.000	516.485	-3.3	105	0.00	1.47- 2.07
4	MNX	500.000	517.911	-3.6	110	0.00	2.07- 2.67
5	RDX		----------NA----------				
6	1,3,5-Trinitrobenzene		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	3,5-Dinitroaniline		----------NA----------				
9	Nitrobenzene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12	2,4,6-Trinitrotoluene		----------NA----------				
13	2-Amino-4,6-Dinitrotoluen		----------NA----------				
14	4-Amino-2,6-Dinitrotoluen		----------NA----------				
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene		----------NA----------				
17	2,6-Dinitrotoluene		----------NA----------				
18	o-Nitrotoluene		----------NA----------				
19	p-Nitrotoluene		----------NA----------				
20	m-Nitrotoluene		----------NA----------				
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	566.364	-13.3	110	0.00	1.07- 1.67
	---------- Amount	Calc.	%Drift	----------			
2	HMX		----------NA----------				
	---------- Amount	Calc.	%Drift	----------			
3	DNX	500.000	505.196	-1.0	104	0.00	1.47- 2.07
4	MNX	500.000	528.313	-5.7	107	0.00	2.07- 2.67
5	RDX		----------NA----------				
6	1,3,5-Trinitrobenzene		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	3,5-Dinitroaniline		----------NA----------				
9	Nitrobenzene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12	2,4,6-Trinitrotoluene		----------NA----------				
13	2-Amino-4,6-Dinitrotoluen		----------NA----------				

Initial Calibration Verification

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

14		4-Amino-2,6-Dinitrotoluen	----------NA----------	
15	S	3,4-Dinitrotoluene	----------NA----------	
16		2,4-Dinitrotoluene	----------NA----------	
17		2,6-Dinitrotoluene	----------NA----------	
18		o-Nitrotoluene	----------NA----------	
19		p-Nitrotoluene	----------NA----------	
20		m-Nitrotoluene	----------NA----------	
21		PETN	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:59 2014

8.8.3

8

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045385.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045385.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045385.D\dad1A.ch
Acq On : 30-Dec-2014, 01:50:37 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	984.980	1.5	98	0.00	1.07- 1.67
2	HMX	1000.000	902.086	9.8	99	0.00	1.28- 1.89
3	DNX	1000.000	974.063	2.6	99	0.00	1.47- 2.07
4	MNX	1000.000	959.718	4.0	100	-0.01	2.07- 2.67
5	RDX	1000.000	987.558	1.2	101	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	940.242	6.0	97	-0.03	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	942.259	5.8	98	-0.03	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	945.017	5.5	98	-0.03	5.81- 6.61
9	Nitrobenzene	1000.000	949.899	5.0	99	-0.02	6.67- 7.47
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	932.263	6.8	97	-0.05	8.92- 9.72
12	2,4,6-Trinitrotoluene	1000.000	976.174	2.4	98	-0.05	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	1000.000	978.199	2.2	98	-0.05	9.54-10.34
14	4-Amino-2,6-Dinitrotol	1000.000	1004.824	-0.5	97	-0.05	9.97-10.77
15 S	3,4-Dinitrotoluene	1000.000	1094.040	-9.4	97	-0.05	10.37-11.17
16	2,4-Dinitrotoluene	1000.000	955.582	4.4	97	-0.05	10.86-11.66
17	2,6-Dinitrotoluene	1000.000	944.047	5.6	98	-0.04	11.25-12.05
18	o-Nitrotoluene	1000.000	949.653	5.0	97	-0.03	13.46-14.34
19	p-Nitrotoluene	1000.000	970.660	2.9	98	-0.03	13.76-14.76
20	m-Nitrotoluene	1000.000	983.490	1.7	99	-0.02	14.33-15.33
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	1015.747	-1.6	98	0.00	1.07- 1.67
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	990.754	0.9	99	0.00	1.28- 1.89
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	958.064	4.2	99	0.00	1.47- 2.07
4	MNX	1000.000	980.826	1.9	99	-0.01	2.07- 2.67
5	RDX	1000.000	948.971	5.1	99	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	970.808	2.9	98	-0.03	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	959.448	4.1	100	-0.03	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	979.577	2.0	99	-0.04	5.81- 6.61
9	Nitrobenzene	1000.000	966.718	3.3	101	-0.03	6.67- 7.47
10	Nitroglycerin	5000.000	4800.479	4.0	97	-0.04	8.55- 9.55
11	Tetryl	1000.000	983.496	1.7	98	-0.05	8.91- 9.71
12	2,4,6-Trinitrotoluene	1000.000	961.677	3.8	98	-0.05	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	1000.000	968.205	3.2	98	-0.05	9.55-10.35

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045385.D

14		4-Amino-2,6-Dinitrotol	1000.000	990.971	0.9	98	-0.05	9.97-10.77
15	S	3,4-Dinitrotoluene	1000.000	1038.724	-3.9	99	-0.05	10.37-11.17
16		2,4-Dinitrotoluene	1000.000	993.314	0.7	98	-0.06	10.86-11.66
17		2,6-Dinitrotoluene	1000.000	996.954	0.3	98	-0.06	11.27-12.07
18		o-Nitrotoluene	1000.000	993.000	0.7	99	-0.03	13.34-14.34
19		p-Nitrotoluene	1000.000	970.165	3.0	98	-0.03	13.76-14.76
20		m-Nitrotoluene	1000.000	1022.720	-2.3	99	-0.02	14.34-15.34
21		PETN	5000.000	3973.781	20.5#	79	-0.04	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Tue Dec 30 08:52:55 2014

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045397.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045397.D\dad1B.ch Vial: 91
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045397.D\dad1A.ch
Acq On : 30-Dec-2014, 06:50:26 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	985.875	1.4	98	0.00	1.07- 1.67
2	HMX	1000.000	916.480	8.4	100	-0.01	1.28- 1.89
3	DNX	1000.000	963.976	3.6	98	-0.01	1.47- 2.07
4	MNX	1000.000	941.501	5.8	98	-0.02	2.07- 2.67
5	RDX	1000.000	967.963	3.2	99	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	946.605	5.3	98	-0.04	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	940.766	5.9	98	-0.04	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	956.636	4.3	99	-0.05	5.81- 6.61
9	Nitrobenzene	1000.000	967.491	3.3	101	-0.04	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	956.230	4.4	99	-0.09	8.92- 9.72
12	2,4,6-Trinitrotoluene	1000.000	984.510	1.5	98	-0.08	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	1000.000	980.017	2.0	98	-0.08	9.54-10.34
14	4-Amino-2,6-Dinitrotol	1000.000	1005.188	-0.5	97	-0.08	9.97-10.77
15 S	3,4-Dinitrotoluene	1000.000	1096.406	-9.6	98	-0.09	10.37-11.17
16	2,4-Dinitrotoluene	1000.000	954.361	4.6	97	-0.09	10.86-11.66
17	2,6-Dinitrotoluene	1000.000	935.254	6.5	97	-0.08	11.25-12.05
18	o-Nitrotoluene	1000.000	957.823	4.2	98	-0.05	13.46-14.34
19	p-Nitrotoluene	1000.000	975.022	2.5	98	-0.05	13.76-14.76
20	m-Nitrotoluene	1000.000	980.088	2.0	99	-0.04	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	1019.967	-2.0	99	0.00	1.07- 1.67
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	994.216	0.6	99	-0.01	1.28- 1.89
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	961.740	3.8	99	-0.01	1.47- 2.07
4	MNX	1000.000	976.279	2.4	99	-0.02	2.07- 2.67
5	RDX	1000.000	942.344	5.8	98	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	982.110	1.8	100	-0.04	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	942.667	5.7	98	-0.04	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	969.896	3.0	98	-0.05	5.81- 6.61
9	Nitrobenzene	1000.000	956.983	4.3	100	-0.04	6.67- 7.47
10	Nitroglycerin	5000.000	4839.619	3.2	98	-0.07	8.55- 9.55
11	Tetryl	1000.000	1007.733	-0.8	100	-0.09	8.91- 9.71
12	2,4,6-Trinitrotoluene	1000.000	968.409	3.2	99	-0.08	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	1000.000	973.276	2.7	99	-0.08	9.55-10.35

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045397.D

14		4-Amino-2,6-Dinitrotol	1000.000	995.406	0.5	99	-0.08	9.97-10.77
15	S	3,4-Dinitrotoluene	1000.000	1051.945	-5.2	100	-0.09	10.37-11.17
16		2,4-Dinitrotoluene	1000.000	987.123	1.3	97	-0.10	10.86-11.66
17		2,6-Dinitrotoluene	1000.000	993.596	0.6	98	-0.09	11.27-12.07
18		o-Nitrotoluene	1000.000	1003.792	-0.4	100	-0.05	13.34-14.34
19		p-Nitrotoluene	1000.000	978.624	2.1	99	-0.05	13.76-14.76
20		m-Nitrotoluene	1000.000	1047.117	-4.7	101	-0.04	14.34-15.34
21		PETN	5000.000	4503.118	9.9	90	-0.05	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Tue Dec 30 08:52:56 2014

8.8.5

8

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ECC1221
Lab FileID: BB045407.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045407.D\dad1B.ch Vial: 91
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045407.D\dad1A.ch
Acq On : 30-Dec-2014, 11:11:04 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54390,GBB1221,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	981.960	1.8	98	0.00	1.07- 1.67
2	HMX	1000.000	906.255	9.4	99	-0.01	1.28- 1.89
3	DNX	1000.000	960.145	4.0	98	-0.01	1.47- 2.07
4	MNX	1000.000	943.169	5.7	98	-0.02	2.07- 2.67
5	RDX	1000.000	970.829	2.9	99	-0.03	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	948.806	5.1	98	-0.05	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	932.582	6.7	97	-0.05	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	941.096	5.9	98	-0.06	5.81- 6.61
9	Nitrobenzene	1000.000	958.075	4.2	100	-0.04	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	970.519	2.9	101	-0.11	8.92- 9.72
12	2,4,6-Trinitrotoluene	1000.000	995.727	0.4	99	-0.10	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	1000.000	1000.017	-0.0	100	-0.10	9.54-10.34
14	4-Amino-2,6-Dinitrotol	1000.000	1037.578	-3.8	100	-0.10	9.97-10.77
15 S	3,4-Dinitrotoluene	1000.000	1125.313	-12.5	100	-0.11	10.37-11.17
16	2,4-Dinitrotoluene	1000.000	962.813	3.7	98	-0.11	10.86-11.66
17	2,6-Dinitrotoluene	1000.000	950.934	4.9	99	-0.09	11.25-12.05
18	o-Nitrotoluene	1000.000	964.245	3.6	98	-0.05	13.46-14.34
19	p-Nitrotoluene	1000.000	984.337	1.6	99	-0.05	13.76-14.76
20	m-Nitrotoluene	1000.000	994.266	0.6	100	-0.05	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	1012.126	-1.2	98	0.00	1.07- 1.67
	---------- Amount	Calc.	%Drift	----------			
2	HMX	1000.000	992.290	0.8	99	-0.01	1.28- 1.89
	---------- Amount	Calc.	%Drift	----------			
3	DNX	1000.000	957.764	4.2	99	-0.01	1.47- 2.07
4	MNX	1000.000	973.372	2.7	98	-0.02	2.07- 2.67
5	RDX	1000.000	937.307	6.3	98	-0.03	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	972.537	2.7	99	-0.05	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	957.610	4.2	99	-0.05	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	977.525	2.2	99	-0.06	5.81- 6.61
9	Nitrobenzene	1000.000	952.304	4.8	100	-0.05	6.67- 7.47
10	Nitroglycerin	5000.000	4797.927	4.0	97	-0.08	8.55- 9.55
11	Tetryl	1000.000	997.339	0.3	99	-0.11	8.91- 9.71
12	2,4,6-Trinitrotoluene	1000.000	966.034	3.4	99	-0.10	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	1000.000	973.784	2.6	99	-0.10	9.55-10.35

Continuing Calibration Summary

Job Number: FA20820
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ECC1221
Lab FileID: BB045407.D

14		4-Amino-2,6-Dinitrotol	1000.000	996.962	0.3	99	-0.10	9.97-10.77
15	S	3,4-Dinitrotoluene	1000.000	1047.741	-4.8	100	-0.11	10.37-11.17
16		2,4-Dinitrotoluene	1000.000	981.995	1.8	97	-0.12	10.86-11.66
17		2,6-Dinitrotoluene	1000.000	1002.555	-0.3	99	-0.11	11.27-12.07
18		o-Nitrotoluene	1000.000	960.846	3.9	96	-0.06	13.34-14.34
19		p-Nitrotoluene	1000.000	959.731	4.0	97	-0.06	13.76-14.76
20		m-Nitrotoluene	1000.000	1025.816	-2.6	99	-0.05	14.34-15.34
21		PETN	5000.000	4451.153	11.0	89	-0.07	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Tue Dec 30 11:53:48 2014

8.8.6

8

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20820
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate	GP25246/GN64657	1.0	0.0	mg/kg	25	25.4	101.5	90-110%
Sulfate	GP25246/GN64657	20	0.0	mg/kg	501	543	108.5	90-110%

Associated Samples:
Batch GP25246: FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20820
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate	GP25246/GN64657	FA20794-1	mg/kg	9.8	25.1	30.0	80.4N(a)	90-110%
Sulfate	GP25246/GN64657	FA20794-1	mg/kg	13700	503	14800	218.9(b)	90-110%

Associated Samples:
Batch GP25246: FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20820
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Nitrate	GP25246/GN64657	FA20794-1	mg/kg	9.8	25.1	29.8	0.7	20%
Sulfate	GP25246/GN64657	FA20794-1	mg/kg	13700	501	14800	0.0	20%

Associated Samples:
Batch GP25246: FA20820-1, FA20820-2, FA20820-3, FA20820-4, FA20820-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20820
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122901.TXT Date Analyzed: 12/29/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64657
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:05	GN64657-CCV1	1		
14:30	ZZZZZZ	2		
14:47	GN64657-CCV2	1		
15:04	GP25246-MB1	1		
15:21	GP25246-B1	1		
15:38	FA20794-1	1		(sample used for QC only; not part of login FA20820)
15:54	ZZZZZZ	1		
16:11	ZZZZZZ	1		
16:28	ZZZZZZ	1		
16:45	FA20820-1	1		
17:02	FA20820-2	1		
17:19	FA20820-3	1		
17:36	FA20820-4	1		
17:53	GN64657-CCV3	1		
18:10	GN64657-CCB1	1		
18:27	FA20820-5	1		
18:44	ZZZZZZ	1		
19:01	ZZZZZZ	1		
19:18	FA21035-3	1		(sample used for QC only; not part of login FA20820)
19:35	GP25246-S1	1		
19:52	GP25246-S2	1		
20:09	GP25246-S3	1		
20:26	GP25246-S4	1		
20:43	GN64657-CCV4	1		
21:00	GN64657-CCB2	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA20820
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122901.TXT Date Analyzed: 12/29/14 Methods: EPA 300/SW846 9056A
Run ID: GN64657 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN64657-CCV1	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64657-CCV2	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64657-CCV3	Nitrogen, Nitrate	2.8	0.10	0.050	2.5	112.0!(a)	90-110
GN64657-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64657-CCV4	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64657-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			

(!) Outside of QC limits
(a) Outside control limits.

Southeast
ACCUTEST LABORATORIES

Reissue #1
04/11/15

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA20794

Sampling Date: 12/15/14

Report to:

FPM Remediations

i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **108**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

April 8, 2015

Ms. Ivana Raicevic
FPM Remediations, Inc.
5811 University Heights Blvd., Suite 101
San Antonio, Texas 78249

RE: Accutest job FA21080 Reissue

Dear Ms. Raicevic,

During a recent Accutest Management initiated 3rd party data review, an issue was discovered with some Ion Chromatography (IC) data. Some anions in associated Quality Control (QC) samples (Calibration Checks and/or Blank Spikes) were incorrectly or inconsistently integrated. These integration issues were isolated to a specific analyst. Accutest Southeast performed a comprehensive review of all IC data reported by this analyst. As a result of this review it was determined that some IC data for this job needed to be footnoted. Since only QC samples were impacted by these integration issues (no sample results changed), only the potential uncertainty associated with a reported result is impacted.

Anions analyzed by Ion Chromatography via EPA 300 or SW846 9056A have method specified quality control limits of 90-110%. Revised quality control data for the samples in question had a maximum recovery of 110.4% for Nitrate. Footnote applied to fractions 1 through 11.

The final report for job number FA21080 has been edited to reflect these changes.

Accutest apologizes for any inconvenience this may have caused and has taken corrective measures to prevent future issues. Please feel free to contact us if we can be of further assistance.

Sincerely,

Rick Watkins
Laboratory Director
Accutest Laboratories, SE

Norm Farmer
Technical Director
Accutest Laboratories, SE

Sections: 1 2 3 4 5 6 7 8 9

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **7**
Section 4: Sample Results **8**
4.1: FA20794-1: XU854ISG06A 9
4.2: FA20794-2: XU854ISN06A 12
4.3: FA20794-3: XU854ISO06A 15
4.4: FA20794-4: XU854ISI06A 18
Section 5: Subcontract Lab Data **21**
Section 6: Misc. Forms **63**
6.1: Chain of Custody 64
Section 7: GC/MS Semi-volatiles - QC Data Summaries **67**
7.1: Method Blank Summary 68
7.2: Blank Spike Summary 69
7.3: Matrix Spike/Matrix Spike Duplicate Summary 70
7.4: Internal Standard Area Summaries 71
7.5: Initial and Continuing Calibration Summaries 73
Section 8: GC Semi-volatiles - QC Data Summaries **81**
8.1: Method Blank Summary 82
8.2: Blank Spike Summary 83
8.3: Laboratory Control Sample Summary 84
8.4: Matrix Spike/Matrix Spike Duplicate Summary 85
8.5: Duplicate Summary 86
8.6: Surrogate Recovery Summaries 88
8.7: GC Surrogate Retention Time Summaries 89
8.8: Initial and Continuing Calibration Summaries 91
Section 9: General Chemistry - QC Data Summaries **103**
9.1: Method Blank and Spike Results Summary 104
9.2: Matrix Spike Results Summary 105
9.3: Matrix Spike Duplicate Results Summary 106
9.4: Inst QC GN64657: Nitrogen, Nitrate 107

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20794

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20794-1	12/15/14	10:13	MS	12/16/14	SO	Soil	XU854ISG06A
FA20794-2	12/15/14	11:14	MS	12/16/14	SO	Soil	XU854ISN06A
FA20794-3	12/15/14	12:14	MS	12/16/14	SO	Soil	XU854ISO06A
FA20794-4	12/15/14	14:16	MS	12/16/14	SO	Soil	XU854ISI06A

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20794

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date:** 1/6/2015 3:32:23 PM

4 Sample(s) were collected on 12/15/2014 and were received at Accutest SE on 12/16/2014 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of FA20794. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54473

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples indicated.

Matrix Spike/Matrix Spike Duplicate Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. % RPD was within control limits in MS/MSD.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54390

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MS, FA20794-1MSD, FA20820-2DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25246

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20794-1MSD, FA20794-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. % RPD was within control limits in MS/MSD.

FA20794-1, 2, 3, 4 for Nitrogen, Nitrate: Associated CCV above upper control limits

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: January 6, 2015

Kim Benham, Client Services (signature on file)

Narrative revised by:

_____ Date: April 03, 2015

Svetlana Izosimova, QA Officer

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual
GBB1221-CC1221	GCSEMI	BB045362.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1221-CC1221	GCSEMI	BB045385.D	o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1221-CC1221	GCSEMI	BB045397.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1221-ECC1221	GCSEMI	BB045407.D	PETN, Tetryl
GBB1221-IC1221	GCSEMI	BB045353.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,4,6-Trinitrotoluene, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-amino-4,6-Dinitrotoluene, 3,4-Dinitrotoluene, 3,5-Dinitroaniline, 4-amino-2,6-Dinitrotoluene, DNX, HMX, m-Nitrotoluene, MNX, Nitrobenzene, Nitroglycerine, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1221-IC1221	GCSEMI	BB045354.D	1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 3,4-Dinitrotoluene, 4-amino-2,6-Dinitrotoluene, DNX, HMX, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX, Tetryl, TNX
GBB1221-IC1221	GCSEMI	BB045355.D	2,6-Dinitrotoluene, m-Nitrotoluene, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, PETN, TNX
GBB1221-IC1221	GCSEMI	BB045356.D	m-Nitrotoluene, MNX, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX
GBB1221-IC1221	GCSEMI	BB045358.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1221-IC1221	GCSEMI	BB045359.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
GBB1221-ICC1221	GCSEMI	BB045357.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1221-ICV1221	GCSEMI	BB045360.D	HMX, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN
GBB1221-ICV1221	GCSEMI	BB045361.D	TNX
OP54390-BS	GCSEMI	BB045389.D	m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene
OP54390-MS	GCSEMI	BB045393.D	HMX, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, Tetryl
OP54390-MSD	GCSEMI	BB045394.D	HMX, m-Nitrotoluene, o-Nitrotoluene, p-Nitrotoluene, PETN, RDX
OP54390-PT1	GCSEMI	BB045390.D	1,3-Dinitrobenzene, HMX, m-Nitrotoluene, Nitrobenzene, o-Nitrotoluene, p-Nitrotoluene, RDX
SQ295-IC295	MSSEMI	Q9300.D	Perchlorate

18 Manual Integrations were found for FA20794

Summary of Hits

Job Number: FA20794
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 12/15/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20794-1	**XU854ISG06A**					
Perchlorate		13.1	1.6	0.78	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		9.8	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20794-2	**XU854ISN06A**					
Perchlorate		10.4	1.6	0.79	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		9.1	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20794-3	**XU854ISO06A**					
Perchlorate		12.2	2.0	0.98	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		2.2	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20794-4	**XU854ISI06A**					
Perchlorate		61.0	1.7	0.84	ug/kg	SW846 6850
Nitrogen, Nitrate [a]		3.8	1.0	0.50	mg/kg	EPA 300/SW846 9056A

(a) Associated CCV outside control limits.

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: XU854ISG06A
Lab Sample ID: FA20794-1 **Date Sampled:** 12/15/14
Matrix: SO - Soil **Date Received:** 12/16/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9514.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.29 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	13.1	1.6	0.78	0.43	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISG06A
Lab Sample ID: FA20794-1 **Date Sampled:** 12/15/14
Matrix: SO - Soil **Date Received:** 12/16/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045392.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	119%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISG06A		
Lab Sample ID:	FA20794-1	**Date Sampled:**	12/15/14
Matrix:	SO - Soil	**Date Received:**	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	9.8	1.0	0.50	0.50	mg/kg	1	12/29/14 15:38	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISN06A
Lab Sample ID: FA20794-2
Matrix: SO - Soil
Method: SW846 6850 IN HOUSE
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/15/14
Date Received: 12/16/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9517.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.26 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	10.4	1.6	0.79	0.44	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISN06A
Lab Sample ID: FA20794-2 **Date Sampled:** 12/15/14
Matrix: SO - Soil **Date Received:** 12/16/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045395.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	127%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISN06A		
Lab Sample ID:	FA20794-2	**Date Sampled:**	12/15/14
Matrix:	SO - Soil	**Date Received:**	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	9.1	1.0	0.50	0.50	mg/kg	1	12/29/14 15:54	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISO06A
Lab Sample ID: FA20794-3 **Date Sampled:** 12/15/14
Matrix: SO - Soil **Date Received:** 12/16/14
Method: SW846 6850 IN HOUSE **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9518.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.02 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.2	2.0	0.98	0.54	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISO06A
Lab Sample ID: FA20794-3 **Date Sampled:** 12/15/14
Matrix: SO - Soil **Date Received:** 12/16/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045396.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	125%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISO06A		
Lab Sample ID:	FA20794-3	**Date Sampled:**	12/15/14
Matrix:	SO - Soil	**Date Received:**	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	2.2	1.0	0.50	0.50	mg/kg	1	12/29/14 16:11	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: XU854ISI06A
Lab Sample ID: FA20794-4
Matrix: SO - Soil
Method: SW846 6850 IN HOUSE
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/15/14
Date Received: 12/16/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9519.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
Run #2							

	Initial Weight	Final Volume
Run #1	1.19 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	61.0	1.7	0.84	0.46	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: XU854ISI06A
Lab Sample ID: FA20794-4 **Date Sampled:** 12/15/14
Matrix: SO - Soil **Date Received:** 12/16/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045399.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	123%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISI06A		
Lab Sample ID:	FA20794-4	**Date Sampled:**	12/15/14
Matrix:	SO - Soil	**Date Received:**	12/16/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [b]	3.8	1.0	0.50	0.50	mg/kg	1	12/29/14 16:28	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.
(b) Associated CCV outside control limits.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Subcontract Lab Data

Report of Analysis

ANALYTICAL DATA PACKAGE
SDG # 1412230

PROJECT NAME: FA20794X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 12, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 41

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:
This is an original submittal of the final report package.

Analytical Information:
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:
No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

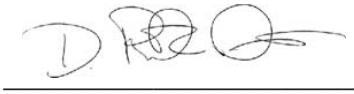
BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.



Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

1412230

CHAIN OF CUSTODY

ACCUTEST LABORATORIES
4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: FA20794X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20794X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISG06A		12/15/14	10:13:00 AM	MS	SO										X	-01
2X	XU854ISN06A		12/15/14	11:14:00 AM	MS	SO	1					1				X	-02
3X	XU854ISO06A		12/15/14	12:14:00 PM	MS	SO	1					1				X	-03
4X	XU854ISI06A		12/15/14	2:16:00 PM	MS	SO	1					1				X	-04

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions: Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

1 Relinquished by Sampler:	Date Time: 122414 1700	Received By: 1	12/30 0900	Relinquished By: 2	Date Time: / Received By: 2
3 Relinquished by Sampler:	Date Time:	Received By: 3		Relinquished By: 4	Date Time: / Received By: 4
5 Relinquished by:	Date Time:	Received By: 5		Custody Seal #	[ ] Intact [ ] Not Intact / Preserved where applicable [ ] / On Ice [ ] / Cooler Temp.

1412230

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 12/30/14 @0900 Workorder# 1412230

1. Tracking # 5815 (last 4 digits, FedEx)

   Courier: FedEx

2. Temperature of rep. sample or temp blank when opened: 0.8 °C + correction factor(-0.0) = 0.8°C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? (YES)..NO...NA

   If yes, how many and where: 2 - front

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 12/30/14

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

   Were these signed and dated correctly? YES...NO..(NA)

8. Packing material used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice (Ice-pack) Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13. a. Were VOA vials received? YES..(NO)..NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO...(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES..(NO)..NA...Comments_____
    If multiple coolers, sequence #_____

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) JTG 12/30/14

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO..(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO..(NA)

16. Was residual chlorine present? YES...NO..(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) JTG 12/30/14

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA If not, PM notified? YES..(NO)..(NA) JTG 12/30/14

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO..(NA)

21. Were there Non-Conformance issues at login? YES..(NO)..NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) JTG 12/30/14

I certify that I attached a label with the unique LIMS number to each container (initial/date) JTG 12/30/14

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) JTG 12/30/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

ACCUTEST LABORATORIES FA20794

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM (Continued)

LIMS Data Entry Second Check Workorder# 1412230

22. Cooler Receipt Form Issues reviewed and communicated to PM? YES...NO...NA

23. Client and Project verified to match the COC/CRF in LIMS Project Screen? YES...NO...NA

24. Following Items verified to items verified to match the COC/CRF in LIMS Receipt Screen:

a. Received Date/Received By YES...NO...NA

b. TAT (COC specified different?) YES...NO...NA

c. Shipping Container Temperatures (corrected temps) YES...NO ...NA

d. Condition Items (seals, intact, labels, preservation, ROI) YES...NO...NA

25. Following LIMS Sample Information verified against COC for each sample:

a. Name YES...NO...NA

b. QC Source YES...NO...NA

c. Matrix YES...NO...NA

d. Sample Type YES...NO...NA

e. Sampled Date/Time (Correct Time Zone) YES...NO...NA

f. Work Analyses/Versions (if applicable) YES...NO...NA

g. Sample Issues included in comments (limited volume, concentration warnings, etc.)? YES...NO...NA

h. Unpreserved VOA holding time set to 7 days? YES...NO...NA

26. Containers consistent with tests requested? YES...NO...NA

27. Field data entered and matching COC? YES...NO...NA

I certify that I have verified the LIMS data entry and answered questions 23-27 above (initial/date): _____

Additional Details:

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1412230

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	12/31/2014		

5

C:\Users\sgordon\Desktop\QS10_R21_20140729_CoolerReceiptForm.doc

1412230

Empirical Laboratories, LLC

Client: Accutest Laboratories
Project: Nitrocellulose

Project Manager: Sonya Gordon
Project Number: ACC_Nitro

Report To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Due to Client: 01/14/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Joshua T. Gross
Date Received: 12/30/2014 09:00
Logged In By: Joshua T. Gross
Date Logged In: 12/30/2014 10:20

Samples Received at: **0.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1412230-01 XU854ISG06A [Solid] Sampled 12/15/2014 10:13 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 09:13	
1412230-02 XU854ISN06A [Solid] Sampled 12/15/2014 11:14 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 10:14	
1412230-03 XU854ISO06A [Solid] Sampled 12/15/2014 12:14 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 11:14	
1412230-04 XU854ISI06A [Solid] Sampled 12/15/2014 14:16 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 13:16	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412230

QC LEVEL: Level IV
Report Due: 1/14/2015
Client Sample Count: 4

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/15/2014	12/30/2014	1412230-01	XU854ISG06A	Solid	X
Client Sample	12/15/2014	12/30/2014	1412230-02	XU854ISN06A	Solid	X
Client Sample	12/15/2014	12/30/2014	1412230-03	XU854ISO06A	Solid	X
Client Sample	12/15/2014	12/30/2014	1412230-04	XU854ISI06A	Solid	X

5

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1412230-01 [XU854ISG06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412230-02 [XU854ISN06A]	5A05001	10.00/25.00	10.2	25.0	1.00			01/05/15
1412230-03 [XU854ISO06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412230-04 [XU854ISI06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15

ANALYSIS DATA SHEET

XU854ISG06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/15/14 10:13

SDG: 1412230
Project: Nitrocellulose
Laboratory ID: 1412230-01
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**2.59**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:57

ANALYSIS DATA SHEET

XU854ISN06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/15/14 11:14

SDG: 1412230
Project: Nitrocellulose
Laboratory ID: 1412230-02
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**2.53**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:01

ANALYSIS DATA SHEET

XU854ISO06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412230-03
Sampled:	12/15/14 12:14	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.29**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:03

5

ANALYSIS DATA SHEET

XU854ISI06A

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
Sampled: 12/15/14 14:16

SDG: 1412230
Project: Nitrocellulose
Laboratory ID: 1412230-04
Received: 12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.34**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:04

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A05001	01/08/15 13:38

5

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids:

SDG: 1412230
Project: Nitrocellulose
Laboratory ID: 5A05001-BS1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.98**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:40

5

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1412230
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%
5A00807-CCV2	Nitrate/Nitrite as N	1200	1187	98.9	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A05001

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A05001-BLK1	Nitrocellulose	0.112	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD
5A00807-CCB2	Nitrocellulose	-12.6	400	1600	ug/L	U	E353.2MOD

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A05001	Laboratory ID:	5A05001-BS1
Preparation:	pNone	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.98	88.8	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412230

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A05001 Batch Matrix: Solid Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISG06A	1412230-01	01/05/15 05:13	10.12	25.00
XU854ISN06A	1412230-02	01/05/15 05:13	10.16	25.00
XU854ISO06A	1412230-03	01/05/15 05:13	10.04	25.00
XU854ISI06A	1412230-04	01/05/15 05:13	10.03	25.00
Blank	5A05001-BLK1	01/05/15 05:13	10.00	25.00
LCS	5A05001-BS1	01/05/15 05:13	10.00	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Sequence:	5A00807	Instrument:	WC-Lachat
Calibration:	5009003		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Blank	5A05001-BLK1		01/08/15 13:38
LCS	5A05001-BS1		01/08/15 13:40
XU854ISG06A	1412230-01		01/08/15 13:57
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00
XU854ISN06A	1412230-02		01/08/15 14:01
XU854ISO06A	1412230-03		01/08/15 14:03
XU854ISI06A	1412230-04		01/08/15 14:04
Calibration Check	5A00807-CCV2		01/08/15 14:20
Calibration Blank	5A00807-CCB2		01/08/15 14:22

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Calibration:	5009003	Instrument:	WC-Lachat
Matrix:	Solid	Calibration Dates:	1/8/15 13:22 1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

5

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

5

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Calibration:	5009003	Instrument:	WC-Lachat
Matrix:	Solid	Calibration Dates:	1/8/15 13:22 1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

5

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412230

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISG06A	12/15/14 10:13	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 13:57	24.20	28.00	
XU854ISN06A	12/15/14 11:14	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:01	24.16	28.00	
XU854ISO06A	12/15/14 12:14	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:03	24.12	28.00	
XU854ISI06A	12/15/14 14:16	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:04	24.03	28.00	

Data for Wet Chemistry
Supporting Raw Data / Logs

ACCUTEST LABORATORIES FA20794

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd QC 1/12/15 1412230

ACCUTEST LABORATORIES FA20794

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528 ✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 Nitrocellulose ug/g

Nitrate/Nitrite

1412230

ACCUTEST LABORATORIES FA20794

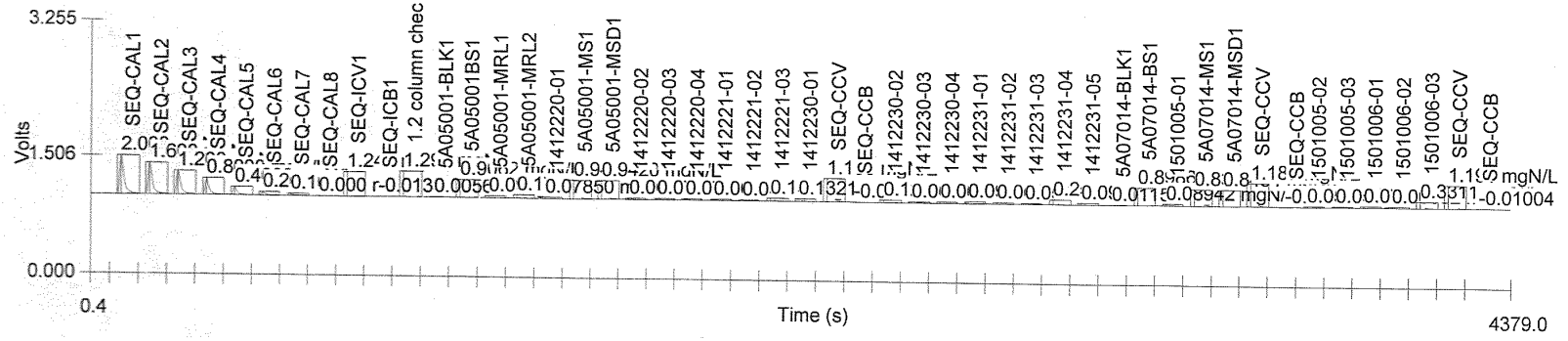
Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View



ACCUTEST LABORATORIES FA20794

Author: Omnion User

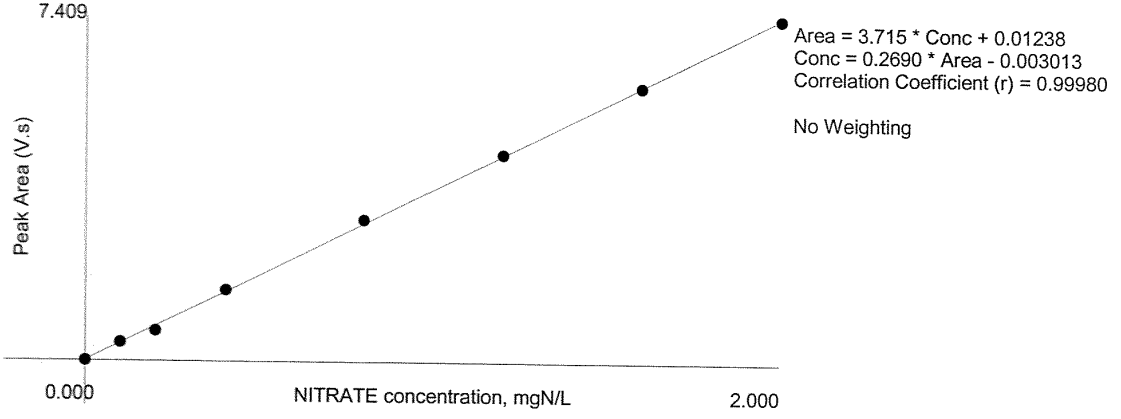
Nitrate/Nitrite

Date : 1/8/2015

Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC

Printed: 1/12/2015 11:29:36AM

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID		ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1412220-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	"
1412220-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	"
1412220-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.15	25						NA	"
1412220-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.13	25						NA	"
1412221-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	"
1412221-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.1	25						NA	"
1412221-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.26	25						NA	"
1412230-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	"
1412230-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	"
1412230-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	"
1412230-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.03	25						NA	"
1412231-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.14	25						NA	"
1412231-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	"
1412231-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	"
1412231-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	"
1412231-05	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.07	25						NA	"
1501001-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10	25						NA	Prepare all MRLs within the first month of the quarter - upload associated method blank as sample.;Prepare/analyzed only if analysis performed this quarter!;

ACCUTEST LABORATORIES FA20794

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC

Printed: 1/12/2015 11:29:36AM

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
5A05001-BLK1		QC	01/05/2015	10	25					NA	
5A05001-BS1		QC	01/05/2015	10	25	14G0256		255		NA	
5A05001-MRL1		QC	01/05/2015	10	25	14G0257		255		NA	
5A05001-MRL2		QC	01/05/2015	10	25	14G0257		500		NA	
5A05001-MS1		QC	01/05/2015	10.09	25	14G0256	1412220-01	255		NA	
5A05001-MSD1		QC	01/05/2015	10.02	25	14G0256	1412220-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20794 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM REMEDIATIONS INC
Address: 5811 UNIVERSITY HEIGHTS BLVD
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: IVANA RAICEVIC E-mail: IRAICEVIC@FPM-REMEDIATIONS.COM
Phone#: 210-495-7744 ext 13 Fax #: 210-495-8544
Sampler(s) Name(s) (Printed): ANDRE SAMPLE

Project Information

Project Name: NM-AZ-PBR
Street: HOLLOMAN AFB
City: ALAMOGORDO State: NM
Project #: 1029-13-01-H-X0854105
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MeOH	8330SL	NC353.2	NO3 300	PERC 6850	LAB USE ONLY
1	X0854ISG06A	12/15	10:13	MS	Soil	1										4	4	X	X	
2	X0854ISN06A	12/15	11:14	MS	Soil	1										4	4	X	X	
3	X0854IS006A	12/15	12:14	MS	Soil	1										4	4	X	X	
4	X0854ISI06A	12/15	14:16	MS	Soil	1										4	4	X	X	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [x] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1	12/15 15:15	2 KP	3 FP 12-16-14	930	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.8

FA20794: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20794 CLIENT: FPM PROJECT: NM-A2-PBR

DATE/TIME RECEIVED: 12-16-14 936 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 7020

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.4
- [ ] CORRECTED TEMPS: 2.8

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

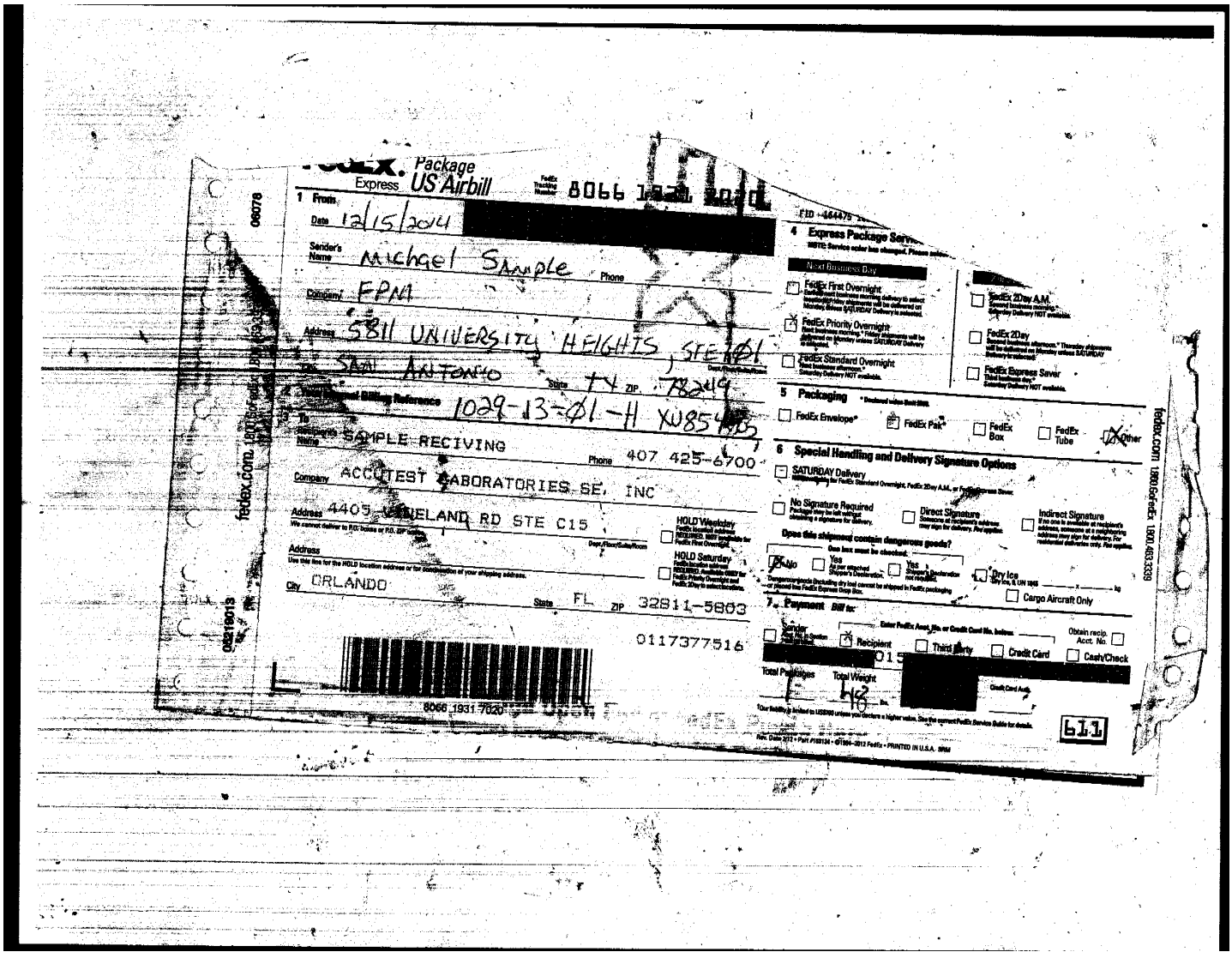
TECHNICIAN SIGNATURE/DATE 12-17-14 REVIEWER SIGNATURE/DATE 12-17-14

NF 10/14

receipt confirmation 102914.xls

6.1 6

FA20794: Chain of Custody
Page 2 of 3



FA20794: Chain of Custody

Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MB	Q9513.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	2.0	0.55	ug/kg	

Blank Spike Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-BS	Q9525.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
14797-73-0	Perchlorate	2	2.1	105	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54473-MS	Q9515.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
OP54473-MSD	Q9516.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301
FA20794-1	Q9514.D	1	01/05/15	NAF	01/02/15	OP54473	SQ301

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	FA20794-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	13.1		1.82	13.7	33* [a]	1.72	13.8	41* [a]	1	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9509.D	**Injection Time:**	09:11
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	20879	4.64
Upper Limit [c]	43769	6.64
Lower Limit [d]	14590	2.64

Lab Sample ID	IS 1 AREA	RT
OP54473-MB	21635	4.62
FA20794-1	20003	4.53
OP54473-MS	20064	4.54
OP54473-MSD	19714	4.54
FA20794-2	19953	4.54
FA20794-3	19463	4.55
FA20794-4	19453	4.55
ZZZZZZ	19951	4.55
ZZZZZZ	19428	4.55

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ301-CC295	**Injection Date:**	01/05/15
Lab File ID:	Q9522.D	**Injection Time:**	11:19
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	19506	4.69
Upper Limit [c]	43769	6.69
Lower Limit [d]	14590	2.69

Lab Sample ID	IS 1 AREA	RT
OP54473-BS	20285	4.66
ZZZZZZ	19024	4.56
ZZZZZZ	19432	4.55
ZZZZZZ	18982	4.56
ZZZZZZ	20688	4.56
ZZZZZZ	20292	4.56
ZZZZZZ	19424	4.56
ZZZZZZ	18219	4.56

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICC295
Lab FileID: Q9302.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2 : D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3 : D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4 : D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5 : D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6 : D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7 : D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------									
3) Perchlorate	1.1702	1.1127	1.2371	1.2032	1.2930	1.3009	1.4553	1.2532	8.869	1.0000

*(value) - Average RF below (value)

7.5.1

7

Initial Calibration Verification

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICV295
Lab FileID: Q9307.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9307
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.917	-4.2	95.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9509.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9509
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.010	0.5	100.5

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9510.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9510
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.189	-5.4	94.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9522.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9522
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.194	9.7	109.7

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9523.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9523
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.206	3.0	103.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9535.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9535
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.128	6.4	106.4

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ301-CC295
Lab FileID: Q9536.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0105_6850_SQ301\sq301.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9536
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.196	-2.1	97.9

CC Criteria: +/- 15%

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-MB	BB045391.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	120%	69-134%

Blank Spike Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-BS	BB045389.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2850	114	75-147
121-82-4	RDX	2500	2520	101	79-126
606-20-2	2,6-Dinitrotoluene	2500	2520	101	81-134
121-14-2	2,4-Dinitrotoluene	2500	2520	101	81-128
35572-78-2	2-amino-4,6-Dinitrotoluene	2500	2550	102	81-127
19406-51-0	4-amino-2,6-Dinitrotoluene	2500	2510	100	74-125
118-96-7	2,4,6-Trinitrotoluene	2500	2540	102	70-123
55-63-0	Nitroglycerine	12500	12000	96	73-121

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	110%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-PT1	BB045390.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	620	572	92	54-255
121-82-4	RDX	587	540	92	59-118
606-20-2	2,6-Dinitrotoluene	1320	1260	95	64-119
121-14-2	2,4-Dinitrotoluene	638	549	86	66-119
35572-78-2	2-amino-4,6-Dinitrotoluene	650	514	79	60-112
19406-51-0	4-amino-2,6-Dinitrotoluene	947	571	60	54-103
118-96-7	2,4,6-Trinitrotoluene	808	690	85	59-100
55-63-0	Nitroglycerine	1000	673	67	62-115

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	111%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-MS	BB045393.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
OP54390-MSD	BB045394.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
FA20794-1	BB045392.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	FA20794-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	99	U	2500	2590	104	2500	2670	107	3	75-147/22
121-82-4	RDX	99	U	2500	2350	94	2500	2320	93	1	79-126/21
606-20-2	2,6-Dinitrotoluene	99	U	2500	2500	100	2500	2500	100	0	81-134/20
121-14-2	2,4-Dinitrotoluene	99	U	2500	2470	99	2500	2480	99	0	81-128/17
35572-78-2	2-amino-4,6-Dinitrotoluene	99	U	2500	2500	100	2500	2510	100	0	81-127/15
19406-51-0	4-amino-2,6-Dinitrotoluene	99	U	2500	2440	98	2500	2480	99	2	74-125/23
118-96-7	2,4,6-Trinitrotoluene	99	U	2500	2490	100	2500	2550	102	2	70-123/16
55-63-0	Nitroglycerine	990	U	12500	12200	98	12500	12500	100	2	73-121/15

CAS No.	Surrogate Recoveries	MS	MSD	FA20794-1	Limits
610-39-9	3,4-Dinitrotoluene	106%	107%	119%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-DUP	BB045402.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
FA20820-2	BB045401.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	FA20820-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20820-2	Limits
610-39-9	3,4-Dinitrotoluene	121%	117%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54390-DUP2	BB045403.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221
FA20820-2	BB045401.D	1	12/30/14	KL	12/26/14	OP54390	GBB1221

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20794-1, FA20794-2, FA20794-3, FA20794-4

CAS No.	Compound	FA20820-2 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20820-2	Limits
610-39-9	3,4-Dinitrotoluene	118%	117%	69-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA20794-1	BB045392.D	119
FA20794-2	BB045395.D	127
FA20794-3	BB045396.D	125
FA20794-4	BB045399.D	123
OP54390-BS	BB045389.D	110
OP54390-DUP	BB045402.D	121
OP54390-DUP2	BB045403.D	118
OP54390-MB	BB045391.D	120
OP54390-MS	BB045393.D	106
OP54390-MSD	BB045394.D	107
OP54390-PT1	BB045390.D	111

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1221-CC1221	**Injection Date:**	12/30/14
Lab File ID:	BB045385.D	**Injection Time:**	01:50
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] **RT**
Check Std	10.72

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
ZZZZZZ	BB045387.D	12/30/14	02:40	10.70
ZZZZZZ	BB045388.D	12/30/14	03:05	10.71
OP54390-BS	BB045389.D	12/30/14	03:30	10.71
OP54390-PT1	BB045390.D	12/30/14	03:55	10.71
OP54390-MB	BB045391.D	12/30/14	04:20	10.70
FA20794-1	BB045392.D	12/30/14	04:45	10.70
OP54390-MS	BB045393.D	12/30/14	05:10	10.69
OP54390-MSD	BB045394.D	12/30/14	05:35	10.69
FA20794-2	BB045395.D	12/30/14	06:00	10.69
FA20794-3	BB045396.D	12/30/14	06:25	10.69

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1221-CC1221	**Injection Date:**	12/30/14
Lab File ID:	BB045397.D	**Injection Time:**	06:50
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.69	10.69

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA20794-4	BB045399.D	12/30/14	07:40		10.67
ZZZZZZ	BB045400.D	12/30/14	08:05		10.67
FA20820-2	BB045401.D	12/30/14	08:30		10.67
OP54390-DUP	BB045402.D	12/30/14	08:55		10.67
OP54390-DUP2	BB045403.D	12/30/14	09:20		10.67
ZZZZZZ	BB045404.D	12/30/14	09:45		10.67
ZZZZZZ	BB045405.D	12/30/14	10:10		10.66
ZZZZZZ	BB045406.D	12/30/14	10:35		10.67
GBB1221-ECC122B	BB045407.D	12/30/14	11:11	10.67	10.67

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Initial Calibration

Calibration Files
20 =BB045353.D 50 =BB045354.D 100 =BB045355.D 200 =BB045356.D
500 =BB045357.D 1000=BB045358.D 2000=BB045359.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.083	3.188	3.339	3.315	3.251	3.260	3.334	3.253	E3	2.83
2)	HMX	1.474	1.670	1.716	1.606	1.362	1.383	1.387	1.514	E3	9.79
3)	DNX	2.832	2.894	2.975	2.866	2.801	2.804	2.844	2.860	E3	2.12
4)	MNX	2.374	2.804	2.556	2.409	2.322	2.355	2.394	2.459	E3	6.88
5)	RDX	1.678	1.843	1.932	1.772	1.747	1.752	1.790	1.788	E3	4.52
6)	1,3,5-Trinitroben	4.481	4.244	3.946	3.884	3.871	3.921	3.957	4.043	E3	5.70
7)	1,3-Dinitrobenzen	5.762	5.450	5.064	5.209	5.032	5.039	5.164	5.246	E3	5.15
8)	3,5-Dinitroanilin	4.428	4.294	4.178	4.237	4.085	4.059	4.165	4.207	E3	3.02
9)	Nitrobenzene	3.284	2.994	3.213	3.005	3.053	2.947	3.019	3.074	E3	4.07
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.249	2.503	2.699	2.670	2.612	2.621	2.703	2.722	E3	8.90
12)	2,4,6-Trinitrotol	3.826	3.865	3.450	3.659	3.673	3.722	3.835	3.719	E3	3.87
13)	2-Amino-4,6-Dinit	3.530	2.871	2.821	2.977	3.028	3.076	3.196	3.071	E3	7.74
14)	4-Amino-2,6-Dinit	2.435	1.814	2.010	2.087	2.154	2.232	2.335	2.153	E3	9.65
15)S	3,4-Dinitrotoluen	1.255	1.611	1.536	1.636	1.789	1.878	1.985	1.670	E3	14.49
16)	2,4-Dinitrotoluen	4.665	4.604	4.533	4.326	4.368	4.431	4.582	4.501	E3	2.84
17)	2,6-Dinitrotoluen	2.520	2.735	2.784	2.590	2.484	2.498	2.572	2.598	E3	4.54
18)	o-Nitrotoluene	2.558	2.143	2.170	2.422	2.225	2.241	2.211	2.281	E3	6.64
19)	p-Nitrotoluene	4.075	3.357	3.374	3.402	3.460	3.500	3.455	3.518	E3	7.14
20)	m-Nitrotoluene	3.363	2.975	2.971	2.975	2.971	3.030	3.055	3.048	E3	4.68
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.230	4.445	5.099	5.021	4.991	5.011	5.125	4.846	E3	7.35
2)	HMX	6.508	6.195	4.907	4.746	3.950	3.968	3.929	4.886	E3	22.11

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 3946.60045 *A

3)	DNX	4.912	4.407	4.943	4.721	4.494	4.508	4.544	4.647	E3	4.60
4)	MNX	3.468	3.785	3.814	3.676	3.612	3.635	3.712	3.672	E3	3.16
5)	RDX	3.145	3.081	2.963	2.852	2.787	2.806	2.864	2.928	E3	4.76
6)	1,3,5-Trinitroben	8.213	7.591	7.478	7.449	7.405	7.515	7.661	7.616	E3	3.64
7)	1,3-Dinitrobenzen	3.725	3.678	3.707	3.397	3.387	3.414	3.504	3.545	E3	4.33
8)	3,5-Dinitroanilin	6.498	7.321	7.046	7.024	6.894	6.889	7.022	6.956	E3	3.56
9)	Nitrobenzene	3.210	3.149	2.901	3.005	2.977	2.862	2.917	3.003	E3	4.35
10)	Nitroglycerin	1.196	1.315	1.272	1.238	1.213	1.229	1.258	1.246	E3	3.19
11)	Tetryl	3.961	4.500	4.527	4.412	4.390	4.433	4.579	4.400	E3	4.66
12)	2,4,6-Trinitrotol	4.562	4.724	4.508	4.392	4.366	4.403	4.578	4.505	E3	2.85
13)	2-Amino-4,6-Dinit	5.080	4.634	4.475	4.586	4.578	4.621	4.850	4.689	E3	4.40
14)	4-Amino-2,6-Dinit	4.560	4.217	4.347	4.444	4.420	4.490	4.748	4.461	E3	3.75
15)S	3,4-Dinitrotoluen	2.765	2.828	3.098	3.156	3.212	3.287	3.560	3.129	E3	8.68
16)	2,4-Dinitrotoluen	2.590	2.550	2.594	2.638	2.658	2.711	2.939	2.668	E3	4.87
17)	2,6-Dinitrotoluen	3.069	3.190	2.949	3.132	3.166	3.207	3.375	3.155	E3	4.15
18)	o-Nitrotoluene	2.918	3.190	2.992	3.097	3.129	3.096	3.156	3.083	E3	3.10
19)	p-Nitrotoluene	3.152	2.835	2.934	2.912	2.943	2.937	2.985	2.957	E3	3.29
20)	m-Nitrotoluene	2.925	3.513	3.544	3.543	3.621	3.627	3.717	3.498	E3	7.50

Initial Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICC1221
Lab FileID: BB045357.D

```
21)  PETN              1.019 1.021 1.064 1.048 1.048 1.045 1.044 1.041 E3   1.52
-------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Tue Dec 30 07:02:24 2014
```

Initial Calibration Verification

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045360.D\dad1A.ch
Acq On : 29-Dec-2014, 14:43:29 Operator: KISMETL
Sample : icv1221-500 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX		----------NA----------				
2	HMX	500.000	517.314	-3.5	115	0.01	1.28- 1.89
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	RDX	500.000	523.852	-4.8	107	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	500.000	514.427	-2.9	107	0.00	4.10- 4.90
7	1,3-Dinitrobenzene	500.000	469.073	6.2	98	0.00	5.29- 6.09
8	3,5-Dinitroaniline	500.000	513.448	-2.7	106	0.00	5.81- 6.61
9	Nitrobenzene	500.000	530.019	-6.0	107	0.00	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	500.000	428.487	14.3	89	0.00	8.92- 9.72
12	2,4,6-Trinitrotoluene	500.000	516.406	-3.3	105	0.00	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	500.000	547.959	-9.6	111	0.00	9.54-10.34
14	4-Amino-2,6-Dinitrotol	500.000	569.662	-13.9	114	0.00	9.97-10.77
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene	500.000	533.805	-6.8	110	0.00	10.86-11.66
17	2,6-Dinitrotoluene	500.000	526.912	-5.4	110	0.00	11.25-12.05
18	o-Nitrotoluene	500.000	538.039	-7.6	110	0.00	13.46-14.34
19	p-Nitrotoluene	500.000	525.630	-5.1	107	0.00	13.76-14.76
20	m-Nitrotoluene	500.000	558.699	-11.7	115	0.00	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX		----------NA----------				
	----------	Amount	Calc.	%Drift	----------		
2	HMX	500.000	572.928	-14.6	114	0.01	1.28- 1.89
	----------	Amount	Calc.	%Drift	----------		
3	DNX		----------NA----------				
4	MNX		----------NA----------				
5	RDX	500.000	509.258	-1.9	107	0.00	2.58- 3.38
6	1,3,5-Trinitrobenzene	500.000	525.399	-5.1	108	0.00	4.10- 4.90
7	1,3-Dinitrobenzene	500.000	489.663	2.1	102	0.00	5.29- 6.09
8	3,5-Dinitroaniline	500.000	529.536	-5.9	107	-0.01	5.81- 6.61
9	Nitrobenzene	500.000	516.106	-3.2	104	0.00	6.67- 7.47
10	Nitroglycerin	2500.000	2589.908	-3.6	106	0.00	8.55- 9.55
11	Tetryl	500.000	452.808	9.4	91	0.00	8.91- 9.71
12	2,4,6-Trinitrotoluene	500.000	537.672	-7.5	111	0.00	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	500.000	563.179	-12.6	115	0.00	9.55-10.35

Initial Calibration Verification

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045360.D

14		4-Amino-2,6-Dinitrotol	500.000	571.387	-14.3	115	0.00	9.97-10.77
15	S	3,4-Dinitrotoluene			----------NA----------			
16		2,4-Dinitrotoluene	500.000	574.059	-14.8	115	-0.02	10.86-11.66
17		2,6-Dinitrotoluene	500.000	557.864	-11.6	111	-0.02	11.27-12.07
18		o-Nitrotoluene	500.000	531.281	-6.3	105	0.00	13.34-14.34
19		p-Nitrotoluene	500.000	529.110	-5.8	106	0.00	13.76-14.76
20		m-Nitrotoluene	500.000	585.508	-17.1#	113	0.00	14.34-15.34
21		PETN	2500.000	3447.072	-37.9#	137	0.00	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:58 2014

8.8.2

8

Initial Calibration Verification

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045361.D\dad1A.ch
Acq On : 29-Dec-2014, 15:51:09 Operator: KISMETL
Sample : icv1221-500,plus Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	544.273	-8.9	109	0.00	1.07- 1.67
2	HMX		----------NA----------				
3	DNX	500.000	516.485	-3.3	105	0.00	1.47- 2.07
4	MNX	500.000	517.911	-3.6	110	0.00	2.07- 2.67
5	RDX		----------NA----------				
6	1,3,5-Trinitrobenzene		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	3,5-Dinitroaniline		----------NA----------				
9	Nitrobenzene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12	2,4,6-Trinitrotoluene		----------NA----------				
13	2-Amino-4,6-Dinitrotoluen		----------NA----------				
14	4-Amino-2,6-Dinitrotoluen		----------NA----------				
15 S	3,4-Dinitrotoluene		----------NA----------				
16	2,4-Dinitrotoluene		----------NA----------				
17	2,6-Dinitrotoluene		----------NA----------				
18	o-Nitrotoluene		----------NA----------				
19	p-Nitrotoluene		----------NA----------				
20	m-Nitrotoluene		----------NA----------				
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	500.000	566.364	-13.3	110	0.00	1.07- 1.67
	---------- Amount	Calc.	%Drift	----------			
2	HMX		----------NA----------				
	---------- Amount	Calc.	%Drift	----------			
3	DNX	500.000	505.196	-1.0	104	0.00	1.47- 2.07
4	MNX	500.000	528.313	-5.7	107	0.00	2.07- 2.67
5	RDX		----------NA----------				
6	1,3,5-Trinitrobenzene		----------NA----------				
7	1,3-Dinitrobenzene		----------NA----------				
8	3,5-Dinitroaniline		----------NA----------				
9	Nitrobenzene		----------NA----------				
10	Nitroglycerin		----------NA----------				
11	Tetryl		----------NA----------				
12	2,4,6-Trinitrotoluene		----------NA----------				
13	2-Amino-4,6-Dinitrotoluen		----------NA----------				

8.8.3

8

Initial Calibration Verification

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ICV1221
Lab FileID: BB045361.D

14		4-Amino-2,6-Dinitrotoluen	----------NA----------	
15	S	3,4-Dinitrotoluene	----------NA----------	
16		2,4-Dinitrotoluene	----------NA----------	
17		2,6-Dinitrotoluene	----------NA----------	
18		o-Nitrotoluene	----------NA----------	
19		p-Nitrotoluene	----------NA----------	
20		m-Nitrotoluene	----------NA----------	
21		PETN	----------NA----------	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045357.D 8330B.M Tue Dec 30 07:02:59 2014

8.8.3

8

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045385.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045385.D\dad1B.ch Vial: 3
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045385.D\dad1A.ch
Acq On : 30-Dec-2014, 01:50:37 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	984.980	1.5	98	0.00	1.07- 1.67
2	HMX	1000.000	902.086	9.8	99	0.00	1.28- 1.89
3	DNX	1000.000	974.063	2.6	99	0.00	1.47- 2.07
4	MNX	1000.000	959.718	4.0	100	-0.01	2.07- 2.67
5	RDX	1000.000	987.558	1.2	101	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	940.242	6.0	97	-0.03	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	942.259	5.8	98	-0.03	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	945.017	5.5	98	-0.03	5.81- 6.61
9	Nitrobenzene	1000.000	949.899	5.0	99	-0.02	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	932.263	6.8	97	-0.05	8.92- 9.72
12	2,4,6-Trinitrotoluene	1000.000	976.174	2.4	98	-0.05	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	1000.000	978.199	2.2	98	-0.05	9.54-10.34
14	4-Amino-2,6-Dinitrotol	1000.000	1004.824	-0.5	97	-0.05	9.97-10.77
15 S	3,4-Dinitrotoluene	1000.000	1094.040	-9.4	97	-0.05	10.37-11.17
16	2,4-Dinitrotoluene	1000.000	955.582	4.4	97	-0.05	10.86-11.66
17	2,6-Dinitrotoluene	1000.000	944.047	5.6	98	-0.04	11.25-12.05
18	o-Nitrotoluene	1000.000	949.653	5.0	97	-0.03	13.46-14.34
19	p-Nitrotoluene	1000.000	970.660	2.9	98	-0.03	13.76-14.76
20	m-Nitrotoluene	1000.000	983.490	1.7	99	-0.02	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	1015.747	-1.6	98	0.00	1.07- 1.67
	---------- Amount	Calc.	%Drift	----------			
2	HMX	1000.000	990.754	0.9	99	0.00	1.28- 1.89
	---------- Amount	Calc.	%Drift	----------			
3	DNX	1000.000	958.064	4.2	99	0.00	1.47- 2.07
4	MNX	1000.000	980.826	1.9	99	-0.01	2.07- 2.67
5	RDX	1000.000	948.971	5.1	99	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	970.808	2.9	98	-0.03	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	959.448	4.1	100	-0.03	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	979.577	2.0	99	-0.04	5.81- 6.61
9	Nitrobenzene	1000.000	966.718	3.3	101	-0.03	6.67- 7.47
10	Nitroglycerin	5000.000	4800.479	4.0	97	-0.04	8.55- 9.55
11	Tetryl	1000.000	983.496	1.7	98	-0.05	8.91- 9.71
12	2,4,6-Trinitrotoluene	1000.000	961.677	3.8	98	-0.05	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	1000.000	968.205	3.2	98	-0.05	9.55-10.35

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045385.D

14		4-Amino-2,6-Dinitrotol	1000.000	990.971	0.9	98	-0.05	9.97-10.77
15	S	3,4-Dinitrotoluene	1000.000	1038.724	-3.9	99	-0.05	10.37-11.17
16		2,4-Dinitrotoluene	1000.000	993.314	0.7	98	-0.06	10.86-11.66
17		2,6-Dinitrotoluene	1000.000	996.954	0.3	98	-0.06	11.27-12.07
18		o-Nitrotoluene	1000.000	993.000	0.7	99	-0.03	13.34-14.34
19		p-Nitrotoluene	1000.000	970.165	3.0	98	-0.03	13.76-14.76
20		m-Nitrotoluene	1000.000	1022.720	-2.3	99	-0.02	14.34-15.34
21		PETN	5000.000	3973.781	20.5#	79	-0.04	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Tue Dec 30 08:52:55 2014

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045397.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045397.D\dad1B.ch Vial: 91
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045397.D\dad1A.ch
Acq On : 30-Dec-2014, 06:50:26 Operator: KISMETL
Sample : cc1221-1000 Inst : G1315B
Misc : OP54361,GBB1221,1000,,,10,,water Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	985.875	1.4	98	0.00	1.07- 1.67
2	HMX	1000.000	916.480	8.4	100	-0.01	1.28- 1.89
3	DNX	1000.000	963.976	3.6	98	-0.01	1.47- 2.07
4	MNX	1000.000	941.501	5.8	98	-0.02	2.07- 2.67
5	RDX	1000.000	967.963	3.2	99	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	946.605	5.3	98	-0.04	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	940.766	5.9	98	-0.04	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	956.636	4.3	99	-0.05	5.81- 6.61
9	Nitrobenzene	1000.000	967.491	3.3	101	-0.04	6.67- 7.47
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	956.230	4.4	99	-0.09	8.92- 9.72
12	2,4,6-Trinitrotoluene	1000.000	984.510	1.5	98	-0.08	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	1000.000	980.017	2.0	98	-0.08	9.54-10.34
14	4-Amino-2,6-Dinitrotol	1000.000	1005.188	-0.5	97	-0.08	9.97-10.77
15 S	3,4-Dinitrotoluene	1000.000	1096.406	-9.6	98	-0.09	10.37-11.17
16	2,4-Dinitrotoluene	1000.000	954.361	4.6	97	-0.09	10.86-11.66
17	2,6-Dinitrotoluene	1000.000	935.254	6.5	97	-0.08	11.25-12.05
18	o-Nitrotoluene	1000.000	957.823	4.2	98	-0.05	13.46-14.34
19	p-Nitrotoluene	1000.000	975.022	2.5	98	-0.05	13.76-14.76
20	m-Nitrotoluene	1000.000	980.088	2.0	99	-0.04	14.33-15.33
21	PETN	----------	----------	NA	----------		

***** Signal #2 *****

1	TNX	1000.000	1019.967	-2.0	99	0.00	1.07- 1.67
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	994.216	0.6	99	-0.01	1.28- 1.89
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	961.740	3.8	99	-0.01	1.47- 2.07
4	MNX	1000.000	976.279	2.4	99	-0.02	2.07- 2.67
5	RDX	1000.000	942.344	5.8	98	-0.02	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	982.110	1.8	100	-0.04	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	942.667	5.7	98	-0.04	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	969.896	3.0	98	-0.05	5.81- 6.61
9	Nitrobenzene	1000.000	956.983	4.3	100	-0.04	6.67- 7.47
10	Nitroglycerin	5000.000	4839.619	3.2	98	-0.07	8.55- 9.55
11	Tetryl	1000.000	1007.733	-0.8	100	-0.09	8.91- 9.71
12	2,4,6-Trinitrotoluene	1000.000	968.409	3.2	99	-0.08	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	1000.000	973.276	2.7	99	-0.08	9.55-10.35

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-CC1221
Lab FileID: BB045397.D

14		4-Amino-2,6-Dinitrotol	1000.000	995.406	0.5	99	-0.08	9.97-10.77
15	S	3,4-Dinitrotoluene	1000.000	1051.945	-5.2	100	-0.09	10.37-11.17
16		2,4-Dinitrotoluene	1000.000	987.123	1.3	97	-0.10	10.86-11.66
17		2,6-Dinitrotoluene	1000.000	993.596	0.6	98	-0.09	11.27-12.07
18		o-Nitrotoluene	1000.000	1003.792	-0.4	100	-0.05	13.34-14.34
19		p-Nitrotoluene	1000.000	978.624	2.1	99	-0.05	13.76-14.76
20		m-Nitrotoluene	1000.000	1047.117	-4.7	101	-0.04	14.34-15.34
21		PETN	5000.000	4503.118	9.9	90	-0.05	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Tue Dec 30 08:52:56 2014

8.8.5

8

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ECC1221
Lab FileID: BB045407.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1229BPL\BB045407.D\dad1B.ch Vial: 91
Signal #2 : C:\HPCHEM\1\DATA\1229BPL\BB045407.D\dad1A.ch
Acq On : 30-Dec-2014, 11:11:04 Operator: KISMETL
Sample : ecc1221-1000 Inst : G1315B
Misc : OP54390,GBB1221,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Mon Dec 29 15:09:47 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	981.960	1.8	98	0.00	1.07- 1.67
2	HMX	1000.000	906.255	9.4	99	-0.01	1.28- 1.89
3	DNX	1000.000	960.145	4.0	98	-0.01	1.47- 2.07
4	MNX	1000.000	943.169	5.7	98	-0.02	2.07- 2.67
5	RDX	1000.000	970.829	2.9	99	-0.03	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	948.806	5.1	98	-0.05	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	932.582	6.7	97	-0.05	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	941.096	5.9	98	-0.06	5.81- 6.61
9	Nitrobenzene	1000.000	958.075	4.2	100	-0.04	6.67- 7.47
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	970.519	2.9	101	-0.11	8.92- 9.72
12	2,4,6-Trinitrotoluene	1000.000	995.727	0.4	99	-0.10	9.11- 9.91
13	2-Amino-4,6-Dinitrotol	1000.000	1000.017	-0.0	100	-0.10	9.54-10.34
14	4-Amino-2,6-Dinitrotol	1000.000	1037.578	-3.8	100	-0.10	9.97-10.77
15 S	3,4-Dinitrotoluene	1000.000	1125.313	-12.5	100	-0.11	10.37-11.17
16	2,4-Dinitrotoluene	1000.000	962.813	3.7	98	-0.11	10.86-11.66
17	2,6-Dinitrotoluene	1000.000	950.934	4.9	99	-0.09	11.25-12.05
18	o-Nitrotoluene	1000.000	964.245	3.6	98	-0.05	13.46-14.34
19	p-Nitrotoluene	1000.000	984.337	1.6	99	-0.05	13.76-14.76
20	m-Nitrotoluene	1000.000	994.266	0.6	100	-0.05	14.33-15.33
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	1012.126	-1.2	98	0.00	1.07- 1.67
	---------- Amount	Calc.	%Drift	----------			
2	HMX	1000.000	992.290	0.8	99	-0.01	1.28- 1.89
	---------- Amount	Calc.	%Drift	----------			
3	DNX	1000.000	957.764	4.2	99	-0.01	1.47- 2.07
4	MNX	1000.000	973.372	2.7	98	-0.02	2.07- 2.67
5	RDX	1000.000	937.307	6.3	98	-0.03	2.58- 3.38
6	1,3,5-Trinitrobenzene	1000.000	972.537	2.7	99	-0.05	4.10- 4.90
7	1,3-Dinitrobenzene	1000.000	957.610	4.2	99	-0.05	5.29- 6.09
8	3,5-Dinitroaniline	1000.000	977.525	2.2	99	-0.06	5.81- 6.61
9	Nitrobenzene	1000.000	952.304	4.8	100	-0.05	6.67- 7.47
10	Nitroglycerin	5000.000	4797.927	4.0	97	-0.08	8.55- 9.55
11	Tetryl	1000.000	997.339	0.3	99	-0.11	8.91- 9.71
12	2,4,6-Trinitrotoluene	1000.000	966.034	3.4	99	-0.10	9.10- 9.90
13	2-Amino-4,6-Dinitrotol	1000.000	973.784	2.6	99	-0.10	9.55-10.35

Continuing Calibration Summary

Job Number: FA20794
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1221-ECC1221
Lab FileID: BB045407.D

14		4-Amino-2,6-Dinitrotol	1000.000	996.962	0.3	99	-0.10	9.97-10.77
15	S	3,4-Dinitrotoluene	1000.000	1047.741	-4.8	100	-0.11	10.37-11.17
16		2,4-Dinitrotoluene	1000.000	981.995	1.8	97	-0.12	10.86-11.66
17		2,6-Dinitrotoluene	1000.000	1002.555	-0.3	99	-0.11	11.27-12.07
18		o-Nitrotoluene	1000.000	960.846	3.9	96	-0.06	13.34-14.34
19		p-Nitrotoluene	1000.000	959.731	4.0	97	-0.06	13.76-14.76
20		m-Nitrotoluene	1000.000	1025.816	-2.6	99	-0.05	14.34-15.34
21		PETN	5000.000	4451.153	11.0	89	-0.07	16.06-17.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045358.D 8330B.M Tue Dec 30 11:53:48 2014

8.8.6

8

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20794
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate	GP25246/GN64657	1.0	0.0	mg/kg	25	25.4	101.5	90-110%
Sulfate	GP25246/GN64657	20	0.0	mg/kg	501	543	108.5	90-110%

Associated Samples:
Batch GP25246: FA20794-1, FA20794-2, FA20794-3, FA20794-4
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20794
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate	GP25246/GN64657	FA20794-1	mg/kg	9.8	25.1	30.0	80.4N(a)	90-110%
Sulfate	GP25246/GN64657	FA20794-1	mg/kg	13700	503	14800	218.9(b)	90-110%

Associated Samples:
Batch GP25246: FA20794-1, FA20794-2, FA20794-3, FA20794-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.
(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20794
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Nitrate	GP25246/GN64657	FA20794-1	mg/kg	9.8	25.1	29.8	0.7	20%
Sulfate	GP25246/GN64657	FA20794-1	mg/kg	13700	501	14800	0.0	20%

Associated Samples:
Batch GP25246: FA20794-1, FA20794-2, FA20794-3, FA20794-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20794
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122901.TXT Date Analyzed: 12/29/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64657
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:05	GN64657-CCV1	1		
14:30	ZZZZZZ	2		
14:47	GN64657-CCV2	1		
15:04	GP25246-MB1	1		
15:21	GP25246-B1	1		
15:38	FA20794-1	1		
15:54	FA20794-2	1		
16:11	FA20794-3	1		
16:28	FA20794-4	1		
16:45	ZZZZZZ	1		
17:02	ZZZZZZ	1		
17:19	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:53	GN64657-CCV3	1		
18:10	GN64657-CCB1	1		
18:27	ZZZZZZ	1		
18:44	ZZZZZZ	1		
19:01	ZZZZZZ	1		
19:18	FA21035-3	1		(sample used for QC only; not part of login FA20794)
19:35	GP25246-S1	1		
19:52	GP25246-S2	1		
20:09	GP25246-S3	1		
20:26	GP25246-S4	1		
20:43	GN64657-CCV4	1		
21:00	GN64657-CCB2	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA20794
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122901.TXT Date Analyzed: 12/29/14 Methods: EPA 300/SW846 9056A
Run ID: GN64657 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN64657-CCV1	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64657-CCV2	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64657-CCV3	Nitrogen, Nitrate	2.8	0.10	0.050	2.5	112.0!(a)	90-110
GN64657-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64657-CCV4	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64657-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			

(!) Outside of QC limits
(a) Outside control limits.

Southeast ACCUTEST LABORATORIES

12/29/14

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA20723

Sampling Date: 12/11/14

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **276**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10 11

Table of Contents

-1-

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **7**
4.1: FA20723-1: XU854ISH0621 8
4.2: FA20723-2: XU854ISH0622 11
4.3: FA20723-3: XU854ISH0623 14
Section 5: Misc. Forms **17**
5.1: Chain of Custody 18
Section 6: GC/MS Semi-volatiles - QC Data Summaries **21**
6.1: Method Blank Summary 22
6.2: Blank Spike Summary 23
6.3: Matrix Spike/Matrix Spike Duplicate Summary 24
6.4: Internal Standard Area Summaries 25
6.5: Initial and Continuing Calibration Summaries 26
Section 7: GC/MS Semi-volatiles - Raw Data **31**
7.1: Samples 32
7.2: Method Blanks 38
7.3: Blank Spikes 40
7.4: Matrix Spike/Matrix Spike Duplicates 42
7.5: Initial and Continuing Calibarations 46
7.6: Instrument Run Logs 71
7.7: Prep Logs 73
Section 8: GC Semi-volatiles - QC Data Summaries **74**
8.1: Method Blank Summary 75
8.2: Blank Spike Summary 76
8.3: Laboratory Control Sample Summary 77
8.4: Matrix Spike/Matrix Spike Duplicate Summary 78
8.5: Duplicate Summary 79
8.6: Surrogate Recovery Summaries 81
8.7: GC Surrogate Retention Time Summaries 82
8.8: Initial and Continuing Calibration Summaries 84
Section 9: GC Semi-volatiles - Raw Data **94**
9.1: Samples 95
9.2: Method Blanks 101
9.3: Blank Spikes 103
9.4: Laboratory Control Samples 106
9.5: Matrix Spike/Matrix Spike Duplicates 109
9.6: Duplicates 115
9.7: Initial and Continuing Calibarations 120
9.8: Instrument Run Logs 153
9.9: Prep Logs 155

Sections:

Table of Contents

Section 10: General Chemistry - QC Data Summaries 156
10.1: Method Blank and Spike Results Summary 157
10.2: Matrix Spike Results Summary 158
10.3: Matrix Spike Duplicate Results Summary 159
10.4: Inst QC GN64610: Nitrogen, Nitrate 160
Section 11: General Chemistry - Raw Data 164
11.1: Raw Data GN64610: Nitrogen, Nitrate 165

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20723

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA20723-1	12/11/14	10:02	MS	12/12/14	SO	Soil	XU854ISH0621
FA20723-2	12/11/14	11:36	MS	12/12/14	SO	Soil	XU854ISH0622
FA20723-3	12/11/14	13:40	MS	12/12/14	SO	Soil	XU854ISH0623

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20723

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date** 12/29/2014 11:34:17

3 Samples were collected on 12/11/2014 and were received at Accutest on 12/12/2014 properly preserved, at 3 Deg. C and intact. These Samples received an Accutest job number of FA20723. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54351

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-3MSD, FA20723-3MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. For method performance in clean matrix refer to Blank Spike.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54324

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20579-1MS, FA20579-1MSD, FA20723-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25228

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-1MSD, FA20723-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For metod performance in clean matrix refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Svetlana Izosimova, QA Officer

Date: December 29, 2014

Summary of Hits

Job Number: FA20723
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 12/11/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20723-1	**XU854ISH0621**					
Perchlorate		9.5	1.9	0.96	ug/kg	SW846 6850
Nitrogen, Nitrate		15.0	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20723-2	**XU854ISH0622**					
Perchlorate		5.9	1.7	0.83	ug/kg	SW846 6850
Nitrogen, Nitrate		27.6	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20723-3	**XU854ISH0623**					
Perchlorate		12.5	1.8	0.88	ug/kg	SW846 6850
Nitrogen, Nitrate		35.6	1.0	0.50	mg/kg	EPA 300/SW846 9056A

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH0621
Lab Sample ID: FA20723-1 **Date Sampled:** 12/11/14
Matrix: SO - Soil **Date Received:** 12/12/14
Method: SW846 6850 SW846 6850 **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9318.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.04 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	9.5	1.9	0.96	0.53	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH0621
Lab Sample ID: FA20723-1 **Date Sampled:** 12/11/14
Matrix: SO - Soil **Date Received:** 12/12/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045297.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH0621		
Lab Sample ID:	FA20723-1	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	15.0	1.0	0.50	0.50	mg/kg	1	12/24/14 02:27	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH0622
Lab Sample ID: FA20723-2 **Date Sampled:** 12/11/14
Matrix: SO - Soil **Date Received:** 12/12/14
Method: SW846 6850 SW846 6850 **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9319.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.20 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	5.9	1.7	0.83	0.46	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH0622
Lab Sample ID: FA20723-2 **Date Sampled:** 12/11/14
Matrix: SO - Soil **Date Received:** 12/12/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045296.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	105%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH0622		
Lab Sample ID:	FA20723-2	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	27.6	1.0	0.50	0.50	mg/kg	1	12/24/14 02:44	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH0623
Lab Sample ID: FA20723-3 **Date Sampled:** 12/11/14
Matrix: SO - Soil **Date Received:** 12/12/14
Method: SW846 6850 SW846 6850 **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9322.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.13 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.5	1.8	0.88	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH0623
Lab Sample ID: FA20723-3 **Date Sampled:** 12/11/14
Matrix: SO - Soil **Date Received:** 12/12/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045300.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	104%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH0623		
Lab Sample ID:	FA20723-3	**Date Sampled:**	12/11/14
Matrix:	SO - Soil	**Date Received:**	12/12/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	35.6	1.0	0.50	0.50	mg/kg	1	12/24/14 03:00	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA20723 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FAM REMEDIATIONS, INC.
Address: 581 UNIVERSITY HEIGHTS, STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: SVANA RAICEVIC E-mail: S.RAICEVIC@FAM-REMEDIATIONS.COM
Phone: 210-495-7744 ext. 13 Fax #: 210-495-8544
Sampler(s) Name(s) (Printed): MIKE SAMPLE

Project Information

Project Name: NM-AZ OBR
Street: HOLLOMAN AFB
City: ALAMO GORDO State: NM
Project #: 029-13-01-V-XW854:05
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	H2SO4	HNO3	NaOH	NaOH/ZnAc	DI WATER	MeOH	8330SL	NC353.2	N0303000	PERC6850
1	XW854ISH0621	12/11	10:02	MS	Soil	1										X	X	X	X
2	XW854ISH0622	12/11	11:36	MS	Soil	1										X	X	X	X
3	XW854ISH0623	12/11	13:40	MS	Soil	1										X	X	X	X

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

LAB USE ONLY

TURNAROUND TIME (Business Days)

Approved By: / Rush Code: MMS

- [X] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1	12/11 15:00	2 FP	3 FP 12-12-14	1030	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 3.0

5.1 5

FA20723: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20723 CLIENT: FPM PROJECT: NM-AZ PBR

DATE/TIME RECEIVED: 12-12-14 1030 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 7031

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.6
- [ ] CORRECTED TEMPS: 3.0

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

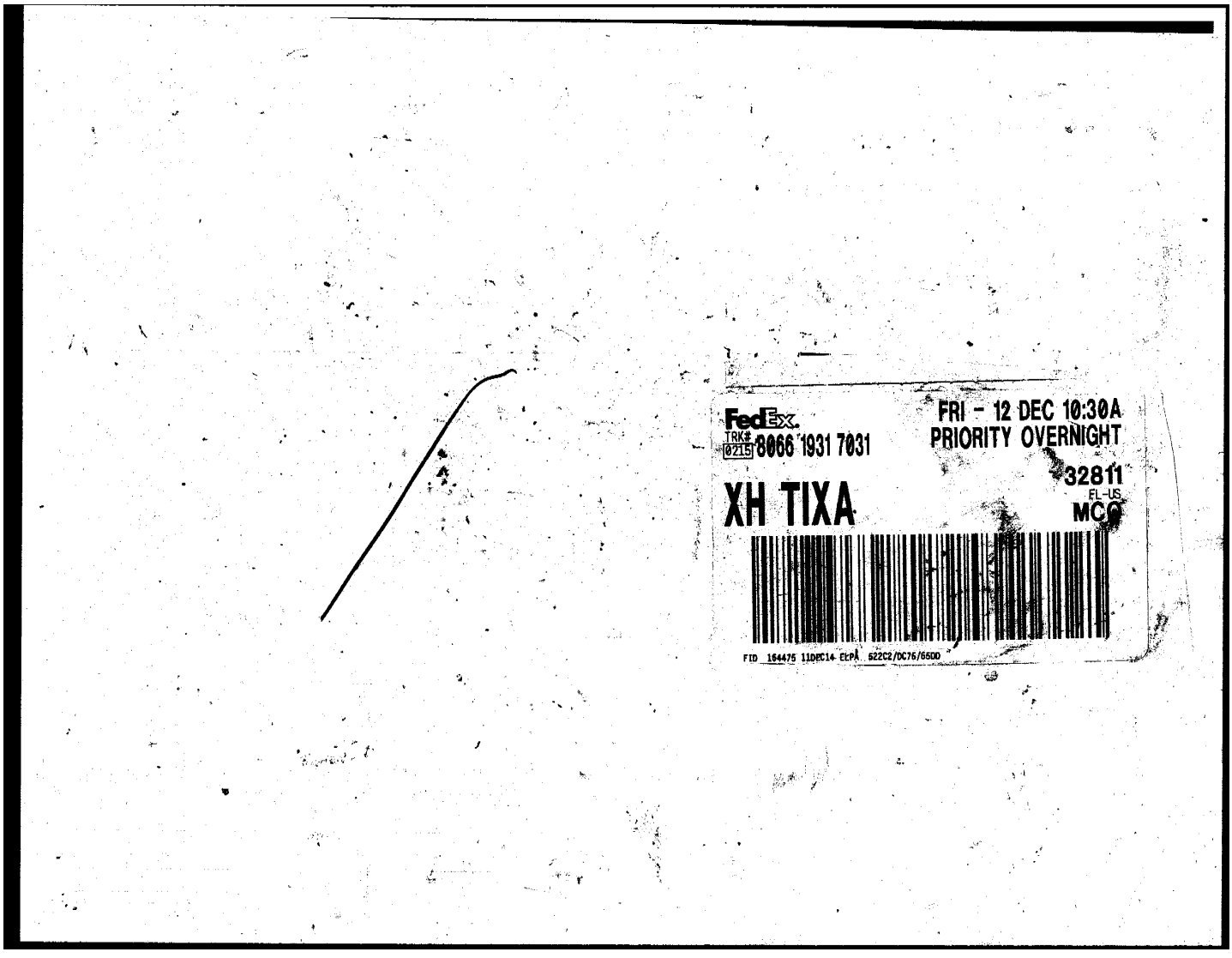
SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 12-15-14 REVIEWER SIGNATURE/DATE 12-15-14

NF 10/14

receipt confirmation 102914.xls

5.1 5



FA20723: Chain of Custody
Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54351-MB	Q9321.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	2.0	0.55	ug/kg	

Blank Spike Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54351-BS	Q9320.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
14797-73-0	Perchlorate	2	2.2	110	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54351-MS	Q9323.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
OP54351-MSD	Q9324.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
FA20723-3	Q9322.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	FA20723-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	12.5		1.8	13.3	44* [a]	1.8	13.5	55* [a]	1	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ295-CC295	**Injection Date:**	12/26/14
Lab File ID:	Q9315.D	**Injection Time:**	11:53
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	29434	4.92
Upper Limit [c]	43769	6.92
Lower Limit [d]	14590	2.92

Lab Sample ID	IS 1 AREA	RT
FA20723-1	32514	4.74
FA20723-2	33666	4.75
OP54351-BS	30701	4.87
OP54351-MB	32566	4.85
FA20723-3	29590	4.74
OP54351-MS	30468	4.75
OP54351-MSD	32871	4.75

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICC295
Lab FileID: Q9302.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2 : D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3 : D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4 : D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5 : D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6 : D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7 : D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------									
3) Perchlorate	1.1702	1.1127	1.2371	1.2032	1.2930	1.3009	1.4553	1.2532	8.869	1.0000

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Sample: SQ295-ICV295
Lab FileID: Q9307.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9307
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.917	-4.2	95.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-CC295
Lab FileID: Q9315.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9315
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.021	1.0	101.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-CC295
Lab FileID: Q9316.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9316
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.181	-9.4	90.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-CC295
Lab FileID: Q9325.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9325
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.087	4.3	104.3

CC Criteria: +/- 15%

Southeast

ACCUTEST LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9318.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:20
Sample Name	:	FA20723-1
Vial	:	Vial 18
Sample Info	:	OP54351,SQ295,1.04,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

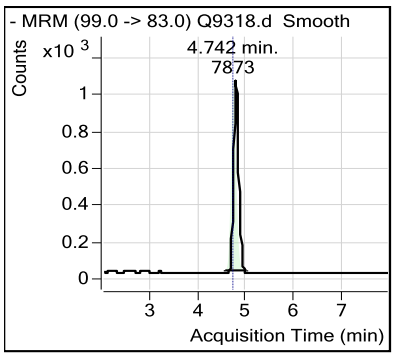
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.738	107.0 -> 89.0	32514	5.000	ng/ml	-0.187	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.742	99.0 -> 83.0	7873	0.991	ng/ml	90	2.8
		101.0 -> 85.0	2785				

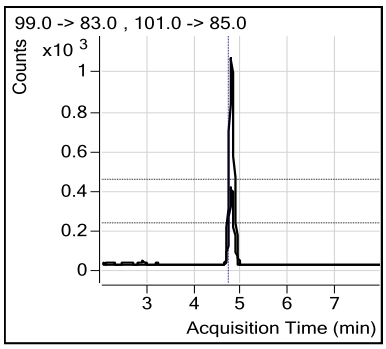
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

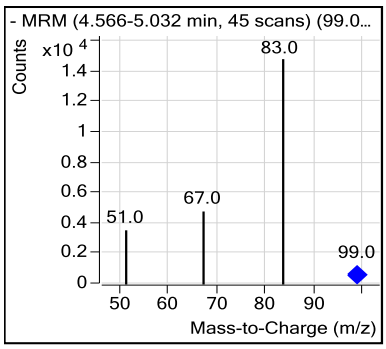
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9318.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:20
Sample Name	:	FA20723-1
Vial	:	Vial 18
Sample Info	:	OP54351,SQ295,1.04,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

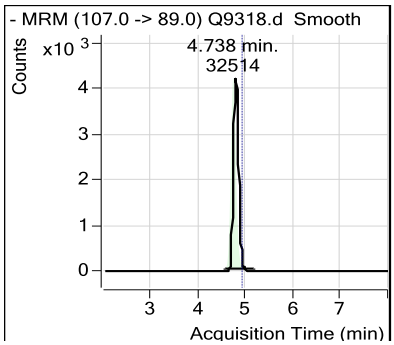
Perchlorate

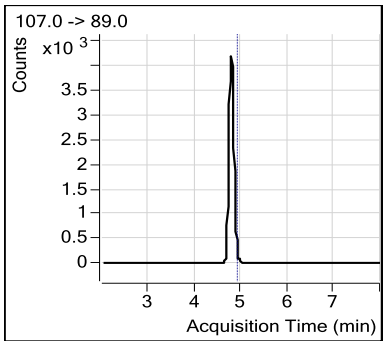


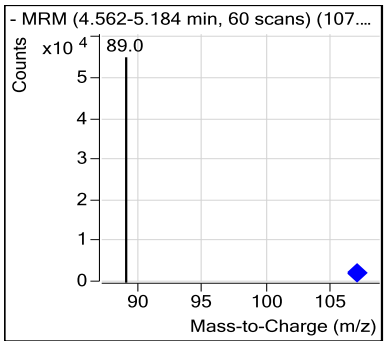




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9319.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:28
Sample Name	:	FA20723-2
Vial	:	Vial 19
Sample Info	:	OP54351,SQ295,1.20,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

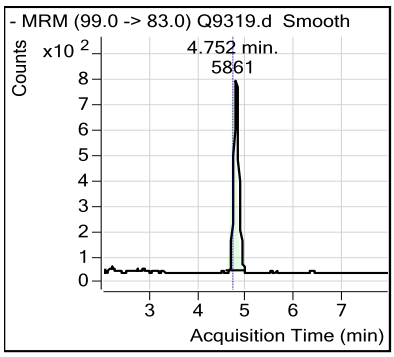
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	33666	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	5861	0.714	ng/ml	86	2.7
		101.0 -> 85.0	2204				

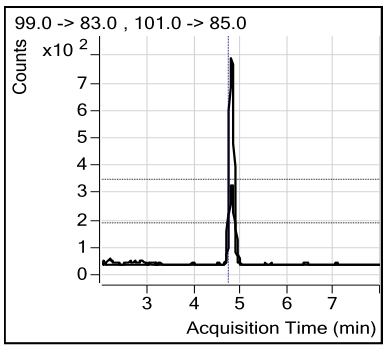
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

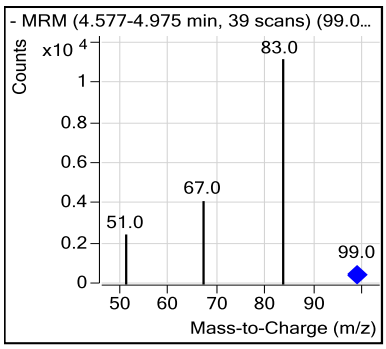
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9319.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:28
Sample Name	:	FA20723-2
Vial	:	Vial 19
Sample Info	:	OP54351,SQ295,1.20,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

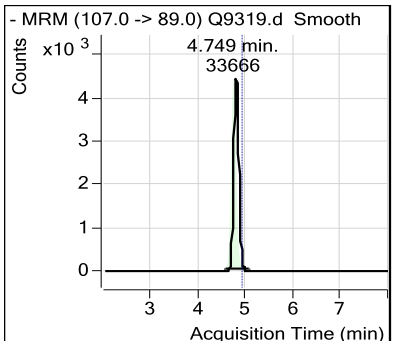
Perchlorate

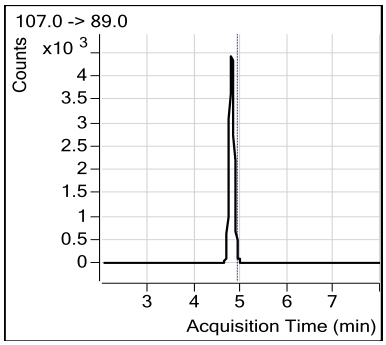


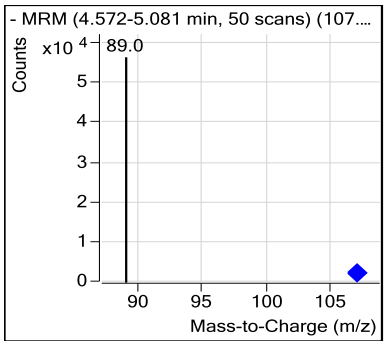




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9322.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:55
Sample Name	:	FA20723-3
Vial	:	Vial 20
Sample Info	:	OP54351,SQ295,1.13,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

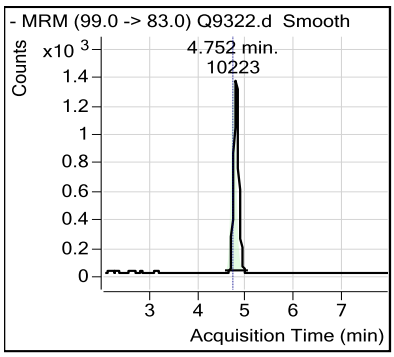
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.738	107.0 -> 89.0	29590	5.000	ng/ml	-0.187	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	10223	1.409	ng/ml	85	2.6
		101.0 -> 85.0	3909				

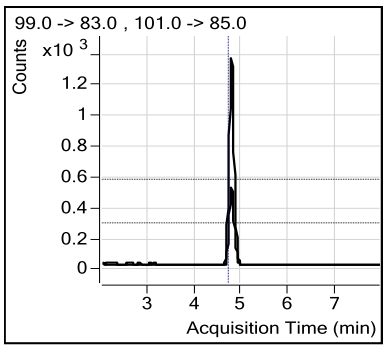
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

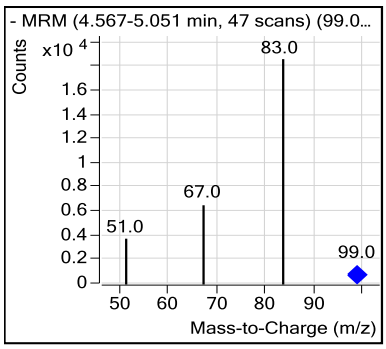
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9322.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:55
Sample Name	:	FA20723-3
Vial	:	Vial 20
Sample Info	:	OP54351,SQ295,1.13,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

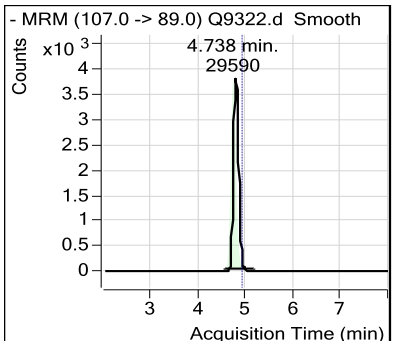
Perchlorate

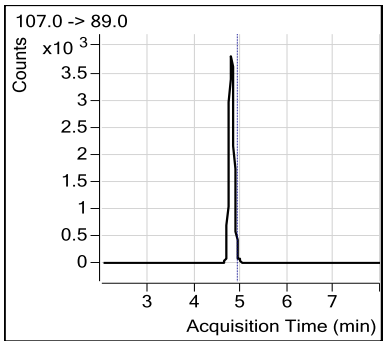


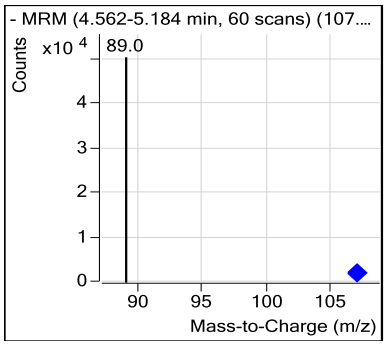




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9321.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:46
Sample Name	:	OP54351-MB
Vial	:	Vial 13
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

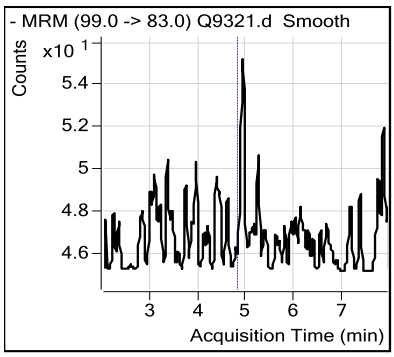
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.852	107.0 -> 89.0	32566	5.000	ng/ml	-0.073	
System Monitoring Compounds							
Target Compounds						Qvalue	Q-Ratio

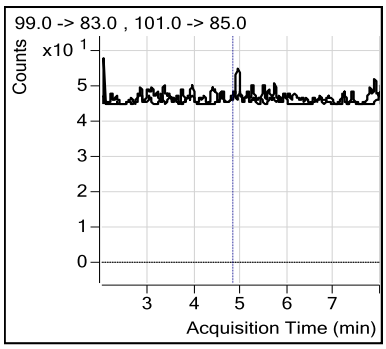
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

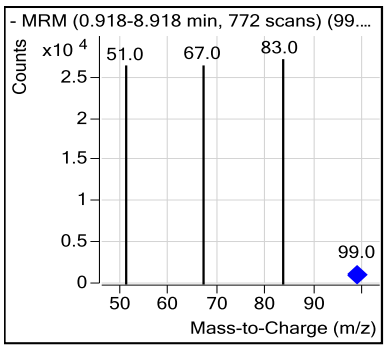
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9321.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:46
Sample Name	:	OP54351-MB
Vial	:	Vial 13
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

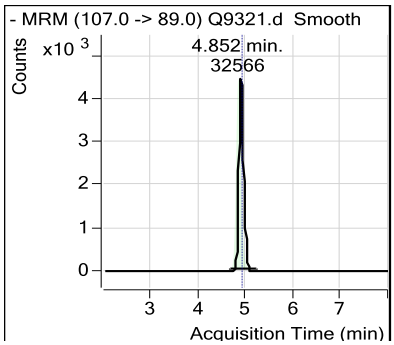
Perchlorate

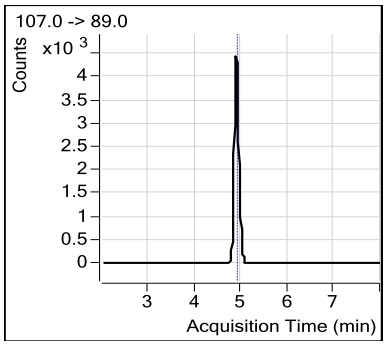


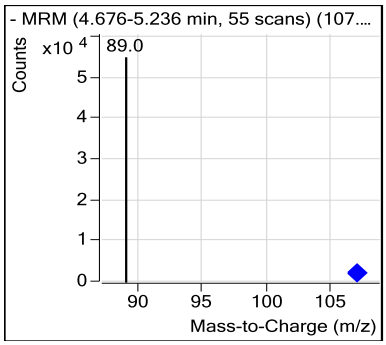




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9320.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:37
Sample Name	:	OP54351-BS
Vial	:	Vial 12
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

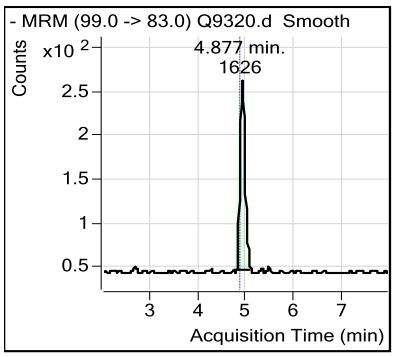
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.873	107.0 -> 89.0	30701	5.000	ng/ml	-0.052	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.877	99.0 -> 83.0	1626	0.218	ng/ml	91	2.9
		101.0 -> 85.0	566				

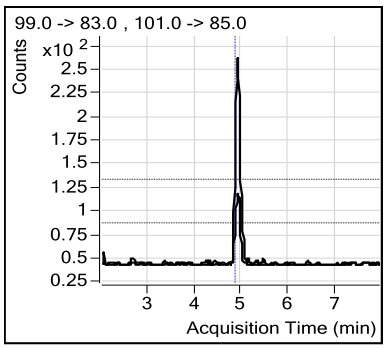
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

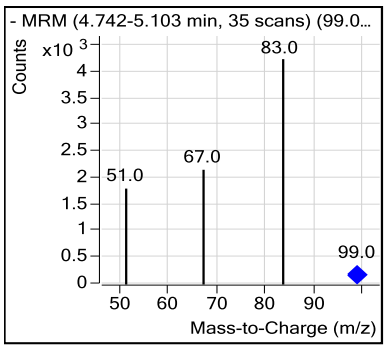
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9320.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:37
Sample Name	:	OP54351-BS
Vial	:	Vial 12
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

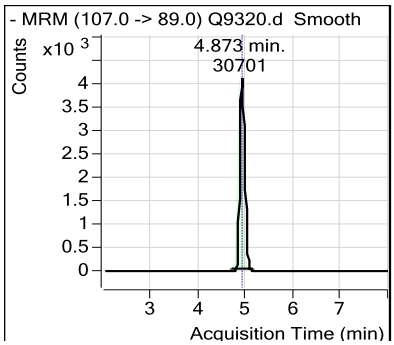
Perchlorate

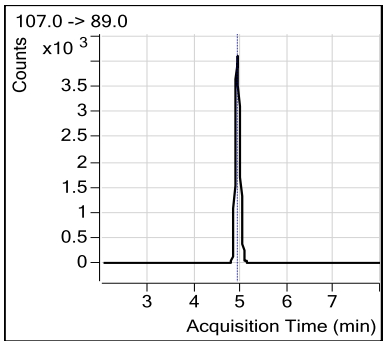


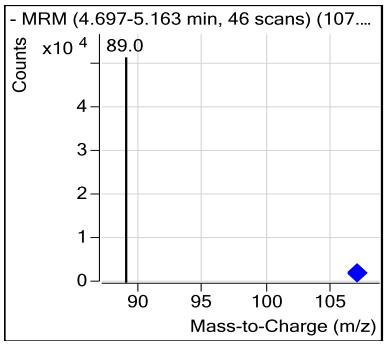




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9323.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:03
Sample Name	:	OP54351-MS
Vial	:	Vial 21
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

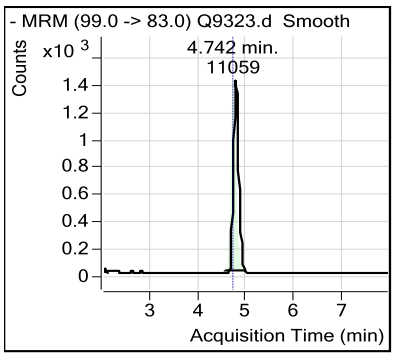
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	30468	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.742	99.0 -> 83.0	11059	1.479	ng/ml	91	2.9
		101.0 -> 85.0	3870				

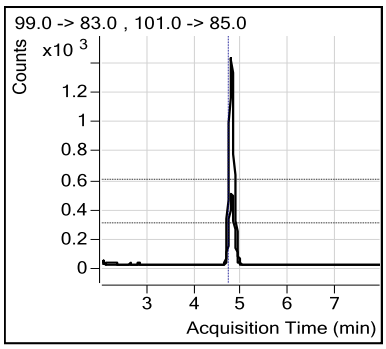
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

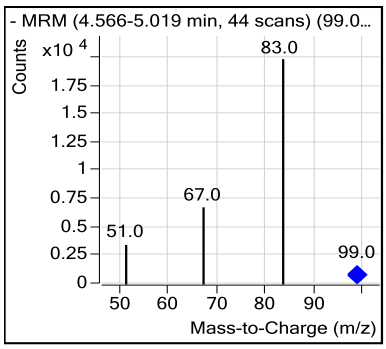
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9323.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:03
Sample Name	:	OP54351-MS
Vial	:	Vial 21
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

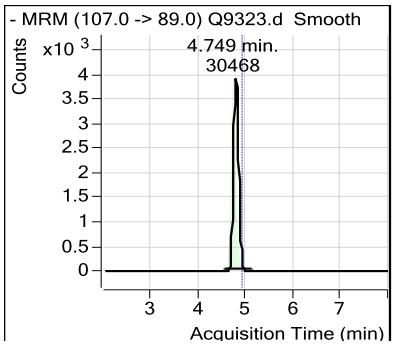
Perchlorate

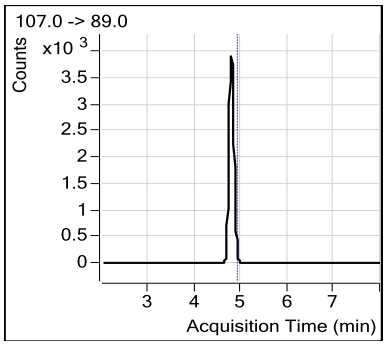


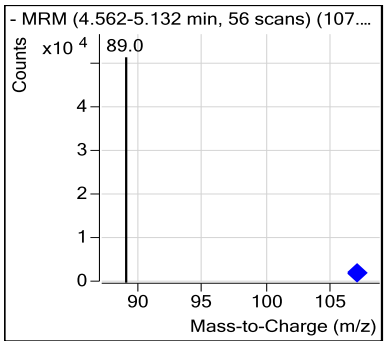




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9324.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:12
Sample Name	:	OP54351-MSD
Vial	:	Vial 22
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

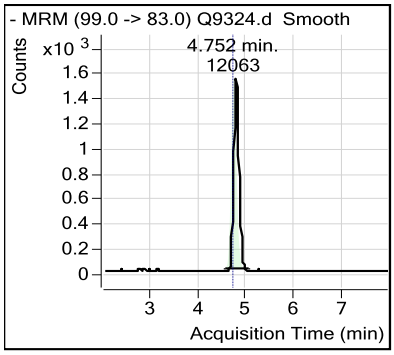
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	32871	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	12063	1.495	ng/ml	99	3.3
		101.0 -> 85.0	3699				

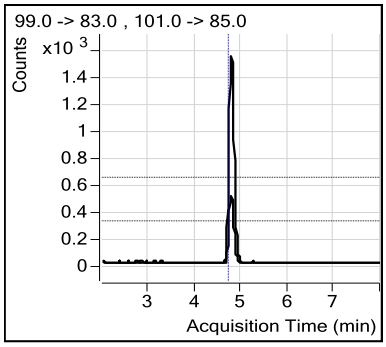
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

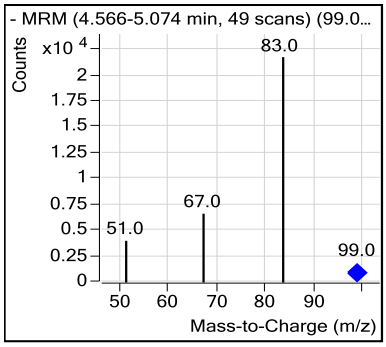
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9324.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:12
Sample Name	:	OP54351-MSD
Vial	:	Vial 22
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

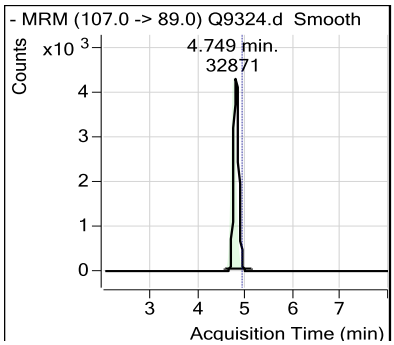
Perchlorate

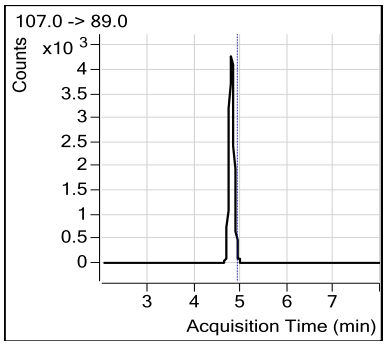


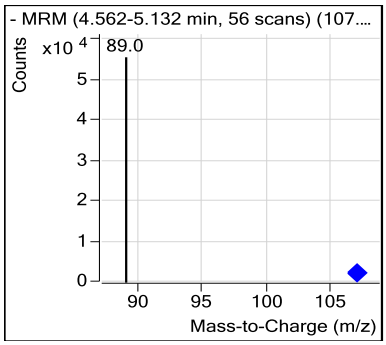




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	31638	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	1481	0.193	ng/ml	98	3.4
		101.0 -> 85.0	430				

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

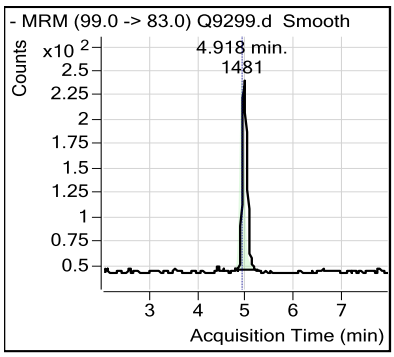
7.5.1

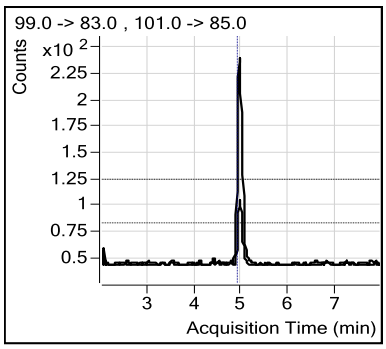
7

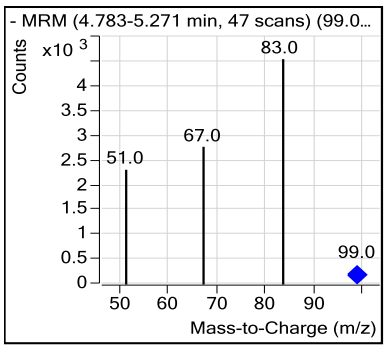
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

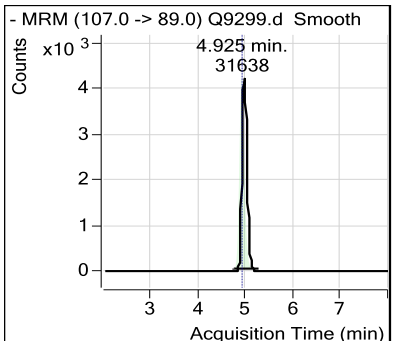
Perchlorate

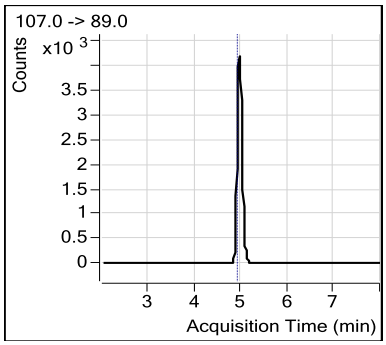


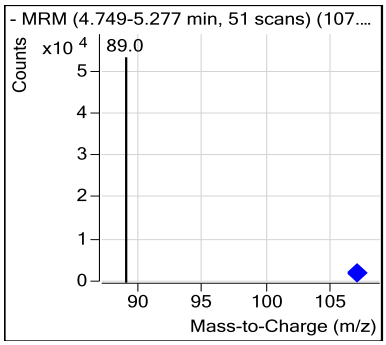




Cl18O4







Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:10

Quantitative Analysis Report for Perchlorate by 685

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	Q-Ratio
Internal Standards								
Cl18O4	4.925	107.0 -> 89.0	30978	5.000	ng/ml		0.000	
System Monitoring Compounds								
Target Compounds							**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	3447	0.457	ng/ml	m	85	2.6
		101.0 -> 85.0	1319					

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

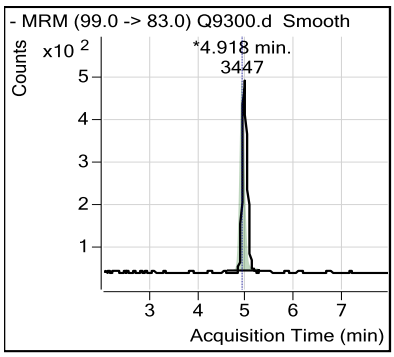
7.5.2

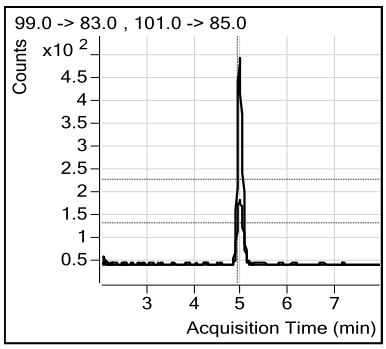
7

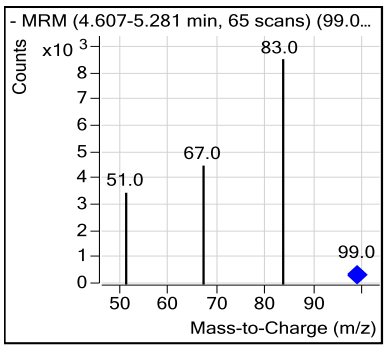
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

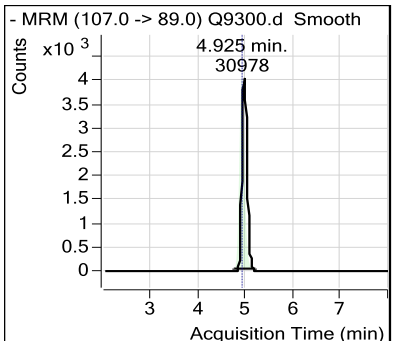
Perchlorate

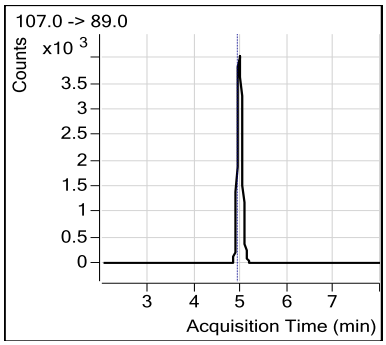


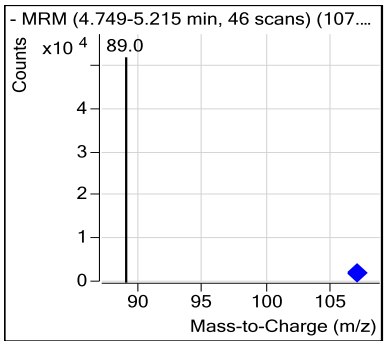




Cl18O4







Manual Integration Approval Summary

Sample Number:	SQ295-IC295	**Method:**	SW846 6850
Lab FileID:	Q9300.D	**Analyst approved:**	12/26/14 14:09 Nancy Saunders
Injection Time:	12/26/14 09:31	**Supervisor approved:**	12/26/14 15:10 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perchlorate	14797-73-0		4.92	Poor instrument integration

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

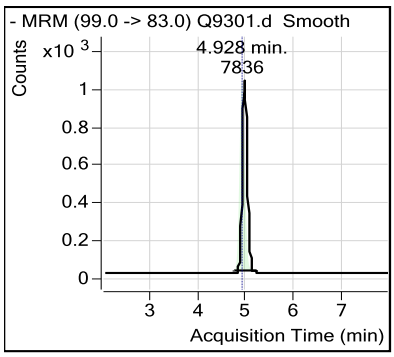
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31673	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.928	99.0 -> 83.0	7836	1.012	ng/ml	94	3.0
		101.0 -> 85.0	2618				

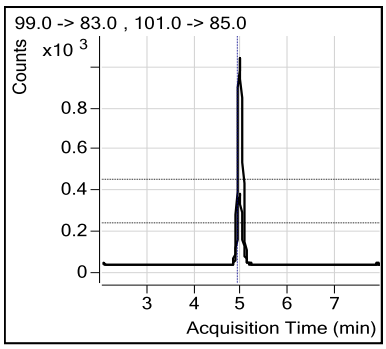
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

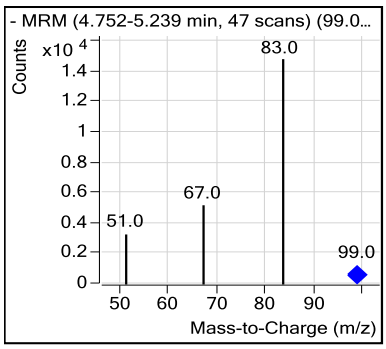
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

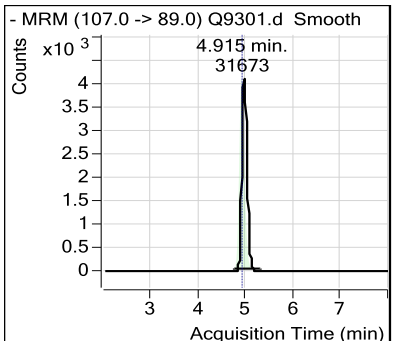
Perchlorate

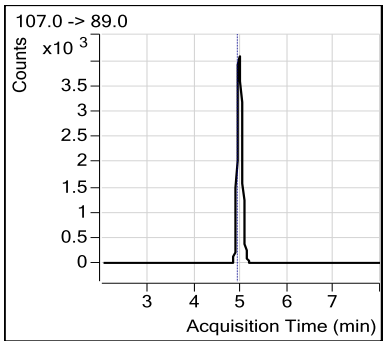


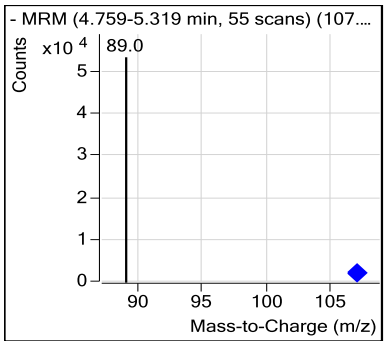




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	30308	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14586	1.954	ng/ml	90	2.8
		101.0 -> 85.0	5130				

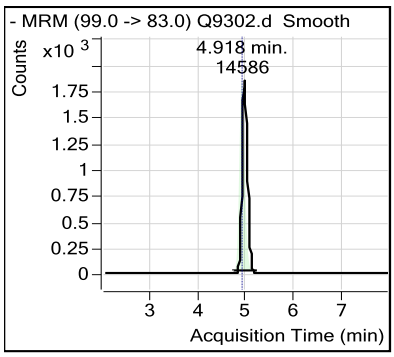
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

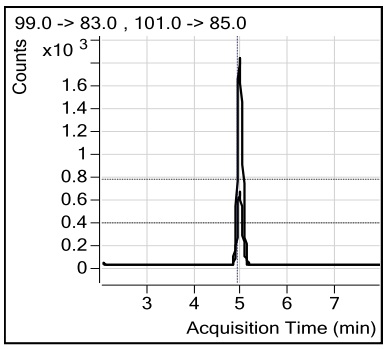
ACCUTEST LABORATORIES FA20723

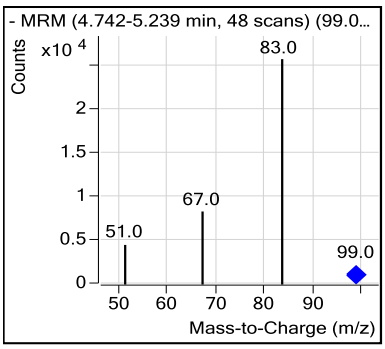
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

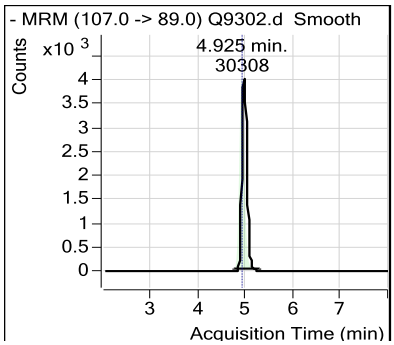
Perchlorate

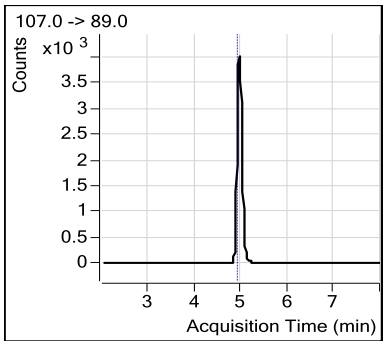


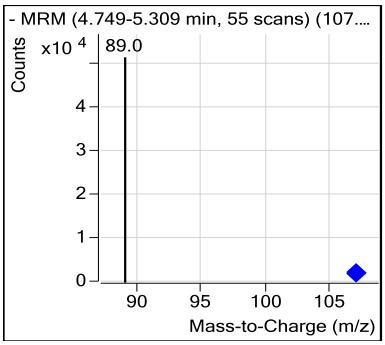




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

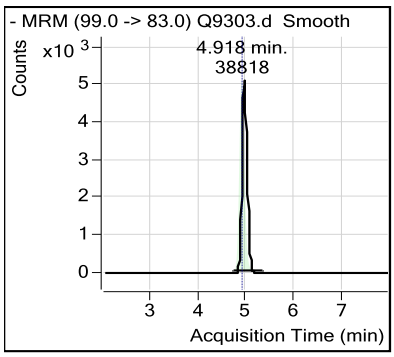
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	30021	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	38818	5.122	ng/ml	94	3.0
		101.0 -> 85.0	12891				

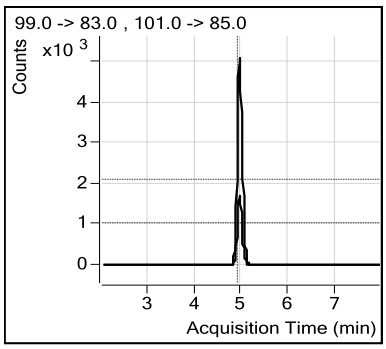
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

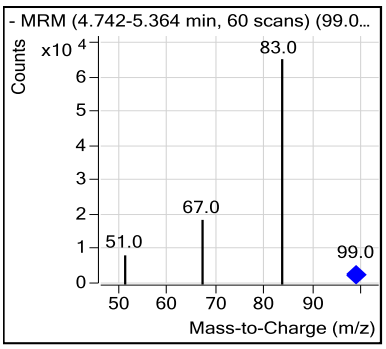
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

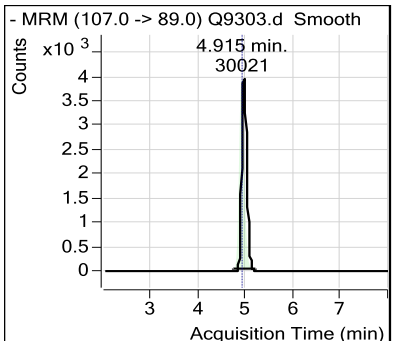
Perchlorate

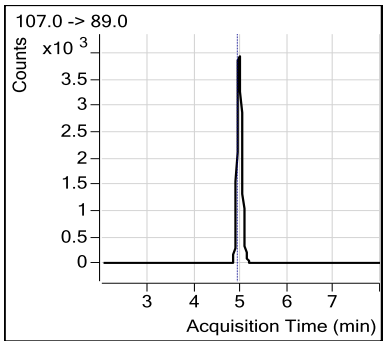


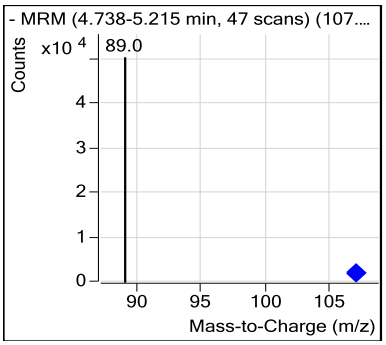




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	29362	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	76394	9.938	ng/ml	95	3.1
		101.0 -> 85.0	24863				

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

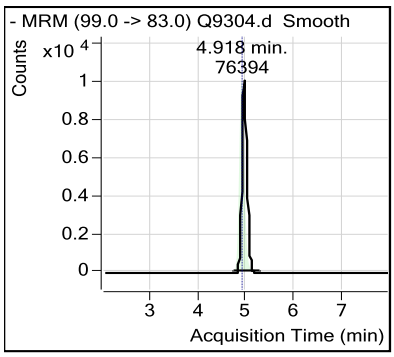
7.5.6

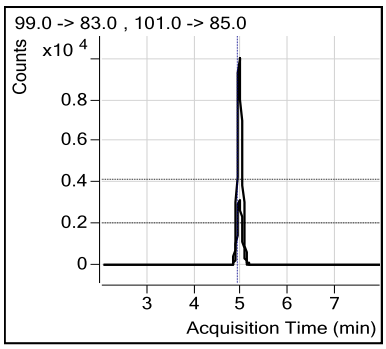
7

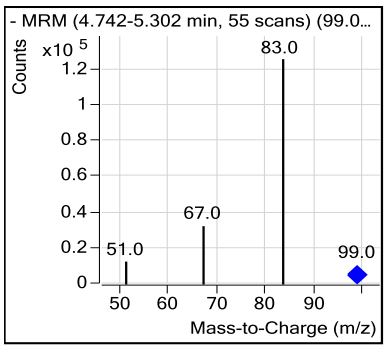
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

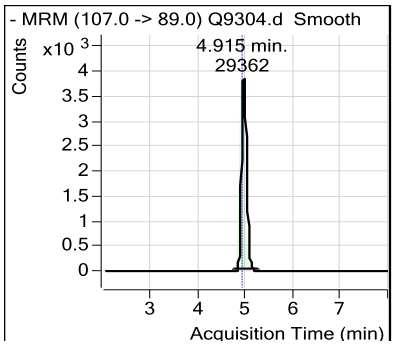
Perchlorate

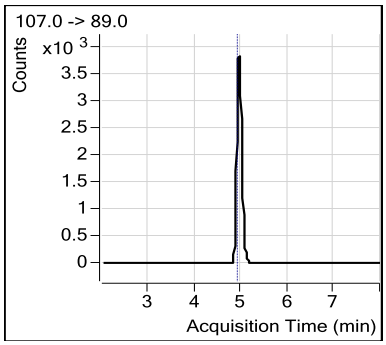


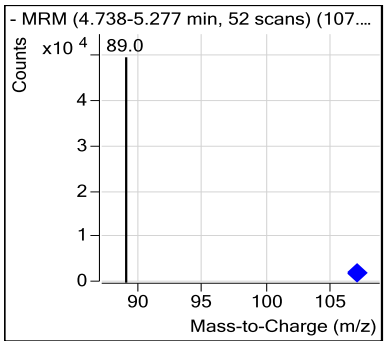




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	26903	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	195761	25.005	ng/ml	95	3.0
		101.0 -> 85.0	64220				

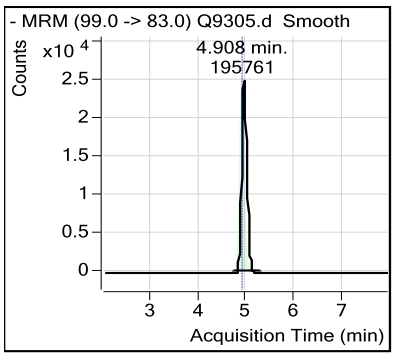
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

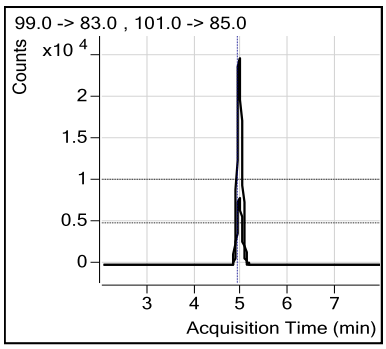
ACCUTEST LABORATORIES FA20723

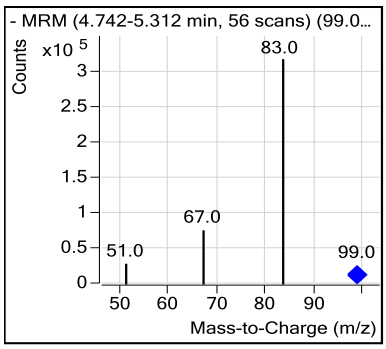
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

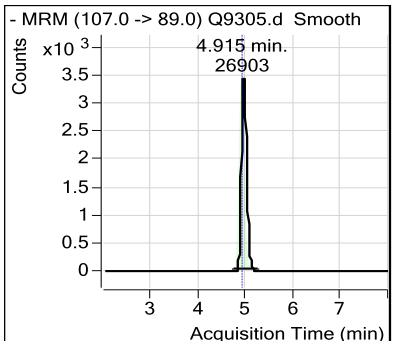
Perchlorate

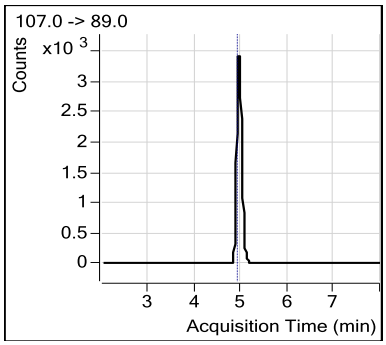


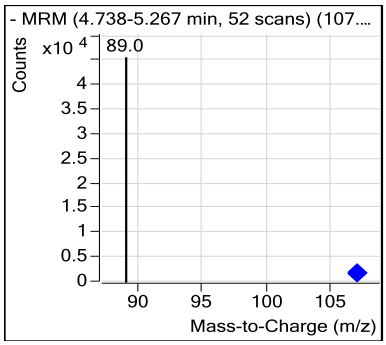




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

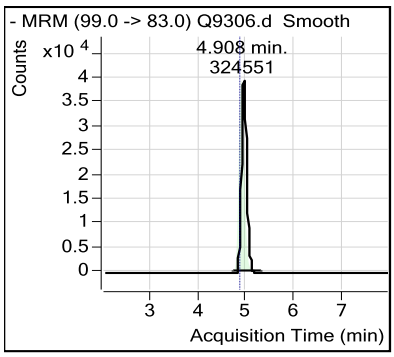
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.904	107.0 -> 89.0	22545	5.000	ng/ml	-0.021	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	324551	43.928	ng/ml	97	3.2
		101.0 -> 85.0	102852				

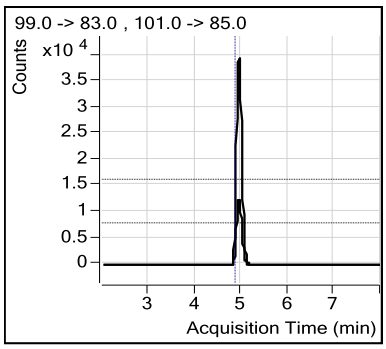
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

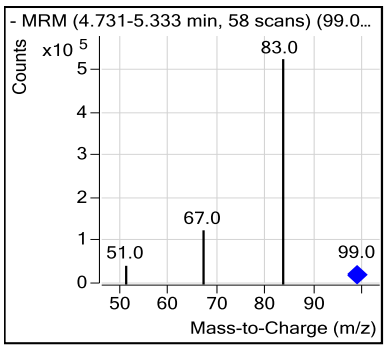
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

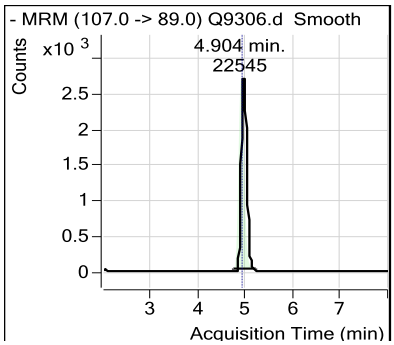
Perchlorate

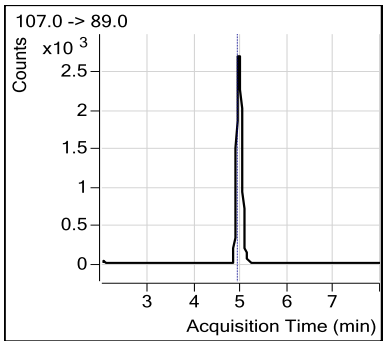


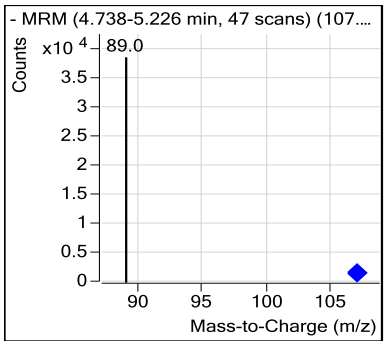




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

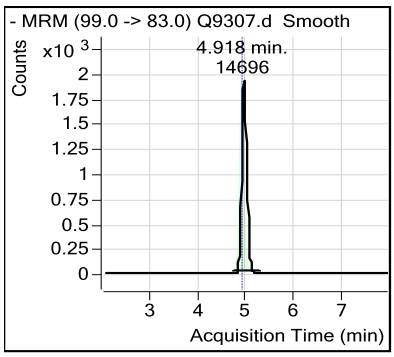
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31140	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14696	1.917	ng/ml	95	3.1
		101.0 -> 85.0	4806				

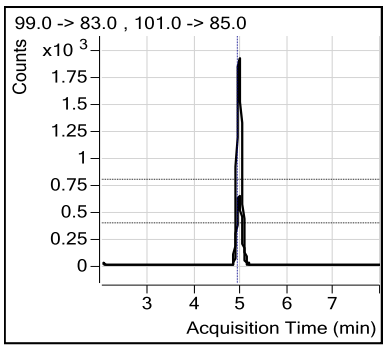
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

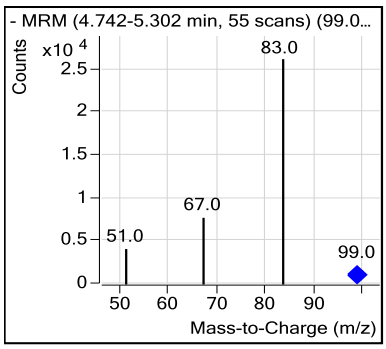
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

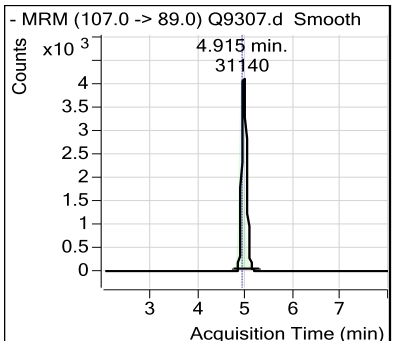
Perchlorate

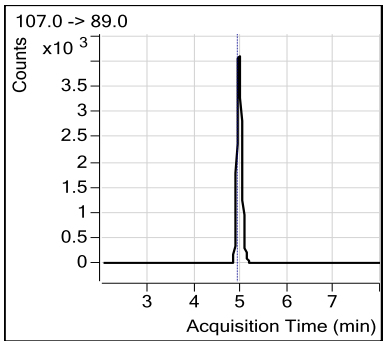


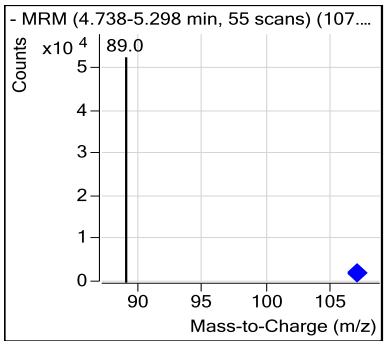




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9315.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:53
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

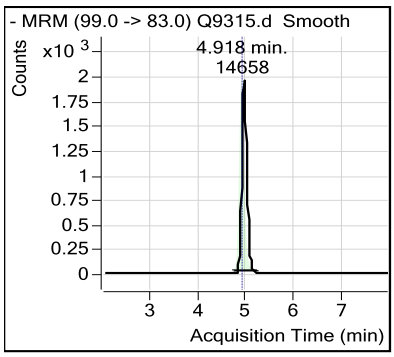
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	29434	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14658	2.021	ng/ml	91	2.9
		101.0 -> 85.0	5114				

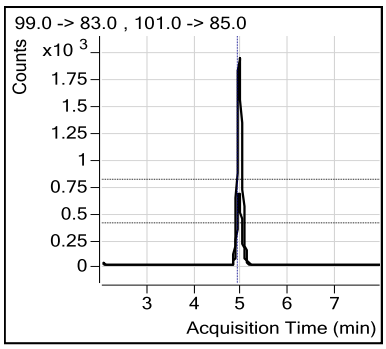
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

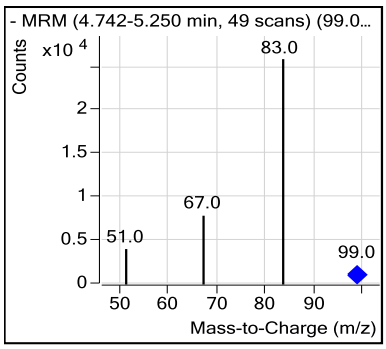
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9315.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:53
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

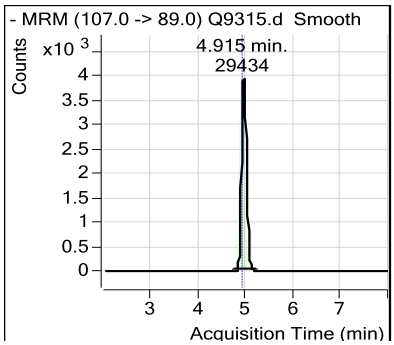
Perchlorate

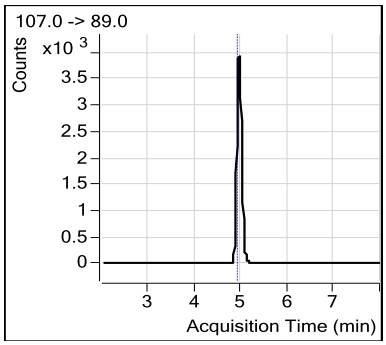


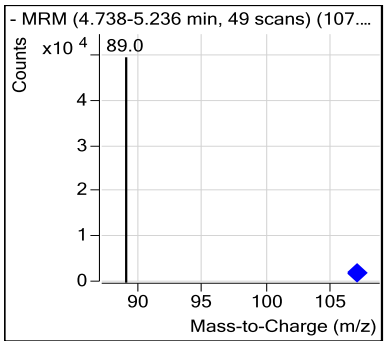




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9316.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:02
Sample Name	:	CC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31304	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	1377	0.181	ng/ml	95	3.1
		101.0 -> 85.0	450				

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

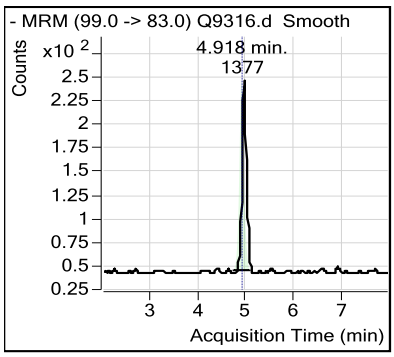
7.5.11

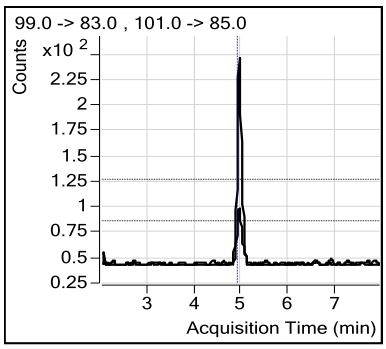
7

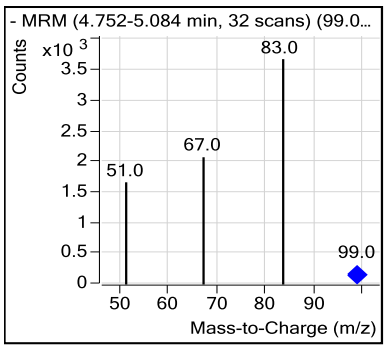
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9316.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:02
Sample Name	:	CC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

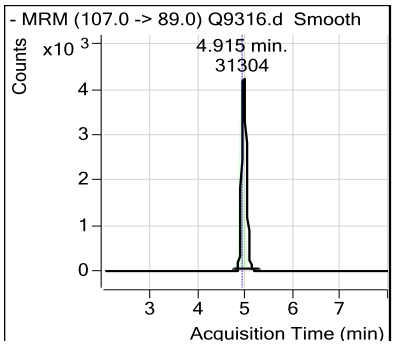
Perchlorate

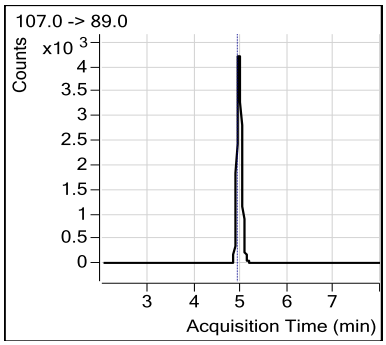


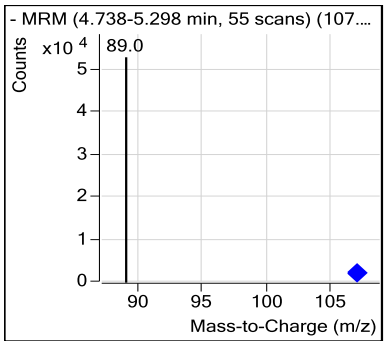




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9325.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:21
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

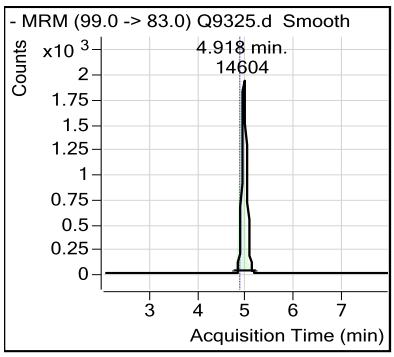
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.904	107.0 -> 89.0	28382	5.000	ng/ml	-0.021	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14604	2.087	ng/ml	94	3.0
		101.0 -> 85.0	4817				

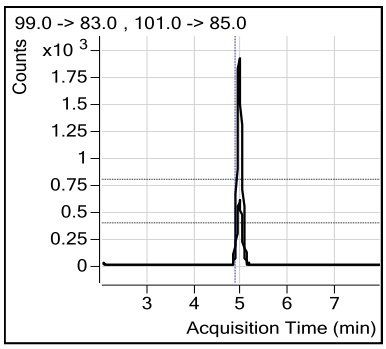
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

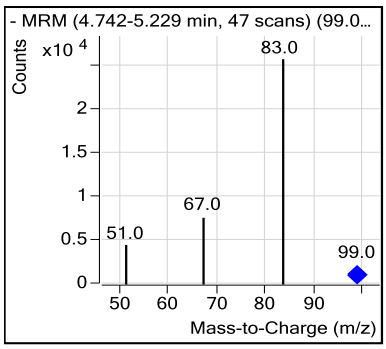
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9325.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:21
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

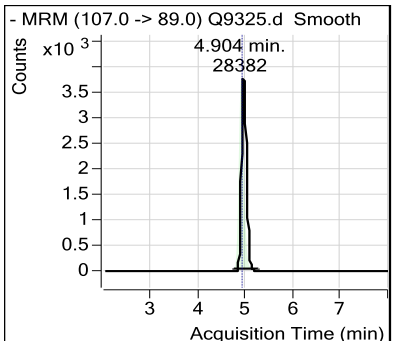
Perchlorate

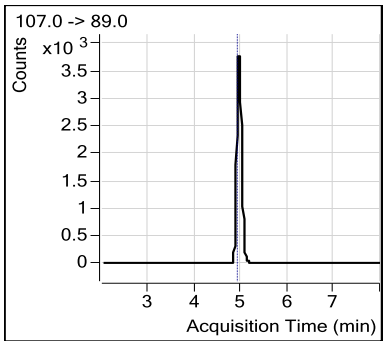


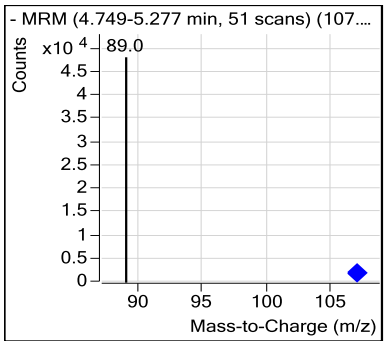




Cl18O4







ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	K prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6BTO
ACQ. METHOD:	Perchlorate_2
PROC. METHOD:	1226 6BTO SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	~~294~~ 295

MC 122614

ANALYST:	NAS
SOLVENT A LOT #:	95/5 084623/066640
SOLVENT B LOT #:	55/5 066640/084623
WATER LOT #:	084623
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9294	1	CCB	6BTO	—	—	210K	—		IS 7 pm curve
Q 95	1	CCB		—	—		—		
Q 96	1	CCB		—	—		—		
Q 97	2	CCB		—	—		—		
Q 98	2	CCB		—	—		—		
Q 99	2	~~ICP~~ ICV295-0.2		LC494	20/10ml		3.4		✓
Q 300	3	FC295-0.5			50ul 10ml		2.6	AII	✓
Q 01	4	-1.0			100ul 10ml		3.0		✓
Q 02	5	ICC295-2.0			200ul 10ml		2.8		✓
Q 03	6	FC295-5.0			500ul 10ml		3.0		✓
Q 04	7	-10			1ml 10ml		3.1		✓
Q 05	8	-25			2.5ml 10ml		3.0		✓
Q 06	9	-50			5ml 10ml		3.2		Drop point
Q 07	10	FCV295-2.0		LC495	20ml 10ml		3.1		Pass
Q 08	11	ICS295-0.2		↓	20ml 10ml	210K 415K	2.7		Pass
Q 09	12	OP5435-1-BS		OP5435	1X	210K	X		AA missinject
Q 10	13	-MB					X		↓
Q 11	14	FA20579-1					2.6		✓
Q 12	15	-2					2.8		✓
Q 13	16	-3					3.0		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	Rx Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate 2
PROC. METHOD:	R226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	295

ANALYST:	NAS		
SOLVENT A LOT #:	9515	084623	066640
SOLVENT B LOT #:	9515	066640	084623
WATER LOT #:	084623		
ISTD Lot #:	1199		

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9314	17	FA20574-4	6850	OP54351	1X	L10K	3.0		✓
Q 15	5	CC295-2.0		LC494	20ave 10ml		2.9		Pass
Q 16	2	-0.2		↓	20ave 10ml		3.1		Pass
Q 17	1	CCB		—	—		—		NA
Q 18	18	FA20723-1		OP54351	1X		2.8		✓
Q 19	19	-2					2.7		✓
Q 20	12	OP54351-BS					2.9		✓
Q 21	13	-MB					—		✓
Q 22	20	FA20723-3					2.6		✓
Q 23	21	OP54351-MS					2.9		✓
Q 24	22	-MSD					3.3		✓
Q 25	5	FC295-2.0		LC494	20ave 10ml		3.0		✓ Pass
Q 26	2	CC295-0.2	↓	↓	20ave 10ml		2.8		Pass
Q 27	1	CCB	↓	—	—	↓	—		
Q									
Q									
Q						12-26-14			
Q						NAS			
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

ACCUTEST LABORATORIES SE

SOLID SAMPLE PREP REPORT

Date/Time: Started 12-22-14 1100 {mm/dd/yy 24:00}

Prep Method: 3550C 3580A or Method (circle)

Date/Time: Finished 12-22-14 {mm/dd/yy 24:00} Batch#: OP54351

Analytical Method: 6850

Ext. By: NMS Conc. By: — Vialed By: NMS Balance ID: ADVPro5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54351-MB	/	1.00			10ml	
OP 54351- BS	/	1.00		20ul		
FA20579-1	1	1.12				
-2		1.04				
-3		1.13				
-4		1.10				
FA20723-1		1.04				
-2		1.20				
-3	↓	1.13			↓	
				12-22-14		
				NMS		
OP54351 - MS	1	1.11	5	20ul	10ml	FA20723-3
- MSD	1	1.11			↓	-3
DUP						

Comments:

Surr. ID: — Conc: — Exp. Date: — Inj. By: — Ver. By —

Spk. ID: LC450 Conc: 100ppb Exp. Date: 05-22-15 Inj. By: NMS Ver. By NMS

Initial Bath Temp (Therm ID): Exchange Bath/N-Evap Temp (Therm ID):

Observed Temp °C: Corr. Temp °C: Observed Temp °C: Corr. Temp °C:

CH2CL2 Lot # — Hexane Lot # — Na2SO4 Lot# —

Acetonitrile Lot # — Methanol Lot # — Acetone Lot# —

Syringe Filter Lot# Filter Paper # Reagent # 084623

Copper Lot # If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: Date: 12-22-14

Accepted By: Date: 12-22-14

NF rev. 09/14/12 extsolid 091412.xls

7.7.1

7

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-MB	BB045287.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	109%	69-134%

Blank Spike Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-BS	BB045285.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2460	98	75-147
121-82-4	RDX	2500	2500	100	79-126
606-20-2	2,6-Dinitrotoluene	2500	2580	103	81-134
121-14-2	2,4-Dinitrotoluene	2500	2540	102	81-128
35572-78-2	2-amino-4,6-Dinitrotoluene	2500	2610	104	81-127
19406-51-0	4-amino-2,6-Dinitrotoluene	2500	2640	106	74-125
118-96-7	2,4,6-Trinitrotoluene	2500	2490	100	70-123
55-63-0	Nitroglycerine	12500	12600	101	73-121

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	109%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-PT1	BB045286.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	620	521	84	54-255
121-82-4	RDX	587	521	89	59-118
606-20-2	2,6-Dinitrotoluene	1320	1330	101	64-119
121-14-2	2,4-Dinitrotoluene	638	637	100	66-119
35572-78-2	2-amino-4,6-Dinitrotoluene	650	601	92	60-112
19406-51-0	4-amino-2,6-Dinitrotoluene	947	511	54	54-103
118-96-7	2,4,6-Trinitrotoluene	808	785	97	59-100
55-63-0	Nitroglycerine	1000	795	80	62-115

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	112%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-MS	BB045289.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
OP54324-MSD	BB045290.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
FA20579-1	BB045288.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	FA20579-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	100	U	2480	2400	97	2500	2440	98	2	75-147/22
121-82-4	RDX	100	U	2480	2190	88	2500	2210	88	1	79-126/21
606-20-2	2,6-Dinitrotoluene	100	U	2480	2460	99	2500	2460	98	0	81-134/20
121-14-2	2,4-Dinitrotoluene	100	U	2480	2410	97	2500	2460	98	2	81-128/17
35572-78-2	2-amino-4,6-Dinitrotoluene	100	U	2480	2460	99	2500	2510	100	2	81-127/15
19406-51-0	4-amino-2,6-Dinitrotoluene	100	U	2480	2500	101	2500	2560	102	2	74-125/23
118-96-7	2,4,6-Trinitrotoluene	100	U	2480	2360	95	2500	2370	95	0	70-123/16
55-63-0	Nitroglycerine	1000	U	12400	12000	97	12500	12300	98	2	73-121/15

CAS No.	Surrogate Recoveries	MS	MSD	FA20579-1	Limits
610-39-9	3,4-Dinitrotoluene	105%	105%	107%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-DUP	BB045298.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
FA20723-1	BB045297.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	FA20723-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20723-1	Limits
610-39-9	3,4-Dinitrotoluene	96%	106%	69-134%

* = Outside of Control Limits.

8.5.1

8

Duplicate Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-DUP2	BB045299.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
FA20723-1	BB045297.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20723-1, FA20723-2, FA20723-3

CAS No.	Compound	FA20723-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20723-1	Limits
610-39-9	3,4-Dinitrotoluene	100%	106%	69-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA20723-1	BB045297.D	106
FA20723-2	BB045296.D	105
FA20723-3	BB045300.D	104
OP54324-BS	BB045285.D	109
OP54324-DUP	BB045298.D	96
OP54324-DUP2	BB045299.D	100
OP54324-MB	BB045287.D	109
OP54324-MS	BB045289.D	105
OP54324-MSD	BB045290.D	105
OP54324-PT1	BB045286.D	112

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1219-CC1219	**Injection Date:**	12/24/14
Lab File ID:	BB045281.D	**Injection Time:**	15:25
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] **RT**
Check Std	10.79

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
ZZZZZZ	BB045282.D	12/24/14	15:50	10.86
ZZZZZZ	BB045283.D	12/24/14	16:15	10.86
ZZZZZZ	BB045284.D	12/24/14	16:40	10.85
OP54324-BS	BB045285.D	12/24/14	17:05	10.85
OP54324-PT1	BB045286.D	12/24/14	17:30	10.85
OP54324-MB	BB045287.D	12/24/14	17:55	10.85
FA20579-1	BB045288.D	12/24/14	18:20	10.85
OP54324-MS	BB045289.D	12/24/14	18:45	10.84
OP54324-MSD	BB045290.D	12/24/14	19:10	10.83
ZZZZZZ	BB045291.D	12/24/14	19:34	10.85

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1219-CC1219	**Injection Date:**	12/24/14
Lab File ID:	BB045292.D	**Injection Time:**	19:59
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.83	10.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
ZZZZZZ	BB045294.D	12/24/14	20:49		10.85
ZZZZZZ	BB045295.D	12/24/14	21:14		10.85
FA20723-2	BB045296.D	12/24/14	21:39		10.85
FA20723-1	BB045297.D	12/24/14	22:04		10.83
OP54324-DUP	BB045298.D	12/24/14	22:29		10.83
OP54324-DUP2	BB045299.D	12/24/14	22:54		10.83
FA20723-3	BB045300.D	12/24/14	23:19		10.83
GBB1219-ECC1219	BB045304.D	12/25/14	00:59	10.70	10.70

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICC1219
Lab FileID: BB045277.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration

Calibration Files
20 =BB045273.D 50 =BB045274.D 100 =BB045275.D 200 =BB045276.D
500 =BB045277.D 1000=BB045278.D 2000=BB045279.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.012	2.994	2.895	2.981	3.065	2.812	3.117	2.982	E3	3.42
2)	HMX	1.531	1.539	1.394	1.768	1.651	1.645	1.620	1.593	E3	7.41
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 1626.92123 *A										
3)	DNX	2.733	2.562	2.805	2.941	2.693	2.725	2.733	2.742	E3	4.18
4)	MNX	2.780	2.694	2.420	2.494	2.306	2.325	2.408	2.490	E3	7.30
5)	RDX	2.200	1.736	1.827	1.872	1.751	1.751	1.802	1.849	E3	8.79
6)	1,3,5-Trinitroben	4.094	4.230	3.839	4.053	3.813	3.841	3.987	3.980	E3	3.94
7)	1,3-Dinitrobenzen	5.669	5.297	5.067	5.235	4.968	4.992	5.166	5.199	E3	4.62
8)	3,5-Dinitroanilin	4.404	4.156	4.218	4.145	4.025	4.042	4.216	4.172	E3	3.05
9)	Nitrobenzene	3.143	2.994	2.849	2.909	2.923	2.910	2.977	2.958	E3	3.20
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.216	2.660	2.765	2.986	2.833	2.845	2.981	2.898	E3	6.26
12)	2,4,6-Trinitrotol	3.996	3.353	3.382	3.526	3.398	3.437	3.581	3.525	E3	6.34
13)	2-Amino-4,6-Dinit	3.463	2.696	2.910	3.113	3.043	3.088	3.215	3.075	E3	7.79
14)	4-Amino-2,6-Dinit	2.199	1.578	1.974	2.214	2.168	2.246	2.346	2.103	E3	12.25
15)S	3,4-Dinitrotoluen	1.692	1.550	1.799	1.920	1.897	1.936	2.034	1.833	E3	9.02
16)	2,4-Dinitrotoluen	4.655	4.371	4.720	4.638	4.416	4.486	4.632	4.560	E3	2.94
17)	2,6-Dinitrotoluen	2.623	2.648	2.672	2.596	2.497	2.506	2.580	2.589	E3	2.59
18)	o-Nitrotoluene	1.817	1.891	2.478	2.367	2.156	2.175	2.209	2.156	E3	10.98
19)	p-Nitrotoluene	2.961	3.565	3.485	3.589	3.375	3.398	3.471	3.406	E3	6.21
20)	m-Nitrotoluene	3.100	2.972	2.915	2.998	2.982	3.030	3.087	3.012	E3	2.18
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.453	3.922	4.344	4.439	4.250	4.331	4.556	4.328	E3	4.72
2)	HMX	4.508	3.744	4.111	4.584	4.584	4.611	4.457	4.371	E3	7.44
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9996										
	Response Ratio = 0.00000 + 4492.30072 *A										
3)	DNX	4.918	3.740	4.421	4.599	4.332	4.361	4.254	4.375	E3	8.17
4)	MNX	3.678	3.905	3.725	3.730	3.558	3.590	3.733	3.703	E3	3.07
5)	RDX	3.344	2.876	2.900	2.962	2.773	2.776	2.883	2.931	E3	6.64
6)	1,3,5-Trinitroben	8.270	8.012	7.443	7.774	7.310	7.442	7.708	7.708	E3	4.47
7)	1,3-Dinitrobenzen	4.011	3.458	3.445	3.536	3.352	3.488	3.509	3.543	E3	6.06
8)	3,5-Dinitroanilin	6.852	7.098	7.086	7.068	6.725	6.835	7.055	6.960	E3	2.18
9)	Nitrobenzene	3.168	2.989	2.924	2.875	2.868	2.837	2.904	2.938	E3	3.82
10)	Nitroglycerin	1.260	1.175	1.291	1.285	1.232	1.237	1.278	1.251	E3	3.25
11)	Tetryl	4.676	4.281	4.386	4.941	4.443	4.552	4.771	4.578	E3	5.07
12)	2,4,6-Trinitrotol	3.699	4.152	4.242	4.268	4.101	4.195	4.387	4.149	E3	5.27
13)	2-Amino-4,6-Dinit	4.281	4.234	4.574	4.799	4.591	4.710	4.922	4.587	E3	5.56
14)	4-Amino-2,6-Dinit	4.225	3.977	4.431	4.679	4.512	4.661	4.877	4.480	E3	6.77
15)S	3,4-Dinitrotoluen	3.397	2.702	3.032	3.382	3.389	3.489	3.695	3.298	E3	9.95
16)	2,4-Dinitrotoluen	2.334	2.287	2.653	2.845	2.863	2.941	3.075	2.714	E3	11.17
17)	2,6-Dinitrotoluen	2.885	2.633	2.901	3.296	3.276	3.337	3.481	3.116	E3	9.91

Initial Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICC1219
Lab FileID: BB045277.D

```
18)  o-Nitrotoluene    2.680 2.800 3.005 3.013 2.970 3.049 3.098 2.945 E3   5.08
19)  p-Nitrotoluene    2.702 3.005 2.599 2.810 2.791 2.861 2.963 2.819 E3   5.01
20)  m-Nitrotoluene    3.498 3.265 3.430 3.580 3.565 3.599 3.705 3.520 E3   4.02
21)  PETN              1.449 1.361 1.309 1.492 1.404 1.378 0.831 1.318 E3  16.90
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9963
               Response Ratio = 0.00000 + 1771.15878 *A + -0.09333 *A^2

--------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Fri Dec 26 10:58:00 2014
```

Initial Calibration Verification

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICV1219
Lab FileID: BB045280.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1A.ch
Acq On : 24-Dec-2014, 15:00:33 Operator: KISMETL
Sample : icv1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:08:36 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	543.499	-8.7	106	0.00	1.06- 1.66
	Amount Calc. %Drift						
2	HMX	500.000	556.673	-11.3	112	0.03	1.14- 1.74
	Amount Calc. %Drift						
3	DNX	500.000	524.137	-4.8	107	0.00	1.44- 2.04
4	MNX	500.000	511.808	-2.4	110	0.00	2.02- 2.62
5	RDX	500.000	534.392	-6.9	113	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	500.000	530.124	-6.0	111	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	500.000	484.597	3.1	101	0.00	5.47- 6.27
8	3,5-Dinitroaniline	500.000	497.080	0.6	103	0.00	5.91- 6.71
9	Nitrobenzene	500.000	549.806	-10.0	111	0.00	7.01- 7.81
10	Nitroglycerin			----------NA----------			
11	Tetryl	500.000	485.109	3.0	99	0.00	8.84- 9.64
12	2,4,6-Trinitrotoluene	500.000	525.027	-5.0	109	0.00	9.28-10.07
13	2-Amino-4,6-Dinitrotol	500.000	554.922	-11.0	112	-0.01	9.73-10.53
14	4-Amino-2,6-Dinitrotol	500.000	573.854	-14.8	111	-0.02	10.16-10.96
15 S	3,4-Dinitrotoluene			----------NA----------			
16	2,4-Dinitrotoluene	500.000	544.642	-8.9	112	-0.01	11.14-11.94
17	2,6-Dinitrotoluene	500.000	546.095	-9.2	113	0.00	11.53-12.33
18	o-Nitrotoluene	500.000	545.747	-9.1	109	0.00	13.84-14.72
19	p-Nitrotoluene	500.000	533.740	-6.7	108	0.00	14.12-15.12
20	m-Nitrotoluene	500.000	564.570	-12.9	114	0.00	14.69-15.69
21	PETN			----------NA----------			
*****	Signal #2 *****						
1	TNX	500.000	563.001	-12.6	115	0.00	1.06- 1.66
	Amount Calc. %Drift						
2	HMX	500.000	554.010	-10.8	112	0.02	1.15- 1.75
	Amount Calc. %Drift						
3	DNX	500.000	500.704	-0.1	102	0.00	1.44- 2.04
4	MNX	500.000	526.250	-5.3	110	0.00	2.02- 2.62
5	RDX	500.000	519.253	-3.9	110	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	500.000	528.189	-5.6	111	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	500.000	475.229	5.0	100	0.00	5.47- 6.27
8	3,5-Dinitroaniline	500.000	497.520	0.5	103	0.00	5.91- 6.71
9	Nitrobenzene	500.000	542.422	-8.5	111	0.00	7.01- 7.81

Initial Calibration Verification

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICV1219
Lab FileID: BB045280.D

10		Nitroglycerin	2500.000	2520.015	-0.8	102	0.00	8.45- 9.45
11		Tetryl	500.000	494.140	1.2	102	-0.01	8.84- 9.64
12		2,4,6-Trinitrotoluene	500.000	570.660	-14.1	115	-0.01	9.28-10.08
13		2-Amino-4,6-Dinitrotol	500.000	567.980	-13.6	113	-0.01	9.73-10.53
14		4-Amino-2,6-Dinitrotol	500.000	571.836	-14.4	114	-0.01	10.16-10.96
15	S	3,4-Dinitrotoluene	----------NA----------					
16		2,4-Dinitrotoluene	500.000	574.477	-14.9	109	-0.01	11.14-11.94
17		2,6-Dinitrotoluene	500.000	572.512	-14.5	109	-0.01	11.54-12.34
18		o-Nitrotoluene	500.000	531.858	-6.4	106	0.00	13.72-14.72
19		p-Nitrotoluene	500.000	525.957	-5.2	106	0.00	14.12-15.12
20		m-Nitrotoluene	500.000	574.865	-15.0	114	0.00	14.69-15.69

			Amount	Calc.	%Drift			
21		PETN	2500.000	2395.826	4.2	106	0.00	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045277.D 8330B.M Fri Dec 26 10:42:28 2014

8.8.2

8

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045281.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1A.ch
Acq On : 24-Dec-2014, 15:25:31 Operator: KISMETL
Sample : cc1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	20.000	21.091	-5.5	104	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	20.000	16.858	15.7	90	0.00	1.14- 1.74
	Amount	Calc.	%Drift				
3	DNX	20.000	20.926	-4.6	105	0.00	1.44- 2.04
4	MNX	20.000	22.938	-14.7	103	-0.01	2.02- 2.62
5	RDX	20.000	20.850	-4.3	88	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	20.000	21.775	-8.9	106	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	20.000	21.136	-5.7	97	0.00	5.47- 6.27
8	3,5-Dinitroaniline	20.000	21.033	-5.2	100	0.00	5.91- 6.71
9	Nitrobenzene	20.000	17.592	12.0	83	0.00	7.01- 7.81
10	Nitroglycerin		----------NA----------				
11	Tetryl	20.000	19.767	1.2	89	0.03	8.84- 9.64
12	2,4,6-Trinitrotoluene	20.000	19.630	1.9	87	-0.03	9.27-10.07
13	2-Amino-4,6-Dinitrotol	20.000	16.721	16.4	74	-0.02	9.73-10.53
14	4-Amino-2,6-Dinitrotol	20.000	19.081	4.6	91	-0.05	10.15-10.95
15 S	3,4-Dinitrotoluene	20.000	16.616	16.9	90	-0.07	10.46-11.26
16	2,4-Dinitrotoluene	20.000	17.170	14.1	84	-0.05	11.14-11.94
17	2,6-Dinitrotoluene	20.000	16.562	17.2	82	0.01	11.53-12.33
18	o-Nitrotoluene	20.000	21.587	-7.9	128	0.02	13.84-14.72
19	p-Nitrotoluene	20.000	19.707	1.5	113	-0.02	14.12-15.12
20	m-Nitrotoluene	20.000	20.578	-2.9	100	0.02	14.69-15.69
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	20.000	21.251	-6.3	103	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	20.000	20.252	-1.3	101	0.00	1.15- 1.75
	Amount	Calc.	%Drift				
3	DNX	20.000	22.083	-10.4	98	0.00	1.44- 2.04
4	MNX	20.000	20.303	-1.5	102	0.00	2.02- 2.62
5	RDX	20.000	19.927	0.4	87	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	20.000	20.911	-4.6	97	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	20.000	20.029	-0.1	88	0.00	5.47- 6.27
8	3,5-Dinitroaniline	20.000	20.415	-2.1	104	0.00	5.91- 6.71
9	Nitrobenzene	20.000	19.809	1.0	92	0.00	7.01- 7.81

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045281.D

				Amount	Calc.	%Drift			
10		Nitroglycerin		100.000	102.199	-2.2	102	0.00	8.45- 9.45
11		Tetryl		20.000	22.497	-12.5	110	0.02	8.84- 9.64
12		2,4,6-Trinitrotoluene		20.000	22.616	-13.1	127	0.00	9.27-10.07
13		2-Amino-4,6-Dinitrotol		20.000	19.839	0.8	106	-0.02	9.72-10.52
14		4-Amino-2,6-Dinitrotol		20.000	19.534	2.3	104	-0.02	10.15-10.95
15	S	3,4-Dinitrotoluene		20.000	21.627	-8.1	105	-0.03	10.46-11.26
16		2,4-Dinitrotoluene		20.000	17.997	10.0	105	0.06	11.14-11.94
17		2,6-Dinitrotoluene		20.000	14.909	25.5#	80	0.09	11.54-12.34
18		o-Nitrotoluene		20.000	18.659	6.7	103	0.03	13.72-14.72
19		p-Nitrotoluene		20.000	21.513	-7.6	112	0.05	14.12-15.12
20		m-Nitrotoluene		20.000	19.529	2.4	98	0.06	14.69-15.69
21		PETN		100.000	109.321	-9.3	133	0.00	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045273.D 8330B.M Fri Dec 26 10:57:13 2014

8.8.3

8

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045292.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1A.ch
Acq On : 24-Dec-2014, 19:59:59 Operator: KISMETL
Sample : cc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1		TNX	1000.000	1013.323	-1.3	107	0.00	1.06- 1.66
			Amount	Calc.	%Drift			
2		HMX	1000.000	956.227	4.4	95	0.00	1.14- 1.74
			Amount	Calc.	%Drift			
3		DNX	1000.000	1009.671	-1.0	102	0.00	1.44- 2.04
4		MNX	1000.000	949.723	5.0	102	0.00	2.02- 2.62
5		RDX	1000.000	945.856	5.4	100	0.00	2.52- 3.32
6		1,3,5-Trinitrobenzene	1000.000	993.541	0.6	103	0.00	4.22- 5.02
7		1,3-Dinitrobenzene	1000.000	966.849	3.3	101	0.00	5.47- 6.27
8		3,5-Dinitroaniline	1000.000	980.561	1.9	101	0.00	5.91- 6.71
9		Nitrobenzene	1000.000	988.947	1.1	101	0.00	7.01- 7.81
10		Nitroglycerin			----------NA----------			
11		Tetryl	1000.000	1017.363	-1.7	104	0.00	8.84- 9.64
12		2,4,6-Trinitrotoluene	1000.000	987.667	1.2	101	-0.01	9.27-10.07
13		2-Amino-4,6-Dinitrotol	1000.000	1015.593	-1.6	101	-0.01	9.73-10.53
14		4-Amino-2,6-Dinitrotol	1000.000	1081.457	-8.1	101	0.00	10.15-10.95
15	S	3,4-Dinitrotoluene	1000.000	1060.076	-6.0	100	-0.02	10.46-11.26
16		2,4-Dinitrotoluene	1000.000	992.034	0.8	101	-0.02	11.14-11.94
17		2,6-Dinitrotoluene	1000.000	974.319	2.6	101	-0.01	11.53-12.33
18		o-Nitrotoluene	1000.000	997.982	0.2	99	0.00	13.84-14.72
19		p-Nitrotoluene	1000.000	997.788	0.2	100	0.00	14.12-15.12
20		m-Nitrotoluene	1000.000	1004.302	-0.4	100	0.00	14.69-15.69
21		PETN			----------NA----------			

***** Signal #2 *****

1		TNX	1000.000	1014.000	-1.4	101	0.00	1.06- 1.66
			Amount	Calc.	%Drift			
2		HMX	1000.000	1034.663	-3.5	101	0.00	1.15- 1.75
			Amount	Calc.	%Drift			
3		DNX	1000.000	1015.218	-1.5	102	0.00	1.44- 2.04
4		MNX	1000.000	983.701	1.6	101	0.00	2.02- 2.62
5		RDX	1000.000	955.166	4.5	101	0.00	2.52- 3.32
6		1,3,5-Trinitrobenzene	1000.000	979.178	2.1	101	0.00	4.22- 5.02
7		1,3-Dinitrobenzene	1000.000	981.621	1.8	100	0.00	5.47- 6.27
8		3,5-Dinitroaniline	1000.000	990.705	0.9	101	0.00	5.91- 6.71
9		Nitrobenzene	1000.000	984.983	1.5	102	0.00	7.01- 7.81

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045292.D

				Amount	Calc.	%Drift			
10		Nitroglycerin	5000.000	4989.487	0.2	101	0.00	8.45- 9.45
11		Tetryl	1000.000	1011.060	-1.1	102	-0.01	8.84- 9.64
12		2,4,6-Trinitrotoluene	1000.000	1019.497	-1.9	101	-0.02	9.27-10.07
13		2-Amino-4,6-Dinitrotol	1000.000	1029.956	-3.0	100	0.00	9.72-10.52
14		4-Amino-2,6-Dinitrotol	1000.000	1073.991	-7.4	103	0.00	10.15-10.95
15	S	3,4-Dinitrotoluene	1000.000	1022.380	-2.2	97	-0.02	10.46-11.26
16		2,4-Dinitrotoluene	1000.000	1064.598	-6.5	98	-0.02	11.14-11.94
17		2,6-Dinitrotoluene	1000.000	1075.999	-7.6	100	-0.01	11.54-12.34
18		o-Nitrotoluene	1000.000	1024.516	-2.5	99	0.00	13.72-14.72
19		p-Nitrotoluene	1000.000	1011.694	-1.2	100	-0.01	14.12-15.12
20		m-Nitrotoluene	1000.000	1036.707	-3.7	101	0.00	14.69-15.69
21		PETN	5000.000	3013.060	39.7#	65	-0.02	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045278.D 8330B.M Fri Dec 26 11:32:53 2014

8.8.4

8

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ECC1219
Lab FileID: BB045304.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1A.ch
Acq On : 25-Dec-2014, 00:59:29 Operator: KISMETL
Sample : ecc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1041.578	-4.2	110	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	920.489	8.0	91	-0.01	1.14- 1.74
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	992.284	0.8	100	0.00	1.44- 2.04
4	MNX	1000.000	934.709	6.5	100	0.00	2.02- 2.62
5	RDX	1000.000	955.880	4.4	101	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	1000.000	963.324	3.7	100	-0.01	4.22- 5.02
7	1,3-Dinitrobenzene	1000.000	957.102	4.3	100	-0.01	5.47- 6.27
8	3,5-Dinitroaniline	1000.000	976.459	2.4	101	-0.01	5.91- 6.71
9	Nitrobenzene	1000.000	975.264	2.5	99	-0.01	7.01- 7.81
10	Nitroglycerin	----------	NA	----------			
11	Tetryl	1000.000	975.805	2.4	99	-0.03	8.84- 9.64
12	2,4,6-Trinitrotoluene	1000.000	975.198	2.5	100	-0.04	9.27-10.07
13	2-Amino-4,6-Dinitrotol	1000.000	997.186	0.3	99	-0.03	9.73-10.53
14	4-Amino-2,6-Dinitrotol	1000.000	972.689	2.7	91	0.04	10.15-10.95
15 S	3,4-Dinitrotoluene	1000.000	981.101	1.9	93	-0.16	10.46-11.26
16	2,4-Dinitrotoluene	1000.000	981.778	1.8	100	-0.04	11.14-11.94
17	2,6-Dinitrotoluene	1000.000	938.866	6.1	97	-0.04	11.53-12.33
18	o-Nitrotoluene	1000.000	981.769	1.8	97	-0.02	13.84-14.72
19	p-Nitrotoluene	1000.000	987.964	1.2	99	-0.02	14.12-15.12
20	m-Nitrotoluene	1000.000	993.710	0.6	99	-0.02	14.69-15.69
21	PETN	----------	NA	----------			
*****	Signal #2 *****						
1	TNX	1000.000	1005.178	-0.5	100	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1021.775	-2.2	100	0.00	1.15- 1.75
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	1001.315	-0.1	100	0.00	1.44- 2.04
4	MNX	1000.000	967.621	3.2	100	0.00	2.02- 2.62
5	RDX	1000.000	951.751	4.8	100	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	1000.000	963.330	3.7	100	-0.01	4.22- 5.02
7	1,3-Dinitrobenzene	1000.000	949.781	5.0	96	-0.01	5.47- 6.27
8	3,5-Dinitroaniline	1000.000	979.745	2.0	100	-0.01	5.91- 6.71
9	Nitrobenzene	1000.000	960.770	3.9	99	-0.01	7.01- 7.81

Continuing Calibration Summary

Job Number: FA20723
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ECC1219
Lab FileID: BB045304.D

				Amount	Calc.	%Drift			
10		Nitroglycerin		5000.000	4956.859	0.9	100	-0.03	8.45- 9.45
11		Tetryl		1000.000	975.332	2.5	98	-0.05	8.84- 9.64
12		2,4,6-Trinitrotoluene		1000.000	1002.415	-0.2	99	-0.04	9.27-10.07
13		2-Amino-4,6-Dinitrotol		1000.000	1007.710	-0.8	98	-0.03	9.72-10.52
14		4-Amino-2,6-Dinitrotol		1000.000	1035.341	-3.5	100	-0.02	10.15-10.95
15	S	3,4-Dinitrotoluene		1000.000	983.203	1.7	93	-0.16	10.46-11.26
16		2,4-Dinitrotoluene		1000.000	1021.109	-2.1	94	-0.04	11.14-11.94
17		2,6-Dinitrotoluene		1000.000	1076.362	-7.6	100	-0.03	11.54-12.34
18		o-Nitrotoluene		1000.000	1011.923	-1.2	98	-0.02	13.72-14.72
19		p-Nitrotoluene		1000.000	1006.436	-0.6	99	-0.02	14.12-15.12
20		m-Nitrotoluene		1000.000	1027.549	-2.8	100	-0.02	14.69-15.69
21		PETN		5000.000	2654.218	46.9#	59	-0.04	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045278.D 8330B.M Fri Dec 26 11:32:54 2014

8.8.5

8

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045297.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045297.D\dad1A.ch
Acq On : 24-Dec-2014, 22:04:50 Operator: KISMETL
Sample : FA20723-1 Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:40 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	975086	1771736	532.074	537.211
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.41%	107.44%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D. d	N.D. d
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

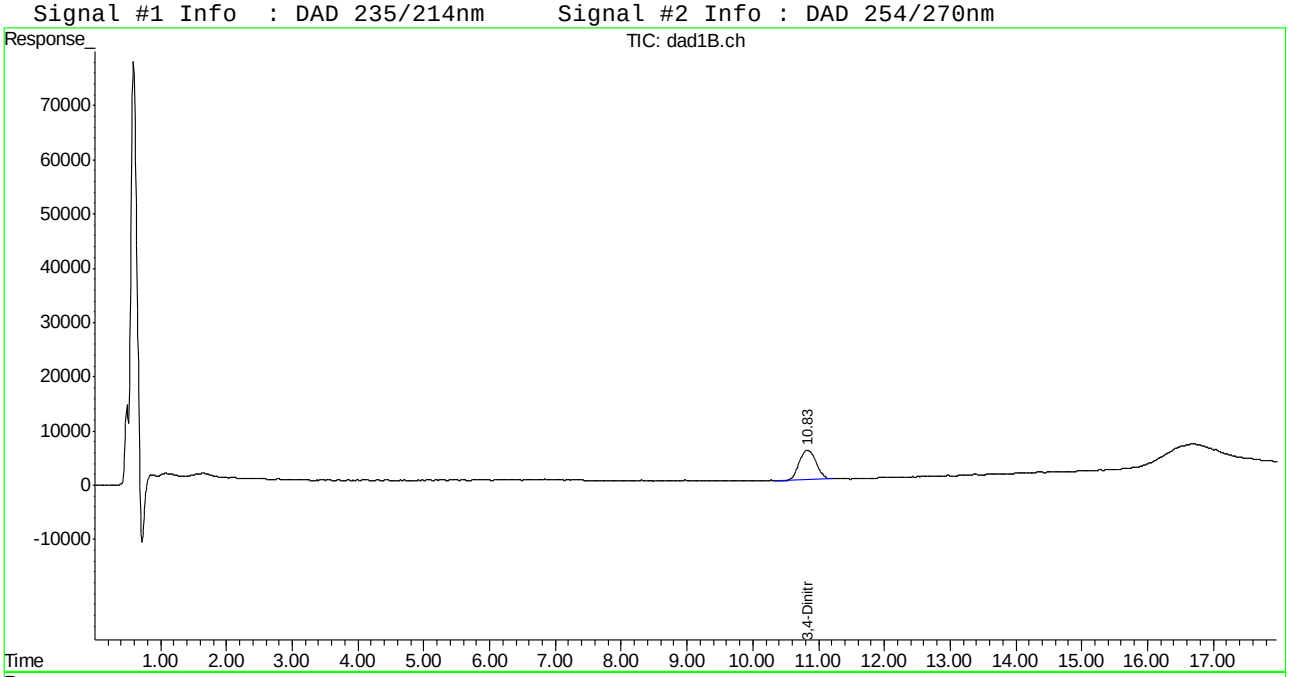
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045297.D 8330B.M Fri Dec 26 11:39:34 2014 Page 1

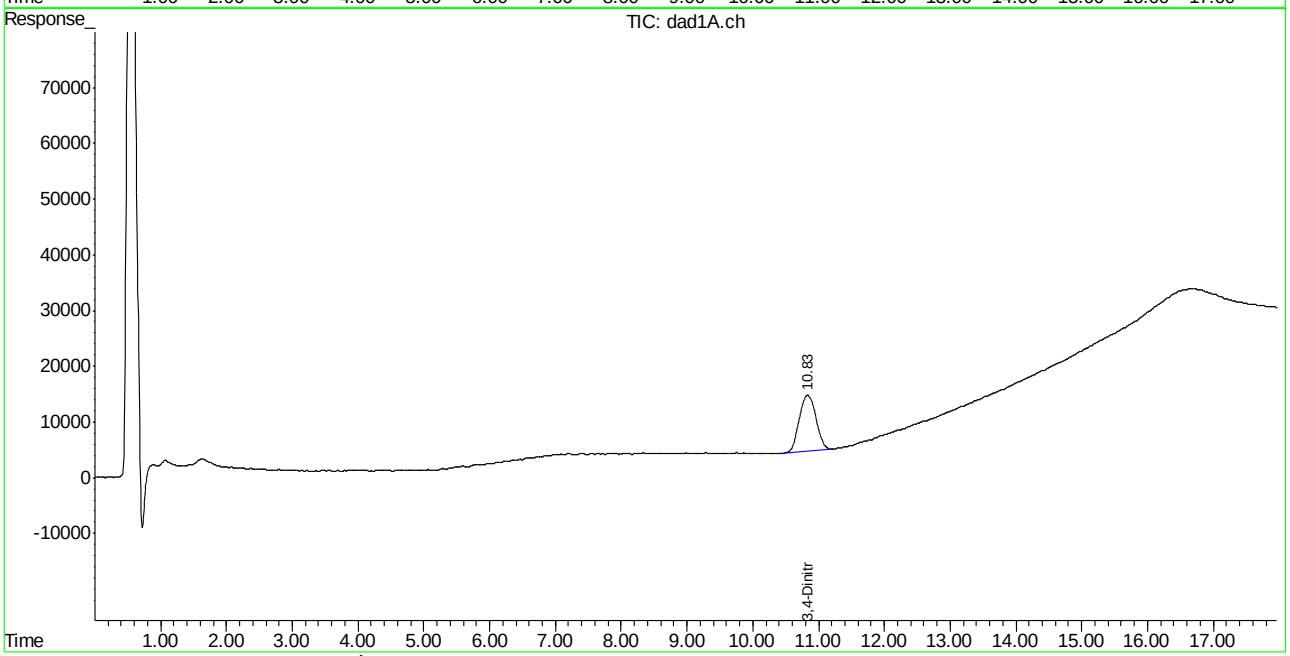
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045297.D\dad1B.ch Vial: 23
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045297.D\dad1A.ch
Acq On : 24-Dec-2014, 22:04:50 Operator: KISMETL
Sample : FA20723-1 Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045296.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045296.D\dad1A.ch
Acq On : 24-Dec-2014, 21:39:52 Operator: KISMETL
Sample : FA20723-2 Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:39 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	962640	1727186	525.282	523.703
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.06%	104.74%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D.	N.D.
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

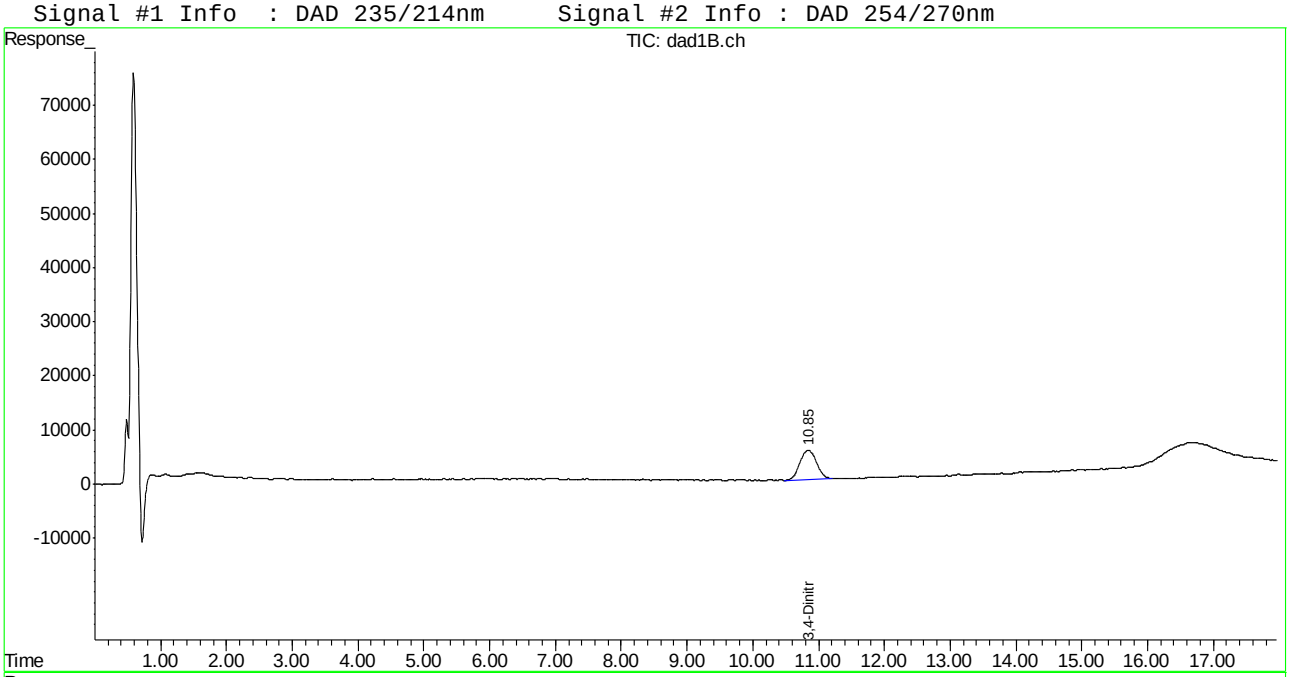
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045296.D 8330B.M Fri Dec 26 11:39:33 2014 Page 1

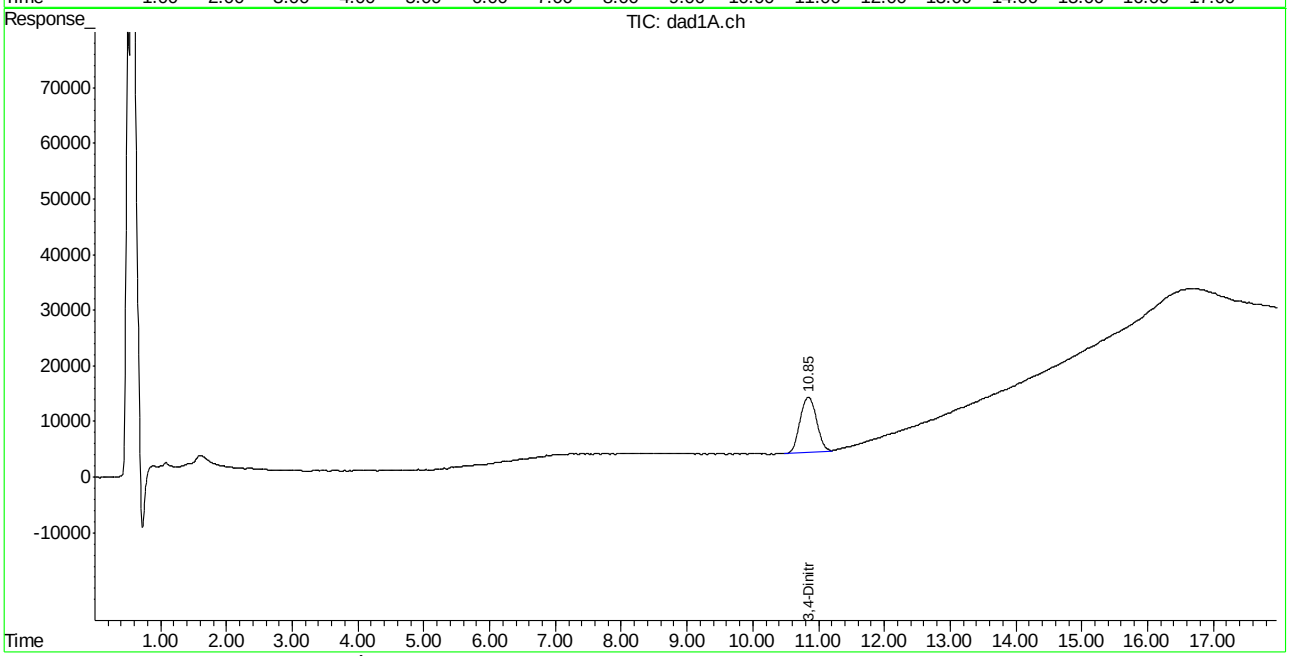
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045296.D\dad1B.ch Vial: 22
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045296.D\dad1A.ch
Acq On : 24-Dec-2014, 21:39:52 Operator: KISMETL
Sample : FA20723-2 Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045300.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045300.D\dad1A.ch
Acq On : 24-Dec-2014, 23:19:44 Operator: KISMETL
Sample : FA20723-3 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:43 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	950578	1676793	518.701	508.424
	Spiked Amount 500.000	Range 72 - 134		Recovery =		103.74%	101.68%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D. d	N.D. d
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D. d	N.D. d
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

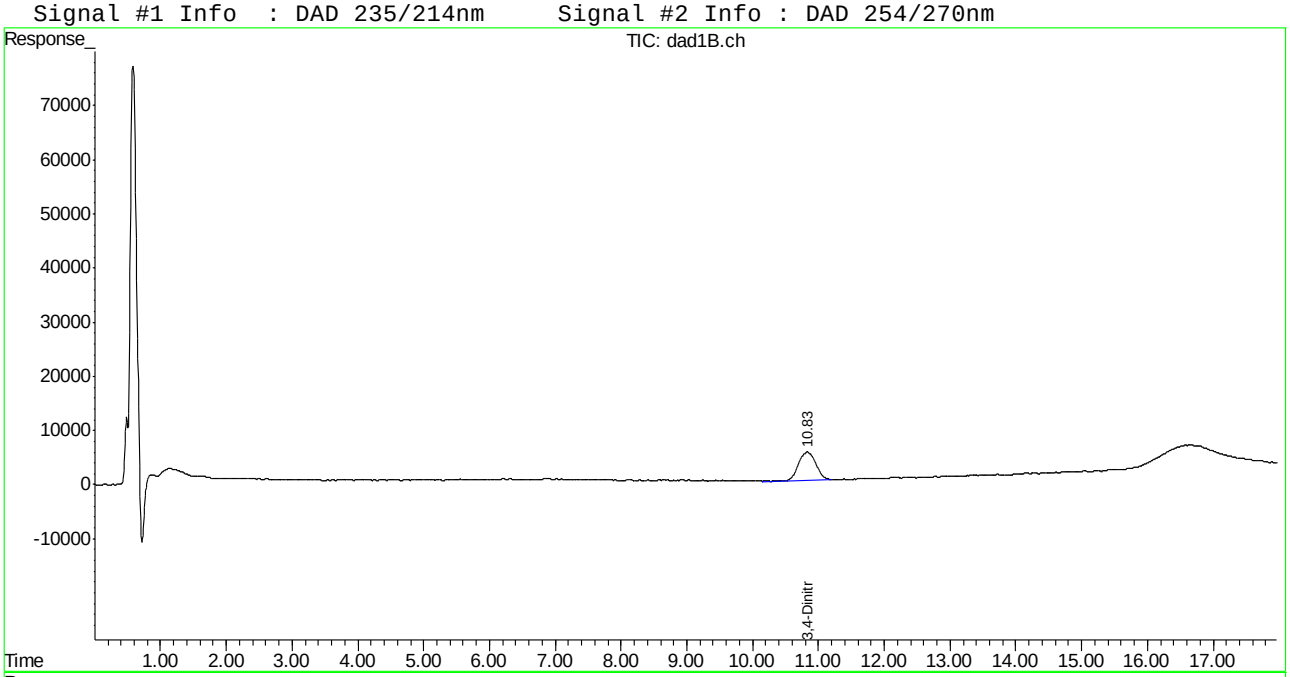
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045300.D 8330B.M Fri Dec 26 11:39:35 2014 Page 1

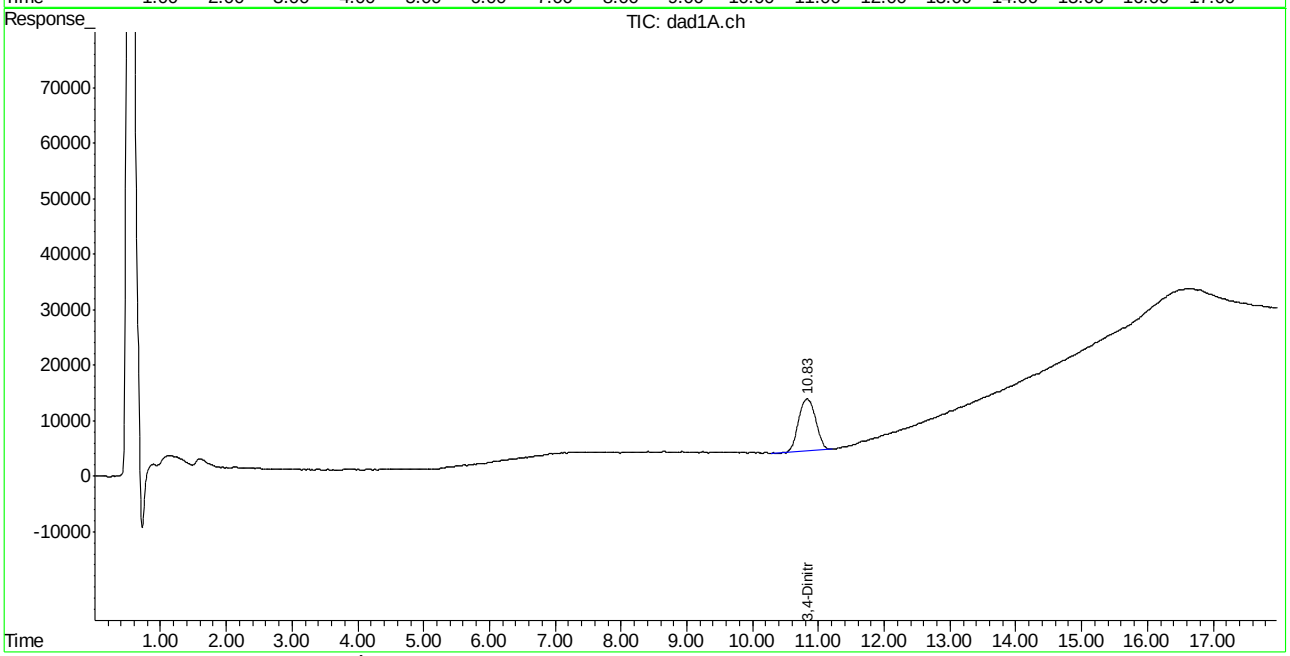
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045300.D\dad1B.ch Vial: 26
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045300.D\dad1A.ch
Acq On : 24-Dec-2014, 23:19:44 Operator: KISMETL
Sample : FA20723-3 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:30 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1B.ch Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1A.ch
Acq On : 24-Dec-2014, 17:55:12 Operator: KISMETL
Sample : op54324-mb Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:30 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	997613	1820322	544.366	551.943
	Spiked Amount 500.000	Range 72 - 134		Recovery =		108.87%	110.39%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

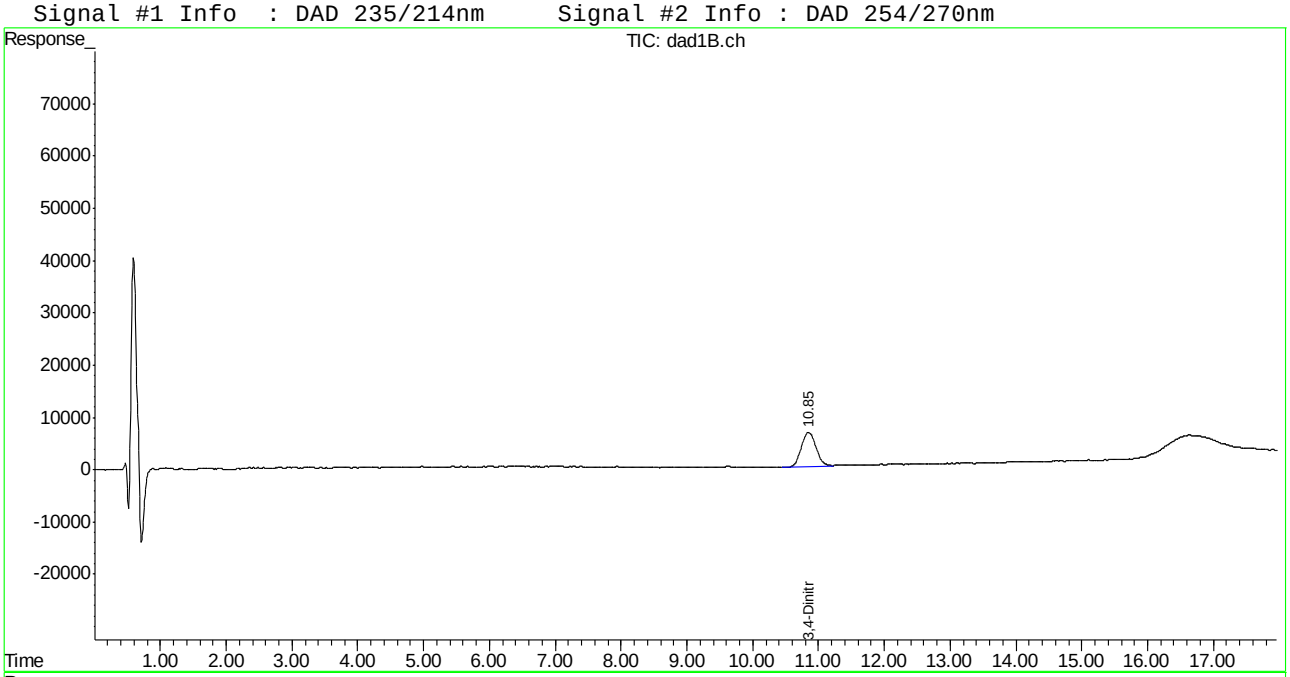
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045287.D 8330B.M Fri Dec 26 11:34:35 2014 Page 1

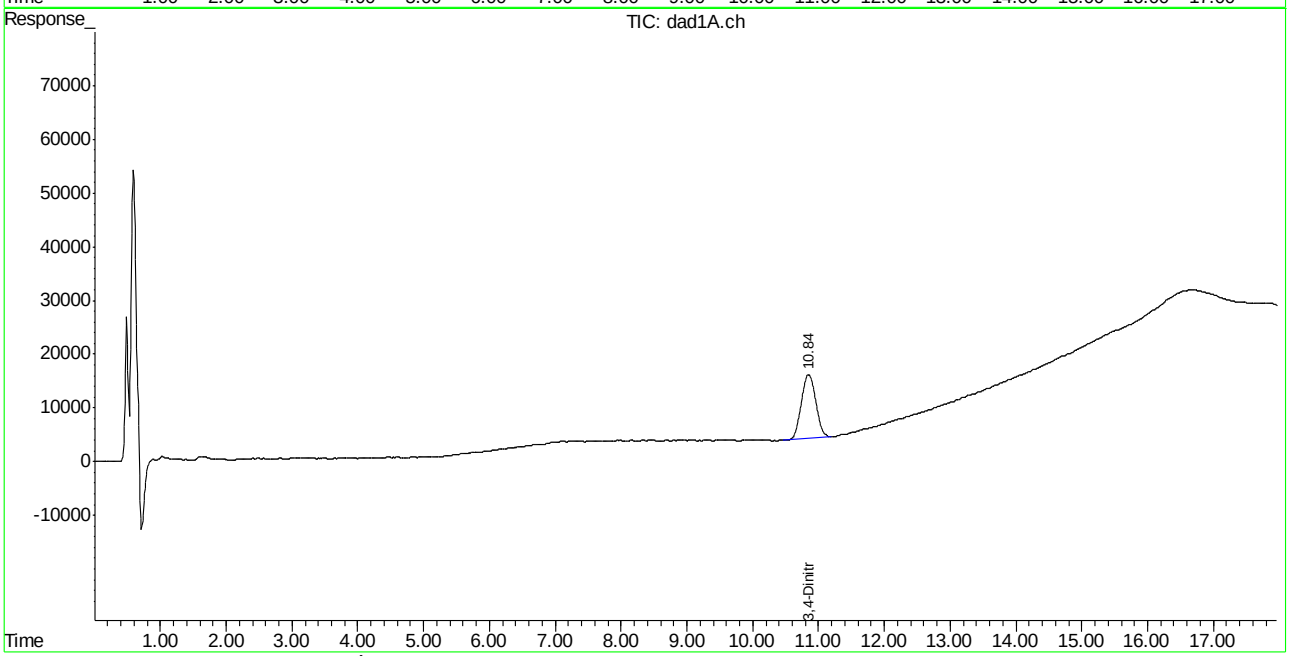
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1B.ch Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1A.ch
Acq On : 24-Dec-2014, 17:55:12 Operator: KISMETL
Sample : op54324-mb Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:19 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1A.ch
Acq On : 24-Dec-2014, 17:05:18 Operator: KISMETL
Sample : op54324-bs Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	996068	1789457	543.523	542.585
	Spiked Amount 500.000	Range 72 - 134		Recovery =		108.70%	108.52%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	799391	2310282	491.352	514.276
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	926016	1460090	500.931	498.227
6)	1,3,5-Trinitrobe	4.62	4.62	2020365	3920988	507.680	508.664
7)	1,3-Dinitrobenze	5.87	5.86	2362750	1600366	454.452	451.718m
8)	3,5-Dinitroanili	6.30	6.30	1966003	3309035	471.212	475.435m
9)	Nitrobenzene	7.40	7.40	1565443	1515613	529.265	515.916m
10)	Nitroglycerin	0.00	8.95	0	3142064	N.D.	2511.628 #
11)	Tetryl	9.24	9.24	1379493	2245730	476.034	490.497
12)	2,4,6-Trinitroto	9.66	9.66	1755472	2192977	498.049	528.518
13)	2-Amino-4,6-Dini	10.11	10.11	1608205	2495732	522.923	544.039
14)	4-Amino-2,6-Dini	10.54	10.54	1108858	2327607	527.166	519.531
16)	2,4-Dinitrotolue	11.52	11.53	2315215	1499816	507.746	552.622
17)	2,6-Dinitrotolue	11.92	11.92	1337368	1716951	516.574	551.044
18)	o-Nitrotoluene	14.21	14.21	1131287	1560290	524.687	529.817m
19)	p-Nitrotoluene	14.61	14.61	1749140	1417984	513.523	503.060
20)	m-Nitrotoluene	15.18	15.18	1663684	1999109	552.375	567.878m
21)	PETN	0.00	16.74	0	3435319	N.D. d	2192.999m

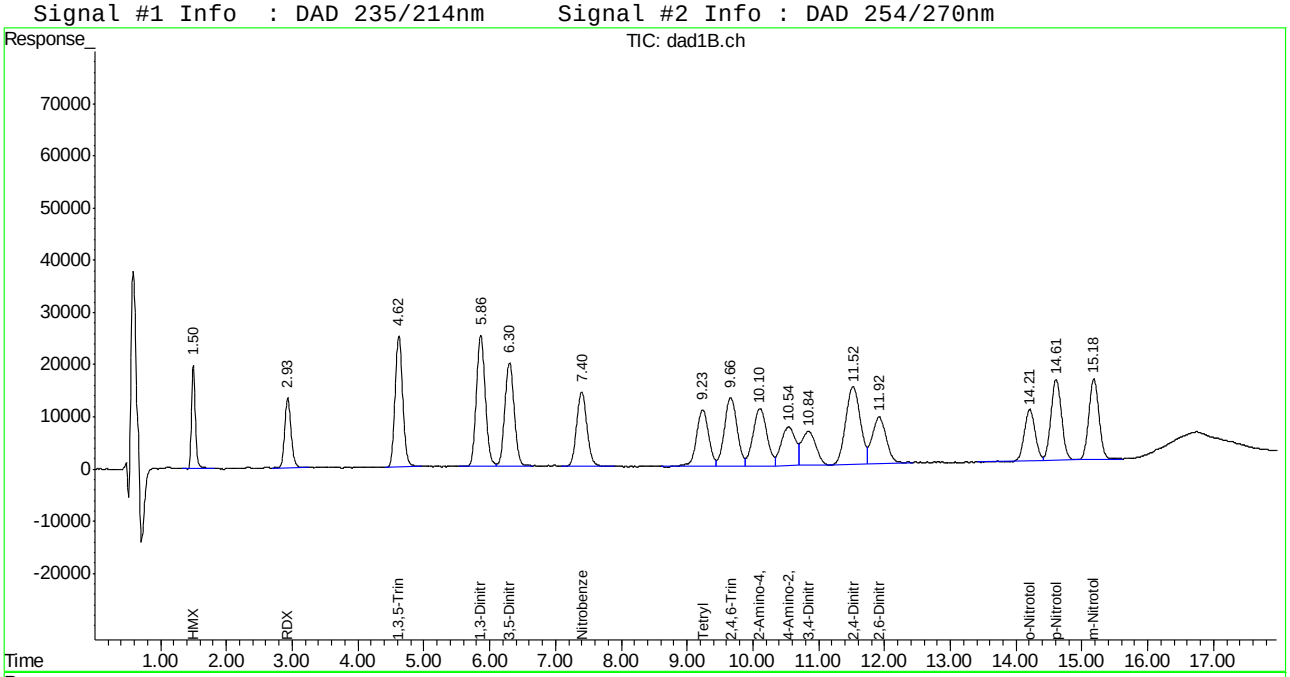
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045285.D 8330B.M Fri Dec 26 11:34:33 2014 Page 1

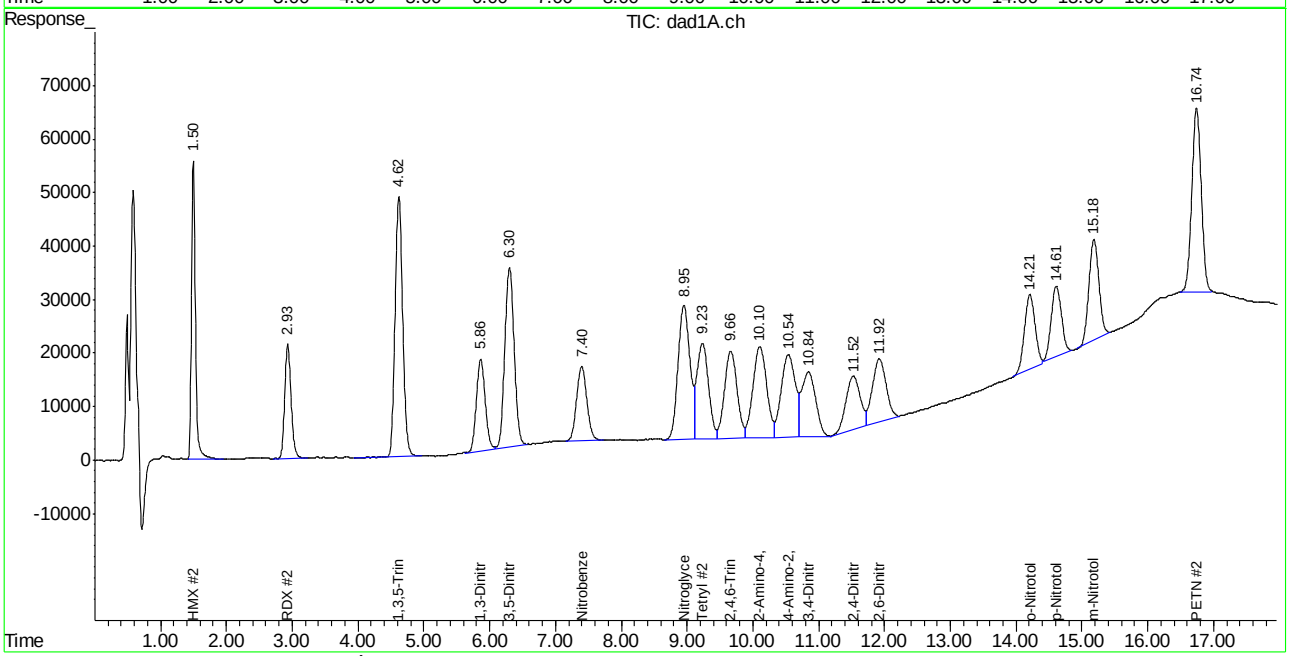
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1A.ch
Acq On : 24-Dec-2014, 17:05:18 Operator: KISMETL
Sample : op54324-bs Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:17 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: OP54324-BS
Lab FileID: BB045285.D
Injection Time: 12/24/14 17:05
Method: SW846 8330B
Analyst approved: 12/26/14 11:47 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.86	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.18	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1A.ch
Acq On : 24-Dec-2014, 17:30:13 Operator: KISMETL
Sample : op54324-pt1 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:29 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	1024020	1823606	558.775	552.939
	Spiked Amount 500.000	Range 72 - 134		Recovery =		111.76%	110.59%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	169478	501179	104.171m	111.564m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.94	192757	314186	104.273m	107.210m
6)	1,3,5-Trinitrobe	4.62	4.62	546074	1078885	137.218	139.962
7)	1,3-Dinitrobenze	5.87	5.87	1064063	712284	204.662	201.049
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	7.40	7.40	562985	562557	190.341	191.495m
10)	Nitroglycerin	0.00	8.96	0	198874	N.D.	158.971 #
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	9.67	9.67	590069	651340	167.410	156.976
13)	2-Amino-4,6-Dini	10.10	10.11	369784	499922	120.239	108.977
14)	4-Amino-2,6-Dini	10.55	10.54	214805	454257	102.121	101.392
16)	2,4-Dinitrotolue	11.53	11.54	580817	355542	127.378	131.003
17)	2,6-Dinitrotolue	11.92	11.93	688653	879833	266.000	282.377
18)	o-Nitrotoluene	14.21	14.21	538747	716038	249.869	243.140m
19)	p-Nitrotoluene	14.61	14.61	1074654	848293	315.503	300.950
20)	m-Nitrotoluene	15.18	15.19	533352	684117	177.083	194.334m
21)	PETN	0.00	16.74	0	328181	N.D. d	187.137m

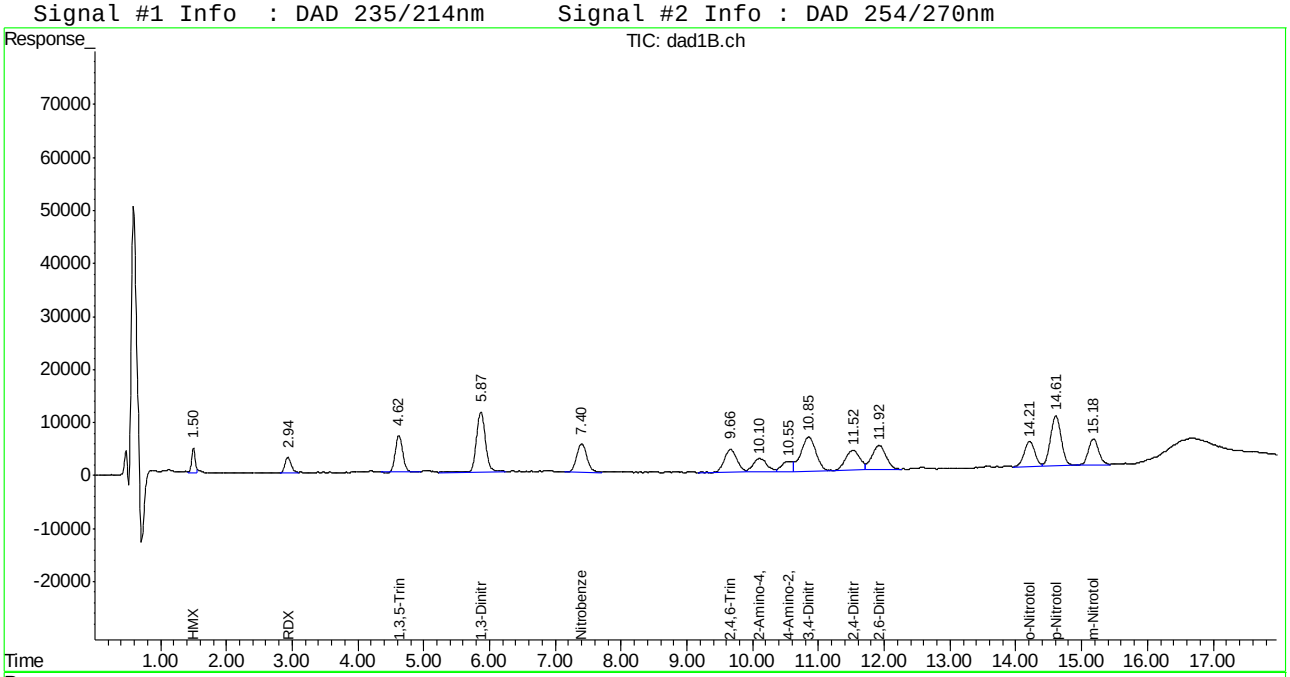
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045286.D 8330B.M Fri Dec 26 11:34:34 2014 Page 1

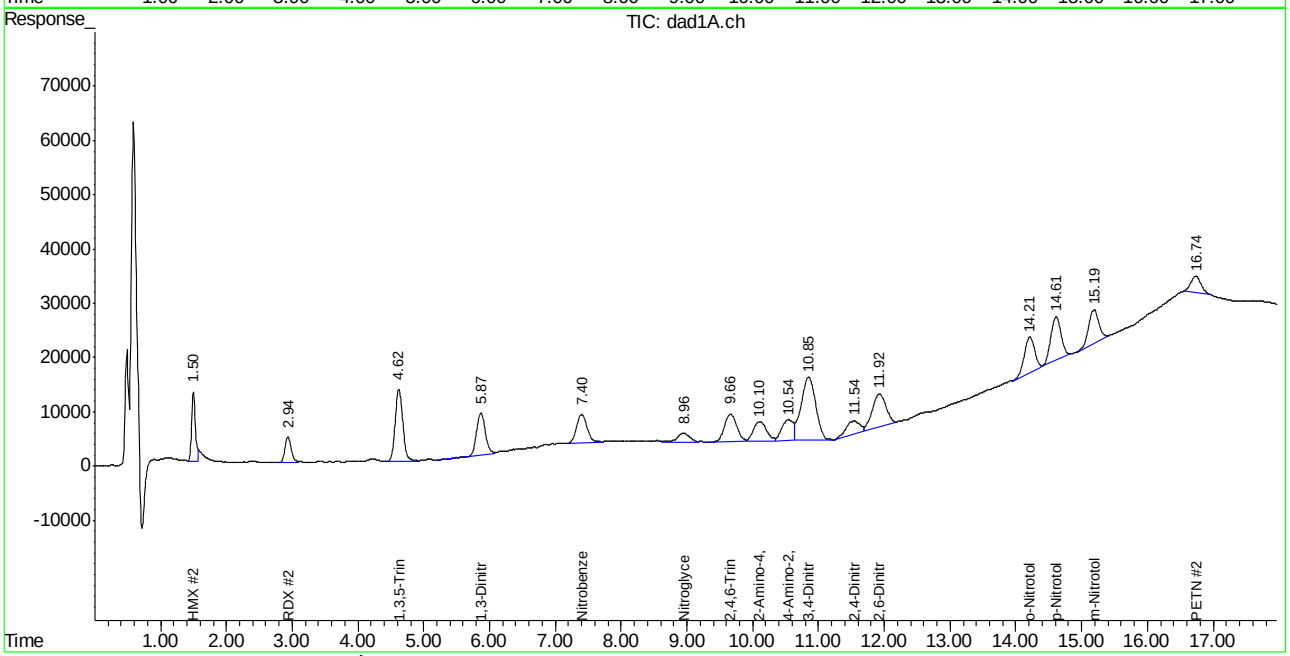
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1A.ch
Acq On : 24-Dec-2014, 17:30:13 Operator: KISMETL
Sample : op54324-pt1 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:18 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: OP54324-PT1
Lab FileID: BB045286.D
Injection Time: 12/24/14 17:30
Method: SW846 8330B
Analyst approved: 12/26/14 11:47 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.50	Overlapping peak
HMX	2691-41-0	2	1.50	Overlapping peak
RDX	121-82-4	1	2.94	Poorly defined baseline
RDX	121-82-4	2	2.94	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.19	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1A.ch
Acq On : 24-Dec-2014, 18:45:05 Operator: KISMETL
Sample : op54324-ms Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:32 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.84	10.84	966577	1721993	527.430	522.129
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.49%	104.43%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	787420	2226226	483.994m	495.565m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	816688	1308235	441.790	446.409
6)	1,3,5-Trinitrobe	4.62	4.62	1758223	3426365	441.809	444.497
7)	1,3-Dinitrobenze	5.87	5.86	2314698	1563551	445.209	441.326m
8)	3,5-Dinitroanili	6.30	6.30	1902273	3213417	455.937	461.696m
9)	Nitrobenzene	7.40	7.40	1491264	1469186	504.186	500.112m
10)	Nitroglycerin	0.00	8.95	0	3040689	N.D.	2430.593 #
11)	Tetryl	9.23	9.23	1181498	1817612	407.710	396.990
12)	2,4,6-Trinitroto	9.66	9.66	1677817	2054637	476.017	495.177
13)	2-Amino-4,6-Dini	10.10	10.10	1527510	2368176	496.684	516.234
14)	4-Amino-2,6-Dini	10.53	10.53	1062637	2258356	505.192	504.074
16)	2,4-Dinitrotolue	11.51	11.52	2222991	1412558	487.520	520.471
17)	2,6-Dinitrotolue	11.91	11.92	1284960	1705130	496.331	547.250
18)	o-Nitrotoluene	14.20	14.20	1110719	1533591	515.148m	520.751m
19)	p-Nitrotoluene	14.60	14.61	1682633	1390275	493.997	493.230
20)	m-Nitrotoluene	15.18	15.18	1609414	1917589	534.357	544.721
21)	PETN	0.00	16.73	0	3210739	N.D. d	2029.911m

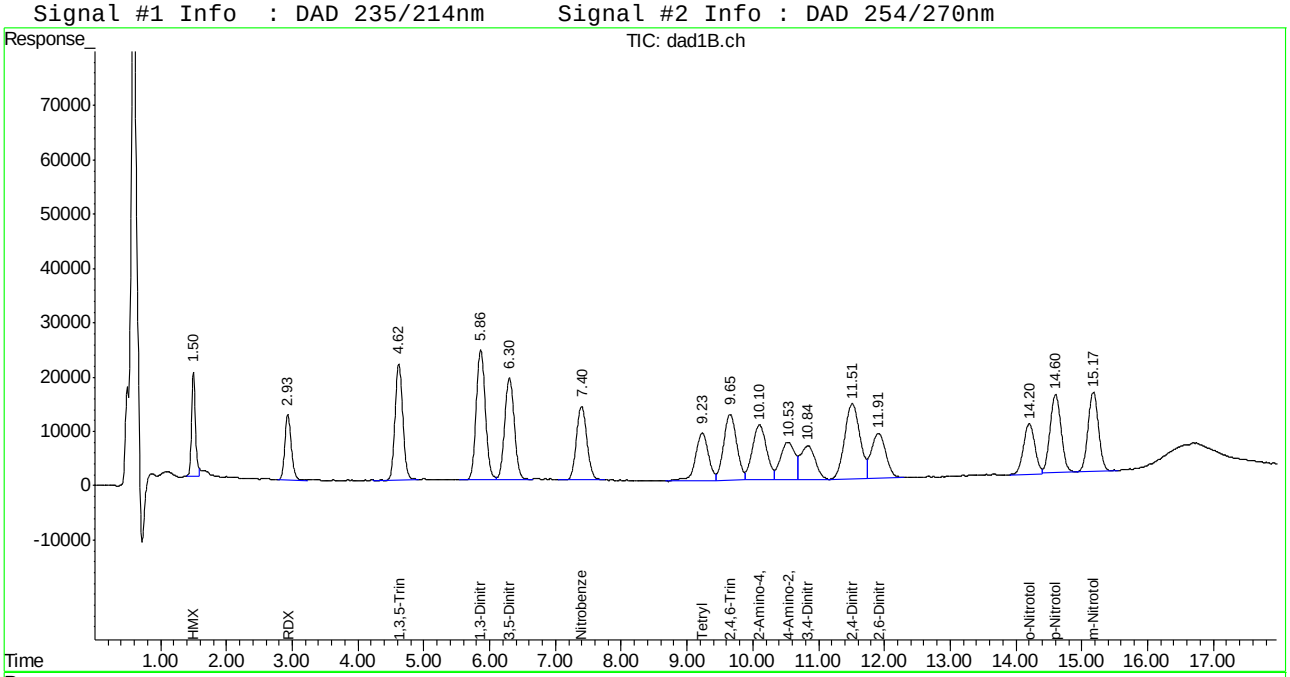
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045289.D 8330B.M Fri Dec 26 11:34:37 2014 Page 1

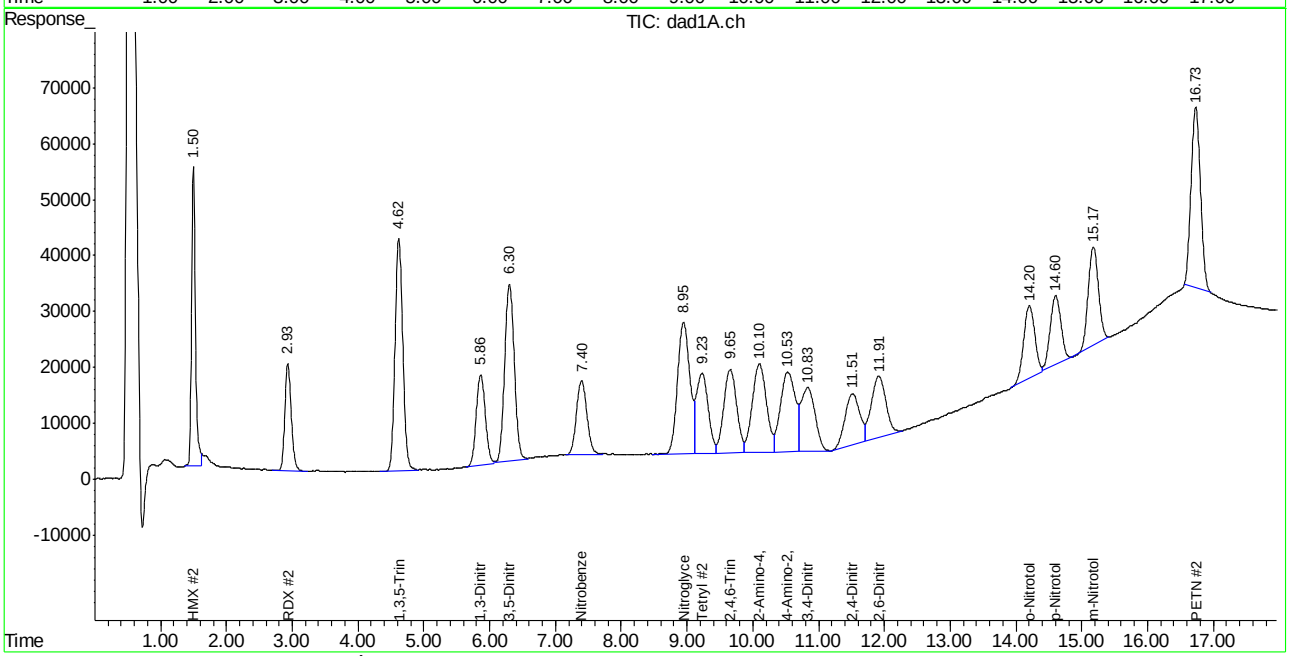
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1A.ch
Acq On : 24-Dec-2014, 18:45:05 Operator: KISMETL
Sample : op54324-ms Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:23 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: OP54324-MS
Lab FileID: BB045289.D
Injection Time: 12/24/14 18:45
Method: SW846 8330B
Analyst approved: 12/26/14 11:55 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.50	Poorly defined baseline
HMX	2691-41-0	2	1.50	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.86	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.20	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.20	Poorly defined baseline
PETN	78-11-5	2	16.73	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1A.ch
Acq On : 24-Dec-2014, 19:10:03 Operator: KISMETL
Sample : op54324-msd Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:33 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	965184	1723296	526.670	522.524
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.33%	104.50%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	792450	2268794	487.085m	505.041m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.93	817851	1291935	442.419	440.847
6)	1,3,5-Trinitrobe	4.62	4.62	1778303	3437605	446.854	445.955
7)	1,3-Dinitrobenze	5.87	5.87	2335856	1618378	449.279	456.802
8)	3,5-Dinitroanili	6.30	6.30	1921853	3239312	460.630	465.417m
9)	Nitrobenzene	7.40	7.40	1488735	1464979	503.331	498.680m
10)	Nitroglycerin	0.00	8.95	0	3066718	N.D.	2451.400 #
11)	Tetryl	9.24	9.23	1196338	1819384	412.831	397.377
12)	2,4,6-Trinitroto	9.66	9.66	1673551	2068294	474.807	498.469
13)	2-Amino-4,6-Dini	10.10	10.10	1544506	2397565	502.211	522.640
14)	4-Amino-2,6-Dini	10.54	10.53	1075719	2272866	511.411	507.313
16)	2,4-Dinitrotolue	11.51	11.52	2240865	1426902	491.440	525.756
17)	2,6-Dinitrotolue	11.91	11.92	1272108	1694321	491.367	543.781
18)	o-Nitrotoluene	14.21	14.20	1149013	1519041	532.908	515.811m
19)	p-Nitrotoluene	14.61	14.61	1718605	1405957	504.558	498.794
20)	m-Nitrotoluene	15.18	15.18	1618270	1912186	537.297	543.186
21)	PETN	0.00	16.73	0	3422231	N.D. d	2183.394m

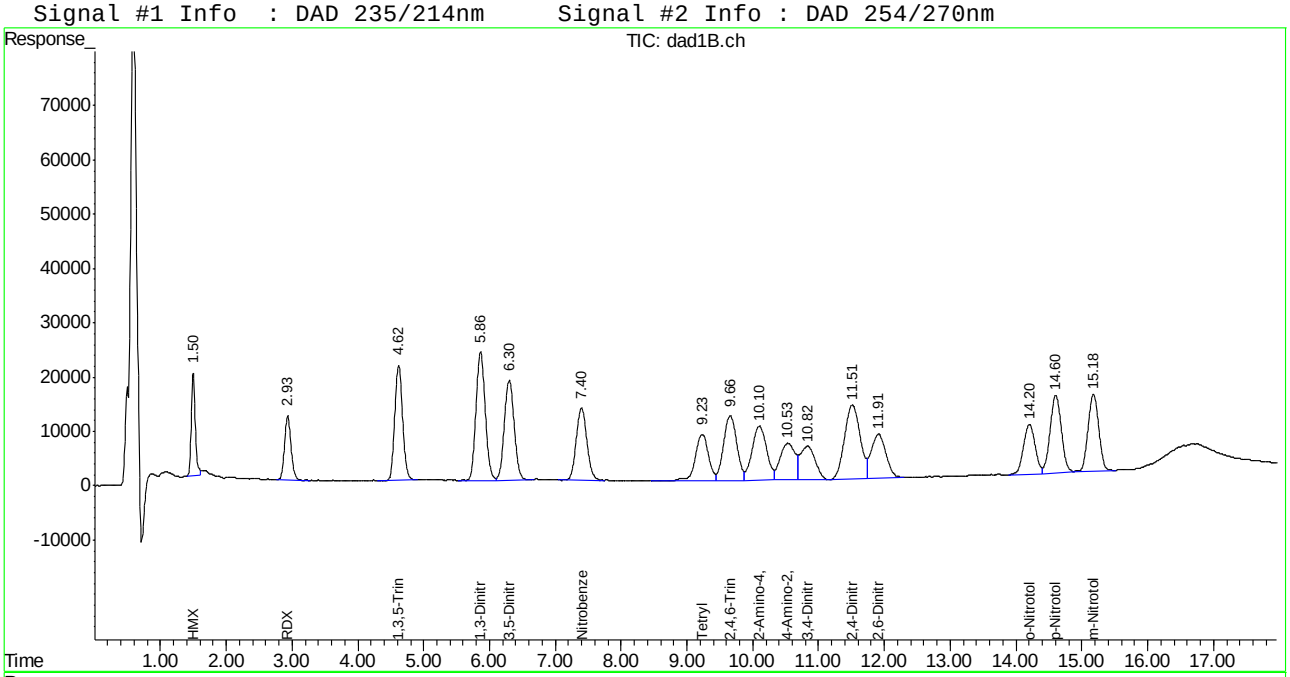
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045290.D 8330B.M Fri Dec 26 11:34:38 2014 Page 1

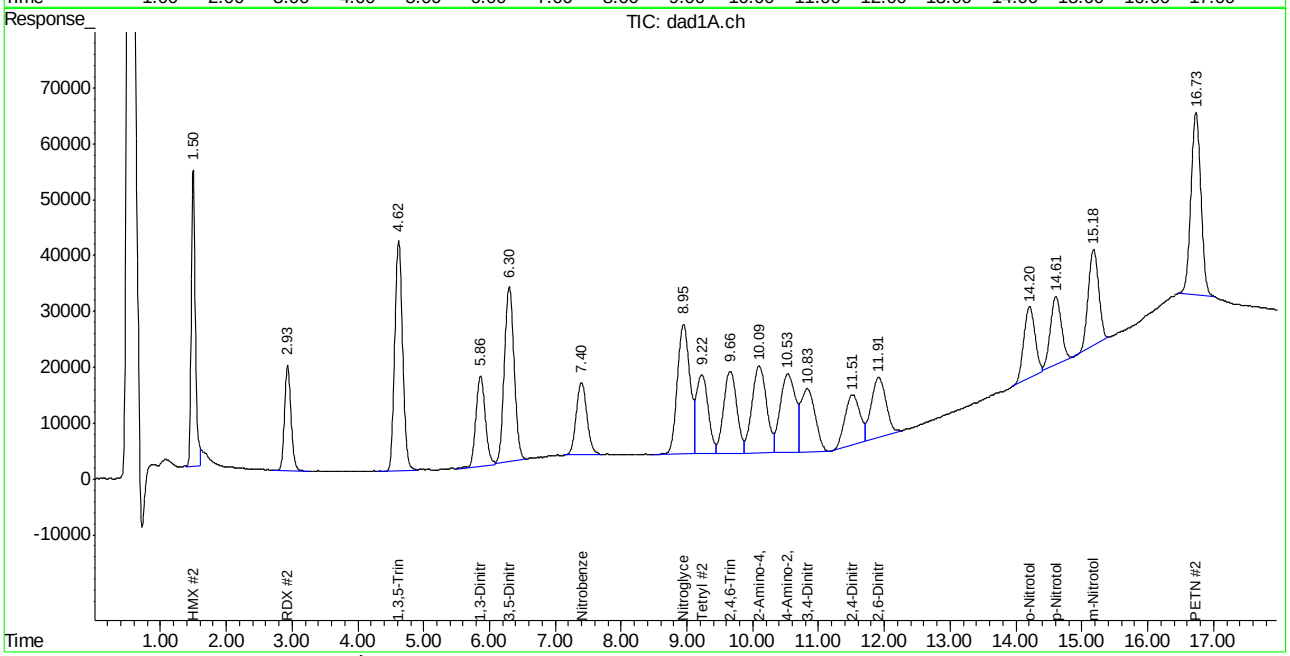
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1A.ch
Acq On : 24-Dec-2014, 19:10:03 Operator: KISMETL
Sample : op54324-msd Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:24 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: OP54324-MSD
Lab FileID: BB045290.D
Injection Time: 12/24/14 19:10
Method: SW846 8330B
Analyst approved: 12/26/14 11:55 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.50	Poorly defined baseline
HMX	2691-41-0	2	1.50	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.20	Poorly defined baseline
PETN	78-11-5	2	16.73	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1A.ch
Acq On : 24-Dec-2014, 22:29:45 Operator: KISMETL
Sample : op54324-dup Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:41 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	880589	1608851	480.510m	487.823
	Spiked Amount 500.000	Range 72 - 134		Recovery =		96.10%	97.56%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

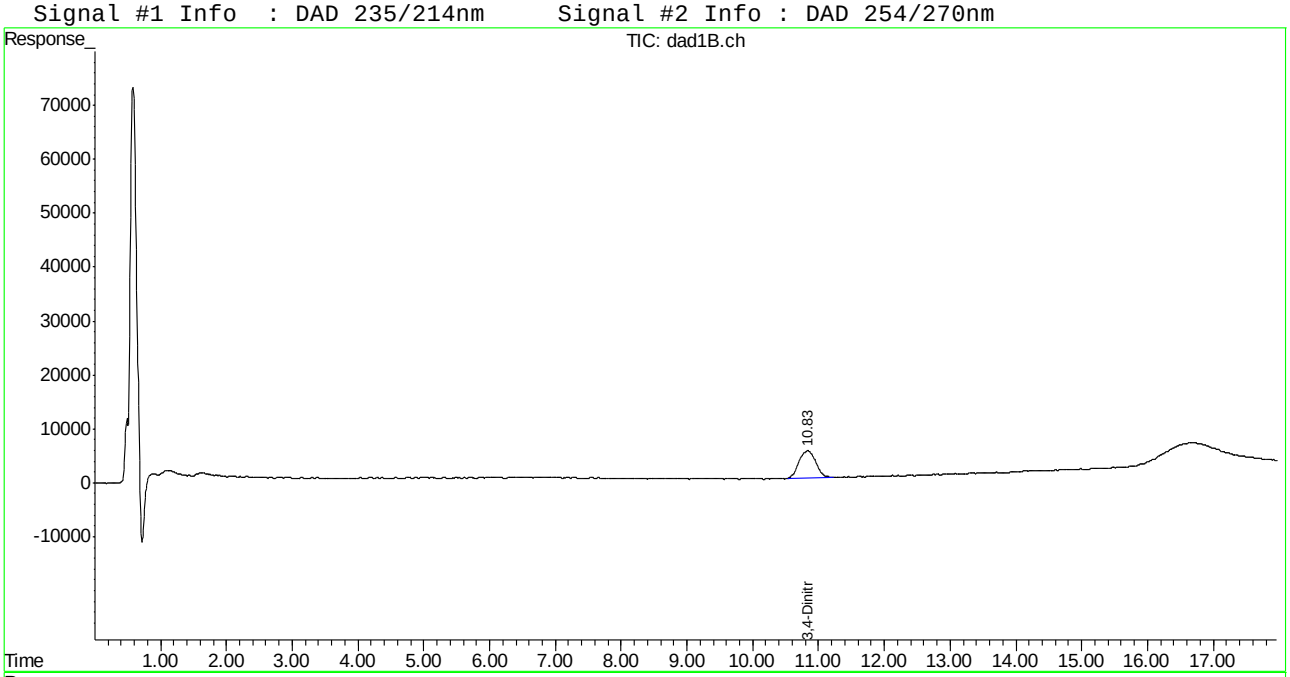
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045298.D 8330B.M Fri Dec 26 11:34:46 2014 Page 1

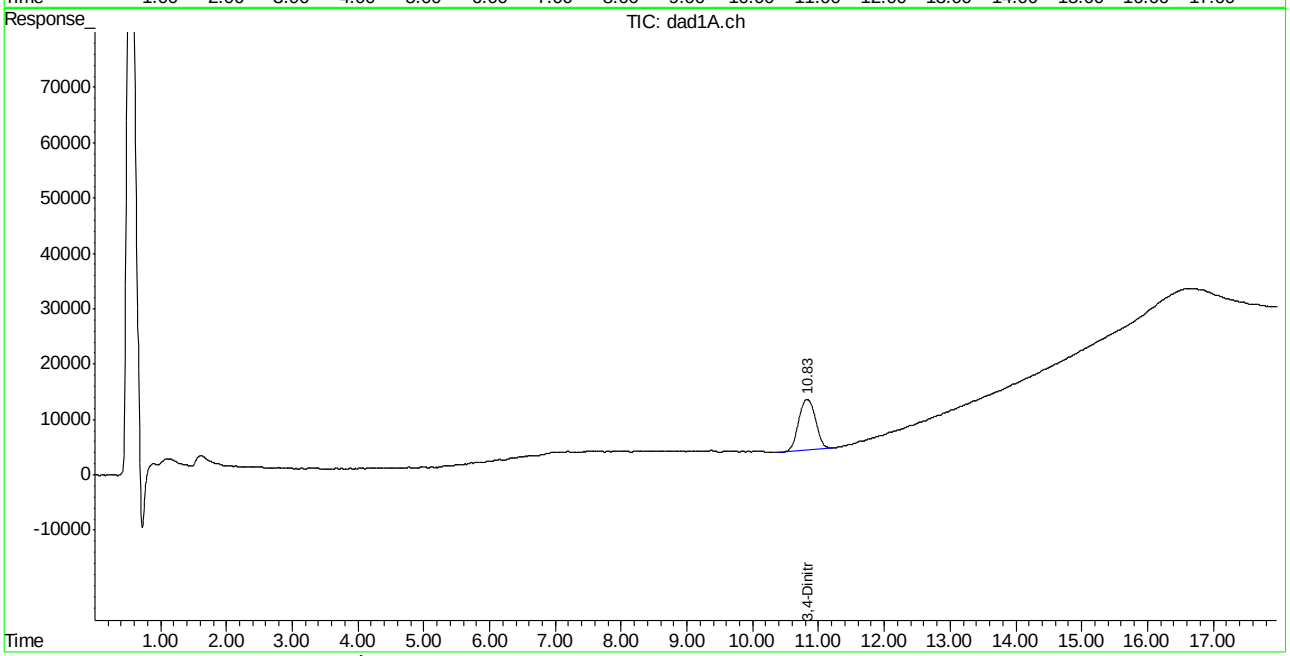
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1A.ch
Acq On : 24-Dec-2014, 22:29:45 Operator: KISMETL
Sample : op54324-dup Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:29 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	OP54324-DUP	**Method:**	SW846 8330B
Lab FileID:	BB045298.D	**Analyst approved:**	12/26/14 11:55 Kismet Lugo
Injection Time:	12/24/14 22:29	**Supervisor approved:**	12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	10.83	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1A.ch
Acq On : 24-Dec-2014, 22:54:45 Operator: KISMETL
Sample : op54324-dup2 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:42 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.82	918119	1654229	500.988	501.582
	Spiked Amount 500.000	Range 72 - 134		Recovery =		100.20%	100.32%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

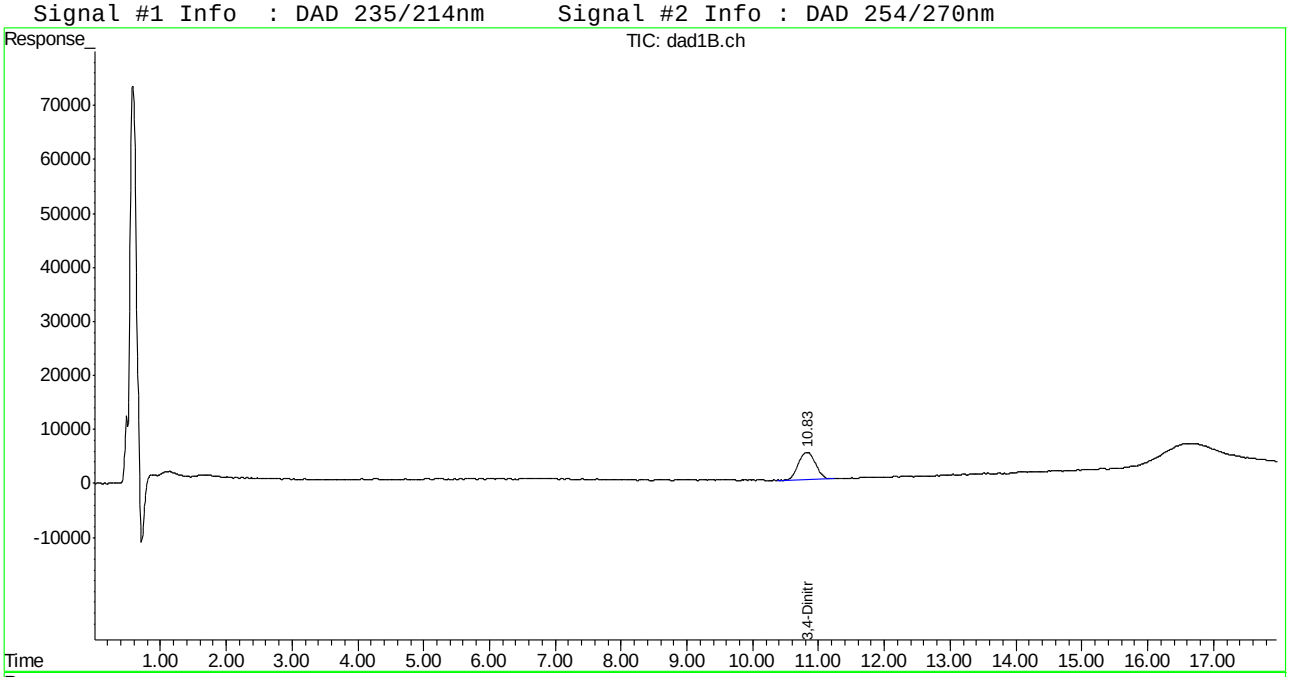
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045299.D 8330B.M Fri Dec 26 11:34:47 2014 Page 1

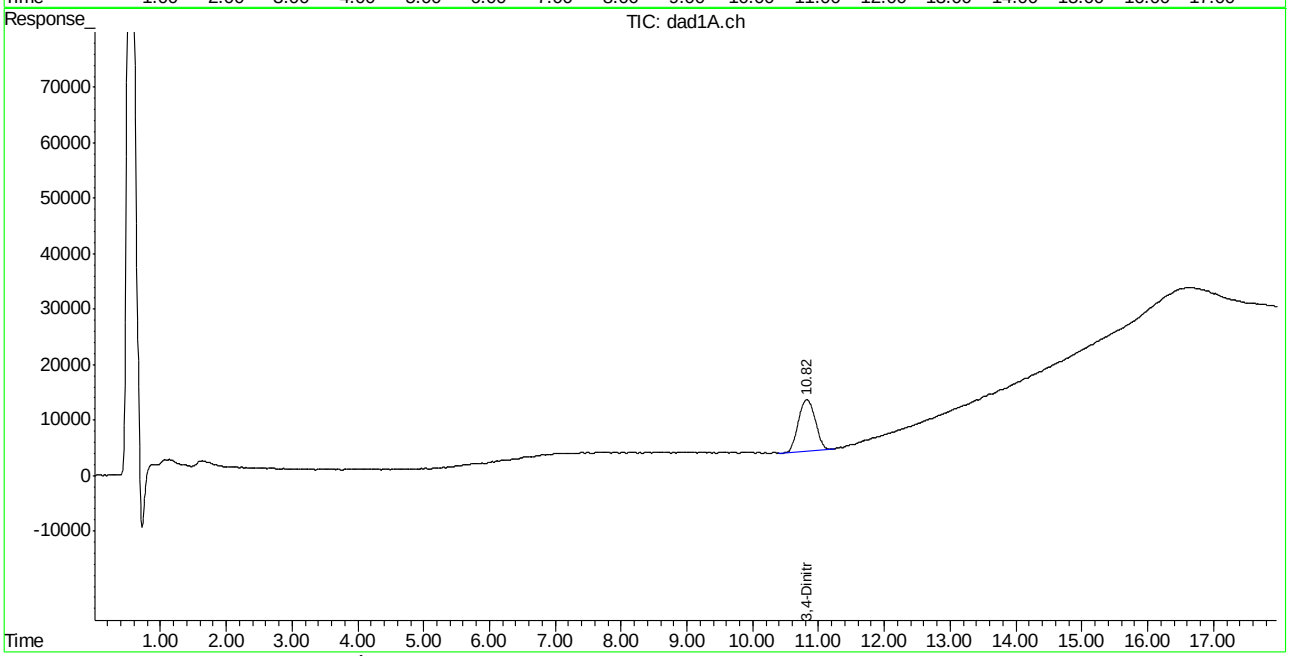
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1A.ch
Acq On : 24-Dec-2014, 22:54:45 Operator: KISMETL
Sample : op54324-dup2 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:29 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1A.ch
Acq On : 24-Dec-2014, 11:56:13 Operator: KISMETL
Sample : ic1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:56 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.78	10.79	33838	67944	17.116m	19.297m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	3.42%#	3.86%#
	Target Compounds						
1)	TNX	1.36	1.36	60245	89063	19.585m	19.978
2)	HMX	1.45	1.45	30628	90165	19.829m	22.365
3)	DNX	1.73	1.73	54662	98360	18.888m	22.222m
4)	MNX	2.31	2.32	55594	73569	22.660m	19.608m
5)	RDX	2.92	2.91	44002	66888	22.823m	22.184m
6)	1,3,5-Trinitrobe	4.62	4.62	81870	165404	20.308	21.521
7)	1,3-Dinitrobenze	5.88	5.89	113377	80230	20.871m	21.576m
8)	3,5-Dinitroanili	6.32	6.33	88070	137044	20.918	19.371
9)	Nitrobenzene	7.40	7.40	62858	63354	20.309m	21.568m
10)	Nitroglycerin	0.00	8.96	0	125956	N.D.	100.141 #
11)	Tetryl	9.23	9.23	64320	93518	22.200m	19.850
12)	2,4,6-Trinitroto	9.66	9.67	79924	73976	21.834m	16.375m
13)	2-Amino-4,6-Dini	10.12	10.12	69269	85626	22.144m	17.843m
14)	4-Amino-2,6-Dini	10.55	10.56	43978	84491	19.217m	17.757m
16)	2,4-Dinitrotolue	11.56	11.58	93095	46679	20.589m	16.314m
17)	2,6-Dinitrotolue	11.95	12.01	52461	57706	20.531m	17.870m
18)	o-Nitrotoluene	14.26	14.30	36334	53603	16.841m	17.662m
19)	p-Nitrotoluene	14.65	14.68	59215	54043	18.393m	19.561m
20)	m-Nitrotoluene	15.18	15.22	61996	69965	18.914m	17.982m
21)	PETN	0.00	16.72	0	144929	N.D.	299.662m#

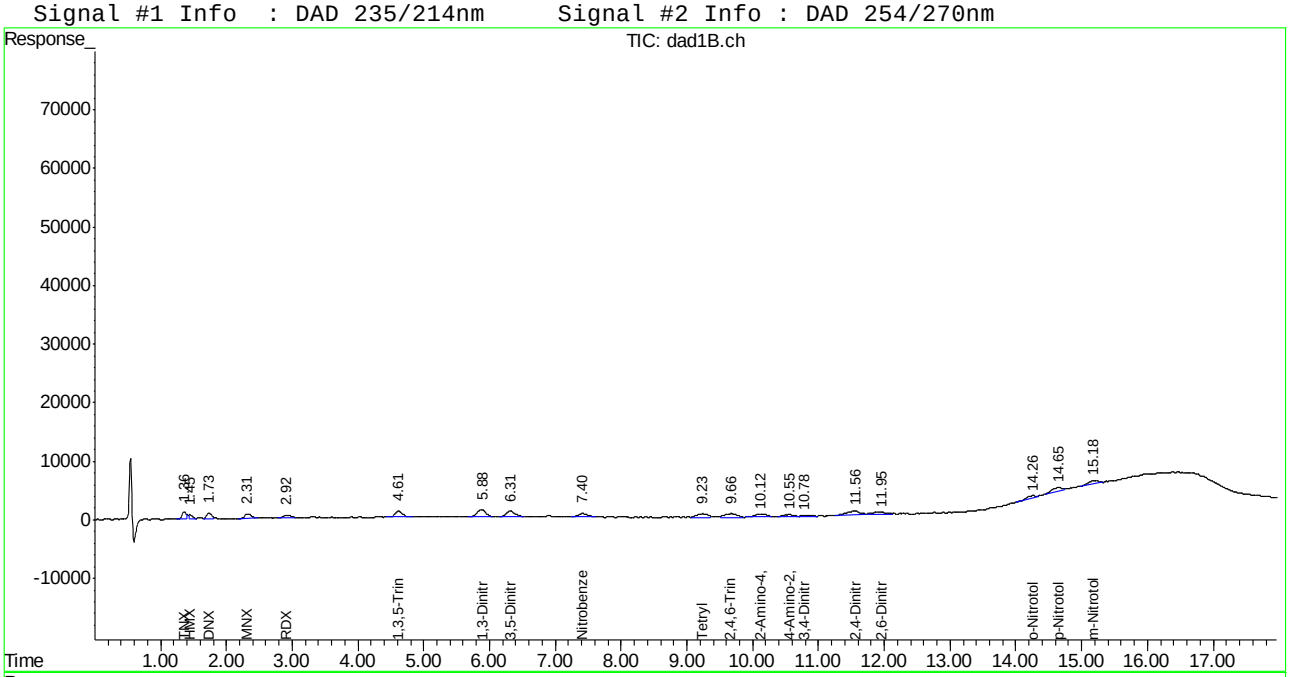
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045273.D 8330B.M Fri Dec 26 10:58:45 2014 Page 1

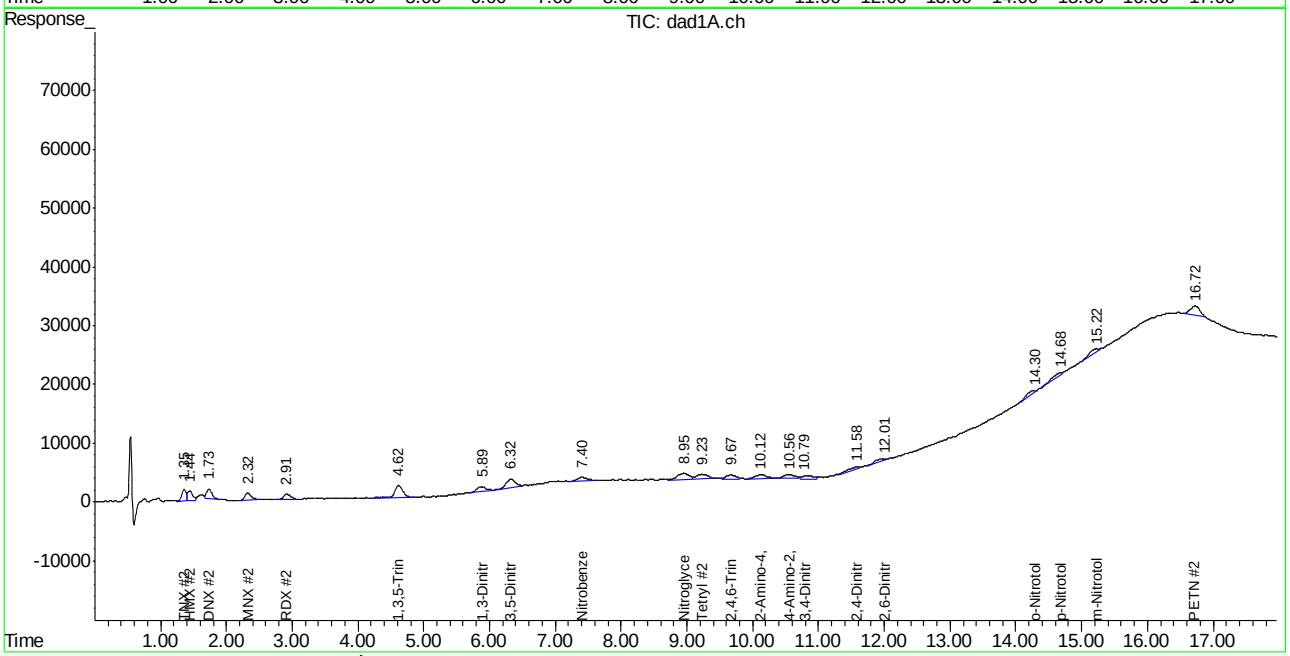
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1A.ch
Acq On : 24-Dec-2014, 11:56:13 Operator: KISMETL
Sample : ic1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 7:23 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219 **Method:** SW846 8330A
Lab FileID: BB045273.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 11:56 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.45	Poorly defined baseline
DNX		1	1.73	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
MNX		1	2.31	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	2	2.91	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.88	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.89	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.40	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
Tetryl	479-45-8	1	9.23	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.66	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.67	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.12	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.12	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.55	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.56	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.78	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.79	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.56	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.95	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.01	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.26	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.30	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.65	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.68	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.18	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.22	Poorly defined baseline
PETN	78-11-5	2	16.72	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1A.ch
Acq On : 24-Dec-2014, 12:29:02 Operator: KISMETL
Sample : ic1219-50 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:57 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.86	77513	135078	39.208m	38.363m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	7.84%#	7.67%#
	Target Compounds						
1)	TNX	1.35	1.35	149687	196121	48.661m	43.992m
2)	HMX	1.43	1.44	76954	187207	49.822m	46.437m
3)	DNX	1.73	1.73	128095	187019	44.263m	42.252m
4)	MNX	2.32	2.32	134707	195268	54.906m	52.044m
5)	RDX	2.92	2.92	86817	143805	45.030m	47.695m
6)	1,3,5-Trinitrobe	4.62	4.62	211497	400593	52.462m	52.121m
7)	1,3-Dinitrobenze	5.87	5.88	264850	172901	48.755m	46.498m
8)	3,5-Dinitroanili	6.32	6.32	207818	354911	49.359m	50.166m
9)	Nitrobenzene	7.41	7.41	149682	149443	48.361	50.875m
10)	Nitroglycerin	0.00	8.96	0	293664	N.D.	233.478m#
11)	Tetryl	9.23	9.23	132983	214056	45.899	45.434m
12)	2,4,6-Trinitroto	9.68	9.68	167633	207611	45.795	45.957m
13)	2-Amino-4,6-Dini	10.14	10.13	134808	211702	43.096m	44.115m
14)	4-Amino-2,6-Dini	10.55	10.56	78876	198845	34.466m	41.790m
16)	2,4-Dinitrotolue	11.54	11.55	218562	114364	48.338m	39.969m
17)	2,6-Dinitrotolue	11.93	11.96	132383	131672	51.809	40.775m
18)	o-Nitrotoluene	14.22	14.23	94575	140005	43.836m	46.132m
19)	p-Nitrotoluene	14.63	14.64	178230	150227	55.361m	54.375m
20)	m-Nitrotoluene	15.19	15.20	148603	163233	45.337	41.954m
21)	PETN	0.00	16.75	0	340292	N.D.	703.602m#

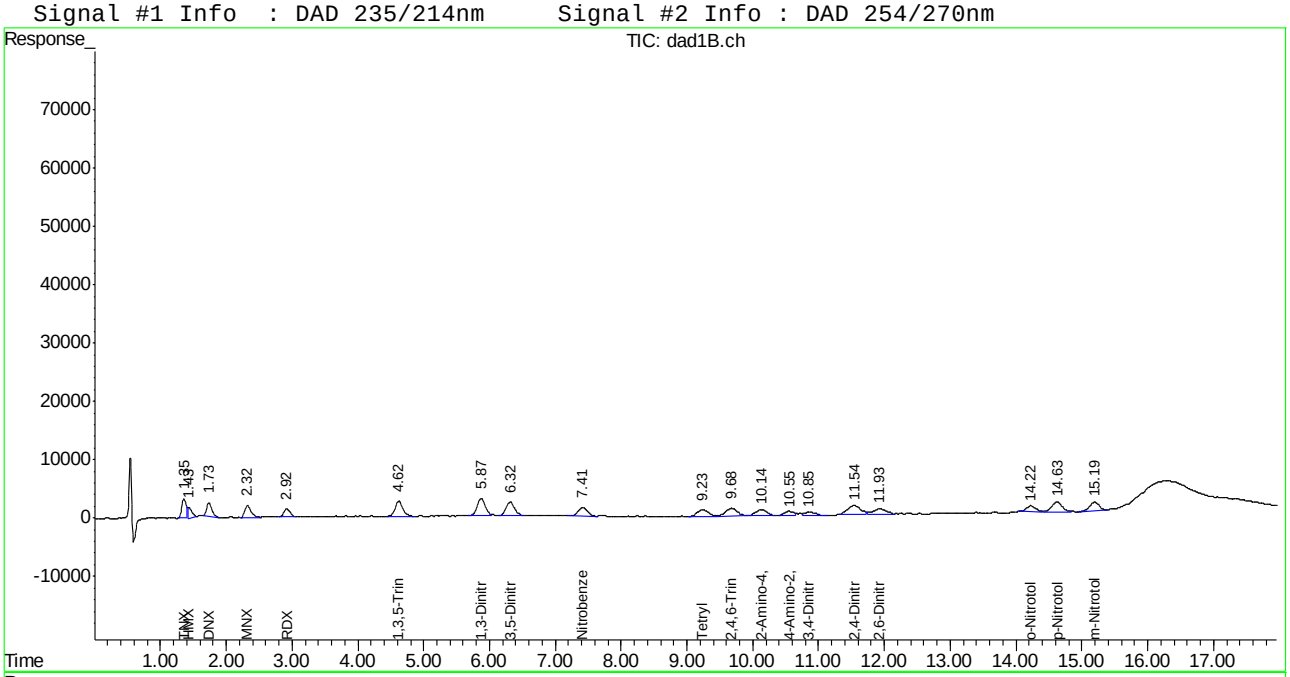
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045274.D 8330B.M Fri Dec 26 10:58:46 2014 Page 1

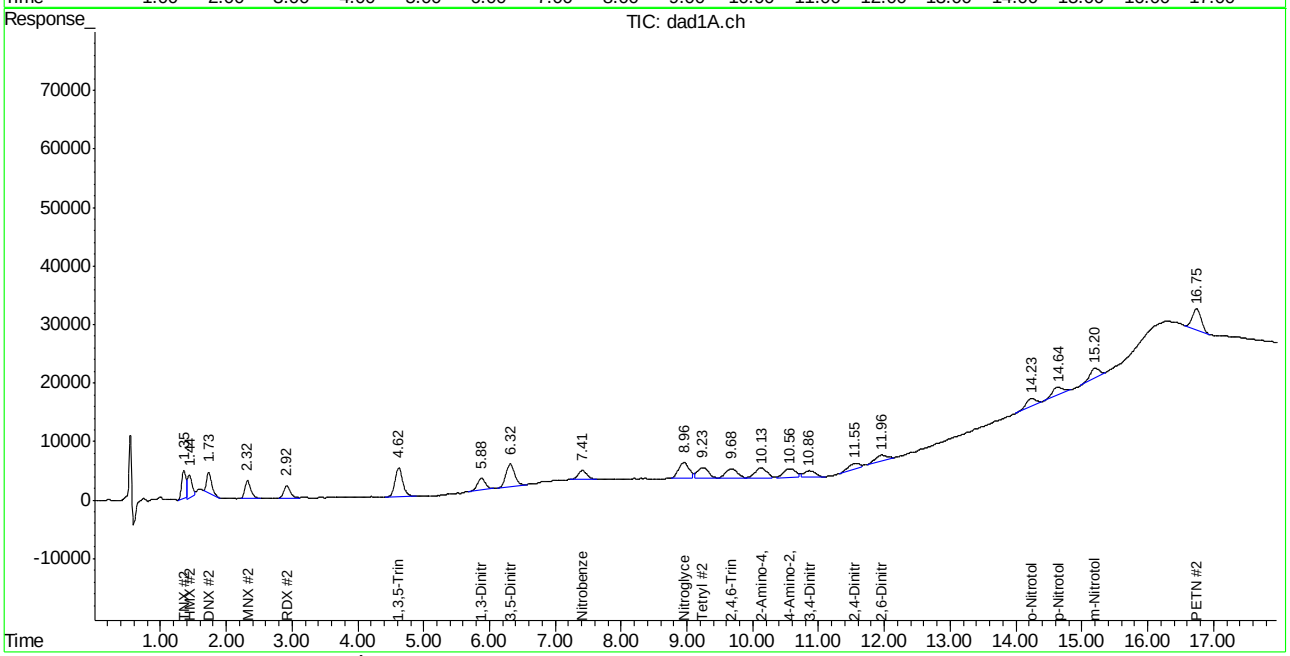
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1A.ch
Acq On : 24-Dec-2014, 12:29:02 Operator: KISMETL
Sample : ic1219-50 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 7:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: GBB1219-IC1219
Lab FileID: BB045274.D
Injection Time: 12/24/14 12:29
Method: SW846 8330A
Analyst approved: 12/26/14 11:46 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Poorly defined baseline
TNX		2	1.35	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.73	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
MNX		1	2.32	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.62	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.62	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.87	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.88	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.32	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.32	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.96	Poorly defined baseline
Tetryl	479-45-8	2	9.23	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.68	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.13	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.14	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.55	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.56	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.85	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.86	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.96	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.22	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.23	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.63	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.64	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.20	Poorly defined baseline
PETN	78-11-5	2	16.75	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1A.ch
Acq On : 24-Dec-2014, 12:53:56 Operator: KISMETL
Sample : ic1219-100 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:58 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.84	10.85	179910	303181	91.003	86.106m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	18.20%#	17.22%#
	Target Compounds						
1)	TNX	1.36	1.36	289544	434407	94.128m	97.442m
2)	HMX	1.43	1.44	139428	411100	90.269m	101.973m
3)	DNX	1.74	1.74	280516	442091	96.930m	99.878m
4)	MNX	2.32	2.32	241967	372451	98.625m	99.268m
5)	RDX	2.92	2.92	182710	289985	94.767m	96.177m
6)	1,3,5-Trinitrobe	4.63	4.63	383870	744341	95.219	96.846
7)	1,3-Dinitrobenze	5.88	5.87	506658	344536	93.269	92.655m
8)	3,5-Dinitroanili	6.32	6.31	421785	708638	100.178	100.165m
9)	Nitrobenzene	7.42	7.41	284905	292356	92.050	99.527m
10)	Nitroglycerin	0.00	8.95	0	645359	N.D.	513.094m#
11)	Tetryl	9.24	9.24	276454	438552	95.419m	93.085m
12)	2,4,6-Trinitroto	9.68	9.68	338193	424207	92.389	93.903m
13)	2-Amino-4,6-Dini	10.13	10.13	290965	457393	93.016	95.312m
14)	4-Amino-2,6-Dini	10.58	10.54	197369	443116	86.244	93.127m
16)	2,4-Dinitrotolue	11.54	11.55	472004	265283	104.390	92.714m
17)	2,6-Dinitrotolue	11.93	11.94	267233	290146	104.583	89.849m
18)	o-Nitrotoluene	14.22	14.21	247825	300548	114.869	99.031m
19)	p-Nitrotoluene	14.62	14.63	348545	259911	108.264	94.076
20)	m-Nitrotoluene	15.19	15.19	291452	343006	88.918	88.158m
21)	PETN	0.00	16.74	0	654504	N.D.	1353.279m#

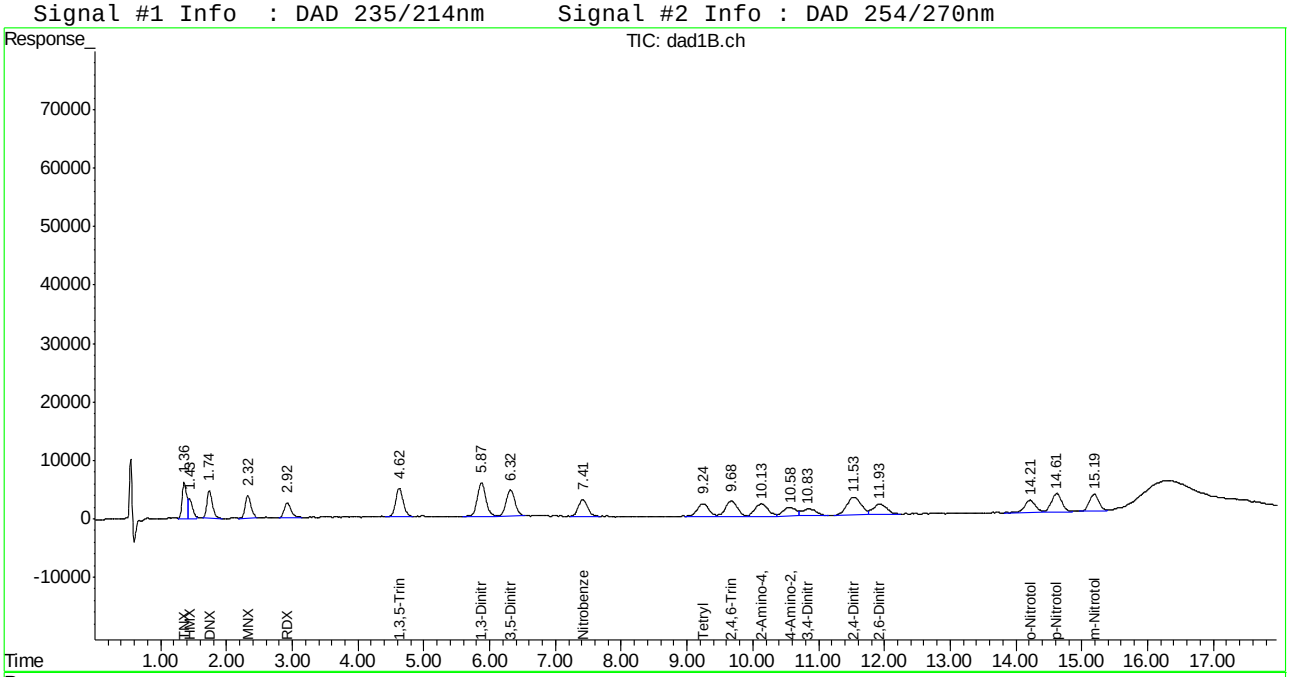
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045275.D 8330B.M Fri Dec 26 10:58:47 2014 Page 1

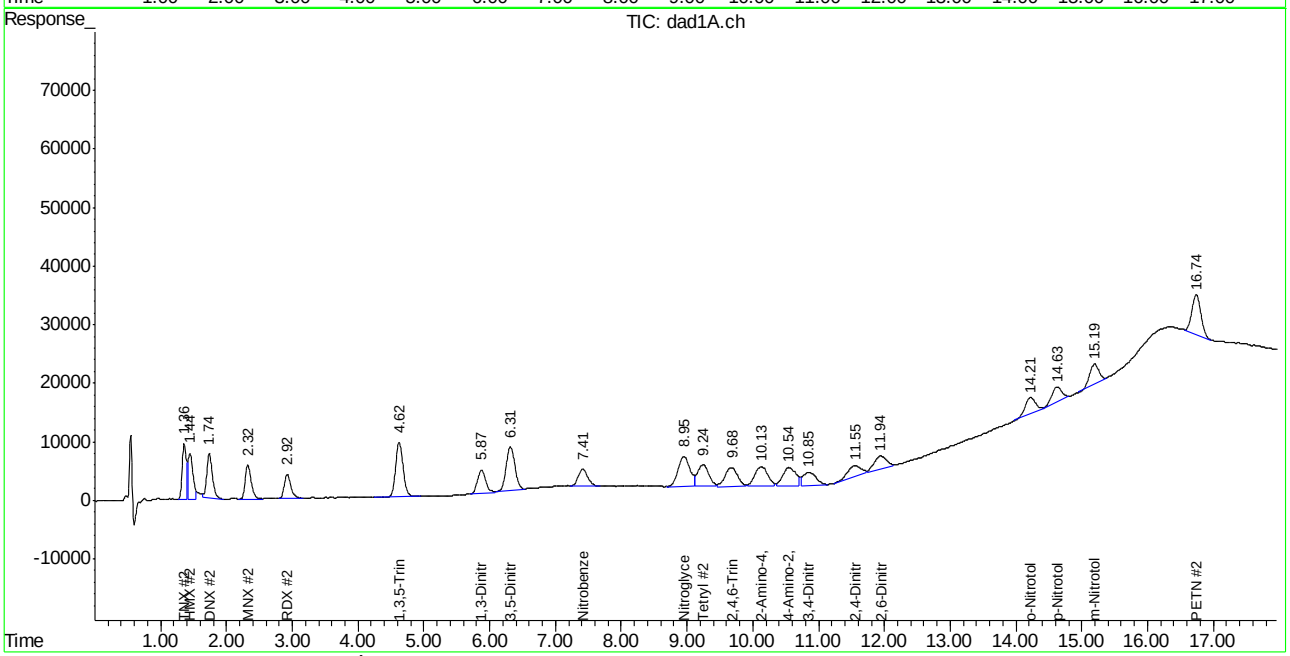
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1A.ch
Acq On : 24-Dec-2014, 12:53:56 Operator: KISMETL
Sample : ic1219-100 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 7:36 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219 **Method:** SW846 8330A
Lab FileID: BB045275.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 12:53 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
TNX		2	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.74	Poorly defined baseline
DNX		2	1.74	Poorly defined baseline
MNX		1	2.32	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.95	Poorly defined baseline
Tetryl	479-45-8	1	9.24	Poorly defined baseline
Tetryl	479-45-8	2	9.24	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.68	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.13	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.54	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.85	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.94	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.19	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1A.ch
Acq On : 24-Dec-2014, 13:18:53 Operator: KISMETL
Sample : ic1219-200 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:59 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.86	384029	676395	194.252	192.102
Spiked Amount	500.000	Range	72 - 134	Recovery	=	38.85%#	38.42%#
	Target Compounds						
1)	TNX	1.35	1.36	596150	887829	193.802m	199.148
2)	HMX	1.43	1.44	353596	916841	228.927m	227.422m
3)	DNX	1.74	1.73	588181	919750	203.242	207.792m
4)	MNX	2.32	2.32	498730	745957	203.281	198.816
5)	RDX	2.92	2.92	374385	592458	194.184	196.495
6)	1,3,5-Trinitrobe	4.62	4.62	810695	1554815	201.094	202.297
7)	1,3-Dinitrobenze	5.87	5.87	1047009	707181	192.740	190.180m
8)	3,5-Dinitroanili	6.31	6.31	829062	1413604	196.911	199.812m
9)	Nitrobenzene	7.41	7.41	581750	575034	187.957	195.759m
10)	Nitroglycerin	0.00	8.95	0	1284855	N.D.	1021.527 #
11)	Tetryl	9.24	9.24	597100	988230	206.090	209.757
12)	2,4,6-Trinitroto	9.67	9.68	705263	853627	192.666	188.960
13)	2-Amino-4,6-Dini	10.13	10.13	622555	959723	199.019	199.988
14)	4-Amino-2,6-Dini	10.55	10.56	442867	935725	193.519	196.656
16)	2,4-Dinitrotolue	11.54	11.55	927594	569056	205.150	198.880
17)	2,6-Dinitrotolue	11.93	11.94	519135	659294	203.166	204.162
18)	o-Nitrotoluene	14.22	14.22	473385	602609	219.417	198.561m
19)	p-Nitrotoluene	14.62	14.63	717733	562055	222.940	203.437
20)	m-Nitrotoluene	15.19	15.19	599653	716025	182.945	184.030m
21)	PETN	0.00	16.74	0	1491806	N.D.	3084.521m#

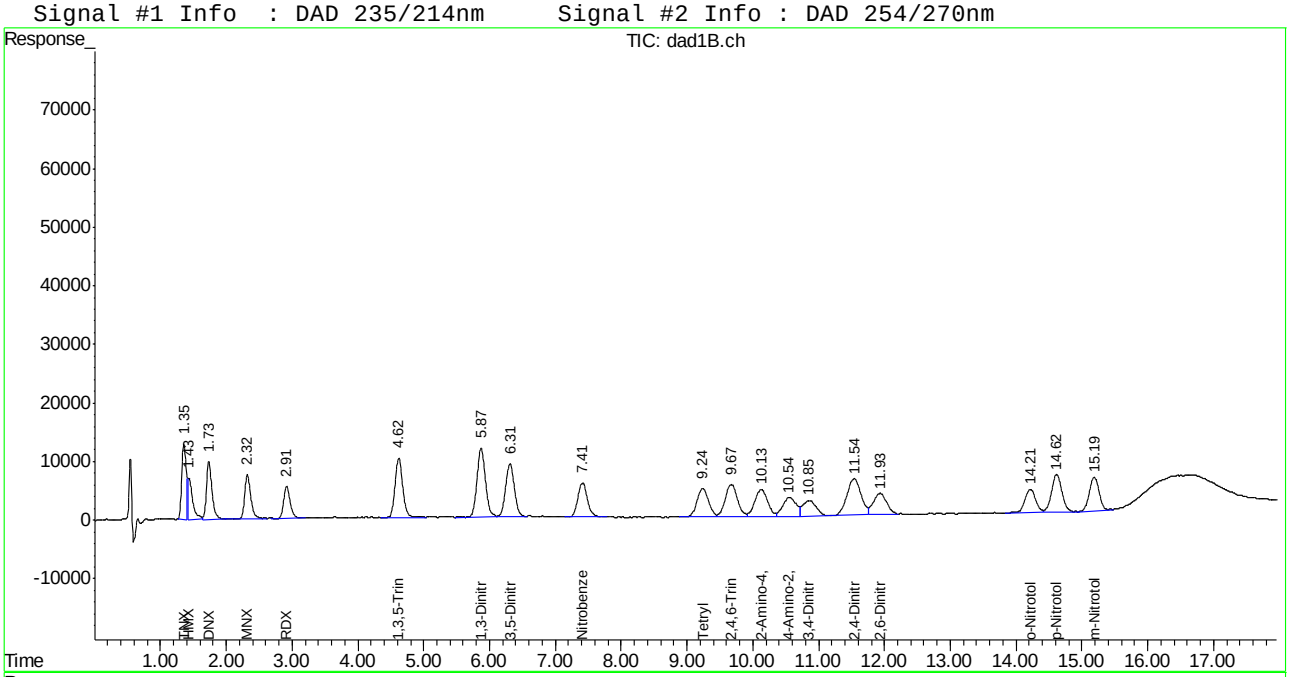
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045276.D 8330B.M Fri Dec 26 10:58:48 2014 Page 1

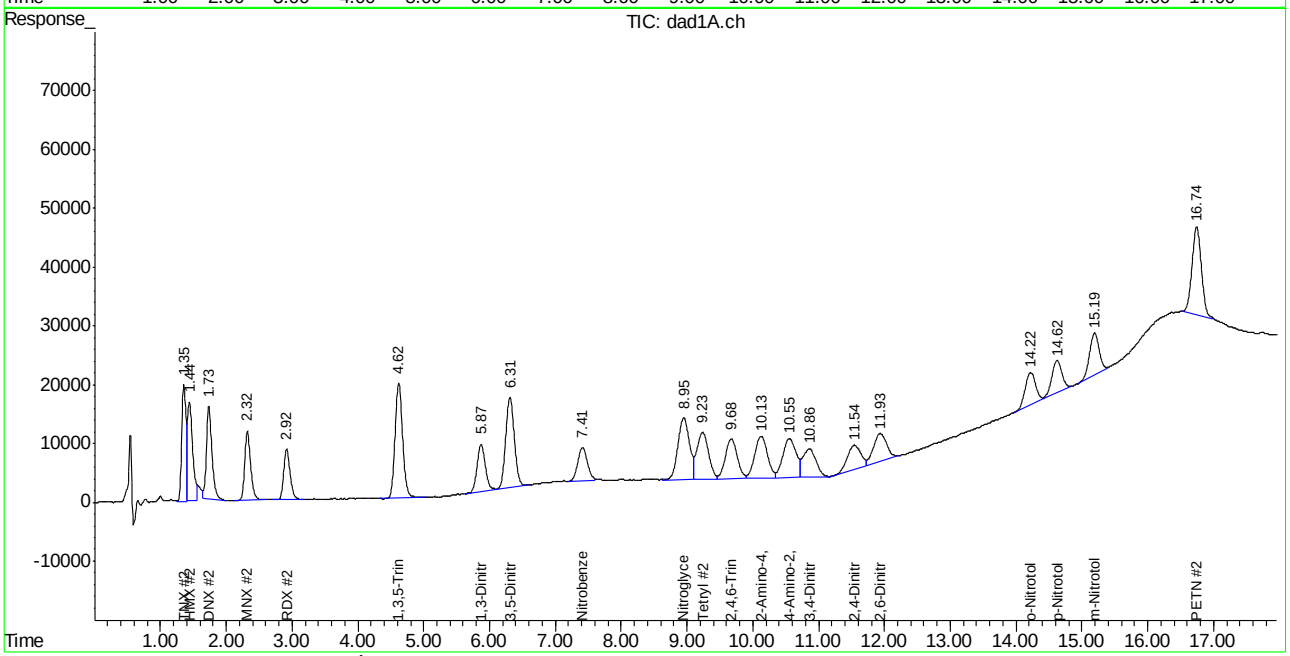
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1A.ch
Acq On : 24-Dec-2014, 13:18:53 Operator: KISMETL
Sample : ic1219-200 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:08 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: GBB1219-IC1219
Lab FileID: BB045276.D
Injection Time: 12/24/14 13:18
Method: SW846 8330A
Analyst approved: 12/26/14 11:46 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.22	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.19	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1A.ch
Acq On : 24-Dec-2014, 13:43:49 Operator: KISMETL
Sample : icc1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:17:00 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.85	948361	1694712	479.707	481.313
Spiked Amount	500.000	Range	72 - 134	Recovery	=	95.94%	96.26%
	Target Compounds						
1)	TNX	1.36	1.36	1532263	2125081	498.122m	476.675
2)	HMX	1.44	1.45	825664	2292059	534.555m	568.544
3)	DNX	1.74	1.74	1346603	2166165	465.310	489.386
4)	MNX	2.33	2.33	1153094	1779028	469.998	474.155
5)	RDX	2.92	2.92	875690	1386499	454.198m	459.848m
6)	1,3,5-Trinitrobe	4.62	4.62	1906659	3654801	472.949	475.527
7)	1,3-Dinitrobenze	5.87	5.87	2484144	1676151	457.298	450.762m
8)	3,5-Dinitroanili	6.31	6.31	2012332	3362518	477.949	475.289m
9)	Nitrobenzene	7.41	7.41	1461267	1433981	472.120	488.170m
10)	Nitroglycerin	0.00	8.95	0	3080582	N.D.	2449.224 #
11)	Tetryl	9.24	9.24	1416650	2221337	488.959	471.490
12)	2,4,6-Trinitroto	9.67	9.67	1699066	2050674	464.157	453.940
13)	2-Amino-4,6-Dini	10.12	10.12	1521328	2295668	486.340	478.373
14)	4-Amino-2,6-Dini	10.55	10.55	1083789	2256187	473.580	474.170
16)	2,4-Dinitrotolue	11.54	11.54	2207991	1431290	488.327	500.222
17)	2,6-Dinitrotolue	11.93	11.93	1248576	1638019	488.636	507.241
18)	o-Nitrotoluene	14.22	14.21	1078020	1484867	499.670	489.268m
19)	p-Nitrotoluene	14.62	14.62	1687656	1395663	524.214	505.164
20)	m-Nitrotoluene	15.19	15.19	1490963	1782378	454.872	458.101
21)	PETN	0.00	16.75	0	3510832	N.D. d	7259.143m

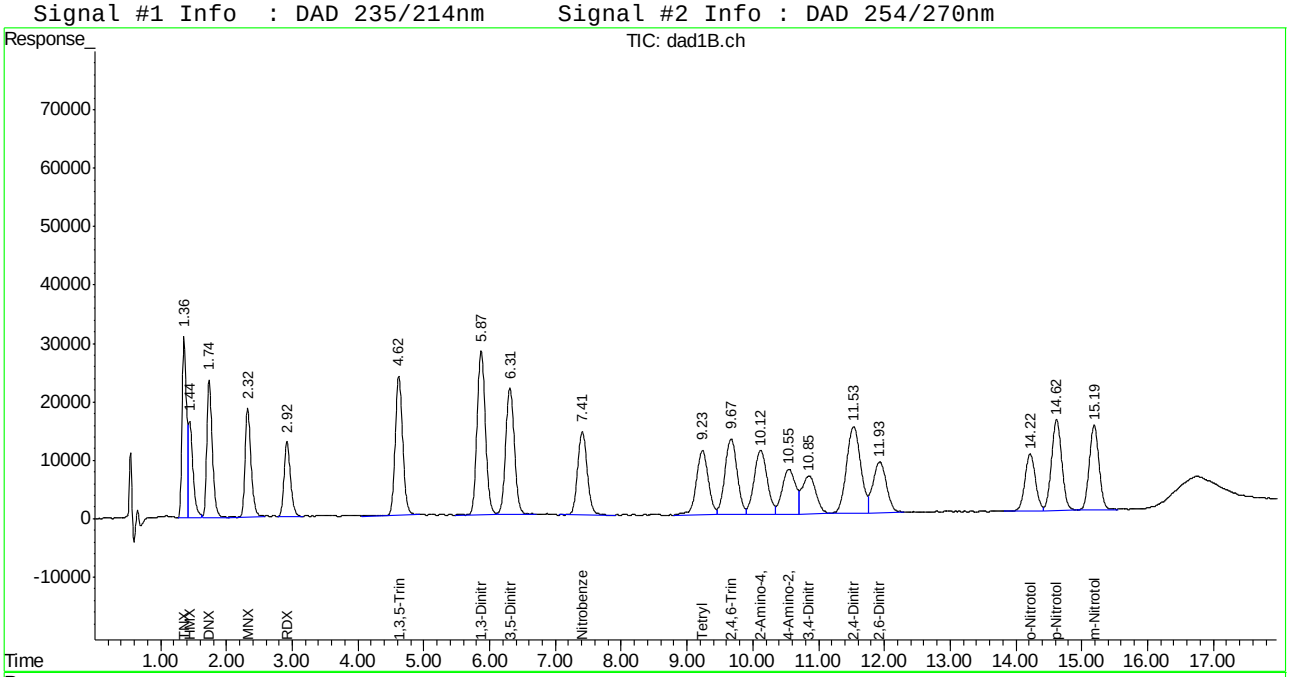
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045277.D 8330B.M Fri Dec 26 10:58:49 2014 Page 1

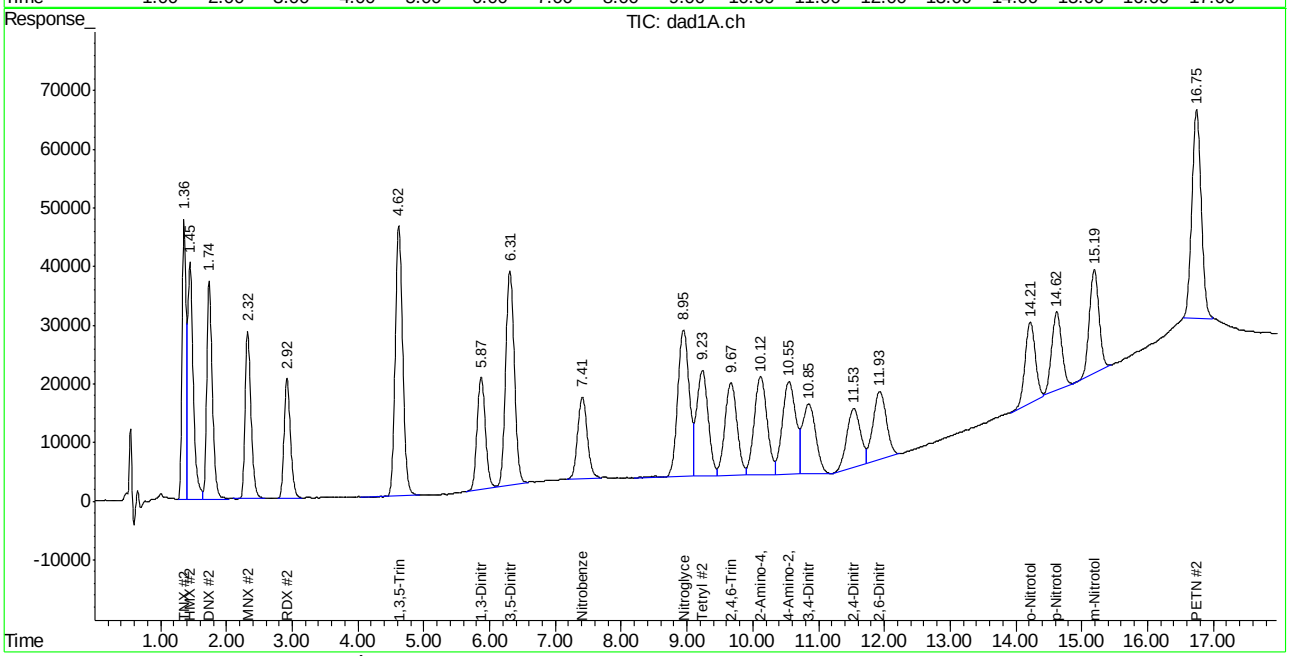
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1A.ch
Acq On : 24-Dec-2014, 13:43:49 Operator: KISMETL
Sample : icc1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:07 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: GBB1219-ICC1219 **Method:** SW846 8330A
Lab FileID: BB045277.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 13:43 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
PETN	78-11-5	2	16.75	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1A.ch
Acq On : 24-Dec-2014, 14:10:36 Operator: KISMETL
Sample : ic1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:17:01 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.86	1935678	3489217	979.118	990.968
Spiked Amount	500.000	Range	72 - 134	Recovery	=	195.82%#	198.19%#
	Target Compounds						
1)	TNX	1.36	1.36	2811881	4330928	914.112m	971.467
2)	HMX	1.44	1.45	1644654	4610964	1064.789m	1143.748
3)	DNX	1.74	1.74	2725048	4360503	941.622	985.136
4)	MNX	2.33	2.33	2325208	3589529	947.750	956.699
5)	RDX	2.92	2.92	1751239	2775610	908.322	920.563
6)	1,3,5-Trinitrobe	4.62	4.62	3841352	7441780	952.853	968.252
7)	1,3-Dinitrobenze	5.87	5.87	4992135	3488098	918.986	938.043
8)	3,5-Dinitroanili	6.31	6.31	4041842	6835035	959.979	966.126m
9)	Nitrobenzene	7.41	7.41	2910446	2837199	940.334	965.868m
10)	Nitroglycerin	0.00	8.95	0	6183817	N.D.	4916.457 #
11)	Tetryl	9.25	9.24	2844898	4551648	981.920	966.109
12)	2,4,6-Trinitroto	9.68	9.68	3436558	4195384	938.811	928.696
13)	2-Amino-4,6-Dini	10.13	10.13	3088225	4710409	987.247	981.558
14)	4-Amino-2,6-Dini	10.56	10.56	2245568	4661281	981.240	979.635
16)	2,4-Dinitrotolue	11.54	11.54	4486251	2940594	992.195	1027.709
17)	2,6-Dinitrotolue	11.94	11.94	2506429	3337175	980.902	1033.413
18)	o-Nitrotoluene	14.22	14.22	2174749	3048577	1008.012	1004.514m
19)	p-Nitrotoluene	14.62	14.62	3397640	2860724	1055.364	1035.447
20)	m-Nitrotoluene	15.19	15.19	3029838	3599350	924.360	925.094
21)	PETN	0.00	16.74	0	6890067	N.D. d	14246.192m

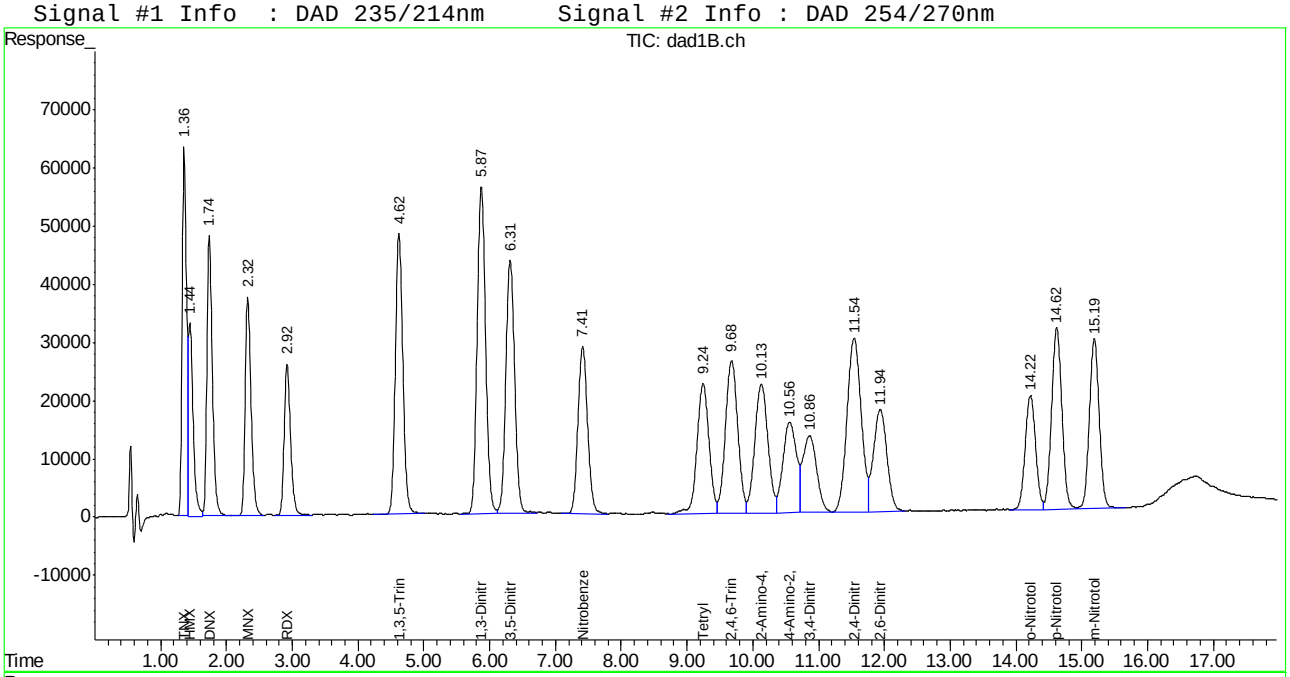
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045278.D 8330B.M Fri Dec 26 10:58:50 2014 Page 1

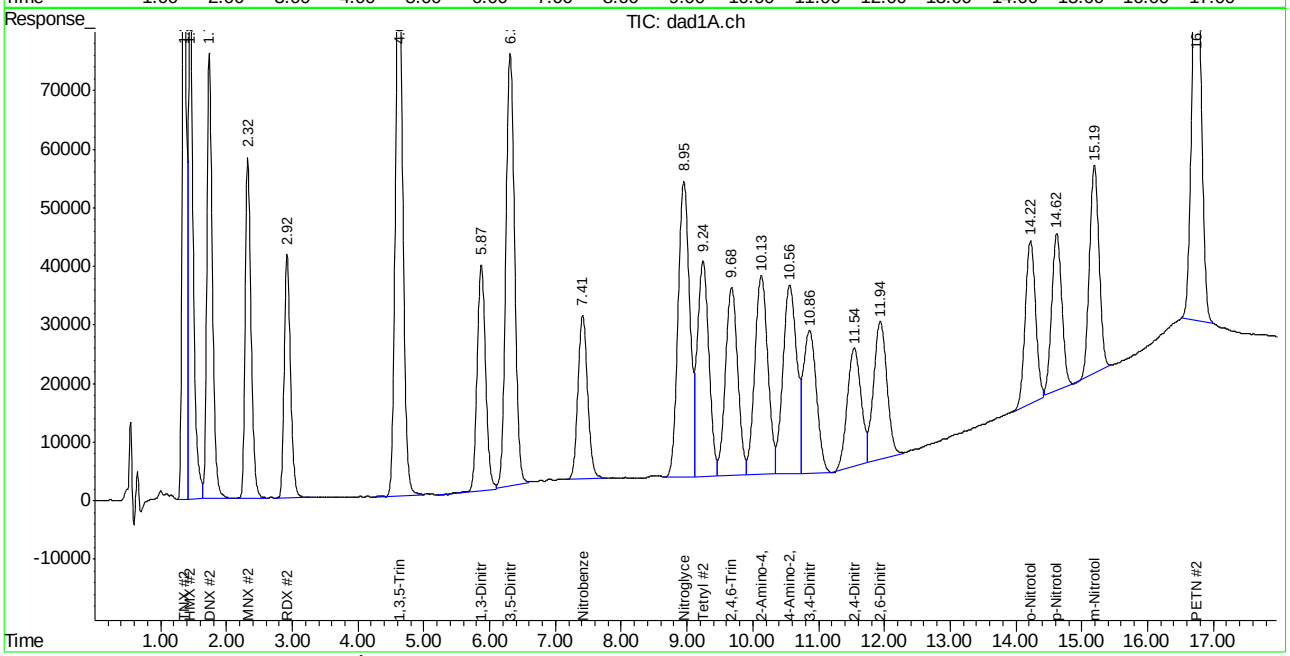
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1A.ch
Acq On : 24-Dec-2014, 14:10:36 Operator: KISMETL
Sample : ic1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:08 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219 **Method:** SW846 8330A
Lab FileID: BB045278.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 14:10 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.22	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

BB045279.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1A.ch
Acq On : 24-Dec-2014, 14:35:35 Operator: KISMETL
Sample : ic1219-2000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:45:51 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:45:14 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	4068946	7389906	2220.295	2240.707
	Spiked Amount 500.000	Range 72 - 134		Recovery =		444.06%#	448.14%#
	Target Compounds						
1)	TNX	1.36	1.36	6233741	9111657	2090.311	2105.303
2)	HMX	1.45	1.46	3240396	8914793	2076.601m	2026.535m
3)	DNX	1.74	1.74	5465997	8507959	1985.152m	1931.902m
4)	MNX	2.33	2.33	4816375	7465591	1934.649	2016.288
5)	RDX	2.92	2.92	3604023	5765492	1949.608	1967.359
6)	1,3,5-Trinitrobe	4.62	4.62	7973905	15415828	2003.693	1999.871
7)	1,3-Dinitrobenze	5.87	5.87	10331989	7017537	1987.256	1980.762
8)	3,5-Dinitroanili	6.31	6.31	8432051	14110469	2020.997	2027.275m
9)	Nitrobenzene	7.41	7.41	5954092	5807087	2013.037	1978.655m
10)	Nitroglycerin	0.00	8.94	0	12782658	N.D.	10217.895 #
11)	Tetryl	9.24	9.24	5962699	9542668	2057.600	2084.244
12)	2,4,6-Trinitroto	9.67	9.67	7162154	8774244	2031.991	2114.636
13)	2-Amino-4,6-Dini	10.12	10.12	6429948	9844457	2090.758	2145.972
14)	4-Amino-2,6-Dini	10.55	10.55	4692913	9753155	2231.073	2176.942
16)	2,4-Dinitrotolue	11.53	11.53	9264597	6150974	2031.803	2266.389
17)	2,6-Dinitrotolue	11.93	11.93	5160255	6961602	1993.209	2234.280
18)	o-Nitrotoluene	14.22	14.21	4417324	6195195	2048.740	2102.841m
19)	p-Nitrotoluene	14.62	14.62	6941396	5925717	2037.895	2102.277
20)	m-Nitrotoluene	15.19	15.19	6173423	7410072	2049.696	2104.945
21)	PETN	0.00	16.74	0	8310386	N.D. d	8334.743m

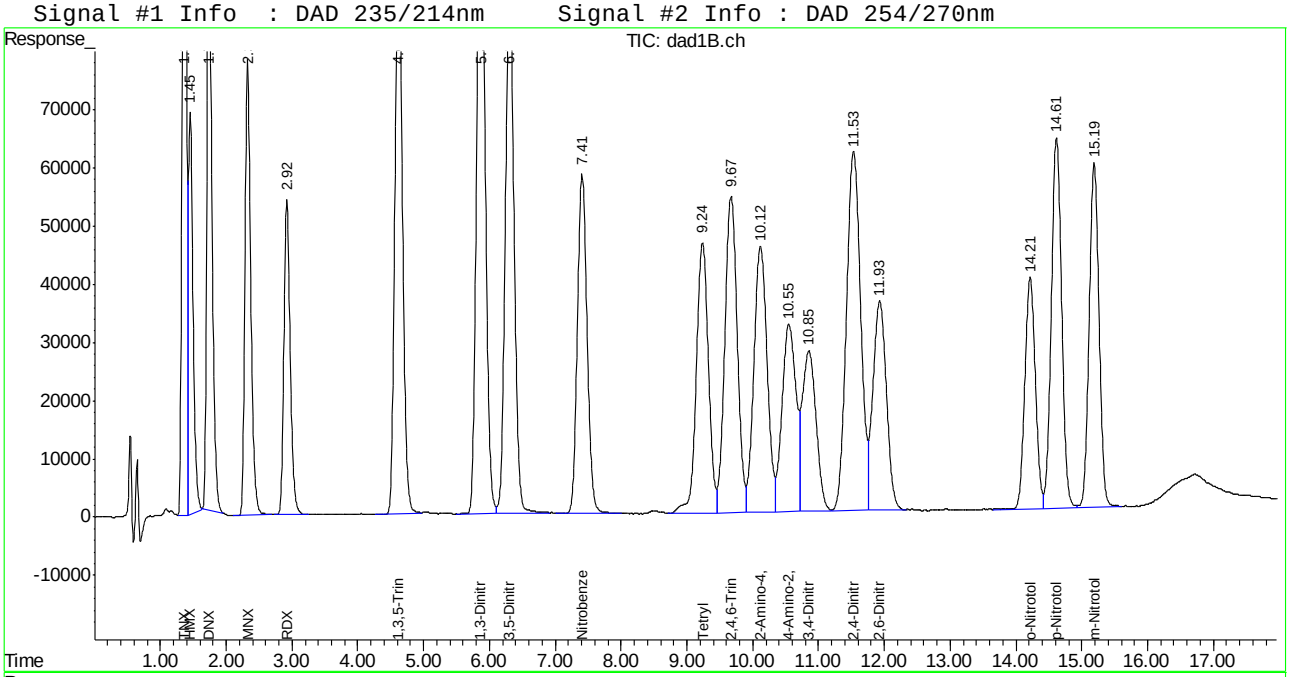
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045279.D 8330B.M Fri Dec 26 10:58:51 2014 Page 1

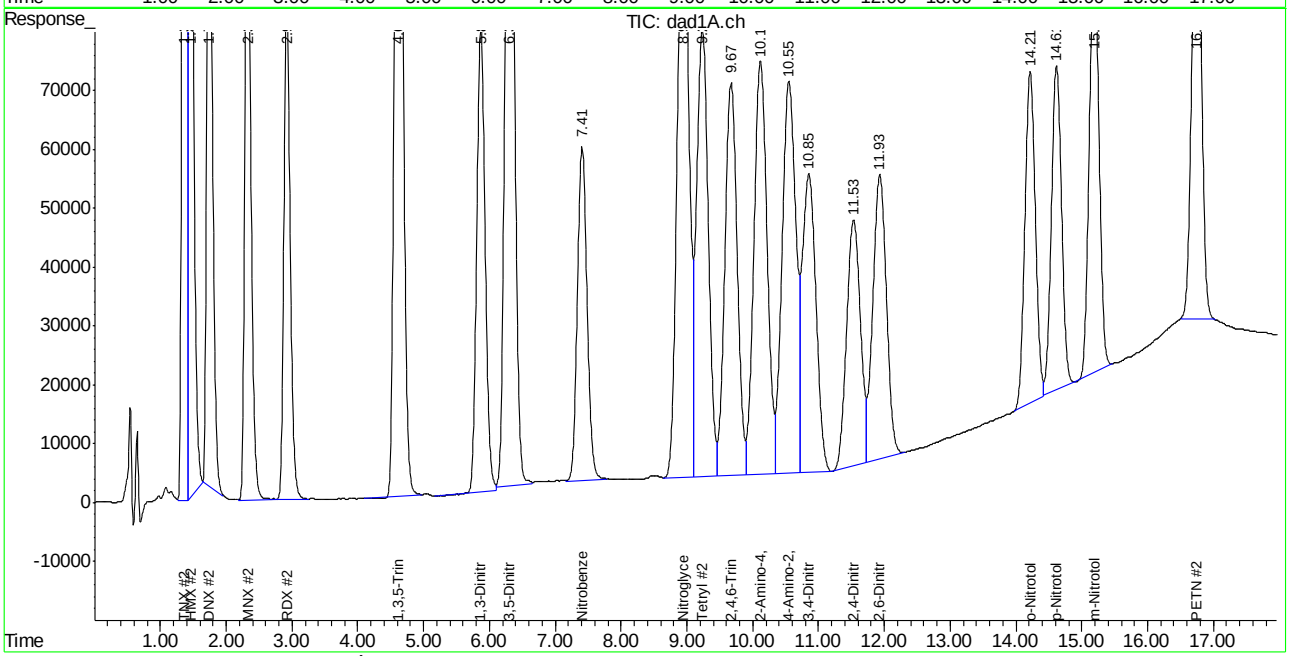
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1A.ch
Acq On : 24-Dec-2014, 14:35:35 Operator: KISMETL
Sample : ic1219-2000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:44 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:45:14 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219 **Method:** SW846 8330A
Lab FileID: BB045279.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 14:35 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.45	Poorly defined baseline
HMX	2691-41-0	2	1.46	Poorly defined baseline
DNX		1	1.74	Poorly defined baseline
DNX		2	1.74	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1A.ch
Acq On : 24-Dec-2014, 15:00:33 Operator: KISMETL
Sample : icv1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:46:04 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	72 - 134	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.36	1.36	1620827	2436645	543.499	563.001
2)	HMX	1.46	1.47	898609	2557546	552.337m	569.318m
3)	DNX	1.74	1.74	1426709	2233923	520.362m	510.614m
4)	MNX	2.33	2.33	1274163	1948514	511.808	526.250
5)	RDX	2.92	2.92	987871	1521708	534.392	519.253
6)	1,3,5-Trinitrobe	4.62	4.62	2109682	4071496	530.124	528.189
7)	1,3-Dinitrobenze	5.87	5.87	2519480	1690736	484.597	477.225m
8)	3,5-Dinitroanili	6.31	6.30	2073927	3477594	497.080	499.653m
9)	Nitrobenzene	7.41	7.40	1626198	1585118	549.806	539.576m
10)	Nitroglycerin	0.00	8.94	0	3200652	N.D.	2558.460m#
11)	Tetryl	9.23	9.23	1405794	2225909	485.109	486.168m
12)	2,4,6-Trinitroto	9.67	9.66	1850563	2358070	525.027	568.306m
13)	2-Amino-4,6-Dini	10.12	10.11	1706615	2653779	554.922	578.492m
14)	4-Amino-2,6-Dini	10.54	10.54	1201115	2552462	571.026m	569.719m
16)	2,4-Dinitrotolue	11.53	11.53	2483452	1559129	544.642	574.477
17)	2,6-Dinitrotolue	11.93	11.93	1413795	1795607	546.095	576.288m
18)	o-Nitrotoluene	14.22	14.21	1176695	1565017	545.747	531.422m
19)	p-Nitrotoluene	14.62	14.62	1818005	1482522	533.740	525.957
20)	m-Nitrotoluene	15.18	15.19	1704293	2020934	565.858m	574.077
21)	PETN	0.00	16.74	0	3681794	N.D. d	2376.289m

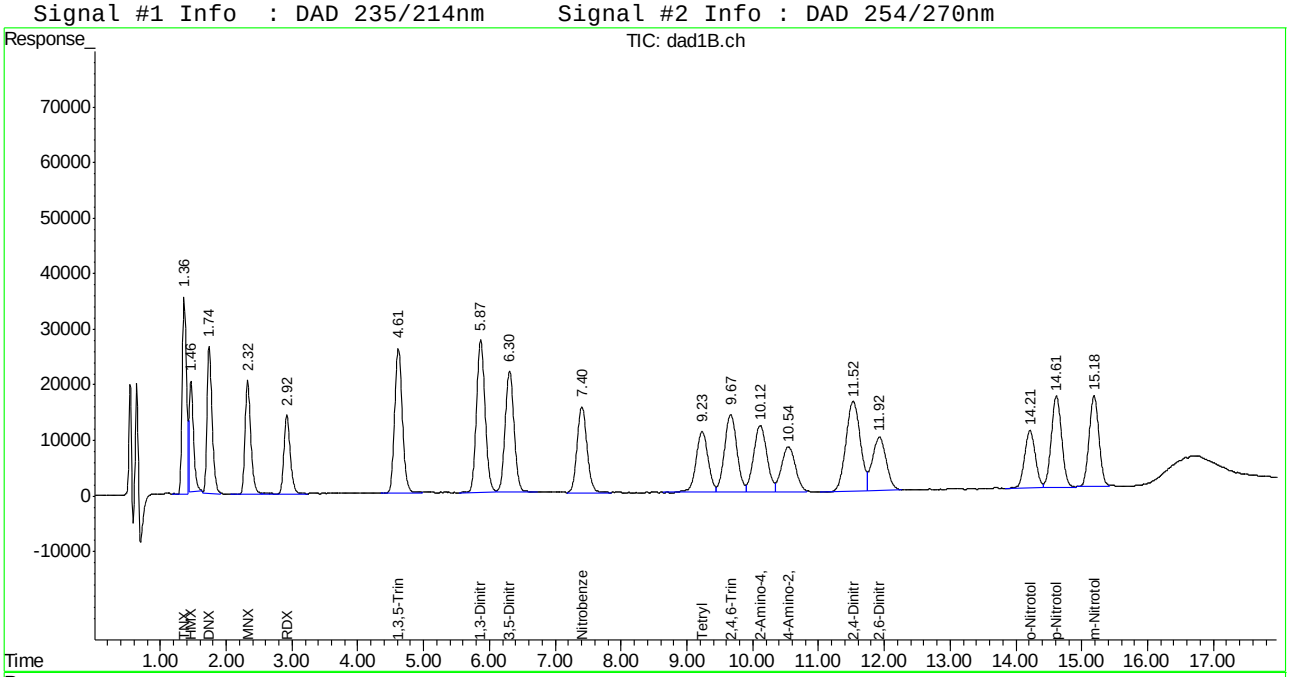
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045280.D 8330B.M Fri Dec 26 10:58:52 2014

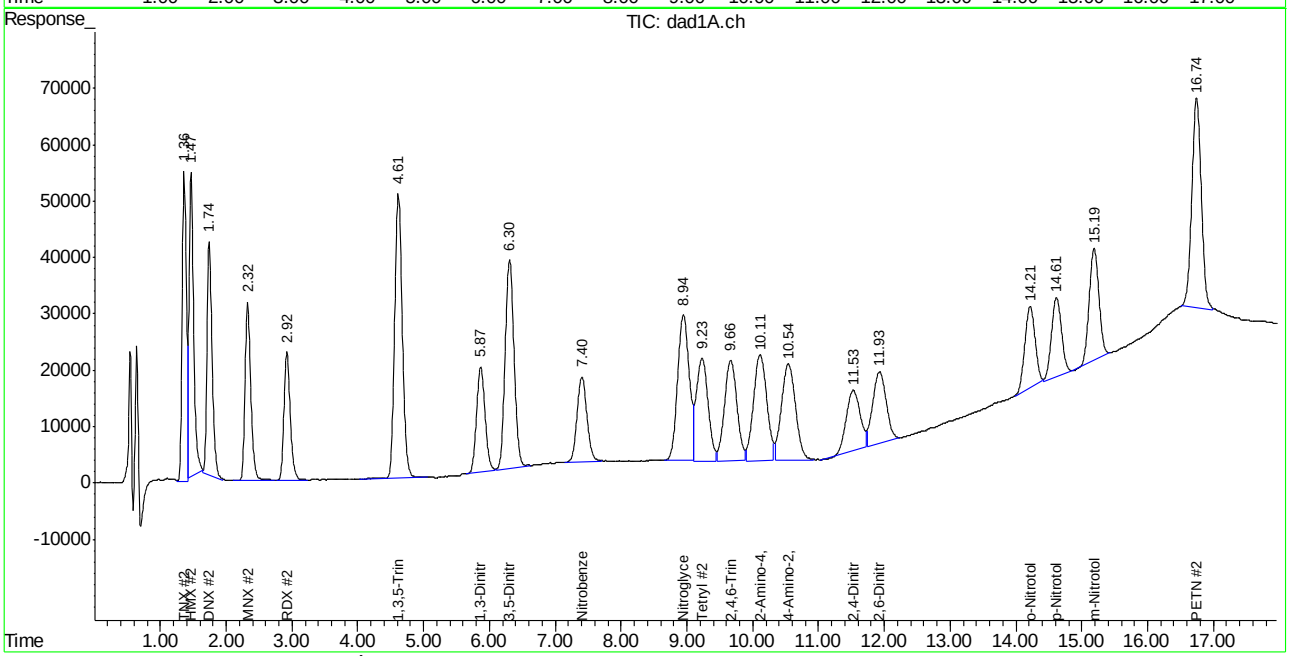
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1A.ch
Acq On : 24-Dec-2014, 15:00:33 Operator: KISMETL
Sample : icv1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:52 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: GBB1219-ICV1219 **Method:** SW846 8330A
Lab FileID: BB045280.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 15:00 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.46	Poorly defined baseline
HMX	2691-41-0	2	1.47	Poorly defined baseline
DNX		1	1.74	Poorly defined baseline
DNX		2	1.74	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.94	Poorly defined baseline
Tetryl	479-45-8	2	9.23	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.11	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.54	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.54	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.93	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.18	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1A.ch
Acq On : 24-Dec-2014, 15:25:31 Operator: KISMETL
Sample : cc1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:46:05 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.79	10.82	30450	71325	16.616m	21.627m
Spiked Amount	500.000	Range 72 - 134		Recovery =		3.32%#	4.33%#
	Target Compounds						
1)	TNX	1.35	1.36	62898	91973	21.091m	21.251
2)	HMX	1.43	1.44	27426	90978	16.858m	20.252
3)	DNX	1.73	1.73	57374	96611	20.926m	22.083m
4)	MNX	2.31	2.32	57105	75176	22.938m	20.303m
5)	RDX	2.92	2.92	38542	58398	20.850m	19.927m
6)	1,3,5-Trinitrobe	4.62	4.62	86657	161187	21.775m	20.911m
7)	1,3-Dinitrobenze	5.88	5.88	109890	70958	21.136m	20.029m
8)	3,5-Dinitroanili	6.30	6.30	87754	142086	21.033m	20.415m
9)	Nitrobenzene	7.41	7.40	52034	58192	17.592m	19.809m
10)	Nitroglycerin	0.00	8.95	0	127851	N.D.	102.199m#
11)	Tetryl	9.27	9.26	57282	103004	19.767m	22.497m
12)	2,4,6-Trinitroto	9.64	9.67	69189	93842	19.630m	22.616m
13)	2-Amino-4,6-Dini	10.11	10.11	51423	91008	16.721m	19.839m
14)	4-Amino-2,6-Dini	10.50	10.53	40135	87515	19.081m	19.534m
16)	2,4-Dinitrotolue	11.48	11.60	78292	48844	17.170m	17.997m
17)	2,6-Dinitrotolue	11.95	12.03	42877	46452	16.562m	14.909m
18)	o-Nitrotoluene	14.24	14.24	46544	54949	21.587m	18.659m
19)	p-Nitrotoluene	14.60	14.67	67124	60638	19.707m	21.513m
20)	m-Nitrotoluene	15.21	15.25	61980	68748	20.578m	19.529m
21)	PETN	0.00	16.75	0	192509	N.D. d	109.321m

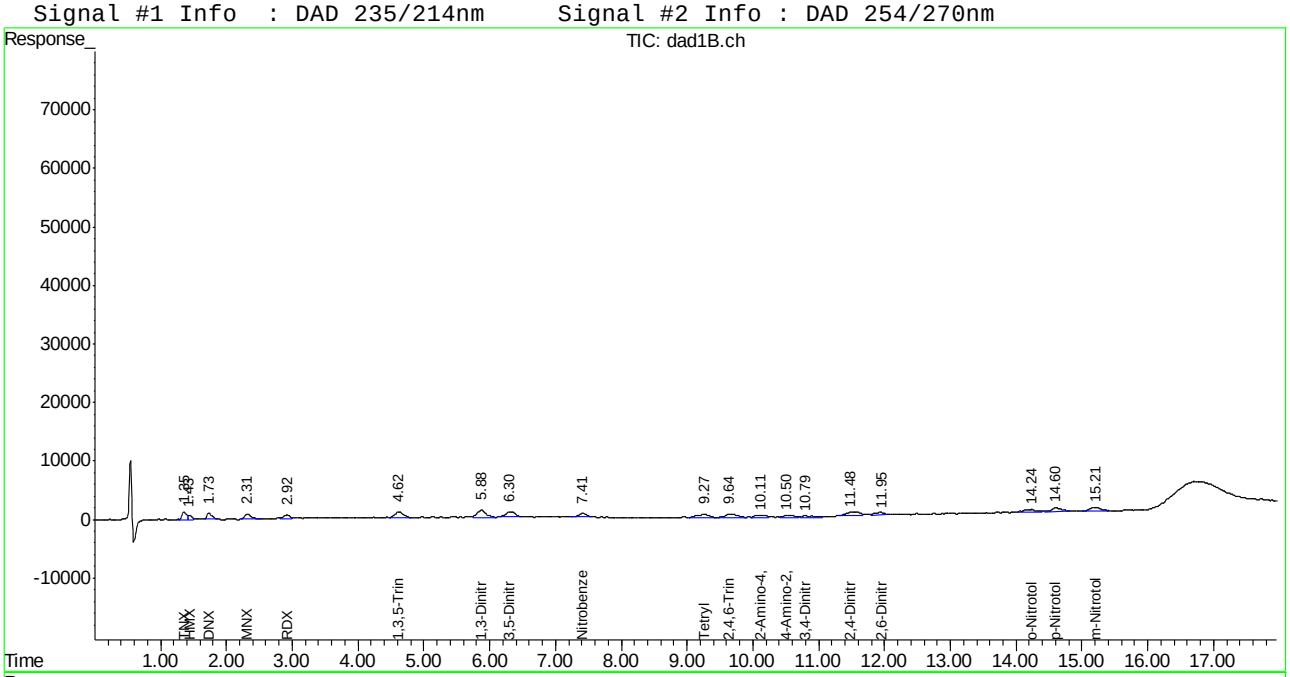
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045281.D 8330B.M Fri Dec 26 10:58:53 2014

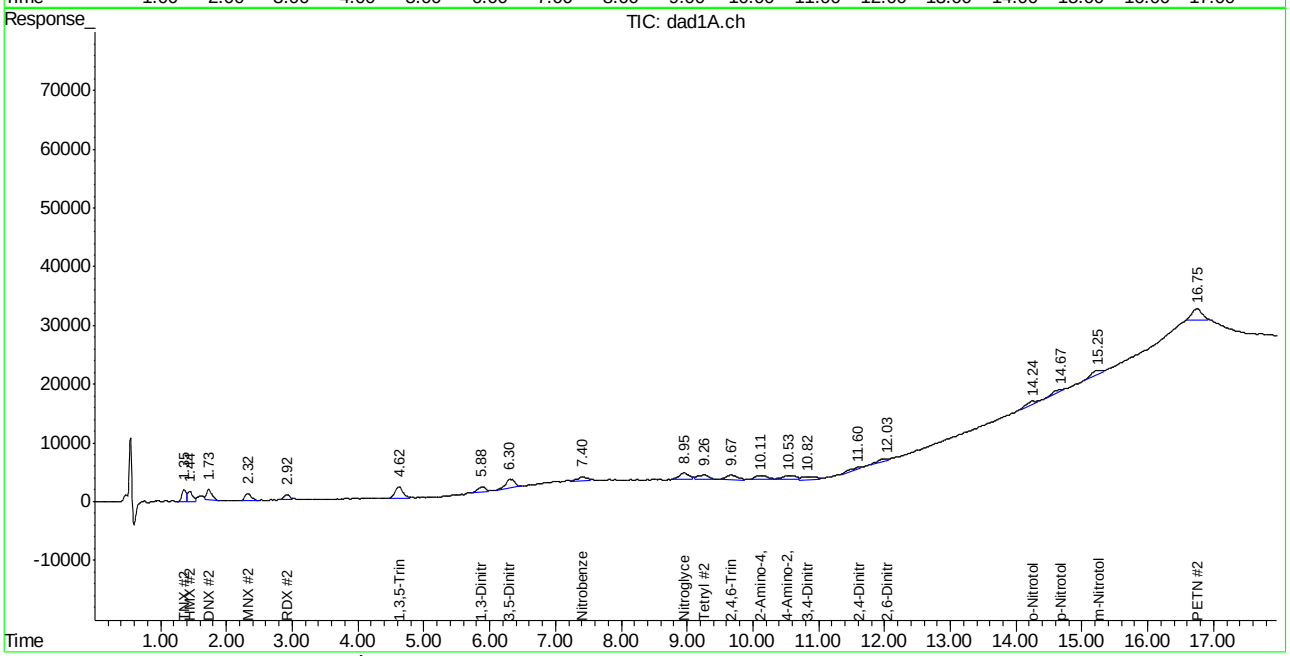
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1A.ch
Acq On : 24-Dec-2014, 15:25:31 Operator: KISMETL
Sample : cc1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:56 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: GBB1219-CC1219 **Method:** SW846 8330A
Lab FileID: BB045281.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 15:25 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
DNX		1	1.73	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
MNX		1	2.31	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.62	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.62	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.88	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.88	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.30	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.95	Poorly defined baseline
Tetryl	479-45-8	2	9.26	Poorly defined baseline
Tetryl	479-45-8	1	9.27	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.64	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.67	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.11	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.50	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.53	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.79	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.82	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.48	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.60	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.95	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.03	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.24	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.24	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.60	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.67	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.25	Poorly defined baseline
PETN	78-11-5	2	16.75	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1A.ch
Acq On : 24-Dec-2014, 19:59:59 Operator: KISMETL
Sample : cc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:35 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	1942712	3371833	1060.076	1022.380
	Spiked Amount 500.000	Range 72 - 134		Recovery =		212.02%#	204.48%#
	Target Compounds						
1)	TNX	1.35	1.36	3021938	4388547	1013.323m	1014.000
2)	HMX	1.44	1.45	1555705	4648018	956.227m	1034.663
3)	DNX	1.74	1.74	2768277	4441554	1009.671	1015.218
4)	MNX	2.32	2.32	2364368	3642293	949.723	983.701
5)	RDX	2.92	2.92	1748499	2799186	945.856	955.166
6)	1,3,5-Trinitrobe	4.62	4.62	3953902	7547902	993.541	979.178
7)	1,3-Dinitrobenze	5.87	5.87	5026765	3477731	966.849	981.621
8)	3,5-Dinitroanili	6.31	6.31	4091120	6895327	980.561	990.705m
9)	Nitrobenzene	7.41	7.41	2925073	2893595	988.947	984.983m
10)	Nitroglycerin	0.00	8.94	0	6241882	N.D.	4989.487 #
11)	Tetryl	9.23	9.23	2948206	4629118	1017.363	1011.060
12)	2,4,6-Trinitroto	9.66	9.66	3481227	4230193	987.667	1019.497
13)	2-Amino-4,6-Dini	10.11	10.12	3123371	4724833	1015.593	1029.956
14)	4-Amino-2,6-Dini	10.55	10.55	2274771	4811705	1081.457	1073.991
16)	2,4-Dinitrotolue	11.52	11.53	4523465	2889315	992.034	1064.598
17)	2,6-Dinitrotolue	11.92	11.92	2522432	3352612	974.319	1075.999
18)	o-Nitrotoluene	14.21	14.21	2151766	3017157	997.982	1024.516m
19)	p-Nitrotoluene	14.61	14.61	3398626	2851675	997.788	1011.694
20)	m-Nitrotoluene	15.18	15.18	3024832	3649537	1004.302	1036.707
21)	PETN	0.00	16.73	0	4489340	N.D. d	3013.060m

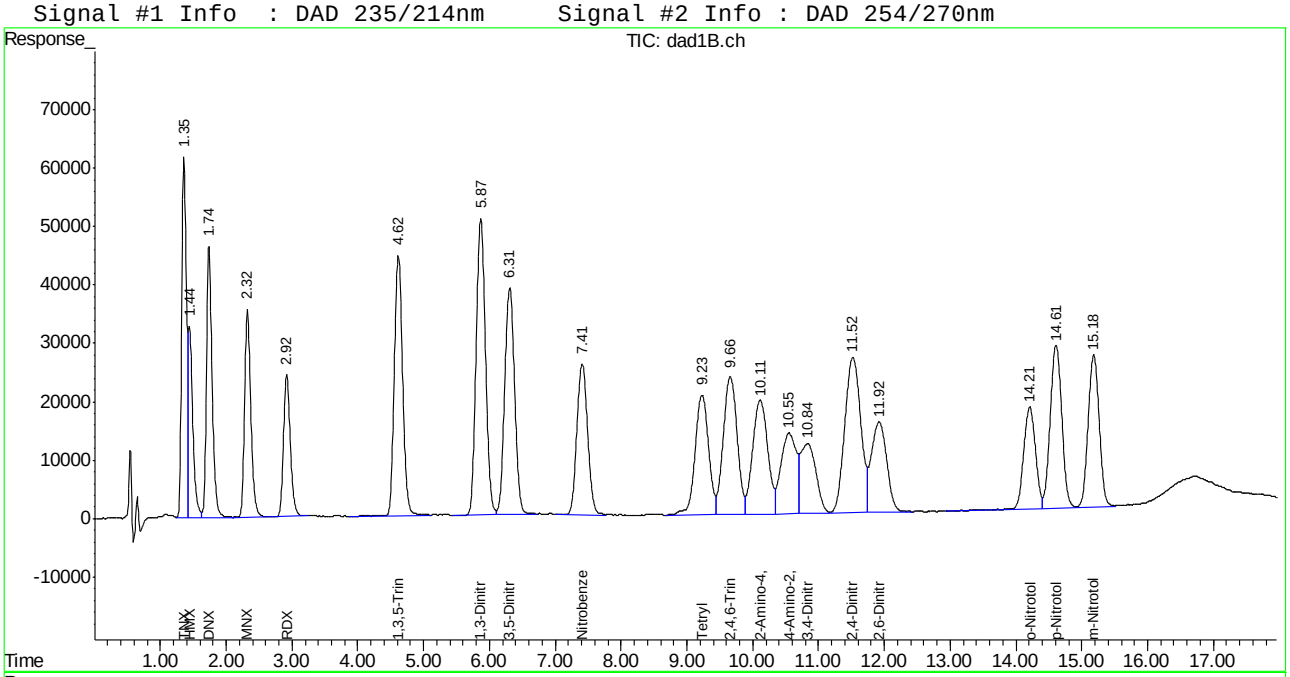
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045292.D 8330B.M Fri Dec 26 11:34:40 2014 Page 1

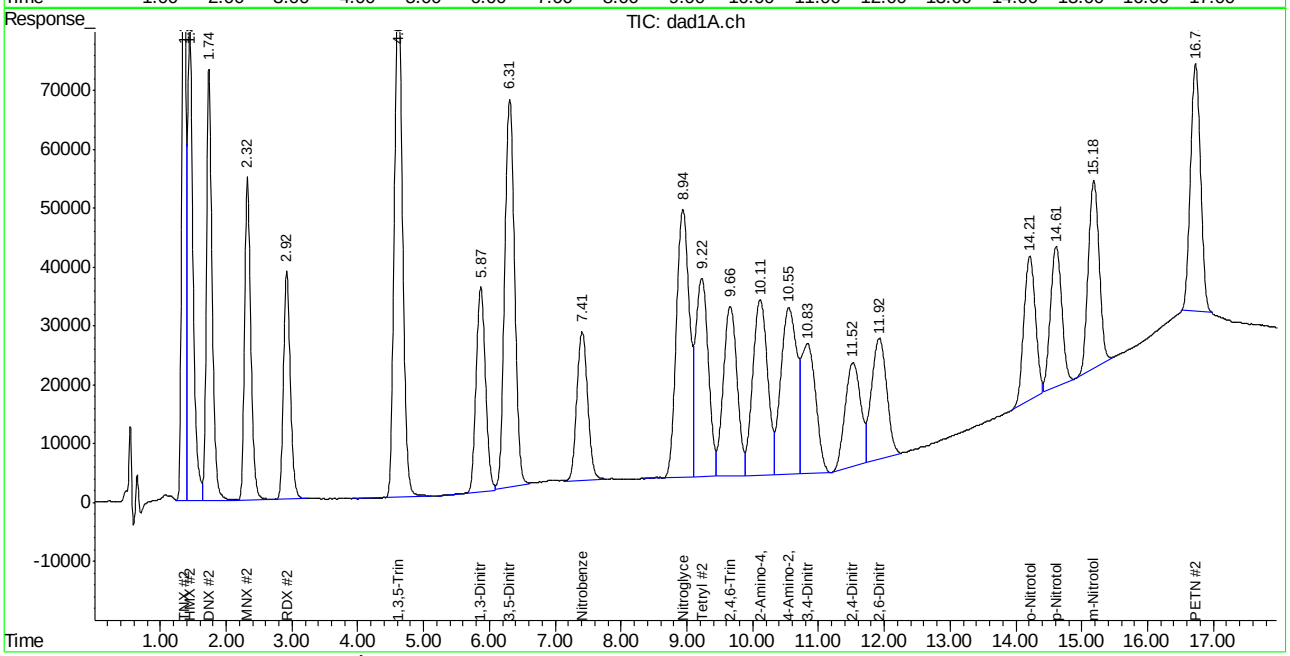
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1A.ch
Acq On : 24-Dec-2014, 19:59:59 Operator: KISMETL
Sample : cc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:04 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number:	GBB1219-CC1219	**Method:**	SW846 8330A
Lab FileID:	BB045292.D	**Analyst approved:**	12/26/14 11:46 Kismet Lugo
Injection Time:	12/24/14 19:59	**Supervisor approved:**	12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Overlapping peak
HMX	2691-41-0	1	1.44	Overlapping peak
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
PETN	78-11-5	2	16.73	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1A.ch
Acq On : 25-Dec-2014, 00:59:29 Operator: KISMETL
Sample : ecc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:47 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.70	10.70	1797979	3242627	981.101m	983.203m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		196.22%#	196.64%#
	Target Compounds						
1)	TNX	1.35	1.36	3106201	4350365	1041.578m	1005.178
2)	HMX	1.43	1.45	1497563	4590119	920.489m	1021.775
3)	DNX	1.74	1.74	2720605	4380732	992.284	1001.315
4)	MNX	2.32	2.32	2326990	3582753	934.709	967.621
5)	RDX	2.92	2.92	1767030	2789176	955.880	951.751
6)	1,3,5-Trinitrobe	4.61	4.61	3833649	7425740	963.324	963.330
7)	1,3-Dinitrobenze	5.86	5.86	4976090	3364930	957.102	949.781
8)	3,5-Dinitroanili	6.30	6.30	4074006	6819043	976.459	979.745m
9)	Nitrobenzene	7.40	7.40	2884601	2822465	975.264	960.770m
10)	Nitroglycerin	0.00	8.92	0	6201065	N.D.	4956.859 #
11)	Tetryl	9.21	9.19	2827775	4465538	975.805	975.332
12)	2,4,6-Trinitroto	9.63	9.63	3437279	4159314	975.198	1002.415
13)	2-Amino-4,6-Dini	10.09	10.09	3066762	4622780	997.186	1007.710
14)	4-Amino-2,6-Dini	10.59	10.53	2045986	4638543	972.689m	1035.341m
16)	2,4-Dinitrotolue	11.50	11.50	4476703	2771286	981.778	1021.109
17)	2,6-Dinitrotolue	11.90	11.90	2430646	3353743	938.866	1076.362
18)	o-Nitrotoluene	14.20	14.19	2116810	2980071	981.769	1011.923m
19)	p-Nitrotoluene	14.60	14.60	3365163	2836856	987.964	1006.436
20)	m-Nitrotoluene	15.17	15.17	2992929	3617297	993.710	1027.549
21)	PETN	0.00	16.71	0	4043568	N.D. d	2654.218m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045304.D 8330B.M Fri Dec 26 11:34:52 2014 Page 1

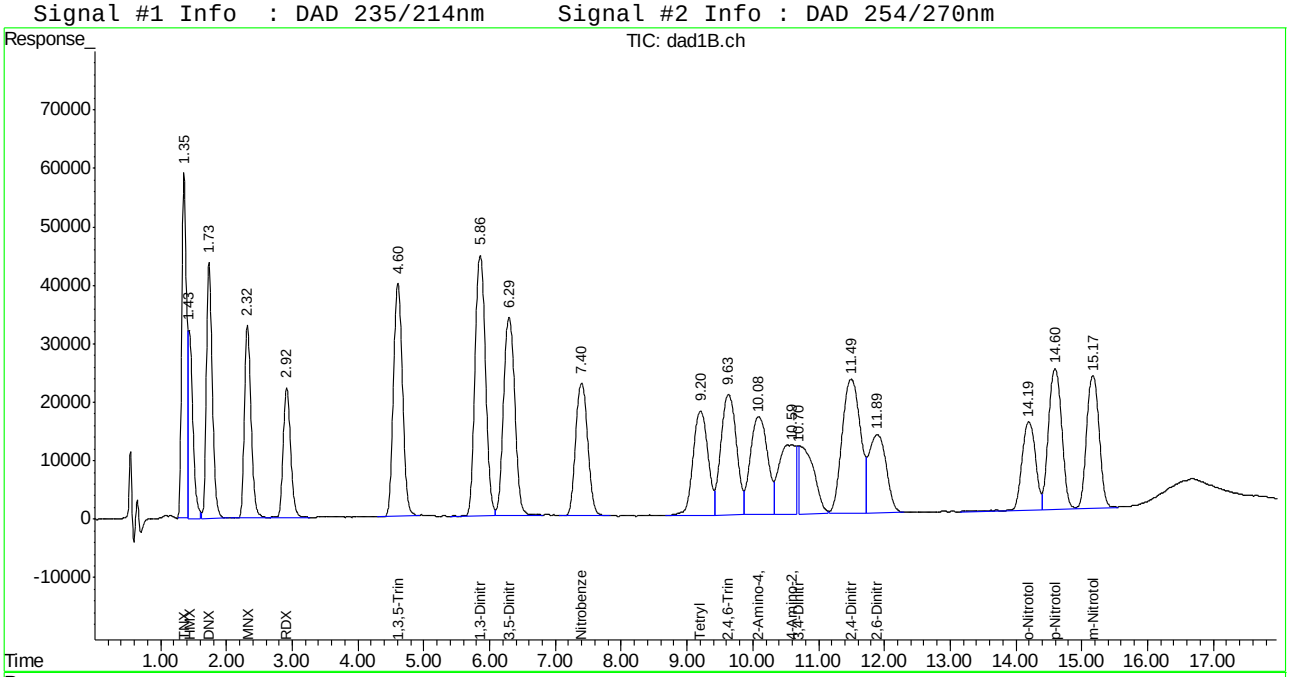
9.7.11
9

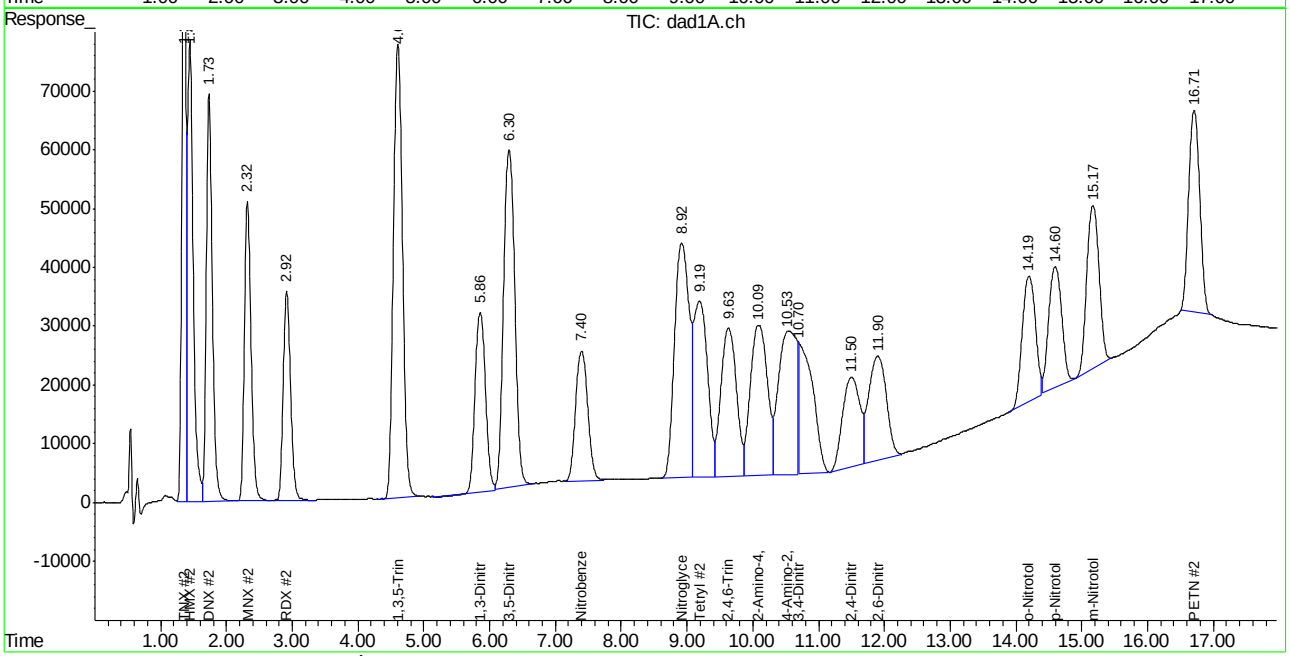
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1A.ch
Acq On : 25-Dec-2014, 00:59:29 Operator: KISMETL
Sample : ecc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:08 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20723

Manual Integration Approval Summary

Sample Number: GBB1219-ECC1219 **Method:** SW846 8330A
Lab FileID: BB045304.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/25/14 00:59 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Overlapping peak
HMX	2691-41-0	1	1.43	Overlapping peak
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.53	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.59	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.70	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.70	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.19	Poorly defined baseline
PETN	78-11-5	2	16.71	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/24/14
RUN BATCH: GBB	1219

ANALYST:	KL
ACETONITRILE LOT #:	208F
MEOH LOT #:	91422
HEAD PRESSURE:	278

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045268	1	solvent	8330	—	—		ND
BB 69	2	CC1218-1000		LC493	1:1	HMX TNXOP PDB	Pass
BB 70	4	ICV 1218-500		—	—	ND	HMXT, PETNT, run curve
BB 71	1	solvent		—	—		ND
BB 72	2	CC1218-1000		LC500	1:1	PDB	PETNT
BB 73	5	IC 1219-20			50+450	PDB	✓
BB 74	6	IC 1219-50			10+340	PDB	✓
BB 75	7	IC1219-100			25+475	PDB	✓
BB 76	8	IC1219-200			50+450	PDB	✓
BB 77	9	ICC1219-500			1:4	PDB	✓
BB 78	10	IC 1219-1000			1:1	PDB	✓
BB 79	11	IC 1219-2000			1x	PDB	✓
BB 80	12	ICV 1219-500		LC497 LC498 E4944, 5029	*	PDB	Pass 2A 26 TS2
BB 81	5	CC 1219-20		LC500	50+450	PDB	Pass 2.16 ↓ S2
BB 82	31	FA 20708-49		op54337		HMXMP51 PDB	✓
BB 83	32	FA 20708-51				↓ ↓	✓
BB 84	33	FA 20708-57		↓	↓	PDB	✓
BB 85	13	op54324-bs		op54324	1x	PDB	✓
BB 86	14	op54324-pt1			↓	HMXOP PDB	✓
BB 87	15	op54324-mb	↓	↓	↓		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

* LC497 25 ml
LC498 25 ml
E4944 10 ml
5029 20 ml
+ 920

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 B
PROC. METHOD:	↓
CALIB. DATE:	12/24/14
RUN BATCH: GBB	1219

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	278

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045288	16	FA20579-1	8330	OP54324	1X	PDB	ND
BB 89	17	OP54324-MS				PDB	✓
BB 90	18	OP54324-MSD				PDB	✓
BB 91	19	FA20579-2		↓	↓		ND
BB 92	2	CC1219-1000		LC500	1:1	TNX-HMXOP PDB	PETN↓, not required
BB 93	1	clb		—	—		ND
BB 94	20	FA20579-3		OP54324	1X		ND
BB 95	21	FA20579-4					ND
BB 96	22	~~FA20253-2~~					ND FA20723-2
BB 97	23	~~FA20CC3-1~~					ND FA20723-1
BB 98	24	OP54324-dup				PDB	ND
BB 99	25	OP54324-dup2					ND
BB 045300	26	~~FA20523-3~~					ND FA20723-3
BB 01	27	grind blk a					ND
BB 02	28	grind blk b					ND
BB 03	29	grind blk c					ND
BB 04	30	CC 1219-1000	↓	LC500	1:1	TNX-HMXOP, PDB 4A OP SUMMARY	PETN↓
BB						LL 12/26/14	
BB							
BB							

12/26/14

* For NELAC purposes, Method 8332 includes analytes by SOP GC020
Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kristi Lyp

ACCUTEST LABORATORIES SE

EXP SAMPLE PREP REPORT

Date/Time: 12/19/14 1600 Started {mm/dd/yy 24:00}

Prep Method: 8330A, 8332, 8330B or Method (circle)

Date/Time: 12/20/14 1130 Finished {mm/dd/yy 24:00}

Analytical Method: 8330B

Batch#: OP54324 Ext. By: CP, MB Vialed By: MB Balance ID: MAUPROS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54324 MB	X	10.0	1.25 ml		50 ml	
OP 54324 BS	X	10.0		125+125ul 1.25ml		
FA20579-1	1	10.0				
-2	1	10.1				
-3	1	10.0				
-4	1	10.0				
FA20723-1	1	10.1				
-2	1	10.1				
-3	1	10.0				
Grinding Blank	A	10.0	—			
	B	10.0	—			
	C	10.0	—			
						12/20/14 MB
OP 54324 DT-1	X	10.0	1.25 ml		50 ml	
FA20579-1 MS	1	10.1		125+125ul 1.25ml		
-1 MSD	1	10.0				
FA2723-1 DUP	1	10.0				
-1 TRP	1	10.0				

Comments:

Surr. ID: E4454K Conc: 20 ppm Exp. Date: 03/02/15 Inj. By: MB Ver. By CP

Spk.1 ID: E5025 6854E Conc: 20 ppm Exp. Date: 06/09/15 12/15/15 Inj. By: MB Ver. By CP

Spk.2 ID: 7183A Conc: 1000 ug/ml 1000 ug/ml Exp. Date: 12/15/15 Inj. By: MB Ver. By CP

MB 12/19/14

Acetonitrile Lot # 06/817 Methanol Lot # — Water Lot# 084623 HPLC

Syringe Filter Lot# 130925007 Reagent # CS1 Reagent # —

Relinquished By: [signature] Date: 12/20/14

Accepted By: [signature] Date: 12/22/14

NF rev. 09/14/12 extsolid_exp 091412.xls

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate	GP25228/GN64610	1.0	0.0	mg/kg	25	24.9	99.8	90-110%

Associated Samples:
Batch GP25228: FA20723-1, FA20723-2, FA20723-3
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate	GP25228/GN64610	FA20723-1	mg/kg	15.0	25	54.7	159.0N(a)	90-110%

Associated Samples:
Batch GP25228: FA20723-1, FA20723-2, FA20723-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Nitrate	GP25228/GN64610	FA20723-1	mg/kg	15.0	25	53.3	2.6	20%

Associated Samples:
Batch GP25228: FA20723-1, FA20723-2, FA20723-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64610
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:47	GN64610-CCV1	1		
10:04	GP25226-MB1	1		
10:21	GP25226-B1	1		
11:11	ZZZZZZ	5		
11:28	ZZZZZZ	25		
11:45	ZZZZZZ	5		
12:02	ZZZZZZ	2		
12:19	ZZZZZZ	2		
12:36	FA20942-18	1		(sample used for QC only; not part of login FA20723)
12:53	GN64610-CCV2	1		
13:10	GN64610-CCB1	1		
13:27	ZZZZZZ	2		
13:44	ZZZZZZ	1		
14:01	GP25226-S1	1		
14:18	GP25226-S2	1		
14:35	ZZZZZZ	5		
14:52	ZZZZZZ	10		
15:09	ZZZZZZ	1		
15:26	ZZZZZZ	10		
15:43	ZZZZZZ	100		
16:00	ZZZZZZ	1		
16:17	GN64610-CCV3	1		
16:33	GN64610-CCB2	1		
16:50	ZZZZZZ	5		
17:07	ZZZZZZ	10		
17:24	ZZZZZZ	10		
17:41	ZZZZZZ	5		
17:58	ZZZZZZ	5		
18:15	FA20942-32	1		(sample used for QC only; not part of login FA20723)
18:32	GP25226-S3	1		
18:49	GP25226-S4	1		
19:06	GN64610-CCV4	1		
19:23	GP25227-MB1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64610
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:40	GP25227-B1	1		
19:57	ZZZZZZ	5		
20:14	ZZZZZZ	10		
20:31	ZZZZZZ	5		
20:48	ZZZZZZ	2		
21:05	ZZZZZZ	2		
21:22	ZZZZZZ	10		
21:39	ZZZZZZ	5		
21:55	ZZZZZZ	5		
22:12	GN64610-CCV5	1		
22:29	GN64610-CCB3	1		
22:46	ZZZZZZ	5		
23:03	ZZZZZZ	5		
23:20	FA20988-2	1		(sample used for QC only; not part of login FA20723)
23:37	FA20988-3	1		(sample used for QC only; not part of login FA20723)
23:54	ZZZZZZ	10		
00:11	ZZZZZZ	10		
00:28	GP25227-S1	1		
00:45	GP25227-S2	1		
01:02	GP25227-S3	1		
01:19	GP25227-S4	1		
01:36	GN64610-CCV6	1		
01:53	GP25228-MB1	1		
02:10	GP25228-B1	1		
02:27	FA20723-1	1		
02:44	FA20723-2	1		
03:00	FA20723-3	1		
03:17	ZZZZZZ	1		
03:34	ZZZZZZ	1		
03:51	ZZZZZZ	1		
04:08	ZZZZZZ	1		
04:25	GP25228-S1	1		
04:42	GP25228-S2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64610
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
04:59	GN64610-CCV7	1		
05:16	GN64610-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA20723
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Run ID: GN64610 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN64610-CCV1	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCV2	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN64610-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64610-CCV3	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64610-CCV4	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCV5	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN64610-CCB3	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64610-CCV6	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCV7	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64610-CCB4	Nitrogen, Nitrate	0.050 U	0.10	0.050			

(!) Outside of QC limits

Southeast ACCUTEST LABORATORIES

General Chemistry

Raw Data

Sequence: 12-24-2014
Operator: Chemistry

Printed: 12/24/2014 8:05:37 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79

Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	BLK	Unknown	1	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 11:21:53 AM
2	STD A	Standard	2	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 11:38:21 AM
3	STD B	Standard	3	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 11:55:18 AM
4	STD C	Standard	4	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 12:12:14 PM
5	STD D	Standard	5	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 12:29:11 PM
6	STD E	Standard	6	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 12:46:09 PM
7	STD F	Standard	7	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 1:03:06 PM
8	STD G	Standard	8	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 1:20:02 PM
9	CCV	Unknown	1	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:47:42 AM
10	MB1	Unknown	2	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:04:10 AM
11	B1	Unknown	3	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:21:07 AM
12	MB1(UF)	Unknown	4	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:38:04 AM
13	B1(UF)	Unknown	5	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:55:01 AM
14	FA20942-13	Unknown	6	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:11:58 AM
15	FA20942-14	Unknown	7	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:28:55 AM
16	FA20942-15	Unknown	8	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:45:52 AM
17	FA20942-16	Unknown	9	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:02:48 PM
18	FA20942-17	Unknown	10	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:19:45 PM
19	FA20942-18	Unknown	11	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:36:42 PM
20	CCV	Unknown	12	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:53:38 PM
21	CCB	Unknown	13	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 1:10:35 PM
22	FA20942-19	Unknown	14	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 1:27:32 PM
23	FA20942-20	Unknown	15	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 1:44:31 PM
24	FA20942-18S1	Unknown	16	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:01:28 PM
25	FA20942-18S2	Unknown	17	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:18:26 PM
26	FA20942-21	Unknown	18	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:35:22 PM
27	FA20942-22	Unknown	19	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:52:20 PM
28	FA20942-23	Unknown	20	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 3:09:17 PM
29	FA20942-24	Unknown	21	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 3:26:14 PM
30	FA20942-25	Unknown	22	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 3:43:13 PM
31	FA20942-26	Unknown	23	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:00:10 PM
32	CCV	Unknown	24	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:17:08 PM
33	CCB	Unknown	25	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:33:53 PM
34	FA20942-27	Unknown	26	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:50:50 PM
35	FA20942-28	Unknown	27	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:07:47 PM
36	FA20942-29	Unknown	28	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:24:44 PM
37	FA20942-30	Unknown	29	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:41:42 PM
38	FA20942-31	Unknown	30	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:58:39 PM
39	FA20942-32	Unknown	31	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 6:15:35 PM
40	FA20942-32S3	Unknown	32	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 6:32:32 PM
41	FA20942-32S4	Unknown	33	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 6:49:29 PM
42	CCV	Unknown	34	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:06:26 PM

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-24-2014
Operator: Chemistry

Printed: 12/24/2014 8:05:37 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79
Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Dil. Factor	Weight	ISTD Amount	Sample ID	Replicate ID	Comment
1	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
2	STD A	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
3	STD B	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
4	STD C	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
5	STD D	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
6	STD E	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
7	STD F	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
8	STD G	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
9	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
10	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
11	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
12	MB1(UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
13	B1(UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
14	FA20942-13	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
15	FA20942-14	25.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
16	FA20942-15	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
17	FA20942-16	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
18	FA20942-17	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
19	FA20942-18	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
20	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
21	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
22	FA20942-19	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
23	FA20942-20	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
24	FA20942-18S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
25	FA20942-18S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
26	FA20942-21	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
27	FA20942-22	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
28	FA20942-23	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
29	FA20942-24	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
30	FA20942-25	100.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
31	FA20942-26	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
32	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
33	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
34	FA20942-27	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
35	FA20942-28	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
36	FA20942-29	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
37	FA20942-30	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
38	FA20942-31	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
39	FA20942-32	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
40	FA20942-32S3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
41	FA20942-32S4	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
42	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-24-2014
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79

Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	MB1	Unknown	35	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:23:23 PM
44	B1	Unknown	36	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:40:19 PM
45	FA20942-33	Unknown	37	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:57:16 PM
46	FA20942-34	Unknown	38	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 8:14:13 PM
47	FA20982-1	Unknown	39	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 8:31:11 PM
48	FA20982-2	Unknown	40	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 8:48:07 PM
49	FA20982-3	Unknown	41	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:05:05 PM
50	FA20982-4	Unknown	42	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:22:03 PM
51	FA20982-5	Unknown	43	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:39:00 PM
52	FA20983-1	Unknown	44	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:55:57 PM
53	CCV	Unknown	45	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:12:53 PM
54	CCB	Unknown	46	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:29:50 PM
55	FA20984-1	Unknown	47	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:46:47 PM
56	FA20988-1	Unknown	48	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:03:44 PM
57	FA20988-2	Unknown	49	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:20:40 PM
58	FA20988-3	Unknown	50	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:37:37 PM
59	FA20989-2	Unknown	1	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:54:34 PM
60	FA20989-3	Unknown	2	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 12:11:30 AM
61	FA20988-2S1	Unknown	3	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 12:28:26 AM
62	FA20988-2S2	Unknown	4	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 12:45:23 AM
63	FA20988-3S3	Unknown	5	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:02:20 AM
64	FA20988-3S4	Unknown	6	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:19:17 AM
65	CCV	Unknown	7	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:36:13 AM
66	MB1	Unknown	8	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:53:10 AM
67	B1	Unknown	9	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 2:10:07 AM
68	FA20723-1	Unknown	10	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 2:27:04 AM
69	FA20723-2	Unknown	11	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 2:44:00 AM
70	FA20723-3	Unknown	12	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:00:58 AM
71	FA20579-1	Unknown	13	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:17:55 AM
72	FA20579-2	Unknown	14	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:34:51 AM
73	FA20579-3	Unknown	15	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:51:48 AM
74	FA20579-4	Unknown	16	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:08:45 AM
75	FA20723-1S1	Unknown	17	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:25:42 AM
76	FA20723-1S2	Unknown	18	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:42:39 AM
77	CCV	Unknown	19	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:59:36 AM
78	CCB	Unknown	20	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 5:16:33 AM
79	BLK	Unknown	21	25.0	SHUTDOWN	ANIONS	Finished	12/24/2014 5:33:30 AM

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-24-2014
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79

Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Dil. Factor	Weight	ISTD Amount	Sample ID	Replicate ID	Comment
43	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
44	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
45	FA20942-33	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
46	FA20942-34	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
47	FA20982-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
48	FA20982-2	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
49	FA20982-3	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
50	FA20982-4	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
51	FA20982-5	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
52	FA20983-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
53	CCV	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
54	CCB	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
55	FA20984-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
56	FA20988-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
57	FA20988-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
58	FA20988-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
59	FA20989-2	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
60	FA20989-3	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
61	FA20988-2S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
62	FA20988-2S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
63	FA20988-3S3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
64	FA20988-3S4	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
65	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
66	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
67	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
68	FA20723-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
69	FA20723-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
70	FA20723-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
71	FA20579-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
72	FA20579-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
73	FA20579-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
74	FA20579-4	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
75	FA20723-1S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
76	FA20723-1S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
77	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
78	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
79	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	11-23-2015
Analyst:	VL
Instrument:	#3
Inst. File Name:	122315

Prep Batchs:	6P25226
Analytical Batch:	GN64610
Calibration Date:	11-15-2015
Pump pressure:	1970 psi

Vial lot#	CC 279
Cap lot#	CC 279
Syringe lot#	CC 283
Filter lot#	CC 283

Standards	
ICAL:	NP
ICV:	CC05354
CCV:	CC05353
QC:	CC05356

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
CCV		AQ			y		✓						✓					
MB1					y		✓						✓					
B1					y		✓						✓					
MB1 (LFT)					n		✓						✓					
B1 (LFT)							✓						✓					
FB20942-13	1		1020uS	5x			✓						✓					
-14	1		2700uS	25x			✓						✓					
-15	1		640uS	5x			✓						✓					
-16	1		620uS	2x			✓						✓					
-17	1		870uS	2x			✓						✓					
-18	1		383.6uS				✓						✓					
CCV							✓						✓					
CCB							✓						✓					
FB20942-19	1		753uS	2x			✓						✓					
-20	1		430.3				✓						✓					
FB20942-18S1	1		383.6uS				✓						✓					
FB20942-18S2	1		383.6uS				✓						✓					
FB20942-21	1		1820uS	5x			✓						✓					
-22	1		2461uS	10x			✓						✓					
-23	1		1234uS				✓						✓					
-24	1		2610uS	10x			✓						✓					
-25	1		6111uS	100x			✓						✓					
-26	1		623uS				✓						✓					
CCV							✓						✓					
CCB							✓						✓					
FB20942-27	1		633uS	5x			✓						✓					
-28	1		2921uS	10x			✓						✓					
-29	1	↓	1426uS	10x	↓		✓						✓					

Rev 050914 lm

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one) Refer to page 45

Date:	12-23-2016
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batches:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
FB20942-30	1	AQ	426.2µS	5x	N		✓						✓					
-31	1		420.8µS	5x			✓						✓					
-32	1		474.5µS				✓						✓					
FB20942-32S3	1		474.5µS				✓						✓					
FB20942-32S4	1		474.5µS				✓						✓					
CCV							✓			✓	✓		✓			✓	✓	
MB1							✓			✓	✓		✓			✓	✓	6P25227
B1							✓			✓	✓		✓			✓	✓	
FB20942-33	1		121µS	5x			✓						✓					
-34	1		249µS	10x			✓						✓					
FB20982-1	25		410.3µS	5x			✓			✓	✓		✓			✓	✓	
-2	25		380.2µS	2x			✓			✓	✓		✓			✓	✓	
-3	25		353.0µS	2x			✓			✓	✓		✓			✓	✓	
-4	25		198.9µS	10x			✓			✓	✓		✓			✓	✓	
-5	25		219.8µS				✓			✓	✓		✓			✓	✓	
FB20983-1	9		360.3µS	5x						✓	✓					✓	✓	
CCV							✓			✓	✓		✓			✓	✓	
CCB							✓			✓	✓		✓			✓	✓	
FB20984-1	9		753µS	5x						✓	✓					✓	✓	
FB20988-1	10		386.5µS	5x						✓	✓					✓	✓	
-2	10		321.4µS							✓	✓					✓	✓	
-3	10		373.9µS							✓	✓					✓	✓	
FB20989-2	10		969µS	10x						✓	✓					✓	✓	
-3	10		857µS	10x						✓	✓					✓	✓	
FB20988-2S1	10		321.4µS			⊕				✓	✓		✓			✓	✓	
FB20988-2S2	10		321.4µS			⊕				✓	✓		✓			✓	✓	
FB20988-3S3	10		373.9µS			⊕				✓	✓		✓			✓	✓	
FB20988-3S4	10	↓	373.9µS		↓	⊕				✓	✓		✓			✓	✓	

Rev 050914 lm ⊕ for QC purpose only

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one) Refer to page 46

Date:	12-23-2014
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed						Results OK or Dilution Needed						Comments
						F	Cl	NO2	Br	NO3	SO4	F	Cl	NO2	Br	NO3	SO4	
CCV		AQ			N		✓			✓			✓			✓		
MB1		SO			Y					✓			✓			✓		6P25228
B1					Y					✓			✓			✓		
FA20723-1	1				Y					✓						✓		
FA20723-2	1									✓						✓		
-3	1									✓						✓		
FA20579-1	1									✓						✓		
-2	1									✓						✓		
-3	1									✓						✓		
-4	1									✓						✓		
FA20723-1S1	1									✓						✓		
FA20723-1S2	1									✓			*			✓		
CCV										✓						✓		
CCB										✓						✓		
BCh (shut down)																		

12-23-2014

Rev 050914 lm

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC2551I	01-01-15								
	CHL		GC086	02-01-15		0.800		50				
	SO_4		GC007	02-01-15								
	Br		GC158	01-09-15		1.25		12.5				
CCV	F	Accutom	GC010	08-31-15	1000	0.250	100	2.5	12-13-16	VG	LL05330	12-13-16
	NO_2		GC12511	01-30-15								
	NO_3		GC169	06-17-16								
	CHL		GC12411	03-31-16		0.500		50				
	SO_4		GC268	05-10-16								
	Br	Spex	GC156	04-30-16		1.25		12.5				
Bl	F	Spex	GC514	12-31-16	1000	0.250	100	2.5			LL05331	
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC2551I	01-01-15								
	CHL		GC086	02-01-15		0.500		50				
	SO_4		GC007	02-01-15								
	Br		GC155	01-07-15		1.25		12.5				
Std A	F	Accutom	GC010	08-31-15	1000	0.01	100	0.1	12-15-16	VG	LL05332	12-15-16
	NO_2		GC12511	09-30-16		0.01		0.1				
	NO_3		GC600111	01-31-15		0.01		0.1				
	CHL		GC124	03-31-16		0.2		2.0				
	SO_4		GC28	05-10-16		0.2		2.0				
	Br	Spex	GC156	04-30-16		0.05		0.5				
Std B	F	Refer to	Std LL05332		1000	0.05	100	0.5			LL05333	
	NO_2					0.05		0.5				
	NO_3					0.05		0.5				
	CHL					1.0		10				
	SO_4					1.0		10				
	Br					0.1		1.0				
Std C	F				1000	0.1	100	1.0			LL05334	
	NO_2					0.1		1.0				
	NO_3					0.1		1.0				

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Cl					3.0		30				
	SO_4					3.0		30				
	Br											
Std D	F					0.75		75				
	NO_2				1000	0.1250	100	2.5			LL05335	
	NO_3					0.1250		2.5				
	Cl					0.1250		2.5				
	SO_4					5.0		50				
	Br					5.0		50				
Std E	F					1.25		12.5				
	NO_2				1000	0.30	100	3.0			LL05336	
	NO_3					0.30		3.0				
	Cl					0.30		3.0				
	SO_4					6.5		65				
	Br					6.5		65				
Std F	F					1.5		15				
	NO_2				1000	0.40	100	4.0			LL05337	
	NO_3					0.40		4.0				
	Cl					0.40		4.0				
	SO_4					8.0		80				
	Br					8.0		80				
Std G	F					2.0		20				
	NO_2				1000	0.50	100	5.0			LL05338	
	NO_3					0.50		5.0				
	Cl					0.50		5.0				
	SO_4					10.0		100				
	Br					10.0		100				
CCV	F	Accutest	CC 010	08-31-15	1000	2.5	100	25				
	NO_2		GC 11511	01-30-15		0.250		2.5			LL05335	
	NO_3		CC 169	06-17-16								
	Cl		CC 124	03-31-16								
	SO_4		CC 268	05-10-16		0.500		50.0				

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Br	spex	CC156	05-30-16		1.25		12.5				
B1	F	spex	CC514	12-31-16	1000	0.250	100	2.5				
	NO_2		CC267	11-05-16								
	NO_3		CC25511	01-01-18								
	CHL		CC096	02-01-15		0.500		50				
	SO_4		CC007	02-01-15								
	Br		CC155	01-07-18		1.25		12.5				

IC Soil Prep

Method: 9056A Date: 12-23-2014
Analyst: VH GP GP25228

	Sample ID.Bottle #	Wt, g	Final Vol, ml	Comments
MB	1181	9.99	100	Boiling chips: GC 139
SB	B1	10.02		Balance: Adv pro1
MS	FA20723-1.1	10.01		
MSD	↓	9.99	↓	
DUP		VH 12-23-2014		
QC 1	FA20723-1.1	10.02	100	vials: GC 271
2	-2.1	10.00		cups: GC 271
3	-3.1	10.03		syringes: GC 283
4	FA20579-1.1	10.02		cups: GC 283
5	-2.1	10.01		spike lot same as LL05355
6	-3.1	9.99		
7	-4.1	10.01	↓	
8				
9				
10				
11				
12		VH 12-23-2014		
13				
14				
15				
16				
17				
18				
19				
20				

Analyst's Signature: VH Date: 12-23-2014

Reveiwer's Signature: [signature] Date: 12/23/14

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO_3		GC 2551I	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO_4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutan	GC 010	08-31-15	1000	0.250	100	2.5	12-22-16	I/L	LL05351	12-22-16
	NO_2		GC 12511	01-31-15								
	NO_3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO_4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05352	
	NO_2	Inorganic	GC 267	11-04-16								
	NO_3		GC 2551I	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO_4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutan	GC 010	08-31-15	1000	0.250	100	2.5	12-23-16	I/L	LL05353	12-23-16
	NO_2		GC 12511	01-31-15								
	NO_3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO_4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05354	
	NO_2	Inorganic	GC 267	11-04-16								
	NO_3		GC 2551I	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO_4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				

IC STANDARDS PREP LOG

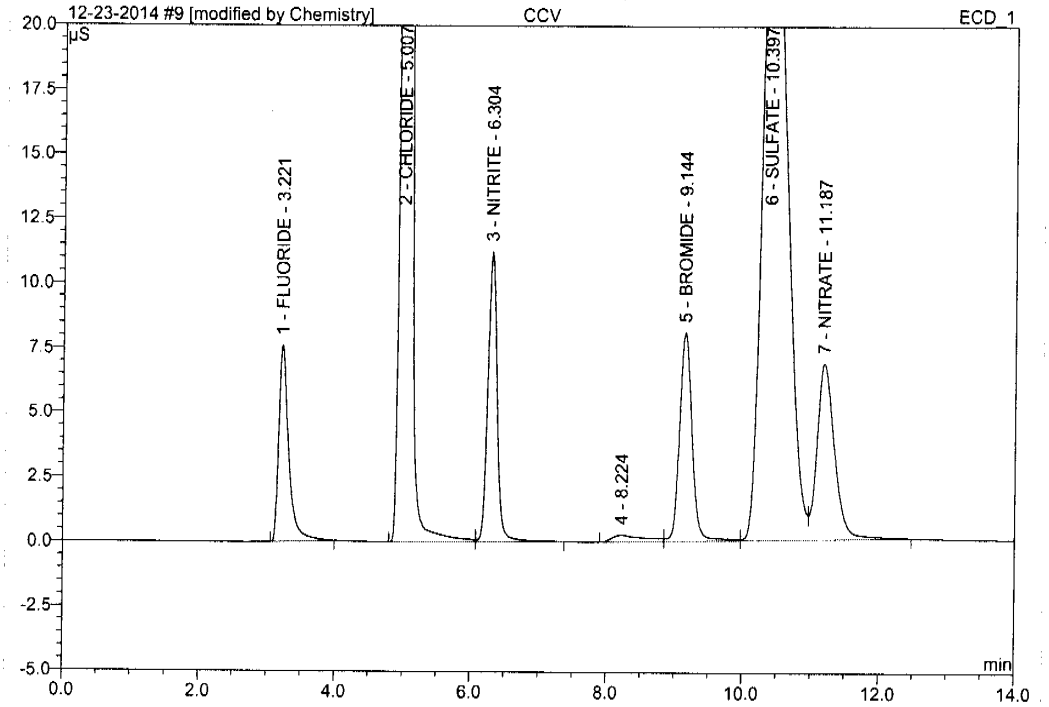
STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO3		GC 255II	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutest	GC 010	08-31-15	1000	0.250	100	2.5	12-22-14	JL	LL05351	12-22-16
	NO2		GC 125II	01-31-15								
	NO3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05352	
	NO2	Inorganic	GC 267	11-04-16								
	NO3		GC 255II	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutest	GC 010	08-31-15	1000	0.250	100	2.5	12-23-14	JL	LL05353	12-23-16
	NO2		GC 125II	01-31-15								
	NO3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05354	
	NO2	Inorganic	GC 267	11-04-16								
	NO3		GC 255II	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 9:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	7.602	1.286	3.91	2.255	BMB
2	5.01	CHLORIDE	120.168	15.030	45.66	51.802	BM *
3	6.30	NITRITE	11.199	1.769	5.37	2.251	MB*
4	8.22	n.a.	0.259	0.143	0.43	n.a.	BM
5	9.14	BROMIDE	8.074	1.720	5.23	12.890	M
6	10.40	SULFATE	27.139	10.928	33.20	49.848	M
7	11.19	NITRATE	6.799	2.038	6.19	2.500	MB
Total:			181.241	32.913	100.00	121.545	

JG 12-24-2014

12/24/14

12/24/14

12/24/14

Anions/Integration

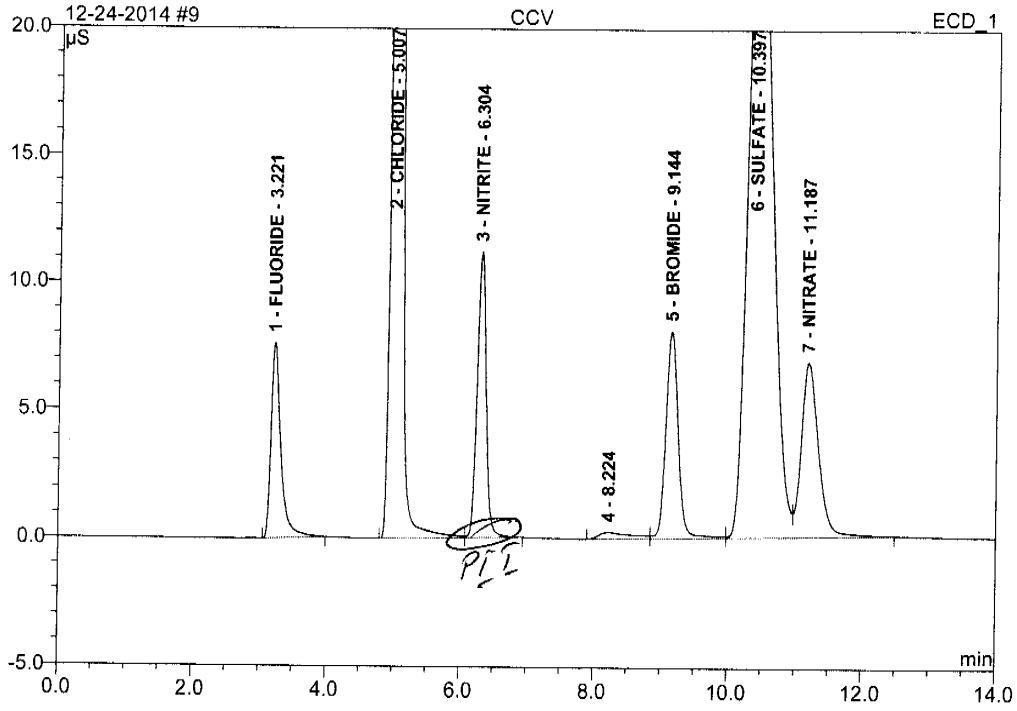
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 9:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	7.602	1.286	3.91	2.255	BMB
2	5.01	CHLORIDE	120.165	15.016	45.69	51.753	BM
3	6.30	NITRITE	11.174	1.737	5.28	2.210	MB
4	8.22	n.a.	0.259	0.143	0.44	n.a.	BM
5	9.14	BROMIDE	8.074	1.720	5.23	12.890	M
6	10.40	SULFATE	27.139	10.928	33.25	49.848	M
7	11.19	NITRATE	6.799	2.038	6.20	2.500	MB
Total:			181.211	32.867	100.00	121.456	

PFL

1:4 12-24-2014 12/24/14

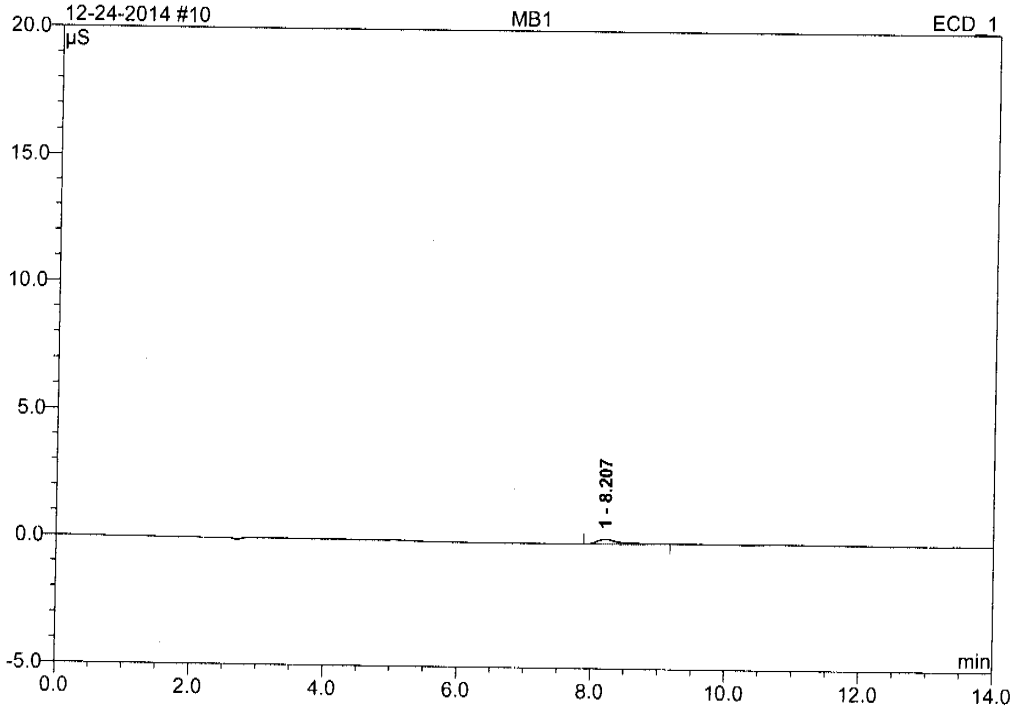
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

10 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



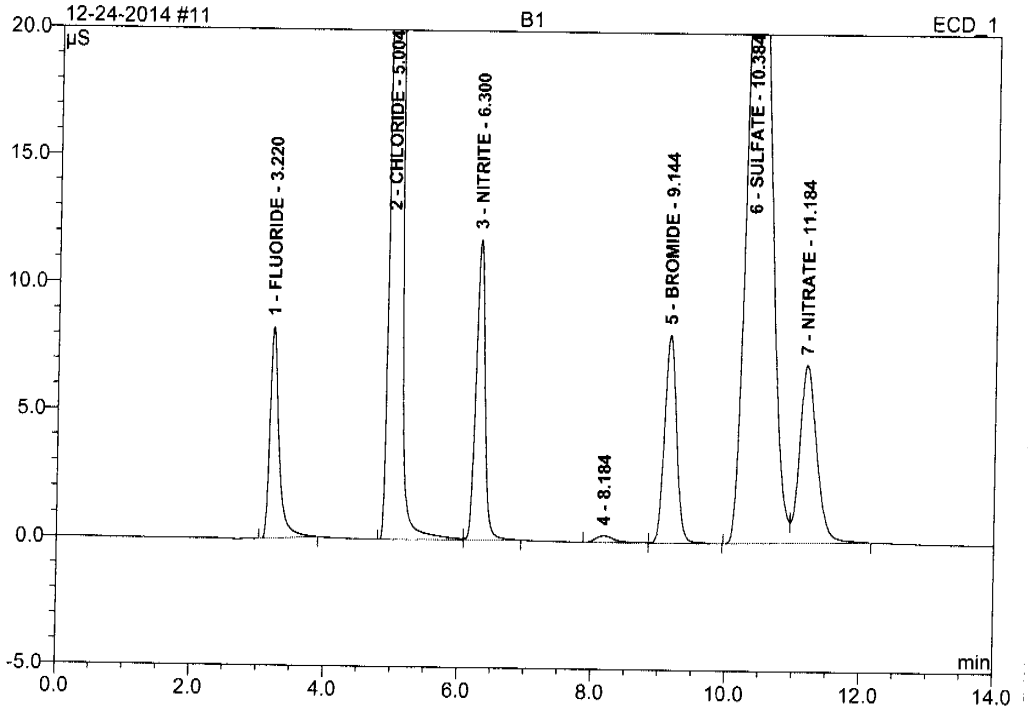
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.21	n.a.	0.189	0.069	100.00	n.a.	BMB
Total:			0.189	0.069	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.307	1.299	3.89	2.279	BMB
2	5.00	CHLORIDE	123.085	15.327	45.94	52.825	BM
3	6.30	NITRITE	11.763	1.830	5.49	2.329	MB
4	8.18	n.a.	0.255	0.084	0.25	n.a.	BM
5	9.14	BROMIDE	8.165	1.684	5.05	12.621	MB
6	10.38	SULFATE	28.338	11.083	33.22	50.555	BM
7	11.18	NITRATE	6.960	2.053	6.15	2.519	MB
Total:			186.873	33.361	100.00	123.128	

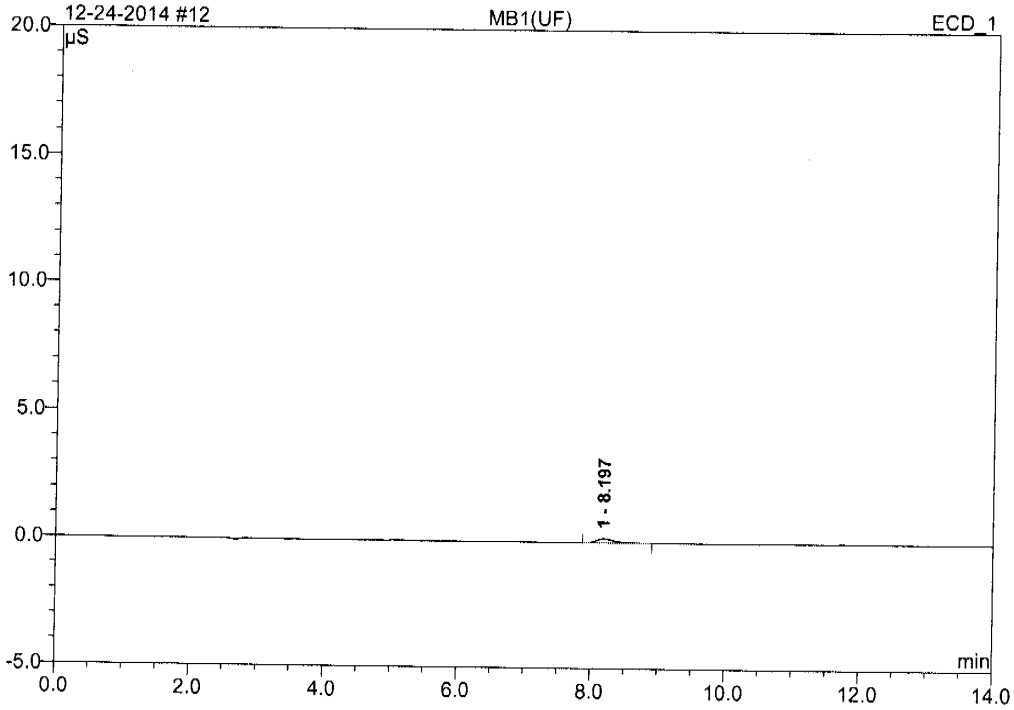
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

12 MB1(UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1(UF)**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



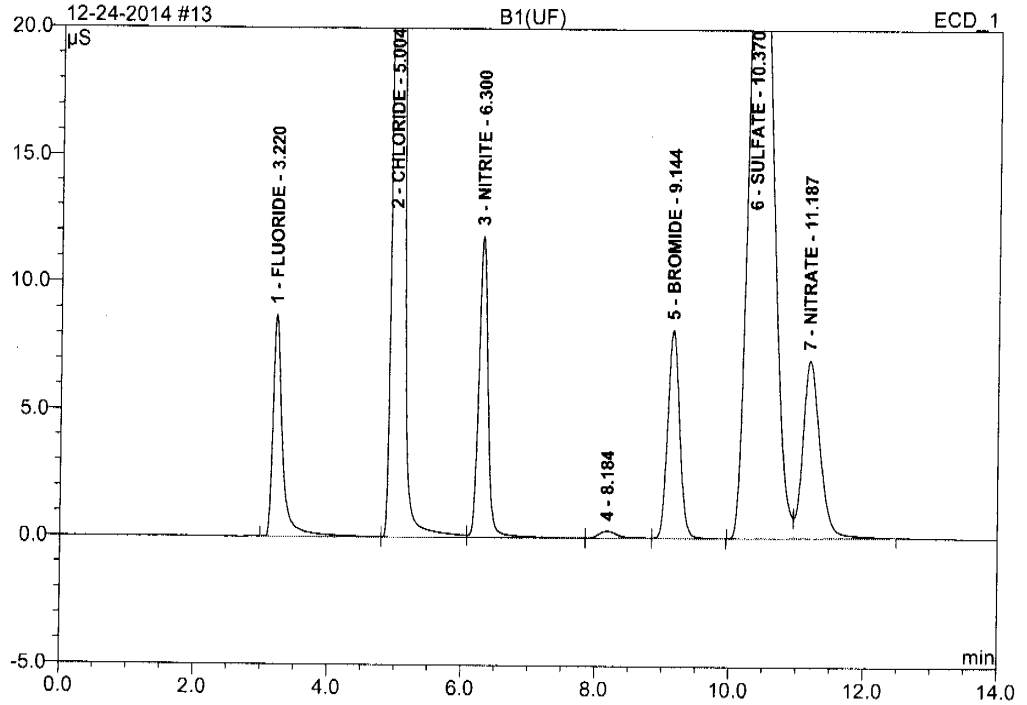
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.20	n.a.	0.159	0.048	100.00	n.a.	BMB
Total:			0.159	0.048	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

13 B1(UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1(UF)**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



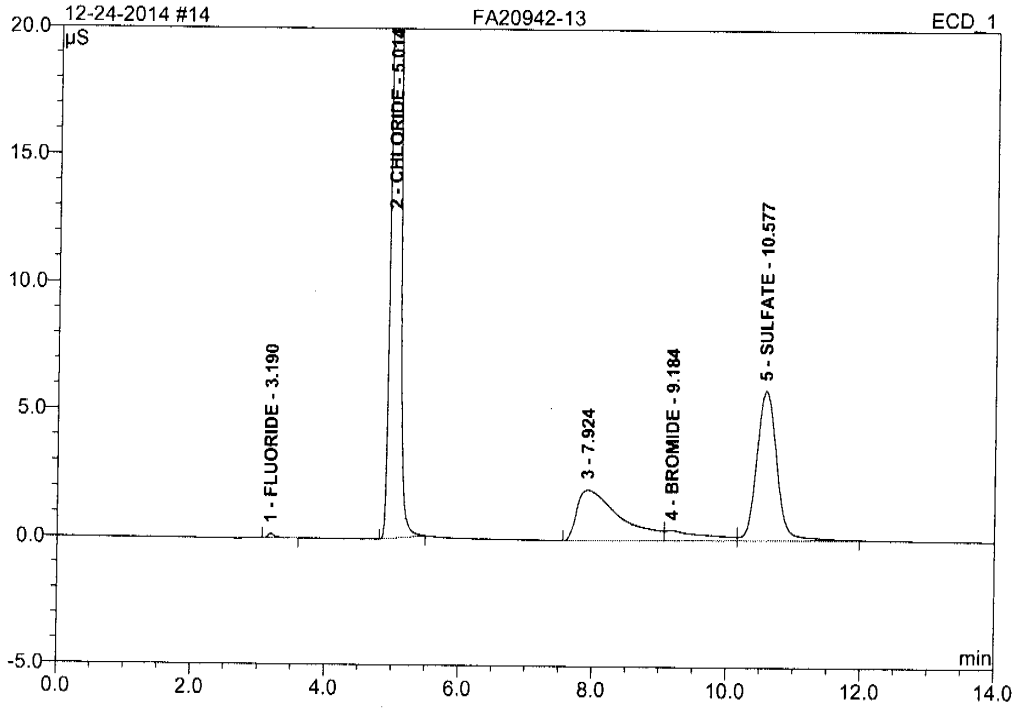
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.718	1.452	4.28	2.547	BM
2	5.00	CHLORIDE	123.205	15.382	45.29	53.017	M
3	6.30	NITRITE	11.809	1.894	5.58	2.411	M
4	8.18	n.a.	0.273	0.093	0.27	n.a.	M
5	9.14	BROMIDE	8.188	1.694	4.99	12.695	MB
6	10.37	SULFATE	28.758	11.362	33.45	51.826	BM
7	11.19	NITRATE	6.994	2.088	6.15	2.562	MB
Total:			187.944	33.966	100.00	125.057	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

14 FA20942-13

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-13**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 11:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



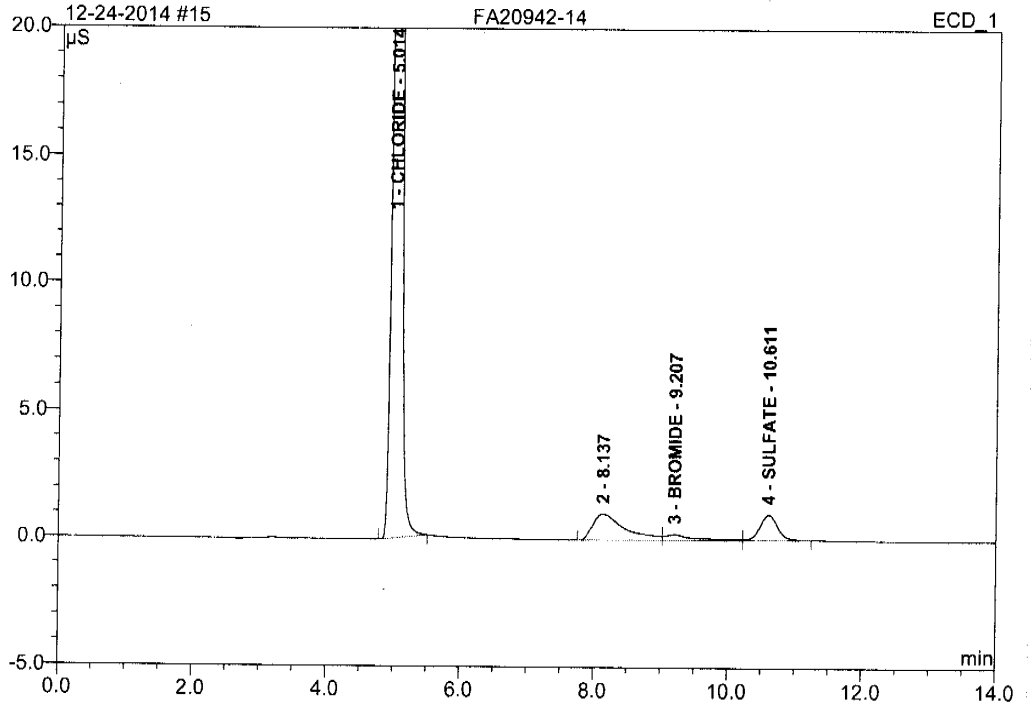
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.174	0.020	0.18	0.174	BMB
2	5.01	CHLORIDE	58.750	7.032	65.08	121.187	BMB
3	7.92	n.a.	1.969	1.458	13.50	n.a.	BM
4	9.18	BROMIDE	0.392	0.266	2.46	9.968	M
5	10.58	SULFATE	5.827	2.030	18.78	46.289	MB
Total:			67.112	10.806	100.00	177.618	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

15 FA20942-14

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-14**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**25.0000**
Recording Time:	**12/23/2014 11:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



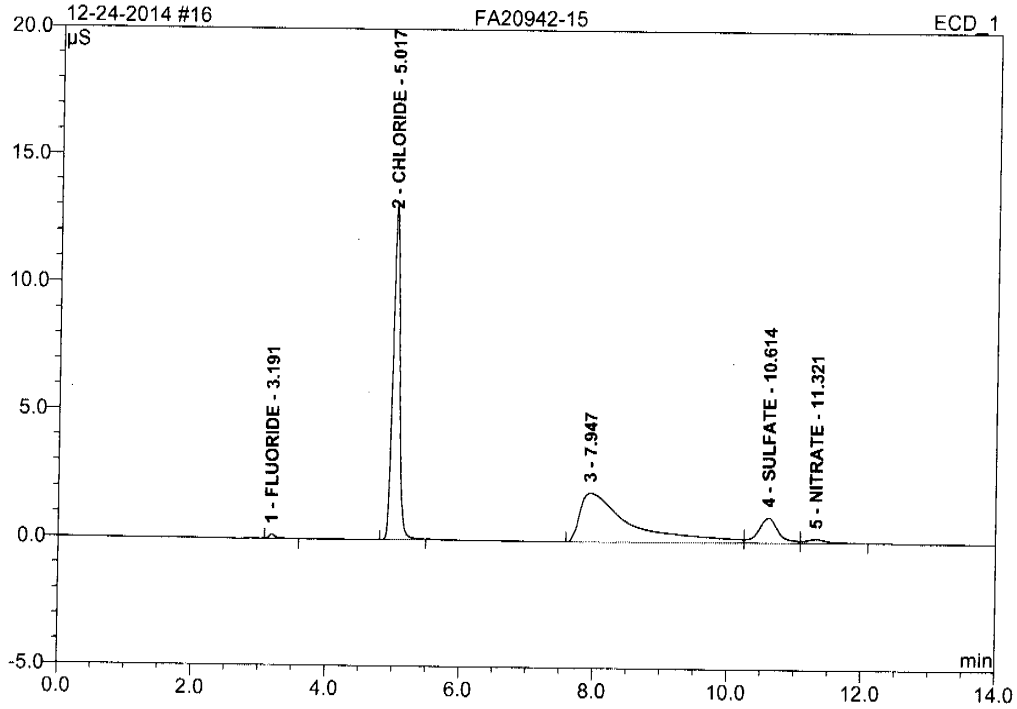
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	69.225	8.388	89.51	722.715	BMB
2	8.14	n.a.	1.030	0.567	6.05	n.a.	BM
3	9.21	BROMIDE	0.226	0.113	1.21	21.248	M
4	10.61	SULFATE	1.002	0.303	3.24	34.587	MB
Total:			71.484	9.371	100.00	778.550	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

16 FA20942-15

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-15**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 11:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.166	0.019	0.52	0.164	BMB
2	5.02	CHLORIDE	13.100	1.544	42.67	26.606	BMB
3	7.95	n.a.	1.896	1.661	45.92	n.a.	BM
4	10.61	SULFATE	0.984	0.337	9.31	7.682	M
5	11.32	NITRATE	0.152	0.057	1.58	0.351	MB
Total:			16.298	3.618	100.00	34.802	

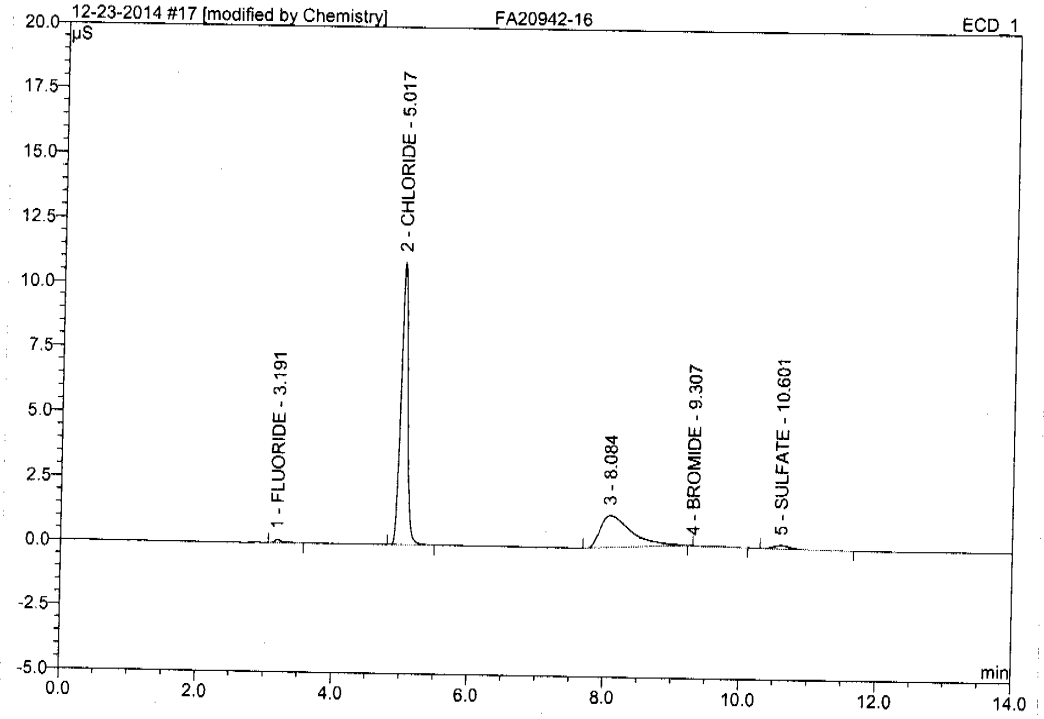
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

17 FA20942-16

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-16**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 12:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.149	0.017	0.87	0.061	BMB
2	5.02	CHLORIDE	10.922	1.290	64.08	8.889	BMB
3	8.08	n.a.	1.244	0.667	33.14	n.a.	BMB*
4	9.31	BROMIDE	0.000	0.003	0.13	0.039	BMB*
5	10.60	SULFATE	0.132	0.036	1.78	0.327	BMB*
Total:			12.448	2.012	100.00	9.316	

VK 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

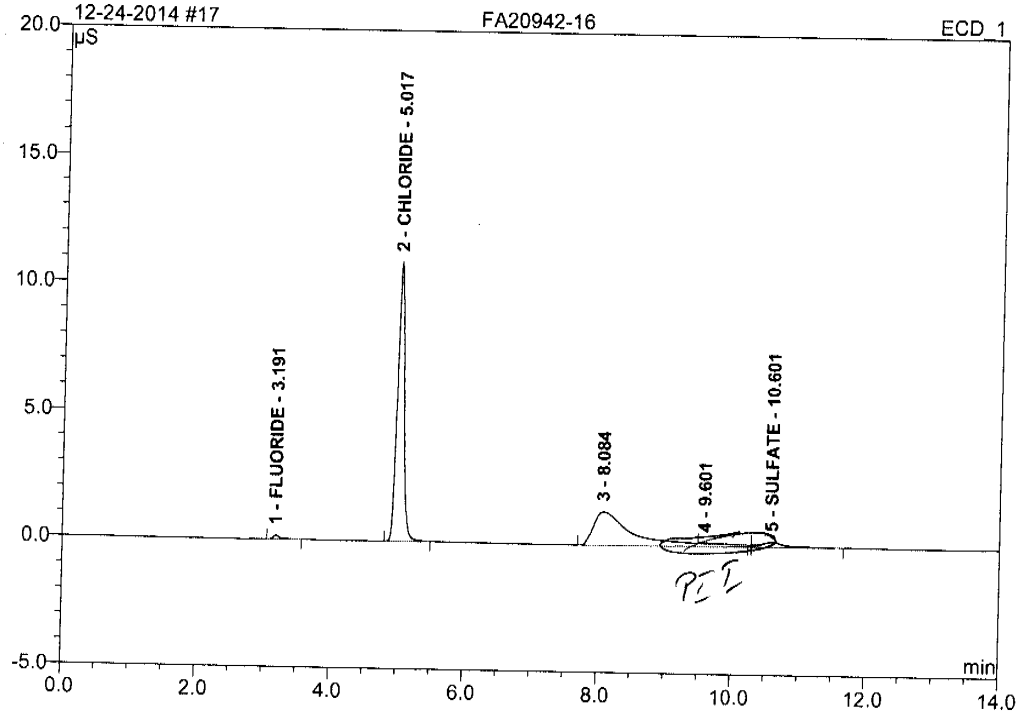
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

17 FA20942-16

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-16**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 12:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.149	0.017	0.75	0.061	BMB
2	5.02	CHLORIDE	10.922	1.290	55.61	8.889	BMB
3	8.08	n.a.	1.287	0.913	39.36	n.a.	BM
4	9.60	n.a.	0.028	0.010	0.45	n.a.	Rd
5	10.60	SULFATE	0.192	0.089	3.83	0.811	MB
Total:			12.578	2.319	100.00	9.761	

PEL

VH 12-24-2014 12/24/14

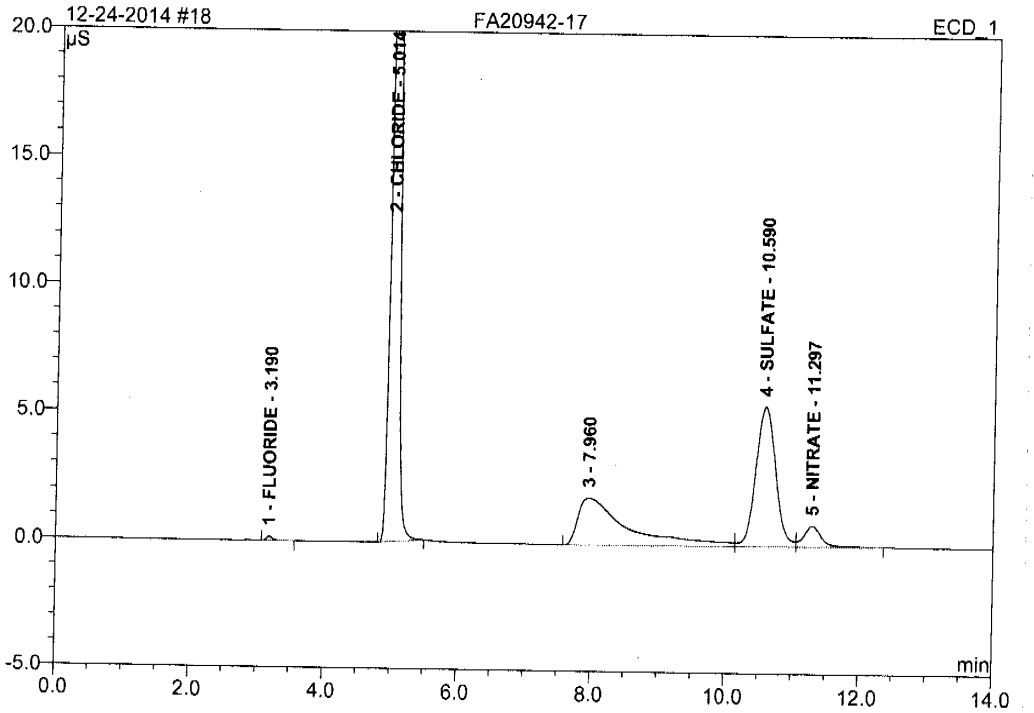
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

18 FA20942-17

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-17**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 12:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.163	0.018	0.20	0.063	BMB
2	5.01	CHLORIDE	42.911	5.123	58.07	35.315	BMB
3	7.96	n.a.	1.832	1.565	17.74	n.a.	BM
4	10.59	SULFATE	5.442	1.860	21.09	16.971	M
5	11.30	NITRATE	0.821	0.255	2.90	0.627	MB
Total:			51.168	8.822	100.00	52.976	

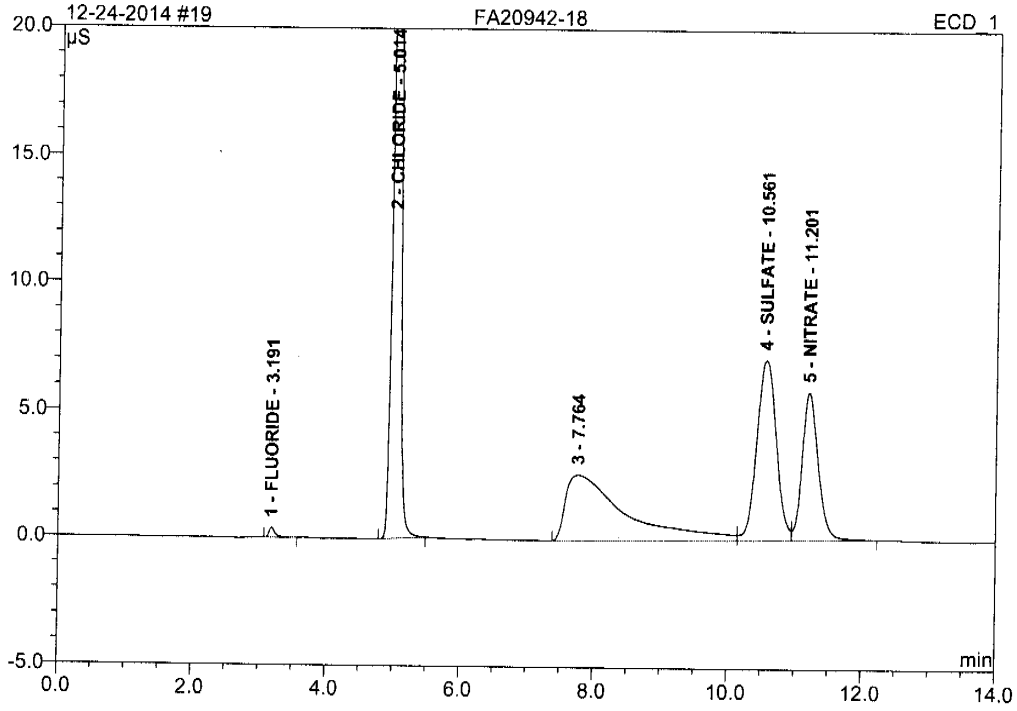
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

19 FA20942-18

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-18**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 12:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



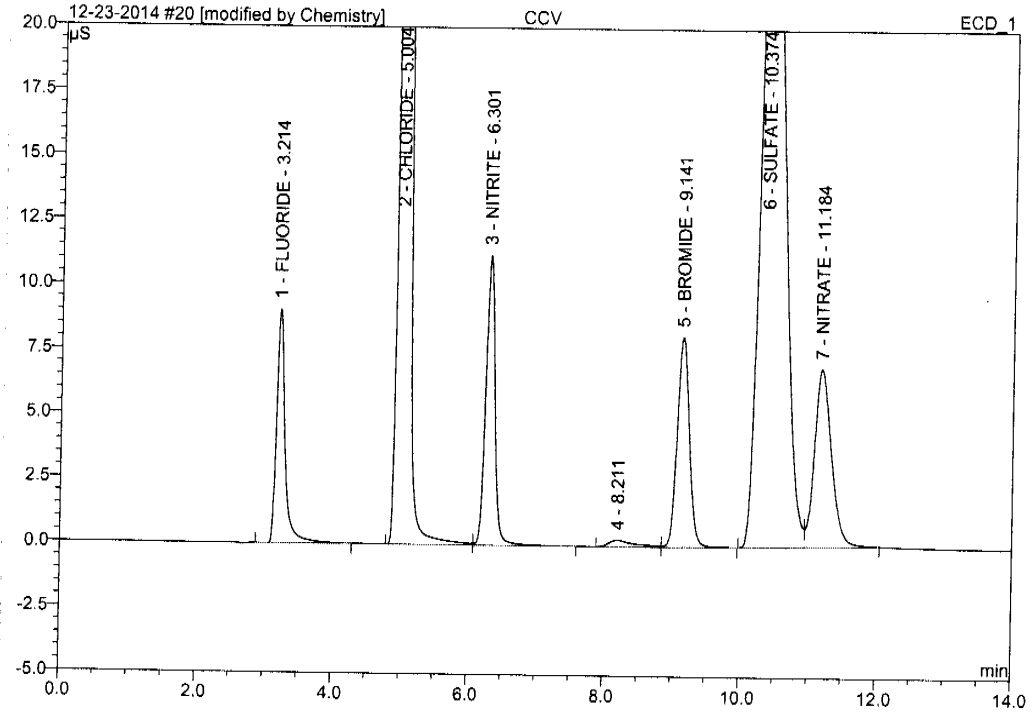
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.397	0.044	0.39	0.077	BMB
2	5.01	CHLORIDE	38.540	4.540	40.07	15.647	BMB
3	7.76	n.a.	2.603	2.721	24.02	n.a.	BM
4	10.56	SULFATE	7.056	2.401	21.19	10.951	M
5	11.20	NITRATE	5.806	1.624	14.33	1.992	MB
Total:			54.402	11.330	100.00	28.667	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

20 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 12:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.052	1.307	3.97	2.291	BMB*
2	5.00	CHLORIDE	121.157	15.032	45.64	51.809	BM *
3	6.30	NITRITE	11.200	1.773	5.38	2.256	MB*
4	8.21	n.a.	0.259	0.118	0.36	n.a.	BM
5	9.14	BROMIDE	8.130	1.686	5.12	12.632	MB
6	10.37	SULFATE	28.605	11.024	33.47	50.286	BM
7	11.18	NITRATE	6.869	1.995	6.06	2.448	MB
Total:			185.272	32.934	100.00	121.723	

MH 12-24-2014 12/24/14

Anions/Integration

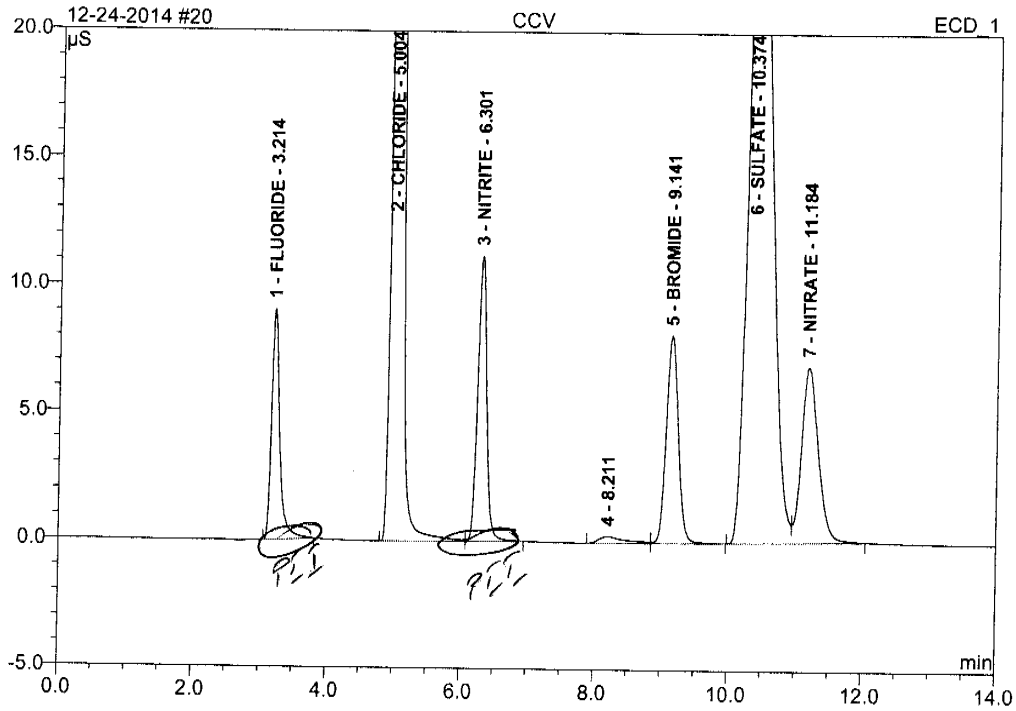
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

20 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 12:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.045	1.272	3.87	2.231	BMB
2	5.00	CHLORIDE	121.153	15.017	45.72	51.756	BM
3	6.30	NITRITE	11.172	1.735	5.28	2.208	MB
4	8.21	n.a.	0.259	0.118	0.36	n.a.	BM
5	9.14	BROMIDE	8.130	1.686	5.13	12.632	MB
6	10.37	SULFATE	28.605	11.024	33.56	50.286	BM
7	11.18	NITRATE	6.869	1.995	6.07	2.448	MB
Total:			185.234	32.847	100.00	121.562	

12-24-2014

Anions/Integration

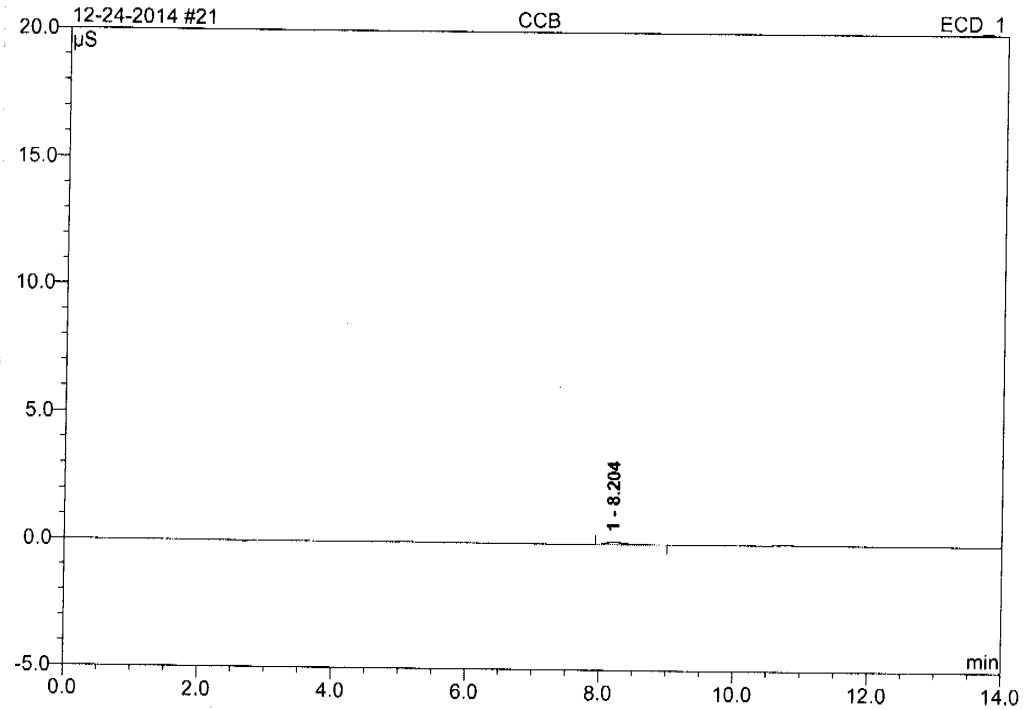
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

21 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 13:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



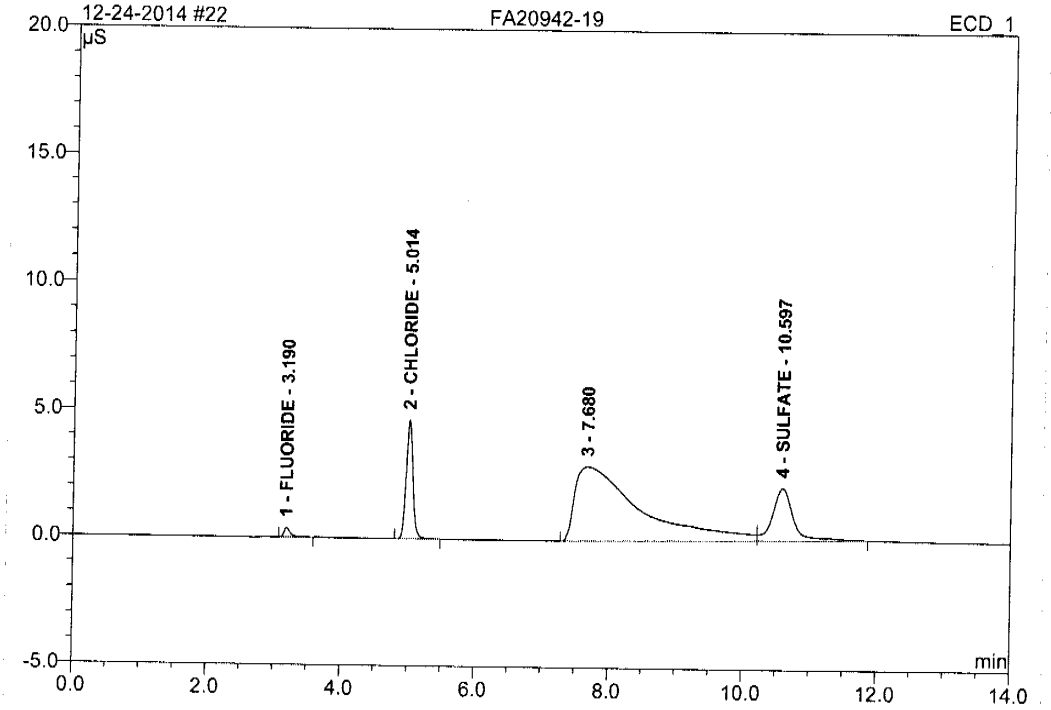
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.20	n.a.	0.112	0.035	100.00	n.a.	BMB
Total:			0.112	0.035	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

22 FA20942-19

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-19**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 13:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

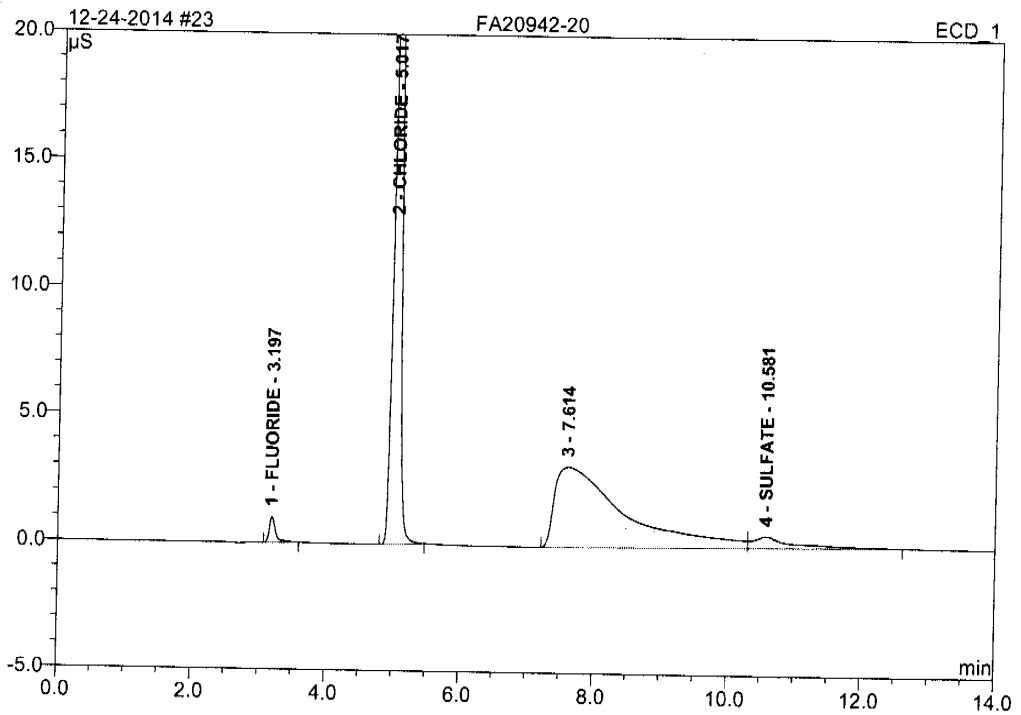


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.374	0.042	0.90	0.146	BMB
2	5.01	CHLORIDE	4.663	0.542	11.71	3.738	BMB
3	7.68	n.a.	2.905	3.300	71.29	n.a.	BM
4	10.60	SULFATE	2.067	0.745	16.09	6.795	MB
Total:			10.008	4.629	100.00	10.679	

23 FA20942-20

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-20**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 13:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	1.000	0.110	1.43	0.192	BMB
2	5.02	CHLORIDE	29.467	3.424	44.63	11.800	BMB
3	7.61	n.a.	3.128	3.803	49.57	n.a.	BM
4	10.58	SULFATE	0.463	0.335	4.37	1.528	MB
Total:			34.058	7.671	100.00	13.520	

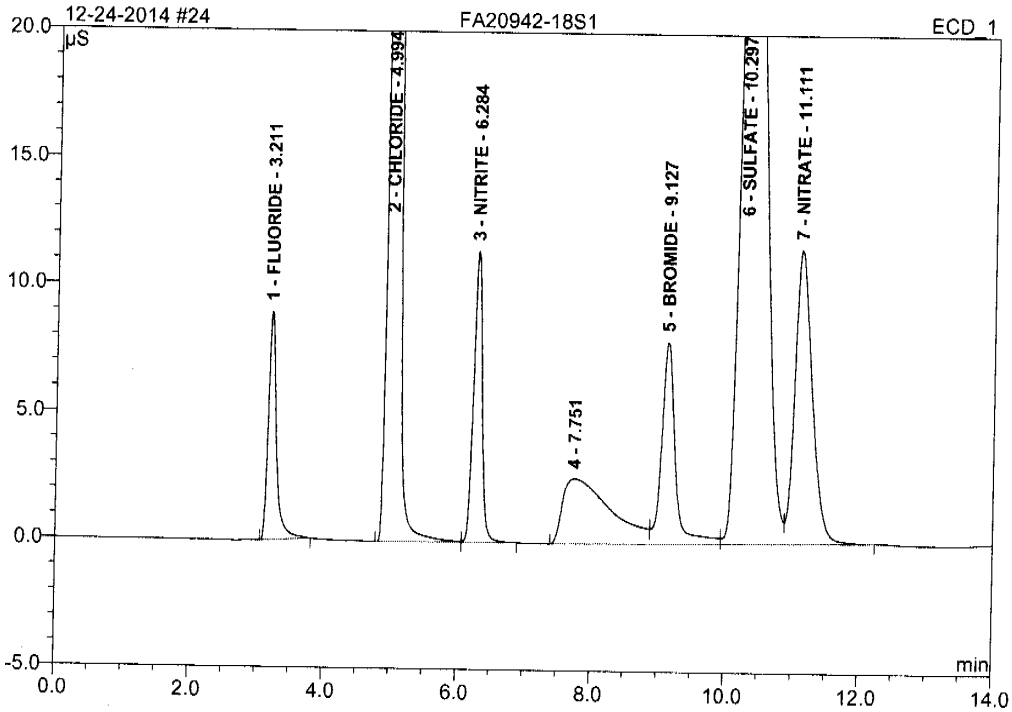
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

24 FA20942-18S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-18S1**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 14:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.950	1.257	2.94	2.205	BMB
2	4.99	CHLORIDE	156.410	19.212	44.89	66.216	BM
3	6.28	NITRITE	11.408	1.702	3.98	2.166	MB
4	7.75	n.a.	2.552	2.123	4.96	n.a.	BM
5	9.13	BROMIDE	7.910	1.880	4.39	14.091	M
6	10.30	SULFATE	33.991	13.163	30.76	60.043	M
7	11.11	NITRATE	11.529	3.460	8.08	4.244	MB
Total:			232.750	42.797	100.00	148.964	

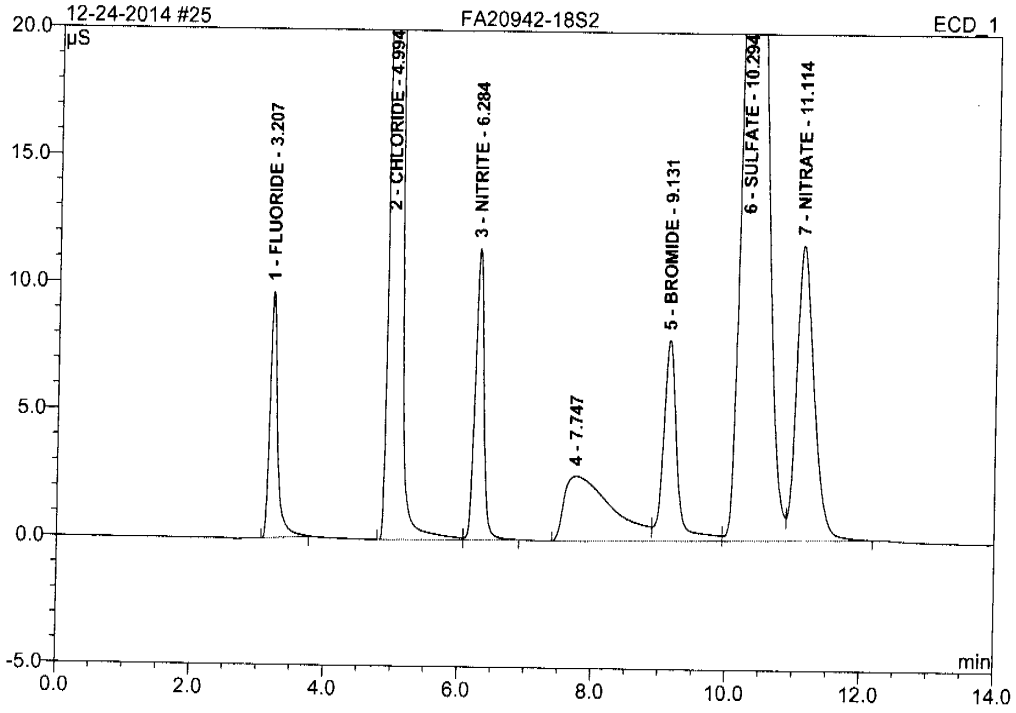
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

25 FA20942-18S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-18S2**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 14:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.672	1.279	2.98	2.243	BMB
2	4.99	CHLORIDE	156.849	19.294	44.94	66.498	BM
3	6.28	NITRITE	11.415	1.718	4.00	2.187	MB
4	7.75	n.a.	2.545	2.100	4.89	n.a.	BM
5	9.13	BROMIDE	7.878	1.848	4.31	13.851	M
6	10.29	SULFATE	34.707	13.190	30.72	60.166	M
7	11.11	NITRATE	11.563	3.500	8.15	4.294	MB
Total:			234.629	42.929	100.00	149.238	

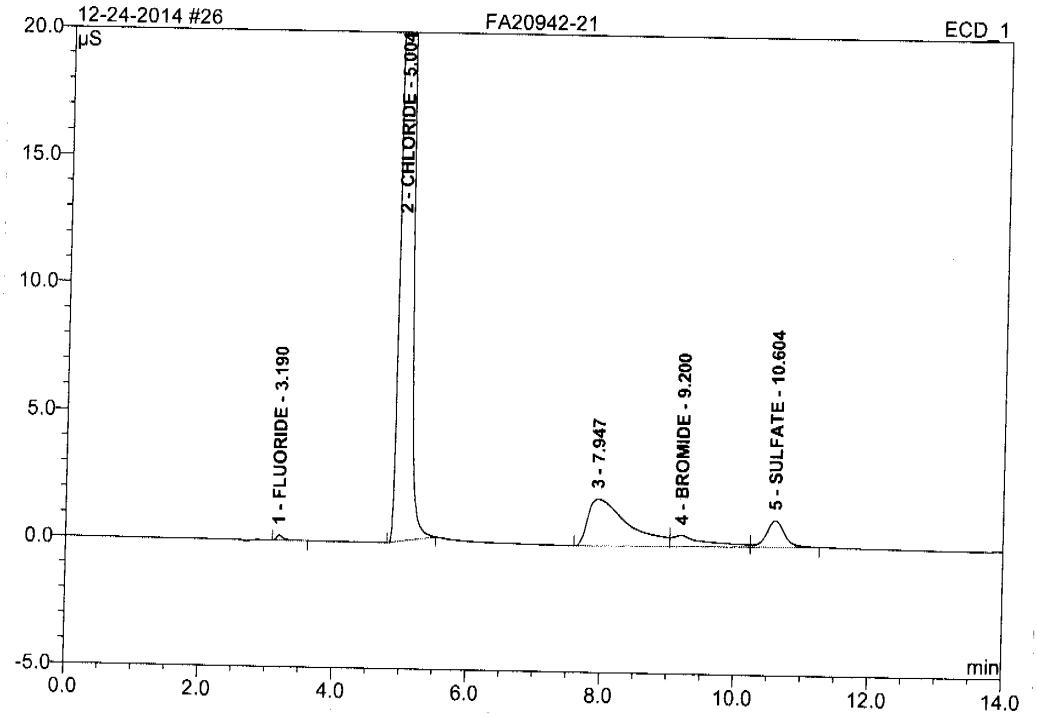
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

26 FA20942-21

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-21**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 14:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.205	0.024	0.15	0.213	BMB
2	5.00	CHLORIDE	121.460	14.751	88.65	254.199	BMB
3	7.95	n.a.	1.840	1.284	7.72	n.a.	BM
4	9.20	BROMIDE	0.442	0.256	1.54	9.599	M
5	10.60	SULFATE	1.044	0.324	1.95	7.393	MB
Total:			124.990	16.639	100.00	271.403	

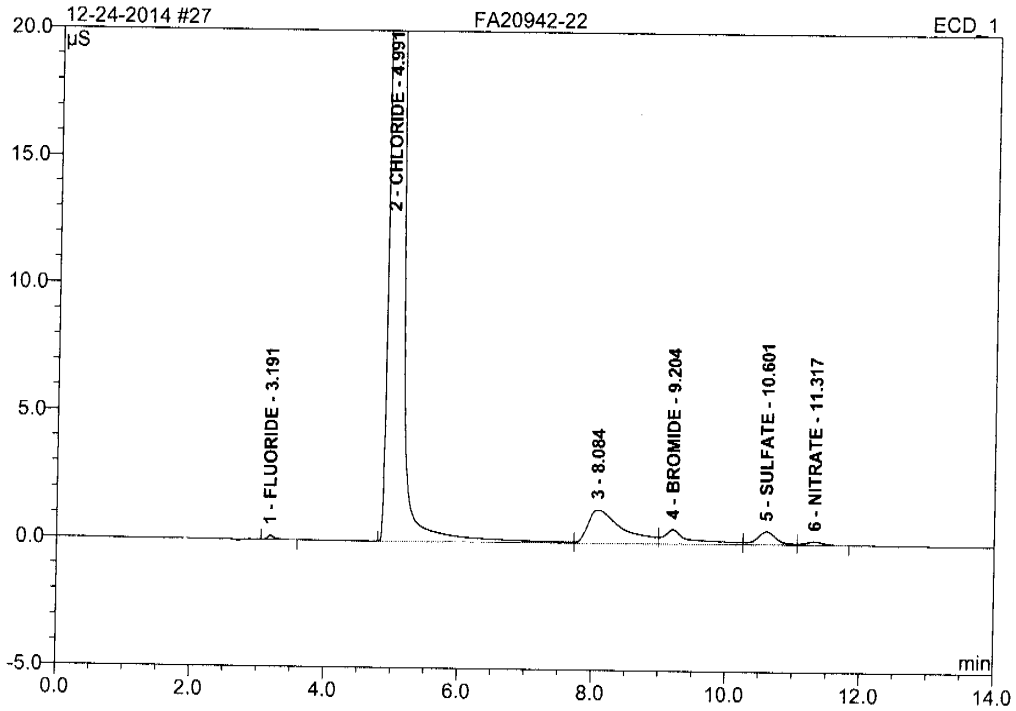
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

27 FA20942-22

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-22**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 14:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.158	0.018	0.07	0.314	BMB
2	4.99	CHLORIDE	203.540	25.999	95.36	896.090	BM
3	8.08	n.a.	1.295	0.772	2.83	n.a.	M
4	9.20	BROMIDE	0.561	0.260	0.95	19.503	M
5	10.60	SULFATE	0.513	0.173	0.64	7.899	M
6	11.32	NITRATE	0.136	0.042	0.16	0.521	MB
Total:			206.204	27.265	100.00	924.327	

Anions/Integration

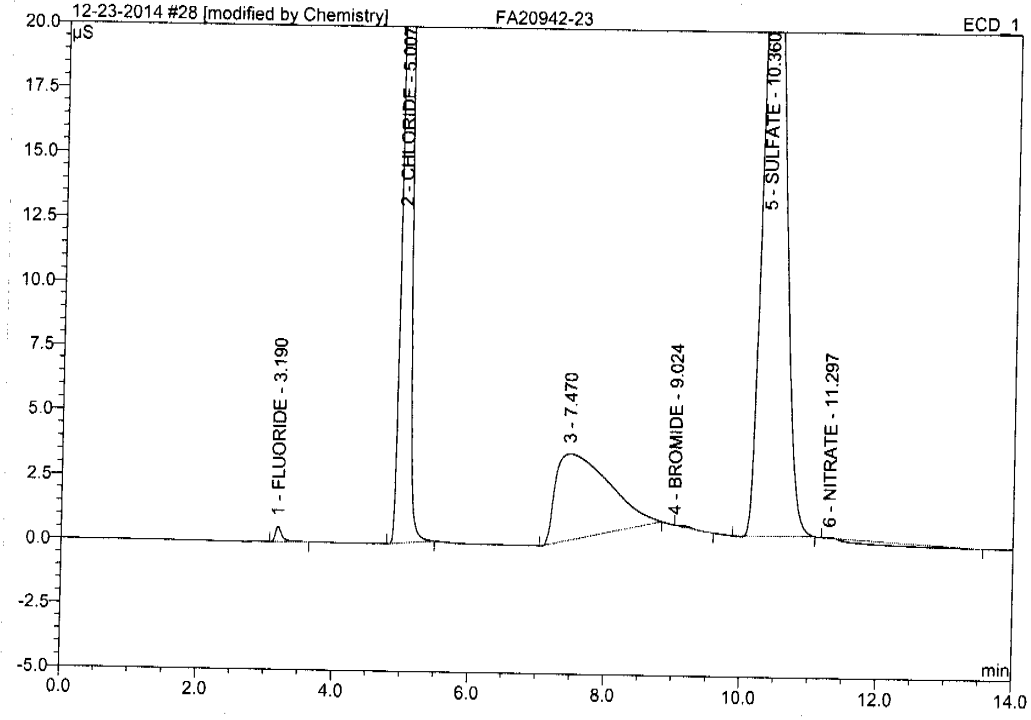
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

28 FA20942-23

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-23**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 15:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.607	0.070	0.35	0.122	BMB
2	5.01	CHLORIDE	58.129	6.813	34.30	23.483	BMB
3	7.47	n.a.	3.344	3.003	15.12	n.a.	BMB*
4	9.02	BROMIDE	0.000	0.006	0.03	0.048	BMB*
5	10.36	SULFATE	26.887	9.803	49.35	44.717	BMB*
6	11.30	NITRATE	0.040	0.168	0.84	0.206	BMB*
Total:			89.008	19.863	100.00	68.576	

Th 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

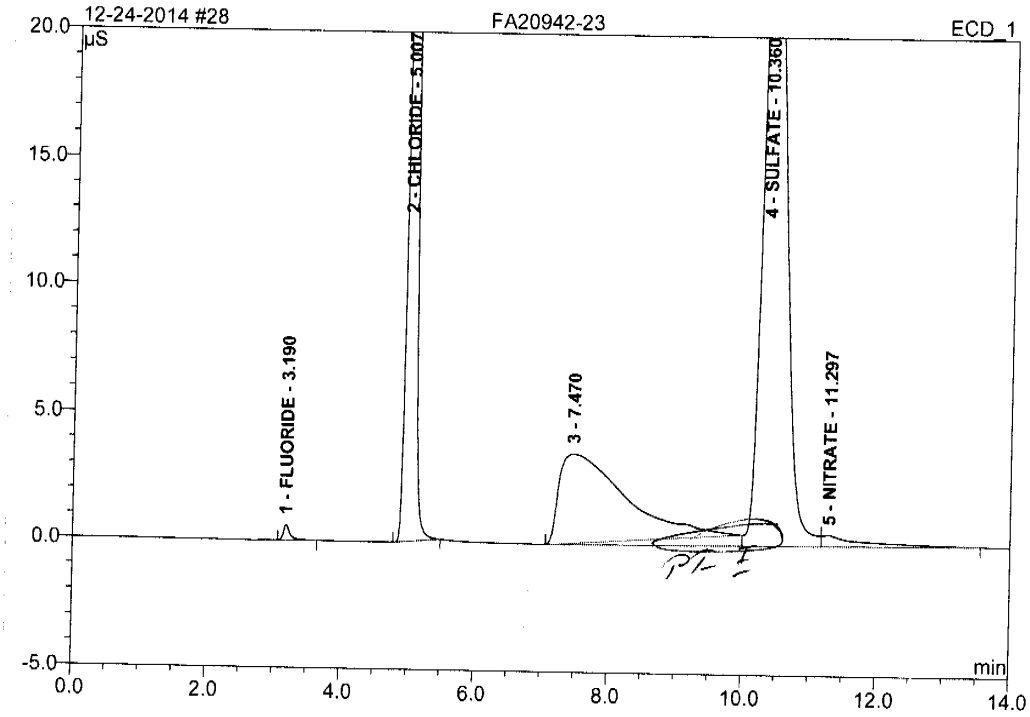
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

28 FA20942-23

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-23**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 15:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.607	0.070	0.31	0.122	BMB
2	5.01	CHLORIDE	58.129	6.813	30.65	23.483	BMB
3	7.47	n.a.	3.526	4.060	18.26	n.a.	Ru
4	10.36	SULFATE	27.343	10.964	49.32	50.013	BM
5	11.30	NITRATE	0.434	0.324	1.46	0.398	MB
Total:			90.040	22.231	100.00	74.016	

VL 12-24-2014

12/24/14

Anions/Integration

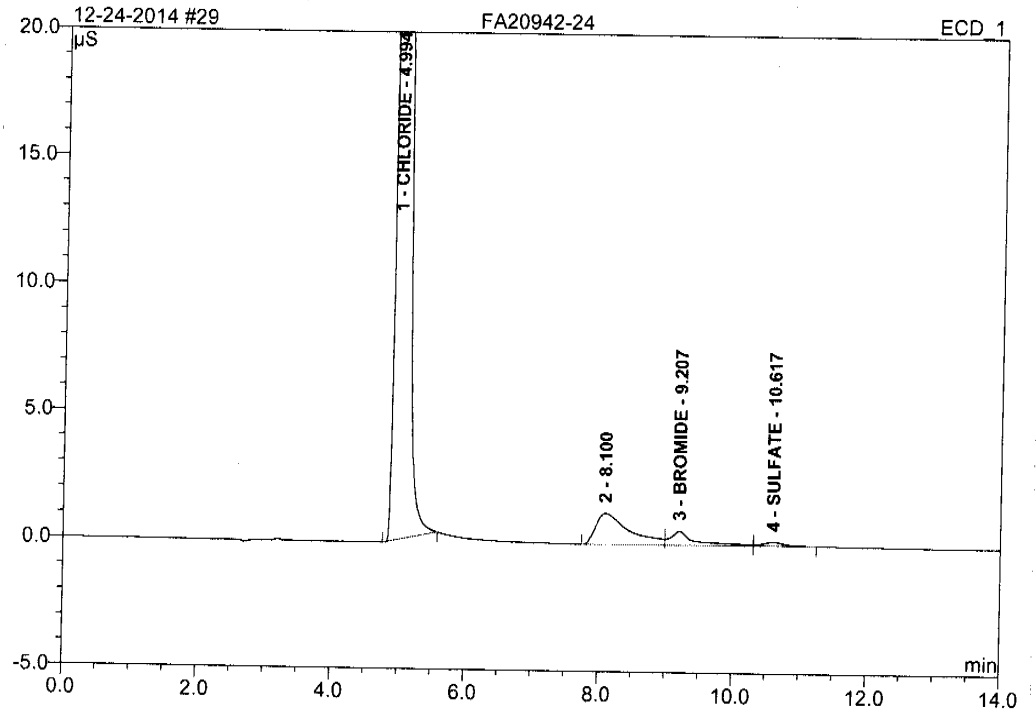
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

29 FA20942-24

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-24**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 15:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



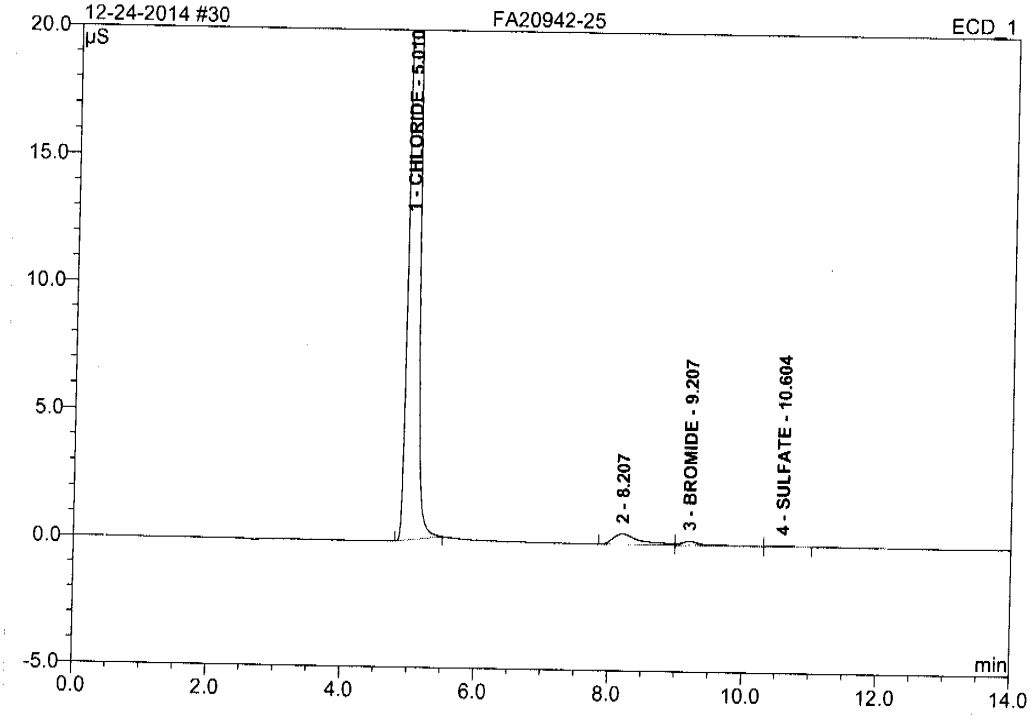
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	4.99	CHLORIDE	217.981	27.449	96.53	946.041	BMB
2	8.10	n.a.	1.205	0.699	2.46	n.a.	BM
3	9.21	BROMIDE	0.540	0.231	0.81	17.312	M
4	10.62	SULFATE	0.151	0.056	0.20	2.537	MB
Total:			219.877	28.435	100.00	965.889	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

30 FA20942-25

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-25**	*Injection Volume:*	**25.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**100.0000**
Recording Time:	**12/23/2014 15:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



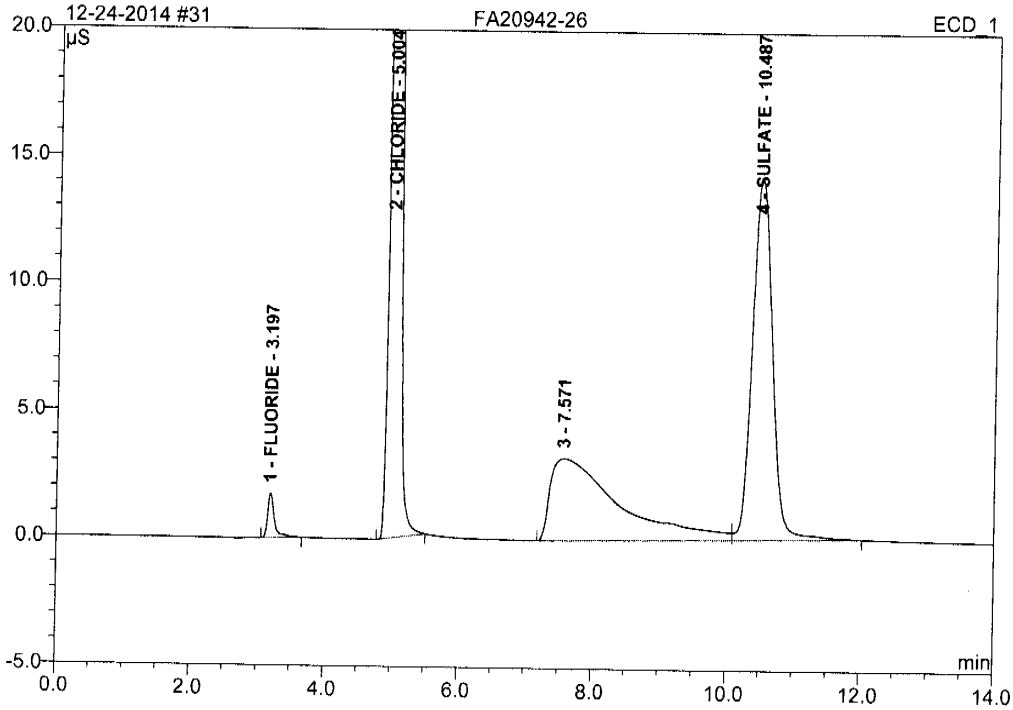
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	70.893	8.536	96.92	2942.127	BMB
2	8.21	n.a.	0.408	0.190	2.16	n.a.	BM
3	9.21	BROMIDE	0.168	0.065	0.74	48.810	M
4	10.60	SULFATE	0.050	0.016	0.19	7.473	MB
Total:			71.519	8.808	100.00	2998.410	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

31 FA20942-26

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-26**	*Injection Volume:*	**25.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 16:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



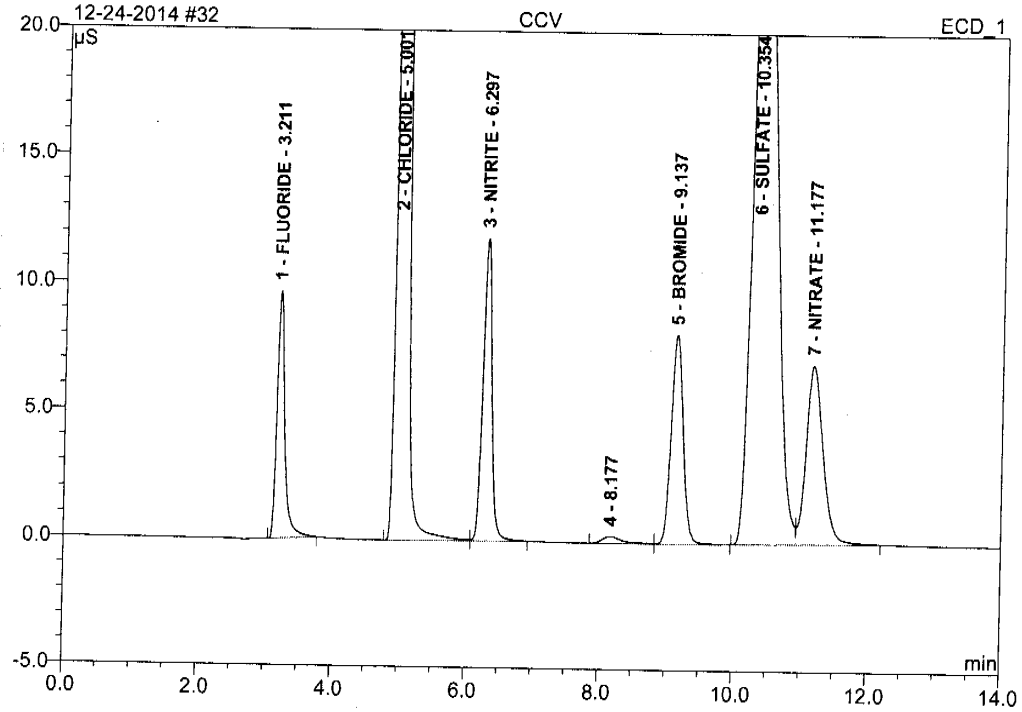
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	1.745	0.201	0.91	0.352	BMB
2	5.00	CHLORIDE	109.213	13.028	59.24	44.901	BMB
3	7.57	n.a.	3.221	3.837	17.45	n.a.	BM
4	10.49	SULFATE	14.109	4.924	22.39	22.463	MB
Total:			128.288	21.990	100.00	67.716	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

32 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 16:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

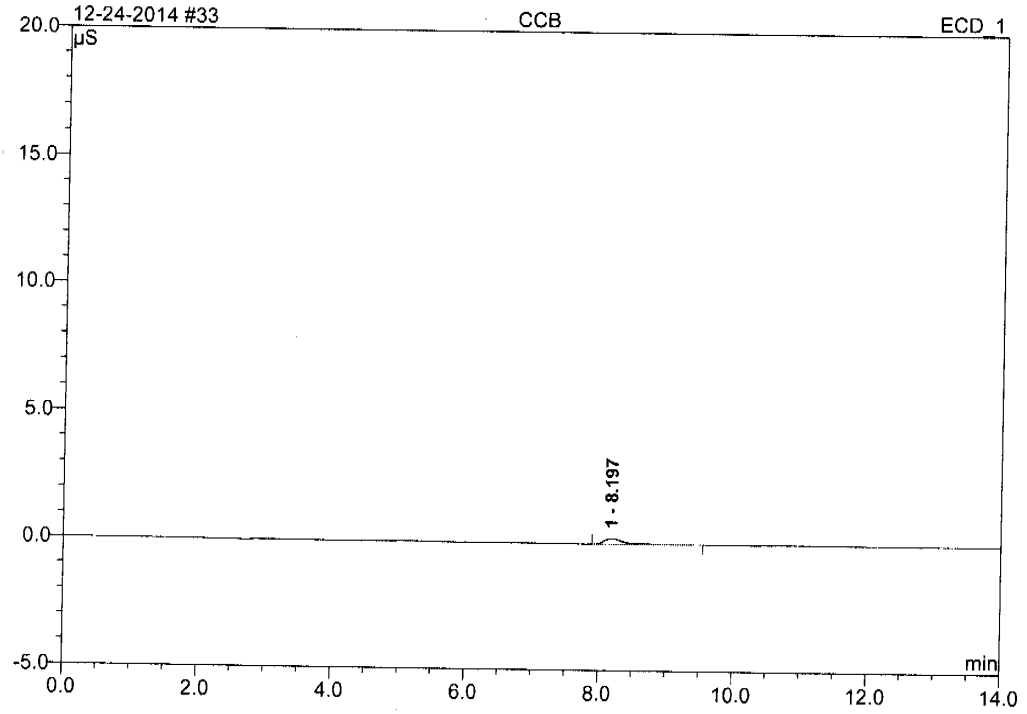


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.696	1.301	3.89	2.282	BMB
2	5.00	CHLORIDE	124.486	15.321	45.85	52.807	BM
3	6.30	NITRITE	11.861	1.830	5.48	2.329	MB
4	8.18	n.a.	0.267	0.094	0.28	n.a.	BM
5	9.14	BROMIDE	8.192	1.691	5.06	12.668	MB
6	10.35	SULFATE	29.824	11.136	33.33	50.797	BM
7	11.18	NITRATE	7.005	2.042	6.11	2.505	MB
Total:			191.330	33.415	100.00	123.388	

33 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 16:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



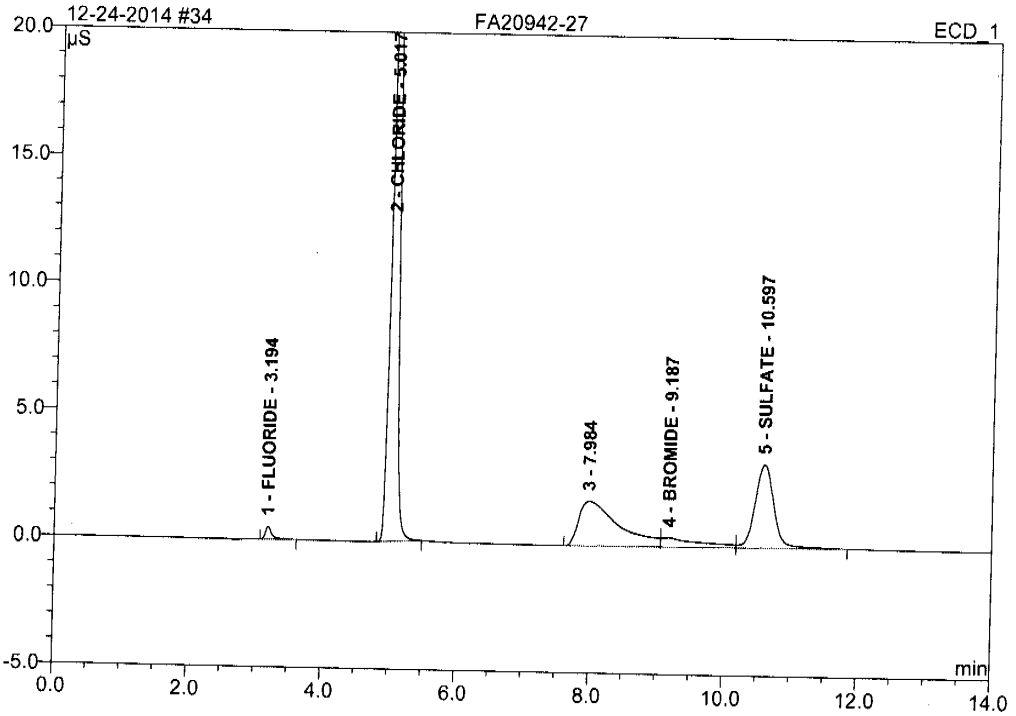
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.20	n.a.	0.219	0.081	100.00	n.a.	BMB
Total:			0.219	0.081	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

34 FA20942-27

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-27**	*Injection Volume:*	**25.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.501	0.055	0.95	0.486	BMB
2	5.02	CHLORIDE	27.962	3.291	56.25	56.717	BMB
3	7.98	n.a.	1.737	1.201	20.52	n.a.	BM
4	9.19	BROMIDE	0.356	0.239	4.09	8.968	M
5	10.60	SULFATE	3.257	1.065	18.20	24.287	MB
Total:			33.812	5.851	100.00	90.458	

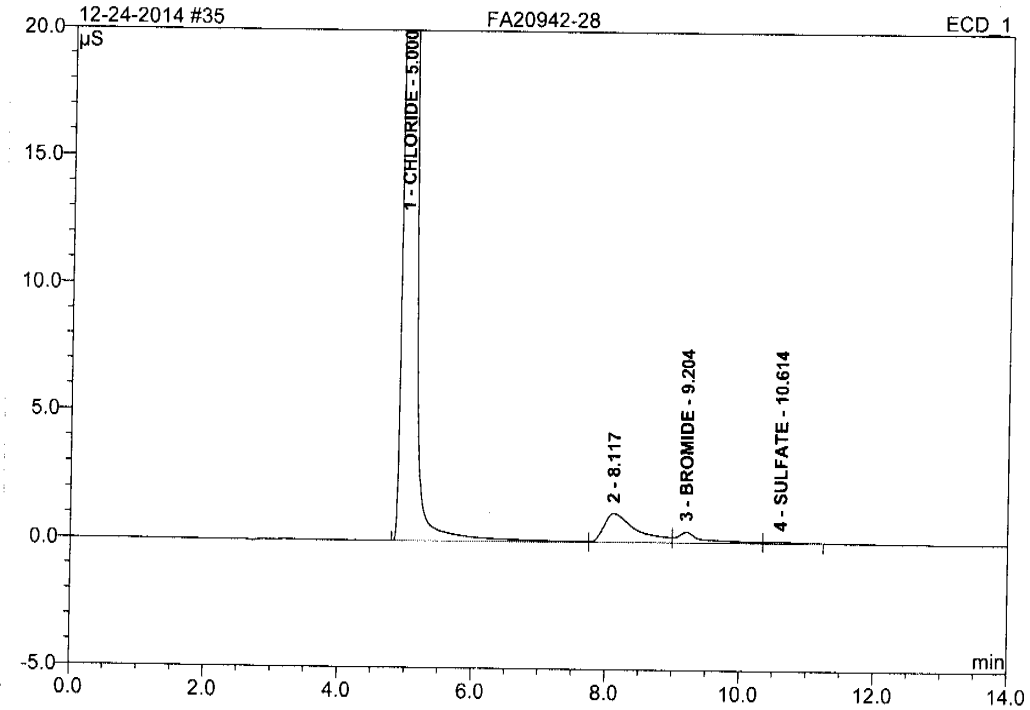
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

35 FA20942-28

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-28**	*Injection Volume:*	**25.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



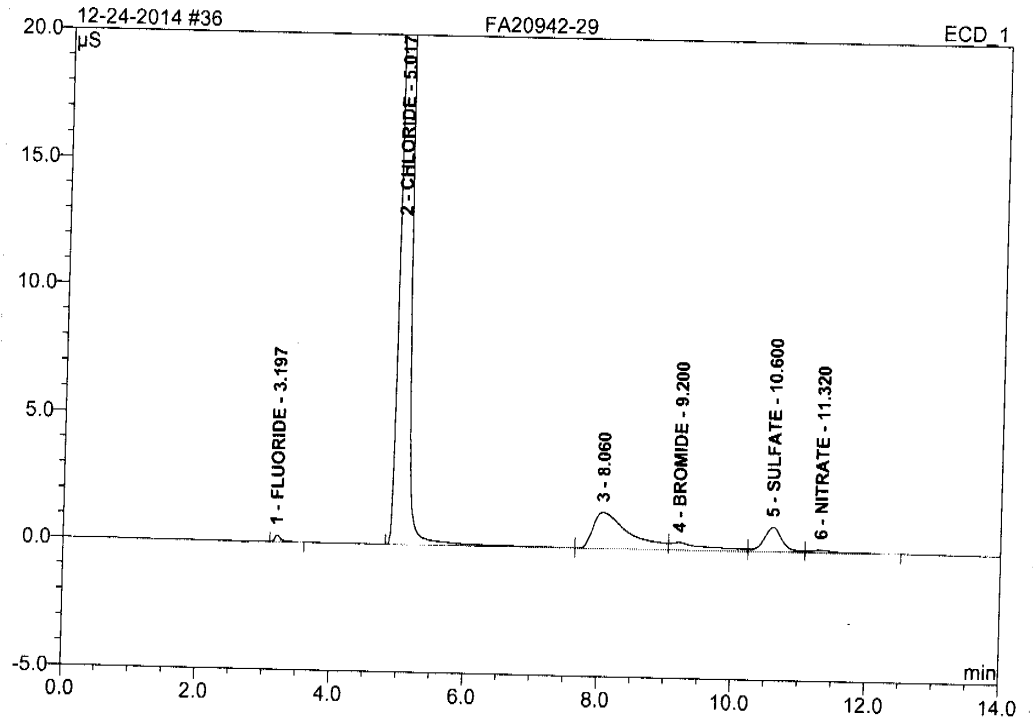
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.00	CHLORIDE	164.822	20.825	96.07	717.751	BM
2	8.12	n.a.	1.116	0.630	2.91	n.a.	M
3	9.20	BROMIDE	0.421	0.193	0.89	14.428	M
4	10.61	SULFATE	0.069	0.028	0.13	1.277	MB
Total:			166.428	21.676	100.00	733.456	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

36 FA20942-29

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-29**	*Injection Volume:*	**25.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 17:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

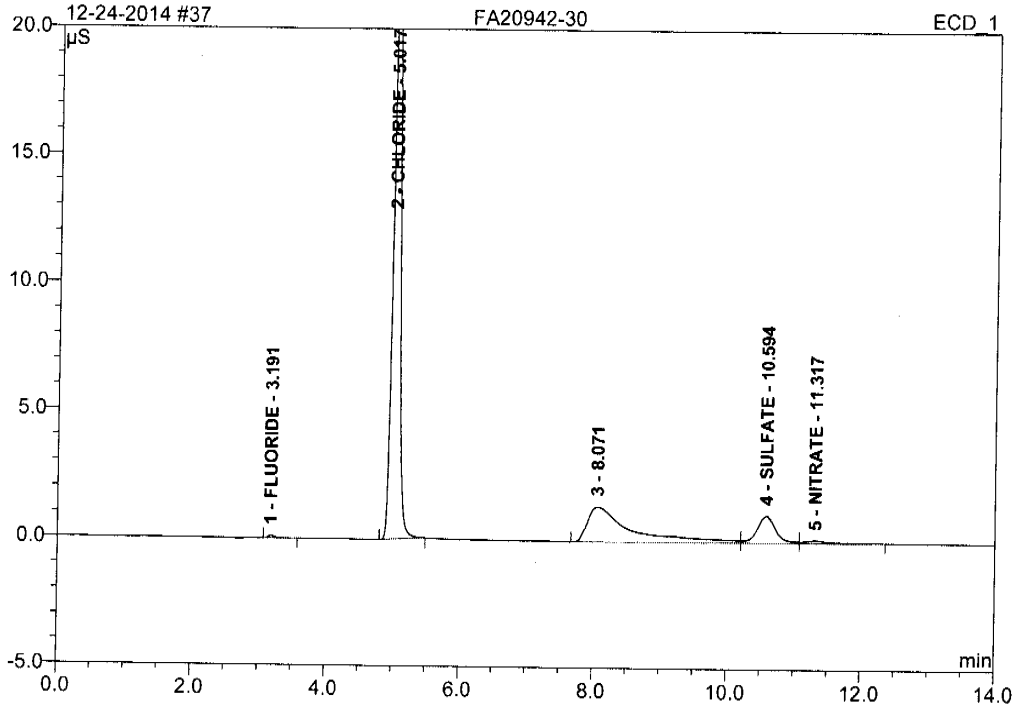


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.250	0.027	0.26	0.481	BMB
2	5.02	CHLORIDE	73.580	9.001	85.96	310.222	BM
3	8.06	n.a.	1.429	0.885	8.45	n.a.	M
4	9.20	BROMIDE	0.302	0.197	1.89	14.790	M
5	10.60	SULFATE	0.962	0.310	2.96	14.118	M
6	11.32	NITRATE	0.110	0.051	0.48	0.620	MB
Total:			76.632	10.470	100.00	340.231	

37 FA20942-30

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-30**	*Injection Volume:*	**25.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 17:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

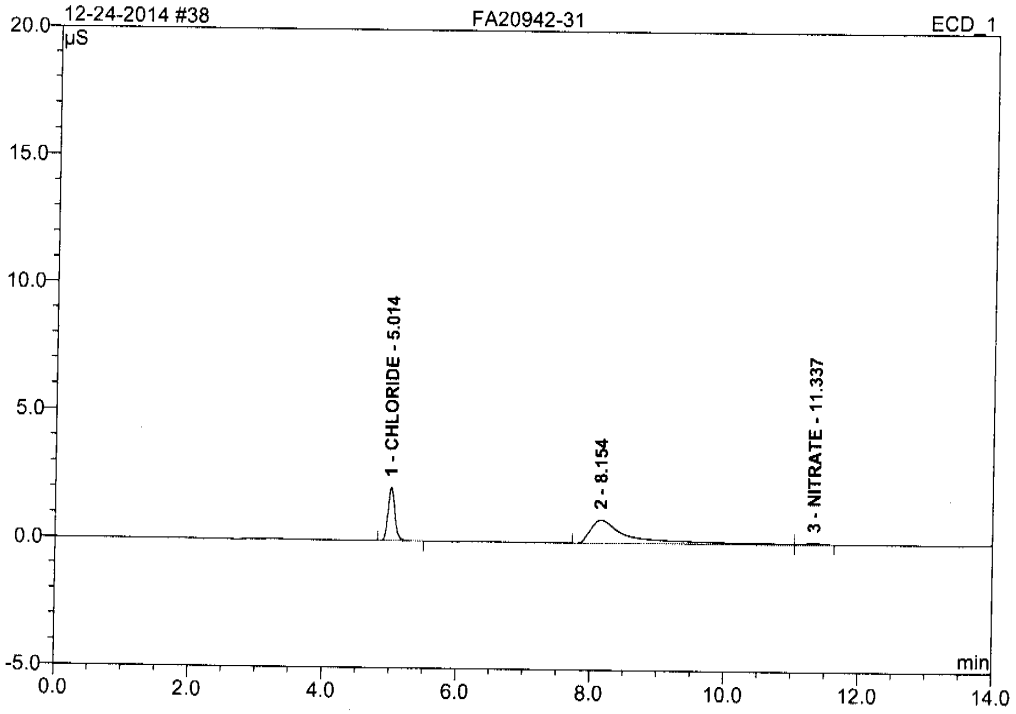


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.106	0.012	0.27	0.103	BMB
2	5.02	CHLORIDE	24.947	2.943	67.86	50.723	BMB
3	8.07	n.a.	1.348	1.004	23.15	n.a.	BM
4	10.59	SULFATE	1.053	0.334	7.70	7.622	M
5	11.32	NITRATE	0.101	0.044	1.02	0.271	MB
Total:			27.555	4.337	100.00	58.719	

38 FA20942-31

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-31**	*Injection Volume:*	**25.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 17:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



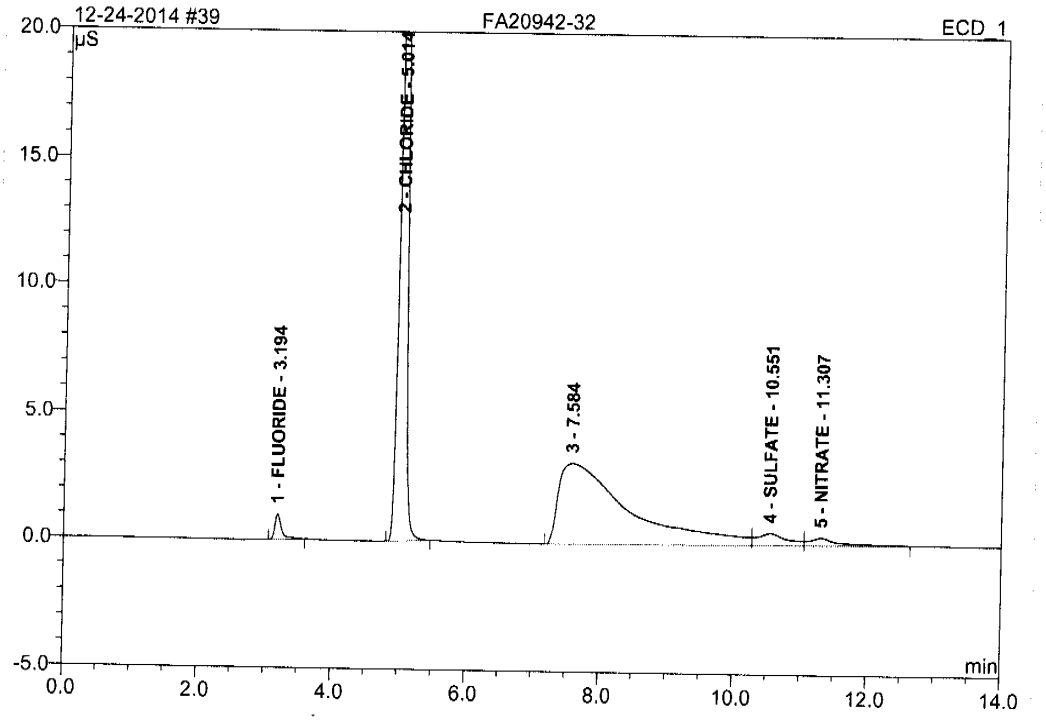
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	2.091	0.247	28.24	4.262	BMB
2	8.15	n.a.	0.908	0.612	69.94	n.a.	BM
3	11.34	NITRATE	0.059	0.016	1.81	0.097	MB
Total:			3.058	0.876	100.00	4.359	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

39 FA20942-32

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-32**	*Injection Volume:*	**25.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 18:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

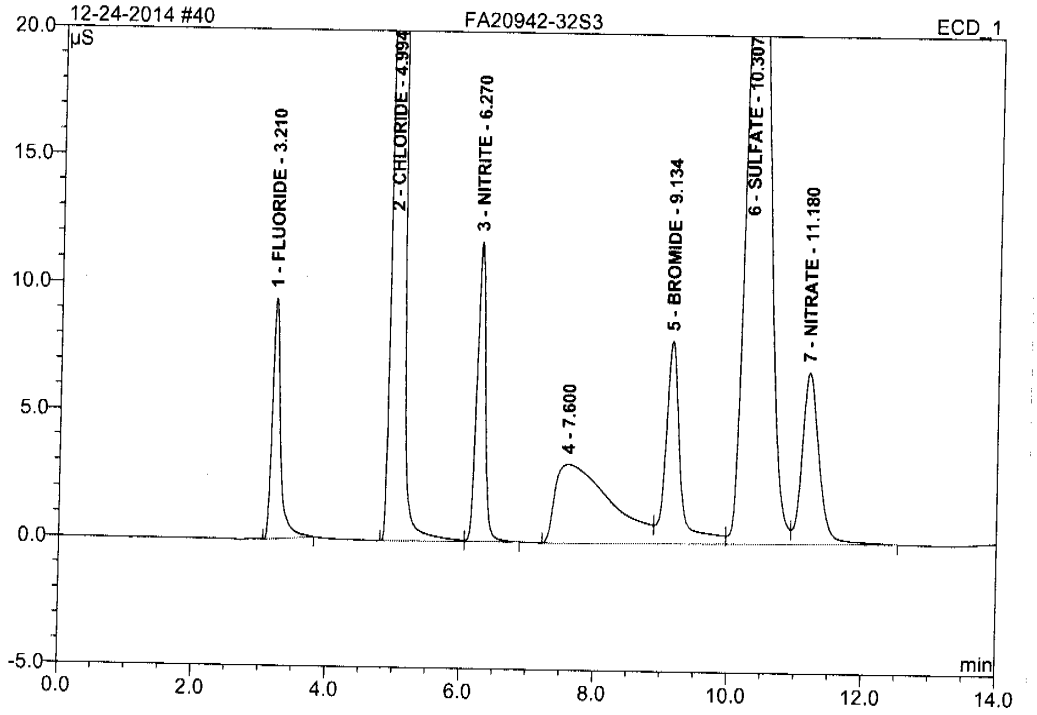


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.997	0.115	1.46	0.201	BMB
2	5.01	CHLORIDE	29.578	3.441	43.89	11.859	BMB
3	7.58	n.a.	3.190	3.893	49.66	n.a.	BM
4	10.55	SULFATE	0.468	0.239	3.04	1.088	M
5	11.31	NITRATE	0.294	0.153	1.95	0.188	MB
Total:			34.528	7.841	100.00	13.336	

40 FA20942-32S3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-32S3**	*Injection Volume:*	**25.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 18:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.435	1.337	3.38	2.345	BMB
2	4.99	CHLORIDE	150.270	18.415	46.55	63.469	BM
3	6.27	NITRITE	11.737	1.735	4.39	2.208	MB
4	7.60	n.a.	3.071	2.936	7.42	n.a.	BM
5	9.13	BROMIDE	7.940	1.999	5.05	14.979	M
6	10.31	SULFATE	29.613	11.150	28.19	50.862	M
7	11.18	NITRATE	6.732	1.985	5.02	2.435	MB
Total:			218.797	39.558	100.00	136.299	

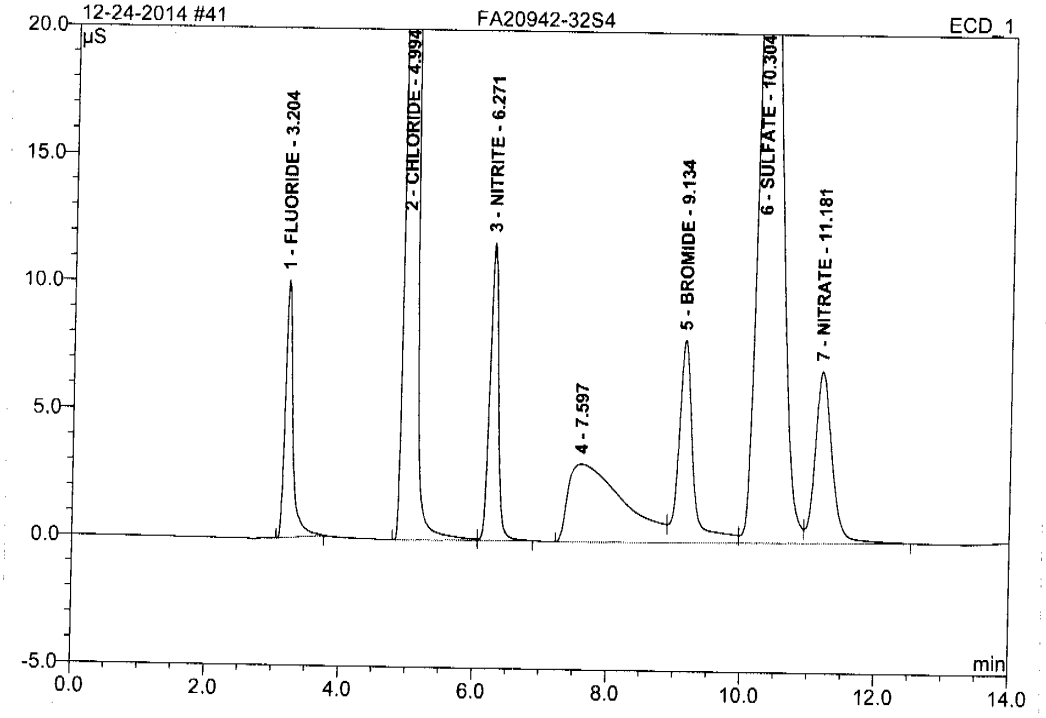
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

41 FA20942-32S4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-32S4**	*Injection Volume:*	**25.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 18:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



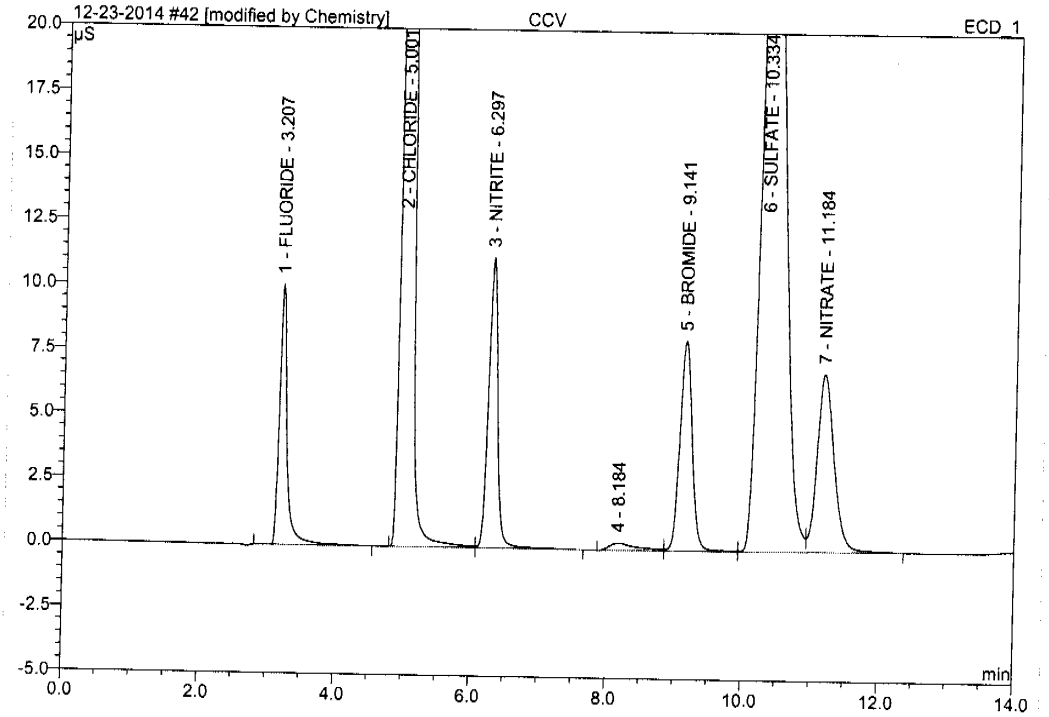
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.098	1.344	3.40	2.357	BMB
2	4.99	CHLORIDE	150.542	18.403	46.56	63.428	BM
3	6.27	NITRITE	11.692	1.734	4.39	2.206	MB
4	7.60	n.a.	3.063	2.924	7.40	n.a.	BM
5	9.13	BROMIDE	7.915	1.983	5.02	14.859	M
6	10.30	SULFATE	30.270	11.150	28.21	50.861	M
7	11.18	NITRATE	6.733	1.985	5.02	2.435	MB
Total:			220.313	39.522	100.00	136.145	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

42 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	10.076	1.328	4.03	2.328	BMB*
2	5.00	CHLORIDE	121.585	14.997	45.48	51.689	BM *
3	6.30	NITRITE	11.234	1.773	5.38	2.257	MB*
4	8.18	n.a.	0.284	0.137	0.41	n.a.	BM
5	9.14	BROMIDE	8.126	1.695	5.14	12.703	M
6	10.33	SULFATE	29.804	11.045	33.50	50.382	M
7	11.18	NITRATE	6.882	1.999	6.06	2.452	MB
Total:			187.990	32.974	100.00	121.811	

1-4 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

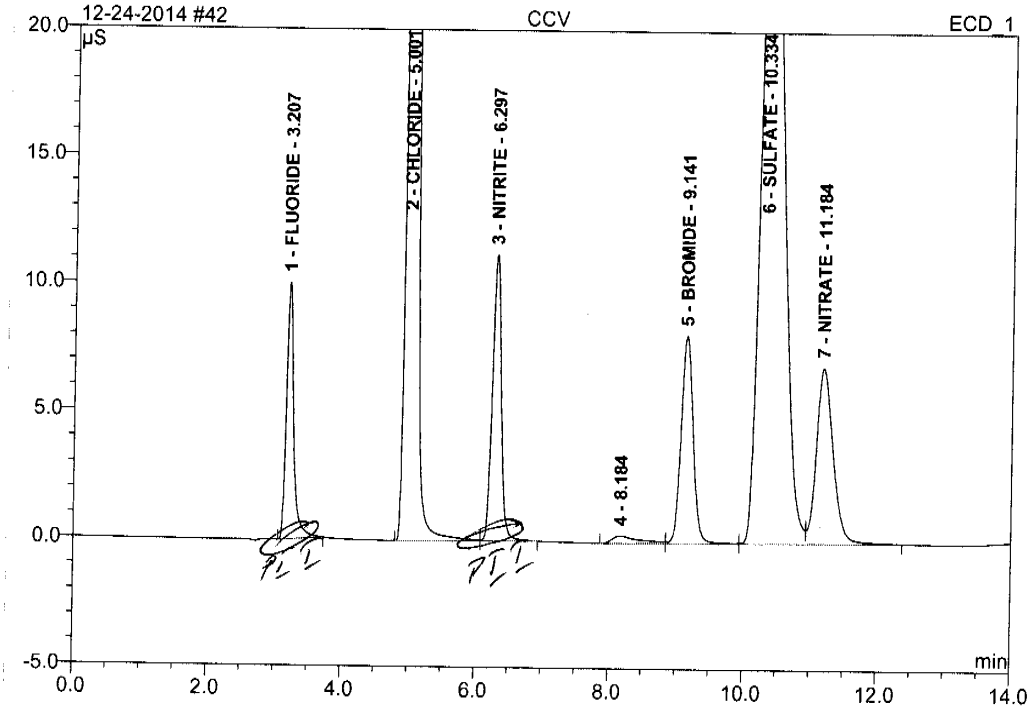
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

42 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	10.054	1.268	3.86	2.223	BMB
2	5.00	CHLORIDE	121.581	14.981	45.60	51.635	BM
3	6.30	NITRITE	11.205	1.733	5.27	2.205	MB
4	8.18	n.a.	0.284	0.137	0.42	n.a.	BM
5	9.14	BROMIDE	8.126	1.695	5.16	12.703	M
6	10.33	SULFATE	29.804	11.045	33.62	50.382	M
7	11.18	NITRATE	6.882	1.999	6.08	2.452	MB
Total:			187.936	32.857	100.00	121.600	

12-24-2014 12/24/14

Anions/Integration

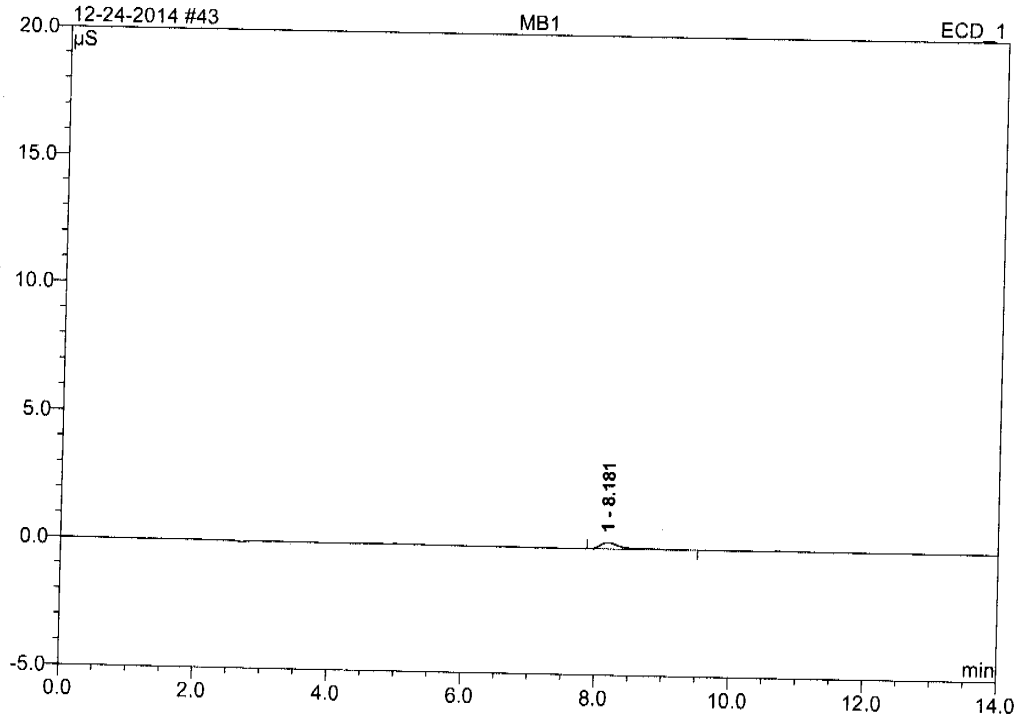
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

43 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.18	n.a.	0.251	0.092	100.00	n.a.	BMB
Total:			0.251	0.092	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

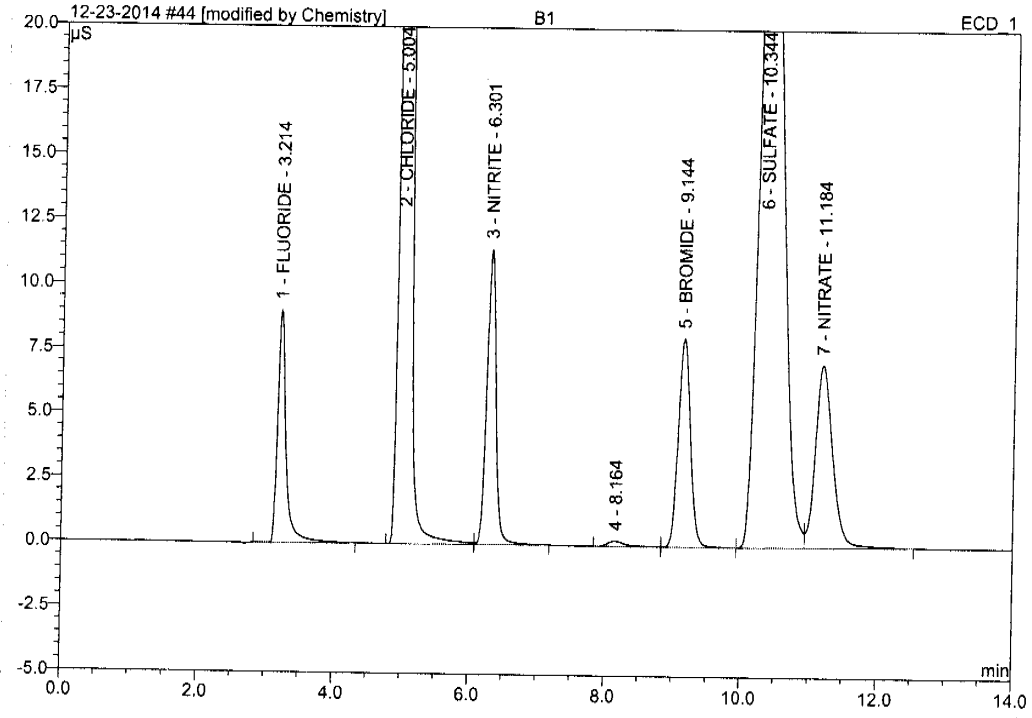
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:26 AM

44 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.007	1.291	3.89	2.263	BMB*
2	5.00	CHLORIDE	122.162	15.120	45.55	52.112	BM *
3	6.30	NITRITE	11.404	1.785	5.38	2.271	MB*
4	8.16	n.a.	0.200	0.062	0.19	n.a.	BM
5	9.14	BROMIDE	8.057	1.663	5.01	12.460	MB
6	10.34	SULFATE	29.420	11.188	33.71	51.036	BM
7	11.18	NITRATE	7.059	2.082	6.27	2.554	MB
Total:			187.308	33.190	100.00	122.696	

Th 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

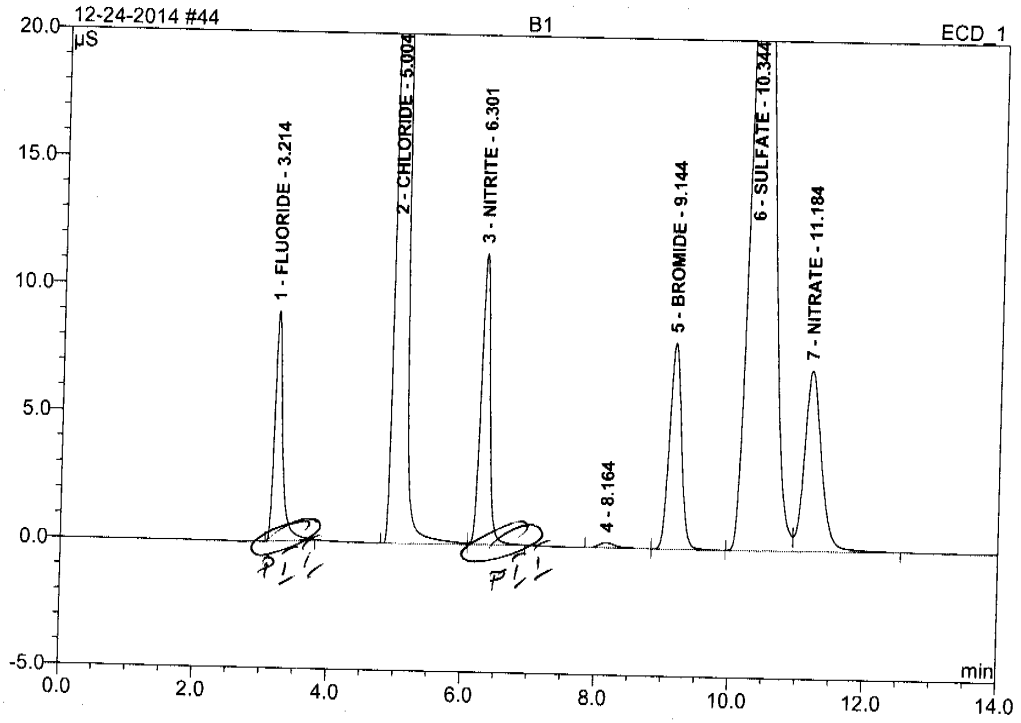
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

44 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.991	1.243	3.75	2.180	BMB
2	5.00	CHLORIDE	122.160	15.111	45.63	52.083	BM
3	6.30	NITRITE	11.389	1.767	5.34	2.249	MB
4	8.16	n.a.	0.200	0.062	0.19	n.a.	BM
5	9.14	BROMIDE	8.057	1.663	5.02	12.460	MB
6	10.34	SULFATE	29.420	11.188	33.78	51.036	BM
7	11.18	NITRATE	7.059	2.082	6.29	2.554	MB
Total:			187.275	33.117	100.00	122.561	

12-24-2014 12/24/14

Anions/Integration

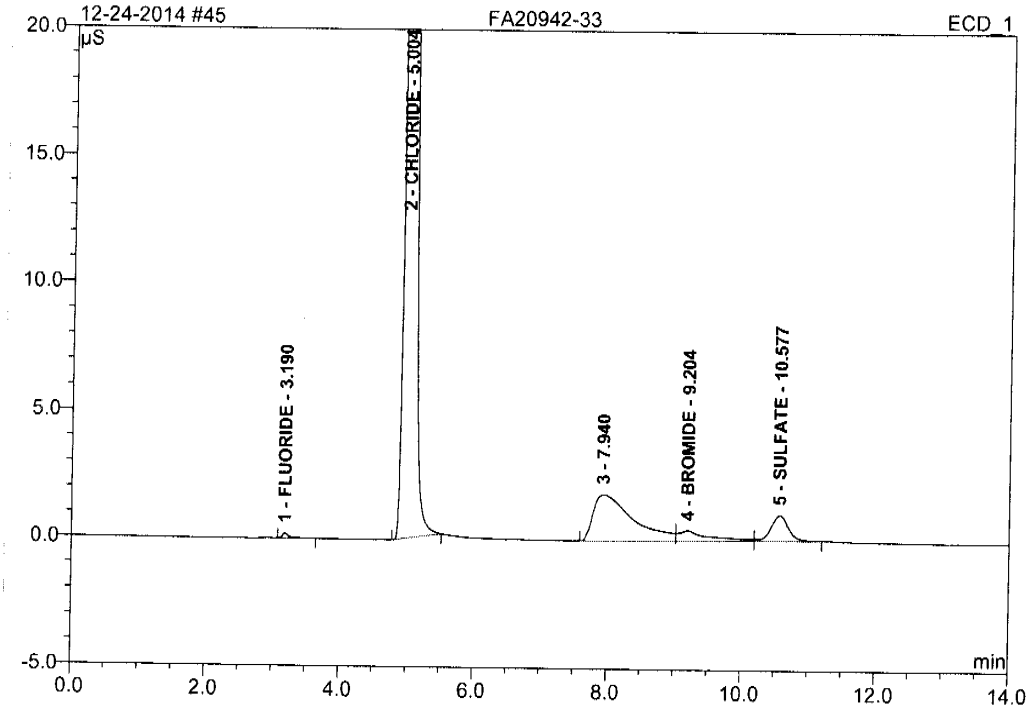
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

45 FA20942-33

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-33**	*Injection Volume:*	**25.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 19:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



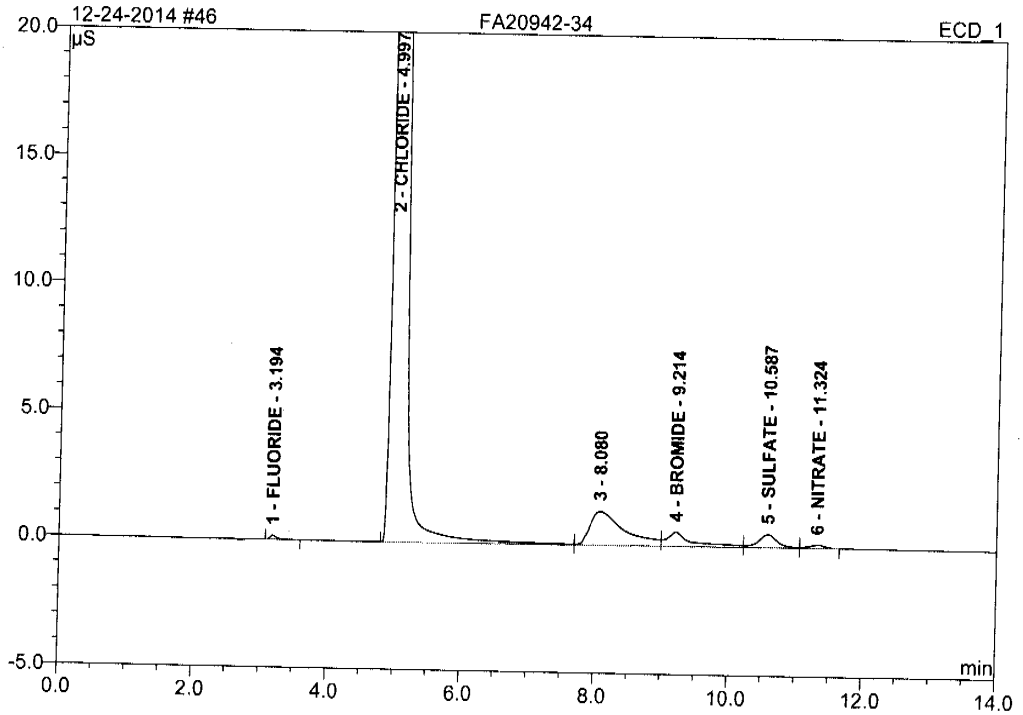
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.194	0.022	0.14	0.192	BMB
2	5.00	CHLORIDE	117.075	14.316	88.75	246.710	BMB
3	7.94	n.a.	1.834	1.259	7.80	n.a.	BM
4	9.20	BROMIDE	0.407	0.226	1.40	8.450	M
5	10.58	SULFATE	1.020	0.308	1.91	7.030	MB
Total:			120.530	16.130	100.00	262.382	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

46 FA20942-34

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-34**	*Injection Volume:*	**25.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 20:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.158	0.018	0.07	0.314	BMB
2	5.00	CHLORIDE	202.739	25.997	95.39	896.003	BM
3	8.08	n.a.	1.312	0.784	2.88	n.a.	M
4	9.21	BROMIDE	0.557	0.249	0.92	18.692	M
5	10.59	SULFATE	0.505	0.169	0.62	7.725	M
6	11.32	NITRATE	0.124	0.035	0.13	0.429	MB
Total:			205.394	27.252	100.00	923.164	

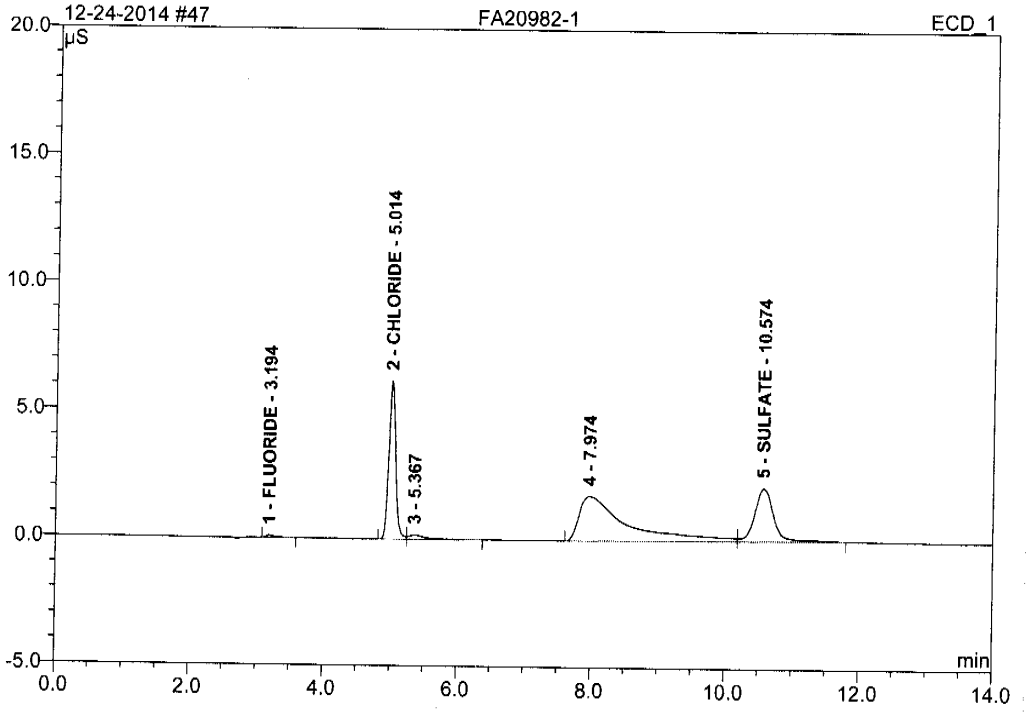
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

47 FA20982-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-1**	*Injection Volume:*	**25.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 20:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

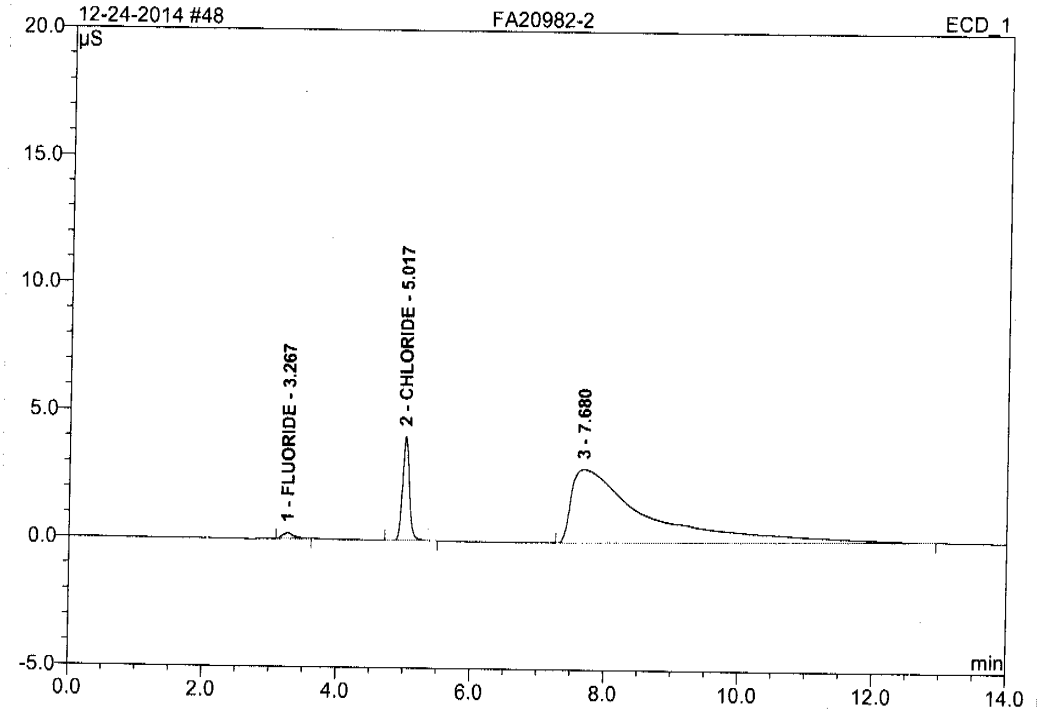


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.098	0.015	0.51	0.131	BMB
2	5.01	CHLORIDE	6.191	0.729	24.84	12.563	BM
3	5.37	n.a.	0.171	0.051	1.75	n.a.	MB
4	7.97	n.a.	1.738	1.448	49.35	n.a.	BM
5	10.57	SULFATE	2.076	0.691	23.55	15.763	MB
Total:			10.273	2.935	100.00	28.456	

48 FA20982-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-2**	*Injection Volume:*	**25.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 20:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.27	FLUORIDE	0.235	0.044	1.03	0.156	BMB
2	5.02	CHLORIDE	4.074	0.479	11.10	3.302	BMB
3	7.68	n.a.	2.883	3.791	87.87	n.a.	BMB
Total:			7.191	4.314	100.00	3.458	

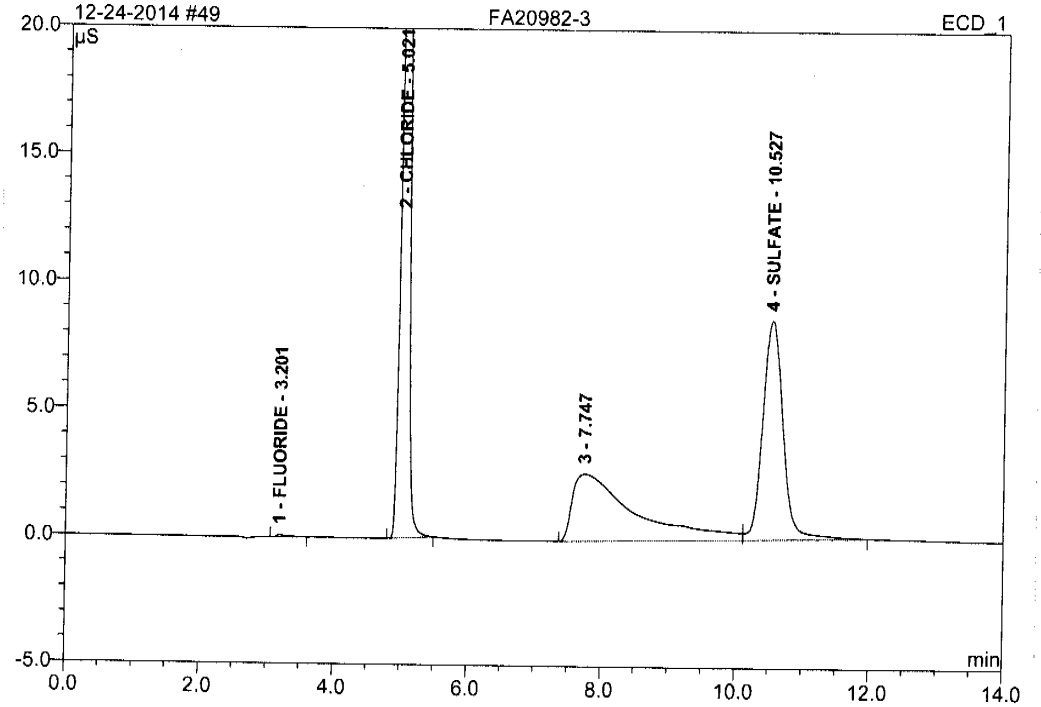
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

49 FA20982-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-3**	*Injection Volume:*	**25.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 21:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.090	0.014	0.13	0.047	BMB
2	5.02	CHLORIDE	40.333	4.764	44.61	32.836	BMB
3	7.75	n.a.	2.630	2.862	26.81	n.a.	BM
4	10.53	SULFATE	8.581	3.038	28.45	27.716	MB
Total:			51.634	10.677	100.00	60.600	

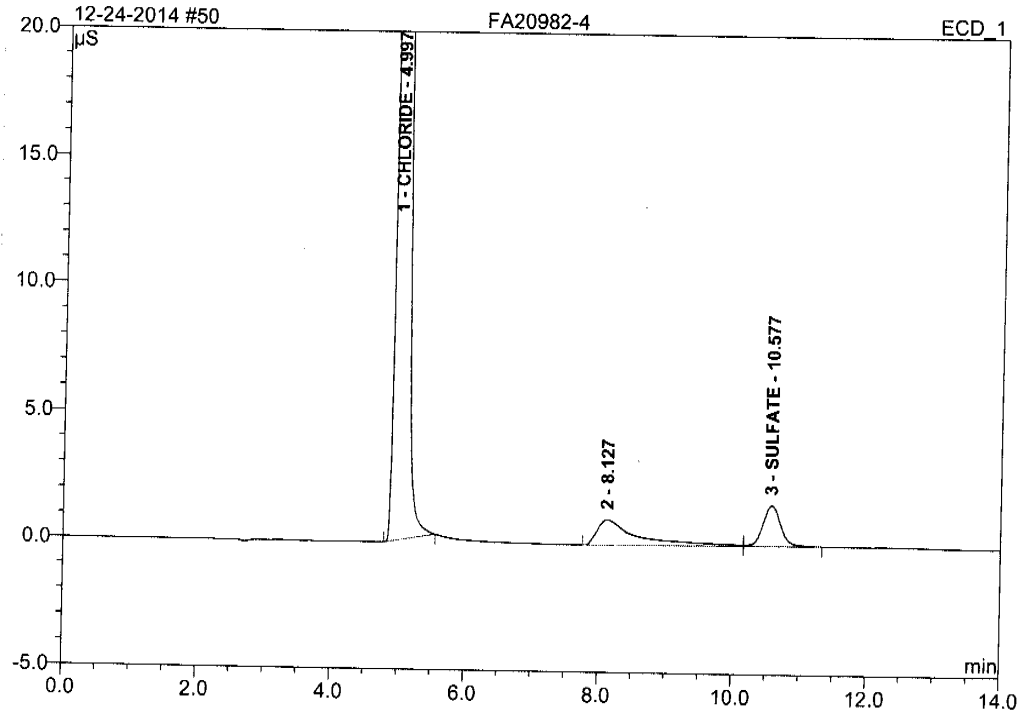
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

50 FA20982-4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-4**	*Injection Volume:*	**25.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 21:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



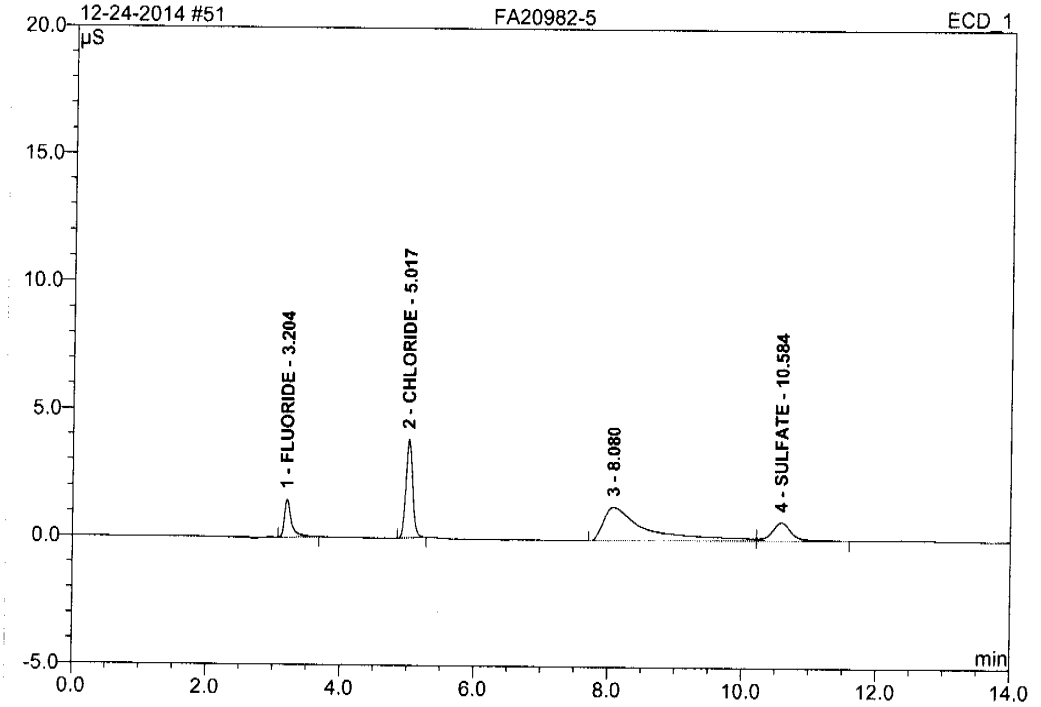
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.00	CHLORIDE	160.124	19.964	94.32	688.075	BMB
2	8.13	n.a.	1.003	0.707	3.34	n.a.	BM
3	10.58	SULFATE	1.608	0.497	2.35	22.649	MB
Total:			162.735	21.167	100.00	710.724	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

51 FA20982-5

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-5**	*Injection Volume:*	**25.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 21:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



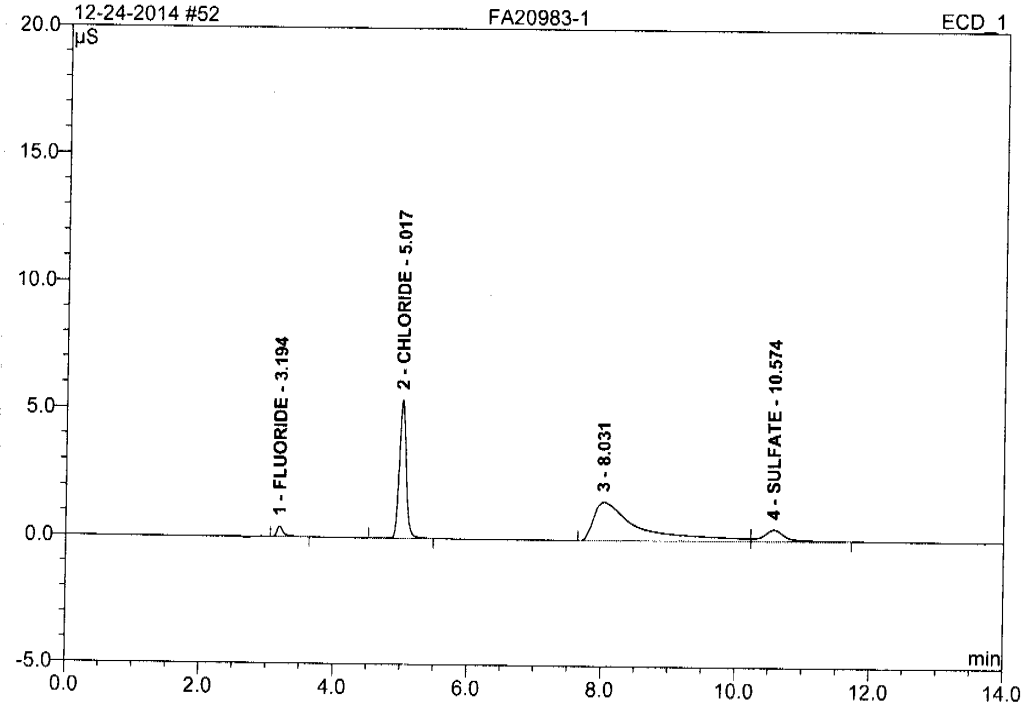
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	1.475	0.178	9.68	1.557	BMB
2	5.02	CHLORIDE	3.859	0.447	24.38	7.707	BMB
3	8.08	n.a.	1.297	0.965	52.58	n.a.	BM
4	10.58	SULFATE	0.719	0.245	13.36	5.590	MB
Total:			7.350	1.835	100.00	14.855	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

52 FA20983-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20983-1**	*Injection Volume:*	**25.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 21:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.414	0.046	2.25	0.401	BMB
2	5.02	CHLORIDE	5.394	0.640	31.52	11.029	BMB
3	8.03	n.a.	1.503	1.169	57.56	n.a.	BM
4	10.57	SULFATE	0.456	0.176	8.67	4.014	MB
Total:			7.767	2.030	100.00	15.444	

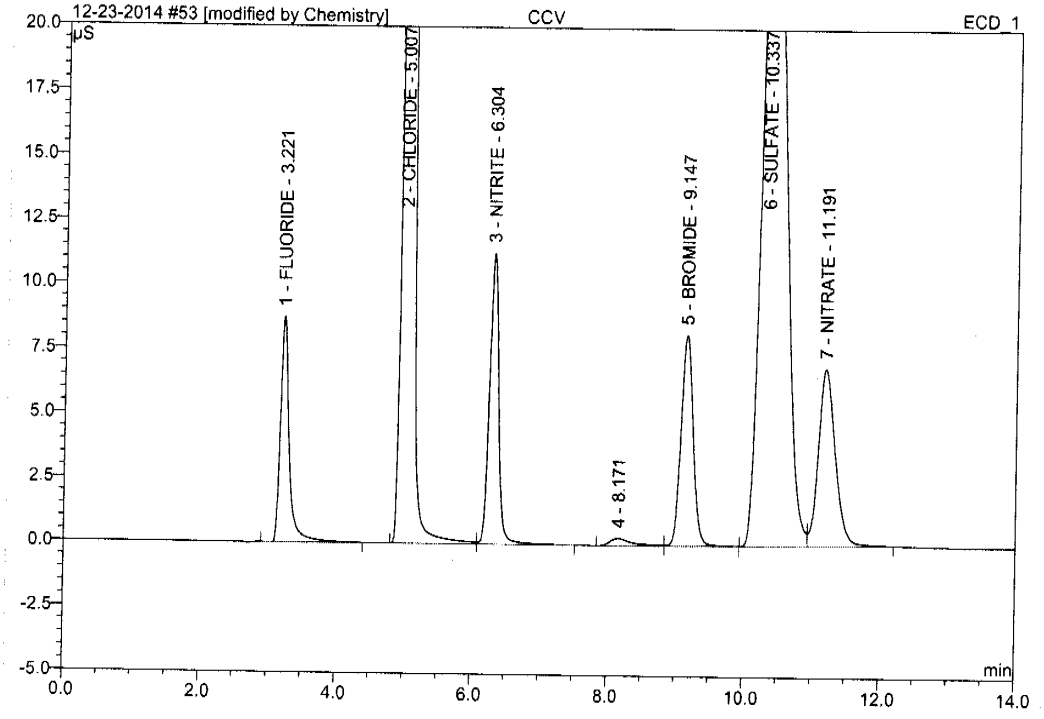
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

53 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.730	1.314	3.98	2.304	BMB*
2	5.01	CHLORIDE	121.155	15.062	45.64	51.911	BM *
3	6.30	NITRITE	11.258	1.777	5.38	2.261	MB*
4	8.17	n.a.	0.283	0.108	0.33	n.a.	BM
5	9.15	BROMIDE	8.161	1.692	5.13	12.677	MB
6	10.34	SULFATE	29.047	11.059	33.51	50.446	BM
7	11.19	NITRATE	6.864	1.986	6.02	2.436	MB
Total:			185.498	32.997	100.00	122.035	

12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

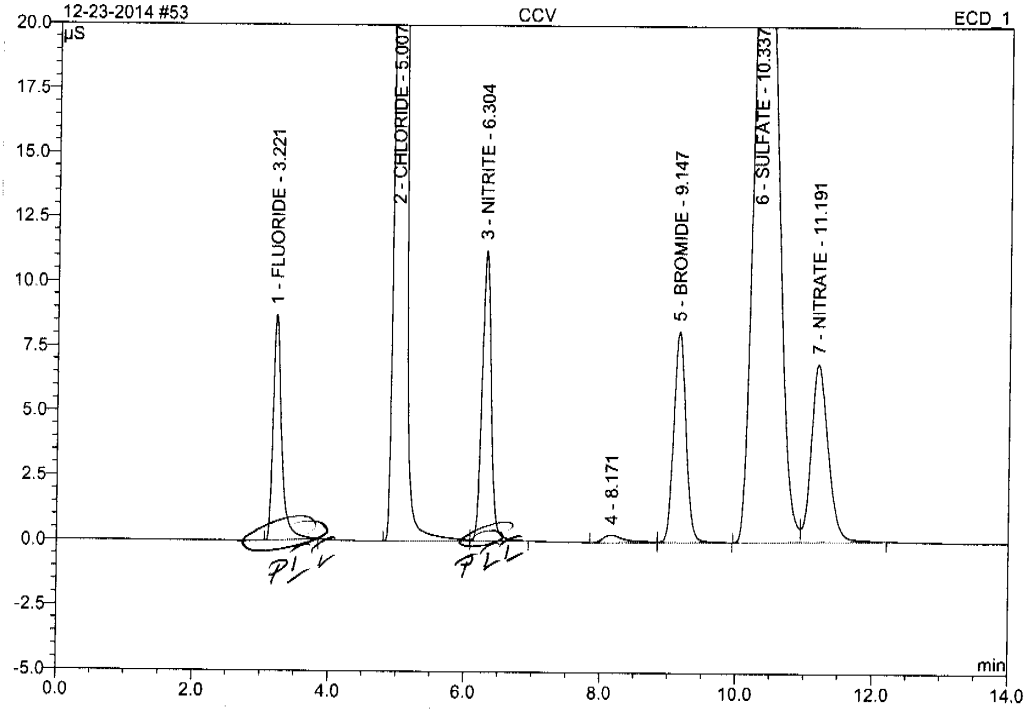
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:33 AM

53 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.721	1.274	3.87	2.234	BMB
2	5.01	CHLORIDE	121.151	15.046	45.73	51.858	BM
3	6.30	NITRITE	11.230	1.740	5.29	2.214	MB
4	8.17	n.a.	0.283	0.108	0.33	n.a.	BM
5	9.15	BROMIDE	8.161	1.692	5.14	12.677	MB
6	10.34	SULFATE	29.047	11.059	33.61	50.446	BM
7	11.19	NITRATE	6.864	1.986	6.04	2.436	MB
Total:			185.457	32.905	100.00	121.865	

14 12-24-2014 12/24/14

Anions/Integration

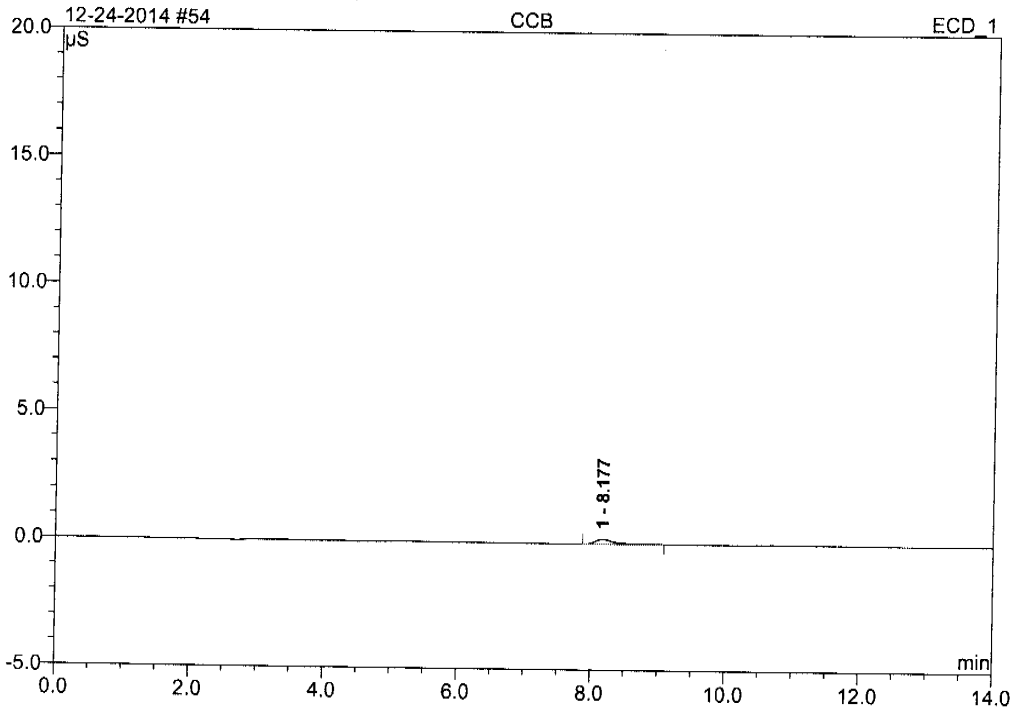
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

54 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 22:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.18	n.a.	0.184	0.062	100.00	n.a.	BMB
Total:			0.184	0.062	100.00	0.000	

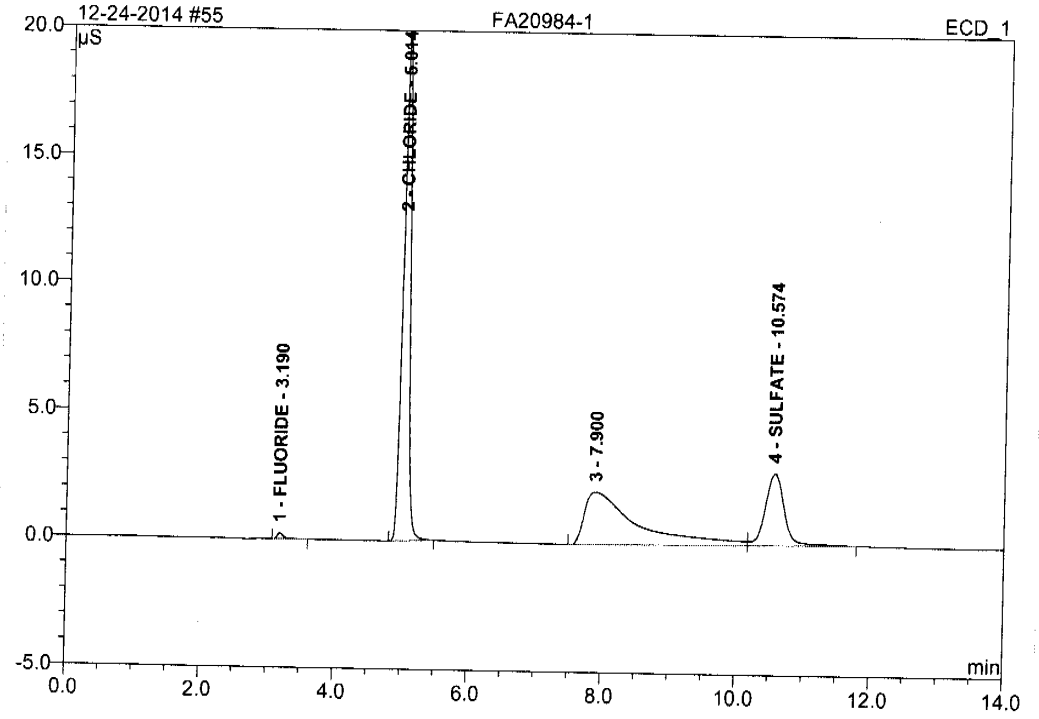
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

55 FA20984-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20984-1**	*Injection Volume:*	**25.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 22:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.233	0.026	0.50	0.228	BMB
2	5.01	CHLORIDE	20.283	2.388	45.81	41.157	BMB
3	7.90	n.a.	2.054	1.865	35.76	n.a.	BM
4	10.57	SULFATE	2.841	0.935	17.93	21.323	MB
Total:			25.410	5.214	100.00	62.708	

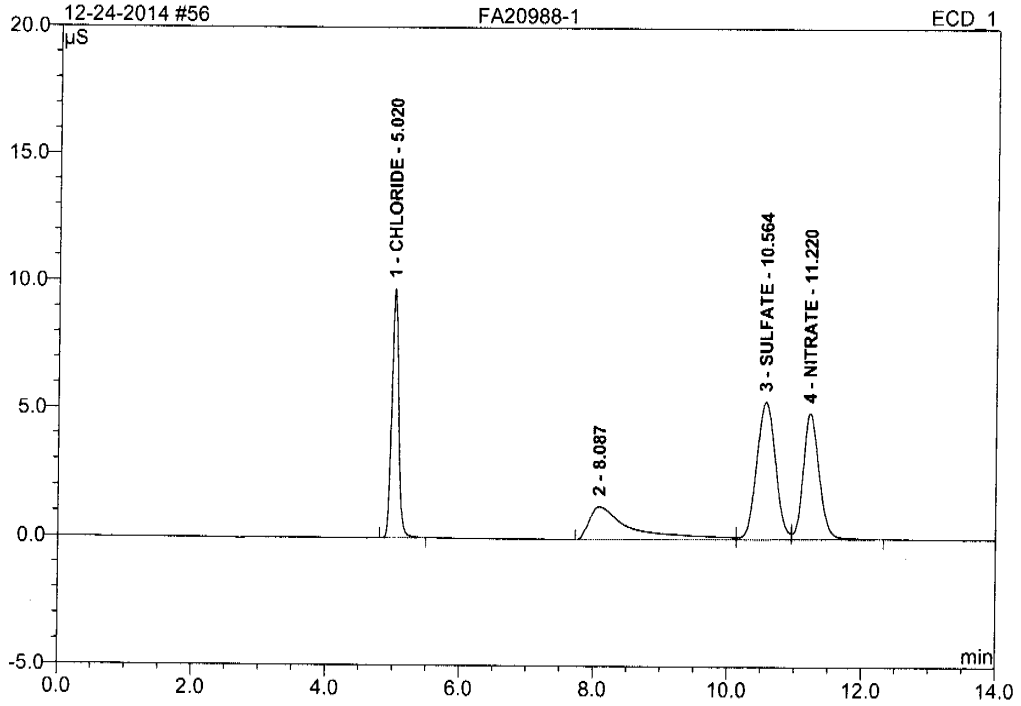
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

56 FA20988-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-1**	*Injection Volume:*	**25.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 23:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



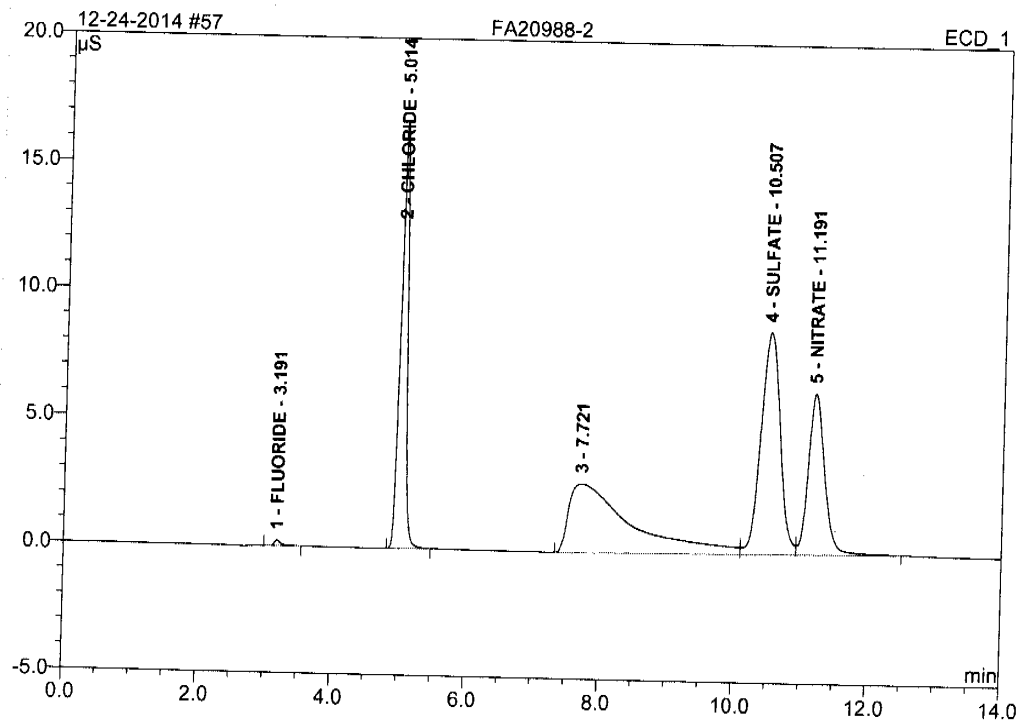
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.02	CHLORIDE	9.735	1.148	22.22	19.780	BMB
2	8.09	n.a.	1.270	0.928	17.97	n.a.	BM
3	10.56	SULFATE	5.338	1.737	33.61	39.608	M
4	11.22	NITRATE	4.898	1.354	26.20	8.302	MB
Total:			21.240	5.166	100.00	67.690	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

57 FA20988-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-2**	*Injection Volume:*	**25.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 23:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.217	0.025	0.26	0.043	BMB
2	5.01	CHLORIDE	16.713	1.951	20.36	6.725	BMB
3	7.72	n.a.	2.707	2.928	30.55	n.a.	BM
4	10.51	SULFATE	8.699	2.881	30.06	13.143	M
5	11.19	NITRATE	6.309	1.800	18.78	2.208	MB
Total:			34.645	9.584	100.00	22.119	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

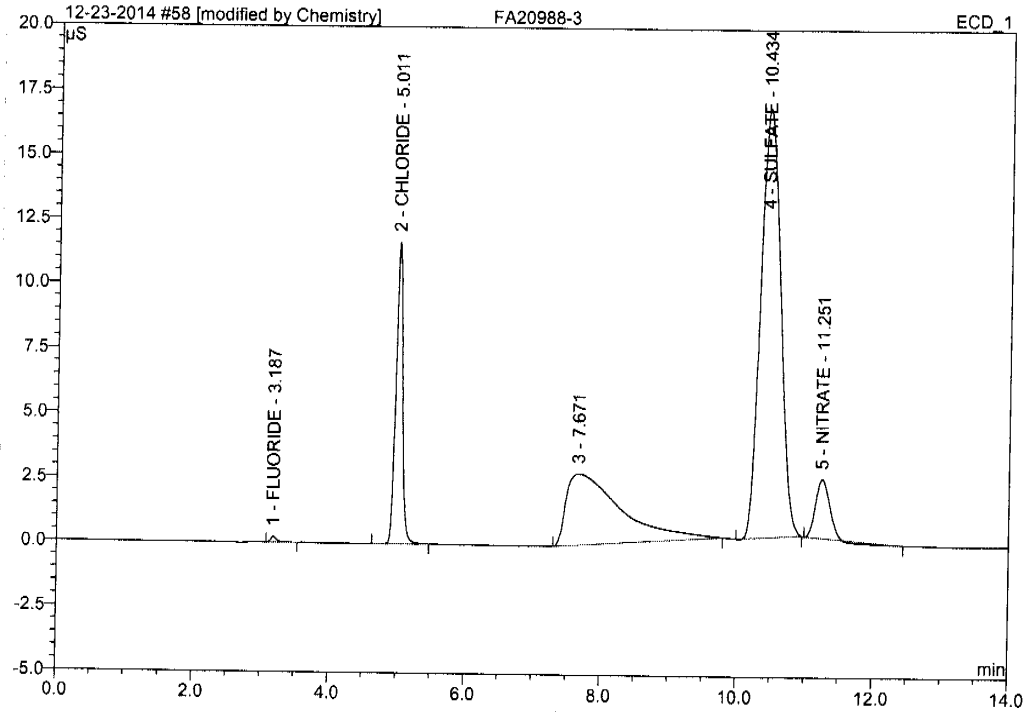
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:37 AM

58 FA20988-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3**	*Injection Volume:*	**25.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 23:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.239	0.026	0.26	0.046	BMB
2	5.01	CHLORIDE	11.685	1.363	13.48	4.699	BMB
3	7.67	n.a.	2.775	2.601	25.72	n.a.	BMB*
4	10.43	SULFATE	16.607	5.611	55.48	25.595	BMB*
5	11.25	NITRATE	2.294	0.511	5.06	0.627	BMB*
Total:			33.600	10.113	100.00	30.967	

VK 12-24-2014 12/24/14

Anions/Integration

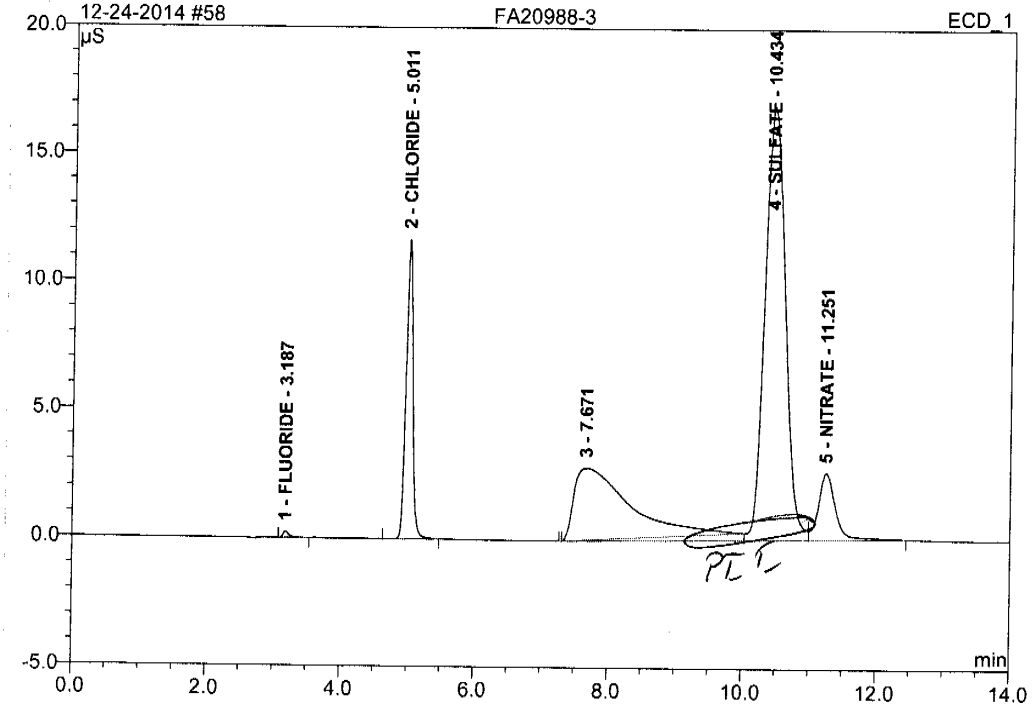
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

58 FA20988-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3**	*Injection Volume:*	**25.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 23:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.239	0.026	0.23	0.046	BMB
2	5.01	CHLORIDE	11.685	1.363	12.17	4.699	BMB
3	7.67	n.a.	2.787	2.714	24.22	n.a.	Ru
4	10.43	SULFATE	16.942	6.321	56.42	28.833	BM
5	11.25	NITRATE	2.596	0.778	6.95	0.955	MB
Total:			34.248	11.202	100.00	34.532	

PL 12-24-2014

12/24/14

Anions/Integration

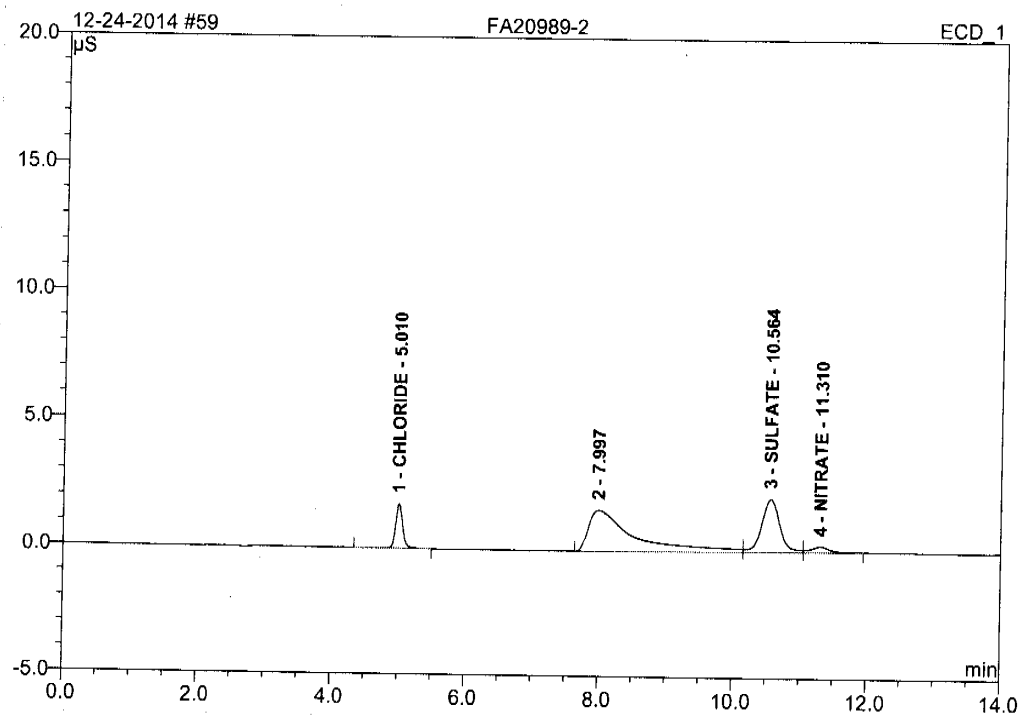
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

59 FA20989-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20989-2**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 23:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

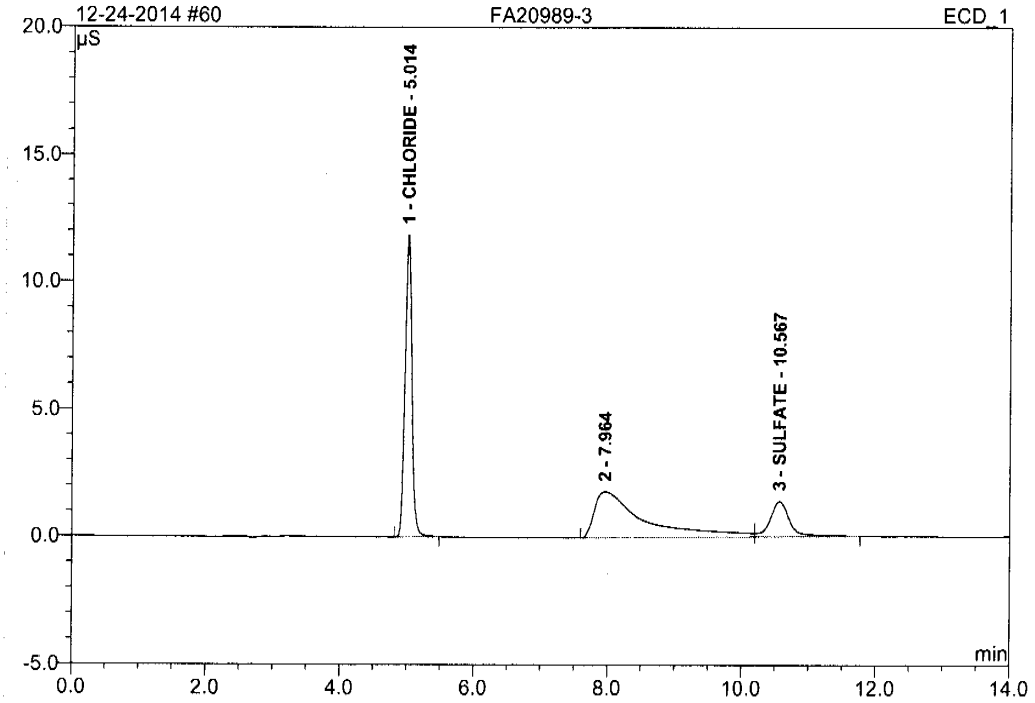


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	1.754	0.215	9.75	7.424	BMB
2	8.00	n.a.	1.611	1.266	57.31	n.a.	BM
3	10.56	SULFATE	2.088	0.654	29.58	29.815	M
4	11.31	NITRATE	0.227	0.074	3.36	0.910	MB
Total:			5.680	2.209	100.00	38.148	

60 FA20989-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20989-3**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/24/2014 0:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



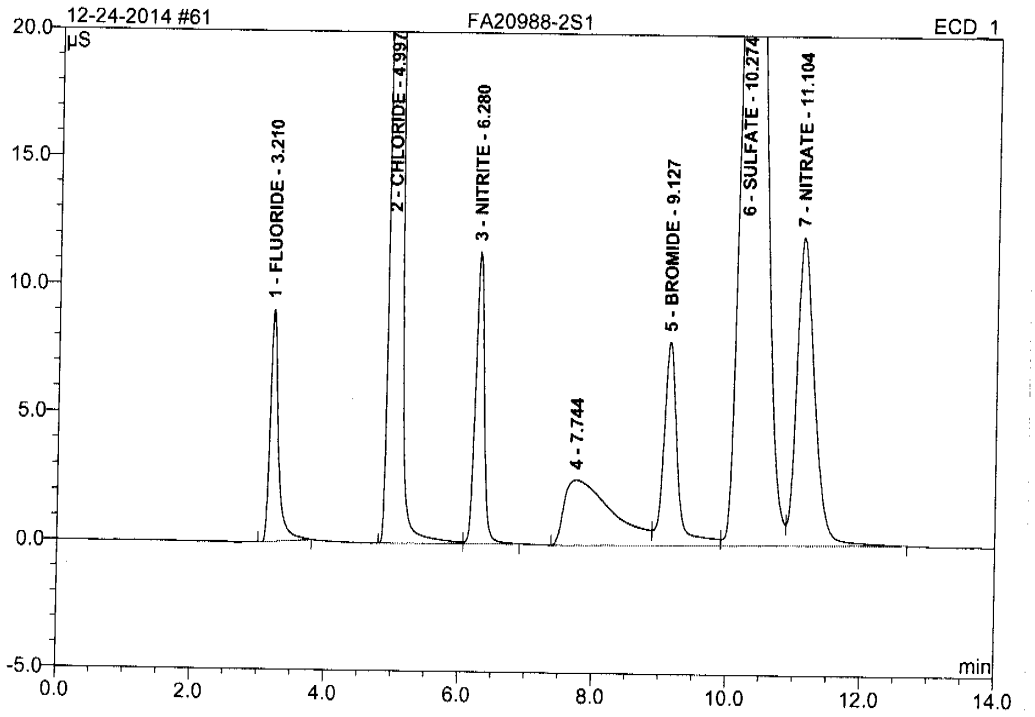
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	11.853	1.397	41.29	48.160	BMB
2	7.96	n.a.	1.788	1.526	45.10	n.a.	BM
3	10.57	SULFATE	1.372	0.461	13.61	21.019	MB
Total:			15.013	3.384	100.00	69.179	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

61 FA20988-2S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-2S1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 0:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



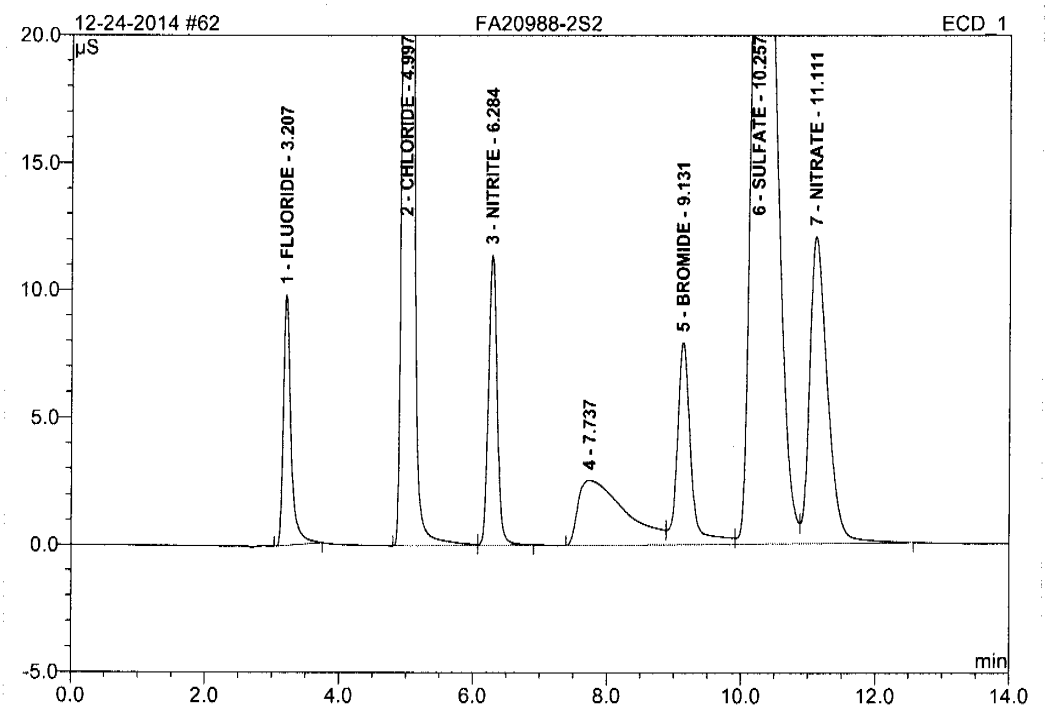
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.043	1.284	3.11	2.251	BMB
2	5.00	CHLORIDE	136.936	16.844	40.75	58.055	BM
3	6.28	NITRITE	11.376	1.715	4.15	2.182	MB
4	7.74	n.a.	2.553	2.120	5.13	n.a.	BM
5	9.13	BROMIDE	7.921	1.891	4.58	14.171	M
6	10.27	SULFATE	35.341	13.755	33.28	62.743	M
7	11.10	NITRATE	12.018	3.726	9.01	4.570	MB
Total:			215.188	41.334	100.00	143.974	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

62 FA20988-2S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-2S2**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 0:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



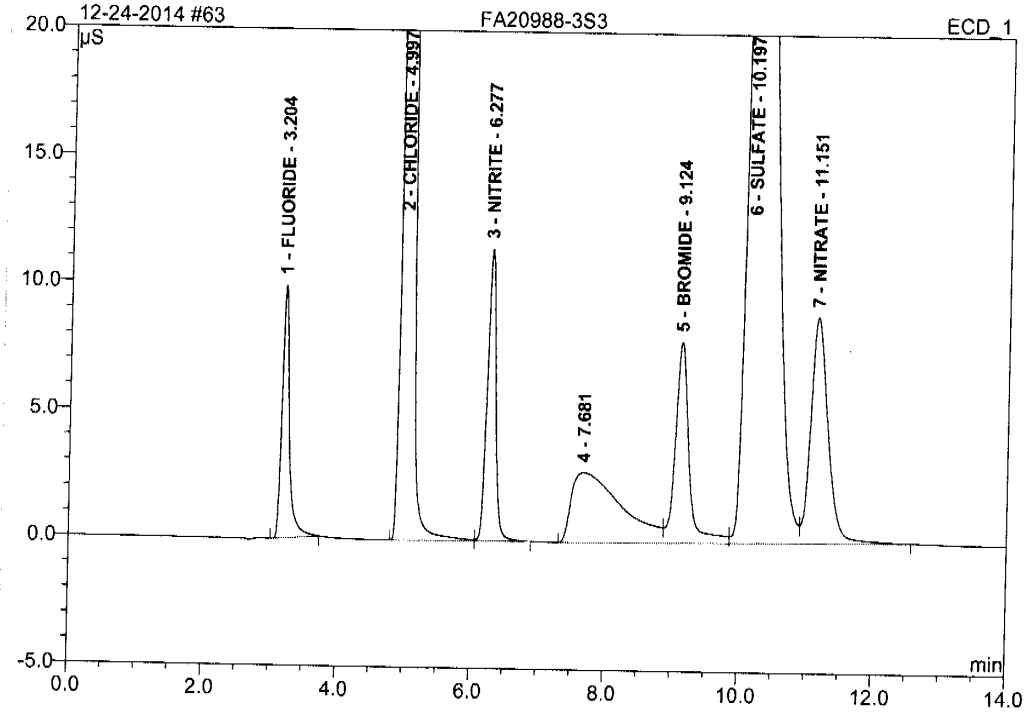
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.826	1.291	3.13	2.264	BMB
2	5.00	CHLORIDE	137.343	16.827	40.76	57.996	BM
3	6.28	NITRITE	11.372	1.708	4.14	2.173	MB
4	7.74	n.a.	2.549	2.103	5.09	n.a.	BM
5	9.13	BROMIDE	7.904	1.873	4.54	14.037	M
6	10.26	SULFATE	35.973	13.773	33.36	62.828	M
7	11.11	NITRATE	12.033	3.707	8.98	4.548	MB
Total:			217.001	41.283	100.00	143.846	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

63 FA20988-3S3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3S3**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	9.919	1.277	2.97	2.239	BMB
2	5.00	CHLORIDE	133.331	16.300	37.98	56.180	BM
3	6.28	NITRITE	11.441	1.713	3.99	2.180	MB
4	7.68	n.a.	2.738	2.368	5.52	n.a.	BM
5	9.12	BROMIDE	7.894	1.875	4.37	14.049	M
6	10.20	SULFATE	41.547	16.721	38.96	76.274	M
7	11.15	NITRATE	8.879	2.667	6.21	3.272	MB
Total:			215.750	42.921	100.00	154.194	

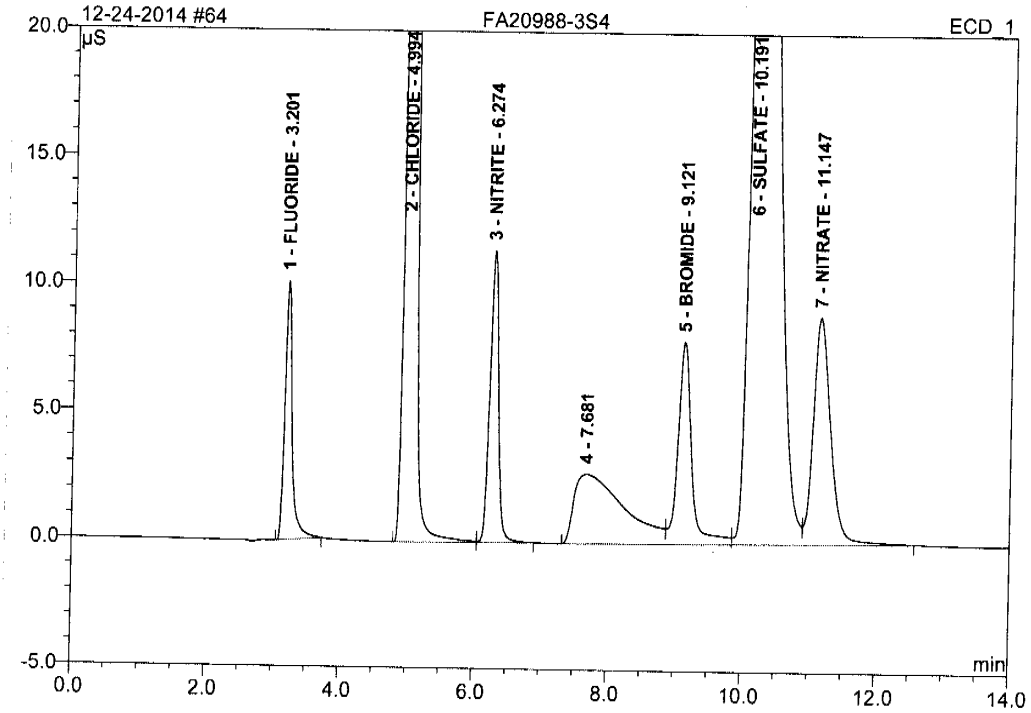
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

64 FA20988-3S4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3S4**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.138	1.282	2.99	2.248	BMB
2	4.99	CHLORIDE	133.120	16.269	37.92	56.074	BM
3	6.27	NITRITE	11.421	1.711	3.99	2.178	MB
4	7.68	n.a.	2.735	2.367	5.52	n.a.	BM
5	9.12	BROMIDE	7.894	1.879	4.38	14.080	M
6	10.19	SULFATE	41.836	16.722	38.97	76.276	M
7	11.15	NITRATE	8.875	2.674	6.23	3.280	MB
Total:			216.019	42.904	100.00	154.137	

Anions/Integration

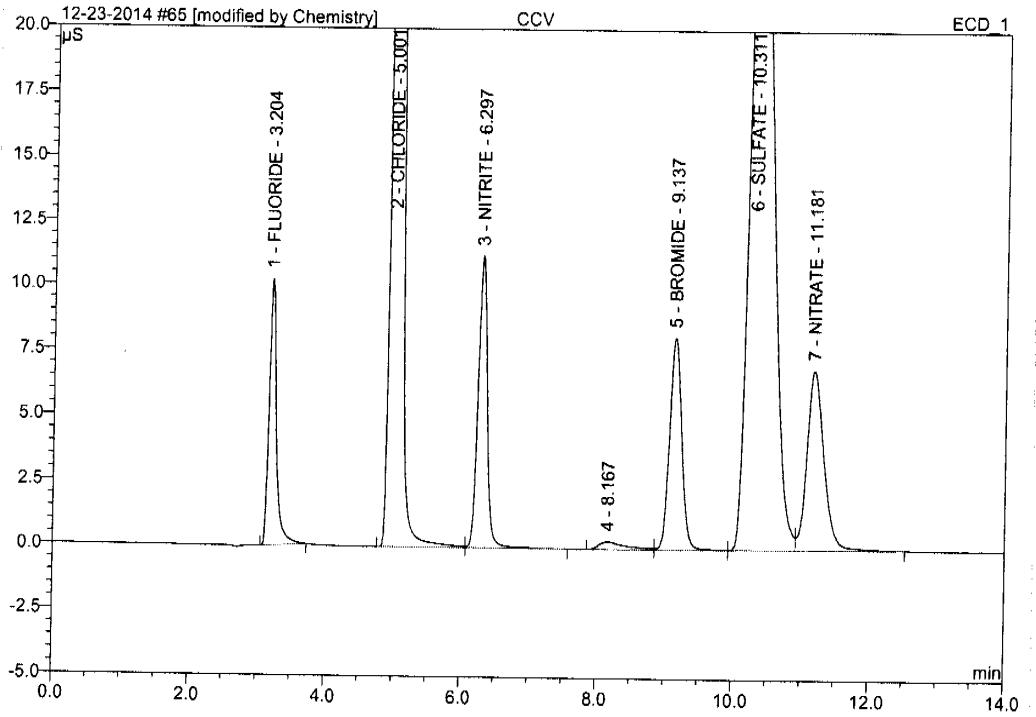
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

65 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.268	1.285	3.88	2.253	BMB
2	5.00	CHLORIDE	121.933	15.062	45.47	51.911	BM *
3	6.30	NITRITE	11.256	1.772	5.35	2.255	MB*
4	8.17	n.a.	0.309	0.144	0.43	n.a.	BM
5	9.14	BROMIDE	8.156	1.698	5.13	12.725	M
6	10.31	SULFATE	30.232	11.135	33.62	50.794	M
7	11.18	NITRATE	6.922	2.030	6.13	2.490	MB
Total:			189.076	33.125	100.00	122.429	

Mh 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

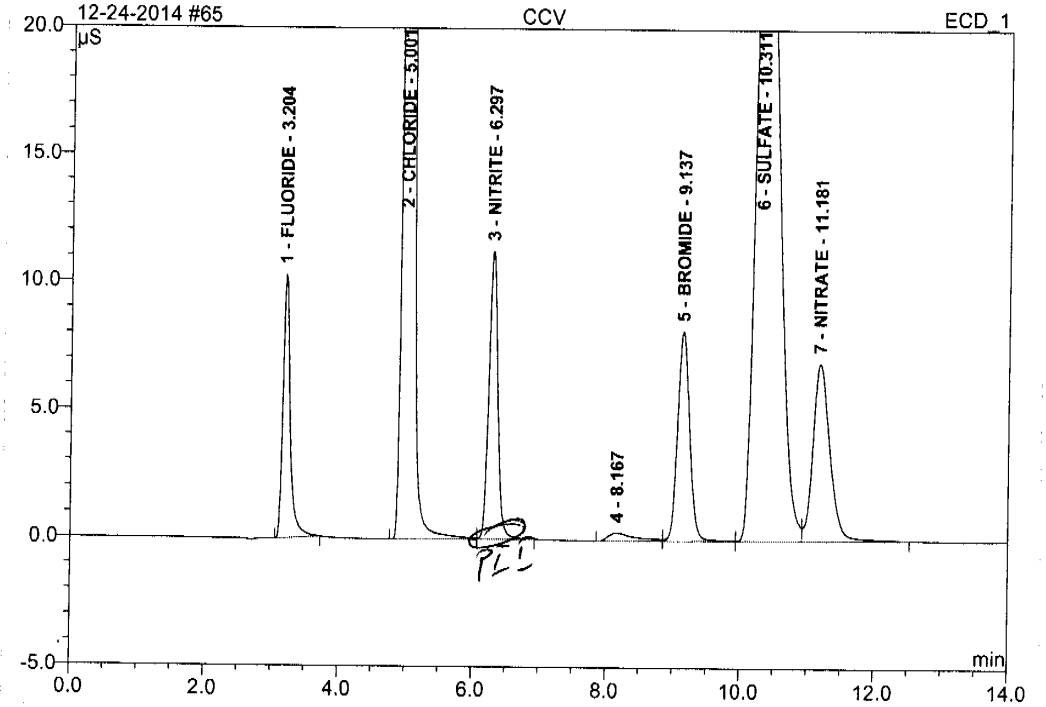
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

65 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.268	1.285	3.88	2.253	BMB
2	5.00	CHLORIDE	121.930	15.048	45.49	51.866	BM
3	6.30	NITRITE	11.232	1.741	5.26	2.215	MB
4	8.17	n.a.	0.309	0.144	0.43	n.a.	BM
5	9.14	BROMIDE	8.156	1.698	5.13	12.725	M
6	10.31	SULFATE	30.232	11.135	33.66	50.794	M
7	11.18	NITRATE	6.922	2.030	6.14	2.490	MB
Total:			189.049	33.081	100.00	122.344	

12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

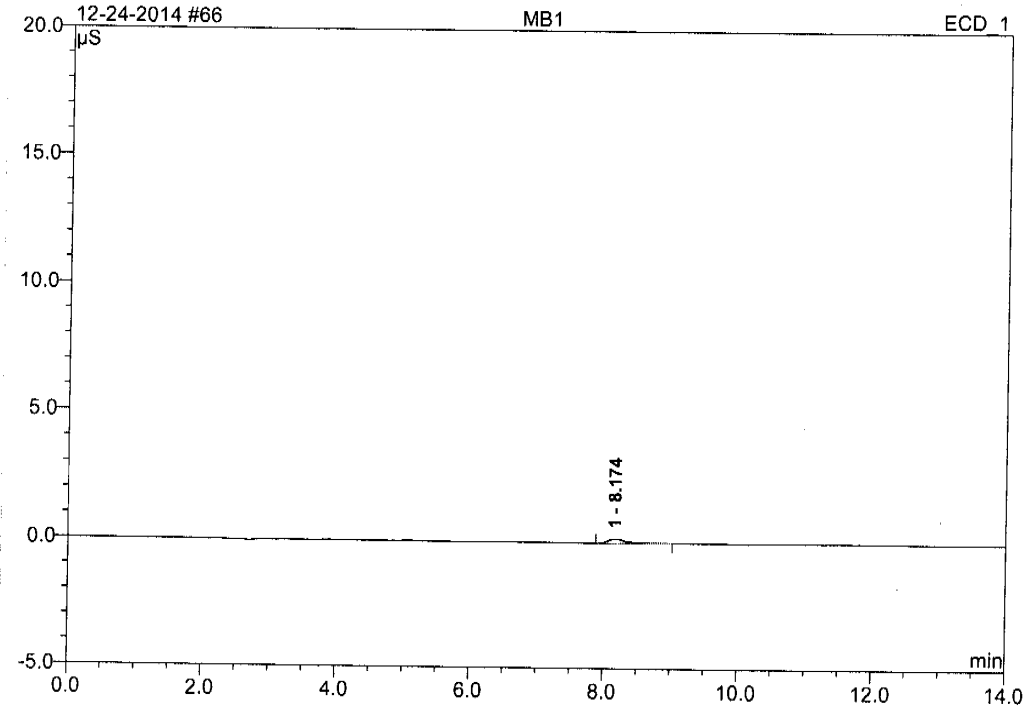
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

66 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.17	n.a.	0.179	0.059	100.00	n.a.	BMB
Total:			0.179	0.059	100.00	0.000	

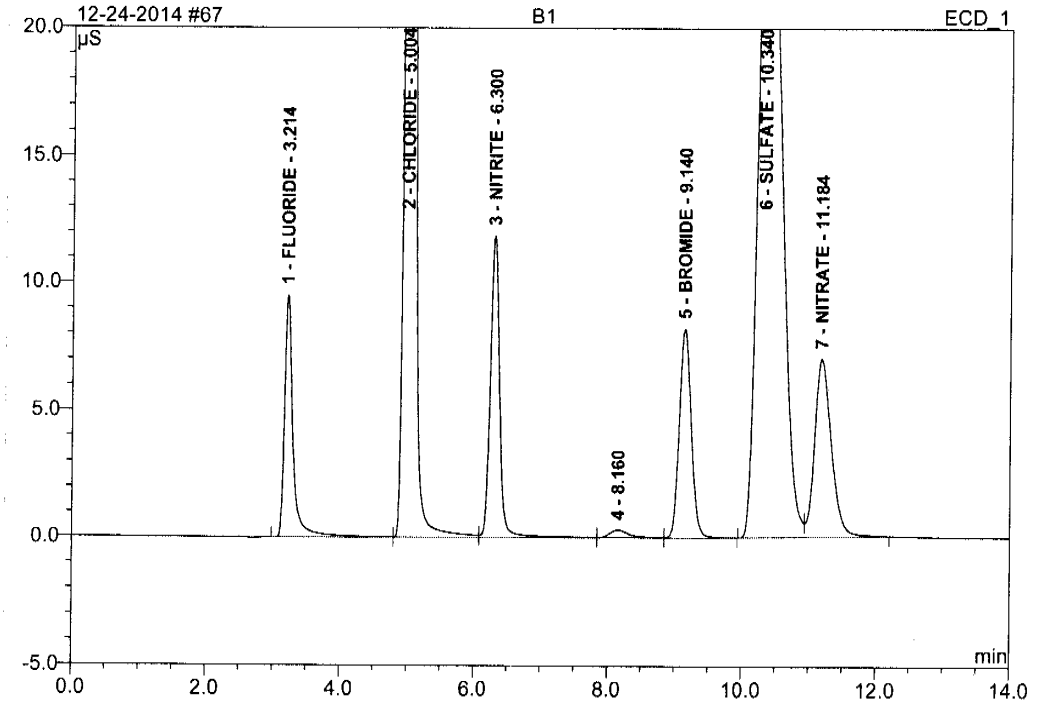
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

67 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.491	1.399	4.15	2.454	BM
2	5.00	CHLORIDE	124.290	15.378	45.57	53.003	M
3	6.30	NITRITE	11.842	1.902	5.64	2.421	M
4	8.16	n.a.	0.295	0.099	0.29	n.a.	M
5	9.14	BROMIDE	8.196	1.694	5.02	12.694	MB
6	10.34	SULFATE	29.880	11.239	33.31	51.269	BM
7	11.18	NITRATE	6.993	2.033	6.02	2.493	MB
Total:			190.987	33.745	100.00	124.333	

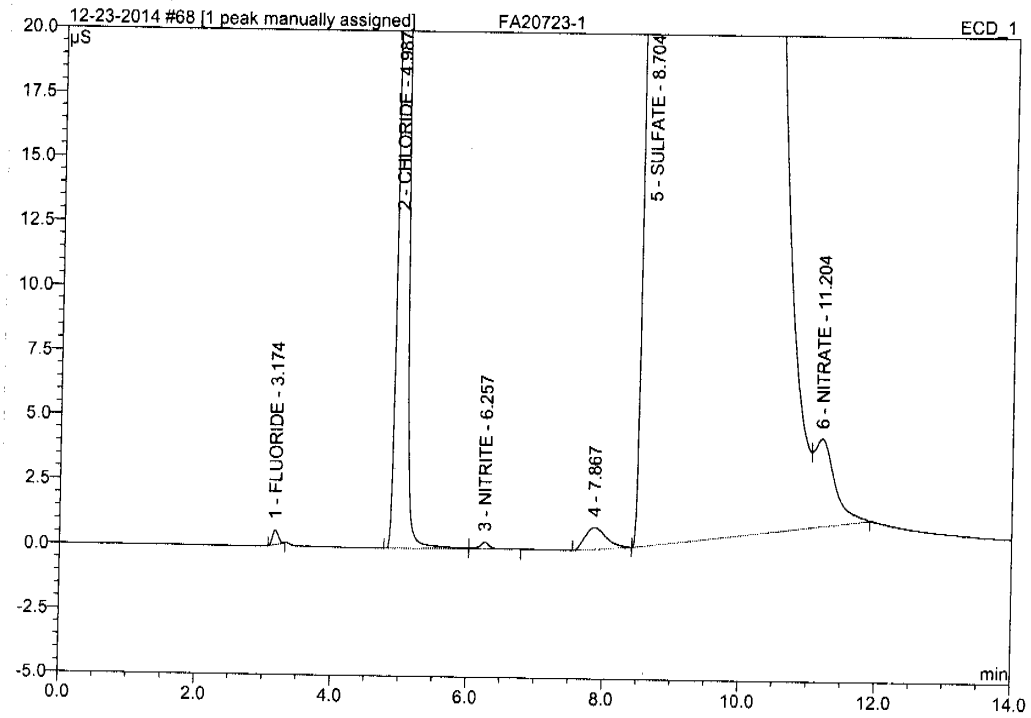
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

68 FA20723-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.571	0.055	0.02	0.097	BMB
2	4.99	CHLORIDE	64.618	7.788	2.60	26.841	BM
3	6.26	NITRITE	0.270	0.048	0.02	0.061	MB
4	7.87	n.a.	0.844	0.312	0.10	n.a.	BMB
5	8.70	SULFATE	276.554	289.909	96.85	1322.421	BM ^
6	11.20	NITRATE	3.372	1.221	0.41	1.498	MB
Total:			346.229	299.333	100.00	1350.918	

12-24-2014 12/24/14

Anions/Integration

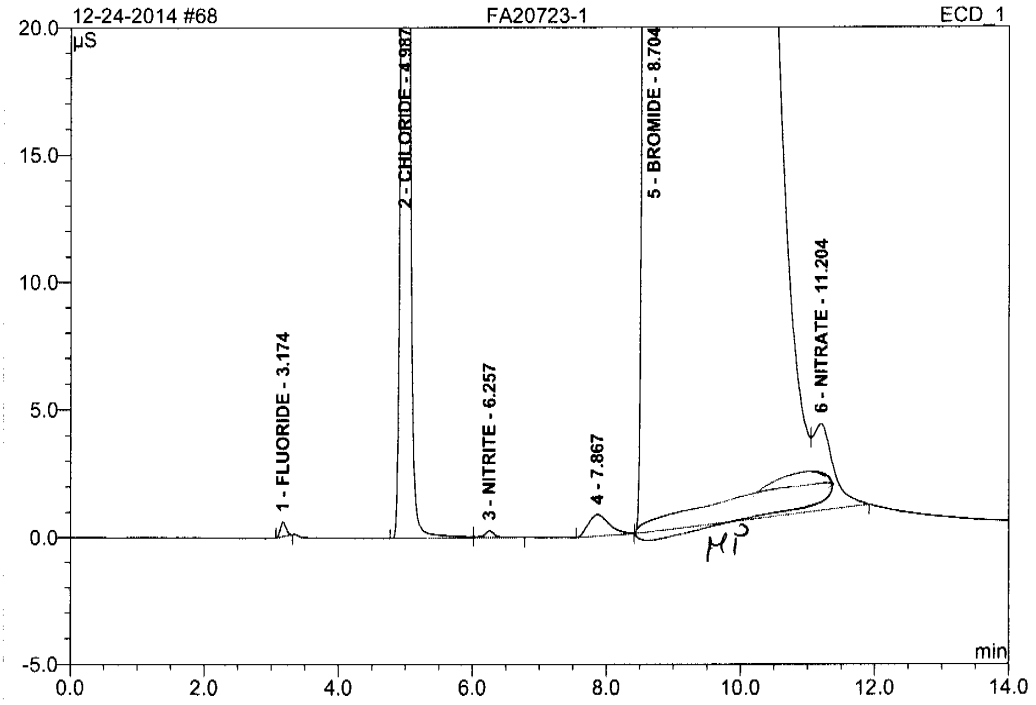
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

68 FA20723-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.571	0.055	0.02	0.097	BMB
2	4.99	CHLORIDE	64.618	7.788	2.60	26.841	BM
3	6.26	NITRITE	0.270	0.048	0.02	0.061	MB
4	7.87	n.a.	0.844	0.312	0.10	n.a.	BMB
5	8.70	BROMIDE	276.554	289.909	96.85	2172.342	BM
6	11.20	NITRATE	3.372	1.221	0.41	1.498	MB
Total:			346.229	299.333	100.00	2200.839	

HL 12-24-2014

12/24/14

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

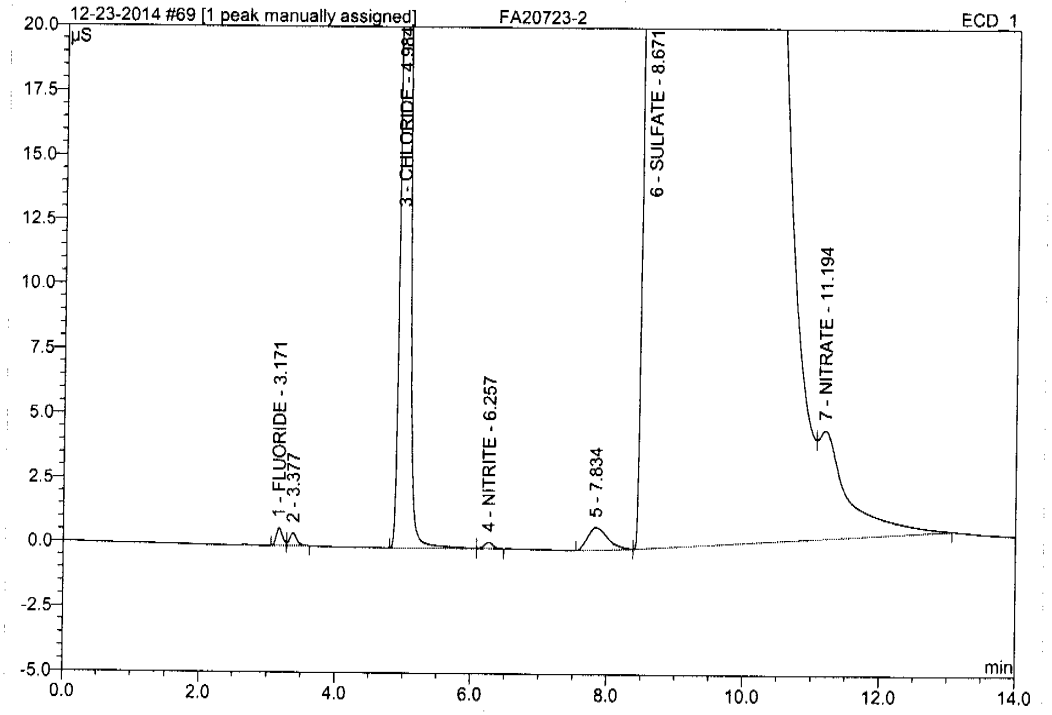
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:53 AM

69 FA20723-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-2**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.707	0.075	0.02	0.131	BM
2	3.38	n.a.	0.508	0.061	0.02	n.a.	MB
3	4.98	CHLORIDE	61.065	7.377	2.36	25.427	BM
4	6.26	NITRITE	0.258	0.037	0.01	0.047	MB
5	7.83	n.a.	0.887	0.310	0.10	n.a.	BMB
6	8.67	SULFATE	285.267	303.008	96.77	1382.169	BM ^
7	11.19	NITRATE	4.212	2.250	0.72	2.760	MB
Total:			352.904	313.117	100.00	1410.533	

12-24-2014 12/24/14

Anions/Integration

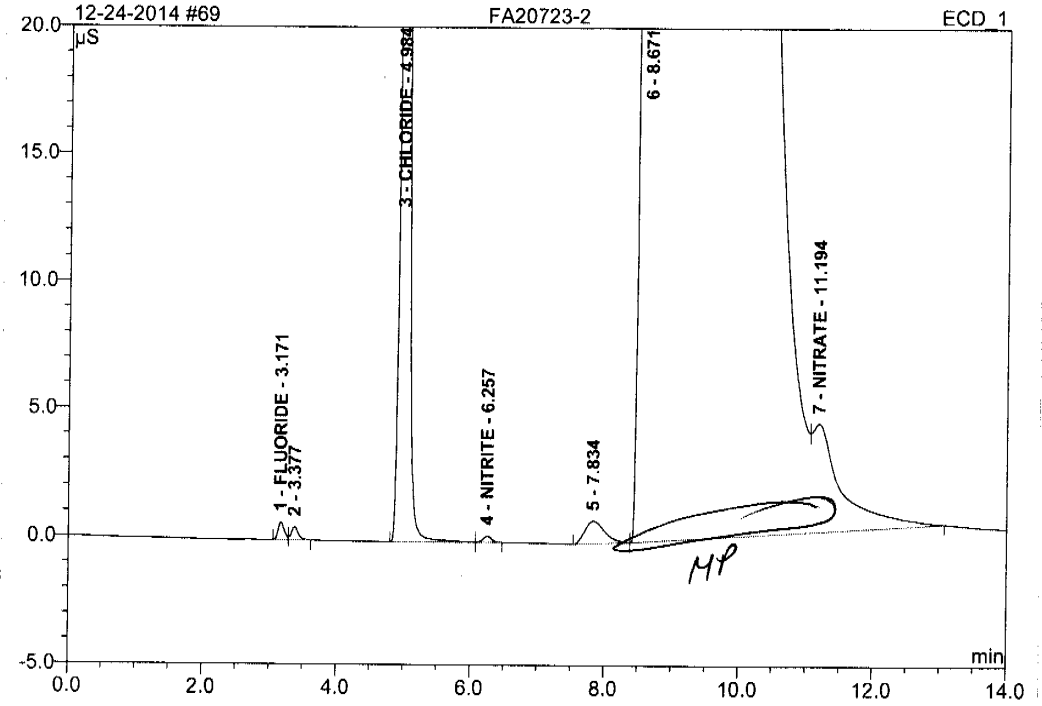
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

69 FA20723-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-2**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.707	0.075	0.02	0.131	BM
2	3.38	n.a.	0.508	0.061	0.02	n.a.	MB
3	4.98	CHLORIDE	61.065	7.377	2.36	25.427	BM
4	6.26	NITRITE	0.258	0.037	0.01	0.047	MB
5	7.83	n.a.	0.887	0.310	0.10	n.a.	BMB
6	8.67	n.a.	285.267	303.008	96.77	n.a.	BM
7	11.19	NITRATE	4.212	2.250	0.72	2.760	MB
Total:			352.904	313.117	100.00	28.364	

MP 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

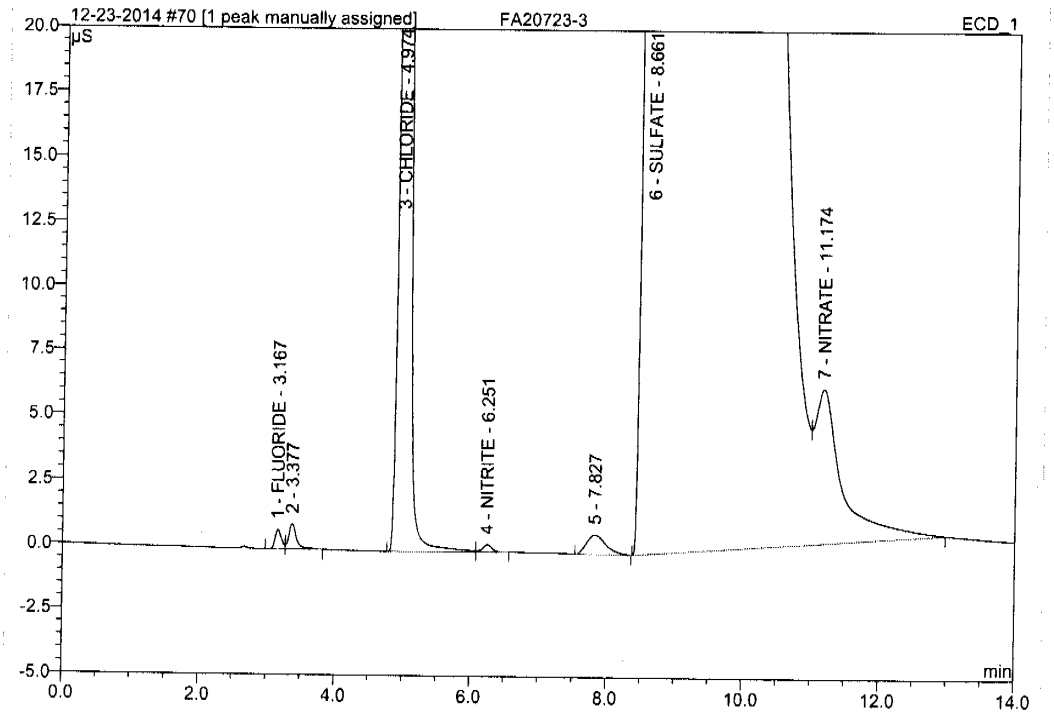
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

70 FA20723-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-3**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.766	0.082	0.03	0.144	BM
2	3.38	n.a.	0.987	0.131	0.04	n.a.	MB
3	4.97	CHLORIDE	116.369	14.294	4.42	49.267	BM
4	6.25	NITRITE	0.293	0.047	0.01	0.060	MB
5	7.83	n.a.	0.776	0.258	0.08	n.a.	BMB
6	8.66	SULFATE	287.656	305.572	94.52	1393.865	BM ^
7	11.17	NITRATE	5.948	2.914	0.90	3.575	MB
Total:			412.796	323.299	100.00	1446.910	

HH 12-24-2014

12/24/14

Anions/Integration

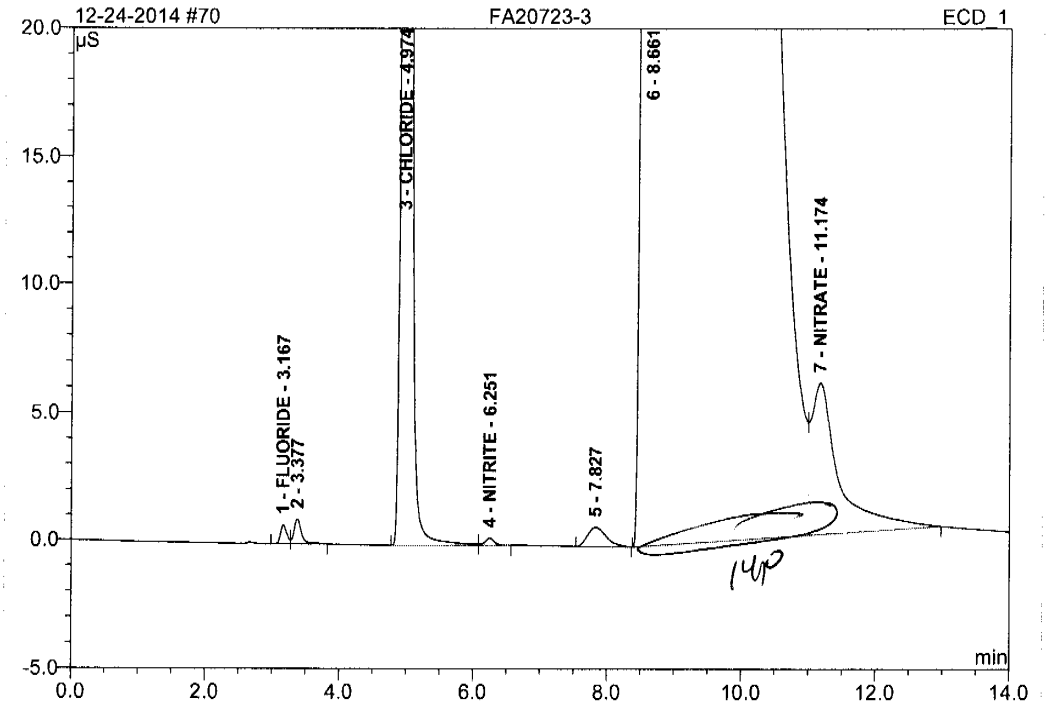
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

70 FA20723-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-3**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.766	0.082	0.03	0.144	BM
2	3.38	n.a.	0.987	0.131	0.04	n.a.	MB
3	4.97	CHLORIDE	116.369	14.294	4.42	49.267	BM
4	6.25	NITRITE	0.293	0.047	0.01	0.060	MB
5	7.83	n.a.	0.776	0.258	0.08	n.a.	BMB
6	8.66	n.a.	287.656	305.572	94.52	n.a.	BM
7	11.17	NITRATE	5.948	2.914	0.90	3.575	MB
Total:			412.796	323.299	100.00	53.046	

JH 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

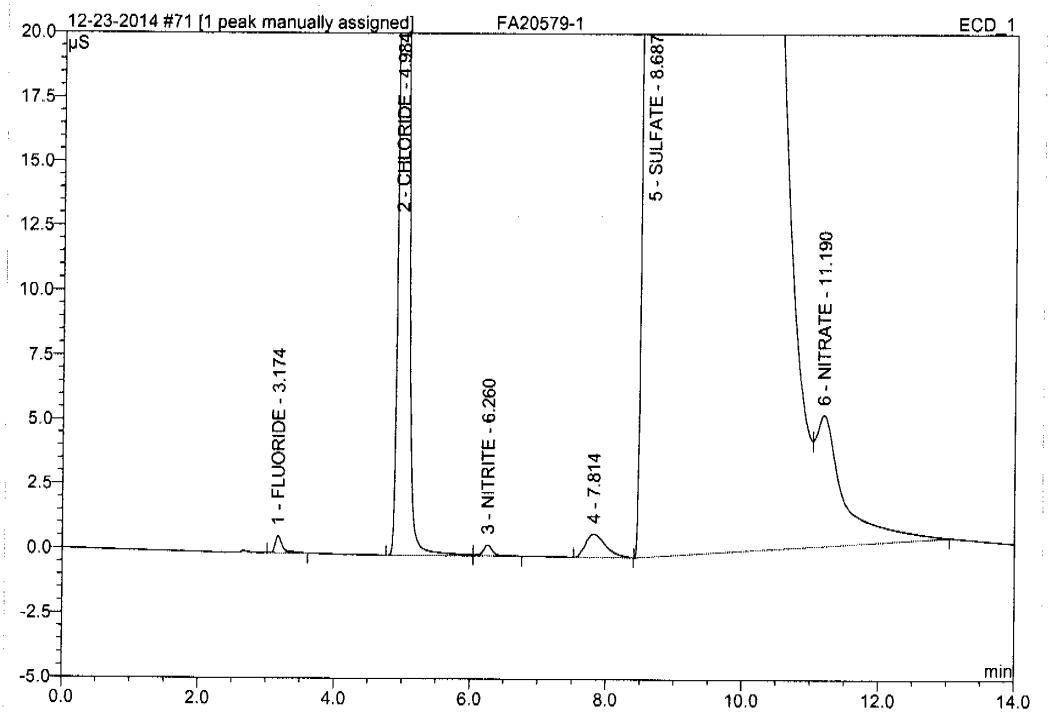
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:54 AM

71 FA20579-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.676	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	70.518	8.576	2.77	29.559	BM
3	6.26	NITRITE	0.428	0.069	0.02	0.088	MB
4	7.81	n.a.	0.904	0.314	0.10	n.a.	BMB
5	8.69	SULFATE	283.292	298.327	96.26	1360.820	BM ^
6	11.19	NITRATE	5.068	2.556	0.82	3.135	MB
Total:			360.886	309.924	100.00	1393.746	

Hk 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

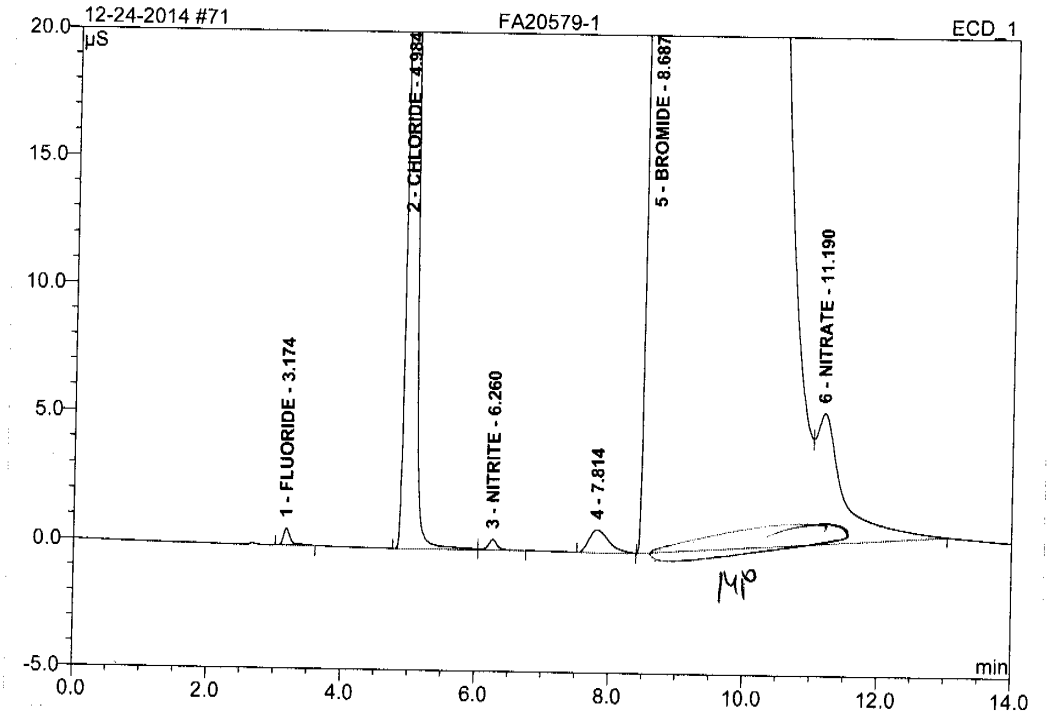
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

71 FA20579-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.676	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	70.518	8.576	2.77	29.559	BM
3	6.26	NITRITE	0.428	0.069	0.02	0.088	MB
4	7.81	n.a.	0.904	0.314	0.10	n.a.	BMB
5	8.69	BROMIDE	283.292	298.327	96.26	2235.419	BM
6	11.19	NITRATE	5.068	2.556	0.82	3.135	MB
Total:			360.886	309.924	100.00	2268.345	

VK 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

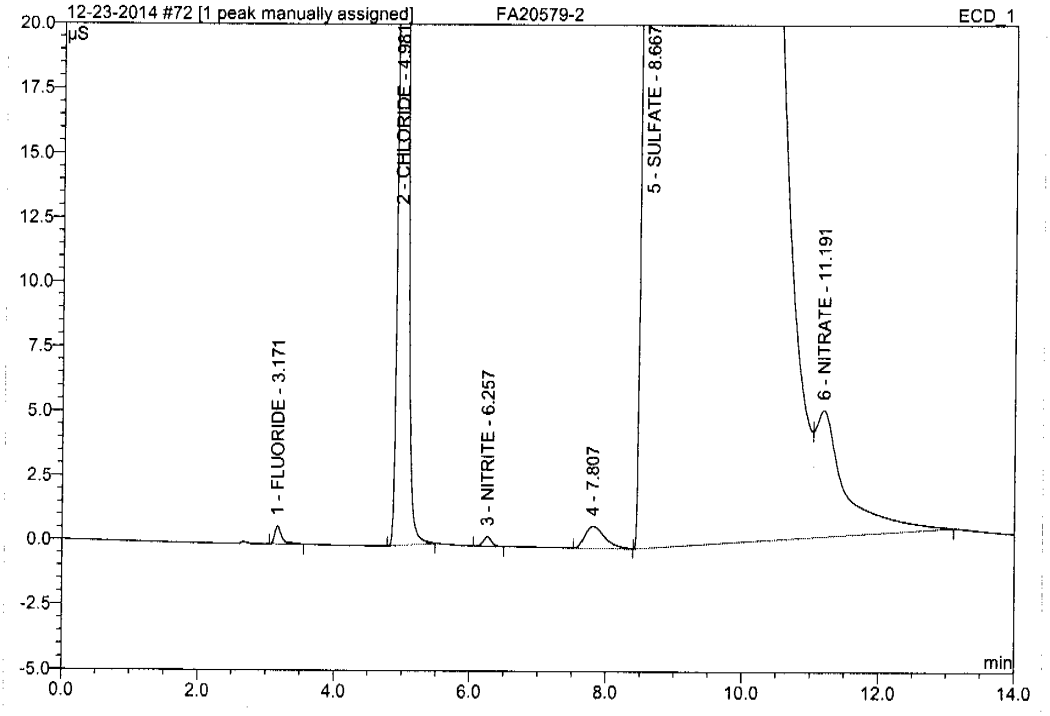
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

72 FA20579-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.703	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	68.256	8.218	2.65	28.323	BMB
3	6.26	NITRITE	0.385	0.052	0.02	0.066	BMB
4	7.81	n.a.	0.859	0.295	0.10	n.a.	BMB
5	8.67	SULFATE	282.368	298.898	96.38	1363.422	BM ^
6	11.19	NITRATE	4.917	2.583	0.83	3.168	MB
Total:			357.487	310.127	100.00	1395.123	

VH 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

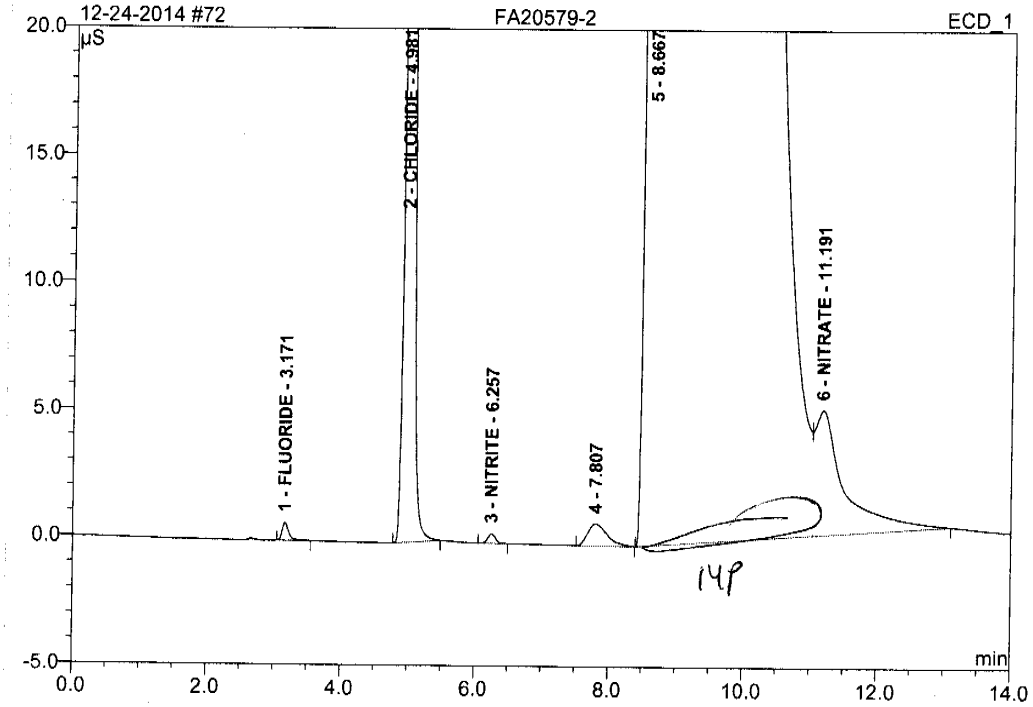
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

72 FA20579-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.703	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	68.256	8.218	2.65	28.323	BMB
3	6.26	NITRITE	0.385	0.052	0.02	0.066	BMB
4	7.81	n.a.	0.859	0.295	0.10	n.a.	BMB
5	8.67	n.a.	282.368	298.898	96.38	n.a.	BM
6	11.19	NITRATE	4.917	2.583	0.83	3.168	MB
Total:			357.487	310.127	100.00	31.702	

12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

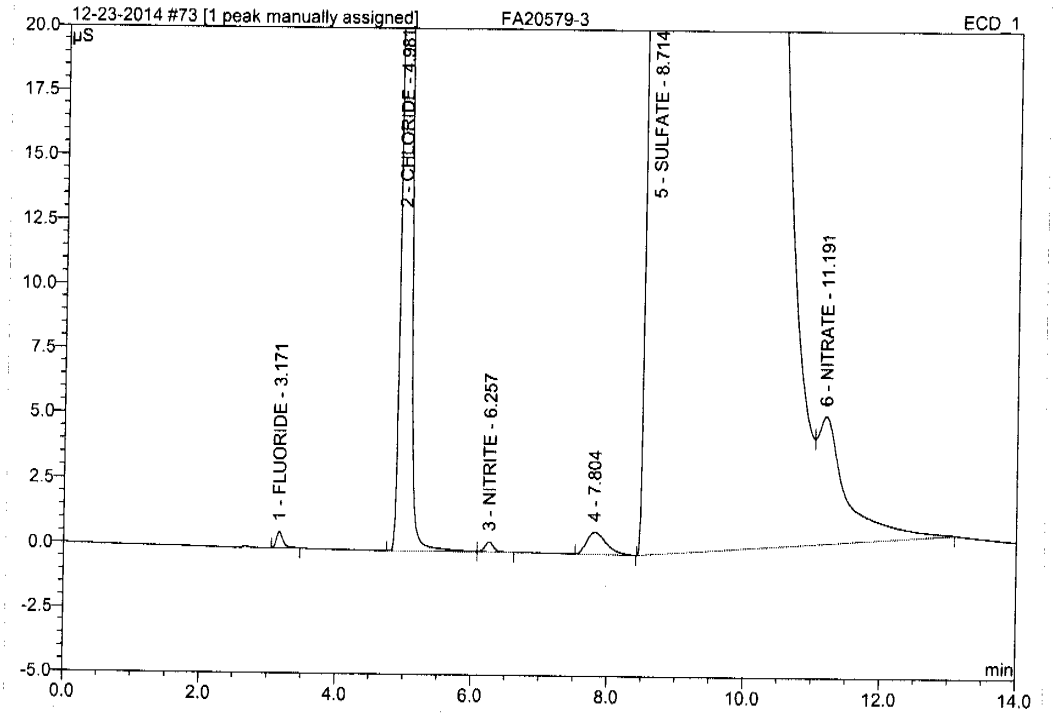
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

73 FA20579-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.654	0.074	0.02	0.129	BMB
2	4.98	CHLORIDE	65.667	7.973	2.63	27.481	BM
3	6.26	NITRITE	0.400	0.059	0.02	0.075	MB
4	7.80	n.a.	0.870	0.298	0.10	n.a.	BMB
5	8.71	SULFATE	279.183	292.126	96.39	1332.533	BM ^
6	11.19	NITRATE	4.886	2.535	0.84	3.109	MB
Total:			351.660	303.065	100.00	1363.328	

12-24-2014

12/24/14

Anions/Integration

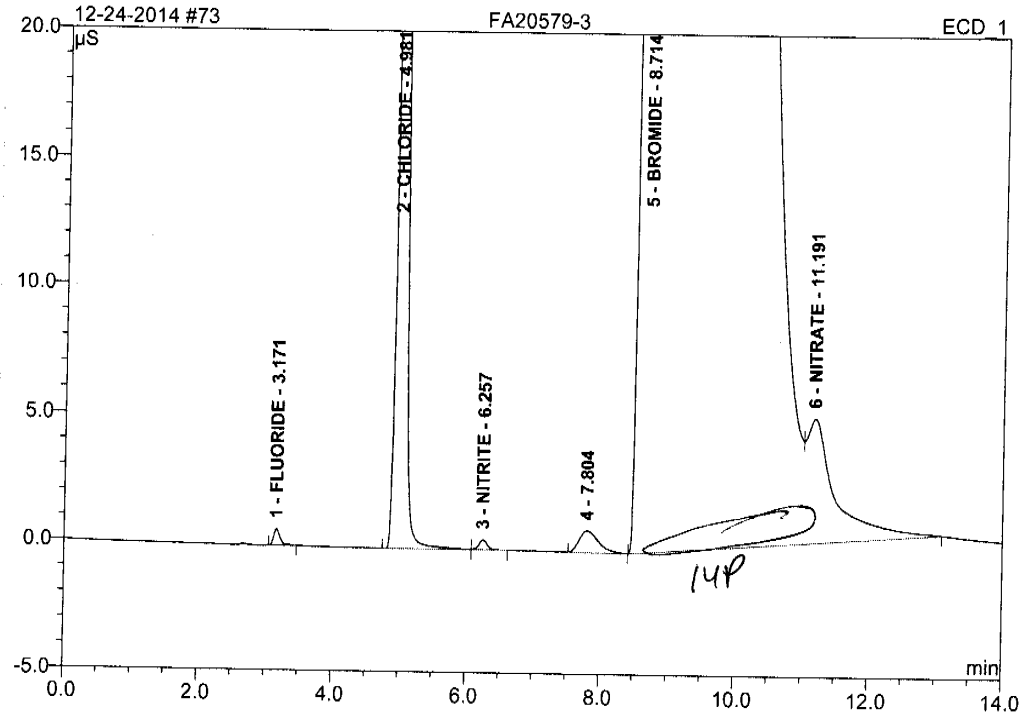
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

73 FA20579-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.654	0.074	0.02	0.129	BMB
2	4.98	CHLORIDE	65.667	7.973	2.63	27.481	BM
3	6.26	NITRITE	0.400	0.059	0.02	0.075	MB
4	7.80	n.a.	0.870	0.298	0.10	n.a.	BMB
5	8.71	BROMIDE	279.183	292.126	96.39	2188.952	BM
6	11.19	NITRATE	4.886	2.535	0.84	3.109	MB
Total:			351.660	303.065	100.00	2219.747	

14P

12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

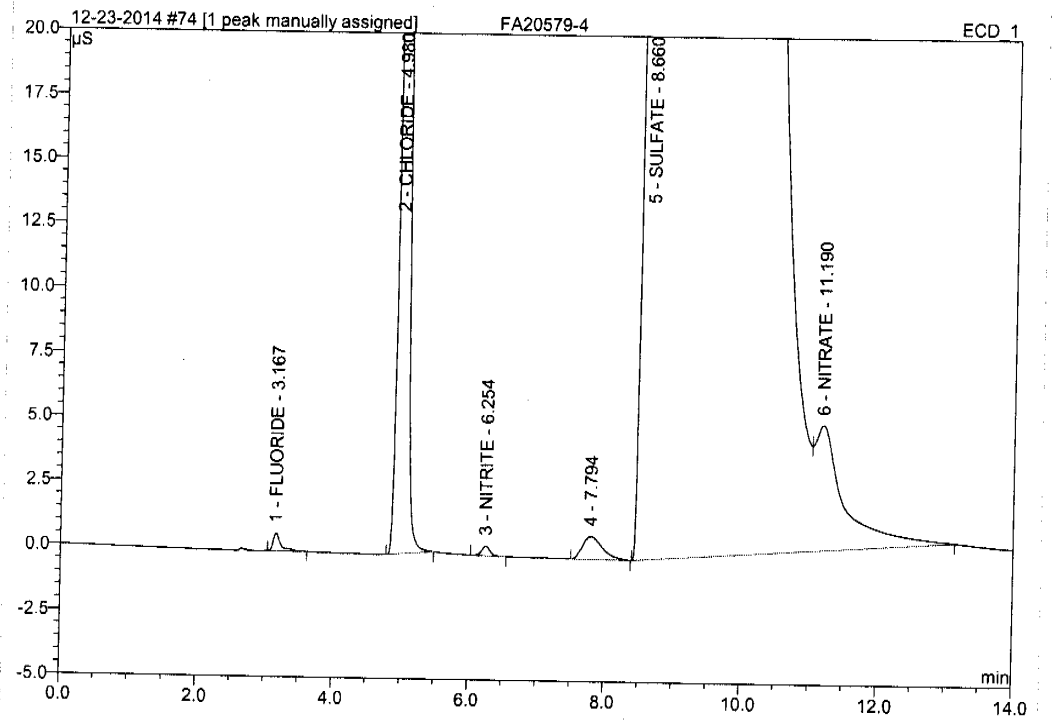
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:56 AM

74 FA20579-4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-4**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.695	0.089	0.03	0.156	BMB
2	4.98	CHLORIDE	65.372	7.870	2.53	27.124	BMB
3	6.25	NITRITE	0.379	0.053	0.02	0.068	BMB
4	7.79	n.a.	0.882	0.301	0.10	n.a.	BMB
5	8.66	SULFATE	284.216	299.813	96.50	1367.597	BM ^
6	11.19	NITRATE	4.850	2.562	0.82	3.142	MB
Total:			356.393	310.687	100.00	1398.086	

VH 12-24-2014

12/24/14

Anions/Integration

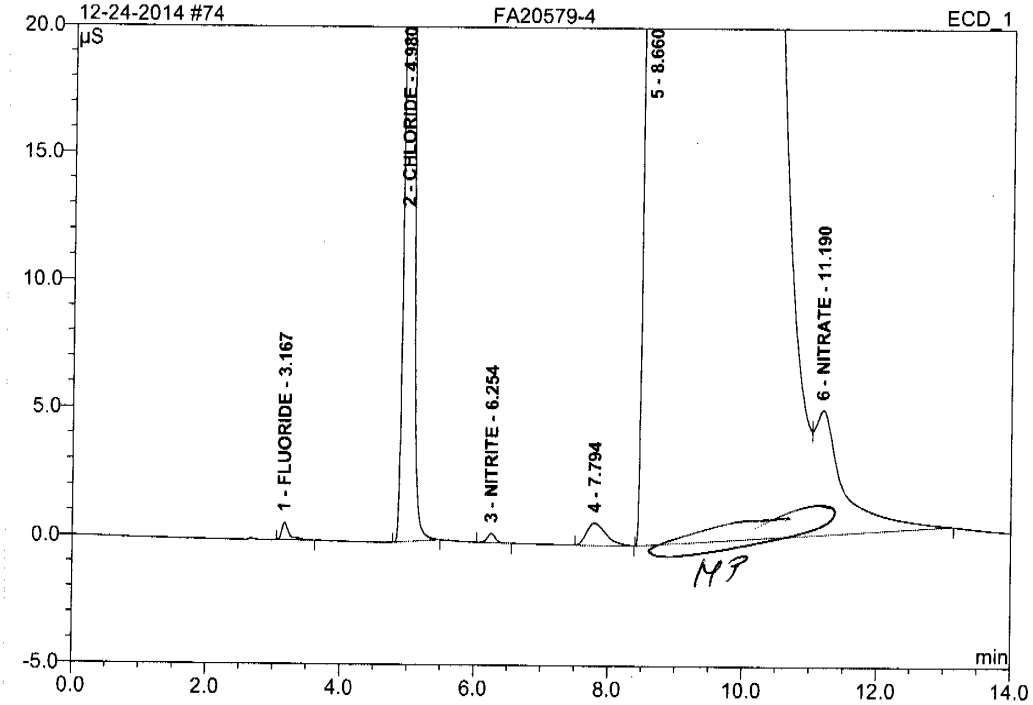
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

74 FA20579-4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-4**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.695	0.089	0.03	0.156	BMB
2	4.98	CHLORIDE	65.372	7.870	2.53	27.124	BMB
3	6.25	NITRITE	0.379	0.053	0.02	0.068	BMB
4	7.79	n.a.	0.882	0.301	0.10	n.a.	BMB
5	8.66	n.a.	284.216	299.813	96.50	n.a.	BM
6	11.19	NITRATE	4.850	2.562	0.82	3.142	MB
Total:			356.393	310.687	100.00	30.490	

MP

MP 12-24-2014

12/24/14

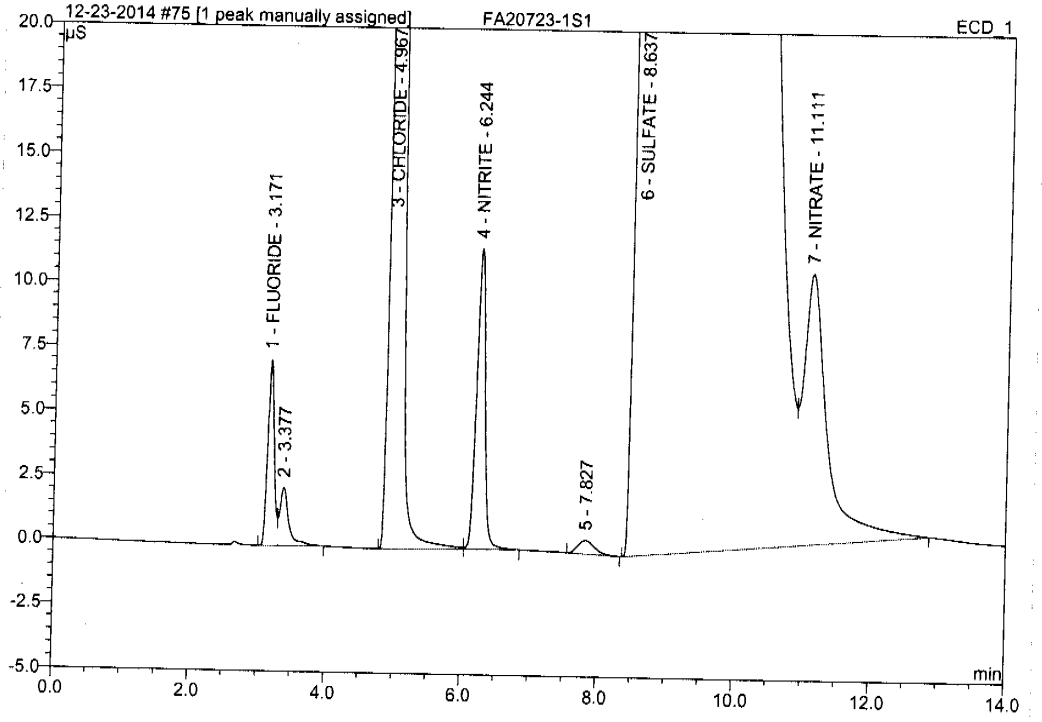
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

75 FA20723-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.200	0.791	0.24	1.387	BM
2	3.38	n.a.	2.271	0.354	0.11	n.a.	MB
3	4.97	CHLORIDE	177.648	22.204	6.73	76.527	BM
4	6.24	NITRITE	11.664	1.713	0.52	2.180	MB
5	7.83	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.64	SULFATE	289.529	300.404	91.01	1370.291	BM ^
7	11.11	NITRATE	10.480	4.464	1.35	5.476	MB
Total:			499.331	330.086	100.00	1455.862	

12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

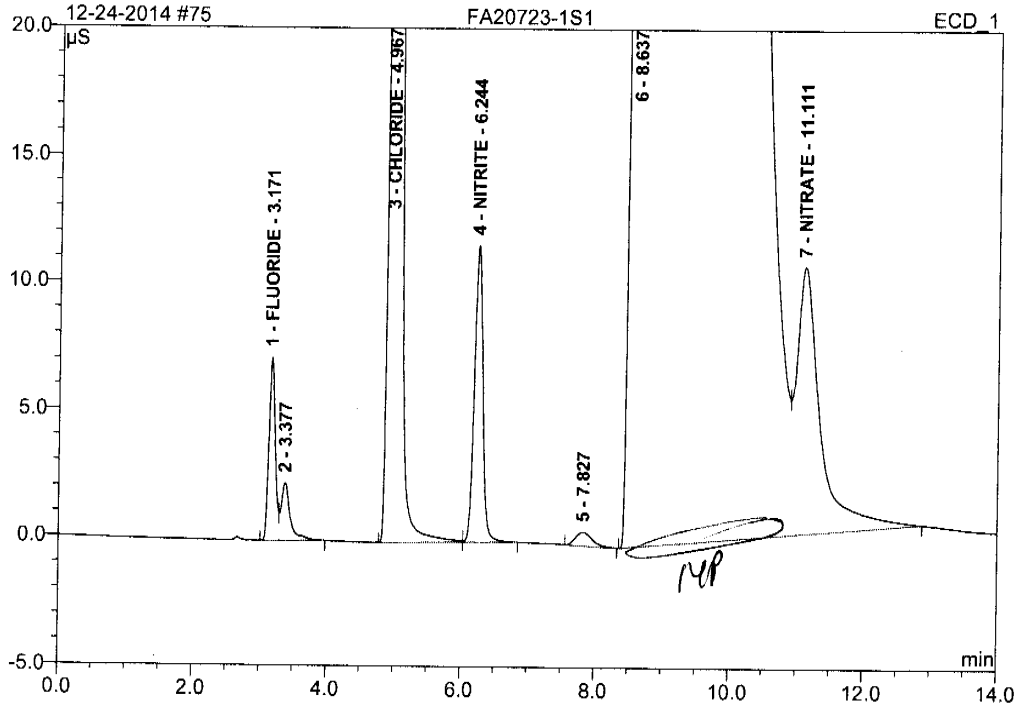
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

75 FA20723-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.200	0.791	0.24	1.387	BM
2	3.38	n.a.	2.271	0.354	0.11	n.a.	MB
3	4.97	CHLORIDE	177.648	22.204	6.73	76.527	BM
4	6.24	NITRITE	11.664	1.713	0.52	2.180	MB
5	7.83	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.64	n.a.	289.529	300.404	91.01	n.a.	BM
7	11.11	NITRATE	10.480	4.464	1.35	5.476	MB
Total:			499.331	330.086	100.00	85.571	

D.L 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

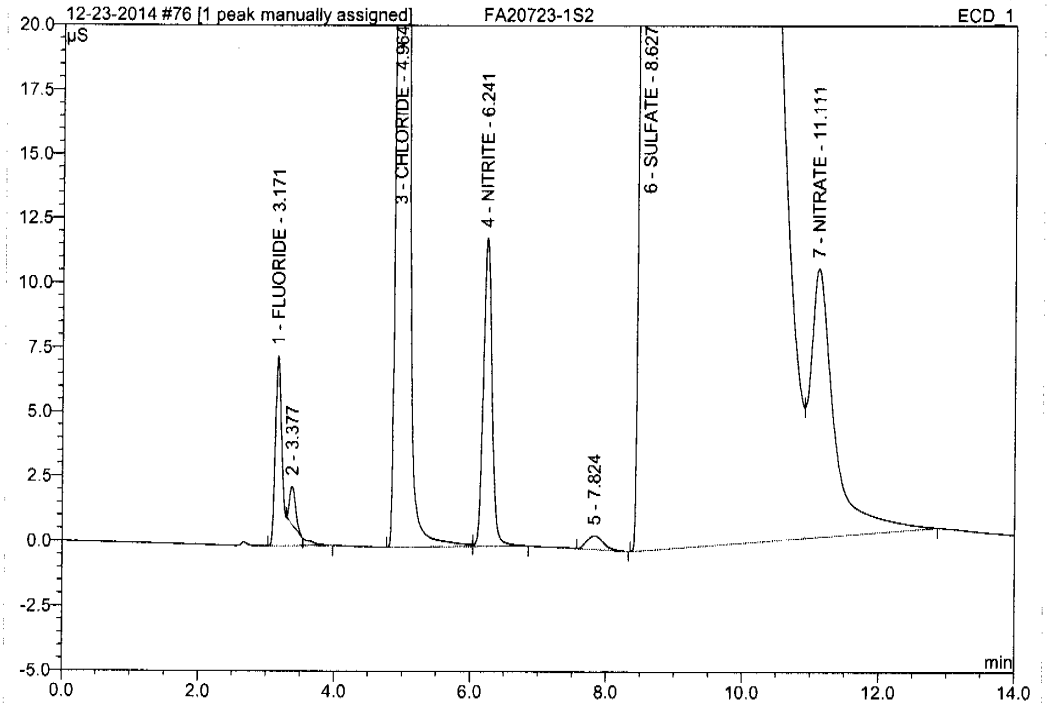
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:57 AM

76 FA20723-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.367	1.018	0.31	1.786	BMB
2	3.38	n.a.	1.469	0.149	0.04	n.a.	Rd
3	4.96	CHLORIDE	180.812	22.612	6.79	77.934	BM
4	6.24	NITRITE	11.930	1.758	0.53	2.237	MB
5	7.82	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.63	SULFATE	292.450	303.124	90.99	1382.698	BM ^
7	11.11	NITRATE	10.400	4.339	1.30	5.323	MB
Total:			504.966	333.156	100.00	1469.978	

12-24-2014

12/24/14

Anions/Integration

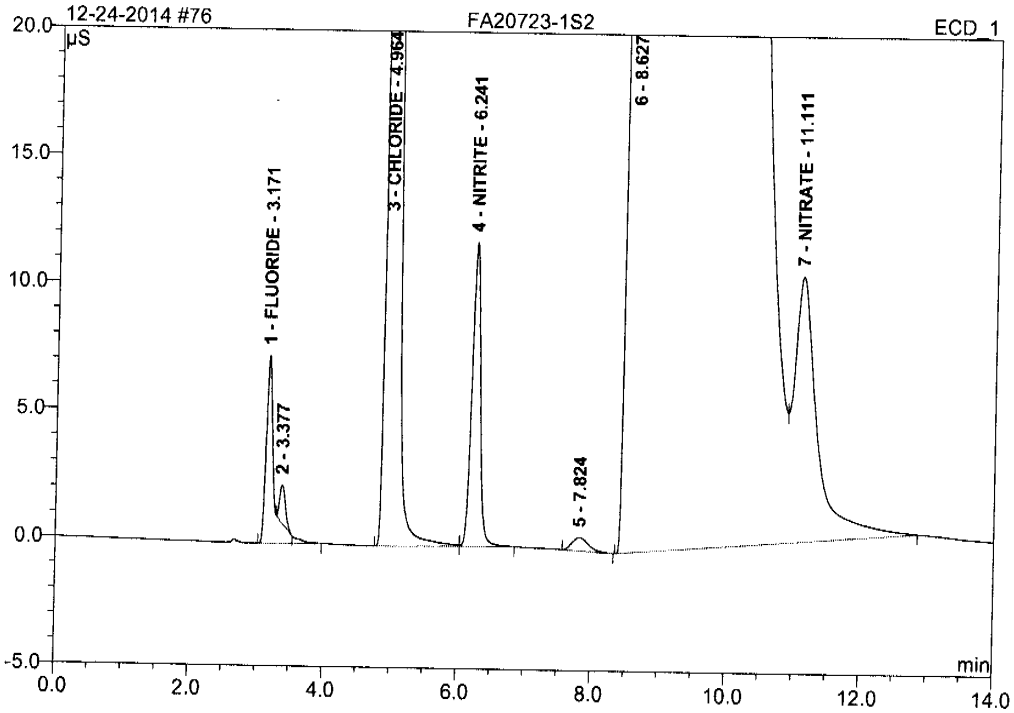
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

76 FA20723-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.367	1.018	0.31	1.786	BMB
2	3.38	n.a.	1.469	0.149	0.04	n.a.	Rd
3	4.96	CHLORIDE	180.812	22.612	6.79	77.934	BM
4	6.24	NITRITE	11.930	1.758	0.53	2.237	MB
5	7.82	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.63	n.a.	292.450	303.124	90.99	n.a.	BM
7	11.11	NITRATE	10.400	4.339	1.30	5.323	MB
Total:			504.966	333.156	100.00	87.280	

12/24/14

Anions/Integration

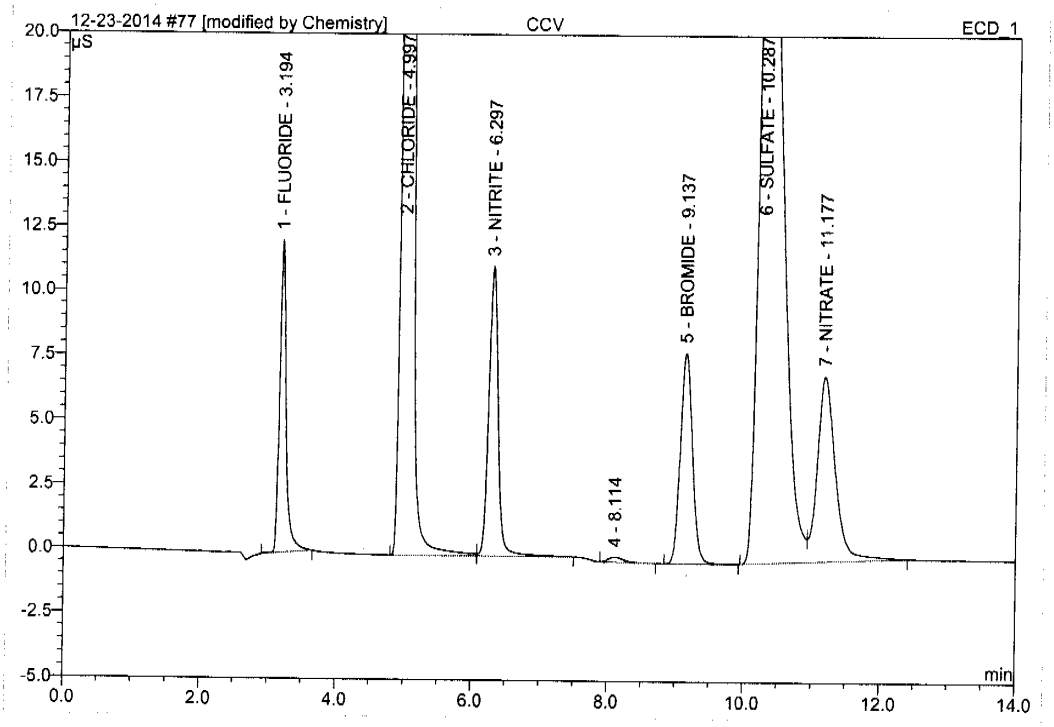
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

77 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	12.136	1.348	4.00	2.363	BMB
2	5.00	CHLORIDE	121.575	15.138	44.94	52.176	BM *
3	6.30	NITRITE	11.244	1.807	5.36	2.299	MB*
4	8.11	n.a.	0.194	0.052	0.15	n.a.	BMB
5	9.14	BROMIDE	8.169	1.687	5.01	12.638	BMB
6	10.29	SULFATE	31.558	11.423	33.91	52.106	BM
7	11.18	NITRATE	7.183	2.231	6.62	2.736	MB
Total:			192.060	33.685	100.00	124.320	

IH 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

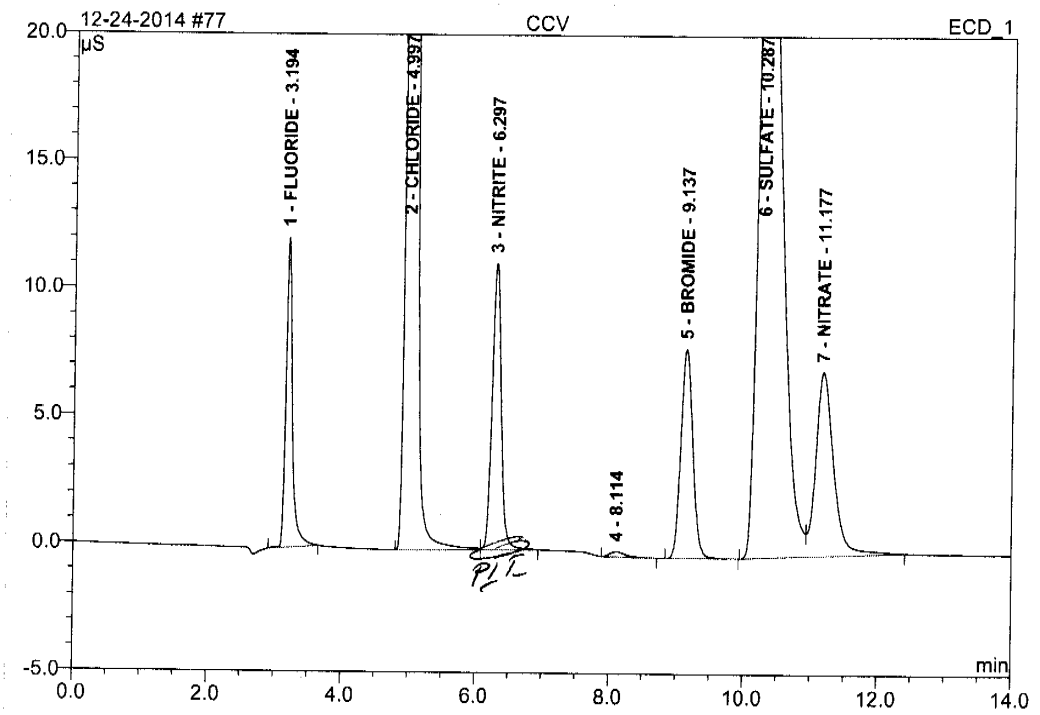
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

77 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	12.136	1.348	4.01	2.363	BMB
2	5.00	CHLORIDE	121.570	15.118	44.98	52.105	BM
3	6.30	NITRITE	11.206	1.755	5.22	2.234	MB
4	8.11	n.a.	0.194	0.052	0.15	n.a.	BMB
5	9.14	BROMIDE	8.169	1.687	5.02	12.638	BMB
6	10.29	SULFATE	31.558	11.423	33.98	52.106	BM
7	11.18	NITRATE	7.183	2.231	6.64	2.736	MB
Total:			192.017	33.613	100.00	124.183	

12/24/14

12-24-2014

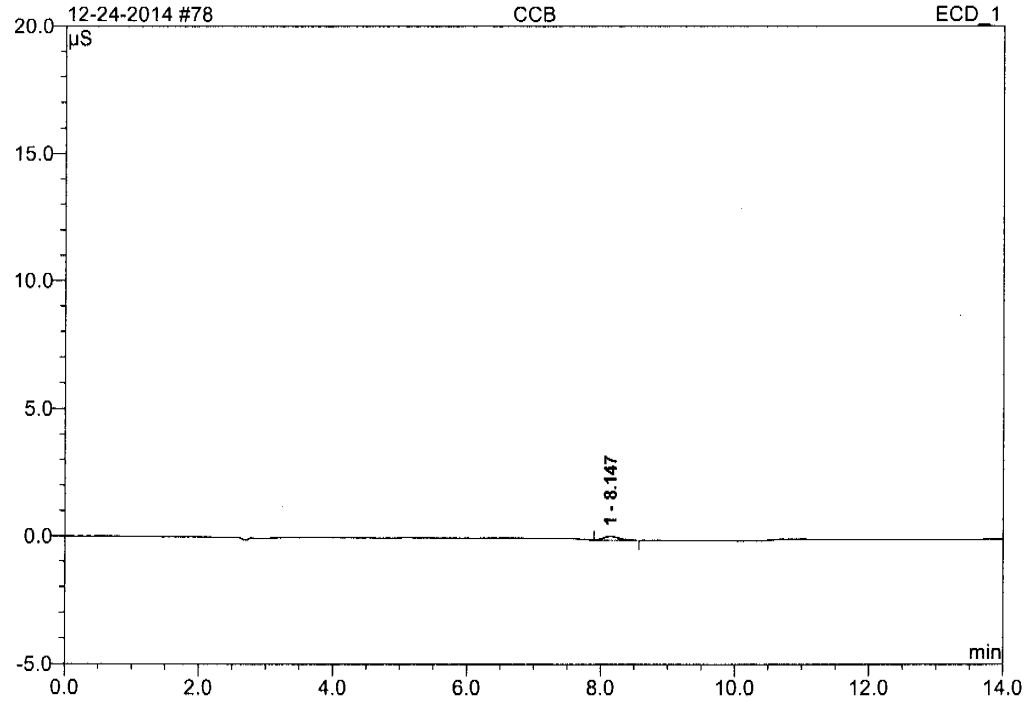
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

78 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 5:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



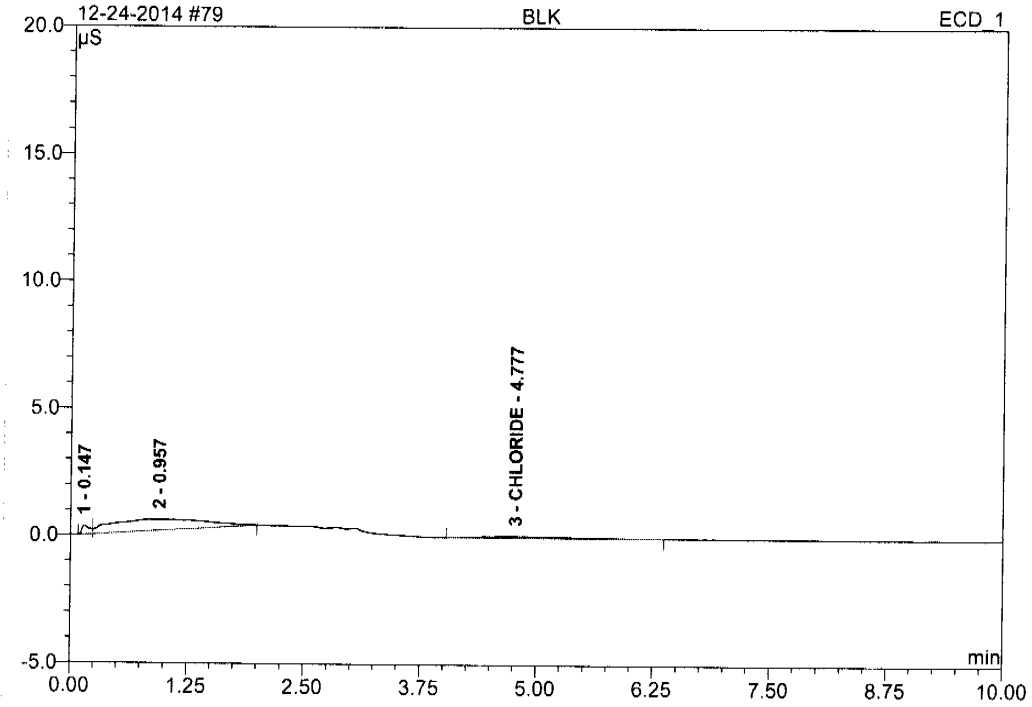
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.15	n.a.	0.162	0.044	100.00	n.a.	BMB
Total:			0.162	0.044	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

79 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 5:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	0.15	n.a.	0.351	0.033	5.40	n.a.	BM
2	0.96	n.a.	0.423	0.505	82.48	n.a.	MB
3	4.78	CHLORIDE	0.065	0.074	12.13	0.256	BMB
Total:			0.839	0.612	100.00	0.256	

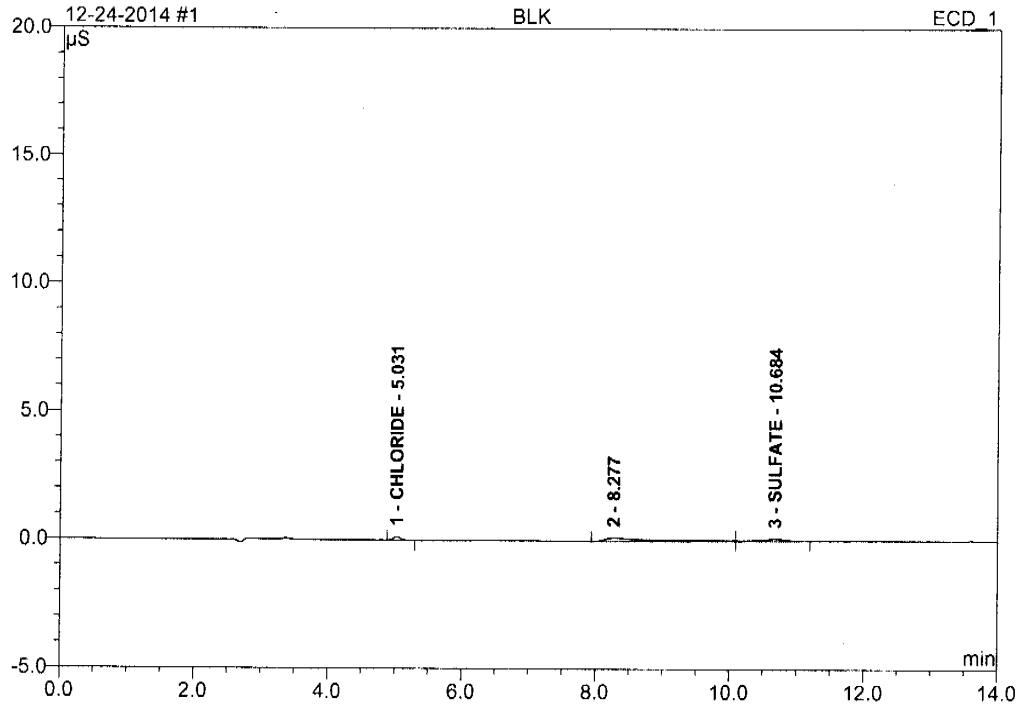
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

1 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



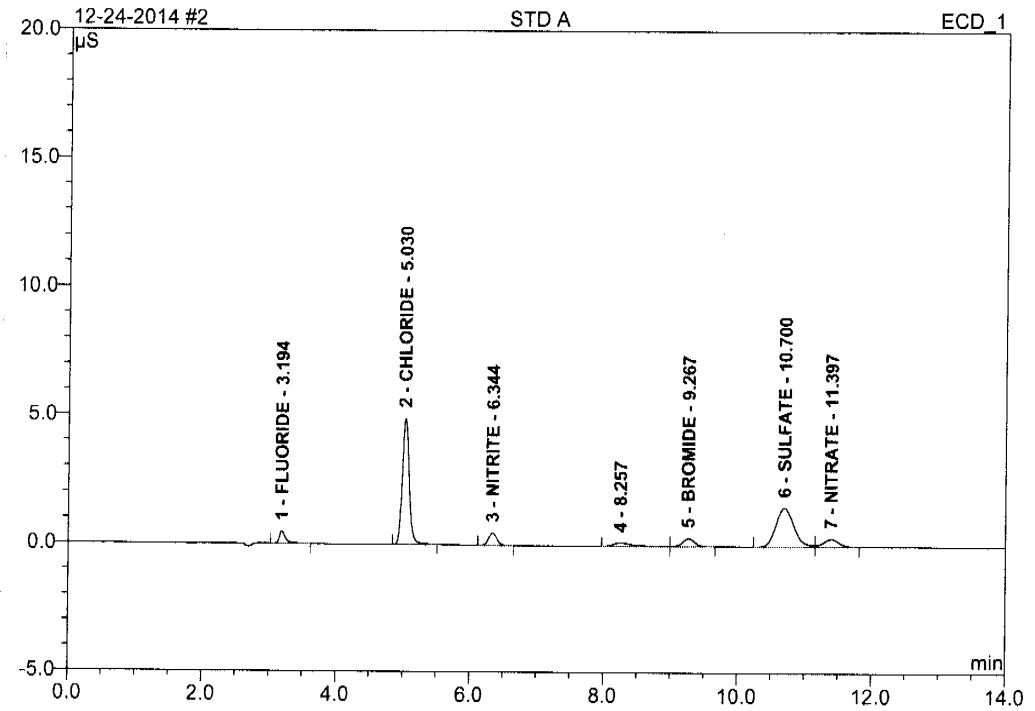
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.03	CHLORIDE	0.139	0.016	10.08	0.056	BMB
2	8.28	n.a.	0.134	0.108	67.59	n.a.	BM
3	10.68	SULFATE	0.083	0.036	22.33	0.163	MB
Total:			0.356	0.160	100.00	0.218	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

2 STD A

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD A**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



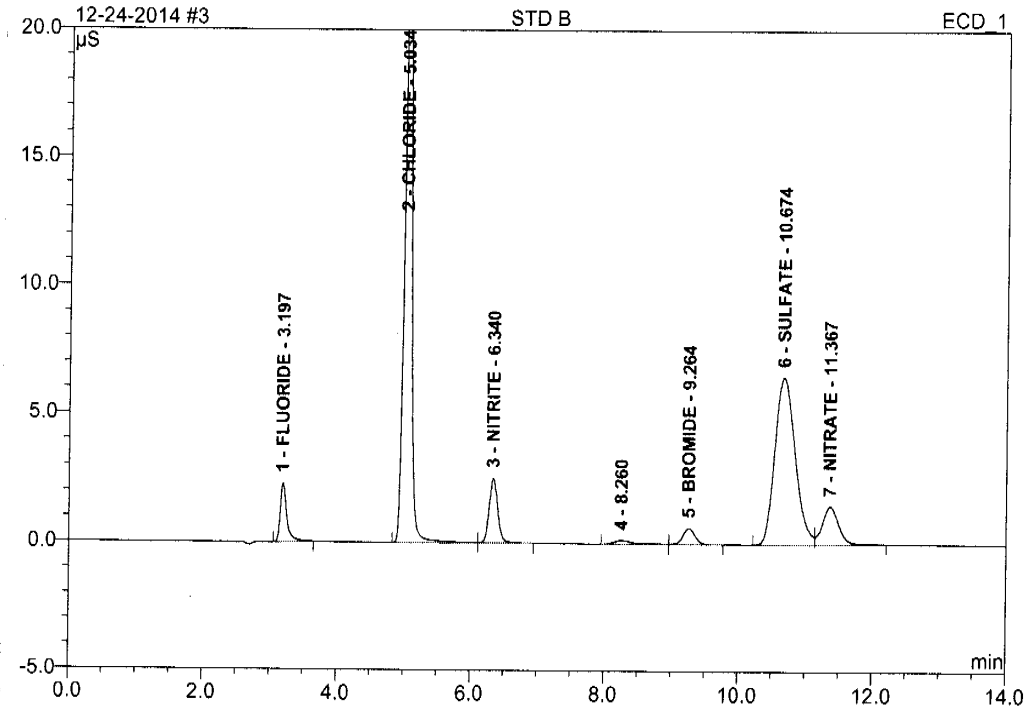
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.473	0.051	3.75	0.090	BMB
2	5.03	CHLORIDE	4.909	0.581	42.50	2.003	BMB
3	6.34	NITRITE	0.484	0.070	5.13	0.089	BMB
4	8.26	n.a.	0.138	0.048	3.52	n.a.	BM
5	9.27	BROMIDE	0.308	0.065	4.75	0.486	MB
6	10.70	SULFATE	1.513	0.470	34.40	2.146	BM
7	11.40	NITRATE	0.297	0.081	5.95	0.100	MB
Total:			8.121	1.367	100.00	4.914	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

3 STD B

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD B**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



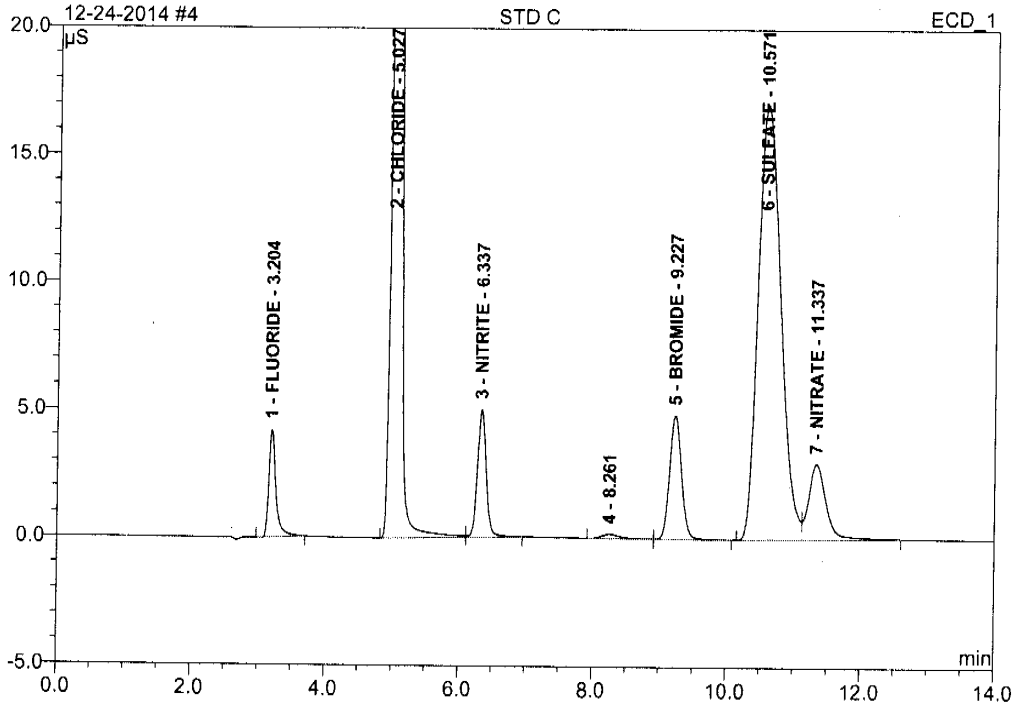
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	2.287	0.257	3.93	0.450	BMB
2	5.03	CHLORIDE	25.145	3.015	46.23	10.392	BM
3	6.34	NITRITE	2.508	0.374	5.74	0.476	MB
4	8.26	n.a.	0.139	0.047	0.72	n.a.	BM
5	9.26	BROMIDE	0.625	0.130	1.99	0.975	MB
6	10.67	SULFATE	6.489	2.280	34.97	10.402	BM
7	11.37	NITRATE	1.469	0.418	6.41	0.513	MB
Total:			38.662	6.521	100.00	23.208	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

4 STD C

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD C**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

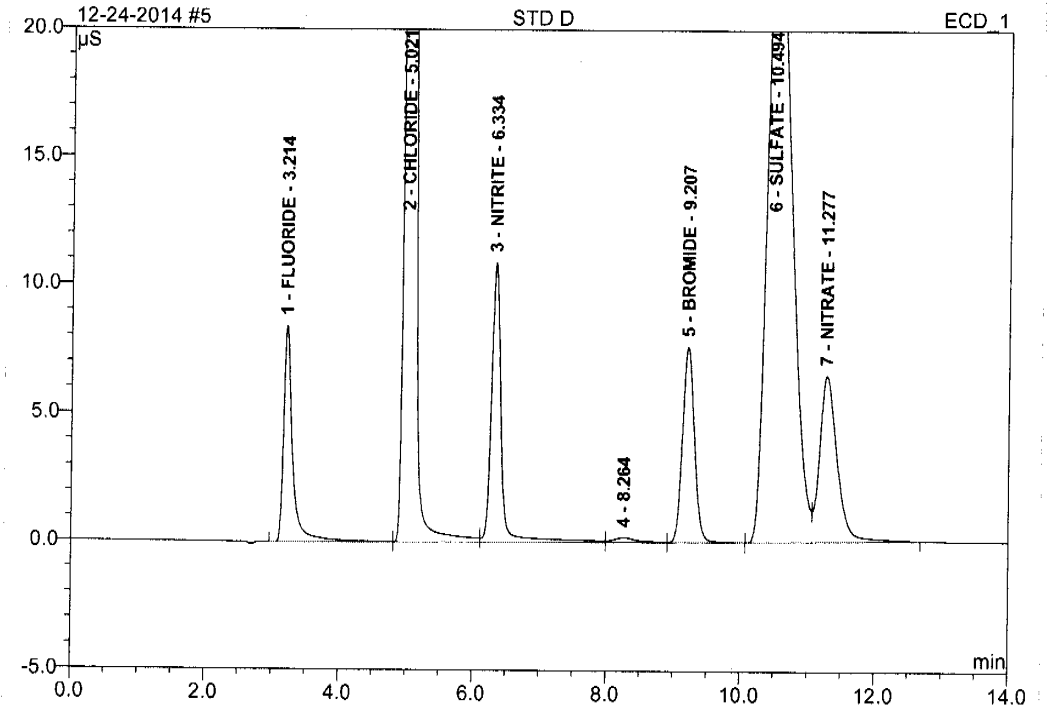


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	4.207	0.514	2.69	0.902	BMB
2	5.03	CHLORIDE	76.065	9.247	48.43	31.870	BM
3	6.34	NITRITE	4.993	0.761	3.99	0.969	MB
4	8.26	n.a.	0.165	0.052	0.27	n.a.	BM
5	9.23	BROMIDE	4.849	0.997	5.22	7.474	MB
6	10.57	SULFATE	17.033	6.625	34.69	30.218	BM
7	11.34	NITRATE	2.961	0.899	4.71	1.102	MB
Total:			110.273	19.095	100.00	72.535	

5 STD D

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD D**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



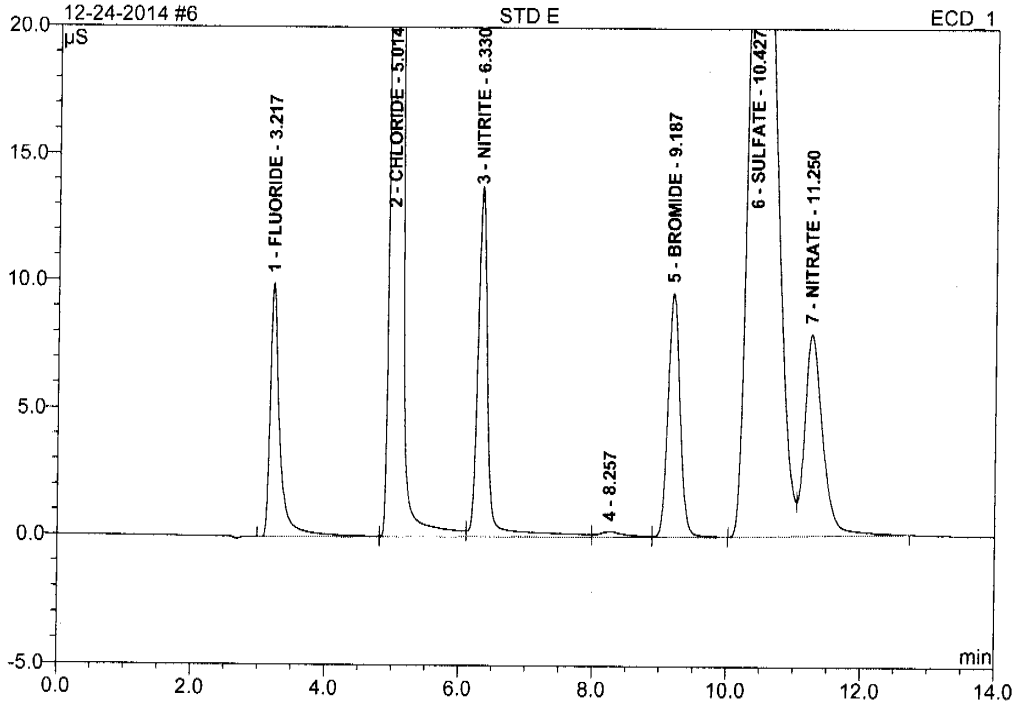
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.405	1.328	4.23	2.329	BM
2	5.02	CHLORIDE	115.261	14.194	45.22	48.922	M
3	6.33	NITRITE	10.881	1.865	5.94	2.374	M
4	8.26	n.a.	0.197	0.082	0.26	n.a.	M
5	9.21	BROMIDE	7.590	1.576	5.02	11.810	MB
6	10.49	SULFATE	25.682	10.362	33.01	47.266	BM
7	11.28	NITRATE	6.462	1.983	6.32	2.433	MB
Total:			174.479	31.392	100.00	115.134	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

6 STD E

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD E**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



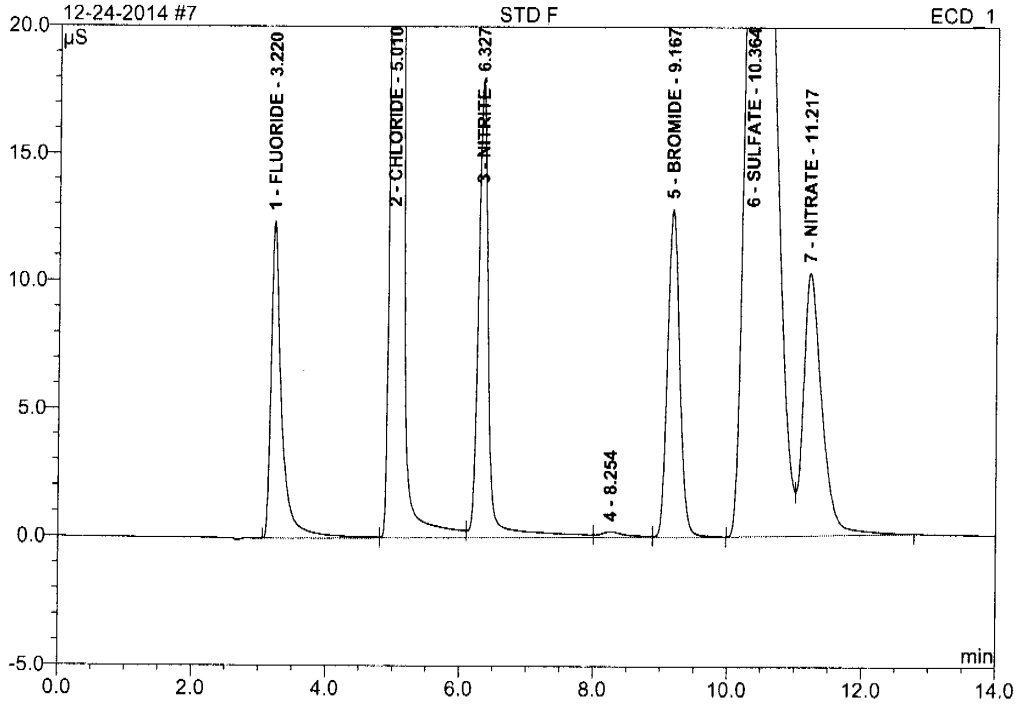
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	9.959	1.678	3.99	2.942	BM
2	5.01	CHLORIDE	152.909	19.012	45.27	65.526	M
3	6.33	NITRITE	13.775	2.406	5.73	3.063	M
4	8.26	n.a.	0.216	0.098	0.23	n.a.	M
5	9.19	BROMIDE	9.569	1.992	4.74	14.926	MB
6	10.43	SULFATE	33.517	14.315	34.09	65.296	BM
7	11.25	NITRATE	7.944	2.496	5.94	3.061	MB
Total:			227.889	41.996	100.00	154.814	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

7 STD F

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD F**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



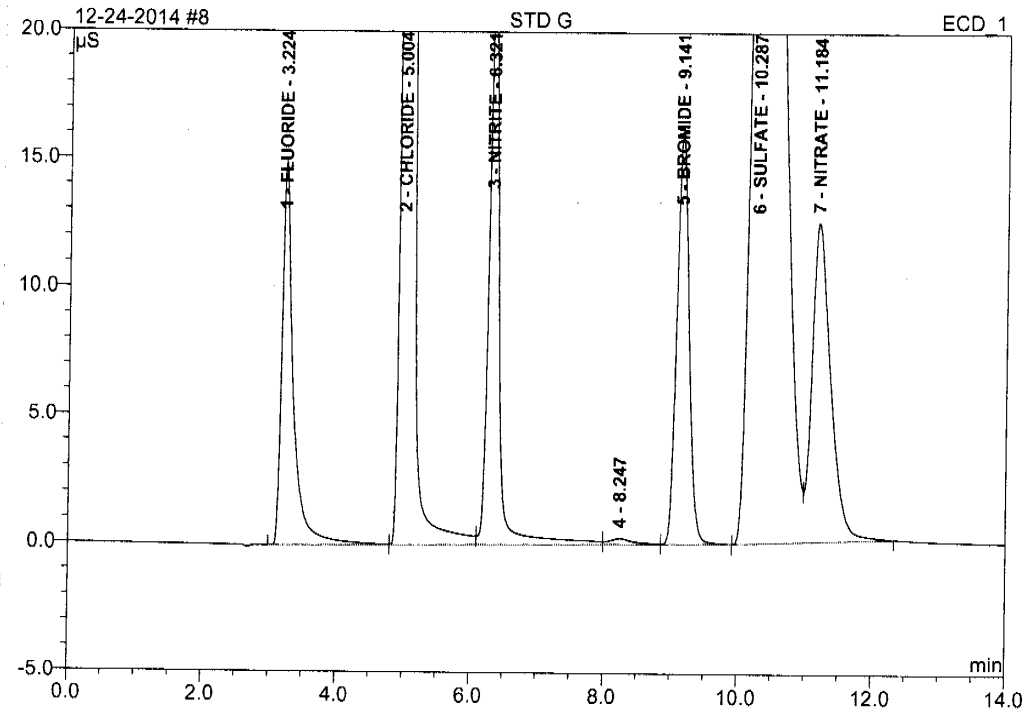
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	12.395	2.267	4.35	3.976	BM
2	5.01	CHLORIDE	182.800	23.015	44.16	79.325	M
3	6.33	NITRITE	17.936	3.155	6.05	4.015	M
4	8.25	n.a.	0.212	0.095	0.18	n.a.	M
5	9.17	BROMIDE	12.807	2.683	5.15	20.102	MB
6	10.36	SULFATE	40.390	17.608	33.78	80.319	BM
7	11.22	NITRATE	10.250	3.294	6.32	4.041	MB
Total:			276.789	52.118	100.00	191.779	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

8 STD G

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



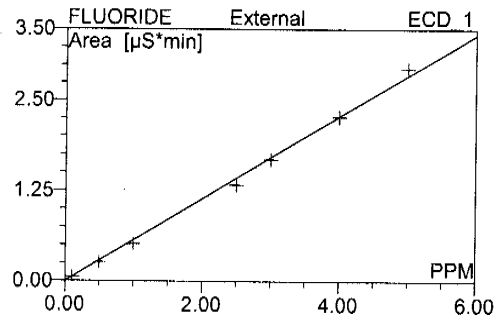
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	14.948	2.945	4.49	5.164	BM
2	5.00	CHLORIDE	228.832	29.054	44.32	100.137	M
3	6.32	NITRITE	22.125	3.946	6.02	5.022	M
4	8.25	n.a.	0.228	0.100	0.15	n.a.	M
5	9.14	BROMIDE	15.982	3.379	5.15	25.317	MB
6	10.29	SULFATE	48.349	22.100	33.71	100.811	BM
7	11.18	NITRATE	12.403	4.029	6.15	4.942	MB
Total:			342.867	65.553	100.00	241.393	

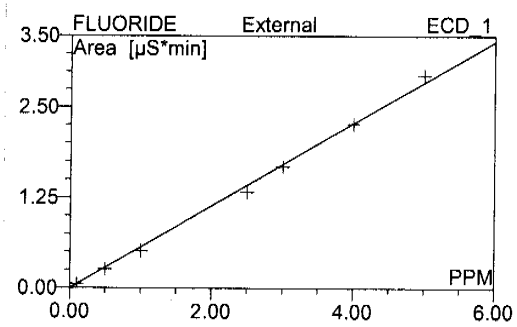
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

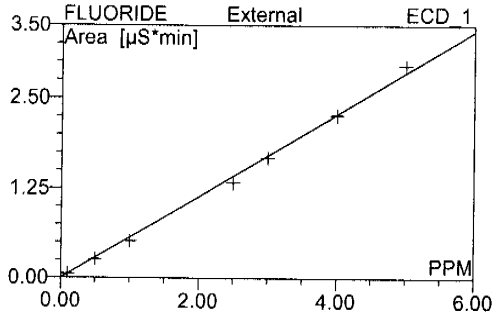
8 STD G

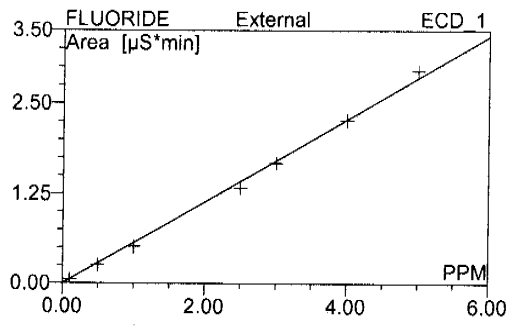
ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**###############**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**









No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	3.22	FLUORIDE	Lin	7	99.6655	0.0000	0.5702	0.0000
2	5.00	CHLORIDE	Lin	7	99.9287	0.0000	0.2901	0.0000
3	6.32	NITRITE	Lin	7	99.8942	0.0000	0.7858	0.0000
4	8.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	9.14	BROMIDE	Lin	7	99.8869	0.0000	0.1335	0.0000
6	10.29	SULFATE	Lin	7	99.8927	0.0000	0.2192	0.0000
7	11.18	NITRATE	Lin	7	99.8807	0.0000	0.8152	0.0000
Average:					99.8581	0.0000	0.4690	0.0000

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Southeast
ACCUTEST LABORATORIES

12/29/14

Technical Report for

FPM Remediations

HM-AZ PBR Holloman AFB; Alamogordo, NM

1029-13-01-H-X0853

Accutest Job Number: FA20579

Sampling Date: 12/09/14

Report to:

FPM Remediations
584 Phoenix Dr
Rome, NY 13441
i.raicevic@fpm-remediations.com

ATTN: Ivana Raicevic

Total number of pages in report: **285**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. Test results relate only to samples analyzed.

Accutest Laboratories is the sole authority for authorizing edits or modifications to this document. Unauthorized modification of this report is strictly prohibited.

Sections: 1 2 3 4 5 6 7 8 9 10 11

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **6**
Section 4: Sample Results **7**
4.1: FA20579-1: XU854ISH06A 8
4.2: FA20579-2: XU854ISH06S 11
4.3: FA20579-3: XU854ISH06D 14
4.4: FA20579-4: XU854ISH06C 17
Section 5: Misc. Forms **20**
5.1: Chain of Custody 21
Section 6: GC/MS Semi-volatiles - QC Data Summaries **24**
6.1: Method Blank Summary 25
6.2: Blank Spike Summary 26
6.3: Matrix Spike/Matrix Spike Duplicate Summary 27
6.4: Internal Standard Area Summaries 28
6.5: Initial and Continuing Calibration Summaries 30
Section 7: GC/MS Semi-volatiles - Raw Data **35**
7.1: Samples 36
7.2: Method Blanks 44
7.3: Blank Spikes 46
7.4: Matrix Spike/Matrix Spike Duplicates 48
7.5: Initial and Continuing Calibarations 52
7.6: Instrument Run Logs 77
7.7: Prep Logs 79
Section 8: GC Semi-volatiles - QC Data Summaries **80**
8.1: Method Blank Summary 81
8.2: Blank Spike Summary 82
8.3: Laboratory Control Sample Summary 83
8.4: Matrix Spike/Matrix Spike Duplicate Summary 84
8.5: Duplicate Summary 85
8.6: Surrogate Recovery Summaries 87
8.7: GC Surrogate Retention Time Summaries 88
8.8: Initial and Continuing Calibration Summaries 90
Section 9: GC Semi-volatiles - Raw Data **100**
9.1: Samples 101
9.2: Method Blanks 110
9.3: Blank Spikes 112
9.4: Laboratory Control Samples 115
9.5: Matrix Spike/Matrix Spike Duplicates 118
9.6: Duplicates 124
9.7: Initial and Continuing Calibarations 129
9.8: Instrument Run Logs 162

Sections:

Table of Contents

9.9: Prep Logs 164
Section 10: General Chemistry - QC Data Summaries 165
10.1: Method Blank and Spike Results Summary 166
10.2: Matrix Spike Results Summary 167
10.3: Matrix Spike Duplicate Results Summary 168
10.4: Inst QC GN64610: Nitrogen, Nitrate 169
Section 11: General Chemistry - Raw Data 173
11.1: Raw Data GN64610: Nitrogen, Nitrate 174

Accutest Laboratories

Sample Summary

FPM Remediations

Job No: FA20579

HM-AZ PBR Holloman AFB; Alamogordo, NM
Project No: 1029-13-01-H-X0853

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA20579-1	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06A
FA20579-2	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06S
FA20579-3	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06D
FA20579-4	12/09/14	13:03	MS	12/10/14	SO	Soil	XU854ISH06C

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: FPM Remediations **Job No:** FA20579

Site: HM-AZ PBR Holloman AFB; Alamogordo, NM **Report Date** 12/29/2014 11:28:01

4 Samples were collected on 12/09/2014 and were received at Accutest on 12/10/2014 properly preserved, at 2.6 Deg. C and intact. These Samples received an Accutest job number of FA20579. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method SW846 6850

Matrix: SO **Batch ID:** OP54351

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-3MSD, FA20723-3MS were used as the QC samples indicated.

Matrix Spike Recovery(s) for Perchlorate are outside control limits. Outside control limits due to high level in sample relative to spike amount. For method performance in clean matix refer to Blank Spike.

Extractables by GC By Method SW846 8330B

Matrix: SO **Batch ID:** OP54324

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20579-1MS, FA20579-1MSD, FA20723-1DUP were used as the QC samples indicated.

Wet Chemistry By Method EPA 300/SW846 9056A

Matrix: SO **Batch ID:** GP25228

All samples were prepped within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20723-1MSD, FA20723-1MS were used as the QC samples for Nitrogen, Nitrate.

MS/MSD Recovery(s) for Nitrogen, Nitrate are outside control limits. Spike recovery indicates possible matrix interference. For method performance in clean matrix refer to Blank Spike.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Svetlana Izosimova, QA Officer

Date: December 29, 2014

Summary of Hits

Job Number: FA20579
Account: FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Collected: 12/09/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FA20579-1	**XU854ISH06A**					
Perchlorate		12.5	1.8	0.89	ug/kg	SW846 6850
Nitrogen, Nitrate		31.3	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20579-2	**XU854ISH06S**					
Perchlorate		15.6	1.9	0.96	ug/kg	SW846 6850
Nitrogen, Nitrate		31.6	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20579-3	**XU854ISH06D**					
Perchlorate		12.9	1.8	0.88	ug/kg	SW846 6850
Nitrogen, Nitrate		31.1	1.0	0.50	mg/kg	EPA 300/SW846 9056A
FA20579-4	**XU854ISH06C**					
Perchlorate		11.2	1.8	0.91	ug/kg	SW846 6850
Nitrogen, Nitrate		31.4	1.0	0.50	mg/kg	EPA 300/SW846 9056A

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06A
Lab Sample ID: FA20579-1
Matrix: SO - Soil
Method: SW846 6850 SW846 6850
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/09/14
Date Received: 12/10/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9311.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.12 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.5	1.8	0.89	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06A
Lab Sample ID: FA20579-1 **Date Sampled:** 12/09/14
Matrix: SO - Soil **Date Received:** 12/10/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045288.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	107%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH06A		
Lab Sample ID:	FA20579-1	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.3	1.0	0.50	0.50	mg/kg	1	12/24/14 03:17	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06S
Lab Sample ID: FA20579-2 **Date Sampled:** 12/09/14
Matrix: SO - Soil **Date Received:** 12/10/14
Method: SW846 6850 SW846 6850 **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9312.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.04 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	15.6	1.9	0.96	0.53	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06S
Lab Sample ID: FA20579-2 **Date Sampled:** 12/09/14
Matrix: SO - Soil **Date Received:** 12/10/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045291.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	99	50	43	ug/kg	
121-82-4	RDX	50 U	99	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	99	50	43	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	99	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	99	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	99	50	42	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	99	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	990	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH06S		
Lab Sample ID:	FA20579-2	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.6	1.0	0.50	0.50	mg/kg	1	12/24/14 03:34	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06D
Lab Sample ID: FA20579-3
Matrix: SO - Soil
Method: SW846 6850 SW846 6850
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Date Sampled: 12/09/14
Date Received: 12/10/14
Percent Solids: n/a [a]

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9313.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.13 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	12.9	1.8	0.88	0.49	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06D
Lab Sample ID: FA20579-3 **Date Sampled:** 12/09/14
Matrix: SO - Soil **Date Received:** 12/10/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045294.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	106%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH06D		
Lab Sample ID:	FA20579-3	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.1	1.0	0.50	0.50	mg/kg	1	12/24/14 03:51	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06C
Lab Sample ID: FA20579-4 **Date Sampled:** 12/09/14
Matrix: SO - Soil **Date Received:** 12/10/14
Method: SW846 6850 SW846 6850 **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q9314.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
Run #2							

	Initial Weight	Final Volume
Run #1	1.10 g	10.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
14797-73-0	Perchlorate	11.2	1.8	0.91	0.50	ug/kg	

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: XU854ISH06C
Lab Sample ID: FA20579-4 **Date Sampled:** 12/09/14
Matrix: SO - Soil **Date Received:** 12/10/14
Method: SW846 8330B SW846 8330B **Percent Solids:** n/a [a]
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB045295.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	50.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
2691-41-0	HMX	50 U	100	50	44	ug/kg	
121-82-4	RDX	50 U	100	50	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	50 U	100	50	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	50 U	100	50	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	50 U	100	50	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	50 U	100	50	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	50 U	100	50	40	ug/kg	
55-63-0	Nitroglycerine	500 U	1000	500	250	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
610-39-9	3,4-Dinitrotoluene	108%		69-134%

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	XU854ISH06C		
Lab Sample ID:	FA20579-4	**Date Sampled:**	12/09/14
Matrix:	SO - Soil	**Date Received:**	12/10/14
		Percent Solids:	n/a [a]
Project:	HM-AZ PBR Holloman AFB; Alamogordo, NM		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate	31.4	1.0	0.50	0.50	mg/kg	1	12/24/14 04:08	VK	EPA 300/SW846 9056A

(a) Percent solids not analyzed. Sample was air dried prior to analysis.

LOQ = Limit of Quantitation
LOD = Limit of Detection
DL = Detection Limit
U = Indicates a result < LOD
J = Indicates a result > = DL (MDL) but < LOQ

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # HA20579 PAGE 1 OF 1

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: FPM REMEDIATIONS, LLC.
Address: 5811 UNIVERSITY HEIGHTS BLVD STE 101
City: SAN ANTONIO State: TX Zip: 78249
Project Contact: JOANA RAICEVIC E-mail: J.RAICEVIC@FPM-REMEDIATIONS.COM
Phone#: 210-495-7744 EXT. 13
Sampler(s) Name(s) (Printed): MIKE SAMPLE.

Project Information

Project Name: NM-AZ PBR
Street: HOLLOMAN AFB
City: ALAMOGORDO State: NM
Project #: 1029-13-0144 - XU854
Fax #: 210-495-8544
Client Purchase Order #: HOLLOMAN AFB

Analytical Information

Accutest Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MeOH	8330SL	NC353.2	NO 3/NO 2	PERC 6850	Matrix Codes / LAB USE ONLY
1	XU854ISH06A	12/9	13:03	MS	Soil	1										X	X	X	X	
2	XU854ISH06S	12/9	13:03	MS	Soil	1										X	X	X	X	
3	XU854ISH06D	12/9	13:03	MS	Soil	1										X	X	X	X	
4	XU854ISH06C	12/9	13:03	MS	Soil	1										X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [X] 10 Days Standard — MB
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [X] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 MIKE SAMPLE	12/9 14:45	2 FED EX	3 FED EX 12-10-14	1030	4
Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
5		6	7		8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.6

5.1 5

FA20579: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA20579 CLIENT: FPM PROJECT: NM-AZ PBR

DATE/TIME RECEIVED: 12-10-14 1035 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8066 1931 6469

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [X] TRIP BLANK NOT PROVIDED
- [X] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.4
- [ ] OBSERVED TEMPS: 2.2
- [ ] CORRECTED TEMPS: 2.6

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 12-10-14 REVIEWER SIGNATURE/DATE 12-10-14

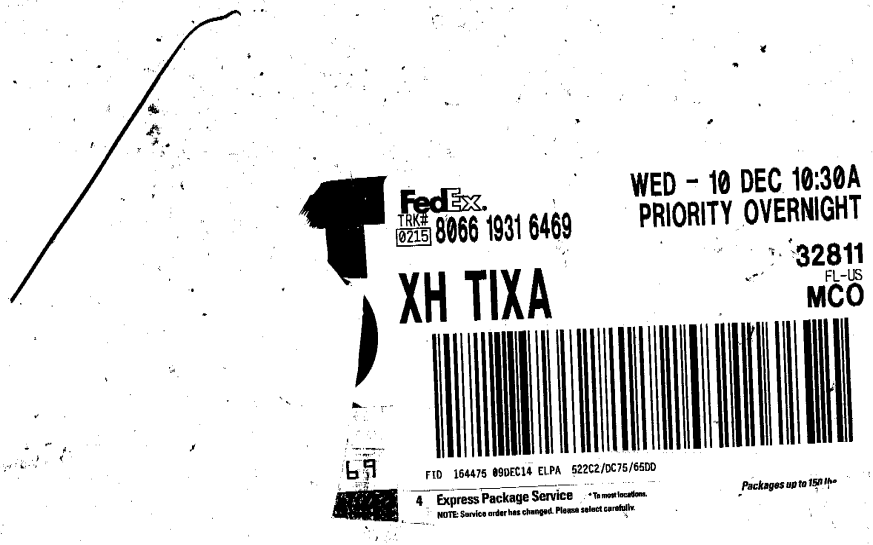
NF 10/14

receipt confirmation 102914.xls

5.1 5

FA20579: Chain of Custody

Page 2 of 3



FA20579: Chain of Custody
Page 3 of 3

Southeast ACCUTEST LABORATORIES

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54351-MB	Q9321.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	Result	RL	MDL	Units	Q
14797-73-0	Perchlorate	ND	2.0	0.55	ug/kg	

Blank Spike Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54351-BS	Q9320.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
14797-73-0	Perchlorate	2	2.2	110	80-120

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54351-MS	Q9323.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
OP54351-MSD	Q9324.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295
FA20723-3	Q9322.D	1	12/26/14	NAF	12/22/14	OP54351	SQ295

The QC reported here applies to the following samples: **Method:** SW846 6850

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	FA20723-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
14797-73-0	Perchlorate	12.5		1.8	13.3	44* [a]	1.8	13.5	55* [a]	1	80-120/15

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ295-ICC295	**Injection Date:**	12/26/14
Lab File ID:	Q9302.D	**Injection Time:**	09:48
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	30308	4.92
Upper Limit [c]	43769	6.92
Lower Limit [d]	14590	2.92

Lab Sample ID	IS 1 AREA	RT
FA20579-1	34091	4.74
FA20579-2	31246	4.75
FA20579-3	32373	4.75
FA20579-4	32867	4.75

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	SQ295-CC295	**Injection Date:**	12/26/14
Lab File ID:	Q9315.D	**Injection Time:**	11:53
Instrument ID:	GCMSQ	**Method:**	SW846 6850

	IS 1 AREA	RT
Initial Cal [a]	29179	4.92
Check Std [b]	29434	4.92
Upper Limit [c]	43769	6.92
Lower Limit [d]	14590	2.92

Lab Sample ID	IS 1 AREA	RT
ZZZZZZ	32514	4.74
ZZZZZZ	33666	4.75
OP54351-BS	30701	4.87
OP54351-MB	32566	4.85
FA20723-3	29590	4.74
OP54351-MS	30468	4.75
OP54351-MSD	32871	4.75

IS 1 = Cl18O4 (ISTD)

(a) Initial Cal is: SQ295-ICC295 Q9302.D 12/26/14 09:48. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to + 50% of initial cal area.
(c) Upper Limit = + 50% of initial standard area; Retention time + 2 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -2 minutes of check standard.

Initial Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-ICC295
Lab FileID: Q9302.D

Initial Calibration ReSponse Factors - D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2 : D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3 : D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4 : D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5 : D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6 : D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7 : D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) Cl18O4	----------ISTD----------									
3) Perchlorate	1.1702	1.1127	1.2371	1.2032	1.2930	1.3009	1.4553	1.2532	8.869	1.0000

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM
Sample: SQ295-ICV295
Lab FileID: Q9307.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9307
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	1.917	-4.2	95.8

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-CC295
Lab FileID: Q9315.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9315
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.021	1.0	101.0

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-CC295
Lab FileID: Q9316.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9316
Type : QC
Level : 1

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	0.200	0.181	-9.4	90.6

CC Criteria: +/- 15%

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: SQ295-CC295
Lab FileID: Q9325.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\1226_6850_SQ295\SQ295.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\1226_6850_SQ295\Q9299.d
2:D:\MassHunter\Data\1226_6850_SQ295\Q9300.d
3:D:\MassHunter\Data\1226_6850_SQ295\Q9301.d
4:D:\MassHunter\Data\1226_6850_SQ295\Q9302.d
5:D:\MassHunter\Data\1226_6850_SQ295\Q9303.d
6:D:\MassHunter\Data\1226_6850_SQ295\Q9304.d
7:D:\MassHunter\Data\1226_6850_SQ295\Q9305.d

Data File: Q9325
Type : QC
Level : 4

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
Cl18O4	---	--ISTD--		
Perchlorate	2.000	2.087	4.3	104.3

CC Criteria: +/- 15%

Southeast

ACCUTEST LABORATORIES

GC/MS Semi-volatiles

Raw Data

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9311.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:18
Sample Name	:	FA20579-1
Vial	:	Vial 14
Sample Info	:	OP54351,SQ295,1.12,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

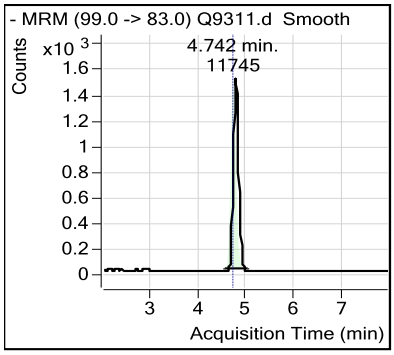
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.738	107.0 -> 89.0	34091	5.000	ng/ml	-0.187	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.742	99.0 -> 83.0	11745	1.405	ng/ml	85	2.6
		101.0 -> 85.0	4450				

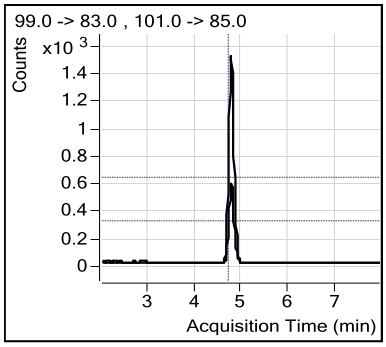
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

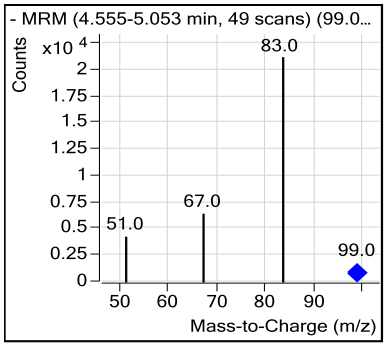
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9311.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:18
Sample Name	:	FA20579-1
Vial	:	Vial 14
Sample Info	:	OP54351,SQ295,1.12,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

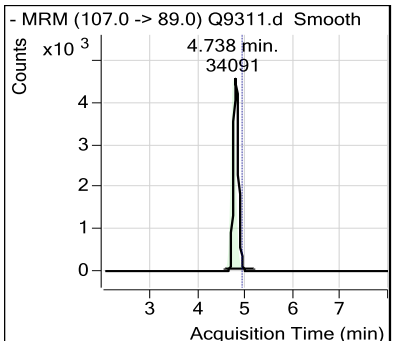
Perchlorate

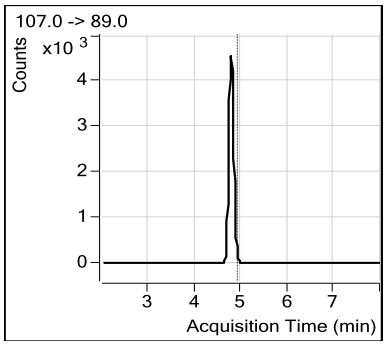


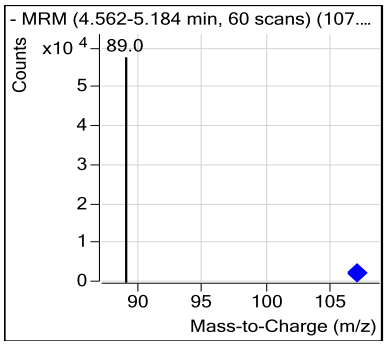




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9312.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:27
Sample Name	:	FA20579-2
Vial	:	Vial 15
Sample Info	:	OP54351,SQ295,1.04,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

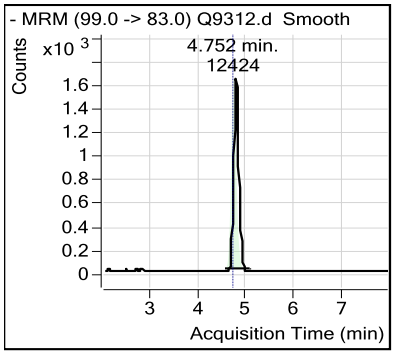
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	31246	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	12424	1.619	ng/ml	89	2.8
		101.0 -> 85.0	4469				

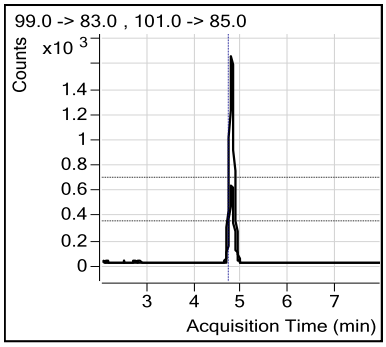
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

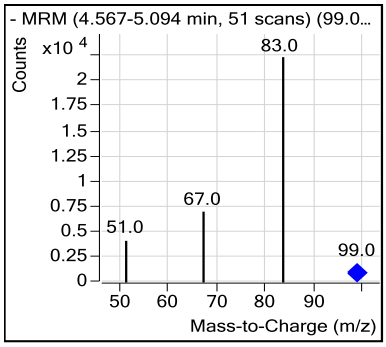
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9312.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:27
Sample Name	:	FA20579-2
Vial	:	Vial 15
Sample Info	:	OP54351,SQ295,1.04,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

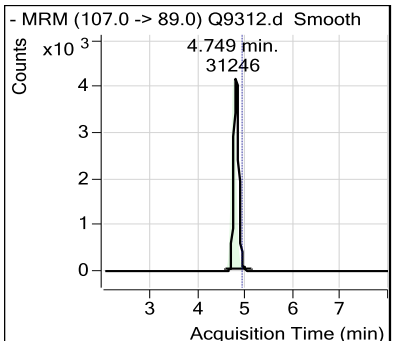
Perchlorate

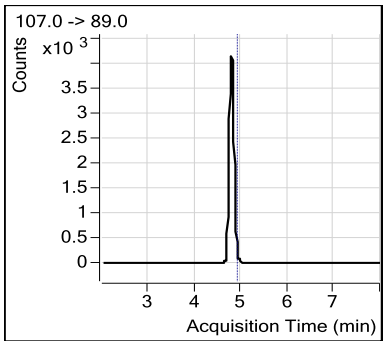


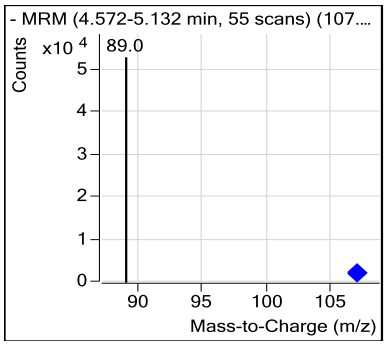




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9313.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:36
Sample Name	:	FA20579-3
Vial	:	Vial 16
Sample Info	:	OP54351,SQ295,1.13,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

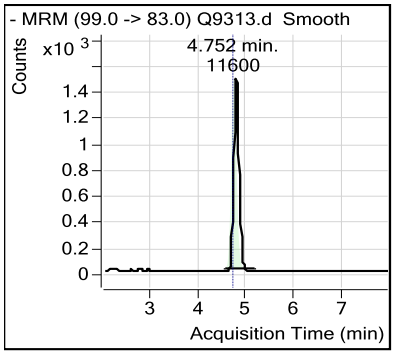
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	32373	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	11600	1.460	ng/ml	95	3.0
		101.0 -> 85.0	3811				

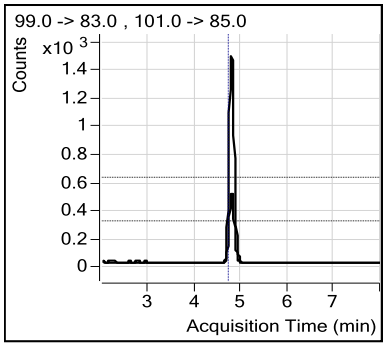
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

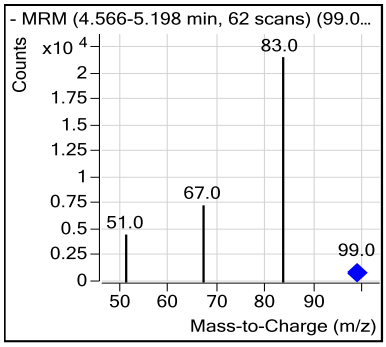
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9313.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:36
Sample Name	:	FA20579-3
Vial	:	Vial 16
Sample Info	:	OP54351,SQ295,1.13,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

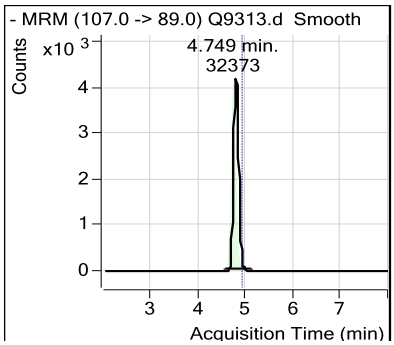
Perchlorate

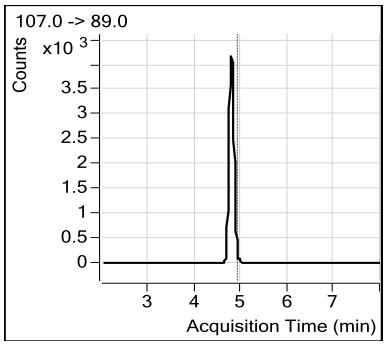


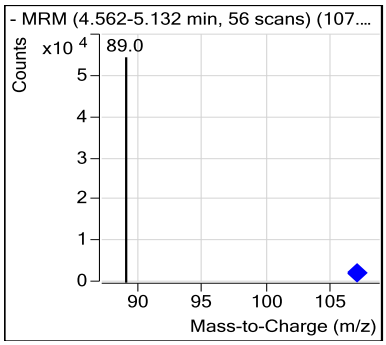




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9314.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:45
Sample Name	:	FA20579-4
Vial	:	Vial 17
Sample Info	:	OP54351,SQ295,1.10,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

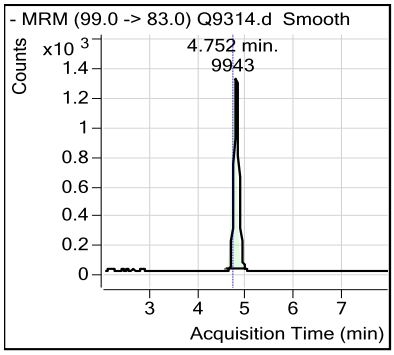
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	32867	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	9943	1.235	ng/ml	93	3.0
		101.0 -> 85.0	3351				

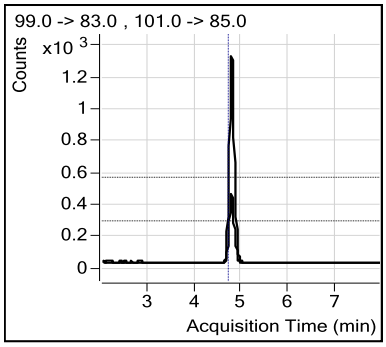
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

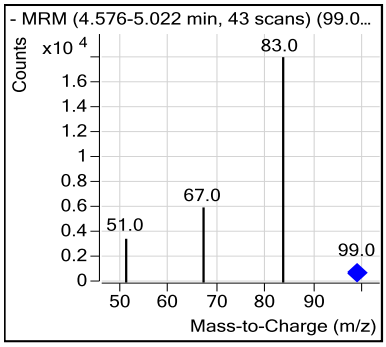
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9314.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:45
Sample Name	:	FA20579-4
Vial	:	Vial 17
Sample Info	:	OP54351,SQ295,1.10,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

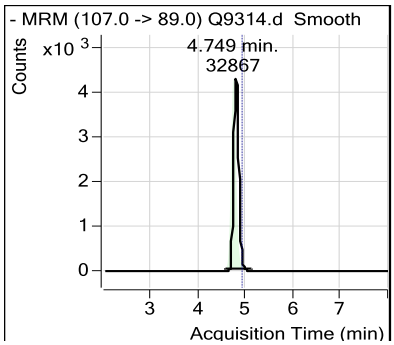
Perchlorate

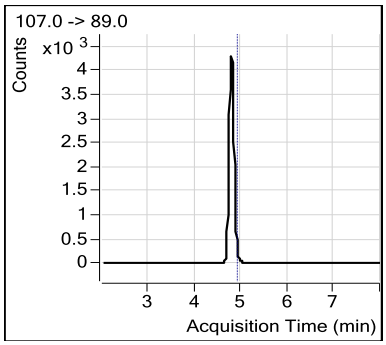


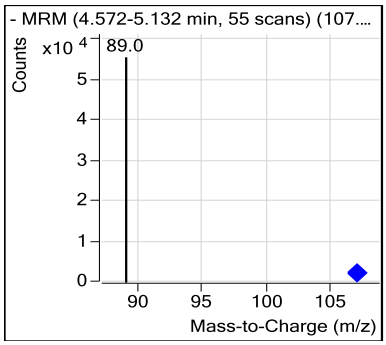




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9321.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:46
Sample Name	:	OP54351-MB
Vial	:	Vial 13
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

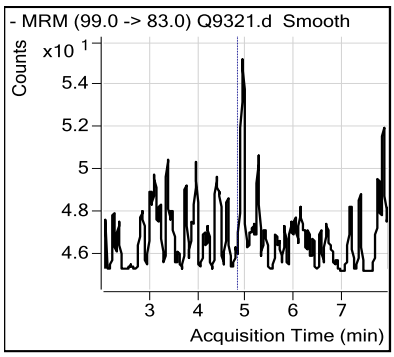
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.852	107.0 -> 89.0	32566	5.000	ng/ml	-0.073	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**

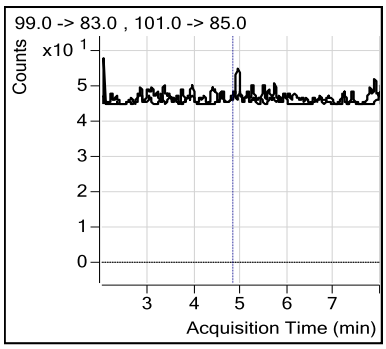
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

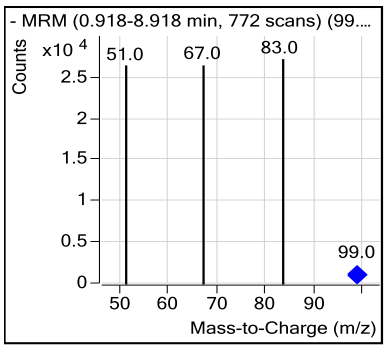
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9321.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:46
Sample Name	:	OP54351-MB
Vial	:	Vial 13
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

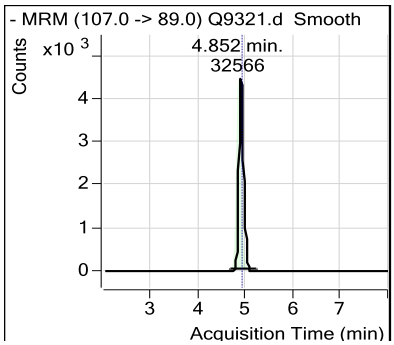
Perchlorate

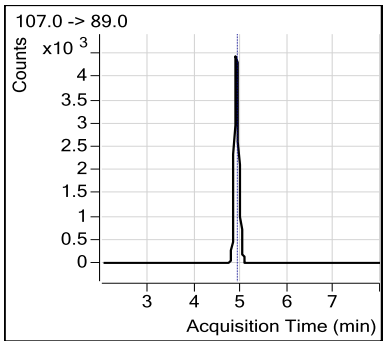


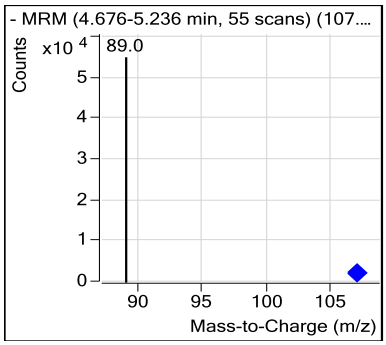




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9320.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:37
Sample Name	:	OP54351-BS
Vial	:	Vial 12
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

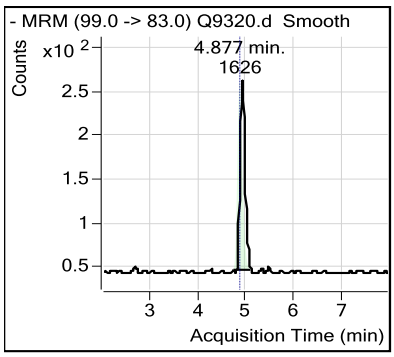
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.873	107.0 -> 89.0	30701	5.000	ng/ml	-0.052	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.877	99.0 -> 83.0	1626	0.218	ng/ml	91	2.9
		101.0 -> 85.0	566				

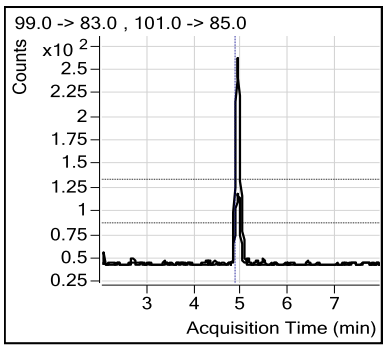
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

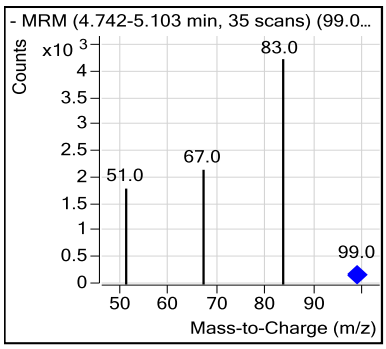
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9320.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:37
Sample Name	:	OP54351-BS
Vial	:	Vial 12
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

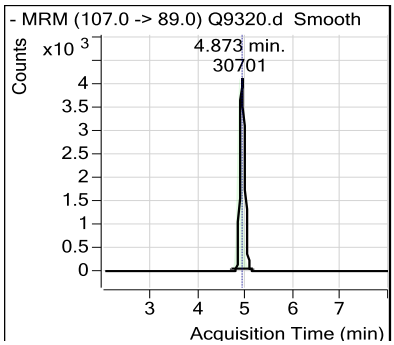
Perchlorate

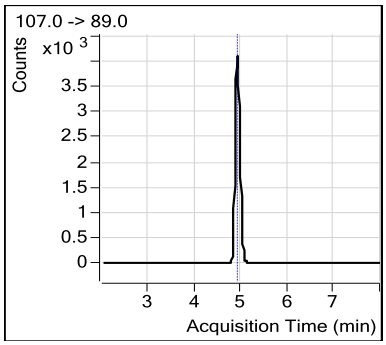


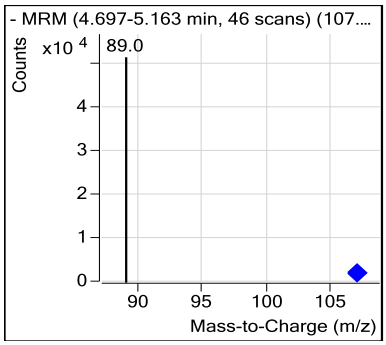




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9323.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:03
Sample Name	:	OP54351-MS
Vial	:	Vial 21
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

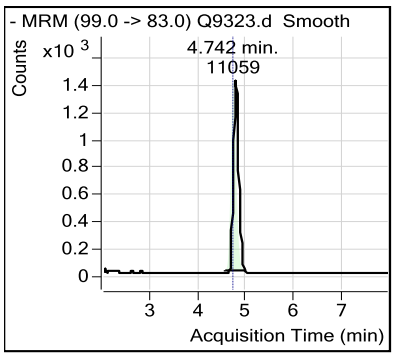
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	30468	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.742	99.0 -> 83.0	11059	1.479	ng/ml	91	2.9
		101.0 -> 85.0	3870				

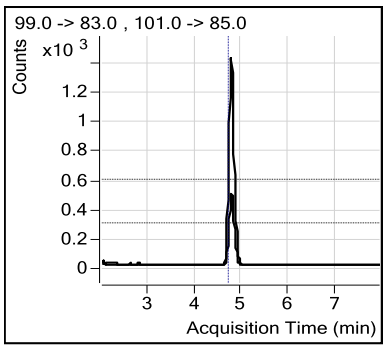
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

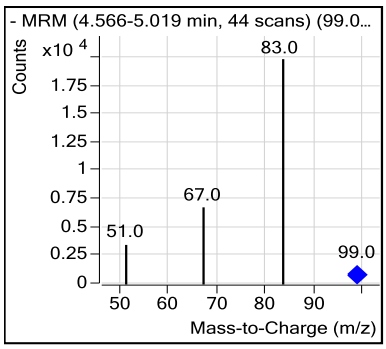
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9323.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:03
Sample Name	:	OP54351-MS
Vial	:	Vial 21
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

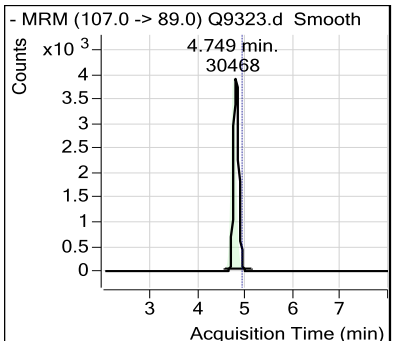
Perchlorate

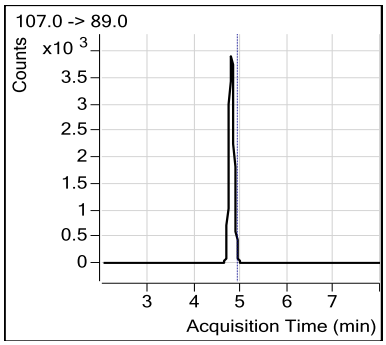


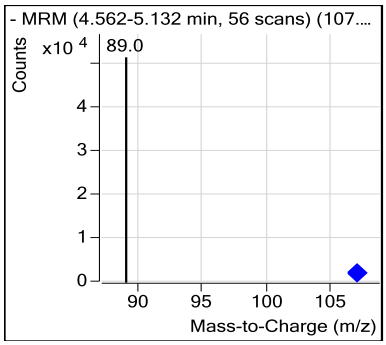




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9324.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:12
Sample Name	:	OP54351-MSD
Vial	:	Vial 22
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

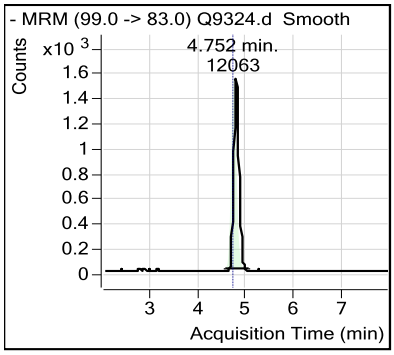
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.749	107.0 -> 89.0	32871	5.000	ng/ml	-0.176	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.752	99.0 -> 83.0	12063	1.495	ng/ml	99	3.3
		101.0 -> 85.0	3699				

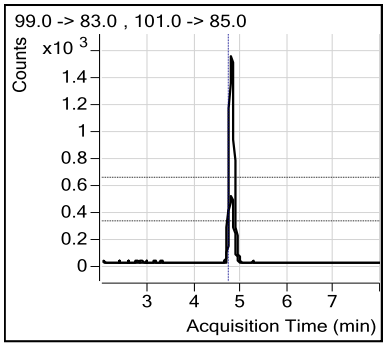
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

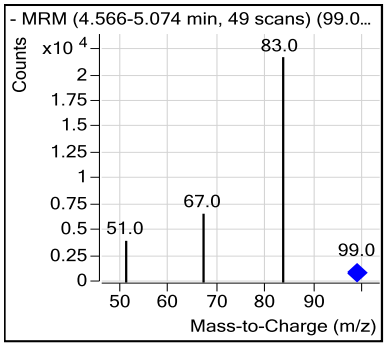
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9324.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:12
Sample Name	:	OP54351-MSD
Vial	:	Vial 22
Sample Info	:	OP54351,SQ295,1.11,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

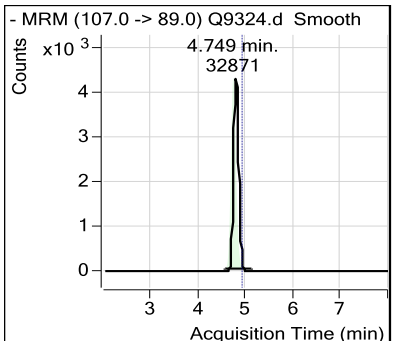
Perchlorate

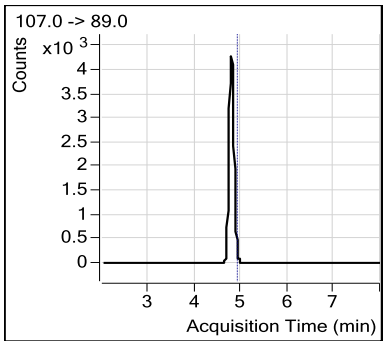


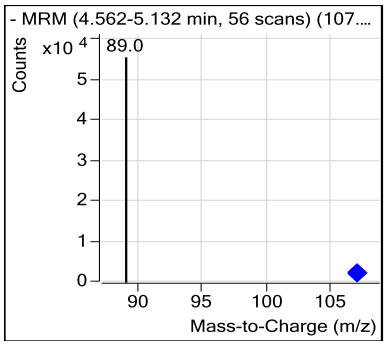




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	31638	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	1481	0.193	ng/ml	98	3.4
		101.0 -> 85.0	430				

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

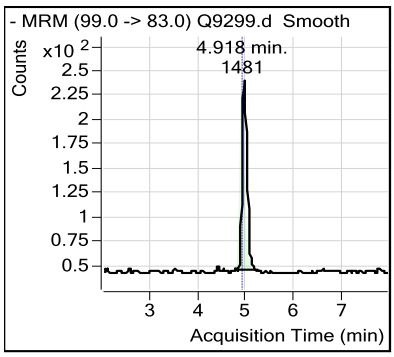
7.5.1

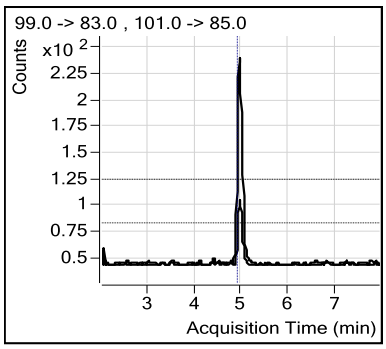
7

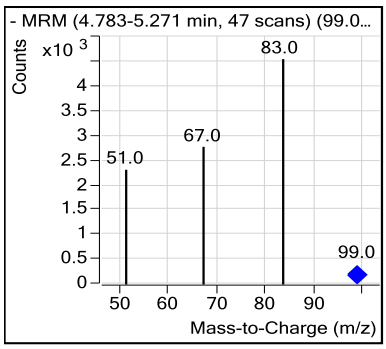
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9299.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:22
Sample Name	:	IC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

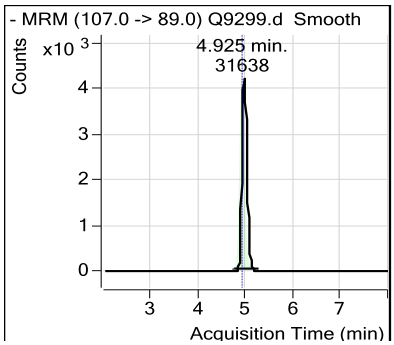
Perchlorate

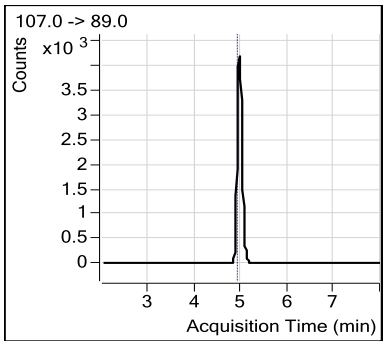


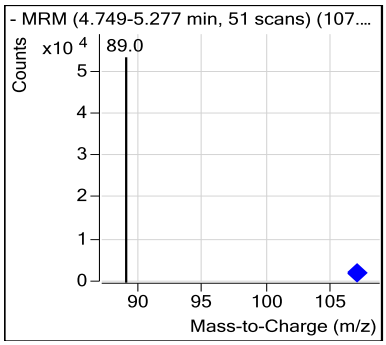




Cl18O4







Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:10

Quantitative Analysis Report for Perchlorate by 685

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)	Q-Ratio
Internal Standards								
Cl18O4	4.925	107.0 -> 89.0	30978	5.000	ng/ml		0.000	
System Monitoring Compounds								
Target Compounds							**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	3447	0.457	ng/ml	m	85	2.6
		101.0 -> 85.0	1319					

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

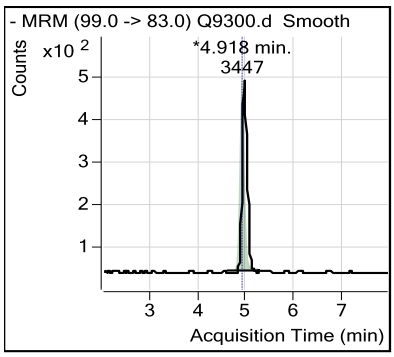
7.5.2

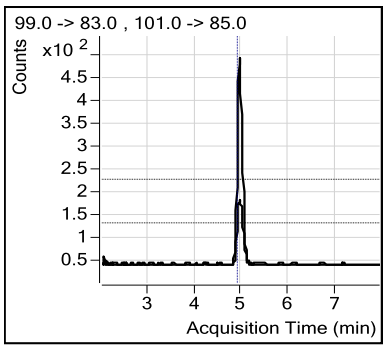
7

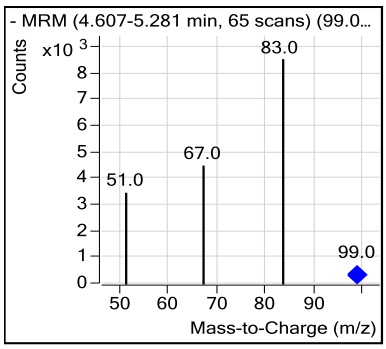
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9300.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:31
Sample Name	:	IC295-0.5
Vial	:	Vial 3
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

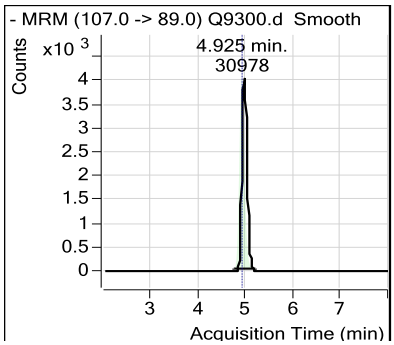
Perchlorate

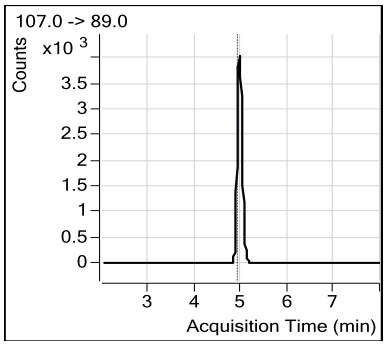


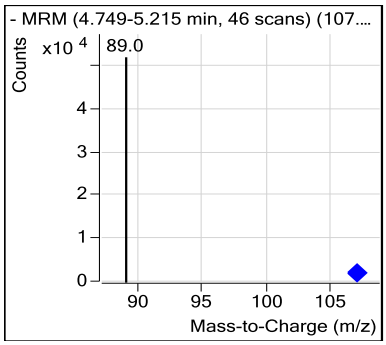




Cl18O4







Manual Integration Approval Summary

Sample Number:	SQ295-IC295	**Method:**	SW846 6850
Lab FileID:	Q9300.D	**Analyst approved:**	12/26/14 14:09 Nancy Saunders
Injection Time:	12/26/14 09:31	**Supervisor approved:**	12/26/14 15:10 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perchlorate	14797-73-0		4.92	Poor instrument integration

Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

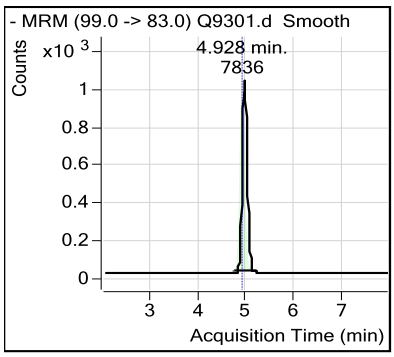
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31673	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.928	99.0 -> 83.0	7836	1.012	ng/ml	94	3.0
		101.0 -> 85.0	2618				

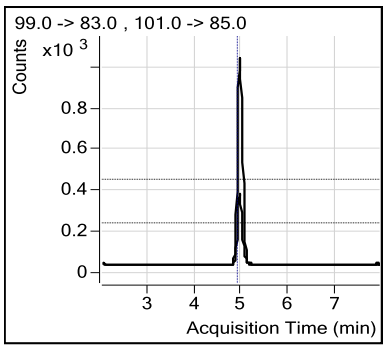
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

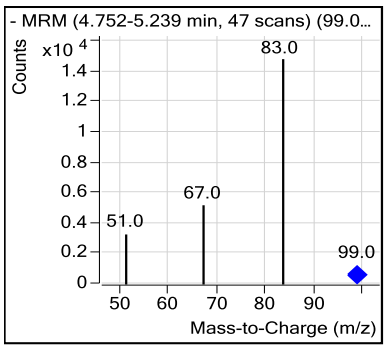
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9301.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:40
Sample Name	:	IC295-1.0
Vial	:	Vial 4
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

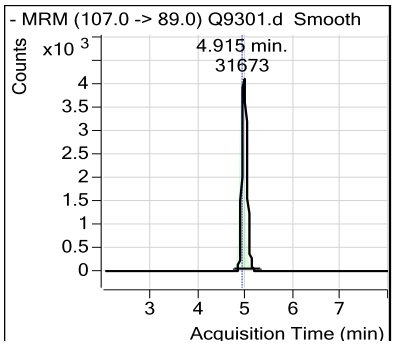
Perchlorate

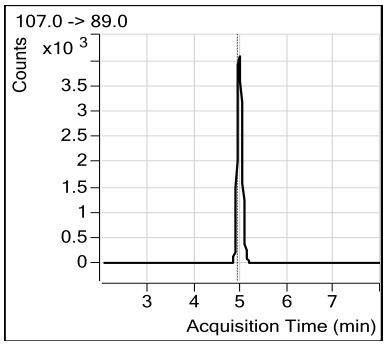


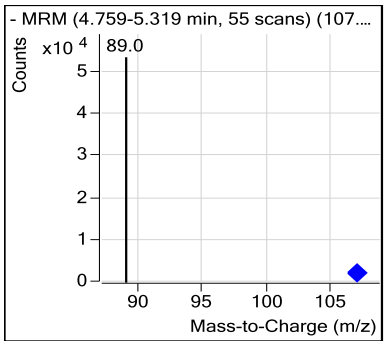




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.925	107.0 -> 89.0	30308	5.000	ng/ml	0.000	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14586	1.954	ng/ml	90	2.8
		101.0 -> 85.0	5130				

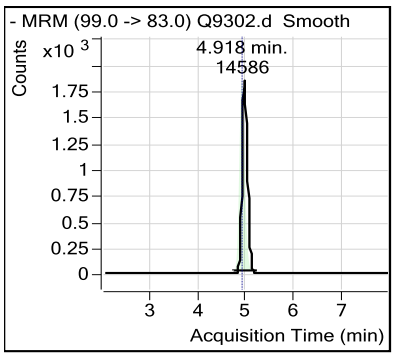
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

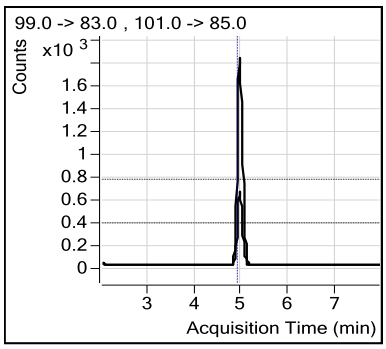
ACCUTEST LABORATORIES FA20579

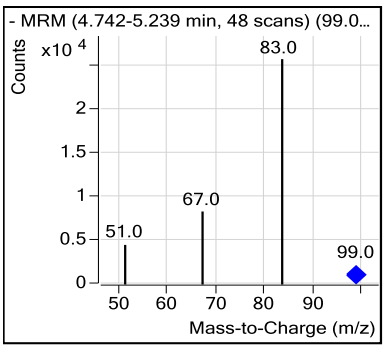
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9302.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:48
Sample Name	:	ICC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

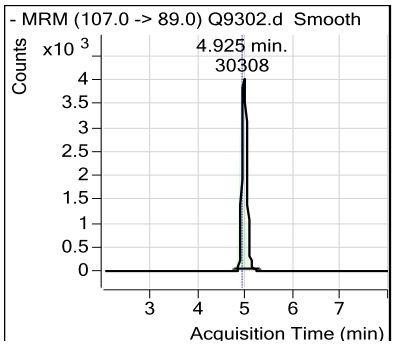
Perchlorate

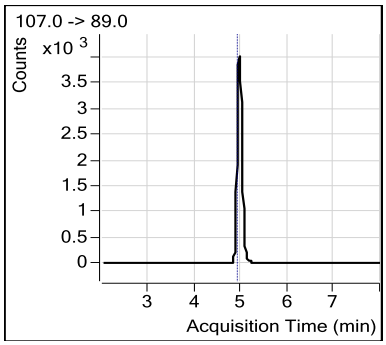


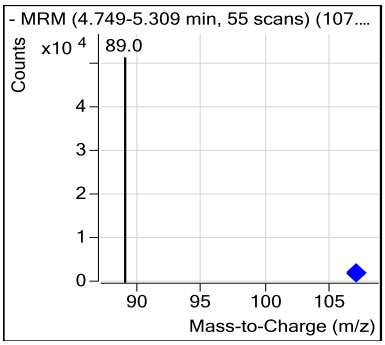




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

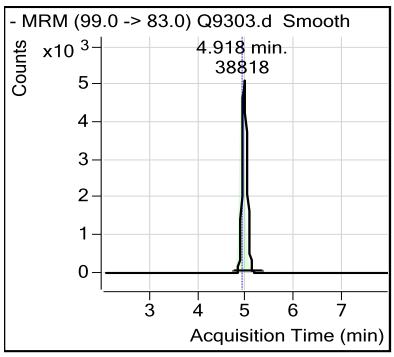
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	30021	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	38818	5.122	ng/ml	94	3.0
		101.0 -> 85.0	12891				

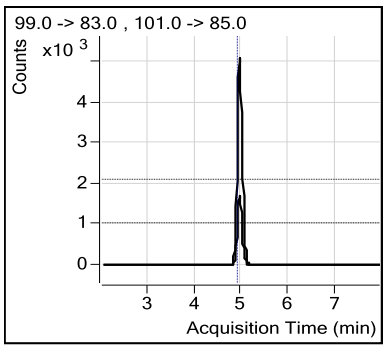
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

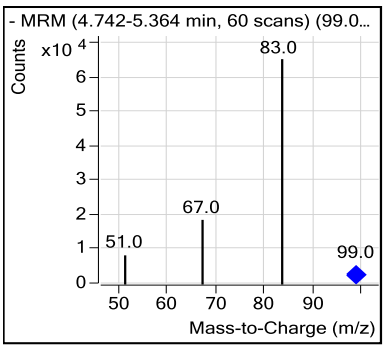
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9303.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 09:57
Sample Name	:	IC295-5.0
Vial	:	Vial 6
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

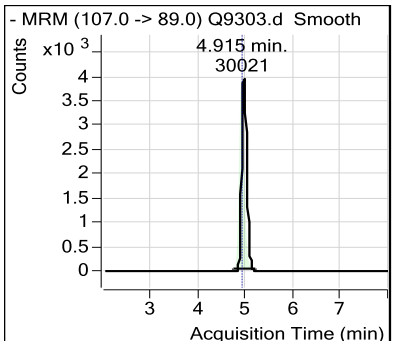
Perchlorate

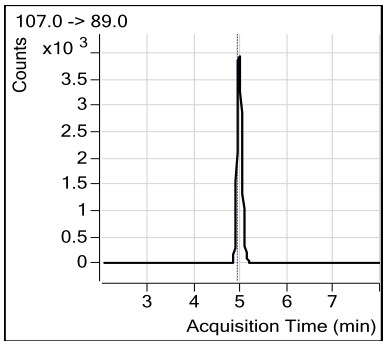


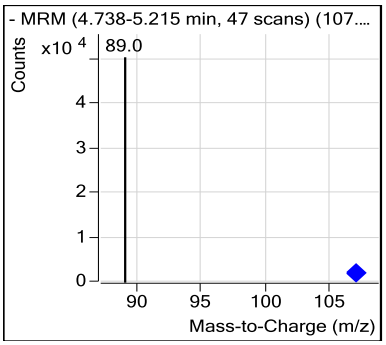




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	29362	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	76394	9.938	ng/ml	95	3.1
		101.0 -> 85.0	24863				

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

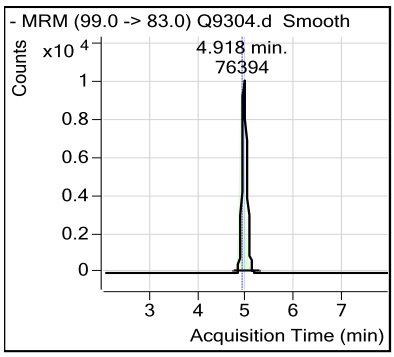
7.5.6

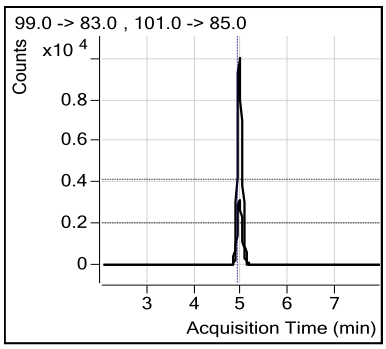
7

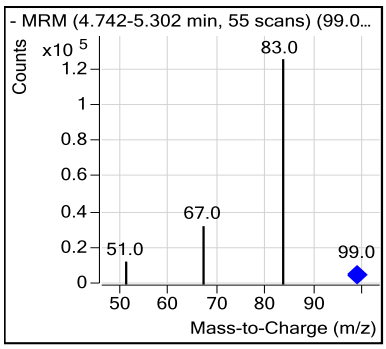
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9304.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:06
Sample Name	:	IC295-10
Vial	:	Vial 7
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

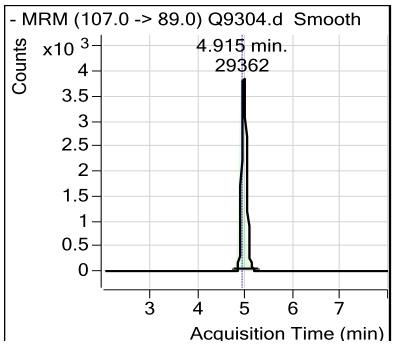
Perchlorate

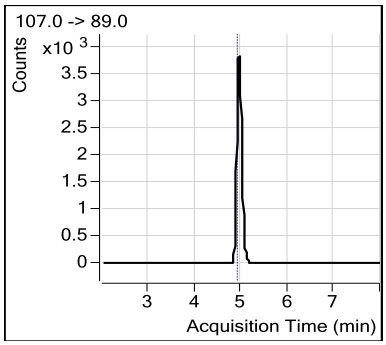


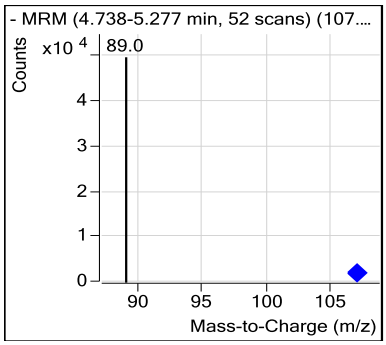




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

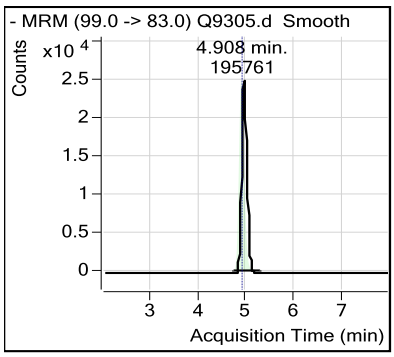
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	26903	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	195761	25.005	ng/ml	95	3.0
		101.0 -> 85.0	64220				

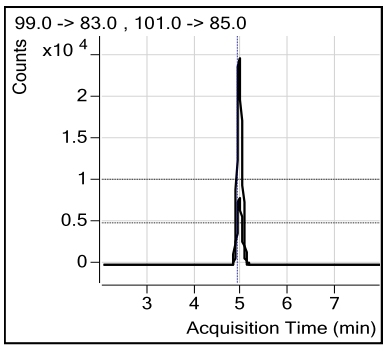
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

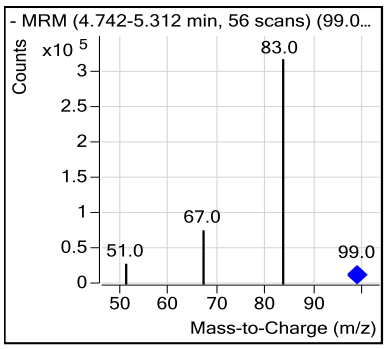
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9305.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:15
Sample Name	:	IC295-25
Vial	:	Vial 8
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

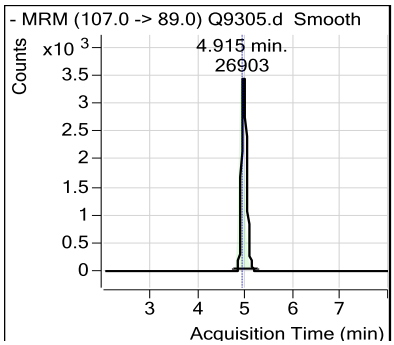
Perchlorate

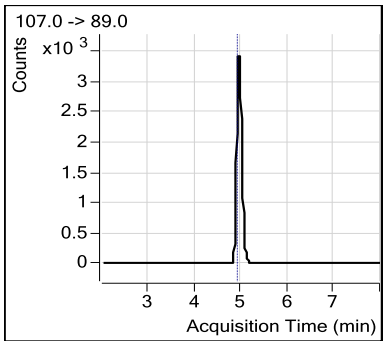


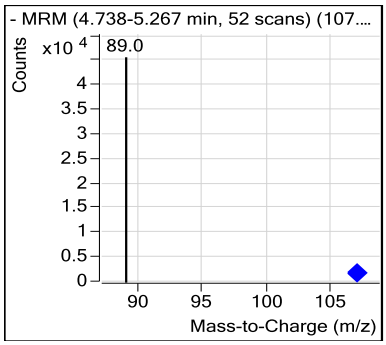




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

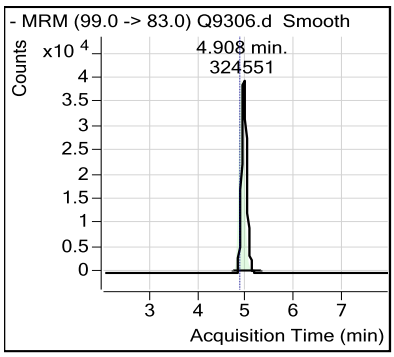
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.904	107.0 -> 89.0	22545	5.000	ng/ml	-0.021	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.908	99.0 -> 83.0	324551	43.928	ng/ml	97	3.2
		101.0 -> 85.0	102852				

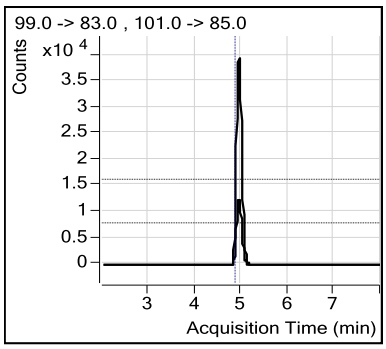
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

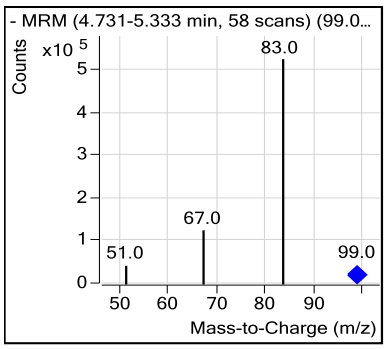
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9306.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:23
Sample Name	:	IC295-50
Vial	:	Vial 9
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

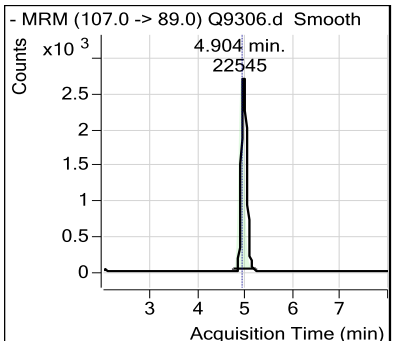
Perchlorate

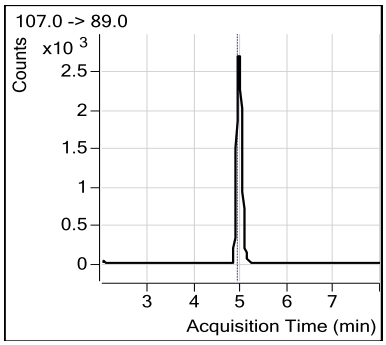


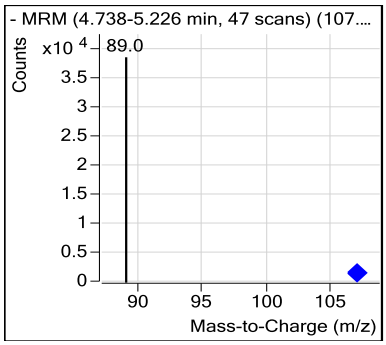




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

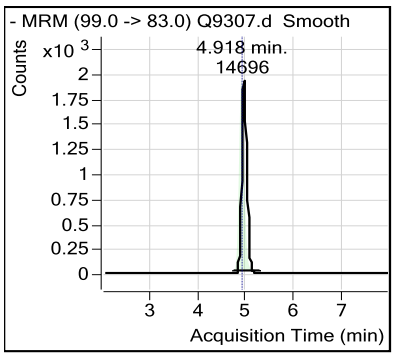
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31140	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14696	1.917	ng/ml	95	3.1
		101.0 -> 85.0	4806				

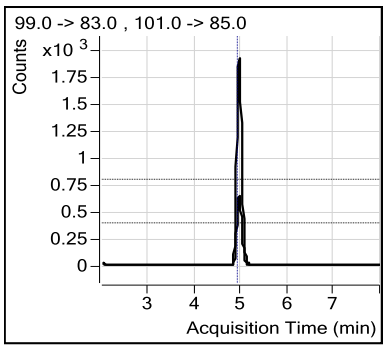
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

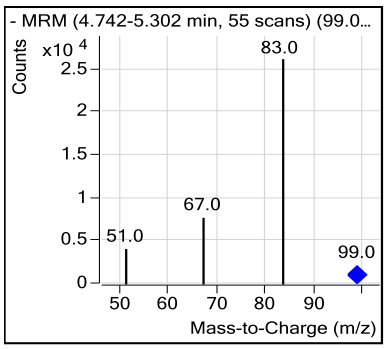
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9307.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 10:33
Sample Name	:	ICV295-2.0
Vial	:	Vial 10
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

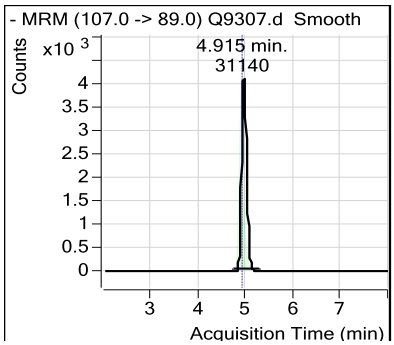
Perchlorate

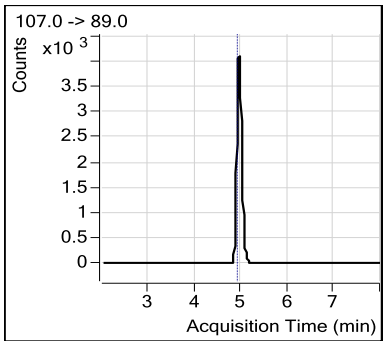


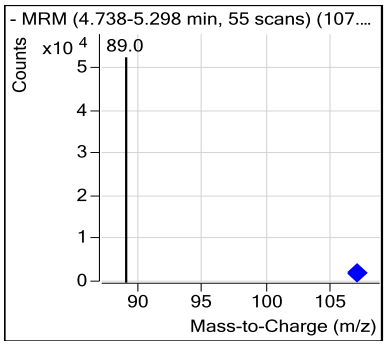




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9315.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:53
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

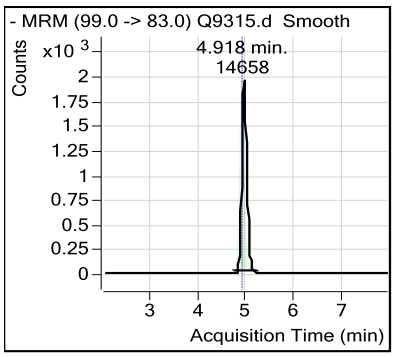
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	29434	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14658	2.021	ng/ml	91	2.9
		101.0 -> 85.0	5114				

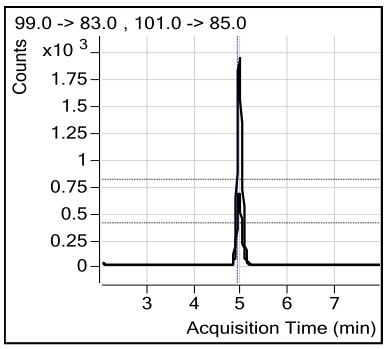
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

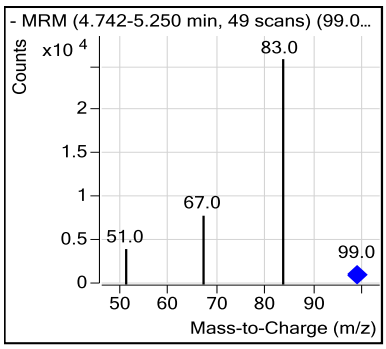
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9315.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 11:53
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

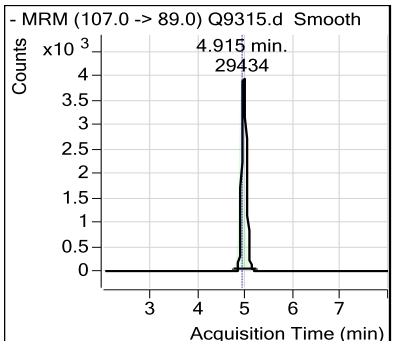
Perchlorate

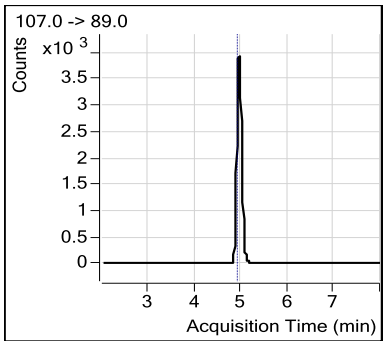


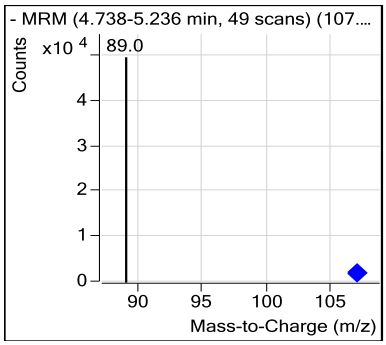




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9316.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:02
Sample Name	:	CC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

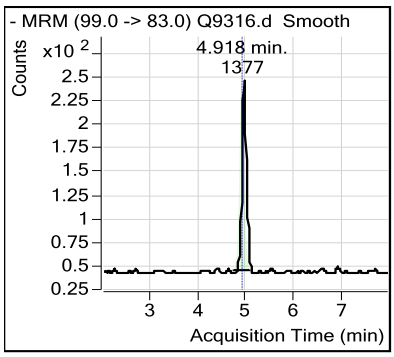
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.915	107.0 -> 89.0	31304	5.000	ng/ml	-0.010	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	1377	0.181	ng/ml	95	3.1
		101.0 -> 85.0	450				

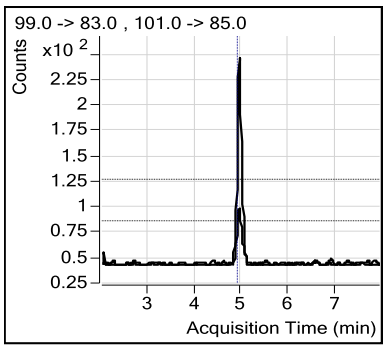
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

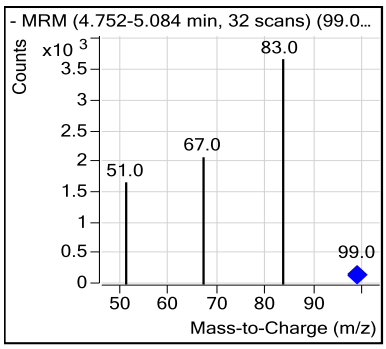
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9316.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 12:02
Sample Name	:	CC295-0.2
Vial	:	Vial 2
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

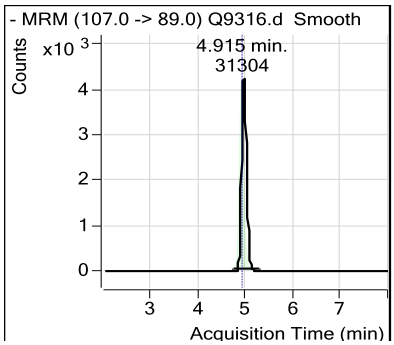
Perchlorate

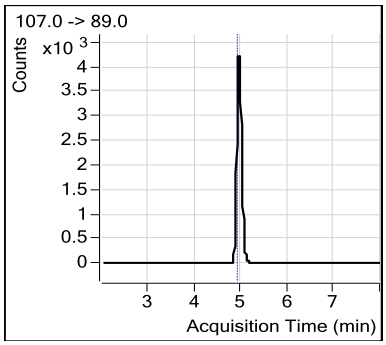


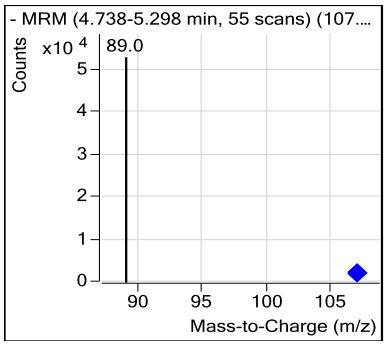




Cl18O4







Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9325.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:21
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	
Quant Batch Name	:	SQ295.batch.bin
Last Calib Update	:	2014-12-26 13:54

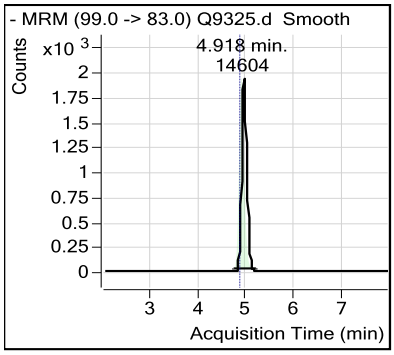
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Q-Ratio
Internal Standards							
Cl18O4	4.904	107.0 -> 89.0	28382	5.000	ng/ml	-0.021	
System Monitoring Compounds							
Target Compounds						**Qvalue**	**Q-Ratio**
Perchlorate	4.918	99.0 -> 83.0	14604	2.087	ng/ml	94	3.0
		101.0 -> 85.0	4817				

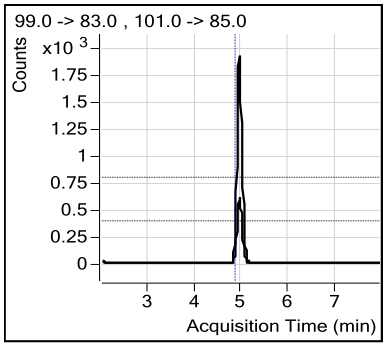
(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

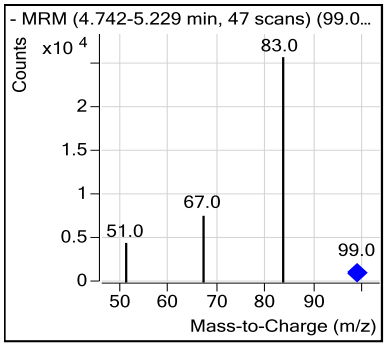
Quantitative Analysis Report for Perchlorate by 6850

Data File	:	Q9325.d
Operator	:	nancyf
Acq Method Name	:	Perchlorate2.m
Acquisition date	:	2014-12-26 13:21
Sample Name	:	CC295-2.0
Vial	:	Vial 5
Sample Info	:	OP54351,SQ295,1.00,,,10,1,SOIL
Quant Method	:	6850_1226_SQ294.quantmethod.xml
Tune File	:	
Tune Date	:	

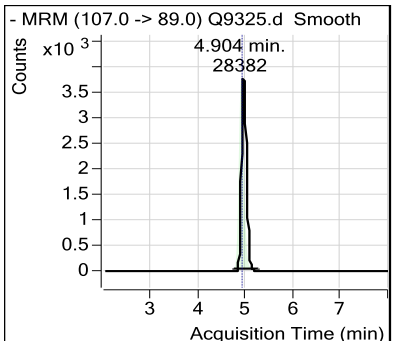
Perchlorate

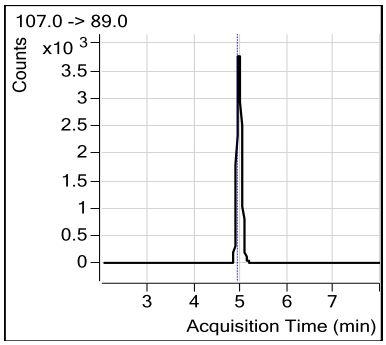


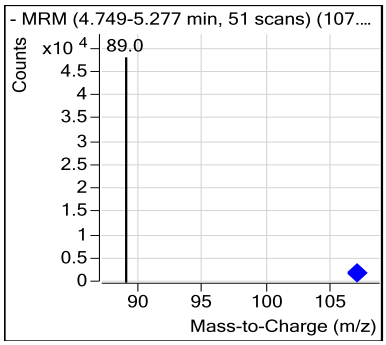




Cl18O4







ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	K prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6BTO
ACQ. METHOD:	Perch1ovoate_2
PROC. METHOD:	1226 6BTO SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	~~294~~ 295

mc 122614

ANALYST:	NAS
SOLVENT A LOT #:	95/5 084623/066640
SOLVENT B LOT #:	95/5 066640/084623
WATER LOT #:	084623
ISTD Lot #:	7199

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9294	1	CCB	6BTO	—	—	C 10K	—		IS 7 pm curve
Q 95	1	CCB		—	—		—		
Q 96	1	CCB		—	—		—		
Q 97	2	CCB		—	—		—		
Q 98	2	CCB		—	—		—		
Q 99	2	~~ICP~~ ICV295-0.2		LC494	20/10ml		3.4		✓
Q 300	3	FCV295-0.5			50ul 10ml		2.6	AZ	✓
Q 01	4	-1.0			100ul 10ml		3.0		✓
Q 02	5	ICCV295-2.0			200ul 10ml		2.8		✓
Q 03	6	FCV295-5.0			500ul 10ml		3.0		✓
Q 04	7	-10			1ml 10ml		3.1		✓
Q 05	8	-25			2.5ml 10ml		3.0		✓
Q 06	9	-50			5ml 10ml		3.2		Drop point
Q 07	10	FCV295-2.0		LC495	20ml 10ml		3.1		Pass
Q 08	11	ICS295-0.2		↓	20ml 10ml	7.0K 4.1K	2.7		Pass
Q 09	12	OP5435-1-BS		OP5435	1X	C 10K	X		AA missinject
Q 10	13	-MB					X		↓
Q 11	14	FA20579-1					2.6		✓
Q 12	15	-2					2.8		✓
Q 13	16	-3	↓	↓	↓	↓	3.0		✓

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

ACCUTEST LABORATORIES SE

DATE:	12-26-14
COLUMN TYPE:	Rx Prime
AMOUNT INJECTED:	15 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	

LCMS1-Q ANALYSIS LOG

METHODS:	6850
ACQ. METHOD:	Perchlorate 2
PROC. METHOD:	R226 6850 SQ295
CALIB. DATE:	12-26-14
RUN BATCH: SQ	295

ANALYST:	NAS		
SOLVENT A LOT #:	9515	084623	066640
SOLVENT B LOT #:	9515	066640	084623
WATER LOT #:	084623		
ISTD Lot #:	7199		

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	SCON	ION RATIO	MANUAL INTS RATIONALE, PK #	COMMENTS
Q 9314	17	FA20574-4	6850	OP54351	1X	L10K	3.0		✓
Q 15	5	CC295-2.0		LC494	20ave 10ml		2.9		Pass
Q 16	2	-0.2		↓	20ave 10ml		3.1		Pass
Q 17	1	CCB		—	—		—		NA
Q 18	18	FA20723-1		OP54351	1X		2.8		✓
Q 19	19	-2					2.7		✓
Q 20	12	OP54351-BS					2.9		✓
Q 21	13	-MB					—		✓
Q 22	20	FA20723-3					2.6		✓
Q 23	21	OP54351-MS					2.9		✓
Q 24	22	-MSD					3.3		✓
Q 25	5	FC295-2.0		LC494	20ave 10ml		3.0		✓ Pass
Q 26	2	CC295-0.2	↓	↓	20ave 10ml		2.8		Pass
Q 27	1	CCB	↓	—	—	↓	—		
Q									
Q									
Q						12-26-14			
Q						NAS			
Q									
Q									

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Analyst's Signature:

ACCUTEST LABORATORIES SE

SOLID SAMPLE PREP REPORT

Date/Time: 12-22-14 1100 (Started) {mm/dd/yy 24:00}

Prep Method: 3550C 3580A or Method (circle)

Date/Time: 12-22-14 (Finished) {mm/dd/yy 24:00}

Batch#: OP54351

Analytical Method: 6850

Ext. By: NMS Conc. By: — Vialed By: NMS Balance ID: ADVPro5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54351-MB	/	1.00			10ml	
OP 54351- BS	/	1.00		20ul		
FA20579-1	1	1.12				
-2		1.04				
-3		1.13				
-4		1.10				
FA20723-1		1.04				
-2		1.20				
-3	↓	1.13			↓	
				12-22-14		
				NMS		
OP54351 - MS	1	1.11	5	20ul	10ml	FA20723-3
- MSD	1	1.11			↓	-3
DUP						

Comments:

Surr. ID: — Conc: — Exp. Date: — Inj. By: — Ver. By —

Spk. ID: LC450 Conc: 100ppb Exp. Date: 05-22-15 Inj. By: NMS Ver. By NMS

Initial Bath Temp (Therm ID): Exchange Bath/N-Evap Temp (Therm ID):

Observed Temp °C: Corr. Temp °C: Observed Temp °C: Corr. Temp °C:

CH2CL2 Lot # — Hexane Lot # — Na2SO4 Lot# —

Acetonitrile Lot # — Methanol Lot # — Acetone Lot# —

Syringe Filter Lot# Filter Paper # Reagent # 084623

Copper Lot # If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: Date: 12-22-14

Accepted By: Date: 12-22-14

NF rev. 09/14/12 extsolid 091412.xls

7.7.1 7

Southeast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-MB	BB045287.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	Result	RL	MDL	Units	Q
2691-41-0	HMX	ND	100	44	ug/kg	
121-82-4	RDX	ND	100	40	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	100	44	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	40	ug/kg	
35572-78-2	2-amino-4,6-Dinitrotoluene	ND	100	40	ug/kg	
19406-51-0	4-amino-2,6-Dinitrotoluene	ND	100	43	ug/kg	
118-96-7	2,4,6-Trinitrotoluene	ND	100	40	ug/kg	
55-63-0	Nitroglycerine	ND	1000	250	ug/kg	

CAS No.	Surrogate Recoveries		Limits
610-39-9	3,4-Dinitrotoluene	109%	69-134%

Blank Spike Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-BS	BB045285.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
2691-41-0	HMX	2500	2460	98	75-147
121-82-4	RDX	2500	2500	100	79-126
606-20-2	2,6-Dinitrotoluene	2500	2580	103	81-134
121-14-2	2,4-Dinitrotoluene	2500	2540	102	81-128
35572-78-2	2-amino-4,6-Dinitrotoluene	2500	2610	104	81-127
19406-51-0	4-amino-2,6-Dinitrotoluene	2500	2640	106	74-125
118-96-7	2,4,6-Trinitrotoluene	2500	2490	100	70-123
55-63-0	Nitroglycerine	12500	12600	101	73-121

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	109%	69-134%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-PT1	BB045286.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
2691-41-0	HMX	620	521	84	54-255
121-82-4	RDX	587	521	89	59-118
606-20-2	2,6-Dinitrotoluene	1320	1330	101	64-119
121-14-2	2,4-Dinitrotoluene	638	637	100	66-119
35572-78-2	2-amino-4,6-Dinitrotoluene	650	601	92	60-112
19406-51-0	4-amino-2,6-Dinitrotoluene	947	511	54	54-103
118-96-7	2,4,6-Trinitrotoluene	808	785	97	59-100
55-63-0	Nitroglycerine	1000	795	80	62-115

CAS No.	Surrogate Recoveries	BSP	Limits
610-39-9	3,4-Dinitrotoluene	112%	69-134%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-MS	BB045289.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
OP54324-MSD	BB045290.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
FA20579-1	BB045288.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	FA20579-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
2691-41-0	HMX	100	U	2480	2400	97	2500	2440	98	2	75-147/22
121-82-4	RDX	100	U	2480	2190	88	2500	2210	88	1	79-126/21
606-20-2	2,6-Dinitrotoluene	100	U	2480	2460	99	2500	2460	98	0	81-134/20
121-14-2	2,4-Dinitrotoluene	100	U	2480	2410	97	2500	2460	98	2	81-128/17
35572-78-2	2-amino-4,6-Dinitrotoluene	100	U	2480	2460	99	2500	2510	100	2	81-127/15
19406-51-0	4-amino-2,6-Dinitrotoluene	100	U	2480	2500	101	2500	2560	102	2	74-125/23
118-96-7	2,4,6-Trinitrotoluene	100	U	2480	2360	95	2500	2370	95	0	70-123/16
55-63-0	Nitroglycerine	1000	U	12400	12000	97	12500	12300	98	2	73-121/15

CAS No.	Surrogate Recoveries	MS	MSD	FA20579-1	Limits
610-39-9	3,4-Dinitrotoluene	105%	105%	107%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-DUP	BB045298.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
FA20723-1	BB045297.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	FA20723-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20723-1	Limits
610-39-9	3,4-Dinitrotoluene	96%	106%	69-134%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54324-DUP2	BB045299.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219
FA20723-1	BB045297.D	1	12/24/14	KL	12/19/14	OP54324	GBB1219

The QC reported here applies to the following samples: **Method:** SW846 8330B

FA20579-1, FA20579-2, FA20579-3, FA20579-4

CAS No.	Compound	FA20723-1 ug/kg	Q	DUP ug/kg	Q	RPD	Limits
2691-41-0	HMX	99 U		ND		nc	22
121-82-4	RDX	99 U		ND		nc	21
606-20-2	2,6-Dinitrotoluene	99 U		ND		nc	20
121-14-2	2,4-Dinitrotoluene	99 U		ND		nc	17
35572-78-2	2-amino-4,6-Dinitrotoluene	99 U		ND		nc	15
19406-51-0	4-amino-2,6-Dinitrotoluene	99 U		ND		nc	23
118-96-7	2,4,6-Trinitrotoluene	99 U		ND		nc	16
55-63-0	Nitroglycerine	990 U		ND		nc	15

CAS No.	Surrogate Recoveries	DUP	FA20723-1	Limits
610-39-9	3,4-Dinitrotoluene	100%	106%	69-134%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Method: SW846 8330B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
FA20579-1	BB045288.D	107
FA20579-2	BB045291.D	108
FA20579-3	BB045294.D	106
FA20579-4	BB045295.D	108
OP54324-BS	BB045285.D	109
OP54324-DUP	BB045298.D	96
OP54324-DUP2	BB045299.D	100
OP54324-MB	BB045287.D	109
OP54324-MS	BB045289.D	105
OP54324-MSD	BB045290.D	105
OP54324-PT1	BB045286.D	112

Surrogate Compounds	Recovery Limits
S1 = 3,4-Dinitrotoluene	69-134%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1219-CC1219	**Injection Date:**	12/24/14
Lab File ID:	BB045281.D	**Injection Time:**	15:25
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] **RT**
Check Std	10.79

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
ZZZZZZ	BB045282.D	12/24/14	15:50	10.86
ZZZZZZ	BB045283.D	12/24/14	16:15	10.86
ZZZZZZ	BB045284.D	12/24/14	16:40	10.85
OP54324-BS	BB045285.D	12/24/14	17:05	10.85
OP54324-PT1	BB045286.D	12/24/14	17:30	10.85
OP54324-MB	BB045287.D	12/24/14	17:55	10.85
FA20579-1	BB045288.D	12/24/14	18:20	10.85
OP54324-MS	BB045289.D	12/24/14	18:45	10.84
OP54324-MSD	BB045290.D	12/24/14	19:10	10.83
FA20579-2	BB045291.D	12/24/14	19:34	10.85

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Check Std:	GBB1219-CC1219	**Injection Date:**	12/24/14
Lab File ID:	BB045292.D	**Injection Time:**	19:59
Instrument ID:	GCBB	**Method:**	SW846 8330B

	S1 [a] RT	S1 [b] RT
Check Std	10.83	10.83

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
FA20579-3	BB045294.D	12/24/14	20:49		10.85
FA20579-4	BB045295.D	12/24/14	21:14		10.85
ZZZZZZ	BB045296.D	12/24/14	21:39		10.85
FA20723-1	BB045297.D	12/24/14	22:04		10.83
OP54324-DUP	BB045298.D	12/24/14	22:29		10.83
OP54324-DUP2	BB045299.D	12/24/14	22:54		10.83
ZZZZZZ	BB045300.D	12/24/14	23:19		10.83
GBB1219-ECC1219	BB045304.D	12/25/14	00:59	10.70	10.70

Surrogate Compounds

S1 = 3,4-Dinitrotoluene

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICC1219
Lab FileID: BB045277.D

Response Factor Report G1315B

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration

Calibration Files
20 =BB045273.D 50 =BB045274.D 100 =BB045275.D 200 =BB045276.D
500 =BB045277.D 1000=BB045278.D 2000=BB045279.D

	Compound	20	50	100	200	500	1000	2000	Avg		%RSD
1)	TNX	3.012	2.994	2.895	2.981	3.065	2.812	3.117	2.982	E3	3.42
2)	HMX	1.531	1.539	1.394	1.768	1.651	1.645	1.620	1.593	E3	7.41
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9998										
	Response Ratio = 0.00000 + 1626.92123 *A										
3)	DNX	2.733	2.562	2.805	2.941	2.693	2.725	2.733	2.742	E3	4.18
4)	MNX	2.780	2.694	2.420	2.494	2.306	2.325	2.408	2.490	E3	7.30
5)	RDX	2.200	1.736	1.827	1.872	1.751	1.751	1.802	1.849	E3	8.79
6)	1,3,5-Trinitroben	4.094	4.230	3.839	4.053	3.813	3.841	3.987	3.980	E3	3.94
7)	1,3-Dinitrobenzen	5.669	5.297	5.067	5.235	4.968	4.992	5.166	5.199	E3	4.62
8)	3,5-Dinitroanilin	4.404	4.156	4.218	4.145	4.025	4.042	4.216	4.172	E3	3.05
9)	Nitrobenzene	3.143	2.994	2.849	2.909	2.923	2.910	2.977	2.958	E3	3.20
10)	Nitroglycerin								0.000		-1.00
11)	Tetryl	3.216	2.660	2.765	2.986	2.833	2.845	2.981	2.898	E3	6.26
12)	2,4,6-Trinitrotol	3.996	3.353	3.382	3.526	3.398	3.437	3.581	3.525	E3	6.34
13)	2-Amino-4,6-Dinit	3.463	2.696	2.910	3.113	3.043	3.088	3.215	3.075	E3	7.79
14)	4-Amino-2,6-Dinit	2.199	1.578	1.974	2.214	2.168	2.246	2.346	2.103	E3	12.25
15)S	3,4-Dinitrotoluen	1.692	1.550	1.799	1.920	1.897	1.936	2.034	1.833	E3	9.02
16)	2,4-Dinitrotoluen	4.655	4.371	4.720	4.638	4.416	4.486	4.632	4.560	E3	2.94
17)	2,6-Dinitrotoluen	2.623	2.648	2.672	2.596	2.497	2.506	2.580	2.589	E3	2.59
18)	o-Nitrotoluene	1.817	1.891	2.478	2.367	2.156	2.175	2.209	2.156	E3	10.98
19)	p-Nitrotoluene	2.961	3.565	3.485	3.589	3.375	3.398	3.471	3.406	E3	6.21
20)	m-Nitrotoluene	3.100	2.972	2.915	2.998	2.982	3.030	3.087	3.012	E3	2.18
21)	PETN								0.000		-1.00

Signal #2

1)	TNX	4.453	3.922	4.344	4.439	4.250	4.331	4.556	4.328	E3	4.72
2)	HMX	4.508	3.744	4.111	4.584	4.584	4.611	4.457	4.371	E3	7.44
	---- Linear regr., Force(0,0) ---- Coefficient = 0.9996										
	Response Ratio = 0.00000 + 4492.30072 *A										
3)	DNX	4.918	3.740	4.421	4.599	4.332	4.361	4.254	4.375	E3	8.17
4)	MNX	3.678	3.905	3.725	3.730	3.558	3.590	3.733	3.703	E3	3.07
5)	RDX	3.344	2.876	2.900	2.962	2.773	2.776	2.883	2.931	E3	6.64
6)	1,3,5-Trinitroben	8.270	8.012	7.443	7.774	7.310	7.442	7.708	7.708	E3	4.47
7)	1,3-Dinitrobenzen	4.011	3.458	3.445	3.536	3.352	3.488	3.509	3.543	E3	6.06
8)	3,5-Dinitroanilin	6.852	7.098	7.086	7.068	6.725	6.835	7.055	6.960	E3	2.18
9)	Nitrobenzene	3.168	2.989	2.924	2.875	2.868	2.837	2.904	2.938	E3	3.82
10)	Nitroglycerin	1.260	1.175	1.291	1.285	1.232	1.237	1.278	1.251	E3	3.25
11)	Tetryl	4.676	4.281	4.386	4.941	4.443	4.552	4.771	4.578	E3	5.07
12)	2,4,6-Trinitrotol	3.699	4.152	4.242	4.268	4.101	4.195	4.387	4.149	E3	5.27
13)	2-Amino-4,6-Dinit	4.281	4.234	4.574	4.799	4.591	4.710	4.922	4.587	E3	5.56
14)	4-Amino-2,6-Dinit	4.225	3.977	4.431	4.679	4.512	4.661	4.877	4.480	E3	6.77
15)S	3,4-Dinitrotoluen	3.397	2.702	3.032	3.382	3.389	3.489	3.695	3.298	E3	9.95
16)	2,4-Dinitrotoluen	2.334	2.287	2.653	2.845	2.863	2.941	3.075	2.714	E3	11.17
17)	2,6-Dinitrotoluen	2.885	2.633	2.901	3.296	3.276	3.337	3.481	3.116	E3	9.91

Initial Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICC1219
Lab FileID: BB045277.D

```
18)  o-Nitrotoluene    2.680 2.800 3.005 3.013 2.970 3.049 3.098 2.945 E3   5.08
19)  p-Nitrotoluene    2.702 3.005 2.599 2.810 2.791 2.861 2.963 2.819 E3   5.01
20)  m-Nitrotoluene    3.498 3.265 3.430 3.580 3.565 3.599 3.705 3.520 E3   4.02
21)  PETN              1.449 1.361 1.309 1.492 1.404 1.378 0.831 1.318 E3  16.90
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9963
              Response Ratio = 0.00000 + 1771.15878 *A + -0.09333 *A^2

--------------------------------------------------------------------------------
(#) = Out of Range

          8330B.M           Fri Dec 26 10:58:00 2014
```

8.8.1

8

Initial Calibration Verification

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICV1219
Lab FileID: BB045280.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1A.ch
Acq On : 24-Dec-2014, 15:00:33 Operator: KISMETL
Sample : icv1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:08:36 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	500.000	543.499	-8.7	106	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	500.000	556.673	-11.3	112	0.03	1.14- 1.74
	Amount	Calc.	%Drift				
3	DNX	500.000	524.137	-4.8	107	0.00	1.44- 2.04
4	MNX	500.000	511.808	-2.4	110	0.00	2.02- 2.62
5	RDX	500.000	534.392	-6.9	113	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	500.000	530.124	-6.0	111	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	500.000	484.597	3.1	101	0.00	5.47- 6.27
8	3,5-Dinitroaniline	500.000	497.080	0.6	103	0.00	5.91- 6.71
9	Nitrobenzene	500.000	549.806	-10.0	111	0.00	7.01- 7.81
10	Nitroglycerin			NA			
11	Tetryl	500.000	485.109	3.0	99	0.00	8.84- 9.64
12	2,4,6-Trinitrotoluene	500.000	525.027	-5.0	109	0.00	9.28-10.07
13	2-Amino-4,6-Dinitrotol	500.000	554.922	-11.0	112	-0.01	9.73-10.53
14	4-Amino-2,6-Dinitrotol	500.000	573.854	-14.8	111	-0.02	10.16-10.96
15 S	3,4-Dinitrotoluene			NA			
16	2,4-Dinitrotoluene	500.000	544.642	-8.9	112	-0.01	11.14-11.94
17	2,6-Dinitrotoluene	500.000	546.095	-9.2	113	0.00	11.53-12.33
18	o-Nitrotoluene	500.000	545.747	-9.1	109	0.00	13.84-14.72
19	p-Nitrotoluene	500.000	533.740	-6.7	108	0.00	14.12-15.12
20	m-Nitrotoluene	500.000	564.570	-12.9	114	0.00	14.69-15.69
21	PETN			NA			

***** Signal #2 *****

1	TNX	500.000	563.001	-12.6	115	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	500.000	554.010	-10.8	112	0.02	1.15- 1.75
	Amount	Calc.	%Drift				
3	DNX	500.000	500.704	-0.1	102	0.00	1.44- 2.04
4	MNX	500.000	526.250	-5.3	110	0.00	2.02- 2.62
5	RDX	500.000	519.253	-3.9	110	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	500.000	528.189	-5.6	111	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	500.000	475.229	5.0	100	0.00	5.47- 6.27
8	3,5-Dinitroaniline	500.000	497.520	0.5	103	0.00	5.91- 6.71
9	Nitrobenzene	500.000	542.422	-8.5	111	0.00	7.01- 7.81

Initial Calibration Verification

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ICV1219
Lab FileID: BB045280.D

			Amount	Calc.	%Drift			
10		Nitroglycerin	2500.000	2520.015	-0.8	102	0.00	8.45- 9.45
11		Tetryl	500.000	494.140	1.2	102	-0.01	8.84- 9.64
12		2,4,6-Trinitrotoluene	500.000	570.660	-14.1	115	-0.01	9.28-10.08
13		2-Amino-4,6-Dinitrotol	500.000	567.980	-13.6	113	-0.01	9.73-10.53
14		4-Amino-2,6-Dinitrotol	500.000	571.836	-14.4	114	-0.01	10.16-10.96
15	S	3,4-Dinitrotoluene	----------NA----------					
16		2,4-Dinitrotoluene	500.000	574.477	-14.9	109	-0.01	11.14-11.94
17		2,6-Dinitrotoluene	500.000	572.512	-14.5	109	-0.01	11.54-12.34
18		o-Nitrotoluene	500.000	531.858	-6.4	106	0.00	13.72-14.72
19		p-Nitrotoluene	500.000	525.957	-5.2	106	0.00	14.12-15.12
20		m-Nitrotoluene	500.000	574.865	-15.0	114	0.00	14.69-15.69
21		PETN	2500.000	2395.826	4.2	106	0.00	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045277.D 8330B.M Fri Dec 26 10:42:28 2014

8.8.2

8

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045281.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1A.ch
Acq On : 24-Dec-2014, 15:25:31 Operator: KISMETL
Sample : cc1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	20.000	21.091	-5.5	104	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	20.000	16.858	15.7	90	0.00	1.14- 1.74
	Amount	Calc.	%Drift				
3	DNX	20.000	20.926	-4.6	105	0.00	1.44- 2.04
4	MNX	20.000	22.938	-14.7	103	-0.01	2.02- 2.62
5	RDX	20.000	20.850	-4.3	88	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	20.000	21.775	-8.9	106	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	20.000	21.136	-5.7	97	0.00	5.47- 6.27
8	3,5-Dinitroaniline	20.000	21.033	-5.2	100	0.00	5.91- 6.71
9	Nitrobenzene	20.000	17.592	12.0	83	0.00	7.01- 7.81
10	Nitroglycerin		----------NA----------				
11	Tetryl	20.000	19.767	1.2	89	0.03	8.84- 9.64
12	2,4,6-Trinitrotoluene	20.000	19.630	1.9	87	-0.03	9.27-10.07
13	2-Amino-4,6-Dinitrotol	20.000	16.721	16.4	74	-0.02	9.73-10.53
14	4-Amino-2,6-Dinitrotol	20.000	19.081	4.6	91	-0.05	10.15-10.95
15 S	3,4-Dinitrotoluene	20.000	16.616	16.9	90	-0.07	10.46-11.26
16	2,4-Dinitrotoluene	20.000	17.170	14.1	84	-0.05	11.14-11.94
17	2,6-Dinitrotoluene	20.000	16.562	17.2	82	0.01	11.53-12.33
18	o-Nitrotoluene	20.000	21.587	-7.9	128	0.02	13.84-14.72
19	p-Nitrotoluene	20.000	19.707	1.5	113	-0.02	14.12-15.12
20	m-Nitrotoluene	20.000	20.578	-2.9	100	0.02	14.69-15.69
21	PETN		----------NA----------				
*****	Signal #2 *****						
1	TNX	20.000	21.251	-6.3	103	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	20.000	20.252	-1.3	101	0.00	1.15- 1.75
	Amount	Calc.	%Drift				
3	DNX	20.000	22.083	-10.4	98	0.00	1.44- 2.04
4	MNX	20.000	20.303	-1.5	102	0.00	2.02- 2.62
5	RDX	20.000	19.927	0.4	87	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	20.000	20.911	-4.6	97	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	20.000	20.029	-0.1	88	0.00	5.47- 6.27
8	3,5-Dinitroaniline	20.000	20.415	-2.1	104	0.00	5.91- 6.71
9	Nitrobenzene	20.000	19.809	1.0	92	0.00	7.01- 7.81

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045281.D

			Amount	Calc.	%Drift			
10		Nitroglycerin	100.000	102.199	-2.2	102	0.00	8.45- 9.45
11		Tetryl	20.000	22.497	-12.5	110	0.02	8.84- 9.64
12		2,4,6-Trinitrotoluene	20.000	22.616	-13.1	127	0.00	9.27-10.07
13		2-Amino-4,6-Dinitrotol	20.000	19.839	0.8	106	-0.02	9.72-10.52
14		4-Amino-2,6-Dinitrotol	20.000	19.534	2.3	104	-0.02	10.15-10.95
15	S	3,4-Dinitrotoluene	20.000	21.627	-8.1	105	-0.03	10.46-11.26
16		2,4-Dinitrotoluene	20.000	17.997	10.0	105	0.06	11.14-11.94
17		2,6-Dinitrotoluene	20.000	14.909	25.5#	80	0.09	11.54-12.34
18		o-Nitrotoluene	20.000	18.659	6.7	103	0.03	13.72-14.72
19		p-Nitrotoluene	20.000	21.513	-7.6	112	0.05	14.12-15.12
20		m-Nitrotoluene	20.000	19.529	2.4	98	0.06	14.69-15.69
21		PETN	100.000	109.321	-9.3	133	0.00	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045273.D 8330B.M Fri Dec 26 10:57:13 2014

8.8.3

8

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045292.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1A.ch
Acq On : 24-Dec-2014, 19:59:59 Operator: KISMETL
Sample : cc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1013.323	-1.3	107	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	1000.000	956.227	4.4	95	0.00	1.14- 1.74
	Amount	Calc.	%Drift				
3	DNX	1000.000	1009.671	-1.0	102	0.00	1.44- 2.04
4	MNX	1000.000	949.723	5.0	102	0.00	2.02- 2.62
5	RDX	1000.000	945.856	5.4	100	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	1000.000	993.541	0.6	103	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	1000.000	966.849	3.3	101	0.00	5.47- 6.27
8	3,5-Dinitroaniline	1000.000	980.561	1.9	101	0.00	5.91- 6.71
9	Nitrobenzene	1000.000	988.947	1.1	101	0.00	7.01- 7.81
10	Nitroglycerin		----------NA----------				
11	Tetryl	1000.000	1017.363	-1.7	104	0.00	8.84- 9.64
12	2,4,6-Trinitrotoluene	1000.000	987.667	1.2	101	-0.01	9.27-10.07
13	2-Amino-4,6-Dinitrotol	1000.000	1015.593	-1.6	101	-0.01	9.73-10.53
14	4-Amino-2,6-Dinitrotol	1000.000	1081.457	-8.1	101	0.00	10.15-10.95
15 S	3,4-Dinitrotoluene	1000.000	1060.076	-6.0	100	-0.02	10.46-11.26
16	2,4-Dinitrotoluene	1000.000	992.034	0.8	101	-0.02	11.14-11.94
17	2,6-Dinitrotoluene	1000.000	974.319	2.6	101	-0.01	11.53-12.33
18	o-Nitrotoluene	1000.000	997.982	0.2	99	0.00	13.84-14.72
19	p-Nitrotoluene	1000.000	997.788	0.2	100	0.00	14.12-15.12
20	m-Nitrotoluene	1000.000	1004.302	-0.4	100	0.00	14.69-15.69
21	PETN		----------NA----------				

***** Signal #2 *****

1	TNX	1000.000	1014.000	-1.4	101	0.00	1.06- 1.66
	Amount	Calc.	%Drift				
2	HMX	1000.000	1034.663	-3.5	101	0.00	1.15- 1.75
	Amount	Calc.	%Drift				
3	DNX	1000.000	1015.218	-1.5	102	0.00	1.44- 2.04
4	MNX	1000.000	983.701	1.6	101	0.00	2.02- 2.62
5	RDX	1000.000	955.166	4.5	101	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	1000.000	979.178	2.1	101	0.00	4.22- 5.02
7	1,3-Dinitrobenzene	1000.000	981.621	1.8	100	0.00	5.47- 6.27
8	3,5-Dinitroaniline	1000.000	990.705	0.9	101	0.00	5.91- 6.71
9	Nitrobenzene	1000.000	984.983	1.5	102	0.00	7.01- 7.81

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-CC1219
Lab FileID: BB045292.D

				Amount	Calc.	%Drift			
10		Nitroglycerin	5000.000	4989.487	0.2	101	0.00	8.45-	9.45
11		Tetryl	1000.000	1011.060	-1.1	102	-0.01	8.84-	9.64
12		2,4,6-Trinitrotoluene	1000.000	1019.497	-1.9	101	-0.02	9.27-	10.07
13		2-Amino-4,6-Dinitrotol	1000.000	1029.956	-3.0	100	0.00	9.72-	10.52
14		4-Amino-2,6-Dinitrotol	1000.000	1073.991	-7.4	103	0.00	10.15-	10.95
15	S	3,4-Dinitrotoluene	1000.000	1022.380	-2.2	97	-0.02	10.46-	11.26
16		2,4-Dinitrotoluene	1000.000	1064.598	-6.5	98	-0.02	11.14-	11.94
17		2,6-Dinitrotoluene	1000.000	1075.999	-7.6	100	-0.01	11.54-	12.34
18		o-Nitrotoluene	1000.000	1024.516	-2.5	99	0.00	13.72-	14.72
19		p-Nitrotoluene	1000.000	1011.694	-1.2	100	-0.01	14.12-	15.12
20		m-Nitrotoluene	1000.000	1036.707	-3.7	101	0.00	14.69-	15.69
21		PETN	5000.000	3013.060	39.7#	65	-0.02	16.14-	17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045278.D 8330B.M Fri Dec 26 11:32:53 2014

8.8.4

8

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ECC1219
Lab FileID: BB045304.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1A.ch
Acq On : 25-Dec-2014, 00:59:29 Operator: KISMETL
Sample : ecc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 200%

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	TNX	1000.000	1041.578	-4.2	110	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	920.489	8.0	91	-0.01	1.14- 1.74
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	992.284	0.8	100	0.00	1.44- 2.04
4	MNX	1000.000	934.709	6.5	100	0.00	2.02- 2.62
5	RDX	1000.000	955.880	4.4	101	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	1000.000	963.324	3.7	100	-0.01	4.22- 5.02
7	1,3-Dinitrobenzene	1000.000	957.102	4.3	100	-0.01	5.47- 6.27
8	3,5-Dinitroaniline	1000.000	976.459	2.4	101	-0.01	5.91- 6.71
9	Nitrobenzene	1000.000	975.264	2.5	99	-0.01	7.01- 7.81
10	Nitroglycerin	----------	----------	NA	----------		
11	Tetryl	1000.000	975.805	2.4	99	-0.03	8.84- 9.64
12	2,4,6-Trinitrotoluene	1000.000	975.198	2.5	100	-0.04	9.27-10.07
13	2-Amino-4,6-Dinitrotol	1000.000	997.186	0.3	99	-0.03	9.73-10.53
14	4-Amino-2,6-Dinitrotol	1000.000	972.689	2.7	91	0.04	10.15-10.95
15 S	3,4-Dinitrotoluene	1000.000	981.101	1.9	93	-0.16	10.46-11.26
16	2,4-Dinitrotoluene	1000.000	981.778	1.8	100	-0.04	11.14-11.94
17	2,6-Dinitrotoluene	1000.000	938.866	6.1	97	-0.04	11.53-12.33
18	o-Nitrotoluene	1000.000	981.769	1.8	97	-0.02	13.84-14.72
19	p-Nitrotoluene	1000.000	987.964	1.2	99	-0.02	14.12-15.12
20	m-Nitrotoluene	1000.000	993.710	0.6	99	-0.02	14.69-15.69
21	PETN	----------	----------	NA	----------		
*****	Signal #2 *****						
1	TNX	1000.000	1005.178	-0.5	100	0.00	1.06- 1.66
	----------	Amount	Calc.	%Drift	----------		
2	HMX	1000.000	1021.775	-2.2	100	0.00	1.15- 1.75
	----------	Amount	Calc.	%Drift	----------		
3	DNX	1000.000	1001.315	-0.1	100	0.00	1.44- 2.04
4	MNX	1000.000	967.621	3.2	100	0.00	2.02- 2.62
5	RDX	1000.000	951.751	4.8	100	0.00	2.52- 3.32
6	1,3,5-Trinitrobenzene	1000.000	963.330	3.7	100	-0.01	4.22- 5.02
7	1,3-Dinitrobenzene	1000.000	949.781	5.0	96	-0.01	5.47- 6.27
8	3,5-Dinitroaniline	1000.000	979.745	2.0	100	-0.01	5.91- 6.71
9	Nitrobenzene	1000.000	960.770	3.9	99	-0.01	7.01- 7.81

Continuing Calibration Summary

Job Number: FA20579
Account: FPMRNYR FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Sample: GBB1219-ECC1219
Lab FileID: BB045304.D

10		Nitroglycerin	5000.000	4956.859	0.9	100	-0.03	8.45- 9.45
11		Tetryl	1000.000	975.332	2.5	98	-0.05	8.84- 9.64
12		2,4,6-Trinitrotoluene	1000.000	1002.415	-0.2	99	-0.04	9.27-10.07
13		2-Amino-4,6-Dinitrotol	1000.000	1007.710	-0.8	98	-0.03	9.72-10.52
14		4-Amino-2,6-Dinitrotol	1000.000	1035.341	-3.5	100	-0.02	10.15-10.95
15	S	3,4-Dinitrotoluene	1000.000	983.203	1.7	93	-0.16	10.46-11.26
16		2,4-Dinitrotoluene	1000.000	1021.109	-2.1	94	-0.04	11.14-11.94
17		2,6-Dinitrotoluene	1000.000	1076.362	-7.6	100	-0.03	11.54-12.34
18		o-Nitrotoluene	1000.000	1011.923	-1.2	98	-0.02	13.72-14.72
19		p-Nitrotoluene	1000.000	1006.436	-0.6	99	-0.02	14.12-15.12
20		m-Nitrotoluene	1000.000	1027.549	-2.8	100	-0.02	14.69-15.69

			Amount	Calc.	%Drift			
21		PETN	5000.000	2654.218	46.9#	59	-0.04	16.14-17.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
BB045278.D 8330B.M Fri Dec 26 11:32:54 2014

8.8.5

8

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045288.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045288.D\dad1A.ch
Acq On : 24-Dec-2014, 18:20:09 Operator: KISMETL
Sample : FA20579-1 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:31 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	984663	1799824	537.299	545.728m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.46%	109.15%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

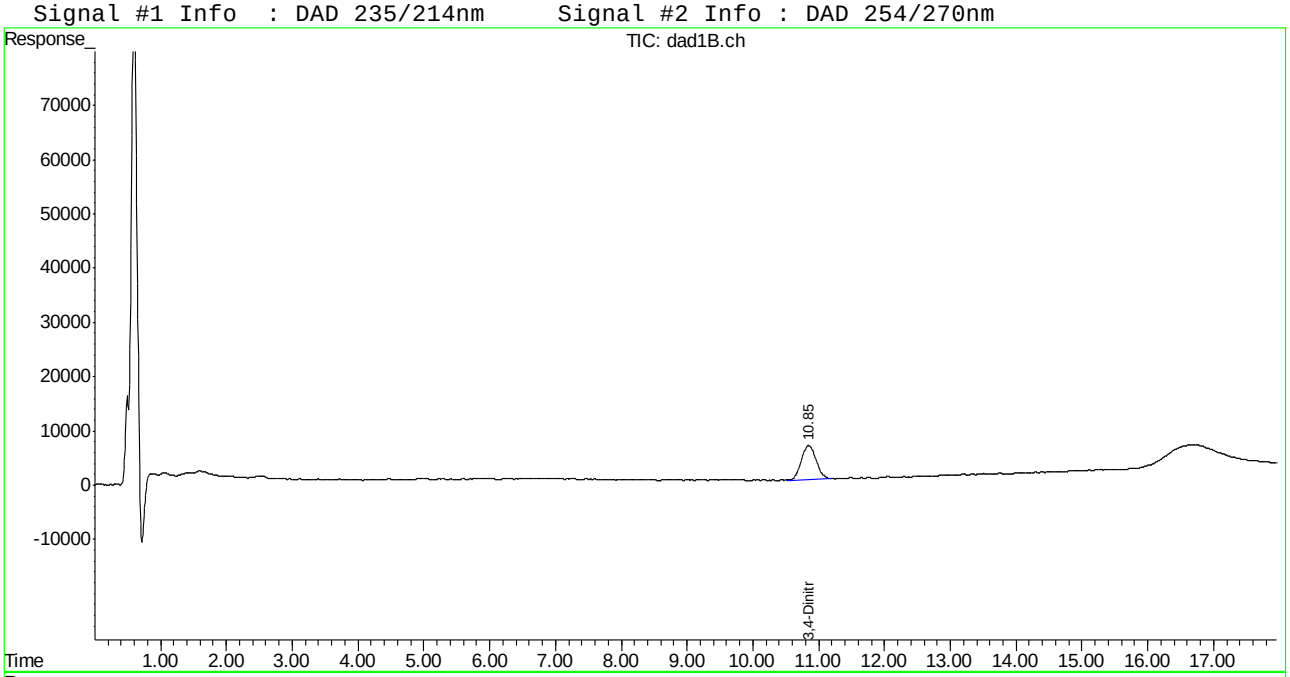
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045288.D 8330B.M Fri Dec 26 11:34:36 2014

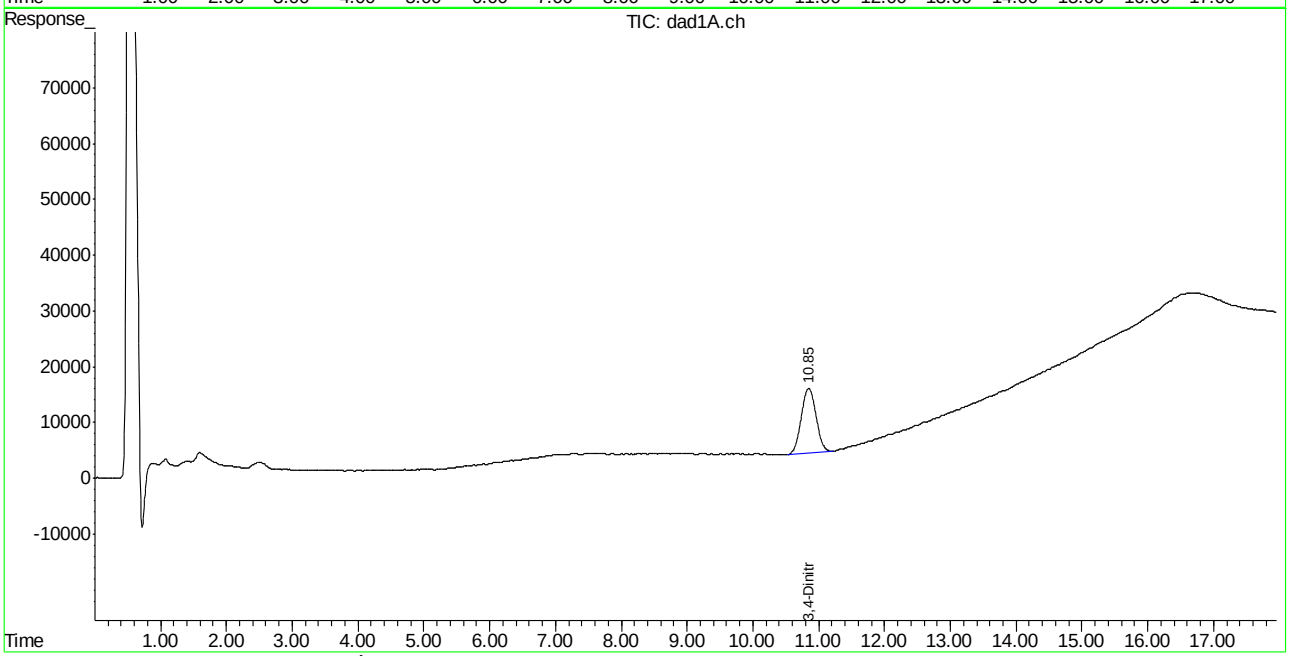
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045288.D\dad1B.ch Vial: 16
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045288.D\dad1A.ch
Acq On : 24-Dec-2014, 18:20:09 Operator: KISMETL
Sample : FA20579-1 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:20 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number:	FA20579-1	**Method:**	SW846 8330B
Lab FileID:	BB045288.D	**Analyst approved:**	12/26/14 11:55 Kismet Lugo
Injection Time:	12/24/14 18:20	**Supervisor approved:**	12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	2	10.85	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045291.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045291.D\dad1A.ch
Acq On : 24-Dec-2014, 19:34:59 Operator: KISMETL
Sample : FA20579-2 Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:34 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	989066	1769970	539.702	536.676
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.94%	107.34%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

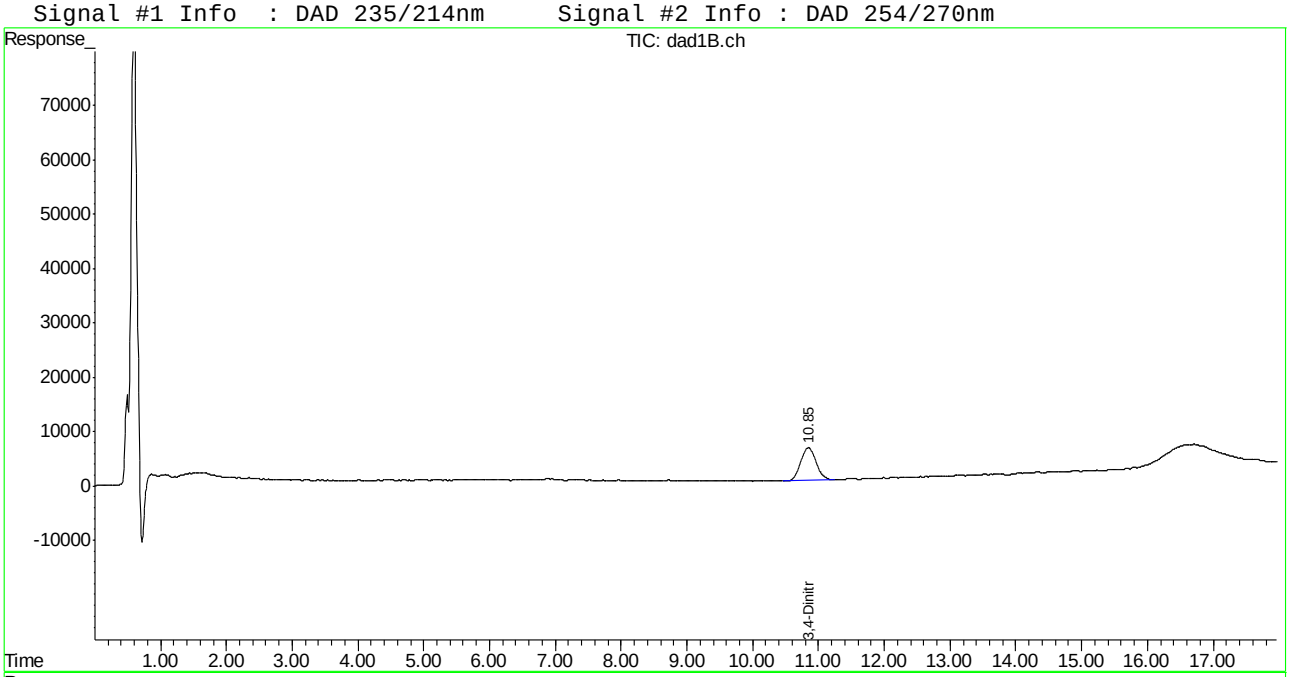
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045291.D 8330B.M Fri Dec 26 11:34:39 2014 Page 1

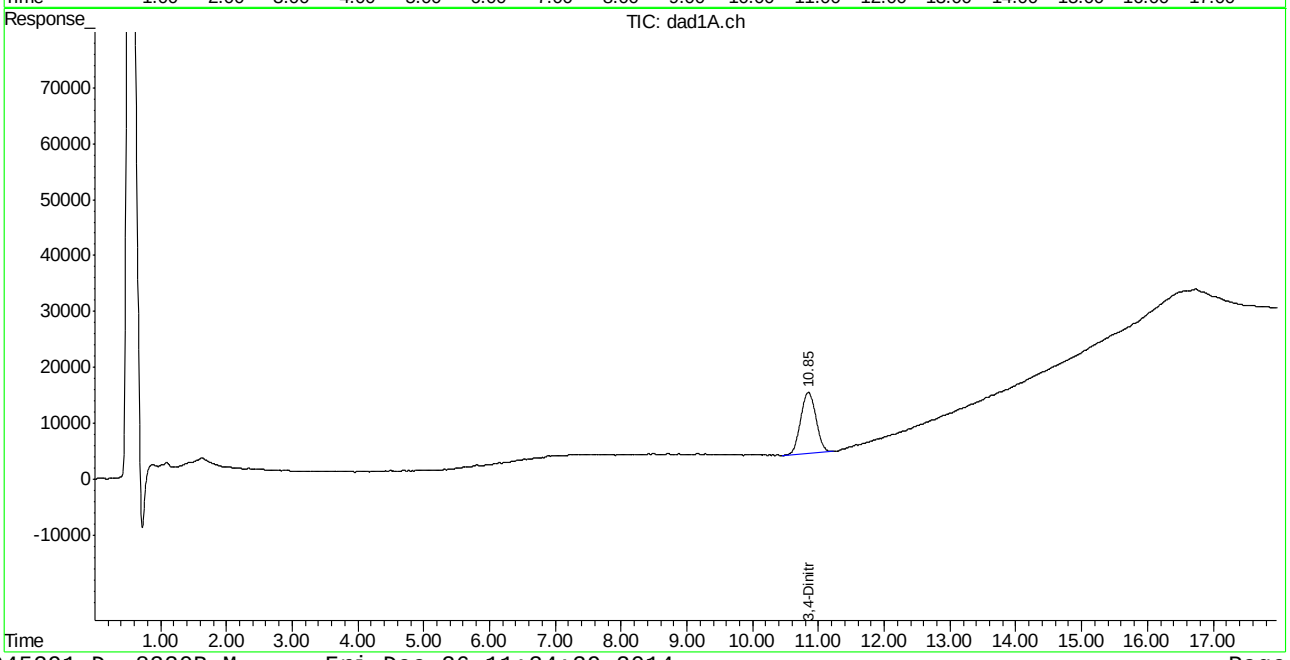
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045291.D\dad1B.ch Vial: 19
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045291.D\dad1A.ch
Acq On : 24-Dec-2014, 19:34:59 Operator: KISMETL
Sample : FA20579-2 Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:25 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045294.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045294.D\dad1A.ch
Acq On : 24-Dec-2014, 20:49:55 Operator: KISMETL
Sample : FA20579-3 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:37 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.84	973714	1804952	531.325	547.283
	Spiked Amount 500.000	Range 72 - 134		Recovery =		106.27%	109.46%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

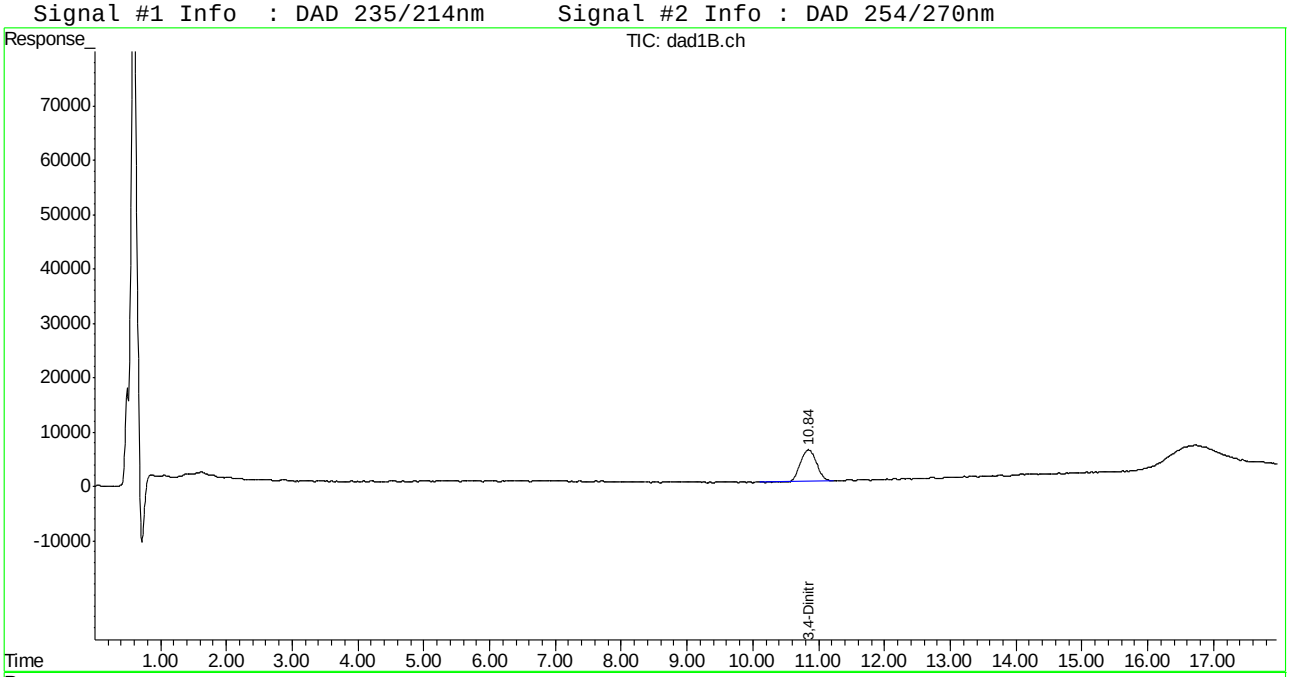
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045294.D 8330B.M Fri Dec 26 11:34:42 2014

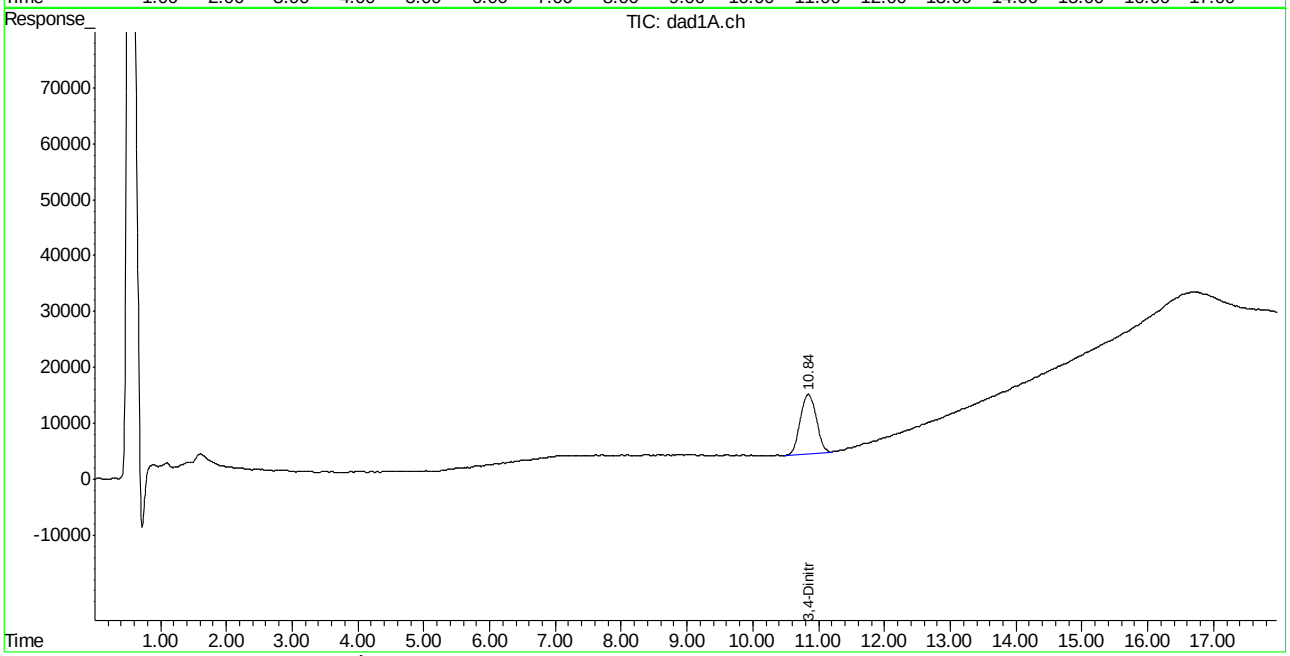
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045294.D\dad1B.ch Vial: 20
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045294.D\dad1A.ch
Acq On : 24-Dec-2014, 20:49:55 Operator: KISMETL
Sample : FA20579-3 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:26 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045295.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045295.D\dad1A.ch
Acq On : 24-Dec-2014, 21:14:55 Operator: KISMETL
Sample : FA20579-4 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:38 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	987268	1794224	538.721	544.030
	Spiked Amount 500.000	Range 72 - 134		Recovery =		107.74%	108.81%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

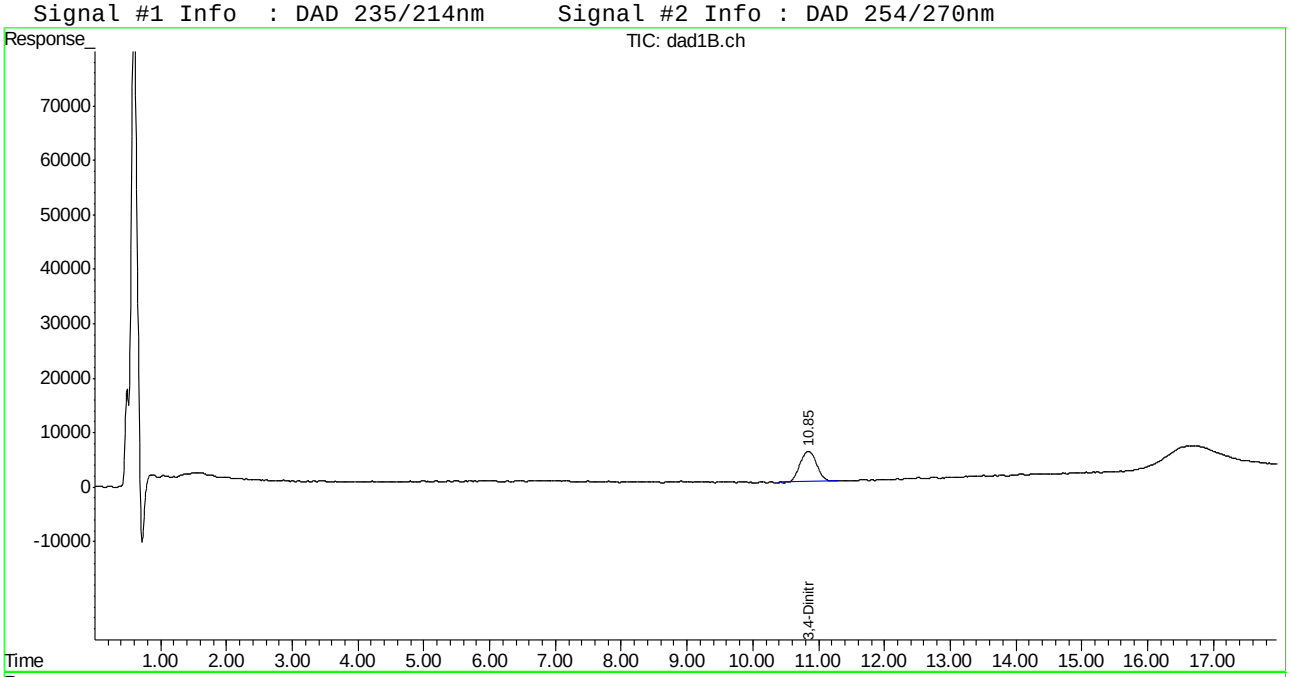
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045295.D 8330B.M Fri Dec 26 11:34:43 2014

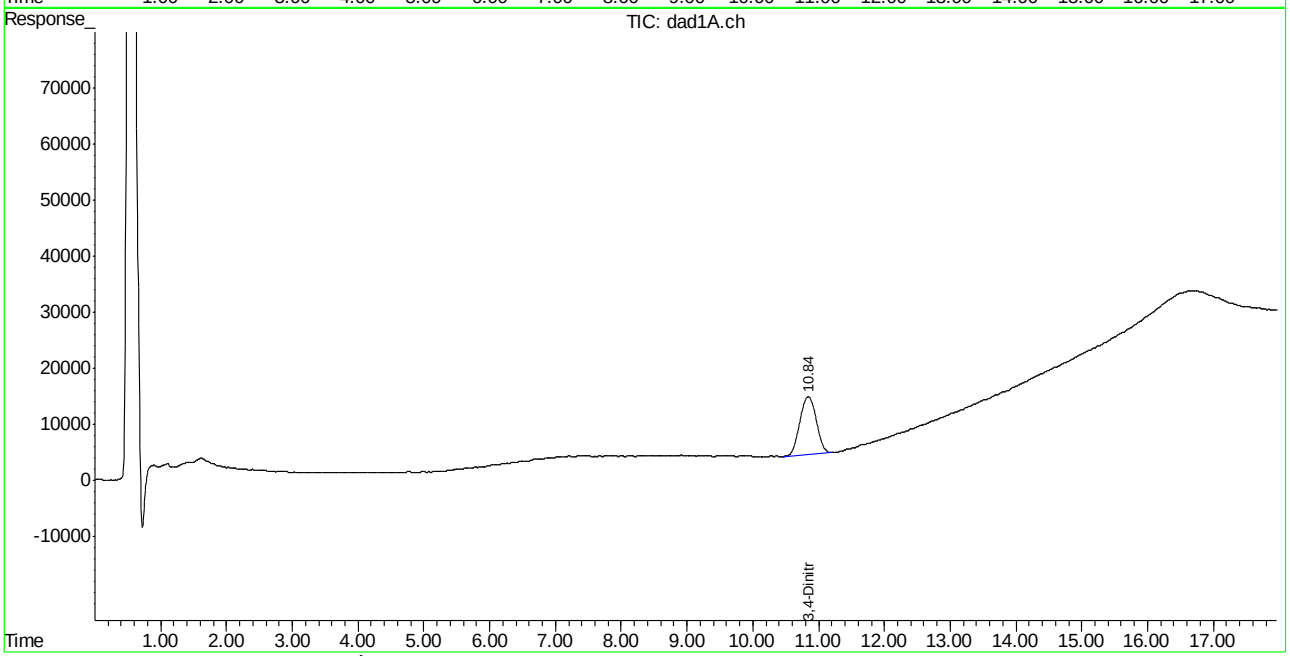
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045295.D\dad1B.ch Vial: 21
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045295.D\dad1A.ch
Acq On : 24-Dec-2014, 21:14:55 Operator: KISMETL
Sample : FA20579-4 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:26 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1B.ch Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1A.ch
Acq On : 24-Dec-2014, 17:55:12 Operator: KISMETL
Sample : op54324-mb Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:30 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	997613	1820322	544.366	551.943
	Spiked Amount 500.000	Range 72 - 134		Recovery =		108.87%	110.39%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D.	N.D.
2)	HMX	0.00	0.00	0	0	N.D.	N.D.
3)	DNX	0.00	0.00	0	0	N.D.	N.D.
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	0.00	0.00	0	0	N.D.	N.D.
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D.	N.D.
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D.	N.D.
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D. d	N.D. d
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

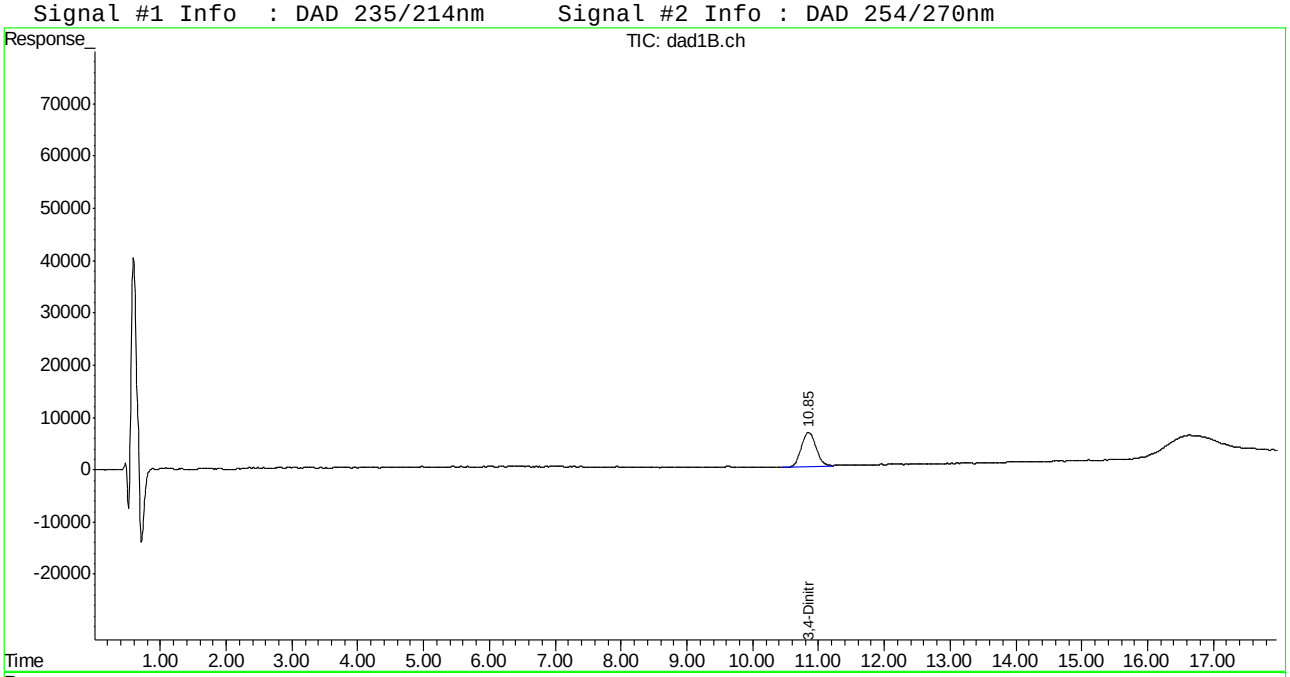
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045287.D 8330B.M Fri Dec 26 11:34:35 2014 Page 1

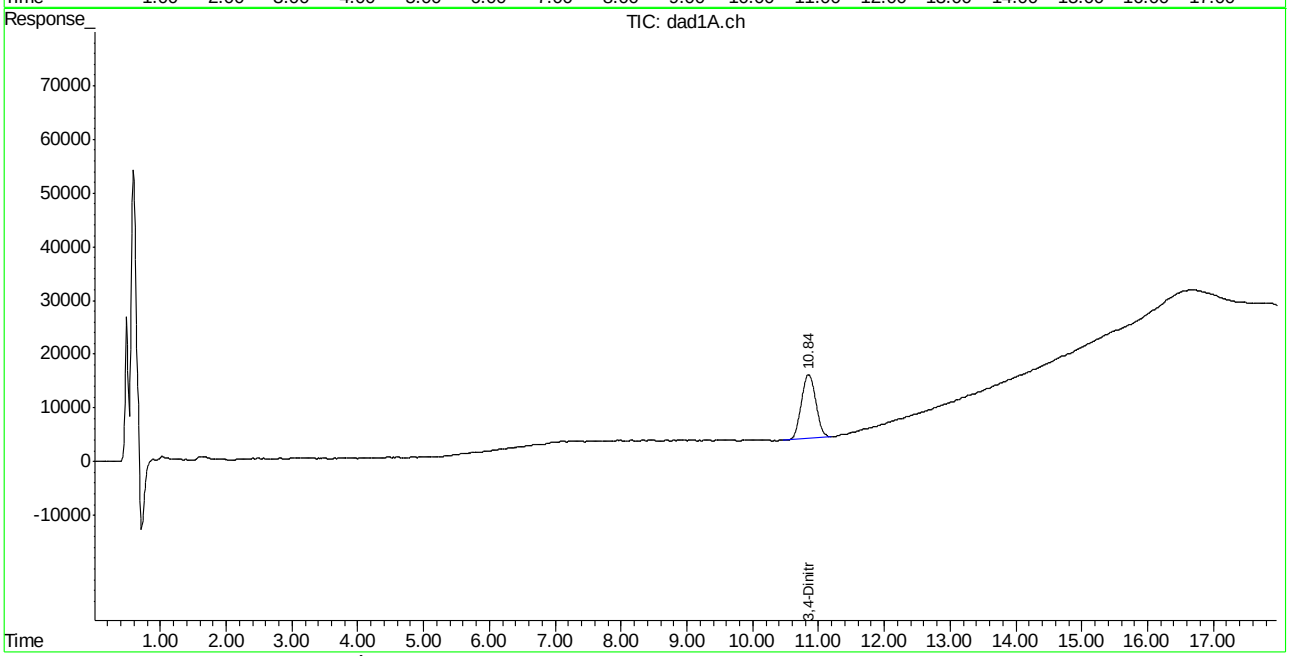
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1B.ch Vial: 15
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045287.D\dad1A.ch
Acq On : 24-Dec-2014, 17:55:12 Operator: KISMETL
Sample : op54324-mb Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:19 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1A.ch
Acq On : 24-Dec-2014, 17:05:18 Operator: KISMETL
Sample : op54324-bs Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	996068	1789457	543.523	542.585
	Spiked Amount 500.000	Range 72 - 134		Recovery =		108.70%	108.52%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	799391	2310282	491.352	514.276
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	926016	1460090	500.931	498.227
6)	1,3,5-Trinitrobe	4.62	4.62	2020365	3920988	507.680	508.664
7)	1,3-Dinitrobenze	5.87	5.86	2362750	1600366	454.452	451.718m
8)	3,5-Dinitroanili	6.30	6.30	1966003	3309035	471.212	475.435m
9)	Nitrobenzene	7.40	7.40	1565443	1515613	529.265	515.916m
10)	Nitroglycerin	0.00	8.95	0	3142064	N.D.	2511.628 #
11)	Tetryl	9.24	9.24	1379493	2245730	476.034	490.497
12)	2,4,6-Trinitroto	9.66	9.66	1755472	2192977	498.049	528.518
13)	2-Amino-4,6-Dini	10.11	10.11	1608205	2495732	522.923	544.039
14)	4-Amino-2,6-Dini	10.54	10.54	1108858	2327607	527.166	519.531
16)	2,4-Dinitrotolue	11.52	11.53	2315215	1499816	507.746	552.622
17)	2,6-Dinitrotolue	11.92	11.92	1337368	1716951	516.574	551.044
18)	o-Nitrotoluene	14.21	14.21	1131287	1560290	524.687	529.817m
19)	p-Nitrotoluene	14.61	14.61	1749140	1417984	513.523	503.060
20)	m-Nitrotoluene	15.18	15.18	1663684	1999109	552.375	567.878m
21)	PETN	0.00	16.74	0	3435319	N.D. d	2192.999m

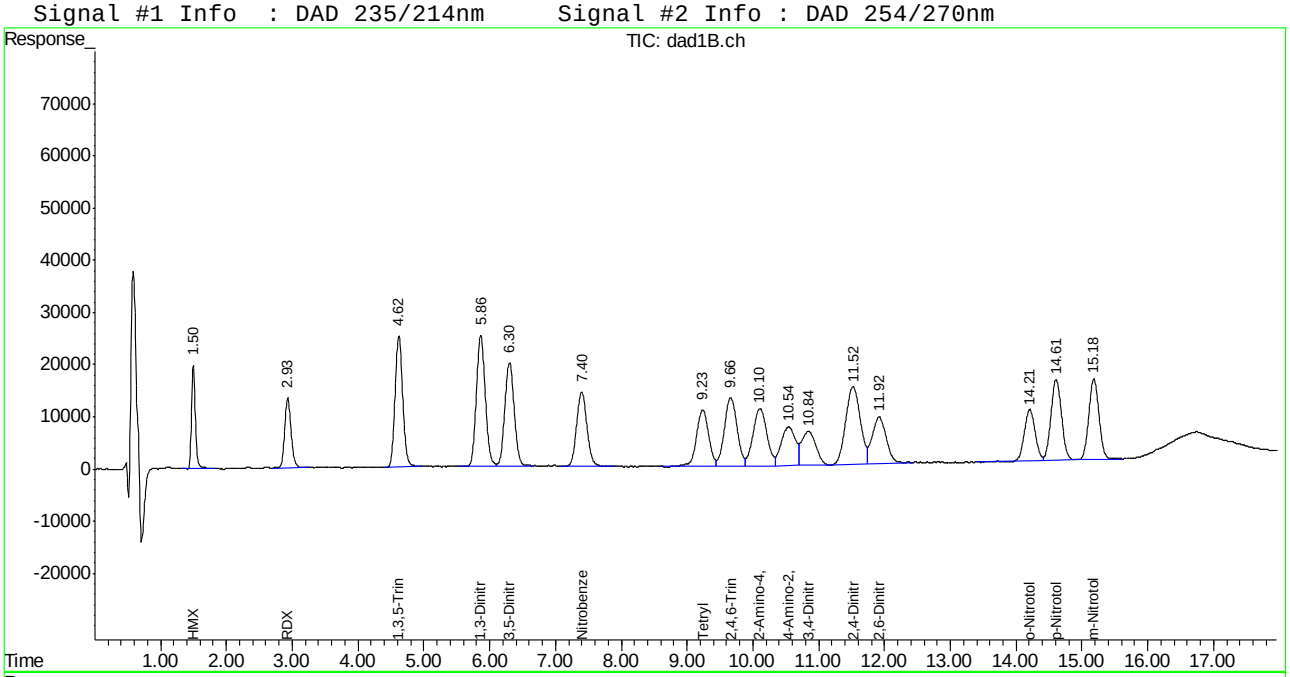
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045285.D 8330B.M Fri Dec 26 11:34:33 2014

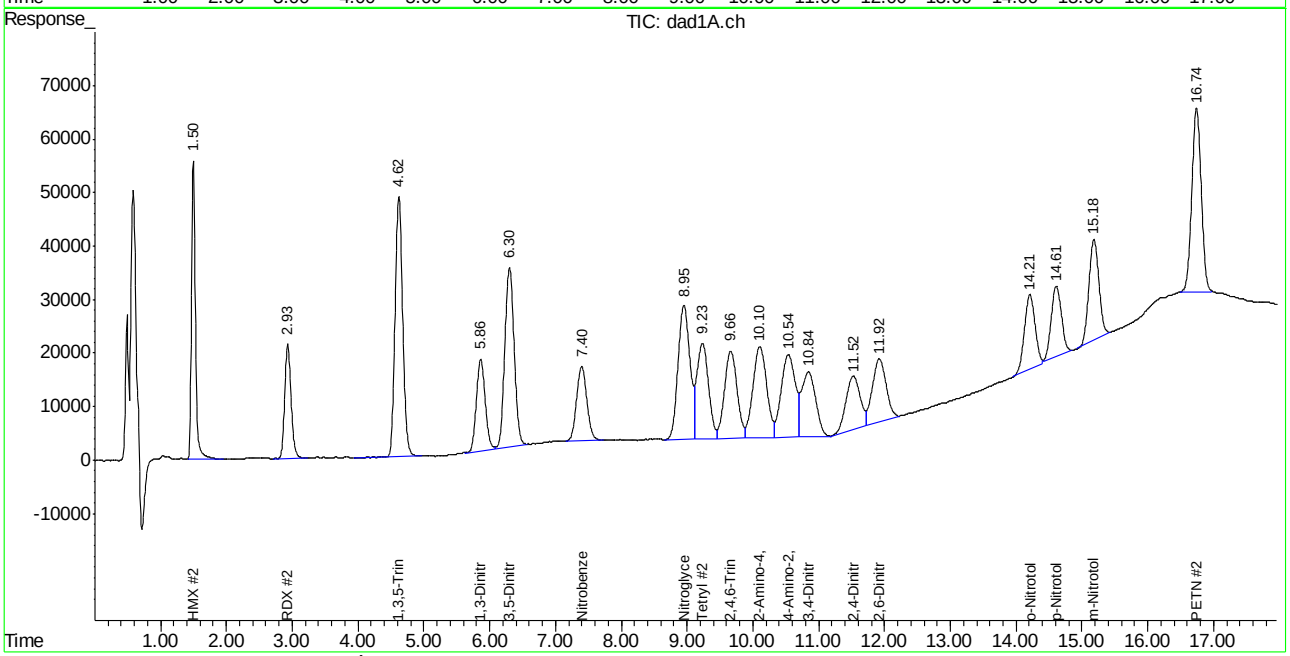
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1B.ch Vial: 13
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045285.D\dad1A.ch
Acq On : 24-Dec-2014, 17:05:18 Operator: KISMETL
Sample : op54324-bs Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:17 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: OP54324-BS
Lab FileID: BB045285.D
Injection Time: 12/24/14 17:05
Method: SW846 8330B
Analyst approved: 12/26/14 11:47 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
1,3-Dinitrobenzene	99-65-0	2	5.86	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.18	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1A.ch
Acq On : 24-Dec-2014, 17:30:13 Operator: KISMETL
Sample : op54324-pt1 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:29 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.85	1024020	1823606	558.775	552.939
	Spiked Amount 500.000	Range 72 - 134		Recovery =		111.76%	110.59%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	169478	501179	104.171m	111.564m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.94	192757	314186	104.273m	107.210m
6)	1,3,5-Trinitrobe	4.62	4.62	546074	1078885	137.218	139.962
7)	1,3-Dinitrobenze	5.87	5.87	1064063	712284	204.662	201.049
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D.	N.D.
9)	Nitrobenzene	7.40	7.40	562985	562557	190.341	191.495m
10)	Nitroglycerin	0.00	8.96	0	198874	N.D.	158.971 #
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	9.67	9.67	590069	651340	167.410	156.976
13)	2-Amino-4,6-Dini	10.10	10.11	369784	499922	120.239	108.977
14)	4-Amino-2,6-Dini	10.55	10.54	214805	454257	102.121	101.392
16)	2,4-Dinitrotolue	11.53	11.54	580817	355542	127.378	131.003
17)	2,6-Dinitrotolue	11.92	11.93	688653	879833	266.000	282.377
18)	o-Nitrotoluene	14.21	14.21	538747	716038	249.869	243.140m
19)	p-Nitrotoluene	14.61	14.61	1074654	848293	315.503	300.950
20)	m-Nitrotoluene	15.18	15.19	533352	684117	177.083	194.334m
21)	PETN	0.00	16.74	0	328181	N.D. d	187.137m

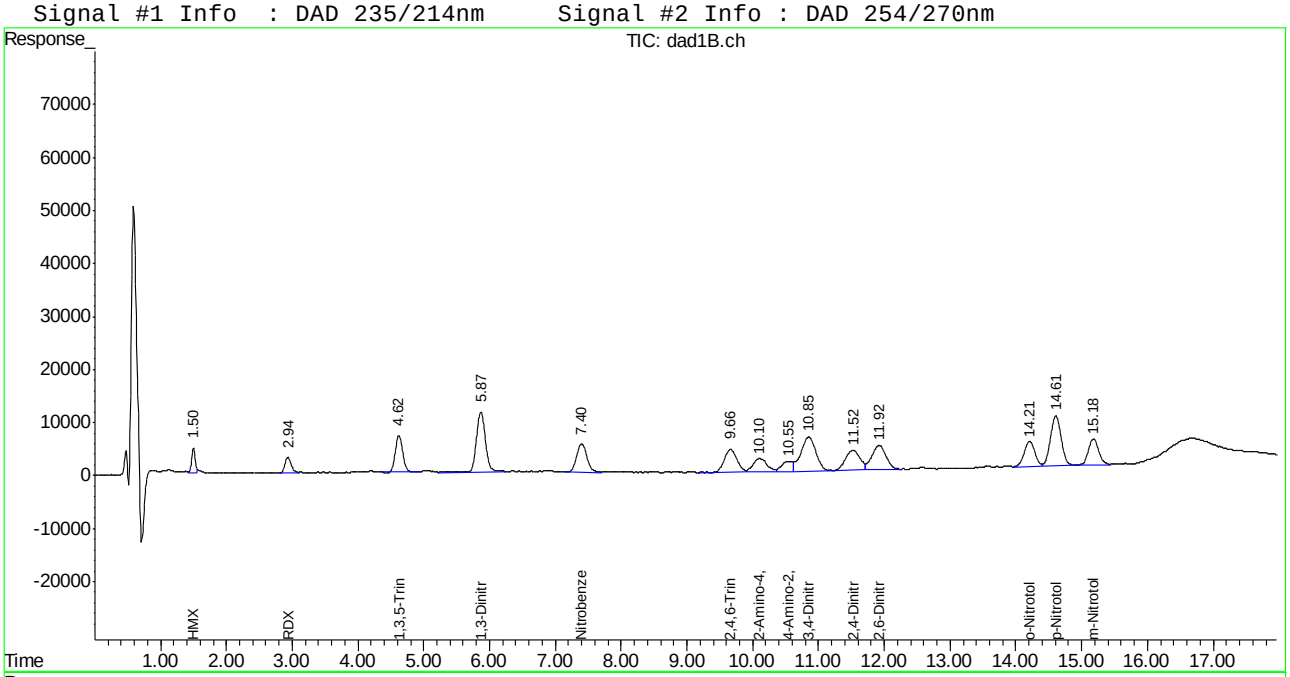
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045286.D 8330B.M Fri Dec 26 11:34:34 2014 Page 1

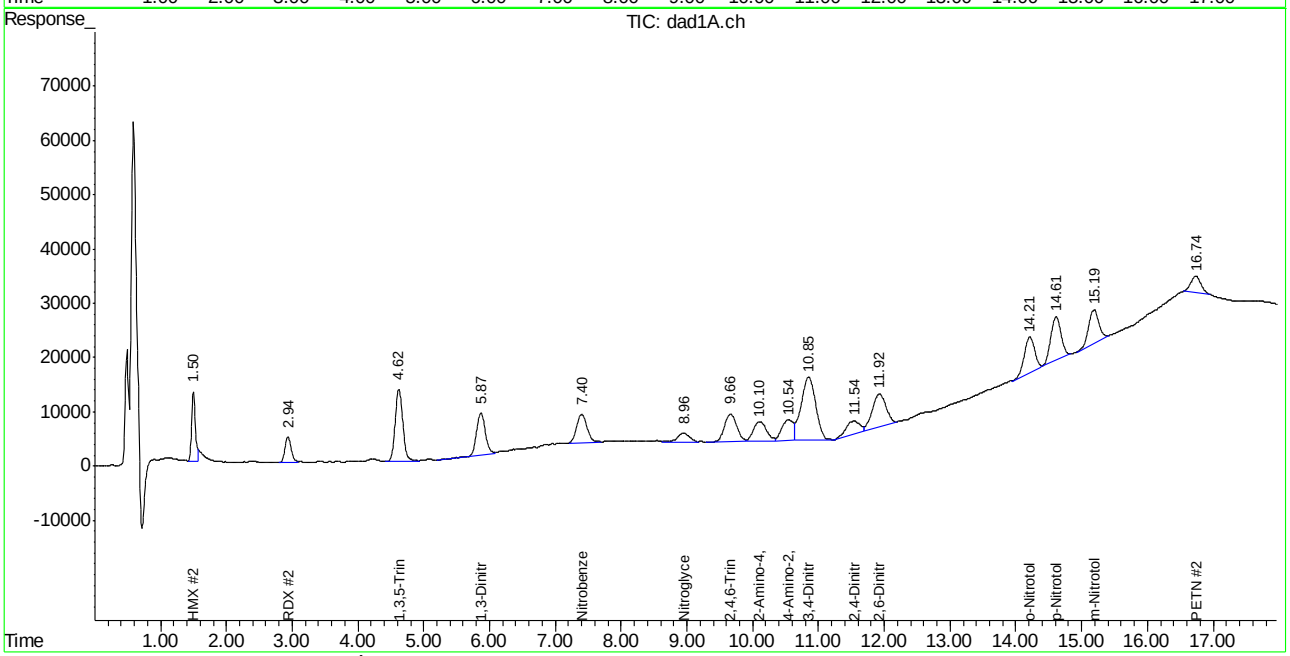
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1B.ch Vial: 14
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045286.D\dad1A.ch
Acq On : 24-Dec-2014, 17:30:13 Operator: KISMETL
Sample : op54324-pt1 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:18 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: OP54324-PT1
Lab FileID: BB045286.D
Injection Time: 12/24/14 17:30
Method: SW846 8330B
Analyst approved: 12/26/14 11:47 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.50	Overlapping peak
HMX	2691-41-0	2	1.50	Overlapping peak
RDX	121-82-4	1	2.94	Poorly defined baseline
RDX	121-82-4	2	2.94	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.19	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1A.ch
Acq On : 24-Dec-2014, 18:45:05 Operator: KISMETL
Sample : op54324-ms Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:32 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.84	10.84	966577	1721993	527.430	522.129
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.49%	104.43%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	787420	2226226	483.994m	495.565m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.93	2.93	816688	1308235	441.790	446.409
6)	1,3,5-Trinitrobe	4.62	4.62	1758223	3426365	441.809	444.497
7)	1,3-Dinitrobenze	5.87	5.86	2314698	1563551	445.209	441.326m
8)	3,5-Dinitroanili	6.30	6.30	1902273	3213417	455.937	461.696m
9)	Nitrobenzene	7.40	7.40	1491264	1469186	504.186	500.112m
10)	Nitroglycerin	0.00	8.95	0	3040689	N.D.	2430.593 #
11)	Tetryl	9.23	9.23	1181498	1817612	407.710	396.990
12)	2,4,6-Trinitroto	9.66	9.66	1677817	2054637	476.017	495.177
13)	2-Amino-4,6-Dini	10.10	10.10	1527510	2368176	496.684	516.234
14)	4-Amino-2,6-Dini	10.53	10.53	1062637	2258356	505.192	504.074
16)	2,4-Dinitrotolue	11.51	11.52	2222991	1412558	487.520	520.471
17)	2,6-Dinitrotolue	11.91	11.92	1284960	1705130	496.331	547.250
18)	o-Nitrotoluene	14.20	14.20	1110719	1533591	515.148m	520.751m
19)	p-Nitrotoluene	14.60	14.61	1682633	1390275	493.997	493.230
20)	m-Nitrotoluene	15.18	15.18	1609414	1917589	534.357	544.721
21)	PETN	0.00	16.73	0	3210739	N.D. d	2029.911m

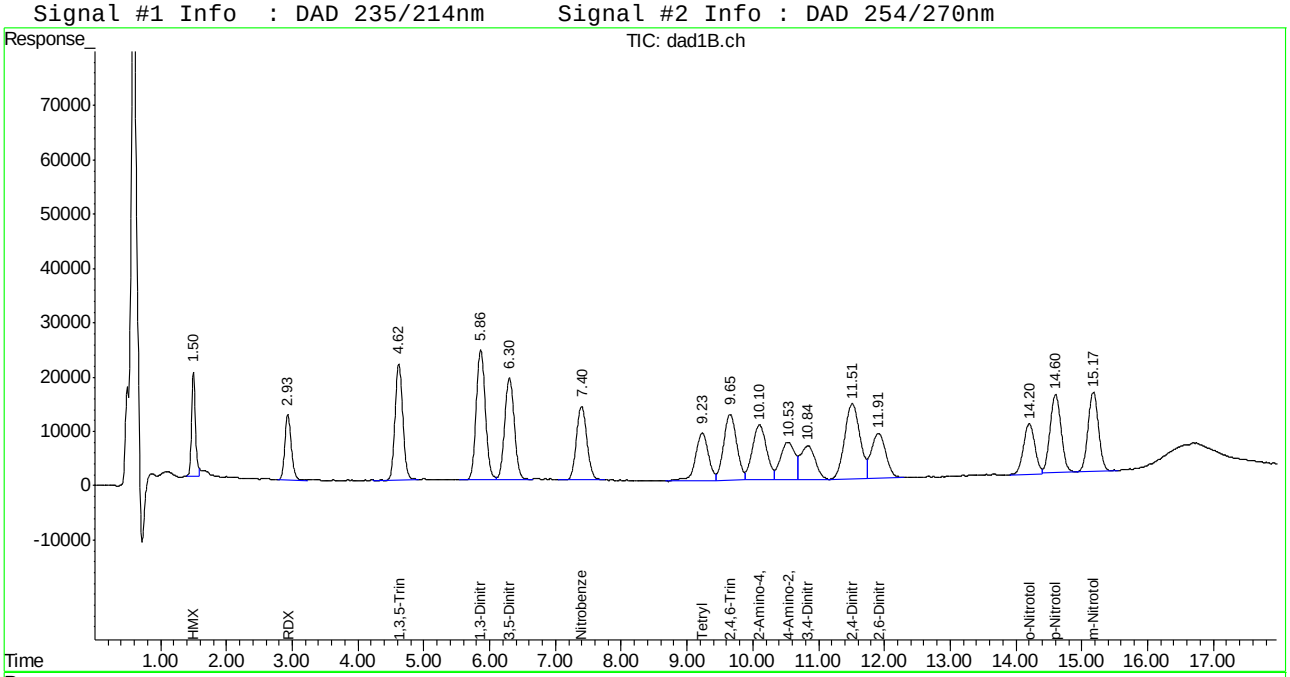
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045289.D 8330B.M Fri Dec 26 11:34:37 2014 Page 1

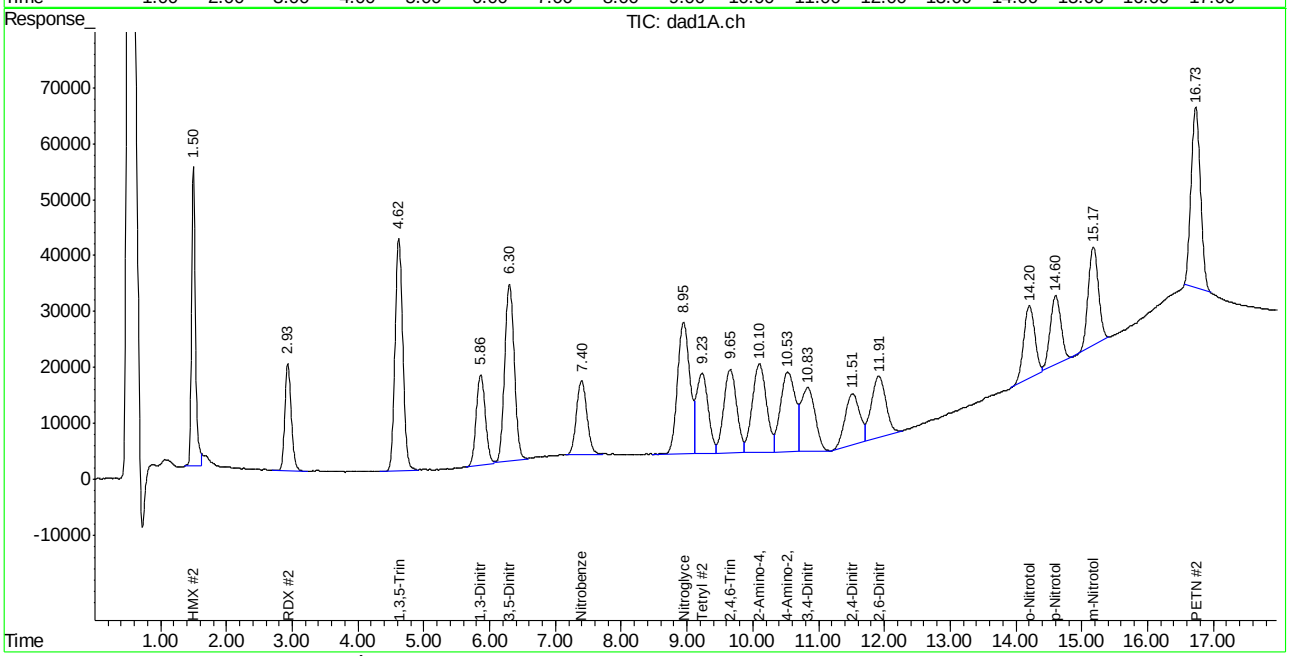
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1B.ch Vial: 17
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045289.D\dad1A.ch
Acq On : 24-Dec-2014, 18:45:05 Operator: KISMETL
Sample : op54324-ms Inst : G1315B
Misc : OP54324,GBB1219,10.1,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:23 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: OP54324-MS
Lab FileID: BB045289.D
Injection Time: 12/24/14 18:45
Method: SW846 8330B
Analyst approved: 12/26/14 11:55 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.50	Poorly defined baseline
HMX	2691-41-0	2	1.50	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.86	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.20	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.20	Poorly defined baseline
PETN	78-11-5	2	16.73	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1A.ch
Acq On : 24-Dec-2014, 19:10:03 Operator: KISMETL
Sample : op54324-msd Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:33 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	965184	1723296	526.670	522.524
	Spiked Amount 500.000	Range 72 - 134		Recovery =		105.33%	104.50%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	1.50	1.50	792450	2268794	487.085m	505.041m
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D.	N.D.
5)	RDX	2.94	2.93	817851	1291935	442.419	440.847
6)	1,3,5-Trinitrobe	4.62	4.62	1778303	3437605	446.854	445.955
7)	1,3-Dinitrobenze	5.87	5.87	2335856	1618378	449.279	456.802
8)	3,5-Dinitroanili	6.30	6.30	1921853	3239312	460.630	465.417m
9)	Nitrobenzene	7.40	7.40	1488735	1464979	503.331	498.680m
10)	Nitroglycerin	0.00	8.95	0	3066718	N.D.	2451.400 #
11)	Tetryl	9.24	9.23	1196338	1819384	412.831	397.377
12)	2,4,6-Trinitroto	9.66	9.66	1673551	2068294	474.807	498.469
13)	2-Amino-4,6-Dini	10.10	10.10	1544506	2397565	502.211	522.640
14)	4-Amino-2,6-Dini	10.54	10.53	1075719	2272866	511.411	507.313
16)	2,4-Dinitrotolue	11.51	11.52	2240865	1426902	491.440	525.756
17)	2,6-Dinitrotolue	11.91	11.92	1272108	1694321	491.367	543.781
18)	o-Nitrotoluene	14.21	14.20	1149013	1519041	532.908	515.811m
19)	p-Nitrotoluene	14.61	14.61	1718605	1405957	504.558	498.794
20)	m-Nitrotoluene	15.18	15.18	1618270	1912186	537.297	543.186
21)	PETN	0.00	16.73	0	3422231	N.D. d	2183.394m

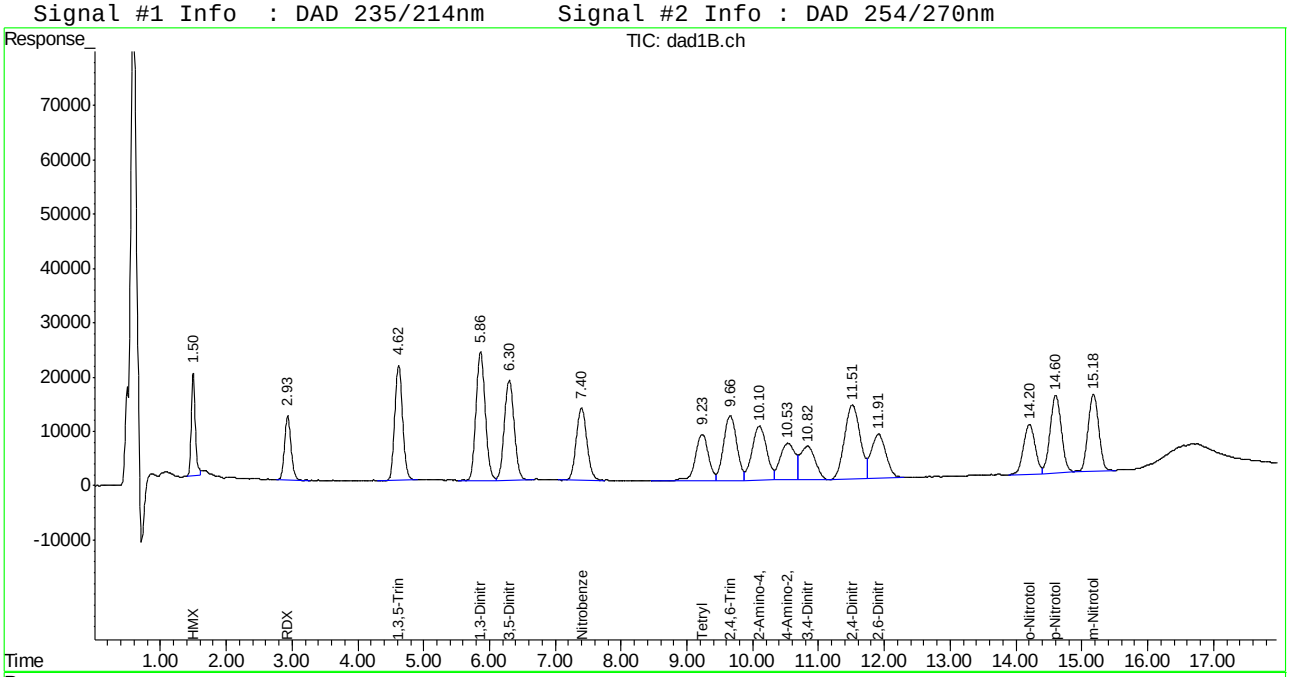
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045290.D 8330B.M Fri Dec 26 11:34:38 2014 Page 1

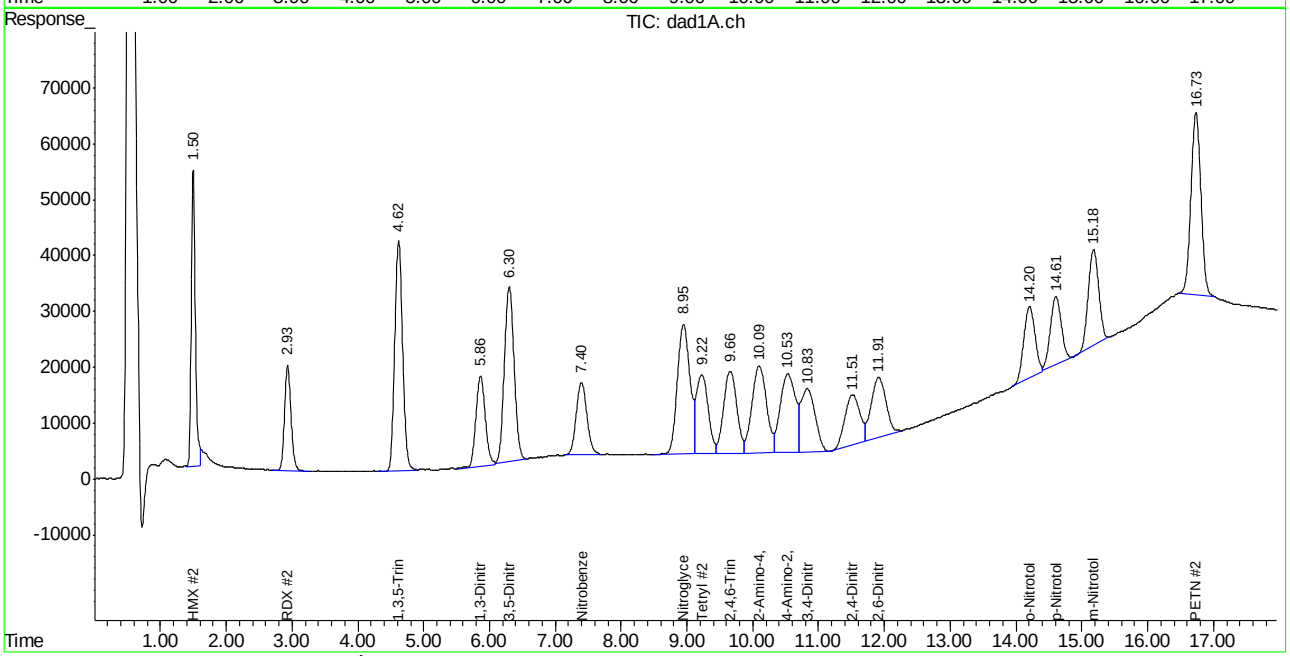
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1B.ch Vial: 18
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045290.D\dad1A.ch
Acq On : 24-Dec-2014, 19:10:03 Operator: KISMETL
Sample : op54324-msd Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:24 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54324-MSD
Lab FileID: BB045290.D
Injection Time: 12/24/14 19:10
Method: SW846 8330B
Analyst approved: 12/26/14 11:55 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.50	Poorly defined baseline
HMX	2691-41-0	2	1.50	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.20	Poorly defined baseline
PETN	78-11-5	2	16.73	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1A.ch
Acq On : 24-Dec-2014, 22:29:45 Operator: KISMETL
Sample : op54324-dup Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:41 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	880589	1608851	480.510m	487.823
	Spiked Amount 500.000	Range 72 - 134		Recovery =		96.10%	97.56%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

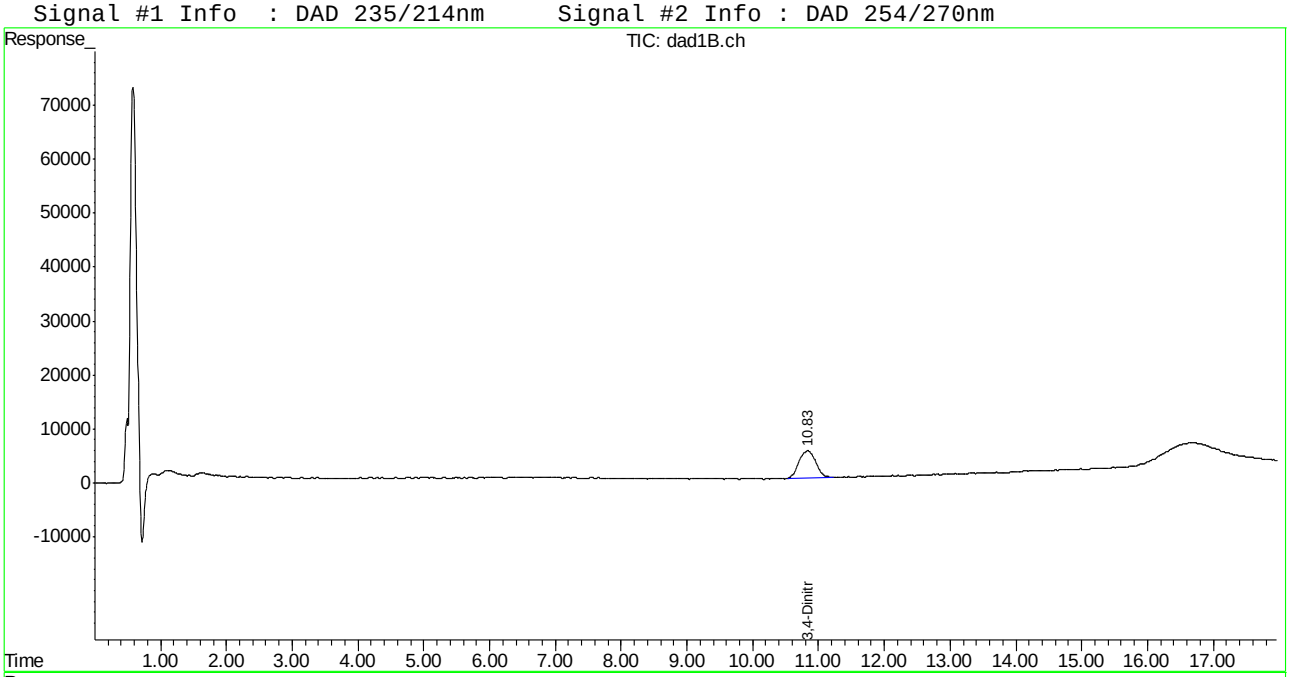
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045298.D 8330B.M Fri Dec 26 11:34:46 2014 Page 1

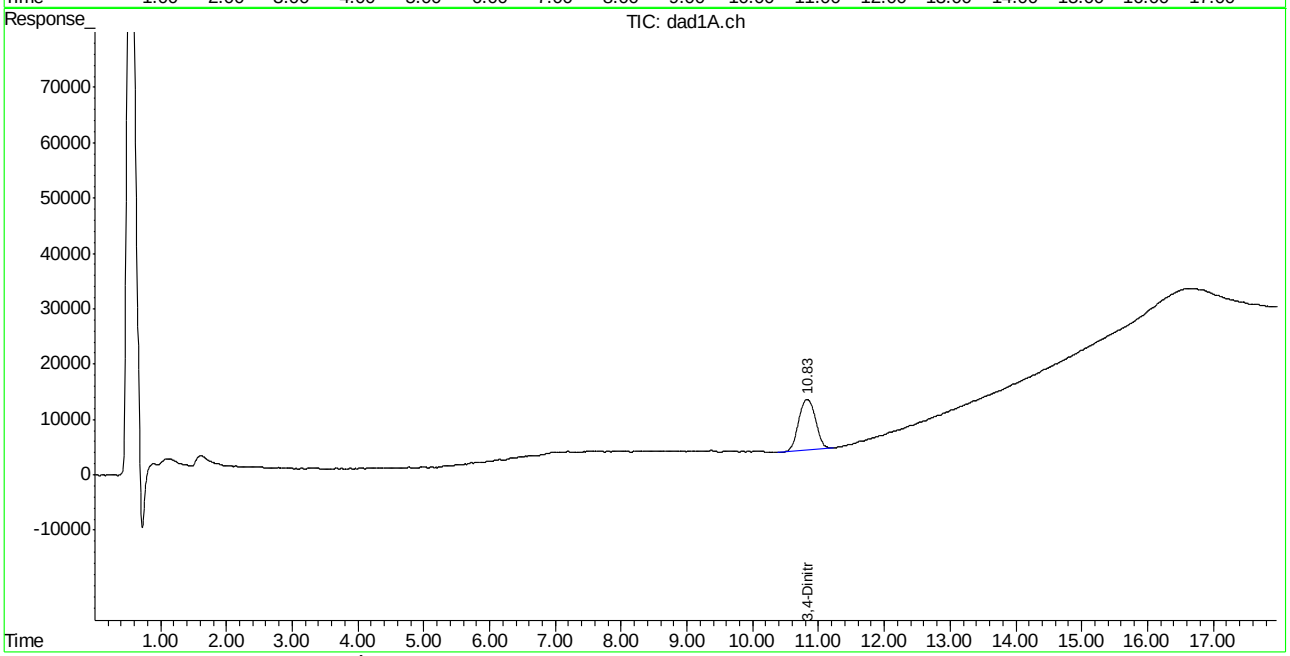
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1B.ch Vial: 24
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045298.D\dad1A.ch
Acq On : 24-Dec-2014, 22:29:45 Operator: KISMETL
Sample : op54324-dup Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:29 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: OP54324-DUP
Lab FileID: BB045298.D
Injection Time: 12/24/14 22:29
Method: SW846 8330B
Analyst approved: 12/26/14 11:55 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
3,4-Dinitrotoluene	610-39-9	1	10.83	Poorly defined baseline

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1A.ch
Acq On : 24-Dec-2014, 22:54:45 Operator: KISMETL
Sample : op54324-dup2 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:42 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.82	918119	1654229	500.988	501.582
	Spiked Amount 500.000	Range 72 - 134		Recovery =		100.20%	100.32%
	Target Compounds						
1)	TNX	0.00	0.00	0	0	N.D. d	N.D. d
2)	HMX	0.00	0.00	0	0	N.D. d	N.D. d
3)	DNX	0.00	0.00	0	0	N.D. d	N.D. d
4)	MNX	0.00	0.00	0	0	N.D. d	N.D. d
5)	RDX	0.00	0.00	0	0	N.D. d	N.D. d
6)	1,3,5-Trinitrobe	0.00	0.00	0	0	N.D. d	N.D. d
7)	1,3-Dinitrobenze	0.00	0.00	0	0	N.D. d	N.D. d
8)	3,5-Dinitroanili	0.00	0.00	0	0	N.D. d	N.D. d
9)	Nitrobenzene	0.00	0.00	0	0	N.D. d	N.D. d
10)	Nitroglycerin	0.00	0.00	0	0	N.D.	N.D.
11)	Tetryl	0.00	0.00	0	0	N.D.	N.D.
12)	2,4,6-Trinitroto	0.00	0.00	0	0	N.D.	N.D.
13)	2-Amino-4,6-Dini	0.00	0.00	0	0	N.D.	N.D.
14)	4-Amino-2,6-Dini	0.00	0.00	0	0	N.D.	N.D.
16)	2,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
17)	2,6-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
18)	o-Nitrotoluene	0.00	0.00	0	0	N.D.	N.D.
19)	p-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
20)	m-Nitrotoluene	0.00	0.00	0	0	N.D. d	N.D. d
21)	PETN	0.00	0.00	0	0	N.D. d	N.D. d

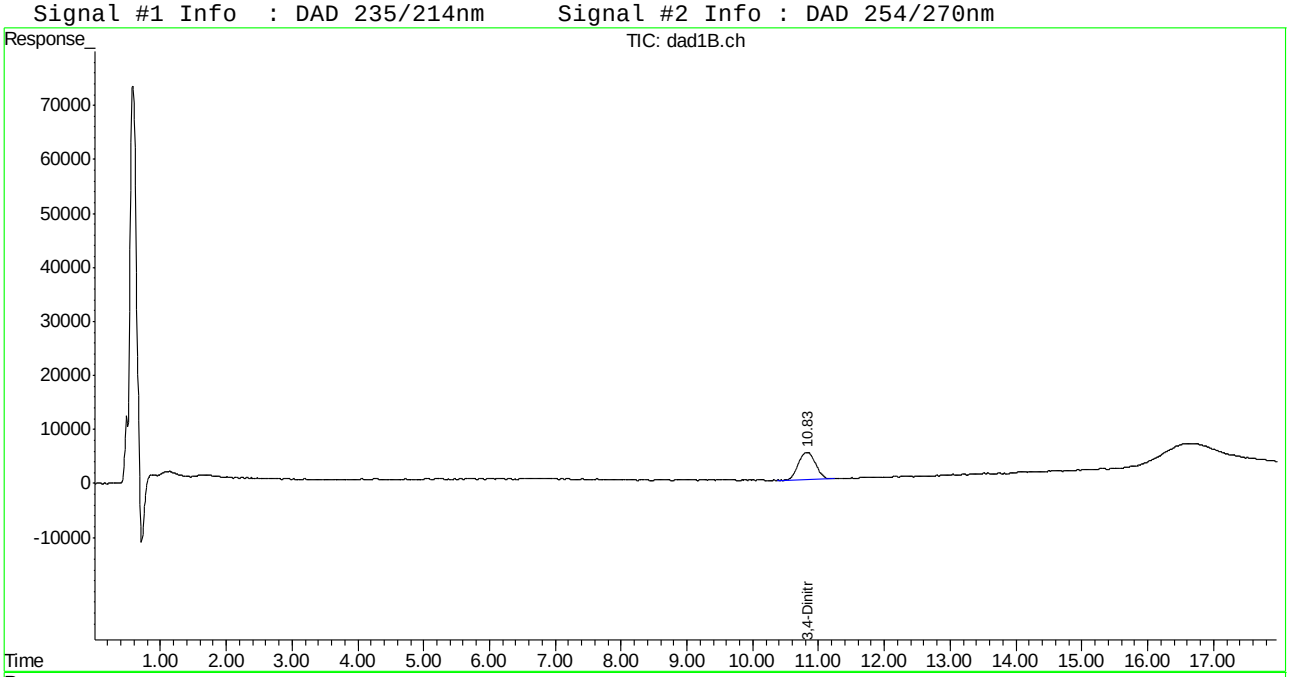
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045299.D 8330B.M Fri Dec 26 11:34:47 2014 Page 1

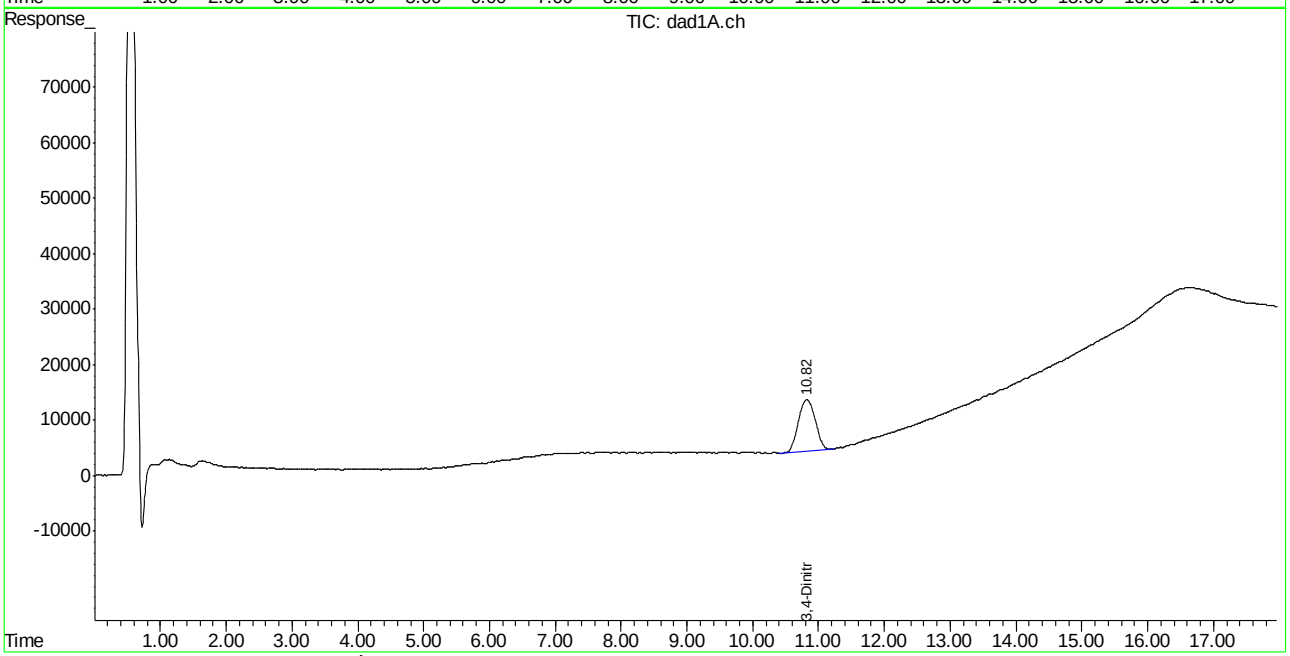
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1B.ch Vial: 25
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045299.D\dad1A.ch
Acq On : 24-Dec-2014, 22:54:45 Operator: KISMETL
Sample : op54324-dup2 Inst : G1315B
Misc : OP54324,GBB1219,10.0,,,50,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:29 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1A.ch
Acq On : 24-Dec-2014, 11:56:13 Operator: KISMETL
Sample : ic1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:56 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.78	10.79	33838	67944	17.116m	19.297m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	3.42%#	3.86%#
	Target Compounds						
1)	TNX	1.36	1.36	60245	89063	19.585m	19.978
2)	HMX	1.45	1.45	30628	90165	19.829m	22.365
3)	DNX	1.73	1.73	54662	98360	18.888m	22.222m
4)	MNX	2.31	2.32	55594	73569	22.660m	19.608m
5)	RDX	2.92	2.91	44002	66888	22.823m	22.184m
6)	1,3,5-Trinitrobe	4.62	4.62	81870	165404	20.308	21.521
7)	1,3-Dinitrobenze	5.88	5.89	113377	80230	20.871m	21.576m
8)	3,5-Dinitroanili	6.32	6.33	88070	137044	20.918	19.371
9)	Nitrobenzene	7.40	7.40	62858	63354	20.309m	21.568m
10)	Nitroglycerin	0.00	8.96	0	125956	N.D.	100.141 #
11)	Tetryl	9.23	9.23	64320	93518	22.200m	19.850
12)	2,4,6-Trinitroto	9.66	9.67	79924	73976	21.834m	16.375m
13)	2-Amino-4,6-Dini	10.12	10.12	69269	85626	22.144m	17.843m
14)	4-Amino-2,6-Dini	10.55	10.56	43978	84491	19.217m	17.757m
16)	2,4-Dinitrotolue	11.56	11.58	93095	46679	20.589m	16.314m
17)	2,6-Dinitrotolue	11.95	12.01	52461	57706	20.531m	17.870m
18)	o-Nitrotoluene	14.26	14.30	36334	53603	16.841m	17.662m
19)	p-Nitrotoluene	14.65	14.68	59215	54043	18.393m	19.561m
20)	m-Nitrotoluene	15.18	15.22	61996	69965	18.914m	17.982m
21)	PETN	0.00	16.72	0	144929	N.D.	299.662m#

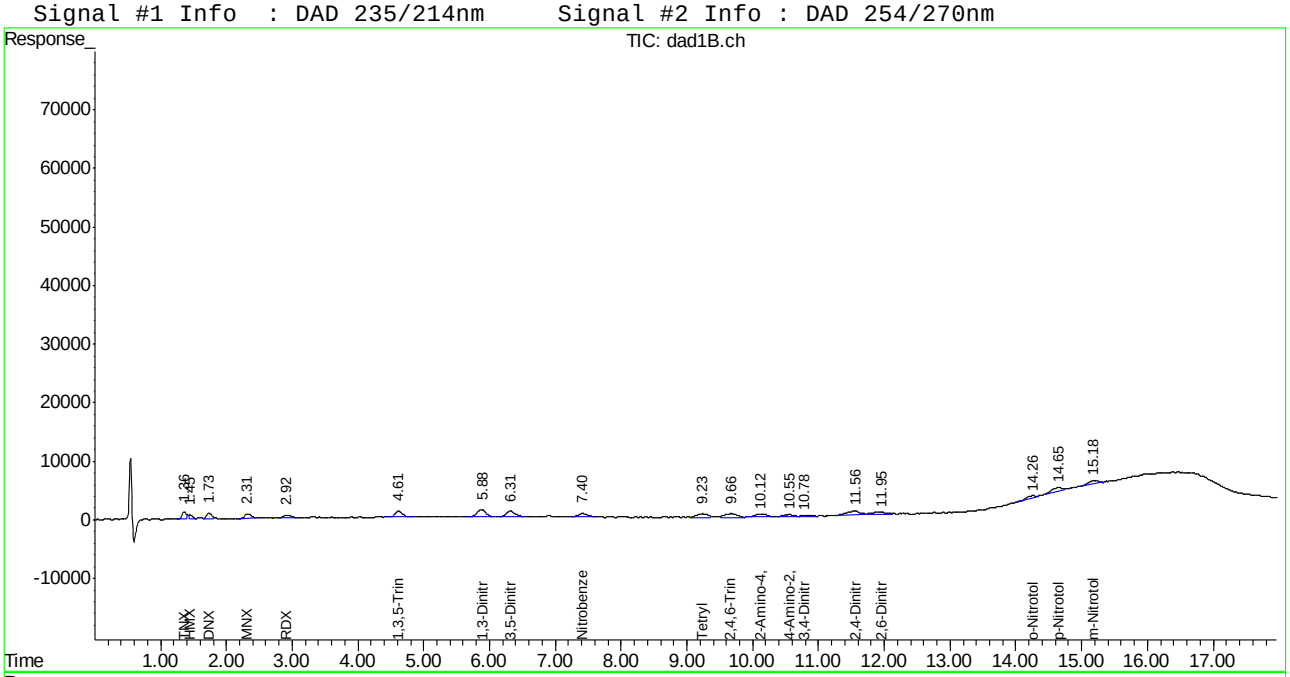
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045273.D 8330B.M Fri Dec 26 10:58:45 2014 Page 1

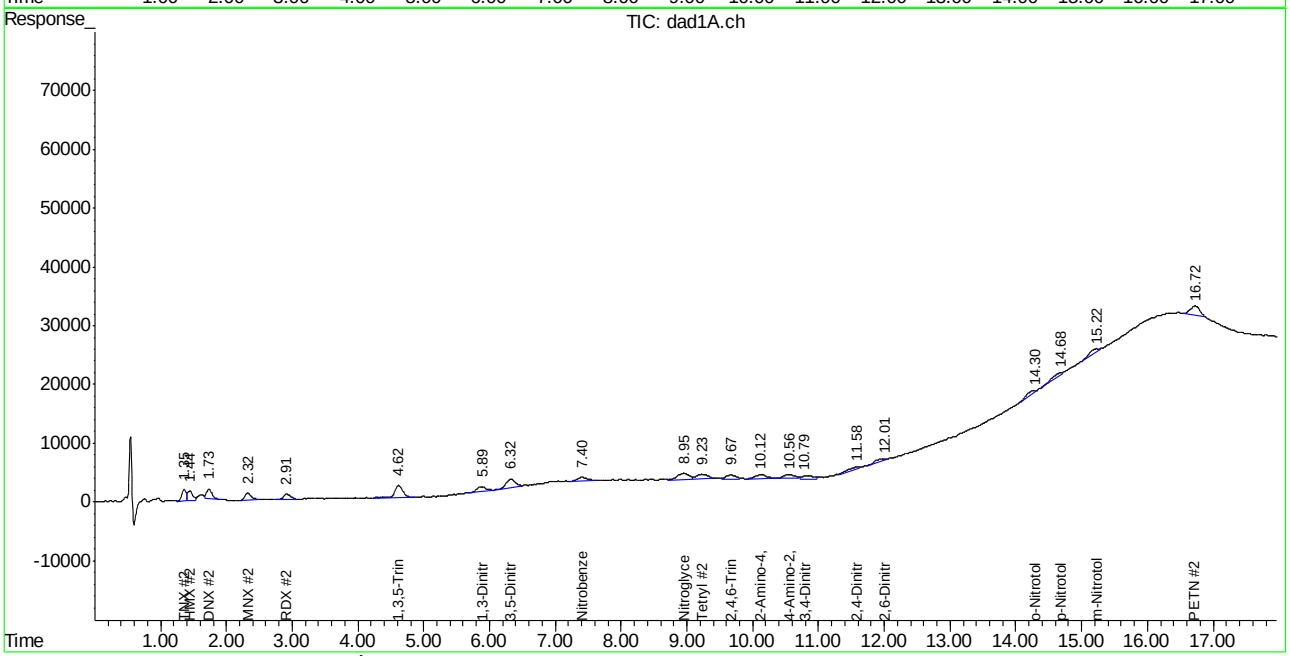
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045273.D\dad1A.ch
Acq On : 24-Dec-2014, 11:56:13 Operator: KISMETL
Sample : ic1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 7:23 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219
Lab FileID: BB045273.D
Injection Time: 12/24/14 11:56
Method: SW846 8330A
Analyst approved: 12/26/14 11:46 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.45	Poorly defined baseline
DNX		1	1.73	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
MNX		1	2.31	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	2	2.91	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.88	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.89	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.40	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
Tetryl	479-45-8	1	9.23	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.66	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.67	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.12	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.12	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.55	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.56	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.78	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.79	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.56	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.58	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.95	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.01	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.26	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.30	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.65	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.68	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.18	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.22	Poorly defined baseline
PETN	78-11-5	2	16.72	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1A.ch
Acq On : 24-Dec-2014, 12:29:02 Operator: KISMETL
Sample : ic1219-50 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:57 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.85	10.86	77513	135078	39.208m	38.363m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		7.84%#	7.67%#
	Target Compounds						
1)	TNX	1.35	1.35	149687	196121	48.661m	43.992m
2)	HMX	1.43	1.44	76954	187207	49.822m	46.437m
3)	DNX	1.73	1.73	128095	187019	44.263m	42.252m
4)	MNX	2.32	2.32	134707	195268	54.906m	52.044m
5)	RDX	2.92	2.92	86817	143805	45.030m	47.695m
6)	1,3,5-Trinitrobe	4.62	4.62	211497	400593	52.462m	52.121m
7)	1,3-Dinitrobenze	5.87	5.88	264850	172901	48.755m	46.498m
8)	3,5-Dinitroanili	6.32	6.32	207818	354911	49.359m	50.166m
9)	Nitrobenzene	7.41	7.41	149682	149443	48.361	50.875m
10)	Nitroglycerin	0.00	8.96	0	293664	N.D.	233.478m#
11)	Tetryl	9.23	9.23	132983	214056	45.899	45.434m
12)	2,4,6-Trinitroto	9.68	9.68	167633	207611	45.795	45.957m
13)	2-Amino-4,6-Dini	10.14	10.13	134808	211702	43.096m	44.115m
14)	4-Amino-2,6-Dini	10.55	10.56	78876	198845	34.466m	41.790m
16)	2,4-Dinitrotolue	11.54	11.55	218562	114364	48.338m	39.969m
17)	2,6-Dinitrotolue	11.93	11.96	132383	131672	51.809	40.775m
18)	o-Nitrotoluene	14.22	14.23	94575	140005	43.836m	46.132m
19)	p-Nitrotoluene	14.63	14.64	178230	150227	55.361m	54.375m
20)	m-Nitrotoluene	15.19	15.20	148603	163233	45.337	41.954m
21)	PETN	0.00	16.75	0	340292	N.D.	703.602m#

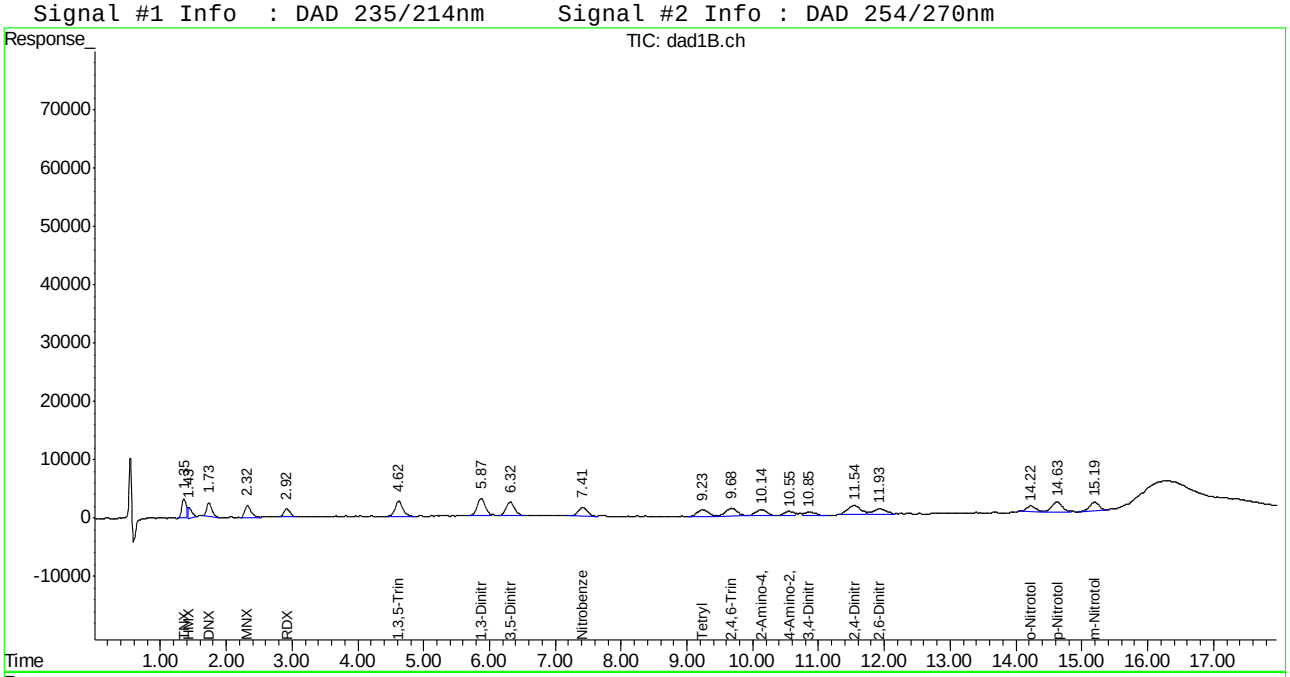
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045274.D 8330B.M Fri Dec 26 10:58:46 2014 Page 1

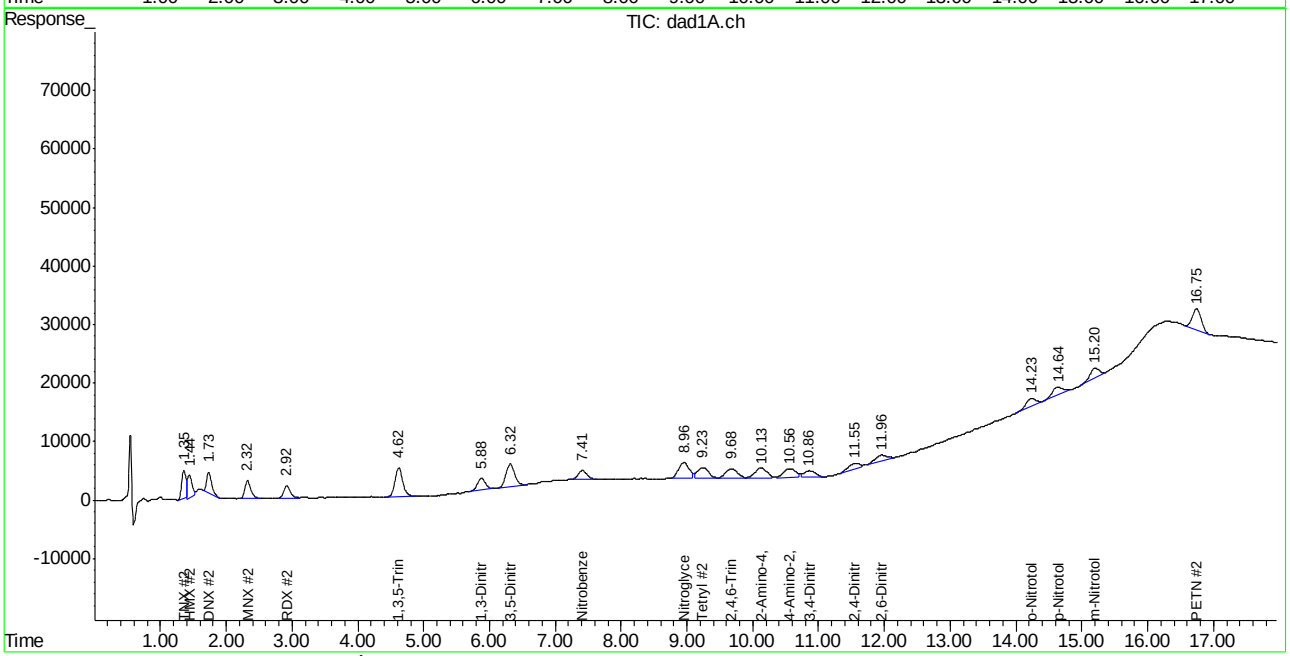
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1B.ch Vial: 6
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045274.D\dad1A.ch
Acq On : 24-Dec-2014, 12:29:02 Operator: KISMETL
Sample : ic1219-50 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 7:28 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219
Lab FileID: BB045274.D
Injection Time: 12/24/14 12:29
Method: SW846 8330A
Analyst approved: 12/26/14 11:46 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Poorly defined baseline
TNX		2	1.35	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.73	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
MNX		1	2.32	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.62	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.62	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.87	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.88	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.32	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.32	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.96	Poorly defined baseline
Tetryl	479-45-8	2	9.23	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.68	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.13	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.14	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.55	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.56	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.85	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.86	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.54	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.96	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.22	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.23	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.63	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.64	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.20	Poorly defined baseline
PETN	78-11-5	2	16.75	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1A.ch
Acq On : 24-Dec-2014, 12:53:56 Operator: KISMETL
Sample : ic1219-100 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:58 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.84	10.85	179910	303181	91.003	86.106m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		18.20%#	17.22%#
	Target Compounds						
1)	TNX	1.36	1.36	289544	434407	94.128m	97.442m
2)	HMX	1.43	1.44	139428	411100	90.269m	101.973m
3)	DNX	1.74	1.74	280516	442091	96.930m	99.878m
4)	MNX	2.32	2.32	241967	372451	98.625m	99.268m
5)	RDX	2.92	2.92	182710	289985	94.767m	96.177m
6)	1,3,5-Trinitrobe	4.63	4.63	383870	744341	95.219	96.846
7)	1,3-Dinitrobenze	5.88	5.87	506658	344536	93.269	92.655m
8)	3,5-Dinitroanili	6.32	6.31	421785	708638	100.178	100.165m
9)	Nitrobenzene	7.42	7.41	284905	292356	92.050	99.527m
10)	Nitroglycerin	0.00	8.95	0	645359	N.D.	513.094m#
11)	Tetryl	9.24	9.24	276454	438552	95.419m	93.085m
12)	2,4,6-Trinitroto	9.68	9.68	338193	424207	92.389	93.903m
13)	2-Amino-4,6-Dini	10.13	10.13	290965	457393	93.016	95.312m
14)	4-Amino-2,6-Dini	10.58	10.54	197369	443116	86.244	93.127m
16)	2,4-Dinitrotolue	11.54	11.55	472004	265283	104.390	92.714m
17)	2,6-Dinitrotolue	11.93	11.94	267233	290146	104.583	89.849m
18)	o-Nitrotoluene	14.22	14.21	247825	300548	114.869	99.031m
19)	p-Nitrotoluene	14.62	14.63	348545	259911	108.264	94.076
20)	m-Nitrotoluene	15.19	15.19	291452	343006	88.918	88.158m
21)	PETN	0.00	16.74	0	654504	N.D.	1353.279m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045275.D 8330B.M Fri Dec 26 10:58:47 2014 Page 1

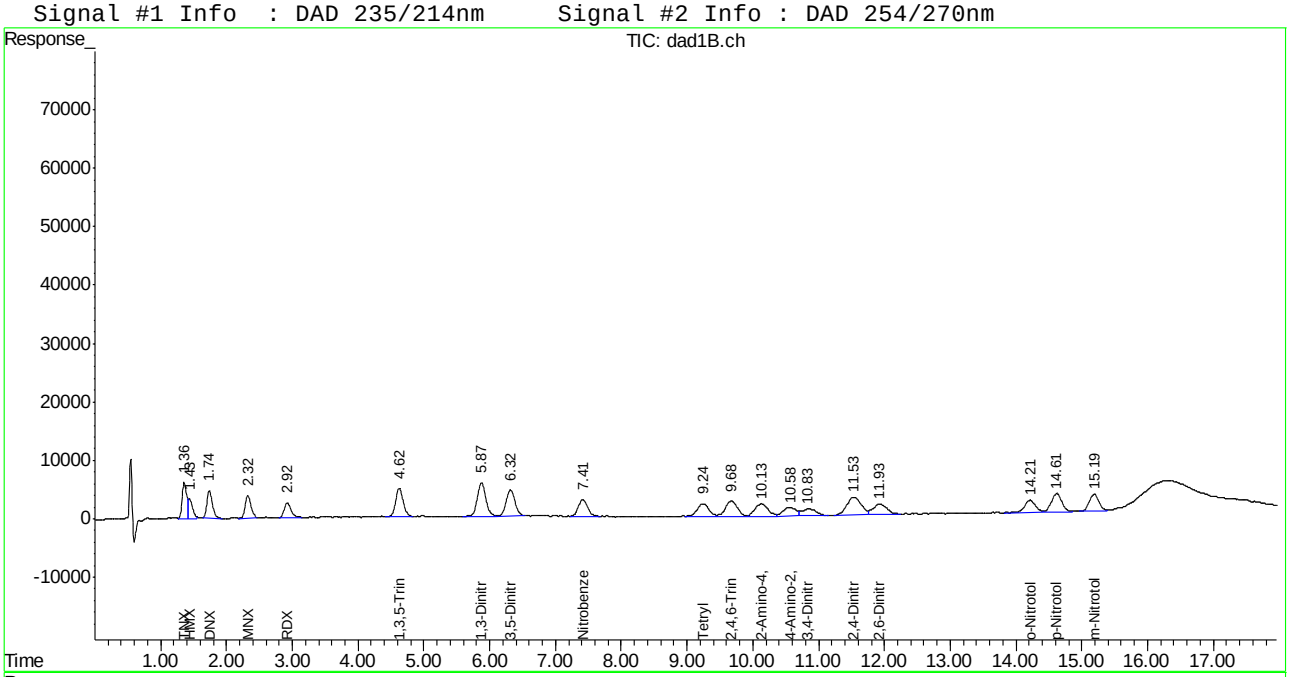
9.7.3
9

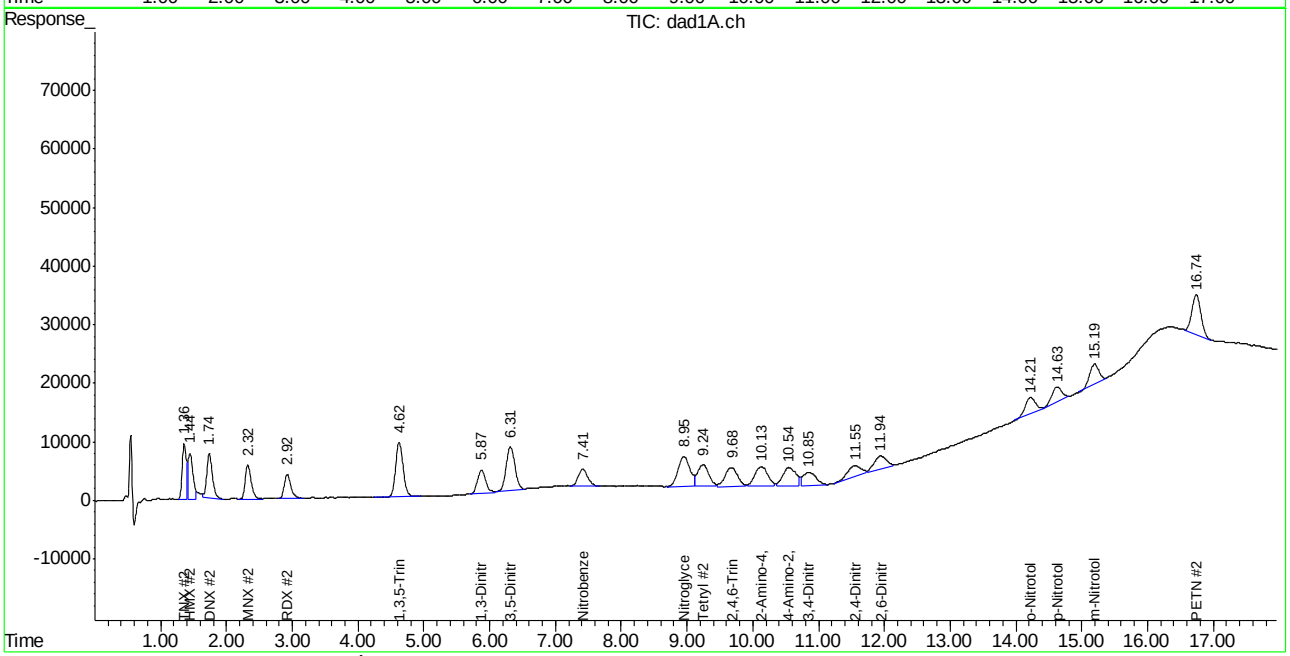
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1B.ch Vial: 7
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045275.D\dad1A.ch
Acq On : 24-Dec-2014, 12:53:56 Operator: KISMETL
Sample : ic1219-100 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 7:36 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-IC1219 **Method:** SW846 8330A
Lab FileID: BB045275.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 12:53 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
TNX		2	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		1	1.74	Poorly defined baseline
DNX		2	1.74	Poorly defined baseline
MNX		1	2.32	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.95	Poorly defined baseline
Tetryl	479-45-8	1	9.24	Poorly defined baseline
Tetryl	479-45-8	2	9.24	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.68	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.13	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.54	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.85	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.55	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.94	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.19	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1A.ch
Acq On : 24-Dec-2014, 13:18:53 Operator: KISMETL
Sample : ic1219-200 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:16:59 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.86	384029	676395	194.252	192.102
Spiked Amount	500.000	Range	72 - 134	Recovery	=	38.85%#	38.42%#
	Target Compounds						
1)	TNX	1.35	1.36	596150	887829	193.802m	199.148
2)	HMX	1.43	1.44	353596	916841	228.927m	227.422m
3)	DNX	1.74	1.73	588181	919750	203.242	207.792m
4)	MNX	2.32	2.32	498730	745957	203.281	198.816
5)	RDX	2.92	2.92	374385	592458	194.184	196.495
6)	1,3,5-Trinitrobe	4.62	4.62	810695	1554815	201.094	202.297
7)	1,3-Dinitrobenze	5.87	5.87	1047009	707181	192.740	190.180m
8)	3,5-Dinitroanili	6.31	6.31	829062	1413604	196.911	199.812m
9)	Nitrobenzene	7.41	7.41	581750	575034	187.957	195.759m
10)	Nitroglycerin	0.00	8.95	0	1284855	N.D.	1021.527 #
11)	Tetryl	9.24	9.24	597100	988230	206.090	209.757
12)	2,4,6-Trinitroto	9.67	9.68	705263	853627	192.666	188.960
13)	2-Amino-4,6-Dini	10.13	10.13	622555	959723	199.019	199.988
14)	4-Amino-2,6-Dini	10.55	10.56	442867	935725	193.519	196.656
16)	2,4-Dinitrotolue	11.54	11.55	927594	569056	205.150	198.880
17)	2,6-Dinitrotolue	11.93	11.94	519135	659294	203.166	204.162
18)	o-Nitrotoluene	14.22	14.22	473385	602609	219.417	198.561m
19)	p-Nitrotoluene	14.62	14.63	717733	562055	222.940	203.437
20)	m-Nitrotoluene	15.19	15.19	599653	716025	182.945	184.030m
21)	PETN	0.00	16.74	0	1491806	N.D.	3084.521m#

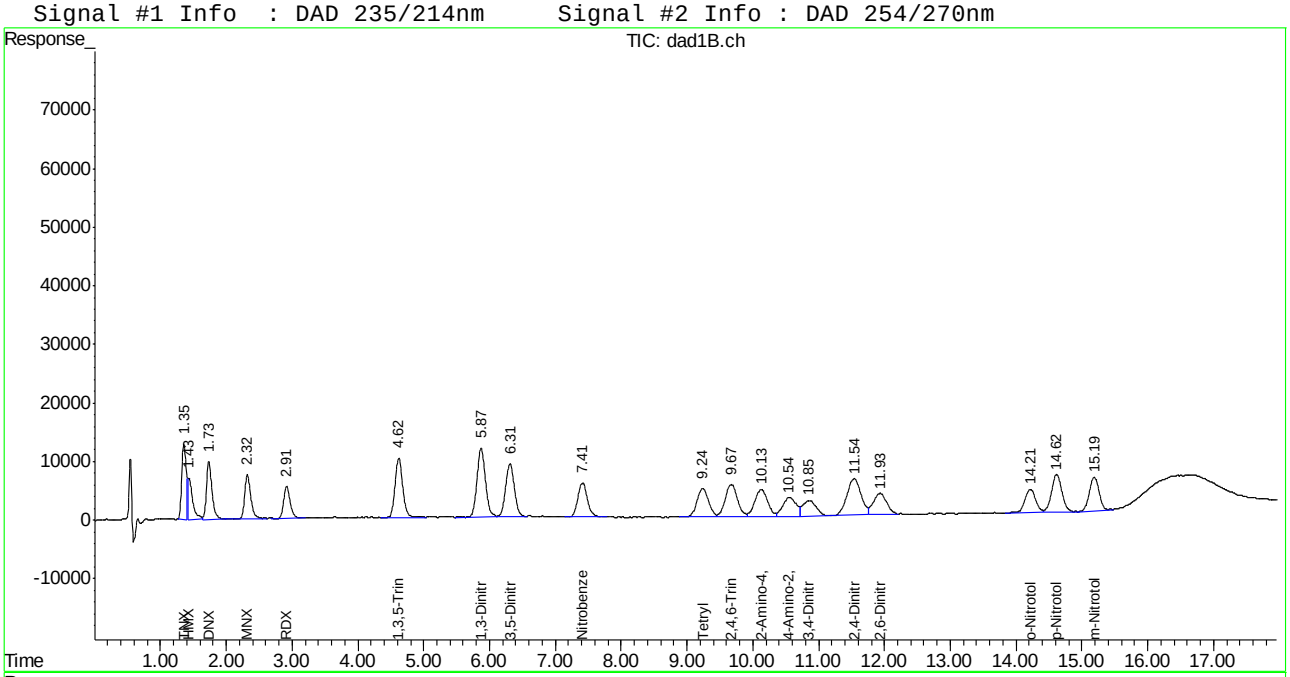
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045276.D 8330B.M Fri Dec 26 10:58:48 2014 Page 1

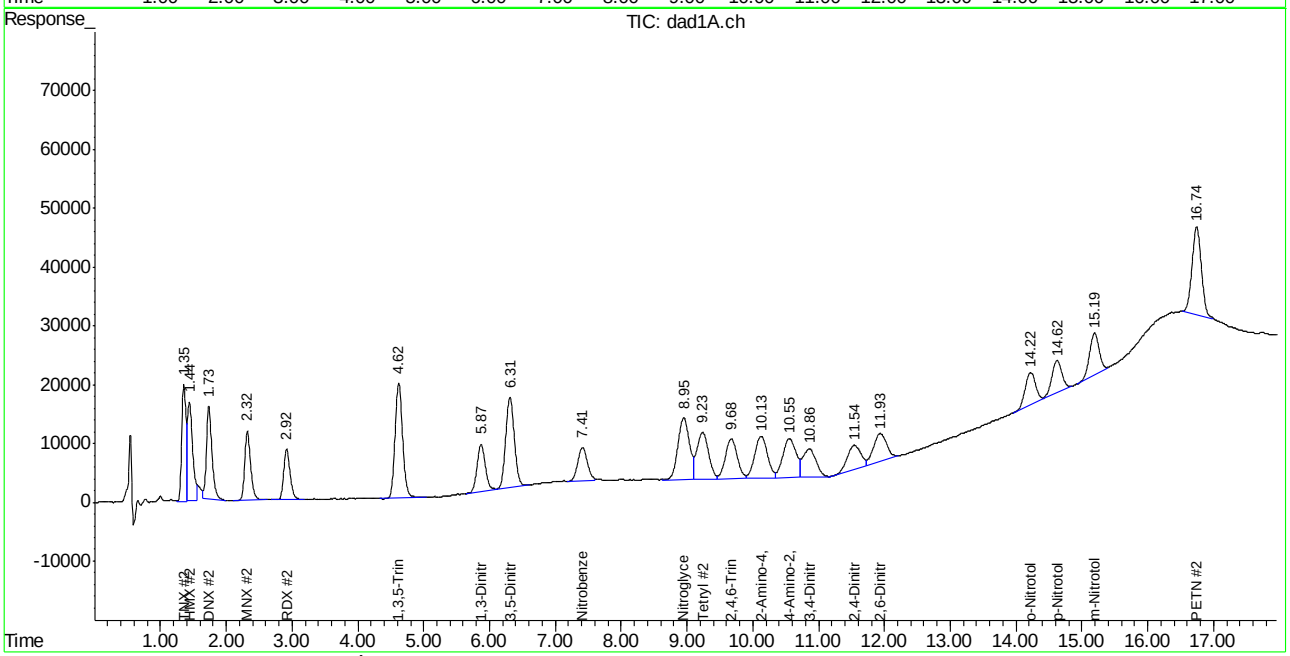
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1B.ch Vial: 8
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045276.D\dad1A.ch
Acq On : 24-Dec-2014, 13:18:53 Operator: KISMETL
Sample : ic1219-200 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:08 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: GBB1219-IC1219
Lab FileID: BB045276.D
Injection Time: 12/24/14 13:18
Method: SW846 8330A
Analyst approved: 12/26/14 11:46 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
HMX	2691-41-0	2	1.44	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.22	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.19	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1A.ch
Acq On : 24-Dec-2014, 13:43:49 Operator: KISMETL
Sample : icc1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:17:00 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.85	948361	1694712	479.707	481.313
Spiked Amount	500.000	Range	72 - 134	Recovery	=	95.94%	96.26%
	Target Compounds						
1)	TNX	1.36	1.36	1532263	2125081	498.122m	476.675
2)	HMX	1.44	1.45	825664	2292059	534.555m	568.544
3)	DNX	1.74	1.74	1346603	2166165	465.310	489.386
4)	MNX	2.33	2.33	1153094	1779028	469.998	474.155
5)	RDX	2.92	2.92	875690	1386499	454.198m	459.848m
6)	1,3,5-Trinitrobe	4.62	4.62	1906659	3654801	472.949	475.527
7)	1,3-Dinitrobenze	5.87	5.87	2484144	1676151	457.298	450.762m
8)	3,5-Dinitroanili	6.31	6.31	2012332	3362518	477.949	475.289m
9)	Nitrobenzene	7.41	7.41	1461267	1433981	472.120	488.170m
10)	Nitroglycerin	0.00	8.95	0	3080582	N.D.	2449.224 #
11)	Tetryl	9.24	9.24	1416650	2221337	488.959	471.490
12)	2,4,6-Trinitroto	9.67	9.67	1699066	2050674	464.157	453.940
13)	2-Amino-4,6-Dini	10.12	10.12	1521328	2295668	486.340	478.373
14)	4-Amino-2,6-Dini	10.55	10.55	1083789	2256187	473.580	474.170
16)	2,4-Dinitrotolue	11.54	11.54	2207991	1431290	488.327	500.222
17)	2,6-Dinitrotolue	11.93	11.93	1248576	1638019	488.636	507.241
18)	o-Nitrotoluene	14.22	14.21	1078020	1484867	499.670	489.268m
19)	p-Nitrotoluene	14.62	14.62	1687656	1395663	524.214	505.164
20)	m-Nitrotoluene	15.19	15.19	1490963	1782378	454.872	458.101
21)	PETN	0.00	16.75	0	3510832	N.D. d	7259.143m

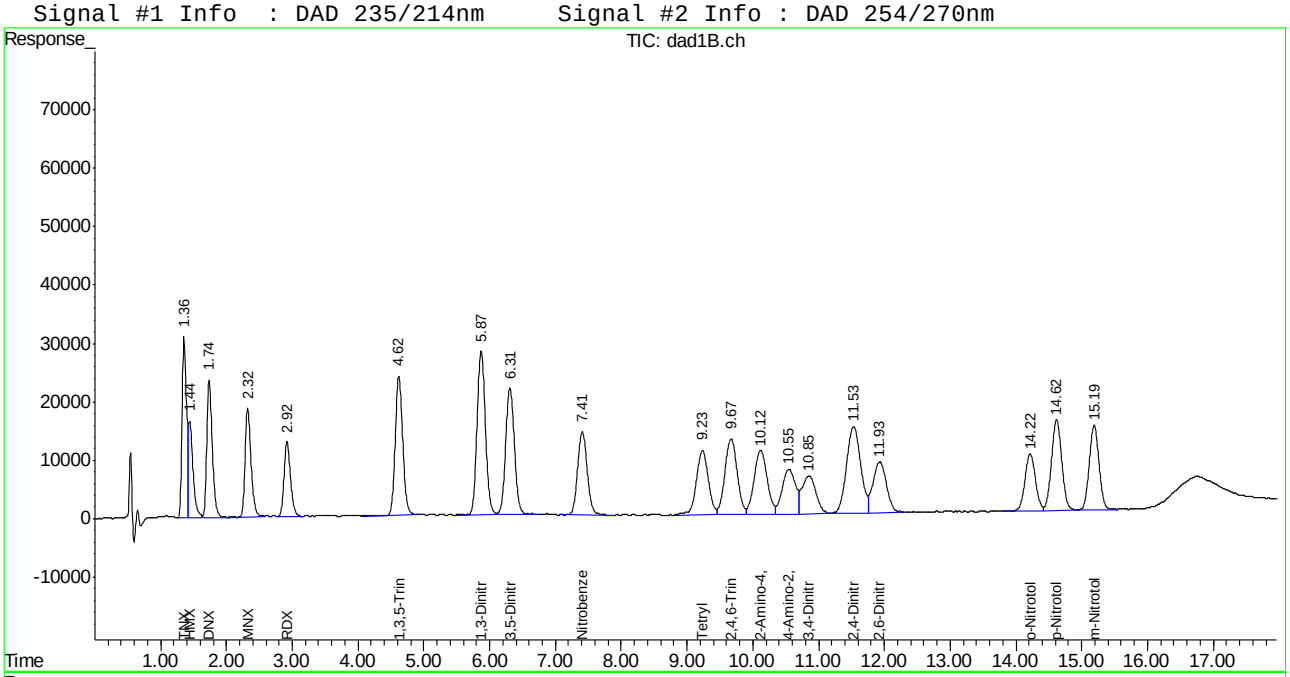
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045277.D 8330B.M Fri Dec 26 10:58:49 2014 Page 1

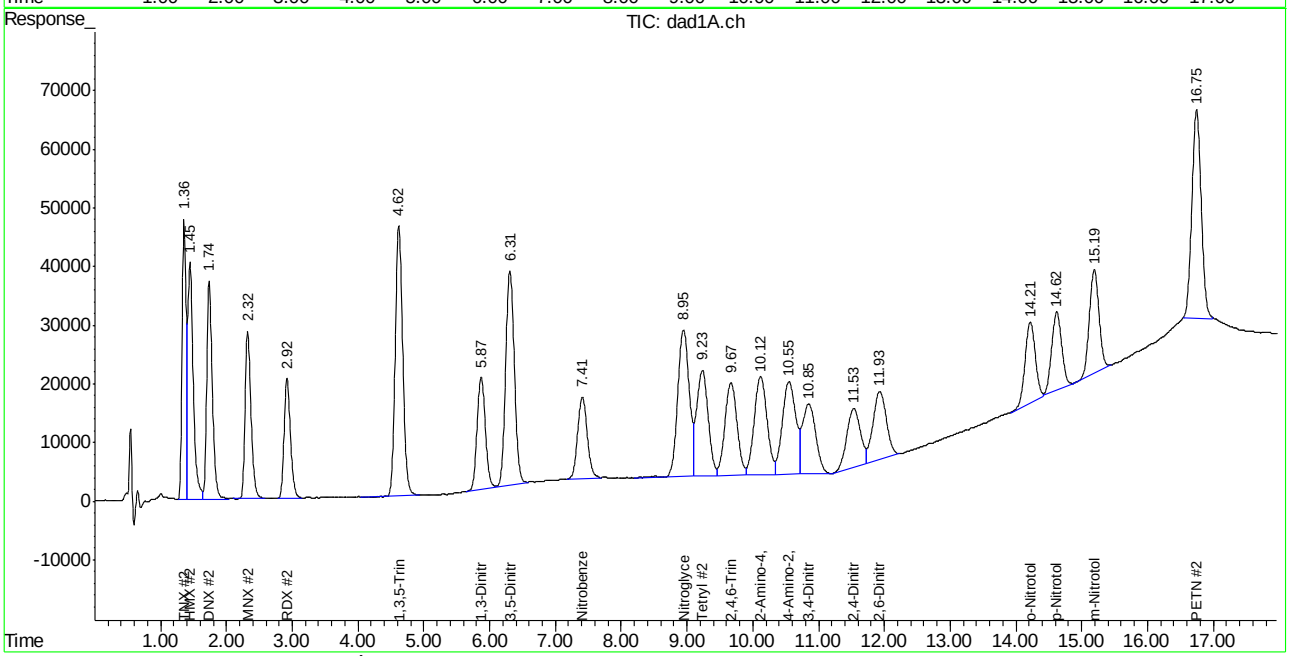
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1B.ch Vial: 9
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045277.D\dad1A.ch
Acq On : 24-Dec-2014, 13:43:49 Operator: KISMETL
Sample : icc1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:07 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: GBB1219-ICC1219 **Method:** SW846 8330A
Lab FileID: BB045277.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 13:43 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
PETN	78-11-5	2	16.75	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1A.ch
Acq On : 24-Dec-2014, 14:10:36 Operator: KISMETL
Sample : ic1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:17:01 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.86	10.86	1935678	3489217	979.118	990.968
Spiked Amount	500.000	Range	72 - 134	Recovery	=	195.82%#	198.19%#
	Target Compounds						
1)	TNX	1.36	1.36	2811881	4330928	914.112m	971.467
2)	HMX	1.44	1.45	1644654	4610964	1064.789m	1143.748
3)	DNX	1.74	1.74	2725048	4360503	941.622	985.136
4)	MNX	2.33	2.33	2325208	3589529	947.750	956.699
5)	RDX	2.92	2.92	1751239	2775610	908.322	920.563
6)	1,3,5-Trinitrobe	4.62	4.62	3841352	7441780	952.853	968.252
7)	1,3-Dinitrobenze	5.87	5.87	4992135	3488098	918.986	938.043
8)	3,5-Dinitroanili	6.31	6.31	4041842	6835035	959.979	966.126m
9)	Nitrobenzene	7.41	7.41	2910446	2837199	940.334	965.868m
10)	Nitroglycerin	0.00	8.95	0	6183817	N.D.	4916.457 #
11)	Tetryl	9.25	9.24	2844898	4551648	981.920	966.109
12)	2,4,6-Trinitroto	9.68	9.68	3436558	4195384	938.811	928.696
13)	2-Amino-4,6-Dini	10.13	10.13	3088225	4710409	987.247	981.558
14)	4-Amino-2,6-Dini	10.56	10.56	2245568	4661281	981.240	979.635
16)	2,4-Dinitrotolue	11.54	11.54	4486251	2940594	992.195	1027.709
17)	2,6-Dinitrotolue	11.94	11.94	2506429	3337175	980.902	1033.413
18)	o-Nitrotoluene	14.22	14.22	2174749	3048577	1008.012	1004.514m
19)	p-Nitrotoluene	14.62	14.62	3397640	2860724	1055.364	1035.447
20)	m-Nitrotoluene	15.19	15.19	3029838	3599350	924.360	925.094
21)	PETN	0.00	16.74	0	6890067	N.D. d	14246.192m

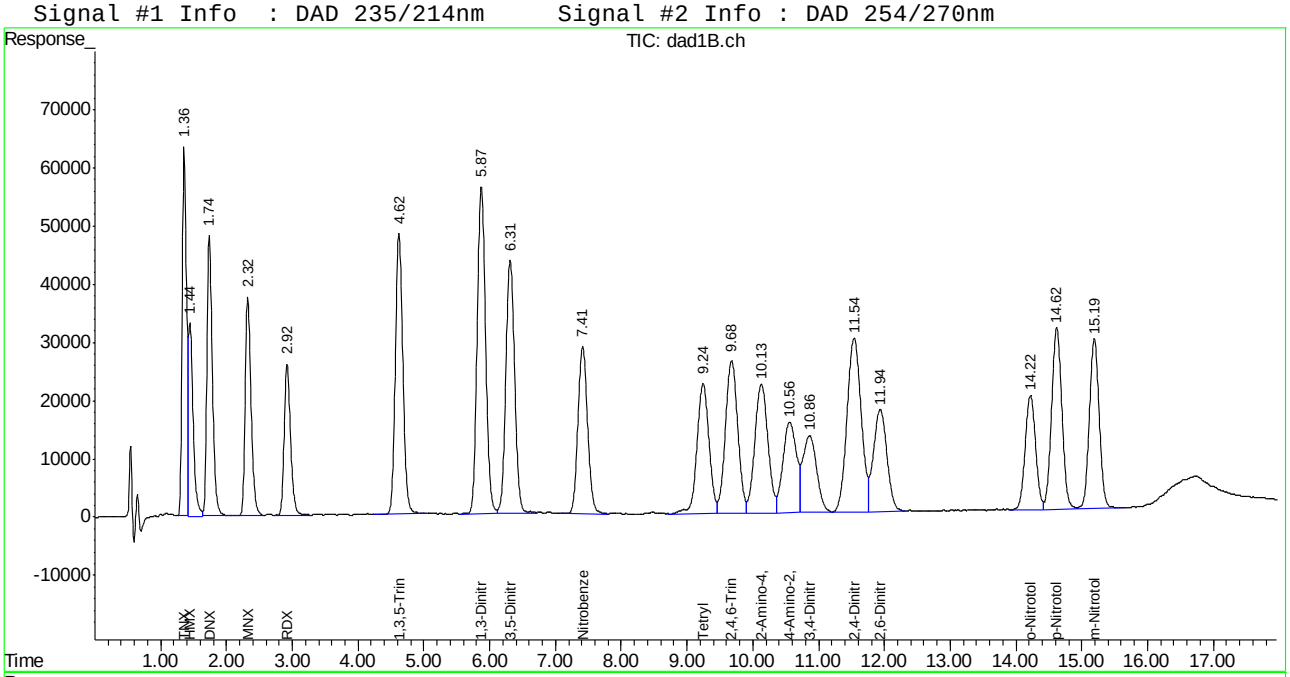
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045278.D 8330B.M Fri Dec 26 10:58:50 2014 Page 1

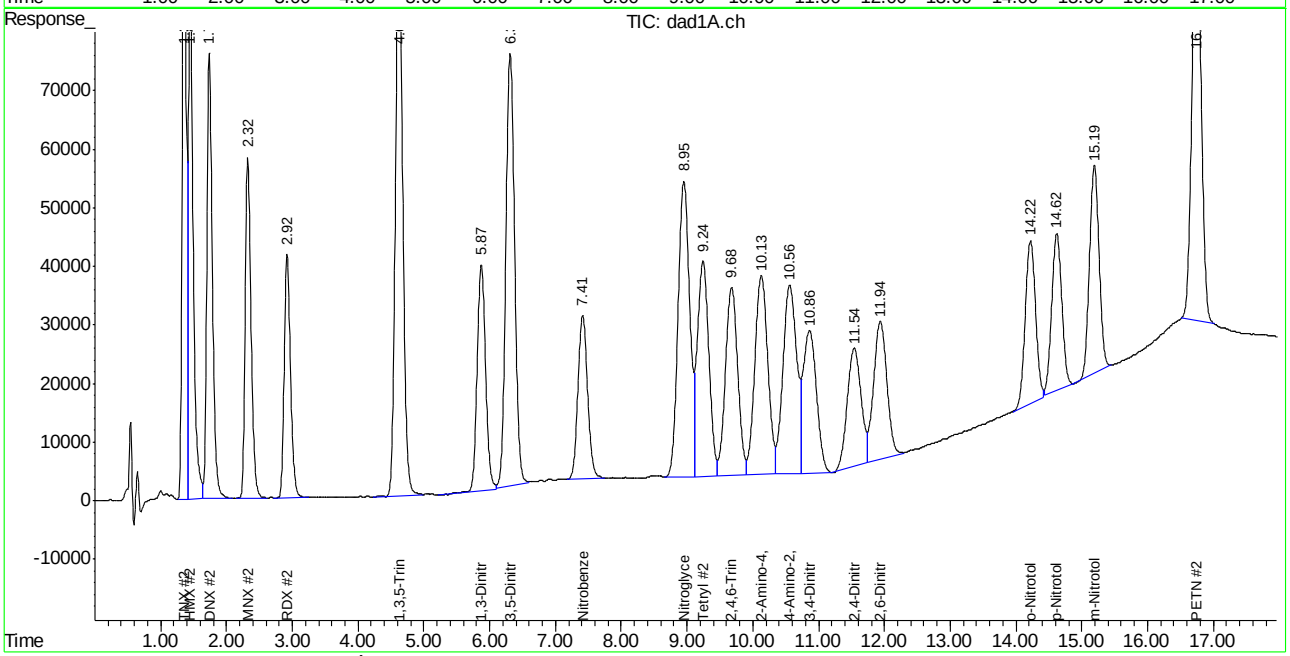
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1B.ch Vial: 10
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045278.D\dad1A.ch
Acq On : 24-Dec-2014, 14:10:36 Operator: KISMETL
Sample : ic1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:08 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:16:40 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: GBB1219-IC1219
Lab FileID: BB045278.D
Injection Time: 12/24/14 14:10
Method: SW846 8330A
Analyst approved: 12/26/14 11:46 Kismet Lugo
Supervisor approved: 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.36	Poorly defined baseline
HMX	2691-41-0	1	1.44	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.22	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

BB045279.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1A.ch
Acq On : 24-Dec-2014, 14:35:35 Operator: KISMETL
Sample : ic1219-2000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 07:45:51 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:45:14 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
15) S 3,4-Dinitrotolue	10.85	10.85	4068946	7389906	2220.295	2240.707
Spiked Amount 500.000	Range 72 - 134		Recovery =		444.06%#	448.14%#
Target Compounds						
1) TNX	1.36	1.36	6233741	9111657	2090.311	2105.303
2) HMX	1.45	1.46	3240396	8914793	2076.601m	2026.535m
3) DNX	1.74	1.74	5465997	8507959	1985.152m	1931.902m
4) MNX	2.33	2.33	4816375	7465591	1934.649	2016.288
5) RDX	2.92	2.92	3604023	5765492	1949.608	1967.359
6) 1,3,5-Trinitrobe	4.62	4.62	7973905	15415828	2003.693	1999.871
7) 1,3-Dinitrobenze	5.87	5.87	10331989	7017537	1987.256	1980.762
8) 3,5-Dinitroanili	6.31	6.31	8432051	14110469	2020.997	2027.275m
9) Nitrobenzene	7.41	7.41	5954092	5807087	2013.037	1978.655m
10) Nitroglycerin	0.00	8.94	0	12782658	N.D.	10217.895 #
11) Tetryl	9.24	9.24	5962699	9542668	2057.600	2084.244
12) 2,4,6-Trinitroto	9.67	9.67	7162154	8774244	2031.991	2114.636
13) 2-Amino-4,6-Dini	10.12	10.12	6429948	9844457	2090.758	2145.972
14) 4-Amino-2,6-Dini	10.55	10.55	4692913	9753155	2231.073	2176.942
16) 2,4-Dinitrotolue	11.53	11.53	9264597	6150974	2031.803	2266.389
17) 2,6-Dinitrotolue	11.93	11.93	5160255	6961602	1993.209	2234.280
18) o-Nitrotoluene	14.22	14.21	4417324	6195195	2048.740	2102.841m
19) p-Nitrotoluene	14.62	14.62	6941396	5925717	2037.895	2102.277
20) m-Nitrotoluene	15.19	15.19	6173423	7410072	2049.696	2104.945
21) PETN	0.00	16.74	0	8310386	N.D. d	8334.743m

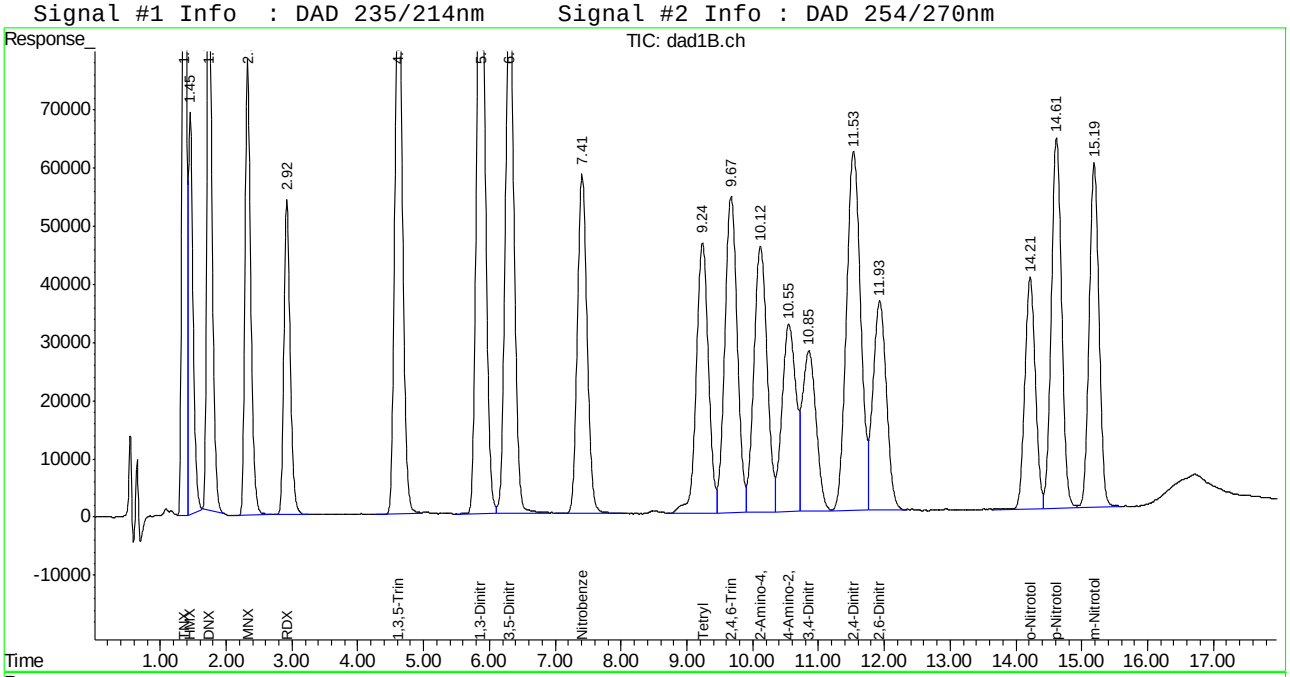
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045279.D 8330B.M Fri Dec 26 10:58:51 2014 Page 1

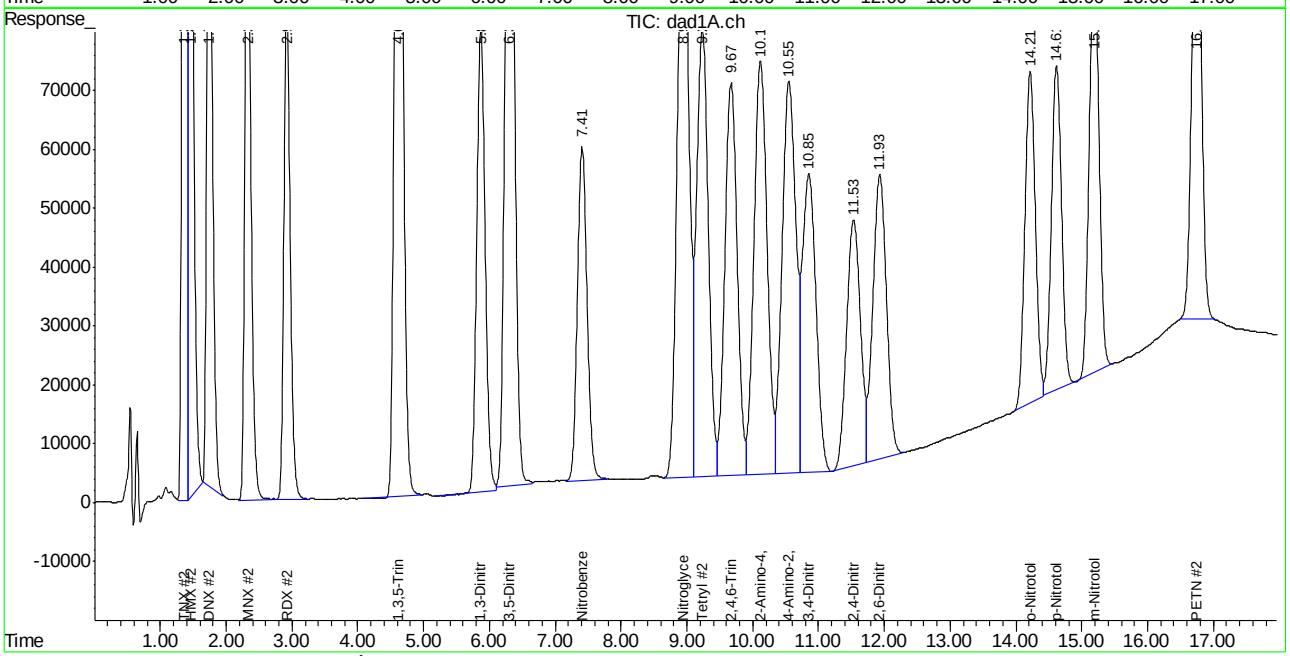
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1B.ch Vial: 11
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045279.D\dad1A.ch
Acq On : 24-Dec-2014, 14:35:35 Operator: KISMETL
Sample : ic1219-2000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:44 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 07:45:14 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: GBB1219-IC1219 **Method:** SW846 8330A
Lab FileID: BB045279.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 14:35 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.45	Poorly defined baseline
HMX	2691-41-0	2	1.46	Poorly defined baseline
DNX		1	1.74	Poorly defined baseline
DNX		2	1.74	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1A.ch
Acq On : 24-Dec-2014, 15:00:33 Operator: KISMETL
Sample : icv1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:46:04 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	0.00	0.00	0	0	N.D.	N.D.
Spiked Amount	500.000	Range	72 - 134	Recovery	=	0.00%#	0.00%#
	Target Compounds						
1)	TNX	1.36	1.36	1620827	2436645	543.499	563.001
2)	HMX	1.46	1.47	898609	2557546	552.337m	569.318m
3)	DNX	1.74	1.74	1426709	2233923	520.362m	510.614m
4)	MNX	2.33	2.33	1274163	1948514	511.808	526.250
5)	RDX	2.92	2.92	987871	1521708	534.392	519.253
6)	1,3,5-Trinitrobe	4.62	4.62	2109682	4071496	530.124	528.189
7)	1,3-Dinitrobenze	5.87	5.87	2519480	1690736	484.597	477.225m
8)	3,5-Dinitroanili	6.31	6.30	2073927	3477594	497.080	499.653m
9)	Nitrobenzene	7.41	7.40	1626198	1585118	549.806	539.576m
10)	Nitroglycerin	0.00	8.94	0	3200652	N.D.	2558.460m#
11)	Tetryl	9.23	9.23	1405794	2225909	485.109	486.168m
12)	2,4,6-Trinitroto	9.67	9.66	1850563	2358070	525.027	568.306m
13)	2-Amino-4,6-Dini	10.12	10.11	1706615	2653779	554.922	578.492m
14)	4-Amino-2,6-Dini	10.54	10.54	1201115	2552462	571.026m	569.719m
16)	2,4-Dinitrotolue	11.53	11.53	2483452	1559129	544.642	574.477
17)	2,6-Dinitrotolue	11.93	11.93	1413795	1795607	546.095	576.288m
18)	o-Nitrotoluene	14.22	14.21	1176695	1565017	545.747	531.422m
19)	p-Nitrotoluene	14.62	14.62	1818005	1482522	533.740	525.957
20)	m-Nitrotoluene	15.18	15.19	1704293	2020934	565.858m	574.077
21)	PETN	0.00	16.74	0	3681794	N.D. d	2376.289m

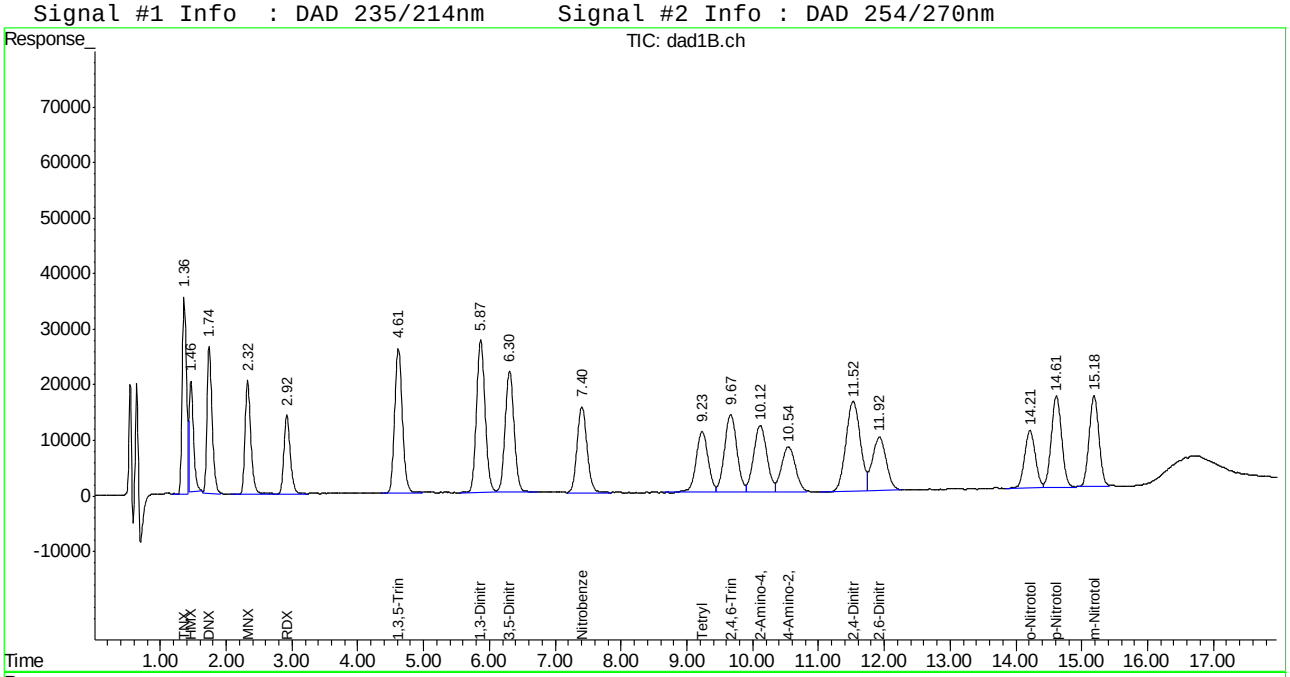
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045280.D 8330B.M Fri Dec 26 10:58:52 2014 Page 1

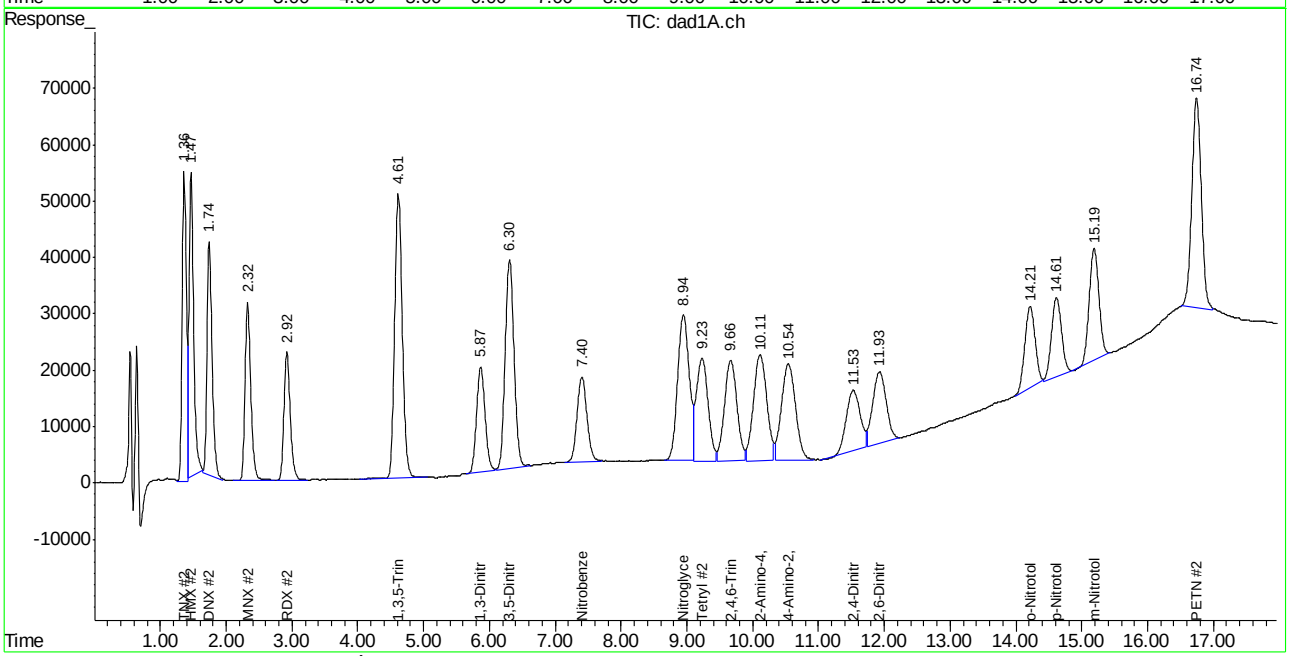
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1B.ch Vial: 12
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045280.D\dad1A.ch
Acq On : 24-Dec-2014, 15:00:33 Operator: KISMETL
Sample : icv1219-500 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:52 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





Manual Integration Approval Summary

Sample Number: GBB1219-ICV1219 **Method:** SW846 8330A
Lab FileID: BB045280.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 15:00 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
HMX	2691-41-0	1	1.46	Poorly defined baseline
HMX	2691-41-0	2	1.47	Poorly defined baseline
DNX		1	1.74	Poorly defined baseline
DNX		2	1.74	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.87	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.94	Poorly defined baseline
Tetryl	479-45-8	2	9.23	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.66	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.11	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.54	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.54	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	11.93	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.18	Poorly defined baseline
PETN	78-11-5	2	16.74	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1A.ch
Acq On : 24-Dec-2014, 15:25:31 Operator: KISMETL
Sample : cc1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:46:05 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.79	10.82	30450	71325	16.616m	21.627m
Spiked Amount	500.000	Range	72 - 134	Recovery	=	3.32%#	4.33%#
	Target Compounds						
1)	TNX	1.35	1.36	62898	91973	21.091m	21.251
2)	HMX	1.43	1.44	27426	90978	16.858m	20.252
3)	DNX	1.73	1.73	57374	96611	20.926m	22.083m
4)	MNX	2.31	2.32	57105	75176	22.938m	20.303m
5)	RDX	2.92	2.92	38542	58398	20.850m	19.927m
6)	1,3,5-Trinitrobe	4.62	4.62	86657	161187	21.775m	20.911m
7)	1,3-Dinitrobenze	5.88	5.88	109890	70958	21.136m	20.029m
8)	3,5-Dinitroanili	6.30	6.30	87754	142086	21.033m	20.415m
9)	Nitrobenzene	7.41	7.40	52034	58192	17.592m	19.809m
10)	Nitroglycerin	0.00	8.95	0	127851	N.D.	102.199m#
11)	Tetryl	9.27	9.26	57282	103004	19.767m	22.497m
12)	2,4,6-Trinitroto	9.64	9.67	69189	93842	19.630m	22.616m
13)	2-Amino-4,6-Dini	10.11	10.11	51423	91008	16.721m	19.839m
14)	4-Amino-2,6-Dini	10.50	10.53	40135	87515	19.081m	19.534m
16)	2,4-Dinitrotolue	11.48	11.60	78292	48844	17.170m	17.997m
17)	2,6-Dinitrotolue	11.95	12.03	42877	46452	16.562m	14.909m
18)	o-Nitrotoluene	14.24	14.24	46544	54949	21.587m	18.659m
19)	p-Nitrotoluene	14.60	14.67	67124	60638	19.707m	21.513m
20)	m-Nitrotoluene	15.21	15.25	61980	68748	20.578m	19.529m
21)	PETN	0.00	16.75	0	192509	N.D. d	109.321m

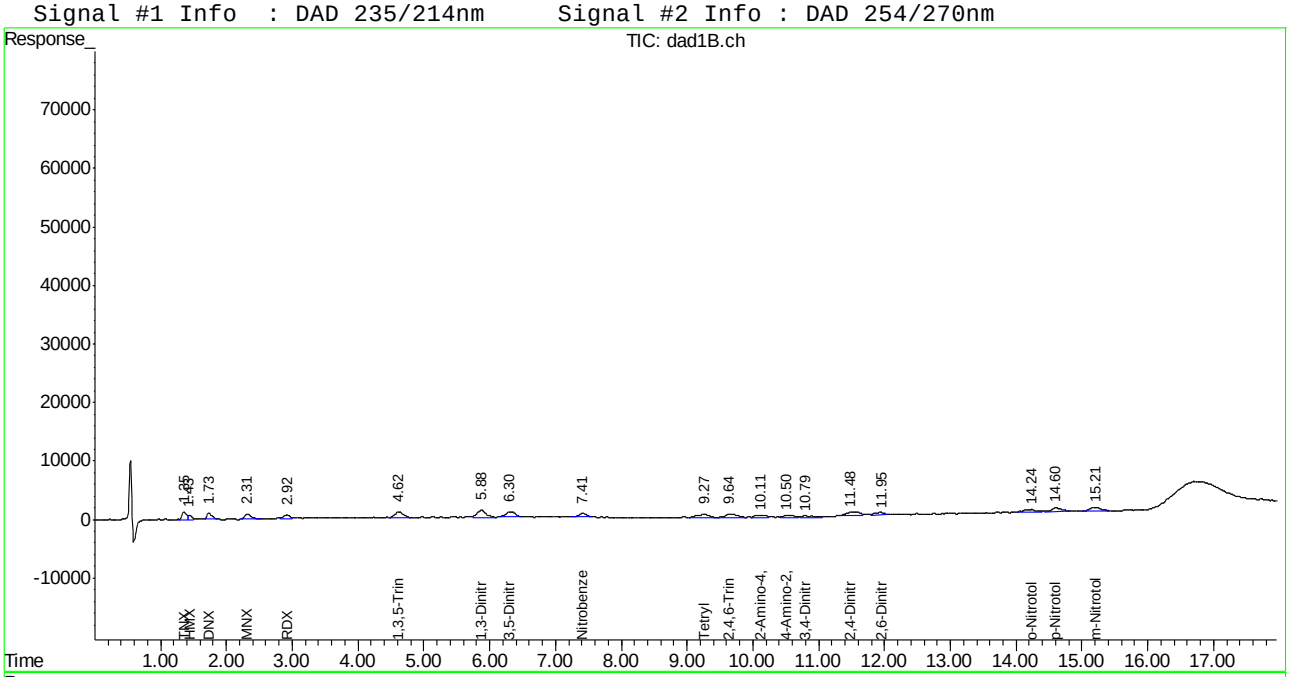
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045281.D 8330B.M Fri Dec 26 10:58:53 2014 Page 1

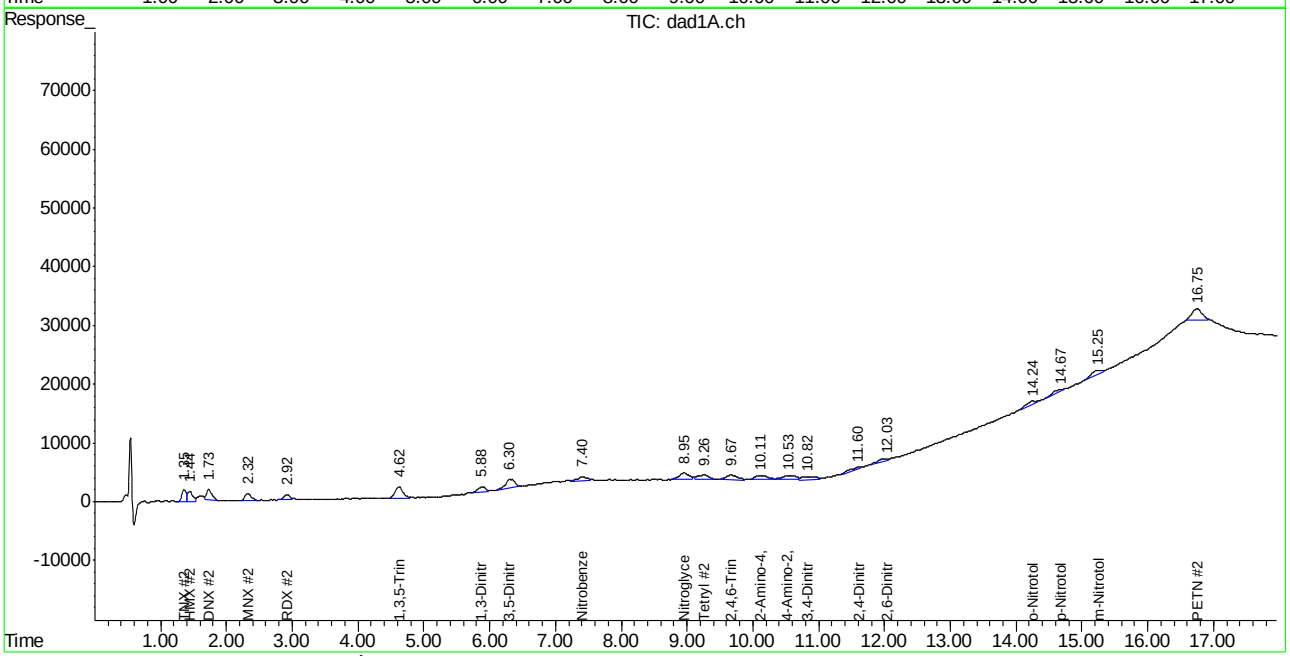
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1B.ch Vial: 5
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045281.D\dad1A.ch
Acq On : 24-Dec-2014, 15:25:31 Operator: KISMETL
Sample : cc1219-20 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 10:56 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: GBB1219-CC1219 **Method:** SW846 8330A
Lab FileID: BB045281.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/24/14 15:25 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Poorly defined baseline
HMX	2691-41-0	1	1.43	Poorly defined baseline
DNX		1	1.73	Poorly defined baseline
DNX		2	1.73	Poorly defined baseline
MNX		1	2.31	Poorly defined baseline
MNX		2	2.32	Poorly defined baseline
RDX	121-82-4	1	2.92	Poorly defined baseline
RDX	121-82-4	2	2.92	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	1	4.62	Poorly defined baseline
1,3,5-Trinitrobenzene	99-35-4	2	4.62	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	1	5.88	Poorly defined baseline
1,3-Dinitrobenzene	99-65-0	2	5.88	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	1	6.30	Poorly defined baseline
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
Nitrobenzene	98-95-3	1	7.41	Poorly defined baseline
Nitroglycerine	55-63-0	2	8.95	Poorly defined baseline
Tetryl	479-45-8	2	9.26	Poorly defined baseline
Tetryl	479-45-8	1	9.27	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	1	9.64	Poorly defined baseline
2,4,6-Trinitrotoluene	118-96-7	2	9.67	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	1	10.11	Poorly defined baseline
2-amino-4,6-Dinitrotoluene	35572-78-2	2	10.11	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.50	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.53	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.79	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.82	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	1	11.48	Poorly defined baseline
2,4-Dinitrotoluene	121-14-2	2	11.60	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	1	11.95	Poorly defined baseline
2,6-Dinitrotoluene	606-20-2	2	12.03	Poorly defined baseline
o-Nitrotoluene	88-72-2	1	14.24	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.24	Poorly defined baseline
p-Nitrotoluene	99-99-0	1	14.60	Poorly defined baseline
p-Nitrotoluene	99-99-0	2	14.67	Poorly defined baseline
m-Nitrotoluene	99-08-1	1	15.21	Poorly defined baseline
m-Nitrotoluene	99-08-1	2	15.25	Poorly defined baseline
PETN	78-11-5	2	16.75	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1A.ch
Acq On : 24-Dec-2014, 19:59:59 Operator: KISMETL
Sample : cc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:35 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.83	10.83	1942712	3371833	1060.076	1022.380
	Spiked Amount 500.000	Range 72 - 134		Recovery =		212.02%#	204.48%#
	Target Compounds						
1)	TNX	1.35	1.36	3021938	4388547	1013.323m	1014.000
2)	HMX	1.44	1.45	1555705	4648018	956.227m	1034.663
3)	DNX	1.74	1.74	2768277	4441554	1009.671	1015.218
4)	MNX	2.32	2.32	2364368	3642293	949.723	983.701
5)	RDX	2.92	2.92	1748499	2799186	945.856	955.166
6)	1,3,5-Trinitrobe	4.62	4.62	3953902	7547902	993.541	979.178
7)	1,3-Dinitrobenze	5.87	5.87	5026765	3477731	966.849	981.621
8)	3,5-Dinitroanili	6.31	6.31	4091120	6895327	980.561	990.705m
9)	Nitrobenzene	7.41	7.41	2925073	2893595	988.947	984.983m
10)	Nitroglycerin	0.00	8.94	0	6241882	N.D.	4989.487 #
11)	Tetryl	9.23	9.23	2948206	4629118	1017.363	1011.060
12)	2,4,6-Trinitroto	9.66	9.66	3481227	4230193	987.667	1019.497
13)	2-Amino-4,6-Dini	10.11	10.12	3123371	4724833	1015.593	1029.956
14)	4-Amino-2,6-Dini	10.55	10.55	2274771	4811705	1081.457	1073.991
16)	2,4-Dinitrotolue	11.52	11.53	4523465	2889315	992.034	1064.598
17)	2,6-Dinitrotolue	11.92	11.92	2522432	3352612	974.319	1075.999
18)	o-Nitrotoluene	14.21	14.21	2151766	3017157	997.982	1024.516m
19)	p-Nitrotoluene	14.61	14.61	3398626	2851675	997.788	1011.694
20)	m-Nitrotoluene	15.18	15.18	3024832	3649537	1004.302	1036.707
21)	PETN	0.00	16.73	0	4489340	N.D. d	3013.060m

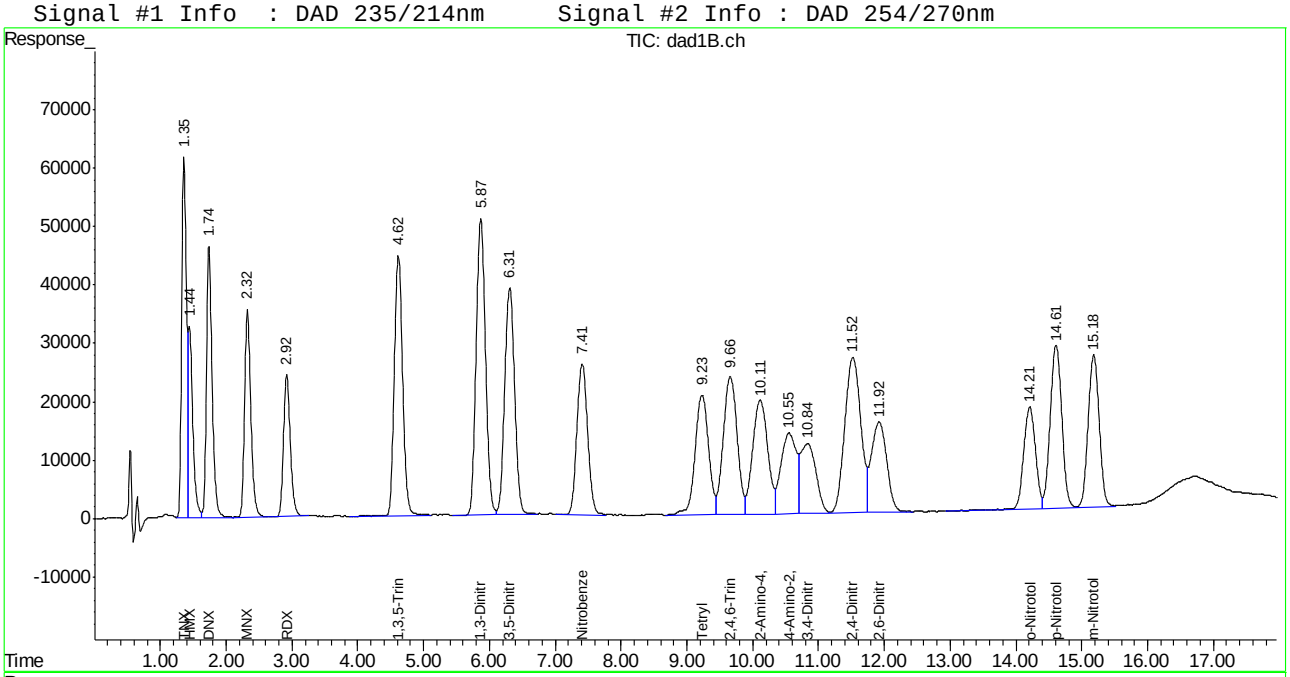
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045292.D 8330B.M Fri Dec 26 11:34:40 2014 Page 1

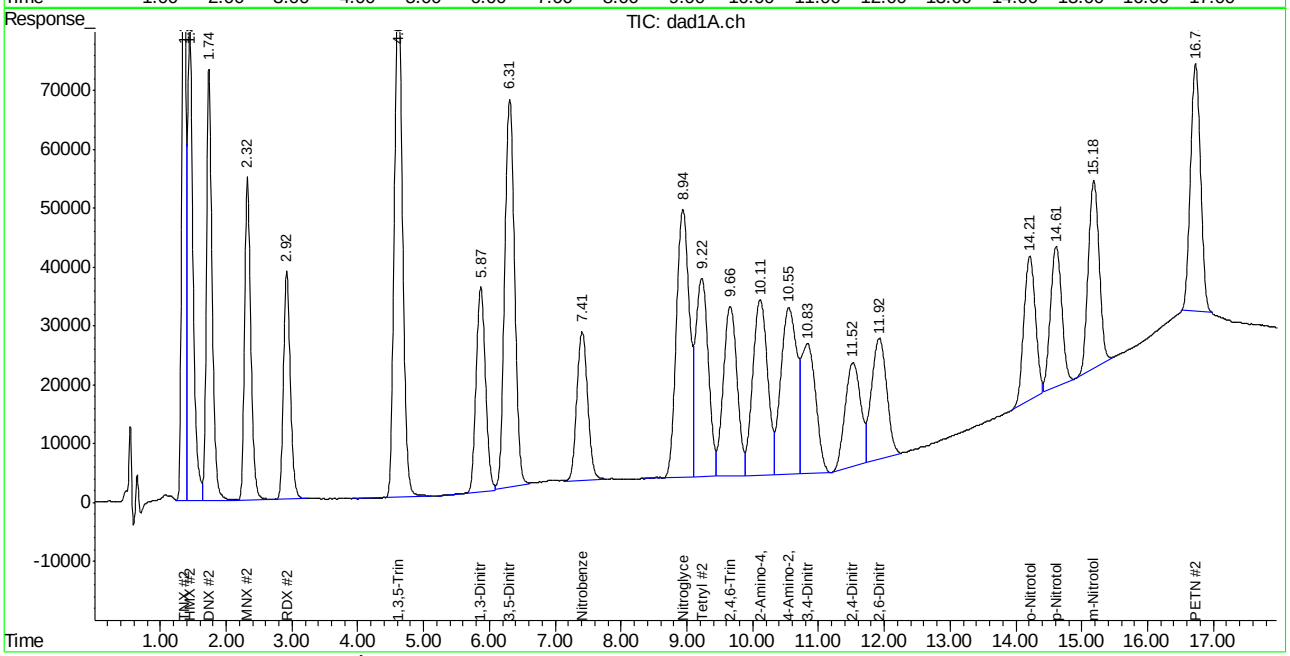
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1B.ch Vial: 2
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045292.D\dad1A.ch
Acq On : 24-Dec-2014, 19:59:59 Operator: KISMETL
Sample : cc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:04 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number:	GBB1219-CC1219	**Method:**	SW846 8330A
Lab FileID:	BB045292.D	**Analyst approved:**	12/26/14 11:46 Kismet Lugo
Injection Time:	12/24/14 19:59	**Supervisor approved:**	12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Overlapping peak
HMX	2691-41-0	1	1.44	Overlapping peak
3,5-Dinitroaniline	618-87-1	2	6.31	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.41	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.21	Poorly defined baseline
PETN	78-11-5	2	16.73	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
12/26/14 15:00

Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1A.ch
Acq On : 25-Dec-2014, 00:59:29 Operator: KISMETL
Sample : ecc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:02:47 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Initial Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
15) S	3,4-Dinitrotolue	10.70	10.70	1797979	3242627	981.101m	983.203m
	Spiked Amount 500.000	Range 72 - 134		Recovery =		196.22%#	196.64%#
	Target Compounds						
1)	TNX	1.35	1.36	3106201	4350365	1041.578m	1005.178
2)	HMX	1.43	1.45	1497563	4590119	920.489m	1021.775
3)	DNX	1.74	1.74	2720605	4380732	992.284	1001.315
4)	MNX	2.32	2.32	2326990	3582753	934.709	967.621
5)	RDX	2.92	2.92	1767030	2789176	955.880	951.751
6)	1,3,5-Trinitrobe	4.61	4.61	3833649	7425740	963.324	963.330
7)	1,3-Dinitrobenze	5.86	5.86	4976090	3364930	957.102	949.781
8)	3,5-Dinitroanili	6.30	6.30	4074006	6819043	976.459	979.745m
9)	Nitrobenzene	7.40	7.40	2884601	2822465	975.264	960.770m
10)	Nitroglycerin	0.00	8.92	0	6201065	N.D.	4956.859 #
11)	Tetryl	9.21	9.19	2827775	4465538	975.805	975.332
12)	2,4,6-Trinitroto	9.63	9.63	3437279	4159314	975.198	1002.415
13)	2-Amino-4,6-Dini	10.09	10.09	3066762	4622780	997.186	1007.710
14)	4-Amino-2,6-Dini	10.59	10.53	2045986	4638543	972.689m	1035.341m
16)	2,4-Dinitrotolue	11.50	11.50	4476703	2771286	981.778	1021.109
17)	2,6-Dinitrotolue	11.90	11.90	2430646	3353743	938.866	1076.362
18)	o-Nitrotoluene	14.20	14.19	2116810	2980071	981.769	1011.923m
19)	p-Nitrotoluene	14.60	14.60	3365163	2836856	987.964	1006.436
20)	m-Nitrotoluene	15.17	15.17	2992929	3617297	993.710	1027.549
21)	PETN	0.00	16.71	0	4043568	N.D. d	2654.218m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
BB045304.D 8330B.M Fri Dec 26 11:34:52 2014 Page 1

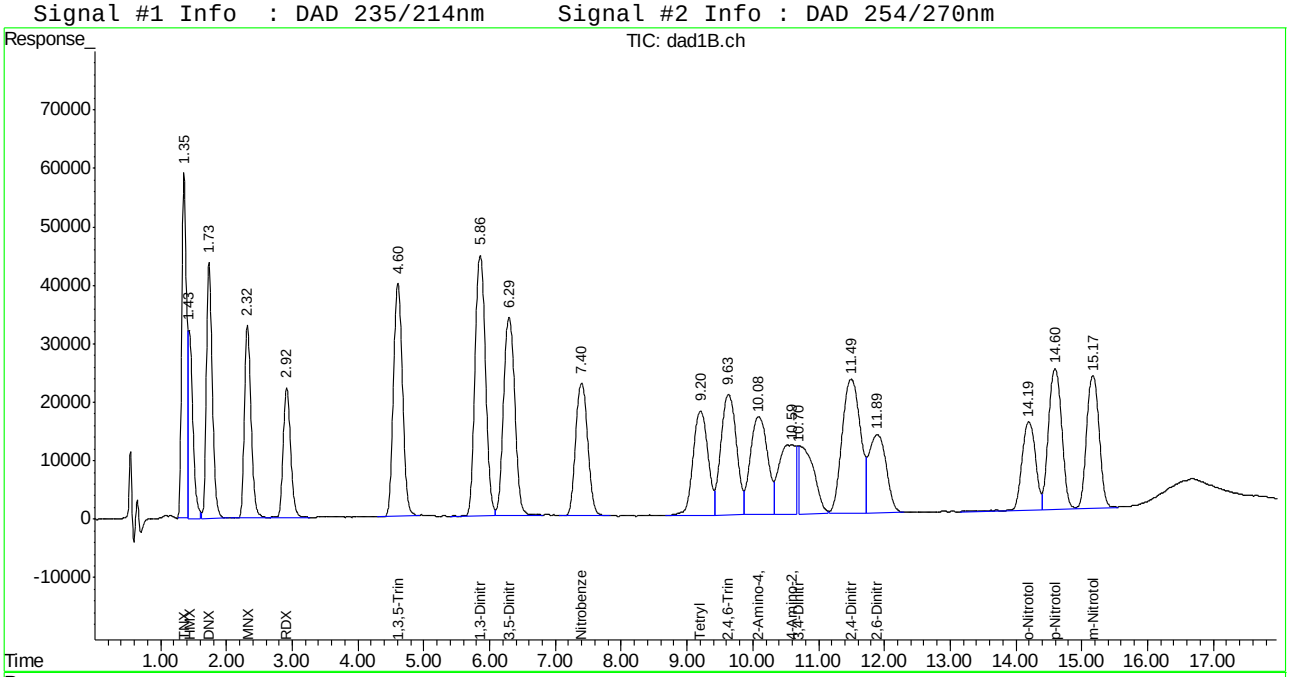
9.7.11
9

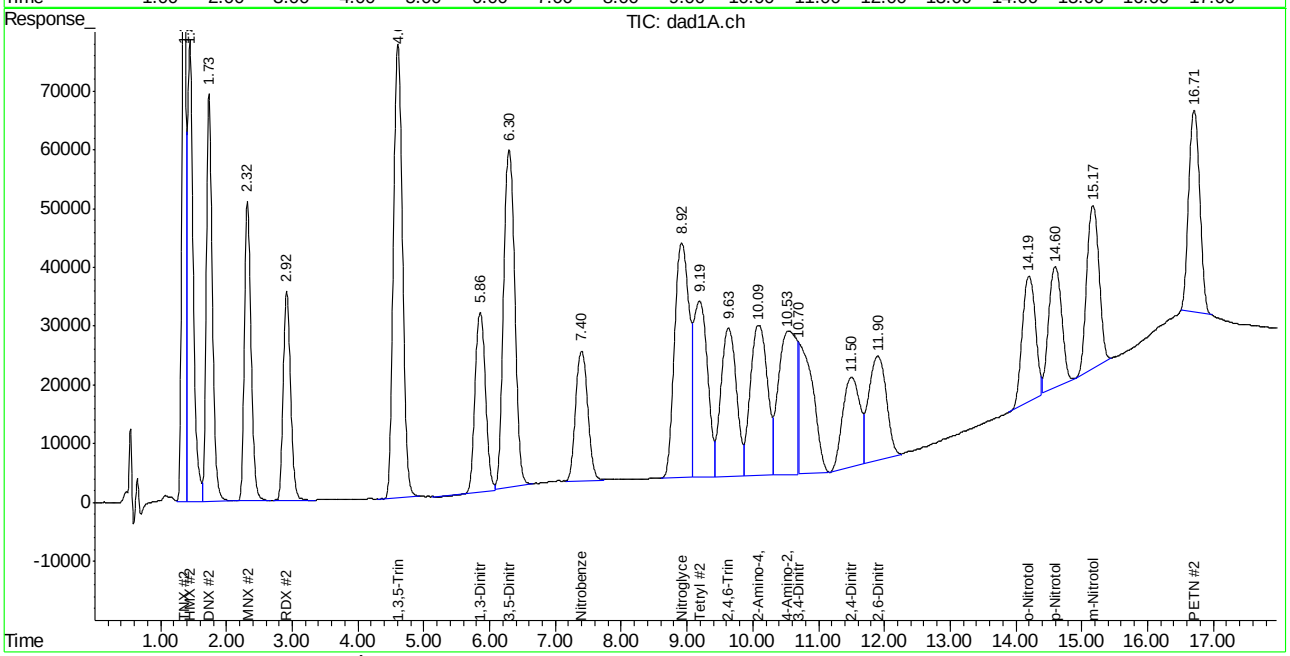
Quantitation Report (QT Reviewed)

Signal #1 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1B.ch Vial: 30
Signal #2 : C:\HPCHEM\1\DATA\1224BPL\BB045304.D\dad1A.ch
Acq On : 25-Dec-2014, 00:59:29 Operator: KISMETL
Sample : ecc1219-1000 Inst : G1315B
Misc : OP54337,GBB1219,2.00,,,20,,soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e
Quant Time: Dec 26 11:08 2014 Quant Results File: 8330B.RES

Quant Method : D:\MSDCHEM\1\METHODS\8330B.M (Chemstation Integrator)
Title : Explosives by 8330A,8330B,8332
Last Update : Fri Dec 26 10:44:27 2014
Response via : Multiple Level Calibration
DataAcq Meth : 8330B.M

Volume Inj. : 100ul
Signal #1 Phase : Extend C-18 Signal #2 Phase: Extend C-18
Signal #1 Info : DAD 235/214nm Signal #2 Info : DAD 254/270nm





ACCUTEST LABORATORIES FA20579

Manual Integration Approval Summary

Sample Number: GBB1219-ECC1219 **Method:** SW846 8330A
Lab FileID: BB045304.D **Analyst approved:** 12/26/14 11:46 Kismet Lugo
Injection Time: 12/25/14 00:59 **Supervisor approved:** 12/26/14 15:00 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
TNX		1	1.35	Overlapping peak
HMX	2691-41-0	1	1.43	Overlapping peak
3,5-Dinitroaniline	618-87-1	2	6.30	Poorly defined baseline
Nitrobenzene	98-95-3	2	7.40	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	2	10.53	Poorly defined baseline
4-amino-2,6-Dinitrotoluene	19406-51-0	1	10.59	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	1	10.70	Poorly defined baseline
3,4-Dinitrotoluene	610-39-9	2	10.70	Poorly defined baseline
o-Nitrotoluene	88-72-2	2	14.19	Poorly defined baseline
PETN	78-11-5	2	16.71	Poorly defined baseline

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT:	HPLC5-BB

HPLC5-BB ANALYSIS LOG

METHODS*:	8330B/A
ACQ. METHOD:	8330B
PROC. METHOD:	↓
CALIB. DATE:	12/24/14
RUN BATCH: GBB	1219

ANALYST:	KL
ACETONITRILE LOT #:	208F
MEOH LOT #:	91422
HEAD PRESSURE:	278

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 0452681	1	solvent	8330	—	—		ND
BB 69	2	cc1218-1000		LC493	1:1	HMX TNXOP PDB	Pass
BB 70	4	ICV 1218-500		—	—	ND	HMXT, PETNT, run curve
BB 71	1	solvent		—	—		ND
BB 72	2	CC1218-1000		LC500	1:1	PDB	PETNT
BB 73	5	IC 1219-20			50+450 50+450	PDB	✓
BB 74	6	IC 1219-50			10+340	PDB	✓
BB 75	7	IC1219-100			25+475	PDB	✓
BB 76	8	IC1219-200			50+450	PDB	✓
BB 77	9	ICC1219-500			1:4	PDB	✓
BB 78	10	IC 1219-1000			1:1	PDB	✓
BB 79	11	IC 1219-2000			1x	PDB	✓
BB 80	12	ICV 1219-500		LC497 LC498 E4944, 5029	*	PDB	Pass 2A26TS2
BB 81	5	CC1219-20		LC500	50+450 1x 50+450	PDB	Pass 2A26↓S2
BB 82	31	FA 20708-49		op54337		HMXMP51 PDB	✓
BB 83	32	FA 20708-51				↓ ↓	✓
BB 84	33	FA 20708-57		↓	↓	PDB	✓
BB 85	13	op54324-bs		op54324	1x	PDB	✓
BB 86	14	op54324-pt1			↓	HMXOP PDB	✓
BB 87	15	op54324-mb	↓	↓	↓		ND

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

* LC497 25ml
LC498 25ml
E4944 10ml
5029 20ml
+ 920

Analyst's Signature: Kimberly Lyo

ACCUTEST LABORATORIES SE

DATE:	12/24/14
COLUMN TYPE:	Ext C18
AMOUNT INJECTED:	100 ul
INSTRUMENT: HPLC5-BB	

HPLC5-BB ANALYSIS LOG

METHODS*:	8330 B/A
ACQ. METHOD:	8330 B
PROC. METHOD:	↓
CALIB. DATE:	12/24/14
RUN BATCH: GBB	1219

ANALYST:	LL
ACETONITRILE LOT #:	2888
MEOH LOT #:	91422
HEAD PRESSURE:	278

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	COMMENTS
BB 045288	16	FA20579-1	8330	OP54324	1X	PDB	ND
BB 89	17	OP54324-MS				PDB	✓
BB 90	18	OP54324-MSD				PDB	✓
BB 91	19	FA20579-2		↓	↓		ND
BB 92	2	CC1219-1000		LC500	1:1	TNX-HMX0P PDB	PETN↓, not required
BB 93	1	clo		—	—		ND
BB 94	20	FA20579-3		OP54324	1X		ND
BB 95	21	FA20579-4					ND
BB 96	22	~~FA20253-2~~					ND FA20723-2
BB 97	23	~~FA20CC3-1~~					ND FA20723-1
BB 98	24	OP54324-dup				PDB	ND
BB 99	25	OP54324-dup2					ND
BB 045300	26	~~FA20523-3~~					ND FA20723-3
BB 01	27	grind blk a					ND
BB 02	28	grind blk b					ND
BB 03	29	grind blk c					ND
BB 04	30	CC 1219-1000	↓	LC500	1:1	TNX-HMXOP, PDB 4A OP SUMMARY	PETN↓
BB						LL 12/26/14	
BB							
BB							

12/26/14

* For NELAC purposes, Method 8332 includes analytes by SOP GC020

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

hplc5_bb_log.xls NF rev. 08/09

Analyst's Signature: Kristi Lyp

ACCUTEST LABORATORIES SE

EXP SAMPLE PREP REPORT

Date/Time: 12/19/14 1600 Started {mm/dd/yy 24:00}

Prep Method: 8330A, 8332, 8330B or Method (circle)

Date/Time: 12/20/14 1130 Finished {mm/dd/yy 24:00}

Analytical Method: 8330B

Batch#: OP54324 Ext. By: CP, MB Vialed By: MB Balance ID: MAUPROS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP 54324 MB	X	10.0	1.25 ml		50 ml	
OP 54324 BS	X	10.0		125+125ul 1.25ml		
FA20579-1	1	10.0				
-2	1	10.1				
-3	1	10.0				
-4	1	10.0				
FA20723-1	1	10.1				
-2	1	10.1				
-3	1	10.0				
Grinding Blank	A	10.0	—			
	B	10.0	—			
	C	10.0	—			
						12/20/14 MB
OP 54324 DT-1	X	10.0	1.25 ml		50 ml	
FA20579-1 MS	1	10.1		125+125ul 1.25ml		
-1 MSD	1	10.0				
FA2723-1 DUP	1	10.0				
-1 TRP	1	10.0				

Comments:

Surr. ID: E4454K Conc: 20 ppm Exp. Date: 03/02/15 Inj. By: MB Ver. By CP

Spk.1 ID: E5025 6854E Conc: 20 ppm Exp. Date: 06/09/15 12/15/15 Inj. By: MB Ver. By CP

Spk.2 ID: 7183A Conc: 1000 ug/ml 1,000 ug/ml Exp. Date: 12/15/15 Inj. By: MB Ver. By CP

MB 12/19/14

Acetonitrile Lot # 06/817 Methanol Lot # — Water Lot# 084623 HPLC

Syringe Filter Lot# 130925007 Reagent # CS1 Reagent # —

Relinquished By: [signature] Date: 12/20/14

Accepted By: [signature] Date: 12/22/14

NF rev. 09/14/12 extsolid_exp 091412.xls

Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate	GP25228/GN64610	1.0	0.0	mg/kg	25	24.9	99.8	90-110%

Associated Samples:
Batch GP25228: FA20579-1, FA20579-2, FA20579-3, FA20579-4
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Nitrogen, Nitrate	GP25228/GN64610	FA20723-1	mg/kg	15.0	25	54.7	159.0N(a)	90-110%

Associated Samples:
Batch GP25228: FA20579-1, FA20579-2, FA20579-3, FA20579-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Nitrogen, Nitrate	GP25228/GN64610	FA20723-1	mg/kg	15.0	25	53.3	2.6	20%

Associated Samples:
Batch GP25228: FA20579-1, FA20579-2, FA20579-3, FA20579-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64610
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:47	GN64610-CCV1	1		
10:04	GP25226-MB1	1		
10:21	GP25226-B1	1		
11:11	ZZZZZZ	5		
11:28	ZZZZZZ	25		
11:45	ZZZZZZ	5		
12:02	ZZZZZZ	2		
12:19	ZZZZZZ	2		
12:36	FA20942-18	1		(sample used for QC only; not part of login FA20579)
12:53	GN64610-CCV2	1		
13:10	GN64610-CCB1	1		
13:27	ZZZZZZ	2		
13:44	ZZZZZZ	1		
14:01	GP25226-S1	1		
14:18	GP25226-S2	1		
14:35	ZZZZZZ	5		
14:52	ZZZZZZ	10		
15:09	ZZZZZZ	1		
15:26	ZZZZZZ	10		
15:43	ZZZZZZ	100		
16:00	ZZZZZZ	1		
16:17	GN64610-CCV3	1		
16:33	GN64610-CCB2	1		
16:50	ZZZZZZ	5		
17:07	ZZZZZZ	10		
17:24	ZZZZZZ	10		
17:41	ZZZZZZ	5		
17:58	ZZZZZZ	5		
18:15	FA20942-32	1		(sample used for QC only; not part of login FA20579)
18:32	GP25226-S3	1		
18:49	GP25226-S4	1		
19:06	GN64610-CCV4	1		
19:23	GP25227-MB1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64610
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:40	GP25227-B1	1		
19:57	ZZZZZZ	5		
20:14	ZZZZZZ	10		
20:31	ZZZZZZ	5		
20:48	ZZZZZZ	2		
21:05	ZZZZZZ	2		
21:22	ZZZZZZ	10		
21:39	ZZZZZZ	5		
21:55	ZZZZZZ	5		
22:12	GN64610-CCV5	1		
22:29	GN64610-CCB3	1		
22:46	ZZZZZZ	5		
23:03	ZZZZZZ	5		
23:20	FA20988-2	1		(sample used for QC only; not part of login FA20579)
23:37	FA20988-3	1		(sample used for QC only; not part of login FA20579)
23:54	ZZZZZZ	10		
00:11	ZZZZZZ	10		
00:28	GP25227-S1	1		
00:45	GP25227-S2	1		
01:02	GP25227-S3	1		
01:19	GP25227-S4	1		
01:36	GN64610-CCV6	1		
01:53	GP25228-MB1	1		
02:10	GP25228-B1	1		
02:27	FA20723-1	1		(sample used for QC only; not part of login FA20579)
02:44	ZZZZZZ	1		
03:00	ZZZZZZ	1		
03:17	FA20579-1	1		
03:34	FA20579-2	1		
03:51	FA20579-3	1		
04:08	FA20579-4	1		
04:25	GP25228-S1	1		
04:42	GP25228-S2	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Analyst: VK Run ID: GN64610
Parameters: Nitrogen, Nitrate

Time	Sample Description	Dilution Factor	PS Recov	Comments
04:59	GN64610-CCV7	1		
05:16	GN64610-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FA20579
Account: FPMRNYR - FPM Remediations
Project: HM-AZ PBR Holloman AFB; Alamogordo, NM

File ID: 314122301.TXT Date Analyzed: 12/23/14 Methods: EPA 300/SW846 9056A
Run ID: GN64610 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN64610-CCV1	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCV2	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN64610-CCB1	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64610-CCV3	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCB2	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64610-CCV4	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCV5	Nitrogen, Nitrate	2.4	0.10	0.050	2.5	96.0	90-110
GN64610-CCB3	Nitrogen, Nitrate	0.050 U	0.10	0.050			
GN64610-CCV6	Nitrogen, Nitrate	2.5	0.10	0.050	2.5	100.0	90-110
GN64610-CCV7	Nitrogen, Nitrate	2.7	0.10	0.050	2.5	108.0	90-110
GN64610-CCB4	Nitrogen, Nitrate	0.050 U	0.10	0.050			

(!) Outside of QC limits

Southeast ACCUTEST LABORATORIES

General Chemistry

Raw Data

Sequence: 12-24-2014
Operator: Chemistry

Printed: 12/24/2014 8:05:37 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79

Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	BLK	Unknown	1	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 11:21:53 AM
2	STD A	Standard	2	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 11:38:21 AM
3	STD B	Standard	3	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 11:55:18 AM
4	STD C	Standard	4	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 12:12:14 PM
5	STD D	Standard	5	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 12:29:11 PM
6	STD E	Standard	6	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 12:46:09 PM
7	STD F	Standard	7	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 1:03:06 PM
8	STD G	Standard	8	25.0	ANIONS-A	ANIONS	Finished	12/15/2014 1:20:02 PM
9	CCV	Unknown	1	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:47:42 AM
10	MB1	Unknown	2	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:04:10 AM
11	B1	Unknown	3	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:21:07 AM
12	MB1(UF)	Unknown	4	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:38:04 AM
13	B1(UF)	Unknown	5	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:55:01 AM
14	FA20942-13	Unknown	6	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:11:58 AM
15	FA20942-14	Unknown	7	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:28:55 AM
16	FA20942-15	Unknown	8	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:45:52 AM
17	FA20942-16	Unknown	9	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:02:48 PM
18	FA20942-17	Unknown	10	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:19:45 PM
19	FA20942-18	Unknown	11	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:36:42 PM
20	CCV	Unknown	12	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 12:53:38 PM
21	CCB	Unknown	13	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 1:10:35 PM
22	FA20942-19	Unknown	14	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 1:27:32 PM
23	FA20942-20	Unknown	15	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 1:44:31 PM
24	FA20942-18S1	Unknown	16	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:01:28 PM
25	FA20942-18S2	Unknown	17	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:18:26 PM
26	FA20942-21	Unknown	18	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:35:22 PM
27	FA20942-22	Unknown	19	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 2:52:20 PM
28	FA20942-23	Unknown	20	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 3:09:17 PM
29	FA20942-24	Unknown	21	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 3:26:14 PM
30	FA20942-25	Unknown	22	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 3:43:13 PM
31	FA20942-26	Unknown	23	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:00:10 PM
32	CCV	Unknown	24	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:17:08 PM
33	CCB	Unknown	25	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:33:53 PM
34	FA20942-27	Unknown	26	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 4:50:50 PM
35	FA20942-28	Unknown	27	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:07:47 PM
36	FA20942-29	Unknown	28	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:24:44 PM
37	FA20942-30	Unknown	29	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:41:42 PM
38	FA20942-31	Unknown	30	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 5:58:39 PM
39	FA20942-32	Unknown	31	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 6:15:35 PM
40	FA20942-32S3	Unknown	32	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 6:32:32 PM
41	FA20942-32S4	Unknown	33	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 6:49:29 PM
42	CCV	Unknown	34	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:06:26 PM

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-24-2014
Operator: Chemistry
Printed: 12/24/2014 8:05:37 AM

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79
Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Dil. Factor	Weight	ISTD Amount	Sample ID	Replicate ID	Comment
1	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
2	STD A	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
3	STD B	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
4	STD C	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
5	STD D	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
6	STD E	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
7	STD F	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
8	STD G	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
9	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
10	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
11	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
12	MB1(UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
13	B1(UF)	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
14	FA20942-13	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
15	FA20942-14	25.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
16	FA20942-15	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
17	FA20942-16	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
18	FA20942-17	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
19	FA20942-18	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
20	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
21	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
22	FA20942-19	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
23	FA20942-20	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
24	FA20942-18S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
25	FA20942-18S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
26	FA20942-21	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
27	FA20942-22	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
28	FA20942-23	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
29	FA20942-24	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
30	FA20942-25	100.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
31	FA20942-26	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
32	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
33	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
34	FA20942-27	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
35	FA20942-28	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
36	FA20942-29	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
37	FA20942-30	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
38	FA20942-31	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
39	FA20942-32	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
40	FA20942-32S3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
41	FA20942-32S4	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
42	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-24-2014
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79

Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	MB1	Unknown	35	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:23:23 PM
44	B1	Unknown	36	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:40:19 PM
45	FA20942-33	Unknown	37	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 7:57:16 PM
46	FA20942-34	Unknown	38	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 8:14:13 PM
47	FA20982-1	Unknown	39	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 8:31:11 PM
48	FA20982-2	Unknown	40	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 8:48:07 PM
49	FA20982-3	Unknown	41	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:05:05 PM
50	FA20982-4	Unknown	42	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:22:03 PM
51	FA20982-5	Unknown	43	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:39:00 PM
52	FA20983-1	Unknown	44	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 9:55:57 PM
53	CCV	Unknown	45	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:12:53 PM
54	CCB	Unknown	46	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:29:50 PM
55	FA20984-1	Unknown	47	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 10:46:47 PM
56	FA20988-1	Unknown	48	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:03:44 PM
57	FA20988-2	Unknown	49	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:20:40 PM
58	FA20988-3	Unknown	50	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:37:37 PM
59	FA20989-2	Unknown	1	25.0	ANIONS-A	ANIONS	Finished	12/23/2014 11:54:34 PM
60	FA20989-3	Unknown	2	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 12:11:30 AM
61	FA20988-2S1	Unknown	3	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 12:28:26 AM
62	FA20988-2S2	Unknown	4	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 12:45:23 AM
63	FA20988-3S3	Unknown	5	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:02:20 AM
64	FA20988-3S4	Unknown	6	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:19:17 AM
65	CCV	Unknown	7	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:36:13 AM
66	MB1	Unknown	8	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 1:53:10 AM
67	B1	Unknown	9	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 2:10:07 AM
68	FA20723-1	Unknown	10	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 2:27:04 AM
69	FA20723-2	Unknown	11	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 2:44:00 AM
70	FA20723-3	Unknown	12	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:00:58 AM
71	FA20579-1	Unknown	13	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:17:55 AM
72	FA20579-2	Unknown	14	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:34:51 AM
73	FA20579-3	Unknown	15	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 3:51:48 AM
74	FA20579-4	Unknown	16	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:08:45 AM
75	FA20723-1S1	Unknown	17	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:25:42 AM
76	FA20723-1S2	Unknown	18	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:42:39 AM
77	CCV	Unknown	19	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 4:59:36 AM
78	CCB	Unknown	20	25.0	ANIONS-A	ANIONS	Finished	12/24/2014 5:16:33 AM
79	BLK	Unknown	21	25.0	SHUTDOWN	ANIONS	Finished	12/24/2014 5:33:30 AM

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

Sequence: 12-24-2014
Operator: Chemistry

Title: ANIONS
Datasource: D6324WN1_local
Location: ICS-2100\My Sequences\ANIONS 2014\DEC 2014
Timebase: ICS-2100
#Samples: 79

Created: 12/24/2014 7:49:02 AM by Chemistry
Last Update: 12/24/2014 7:49:02 AM by Chemistry

No.	Name	Dil. Factor	Weight	ISTD Amount	Sample ID	Replicate ID	Comment
43	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
44	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
45	FA20942-33	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
46	FA20942-34	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
47	FA20982-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
48	FA20982-2	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
49	FA20982-3	2.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
50	FA20982-4	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
51	FA20982-5	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
52	FA20983-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
53	CCV	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
54	CCB	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
55	FA20984-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
56	FA20988-1	5.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
57	FA20988-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
58	FA20988-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
59	FA20989-2	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
60	FA20989-3	10.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
61	FA20988-2S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
62	FA20988-2S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
63	FA20988-3S3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
64	FA20988-3S4	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
65	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
66	MB1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
67	B1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
68	FA20723-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
69	FA20723-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
70	FA20723-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
71	FA20579-1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
72	FA20579-2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
73	FA20579-3	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
74	FA20579-4	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
75	FA20723-1S1	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
76	FA20723-1S2	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
77	CCV	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
78	CCB	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK
79	BLK	1.0000	1.0000	1.0000		02	ICS 2100 SYSTEM OPERATOR: VESNAK

Chromeleon © Dionex Corporation, Version 6.80 SR10 Build 2818 (166959)

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12-23-2014
Analyst:	VL
Instrument:	#3
Inst. File Name:	122314

Prep Batchs:	GP25226
Analytical Batch:	GN64610
Calibration Date:	12-15-2014
Pump pressure:	1970 psi

Vial lot#	CC 279
Cap lot#	CC 279
Syringe lot#	CC 283
Filter lot#	CC 283

Standards	
ICAL:	NP
ICV:	CC05354
CCV:	CC05353
QC:	CC05356

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
CCV		AQ			n		✓						✓					
MB1					n		✓						✓					
B1					n		✓						✓					
MB1 (LFT)					n		✓						✓					
B1 (LFT)					n		✓						✓					
FA20942-13	1		1020uS	5x			✓						✓					
-14	1		2700uS	25x			✓						✓					
-15	1		640uS	5x			✓						✓					
-16	1		620uS	2x			✓						✓					
-17	1		870uS	2x			✓						✓					
-18	1		383.6uS				✓						✓					
CCV							✓						✓					
CCB							✓						✓					
FA20942-19	1		753uS	2x			✓						✓					
-20	1		430.3				✓						✓					
FA20942-18S1	1		383.6uS				✓						✓					
FA20942-18S2	1		383.6uS				✓						✓					
FA20942-21	1		1820uS	5x			✓						✓					
-22	1		2461uS	10x			✓						✓					
-23	1		723uS				✓						✓					
-24	1		2610uS	10x			✓						✓					
-25	1		611uS	100x			✓						✓					
-26	1		623uS				✓						✓					
CCV							✓						✓					
CCB							✓						✓					
FA20942-27	1		633uS	5x			✓						✓					
-28	1		2921uS	10x			✓						✓					
-29	1	↓	1426uS	10x	↓		✓						✓					

Rev 050914 lm

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one) Refer to page 45

Date:	12-23-2016
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
FB20942-30	1	AQ	426.2	5x	N		✓						✓					
-31	1		420.8	5x			✓						✓					
-32	1		474.5				✓						✓					
FB20942-32S	1		474.5				✓						✓					
FB20942-32SD	1		474.5				✓						✓					
CCV							✓			✓	✓		✓			✓	✓	
MB1							✓			✓	✓		✓			✓	✓	6P25227
B1							✓			✓	✓		✓			✓	✓	
FB20942-33	1		121	5x			✓						✓					
-34	1		249	10x			✓						✓					
FB20982-1	25		410.3	5x			✓			✓	✓		✓			✓	✓	
-2	25		380.2	2x			✓			✓	✓		✓			✓	✓	
-3	25		363.0	2x			✓			✓	✓		✓			✓	✓	
-4	25		198.9	10x			✓			✓	✓		✓			✓	✓	
-5	25		219.8				✓			✓	✓		✓			✓	✓	
FB20983-1	9		360.3	5x						✓	✓					✓	✓	
CCV							✓			✓	✓		✓			✓	✓	
CCB							✓			✓	✓		✓			✓	✓	
FB20984-1	9		753	5x						✓	✓					✓	✓	
FB20988-1	10		386	5x						✓	✓					✓	✓	
-2	10		321.4							✓	✓					✓	✓	
-3	10		373.9							✓	✓					✓	✓	
FB20989-2	10		769	10x						✓	✓					✓	✓	
-3	10		857	10x						✓	✓					✓	✓	
FB20988-2S	10		321.4			⊕				✓	✓		✓			✓	✓	
FB20988-2SD	10		321.4			⊕				✓	✓		✓			✓	✓	
FB20988-3S	10		373.9			⊕				✓	✓		✓			✓	✓	
FB20988-3SD	10	↓	373.9		↓	⊕				✓	✓		✓			✓	✓	

Rev 050914 lm ⊕ for QC purpose only

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one) Refer to page 46

Date:	12-23-2014
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
CCV		AQ			N		✓			✓			✓			✓		
MB1		SO			Y					✓			✓			✓		6P25228
B1					Y					✓			✓			✓		
FA20723-1	1				Y					✓						✓		
FA20723-2	1									✓						✓		
-3	1									✓						✓		
FA20579-1	1									✓						✓		
-2	1									✓						✓		
-3	1									✓						✓		
-4	1									✓						✓		
FA20723-1S1	1									✓						✓		
FA20723-1S2	1									✓			*			✓		
CCV										✓						✓		
CCB										✓						✓		
BCh (shut down)																		

12-23-2014

Rev 050914 lm

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC255II	01-01-15								
	CHL		GC086	02-01-15		0.800		50				
	SO_4		GC007	02-01-15								
	Br		GC158	01-09-15		1.25		12.5				
CCV	F	Accutom	GC010	08-31-15	1000	0.250	100	2.5	12-13-16	VG	LL05330	12-13-16
	NO_2		GC125II	01-30-15								
	NO_3		GC169	06-17-16								
	CHL		GC124II	03-31-16		0.500		50				
	SO_4		GC268	05-10-16								
	Br	Spex	GC156	04-30-16		1.25		12.5				
Bl	F	Spex	GC514	12-31-16	1000	0.250	100	2.5			LL05331	
	NO_2	Inorganic	GC267	11-04-16								
	NO_3		GC255II	01-01-15								
	CHL		GC086	02-01-15		0.500		50				
	SO_4		GC007	02-01-15								
	Br		GC155	01-07-15		1.25		12.5				
Std A	F	Accutom	GC010	08-31-15	1000	0.01	100	0.1	12-15-16	VG	LL05332	12-15-16
	NO_2		GC125II	09-30-16		0.01		0.1				
	NO_3		GC600III	01-31-15		0.01		0.1				
	CHL		GC124	03-31-16		0.2		2.0				
	SO_4		GC268	05-10-16		0.2		2.0				
	Br	Spex	GC156	04-30-16		0.05		0.5				
Std B	F	Refer to	Std LL05332		1000	0.05	100	0.5			LL05333	
	NO_2					0.05		0.5				
	NO_3					0.05		0.5				
	CHL					1.0		10				
	SO_4					1.0		10				
	Br					0.1		1.0				
Std C	F				1000	0.1	100	1.0			LL05334	
	NO_2					0.1		1.0				
	NO_3					0.1		1.0				

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Cl					3.0		30				
	SO_4					3.0		30				
	Br					0.75		75				
Std D	F				1000	0.250	100	2.5			LL05335	
	NO_2					0.250		2.5				
	NO_3					0.250		2.5				
	Cl					5.0		50				
	SO_4					5.0		50				
	Br					1.25		12.5				
Std E	F				1000	0.30	100	3.0			LL05336	
	NO_2					0.30		3.0				
	NO_3					0.30		3.0				
	Cl					6.5		65				
	SO_4					6.5		65				
	Br					1.5		15				
Std F	F				1000	0.40	100	4.0			LL05337	
	NO_2					0.40		4.0				
	NO_3					0.40		4.0				
	Cl					8.0		80				
	SO_4					8.0		80				
	Br					2.0		20				
Std G	F				1000	0.50	100	5.0			LL05338	
	NO_2					0.50		5.0				
	NO_3					0.50		5.0				
	Cl					10.0		100				
	SO_4					10.0		100				
	Br					2.5		25				
CCV	F	Accutest	CC 010	08-31-15	1000	0.250	100	2.5			LL05335	
	NO_2		GC 11511	01-30-15								
	NO_3		CC 169	06-17-16								
	Cl		CC 124	03-31-16		0.500		5.0				
	SO_4		CC 268	05-10-16								

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	Br	spex	CC156	05-30-16		1.25		12.5				
B1	F	spex	CC514	12-31-16	1000	0.250	100	2.5				
	NO_2		CC267	11-05-16								
	NO_3		CC25511	01-01-18								
	Cl		CC096	02-01-15		0.500		50				
	SO_4		CC007	02-01-15								
	Br		CC155	01-07-18		1.25		12.5				

IC Soil Prep

Method: 9056A Date: 12-23-2014
Analyst: VL GP GP25228

	Sample ID.Bottle #	Wt, g	Final Vol, ml	Comments
MB	1181	9.99	100	Boiling chips: GC 139
SB	B1	10.02		Balance: Adv pro1
MS	FA20723-1.1	10.01		
MSD	↓	9.99	↓	
DUP		VL 12-23-2014		
QC 1	FA20723-1.1	10.02	100	vials: GC 271
2	-2.1	10.00		cups: GC 271
3	-3.1	10.03		syringes: GC 283
4	FA20579-1.1	10.02		cups: GC 283
5	-2.1	10.01		spike lot same as LL05355
6	-3.1	9.99		
7	-4.1	10.01	↓	
8				
9				
10				
11				
12		VL 12-23-2014		
13				
14				
15				
16				
17				
18				
19				
20				

Analyst's Signature: VL Date: 12-23-2014

Reveiwer's Signature: [signature] Date: 12/23/14

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO_3		GC 2551I	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO_4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutan	GC 010	08-31-15	1000	0.250	100	2.5	12-22-16	✓	LL05351	12-22-16
	NO_2		GC 12511	01-31-15								
	NO_3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO_4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05352	
	NO_2	Inorganic	GC 267	11-04-16								
	NO_3		GC 2551I	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO_4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutan	GC 010	08-31-15	1000	0.250	100	2.5	12-23-16	✓	LL05353	12-23-16
	NO_2		GC 12511	01-31-15								
	NO_3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO_4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05354	
	NO_2	Inorganic	GC 267	11-04-16								
	NO_3		GC 2551I	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO_4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				

IC STANDARDS PREP LOG

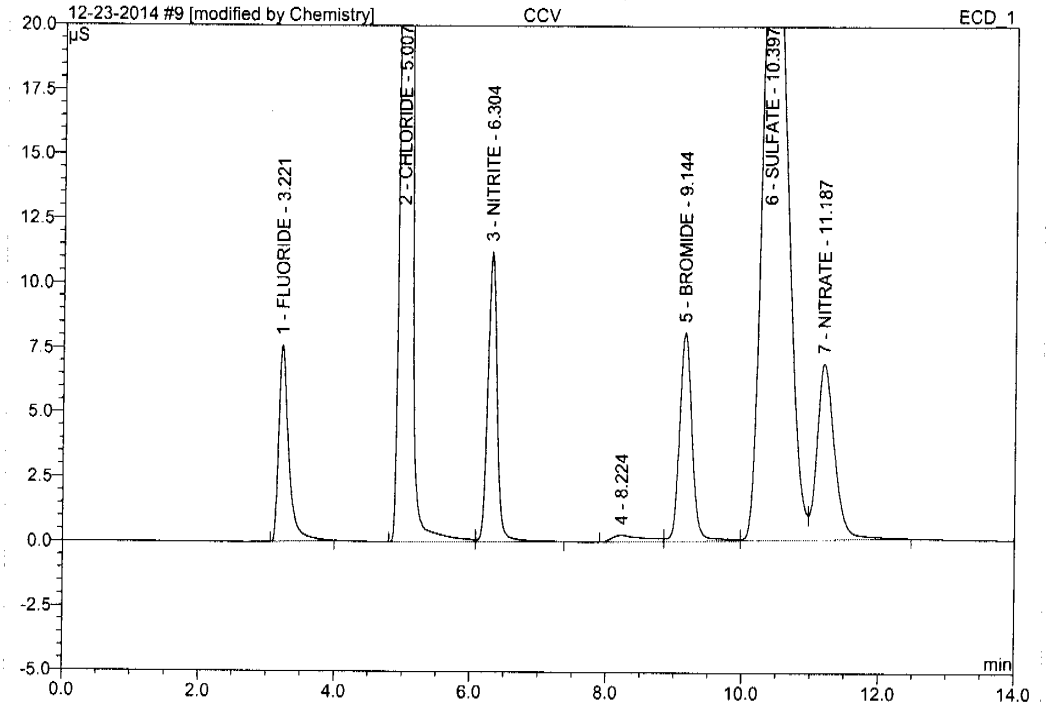
STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
	NO3		GC 255II	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutest	GC 010	08-31-15	1000	0.250	100	2.5	12-22-14	IL	LL05351	12-22-16
	NO2		GC 125II	01-31-15								
	NO3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05352	
	NO2	Inorganic	GC 267	11-04-16								
	NO3		GC 255II	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				
CCV	F	Accutest	GC 010	08-31-15	1000	0.250	100	2.5	12-23-14	IL	LL05353	12-23-16
	NO2		GC 125II	01-31-15								
	NO3		GC 169	06-17-16								
	CHL		GC 124	03-31-16		0.500		50				
	SO4		GC 268	05-10-16								
	Br	Spex	GC 156	04-30-16		1.25		12.5				
BI	F	Spex	GC 514	12-31-16	1000	0.250	100	2.5			LL05354	
	NO2	Inorganic	GC 267	11-04-16								
	NO3		GC 255II	01-01-15								
	CHL		GC 086	02-01-15		0.500		50				
	SO4		GC 007	02-01-15								
	Br		GC 155	01-07-15		1.25		12.5				

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 9:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	7.602	1.286	3.91	2.255	BMB
2	5.01	CHLORIDE	120.168	15.030	45.66	51.802	BM *
3	6.30	NITRITE	11.199	1.769	5.37	2.251	MB*
4	8.22	n.a.	0.259	0.143	0.43	n.a.	BM
5	9.14	BROMIDE	8.074	1.720	5.23	12.890	M
6	10.40	SULFATE	27.139	10.928	33.20	49.848	M
7	11.19	NITRATE	6.799	2.038	6.19	2.500	MB
Total:			181.241	32.913	100.00	121.545	

JG 12-24-2014

12/24/14

12/24/14

12/24/14

Anions/Integration

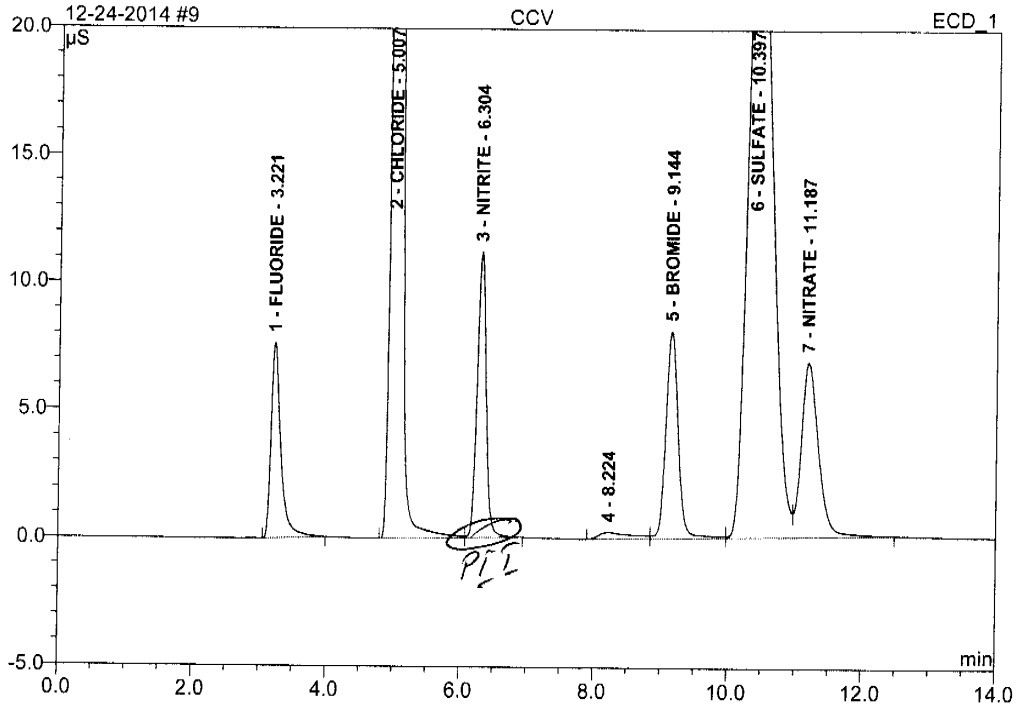
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

9 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 9:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	7.602	1.286	3.91	2.255	BMB
2	5.01	CHLORIDE	120.165	15.016	45.69	51.753	BM
3	6.30	NITRITE	11.174	1.737	5.28	2.210	MB
4	8.22	n.a.	0.259	0.143	0.44	n.a.	BM
5	9.14	BROMIDE	8.074	1.720	5.23	12.890	M
6	10.40	SULFATE	27.139	10.928	33.25	49.848	M
7	11.19	NITRATE	6.799	2.038	6.20	2.500	MB
Total:			181.211	32.867	100.00	121.456	

PFL

1:4 12-24-2014 12/24/14

Anions/Integration

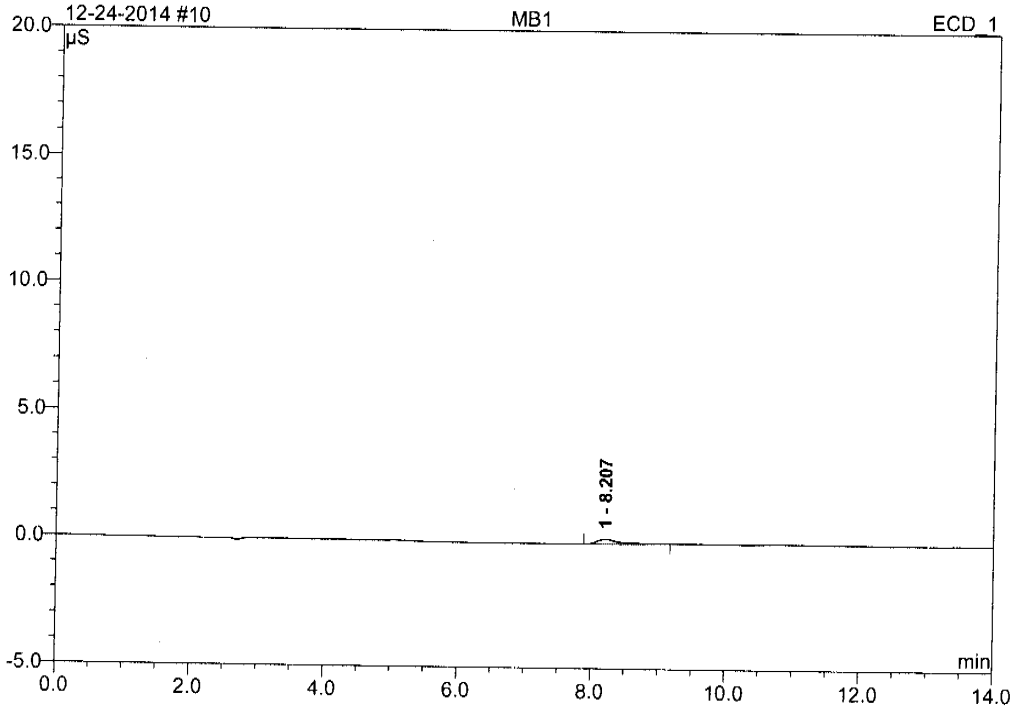
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

10 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



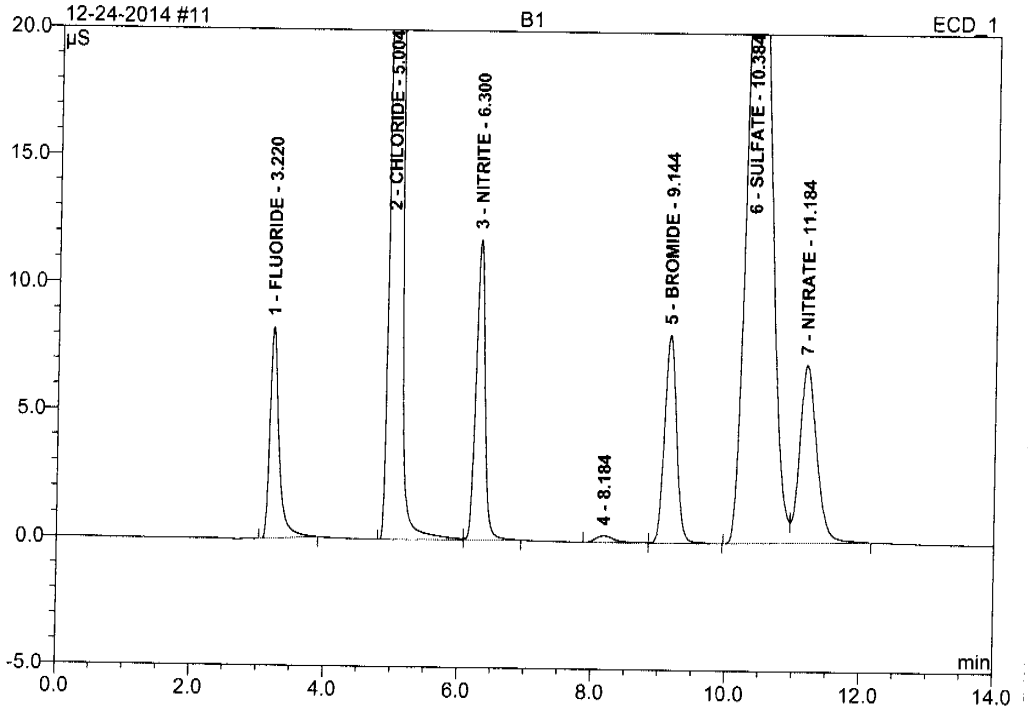
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.21	n.a.	0.189	0.069	100.00	n.a.	BMB
Total:			0.189	0.069	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



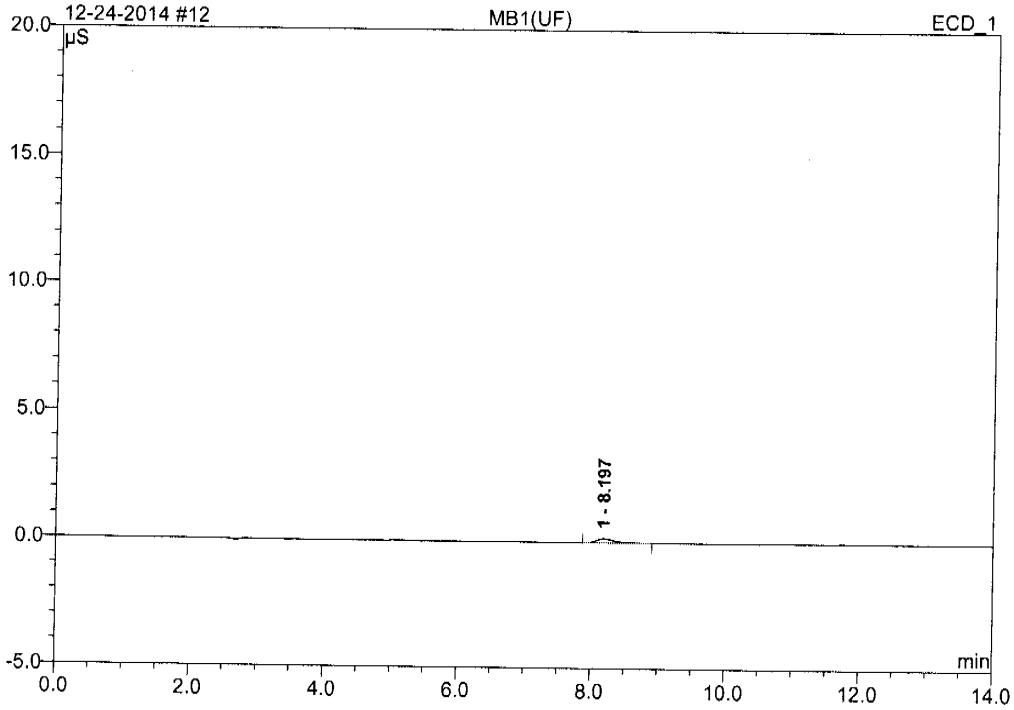
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.307	1.299	3.89	2.279	BMB
2	5.00	CHLORIDE	123.085	15.327	45.94	52.825	BM
3	6.30	NITRITE	11.763	1.830	5.49	2.329	MB
4	8.18	n.a.	0.255	0.084	0.25	n.a.	BM
5	9.14	BROMIDE	8.165	1.684	5.05	12.621	MB
6	10.38	SULFATE	28.338	11.083	33.22	50.555	BM
7	11.18	NITRATE	6.960	2.053	6.15	2.519	MB
Total:			186.873	33.361	100.00	123.128	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

12 MB1(UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1(UF)**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



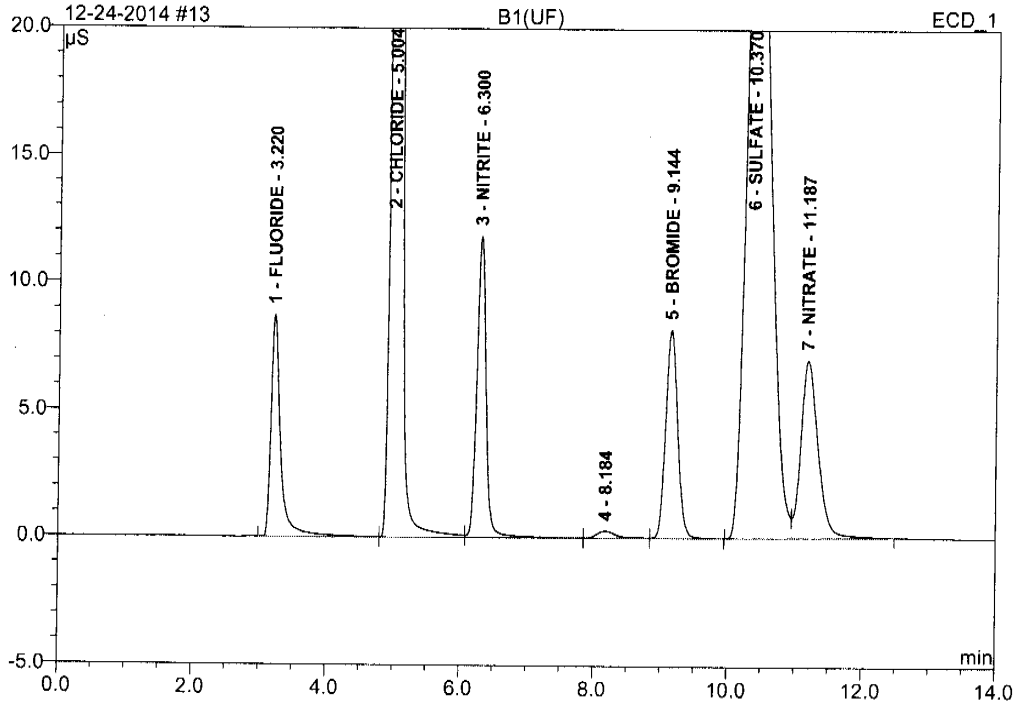
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.20	n.a.	0.159	0.048	100.00	n.a.	BMB
Total:			0.159	0.048	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

13 B1(UF)

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1(UF)**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 10:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



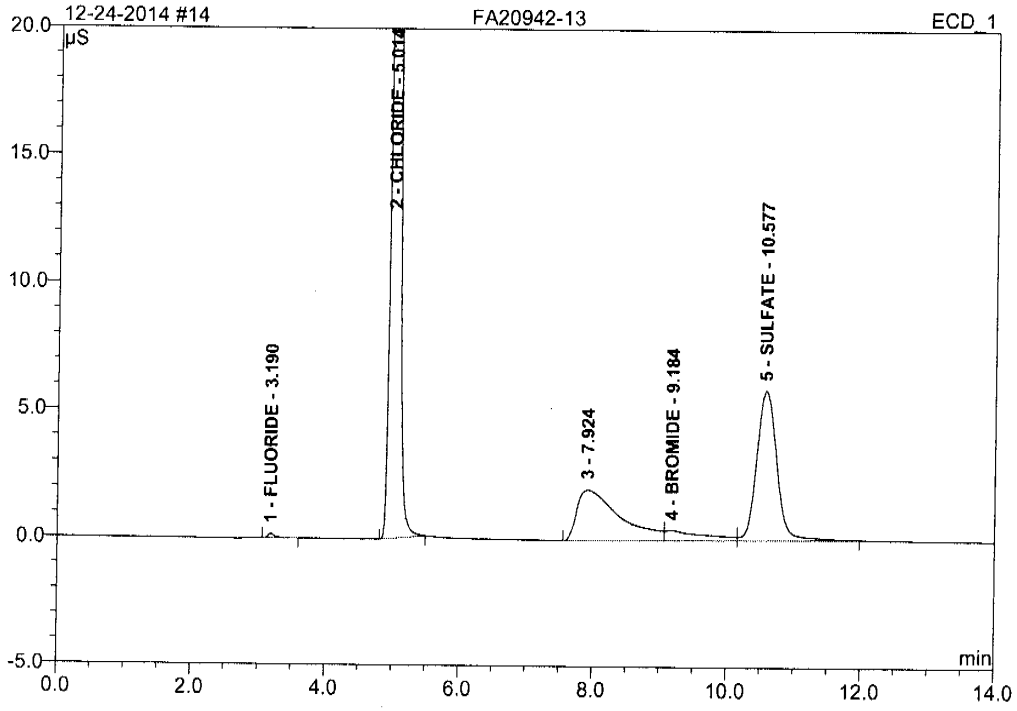
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.718	1.452	4.28	2.547	BM
2	5.00	CHLORIDE	123.205	15.382	45.29	53.017	M
3	6.30	NITRITE	11.809	1.894	5.58	2.411	M
4	8.18	n.a.	0.273	0.093	0.27	n.a.	M
5	9.14	BROMIDE	8.188	1.694	4.99	12.695	MB
6	10.37	SULFATE	28.758	11.362	33.45	51.826	BM
7	11.19	NITRATE	6.994	2.088	6.15	2.562	MB
Total:			187.944	33.966	100.00	125.057	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

14 FA20942-13

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-13**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 11:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

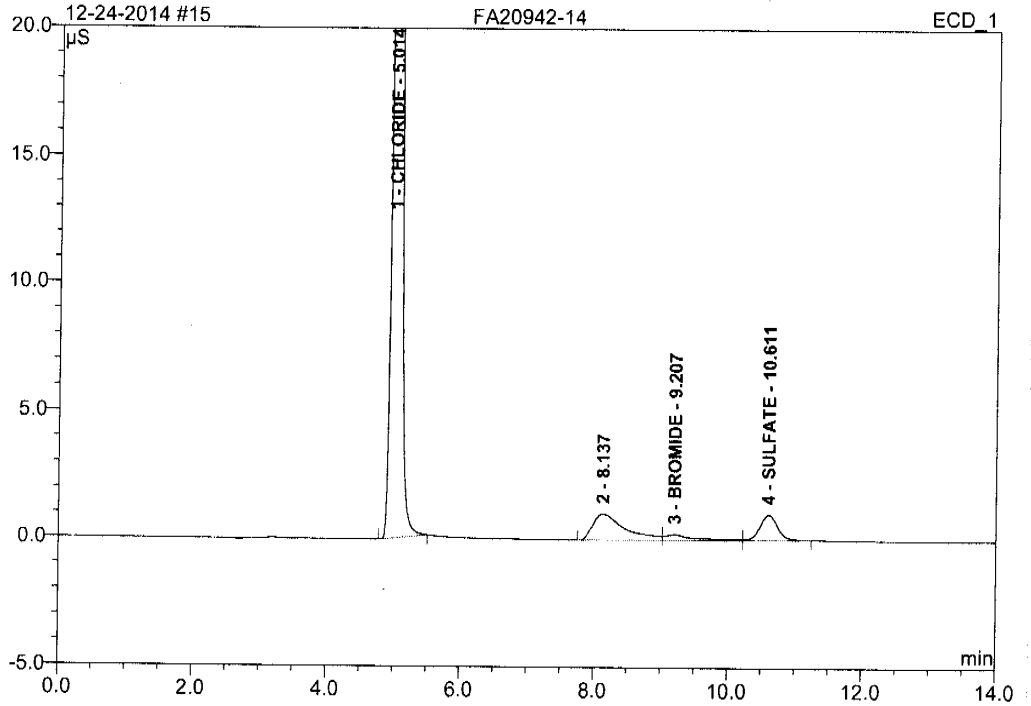


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.174	0.020	0.18	0.174	BMB
2	5.01	CHLORIDE	58.750	7.032	65.08	121.187	BMB
3	7.92	n.a.	1.969	1.458	13.50	n.a.	BM
4	9.18	BROMIDE	0.392	0.266	2.46	9.968	M
5	10.58	SULFATE	5.827	2.030	18.78	46.289	MB
Total:			67.112	10.806	100.00	177.618	

15 FA20942-14

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-14**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**25.0000**
Recording Time:	**12/23/2014 11:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



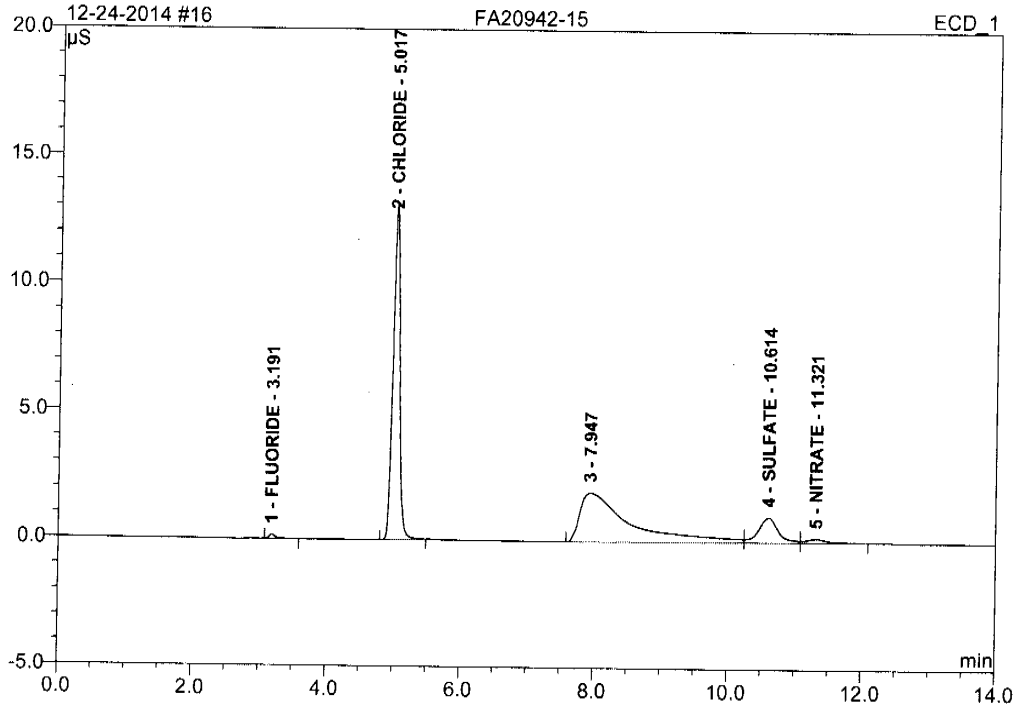
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	69.225	8.388	89.51	722.715	BMB
2	8.14	n.a.	1.030	0.567	6.05	n.a.	BM
3	9.21	BROMIDE	0.226	0.113	1.21	21.248	M
4	10.61	SULFATE	1.002	0.303	3.24	34.587	MB
Total:			71.484	9.371	100.00	778.550	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

16 FA20942-15

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-15**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 11:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



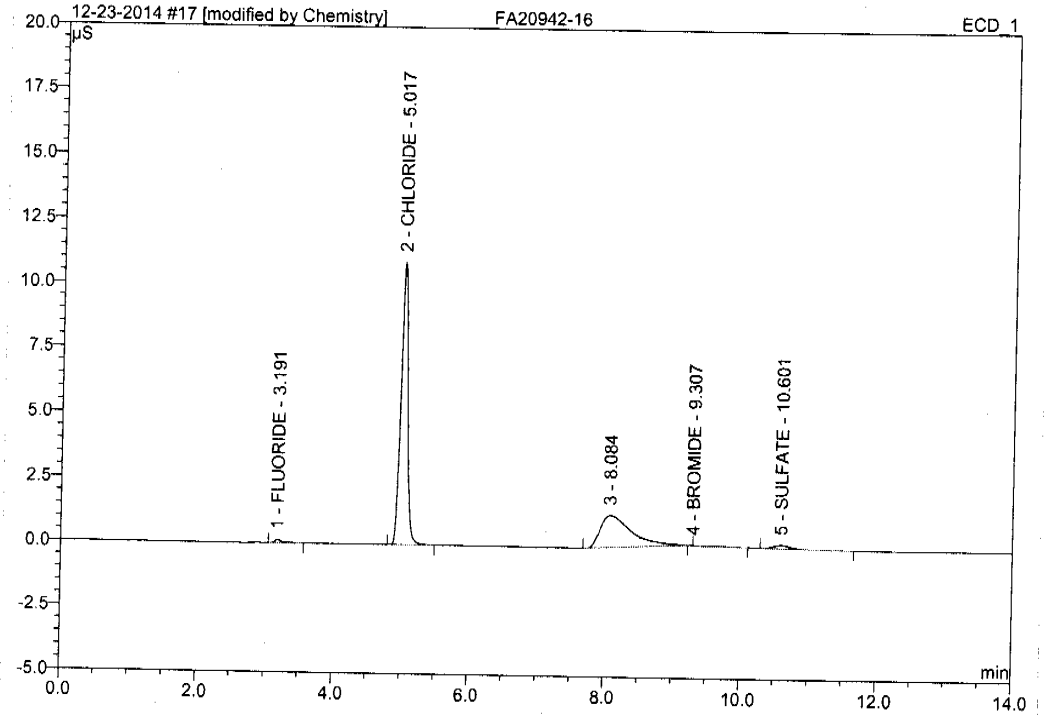
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.166	0.019	0.52	0.164	BMB
2	5.02	CHLORIDE	13.100	1.544	42.67	26.606	BMB
3	7.95	n.a.	1.896	1.661	45.92	n.a.	BM
4	10.61	SULFATE	0.984	0.337	9.31	7.682	M
5	11.32	NITRATE	0.152	0.057	1.58	0.351	MB
Total:			16.298	3.618	100.00	34.802	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

17 FA20942-16

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-16**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 12:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.149	0.017	0.87	0.061	BMB
2	5.02	CHLORIDE	10.922	1.290	64.08	8.889	BMB
3	8.08	n.a.	1.244	0.667	33.14	n.a.	BMB*
4	9.31	BROMIDE	0.000	0.003	0.13	0.039	BMB*
5	10.60	SULFATE	0.132	0.036	1.78	0.327	BMB*
Total:			12.448	2.012	100.00	9.316	

VK 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

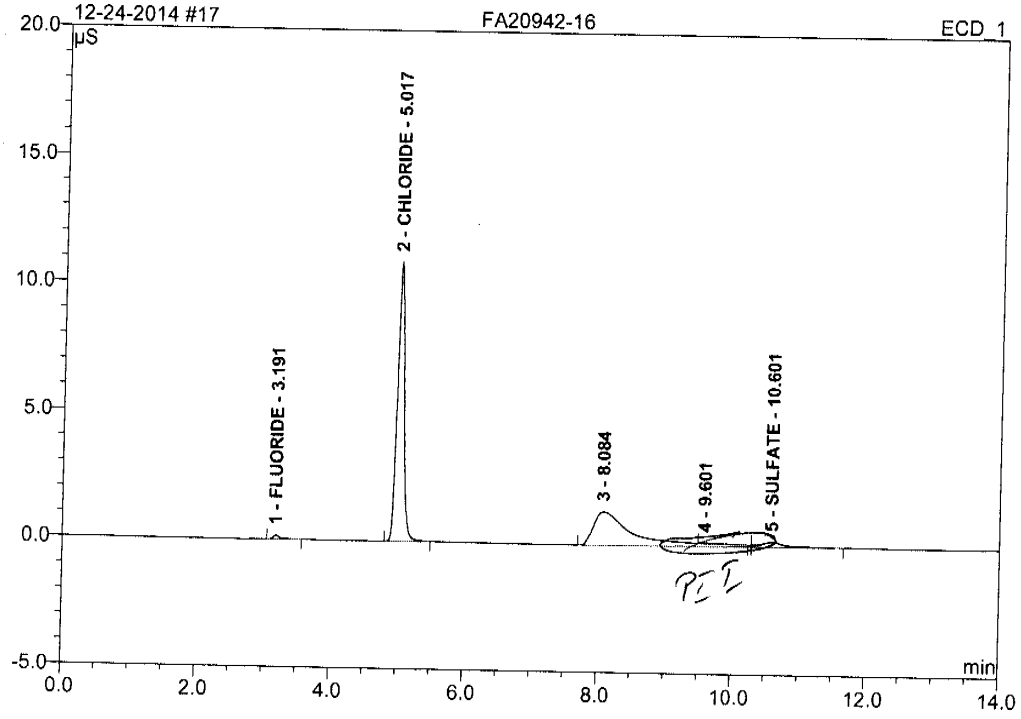
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

17 FA20942-16

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-16**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 12:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.149	0.017	0.75	0.061	BMB
2	5.02	CHLORIDE	10.922	1.290	55.61	8.889	BMB
3	8.08	n.a.	1.287	0.913	39.36	n.a.	BM
4	9.60	n.a.	0.028	0.010	0.45	n.a.	Rd
5	10.60	SULFATE	0.192	0.089	3.83	0.811	MB
Total:			12.578	2.319	100.00	9.761	

VH 12-24-2014 12/24/14

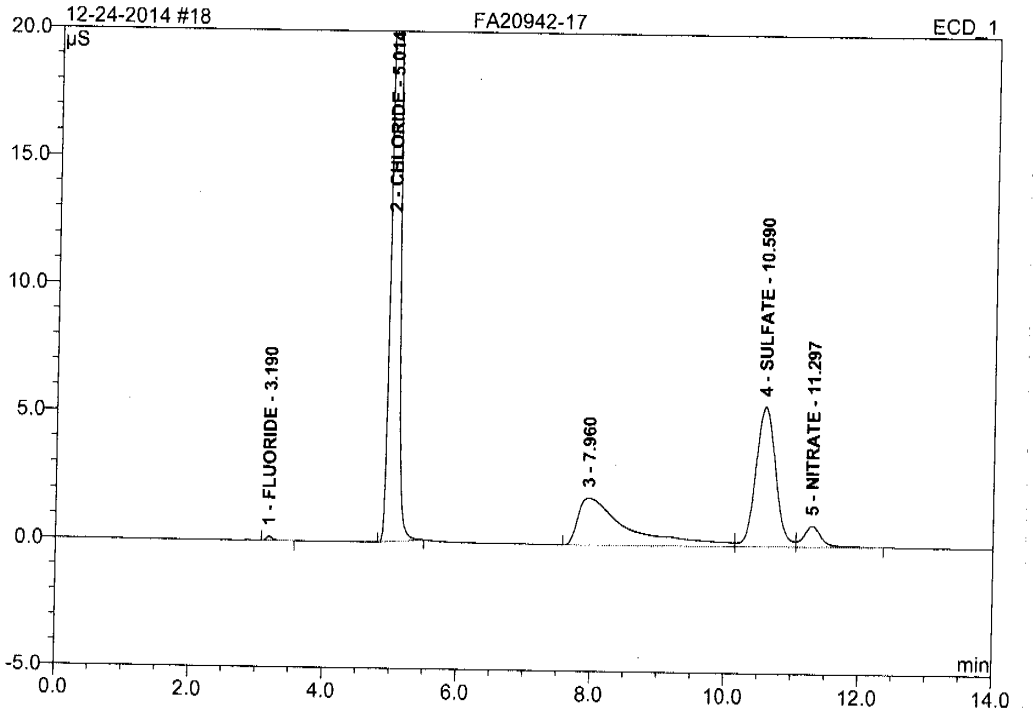
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

18 FA20942-17

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-17**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 12:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.163	0.018	0.20	0.063	BMB
2	5.01	CHLORIDE	42.911	5.123	58.07	35.315	BMB
3	7.96	n.a.	1.832	1.565	17.74	n.a.	BM
4	10.59	SULFATE	5.442	1.860	21.09	16.971	M
5	11.30	NITRATE	0.821	0.255	2.90	0.627	MB
Total:			51.168	8.822	100.00	52.976	

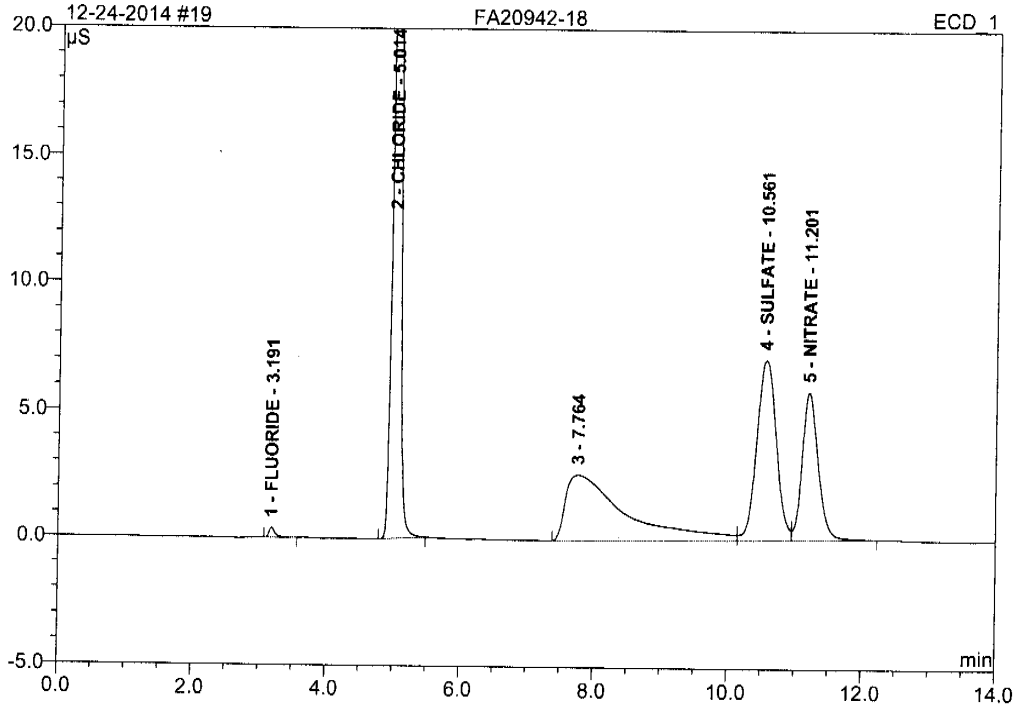
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

19 FA20942-18

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-18**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 12:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



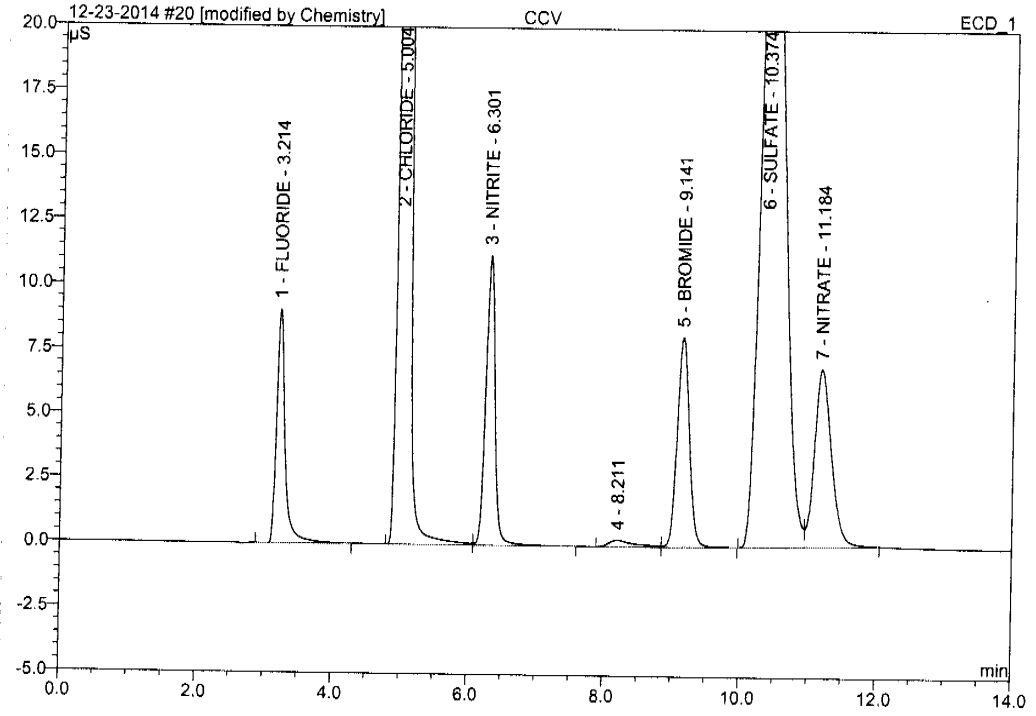
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.397	0.044	0.39	0.077	BMB
2	5.01	CHLORIDE	38.540	4.540	40.07	15.647	BMB
3	7.76	n.a.	2.603	2.721	24.02	n.a.	BM
4	10.56	SULFATE	7.056	2.401	21.19	10.951	M
5	11.20	NITRATE	5.806	1.624	14.33	1.992	MB
Total:			54.402	11.330	100.00	28.667	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

20 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 12:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.052	1.307	3.97	2.291	BMB*
2	5.00	CHLORIDE	121.157	15.032	45.64	51.809	BM *
3	6.30	NITRITE	11.200	1.773	5.38	2.256	MB*
4	8.21	n.a.	0.259	0.118	0.36	n.a.	BM
5	9.14	BROMIDE	8.130	1.686	5.12	12.632	MB
6	10.37	SULFATE	28.605	11.024	33.47	50.286	BM
7	11.18	NITRATE	6.869	1.995	6.06	2.448	MB
Total:			185.272	32.934	100.00	121.723	

MH 12-24-2014 12/24/14

Anions/Integration

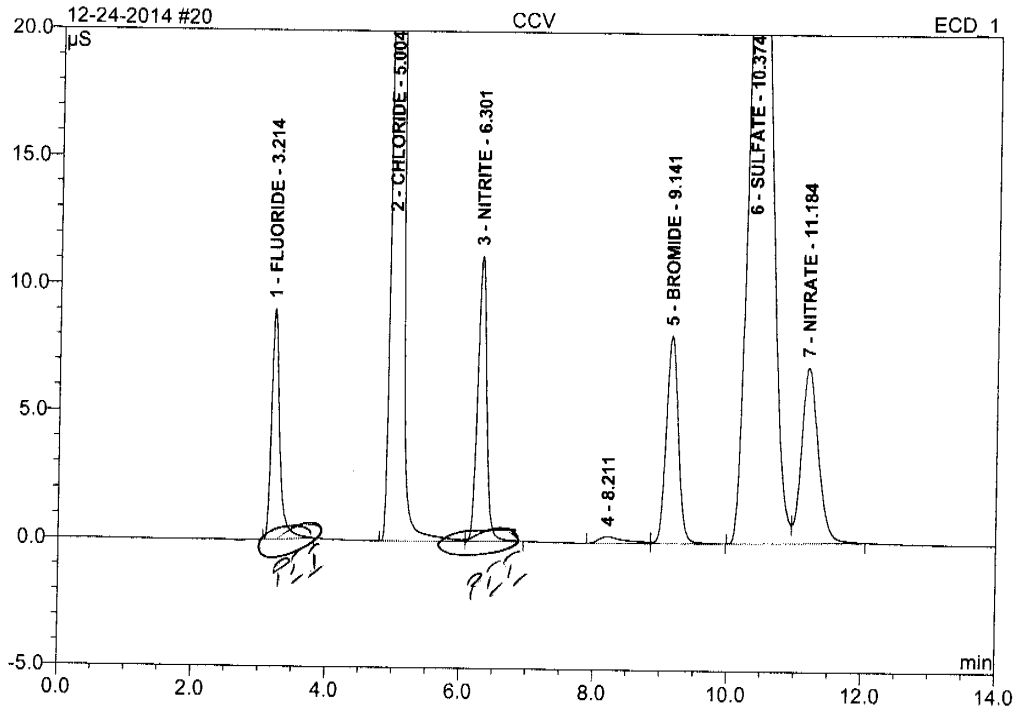
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

20 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 12:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.045	1.272	3.87	2.231	BMB
2	5.00	CHLORIDE	121.153	15.017	45.72	51.756	BM
3	6.30	NITRITE	11.172	1.735	5.28	2.208	MB
4	8.21	n.a.	0.259	0.118	0.36	n.a.	BM
5	9.14	BROMIDE	8.130	1.686	5.13	12.632	MB
6	10.37	SULFATE	28.605	11.024	33.56	50.286	BM
7	11.18	NITRATE	6.869	1.995	6.07	2.448	MB
Total:			185.234	32.847	100.00	121.562	

12-24-2014

Anions/Integration

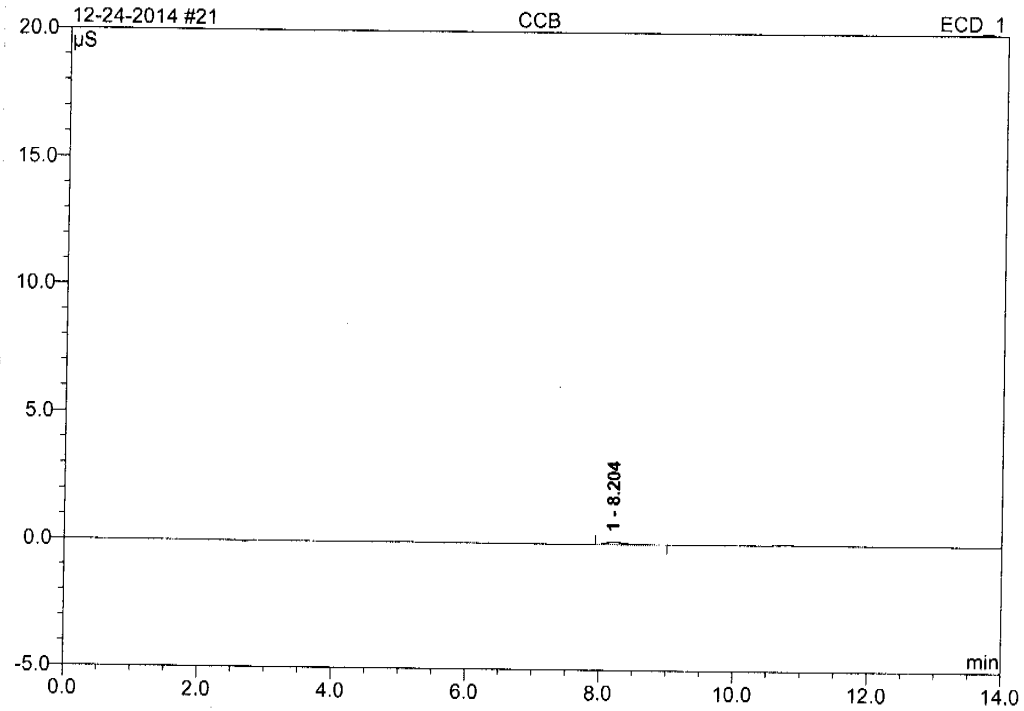
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

21 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 13:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



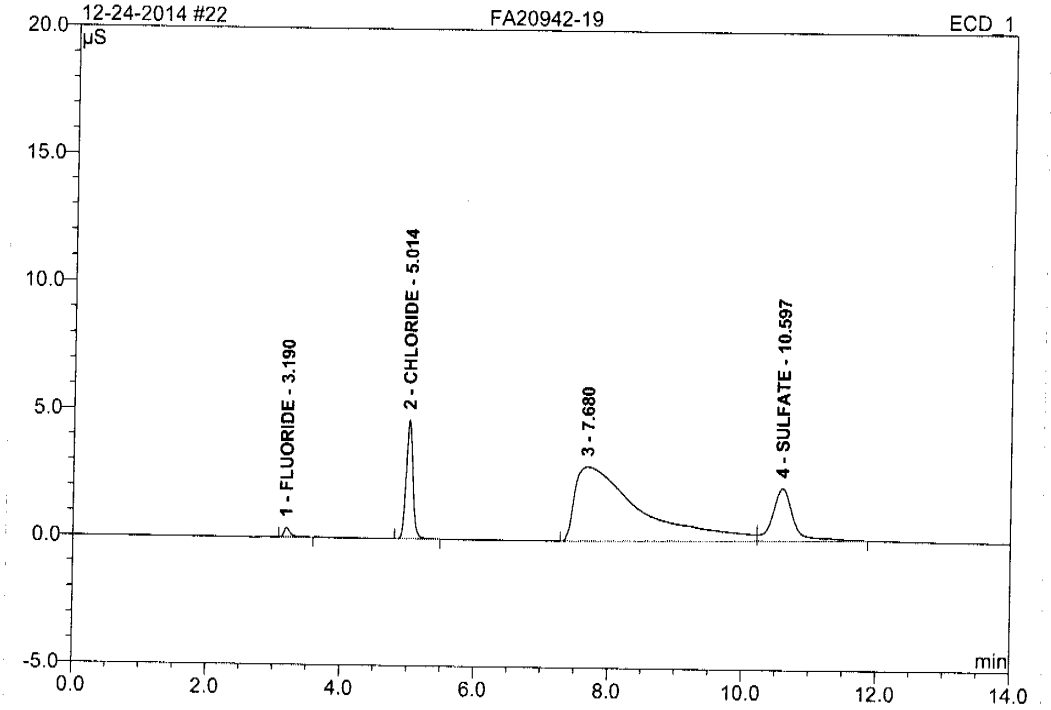
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.20	n.a.	0.112	0.035	100.00	n.a.	BMB
Total:			0.112	0.035	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

22 FA20942-19

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-19**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 13:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

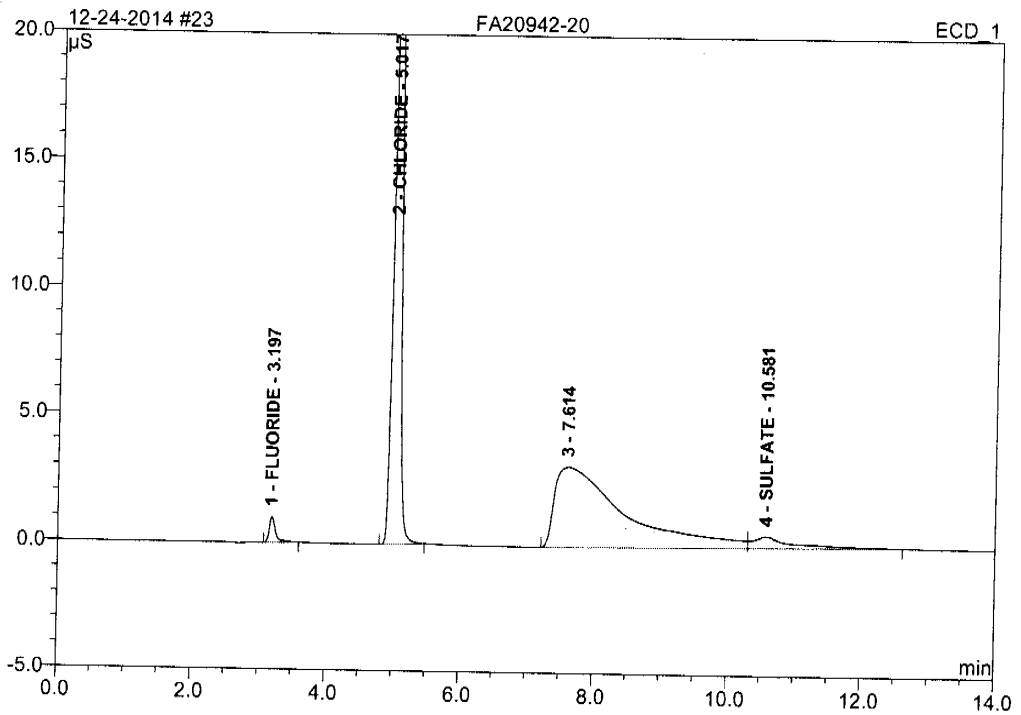


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.374	0.042	0.90	0.146	BMB
2	5.01	CHLORIDE	4.663	0.542	11.71	3.738	BMB
3	7.68	n.a.	2.905	3.300	71.29	n.a.	BM
4	10.60	SULFATE	2.067	0.745	16.09	6.795	MB
Total:			10.008	4.629	100.00	10.679	

23 FA20942-20

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-20**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 13:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	1.000	0.110	1.43	0.192	BMB
2	5.02	CHLORIDE	29.467	3.424	44.63	11.800	BMB
3	7.61	n.a.	3.128	3.803	49.57	n.a.	BM
4	10.58	SULFATE	0.463	0.335	4.37	1.528	MB
Total:			34.058	7.671	100.00	13.520	

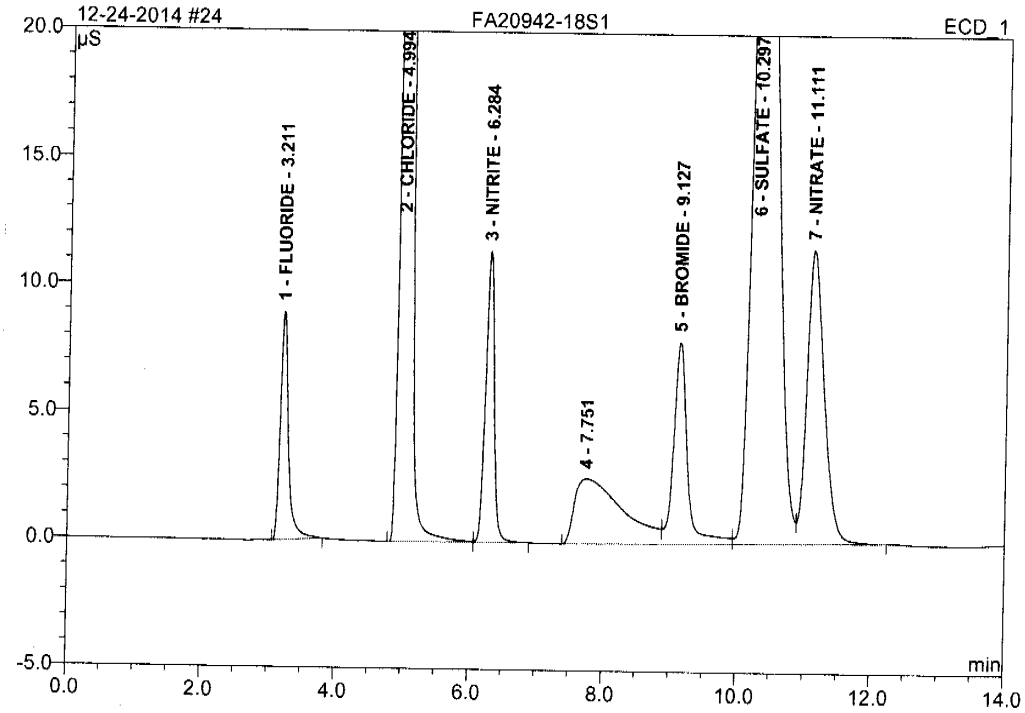
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

24 FA20942-18S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-18S1**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 14:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.950	1.257	2.94	2.205	BMB
2	4.99	CHLORIDE	156.410	19.212	44.89	66.216	BM
3	6.28	NITRITE	11.408	1.702	3.98	2.166	MB
4	7.75	n.a.	2.552	2.123	4.96	n.a.	BM
5	9.13	BROMIDE	7.910	1.880	4.39	14.091	M
6	10.30	SULFATE	33.991	13.163	30.76	60.043	M
7	11.11	NITRATE	11.529	3.460	8.08	4.244	MB
Total:			232.750	42.797	100.00	148.964	

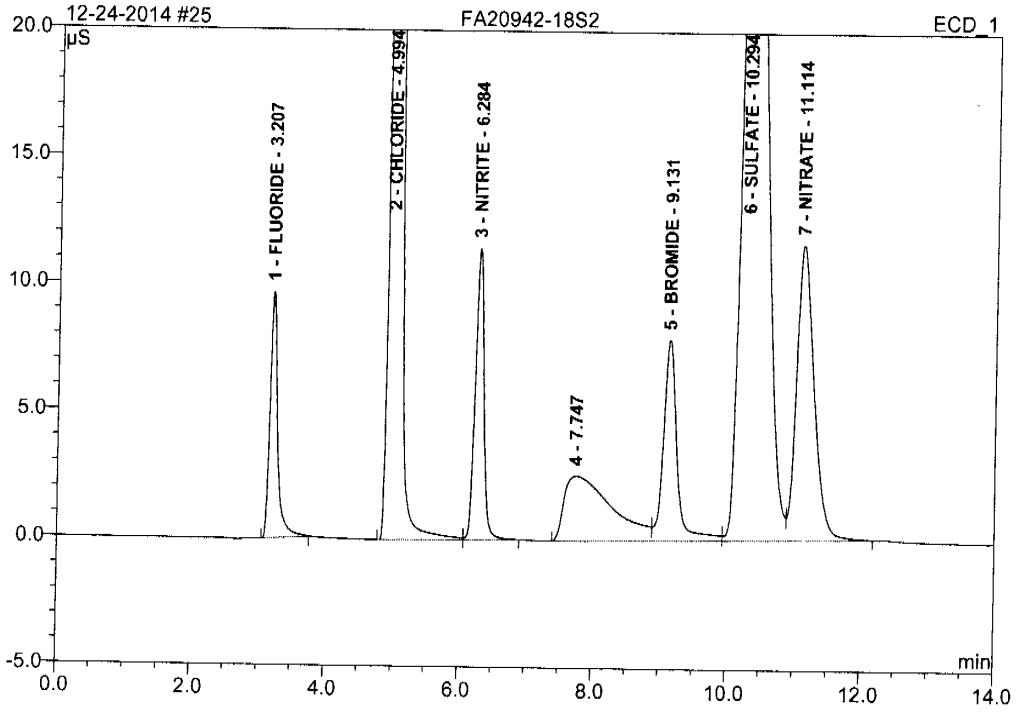
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

25 FA20942-18S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-18S2**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 14:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



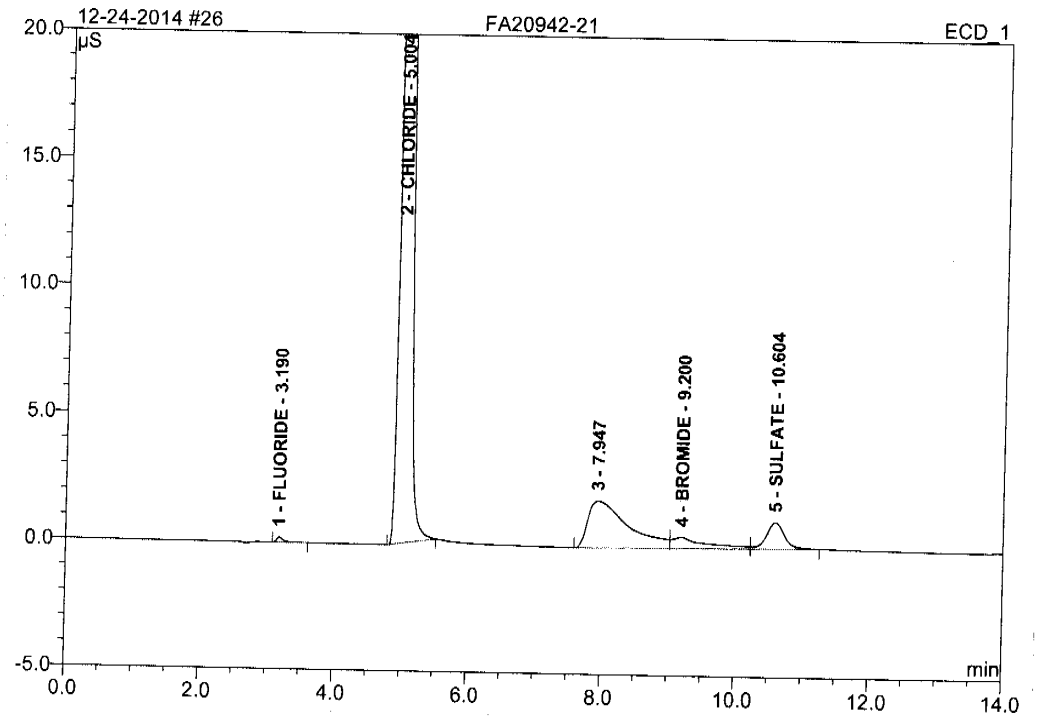
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.672	1.279	2.98	2.243	BMB
2	4.99	CHLORIDE	156.849	19.294	44.94	66.498	BM
3	6.28	NITRITE	11.415	1.718	4.00	2.187	MB
4	7.75	n.a.	2.545	2.100	4.89	n.a.	BM
5	9.13	BROMIDE	7.878	1.848	4.31	13.851	M
6	10.29	SULFATE	34.707	13.190	30.72	60.166	M
7	11.11	NITRATE	11.563	3.500	8.15	4.294	MB
Total:			234.629	42.929	100.00	149.238	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

26 FA20942-21

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-21**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 14:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.205	0.024	0.15	0.213	BMB
2	5.00	CHLORIDE	121.460	14.751	88.65	254.199	BMB
3	7.95	n.a.	1.840	1.284	7.72	n.a.	BM
4	9.20	BROMIDE	0.442	0.256	1.54	9.599	M
5	10.60	SULFATE	1.044	0.324	1.95	7.393	MB
Total:			124.990	16.639	100.00	271.403	

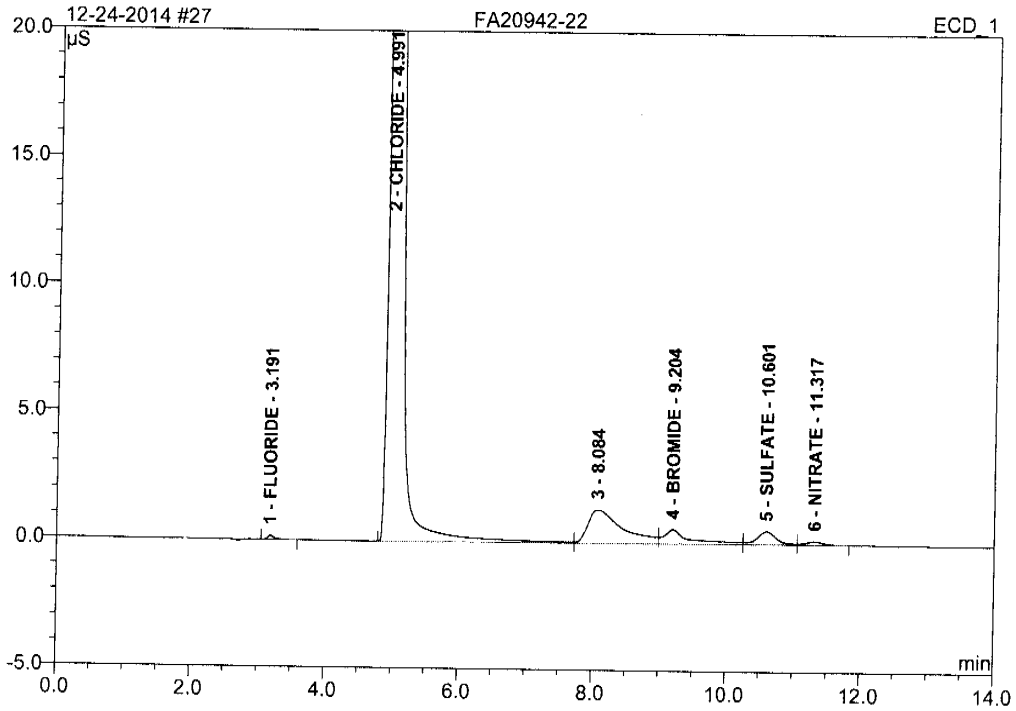
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

27 FA20942-22

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-22**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 14:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.158	0.018	0.07	0.314	BMB
2	4.99	CHLORIDE	203.540	25.999	95.36	896.090	BM
3	8.08	n.a.	1.295	0.772	2.83	n.a.	M
4	9.20	BROMIDE	0.561	0.260	0.95	19.503	M
5	10.60	SULFATE	0.513	0.173	0.64	7.899	M
6	11.32	NITRATE	0.136	0.042	0.16	0.521	MB
Total:			206.204	27.265	100.00	924.327	

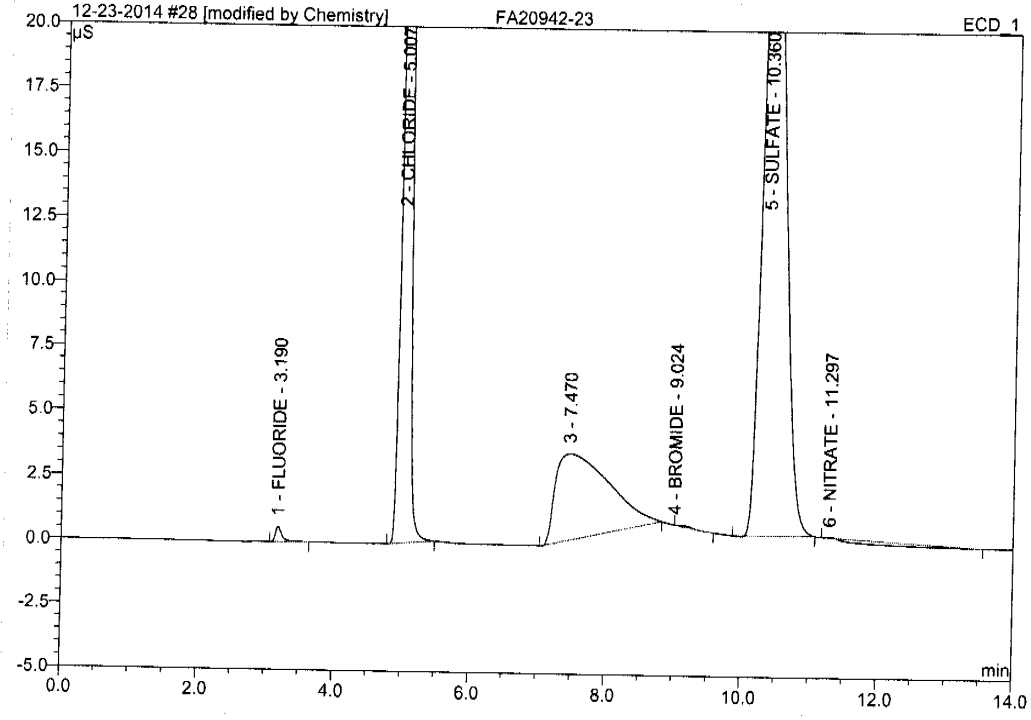
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

28 FA20942-23

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-23**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 15:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.607	0.070	0.35	0.122	BMB
2	5.01	CHLORIDE	58.129	6.813	34.30	23.483	BMB
3	7.47	n.a.	3.344	3.003	15.12	n.a.	BMB*
4	9.02	BROMIDE	0.000	0.006	0.03	0.048	BMB*
5	10.36	SULFATE	26.887	9.803	49.35	44.717	BMB*
6	11.30	NITRATE	0.040	0.168	0.84	0.206	BMB*
Total:			89.008	19.863	100.00	68.576	

Th 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

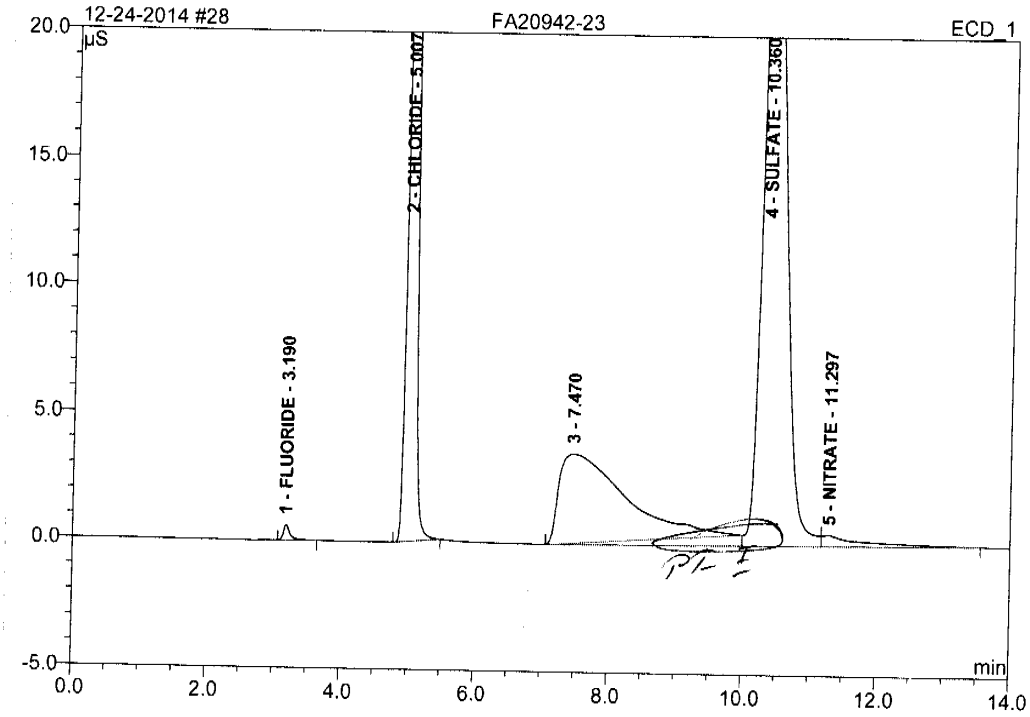
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

28 FA20942-23

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-23**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 15:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.607	0.070	0.31	0.122	BMB
2	5.01	CHLORIDE	58.129	6.813	30.65	23.483	BMB
3	7.47	n.a.	3.526	4.060	18.26	n.a.	Ru
4	10.36	SULFATE	27.343	10.964	49.32	50.013	BM
5	11.30	NITRATE	0.434	0.324	1.46	0.398	MB
Total:			90.040	22.231	100.00	74.016	

12-24-2014

12/24/14

Anions/Integration

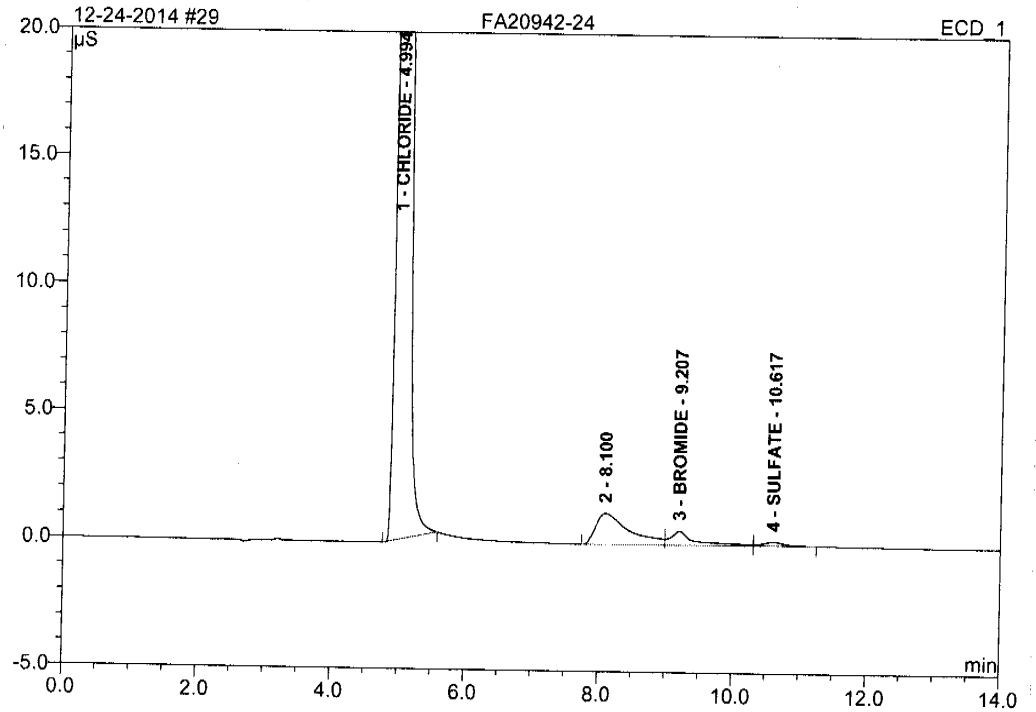
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

29 FA20942-24

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-24**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 15:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	4.99	CHLORIDE	217.981	27.449	96.53	946.041	BMB
2	8.10	n.a.	1.205	0.699	2.46	n.a.	BM
3	9.21	BROMIDE	0.540	0.231	0.81	17.312	M
4	10.62	SULFATE	0.151	0.056	0.20	2.537	MB
Total:			219.877	28.435	100.00	965.889	

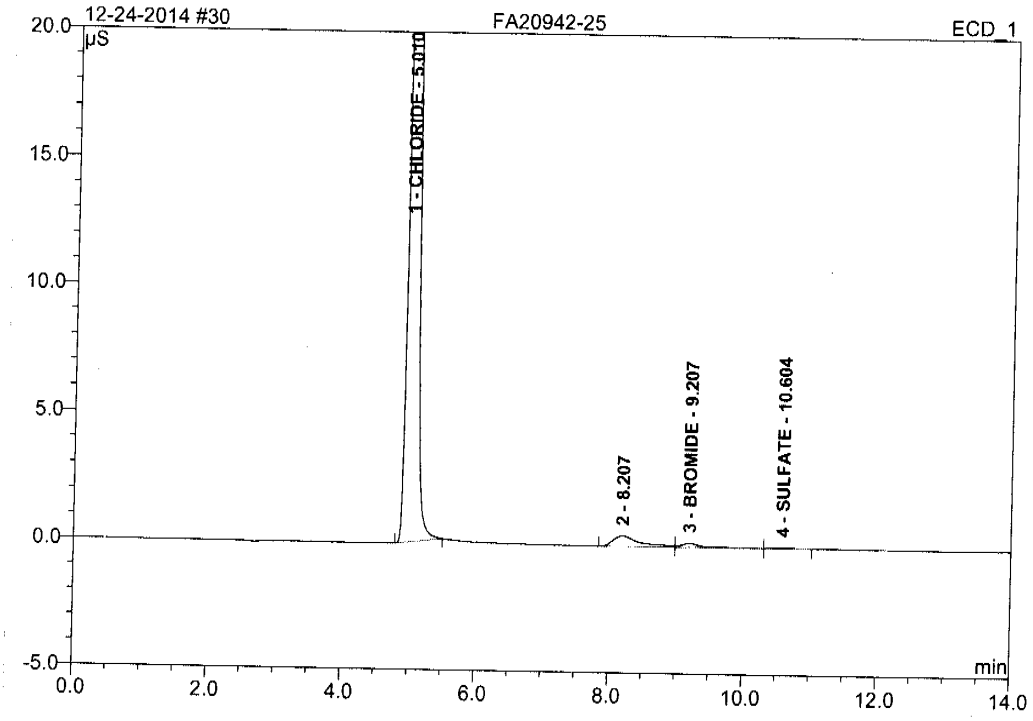
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

30 FA20942-25

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-25**	*Injection Volume:*	**25.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**100.0000**
Recording Time:	**12/23/2014 15:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



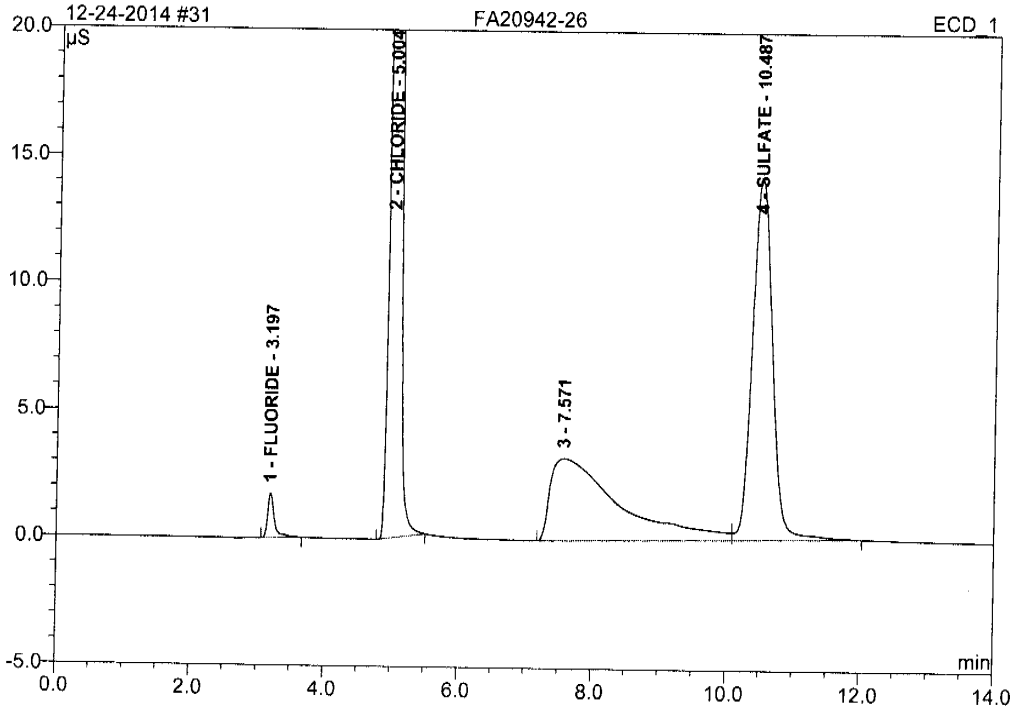
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	70.893	8.536	96.92	2942.127	BMB
2	8.21	n.a.	0.408	0.190	2.16	n.a.	BM
3	9.21	BROMIDE	0.168	0.065	0.74	48.810	M
4	10.60	SULFATE	0.050	0.016	0.19	7.473	MB
Total:			71.519	8.808	100.00	2998.410	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

31 FA20942-26

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-26**	*Injection Volume:*	**25.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 16:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	1.745	0.201	0.91	0.352	BMB
2	5.00	CHLORIDE	109.213	13.028	59.24	44.901	BMB
3	7.57	n.a.	3.221	3.837	17.45	n.a.	BM
4	10.49	SULFATE	14.109	4.924	22.39	22.463	MB
Total:			128.288	21.990	100.00	67.716	

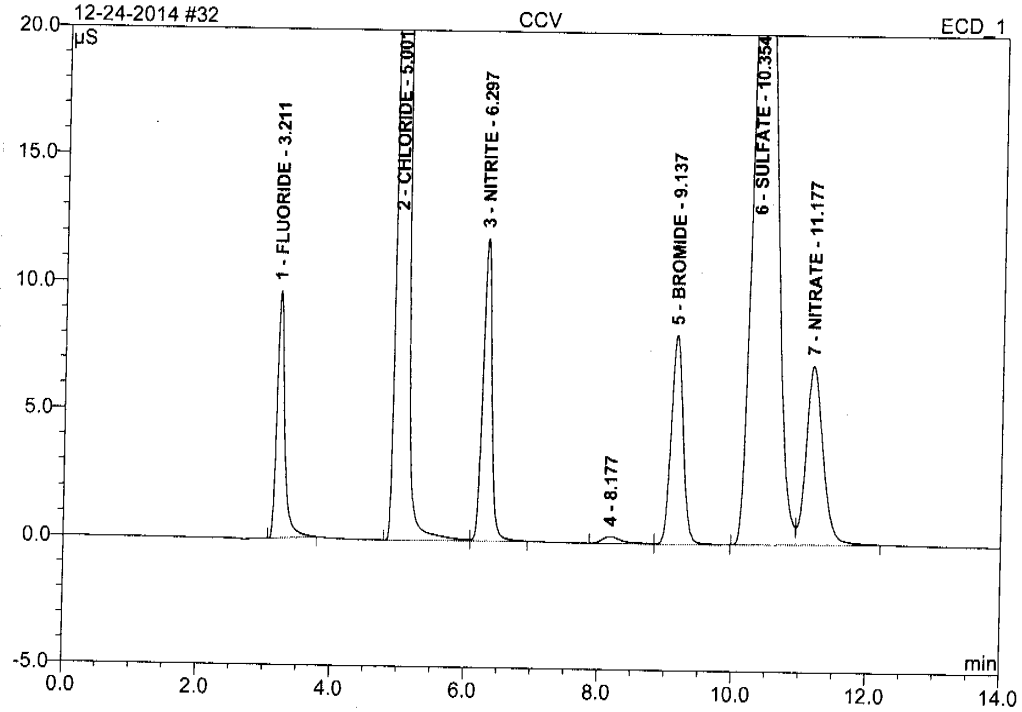
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

32 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 16:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.696	1.301	3.89	2.282	BMB
2	5.00	CHLORIDE	124.486	15.321	45.85	52.807	BM
3	6.30	NITRITE	11.861	1.830	5.48	2.329	MB
4	8.18	n.a.	0.267	0.094	0.28	n.a.	BM
5	9.14	BROMIDE	8.192	1.691	5.06	12.668	MB
6	10.35	SULFATE	29.824	11.136	33.33	50.797	BM
7	11.18	NITRATE	7.005	2.042	6.11	2.505	MB
Total:			191.330	33.415	100.00	123.388	

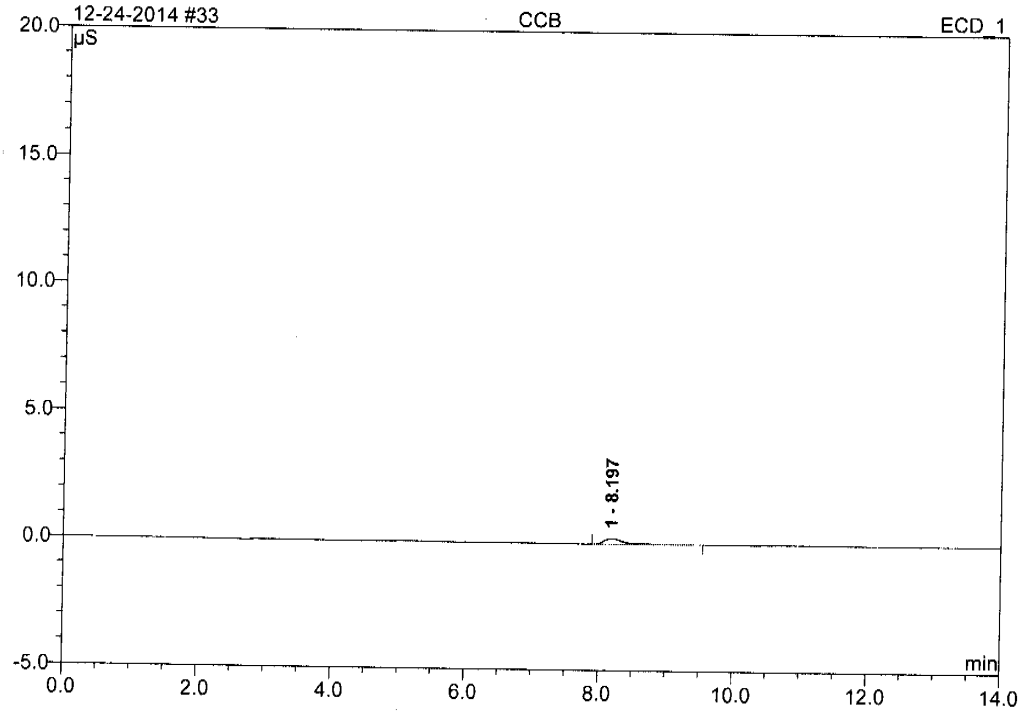
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

33 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 16:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



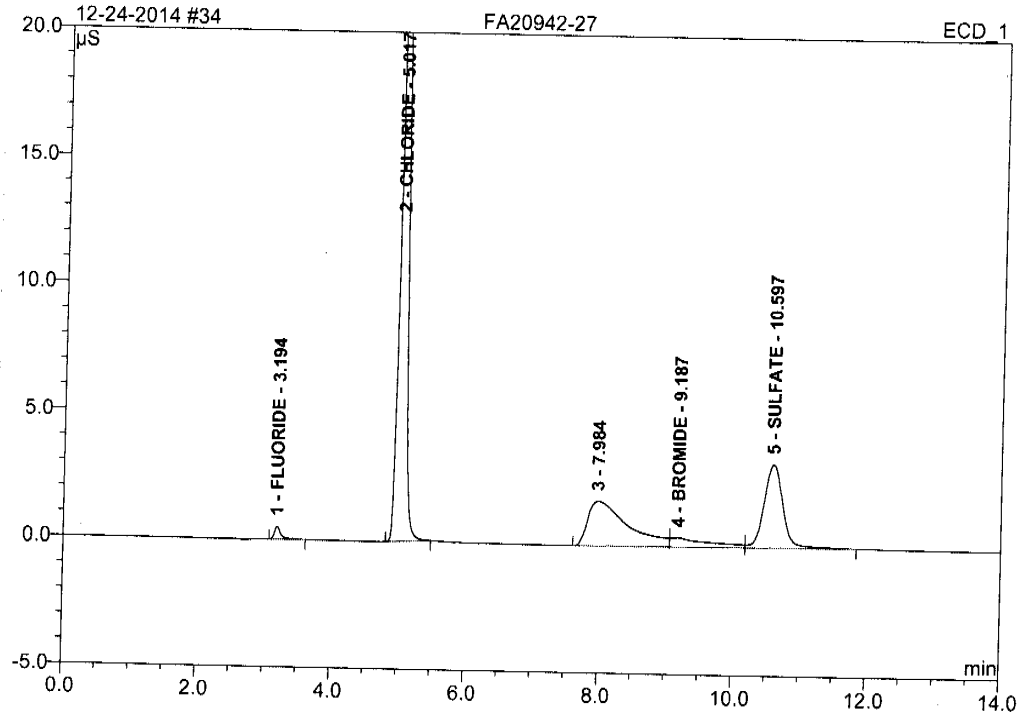
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.20	n.a.	0.219	0.081	100.00	n.a.	BMB
Total:			0.219	0.081	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

34 FA20942-27

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-27**	*Injection Volume:*	**25.0**
Vial Number:	**26**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 16:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.501	0.055	0.95	0.486	BMB
2	5.02	CHLORIDE	27.962	3.291	56.25	56.717	BMB
3	7.98	n.a.	1.737	1.201	20.52	n.a.	BM
4	9.19	BROMIDE	0.356	0.239	4.09	8.968	M
5	10.60	SULFATE	3.257	1.065	18.20	24.287	MB
Total:			33.812	5.851	100.00	90.458	

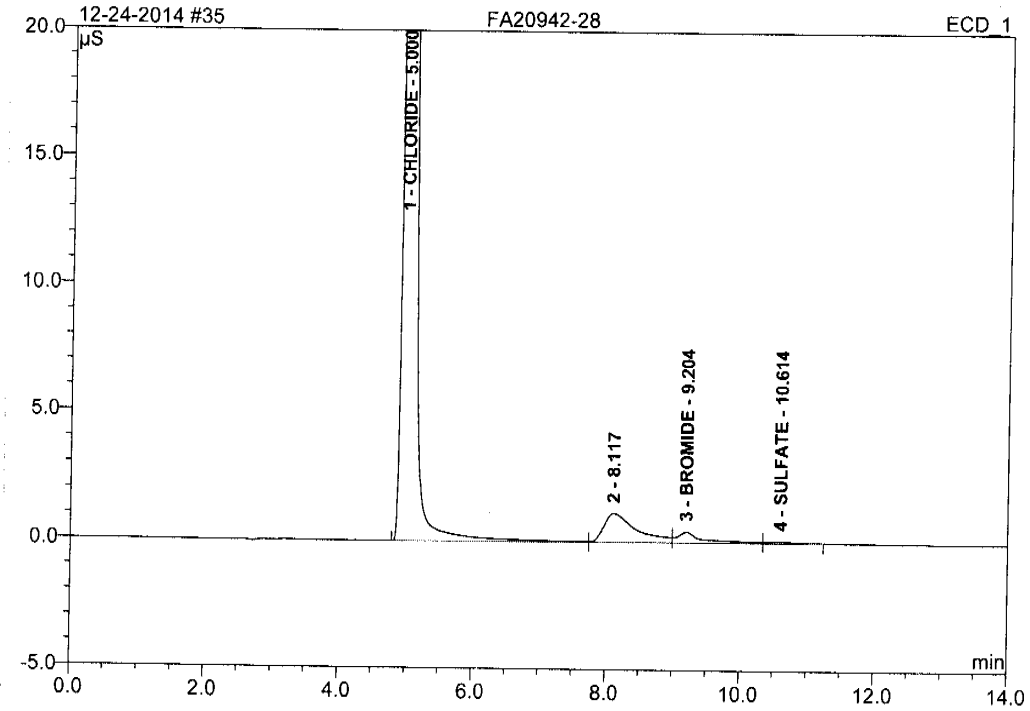
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

35 FA20942-28

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-28**	*Injection Volume:*	**25.0**
Vial Number:	**27**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 17:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



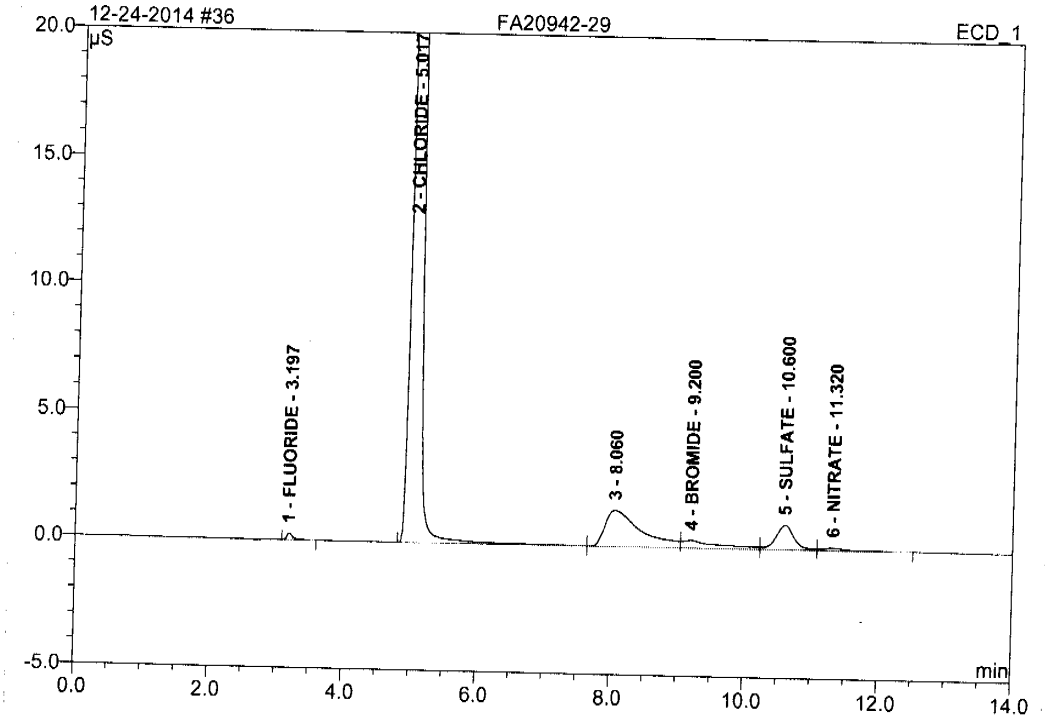
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.00	CHLORIDE	164.822	20.825	96.07	717.751	BM
2	8.12	n.a.	1.116	0.630	2.91	n.a.	M
3	9.20	BROMIDE	0.421	0.193	0.89	14.428	M
4	10.61	SULFATE	0.069	0.028	0.13	1.277	MB
Total:			166.428	21.676	100.00	733.456	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

36 FA20942-29

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-29**	*Injection Volume:*	**25.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 17:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

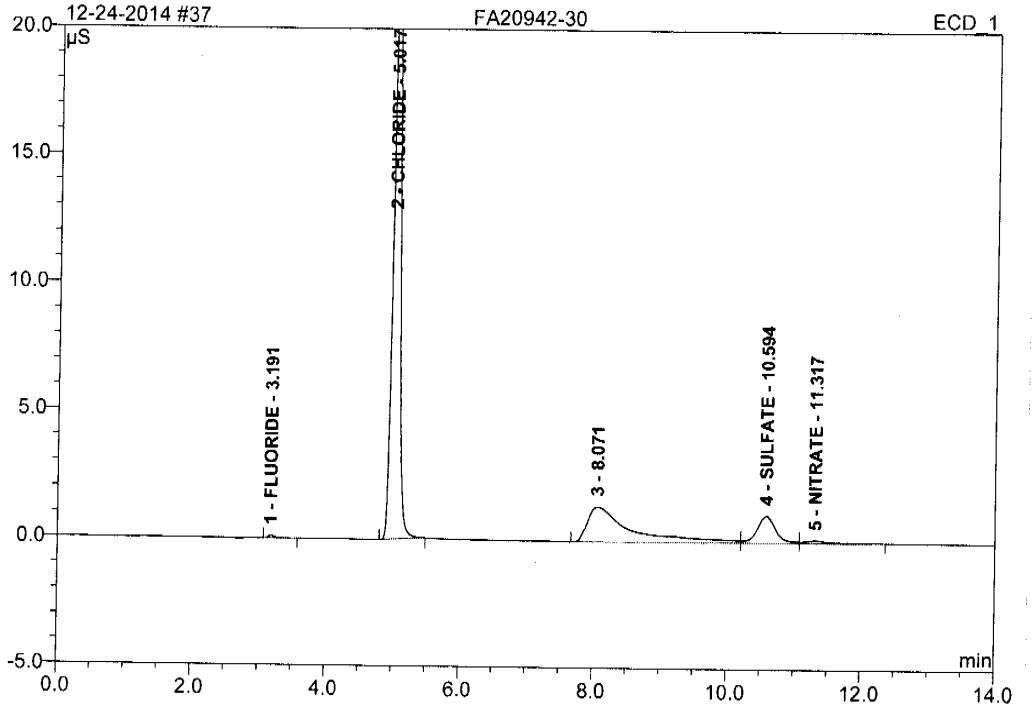


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.250	0.027	0.26	0.481	BMB
2	5.02	CHLORIDE	73.580	9.001	85.96	310.222	BM
3	8.06	n.a.	1.429	0.885	8.45	n.a.	M
4	9.20	BROMIDE	0.302	0.197	1.89	14.790	M
5	10.60	SULFATE	0.962	0.310	2.96	14.118	M
6	11.32	NITRATE	0.110	0.051	0.48	0.620	MB
Total:			76.632	10.470	100.00	340.231	

37 FA20942-30

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-30**	*Injection Volume:*	**25.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 17:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

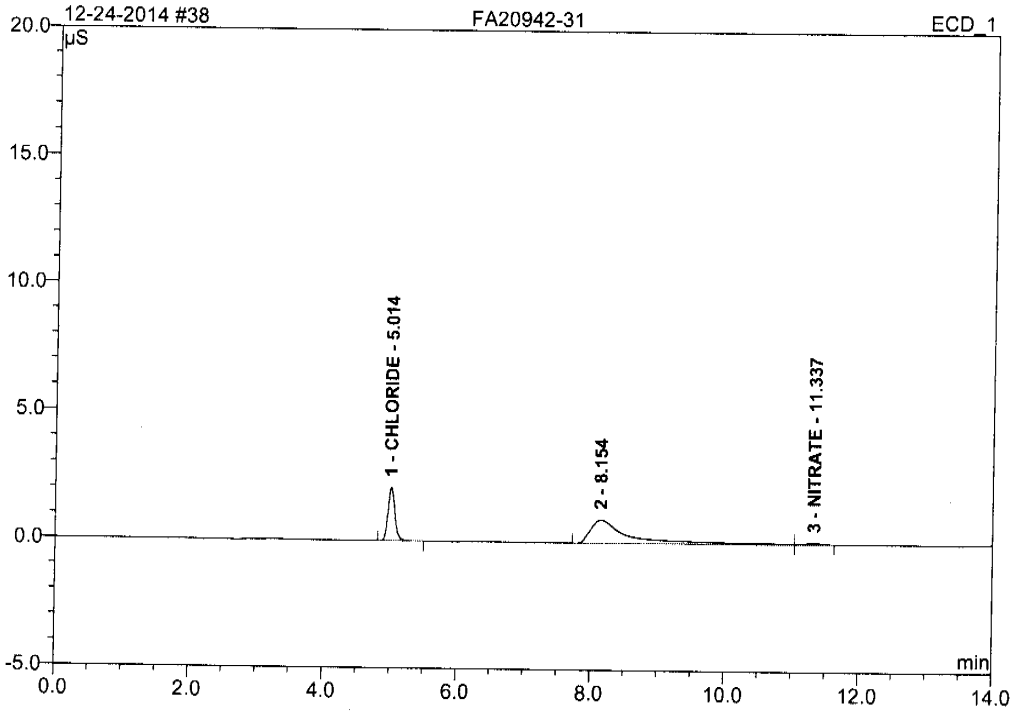


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.106	0.012	0.27	0.103	BMB
2	5.02	CHLORIDE	24.947	2.943	67.86	50.723	BMB
3	8.07	n.a.	1.348	1.004	23.15	n.a.	BM
4	10.59	SULFATE	1.053	0.334	7.70	7.622	M
5	11.32	NITRATE	0.101	0.044	1.02	0.271	MB
Total:			27.555	4.337	100.00	58.719	

38 FA20942-31

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-31**	*Injection Volume:*	**25.0**
Vial Number:	**30**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 17:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



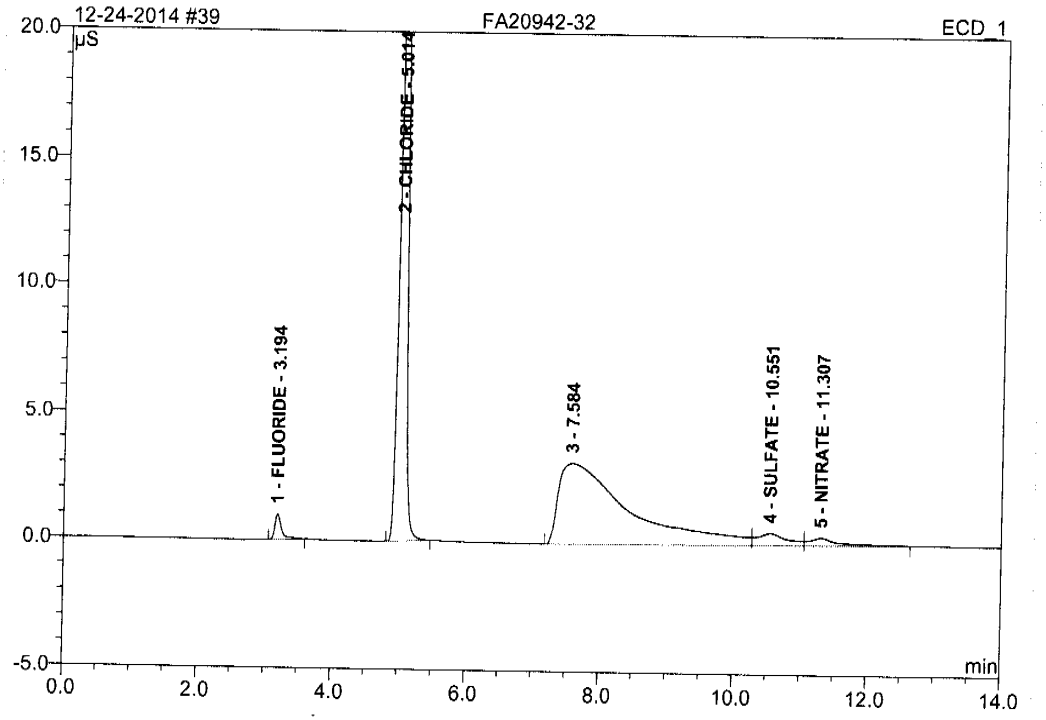
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	2.091	0.247	28.24	4.262	BMB
2	8.15	n.a.	0.908	0.612	69.94	n.a.	BM
3	11.34	NITRATE	0.059	0.016	1.81	0.097	MB
Total:			3.058	0.876	100.00	4.359	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

39 FA20942-32

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-32**	*Injection Volume:*	**25.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 18:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

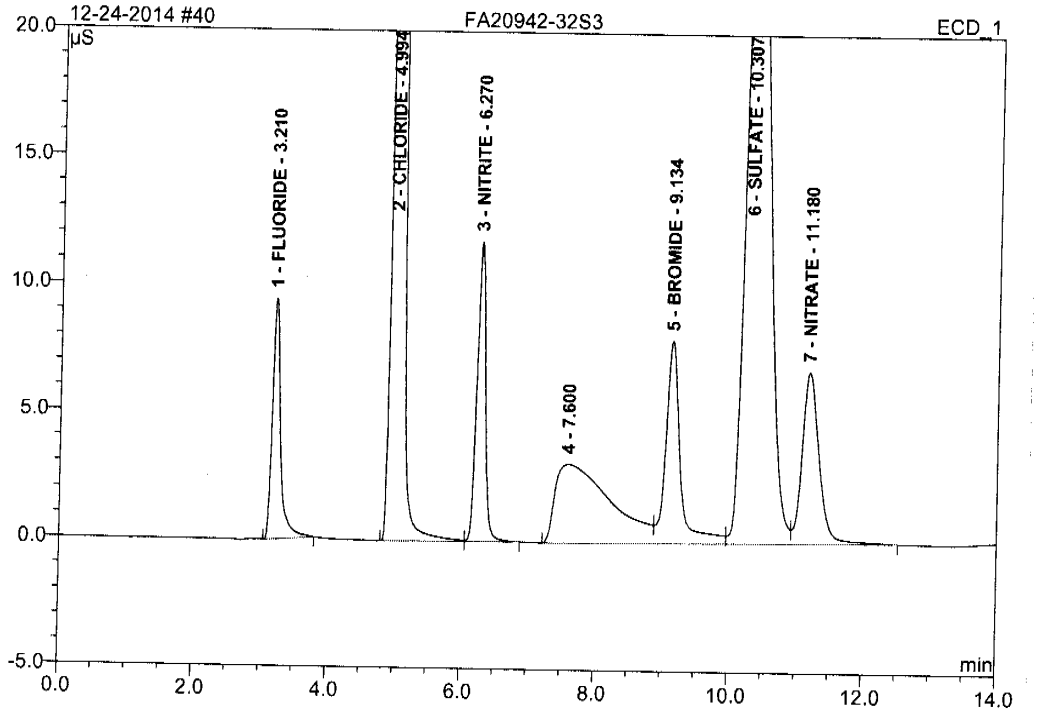


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.997	0.115	1.46	0.201	BMB
2	5.01	CHLORIDE	29.578	3.441	43.89	11.859	BMB
3	7.58	n.a.	3.190	3.893	49.66	n.a.	BM
4	10.55	SULFATE	0.468	0.239	3.04	1.088	M
5	11.31	NITRATE	0.294	0.153	1.95	0.188	MB
Total:			34.528	7.841	100.00	13.336	

40 FA20942-32S3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-32S3**	*Injection Volume:*	**25.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 18:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



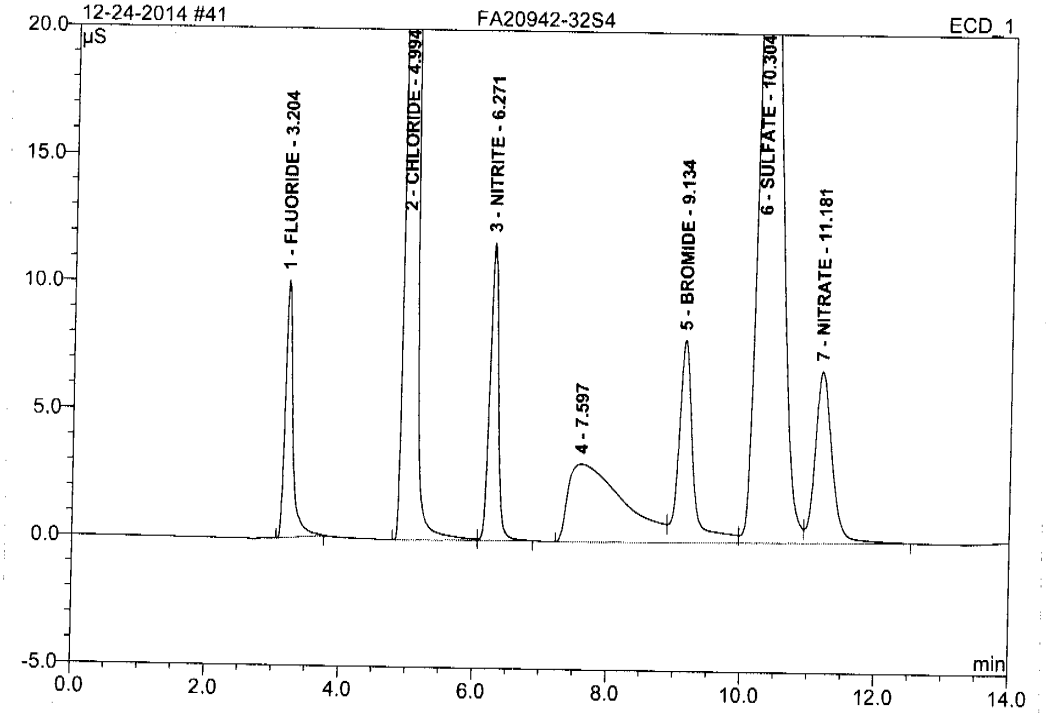
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.435	1.337	3.38	2.345	BMB
2	4.99	CHLORIDE	150.270	18.415	46.55	63.469	BM
3	6.27	NITRITE	11.737	1.735	4.39	2.208	MB
4	7.60	n.a.	3.071	2.936	7.42	n.a.	BM
5	9.13	BROMIDE	7.940	1.999	5.05	14.979	M
6	10.31	SULFATE	29.613	11.150	28.19	50.862	M
7	11.18	NITRATE	6.732	1.985	5.02	2.435	MB
Total:			218.797	39.558	100.00	136.299	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

41 FA20942-32S4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-32S4**	*Injection Volume:*	**25.0**
Vial Number:	**33**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 18:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



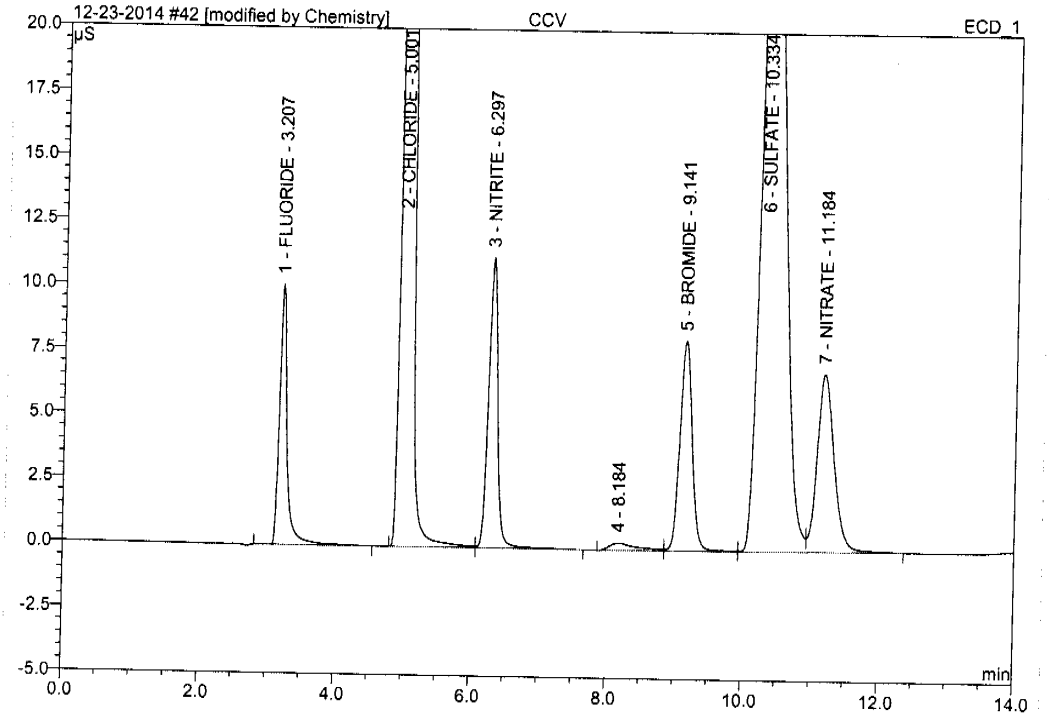
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.098	1.344	3.40	2.357	BMB
2	4.99	CHLORIDE	150.542	18.403	46.56	63.428	BM
3	6.27	NITRITE	11.692	1.734	4.39	2.206	MB
4	7.60	n.a.	3.063	2.924	7.40	n.a.	BM
5	9.13	BROMIDE	7.915	1.983	5.02	14.859	M
6	10.30	SULFATE	30.270	11.150	28.21	50.861	M
7	11.18	NITRATE	6.733	1.985	5.02	2.435	MB
Total:			220.313	39.522	100.00	136.145	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

42 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	10.076	1.328	4.03	2.328	BMB*
2	5.00	CHLORIDE	121.585	14.997	45.48	51.689	BM *
3	6.30	NITRITE	11.234	1.773	5.38	2.257	MB*
4	8.18	n.a.	0.284	0.137	0.41	n.a.	BM
5	9.14	BROMIDE	8.126	1.695	5.14	12.703	M
6	10.33	SULFATE	29.804	11.045	33.50	50.382	M
7	11.18	NITRATE	6.882	1.999	6.06	2.452	MB
Total:			187.990	32.974	100.00	121.811	

IH 12-24-2014

12/24/14

Anions/Integration

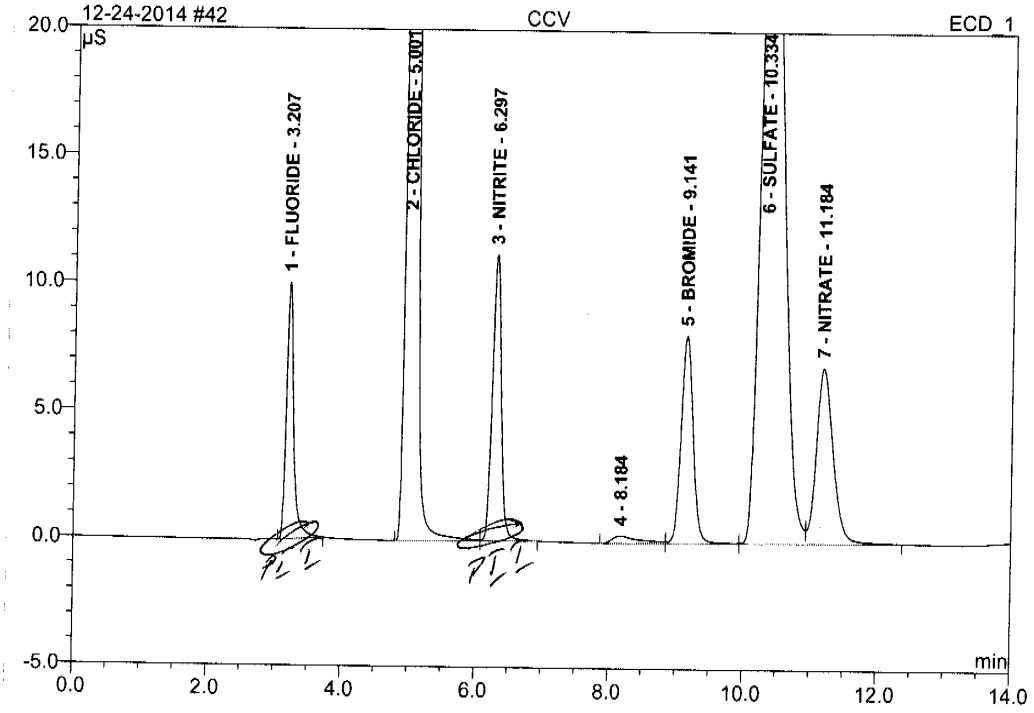
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

42 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	10.054	1.268	3.86	2.223	BMB
2	5.00	CHLORIDE	121.581	14.981	45.60	51.635	BM
3	6.30	NITRITE	11.205	1.733	5.27	2.205	MB
4	8.18	n.a.	0.284	0.137	0.42	n.a.	BM
5	9.14	BROMIDE	8.126	1.695	5.16	12.703	M
6	10.33	SULFATE	29.804	11.045	33.62	50.382	M
7	11.18	NITRATE	6.882	1.999	6.08	2.452	MB
Total:			187.936	32.857	100.00	121.600	

12-24-2014 12/24/14

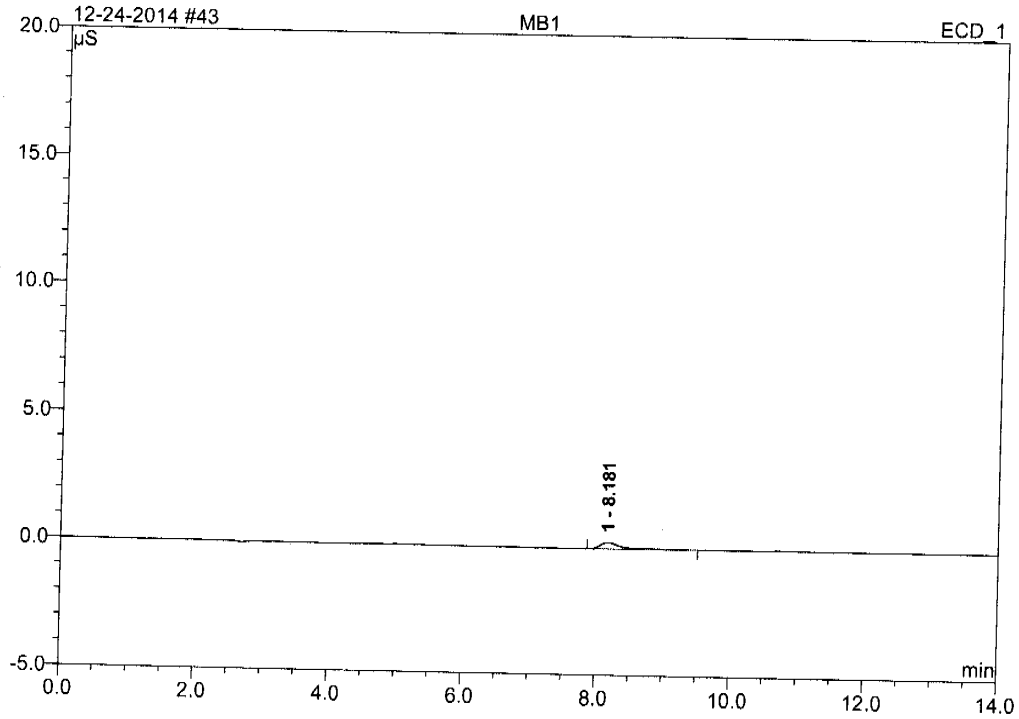
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

43 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.18	n.a.	0.251	0.092	100.00	n.a.	BMB
Total:			0.251	0.092	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

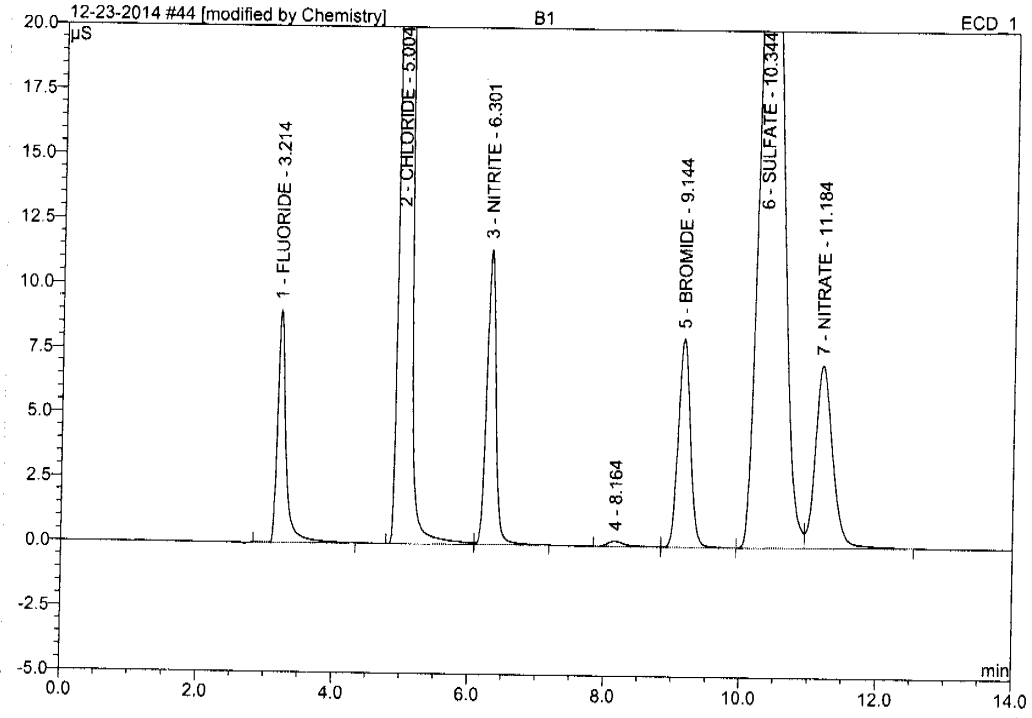
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:26 AM

44 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.007	1.291	3.89	2.263	BMB*
2	5.00	CHLORIDE	122.162	15.120	45.55	52.112	BM *
3	6.30	NITRITE	11.404	1.785	5.38	2.271	MB*
4	8.16	n.a.	0.200	0.062	0.19	n.a.	BM
5	9.14	BROMIDE	8.057	1.663	5.01	12.460	MB
6	10.34	SULFATE	29.420	11.188	33.71	51.036	BM
7	11.18	NITRATE	7.059	2.082	6.27	2.554	MB
Total:			187.308	33.190	100.00	122.696	

Th 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

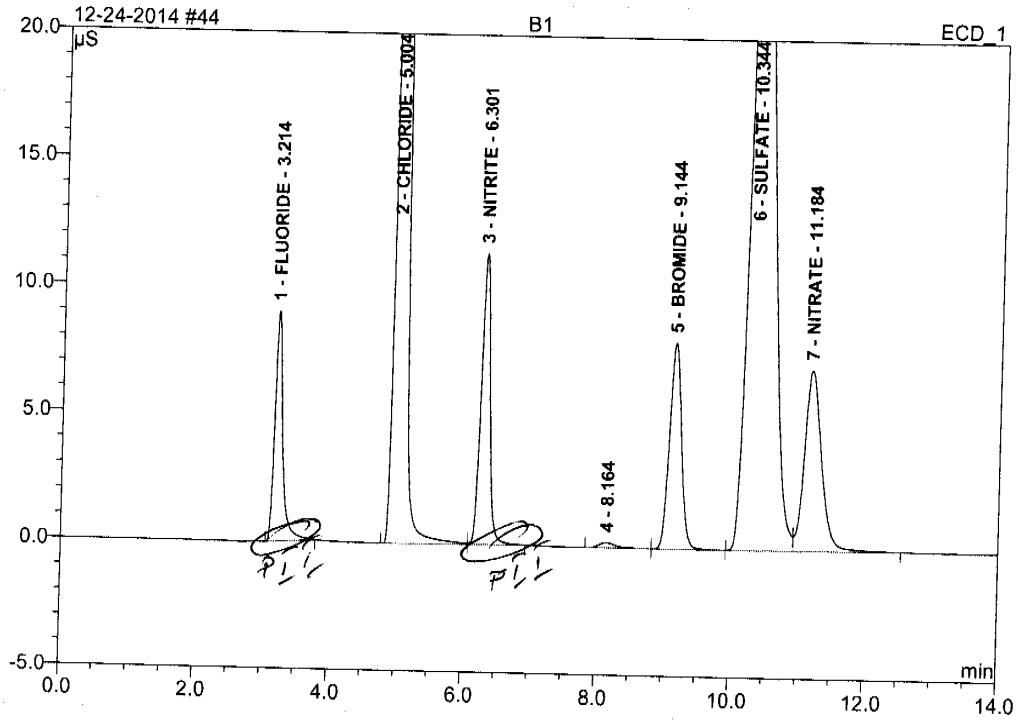
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

44 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 19:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.991	1.243	3.75	2.180	BMB
2	5.00	CHLORIDE	122.160	15.111	45.63	52.083	BM
3	6.30	NITRITE	11.389	1.767	5.34	2.249	MB
4	8.16	n.a.	0.200	0.062	0.19	n.a.	BM
5	9.14	BROMIDE	8.057	1.663	5.02	12.460	MB
6	10.34	SULFATE	29.420	11.188	33.78	51.036	BM
7	11.18	NITRATE	7.059	2.082	6.29	2.554	MB
Total:			187.275	33.117	100.00	122.561	

12-24-2014 12/24/14

Anions/Integration

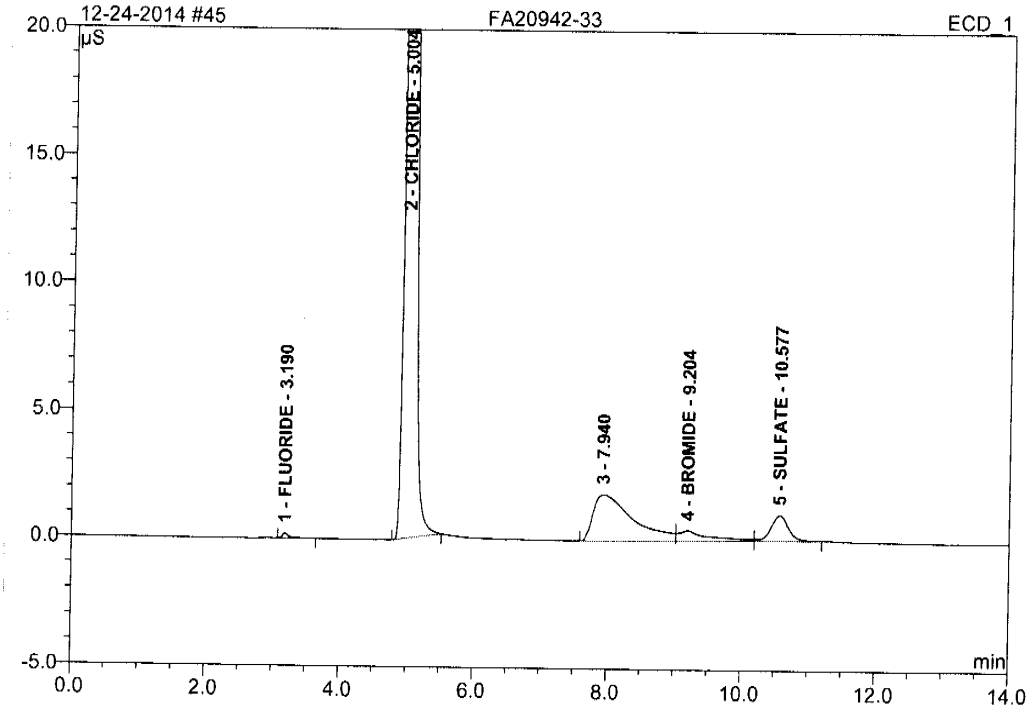
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

45 FA20942-33

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-33**	*Injection Volume:*	**25.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 19:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



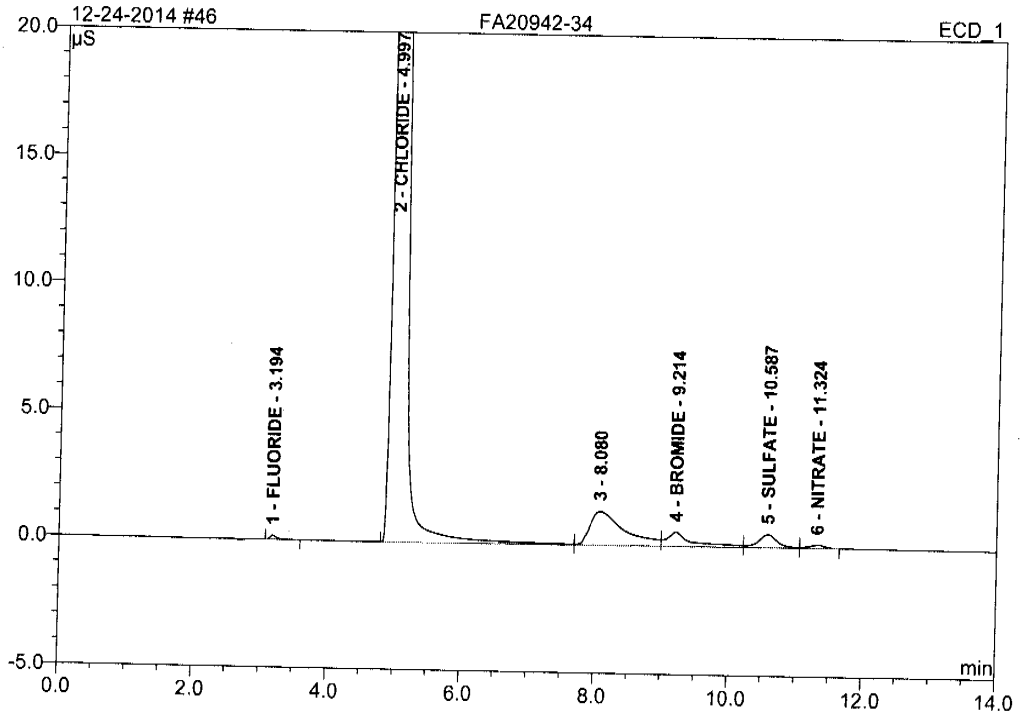
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.194	0.022	0.14	0.192	BMB
2	5.00	CHLORIDE	117.075	14.316	88.75	246.710	BMB
3	7.94	n.a.	1.834	1.259	7.80	n.a.	BM
4	9.20	BROMIDE	0.407	0.226	1.40	8.450	M
5	10.58	SULFATE	1.020	0.308	1.91	7.030	MB
Total:			120.530	16.130	100.00	262.382	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

46 FA20942-34

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20942-34**	*Injection Volume:*	**25.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 20:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.158	0.018	0.07	0.314	BMB
2	5.00	CHLORIDE	202.739	25.997	95.39	896.003	BM
3	8.08	n.a.	1.312	0.784	2.88	n.a.	M
4	9.21	BROMIDE	0.557	0.249	0.92	18.692	M
5	10.59	SULFATE	0.505	0.169	0.62	7.725	M
6	11.32	NITRATE	0.124	0.035	0.13	0.429	MB
Total:			205.394	27.252	100.00	923.164	

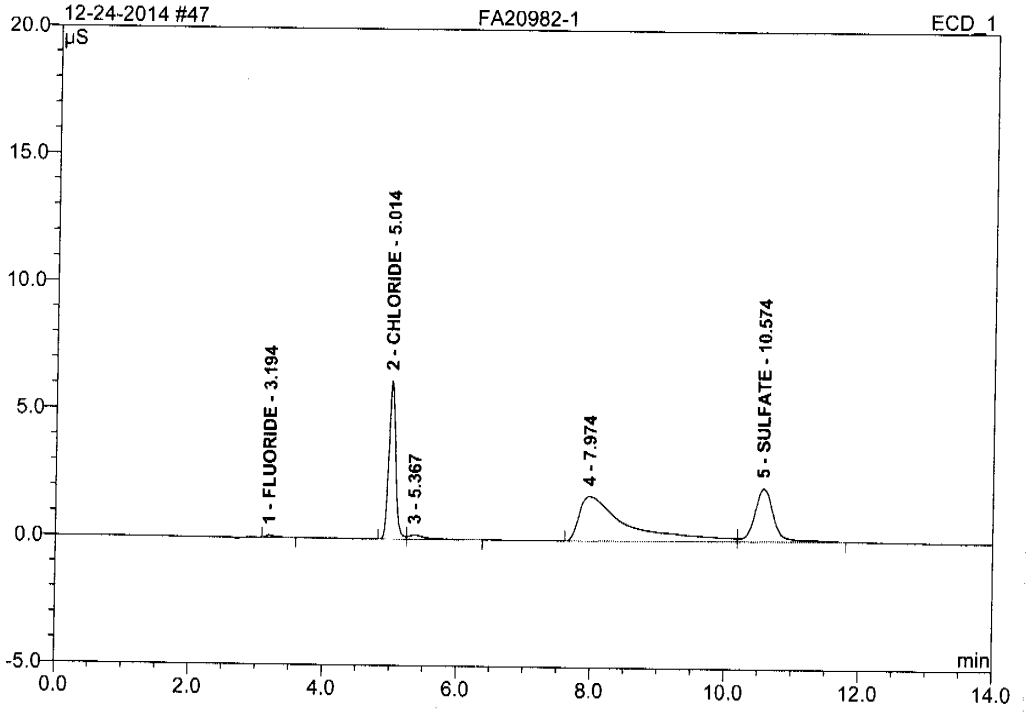
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

47 FA20982-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-1**	*Injection Volume:*	**25.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 20:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

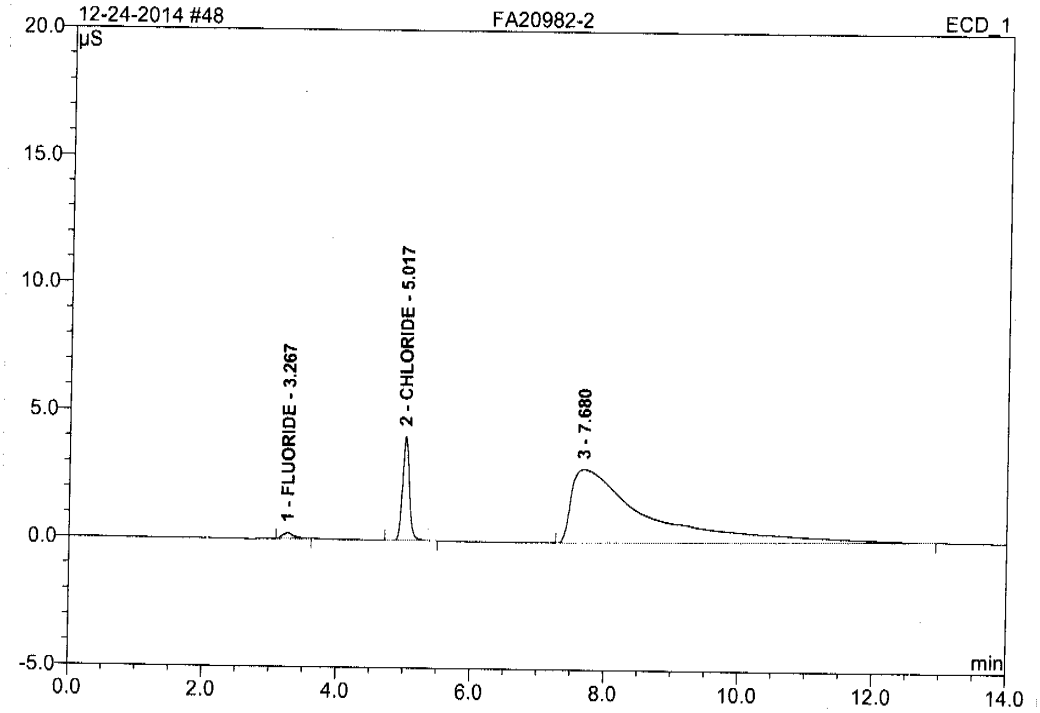


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.098	0.015	0.51	0.131	BMB
2	5.01	CHLORIDE	6.191	0.729	24.84	12.563	BM
3	5.37	n.a.	0.171	0.051	1.75	n.a.	MB
4	7.97	n.a.	1.738	1.448	49.35	n.a.	BM
5	10.57	SULFATE	2.076	0.691	23.55	15.763	MB
Total:			10.273	2.935	100.00	28.456	

48 FA20982-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-2**	*Injection Volume:*	**25.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 20:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.27	FLUORIDE	0.235	0.044	1.03	0.156	BMB
2	5.02	CHLORIDE	4.074	0.479	11.10	3.302	BMB
3	7.68	n.a.	2.883	3.791	87.87	n.a.	BMB
Total:			7.191	4.314	100.00	3.458	

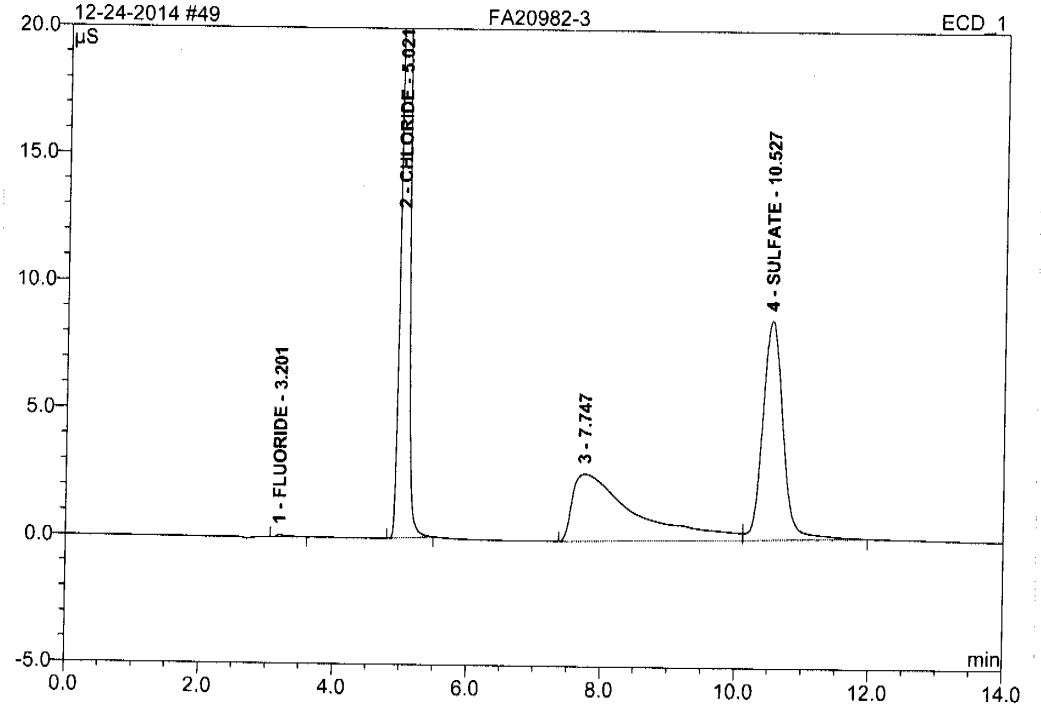
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

49 FA20982-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-3**	*Injection Volume:*	**25.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**2.0000**
Recording Time:	**12/23/2014 21:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	0.090	0.014	0.13	0.047	BMB
2	5.02	CHLORIDE	40.333	4.764	44.61	32.836	BMB
3	7.75	n.a.	2.630	2.862	26.81	n.a.	BM
4	10.53	SULFATE	8.581	3.038	28.45	27.716	MB
Total:			51.634	10.677	100.00	60.600	

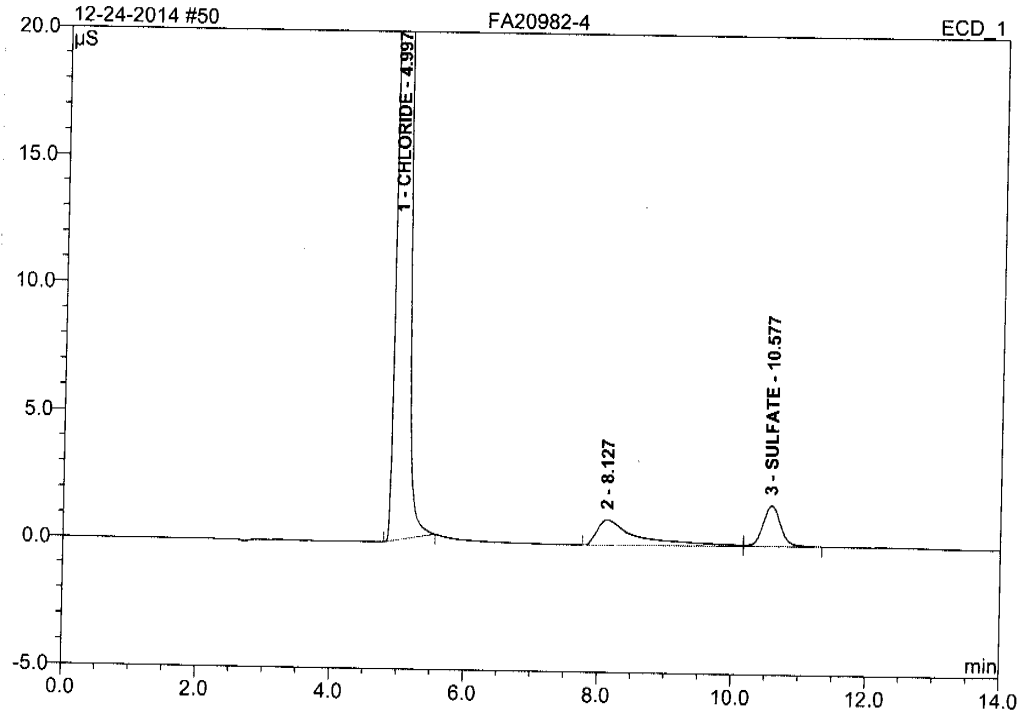
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

50 FA20982-4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-4**	*Injection Volume:*	**25.0**
Vial Number:	**42**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 21:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



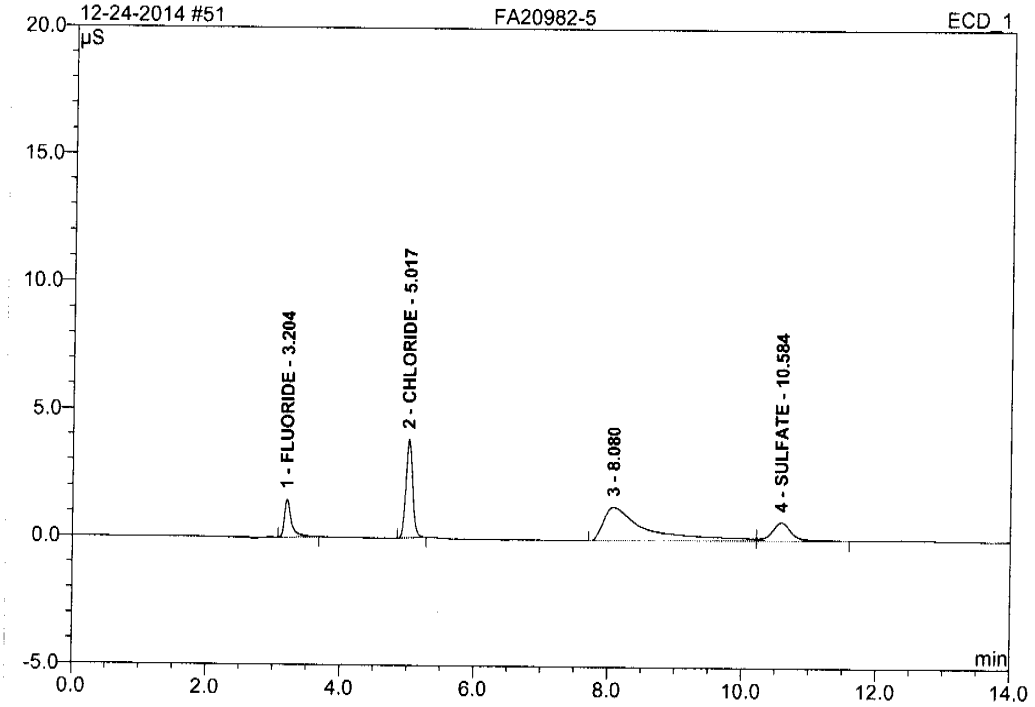
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.00	CHLORIDE	160.124	19.964	94.32	688.075	BMB
2	8.13	n.a.	1.003	0.707	3.34	n.a.	BM
3	10.58	SULFATE	1.608	0.497	2.35	22.649	MB
Total:			162.735	21.167	100.00	710.724	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

51 FA20982-5

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20982-5**	*Injection Volume:*	**25.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 21:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



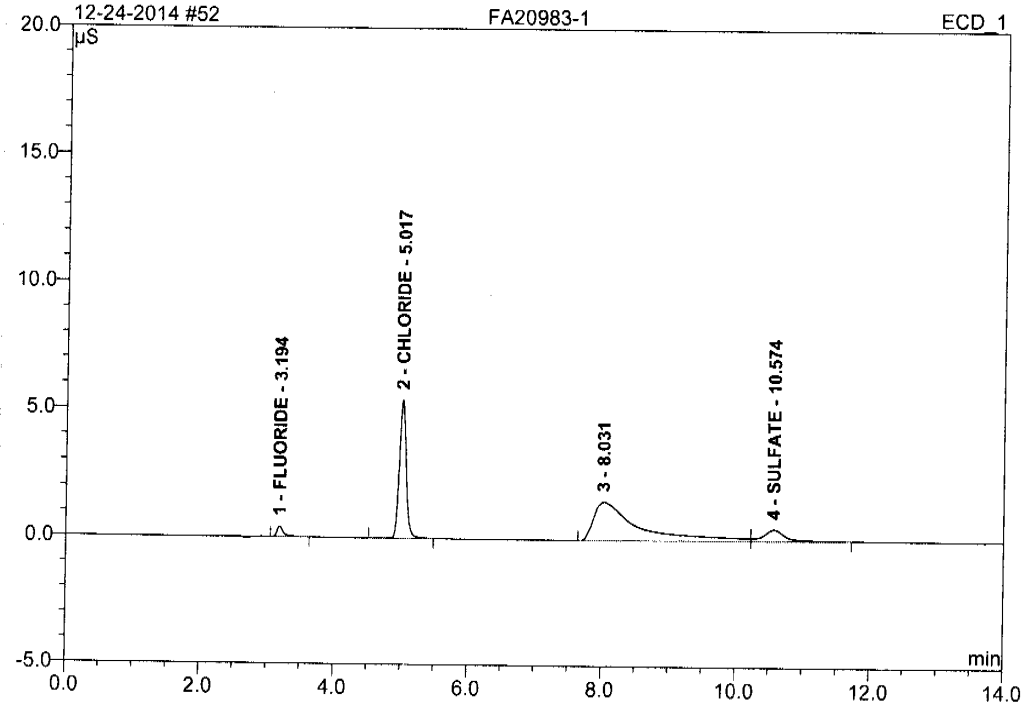
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	1.475	0.178	9.68	1.557	BMB
2	5.02	CHLORIDE	3.859	0.447	24.38	7.707	BMB
3	8.08	n.a.	1.297	0.965	52.58	n.a.	BM
4	10.58	SULFATE	0.719	0.245	13.36	5.590	MB
Total:			7.350	1.835	100.00	14.855	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

52 FA20983-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20983-1**	*Injection Volume:*	**25.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 21:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.414	0.046	2.25	0.401	BMB
2	5.02	CHLORIDE	5.394	0.640	31.52	11.029	BMB
3	8.03	n.a.	1.503	1.169	57.56	n.a.	BM
4	10.57	SULFATE	0.456	0.176	8.67	4.014	MB
Total:			7.767	2.030	100.00	15.444	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

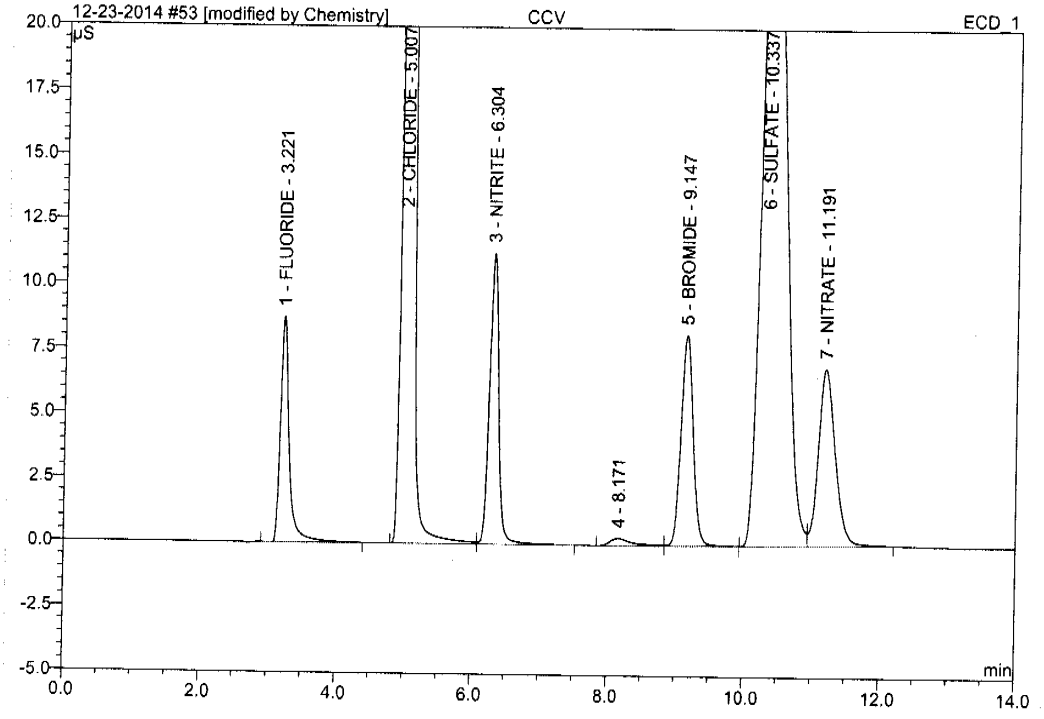
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:32 AM

53 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.730	1.314	3.98	2.304	BMB*
2	5.01	CHLORIDE	121.155	15.062	45.64	51.911	BM *
3	6.30	NITRITE	11.258	1.777	5.38	2.261	MB*
4	8.17	n.a.	0.283	0.108	0.33	n.a.	BM
5	9.15	BROMIDE	8.161	1.692	5.13	12.677	MB
6	10.34	SULFATE	29.047	11.059	33.51	50.446	BM
7	11.19	NITRATE	6.864	1.986	6.02	2.436	MB
Total:			185.498	32.997	100.00	122.035	

12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

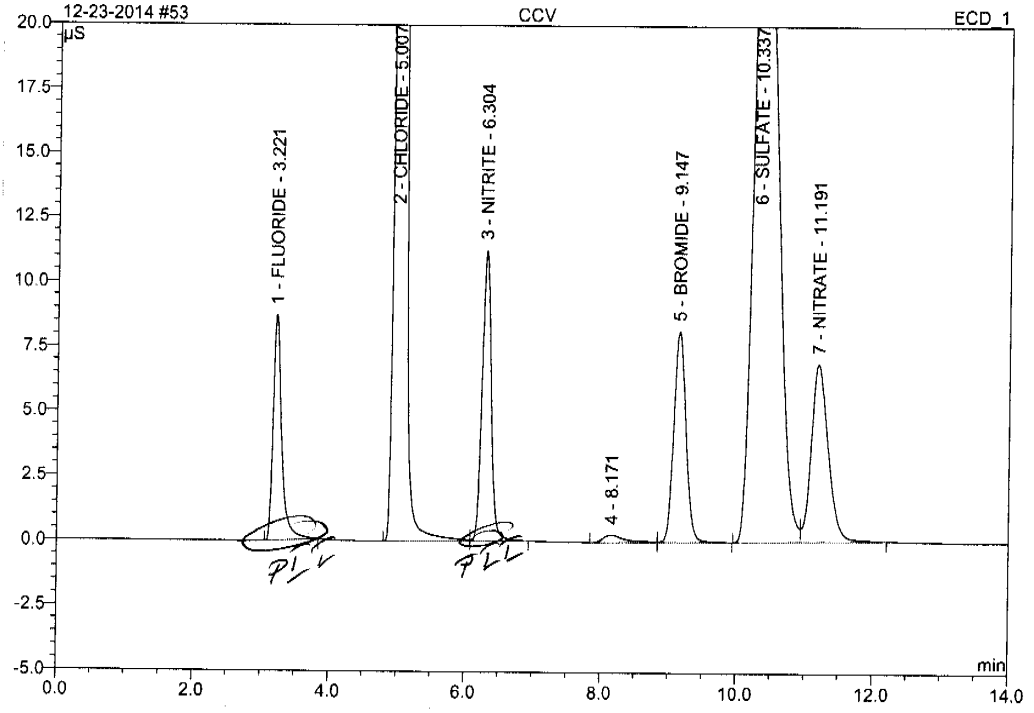
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:33 AM

53 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	8.721	1.274	3.87	2.234	BMB
2	5.01	CHLORIDE	121.151	15.046	45.73	51.858	BM
3	6.30	NITRITE	11.230	1.740	5.29	2.214	MB
4	8.17	n.a.	0.283	0.108	0.33	n.a.	BM
5	9.15	BROMIDE	8.161	1.692	5.14	12.677	MB
6	10.34	SULFATE	29.047	11.059	33.61	50.446	BM
7	11.19	NITRATE	6.864	1.986	6.04	2.436	MB
Total:			185.457	32.905	100.00	121.865	

14 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

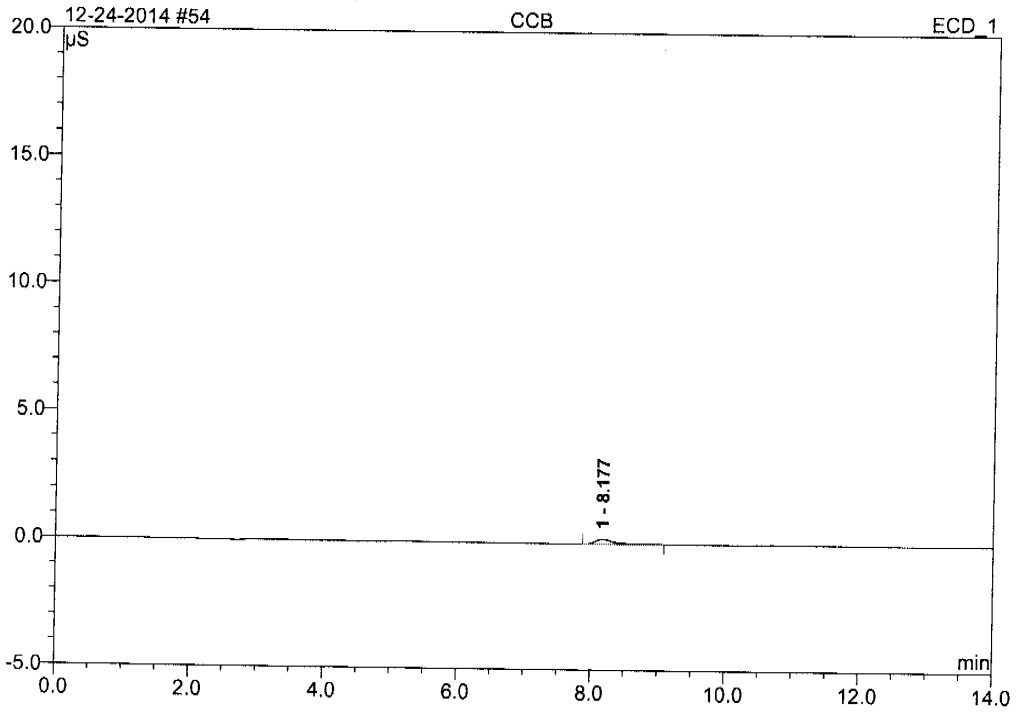
11.1 11

ACCUTEST LABORATORIES
FA20579

54 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 22:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.18	n.a.	0.184	0.062	100.00	n.a.	BMB
Total:			0.184	0.062	100.00	0.000	

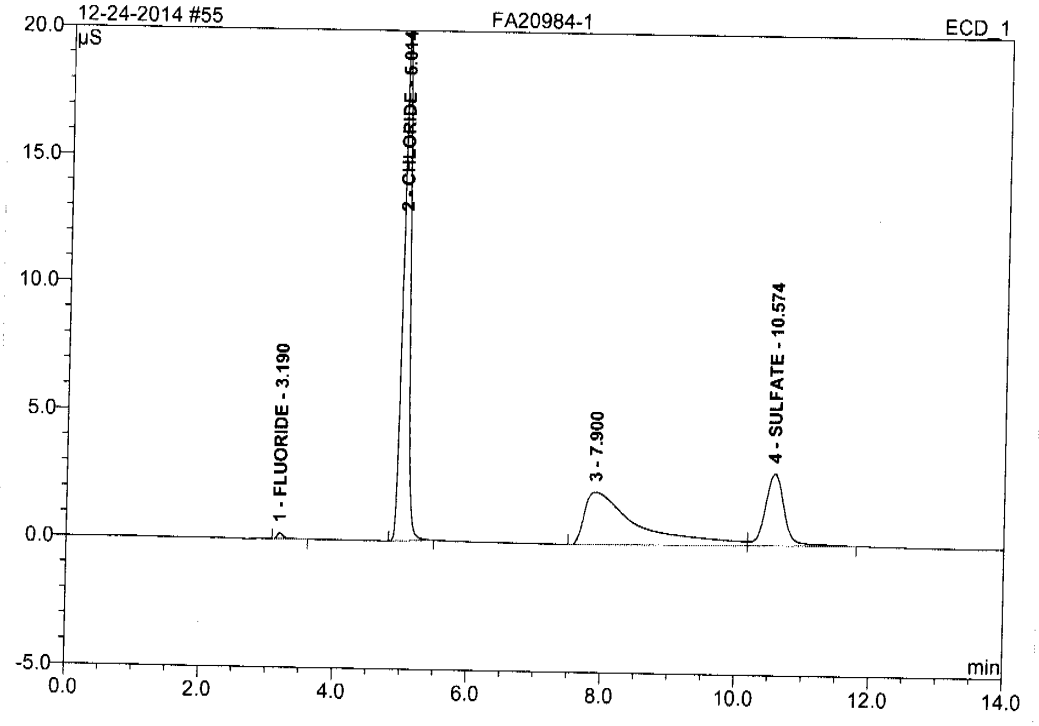
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

55 FA20984-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20984-1**	*Injection Volume:*	**25.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 22:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.233	0.026	0.50	0.228	BMB
2	5.01	CHLORIDE	20.283	2.388	45.81	41.157	BMB
3	7.90	n.a.	2.054	1.865	35.76	n.a.	BM
4	10.57	SULFATE	2.841	0.935	17.93	21.323	MB
Total:			25.410	5.214	100.00	62.708	

Anions/Integration

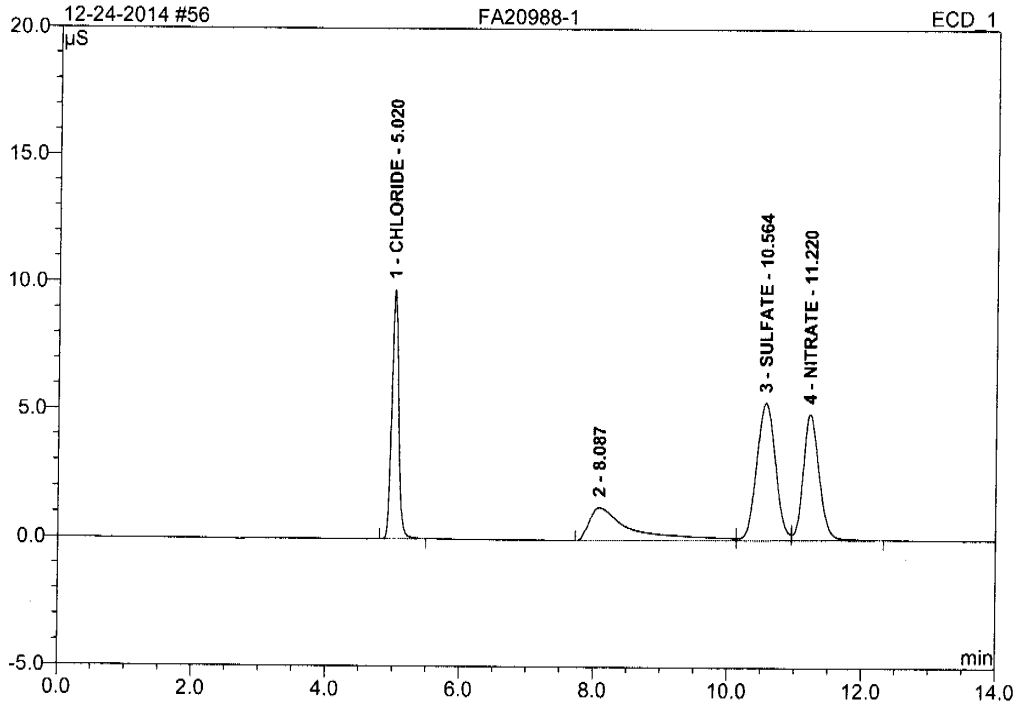
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

56 FA20988-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-1**	*Injection Volume:*	**25.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**5.0000**
Recording Time:	**12/23/2014 23:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



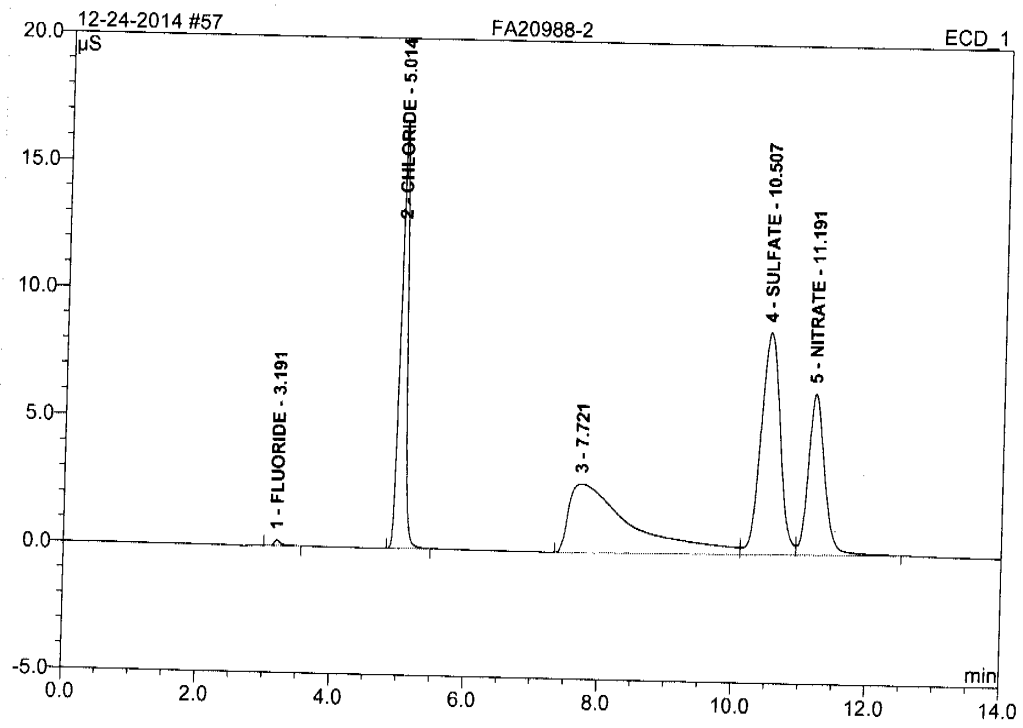
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.02	CHLORIDE	9.735	1.148	22.22	19.780	BMB
2	8.09	n.a.	1.270	0.928	17.97	n.a.	BM
3	10.56	SULFATE	5.338	1.737	33.61	39.608	M
4	11.22	NITRATE	4.898	1.354	26.20	8.302	MB
Total:			21.240	5.166	100.00	67.690	

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

57 FA20988-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-2**	*Injection Volume:*	**25.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 23:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.217	0.025	0.26	0.043	BMB
2	5.01	CHLORIDE	16.713	1.951	20.36	6.725	BMB
3	7.72	n.a.	2.707	2.928	30.55	n.a.	BM
4	10.51	SULFATE	8.699	2.881	30.06	13.143	M
5	11.19	NITRATE	6.309	1.800	18.78	2.208	MB
Total:			34.645	9.584	100.00	22.119	

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

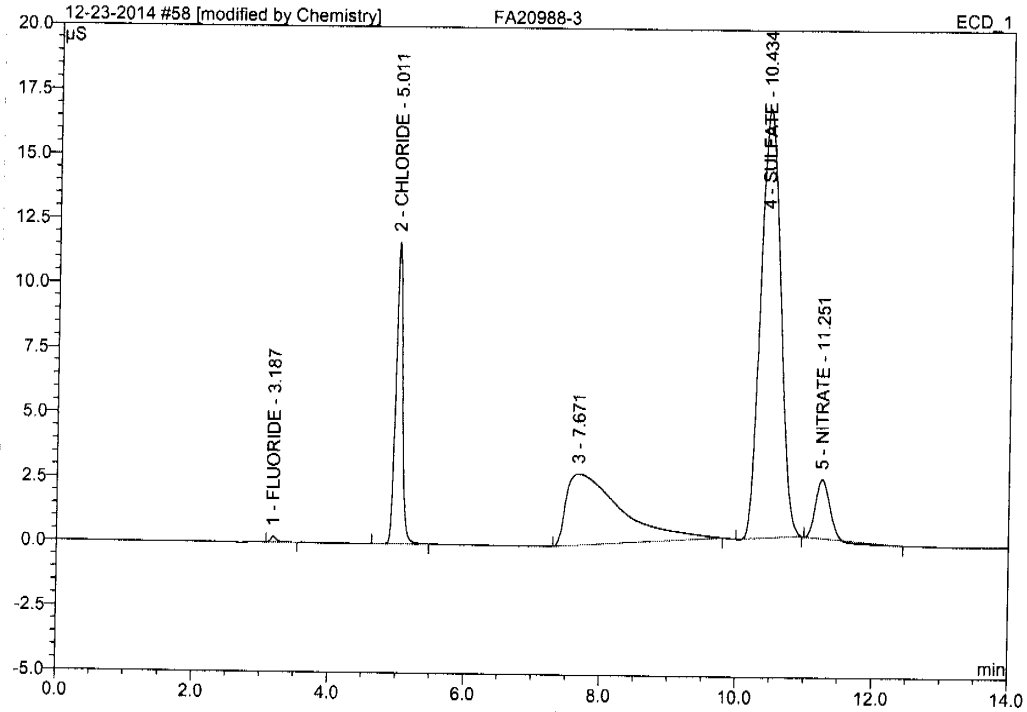
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:37 AM

58 FA20988-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3**	*Injection Volume:*	**25.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 23:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.239	0.026	0.26	0.046	BMB
2	5.01	CHLORIDE	11.685	1.363	13.48	4.699	BMB
3	7.67	n.a.	2.775	2.601	25.72	n.a.	BMB*
4	10.43	SULFATE	16.607	5.611	55.48	25.595	BMB*
5	11.25	NITRATE	2.294	0.511	5.06	0.627	BMB*
Total:			33.600	10.113	100.00	30.967	

VK 12-24-2014 12/24/14

Anions/Integration

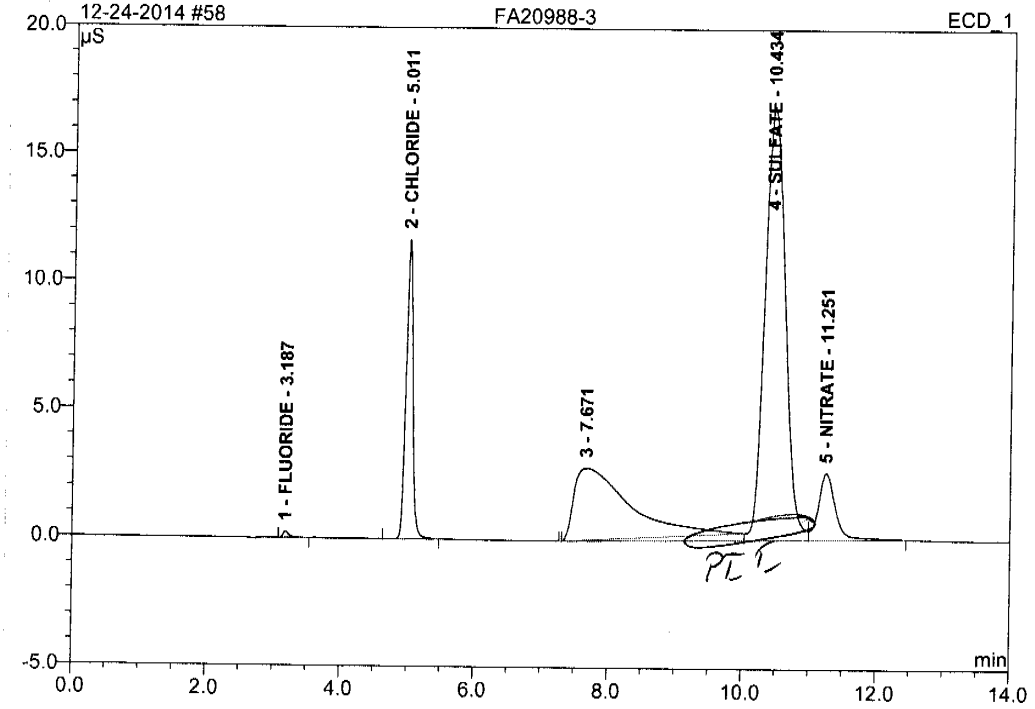
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

58 FA20988-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3**	*Injection Volume:*	**25.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/23/2014 23:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.239	0.026	0.23	0.046	BMB
2	5.01	CHLORIDE	11.685	1.363	12.17	4.699	BMB
3	7.67	n.a.	2.787	2.714	24.22	n.a.	Ru
4	10.43	SULFATE	16.942	6.321	56.42	28.833	BM
5	11.25	NITRATE	2.596	0.778	6.95	0.955	MB
Total:			34.248	11.202	100.00	34.532	

VL 12-24-2014

12/24/14

Anions/Integration

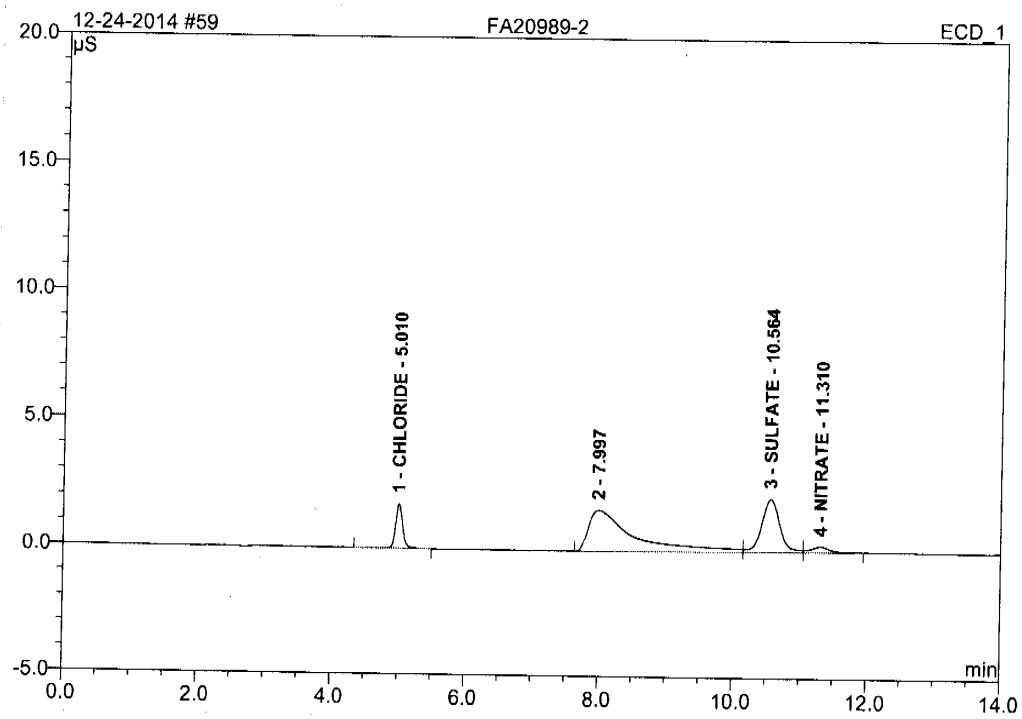
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

59 FA20989-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20989-2**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/23/2014 23:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

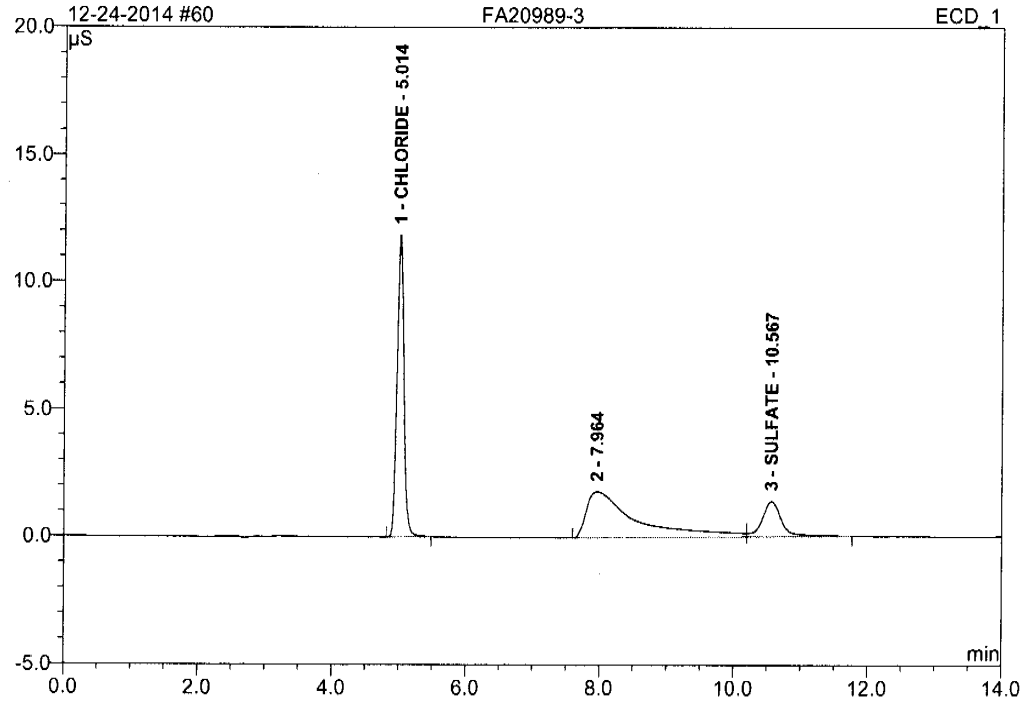


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	1.754	0.215	9.75	7.424	BMB
2	8.00	n.a.	1.611	1.266	57.31	n.a.	BM
3	10.56	SULFATE	2.088	0.654	29.58	29.815	M
4	11.31	NITRATE	0.227	0.074	3.36	0.910	MB
Total:			5.680	2.209	100.00	38.148	

60 FA20989-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20989-3**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**10.0000**
Recording Time:	**12/24/2014 0:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



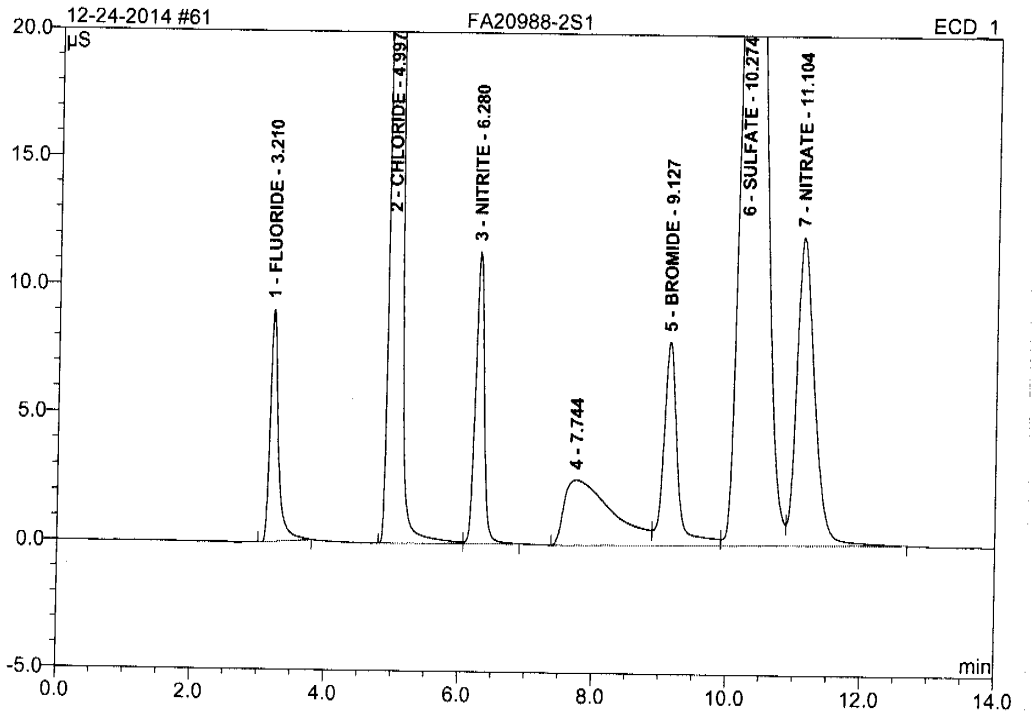
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.01	CHLORIDE	11.853	1.397	41.29	48.160	BMB
2	7.96	n.a.	1.788	1.526	45.10	n.a.	BM
3	10.57	SULFATE	1.372	0.461	13.61	21.019	MB
Total:			15.013	3.384	100.00	69.179	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

61 FA20988-2S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-2S1**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 0:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

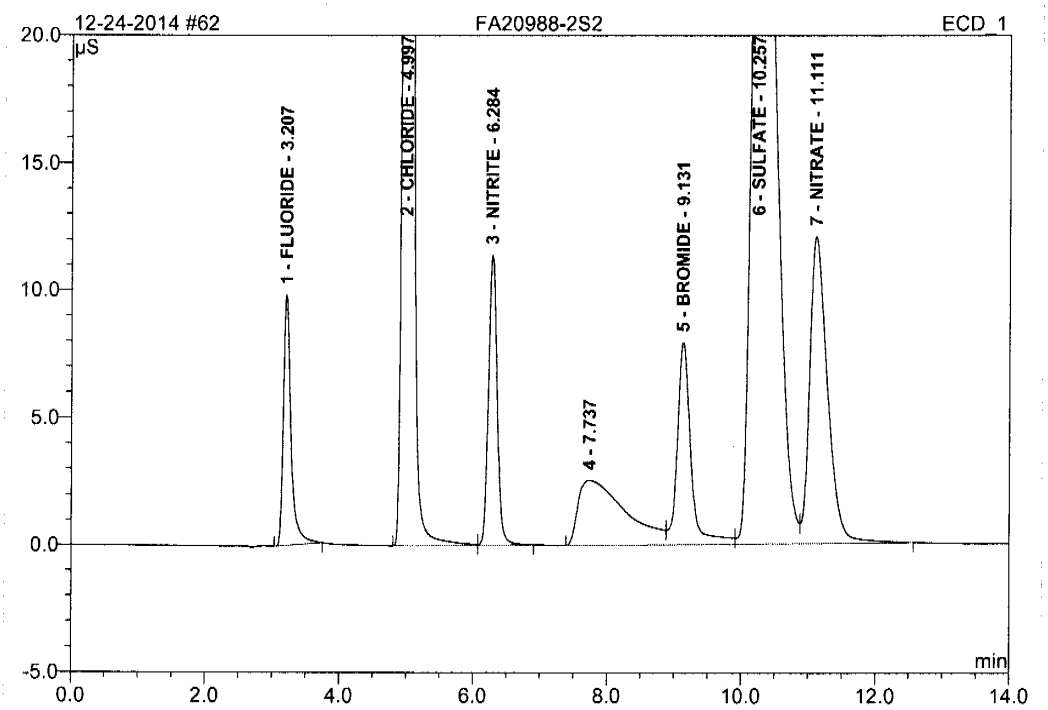


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.043	1.284	3.11	2.251	BMB
2	5.00	CHLORIDE	136.936	16.844	40.75	58.055	BM
3	6.28	NITRITE	11.376	1.715	4.15	2.182	MB
4	7.74	n.a.	2.553	2.120	5.13	n.a.	BM
5	9.13	BROMIDE	7.921	1.891	4.58	14.171	M
6	10.27	SULFATE	35.341	13.755	33.28	62.743	M
7	11.10	NITRATE	12.018	3.726	9.01	4.570	MB
Total:			215.188	41.334	100.00	143.974	

62 FA20988-2S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-2S2**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 0:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



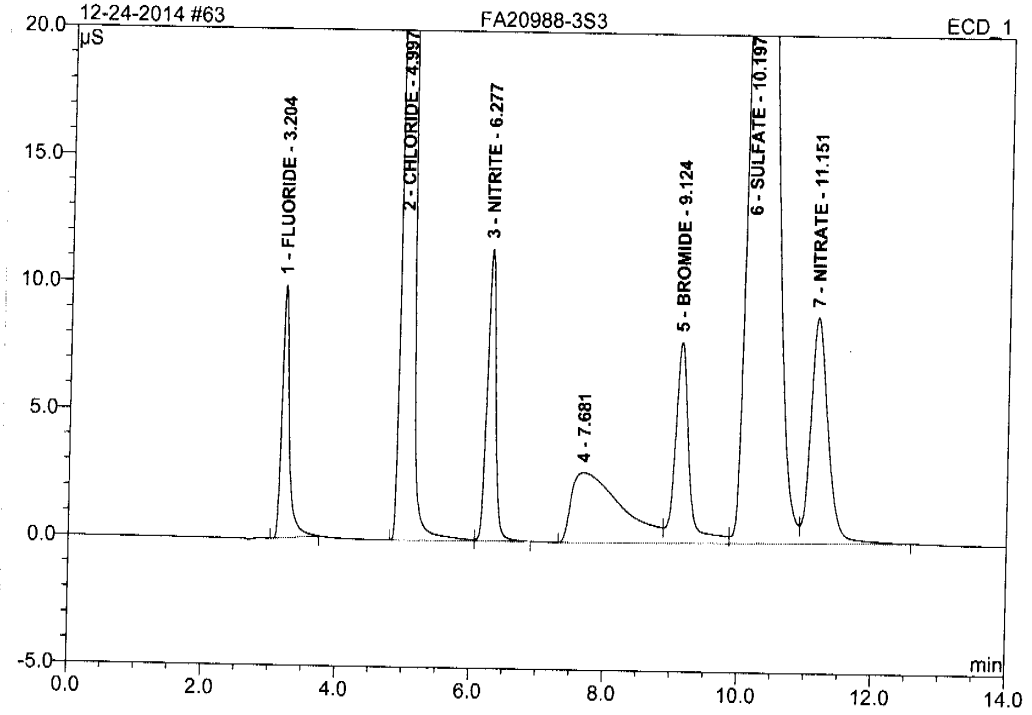
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.826	1.291	3.13	2.264	BMB
2	5.00	CHLORIDE	137.343	16.827	40.76	57.996	BM
3	6.28	NITRITE	11.372	1.708	4.14	2.173	MB
4	7.74	n.a.	2.549	2.103	5.09	n.a.	BM
5	9.13	BROMIDE	7.904	1.873	4.54	14.037	M
6	10.26	SULFATE	35.973	13.773	33.36	62.828	M
7	11.11	NITRATE	12.033	3.707	8.98	4.548	MB
Total:			217.001	41.283	100.00	143.846	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

63 FA20988-3S3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3S3**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	9.919	1.277	2.97	2.239	BMB
2	5.00	CHLORIDE	133.331	16.300	37.98	56.180	BM
3	6.28	NITRITE	11.441	1.713	3.99	2.180	MB
4	7.68	n.a.	2.738	2.368	5.52	n.a.	BM
5	9.12	BROMIDE	7.894	1.875	4.37	14.049	M
6	10.20	SULFATE	41.547	16.721	38.96	76.274	M
7	11.15	NITRATE	8.879	2.667	6.21	3.272	MB
Total:			215.750	42.921	100.00	154.194	

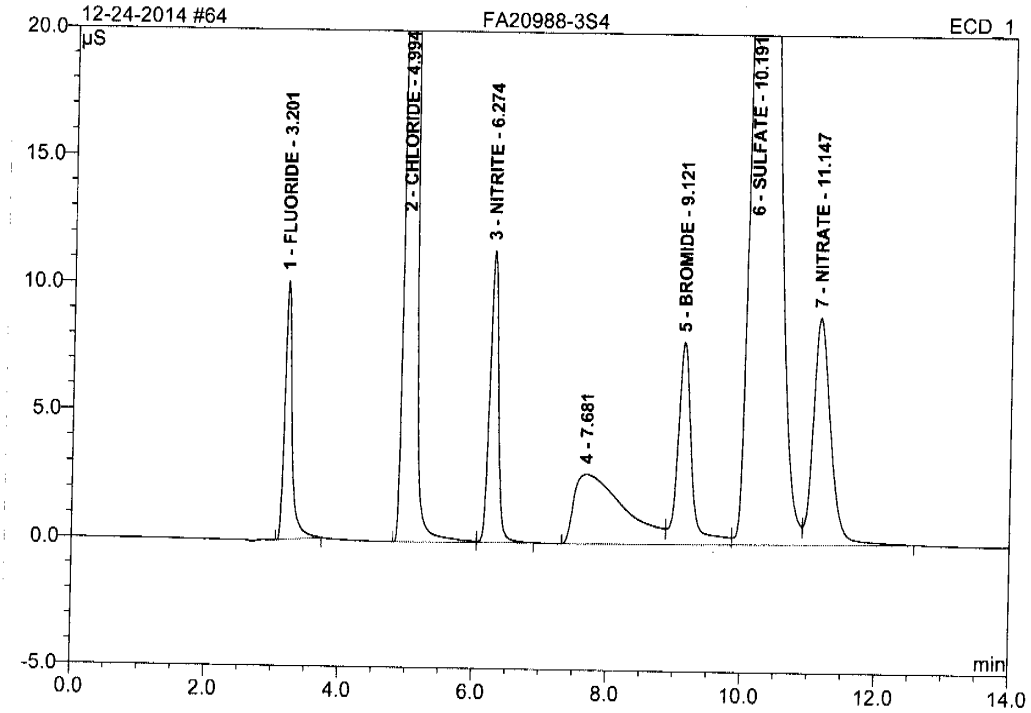
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

64 FA20988-3S4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20988-3S4**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.138	1.282	2.99	2.248	BMB
2	4.99	CHLORIDE	133.120	16.269	37.92	56.074	BM
3	6.27	NITRITE	11.421	1.711	3.99	2.178	MB
4	7.68	n.a.	2.735	2.367	5.52	n.a.	BM
5	9.12	BROMIDE	7.894	1.879	4.38	14.080	M
6	10.19	SULFATE	41.836	16.722	38.97	76.276	M
7	11.15	NITRATE	8.875	2.674	6.23	3.280	MB
Total:			216.019	42.904	100.00	154.137	

Anions/Integration

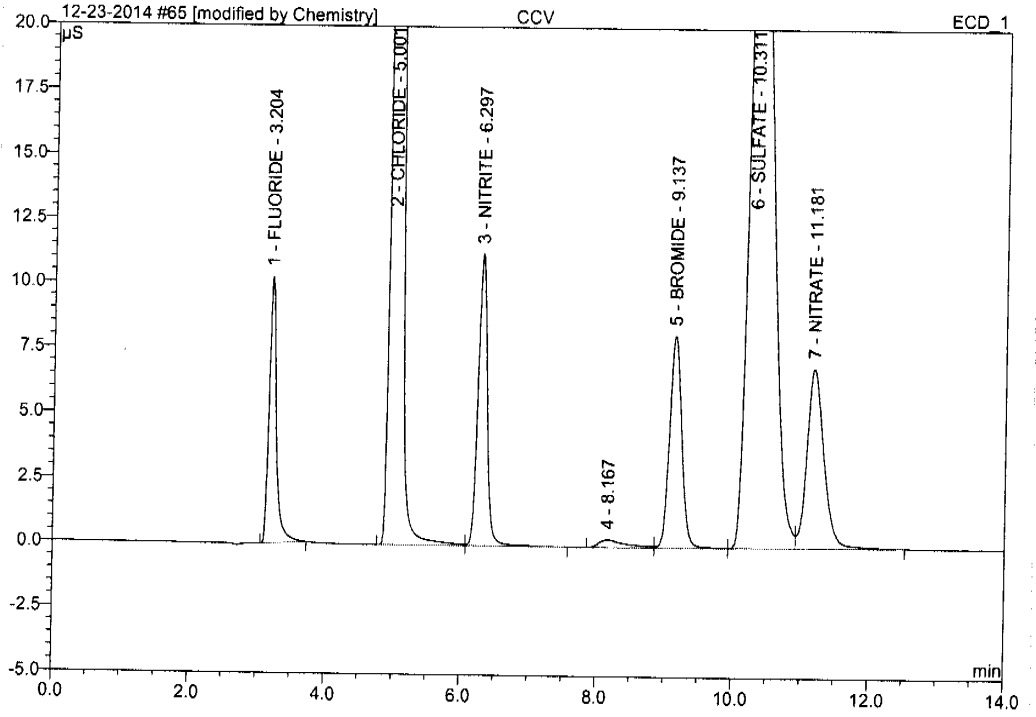
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

65 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.268	1.285	3.88	2.253	BMB
2	5.00	CHLORIDE	121.933	15.062	45.47	51.911	BM *
3	6.30	NITRITE	11.256	1.772	5.35	2.255	MB*
4	8.17	n.a.	0.309	0.144	0.43	n.a.	BM
5	9.14	BROMIDE	8.156	1.698	5.13	12.725	M
6	10.31	SULFATE	30.232	11.135	33.62	50.794	M
7	11.18	NITRATE	6.922	2.030	6.13	2.490	MB
Total:			189.076	33.125	100.00	122.429	

Mh 12-24-2014

12/24/14

Anions/Integration

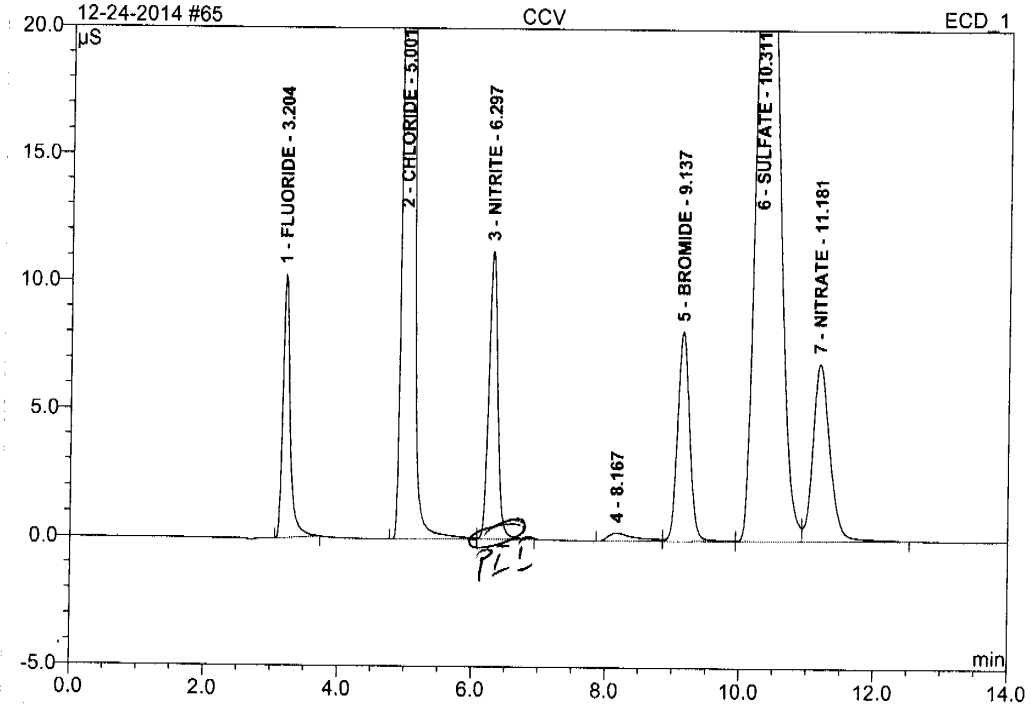
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

65 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	10.268	1.285	3.88	2.253	BMB
2	5.00	CHLORIDE	121.930	15.048	45.49	51.866	BM
3	6.30	NITRITE	11.232	1.741	5.26	2.215	MB
4	8.17	n.a.	0.309	0.144	0.43	n.a.	BM
5	9.14	BROMIDE	8.156	1.698	5.13	12.725	M
6	10.31	SULFATE	30.232	11.135	33.66	50.794	M
7	11.18	NITRATE	6.922	2.030	6.14	2.490	MB
Total:			189.049	33.081	100.00	122.344	

12-24-2014 12/24/14

Anions/Integration

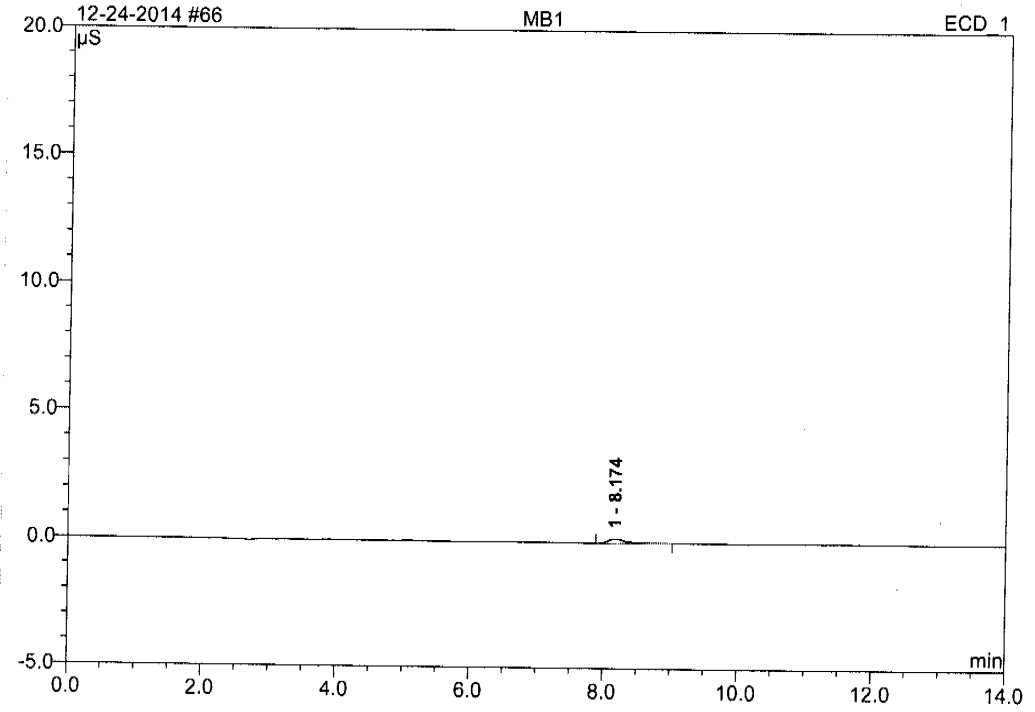
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

66 MB1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**MB1**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 1:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.17	n.a.	0.179	0.059	100.00	n.a.	BMB
Total:			0.179	0.059	100.00	0.000	

Anions/Integration

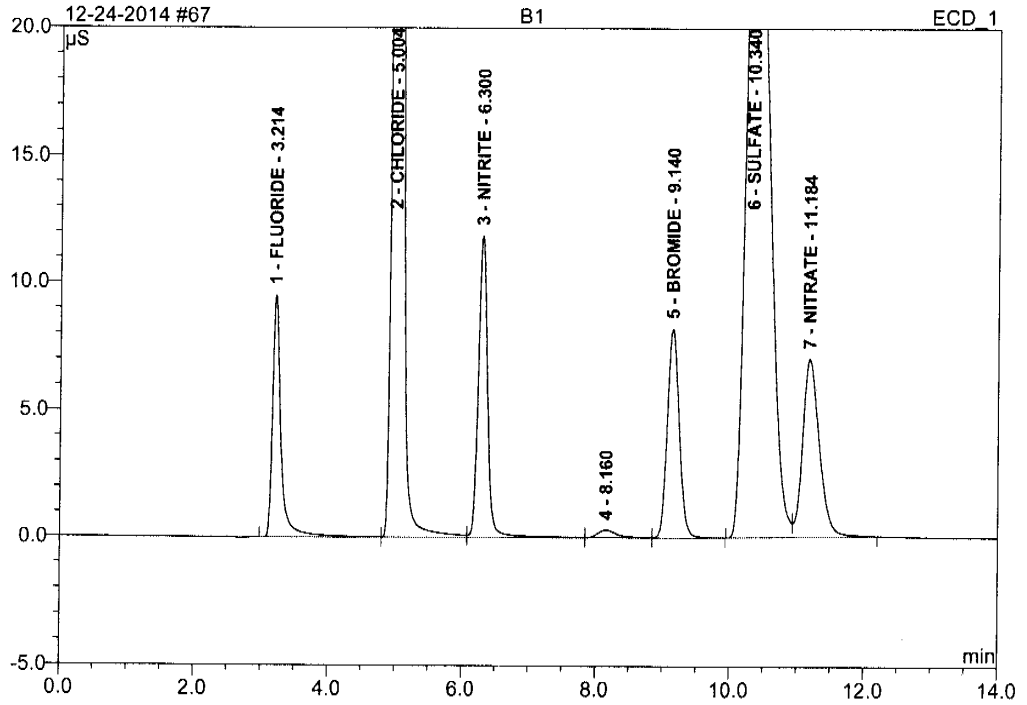
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

67 B1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**B1**	*Injection Volume:*	**25.0**
Vial Number:	**9**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	9.491	1.399	4.15	2.454	BM
2	5.00	CHLORIDE	124.290	15.378	45.57	53.003	M
3	6.30	NITRITE	11.842	1.902	5.64	2.421	M
4	8.16	n.a.	0.295	0.099	0.29	n.a.	M
5	9.14	BROMIDE	8.196	1.694	5.02	12.694	MB
6	10.34	SULFATE	29.880	11.239	33.31	51.269	BM
7	11.18	NITRATE	6.993	2.033	6.02	2.493	MB
Total:			190.987	33.745	100.00	124.333	

Anions/Integration

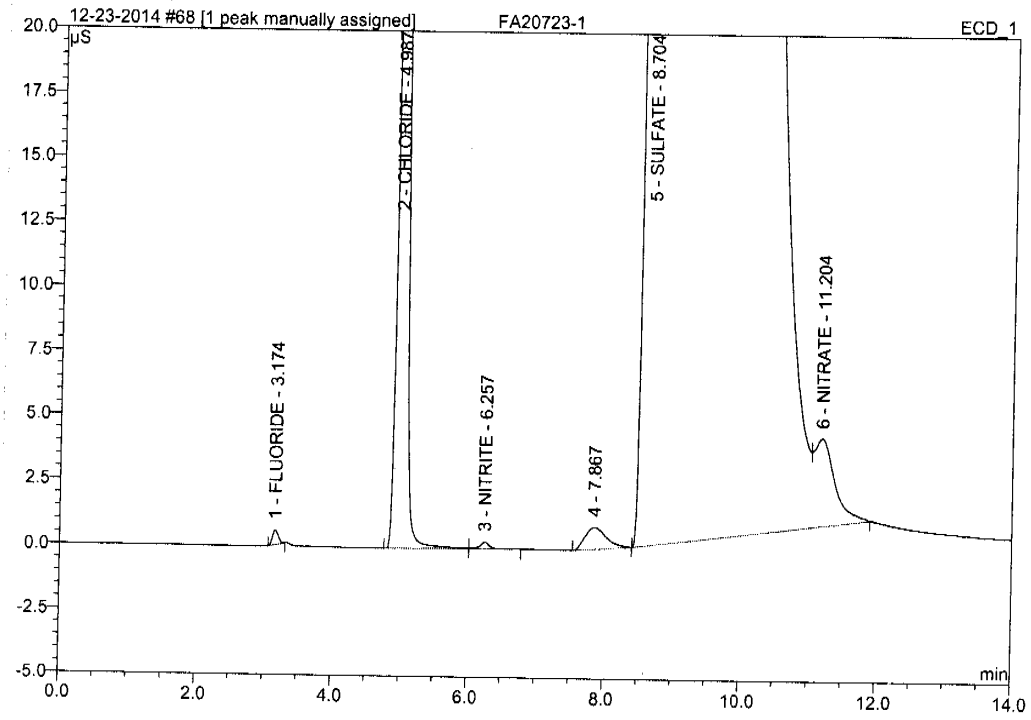
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

68 FA20723-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.571	0.055	0.02	0.097	BMB
2	4.99	CHLORIDE	64.618	7.788	2.60	26.841	BM
3	6.26	NITRITE	0.270	0.048	0.02	0.061	MB
4	7.87	n.a.	0.844	0.312	0.10	n.a.	BMB
5	8.70	SULFATE	276.554	289.909	96.85	1322.421	BM ^
6	11.20	NITRATE	3.372	1.221	0.41	1.498	MB
Total:			346.229	299.333	100.00	1350.918	

IH 12-24-2014 12/24/14

Anions/Integration

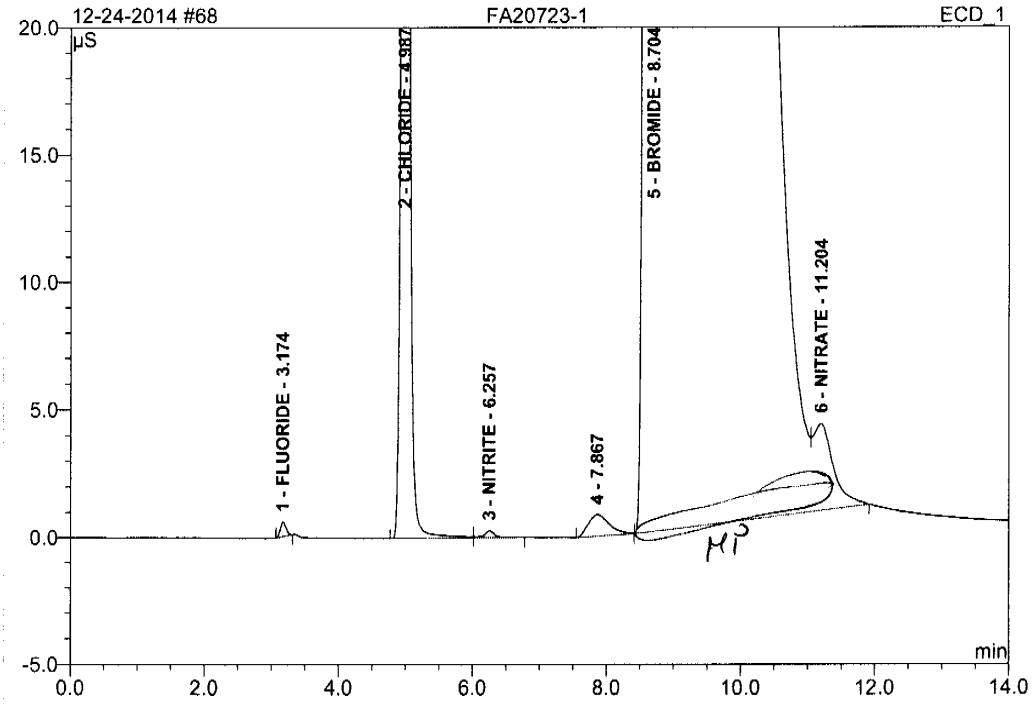
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

68 FA20723-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1**	*Injection Volume:*	**25.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:27**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.571	0.055	0.02	0.097	BMB
2	4.99	CHLORIDE	64.618	7.788	2.60	26.841	BM
3	6.26	NITRITE	0.270	0.048	0.02	0.061	MB
4	7.87	n.a.	0.844	0.312	0.10	n.a.	BMB
5	8.70	BROMIDE	276.554	289.909	96.85	2172.342	BM
6	11.20	NITRATE	3.372	1.221	0.41	1.498	MB
Total:			346.229	299.333	100.00	2200.839	

HL 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

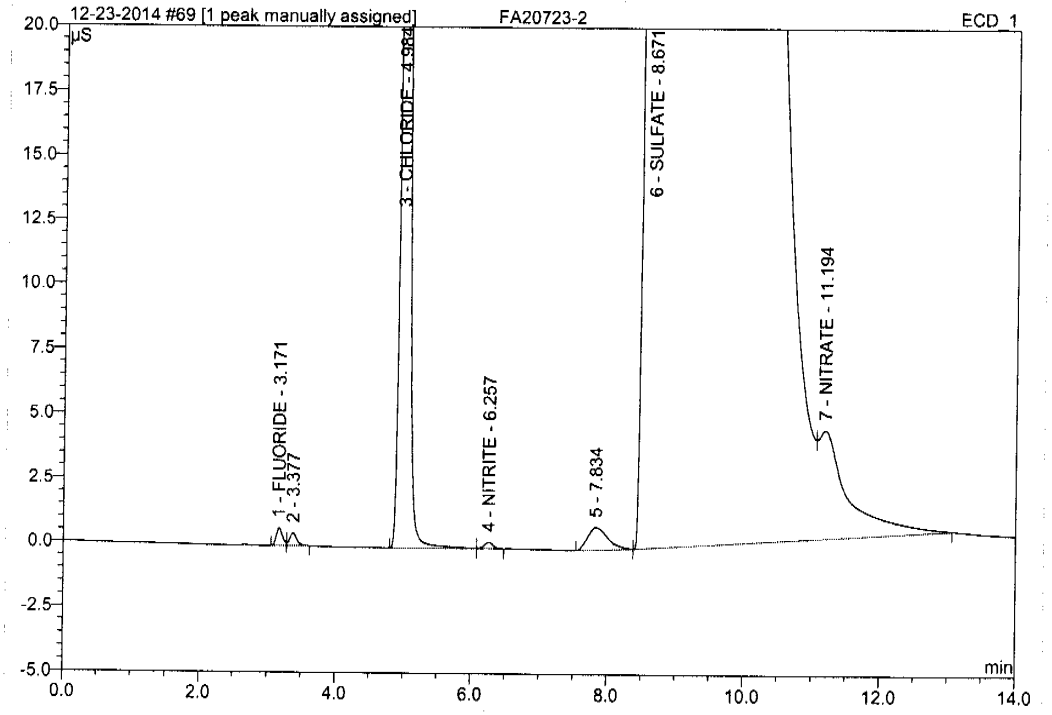
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:53 AM

69 FA20723-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-2**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.707	0.075	0.02	0.131	BM
2	3.38	n.a.	0.508	0.061	0.02	n.a.	MB
3	4.98	CHLORIDE	61.065	7.377	2.36	25.427	BM
4	6.26	NITRITE	0.258	0.037	0.01	0.047	MB
5	7.83	n.a.	0.887	0.310	0.10	n.a.	BMB
6	8.67	SULFATE	285.267	303.008	96.77	1382.169	BM ^
7	11.19	NITRATE	4.212	2.250	0.72	2.760	MB
Total:			352.904	313.117	100.00	1410.533	

VK 12-24-2014

12/24/14

Anions/Integration

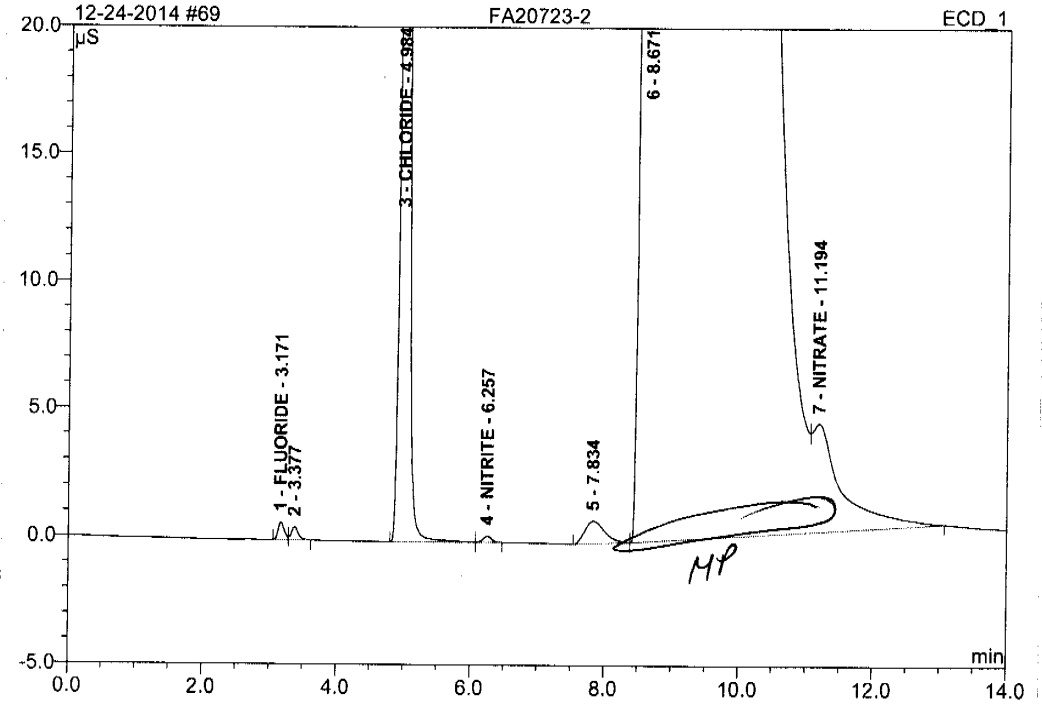
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

69 FA20723-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-2**	*Injection Volume:*	**25.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 2:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.707	0.075	0.02	0.131	BM
2	3.38	n.a.	0.508	0.061	0.02	n.a.	MB
3	4.98	CHLORIDE	61.065	7.377	2.36	25.427	BM
4	6.26	NITRITE	0.258	0.037	0.01	0.047	MB
5	7.83	n.a.	0.887	0.310	0.10	n.a.	BMB
6	8.67	n.a.	285.267	303.008	96.77	n.a.	BM
7	11.19	NITRATE	4.212	2.250	0.72	2.760	MB
Total:			352.904	313.117	100.00	28.364	

MP 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

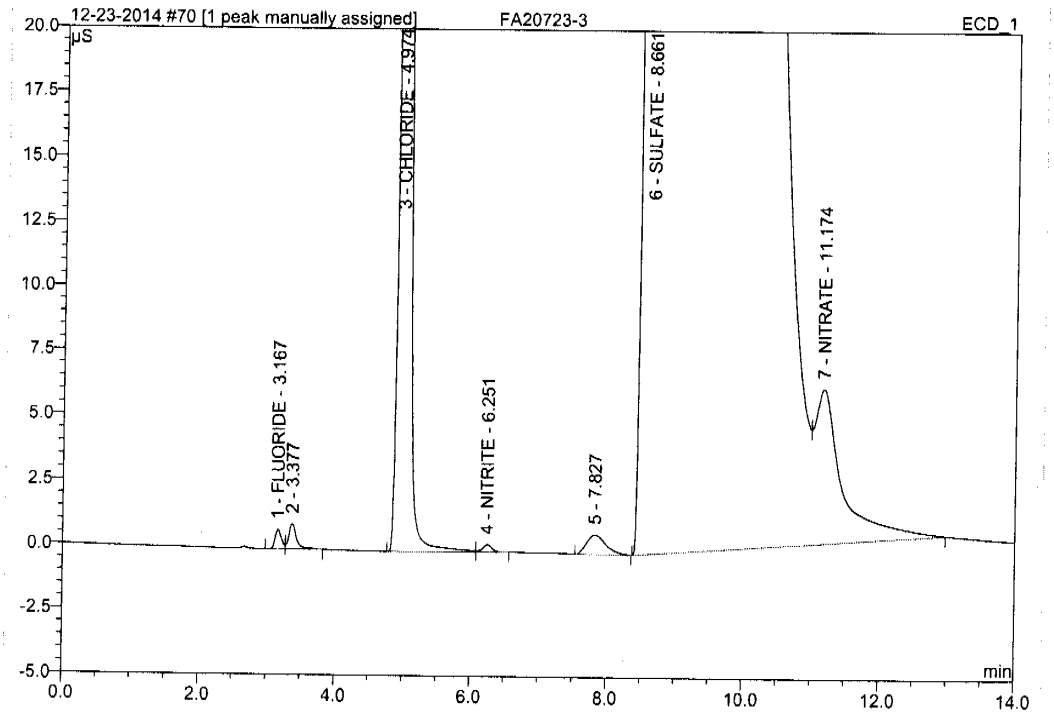
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

70 FA20723-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-3**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.766	0.082	0.03	0.144	BM
2	3.38	n.a.	0.987	0.131	0.04	n.a.	MB
3	4.97	CHLORIDE	116.369	14.294	4.42	49.267	BM
4	6.25	NITRITE	0.293	0.047	0.01	0.060	MB
5	7.83	n.a.	0.776	0.258	0.08	n.a.	BMB
6	8.66	SULFATE	287.656	305.572	94.52	1393.865	BM ^
7	11.17	NITRATE	5.948	2.914	0.90	3.575	MB
Total:			412.796	323.299	100.00	1446.910	

HH 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

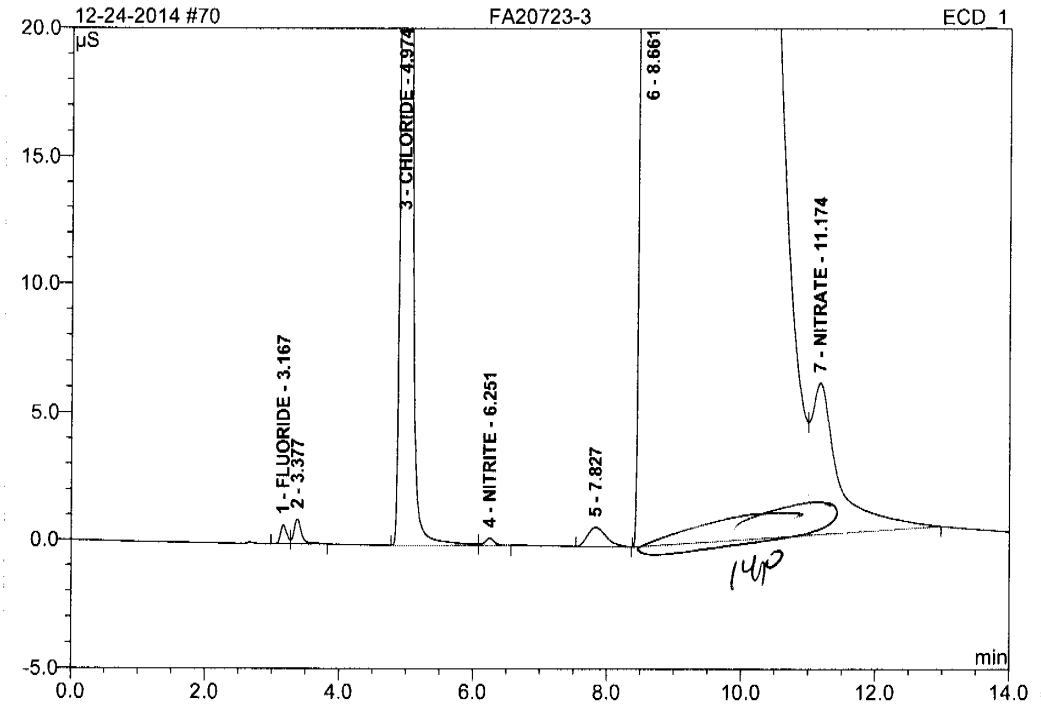
Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

12/24/2014 8:05 AM

70 FA20723-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-3**	*Injection Volume:*	**25.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.766	0.082	0.03	0.144	BM
2	3.38	n.a.	0.987	0.131	0.04	n.a.	MB
3	4.97	CHLORIDE	116.369	14.294	4.42	49.267	BM
4	6.25	NITRITE	0.293	0.047	0.01	0.060	MB
5	7.83	n.a.	0.776	0.258	0.08	n.a.	BMB
6	8.66	n.a.	287.656	305.572	94.52	n.a.	BM
7	11.17	NITRATE	5.948	2.914	0.90	3.575	MB
Total:			412.796	323.299	100.00	53.046	

VK 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

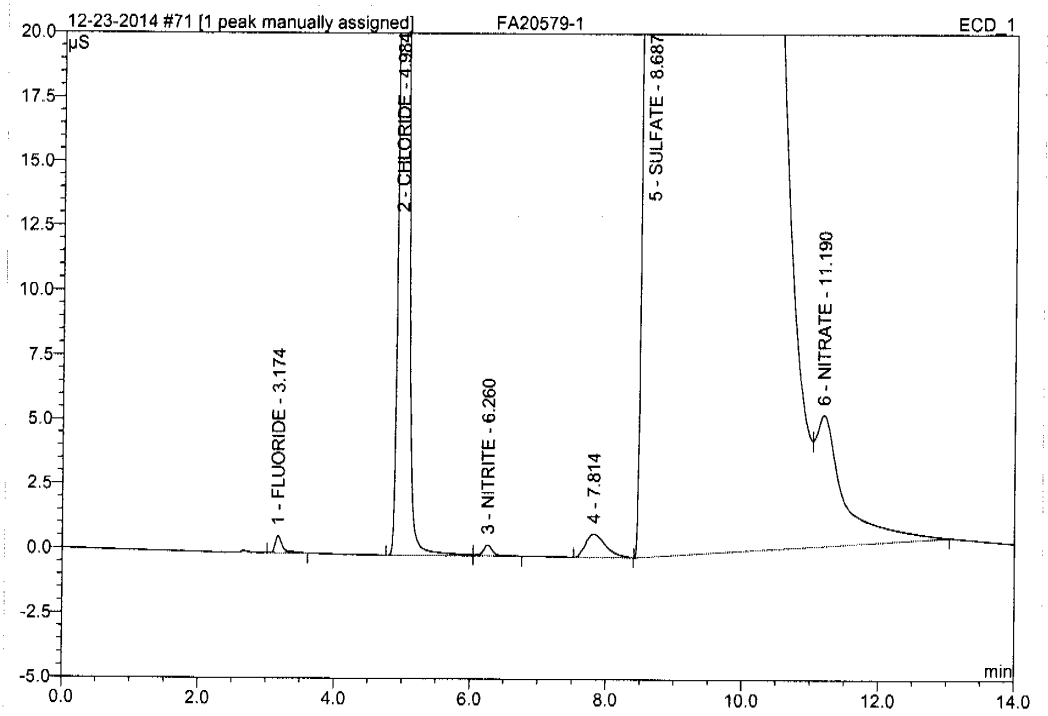
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:54 AM

71 FA20579-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.676	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	70.518	8.576	2.77	29.559	BM
3	6.26	NITRITE	0.428	0.069	0.02	0.088	MB
4	7.81	n.a.	0.904	0.314	0.10	n.a.	BMB
5	8.69	SULFATE	283.292	298.327	96.26	1360.820	BM ^
6	11.19	NITRATE	5.068	2.556	0.82	3.135	MB
Total:			360.886	309.924	100.00	1393.746	

Hh 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

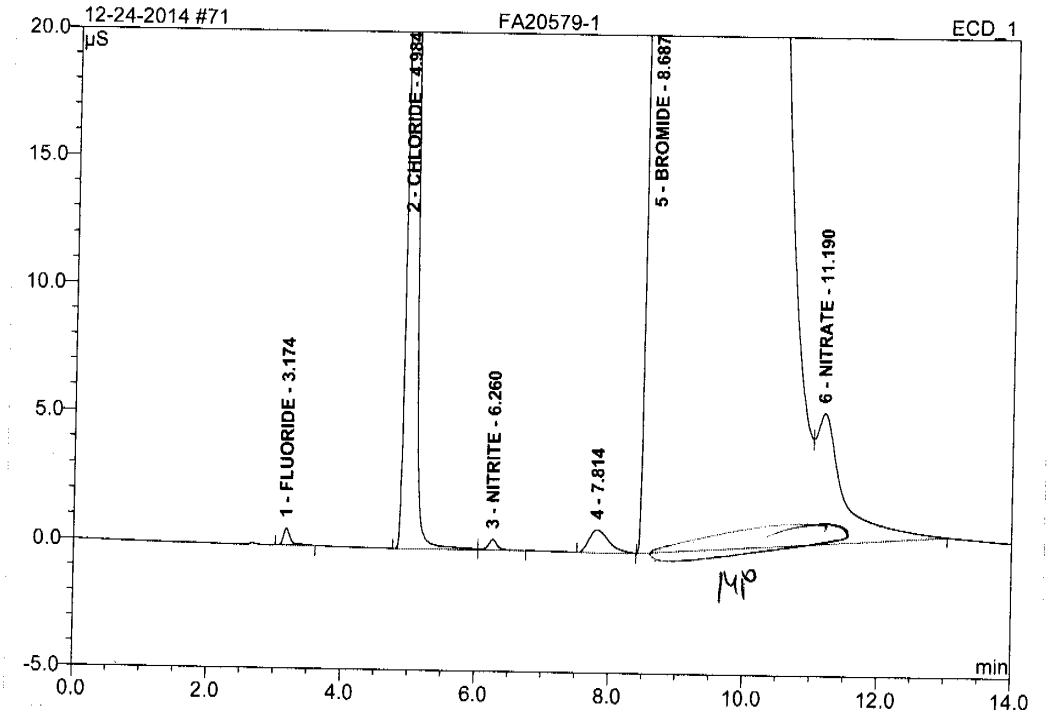
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

71 FA20579-1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-1**	*Injection Volume:*	**25.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.676	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	70.518	8.576	2.77	29.559	BM
3	6.26	NITRITE	0.428	0.069	0.02	0.088	MB
4	7.81	n.a.	0.904	0.314	0.10	n.a.	BMB
5	8.69	BROMIDE	283.292	298.327	96.26	2235.419	BM
6	11.19	NITRATE	5.068	2.556	0.82	3.135	MB
Total:			360.886	309.924	100.00	2268.345	

VK 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

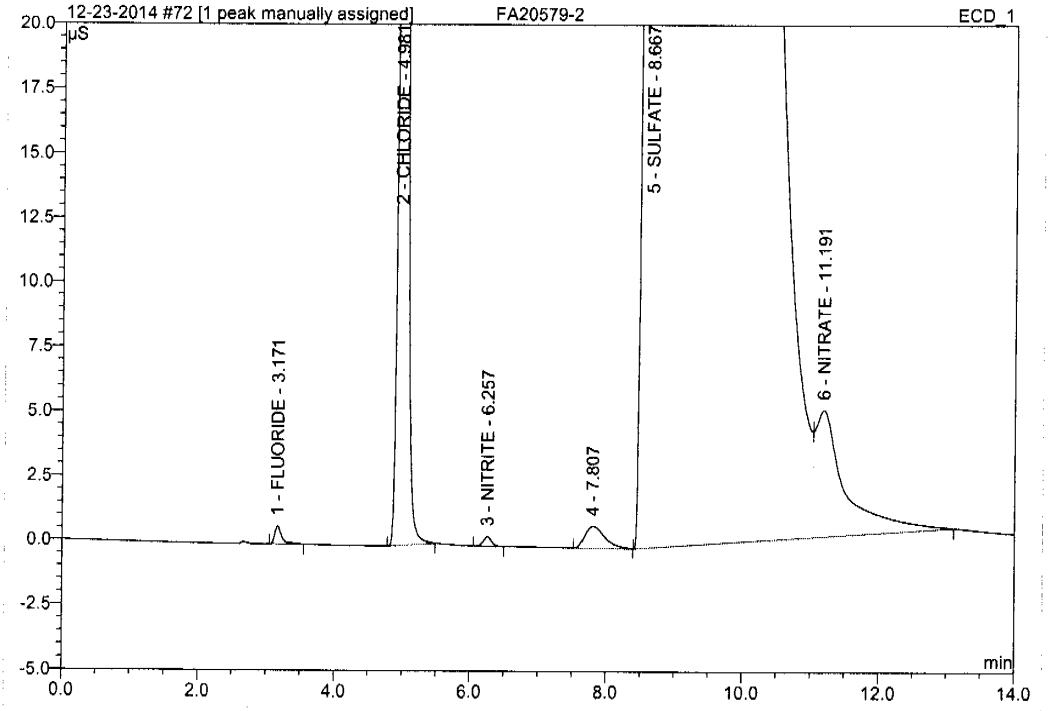
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

72 FA20579-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.703	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	68.256	8.218	2.65	28.323	BMB
3	6.26	NITRITE	0.385	0.052	0.02	0.066	BMB
4	7.81	n.a.	0.859	0.295	0.10	n.a.	BMB
5	8.67	SULFATE	282.368	298.898	96.38	1363.422	BM ^
6	11.19	NITRATE	4.917	2.583	0.83	3.168	MB
Total:			357.487	310.127	100.00	1395.123	

VH 12-24-2014 12/24/14

Anions/Integration

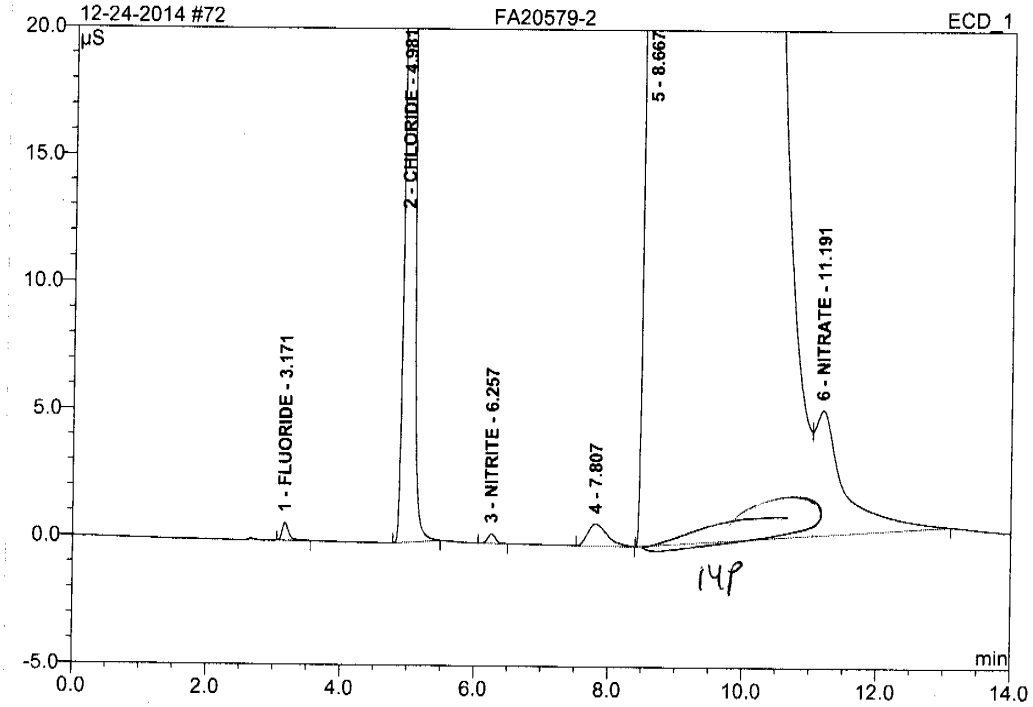
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

72 FA20579-2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-2**	*Injection Volume:*	**25.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.703	0.082	0.03	0.144	BMB
2	4.98	CHLORIDE	68.256	8.218	2.65	28.323	BMB
3	6.26	NITRITE	0.385	0.052	0.02	0.066	BMB
4	7.81	n.a.	0.859	0.295	0.10	n.a.	BMB
5	8.67	n.a.	282.368	298.898	96.38	n.a.	BM
6	11.19	NITRATE	4.917	2.583	0.83	3.168	MB
Total:			357.487	310.127	100.00	31.702	

12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

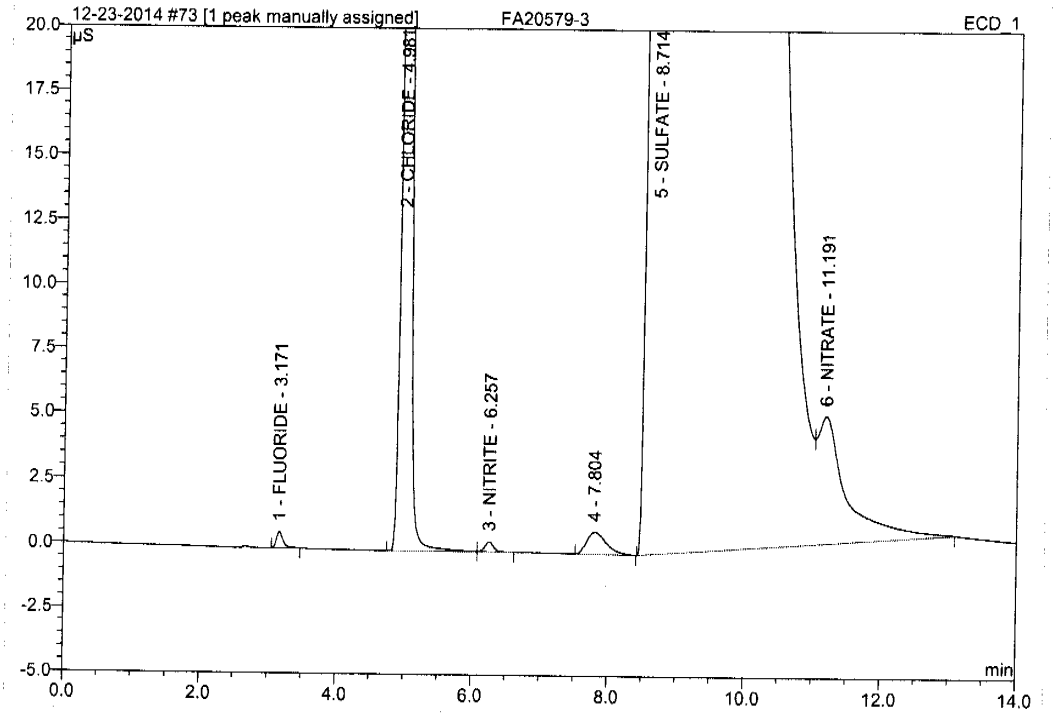
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

73 FA20579-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.654	0.074	0.02	0.129	BMB
2	4.98	CHLORIDE	65.667	7.973	2.63	27.481	BM
3	6.26	NITRITE	0.400	0.059	0.02	0.075	MB
4	7.80	n.a.	0.870	0.298	0.10	n.a.	BMB
5	8.71	SULFATE	279.183	292.126	96.39	1332.533	BM ^
6	11.19	NITRATE	4.886	2.535	0.84	3.109	MB
Total:			351.660	303.065	100.00	1363.328	

12-24-2014

12/24/14

Anions/Integration

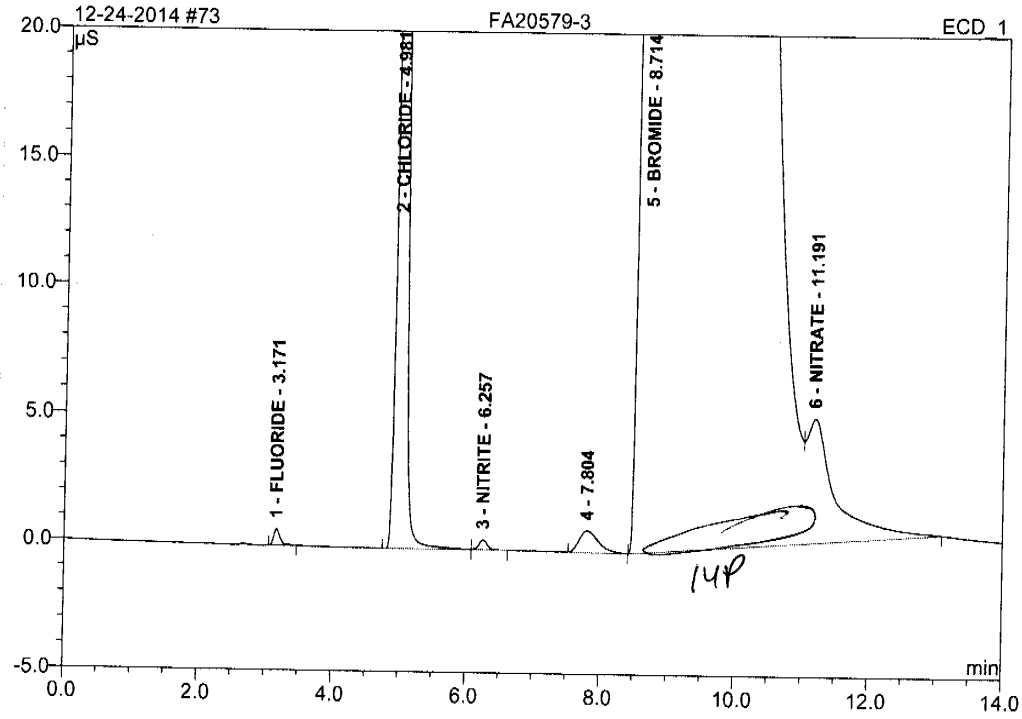
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

73 FA20579-3

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-3**	*Injection Volume:*	**25.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 3:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.654	0.074	0.02	0.129	BMB
2	4.98	CHLORIDE	65.667	7.973	2.63	27.481	BM
3	6.26	NITRITE	0.400	0.059	0.02	0.075	MB
4	7.80	n.a.	0.870	0.298	0.10	n.a.	BMB
5	8.71	BROMIDE	279.183	292.126	96.39	2188.952	BM
6	11.19	NITRATE	4.886	2.535	0.84	3.109	MB
Total:			351.660	303.065	100.00	2219.747	

12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

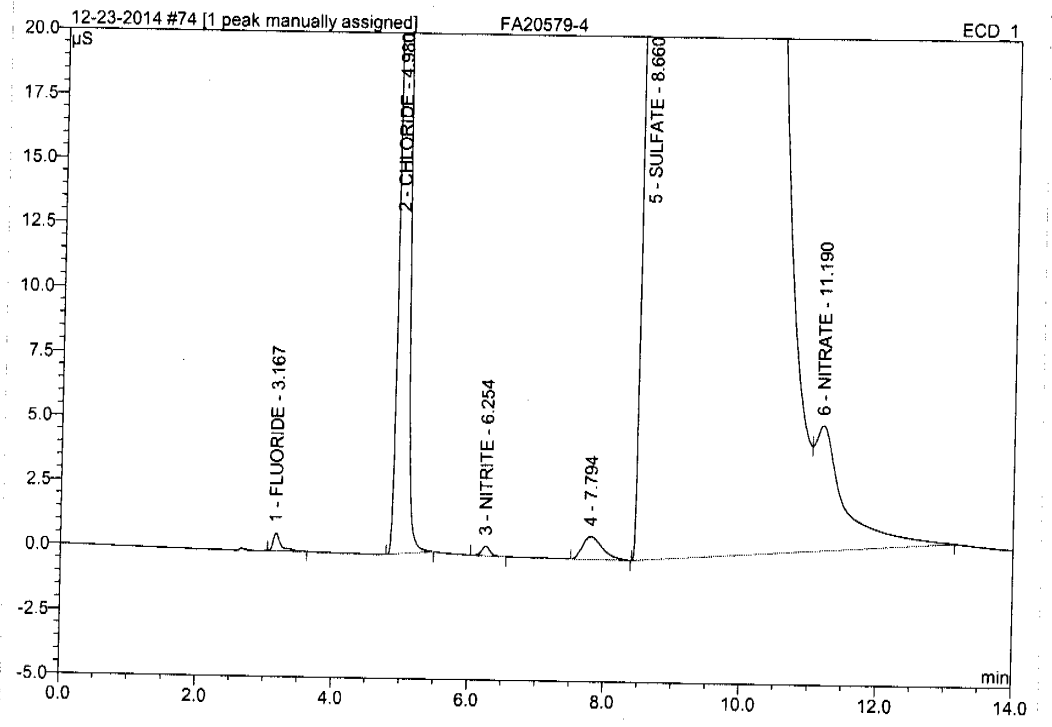
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:56 AM

74 FA20579-4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-4**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.695	0.089	0.03	0.156	BMB
2	4.98	CHLORIDE	65.372	7.870	2.53	27.124	BMB
3	6.25	NITRITE	0.379	0.053	0.02	0.068	BMB
4	7.79	n.a.	0.882	0.301	0.10	n.a.	BMB
5	8.66	SULFATE	284.216	299.813	96.50	1367.597	BM ^
6	11.19	NITRATE	4.850	2.562	0.82	3.142	MB
Total:			356.393	310.687	100.00	1398.086	

VH 12-24-2014 12/24/14

Anions/Integration

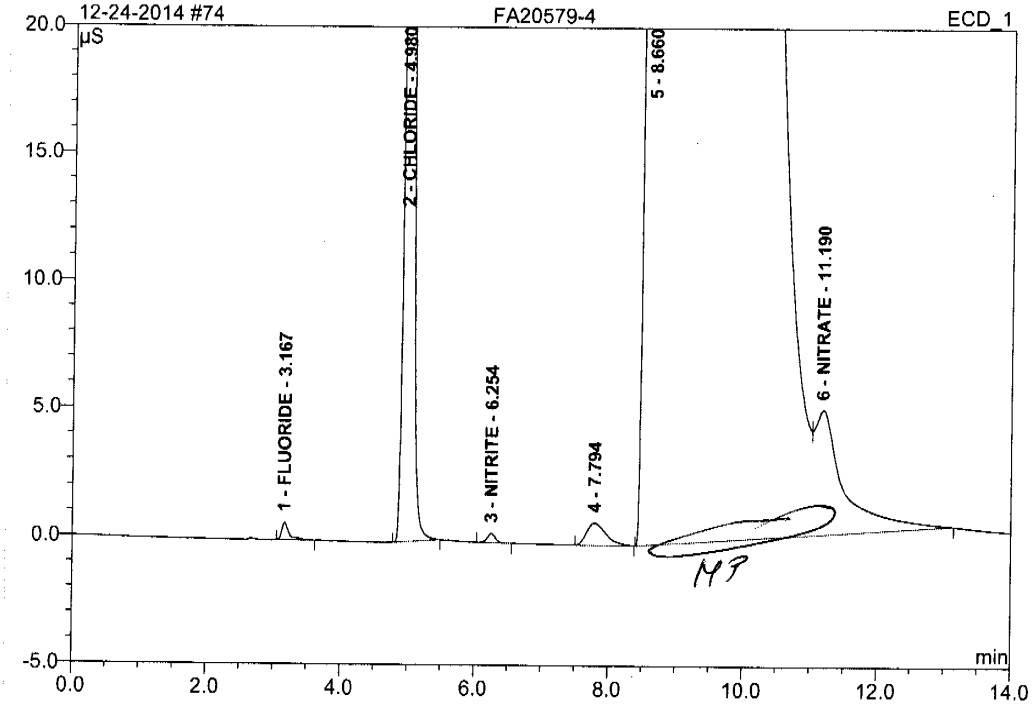
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

74 FA20579-4

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20579-4**	*Injection Volume:*	**25.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	0.695	0.089	0.03	0.156	BMB
2	4.98	CHLORIDE	65.372	7.870	2.53	27.124	BMB
3	6.25	NITRITE	0.379	0.053	0.02	0.068	BMB
4	7.79	n.a.	0.882	0.301	0.10	n.a.	BMB
5	8.66	n.a.	284.216	299.813	96.50	n.a.	BM
6	11.19	NITRATE	4.850	2.562	0.82	3.142	MB
Total:			356.393	310.687	100.00	30.490	

MP

1K 12-24-2014

12/24/14

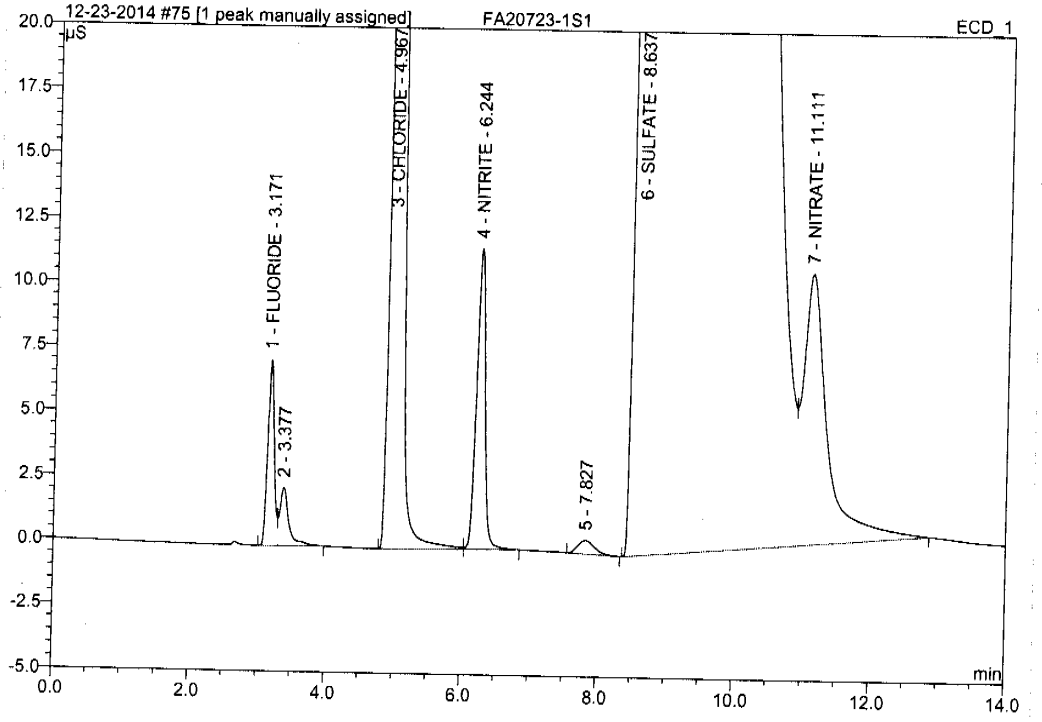
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

75 FA20723-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.200	0.791	0.24	1.387	BM
2	3.38	n.a.	2.271	0.354	0.11	n.a.	MB
3	4.97	CHLORIDE	177.648	22.204	6.73	76.527	BM
4	6.24	NITRITE	11.664	1.713	0.52	2.180	MB
5	7.83	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.64	SULFATE	289.529	300.404	91.01	1370.291	BM ^
7	11.11	NITRATE	10.480	4.464	1.35	5.476	MB
Total:			499.331	330.086	100.00	1455.862	

MH 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

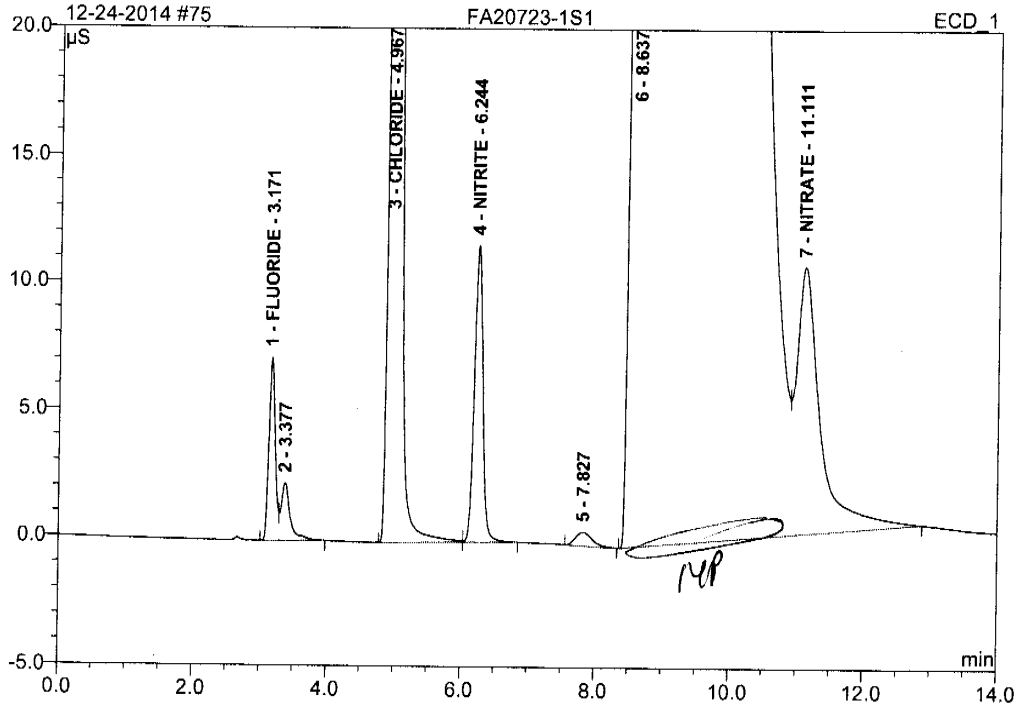
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

75 FA20723-1S1

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S1**	*Injection Volume:*	**25.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.200	0.791	0.24	1.387	BM
2	3.38	n.a.	2.271	0.354	0.11	n.a.	MB
3	4.97	CHLORIDE	177.648	22.204	6.73	76.527	BM
4	6.24	NITRITE	11.664	1.713	0.52	2.180	MB
5	7.83	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.64	n.a.	289.529	300.404	91.01	n.a.	BM
7	11.11	NITRATE	10.480	4.464	1.35	5.476	MB
Total:			499.331	330.086	100.00	85.571	

D.L 12-24-2014 12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

11.1 11

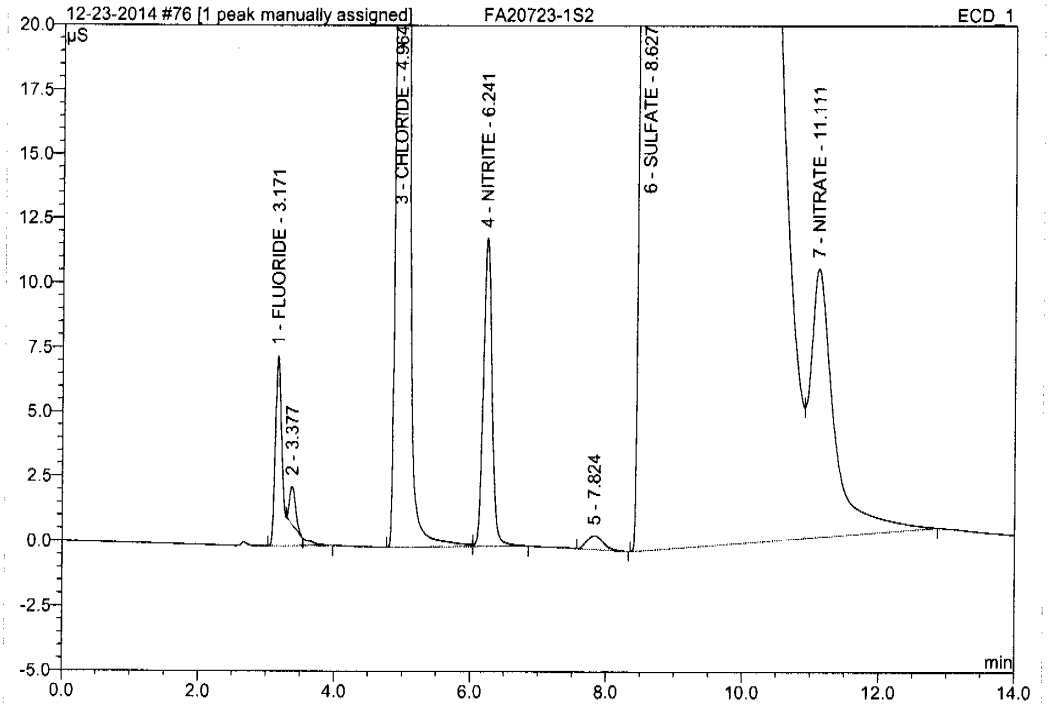
Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

12/24/2014 9:57 AM

76 FA20723-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.367	1.018	0.31	1.786	BMB
2	3.38	n.a.	1.469	0.149	0.04	n.a.	Rd
3	4.96	CHLORIDE	180.812	22.612	6.79	77.934	BM
4	6.24	NITRITE	11.930	1.758	0.53	2.237	MB
5	7.82	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.63	SULFATE	292.450	303.124	90.99	1382.698	BM ^
7	11.11	NITRATE	10.400	4.339	1.30	5.323	MB
Total:			504.966	333.156	100.00	1469.978	

12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

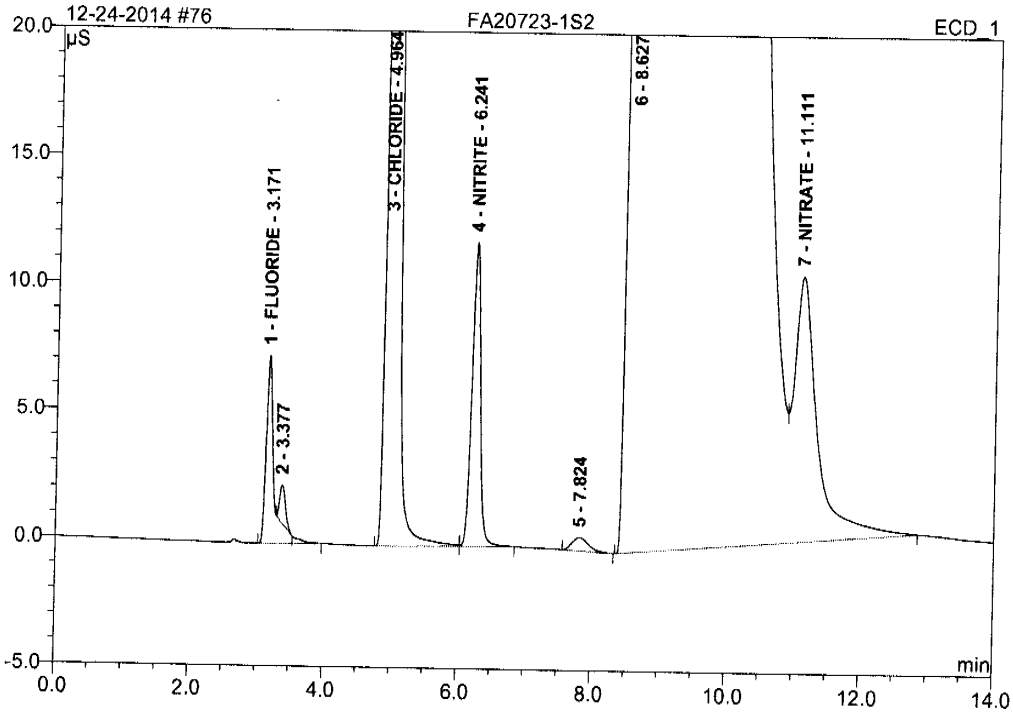
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

76 FA20723-1S2

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**FA20723-1S2**	*Injection Volume:*	**25.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.17	FLUORIDE	7.367	1.018	0.31	1.786	BMB
2	3.38	n.a.	1.469	0.149	0.04	n.a.	Rd
3	4.96	CHLORIDE	180.812	22.612	6.79	77.934	BM
4	6.24	NITRITE	11.930	1.758	0.53	2.237	MB
5	7.82	n.a.	0.538	0.156	0.05	n.a.	BMB
6	8.63	n.a.	292.450	303.124	90.99	n.a.	BM
7	11.11	NITRATE	10.400	4.339	1.30	5.323	MB
Total:			504.966	333.156	100.00	87.280	

12/24/14

Anions/Integration

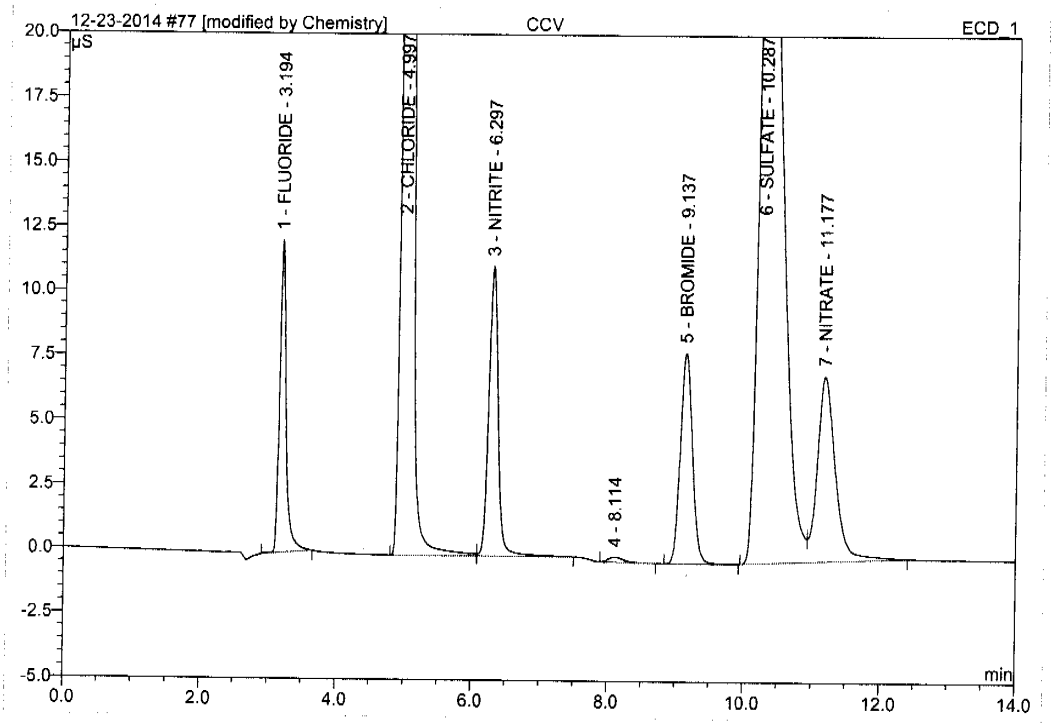
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

Operator:Chemistry Timebase:ICS-2100 Sequence:12-23-2014

77 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	12.136	1.348	4.00	2.363	BMB
2	5.00	CHLORIDE	121.575	15.138	44.94	52.176	BM *
3	6.30	NITRITE	11.244	1.807	5.36	2.299	MB*
4	8.11	n.a.	0.194	0.052	0.15	n.a.	BMB
5	9.14	BROMIDE	8.169	1.687	5.01	12.638	BMB
6	10.29	SULFATE	31.558	11.423	33.91	52.106	BM
7	11.18	NITRATE	7.183	2.231	6.62	2.736	MB
Total:			192.060	33.685	100.00	124.320	

IH 12-24-2014

12/24/14

Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

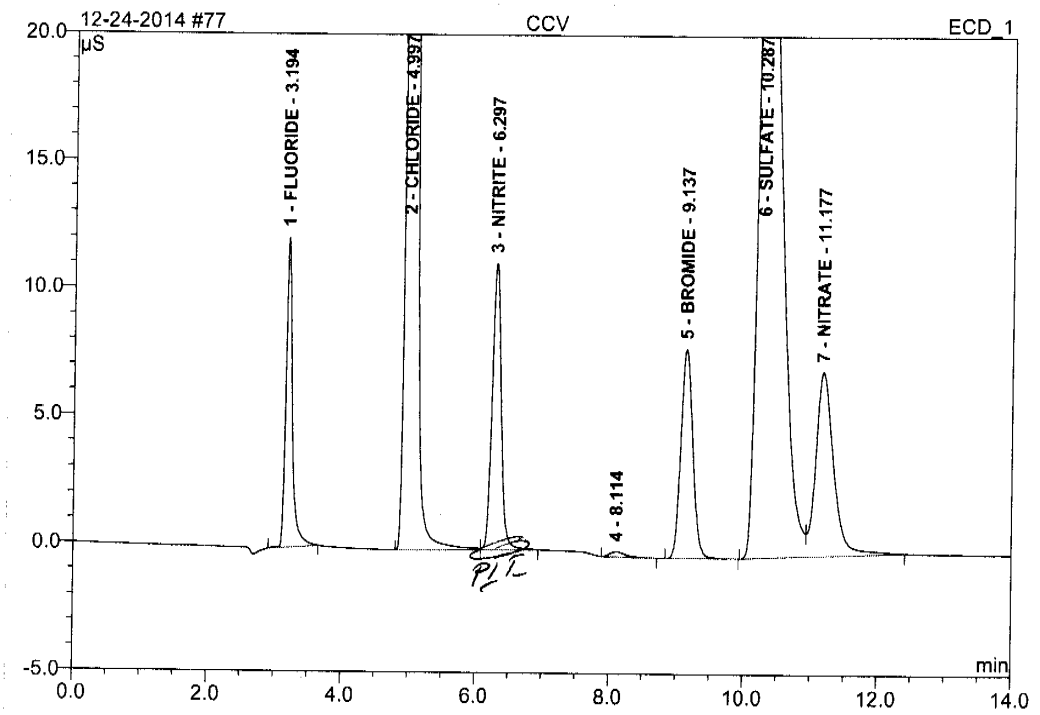
11.1 11

Operator:Chemistry Timebase:ICS-2100 Sequence:12-24-2014

77 CCV

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCV**	*Injection Volume:*	**25.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 4:59**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	12.136	1.348	4.01	2.363	BMB
2	5.00	CHLORIDE	121.570	15.118	44.98	52.105	BM
3	6.30	NITRITE	11.206	1.755	5.22	2.234	MB
4	8.11	n.a.	0.194	0.052	0.15	n.a.	BMB
5	9.14	BROMIDE	8.169	1.687	5.02	12.638	BMB
6	10.29	SULFATE	31.558	11.423	33.98	52.106	BM
7	11.18	NITRATE	7.183	2.231	6.64	2.736	MB
Total:			192.017	33.613	100.00	124.183	

12/24/14

12-24-2014

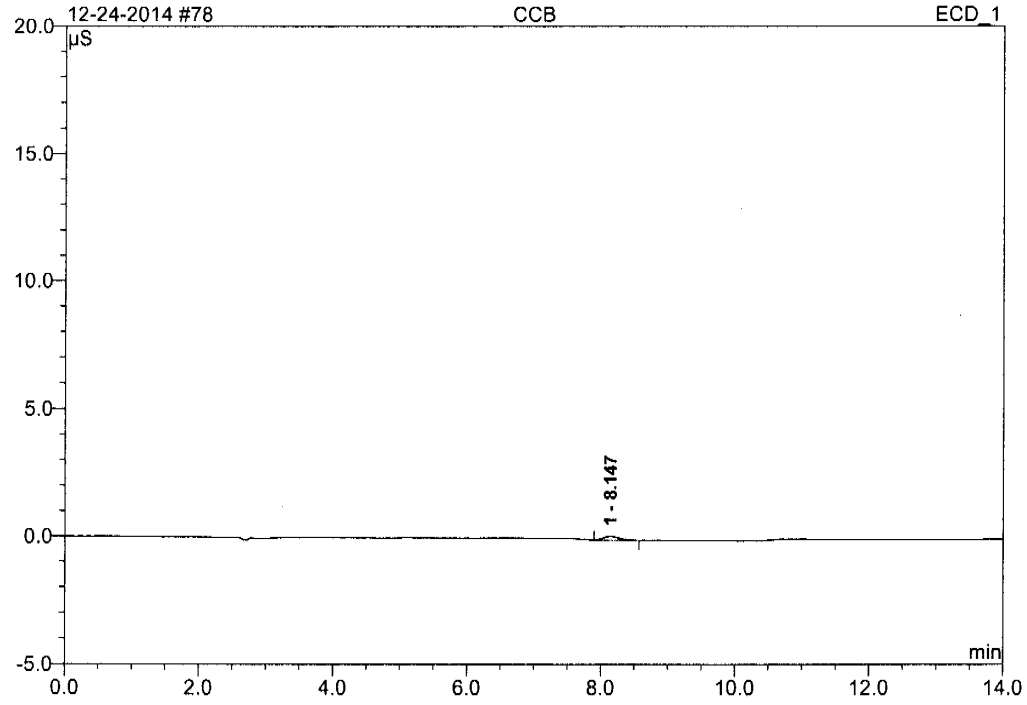
Anions/Integration

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

78 CCB

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**CCB**	*Injection Volume:*	**25.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 5:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



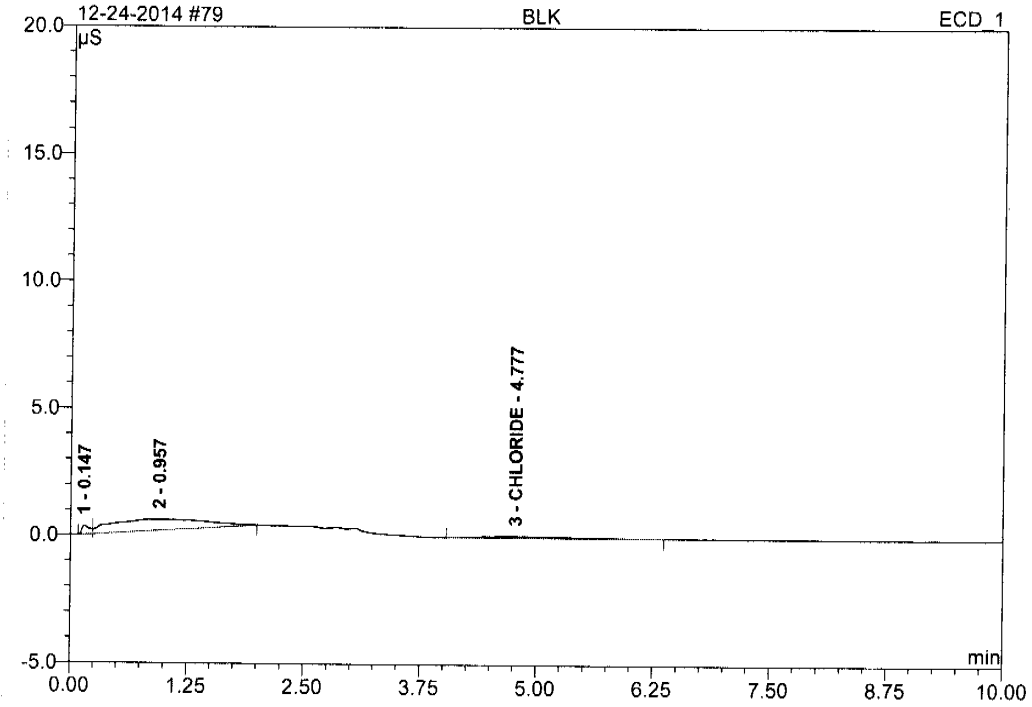
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	8.15	n.a.	0.162	0.044	100.00	n.a.	BMB
Total:			0.162	0.044	100.00	0.000	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

79 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**SHUTDOWN**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/24/2014 5:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**10.00**	*Sample Amount:*	**1.0000**



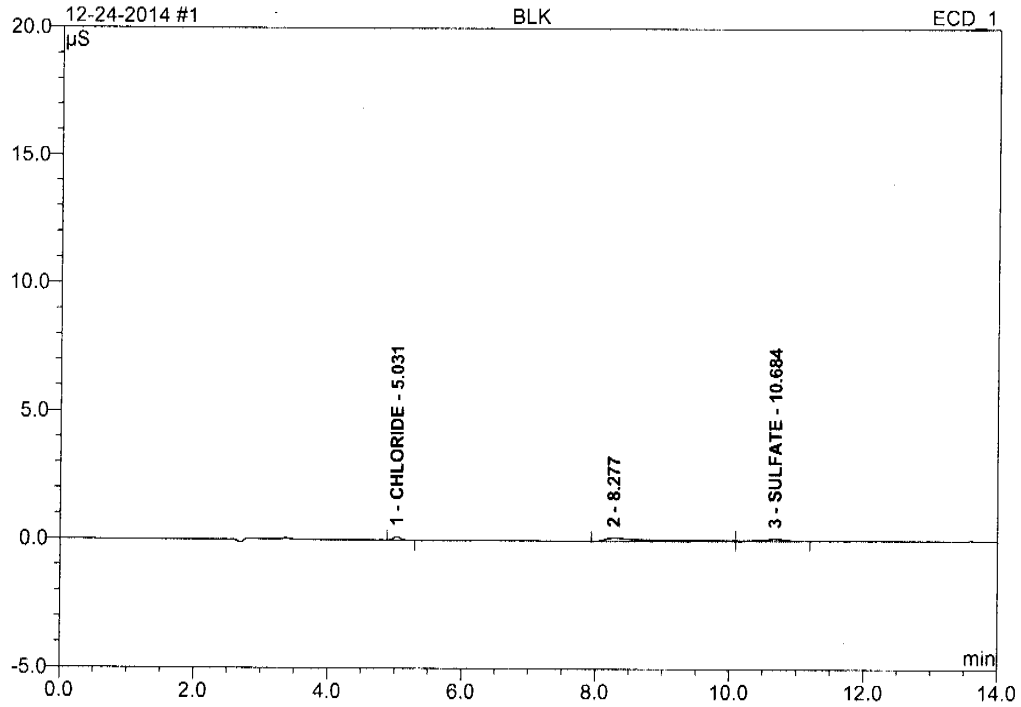
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	0.15	n.a.	0.351	0.033	5.40	n.a.	BM
2	0.96	n.a.	0.423	0.505	82.48	n.a.	MB
3	4.78	CHLORIDE	0.065	0.074	12.13	0.256	BMB
Total:			0.839	0.612	100.00	0.256	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

1 BLK

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**BLK**	*Injection Volume:*	**25.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



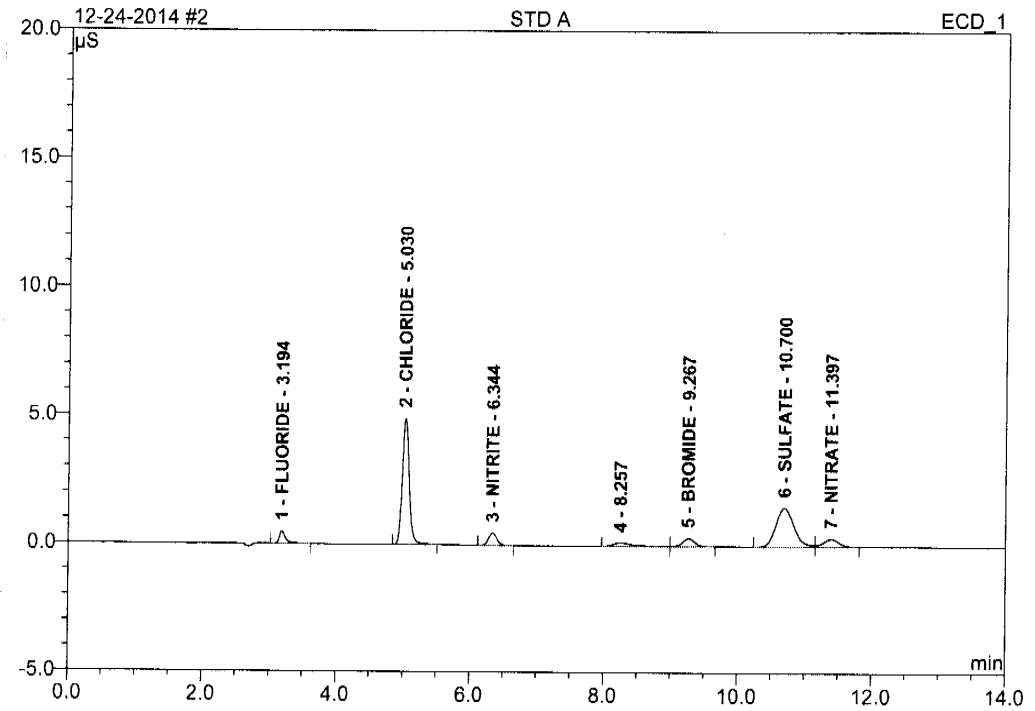
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	5.03	CHLORIDE	0.139	0.016	10.08	0.056	BMB
2	8.28	n.a.	0.134	0.108	67.59	n.a.	BM
3	10.68	SULFATE	0.083	0.036	22.33	0.163	MB
Total:			0.356	0.160	100.00	0.218	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

2 STD A

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD A**	*Injection Volume:*	**25.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



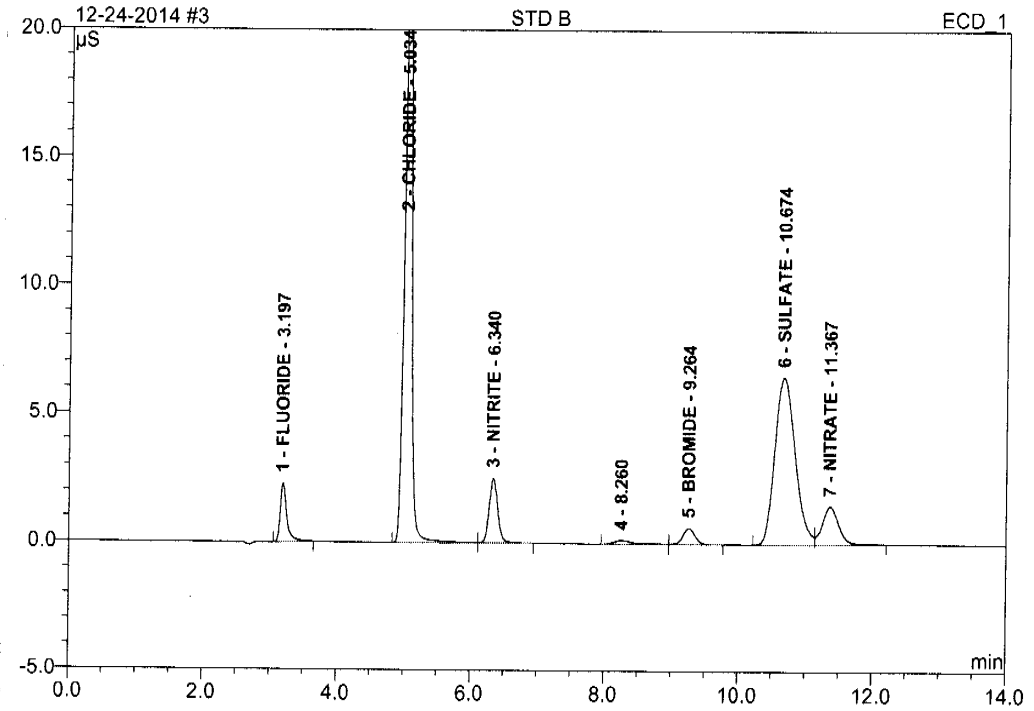
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.19	FLUORIDE	0.473	0.051	3.75	0.090	BMB
2	5.03	CHLORIDE	4.909	0.581	42.50	2.003	BMB
3	6.34	NITRITE	0.484	0.070	5.13	0.089	BMB
4	8.26	n.a.	0.138	0.048	3.52	n.a.	BM
5	9.27	BROMIDE	0.308	0.065	4.75	0.486	MB
6	10.70	SULFATE	1.513	0.470	34.40	2.146	BM
7	11.40	NITRATE	0.297	0.081	5.95	0.100	MB
Total:			8.121	1.367	100.00	4.914	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

3 STD B

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD B**	*Injection Volume:*	**25.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 11:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



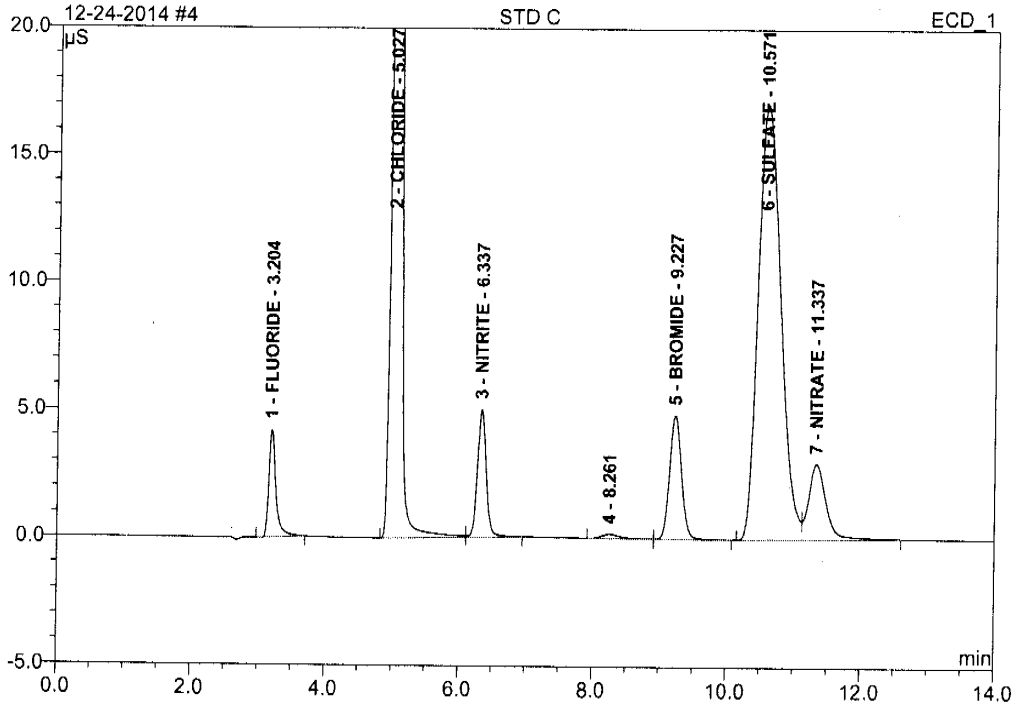
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	2.287	0.257	3.93	0.450	BMB
2	5.03	CHLORIDE	25.145	3.015	46.23	10.392	BM
3	6.34	NITRITE	2.508	0.374	5.74	0.476	MB
4	8.26	n.a.	0.139	0.047	0.72	n.a.	BM
5	9.26	BROMIDE	0.625	0.130	1.99	0.975	MB
6	10.67	SULFATE	6.489	2.280	34.97	10.402	BM
7	11.37	NITRATE	1.469	0.418	6.41	0.513	MB
Total:			38.662	6.521	100.00	23.208	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

4 STD C

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD C**	*Injection Volume:*	**25.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**

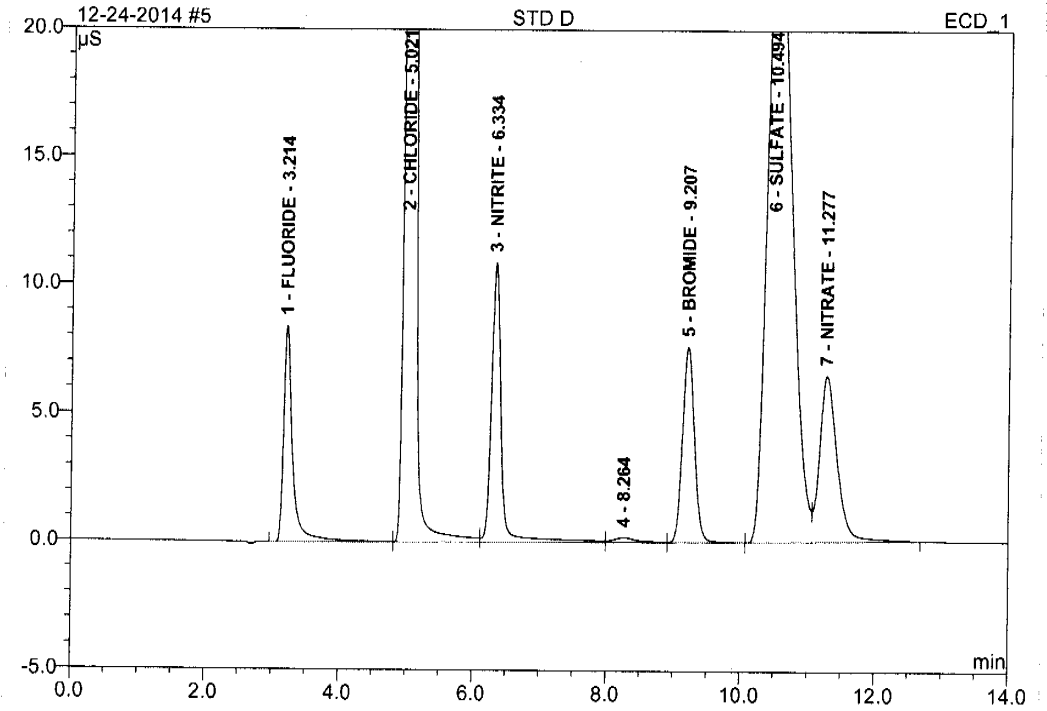


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.20	FLUORIDE	4.207	0.514	2.69	0.902	BMB
2	5.03	CHLORIDE	76.065	9.247	48.43	31.870	BM
3	6.34	NITRITE	4.993	0.761	3.99	0.969	MB
4	8.26	n.a.	0.165	0.052	0.27	n.a.	BM
5	9.23	BROMIDE	4.849	0.997	5.22	7.474	MB
6	10.57	SULFATE	17.033	6.625	34.69	30.218	BM
7	11.34	NITRATE	2.961	0.899	4.71	1.102	MB
Total:			110.273	19.095	100.00	72.535	

5 STD D

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD D**	*Injection Volume:*	**25.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



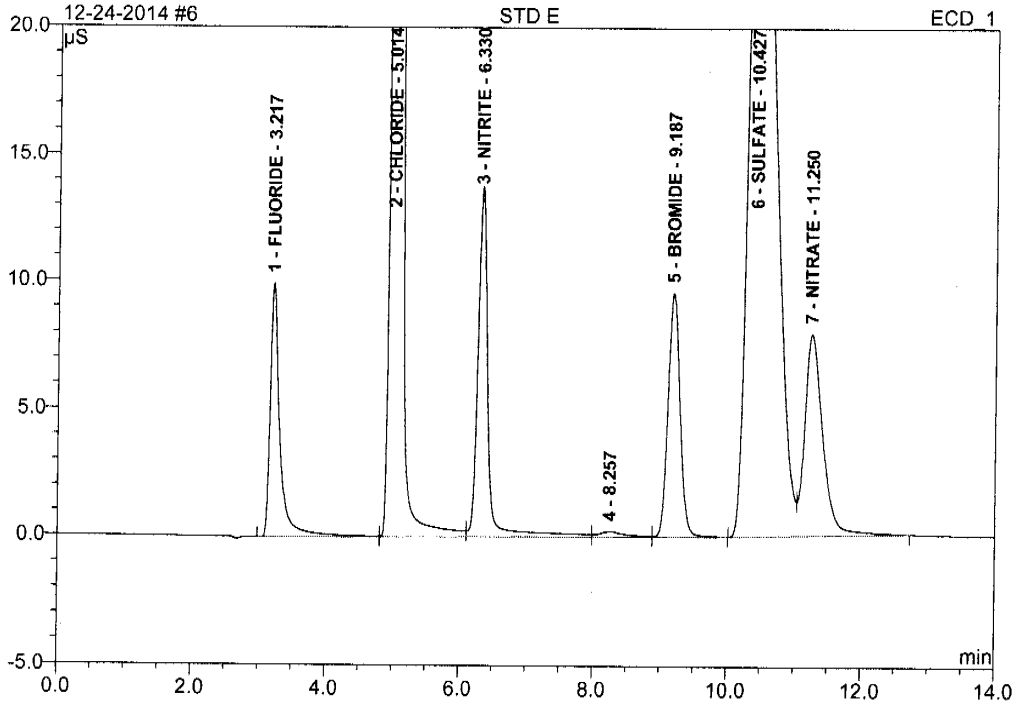
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.21	FLUORIDE	8.405	1.328	4.23	2.329	BM
2	5.02	CHLORIDE	115.261	14.194	45.22	48.922	M
3	6.33	NITRITE	10.881	1.865	5.94	2.374	M
4	8.26	n.a.	0.197	0.082	0.26	n.a.	M
5	9.21	BROMIDE	7.590	1.576	5.02	11.810	MB
6	10.49	SULFATE	25.682	10.362	33.01	47.266	BM
7	11.28	NITRATE	6.462	1.983	6.32	2.433	MB
Total:			174.479	31.392	100.00	115.134	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

6 STD E

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD E**	*Injection Volume:*	**25.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 12:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



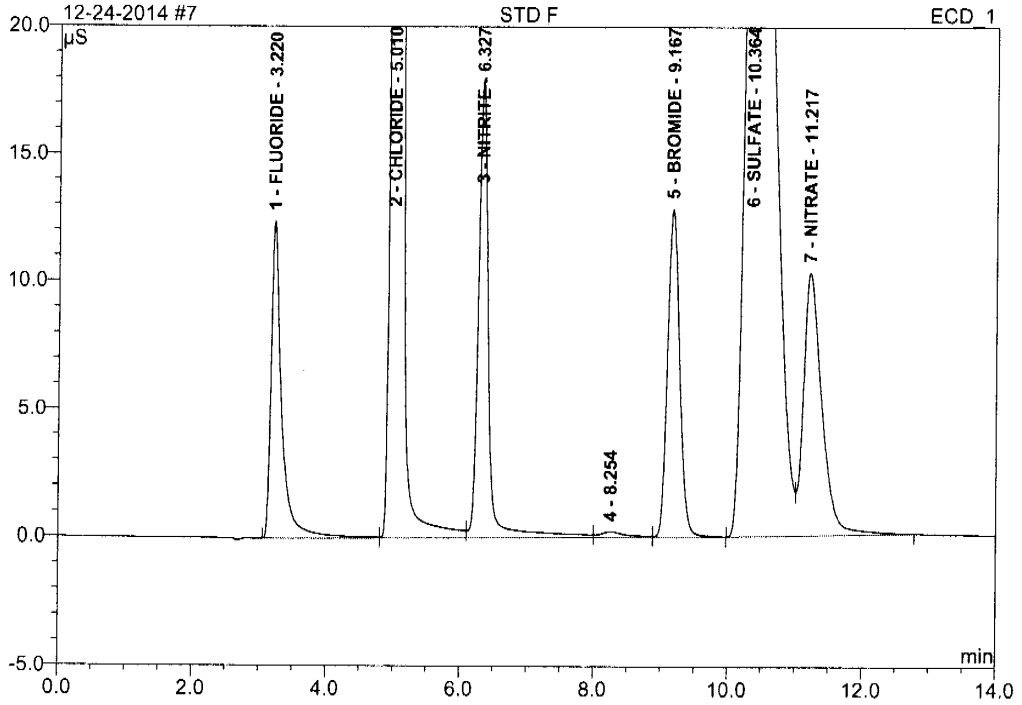
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	9.959	1.678	3.99	2.942	BM
2	5.01	CHLORIDE	152.909	19.012	45.27	65.526	M
3	6.33	NITRITE	13.775	2.406	5.73	3.063	M
4	8.26	n.a.	0.216	0.098	0.23	n.a.	M
5	9.19	BROMIDE	9.569	1.992	4.74	14.926	MB
6	10.43	SULFATE	33.517	14.315	34.09	65.296	BM
7	11.25	NITRATE	7.944	2.496	5.94	3.061	MB
Total:			227.889	41.996	100.00	154.814	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

7 STD F

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD F**	*Injection Volume:*	**25.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



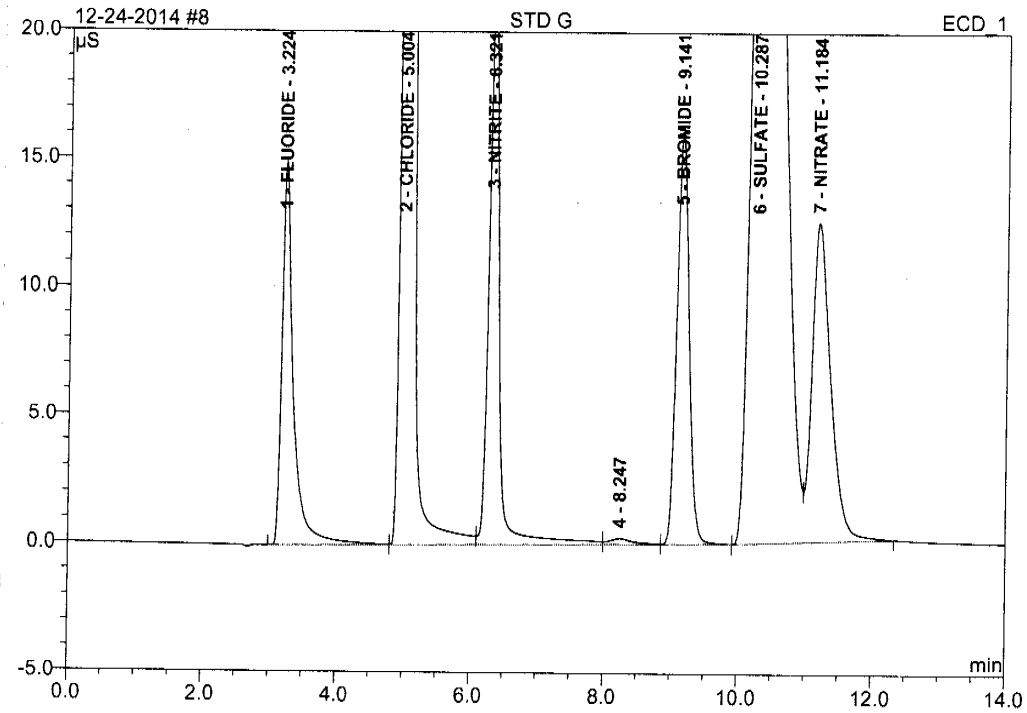
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	12.395	2.267	4.35	3.976	BM
2	5.01	CHLORIDE	182.800	23.015	44.16	79.325	M
3	6.33	NITRITE	17.936	3.155	6.05	4.015	M
4	8.25	n.a.	0.212	0.095	0.18	n.a.	M
5	9.17	BROMIDE	12.807	2.683	5.15	20.102	MB
6	10.36	SULFATE	40.390	17.608	33.78	80.319	BM
7	11.22	NITRATE	10.250	3.294	6.32	4.041	MB
Total:			276.789	52.118	100.00	191.779	

Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

8 STD G

ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**12/15/2014 13:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**



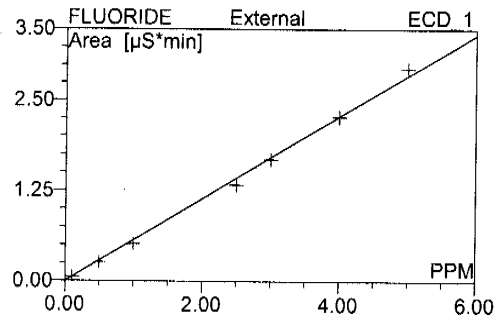
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPM	Type
1	3.22	FLUORIDE	14.948	2.945	4.49	5.164	BM
2	5.00	CHLORIDE	228.832	29.054	44.32	100.137	M
3	6.32	NITRITE	22.125	3.946	6.02	5.022	M
4	8.25	n.a.	0.228	0.100	0.15	n.a.	M
5	9.14	BROMIDE	15.982	3.379	5.15	25.317	MB
6	10.29	SULFATE	48.349	22.100	33.71	100.811	BM
7	11.18	NITRATE	12.403	4.029	6.15	4.942	MB
Total:			342.867	65.553	100.00	241.393	

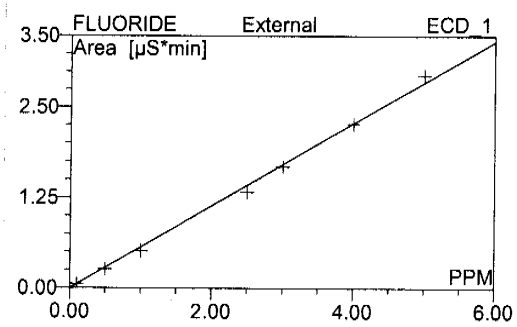
Chromeleon (c) Dionex 1996-2006
Version 6.80 SR10 Build 2818 (166959)

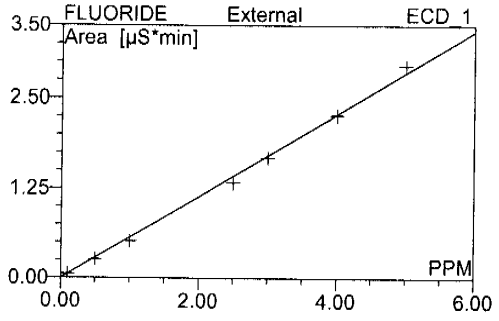
8 STD G

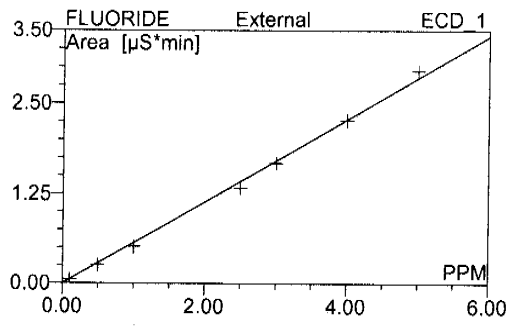
ICS 2100 SYSTEM OPERATOR: VESNAK

Sample Name:	**STD G**	*Injection Volume:*	**25.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ANIONS-A**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ANIONS**	*Dilution Factor:*	**1.0000**
Recording Time:	**###############**	*Sample Weight:*	**1.0000**
Run Time (min):	**14.00**	*Sample Amount:*	**1.0000**









No.	Ret.Time min	Peak Name	Cal.Type	Points	Coeff.Det. %	Offset	Slope	Curve
1	3.22	FLUORIDE	Lin	7	99.6655	0.0000	0.5702	0.0000
2	5.00	CHLORIDE	Lin	7	99.9287	0.0000	0.2901	0.0000
3	6.32	NITRITE	Lin	7	99.8942	0.0000	0.7858	0.0000
4	8.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	9.14	BROMIDE	Lin	7	99.8869	0.0000	0.1335	0.0000
6	10.29	SULFATE	Lin	7	99.8927	0.0000	0.2192	0.0000
7	11.18	NITRATE	Lin	7	99.8807	0.0000	0.8152	0.0000
Average:					99.8581	0.0000	0.4690	0.0000

ANALYTICAL DATA PACKAGE
SDG # 1501005

PROJECT NAME: FA20937X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 13, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 41

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	14

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:

This is an original submittal of the final report package.

Analytical Information:

All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:

No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 01/09/2015)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

~~1510~~ 1501005

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # FA20937X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20937X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISK06Z2		12/18/14	9:00:00 AM	MS	SO	1					1				X	-01
2X	XU854ISK06Z3		12/18/14	10:07:00 AM	MS	SO	1					1				X	-02
3X	XU854ISM06A		12/18/14	11:06:00 AM	MS	SO	1					1				X	-03

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 010215	Received By: 1	1/6/15 0915	Relinquished By: 2	Date Time: / Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3		Relinquished By: 4	Date Time: / Received By: 4
Relinquished by: 5	Date Time:	Received By: 5		Custody Seal #	[ ] Intact [ ] Not Intact / Preserved where applicable [ ] / On Ice [ ] / Cooler Temp.

1501005

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 01/06/15 @ 0915 Work Order: 1501005

1. Tracking # 5962 (last 4 digits, FedEx)

   Courier: Fedex

2. Temperature of rep. sample or temp blank when opened: 4.6 °C + correction factor(-0.0) = 4.6 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? (YES)..NO...NA

   If yes, how many and where: 1 on front

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 1/6/15

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

   Were these signed and dated correctly? YES...NO..(NA)

8. Packing material used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice (Ice-pack) Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13. a. Were VOA vials received? YES..(NO)..NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO..(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES..(NO)..NA...Comments_____
    If multiple coolers, sequence #____

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) JTG 1/6/15 1/6/15

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO..(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO..(NA)

16. Was residual chlorine present? YES...NO..(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) JTG 1/6/15

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA If not, PM notified? YES...NO..(NA)

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA If not, PM notified? YES...NO..(NA)

21. Were there Non-Conformance issues at login? YES..(NO)..NCR#_____

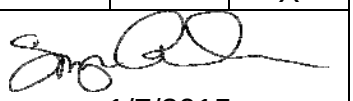
I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) JTG 1/6/15

I certify that I attached a label with the unique LIMS number to each container (initial/date) JTG 1/6/15

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) JTG 1/6/15

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1501005

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	 1/7/2015		

1501005

Empirical Laboratories, LLC

Client: Accutest Laboratories
Project: Nitrocellulose

Project Manager: Sonya Gordon
Project Number: ACC_Nitro

Report To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Due to Client: 01/20/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Joshua T. Gross
Date Received: 01/06/2015 09:15
Logged In By: Joshua T. Gross
Date Logged In: 01/06/2015 09:29

Samples Received at: **4.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1501005-01 XU854ISK06Z2 [Solid] Sampled 12/18/2014 09:00 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/15/2015 14:00	10	01/15/2015 08:00	
1501005-02 XU854ISK06Z3 [Solid] Sampled 12/18/2014 10:07 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/15/2015 14:00	10	01/15/2015 09:07	
1501005-03 XU854ISM06A [Solid] Sampled 12/18/2014 11:06 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/15/2015 14:00	10	01/15/2015 10:06	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1501005

QC LEVEL: Level IV
Report Due: 1/20/2015
Client Sample Count: 3

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/18/2014	1/6/2015	1501005-01	XU854ISK06Z2	Solid	X
Client Sample	12/18/2014	1/6/2015	1501005-02	XU854ISK06Z3	Solid	X
Client Sample	12/18/2014	1/6/2015	1501005-03	XU854ISM06A	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNitrocellulose EPA 353.2-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1501005-01 [XU854ISK06Z2]	5A07014	10.00/25.00	10.1	25.0	1.00			01/07/15
1501005-02 [XU854ISK06Z3]	5A07014	10.00/25.00	10.2	25.0	1.00			01/07/15
1501005-03 [XU854ISM06A]	5A07014	10.00/25.00	10.3	25.0	1.00			01/07/15

ANALYSIS DATA SHEET

XU854ISK06Z2

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501005-01
Sampled:	12/18/14 09:00	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.75**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:16

ANALYSIS DATA SHEET

XU854ISK06Z3

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501005-02
Sampled:	12/18/14 10:07	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose		1.00	2.00	4.00	1	U	E353.2MOD	5A07014	01/08/15 14:23

ANALYSIS DATA SHEET

XU854ISM06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501005-03
Sampled:	12/18/14 11:06	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.07**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:25

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1501005
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A07014-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A07014	01/08/15 14:13

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: 1501005
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A07014-BS1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.83**	**1.00**	2.00	4.00	1		E353.2MOD	5A07014	01/08/15 14:14

ANALYSIS DATA SHEET

Matrix Spike

Laboratory: Empirical Laboratories, LLC
SDG: 1501005
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A07014-MS1
% Solids: 0.00

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**16.39**	**1.00**	2.00	4.00	1		E353.2MOD	5A07014	01/08/15 14:17

ANALYSIS DATA SHEET

Matrix Spike Dup

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids: 0.00

SDG: 1501005
Project: Nitrocellulose
Laboratory ID: 5A07014-MSD1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**16.35**	**1.00**	2.00	4.00	1		E353.2MOD	5A07014	01/08/15 14:19

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1501005
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%
5A00807-CCV2	Nitrate/Nitrite as N	1200	1187	98.9	ug/L	+/- 10.00%
5A00807-CCV3	Nitrate/Nitrite as N	1200	1191	99.2	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1501005
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A07014

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A07014-BLK1	Nitrocellulose	0.229	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1501005
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD
5A00807-CCB2	Nitrocellulose	-12.6	400	1600	ug/L	U	E353.2MOD
5A00807-CCB3	Nitrocellulose	-10.0	400	1600	ug/L	U	E353.2MOD

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

E353.2MOD

XU854ISK06Z2

Laboratory: Empirical Laboratories, LLC

SDG: 1501005

Client: Accutest Laboratories

Project: Nitrocellulose

Matrix: Solid

Batch: 5A07014

% Solids:

Source Sample Name: **1501005-01**

ANALYTE	SPIKE ADDED (ug/g)	SAMPLE CONCENTRATION (ug/g)	MS CONCENTRATION (ug/g)	MS % REC.	Q	QC LIMITS REC.
Nitrocellulose	19.92	1.750	16.39	73.5		50 - 120

ANALYTE	SPIKE ADDED (ug/g)	MSD CONCENTRATION (ug/g)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
Nitrocellulose	19.73	16.35	74.0	0.255		20	50 - 120

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A07014	Laboratory ID:	5A07014-BS1
Preparation:	pNitrocellulose EPA 353.2	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.83	88.1	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1501005

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A07014 Batch Matrix: Solid Preparation: pNitrocellulose EPA 353.2

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISK06Z2	1501005-01	01/07/15 14:20	10.14	25.00
XU854ISK06Z3	1501005-02	01/07/15 14:20	10.21	25.00
XU854ISM06A	1501005-03	01/07/15 14:20	10.28	25.00
Blank	5A07014-BLK1	01/07/15 14:20	10.00	25.00
LCS	5A07014-BS1	01/07/15 14:20	10.00	25.00
XU854ISK06Z2	5A07014-MS1	01/07/15 14:20	10.16	25.00
XU854ISK06Z2	5A07014-MSD1	01/07/15 14:20	10.26	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1501005
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Instrument: WC-Lachat
Calibration: 5009003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00
Blank	5A07014-BLK1		01/08/15 14:13
LCS	5A07014-BS1		01/08/15 14:14
XU854ISK06Z2	1501005-01		01/08/15 14:16
XU854ISK06Z2	5A07014-MS1		01/08/15 14:17
XU854ISK06Z2	5A07014-MSD1		01/08/15 14:19
Calibration Check	5A00807-CCV2		01/08/15 14:20
Calibration Blank	5A00807-CCB2		01/08/15 14:22
XU854ISK06Z3	1501005-02		01/08/15 14:23
XU854ISM06A	1501005-03		01/08/15 14:25
Calibration Check	5A00807-CCV3		01/08/15 14:30
Calibration Blank	5A00807-CCB3		01/08/15 14:32

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501005	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1501005

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISK06Z2	12/18/14 09:00	01/06/15 09:15	01/07/15 14:20	N/A	28.00	01/08/15 14:16	21.26	28.00	
XU854ISK06Z3	12/18/14 10:07	01/06/15 09:15	01/07/15 14:20	N/A	28.00	01/08/15 14:23	21.22	28.00	
XU854ISM06A	12/18/14 11:06	01/06/15 09:15	01/07/15 14:20	N/A	28.00	01/08/15 14:25	21.18	28.00	

Data for Wet Chemistry Supporting Raw Data / Logs

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd vBLQ
1/12/15
1501005

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 ug/L Nitrocellulose

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View

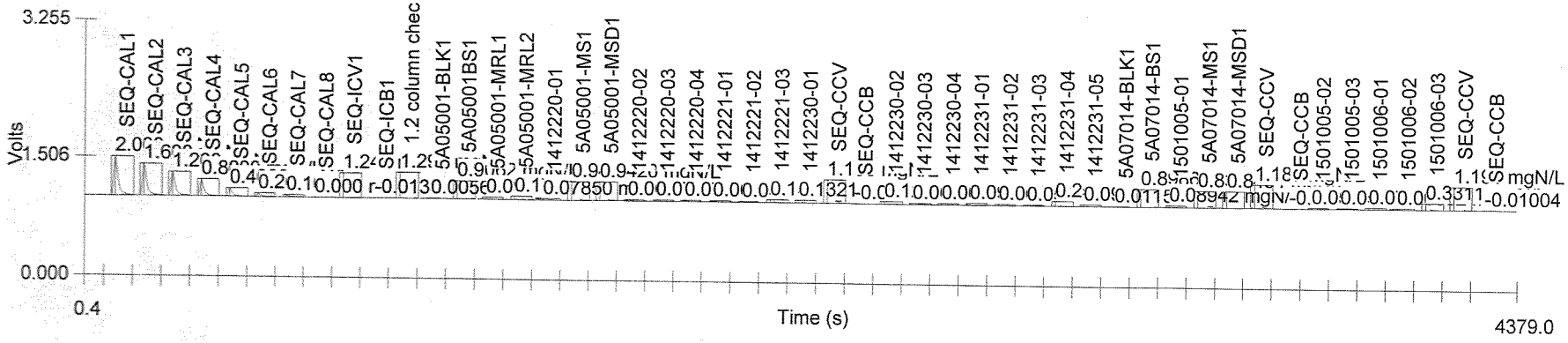
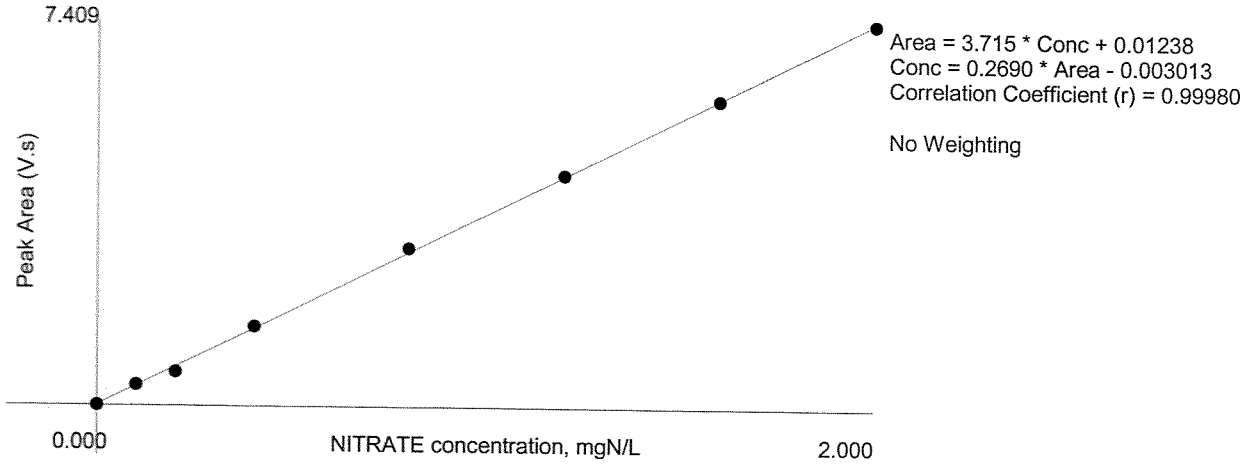


Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

PREPARATION BENCH SHEET

5A07014

Empirical Laboratories, LLC **Printed: 1/12/2015 5:04:36PM**

Instrument:

Matrix: Solid **Prepared using: WC - pNitrocellulose EPA 353.2** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1501005-01	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.14	25					NA	;;
1501005-02	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.21	25					NA	;;
1501005-03	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.28	25					NA	;;
1501006-01	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.35	25					NA	;;
1501006-02	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.17	25					NA	;;
1501006-03	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.14	25					NA	;;
5A07014-BLK1		QC	01/07/2015	10	25					NA	
5A07014-BS1		QC	01/07/2015	10	25	14G0256		255		NA	
5A07014-MS1		QC	01/07/2015	10.16	25	14G0256	1501005-01	255		NA	
5A07014-MSD1		QC	01/07/2015	10.26	25	14G0256	1501005-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

ANALYTICAL DATA PACKAGE
SDG # 1501006

PROJECT NAME: FA20881X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 13, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 39

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	9
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:

This is an original submittal of the final report package.

Analytical Information:

All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:

No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 01/09/2015)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

ORGANIC CALCULATIONS

GC/MS Volatiles

$$\text{Final Concentration} = \frac{\text{On-column(ug/L or ug/Kg) * Expected Vol/Weight (mL or g) * Dilution}}{\text{Initial Vol/Weight (mL or g) * (Percent Solids/100) (if applicable)}}$$

Note - Expected Vol/Weight value is found in "Final Vol" column of Preparation Batch Summary.

GC/MS Extractables

$$\text{Final Concentration} = \frac{\text{On-column(ng/uL) * Final Vol (ml) * Dilution *(1000uL/mL)}}{\text{Initial Vol/Weight (mL or g) * (Percent Solids/100) (if applicable)}}$$

= ng/mL or ng/g

= ug/L or ug/kg

GC or LC Extractables

$$\text{Final Concentration} = \frac{\text{On-column(ng/mL) * Final Vol (mL) * Dilution}}{\text{Initial Vol/Weight (mL or g) * (Percent Solids/100) (if applicable)}}$$

= ng/mL or ng/g

= ug/L or ug/kg

Sample Receipt Information

1501006

CHAIN OF CUSTODY

ACCUTEST LABORATORIES
4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: FA20881X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20881X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISK06A		12/17/14	1:40:00 PM	MS	SO	1					1				X	
2X	XU854ISK06C		12/17/14	1:40:00 PM	MS	SO	1					1				X	
3X	XU854ISK06Z1		12/17/14	2:30:00 PM	MS	SO	1					1				X	

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 01-02-15 1700	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

1501006

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 01/06/15 @ 0915 Work Order: 1501006

1. Tracking # 5962 (last 4 digits, FedEx)

   Courier: Fedex

2. Temperature of rep. sample or temp blank when opened: 4.6 °C + correction factor(-0.0) = 4.6 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? (YES)..NO...NA

   If yes, how many and where: 1 on front

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 1/6/15

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

   Were these signed and dated correctly? YES...NO..(NA)

8. Packing material used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice (Ice-pack) Ice (direct contact) Dry Ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13. a. Were VOA vials received? YES...(NO)..NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO..(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES..(NO)..NA...Comments_____
    If multiple coolers, sequence #_____

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) JTG 1/6/15

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO..(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO..(NA)

16. Was residual chlorine present? YES...NO..(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) JTG 1/6/15

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA If not, PM notified? YES...NO..(NA)

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO..(NA)

21. Were there Non-Conformance issues at login? YES..(NO)..NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) JTG 1/6/15

I certify that I attached a label with the unique LIMS number to each container (initial/date) JTG 1/6/15

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) JTG 1/6/15

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1501006

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	1/7/2015		

1501006

Empirical Laboratories, LLC

Client:	**Accutest Laboratories**	**Project Manager:**	**Sonya Gordon**
Project:	**Nitrocellulose**	**Project Number:**	**ACC_Nitro**

Report To:

Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:

Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Due to Client: 01/20/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Joshua T. Gross Date Received: 01/06/2015 09:15

Logged In By: Joshua T. Gross Date Logged In: 01/06/2015 09:35

Samples Received at: **4.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1501006-01 XU854ISK06A [Solid] Sampled 12/17/2014 13:40 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/15/2015 14:00	10	01/14/2015 12:40	
1501006-02 XU854ISK06C [Solid] Sampled 12/17/2014 13:40 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/15/2015 14:00	10	01/14/2015 12:40	
1501006-03 XU854ISK06Z1 [Solid] Sampled 12/17/2014 14:30 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/15/2015 14:00	10	01/14/2015 13:30	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1501006

QC LEVEL: Level IV
Report Due: 1/20/2015
Client Sample Count: 3

Sample Type	Sampled	Received	Lab ID	Client ID	Lab Matrix	Report Matrix	E353.2MOD
Client Sample	12/17/2014	1/6/2015	1501006-01	XU854ISK06A	Solid	Solid	X
Client Sample	12/17/2014	1/6/2015	1501006-02	XU854ISK06C	Solid	Solid	X
Client Sample	12/17/2014	1/6/2015	1501006-03	XU854ISK06Z1	Solid	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNitrocellulose EPA 353.2-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1501006-01 [XU854ISK06A]	5A07014	10.00/25.00	10.4	25.0	1.00			01/07/15
1501006-02 [XU854ISK06C]	5A07014	10.00/25.00	10.2	25.0	1.00			01/07/15
1501006-03 [XU854ISK06Z1]	5A07014	10.00/25.00	10.1	25.0	1.00			01/07/15

ANALYSIS DATA SHEET

XU854ISK06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501006-01
Sampled:	12/17/14 13:40	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.46**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:26

ANALYSIS DATA SHEET

XU854ISK06C

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501006-02
Sampled:	12/17/14 13:40	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.30**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A07014	01/08/15 14:28

ANALYSIS DATA SHEET

XU854ISK06Z1

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1501006-03
Sampled:	12/17/14 14:30	Received:	01/06/15 09:15

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**6.48**	**1.00**	2.00	4.00	1		E353.2MOD	5A07014	01/08/15 14:29

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1501006
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A07014-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A07014	01/08/15 14:13

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: 1501006
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A07014-BS1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.83**	**1.00**	2.00	4.00	1		E353.2MOD	5A07014	01/08/15 14:14

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1501006
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%
5A00807-CCV2	Nitrate/Nitrite as N	1200	1187	98.9	ug/L	+/- 10.00%
5A00807-CCV3	Nitrate/Nitrite as N	1200	1191	99.2	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1501006
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A07014

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A07014-BLK1	Nitrocellulose	0.229	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1501006
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD
5A00807-CCB2	Nitrocellulose	-12.6	400	1600	ug/L	U	E353.2MOD
5A00807-CCB3	Nitrocellulose	-10.0	400	1600	ug/L	U	E353.2MOD

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A07014	Laboratory ID:	5A07014-BS1
Preparation:	pNitrocellulose EPA 353.2	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.83	88.1	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1501006

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A07014 Batch Matrix: Solid Preparation: pNitrocellulose EPA 353.2

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISK06A	1501006-01	01/07/15 14:20	10.35	25.00
XU854ISK06C	1501006-02	01/07/15 14:20	10.17	25.00
XU854ISK06Z1	1501006-03	01/07/15 14:20	10.14	25.00
Blank	5A07014-BLK1	01/07/15 14:20	10.00	25.00
LCS	5A07014-BS1	01/07/15 14:20	10.00	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1501006
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Instrument: WC-Lachat
Calibration: 5009003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00
Blank	5A07014-BLK1		01/08/15 14:13
LCS	5A07014-BS1		01/08/15 14:14
Calibration Check	5A00807-CCV2		01/08/15 14:20
Calibration Blank	5A00807-CCB2		01/08/15 14:22
XU854ISK06A	1501006-01		01/08/15 14:26
XU854ISK06C	1501006-02		01/08/15 14:28
XU854ISK06Z1	1501006-03		01/08/15 14:29
Calibration Check	5A00807-CCV3		01/08/15 14:30
Calibration Blank	5A00807-CCB3		01/08/15 14:32

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1501006	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1501006

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISK06A	12/17/14 13:40	01/06/15 09:15	01/07/15 14:20	N/A	28.00	01/08/15 14:26	22.07	28.00	
XU854ISK06C	12/17/14 13:40	01/06/15 09:15	01/07/15 14:20	N/A	28.00	01/08/15 14:28	22.08	28.00	
XU854ISK06Z1	12/17/14 14:30	01/06/15 09:15	01/07/15 14:20	N/A	28.00	01/08/15 14:29	22.04	28.00	

Data for Wet Chemistry Supporting Raw Data / Logs

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd BLQ 1/12/15 1501006

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 ug/g Nitrocellulose

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View

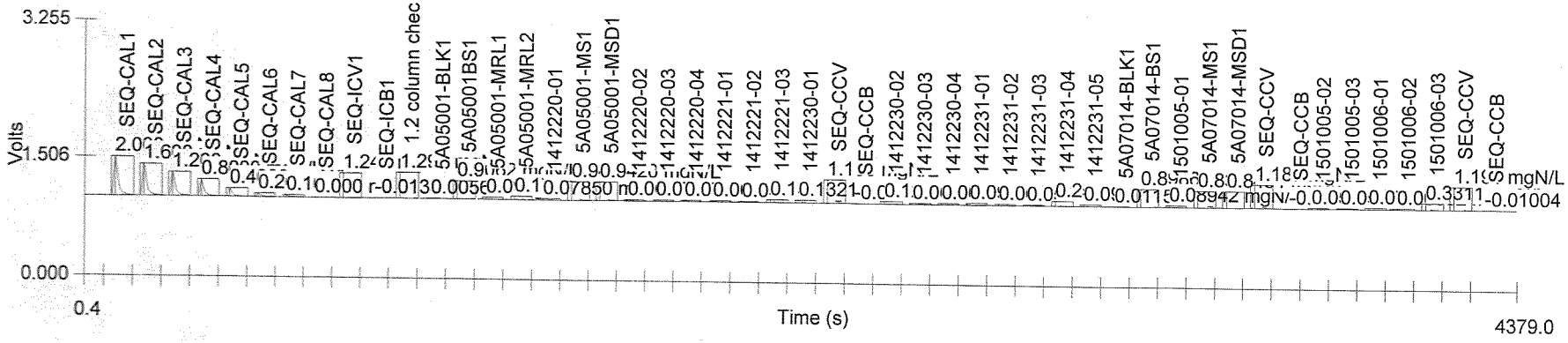
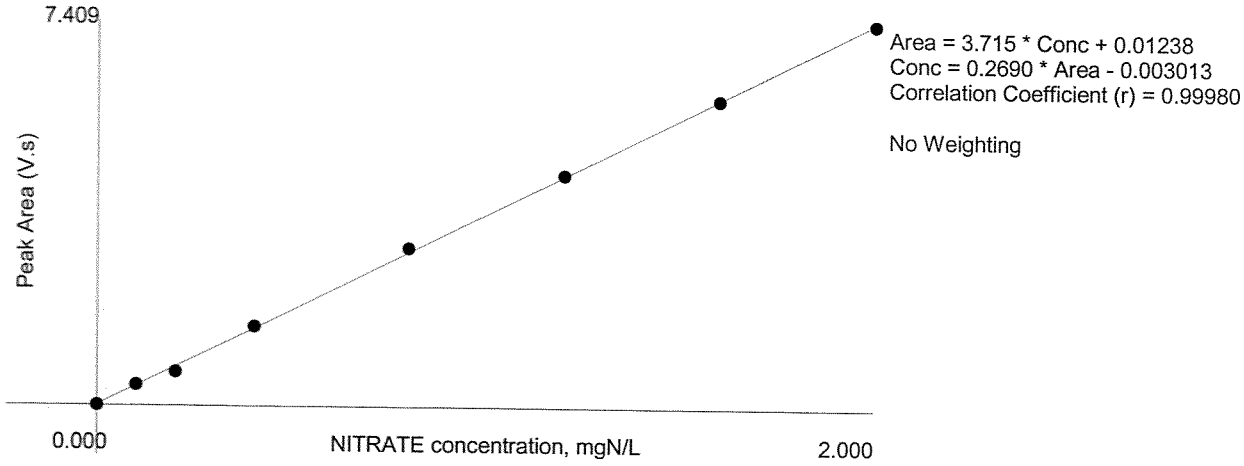


Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



36

1501006

Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

PREPARATION BENCH SHEET

5A07014

Empirical Laboratories, LLC **Printed: 1/12/2015 5:04:36PM**

Instrument:

Matrix: Solid **Prepared using: WC - pNitrocellulose EPA 353.2** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1501005-01	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.14	25					NA	;;
1501005-02	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.21	25					NA	;;
1501005-03	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.28	25					NA	;;
1501006-01	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.35	25					NA	;;
1501006-02	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.17	25					NA	;;
1501006-03	A	WC_NITROCELLULOSE_353.2	01/07/2015	10.14	25					NA	;;
5A07014-BLK1		QC	01/07/2015	10	25					NA	
5A07014-BS1		QC	01/07/2015	10	25	14G0256		255		NA	
5A07014-MS1		QC	01/07/2015	10.16	25	14G0256	1501005-01	255		NA	
5A07014-MSD1		QC	01/07/2015	10.26	25	14G0256	1501005-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

ANALYTICAL DATA PACKAGE
SDG # 1412231

PROJECT NAME: FA20820X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 12, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 42

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:

This is an original submittal of the final report package.

Analytical Information:

All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:

No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 01/09/2015)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

1412231

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # FA20820X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20820X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCL	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISP06A		12/16/14	8:21:00 AM	MS	SO	1					1				X	-01
2X	XU854ISQ06A		12/16/14	9:07:00 AM	MS	SO	1					1				X	-02
3X	XU854ISR06A		12/16/14	10:32:00 AM	MS	SO	1					1				X	-03
4X	XU854ISL06A		12/16/14	11:35:00 AM	MS	SO	1					1				X	-04
5X	XU854ISJ06A		12/16/14	1:30:00 PM	MS	SO	1					1				X	-05

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Labiink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions

Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Tin 12-29-14 17:00	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

1412231

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 12/30/14 @0900 Workorder# 1412231

1. Tracking # 5815 (last 4 digits, FedEx)

   Courier: FedEx

2. Temperature of rep. sample or temp blank when opened: 0.8 °C + correction factor(-0.0) = 0.8°C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? (YES)..NO...NA

   If yes, how many and where: 2 - front

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 12/30/14

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

   Were these signed and dated correctly? YES...NO..(NA)

8. Packing material used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice (Ice-pack) Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13. a. Were VOA vials received? YES..(NO)..NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO..(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES..(NO)..NA...Comments_____
    If multiple coolers, sequence # —

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) JTG 12/30/14

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO..(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO..(NA)

16. Was residual chlorine present? YES...NO..(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) JTG 12/30/14

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)..NO...NA If not, PM notified? YES...NO..(NA)

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO..(NA)

21. Were there Non-Conformance issues at login? YES..(NO)...NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) JTG 12/30/14

I certify that I attached a label with the unique LIMS number to each container (initial/date) JTG 12/30/14

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) JTG 12/30/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM (Continued)

LIMS Data Entry Second Check

Workorder# 1412231

22. Cooler Receipt Form issues reviewed and communicated to PM? YES...NO...NA

23. Client and Project verified to match the COC/CRF in LIMS Project Screen? YES...NO...NA

24. Following items verified to items verified to match the COC/CRF in LIMS Receipt Screen:

- a. Received Date/Received By YES...NO...NA
- b. TAT (COC specified different?) YES...NO...NA
- c. Shipping Container Temperatures (corrected temps) YES...NO ...NA
- d. Condition Items (seals, intact, labels, preservation, ROI) YES...NO...NA

25. Following LIMS Sample Information verified against COC for each sample:

- a. Name YES...NO...NA
- b. QC Source YES...NO...NA
- c. Matrix YES...NO...NA
- d. Sample Type YES...NO...NA
- e. Sampled Date/Time (Correct Time Zone) YES...NO...NA
- f. Work Analyses/Versions (if applicable) YES...NO...NA
- g. Sample Issues included in comments (limited volume, concentration warnings, etc.)? YES...NO...NA
- h. Unpreserved VOA holding time set to 7 days? YES...NO...NA

26. Containers consistent with tests requested? YES...NO...NA

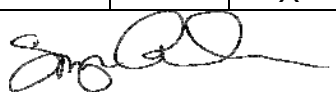
27. Field data entered and matching COC? YES...NO...NA

I certify that I have verified the LIMS data entry and answered questions 23-27 above (initial/date): _____

Additional Details:

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1412231

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	 12/31/2014		

1412231

Empirical Laboratories, LLC

Client: Accutest Laboratories
Project: Nitrocellulose

Project Manager: Sonya Gordon
Project Number: ACC_Nitro

Report To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Due to Client: 01/14/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Joshua T. Gross
Date Received: 12/30/2014 09:00

Logged In By: Joshua T. Gross
Date Logged In: 12/30/2014 10:27

Samples Received at: **0.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1412231-01 XU854ISP06A [Solid] Sampled 12/16/2014 08:21 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 07:21	
1412231-02 XU854ISQ06A [Solid] Sampled 12/16/2014 09:07 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 08:07	
1412231-03 XU854ISR06A [Solid] Sampled 12/16/2014 10:32 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 09:32	
1412231-04 XU854ISL06A [Solid] Sampled 12/16/2014 11:35 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 10:35	
1412231-05 XU854ISJ06A [Solid] Sampled 12/16/2014 13:30 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/13/2015 12:30	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412231

QC LEVEL: Level IV
Report Due: 1/14/2015
Client Sample Count: 5

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/16/2014	12/30/2014	1412231-01	XU854ISP06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-02	XU854ISQ06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-03	XU854ISR06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-04	XU854ISL06A	Solid	X
Client Sample	12/16/2014	12/30/2014	1412231-05	XU854ISJ06A	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1412231-01 [XU854ISP06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412231-02 [XU854ISQ06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412231-03 [XU854ISR06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412231-04 [XU854ISL06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412231-05 [XU854ISJ06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15

ANALYSIS DATA SHEET

XU854ISP06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412231-01
Sampled:	12/16/14 08:21	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.81**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:06

ANALYSIS DATA SHEET

XU854ISQ06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412231-02
Sampled:	12/16/14 09:07	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.25**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:07

ANALYSIS DATA SHEET

XU854ISR06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412231-03
Sampled:	12/16/14 10:32	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.17**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:09

ANALYSIS DATA SHEET

XU854ISL06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412231-04
Sampled:	12/16/14 11:35	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**4.97**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 14:10

ANALYSIS DATA SHEET

XU854ISJ06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412231-05
Sampled:	12/16/14 13:30	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.81**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:12

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A05001	01/08/15 13:38

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids:

SDG: 1412231
Project: Nitrocellulose
Laboratory ID: 5A05001-BS1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.98**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:40

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1412231
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%
5A00807-CCV2	Nitrate/Nitrite as N	1200	1187	98.9	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A05001

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A05001-BLK1	Nitrocellulose	0.112	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD
5A00807-CCB2	Nitrocellulose	-12.6	400	1600	ug/L	U	E353.2MOD

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A05001	Laboratory ID:	5A05001-BS1
Preparation:	pNone	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.98	88.8	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412231

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A05001 Batch Matrix: Solid Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISP06A	1412231-01	01/05/15 05:13	10.14	25.00
XU854ISQ06A	1412231-02	01/05/15 05:13	10.12	25.00
XU854ISR06A	1412231-03	01/05/15 05:13	10.04	25.00
XU854ISL06A	1412231-04	01/05/15 05:13	10.02	25.00
XU854ISJ06A	1412231-05	01/05/15 05:13	10.07	25.00
Blank	5A05001-BLK1	01/05/15 05:13	10.00	25.00
LCS	5A05001-BS1	01/05/15 05:13	10.00	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412231
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Instrument: WC-Lachat
Calibration: 5009003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Blank	5A05001-BLK1		01/08/15 13:38
LCS	5A05001-BS1		01/08/15 13:40
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00
XU854ISP06A	1412231-01		01/08/15 14:06
XU854ISQ06A	1412231-02		01/08/15 14:07
XU854ISR06A	1412231-03		01/08/15 14:09
XU854ISL06A	1412231-04		01/08/15 14:10
XU854ISJ06A	1412231-05		01/08/15 14:12
Calibration Check	5A00807-CCV2		01/08/15 14:20
Calibration Blank	5A00807-CCB2		01/08/15 14:22

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412231	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412231

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISP06A	12/16/14 08:21	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:06	23.28	28.00	
XU854ISQ06A	12/16/14 09:07	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:07	23.25	28.00	
XU854ISR06A	12/16/14 10:32	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:09	23.19	28.00	
XU854ISL06A	12/16/14 11:35	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:10	23.15	28.00	
XU854ISJ06A	12/16/14 13:30	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:12	23.07	28.00	

Data for Wet Chemistry Supporting Raw Data / Logs

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd v BLQ 1/12/15

1412231

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 ug/g Nitrocellulose

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View

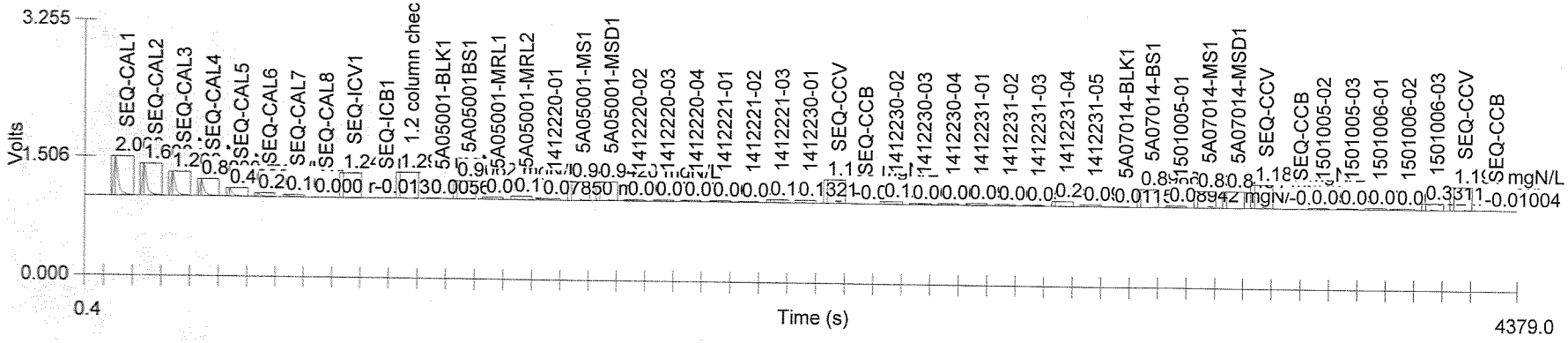
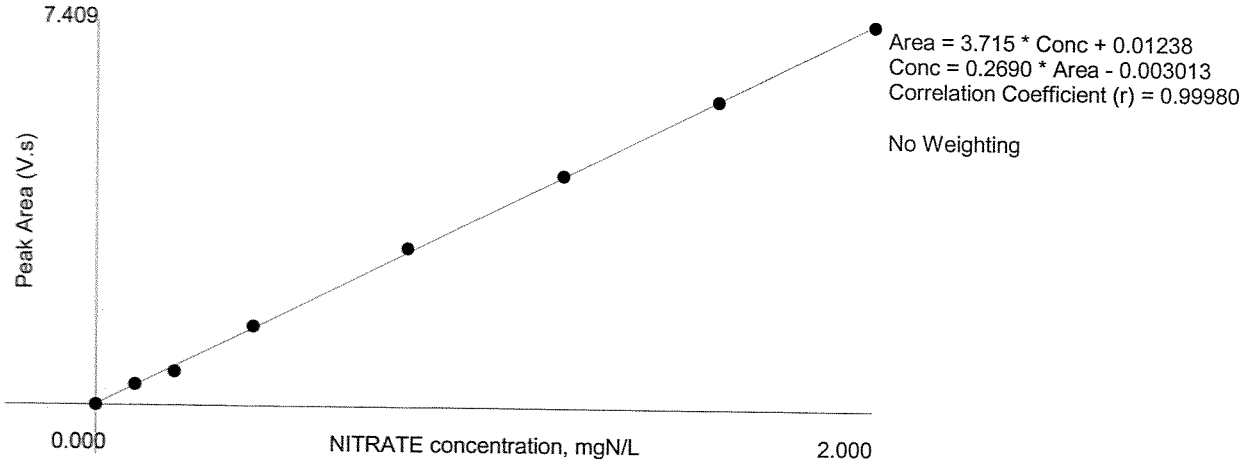


Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID		ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1412220-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412220-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412220-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.15	25						NA	;;
1412220-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.13	25						NA	;;
1412221-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412221-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.1	25						NA	;;
1412221-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.26	25						NA	;;
1412230-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412230-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412230-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412230-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.03	25						NA	;;
1412231-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.14	25						NA	;;
1412231-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412231-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412231-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412231-05	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.07	25						NA	;;
1501001-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10	25						NA	Prepare all MRLs within the first month of the quarter - upload associated method blank as sample.;Prepare/analyzed only if analysis performed this quarter!;

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
5A05001-BLK1		QC	01/05/2015	10	25					NA	
5A05001-BS1		QC	01/05/2015	10	25	14G0256		255		NA	
5A05001-MRL1		QC	01/05/2015	10	25	14G0257		255		NA	
5A05001-MRL2		QC	01/05/2015	10	25	14G0257		500		NA	
5A05001-MS1		QC	01/05/2015	10.09	25	14G0256	1412220-01	255		NA	
5A05001-MSD1		QC	01/05/2015	10.02	25	14G0256	1412220-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

ANALYTICAL DATA PACKAGE
SDG # 1412230

PROJECT NAME: FA20794X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 12, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 41

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Changes to the Revision:

This is an original submittal of the final report package.

Analytical Information:

All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:

No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 01/09/2015)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

1412230

CHAIN OF CUSTODY

ACCUTEST LABORATORIES
4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: FA20794X

Client / Reporting Information

Company Name: Accutest Laboratories
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: Jeans E-mail: jeans@accutest.com
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): MS Phone:

Project Information

Project Name: FA20794X
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocellulose 535.2	LAB USE ONLY
1X	XU854ISG06A		12/15/14	10:13:00 AM	MS	SO										X	-01
2X	XU854ISN06A		12/15/14	11:14:00 AM	MS	SO	1					1				X	-02
3X	XU854ISO06A		12/15/14	12:14:00 PM	MS	SO	1					1				X	-03
4X	XU854ISI06A		12/15/14	2:16:00 PM	MS	SO	1					1				X	-04

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions: Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 12/14/14 1700	Received By: 1	12/30 0900	Relinquished By: 2	Date Time: / Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3		Relinquished By: 4	Date Time: / Received By: 4
Relinquished by: 5	Date Time:	Received By: 5		Custody Seal #	[ ] Intact [ ] Not Intact / Preserved where applicable [ ] / On Ice [ ] / Cooler Temp.

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 12/30/14 @0900 Workorder# 1412230

1. Tracking # 5815 (last 4 digits, FedEx)

   Courier: FedEx

2. Temperature of rep. sample or temp blank when opened: 0.8 °C + correction factor(-0.0) = 0.8°C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..(NA)

4. Were custody seals on outside of cooler? (YES)..NO...NA

   If yes, how many and where: 2 - front

5. Were the seals intact, signed, and dated correctly? (YES)..NO...NA

6. Were custody papers inside cooler? (YES)..NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 12/30/14

7. Were custody seals on containers: YES (NO?) and Intact YES...NO..(NA)

   Were these signed and dated correctly? YES...NO..(NA)

8. Packing material used? (Bubblewrap) (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice (Ice-pack) Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)..NO...NA

12. Did all container labels and tags agree with custody papers? (YES)..NO...NA

13. a. Were VOA vials received? YES..(NO)..NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO...(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES..(NO)..NA...Comments_____
    If multiple coolers, sequence #_____

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) JTG 12/30/14

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO..(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO..(NA)

16. Was residual chlorine present? YES...NO..(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) JTG 12/30/14

17. Were custody papers properly filled out (ink, signed, etc)? (YES)..NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA If not, PM notified? YES..(NO)..(NA) JTG 12/30/14

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO..(NA)

21. Were there Non-Conformance issues at login? YES..(NO)..NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) JTG 12/30/14

I certify that I attached a label with the unique LIMS number to each container (initial/date) JTG 12/30/14

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) JTG 12/30/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM (Continued)

LIMS Data Entry Second Check

Workorder# 1412230

22. Cooler Receipt Form Issues reviewed and communicated to PM? YES...NO...NA

23. Client and Project verified to match the COC/CRF in LIMS Project Screen? YES...NO...NA

24. Following items verified to items verified to match the COC/CRF in LIMS Receipt Screen:

a. Received Date/Received By YES...NO...NA

b. TAT (COC specified different?) YES...NO...NA

c. Shipping Container Temperatures (corrected temps) YES...NO ...NA

d. Condition Items (seals, intact, labels, preservation, ROI) YES...NO...NA

25. Following LIMS Sample Information verified against COC for each sample:

a. Name YES...NO...NA

b. QC Source YES...NO...NA

c. Matrix YES...NO...NA

d. Sample Type YES...NO...NA

e. Sampled Date/Time (Correct Time Zone) YES...NO...NA

f. Work Analyses/Versions (if applicable) YES...NO...NA

g. Sample Issues included in comments (limited volume, concentration warnings, etc.)? YES...NO...NA

h. Unpreserved VOA holding time set to 7 days? YES...NO...NA

26. Containers consistent with tests requested? YES...NO...NA

27. Field data entered and matching COC? YES...NO...NA

I certify that I have verified the LIMS data entry and answered questions 23-27 above (initial/date): _____.

Additional Details:

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1412230

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	12/31/2014		

1412230

Empirical Laboratories, LLC

Client: Accutest Laboratories
Project: Nitrocellulose

Project Manager: Sonya Gordon
Project Number: ACC_Nitro

Report To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone :(407) 425-6700
Fax: (407) 425-0707

Due to Client: 01/14/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Joshua T. Gross
Date Received: 12/30/2014 09:00

Logged In By: Joshua T. Gross
Date Logged In: 12/30/2014 10:20

Samples Received at: **0.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1412230-01 XU854ISG06A [Solid] Sampled 12/15/2014 10:13 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 09:13	
1412230-02 XU854ISN06A [Solid] Sampled 12/15/2014 11:14 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 10:14	
1412230-03 XU854ISO06A [Solid] Sampled 12/15/2014 12:14 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 11:14	
1412230-04 XU854ISI06A [Solid] Sampled 12/15/2014 14:16 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/09/2015 14:00	10	01/12/2015 13:16	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412230

QC LEVEL: Level IV
Report Due: 1/14/2015
Client Sample Count: 4

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/15/2014	12/30/2014	1412230-01	XU854ISG06A	Solid	X
Client Sample	12/15/2014	12/30/2014	1412230-02	XU854ISN06A	Solid	X
Client Sample	12/15/2014	12/30/2014	1412230-03	XU854ISO06A	Solid	X
Client Sample	12/15/2014	12/30/2014	1412230-04	XU854ISI06A	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1412230-01 [XU854ISG06A]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412230-02 [XU854ISN06A]	5A05001	10.00/25.00	10.2	25.0	1.00			01/05/15
1412230-03 [XU854ISO06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412230-04 [XU854ISI06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15

ANALYSIS DATA SHEET

XU854ISG06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412230-01
Sampled:	12/15/14 10:13	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**2.59**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:57

ANALYSIS DATA SHEET

XU854ISN06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412230-02
Sampled:	12/15/14 11:14	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**2.53**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:01

ANALYSIS DATA SHEET

XU854ISO06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412230-03
Sampled:	12/15/14 12:14	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.29**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:03

ANALYSIS DATA SHEET

XU854ISI06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412230-04
Sampled:	12/15/14 14:16	Received:	12/30/14 09:00

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.34**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 14:04

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A05001	01/08/15 13:38

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids:

SDG: 1412230
Project: Nitrocellulose
Laboratory ID: 5A05001-BS1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.98**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:40

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1412230
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%
5A00807-CCV2	Nitrate/Nitrite as N	1200	1187	98.9	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A05001

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A05001-BLK1	Nitrocellulose	0.112	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD
5A00807-CCB2	Nitrocellulose	-12.6	400	1600	ug/L	U	E353.2MOD

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A05001	Laboratory ID:	5A05001-BS1
Preparation:	pNone	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.98	88.8	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412230

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A05001 Batch Matrix: Solid Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISG06A	1412230-01	01/05/15 05:13	10.12	25.00
XU854ISN06A	1412230-02	01/05/15 05:13	10.16	25.00
XU854ISO06A	1412230-03	01/05/15 05:13	10.04	25.00
XU854ISI06A	1412230-04	01/05/15 05:13	10.03	25.00
Blank	5A05001-BLK1	01/05/15 05:13	10.00	25.00
LCS	5A05001-BS1	01/05/15 05:13	10.00	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412230
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Instrument: WC-Lachat
Calibration: 5009003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Blank	5A05001-BLK1		01/08/15 13:38
LCS	5A05001-BS1		01/08/15 13:40
XU854ISG06A	1412230-01		01/08/15 13:57
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00
XU854ISN06A	1412230-02		01/08/15 14:01
XU854ISO06A	1412230-03		01/08/15 14:03
XU854ISI06A	1412230-04		01/08/15 14:04
Calibration Check	5A00807-CCV2		01/08/15 14:20
Calibration Blank	5A00807-CCB2		01/08/15 14:22

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412230	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412230

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISG06A	12/15/14 10:13	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 13:57	24.20	28.00	
XU854ISN06A	12/15/14 11:14	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:01	24.16	28.00	
XU854ISO06A	12/15/14 12:14	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:03	24.12	28.00	
XU854ISI06A	12/15/14 14:16	12/30/14 09:00	01/05/15 05:13	N/A	28.00	01/08/15 14:04	24.03	28.00	

Data for Wet Chemistry Supporting Raw Data / Logs

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd BLQ 1/12/15

1412230

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 ug/g Nitrocellulose

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View

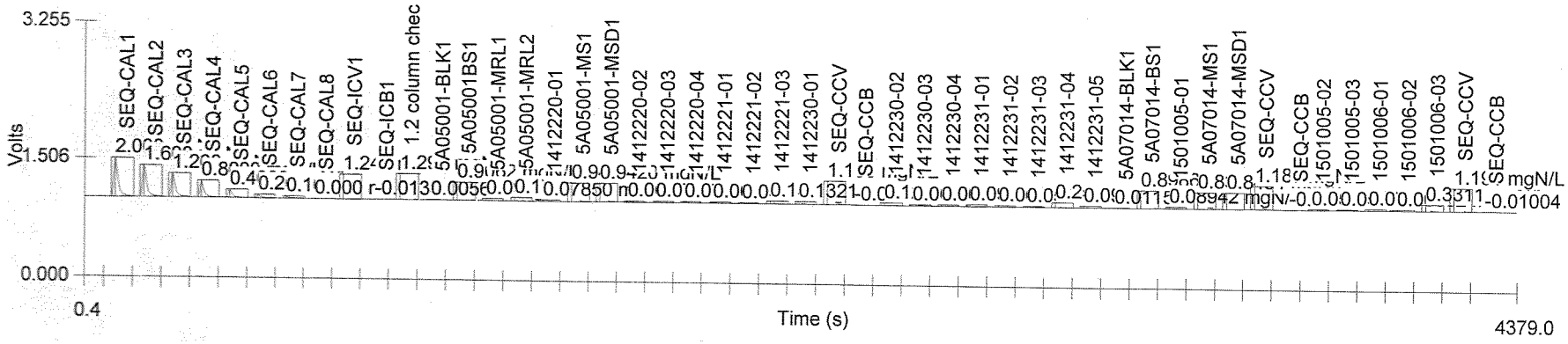
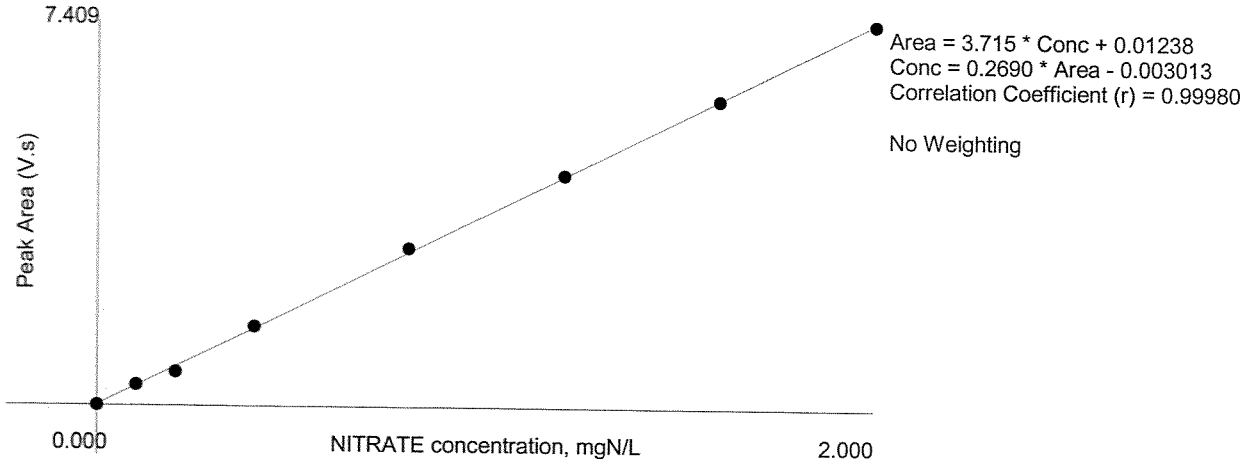


Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



37

1412230

Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID		ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1412220-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412220-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412220-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.15	25						NA	;;
1412220-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.13	25						NA	;;
1412221-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412221-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.1	25						NA	;;
1412221-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.26	25						NA	;;
1412230-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412230-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412230-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412230-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.03	25						NA	;;
1412231-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.14	25						NA	;;
1412231-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412231-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412231-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412231-05	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.07	25						NA	;;
1501001-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10	25						NA	Prepare all MRLs within the first month of the quarter - upload associated method blank as sample.;Prepare/analyzed only if analysis performed this quarter!;

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
5A05001-BLK1		QC	01/05/2015	10	25					NA	
5A05001-BS1		QC	01/05/2015	10	25	14G0256		255		NA	
5A05001-MRL1		QC	01/05/2015	10	25	14G0257		255		NA	
5A05001-MRL2		QC	01/05/2015	10	25	14G0257		500		NA	
5A05001-MS1		QC	01/05/2015	10.09	25	14G0256	1412220-01	255		NA	
5A05001-MSD1		QC	01/05/2015	10.02	25	14G0256	1412220-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

ANALYTICAL DATA PACKAGE
SDG # 1412221

PROJECT NAME: FA20723X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 12, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 40

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

The following issues were discovered with the COC and/or samples upon log-in:

1. The client IDs on the container did not match the IDs on the COC. The client was contacted and indicated the IDs on the container are project name on COC and Accutest sample number.

Changes to the Revision:

This is an original submittal of the final report package.

Analytical Information:

All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:

No anomalies or deviations are noted.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 01/09/2015)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

1412221

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # FA20723X

Client / Reporting Information	Project Information	Billing Information (if different from Report to)
Company Name: Accutest Laboratories	Project Name: FA20723X	
Street Address: 4405 Vineland Rd, Suite C-15	Street	
City: Orlando State: FL Zip: 32811	City State	Company Name
Project Contact: jeans E-mail: jeans@accutest.com	Project #	Street Address
Phone #: 407-425-6700 Fax #	Client Purchase Order #	City State Zip
Sampler(s) Name(s): MS Phone	Project Manager	Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocelluose 353.2	LAB USE ONLY
01 1X	XU854ISH0621		12/11/14	10:02:00 AM	MS	SO	1					1				X	
02 2X	XU854ISH0622		12/11/14	11:36:00 AM	MS	SO	1					1				X	
03 3X	XU854ISH0623		12/11/14	1:40:00 PM	MS	SO	1					1				X	

Turnaround Time (Business days)

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions: Empirical

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time	Received By:	Relinquished By:	Date Time:	Received By:
1	[signature] ALSC	12-19-14 1700	1	2	12/20/14 945	2 [signature]
3			3	4		4
5			5			

Custody Seal # [ ] Intact [ ] Not intact — Preserved where applicable [ ] — On Ice [ ] — Cooler Temp.

1412221

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 12/20/14 @0945 Workorder# 141222

1. Tracking # 5182 (last 4 digits, FedEx)

   Courier: FedEx

2. Temperature of rep. sample or temp blank when opened: 3.1 °C + correction factor(-0.3) = 3.1 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

   If yes, how many and where: 1 on Front

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTG 12/20/14

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

   Were these signed and dated correctly? YES...NO...(NA)

8. Packing material used? Bubblewrap (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13. a. Were VOA vials received? YES...(NO)...NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO...(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES...NO...(NA) Comments_____
    If multiple coolers, sequence #_____

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) TH 12/23/14

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...(NA)

16. Was residual chlorine present? YES...NO...(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) TH 12/23/14

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA If not, PM notified? YES...NO...(NA)

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO...(NA)

21. Were there Non-Conformance issues at login? YES...(NO)...NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) TH 12/23/14

I certify that I attached a label with the unique LIMS number to each container (initial/date) TH 12/23/14

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) TH 12/23/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM (Continued)

LIMS Data Entry Second Check

Workorder# 1412221

22. Cooler Receipt Form Issues reviewed and communicated to PM? (YES)...NO...NA

23. Client and Project verified to match the COC/CRF in LIMS Project Screen? (YES)...NO...NA

24. Following items verified to items verified to match the COC/CRF in LIMS Receipt Screen:

a. Received Date/Received By (YES)...NO...NA

b. TAT (COC specified different?) (YES)...NO...NA

c. Shipping Container Temperatures (corrected temps) (YES)...NO ...NA

d. Condition Items (seals, intact, labels, preservation, ROI) (YES)...NO...NA

25. Following LIMS Sample Information verified against COC for each sample:

a. Name (YES)...NO...NA

b. QC Source YES...NO...(NA)

c. Matrix (YES)...NO...NA

d. Sample Type (YES)...NO...NA

e. Sampled Date/Time (Correct Time Zone) (YES)...NO...NA

f. Work Analyses/Versions (if applicable) YES...NO...(NA)

g. Sample Issues included in comments (limited volume, concentration warnings, etc.)? YES...NO...(NA)

h. Unpreserved VOA holding time set to 7 days? YES...NO...(NA)

26. Containers consistent with tests requested? (YES)...NO...NA

27. Field data entered and matching COC? (YES)...NO...NA

I certify that I have verified the LIMS data entry and answered questions 23-27 above (initial/date): AMO 12/23/14

Additional Details:

IDs on containers did not match IDs on COC. PM contacted client. IDs on containers are project name on COC + Accutest sample #, per client. AMO 12/23/14

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1412221

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	12/23/2014		

1412221

Empirical Laboratories, LLC

Client:	**Accutest Laboratories**	**Project Manager:**	**Sonya Gordon**
Project:	**Nitrocellulose**	**Project Number:**	**ACC_Nitro**

Report To:

Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:

Accutest Laboratories - NE
Matt Morrell
50 D'Angelo Drive
Marlborough, MA 01752
Phone :(508) 481-6200
Fax: (508) 481-7753

Due to Client: 01/06/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Tiana L. Hutchings
Date Received: 12/20/2014 09:45
Logged In By: Tiana L. Hutchings
Date Logged In: 12/23/2014 11:00

Samples Received at: **3.1°C**

Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1412221-01 XU854ISH0621 [Solid] Sampled 12/11/2014 10:02 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/08/2015 09:02	
1412221-02 XU854ISH0622 [Solid] Sampled 12/11/2014 11:36 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/08/2015 10:36	
1412221-03 XU854ISH0623 [Solid] Sampled 12/11/2014 13:40 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/08/2015 12:40	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412221

QC LEVEL: Level IV
Report Due: 1/8/2015
Client Sample Count: 3

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/11/2014	12/20/2014	1412221-01	XU854ISH0621	Solid	X
Client Sample	12/11/2014	12/20/2014	1412221-02	XU854ISH0622	Solid	X
Client Sample	12/11/2014	12/20/2014	1412221-03	XU854ISH0623	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1412221-01 [XU854ISH0621]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412221-02 [XU854ISH0622]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15
1412221-03 [XU854ISH0623]	5A05001	10.00/25.00	10.3	25.0	1.00			01/05/15

ANALYSIS DATA SHEET

XU854ISH0621

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412221-01
Sampled:	12/11/14 10:02	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.20**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:51

ANALYSIS DATA SHEET

XU854ISH0622

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412221-02
Sampled:	12/11/14 11:36	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.03**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:54

ANALYSIS DATA SHEET

XU854ISH0623

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412221-03
Sampled:	12/11/14 13:40	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**2.95**	**1.00**	2.00	4.00	1	J	E353.2MOD	5A05001	01/08/15 13:56

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1412221
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A05001	01/08/15 13:38

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: 1412221
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BS1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.98**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:40

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1412221
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412221
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A05001

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A05001-BLK1	Nitrocellulose	0.112	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412221
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A05001	Laboratory ID:	5A05001-BS1
Preparation:	pNone	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.98	88.8	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412221

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A05001 Batch Matrix: Solid Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISH0621	1412221-01	01/05/15 05:13	10.04	25.00
XU854ISH0622	1412221-02	01/05/15 05:13	10.10	25.00
XU854ISH0623	1412221-03	01/05/15 05:13	10.26	25.00
Blank	5A05001-BLK1	01/05/15 05:13	10.00	25.00
LCS	5A05001-BS1	01/05/15 05:13	10.00	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412221
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Instrument: WC-Lachat
Calibration: 5009003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Blank	5A05001-BLK1		01/08/15 13:38
LCS	5A05001-BS1		01/08/15 13:40
XU854ISH0621	1412221-01		01/08/15 13:51
XU854ISH0622	1412221-02		01/08/15 13:54
XU854ISH0623	1412221-03		01/08/15 13:56
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412221	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412221

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISH0621	12/11/14 10:02	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:51	28.20	28.00	
XU854ISH0622	12/11/14 11:36	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:54	28.14	28.00	
XU854ISH0623	12/11/14 13:40	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:56	28.05	28.00	

Data for Wet Chemistry Supporting Raw Data / Logs

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd BLQ 1/12/15

1412221

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 ug/g Nitrocellulose

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View

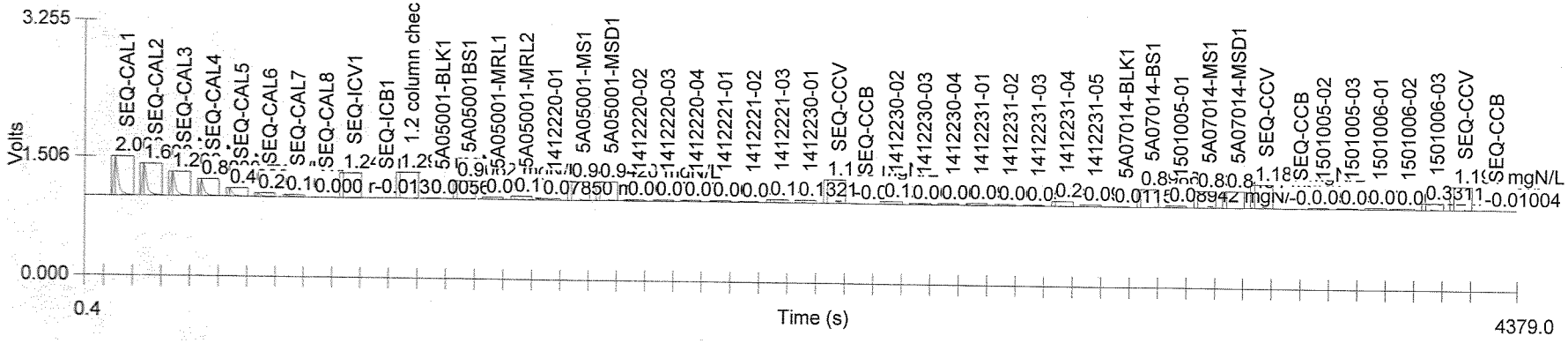
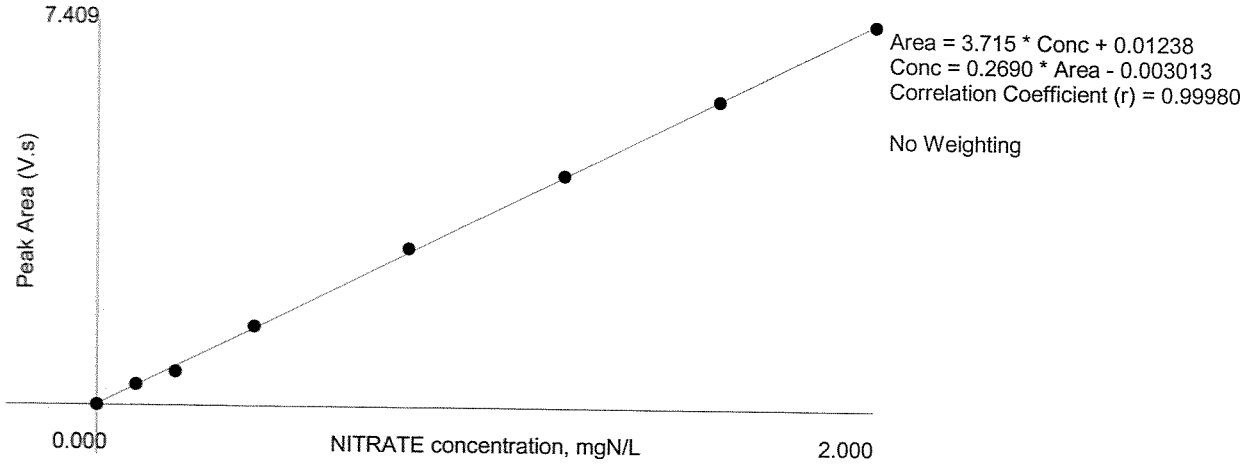


Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



Creator : Omnion User
Creation Date : 1/8/2015 1:20:40 PM
Last Modified : 1/8/2015 2:34:48 PM
Description :

Cup	Sample ID	MDF	Weight	Sample Type	Comments
1	SEQ-CAL1			Calibration Standard	
2	SEQ-CAL2			Calibration Standard	
3	SEQ-CAL3			Calibration Standard	
4	SEQ-CAL4			Calibration Standard	
5	SEQ-CAL5			Calibration Standard	
6	SEQ-CAL6			Calibration Standard	
7	SEQ-CAL7			Calibration Standard	
8	SEQ-CAL8			Calibration Standard	
9	SEQ-ICV1			Check Standard	
8	SEQ-ICB1			Check Standard	
10	1.2 column check	1.000		Unknown	
11	5A05001-BLK1	1.000		Unknown	
12	5A05001BS1	1.000		Unknown	
13	5A05001-MRL1	1.000		Unknown	
14	5A05001-MRL2	1.000		Unknown	
15	1412220-01	1.000		Unknown	
16	5A05001-MS1	1.000		Unknown	
17	5A05001-MSD1	1.000		Unknown	
18	1412220-02	1.000		Unknown	
19	1412220-03	1.000		Unknown	
20	1412220-04	1.000		Unknown	
21	1412221-01	1.000		Unknown	
22	1412221-02	1.000		Unknown	
23	1412221-03	1.000		Unknown	
24	1412230-01	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
25	1412230-02	1.000		Unknown	
26	1412230-03	1.000		Unknown	
27	1412230-04	1.000		Unknown	
28	1412231-01	1.000		Unknown	
29	1412231-02	1.000		Unknown	
30	1412231-03	1.000		Unknown	
31	1412231-04	1.000		Unknown	
32	1412231-05	1.000		Unknown	
33	5A07014-BLK1	1.000		Unknown	
34	5A07014-BS1	1.000		Unknown	
35	1501005-01	1.000		Unknown	
36	5A07014-MS1	1.000		Unknown	
37	5A07014-MSD1	1.000		Unknown	

3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	
38	1501005-02	1.000		Unknown	
39	1501005-03	1.000		Unknown	
40	1501006-01	1.000		Unknown	
41	1501006-02	1.000		Unknown	
42	1501006-03	1.000		Unknown	
3	SEQ-CCV			Check Standard	
8	SEQ-CCB			Check Standard	

Analyte Table

	NITRATE
	(mgN/L)
SEQ-CAL1	2.000
SEQ-CAL2	1.600
SEQ-CAL3	1.200
SEQ-CAL4	0.8000
SEQ-CAL5	0.4000
SEQ-CAL6	0.2000
SEQ-CAL7	0.1000
SEQ-CAL8	0.000

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID		ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1412220-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412220-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412220-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.15	25						NA	;;
1412220-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.13	25						NA	;;
1412221-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412221-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.1	25						NA	;;
1412221-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.26	25						NA	;;
1412230-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412230-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412230-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412230-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.03	25						NA	;;
1412231-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.14	25						NA	;;
1412231-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412231-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412231-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412231-05	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.07	25						NA	;;
1501001-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10	25						NA	Prepare all MRLs within the first month of the quarter - upload associated method blank as sample.;Prepare/analyzed only if analysis performed this quarter!;

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
5A05001-BLK1		QC	01/05/2015	10	25					NA	
5A05001-BS1		QC	01/05/2015	10	25	14G0256		255		NA	
5A05001-MRL1		QC	01/05/2015	10	25	14G0257		255		NA	
5A05001-MRL2		QC	01/05/2015	10	25	14G0257		500		NA	
5A05001-MS1		QC	01/05/2015	10.09	25	14G0256	1412220-01	255		NA	
5A05001-MSD1		QC	01/05/2015	10.02	25	14G0256	1412220-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

ANALYTICAL DATA PACKAGE
SDG # 1412220

PROJECT NAME: FA20579X
PROJECT LOCATION: Holloman Air Force Base, New Mexico

SUBMITTAL TO:
Jean Dent-Smith
Accutest Laboratories Southeast
4405 Vineland Road, Ste. C-15
Orlando, FL 32811

SUBMITTAL BY:
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
Nashville, TN 37228
Tel (615)345-1115
Fax (866)417-0548

LABORATORY CONTACT PERSON:
Project Manager: Sonya Gordon
Tel (615)345-1115
Fax (866)417-0548
Email: sgordon@empirlabs.com

Original Report Date: January 12, 2015
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 42

THIS DOCUMENT MEETS DoD QSM 4.2 STANDARDS

The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.

L-A-B Accredited - Certificate Number L2226 - Testing

Table of Contents

#	Description	Page #
1	Cover Page	1
2	Table of Contents	2
3	Case Narrative	3
4	Sample Receipt Information Chain of Custody Forms Sample Receipt Confirmations WorkOrder Summary Sample Delivery Group (SDG) Sheets	8
5	Data for Nitrocellulose Required Data / QAQC / Calibration Forms Supporting Raw Data / Logs	15

Sample Delivery Group Case Narrative

Receipt Information:

The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

The following issues were discovered with the COC and/or samples upon log-in:

1. The client IDs on the container did not match the IDs on the COC. The client was contacted and indicated the IDs on the container are project name on COC and Accutest sample number.

Changes to the Revision:

This is an original submittal of the final report package.

Analytical Information:

All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. Sample preparation and dilution information is provided within the final results report and at the beginning of each form set. The following information is provided specific to individual methods:

Nitrocellulose:

The following were analyzed outside of the method recommended holding time:
Nitrocellulose for 1412220-01, -02, -03, and -04; note – the samples were analyzed 30 days after sampling with a 28 day recommended holding time due to an analyst oversight

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

Data Qualifiers:

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

Analytical Report Terms and Qualifiers

DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.2 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are associated with the reported result.

B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.

H1: The result was analyzed outside of the EPA recommended holding time.

H2: The result was extracted outside of the EPA recommended holding time.

H3: The sample for this analyte was received outside of the EPA recommended holding time.

J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.

N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded criteria.

U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

Chromatographic Flags for Manual Integration:

The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

A: The peak was manually integrated as it was not integrated in the original chromatogram.

B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.

C: The peak was manually integrated to correct the baseline from the original chromatogram.

D: The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.

E: The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

LIMS Definitions / Naming Conventions:

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

BLK: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK

appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

BS: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

MS: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

IDs: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

Statement of Data Authenticity:

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

Empirical Laboratories, LLC
Certifications/Approvals
(Revised 01/09/2015)

DoD ELAP QSM5.0, Certificate Number L2226
- Aqueous
- Non-aqueous
- Expires: 11/30/2015

State of Florida, Department of Health – NELAP, Lab ID: E87646
- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2015

State of Georgia, Environmental Protection Agency – NELAP, Self Certification
- Expires: 06/30/2015

State of Illinois, Environmental Protection Agency – NELAP, Certificate Number: 003464
- Groundwater
- Solid and Hazardous Waste
- Expires: 09/13/2015

Commonwealth of Kentucky, Energy and Environment Cabinet – WWLCP, Laboratory Number: 98017
- Wastewater
- Expires: 12/31/2015

Commonwealth of Kentucky, Department of Environmental Protection – UST, Certificate Number: 77
- Aqueous
- Non-aqueous
- Expires: 06/30/2015

State of New Jersey, Department of Environmental Protection – NELAP Primary, Lab ID: TN473
- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2015

State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of North Dakota, Department of Health – NELAP, Certificate No.: R-204
- Aqueous
- Non-aqueous
- Expires: Extension Letter Pending Renewal of Certification

Commonwealth of Pennsylvania, Department of Environmental Protection – NELAP, Lab ID: 68-05374
- Aqueous
- Non-aqueous
- Expires: 10/31/2015

State of Texas, Commission on Environmental Quality – NELAP, Certificate Number: T104704307-15-11
- Aqueous
- Non-aqueous
- Expires: 12/31/2015

State of Utah, Department of Health – NELAP, Certificate Number: TN0042014-6
- Aqueous
- Non-aqueous
- Expires: 07/31/2015

Commonwealth of Virginia, Department of General Services – NELAP, Certificate Number: 7596, Lab ID: 460243
- Aqueous
- Non-aqueous
- Expires: 12/14/2015

State of Washington, Department of Ecology – NELAP, Lab ID: C934-14
- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2015

Sample Receipt Information

1412220

CHAIN OF CUSTODY

ACCUTEST LABORATORIES
4405 Vineland Rd, Suite C-15, Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: FA20579X

Client / Reporting Information	Project Information	Billing Information (if different from Report to)
Company Name: Accutest Laboratories	Project Name: FA20579X	
Street Address: 4405 Vineland Rd, Suite C-15	Street:	
City: Orlando State: FL Zip: 32811	City: State:	Company Name:
Project Contact: jeans E-mail: jeans@accutest.com	Project #:	Street Address:
Phone #: 407-425-6700 Fax #:	Client Purchase Order #:	City: State: Zip:
Sampler(s) Name(s): MS Phone:	Project Manager:	Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Nitrocelluose 353.2	LAB USE ONLY
01 1X	XU854ISH06A		12/9/14	1:03:00 PM	MS	SO	1					1				X	
02 2X	XU854ISH06S		12/9/14	1:03:00 PM	MS	SO	1					1				X	
03 3X	XU854ISH06D		12/9/14	1:03:00 PM	MS	SO	1					1				X	
04 4X	XU854ISH06C		12/9/14	1:03:00 PM	MS	SO	1					1				X	

Turnaround Time (Business days)

- [ ] 10 Day (business)
- [ ] 5-7 Day
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [X] other 14

Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1, Results Only)
- [ ] Commercial "B" (Level 2, Results + QC summary)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] DOD FULT1 (Level 4)
- [X] Other FULT1
- [ ] EDD Format

Comments / Special Instructions: Empirical Labs

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 12-19-14 1700	Received By: 1	Relinquished By: 2	Date Time: 12/20/14 945	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not intact	Preserved where applicable [ ] On Ice [ ] Cooler Temp.

9

1412220 Data Package

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 12/20/14 @0945 Workorder# 1412220

1. Tracking # 5182 (last 4 digits, FedEx)

   Courier: FedEx

2. Temperature of rep. sample or temp blank when opened: 3.1 °C + correction factor(-0.3) = 3.1 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...(NA)

4. Were custody seals on outside of cooler? (YES)...NO...NA

   If yes, how many and where: 1 on front

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

   I certify that I opened the cooler and answered questions 1-6 (initial/date) JTC 12/20/14

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

   Were these signed and dated correctly? YES...NO...(NA)

8. Packing material used? Bubblewrap (Plastic bag) Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13. a. Were VOA vials received? YES...(NO)...NA

    b. Was there observable headspace present in any VOA vial (>5mm-6mm)? YES...NO...(NA)

14. Was there a Trip Blank in this cooler (custody seals present/intact)? YES...NO...(NA)...Comments_____
    If multiple coolers, sequence #_____

    I certify that I unloaded the cooler and answered questions 7-14 (initial/date) TH 12/23/14

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

    b. Did the bottle labels indicate that the correct preservatives were used? YES...NO...(NA)

16. Was residual chlorine present? YES...NO...(NA)

    I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial/date) TH 12/23/14

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA If not, PM notified? YES...NO...(NA)

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA If not, PM notified? YES...NO...(NA)

21. Were there Non-Conformance issues at login? YES...(NO)...NCR#_____

I certify that I entered this project into LIMS and answered questions 17-21 (initial/date) TH 12/23/14

I certify that I attached a label with the unique LIMS number to each container (initial/date) TH 12/23/14

I certify that I notified the laboratory of any short holding time or RUSH parameters (initial/date) TH 12/23/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

II. EMPIRICAL LABORATORIES
COOLER RECEIPT FORM (Continued)

LIMS Data Entry Second Check Workorder# 1412220

22. Cooler Receipt Form Issues reviewed and communicated to PM? YES...NO...NA

23. Client and Project verified to match the COC/CRF in LIMS Project Screen? YES...NO...NA

24. Following items verified to items verified to match the COC/CRF in LIMS Receipt Screen:

a. Received Date/Received By YES...NO...NA

b. TAT (COC specified different?) YES...NO...NA

c. Shipping Container Temperatures (corrected temps) YES...NO ...NA

d. Condition Items (seals, intact, labels, preservation, ROI) YES...NO...NA

25. Following LIMS Sample Information verified against COC for each sample:

a. Name YES...NO...NA

b. QC Source SMO 12/23/14 YES...NO...NA

c. Matrix YES...NO...NA

d. Sample Type YES...NO...NA

e. Sampled Date/Time (Correct Time Zone) YES...NO...NA

f. Work Analyses/Versions (if applicable) YES...NO...NA

g. Sample Issues included in comments (limited volume, concentration warnings, etc.)? YES...NO...NA

h. Unpreserved VOA holding time set to 7 days? YES...NO...NA

26. Containers consistent with tests requested? YES...NO...NA

27. Field data entered and matching COC? YES...NO...NA

I certify that I have verified the LIMS data entry and answered questions 23-27 above (initial/date): SMO 12/23/14

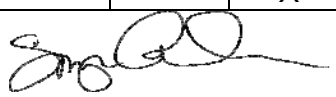
Additional Details:

IDs on containers did not match IDs on COC. PM contacted client. IDs on containers are project name on COC + Accutest sample #, per client SMO 12/23/14

C:\Documents and Settings\jgross\Desktop\Cooler Receipt Updated 2014.doc

III. EMPIRICAL LABORATORIES, LLC
DATA ENTRY VERIFICATION FORM – PROJECT MANAGEMENT

Workorder#: 1412220

	Verification Item	Yes	No	NA
1.	**Cooler Receipt Form Issues reviewed and communicated to client**			X
2.	**Element/ Project Screen/items verified to match the COC/CRF:**			
a.	**Client/Project**	X		
b.	Comments requiring laboratory reminder?			X
c.	Client and/or Project Memo requiring laboratory reminder?			X
3.	**Receipt Screen items verified to match the COC/CRF:**			
a.	Received Date/Received By	X		
b.	Workorder Due Date	X		
c.	Package Due Date	X		
d.	TAT	X		
e.	SDG Identifier Populated	X		
4.	**Sample Information verified against COC for each sample:**			
a.	Name	X		
b.	QC Source			X
c.	Matrix	X		
d.	Sample Type	X		
e.	Sampled Date/Time (Correct Time Zone)	X		
f.	Work Analyses/Versions	X		
g.	Sample Issues included in comments	X		
h.	Unpreserved VOA holding time set to 7 days			X
5.	**Containers consistent with tests requested**	X		
6.	**Field data entered and matching COC, if applicable**			X
	I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial/date):	 12/23/2014		

1412220

Empirical Laboratories, LLC

Client: Accutest Laboratories
Project: Nitrocellulose

Project Manager: Sonya Gordon
Project Number: ACC_Nitro

Report To:
Accutest Laboratories
Jean Dent-Smith
4405 Vineland Rd., Ste C-15
Orlando, FL 32811
Phone: (407) 425-6700
Fax: (407) 425-0707

Invoice To:
Accutest Laboratories - NE
Matt Morrell
50 D'Angelo Drive
Marlborough, MA 01752
Phone :(508) 481-6200
Fax: (508) 481-7753

Due to Client: 01/06/2015 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Tiana L. Hutchings
Date Received: 12/20/2014 09:45
Logged In By: Tiana L. Hutchings
Date Logged In: 12/23/2014 10:55

Samples Received at: **3.1°C**

Custody Seals	No	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	No		

Method	Test Code	Due	TAT	Expires	Comments
1412220-01 XU854ISH06A [Solid] Sampled 12/09/2014 13:03 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/06/2015 12:03	
1412220-02 XU854ISH06S [Solid] Sampled 12/09/2014 13:03 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/06/2015 12:03	
1412220-03 XU854ISH06D [Solid] Sampled 12/09/2014 13:03 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/06/2015 12:03	
1412220-04 XU854ISH06C [Solid] Sampled 12/09/2014 13:03 Eastern 'Client Sample'					
E353.2MOD	WC_NITROCELLULOSE_353.2_MODIFIE	01/02/2015 14:00	8	01/06/2015 12:03	

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Accutest Laboratories
PROJECT NAME: Nitrocellulose
SDG #: 1412220

QC LEVEL: Level IV
Report Due: 1/8/2015
Client Sample Count: 4

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E353.2MOD
Client Sample	12/9/2014	12/20/2014	1412220-01	XU854ISH06A	Solid	X
Client Sample	12/9/2014	12/20/2014	1412220-02	XU854ISH06S	Solid	X
Client Sample	12/9/2014	12/20/2014	1412220-03	XU854ISH06D	Solid	X
Client Sample	12/9/2014	12/20/2014	1412220-04	XU854ISH06C	Solid	X

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-E353.2MOD

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [g]	Final [mL]	Dilution	% Solids	Notes	Date
1412220-01 [XU854ISH06A]	5A05001	10.00/25.00	10.0	25.0	1.00			01/05/15
1412220-02 [XU854ISH06S]	5A05001	10.00/25.00	10.2	25.0	1.00			01/05/15
1412220-03 [XU854ISH06D]	5A05001	10.00/25.00	10.2	25.0	1.00			01/05/15
1412220-04 [XU854ISH06C]	5A05001	10.00/25.00	10.1	25.0	1.00			01/05/15

ANALYSIS DATA SHEET

XU854ISH06A

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412220-01
Sampled:	12/09/14 13:03	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.55**	**1.00**	2.00	4.00	1	H1J	E353.2MOD	5A05001	01/08/15 13:44

ANALYSIS DATA SHEET

XU854ISH06S

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412220-02
Sampled:	12/09/14 13:03	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.32**	**1.00**	2.00	4.00	1	H1J	E353.2MOD	5A05001	01/08/15 13:48

ANALYSIS DATA SHEET

XU854ISH06D

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412220-03
Sampled:	12/09/14 13:03	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.40**	**1.00**	2.00	4.00	1	H1J	E353.2MOD	5A05001	01/08/15 13:50

ANALYSIS DATA SHEET

XU854ISH06C

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid	Laboratory ID:	1412220-04
Sampled:	12/09/14 13:03	Received:	12/20/14 09:45

Parameters listed below do not require Dry Weight correction:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**1.38**	**1.00**	2.00	4.00	1	H1J	E353.2MOD	5A05001	01/08/15 13:51

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
SDG: 1412220
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BLK1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	ND	1.00	2.00	4.00	1	U	E353.2MOD	5A05001	01/08/15 13:38

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: 1412220
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-BS1
% Solids:

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**17.98**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:40

ANALYSIS DATA SHEET

Matrix Spike

Laboratory: Empirical Laboratories, LLC
SDG: 1412220
Client: Accutest Laboratories
Project: Nitrocellulose
Matrix: Solid
Laboratory ID: 5A05001-MS1
% Solids: 0.00

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**18.58**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:45

ANALYSIS DATA SHEET

Matrix Spike Dup

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Matrix: Solid
% Solids: 0.00

SDG: 1412220
Project: Nitrocellulose
Laboratory ID: 5A05001-MSD1

CAS NO.	Analyte	Conc. (ug/g)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
9004-70-0	Nitrocellulose	**18.65**	**1.00**	2.00	4.00	1		E353.2MOD	5A05001	01/08/15 13:47

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2MOD

Laboratory: Empirical Laboratories, LLC
Client: Accutest Laboratories
Instrument ID: WC-Lachat

SDG: 1412220
Project: Nitrocellulose
Calibration: 5009003
Sequence: 5A00807

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
5A00807-ICV1	Nitrate/Nitrite as N	1200	1240	103	ug/L	+/- 10.00%
5A00807-CCV1	Nitrate/Nitrite as N	1200	1198	99.8	ug/L	+/- 10.00%

METHOD BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412220
Client: Accutest Laboratories
Project: Nitrocellulose
Batch: 5A05001

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A05001-BLK1	Nitrocellulose	0.112	1.00	4.00	ug/g	U	E353.2MOD

BLANKS
E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412220
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Calibration: 5009003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
5A00807-ICB1	Nitrocellulose	-13.32	400	1600	ug/L	U	E353.2MOD
5A00807-CCB1	Nitrocellulose	-1.73	400	1600	ug/L	U	E353.2MOD

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

E353.2MOD

XU854ISH06A

Laboratory: Empirical Laboratories, LLC

SDG: 1412220

Client: Accutest Laboratories

Project: Nitrocellulose

Matrix: Solid

Batch: 5A05001

% Solids:

Source Sample Name: **1412220-01**

ANALYTE	SPIKE ADDED (ug/g)	SAMPLE CONCENTRATION (ug/g)	MS CONCENTRATION (ug/g)	MS % REC.	Q	QC LIMITS REC.
Nitrocellulose	20.06	1.554	18.58	84.9		50 - 120

ANALYTE	SPIKE ADDED (ug/g)	MSD CONCENTRATION (ug/g)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
Nitrocellulose	20.20	18.65	84.7	0.378		20	50 - 120

LCS / LCS DUPLICATE RECOVERY

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220
Client:	Accutest Laboratories	Project:	Nitrocellulose
Matrix:	Solid		
Batch:	5A05001	Laboratory ID:	5A05001-BS1
Preparation:	pNone	Initial/Final:	10 g / 25 mL

ANALYTE	SPIKE ADDED (ug/g)	LCS CONCENTRATION (ug/g)	LCS % REC.	QC LIMITS REC.
Nitrocellulose	20.24	17.98	88.8	50 - 120

PREPARATION BATCH SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412220

Client: Accutest Laboratories Project: Nitrocellulose

Batch: 5A05001 Batch Matrix: Solid Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
XU854ISH06A	1412220-01	01/05/15 05:13	10.02	25.00
XU854ISH06S	1412220-02	01/05/15 05:13	10.16	25.00
XU854ISH06D	1412220-03	01/05/15 05:13	10.15	25.00
XU854ISH06C	1412220-04	01/05/15 05:13	10.13	25.00
Blank	5A05001-BLK1	01/05/15 05:13	10.00	25.00
LCS	5A05001-BS1	01/05/15 05:13	10.00	25.00
XU854ISH06A	5A05001-MS1	01/05/15 05:13	10.09	25.00
XU854ISH06A	5A05001-MSD1	01/05/15 05:13	10.02	25.00

ANALYSIS SEQUENCE SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC
SDG: 1412220
Client: Accutest Laboratories
Project: Nitrocellulose
Sequence: 5A00807
Instrument: WC-Lachat
Calibration: 5009003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	5A00807-CAL1		01/08/15 13:22
Cal Standard	5A00807-CAL2		01/08/15 13:24
Cal Standard	5A00807-CAL3		01/08/15 13:25
Cal Standard	5A00807-CAL4		01/08/15 13:27
Cal Standard	5A00807-CAL5		01/08/15 13:28
Cal Standard	5A00807-CAL6		01/08/15 13:29
Cal Standard	5A00807-CAL7		01/08/15 13:31
Cal Standard	5A00807-CAL8		01/08/15 13:32
Initial Cal Check	5A00807-ICV1		01/08/15 13:34
Initial Cal Blank	5A00807-ICB1		01/08/15 13:35
Blank	5A05001-BLK1		01/08/15 13:38
LCS	5A05001-BS1		01/08/15 13:40
XU854ISH06A	1412220-01		01/08/15 13:44
XU854ISH06A	5A05001-MS1		01/08/15 13:45
XU854ISH06A	5A05001-MSD1		01/08/15 13:47
XU854ISH06S	1412220-02		01/08/15 13:48
XU854ISH06D	1412220-03		01/08/15 13:50
XU854ISH06C	1412220-04		01/08/15 13:51
Calibration Check	5A00807-CCV1		01/08/15 13:58
Calibration Blank	5A00807-CCB1		01/08/15 14:00

INITIAL CALIBRATION DATA

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	2000	0.0037045	1600	0.003715	1200	3.744167E-03	800	0.003835	400	0.0038525	200	0.0032565

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Nitrate/Nitrite as N	100	0.003987	0	0								

INITIAL CALIBRATION DATA (Continued)

E353.2MOD

Laboratory:	Empirical Laboratories, LLC	SDG:	1412220	
Client:	Accutest Laboratories	Project:	Nitrocellulose	
Calibration:	5009003	Instrument:	WC-Lachat	
Matrix:	Solid	Calibration Dates:	1/8/15 13:22	1/8/15 13:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Nitrate/Nitrite as N	3.261833E-03	40.92995			0.9995953		0.99	

Per current DoD QSM requirements, effective 03/17/2014, Empirical has updated the linear calibration coefficient requirements to reflect a limit of 0.990 for "r2" rather than the previously reported limit of 0.995 for "r". The change in assessment criteria is consistent with regulatory requirements.

HOLDING TIME SUMMARY

E353.2MOD

Laboratory: Empirical Laboratories, LLC SDG: 1412220

Client: Accutest Laboratories Project: Nitrocellulose

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
XU854ISH06A	12/09/14 13:03	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:44	30.07	28.00	*
XU854ISH06S	12/09/14 13:03	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:48	30.07	28.00	*
XU854ISH06D	12/09/14 13:03	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:50	30.07	28.00	*
XU854ISH06C	12/09/14 13:03	12/20/14 09:45	01/05/15 05:13	N/A	28.00	01/08/15 13:51	30.08	28.00	*

Data for Wet Chemistry Supporting Raw Data / Logs

Empirical Laboratories

Nitrate/Nitrite for Nitrocellulose

Client(s): ACCUTEST

Analyst: RLS
Prep Date: 1/6/15; 1/8/15 **Date analyzed:** 1/8/2015
Prepped by: RLS & AJN **Method#:** 353.2 Modified
Analyst Authorization:
Batch: 5A05001 ; 5A07014
Sequence: 5A00807

Lab No.	Client	Sample Description	Matrix	True Value (ug/L),(ug/g),(mg/L)	Initial Sample Volume or Weight (L or g)	Final Volume (L)	Nitrate + Nitrite (as N) Concentration (mg/L)	Nitrocellulose Concentration	Units (ug/L),(ug/g).or(mg/L)	% Recovery	Control Limit		Comments
											Low %	High %	
SEQ-ICV1	QC	14H0447	H2O	1.20			1.24		mg/L	103.33	90	110	
SEQ-ICB1	QC	DI H2O	H2O	0.00			-0.01332		mg/L				
5A05001-BLK1	QC		SOIL	0.00	10.00	0.025	0.005626	0.1116	ug/g				
5A05001-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.9062	17.9802	ug/g	89.90	50	120	
5A05001-MLR1	QC	14A0196	SOIL	2.00	10.00	0.025	0.09587	1.9022	ug/g	95.11	50	150	
5A05001-MRL2	QC	14A0196	SOIL	3.00	10.00	0.025	0.1795	3.5615	ug/g	118.72	50	150	
1412220-01	ACCUTEST		SOIL		10.02	0.025	0.0785	1.5544	ug/g				
5A05001-MS1	QC	1412220-01	SOIL	20.00	10.09	0.025	0.945	18.5828	ug/g	92.91	50	120	
5A05001-MSD1	QC	1412220-01	SOIL	20.00	10.02	0.025	0.942	18.6532	ug/g	93.27	50	120	
1412220-02	ACCUTEST		SOIL		10.16	0.025	0.06734	1.3151	ug/g				
1412220-03	ACCUTEST		SOIL		10.15	0.025	0.07167	1.4010	ug/g				
1412220-04	ACCUTEST		SOIL		10.13	0.025	0.0706	1.3828	ug/g				
1412221-01	ACCUTEST		SOIL		10.04	0.025	0.06082	1.2019	ug/g				
1412221-02	ACCUTEST		SOIL		10.10	0.025	0.05263	1.0339	ug/g				
1412221-03	ACCUTEST		SOIL		10.26	0.025	0.1528	2.9549	ug/g				
1412230-01	ACCUTEST		SOIL		10.12	0.025	0.1321	2.5900	ug/g				
SEQ-CCV1	QC	14D0647	H2O	1.2			1.198	1.1980	mg/L	99.83	90	110	
SEQ-CCB1	QC	DI H2O	H2O	0.00			-0.00173	-0.00713	mg/L				
1412230-02	ACCUTEST		SOIL		10.16	0.025	0.1297	2.5329	ug/g				
1412230-03	ACCUTEST		SOIL		10.04	0.025	0.06528	1.2901	ug/g				
1412230-04	ACCUTEST		SOIL		10.03	0.025	0.06787	1.3426	ug/g				
1412231-01	ACCUTEST		SOIL		10.14	0.025	0.09241	1.8082	ug/g				
1412231-02	ACCUTEST		SOIL		10.12	0.025	0.06373	1.2495	ug/g				
1412231-03	ACCUTEST		SOIL		10.04	0.025	0.05921	1.1701	ug/g				
1412231-04	ACCUTEST		SOIL		10.02	0.025	0.2515	4.9801	ug/g				
1412231-05	ACCUTEST		SOIL		10.07	0.025	0.09169	1.8066	ug/g				
5A07014-BLK1	QC		SOIL	0.00	10.00	0.025	0.01152	0.2286	ug/g				
5A07014-BS1	QC	14G0256	SOIL	20.00	10.00	0.025	0.8986	17.8294	ug/g	89.15	50	120	
1501005-01	ACCUTEST		SOIL		10.14	0.025	0.08942	1.7497	ug/g				
5A07014-MS1	QC	1501005-01	SOIL	20	10.16	0.025	0.8393	16.3905	ug/g	81.95	50	120	
5A07014-MSD1	QC	1501005-01	SOIL	20.00	10.26	0.025	0.8454	16.3487	ug/g	81.74	50	120	
SEQ-CCV2	QC	14D0647	H2O	1.2			1.187	1.1870	mg/L	98.92	90	110	
SEQ-CCB2	QC	DI H2O	H2O	0			-0.01255	-0.01255	mg/L				
1501005-02	ACCUTEST		SOIL		10.21	0.025	0.05133	0.9975	ug/g				
1501005-03	ACCUTEST		SOIL		10.28	0.025	0.05567	1.0745	ug/g				
1501006-01	ACCUTEST		SOIL		10.35	0.025	0.07634	1.4635	ug/g				
1501006-02	ACCUTEST		SOIL		10.17	0.025	0.06682	1.3036	ug/g				
1501006-03	ACCUTEST		SOIL		10.14	0.025	0.3311	6.4787	ug/g				
SEQ-CCV3	QC	14D0647	H2O	1.2			1.191	1.1910	mg/L	99.25	90	110	
SEQ-CCB3	QC	DI H2O	H2O	0			-0.01004	-0.01004	mg/L				

2nd QC 1/12/15

Author: Omnion User

Nitrate/Nitrite

Date : 1/8/2015

Original Run Filename: OM_1-8-2015_01-20-40PM.OMN created 1/8/2015 1:20:40 PM
Original Run Author's Signature: [Omnion User]
Current Run Filename: OM_1-8-2015_01-20-40PM.OMN last modified 1/8/2015 2:34:48 PM
Current Run Author's Signature: [Omnion User]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NITRATE Conc. (mgN/L)	Area (V.s)	Height (V)	Detection Time	MDF	Description
SEQ-CAL1	1	1	2.000	7.409	0.4998	1/8/2015@1:22:41 PM		
SEQ-CAL2	1	2	1.600	5.944	0.4075	1/8/2015@1:24:08 PM		
SEQ-CAL3	1	3	1.200	4.493	0.3045	1/8/2015@1:25:35 PM		
SEQ-CAL4	1	4	0.8000	3.068	0.2127	1/8/2015@1:27:02 PM		
SEQ-CAL5	1	5	0.4000	1.541	0.1050	1/8/2015@1:28:29 PM		
SEQ-CAL6	1	6	0.2000	0.6513	0.04489	1/8/2015@1:29:55 PM		
SEQ-CAL7	1	7	0.1000	0.3987	0.02758	1/8/2015@1:31:23 PM		
SEQ-CAL8	1	8	0.000	0.002388	0.001106	1/8/2015@1:32:50 PM		
SEQ-ICV1	1	9	1.240	4.622	0.3107	1/8/2015@1:34:17 PM		
	Known Conc:		1.200					
	Calibration:		Table/Fig. 1					
SEQ-ICB1	1	8	-0.01332	-0.03830	-0.001101	1/8/2015@1:35:44 PM		
	Known Conc:		0.000					
1.2 column check	1	10	1.291	4.811	0.3253	1/8/2015@1:37:11 PM	1.00	
5A05001-BLK1	1	11	0.005626	0.03211	0.002199	1/8/2015@1:38:38 PM	1.00	
5A05001BS1	1	12	0.9062	3.380	0.2289	1/8/2015@1:40:05 PM	1.00	
5A05001-MRL1	1	13	0.09587	0.3675	0.02369	1/8/2015@1:41:32 PM	1.00	
5A05001-MRL2	1	14	0.1795	0.6783	0.04482	1/8/2015@1:42:59 PM	1.00	
1412220-01	1	15	0.07850	0.3030	0.01856	1/8/2015@1:44:27 PM	1.00	
5A05001-MS1	1	16	0.9450	3.524	0.2358	1/8/2015@1:45:54 PM	1.00	
5A05001-MSD1	1	17	0.9420	3.513	0.2362	1/8/2015@1:47:20 PM	1.00	
1412220-02	1	18	0.06734	0.2615	0.01672	1/8/2015@1:48:47 PM	1.00	
1412220-03	1	19	0.07167	0.2776	0.01752	1/8/2015@1:50:15 PM	1.00	
1412220-04	1	20	0.07060	0.2736	0.01661	1/8/2015@1:51:41 PM	1.00	
1412221-01	1	21	0.06082	0.2372	0.01429	1/8/2015@1:53:08 PM	1.00	
1412221-02	1	22	0.05263	0.2068	0.01195	1/8/2015@1:54:36 PM	1.00	
1412221-03	1	23	0.1528 ✓	0.5792	0.03794	1/8/2015@1:56:03 PM	1.00	
1412230-01	1	24	0.1321	0.5024	0.03220	1/8/2015@1:57:29 PM	1.00	
SEQ-CCV	1	3	1.198	4.464	0.2962	1/8/2015@1:58:56 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.001730	0.004770	9.594e-4	1/8/2015@2:00:23 PM		
	Known Conc:		0.000					
1412230-02	1	25	0.1297	0.4932	0.03158	1/8/2015@2:01:51 PM	1.00	
1412230-03	1	26	0.06528	0.2538	0.01479	1/8/2015@2:03:18 PM	1.00	
1412230-04	1	27	0.06787	0.2635	0.01646	1/8/2015@2:04:45 PM	1.00	
1412231-01	1	28	0.09241	0.3547	0.02242	1/8/2015@2:06:12 PM	1.00	
1412231-02	1	29	0.06373	0.2481	0.01528	1/8/2015@2:07:40 PM	1.00	
1412231-03	1	30	0.05921	0.2313	0.01385	1/8/2015@2:09:07 PM	1.00	
1412231-04	1	31	0.2515	0.9461	0.06342	1/8/2015@2:10:34 PM	1.00	

1/8/15

See # 5A00807
Cal # 5009003

Nitrocellulose Analysis

1 2221-03 = (0.5792 x 0.2690) - 0.003013

= 0.1527918 mg/L x 1000 = 152.79 ug/L

x 0.025 = 3.819795 / 0.126

= 30.315833 / 10.26g = 2.955 ug/g Nitrocellulose

Nitrate/Nitrite

1412220 Data Package

1412231-05	1	32	0.09169	0.3520	0.02250	1/8/2015@2:12:01 PM	1.00	
5A07014-BLK1	1	33	0.01152	0.05400	0.002629	1/8/2015@2:13:29 PM	1.00	
5A07014-BS1	1	34	0.8986	3.351	0.2246	1/8/2015@2:14:56 PM	1.00	
1501005-01	1	35	0.08942	0.3436	0.02231	1/8/2015@2:16:23 PM	1.00	
5A07014-MS1	1	36	0.8393	3.131	0.2089	1/8/2015@2:17:51 PM	1.00	
5A07014-MSD1	1	37	0.8454	3.153	0.2092	1/8/2015@2:19:18 PM	1.00	
SEQ-CCV	1	3	1.187	4.423	0.2975	1/8/2015@2:20:45 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01255	-0.03544	-0.001242	1/8/2015@2:22:12 PM		
	Known Conc:		0.000					
1501005-02	1	38	0.05133	0.2020	0.01234	1/8/2015@2:23:40 PM	1.00	
1501005-03	1	39	0.05567	0.2181	0.01279	1/8/2015@2:25:07 PM	1.00	
1501006-01	1	40	0.07634	0.2950	0.01837	1/8/2015@2:26:35 PM	1.00	
1501006-02	1	41	0.06682	0.2596	0.01567	1/8/2015@2:28:02 PM	1.00	
1501006-03	1	42	0.3311	1.242	0.08225	1/8/2015@2:29:29 PM	1.00	
SEQ-CCV	1	3	1.191	4.439	0.2939	1/8/2015@2:30:57 PM		
	Known Conc:		1.200					
SEQ-CCB	1	8	-0.01004	-0.02610	-0.001090	1/8/2015@2:32:24 PM		
	Known Conc:		0.000					

Channel 1 (NITRATE) : Current View

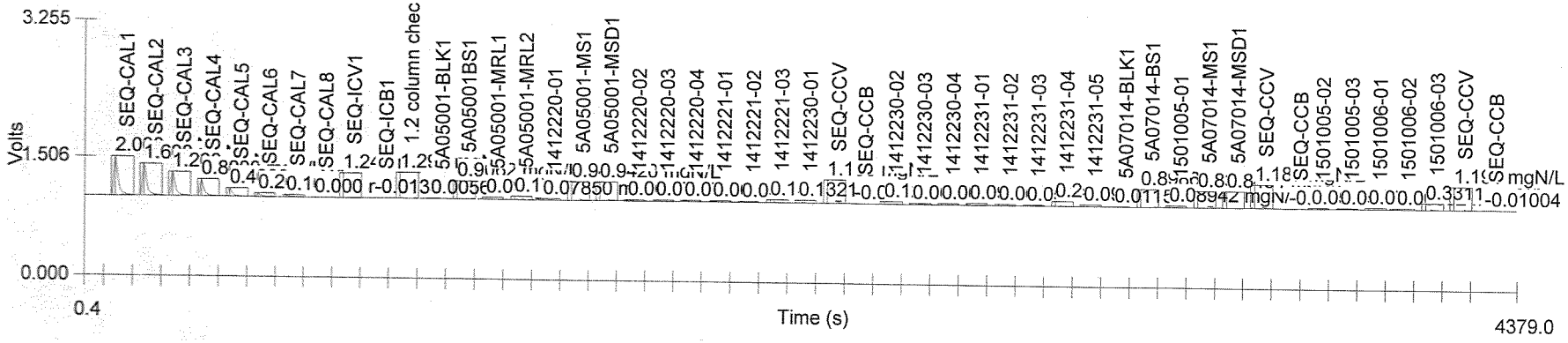
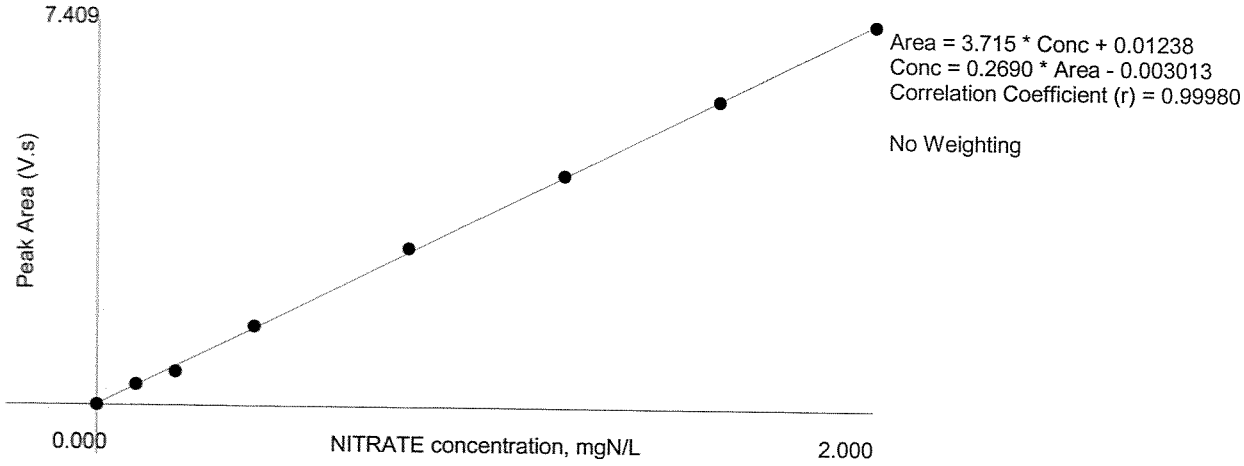


Table 1: NITRATE

	Known Conc. (mgN/L)	Rep	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc. (mgN/L)	Detection Date	Detection Time
1	2.000	1	7.409	0.4998	0.0	0.5	1.990	1/8/2015	1:22:41 PM
2	1.600	1	5.944	0.4075	0.0	0.2	1.596	1/8/2015	1:24:08 PM
3	1.200	1	4.493	0.3045	0.0	-0.5	1.206	1/8/2015	1:25:35 PM
4	0.8000	1	3.068	0.2127	0.0	-2.8	0.8224	1/8/2015	1:27:02 PM
5	0.4000	1	1.541	0.1050	0.0	-2.8	0.4114	1/8/2015	1:28:29 PM
6	0.2000	1	0.6513	0.04489	0.0	13.8	0.1722	1/8/2015	1:29:55 PM
7	0.1000	1	0.3987	0.02758	0.0	-3.9	0.1043	1/8/2015	1:31:23 PM
8	0.000	1	0.002388	0.001106			-0.002370	1/8/2015	1:32:50 PM

Figure 1: NITRATE



PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID		ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
1412220-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412220-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412220-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.15	25						NA	;;
1412220-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.13	25						NA	;;
1412221-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412221-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.1	25						NA	;;
1412221-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.26	25						NA	;;
1412230-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412230-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.16	25						NA	;;
1412230-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412230-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.03	25						NA	;;
1412231-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.14	25						NA	;;
1412231-02	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.12	25						NA	;;
1412231-03	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.04	25						NA	;;
1412231-04	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.02	25						NA	;;
1412231-05	A	WC_NITROCELLULOSE_353.2	01/05/2015	10.07	25						NA	;;
1501001-01	A	WC_NITROCELLULOSE_353.2	01/05/2015	10	25						NA	Prepare all MRLs within the first month of the quarter - upload associated method blank as sample.;Prepare/analyzed only if analysis performed this quarter!;

PREPARATION BENCH SHEET

5A05001

Empirical Laboratories, LLC **Printed: 1/12/2015 11:29:36AM**

Instrument:

Matrix: Solid **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Comments (Sample; Analysis; Extraction)
5A05001-BLK1		QC	01/05/2015	10	25					NA	
5A05001-BS1		QC	01/05/2015	10	25	14G0256		255		NA	
5A05001-MRL1		QC	01/05/2015	10	25	14G0257		255		NA	
5A05001-MRL2		QC	01/05/2015	10	25	14G0257		500		NA	
5A05001-MS1		QC	01/05/2015	10.09	25	14G0256	1412220-01	255		NA	
5A05001-MSD1		QC	01/05/2015	10.02	25	14G0256	1412220-01	255		NA	

Reagents Used:

Standard	Description
14G0536	1N NaOH Solution
14J0549	Acetone
14L0249	Methanol

Appendix H

Munitions Response Site Prioritization Protocol Tables

This page is intentionally left blank

Table of Contents

MRSPP Primer Scoring Tables for the XU854 MRS
MRSPP Primer Scoring Tables for the SR864 MRS
MRSPP Primer Scoring Tables for the ML865 MRS
MRSPP Primer Scoring Tables for the RR869a MRS

This page is intentionally left blank

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table A

MRS Background Information

Munitions Response Site Name: Able 51 Area

Component: Air Force

Installation/Property Name: HOLLOMAN AIR FORCE BASE

Location (City, County, State): Alamogordo, Otero County, NM

Site Name/Project name (Project No.): Able 51 Area

Date Information Entered\Updated: 4/10/2015 2:49:34 PM

Point of Contact Name: DeAnna Rothhaupt **Point of Contact Phone:** (575) 571-3931

Project Phase (check only one):

☐ PA	☐ SI	☑ RI	☐ FS	☐ RD
☐ RA	☐ RIP	☐ RC		

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
☑ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Able 51 Area (XU854) site is a 47.70-acre MRS that encompasses the 47.70-acre Able 51 Area MRA, MRA 854. The Able 51 Area MRA was designated the XU854 MRS at the conclusion of the CSE Phase II. The site is located south of the HSTT and southwest of the Jeep Target Area. The site lies just west of the Holloman AFB main installation boundary fence; however, the site is located on Holloman AFB property which is administered by the White Sands Missile Range.

Able 51 Area was used as a launch facility in the late 1950s and early 1960s for testing of Mace and Matador missiles. Also referred to as the Zero Length (ZEL) site or BQM-34A Drone Launch site, this area was also used for research on mobile launch capability of both manned and unmanned aircraft, using rocket boosters, without the need for prepared airfields. The Able 51 Area contains buildings 1440 and 1442 which are considered individually eligible for inclusion in the National Register of Historic Places (NRHP). Building 1440, completed in 1962 as a missile launch facility, was an observation blockhouse for Mace and Matador missiles and drone launches. Building 1442 was constructed in 1959 as a missile launch facility.

Small arms debris associated with recent training activities consisting of .22-caliber, 5.56mm, 7.62mm, .38-caliber, .45-caliber, and .50-caliber was encountered during the CSE Phase II and RI investigations. MD associated with 40mm flares, M74 airburst simulator, slap flares, and smoke grenades was observed on the surface during the CSE Phase II. MD associated with 40mm flares, M74 airburst simulator, slap flares, and smoke grenades was observed on the surface during the CSE Phase II. A negligible amount of MD (surface and subsurface) was discovered during the RI including 40mm cartridge, M18 smoke grenade (expended), 40mm casing, 40mm, flare pieces, and a grenade spoon.. The CSE Phase II and RI did not discover any evidence of formal small arms training (e.g., targets, berms, and firing positions). No MEC was encountered during the CSE Phase II or RI.

Description of Pathways for Human and Ecological Receptors:

MEC: Natural physical processes and human activities (intrusive and non-intrusive) for surface and subsurface MEC. Pathways for surface and subsurface MEC are incomplete for all receptors.

MC: No MEC presenting a potential source for MC was observed at the Able 51 Area during the CSE Phase II and RI, thus no MC soil sampling occurred during the CSE Phase II or RI. Incremental soil (IS) sampling to detect propellant constituents associated with historical rocket/missile testing was conducted during the RI. Propellant constituents Nitrocellulose, Nitroglycerine, Perchlorate, and Nitrate detected in the IS soil samples were at concentrations well below SSLs. No contamination due to munitions constituents or propellants is suspected. All pathways are incomplete for both human and ecological receptors.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Description of Receptors (Human and Ecological):

Human receptors include Base personnel and residents, authorized contractors, visitors, recreational users, and trespassers.
Ecological receptors (biota) include all current and future terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles, which may be exposed to the soil at the MRS.

Reference (Section, Page #):

GENERAL - RI -1.6.1/ 1.8.2.1/ 1.9.1/ 5.1.1/ 5.12.1/ 6.2.1/ 6.3.1/ 7.1.1, LOCATION - , POC - , CONTRACTOR -

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 1

EHE Module: Munitions Type Data Element Worksheet

Classification	Description	Score
Sensitive	- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions]. - All hand grenades containing energetic filler. - Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	30

High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."
	- All DMM containing a high-explosive filler that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		25

Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).
	- All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		20

High explosive (unused)	- All DMM containing a high explosive filler that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		15

Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).
	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:
	  - Damaged by burning or detonation
	  - Deteriorated to the point of instability.
		15

Bulk secondary high explosives, pyrotechnics, or propellant	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated. - Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10

Pyrotechnic (not used or damaged)	- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		10

Practice	- All UXO that are practice munitions that are not associated with a sensitive fuze.
	- All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		5

Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).**	0

Site-specific data used in selection MUNITIONS TYPE classification:

Small arms debris associated with recent training activities consisting of .22-caliber, 5.56mm, 7.62mm, .38-caliber, .45-caliber, and .50-caliber was encountered during the CSE Phase II and RI investigations. MD associated with 40mm flares, M74 airburst simulator, slap flares, and smoke grenades was observed on the surface during the CSE Phase II. A negligible amount of MD (surface and subsurface) was discovered during the RI including 40mm cartridge, M18 smoke grenade (expended), 40mm casing, 40mm, flare pieces, and a grenade spoon. The CSE Phase II and RI did not discover any evidence of formal small arms training (e.g., targets, berms, and firing positions). No MEC was encountered during the CSE Phase II or RI.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Reference (Section, Page #):	RI - 1.8.2.1/ 7.1.1

Table 2

EHE Module: Source of Hazard Data Element Worksheet

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	- The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	5

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

Small arms debris associated with recent training activities consisting of .22-caliber, 5.56mm, 7.62mm, .38-caliber, .45-caliber, and .50-caliber was encountered during the CSE Phase II and RI investigations. MD associated with 40mm flares, M74 airburst simulator, slap flares, and smoke grenades was observed on the surface during the CSE Phase II. A negligible amount of MD (surface and subsurface) was discovered during the RI including 40mm cartridge, M18 smoke grenade (expended), 40mm casing, 40mm, flare pieces, and a grenade spoon. The CSE Phase II and RI did not discover any evidence of formal small arms training (e.g., targets, berms, and firing positions). No MEC was encountered during the CSE Phase II or RI.

Reference (Section, Page #):	RI - 1.8.2.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 3

EHE Module: Information on the Location of Munitions Data Element Worksheet

Classification	Description	Score
Confirmed surface	- Physical evidence indicates that there are UXO or DMM on the surface of the MRS - Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.	25
Confirmed subsurface, active	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	20
Confirmed subsurface, stable	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	- There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).**	0

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Small arms debris associated with recent training activities consisting of .22-caliber, 5.56mm, 7.62mm, .38-caliber, .45-caliber, and .50-caliber was encountered during the CSE Phase II and RI investigations. MD associated with 40mm flares, M74 airburst simulator, slap flares, and smoke grenades was observed on the surface during the CSE Phase II. A negligible amount of MD (surface and subsurface) was discovered during the RI including 40mm cartridge, M18 smoke grenade (expended), 40mm casing, 40mm, flare pieces, and a grenade spoon. The CSE Phase II and RI did not discover any evidence of formal small arms training (e.g., targets, berms, and firing positions). No MEC was encountered during the CSE Phase II or RI.

Reference (Section, Page #):	RI - 1.8.2.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 4

EHE Module: Ease of Access Data Element Worksheet

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	8

Site-specific characteristics used to select the EASE OF ACCESS classification:

Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Able 51 Area (XU854) MRSis located just west of the Holloman AFB main installation boundary fence, on the land that belongs to the White Sands Missile Range. The XU854 MRS is accessed through a locked gate located at the end of the main access road, but the fence is not complete and may be circumvented using established dirt roads.

2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.

Buildings 1440 and 1442 are within the MRS. Since missile testing ended at the Able 51 Area in the early 1970s, building 1440 has been either used for storage or has been vacant. Building 1442 is currently vacant. There are 81 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and flight line support buildings.

Cultural resource sites present within the MRS include two Cold War era missile development facilities (buildings 1440 and 1442). Both buildings are considered individually eligible for inclusion in the NRHP.

No ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.1/ 1.7.8/ 1.7.9/ 1.9.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 5

EHE Module: Status of Property Data Element Worksheet

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the EASE OF ACCESS classification:

Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Able 51 Area (XU854) MRSis located just west of the Holloman AFB main installation boundary fence, on the land that belongs to the White Sands Missile Range. The XU854 MRS is accessed through a locked gate located at the end of the main access road, but the fence is not complete and may be circumvented using established dirt roads.

2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.

Buildings 1440 and 1442 are within the MRS. Since missile testing ended at the Able 51 Area in the early 1970s, building 1440 has been either used for storage or has been vacant. Building 1442 is currently vacant. There are 81 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and flight line support buildings.

Cultural resource sites present within the MRS include two Cold War era missile development facilities (buildings 1440 and 1442). Both buildings are considered individually eligible for inclusion in the NRHP.

No ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.8.2.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 6

EHE Module: Population Density Data Element Worksheet

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Able 51 Area (XU854) MRSis located just west of the Holloman AFB main installation boundary fence, on the land that belongs to the White Sands Missile Range. The XU854 MRS is accessed through a locked gate located at the end of the main access road, but the fence is not complete and may be circumvented using established dirt roads.

2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.

Buildings 1440 and 1442 are within the MRS. Since missile testing ended at the Able 51 Area in the early 1970s, building 1440 has been either used for storage or has been vacant. Building 1442 is currently vacant. There are 81 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and flight line support buildings.

Cultural resource sites present within the MRS include two Cold War era missile development facilities (buildings 1440 and 1442). Both buildings are considered individually eligible for inclusion in the NRHP.

No ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.1/ 1.7.8/ 1.7.9/ 1.9.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 7

EHE Module: Population Near Hazard Data Element Worksheet

Classification	Description	Score
26 or more inhabited structures	- There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	5
16 to 25 inhabited structures	- There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	- There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	- There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	- There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	- There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
Population Near Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	5

Site-specific data characteristics used to select the POPULATION NEAR HAZARD classification:

Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Able 51 Area (XU854) MRSis located just west of the Holloman AFB main installation boundary fence, on the land that belongs to the White Sands Missile Range. The XU854 MRS is accessed through a locked gate located at the end of the main access road, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
Buildings 1440 and 1442 are within the MRS. Since missile testing ended at the Able 51 Area in the early 1970s, building 1440 has been either used for storage or has been vacant. Building 1442 is currently vacant. There are 81 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and flight line support buildings.
Cultural resource sites present within the MRS include two Cold War era missile development facilities (buildings 1440 and 1442). Both buildings are considered individually eligible for inclusion in the NRHP.
No ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.1/ 1.7.8/ 1.7.9/ 1.9.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 8

EHE Module: Types of Activities/Structures Data Element Worksheet

Classification	Description	Score
Residential. educational, or subsitence	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	5
Parks and recreational areas	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	4
Agricultural, forestry	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Industrial or warehousing	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
Types of Activites/Structures	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	2

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Able 51 Area (XU854) MRSis located just west of the Holloman AFB main installation boundary fence, on the land that belongs to the White Sands Missile Range. The XU854 MRS is accessed through a locked gate located at the end of the main access road, but the fence is not complete and may be circumvented using established dirt roads.

2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.

Buildings 1440 and 1442 are within the MRS. Since missile testing ended at the Able 51 Area in the early 1970s, building 1440 has been either used for storage or has been vacant. Building 1442 is currently vacant. There are 81 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and flight line support buildings.

Cultural resource sites present within the MRS include two Cold War era missile development facilities (buildings 1440 and 1442). Both buildings are considered individually eligible for inclusion in the NRHP.

No ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.1/ 1.7.8/ 1.7.9/ 1.9.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Worksheet

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	3

Site-specific characteristics used to select the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:

Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Able 51 Area (XU854) MRSis located just west of the Holloman AFB main installation boundary fence, on the land that belongs to the White Sands Missile Range. The XU854 MRS is accessed through a locked gate located at the end of the main access road, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
Buildings 1440 and 1442 are within the MRS. Since missile testing ended at the Able 51 Area in the early 1970s, building 1440 has been either used for storage or has been vacant. Building 1442 is currently vacant. There are 81 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and flight line support buildings.
Cultural resource sites present within the MRS include two Cold War era missile development facilities (buildings 1440 and 1442). Both buildings are considered individually eligible for inclusion in the NRHP.
No ecological resources are present at the MRS.

Reference (Section, Page #): RI - 1.6.1/ 1.7.8/ 1.7.9/ 1.9.1/ 7.1.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 10

Determining the EHE Module Rating

	Source	Score
Explosive Hazard Factor Data Elements		
Munitions Type	**Table 1**	0
Source of Hazard	**Table 2**	5
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 3**	0
Ease of Access	**Table 4**	8
Status of Property	**Table 5**	0
Receptors Factor Data Elements		
Population Density	**Table 6**	1
Population Near Hazard	**Table 7**	5
Types of Activities/Structures	**Table 8**	2
Ecological and/or Cultural Resources	**Table 9**	3
	Sum	24

EHE Module Value	EHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected Explosive Hazard
	Evaluation Pending

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 20

Determining the CHE Module Rating

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	**Table 11**	N/A
Source of CWM	**Table 12**	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 13**	N/A
Ease of Access	**Table 14**	N/A
Status of Property	**Table 15**	N/A
Receptors Factor Data Elements		
Population Density	**Table 16**	N/A
Population Near Hazard	**Table 17**	N/A
Types of Activities/Structures	**Table 18**	N/A
Ecological and/or Cultural Resources	**Table 19**	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 21

HHE Module: Groundwater Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

No MEC presenting a potential source for MC was observed at the Able 51 Area during the CSE Phase II and RI, thus no MC soil sampling occurred during the CSE Phase II or RI. IS sampling to detect propellant constituents associated with historical rocket/missile testing was conducted during the RI. Propellant constituents Nitrocellulose, Nitroglycerine, Perchlorate, and Nitrate detected in the IS soil samples were at concentrations well below SSLs. No soil contamination due to munitions constituents or propellants is suspected. Contamination of groundwater is not suspected.

Reference (Section, Page #):

RI - 1.8.2.1/ 4.5.1/

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 22

HHE Module: Surface Water - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to surface water to whick contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to whick contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to whick contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 23

HHE Module: Sediment - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 24

HHE Module: Surface Water - Ecological Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 25

HHE Module: Sediment - Ecological Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 854 **MRS:** XU854

FFID: NM657212442200

Table 26

HHE Module: Soil - Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
Perchlorate	0.352	55	0.0
Nitrate	35.6	130000	0.0
Nitroglycerin	0.78	1000	0.0
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**0.0**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**L**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the soil to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	L

Receptor Factor		
Identified	Identified receptors to have access to soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to soil to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	L

Alternative Module Ratings	
	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Very low levels of contamination and results indicatesa low potential for contaminant migration from the source via the soil to a potential point of exposure.

Rationale for Selection of RF:

Very low levels of contamination and little potential for receptors to have access to soil with contamination.

Sample comments:

No MEC presenting a potential source for MC was observed at the Able 51 Area during the CSE Phase II and RI, thus no MC soil sampling occurred during the CSE Phase II or RI. Incremental soil (IS) sampling to detect propellant constituents associated with historical rocket/missile testing was conducted during the RI. Nitrocellulose, Nitroglycerine, Perchlorate, and Nitrate detected in the IS samples were at concentrations well below SSLs. No soil contamination due to munitions constituents or propellants is suspected.

Reference (Section, Page #):

RI - 1.8.2.1/ 4.5.1/

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 27

Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	L	L	LLL	G

HHE Ratings (for reference only)	
Combination	**Rating**
HHH	A
HHM	B
HHL HMM	C
HML MMM	D
HLL MML	E
MLL	F
LLL	G
Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected MC Hazard
	Evaluation Pending
HHE Module Ratings	G

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 854 **MRS:** XU854
FFID: NM657212442200

Table 28

MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	3	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No Longer Required		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
			MRS Priority	8	

This page is intentionally left blank

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table A

MRS Background Information

Munitions Response Site Name: Poorman Range

Component: Air Force

Installation/Property Name: HOLLOMAN AIR FORCE BASE

Location (City, County, State): Alamogordo, Otero County, NM

Site Name/Project name (Project No.): Poorman Range

Date Information Entered\Updated: 4/10/2015 4:24:58 PM

Point of Contact Name: DeAnna Rothhaupt **Point of Contact Phone:** (575) 571-3931

Project Phase (check only one):

☐ PA	☐ SI	☑ RI	☐ FS	☐ RD
☐ RA	☐ RIP	☐ RC		

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
☑ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Poorman Range (SR864) site is a 22.80-acre MRS that encompasses the 5.40-acre Poorman Range MRA, MRA 864. The MRA acreage increased from 5.40-acres to 22.80-acres based on the presence of MEC, MD, and small arms debris (SD) east and west of the original MRA boundary and the entire MRA was designated as the SR864 MRS at the conclusion of the CSE Phase II. The site is located east of the Jeep Target Area active range, just southwest of the Jeep Target Area Skeet Range (TS862). The MRA is visible on aerial photography from as early as 1945. The Laboratory of Anthropology Site Record describes it as a feature located southeast of the Jeep Target Area consisting of 25 gun placement stations. Each firing station is composed of a constellation of seven concrete pads, including one gun mount pad. The area was used for training using .50 caliber guns and ammunition.
Evidence of historical small arms range use was observed during the CSE phase II and RI. The concrete firing pads are still intact and wooden tow target cart debris was present. .50 caliber casings and links were observed near the firing pads.
Evidence of training maneuver activity, likely from recent Prime BEEF training at the Jeep Target Area range, was observed during the CSE Phase II and RI. Small arms debris including .30, and .45 caliber, and 5.56mm and 7.62mm blanks were encountered during the CSE phase II and/or RI.
MD observed during the CSE Phase II included M18 smoke grenade, M116A1 hand grenade simulator, and M115A2 ground burst simulator pieces.
MD encountered during the RI included M18 smoke grenade pieces, a grenade spoon, and a trip flare bracket.
MEC items encountered during the CSE Phase II visual survey included two intact M18 smoke grenades, two intact M116A1 hand grenade simulators, and one intact M115A2 ground burst simulator which were turned over to Base EOD. MEC encountered during the 100% coverage RI surface clearance included one M18 smoke grenade. One DMM item, an M18 smoke grenade with safety pin intact was also discovered during the RI. No subsurface MEC/DMM was encountered during the 100% coverage RI subsurface investigation.

Description of Pathways for Human and Ecological Receptors:

MEC: Natural physical processes and human activities (intrusive and non-intrusive) for surface and subsurface MEC. Pathways for surface and subsurface MEC are incomplete for all receptors.
MC: Lead and PAH's were detected in soil during the CSE Phase II. Lead was slightly above approved Holloman AFB soil background and the Eco SSl for the most sensitive ecological receptor category but well below HH SSLs. PAH detections were below HH and Eco SSls. During the RI soil samples were collected at MEC/DMM find locations and at the Safe Disposal Area (SDA) location. The RI samples were non-detect for explosives and all detected metals were below background concentrations. Based on CSE Phase II and RI results all pathways are considered incomplete for both human and ecological receptors.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Description of Receptors (Human and Ecological):

Human receptors include Base personnel and residents, authorized contractors, visitors, recreational users, and trespassers.
Ecological receptors (biota) include all current and future terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles, which may be exposed to the soil at the MRS.

Reference (Section, Page #):

GENERAL - RI - 1.6.2/ 1.8.2.2/ 1.9.2/ 5.1.2/ 5.2.2/ 6.2.2/ 6.3.2/ 7.1.2, LOCATION - , POC - , CONTRACTOR -

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 1

EHE Module: Munitions Type Data Element Worksheet

Classification	Description	Score
Sensitive	- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions]. - All hand grenades containing energetic filler. - Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	30

High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."
	- All DMM containing a high-explosive filler that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		25

Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).
	- All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		20

High explosive (unused)	- All DMM containing a high explosive filler that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		15

Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).
	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:
	  - Damaged by burning or detonation
	  - Deteriorated to the point of instability.
		15

Bulk secondary high explosives, pyrotechnics, or propellant	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated. - Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10

Pyrotechnic (not used or damaged)	- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		10

Practice	- All UXO that are practice munitions that are not associated with a sensitive fuze.
	- All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		5

Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).**	0

Site-specific data used in selection MUNITIONS TYPE classification:

100% coverage surface and subsurface removal was performed during the RI. One MEC item, an M18 smoke grenade with fuze impinged, and one DMM item an M18 smoke grenade with safety pin intact was removed from the surface during the RI. MD, associated with recent training activities, were removed including M18 smoke grenade pieces, a grenade spoon, and a trip flare bracket. Small arms debris associated with historic and recent training was removed including .30, and .45 caliber, and 5.56mm and 7.62mm blanks and wooden tow target cart debris.

Reference (Section, Page #):	RI - 1.8.2.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 2

EHE Module: Source of Hazard Data Element Worksheet

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	- The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	0

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

1100% coverage surface and subsurface removal was performed during the RI. One MEC item, an M18 smoke grenade with fuze impinged, and one DMM item an M18 smoke grenade with safety pin intact was removed from the surface during the RI. MD, associated with recent training activities, were removed including M18 smoke grenade pieces, a grenade spoon, and a trip flare bracket. Small arms debris associated with historic and recent training was removed including .30, and .45 caliber, and 5.56mm and 7.62mm blanks and wooden tow target cart debris.

Reference (Section, Page #):	RI - 1.8.2.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 3

EHE Module: Information on the Location of Munitions Data Element Worksheet

Classification	Description	Score
Confirmed surface	- Physical evidence indicates that there are UXO or DMM on the surface of the MRS - Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.	25
Confirmed subsurface, active	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	20
Confirmed subsurface, stable	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	- There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).**	0

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

100% coverage surface and subsurface removal was performed during the RI. One MEC item, an M18 smoke grenade with fuze impinged, and one DMM item an M18 smoke grenade with safety pin intact was removed from the surface during the RI. MD, associated with recent training activities, were removed including M18 smoke grenade pieces, a grenade spoon, and a trip flare bracket. Small arms debris associated with historic and recent training was removed including .30, and .45 caliber, and 5.56mm and 7.62mm blanks and wooden tow target cart debris.

Reference (Section, Page #):	RI - 1.8.2.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 4

EHE Module: Ease of Access Data Element Worksheet

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	8

Site-specific characteristics used to select the EASE OF ACCESS classification:

The Poorman Range MRS (SR864) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Poorman Range is accessed through a locked gate, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 101 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.2/ 1.7.8/ 1.7.9/ 1.9.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 5

EHE Module: Status of Property Data Element Worksheet

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the EASE OF ACCESS classification:

The Poorman Range MRS (SR864) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Poorman Range is accessed through a locked gate, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 101 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.8.2.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 6

EHE Module: Population Density Data Element Worksheet

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

The Poorman Range MRS (SR864) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Poorman Range is accessed through a locked gate, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 101 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.2/ 1.7.8/ 1.7.9/ 1.9.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 7

EHE Module: Population Near Hazard Data Element Worksheet

Classification	Description	Score
26 or more inhabited structures	- There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	5
16 to 25 inhabited structures	- There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	- There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	- There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	- There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	- There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
Population Near Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	5

Site-specific data characteristics used to select the POPULATION NEAR HAZARD classification:

The Poorman Range MRS (SR864) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Poorman Range is accessed through a locked gate, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 101 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.2/ 1.7.8/ 1.7.9/ 1.9.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 8

EHE Module: Types of Activities/Structures Data Element Worksheet

Classification	Description	Score
Residential. educational, or subsitence	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	5
Parks and recreational areas	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	4
Agricultural, forestry	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Industrial or warehousing	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
Types of Activites/Structures	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	2

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

The Poorman Range MRS (SR864) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Poorman Range is accessed through a locked gate, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 101 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.2/ 1.7.8/ 1.7.9/ 1.9.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Worksheet

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:

The Poorman Range MRS (SR864) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. The Poorman Range is accessed through a locked gate, but the fence is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 101 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.2/ 1.7.8/ 1.7.9/ 1.9.2/ 7.1.2

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 10

Determining the EHE Module Rating

	Source	Score
Explosive Hazard Factor Data Elements		
Munitions Type	**Table 1**	0
Source of Hazard	**Table 2**	0
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 3**	0
Ease of Access	**Table 4**	8
Status of Property	**Table 5**	0
Receptors Factor Data Elements		
Population Density	**Table 6**	1
Population Near Hazard	**Table 7**	5
Types of Activities/Structures	**Table 8**	2
Ecological and/or Cultural Resources	**Table 9**	0
	Sum	16

EHE Module Value	EHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected Explosive Hazard
	Evaluation Pending

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 20

Determining the CHE Module Rating

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	**Table 11**	N/A
Source of CWM	**Table 12**	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 13**	N/A
Ease of Access	**Table 14**	N/A
Status of Property	**Table 15**	N/A
Receptors Factor Data Elements		
Population Density	**Table 16**	N/A
Population Near Hazard	**Table 17**	N/A
Types of Activities/Structures	**Table 18**	N/A
Ecological and/or Cultural Resources	**Table 19**	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 21

HHE Module: Groundwater Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Lead and PAH's were detected in soil during the CSE Phase II. Lead was slightly above approved Holloman AFB soil background and the Eco SSI for the most sensitive ecological receptor category but well below HH SSLs. PAH detections were below HH and Eco SSIs. CSE Phase II HH and Eco risk assessments determined that the detected lead and PAH concentrations do not pose potential risk for human or ecological receptors. During the RI soil samples were collected at MEC/DMM find locations and at the Safe Disposal Area (SDA) location. The RI samples were non-detect for explosives and detected metals were below background concentrations. Contamination of groundwater is not suspected.

Reference (Section, Page #):

CSE Phase II – 7.2.5/ 10.2.15/ RI - 4.5.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 22

HHE Module: Surface Water - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to surface water to whick contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to whick contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to whick contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 23

HHE Module: Sediment - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 24

HHE Module: Surface Water - Ecological Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 25

HHE Module: Sediment - Ecological Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.7.6

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 864 **MRS:** SR864

FFID: NM657212442200

Table 26

HHE Module: Soil - Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
Lead	25	400	0.1
Pyrene	0.05	2300	0.0
Naphthalene	0.0097	56	0.0
Indeno[1,2,3-cd]pyrene	0.0074	62	0.0
Fluorene	0.0023	2700	0.0
Fluoranthene	0.094	2300	0.0
Dibenz[ah]anthracene	0.0021	6.2	0.0
2-Methylnaphthalene	0.0038	310	0.0
Chrysene	0.018	6200	0.0
Benzo[k]fluoranthene	0.01	620	0.0
Benzo[b]fluoranthene	0.025	62	0.0
Benzo[a]pyrene	0.011	6.2	0.0
Benz[a]anthracene	0.0087	62	0.0
Anthracene	0.0035	22000	0.0
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**0.1**
CHF > 100	**H (High)**		
100 > CHF > 2	**M (Medium)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**L**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the soil to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	L

Receptor Factor		
Identified	Identified receptors to have access to soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to soil to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	L

Alternative Module Ratings	
	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Very low levels of contamination and results indicatesa low potential for contaminant migration from the source via the soil to a potential point of

exposure.

Rationale for Selection of RF:

Very low levels of contamination and little potential for receptors to have access to soil with contamination.

Sample comments:

Lead and PAH's were detected in soil during the CSE Phase II. Lead was slightly above approved Holloman AFB soil background and the Eco SSl for the most sensitive ecological receptor category but well below HH SSLs. PAH detections were below HH and Eco SSls. CSE Phase II HH and Eco risk assessments determined that the detected lead and PAH concentrations do not pose potential risk for human or ecological receptors. During the RI soil samples were collected at MEC/DMM find locations and at the Safe Disposal Area (SDA) location. The RI samples were non-detect for explosives and detected metals were below background concentrations. CSE Phase II HH and Eco risk assessments determined that the detected lead and PAH concentrations do not pose potential risk for human or ecological receptors. The maximum lead and PAH results from the CSE Phase II and copper results from the RI are reported.

Reference (Section, Page #):

RI - 1.8.2.2/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 27

Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	L	L	LLL	G

HHE Ratings (for reference only)	
Combination	**Rating**
HHH	A
HHM	B
HHL HMM	C
HML MMM	D
HLL MML	E
MLL	F
LLL	G
Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected MC Hazard
	Evaluation Pending
HHE Module Ratings	G

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 864 **MRS:** SR864
FFID: NM657212442200

Table 28

MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	3	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No Longer Required		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
			MRS Priority	8	

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table A

MRS Background Information

Munitions Response Site Name: Ballistics Rain Field

Component: Air Force

Installation/Property Name: HOLLOMAN AIR FORCE BASE

Location (City, County, State): Alamogordo, Otero County, NM

Site Name/Project name (Project No.): Ballistics Rain Field

Date Information Entered\Updated: 4/10/2015 3:29:12 PM

Point of Contact Name: DeAnna Rothhaupt **Point of Contact Phone:** (575) 571-3931

Project Phase (check only one):

☐ PA	☐ SI	☑ RI	☐ FS	☐ RD
☐ RA	☐ RIP	☐ RC		

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
☑ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Ballistics Rain Field (ML865) site is an 18.30-acre MRS that encompasses the 5.2-acre Ballistics Rain Field MRA, MRA 865. The MRA acreage increased from 5.2-acres to 18.30 acres based on the presence of munitions related items surrounding the MRA and the entire MRA was designated as the ML865 MRS at the conclusion of the CSE Phase II. The MRA was used to create artificial rain for the purpose of testing the effects on artillery. The period of operation for MRA 865 is unknown; however; aerial photography from 1972 shows the earth and timber target butt at the western end of a road perpendicular to the HSTT. Debris from 20, 37, 75, 105, and 155mm projectiles were observed during the CSE Phase II. Some projectiles were intact; these were collected by Holloman AFB EOD and confirmed to contain inert filler. In addition to the projectiles, expended 5-inch rocket motors and missile debris were observed during the CSE Phase II. MD discovered during the 100% coverage RI surface clearance and limited intrusive investigation of exploratory test pits included 40, 75, and 105mm projectiles. Intact projectiles were confirmed to contain inert filler. In addition expended 5-inch rocket motor pieces were also discovered on the surface during the RI. No MEC has been found at the MRS during the CSE Phase II or RI; however significant DGM anomalies indicate the potential for subsurface MEC.

Description of Pathways for Human and Ecological Receptors:

MEC: Natural physical processes and human activities (intrusive and non-intrusive) for surface and subsurface MEC. Pathways for surface MEC are incomplete for all receptors and pathways for subsurface MEC are potentially complete for Base personnel and residents and contractors and incomplete for visitors/recreational users and trespassers and biota.
MC: CSE Phase II surface soil samples were non-detect for explosives. RDX was detected in one RI soil sample below the HH and Eco SSL. Metals were below approved Holloman AFB soil background concentrations with the exception of copper which exceeded the background and Eco SSL but was well below human health screening level in three RI soil samples. Surface soil pathways are incomplete for all receptors. Subsurface soil pathways are potentially complete for all receptors. Food chain pathways are potentially complete for biota and incomplete for all other receptors.

Description of Receptors (Human and Ecological):

Human receptors include Base personnel and residents, authorized contractors, visitors, recreational users, and trespassers.
Ecological receptors (biota)include all current and future terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles, which may be exposed to the soil at the MRS.

Reference (Section, Page #):

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

GENERAL - RI - 1.6.3/ 1.8.2.3/ 1.9.3/ 1.8.2.3/ 5.1.3/ 5.2.3/ 6.2.3/ 6.3.3/ 7.1.3, LOCATION - , POC - , CONTRACTOR -

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 1

EHE Module: Munitions Type Data Element Worksheet

Classification	Description	Score
Sensitive	- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions]. - All hand grenades containing energetic filler. - Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	30

High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."
	- All DMM containing a high-explosive filler that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		25

Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).
	- All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		20

High explosive (unused)	- All DMM containing a high explosive filler that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		15

Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).
	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:
	  - Damaged by burning or detonation
	  - Deteriorated to the point of instability.
		15

Bulk secondary high explosives, pyrotechnics, or propellant	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated. - Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10

Pyrotechnic (not used or damaged)	- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		10

Practice	- All UXO that are practice munitions that are not associated with a sensitive fuze.
	- All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		5

Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).**	25

Site-specific data used in selection MUNITIONS TYPE classification:

Debris from 20, 37, 75, 105, and 155mm projectiles were observed during the CSE Phase II. Some projectiles were intact; these were collected by Holloman AFB EOD and confirmed to contain inert filler. In addition to the projectiles, expended 5-inch rocket motors and missile debris were observed during the CSE Phase II. MD discovered during the 100% coverage surface clearance and limited intrusive investigation of exploratory test pits included 40, 75, and 105mm projectiles. Intact projectiles were confirmed to contain inert filler. In addition expended 5-inch rocket motor pieces and 40 mm projectile pieces were also discovered on the surface during the RI. No MEC has been found at the MRS during the CSE Phase II or RI.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Reference (Section, Page #):	RI - 1.8.2.3/ 7.1.3

Table 2

EHE Module: Source of Hazard Data Element Worksheet

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	- The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	10

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

Debris from 20, 37, 75, 105, and 155mm projectiles were observed during the CSE Phase II. Some projectiles were intact; these were collected by Holloman AFB EOD and confirmed to contain inert filler. In addition to the projectiles, expended 5-inch rocket motors and missile debris were observed during the CSE Phase II. MD discovered during the 100% coverage surface clearance and limited intrusive investigation of exploratory test pits included 40, 75, and 105mm projectiles. Intact projectiles were confirmed to contain inert filler. In addition expended 5-inch rocket motor pieces were also discovered on the surface during the RI. No MEC has been found at the MRS during the CSE Phase II or RI; however significant DGM anomalies indicate the potential for subsurface MEC.

Reference (Section, Page #):	RI - 1.8.2.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 3

EHE Module: Information on the Location of Munitions Data Element Worksheet

Classification	Description	Score
Confirmed surface	- Physical evidence indicates that there are UXO or DMM on the surface of the MRS - Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.	25
Confirmed subsurface, active	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	20
Confirmed subsurface, stable	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	- There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).**	10

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

Debris from 20, 37, 75, 105, and 155mm projectiles were observed during the CSE Phase II. Some projectiles were intact; these were collected by Holloman AFB EOD and confirmed to contain inert filler. In addition to the projectiles, expended 5-inch rocket motors and missile debris were observed during the CSE Phase II. MD discovered during the 100% coverage surface clearance and limited intrusive investigation of exploratory test pits included 40, 75, and 105mm projectiles. Intact projectiles were confirmed to contain inert filler. In addition expended 5-inch rocket motor pieces were also discovered on the surface during the RI. No MEC has been found at the MRS during the CSE Phase II or RI; however significant DGM anomalies indicate the potential for subsurface MEC.

Reference (Section, Page #):	RI - 1.8.2.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 4

EHE Module: Ease of Access Data Element Worksheet

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	8

Site-specific characteristics used to select the EASE OF ACCESS classification:

The Ballistics Rain Field MRS (ML865) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. MRS specific barriers include a locked gate and barbwire fence around the site but this fence is incomplete.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 12 structures in a two mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.3/ 1.7.8/ 1.7.9/ 1.9.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 5

EHE Module: Status of Property Data Element Worksheet

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the EASE OF ACCESS classification:

The Ballistics Rain Field MRS (ML865) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. MRS specific barriers include a locked gate and barbwire fence around the site but this fence is incomplete.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 12 structures in a two mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.8.2.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 6

EHE Module: Population Density Data Element Worksheet

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

The Ballistics Rain Field MRS (ML865) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. MRS specific barriers include a locked gate and barbwire fence around the site but this fence is incomplete.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 12 structures in a two mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.3/ 1.7.8/ 1.7.9/ 1.9.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 7

EHE Module: Population Near Hazard Data Element Worksheet

Classification	Description	Score
26 or more inhabited structures	- There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	5
16 to 25 inhabited structures	- There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	- There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	- There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	- There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	- There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
Population Near Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	3

Site-specific data characteristics used to select the POPULATION NEAR HAZARD classification:

The Ballistics Rain Field MRS (ML865) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. MRS specific barriers include a locked gate and barbwire fence around the site but this fence is incomplete.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 12 structures in a two mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.3/ 1.7.8/ 1.7.9/ 1.9.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 8

EHE Module: Types of Activities/Structures Data Element Worksheet

Classification	Description	Score
Residential. educational, or subsitence	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	5
Parks and recreational areas	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	4
Agricultural, forestry	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Industrial or warehousing	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
Types of Activites/Structures	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	2

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

The Ballistics Rain Field MRS (ML865) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. MRS specific barriers include a locked gate and barbwire fence around the site but this fence is incomplete.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 12 structures in a two mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.3/ 1.7.8/ 1.7.9/ 1.9.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Worksheet

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:

The Ballistics Rain Field MRS (ML865) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. MRS specific barriers include a locked gate and barbwire fence around the site but this fence is incomplete.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 12 structures in a two mile radius of the MRS, consisting of operational mission support facilities.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.3/ 1.7.8/ 1.7.9/ 1.9.3/ 7.1.3

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 10

Determining the EHE Module Rating

	Source	Score
Explosive Hazard Factor Data Elements		
Munitions Type	**Table 1**	25
Source of Hazard	**Table 2**	10
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 3**	10
Ease of Access	**Table 4**	8
Status of Property	**Table 5**	0
Receptors Factor Data Elements		
Population Density	**Table 6**	1
Population Near Hazard	**Table 7**	3
Types of Activities/Structures	**Table 8**	2
Ecological and/or Cultural Resources	**Table 9**	0
	Sum	59

EHE Module Value	EHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected Explosive Hazard
	Evaluation Pending

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 20

Determining the CHE Module Rating

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	**Table 11**	N/A
Source of CWM	**Table 12**	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 13**	N/A
Ease of Access	**Table 14**	N/A
Status of Property	**Table 15**	N/A
Receptors Factor Data Elements		
Population Density	**Table 16**	N/A
Population Near Hazard	**Table 17**	N/A
Types of Activities/Structures	**Table 18**	N/A
Ecological and/or Cultural Resources	**Table 19**	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 21

HHE Module: Groundwater Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

CSE Phase II surface soil samples were non-detect for explosives. RDX was detected in one RI soil sample below the HH and Eco SSL. Metals were below approved Holloman AFB soil background concentrations with the exception of copper which exceeded the background and Eco SSL but was well below human health screening level in three RI soil samples. Contamination of groundwater is not suspected, thus no groundwater samples were collected during the CSE phase II or RI.

Reference (Section, Page #):

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 22

HHE Module: Surface Water - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to surface water to whick contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to whick contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to whick contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 23

HHE Module: Sediment - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 24

HHE Module: Surface Water - Ecological Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 25

HHE Module: Sediment - Ecological Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 865 **MRS:** ML865

FFID: NM657212442200

Table 26

HHE Module: Soil - Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
RDX (Cyclonite)	0.108	180	0.0
Copper and compounds	21.9	3100	0.0
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**0.0**
CHF > 100	**H (High)**		
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**L**

$$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$$

Migratory Pathway Factor

Evident	Analytical data or observable evidence indicates that contamination in the soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the soil to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	L

Receptor Factor

Identified	Identified receptors to have access to soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to soil to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	L

Alternative Module Ratings	
	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Very low levels of contamination and results indicatesa low potential for contaminant migration from the source via the soil to a potential point of exposure.

Rationale for Selection of RF:

Very low levels of contamination and little potential for receptors to have access to soil with contamination.

Sample comments:

During the CSE Phase II, four surface soil samples were collected in the vicinity of damaged suspected MEC items and analyzed for explosives. All sample results were non-detect.
During the RI, eleven surface soil samples were collected in areas with a high concentration of MD and one sample was collected at the Safe Disposal Area (SDA) detonation location and analyzed for metals and explosives. All samples were non-detect for explosives except for the RI soil sample at the SDA location where RDX was detected below the HH and Eco SSL. Metals were detected below approved Holloman AFB soil background concentrations with the exception of copper in three samples which exceeded background and the Eco SSL but were well below the HH SSL.

Reference (Section, Page #):

RI - 1.8.2.3/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 27

Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	L	L	L	LLL	G

HHE Ratings (for reference only)	
Combination	**Rating**
HHH	A
HHM	B
HHL HMM	C
HML MMM	D
HLL MML	E
MLL	F
LLL	G
Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected MC Hazard
	Evaluation Pending
HHE Module Ratings	G

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 865 **MRS:** ML865
FFID: NM657212442200

Table 28

MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	3	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No Longer Required		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
			MRS Priority	6	

This page is intentionally left blank

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table A

MRS Background Information

Munitions Response Site Name: Debris Field

Component: Air Force

Installation/Property Name: HOLLOMAN AIR FORCE BASE

Location (City, County, State): Alamogordo, Otero County, NM

Site Name/Project name (Project No.): Debris Field

Date Information Entered\Updated: 4/10/2015 4:53:31 PM

Point of Contact Name: DeAnna Rothhaupt **Point of Contact Phone:** (575) 571-3931

Project Phase (check only one):

☐ PA	☐ SI	☑ RI	☐ FS	☐ RD
☐ RA	☐ RIP	☐ RC		

Media Evaluated (check all that apply):

☐ Groundwater	☐ Sediment (human receptor)
☐ Surface soil	☐ Surface Water (ecological receptor)
☐ Sediment (ecological receptor)	☐ Surface Water (human receptor)

MRS Summary:

MRS Description: Describe the munitions-related activities that occurred at the installation, the dates of operation, and the UXO, DMM, or MC known or suspected to be present. When possible, identify munitions, CWM, and MC by type:

The Debris Field (RR869a) site is a 3.50-acre MRS that represents a portion of the 3.60-acre Debris Field MRA, MRA 869. The Debris Field MRA was delineated into two MRSs at the conclusion of the CSE Phase II: (1) the Debris Field (RR869a) MRS, 3.50 acres in size and (2) the Debris Field (RR869) MRS, 0.10 acres in size, which overlaps with a portion IRP site OT-04 which is ineligible under the MMRP. The history of munitions use at the MRA is unknown, debris consistent with a possible missile/drone crash and possible fragments of 5-inch rocket motors were observed during the CSE Phase I. The site is located on the south of Ritas Draw and north of Munitions Storage Buildings 1197 and 1198.
MD observed during the CSE Phase II visual survey included 2.75 inch rocket and rocket launcher debris, possible 5-inch rocket debris, one expended hand grenade fuze, and squib blasting wires, one of which was complete and treated as MEC by Base EOD. Also observed was one .50 caliber (steel body) projectile, along with sparse clay target debris.
MD recovered during the 100% coverage RI surface clearance were M18, smoke grenade (expended fuze components) and MK10, 5 inch rocket motor (venturi). No MEC/DMM was recovered during the RI surface clearance. No subsurface MEC or MD was recovered during the limited RI intrusive investigation conducted along the OT-04 site fence line bordering the MRS.

Description of Pathways for Human and Ecological Receptors:

MEC: Natural physical processes and human activities (intrusive and non-intrusive) for surface and subsurface MEC. Pathways for surface MEC are incomplete for all receptors. Pathways for subsurface MEC are potentially complete for Base personnel and authorized contractors.
MC: Subsurface soil pathways are potentially complete for all receptors. All other pathways are incomplete for all receptors.

Description of Receptors (Human and Ecological):

Human receptors include Base personnel and residents, authorized contractors, visitors, recreational users, and trespassers.
Ecological receptors (biota) include all current and future terrestrial invertebrates, plants, and terrestrial birds, mammals, and reptiles, which may be exposed to the soil at the MRS.

Reference (Section, Page #):

GENERAL - RI - 1.6.4/ 1.8.2.4/ 1.9.4/ 5.1.4/ 5.2.4/ 6.2.4/ 6.3.4/ 7.1.4, LOCATION - , POC - , CONTRACTOR -

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 1

EHE Module: Munitions Type Data Element Worksheet

Classification	Description	Score
Sensitive	- All UXO that are considered likely to function upon any interaction with exposed persons [e.g., submunitions, 40mm high explosive (HE) grenades, white phosphorus (WP) munitions, high-explosive antitank (HEAT) munitions, and practice munitions with sensitive fuzes, but excluding all other practice munitions]. - All hand grenades containing energetic filler. - Bulk primary explosives, or mixtures of these with environmental media, such that the mixture poses an explosive hazard.	30

High explosive (used or damaged)	- All UXO containing a high-explosive filler (e.g., RDX, Composition B), that are not considered "sensitive."
	- All DMM containing a high-explosive filler that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		25

Pyrotechnic (used or damaged)	- All UXO containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades).
	- All DMM containing pyrotechnic fillers other than white phosphorous (e.g., flares, signals, simulators, smoke grenades) that have:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		20

High explosive (unused)	- All DMM containing a high explosive filler that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		15

Propellant	- All UXO containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor).
	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor) that are:
	  - Damaged by burning or detonation
	  - Deteriorated to the point of instability.
		15

Bulk secondary high explosives, pyrotechnics, or propellant	- All DMM containing mostly single-, double-, or triple-based propellant, or composite propellants (e.g., a rocket motor), that are deteriorated. - Bulk secondary high explosives, pyrotechnic compositions, or propellant (not contained in a munition), or mixtures of these with environmental media such that the mixture poses an explosive hazard.	10

Pyrotechnic (not used or damaged)	- All DMM containing a pyrotechnic fillers (i.e., red phosphorous), other than white phosphorous filler, that:
	  - Have not been damaged by burning or detonation
	  - Are not deteriorated to the point of instability.
		10

Practice	- All UXO that are practice munitions that are not associated with a sensitive fuze.
	- All DMM that are practice munitions that are not associated with a sensitive fuze and that have not:
	  - Been damaged by burning or detonation
	  - Deteriorated to the point of instability.
		5

Riot control	- All UXO or DMM containing a riot control agent filler (e.g., tear gas).	3
Small arms	- All used munitions or DMM that are categorized as small arms ammunition [Physical evidence or historical evidence that no other types of munitions (e.g., grenades, subcaliber training rockets) were used or are present on the MRS is required for selection of this category.].	2
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
MUNITIONS TYPE	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 30).**	20

Site-specific data used in selection MUNITIONS TYPE classification:

MD recovered during the 100% coverage RI surface clearance were M18, smoke grenade (expended fuze components) and MK10, 5 inch rocket motor (venturi). No MEC/DMM was recovered during the RI surface clearance. No subsurface MEC or MD was recovered during the limited RI intrusive investigation conducted along the OT-04 site fence line bordering the MRS. No hazard remains on the surface however, the potential for encountering rocket debris in the subsurface remains.

Reference (Section, Page #):	RI - 1.8.2.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 2

EHE Module: Source of Hazard Data Element Worksheet

Classification	Description	Score
Former Range	- The MRS is a former military range where munitions (including practice munitions with sensitive fuzes) have been used. Such areas include: impact or target areas, associated buffer and safety zones, firing points, and live-fire maneuver areas.	10
Former Munitions treatment (i.e., OB/OD unit)	- The MRS is a location where UXO or DMM (e.g., munitions, bulk explosives, bulk pyrotechnic, or bulk propellants) were burned or detonated for the purpose of treatment prior to disposal.	8
Former practice munitions range	- The MRS is a former military range on which only practice munitions without sensitive fuzes were used.	6
Former maneuver area	- The MRS is a former maneuver area where no munitions other than flares, simulators, smokes, and blanks were used. There must be evidence that no other munitions were used at the location to place an MRS into this category.	5
Former burial pit or other disposal area	- The MRS is a location where DMM were buried or disposed of (e.g., disposed of into a water body) without prior thermal treatment.	5
Former industrial operating facilities	- The MRS is a location that is a former munitions maintenance, manufacturing, or demilitarization facility.	4
Former firing points	- The MRS is a firing point, where the firing point is delineated as an MRS separate from the rest of a former military range.	4
Former missile or air defense artillery emplacements	- The MRS is a former missile defense or air defense artillery (ADA) emplacement not associated with a military range.	2
Former storage or transfer points	- The MRS is a location where munitions were stored or handled for transfer between different modes of transportation (e.g., rail to truck, truck to weapon system).	2
Former small arms range	- The MRS is a former military range where only small arms ammunition was used [There must be evidence that no other types of munitions (e.g., grenades) were used or are present to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that no UXO or DMM are present, or there is historical evidence indicating that no UXO or DMM are present.	0
Source of Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	5

Site-specific data characteristics used to select the SOURCE OF HAZARD classification:

MD recovered during the 100% coverage RI surface clearance were M18, smoke grenade (expended fuze components) and MK10, 5 inch rocket motor (venturi). No MEC/DMM was recovered during the RI surface clearance. No subsurface MEC or MD was recovered during the limited RI intrusive investigation conducted along the OT-04 site fence line bordering the MRS. No hazard remains on the surface however, the potential for encountering rocket debris in the subsurface remains.

Reference (Section, Page #): RI - 1.8.2.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 3

EHE Module: Information on the Location of Munitions Data Element Worksheet

Classification	Description	Score
Confirmed surface	- Physical evidence indicates that there are UXO or DMM on the surface of the MRS - Historical evidence (e.g., a confirmed incident report or accident report) indicates there are UXO or DMM on the surface of the MRS.	25
Confirmed subsurface, active	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS, and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena (e.g., drought, flooding, erosion, frost, heat heave, tidal action), or intrusive activities (e.g., plowing, construction, dredging) at the MRS are likely to expose UXO or DMM.	20
Confirmed subsurface, stable	- Physical evidence indicates the presence of UXO or DMM in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed. - Historical evidence indicates that UXO or DMM are located in the subsurface of the MRS and the geological conditions at the MRS are not likely to cause UXO or DMM to be exposed, in the future, by naturally occurring phenomena, or intrusive activities at the MRS are not likely to cause UXO or DMM to be exposed.	15
Suspected (physical evidence)	- There is physical evidence (e.g., munitions debris, such fragments, penetrators, projectiles, shell casings, links, fins), other than the documented presence of UXO or DMM, indicating that UXO or DMM may be present at the MRS.	10
Suspected (historical evidence)	- There is historical evidence indicating that UXO or DMM may be present at the MRS.	5
Subsurface, physical constraint	- There is physical or historical evidence indicating that UXO or DMM may be present in the subsurface, but there is a physical constraint (e.g., pavement, water depth over 120 feet) preventing direct access to the UXO or DMM.	2
Small arms range (regardless of location	- The presence of small arms ammunition is confirmed or suspected, regardless of other factors such as geological stability [There must be evidence that no other types of munitions (e.g., grenades) were used or are present at the MRS to place an MRS into this category.].	1
Evidence of no munitions	- Following investigation of the MRS, there is physical evidence that there are no UXO or DMM present, or there is historical evidence indicating that no UXO or DMM are present.	0
Location of Munitions	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 25).**	10

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

MD recovered during the 100% coverage RI surface clearance were M18, smoke grenade (expended fuze components) and MK10, 5 inch rocket motor (venturi). No MEC/DMM was recovered during the RI surface clearance. No subsurface MEC or MD was recovered during the limited RI intrusive investigation conducted along the OT-04 site fence line bordering the MRS. No hazard remains on the surface however, the potential for encountering rocket debris in the subsurface remains.

Reference (Section, Page #):	RI - 1.8.2.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 4

EHE Module: Ease of Access Data Element Worksheet

Classification	Description	Score
No barrier	- There is no barrier preventing access to any part of the MRS (i.e., all parts of the MRS are accessible).	10
Barrier to MRS access is incomplete	- There is a barrier preventing access to parts of the MRS, but not the entire MRS.	8
Barrier to MRS access is complete but not monitored	- There is a barrier preventing access to all parts of the MRS, but there is no surveillance (e.g., by a guard) to ensure that the barrier is effectively preventing access to all parts of the MRS.	5
Barrier to MRS access is complete and monitored	- There is a barrier preventing access to all parts of the MRS, and there is active, continual surveillance (e.g., by a guard, video monitoring) to ensure that the barrier is effectively preventing access to all parts of the MRS.	0
Ease of Access	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 10).**	8

Site-specific characteristics used to select the EASE OF ACCESS classification:

The Debris Field MRS (RR869a) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. A fence with a locked gate encompassing the area that includes the Debris Field is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 100 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and recreational areas.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.4/ 1.7.8/ 1.7.9/ 1.9.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 5

EHE Module: Status of Property Data Element Worksheet

Classification	Description	Score
Non-DoD control	- The MRS is at a location that is no longer owned by, leased to, or otherwise possessed or used by DoD. Examples are privately owned land or water bodies; land or water bodies owned or controlled by state, tribal, or local governments; and land or water bodies managed by other federal agencies.	5
Scheduled for transfer from DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD, and DoD plans to transfer that land or water body to the control of another entity (e.g., a state, tribal, or local government; a private party; another federal agency) within 3 years from the date the rule is applied.	3
DoD control	- The MRS is on land or is a water body that is owned, leased, or otherwise possessed by DoD. With respect to property that is leased or otherwise possessed, DoD must control access to the MRS 24 hours per day, every day of the calendar year.	0
Status of Property	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the EASE OF ACCESS classification:

The Debris Field MRS (RR869a) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. A fence with a locked gate encompassing the area that includes the Debris Field is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 100 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and recreational areas.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.8.2.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 6

EHE Module: Population Density Data Element Worksheet

Classification	Description	Score
> 500 persons per square mile	- There are more than 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	5
100- 500 persons per square mile	- There are 100 to 500 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	3
< 100 persons per square mile	- There are fewer than 100 persons per square mile in the county in which the MRS is located, based on U.S. Census Bureau data.	1
Population Density	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	1

Site-specific characteristics that helped select the POPULATION DENSITY classification

The Debris Field MRS (RR869a) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. A fence with a locked gate encompassing the area that includes the Debris Field is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 100 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and recreational areas.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.4/ 1.7.8/ 1.7.9/ 1.9.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a
FFID: NM657212442200

Table 7

EHE Module: Population Near Hazard Data Element Worksheet

Classification	Description	Score
26 or more inhabited structures	- There are 26 or more inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	5
16 to 25 inhabited structures	- There are 16 to 25 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	4
11 to 15 inhabited structures	- There are 11 to 15 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	3
6 to 10 inhabited structures	- There are 6 to 10 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	2
1 to 5 inhabited structures	- There are 1 to 5 inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	1
0 inhabited structures	- There are no inhabited structures located up to 2 miles from the boundary of the MRS, within the boundary of the MRS, or both.	0
Population Near Hazard	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	5

Site-specific data characteristics used to select the POPULATION NEAR HAZARD classification:

The Debris Field MRS (RR869a) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. A fence with a locked gate encompassing the area that includes the Debris Field is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 100 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and recreational areas.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.4/ 1.7.8/ 1.7.9/ 1.9.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 8

EHE Module: Types of Activities/Structures Data Element Worksheet

Classification	Description	Score
Residential. educational, or subsitence	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with any of the following purposes: residential, educational, child care, critical assets (e.g., hospitals, fire and rescue, police stations, dams), hotels, commercial, shopping centers, playgrounds, community gathering areas, religious sites, or sites used for subsistence hunting, fishing, and gathering.	5
Parks and recreational areas	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with parks, nature preserves, or other recreational uses.	4
Agricultural, forestry	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with agriculture or forestry.	3
Industrial or warehousing	- Activities are conducted, or inhabited structures are located up to two miles from the MRS's boundary or within the MRS's boundary, that are associated with industrial activities or warehousing.	2
No known or recurring activities	- There are no known or recurring activities occurring up to two miles from the MRS's boundary or within the MRS's boundary.	1
Types of Activites/Structures	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	4

Site-specific data characteristics used to select the LOCATION OF MUNITIONS classification:

The Debris Field MRS (RR869a) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. A fence with a locked gate encompassing the area that includes the Debris Field is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 100 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and recreational areas.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.4/ 1.7.8/ 1.7.9/ 1.9.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 9

EHE Module: Ecological and/or Cultural Resources Data Element Worksheet

Classification	Description	Score
Ecological and cultural resources present	- There are both ecological and cultural resources present on the MRS.	5
Ecological resources present	- There are ecological resources present on the MRS.	3
Cultural resources present	- There are cultural resources present on the MRS.	3
No ecological or cultural resources present	- There are no ecological resources or cultural resources present on the MRS.	0
Ecological and/or Cultural Resources	**DIRECTIONS: Record the single highest score from above in the box to the right (maximum score = 5).**	0

Site-specific characteristics used to select the ECOLOGICAL AND/OR CULTURAL RESOURCES classification:

The Debris Field MRS (RR869a) is located on Holloman AFB, which is an active military installation. Access to Holloman AFB requires admittance through the security gate and there is a fence around the installation. A fence with a locked gate encompassing the area that includes the Debris Field is not complete and may be circumvented using established dirt roads.
2010 census data indicates that Otero county has a population of 63,797 (U.S. Census Bureau [USCB], 2015). In 2013 Otero County had an estimated population of 54,616. Based on the 2013 population estimate, Otero County has a population density of 9.9 people per square mile.
There are 100 buildings within a two-mile radius of the MRS, consisting of operational mission support facilities and recreational areas.
No cultural or ecological resources are present at the MRS.

Reference (Section, Page #):	RI - 1.6.4/ 1.7.8/ 1.7.9/ 1.9.4/ 7.1.4

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a
FFID: NM657212442200

Table 10

Determining the EHE Module Rating

	Source	Score
Explosive Hazard Factor Data Elements		
Munitions Type	**Table 1**	20
Source of Hazard	**Table 2**	5
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 3**	10
Ease of Access	**Table 4**	8
Status of Property	**Table 5**	0
Receptors Factor Data Elements		
Population Density	**Table 6**	1
Population Near Hazard	**Table 7**	5
Types of Activities/Structures	**Table 8**	4
Ecological and/or Cultural Resources	**Table 9**	0
	Sum	53

EHE Module Value	EHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected Explosive Hazard
	Evaluation Pending

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a
FFID: NM657212442200

Table 20

Determining the CHE Module Rating

	Source	Score
CWM Hazard Factor Data Elements		
CWM Configuration	**Table 11**	N/A
Source of CWM	**Table 12**	N/A
Accessibility Factor Data Elements		
Information on Location of Munitions	**Table 13**	N/A
Ease of Access	**Table 14**	N/A
Status of Property	**Table 15**	N/A
Receptors Factor Data Elements		
Population Density	**Table 16**	N/A
Population Near Hazard	**Table 17**	N/A
Types of Activities/Structures	**Table 18**	N/A
Ecological and/or Cultural Resources	**Table 19**	N/A
	Sum	N/A

CHE Module Value	CHE Module Rating
92 to 100	**A**
82 to 91	**B**
71 to 81	**C**
60 to 70	**D**
48 to 59	**E**
38 to 47	**F**
less than 38	**G**
Alternative Module Ratings	**Prioritization No Longer Required**
	No Known or Suspected CWM Hazard
	Evaluation Pending

Tables 11-19 were not generated because there is no known or suspected CWM hazard at the MRS.

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 21

HHE Module: Groundwater Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the groundwater is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in groundwater has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the groundwater to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	There is a threatened water supply well downgradient of the source and the groundwater is a current source of drinking water or source of water for other beneficial uses such as irrigation/agriculture (equivalent to Class I or IIA aquifer).	H
Potential	There is no threatened water supply well downgradient of the source and the groundwater is currently or potentially usable for drinking water, irrigation, or agriculture (equivalent to Class I, IIA, or IIB aquifer).	M
Limited	There is no potentially threatened water supply well downgradient of the source and the groundwater is not considered a potential source of drinking water and is of limited beneficial use (equivalent to Class IIIA or IIIB aquifer, or where perched aquifer exists only).	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Groundwater sampling was conducted downgradient of the Debris Field (RR869a) as part of the investigation of the adjacent IRP site OT-04 (Debris Field [RR869]). Groundwater sampling was not conducted as part of the CSE Phase II or RI.

Reference (Section, Page #):

CSE Phase II – 7.2.5/ 10.2.20/ RI - 1.8.2.4/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a
FFID: NM657212442200

Table 22

HHE Module: Surface Water - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to surface water to whick contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to whick contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to whick contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.8.2.4/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 23

HHE Module: Sediment - Human Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA
Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to sediment to which contamination has moved or can move	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.8.2.4/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 24

HHE Module: Surface Water - Ecological Data Element Worksheet

Contaminant	Maximum Concentration (ug/L)	Comparison Value (ug/L)	Ratios
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CHF Value		CHF VALUE	NA

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the surface water is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in surface water has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the surface water to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Receptor Factor		
Identified	Identified receptors have access to surface water to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to surface water to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to surface water to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.8.2.4/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 25

HHE Module: Sediment - Ecological Endpoint Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	**CHF Value**	**Contamination Hazard Factor (CHF)**	**No Data**
CHF > 100	**H (High)**	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	**M (Medium)**		
2 > CHF	**L (Low)**		
CHF Value		**CHF VALUE**	**NA**

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the sediment is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in sediment has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the sediment to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Receptor Factor		
Identified	Identified receptors to have access to sediment to which contamination has moved or can move.	H
Potential	potential for receptors to have access to sediment to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to sediment to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF

Sample comments:

Surface water and sediment were not present at the MRS.

Reference (Section, Page #):

RI - 1.8.2.4/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE

MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a

FFID: NM657212442200

Table 26

HHE Module: Soil - Data Element Worksheet

Contaminant	Maximum Concentration (mg/kg)	Comparison Value (mg/kg)	Ratios
CHF Scale	CHF Value	Contamination Hazard Factor (CHF)	No Data
CHF > 100	H (High)	$CHF = \sum \frac{\text{[Maximum Concentration of Contaminant]}}{\text{[Comparison Value for Contaminant]}}$	
100 > CHF > 2	M (Medium)		
2 > CHF	L (Low)		
CHF Value		CHF VALUE	NA

Migratory Pathway Factor		
Evident	Analytical data or observable evidence indicates that contamination in the soil is present at, moving toward, or has moved to a point of exposure.	H
Potential	Contamination in soil has moved only slightly beyond the source (i.e., tens of feet), could move but is not moving appreciably, or information is not sufficient to make a determination of Evident or Confined.	M
Confined	Information indicates a low potential for contaminant migration from the source via the soil to a potential point of exposure (possibly due to geological structures or physical controls).	L
Migratory Pathway Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Receptor Factor		
Identified	Identified receptors to have access to soil to which contamination has moved or can move.	H
Potential	Potential for receptors to have access to soil to which contamination has moved or can move.	M
Limited	Little or no potential for receptors to have access to soil to which contamination has moved or can move.	L
Receptor Factor	The single highest value from above in the box to the right (maximum value = H).	NA

Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected Hazard

Rationale for Selection of MPF:

Rationale for Selection of RF:

Sample comments:

No soil samples were collected at the MRS for MC/COPC analysis as no source of potential contamination was identified during the CSE Phase II or RI. Therefore, no human health or ecological screening was conducted for this site. Any risk at this site is expected to be similar to background conditions.

Reference (Section, Page #):

RI - 1.8.2.4/ 4.5.1

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a
FFID: NM657212442200

Table 27

Determining the HHE Module Rating

Media Source	Contaminant Hazard Factor	Migratory Pathway Factor Value	Receptor Factor Value	3-Letter Ratings (Hs-Ms-Ls)	Media Rating (A-G)
Groundwater (Table 21)	NA	NA	NA	NA	NA
Surface Water/Human Endpoint (Table 22)	NA	NA	NA	NA	NA
Sediment/Human Endpoint (Table 23)	NA	NA	NA	NA	NA
Surface Water/Ecological Endpoint (Table 24)	NA	NA	NA	NA	NA
Sediment/Ecological Endpoint (Table 25)	NA	NA	NA	NA	NA
Soil (Table 26)	NA	NA	NA	NA	NA

HHE Ratings (for reference only)	
Combination	**Rating**
HHH	A
HHM	B
HHL HMM	C
HML MMM	D
HLL MML	E
MLL	F
LLL	G
Alternative Module Ratings	Prioritization No Longer Required
	No Known or Suspected MC Hazard
	Evaluation Pending
HHE Module Ratings	

Installation: HOLLOMAN AIR FORCE BASE
MAJCOM: ACC **MRAID:** 869 **MRS:** RR869a
FFID: NM657212442200

Table 28

MRS Priority

EHE Rating	Priority	CHE Rating	Priority	HHE Rating	Priority
		A	1		
A	2	B	2	A	2
B	3	C	3	B	3
C	4	D	4	C	4
D	5	E	5	D	5
E	6	F	6	E	6
F	7	G	7	F	7
G	8			G	8
Prioritization No Longer Required		Prioritization No Longer Required		Prioritization No Longer Required	
No Known or Suspected Hazard		No Known or Suspected Hazard		No Known or Suspected Hazard	
Evaluation Pending		Evaluation Pending		Evaluation Pending	
			MRS Priority	6	